

COVID-19: Country Journeys

NUS Saw Swee Hock School of Public Health

The final update as of 15 July 2020

Contents

Contents.....	1
Country Journeys Summary.....	2
Countries - Summary Table of Easing Measures.....	6
Countries - Summary Table of Length of Time in Social Isolation	9
Demographics	10
Wider Impacts	12
Economics	12
Mental Health.....	13
Families	13
Education.....	14
Health Care.....	14
Public Opinion and Behaviour	14
Individual Country Journeys	16
Singapore	16
China	31
Wuhan, Hubei, China	41
Shanghai, China	49
Hong Kong.....	52
Vietnam	58
South Korea.....	64
Hokkaido, Japan	73
New York, USA.....	82
New Zealand.....	94
Australia.....	103
Italy	113
Czech Republic.....	119
Germany	125
Switzerland	131
Denmark	138
Austria	143
Sweden.....	148
Acknowledgement	156
References.....	157

Country Journeys Summary

The report is based on a time-limited online scan and is being regularly updated. Updates for this week are in **purple**.

The report was developed and updated week-on-week through to July 17. The report outlines the first phase of reopening, as at the end of July many countries moved towards strategies of localised and targeted restrictions in response to any rises in cases.

The report follows different countries on their journeys through the COVID-19 pandemic, looking at the measures put in place to manage the outbreak and the approaches taken to ease restrictions, and themes emerging across the countries.

On the 5 January the WHO announced that on 31 December 2019, the WHO China Country Office was informed of cases of pneumonia of unknown cause detected in Wuhan City, Hubei Province of China. As of 3 January 2020, a total of 44 patients with pneumonia of unknown etiology had been reported to WHO by the national authorities in China. Of the 44 cases reported, 11 were severely ill, while the remaining 33 patients were in stable condition. According to media reports, the concerned market in Wuhan was closed on 1 January 2020 for environmental sanitation and disinfection.¹

The genetic sequence of the novel coronavirus was shared globally by China on 12 January 2020. The WHO conducted several fact-finding trips to China and convened an Emergency Committee on 22 January. On 11 March 2020, WHO made the assessment that “COVID-19 can be characterised as a pandemic”; at that point there were 118,000 cases reported globally in 114 countries.²

From 10 March, many regions across Europe and beyond announced lockdowns or measures that effectively amount to lockdowns, in response to the same trigger points that Wuhan experienced, which was that their healthcare systems, especially hospitals, were being overwhelmed. However, there was a high degree of variation in restrictions and how they are carried out in practice. These are also separate from and usually implemented alongside wider travel restrictions.

The word “lockdown” is not a single intervention and has different meanings in different countries. Its implementation may vary in extent, scale and duration. Based on the 1918 pandemic and the COVID-19 experiences in China and Italy, the term is commonly interpreted to include the following social distancing measures:

- Mandatory isolation of ill people and the quarantine of those suspected of having contact with them.
- Closure of schools, non-essential shops, entertainment establishments (though food and pharmacies remain open).
- Bans on public gatherings and large events.

Social distancing, physical distancing, or safe distancing are terms used to describe a set of measures wherein the community is discouraged or prevented from social interactions that may facilitate viral transmission, which intended to stop or slow down the spread of an infectious disease (eg COVID-19). This report uses the term "social distancing" throughout, as this is commonly used in media in Singapore and beyond.

Countries eased restrictions at different times, usually based on where they were on the epidemiological curve, experiencing sustained declines in new reported cases, hospitalisations and fatalities.

Common themes across the countries:

- Data validity and changes in how data is collected, categorised and reported.
- Lengths of lockdowns and social isolation varies from country to country. Generally, countries that locked down early in their outbreak had shorter periods of enforcing social isolation. Countries (with the exception of Wuhan and Singapore) did not extend the restriction on small social gatherings past 66 days.
- It will take time to determine the impact of easing restrictions on the virus and day-to-day counts should be balanced against averages across days and trend lines. However, some countries that have gradually eased restrictions have sustained low levels of reported infections (Denmark, Switzerland, Germany, Austria). Reopening has been cautious across most countries. Although some clusters of cases have emerged, at present the case numbers continue to remain low across many countries that have reopened.

There seems to be a difference in the longer-term strategic approach to the pandemic across parts of the world. Most countries coming out of lockdown are avoiding reimposing measures when cases and clusters emerge. By the end of June, some countries were consistently taking a more holistic view of the pandemic and moving away from intense focus on the numbers day-to-day and lockdowns towards balancing wider impacts on the economy, mental health and health.

However, some countries with clusters of cases reimpose strict lockdown of areas (eg Seoul in South Korea, areas of Beijing in China, areas of Australia and Germany).

- “New normal” rather than a return to pre-COVID-19. However, the what this new normal means is highly variable in terms of restrictions from country to country.

High-levels of complexity of policies and rules from country to country, which regularly change.

- Most countries with lockdowns significantly lowered mobility levels in workplaces, transit stations and retail and recreation. As measures are eased mobility increases gradually, but takes a while to return to baseline levels.
- Measures are increasingly moving towards a more local level of granularity based on local risk levels and assessment of metrics (eg locking down specific areas or buildings with cases, allowing schools in areas of low case numbers to opt out of mask wearing), rather than full lockdowns.

Specific advice for those in more vulnerable groups is emerging (eg South Korea advises against seniors gathering in packed rooms without windows, saying if they do end up in such settings, they mustn’t eat or sing, and must wear a face mask and use hand sanitizer).

- Need to continually seek to identify areas of vulnerability, such as populations that may not seek healthcare, unseen populations, those fearful of testing and the consequences or those who are marginalised (eg people in nursing homes, migrant workers, homeless, LGBT communities, sex workers, and so on). In addition, continually reviewing and identifying high-risk environments for transmission and high-risk occupations.

Increasing concern for the vulnerability of migrant workers; these individuals are often stranded due to border controls and many have lost employment due to the pandemic and are unable to easily access support. Some countries are extending support to migrant workers (South Korea, New Zealand).

- Lockdown is a political and social issue of contention - some countries have experienced protests against the lockdowns; equally there is a large cohort in the same countries that want restrictions to remain in place longer. Since early June, after nearly 3 months of restrictions and increasing mental health, economic and education impacts, there have been increasing tensions and protests across multiple countries. There have also been large-scale Black Lives Matter protests after the death of George Floyd, a 46-year-old black man who died in Minneapolis after a white police officer pressed his knee to Floyd's neck for almost nine minutes while Floyd was handcuffed face down in the street.
- By the end of June, as countries reopen and travel between countries gradually resumes, there has been increasing commentary suggesting increases in cases and clusters could result in widespread outbreaks. There is a lack of clear definition on what constitutes a wave in relation to COVID-19. At the end of June, South Korea announced it was experiencing a "second wave"; daily cases were around 60 and focused on the capital. WHO has avoided using this term in relation to South Korea's status.

There is increasing complexity of detail from country to country and across measures and policies and rules associated with easing of restrictions.

- **Borders.** Some countries are forming travel arrangements with near neighbours and some are requiring regular testing for commuters across borders. Some air travel restarted for essential business. Air travel arrangements between individual countries, or groups of countries, are being discussed. Increasing use of metrics to categorise countries and determine border opening with them.
- **Tracking, tracing, testing.** High levels of testing – as capacity increases then moving to targeted groups (eg transport and border staff, health workers, groups in high-density shared accommodation) and pooled testing when low levels of infection are suggested. Most countries are adopting technologies to support tracking and tracing, businesses also supplement this with contact tracing forms – effectiveness of the technology solutions is being debated. Discussion is ongoing on the use of antibody testing given emerging information on broader immune mechanisms.
- **Isolation.** Isolation of potential cases, either in centres or at home (often with supporting technology).

Quarantines in facilities and/or hotels are being used in some countries for people returning from overseas. There have been challenges in ensuring transparent and robust processes, as well as costs. Some countries allow people to self-quarantine at home.

In addition, some countries put in place two-week isolation for people joining high-density groups (eg workers dorms, prisons, nursing homes).

- **Masks.** Usually recommended for public places, transport, indoors, crowds and around high-risk individuals. Rarely recommended when outside socially distanced from others not of the same household (guidelines vary from 1m, 1.5m to 2m).

There are health and safety concerns regarding mask wearing when undertaking exercise. In China, schools in areas of low cases can opt out of wearing masks. Some countries only advise mask wearing if unwell.

- **Public places and gatherings.** Outdoor areas often in first phase of reopening (beaches, hiking trails and so on). Regular (twice daily) ventilation of indoor spaces is suggested by several countries.

- **Transport.** Often first to reopen, usually with guidance on mask wearing, social distancing and hygiene.
- **Places of worship.** Very few places have reopened places of worship for services, some are open for reflection and pray. Those that do open, usually follow social distancing guidelines, have mask wearing and do not permit singing. There have been clusters of cases emerge from the return to worship.
- **Business.** Electronic payment consistently required. Businesses required to follow safe distancing, mask wearing and hygiene measures. Working from home where possible continues to be encouraged.

Opening café and restaurants for outside sit-down service is a common approach to early lifting of restrictions in the service sector.

Opening of bars and nightclubs is viewed as higher risk and one of the last restrictions to be lifted. There have been clusters in countries that reopened clubs. There are high-risk industries common across countries, such as meat processing / packing, distribution centres, call centres (this may be due to susceptibility of the environment and ability to effectively social distance or due to them being essential services and open).

- **Education.** More countries are seeking to reopen schools, adopting different models with the goal of preventing or reducing infections. There have been clusters of cases linked to schools after reopening.

Countries - Summary Table of Easing Measures

The following table is a high-level summary of the countries in the report. It should be noted that where there is reopening it is **predominantly with restrictions** (although these restrictions are not summarised in the table). The table should be read alongside the narrative country journeys and comes with a caveat that each country's situation can change day-by-day and much detail underpins the simplification in the table below. The table was last updated on the 17 July 2020. For larger countries with internal jurisdictions the broad approach is summarised.

	Tracking and tracing	Testing	Isolation	Masks and social distancing	Public places and gatherings	Education	Places of worship	Offices	F&B	Bars and clubs	Manufacturing and construction	Borders and international travel
Singapore	App and contact tracing system Wearable device to be rolled-out	Testing of suspected cases and priority groups. Some testing of case contacts	Quarantine of cases and of travellers in facilities and allow home-quarantine for 14 days from selected countries	Compulsory in all public places and all outside spaces for anyone aged 2 and over	Groups of 5	Preschools and specific years Reopened 29 June	Reopened with restrictions	WFH if possible Split-team working Some have Apps to monitor health	Reopened for groups of 5	Closed (able to open if serving food and sit-down only)	Phased reopening Some have Apps to monitor health	Green lane with China
China	QR health codes and contact tracing	Mass testing populations with cases	Lockdown of areas with cases. Quarantine of travellers	Compulsory in public places	Reopened	Reopening Mask-wearing optional in low risk areas	Online	Reopened	Close if cases emerge Take away only	Close if cases emerge Night markets open	Reopened	Green lanes
Hong Kong	App and contact tracing system	Testing suspected cases and travellers	Home quarantine with tech monitoring. Community isolation facilities	Compulsory in public places	Reopened with limits	Reopened and then closed early for holidays after cases rose	Reopened	Reopened	Reopened	Reopened Night markets open	Reopened	Airport reopening with testing of travellers into city Cross-border talks for exemptions from quarantine with China
Vietnam	App and contact tracing system	Testing suspected cases, contacts and travellers	Quarantine of cases and of travellers in facilities	In public places	Reopening Up to 30 people can gather	Reopening	Reopened, up to 30 can gather	Reopened	Reopened	Closed (localities set to determine opening)	Reopened	Domestic flights. Plans to reopen to low risk countries
South Korea	App and contact tracing system	Testing of cases and contacts	Lockdown of areas of cases Home-quarantine with tech to monitor	In public places	Reopened	Reopening and closures linked to specific cases	Reopened	Open	Open	Opened and then closed Night markets likely open (advised closures in Seoul)	Open	Reopening for selected routes.

	Tracking and tracing	Testing	Isolation	Masks and social distancing	Public places and gatherings	Education	Places of worship	Offices	F&B	Bars and clubs	Manufacturing and construction	Borders and international travel
Japan	Cluster approach App	Suspected cases	Self-isolation with symptoms and after travel	Mask wearing and social distancing	Reopening	Reopening	Some moved online or to small groups	Some stayed open, WFH encouraged. Reopening	Some stayed open or are now reopened	Some stayed open or are now reopened	Some stayed open or are now reopened	Closed
New York, USA	Contract tracing system	Testing for suspected cases	Self-isolation with symptoms	Compulsory on public transport and required in workplaces	Reopening Up to 10 can gather	Reopening in Sept	Up to 10 can gather	Reopened	Reopened	Reopened	Reopened	Airports stayed open. National bans from travellers from some countries
New Zealand	App and contact tracing system	Testing of suspected cases	Self-isolation with symptoms and quarantine of returning travellers	Healthy people in the community are not required to wear a face mask	Reopened	Reopened	Reopened	Reopened WFH if possible	Reopened	Reopened	Reopened	Considering reopening to low-risk countries
Australia	App and contact tracing system	Testing of suspected cases	Restrictions returned in some areas. Self-isolation with symptoms and returning travellers	Masks for those who are unwell or suspected cases	Reopened	Reopening and close if cases / clusters	Reopened	Reopened	Reopened	Reopened	Reopened	Regional travel allowed. Considering travel to low-risk countries
Italy	App and contact tracing	Testing of suspected cases	Self-isolation with symptoms	Masks on public transport	Reopened	Reopening in Sept	Reopened	Reopened	Reopened	Reopened	Reopened	Reopened
Czech Republic	App and contact tracing	Testing of cases and contacts	Quarantine of cases and contacts	Masks will no longer be mandatory inside public places from 1 July	Reopened	Reopened	Reopened	Reopened	Reopened	Reopened	Reopened	Reopening to selected countries
Germany	App and contact tracing	Testing	Lockdown based on specific areas / where clusters are	On public transport, airports and in shops	Reopened	Reopening	Reopened	Reopened	Reopened	Reopened	Reopened	Reopening to selected countries
Switzerland	App and contact tracing system	Testing	Self-isolation with symptoms	Recommended mask wearing when social distancing not possible	Reopened	Reopened	Reopened	Reopened	Reopened	Reopened	Reopened	Reopening to selected countries
Denmark	App and contact tracing system	Testing	Self-isolation with symptoms	Mask wearing not advised Social distancing	Reopened	Reopened	Reopened	Reopened	Reopened	Reopened	Reopened	Reopening to selected countries

	Tracking and tracing	Testing	Isolation	Masks and social distancing	Public places and gatherings	Education	Places of worship	Offices	F&B	Bars and clubs	Manufacturing and construction	Borders and international travel
Austria	App	Testing	Self-isolation with symptoms	Mask wearing in public places and social distancing	Reopened	Phased reopening	Reopened	Reopened	Reopened	Reopened	Reopened	Reopening to selected countries
Sweden	Symptom tracker app	Testing prioritised Immunity testing for health workers	Self-isolation with symptoms	Mask wearing not advised	Gatherings of more than 50 not permitted	Stayed open	Online	Stayed open, encouraged WFH	Stayed open with restrictions	Bars and clubs stayed open with restrictions	Stayed open with restrictions	Neighbouring countries have not reopened to Sweden as yet

Countries - Summary Table of Length of Time in Social Isolation

The following table is a high-level summary of the length of time that social isolation was imposed in countries in the report. Defined as the restriction of gatherings of friends and family in social situations.

The table should be read alongside the narrative country journeys and impacts of lockdowns. The table was last updated on 12 June 2020 from online information; if there are inaccurate statements please do contact the team to correct.

From the selection of countries followed in Country Journeys, Singapore continues to restrict the gathering of friends and family (66 days as at 12 June – only limited visits of parents or grandparents were allowed from June 2 after 56 days), Wuhan maintained measures for 76 days.

New York, Italy, Germany, Czech Republic, Australia, New Zealand and Vietnam all allowed small gatherings by 66 days of lockdown (some far sooner, generally ones that went into lockdown earlier). South Korea, Japan, Hong Kong, Switzerland, Denmark and Sweden permitted small gatherings throughout the period.

	Lockdown Start date	Days after lockdown social isolation eased
Singapore	7 April	53 days - Limited visits of parents or grandparents allowed 73 days - 5 could meet
China, Wuhan	23 January	76 days - This is when Wuhan reopened, so assumed social interactions
Hong Kong	Avoided full lockdown	4 could meet throughout and raised to 8 people in May
Vietnam	1 April – 22 April	22 days
South Korea	Avoided full lockdown Localised lockdowns	0 days
Japan	Avoided full lockdown	0 days
New York, USA	22 March	60 days - From 21 May up to 10 could meet
New Zealand	26 March	32 days – Bubbles allowed to meet 48 days – 10 could meet 64 days – 100 could meet 75 days – unlimited
Australia	23 March	53 days – States vary, most allowed small gatherings at this point and expanded as time went on
Italy	10 March	66 days – approx. when small gatherings allowed
Czech Republic	12 March	66 days – approx. when small gatherings allowed
Germany	14 March	64 days – Different households could meet then expanded further
Switzerland	21 March - Gatherings up to 5 allowed throughout with social distancing	70 days – Groups allowed to meet expanded from 5 to 30
Denmark	13 March - Gatherings up to 10 allowed throughout with social distancing	87 days – Groups allowed to meet expanded from 10 to 50
Austria	11 March	51 days – Groups of 10 allowed to meet
Sweden	Avoided full lockdown	0 days

Demographics

The following section is to be developed further, but demographics are likely to have an impact on the effect of the pandemic on individual countries.

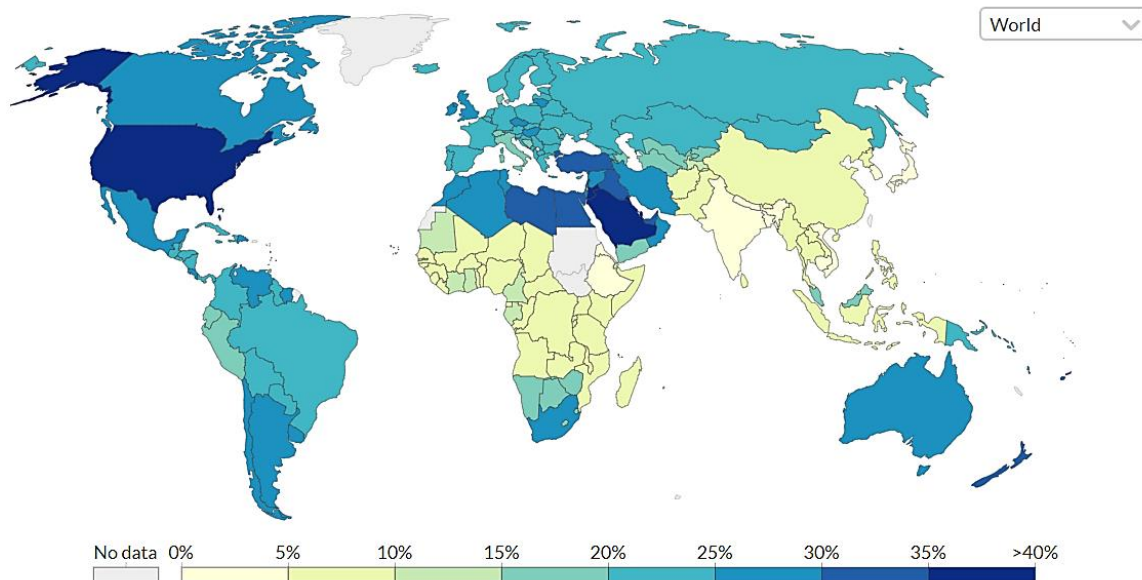
The impact of underlying country demographics on COVID-19 has yet to be fully determined; age is a strong risk factor for severe illness, complications, and death. Fatality is found to be higher for patients with comorbidities (cardiovascular disease, diabetes, chronic respiratory disease, hypertension, chronic kidney disease and cancer).³ Being overweight and obese is a major risk factor for chronic diseases.⁴

The initial information is based on a quick search of data available that covers all of the countries in the report. From the group of countries in our report, Japan has the oldest population although one of the least obese. Vietnam and South Korea have a lower proportion of older people and some of the lowest levels of obesity. The US has most obese population and one of the oldest.

Share of adults that are obese, 2016

Obesity is defined as having a body-mass index (BMI) equal to or greater than 30. BMI is a person's weight in kilograms divided by his or her height in metres squared.

Our World
in Data



Source: WHO, Global Health Observatory

CC BY

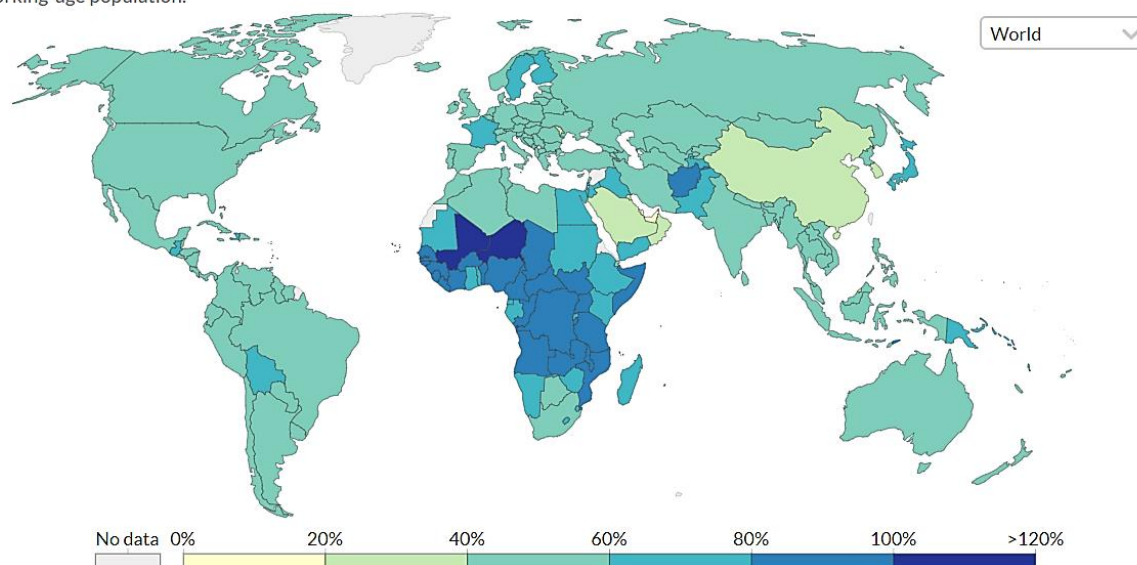
Source: Our World in Data.⁵

Singapore	6.1%	Australia	29%
China	6.2%	Italy	19.9%
Hong Kong	N/A	Czech Republic	26%
Vietnam	2.1%	Germany	22.3%
South Korea	4.7%	Switzerland	19.5%
Japan	4.3%	Denmark	19.7%
USA	36.2%	Austria	20.1%
New Zealand	30.8%	Sweden	20.6%

Age dependency ratio, 2017

The age dependency ratio is the sum of the young population (under age 15) and elderly population (age 65 and over) relative to the working-age population (ages 15 to 64). Data are shown as the number of dependents per 100 working-age population.

Our World
in Data



Source: World Bank

Source: Our World in Data.⁶

The age dependency ratio is the sum of the young population (under age 15) and elderly population (age 65 and over) relative to the working-age population (ages 15 to 64). Data are shown as the number of dependents per 100 working-age population. The more dependents in the population the higher the %.

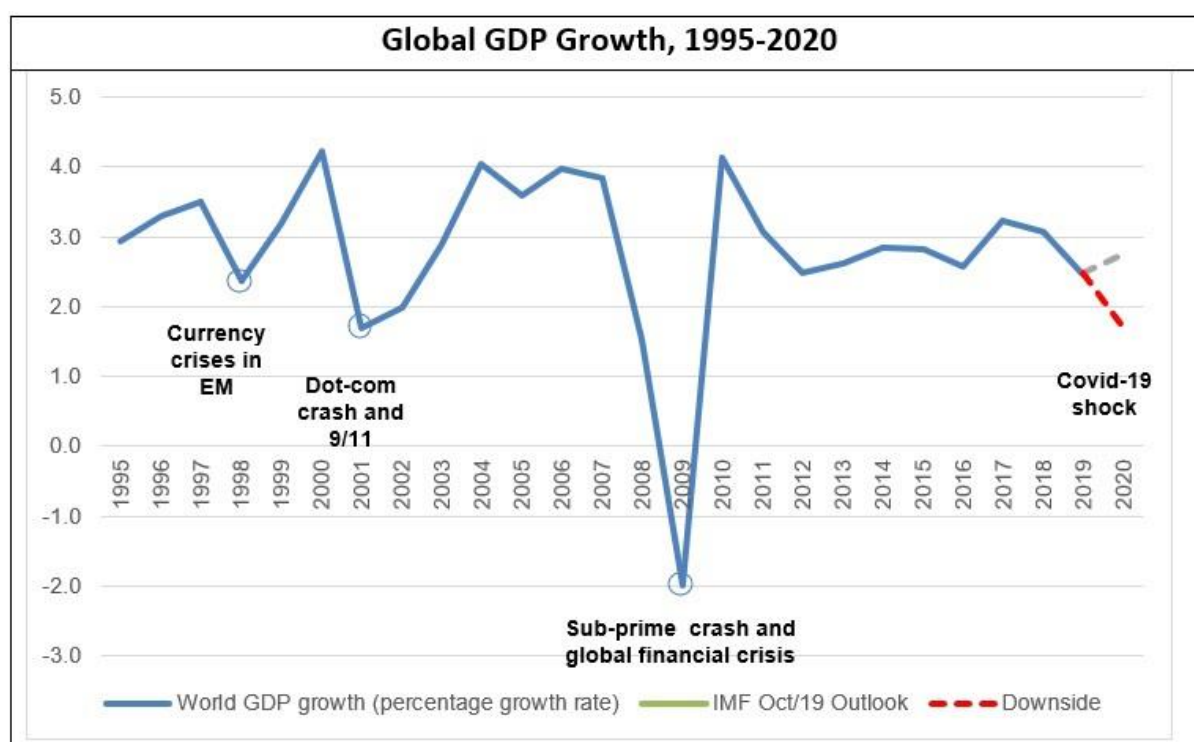
Singapore	38.7%	Australia	53%
China	39.5%	Italy	58%
Hong Kong	N/A	Czech Republic	52%
Vietnam	43%	Germany	53%
South Korea	37.7%	Switzerland	50%
Japan	66.5%	Denmark	57%
USA	52%	Austria	50%
New Zealand	54%	Sweden	60%

Wider Impacts

Fundamentally COVID-19 is a health issue, but as more is understood around true infection rates (through serological testing), case fatality rates, and potential effective treatments then more and more countries are likely to consider the balance of impact of COVID-19 epidemics vs economic realities and wider impacts.

Economics

In terms of economic impact, some comment is provided within country journeys. Globally the lockdowns, travel restrictions, and social distancing measures are likely to result in a dramatic fall in spending (both consumer and business) leading to a recession. UN Conference on Trade and Development forecasts a recession in some countries and that global annual growth will be depressed to below 2.5%, the recessionary threshold for the world economy.⁷



Source: UN⁸

In April, the World Economic Outlook projects global growth in 2020 to fall to -3 percent. This would make the pandemic lockdown the worst recession since the Great Depression, and far worse than the Global Financial Crisis of 2008/9. The cumulative loss to global GDP over 2020 and 2021 from the pandemic was estimated by the IMF to be 9 trillion dollars.⁹

Measures taken to control the spread of the virus, such as lockdowns and travel restrictions, have led to supply chain disruptions and a sharp decline in travellers.

Small businesses are especially susceptible to the negative economic effects of a pandemic. US estimates suggest that 25-40% of small businesses never reopen following a major disaster.^{10,11}

Countries have put in place economic support packages to try to mitigate some of the impacts of the pandemic, with many announcing additional support packages as time goes on.

Mental Health

The country journeys comment on information on the impact of the pandemic on mental health. Overall, the pandemic has led to feelings of fear and anxiety: fear of falling ill, fear of health facilities and becoming infected there, fear of being separated from family and friends in quarantine, fear of job losses and financial hardship, to name but a few.¹²

Up to a third of people may have symptoms of anxiety and depression as a result of the pandemic, with many having difficulty sleeping.¹³

The age of social media and rolling news coverage can lead to intense feelings of anxiety as well as the spread of false information that can increase stress.¹⁴ People spending more than three hours focusing on COVID-19 a day are at higher risk of generalised anxiety.¹⁵

Studies also highlight the increase in post-traumatic stress related to the COVID-19 pandemic, both in the general population and more so in high-risk groups like those placed in quarantines and health workers.^{16,17}

The pandemic has also led to an economic crisis within countries and globally, resulting in job losses, businesses closing and uncertainty going forward. Job losses and financial hardship disproportionately affect lower income and younger groups and can cause anxiety, depression and suicide.^{18,19}

The pandemic has also led to lockdowns and social isolation and loneliness, which can increase the risks of premature mortality, and the magnitude of the risk exceeds that of many leading health indicators (eg obesity, substance abuse, physical inactivity and so on). Age was found to be a factor with adults under 65 being more negatively affected.²⁰

Social isolation is more strongly associated with poor health conditions and behaviours in younger adults compared to older age groups.^{21, 22} However, each country context is different; within Singapore there is concern that older adults that live alone and are unable to connect in the online space may be confused over rules and increasingly vulnerable to feeling displaced and lonely.²³

Recognising the substantial impact of the pandemic on mental health, in March 2020, the UN published an “Interim Briefing Note Addressing Mental Health and Psychosocial Aspects of COVID-19 Outbreak”.²⁴ WHO has also published a short report on mental health and psychosocial considerations during the COVID-19 pandemic.²⁵

In May, a Lancet Editorial identified the lack of focus on those with severe mental illness who would usually receive community support, or on the problems faced on inpatient mental health units.²⁶

Families

The risk of increased domestic violence with lockdowns has become a global concern; in April 2020 UN chief Antonio Guterres called on governments to include protections for women and girls as a key part of COVID-19 countermeasures, stating that “for many women and girls, the threat looms largest where they should be safest: in their own homes”.²⁷

Increased time spent together during lockdowns can put strains on the marital relationship. In China, the city of Xi’an, in central China, and Dazhou, in Sichuan province, both reported record-high numbers of divorce filings in early March, leading to long backlogs at government offices.²⁸

Education

Most governments around the world temporarily closed educational institutions in an attempt to contain the spread of the COVID-19 pandemic. UNESCO states that school closures carry high social and economic costs for people across communities. Their impact however is particularly severe for the most vulnerable and marginalised children and their families. The resulting disruptions exacerbate already existing disparities within the education system but also in other aspects of their lives.²⁹ For example, an additional 10 days of school can significantly increase test scores on knowledge by 1%.³⁰

UNESCO outlines further impacts that include: interrupted learning, social isolation, challenges to exams and gaining qualifications, poor nutrition as many children rely on school meals, confusion and stress, economic costs as working parents are more likely to miss work to look after children, strain on health systems if health workers with children have to stay home to look after children.

Health Care

Many countries in the world postponed non-urgent healthcare services to expand capacity for COVID-19 patients. In addition, many patients are choosing not to attend healthcare facilities, possibly through fear of becoming infected with COVID-19 or not wanting to burden healthcare.^{31,32} Delayed care can lead to the obvious direct health implications but also mental health impacts of stress and anxiety.

A modelling study from the University of Birmingham suggests that globally, over 28 million elective surgeries have been cancelled as a result of the COVID-19 pandemic (each extra week of disruption is associated with 2.4 million cancellations). Orthopaedic surgery is most commonly cancelled, but estimates suggest 38% of global cancer surgery has been postponed or cancelled. The backlog could take 45 weeks to clear.³³

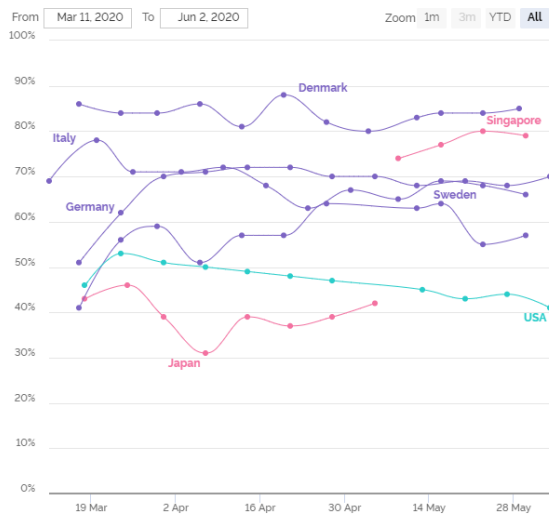
Additional impacts on delays in screening and chronic disease management are outlined in individual country journeys.

Public Opinion and Behaviour

The following YouGov graphs present survey results from countries in the report (where available).

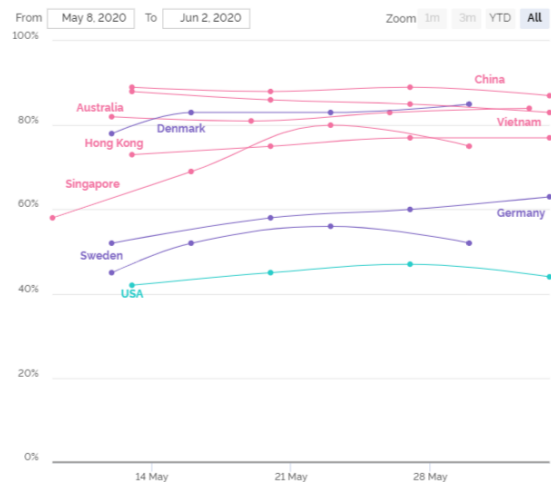
YouGov COVID-19 tracker: government handling

% of people in each country who think the government is handling the issue of coronavirus "very" or "somewhat" well



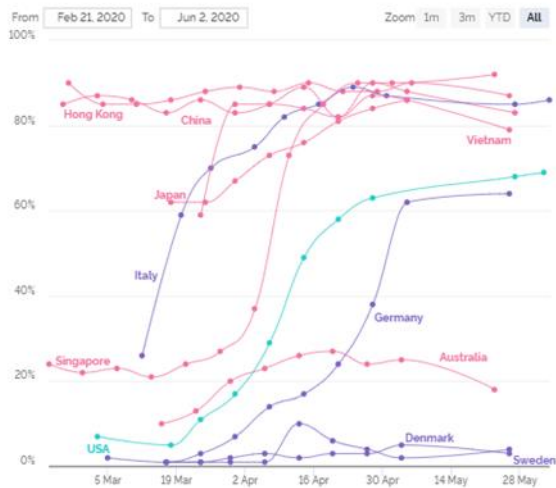
YouGov COVID-19 tracker: perceived national improvement

% of people in each country who think the coronavirus situation is getting better in their country



YouGov COVID-19 behaviour changes tracker: Wearing a face mask when in public places

% of people in each country who say they are: Wearing a face mask when in public places.



YouGov (2020)³⁴

Individual Country Journeys

Singapore

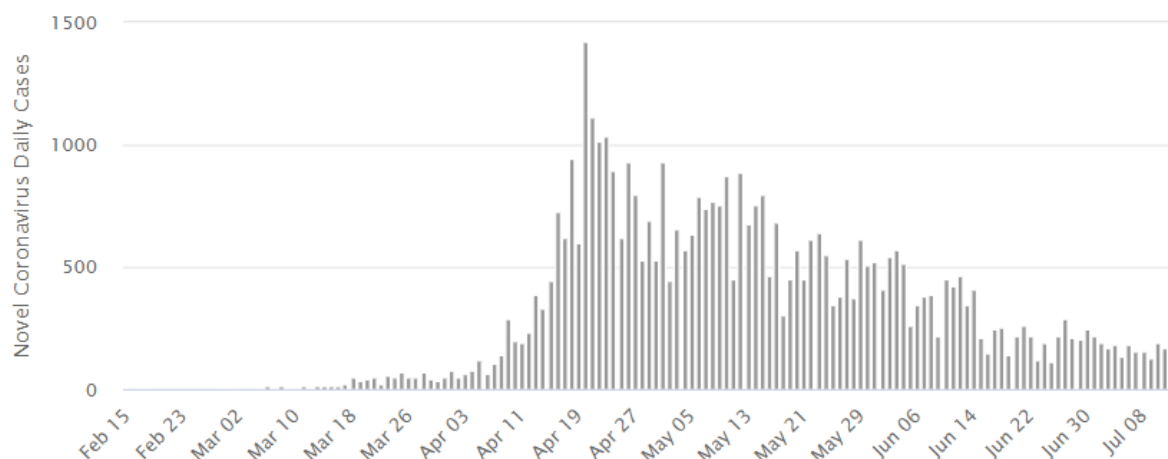
Background

Singapore is highly connected. Singapore's Changi Airport is a key air hub, with more than 68.3 million passengers each year.³⁵ Of the five million people who left Hubei before Chinese New Year, over 10,000 flew to Singapore.^{36,37} Some stayed while others went on to other destinations. It was no surprise when Singapore recorded its first case on January 23, a Chinese national from Wuhan.

Singapore's first rise in cases was a result of travellers returning from areas with established community spread (Europe, US and ASEAN countries). From April 9, reported cases surged due to identification of infections in the high-density migrant worker dormitories. There was also increasing numbers of unlinked cases in the community.

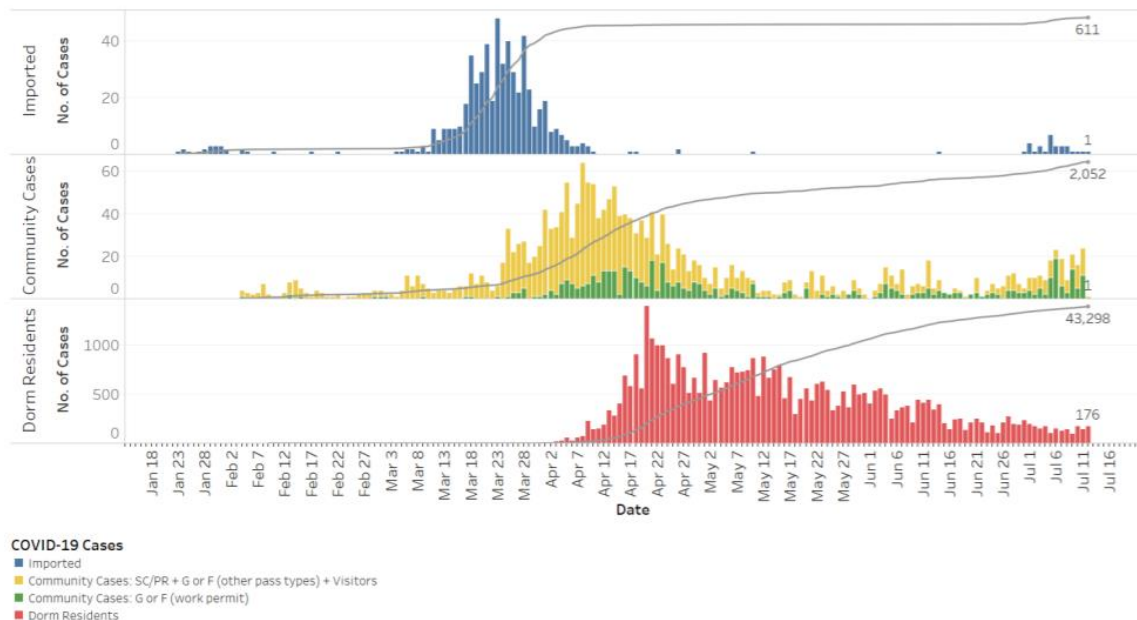
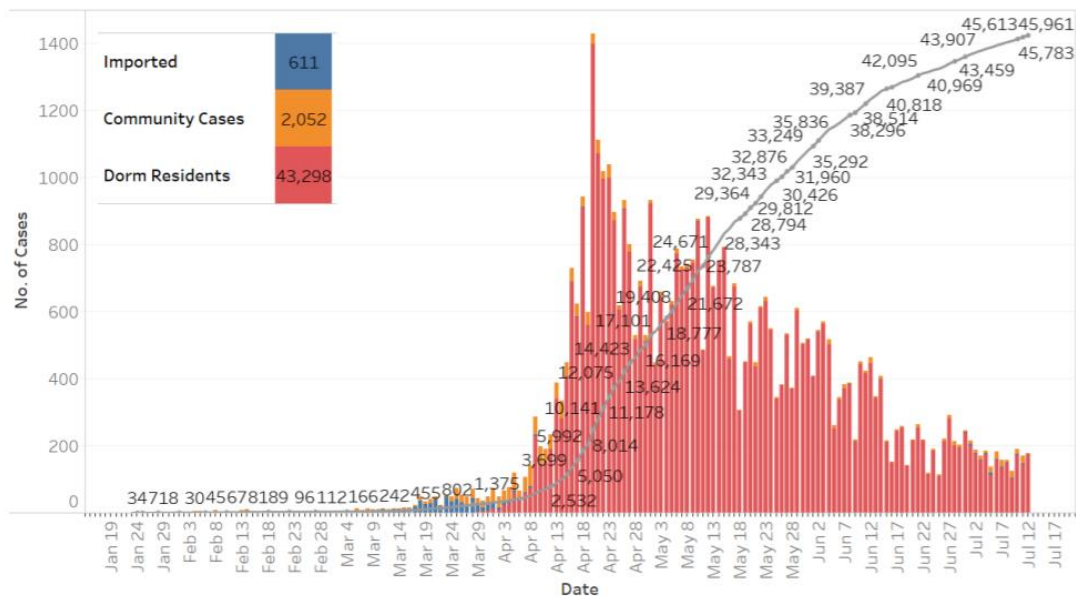
As at 13 July, Singapore had reported 45,961 confirmed cases and 26 deaths directly attributable to COVID-19 and 14 had tested positive for COVID-19 but were classified as deaths from other causes (eg death from a cerebral haemorrhage / coronary thrombosis).^{38,39,40,41,42} These were mainly migrant workers residing in dormitories.

The data released for the first quarter of 2020 found that excess deaths in Singapore was 5-9% higher in 2020 compared to the historical average of 5 years previously for the months of January to March.⁴³ Further analysis is being undertaken.



Worldometer (2020)

COVID-19 epidemic curve by Press Release Date of cases.⁴⁴



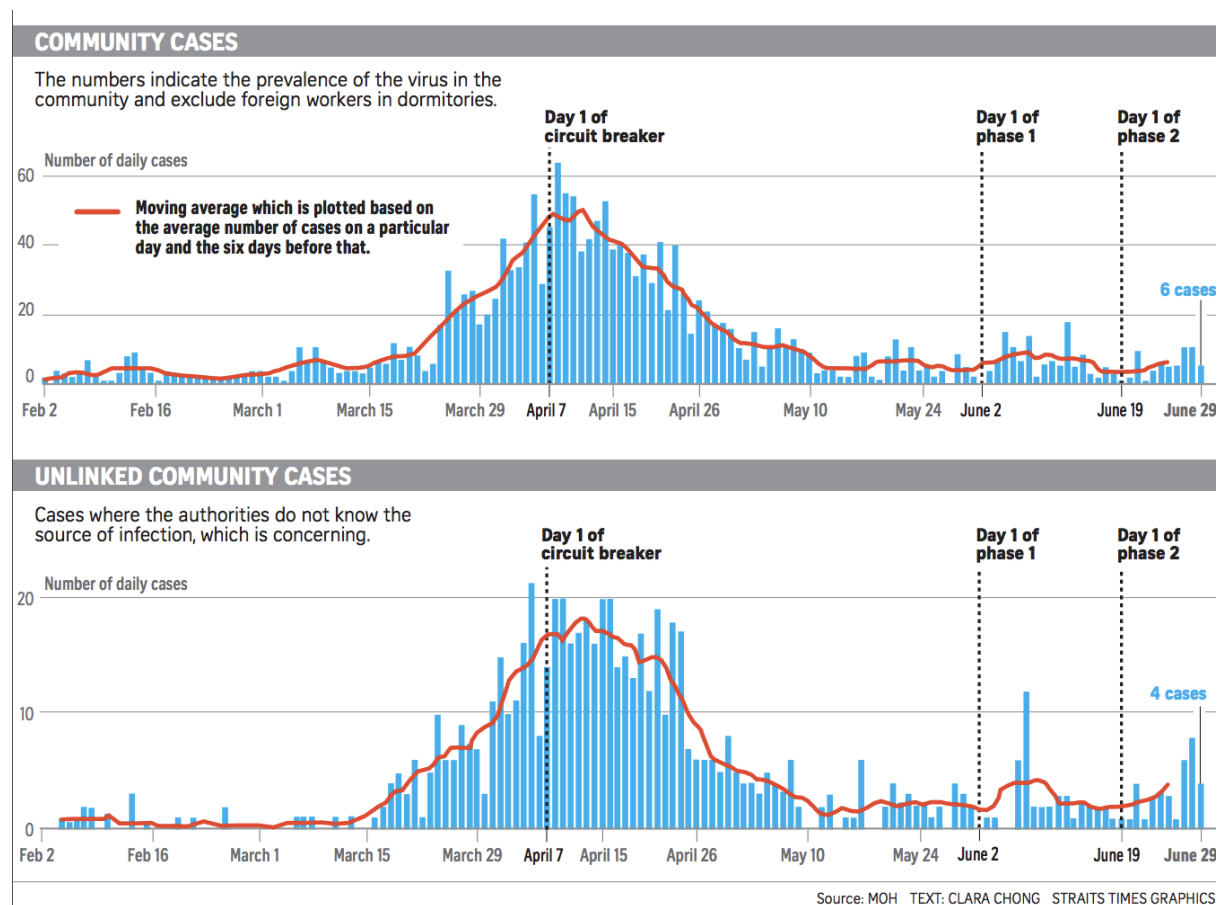
MOH (2020)⁴⁵

Cases can be a facet of testing; hospitalisations can be used as an indicator to view outbreak level. Hospitalisations were above 1000 from April through to May 19, it took approx. another 10 days to dip below 500 cases in the hospital at May 29. Through June and July cases in hospital were consistently around 200.

Summary of Cases by Status

Date	Currently Admitted in Hospitals	
	ICU	General Wards
6/29/2020	1	196
6/30/2020	1	214
7/1/2020	1	208
7/2/2020	1	200
7/3/2020	1	222
7/4/2020	2	202
7/5/2020	2	210
7/6/2020	2	206
7/7/2020	1	218
7/8/2020	1	213
7/9/2020	1	196
7/10/2020	1	202
7/11/2020	1	191
7/12/2020	1	181

MOH (2020)⁴⁶



Source: Straits Times (2020)⁴⁷

Singapore saw an increase in community cases 12 days into Phase 2 of reopening. “People need to be vigilant and cautious, despite a clear sense of ‘crisis fatigue’” said Professor Teo Yik Ying, dean of National University of Singapore’s Saw Swee Hock School of Public Health.⁴⁸

Mobility

Through April and May mobility data remained 60%-70% lower than baseline for retail and recreation, transit stations and workplaces.⁴⁹

Seroprevalence

Antibody testing of 1,100 of health workers conducted between February and early April 2020 found no antibodies. Studies from 774 blood samples taken as part of routine care found no antibodies as of the last two weeks of March 2020. Testing of a sample of 300 people who were close contacts of cases found 2.5% had antibodies.⁵⁰

Lockdown Summary

On 23 Jan, Singapore held its first multi-ministry task force meeting to provide leadership to the response to the COVID-19 situation.⁵¹

Early measures included:

- Temperature and travel screening at border points, schools, workplaces, health facilities, tourist attractions, religious places and events.
- Identification of possible cases at public healthcare facilities and Public Health Preparedness Clinics.
- Identification of potential cases at entry points, including swab test checkpoints for suspected cases at Changi airport with a 3 to 6 hour result turnaround.
- Contact tracing of cases and their contacts, mobilising Ministry of Health staff, the police and other partners.
- Quarantine Orders and Stay-Home Notices to isolate suspected carriers or the close contacts (violation of a SHN resulted in one case in the removal of visa status and barred re-entry).
- Travel declarations at schools and workplaces.
- Daily updates from the Ministry of Health and advisories across all sectors.
- Daily messages to the public from a Government WhatsApp group and constant messaging on hand washing and what to do if unwell.
- Parallel messaging through non-tech platforms (eg cartoons, print-media, posters).
- Rebuttal of fake news (in one case invoking the Protection from Online Falsehoods and Manipulation Act).
- Funding of research and development related to COVID-19.
- From mid-Feb businesses were encouraged to consider split-shift working, put in place safe distancing measures and increased cleaning and support working from home where possible.⁵² These were subsequently converted into formal measures through Mar.⁵³

After rises in cases from travellers returning from other countries at the end of Mar and early Apr, there were additional measures put in place: a ban on tourists and short-term visitors; 14-day self-quarantine for returning residents; workplace measures; closing pubs and


entertainment outlets; closing clubs for children; and enforcing social distancing in restaurants and shops. However, people were still free to go to shops and restaurants, and schools and transportation remain open.

The surge in cases in the migrant worker community alongside increasing unlinked community cases led to Singapore instigating a “circuit-breaker”. The April four week “circuit breaker” measures involved the closure of non-essential shops, workplaces and services, as well as the population staying home (only going out for food and exercising at parks at a safe distance).⁵⁴ Private social gatherings of any size, in homes or public spaces, were not permitted - first-time offenders may face a fine of up to \$10,000, jail of up to six months, or both. Subsequent offences carry a fine of up to \$20,000, jail of up to 12 months, or both.⁵⁵ Quarantine measures, testing and healthcare support were also put in place around migrant worker dormitories, due to increasing cases.^{56,57}

Due to continuing cases in the migrant worker dormitory communities the “circuit breaker” measures were extended for another month through May and then at the end of May most of the measures were extended for a further month to the end of June.


Exit Strategy

On 19 May 2020 the Multi-Ministry Taskforce announced that Singapore will ease measures in a three-phased approach.




S'pore's circuit breaker ends June 1

Singapore will enter 3 phases - safe reopening, safe transition and safe nation.



PHASE 1


1 From June 2, will take at least 4 weeks



- ✓ **Some businesses** will reopen with measures in place.
- ✓ **Households** can have 2 visitors a day - must be children and/or grandchildren from the same household.
- ✓ **Pri 6, Sec 4 and 5 students** to attend school daily. Other students alternate between home-based learning and school.
- ✓ **Pre-schools** will reopen fully by June 10. Student care centres will also resume.
- ✓ Places of **worship** to reopen for private worship only.
- ✓ **Marriage solemnisations** can take place in-person, with 10 people attending.

PHASE 2


2 Over a few months



- ✓ **F&B dine-in** will be allowed. **Retail outlets, gyms, fitness studios, tuition and enrichment centres** will reopen.
- ✓ **All students** will return to school.
- ✓ **Sports, recreation and outdoor facilities** will reopen, with safe management practices.

PHASE 3

3 S'pore enters a 'new normal' until a vaccine is available



- ✓ **Social, cultural, religious and business** gatherings or events would have resumed, with limited crowd sizes.

Straits Times (2020)⁵⁸

On 15 June, phase 2 was announced. Summarised below.

S'pore starts phase 2 of reopening

ST

Most activities can resume from June 19 when phase 2 of Singapore's Covid-19 reopening starts, with safe distancing rules in place:

What will be allowed



DINE-IN

- F&B dine-in can resume, but each table can sit only up to 5 people
- Safe distancing of at least 1m



SOCIAL GATHERINGS

- Gatherings of up to 5 people allowed
- Within the home, each household may receive up to 5 visitors



RETAIL OUTLETS

- Retail outlets can reopen. Malls and large outlets must prevent crowds or long queues



SCHOOLS

- Students to return to school daily from June 29



SPORTS FACILITIES & WELLNESS

- Sports, parks and other public facilities, such as gyms, to reopen. Same for facilities in condos and clubs
- Personal wellness services, such as spas, can resume



HEALTHCARE

- Services, including health screening and aesthetic procedures, can resume
- Visits allowed at nursing homes and elderly residential facilities



HOME-BASED SERVICES

- Tuition and enrichment lessons can resume, except for singing or voice training classes.

Tracking, tracing, testing

The TraceTogether App was launched on 20 March, to facilitate contact tracing after cases are reported. By 8 May, 25% of the population had downloaded the app (75% is needed for it to be effective).⁶⁰ From 12 May, businesses that were allowed to open (hairdressers, grocery stores and food outlets for take-away only) had to put in place the government's SafeEntry system. Customers either had their national ID scanned to enter and exit the premises or they registered by scanning a business-specific QR code on their mobile phones and access.⁶¹ Temperature screening was also undertaken.

On 5 June, it was announced that a wearable device ('token') for contact tracing may be issued to everyone in Singapore due to technical difficulties that had prevented TraceTogether from working well on iPhones.⁶² The introduction of portable contact tracing led to an online petition over privacy; more than 37,000 people signed by June 7.⁶³

TraceTogether tokens issued at the end of June to those without phones are able to support the tracing technology. Older people were prioritised for receipt of the tokens.⁶⁴ Vulnerable seniors, such as those living on their own, who have poor family support or who are physically frail and do not own or use digital devices, began receiving TraceTogether tokens from June 28.⁶⁵

COVID-19 tests ordered by the doctors at Singapore's polyclinics and clinics are fully subsidised by the government. Those returning from abroad who had left Singapore after 27 March 2020 were required to pay \$200 for a test near the end of their 14-day isolation.

As part of easing some measures, Singapore announced that it was ramping up testing capacity towards the goal of 40,000 tests a day. The three purposes of testing were stated as (a) to find those who are positive, (b) to conduct surveillance to understand the overall transmission landscape, and (c) to look for those who are negative and to allow them to go back to work. Testing will also be prioritised for nursing homes, front-line medical workers in hospitals and migrant workers (as they work and live in larger groups). Serological testing was also used to determine whether people had recovered from the infection.⁶⁶

As at 19 May, it was reported that over 281,000 tests on 191,000 unique individuals had been carried out since the start of the epidemic in Singapore (49,000 tests per million people).⁶⁷ In June, testing of contacts of cases also occurred to identify some asymptomatic cases.⁶⁸

As at June, there were close to 200 swab and send home clinics (flugowhere.gov.sg) and four screening centres strategically located across the island. Testing capacity in June was at around 13,000 a day, still with the aim to get to 40,000 in the future.⁶⁹

Since the start of the outbreak, testing was prioritised for certain age groups and those with underlying conditions. In June, testing was still being prioritised for certain groups as well as people diagnosed with acute respiratory infection when they visit the doctor, with priority given to: seniors above 65 years old, healthcare workers, and increased to include (from June) educational institutions and students who are aged 13 and older.⁷⁰

From 22 June, testing criteria was expanded to include people aged 45 and over attending primary care with an acute respiratory infection. Close contacts of confirmed cases will also be tested.⁷¹

On 22 June, Prof Leo Yee Sin, Executive Director of Singapore's National Centre for Infectious Diseases reflected that initially they had assumed that COVID-19 was like SARS and would mainly infect people from symptomatic individuals. If she could turn back time, they would quickly advise the public to take extra caution earlier and to contact trace earlier.

She also outlined that communication technology is more advanced since the SARS outbreak, hence communicating with experts worldwide becomes easier and makes research and decision making much faster.⁷²

Isolation

As at 21 May, all Singapore Citizens, Permanent Residents and Long Term Pass holders entering Singapore were required to serve a 14-day self-isolation at dedicated Stay-Home Notice (SHN) facilities (hotels) or in their own home.⁷³

By the end of Apr, there were 18,000 bed spaces for isolation and care needs, with another 23,000 planned – for those who test positive for the virus.⁷⁴

- Hospital isolation wards and dedicated COVID-19 intensive care facilities
- Community care isolation facilities for mild cases
- Community recovery facilities for people who remain well at the end of the 14th day after being diagnosed and who do not require further medical care
- Swab isolation facilities for people awaiting the result of a swab test, to prevent the potential spread of Covid-19 in the wider community
- Migrant worker dormitory isolation facilities.

Regional “bubbles” within Singapore are being considered to aid containment of future outbreaks.⁷⁵

Singapore citizens, permanent residents, and long-term pass holders were allowed to return in June after gaining approval from the government. Depending on the country they were returning from, the individual would either undertake the 14-day quarantine at their residence or in a hotel (at a cost to the individual of \$2000). Tests were required at the end of the quarantine (at \$200). Those getting tested are required to take their own private vehicle or pre-booked taxi, they are not allowed to take public transport.⁷⁶

Masks

From April 14 it became mandatory for everyone to wear a mask when they step out as part of stricter measures to curb the further spread of the coronavirus, with \$300 fines for those who do not wear a mask.⁷⁷ The government distributed reusable masks to the population several times. Masks are mandatory when outside, on public transport, taxis, and private hire cars, walking to or at markets, at all workplace premises, public places and gatherings.⁷⁸

In early June, both face mask and face shield were initially allowed after “circuit breaker”. This was later amended to only specific groups allowed to wear face shields in place of face masks (eg teachers, children below 12 years old of age, people with existing health conditions, people doing TV).⁷⁹

Prior to mask wearing being mandatory, just over 20% would wear a mask when in a public place, after April 14 this rose to 90%.⁸⁰

Public places and gatherings

From 19 June (73 days after the “circuit breaker” was imposed), groups of 5 could meet outside or 5 visitors were allowed in a home.⁸¹

From June 19, parks, sports and other public facilities, including stadiums, swimming pools, golf courses, playgrounds, bowling centres and fitness studios, reopened. This applied to similar facilities in private settings such as condominiums and clubs.⁸²

Singapore GE: Campaigning dos and don'ts

ST

The Elections Department has issued preliminary campaigning guidelines for the next election should it take place during phase 2 of the Covid-19 reopening.

1. No physical rallies

- Candidates can hold e-rally livestreams and other campaigning activities online
- They can use, if they wish, venues provided by Govt for candidates to livestream to their declared platforms



2. More airtime on national TV for parties & candidates

- Constituency political broadcast (**New**):
3 mins per SMC candidate; 12 or 15 mins for GRCs
- To be aired on MediaCorp Ch5
- This is in addition to the 2 party political broadcasts on 19 TV/radio channels



3. Walkabouts & door-to-door campaigning

- Allowed but no more than 5 people per group, no mixing between groups
- Each group should remain at least 1m apart from other groups
- Minimise physical contact, such as avoid shaking hands



4. No gathering of supporters

- Supporters should not gather at nomination centres or at assembly centres on Polling Day
- They can follow proceedings on TV/Internet



5. Perambulating vehicles

- Allowed for campaigning, but candidates cannot speak/livestream/broadcast music or videos
- No thank-you vehicular processions after Polling Day
- Banners & posters allowed



The 10 July election led to some long queues that slowed the voting process, thought to be due to the initial requirement to sanitize hands and then wear gloves. Polling hours were eventually extended from 8pm to 10pm so that all voters could cast their votes.⁸⁵

Libraries reopened on July 1 with shorter opening hours and capacity controls.⁸⁶

Indoor sports halls closed on 28 June to deep-clean after a positive case was reported to have played badminton at one site and required measures had not been followed. On reopening coloured wrist bands will be issued and worn by players to clearly identify individual groups.⁸⁷

Transport

Transport has continued throughout, with some reduction in service. Masks are required.

From 8 June, essential business travel between Singapore and China was permitted under a "fast lane" agreement. Travellers on both sides were exempt from rules that require everyone else to serve quarantine periods of up to 14 days. However, travellers must agree to be tested and bear the costs. If found to be infected they would be hospitalised and have to pay for their own treatment.⁸⁸

The strict border closure resulted in difficulties for pass holders returning to their homes in Singapore if they were outside of the country when the borders were closed.⁸⁹ No official figures have been released on how many people have been affected in this way due to travel restrictions. However, a private social media group called "Getting back home to SG" had about 6,000 members on 17 June 2020 and 8,500 members at the end of June.^{90, 91}

From June 17, residents and pass holders were allowed to self-quarantine for 14 days at their homes but only if returning from Australia, Brunei, Hong Kong, Japan, Macau, mainland China, New Zealand, South Korea, Taiwan and Vietnam (and had been in one of these countries for the last 14 consecutive days before their entry).⁹²

From 22 June, transits from Hong Kong, Chongqing, Guangzhou, Shanghai, Osaka and Tokyo were added to an approved list that already includes cities in Australia and New Zealand. Transfer permitted only between SIA group flights and not with those of other airlines.⁹³

Places of worship

From 2 Jun, places of worship reopened for private worship (individual prayer or up to 5 members of the same household). 5 households were allowed in the religious site, subject to adequate safe distancing measures put in place.⁹⁴

From 19 June, cemeteries opened for visiting. Safety measures were emphasised like mass and group size. From 19 June, 20 people were allowed to be present at weddings, cremations, burial services and wakes.⁹⁵

From 26 June, Muslims were able to return to most mosques for prayers, but limited to 50 people per session. Mosques provided two half-hour prayer sessions on Friday's, with half an hour interval to ensure safe crowd management. Without booking, they will not be allowed into mosques. Each person was allowed to book only one slot for Friday prayers every three weeks. Enhanced safe distancing management measures were also in place. Seniors age 60 and above and children below 12 were strongly discouraged from attending. Religious talks and lectures continued to be conducted online.⁹⁶

Business

Prior to “circuit breaker” business continuity plans and safe distancing measures were enforced. Allowing businesses to return to workplaces comes with similar measures that were in place in Mar with the addition of mask wearing and SafeEntry tracking.

Migrant workers were required to download FWMOMCare mobile app, and record their temperatures twice daily, and state if they had a cough, sore throat, runny nose, or shortness of breath. If the worker reported any symptoms a doctor was alerted and contacted the worker within 30 minutes to provide a teleconsultation. Workers were also required to have TraceTogether app.⁹⁷ SGDormBot (Chatbot) with artificial intelligence technology was implemented at six migrant worker dorms, to allow doctors to monitor migrant’s health in real time. The bot reminded residents to monitor their temperature, heart rate and oxygen level using their native language.⁹⁸

From 19 June food and beverage outlets and retail reopened with social distancing measures, masks and limited to groups of 5. Live music and television and video screenings were not allowed in food and beverage outlets, and liquor sales and consumption was prohibited after 10.30pm. Karaoke outlets, bars, nightclubs, cinemas, theatres as well as libraries, museums and other large cultural and entertainment venues remained closed at this time. All healthcare services reopened and visitors were allowed in nursing homes. Home tuition services (eg music) allowed from 19 June.⁹⁹

From 19 June (73 days after the “circuit breaker”) work from home was still the default where possible.

On the first weekend of retail reopening (June 20 and 21), Enterprise Singapore deployed more than 600 safe distancing ambassadors and enforcement officers at 95 shopping malls, covering more than 12,700 businesses.¹⁰⁰

Attractions including the Singapore Zoo, ArtScience Museum and Universal Studios were allowed to reopen from July 1.¹⁰¹

Staycations were allowed in hotels from early July with safe distancing measures, contact tracing and enhanced cleaning.¹⁰²

From July 13, cinemas reopened. Five people could sit together. However, different groups of five were required to be 1m apart and all mandated to wear masks if not eating or drinking.¹⁰³

Education

See diagram above. Prior to reopening pre-schools, 16,000 staff were tested; this detected 8 cases.¹⁰⁴ From June 2, year groups rotated in school and home-based learning.

From 29 June all school children could return to school.¹⁰⁵ Home Based Learning (HBL) is set to become routine, with schools setting aside several days every month for online learning.¹⁰⁶

Issues

There have been unexpected challenges, common to other countries. Most evident would be the panic buying of masks, groceries and commodities when Singapore raised its alert levels (DORSCON). There has also been a rescheduling of some of the normal healthcare delivery, and the consequent health costs for the rest of the patient population is unknown.

The main concern has centred around the migrant worker community. Singapore has around 1,400,000 migrant workers, of whom some 284,000 construction workers are in high density

accommodation such as dormitories (workers are mainly from India and Bangladesh).¹⁰⁷ As at 25 May, 93% of cases were from the migrant worker community.¹⁰⁸

There was an early case of a migrant worker with COVID-19 (case number 42), the 19 close contacts were isolated and tested, additional cleaning and temperature taking was also put in place. However, in hindsight, wider testing of the migrant worker communities may have identified the emerging outbreak in this community earlier.¹⁰⁹

“The government was really focused on fighting COVID-19 on two battlefronts: community transmission and imported cases, but it overlooked the vulnerabilities of this third front that’s now glaringly obvious to everyone” Jeremy Lim, co-director of global health at the National University of Singapore’s Saw Swee Hock School of Public Health.¹¹⁰

Singapore, from the beginning of the COVID-19 case reporting, has presented cases in terms of different groups – “imported”, “cases residing in dormitories”, “work pass holder”, “work permit holders”, “Singaporean/permanent resident”.¹¹¹ There has been comment around the segregation of the groups physically and in policy terms (particularly migrant workers in dormitories), promoting a sense of the “other”.¹¹² National Development Minister Lawrence Wong reportedly stated that in Singapore there are “two separate infections,” only one was circulating “in our own community.”¹¹³

In response to the outbreak, Singapore started building new worker dormitories to new standards - single beds with 1m spacing between (compared to bunk-beds now), a bathroom to 5 workers (15 currently), 15 sickbay spaces for every 1000 workers (1 currently).¹¹⁴

Gavin Yamey, Associate Director for Policy at the Duke Global Health Institute stated that “If we forget marginalised communities, if we forget the poor, the homeless, the incarcerated... we are going to continue to see outbreaks. This will continue to fuel our epidemic.”¹¹⁵

By the end of June, 87,000 migrant workers had been cleared to work - 241 dormitories, 21 blocks in larger dorm complexes and 14 purpose-built dormitories.¹¹⁶

Culture, Community and Youth Minister Grace Fu has stated that the pandemic situation has increased tensions between foreigners and locals, citing the incident of foreigners gathering outside on 16 May (images were widely circulated on social media) that led to a “visceral reaction” from locals. Senior Minister of State Janil Puthucheary also noted that racial fault lines and xenophobia are likely to be exacerbated as the economic situation worsens.¹¹⁷

Penalties for non-compliance with the rules are enforced. Social distancing infringements carry an instant \$300 fine, with the possibility of court if more egregious. For each charge of breaking COVID-19 regulations, there is the possibility of being jailed for up to six months, fined up to S\$10,000, or both. Foreigners who violate safe distancing rules may have their work passes revoked.

- As of 21 Mar, 89 work passes had been revoked for breaching entry approval and Stay-Home Notice (SHN) requirements.¹¹⁸
- In April, 24 foreign workers had work passes revoked and were deported and permanently banned from working in Singapore after gathering outside.¹¹⁹
- Jail sentences and fines for those breaking Stay at Home orders.¹²⁰
- On 3 June nine (mostly foreign) students were fined between S\$2,500 and S\$4,500 on Wednesday for gathering at an apartment.¹²¹
- On 16 May, six foreigners were charged with gathering outside on 16 May.¹²²

Businesses have also been subject to enforcement of the rules. Businesses reopened on June 2 and in the first week 58 fines were issued for failure to comply with rules on safe management (have employees work from home when possible, safe distancing of at least one metre at workplaces and storefronts, and sector-specific requirements).¹²³

Government leaks have also been prosecuted. Under the Official Secrets Act, an offence of wrongful communication of information carries a jail term of up to two years and a fine of up to S\$2,000. As at June 15, four people have been arrested for three different leaks of information (sharing daily numbers before official release, sharing a media release regarding school closures before official release, and sharing dates of possible phased reopening).¹²⁴

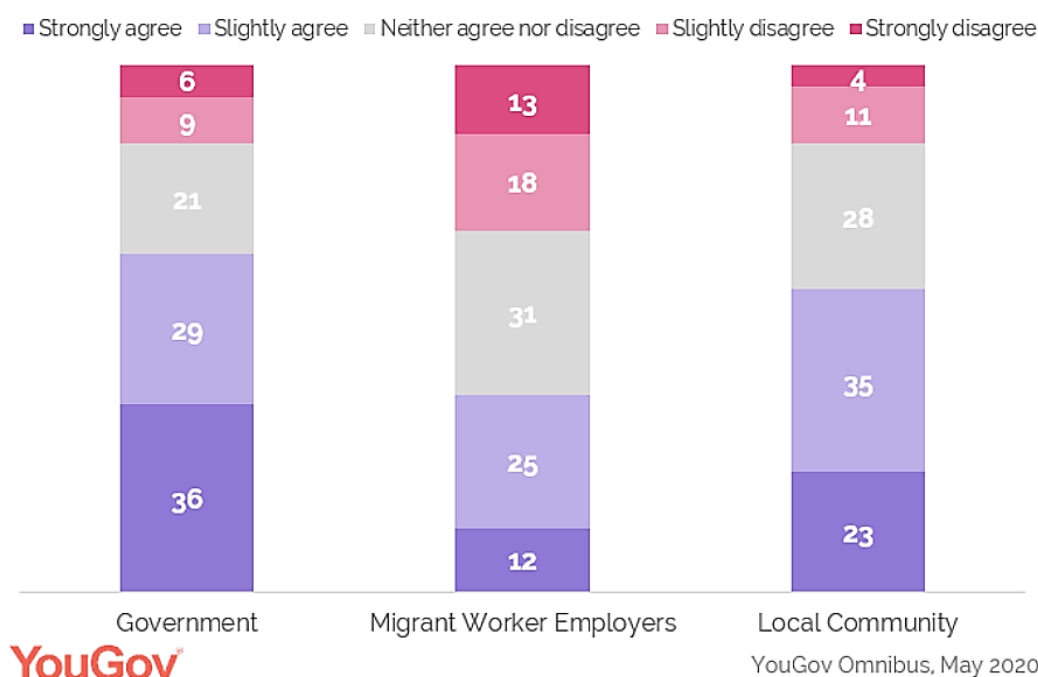
Public Opinion

In May, YouGov reported that 74% of Singaporeans felt that the government has handled COVID-19 well. 14% think the government has done very well and 60% think they have done fairly well. 17% think they have handled the issue fairly badly, and 6% think they have handled it very badly. The remaining 3% are undecided.¹²⁵

The outbreak of COVID-19 infections in the migrant worker dormitories highlighted the high-density, crowded and poor living conditions of low-wage foreign workers. In a YouGov poll, 87% of Singaporeans agree that migrant worker living conditions need to be more strictly regulated – with 60% strongly agreeing and 27% slightly agreeing. 65% of Singaporeans felt that government is doing enough for migrant workers during the epidemic. Older Singaporeans (aged 55 and above) are much more likely to be satisfied with government measures than younger Singaporeans (aged 18 to 24) (69% vs. 53%). 21% are undecided, and the remaining 14% felt that the government is not doing enough.¹²⁶

Government has responded best to migrant worker COVID-19 outbreak according to Singaporeans

The majority of COVID-19 cases in Singapore can be traced to migrant worker dormitories. To what extent do you agree with the statement: "The government / employers / local communities are doing enough for migrant workers during the COVID-19 situation."



Economic Impact

The IMF forecasted that Singapore's GDP would be minus 3.5% in 2020 and 3% in 2021.¹²⁷ At the end of May Singapore's Ministry of Trade and Industry forecast the Singapore economy will shrink by 7 to 4 per cent, worse than the 4 to 1 per cent decline predicted at the end of Mar.^{128,129} Job losses are forecast to be from 45,000 to 200,000 for 2020.¹³⁰

The government announced multiple multi-billion-dollar economic packages to reduce the impact to businesses and households from the pandemic. Unity, Resilience, Solidarity, and Fortitude Budgets amount to close to SG\$100 billion (around 20% GDP), much of which was drawn from national reserves.¹³¹

By June 30, 95,000 employers received \$450 million in wage credit payouts - the Government will co-fund 20% of qualifying wage increases to more than 800,000 Singaporean employees up to \$5,000 a month.¹³²

In June it was reported that the number of people working, excluding maids, fell by 25,600 in the three months to March 31 this year - the biggest quarterly contraction on record. This does not take into account those that have been under-employed during this time who have seen wages cut (eg taxi, food and beverage operators open for only take away).¹³³

Wider impacts

More families have sought counselling for marital conflicts and family violence during the "circuit breaker".¹³⁴ From April 7 to May 6, there were 476 police reports filed for offences associated with family violence, a 22% increase compared to the average.¹³⁵

Many hospital elective procedures and health screenings were postponed from Feb to free up capacity (eg aesthetic services, cataract surgery, joint replacement surgery), as was non-essential primary care and community nursing services. Some will restart from Jun.¹³⁶

Mental health support organisations have seen an increase in people seeking help. Surveys have also found that around a quarter were experiencing low moods and anxiety.¹³⁷

China

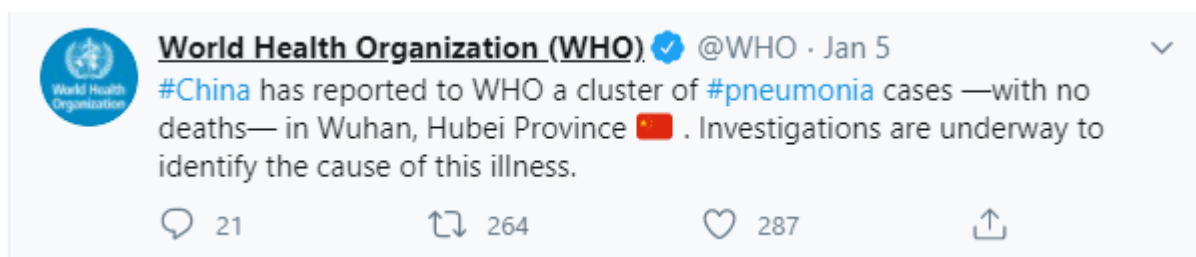
The following Country Journey provides a summary overview of China and then goes on to explore the journey of Wuhan, Suifenhe, Shanghai.

Background

In 2019 there was an emerging cluster of people with atypical pneumonia in Wuhan, Hubei Province.

On 30 Dec Dr Li Wenliang, 34, a doctor at a Wuhan hospital, privately messaged a group of doctors highlighting concern around a virus that seemed similar to SARS, this message was then shared more widely.^{138,139}

Returning back to 31 Dec 2019, Wuhan Municipal Health Commission reported the cluster of cases of pneumonia to the WHO. A novel coronavirus was eventually identified (it was not until 11 Feb that the virus was officially named by the WHO – the virus is severe acute respiratory syndrome coronavirus 2 “SARS-CoV-2” and causes the coronavirus disease “COVID-19”). On 1 Jan 2020, WHO set up an Incident Management Support Team, putting the organisation on an emergency footing to focus on dealing with the outbreak. On 4 Jan 2020, WHO reported on social media that there was a cluster of pneumonia cases in Wuhan.¹⁴⁰



On 10 Jan, the first death and 41 confirmed cases of the novel COVID-19 viral infections were reported in China.¹⁴¹

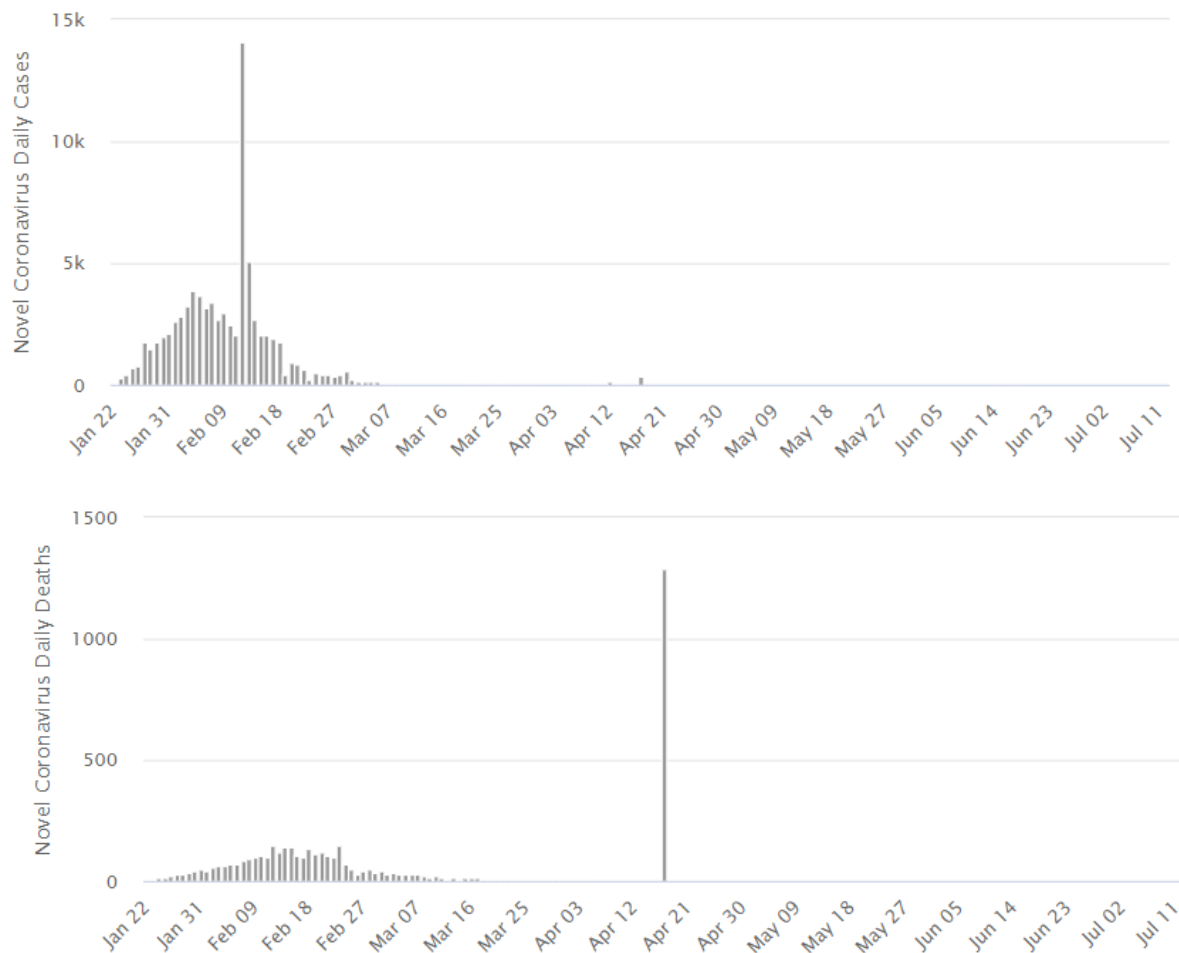
On 11-12 Jan, China publicly shared the genetic sequence of COVID-19.¹⁴²

On 20-21 Jan, WHO experts from its China and Western Pacific regional offices visited Wuhan. 22 Jan, WHO issued a statement that there was evidence of human-to-human transmission, but that more investigation was needed to understand the full extent of transmission.¹⁴³

By 20 Feb, total of 75,465 confirmed cases had been reported in China, most in Hubei province.¹⁴⁴

During January and February, case reporting in China followed the pattern outlined in the graph, predictable rises and declines.

As at June 29, China had reported 83,512 cases and 4,634 deaths.



Worldometer (2020)

Categorisation of cases in China changed several times, some were diagnosed with CT scans early on, this changed to only laboratory confirmed cases being added to the case counts.¹⁴⁵ Similarly, there were changes in classification around symptomatic and asymptomatic cases. Data transparency from China was identified as a concern by both academics and political leaders across the globe.^{146,147}

On 17 Apr, Wuhan increased its death count from COVID-19 by 50%, adding 1,290 fatalities. Stating that these were deaths that occurred outside of hospitals.¹⁴⁸

Lockdown

On 23 Jan 2020, a lockdown in Wuhan and other cities in Hubei province was announced. Wuhan was the first city put in lockdown in China, followed quickly by other cities and regions. During the full lockdown, all residents were not allowed to leave their homes. Daily amenities and food were delivered to the doorstep by district council members.¹⁴⁹

From 28 Mar 2020, China closed its borders to non-Chinese citizens. China initially allowed nationals to return, this was mainly through the land border with Russia as flights were restricted. However, this resulted in an influx of COVID-19 cases at the borders and the hospital systems becoming reportedly overwhelmed. The land border to Russia was closed on 7 Apr.¹⁵⁰

16-24 Feb there was a WHO-China Joint mission, which included experts from Canada, Germany, Japan, Nigeria, Republic of Korea, Russia, Singapore and the US. The Joint

Mission report outlined the knowledge to date around the virus and also praised China's response.¹⁵¹ The report drew four major conclusions:

1. "In the face of a previously unknown virus, China has rolled out perhaps the most ambitious, agile and aggressive disease containment effort in history. The strategy that underpinned this containment effort was initially a national approach that promoted universal temperature monitoring, masking, and hand washing. However, as the outbreak evolved, and knowledge was gained, a science and risk-based approach was taken to tailor implementation. Specific containment measures were adjusted to the provincial, county and even community context, the capacity of the setting, and the nature of novel coronavirus transmission there."
2. "Achieving China's exceptional coverage with and adherence to these containment measures has only been possible due to the deep commitment of the Chinese people to collective action in the face of this common threat. At a community level this is reflected in the remarkable solidarity of provinces and cities in support of the most vulnerable populations and communities. Despite ongoing outbreaks in their own areas, Governors and Mayors have continued to send thousands of health care workers and tons of vital PPE supplies into Hubei province and Wuhan city."
3. "China's bold approach to contain the rapid spread of this new respiratory pathogen has changed the course of a rapidly escalating and deadly epidemic. A particularly compelling statistic is that on the first day of the advance team's work there were 2478 newly confirmed cases of COVID-19 reported in China. Two weeks later, on the final day of this Mission, China reported 409 newly confirmed cases. This decline in COVID-19 cases across China is real."
4. "China is already, and rightfully, working to bolster its economy, reopen its schools and return to a more normal semblance of its society, even as it works to contain the remaining chains of COVID-19 transmission. Appropriately, a science-based, risk informed and phased approach is being taken, with a clear recognition and readiness of the need to immediately react to any new COVID-19 cases or clusters as key elements of the containment strategy are lifted."

In China, the lockdown of Wuhan was the most extreme in terms of scale and scope. China later went on to shut down parts of other cities in a more tailored approach as cases emerged (eg in Beijing in June).

In Apr there were a surge in cases in Suifenhe, the city close to the Russia-China border due to travellers returning from Russia. As of 13 Apr, Suifenhe reported 322 imported cases, out of a total of 872 cases and 13 deaths.^{152,153} This led to containment measures being put in place.

In Jun, a cluster of cases emerged in Fengtai, Beijing, that had also spread to neighbouring areas. Fengtai Qu was categorised as a high-risk area and nearby Xicheng Qu and other areas as medium-risk.¹⁵⁴

北京 Beijing

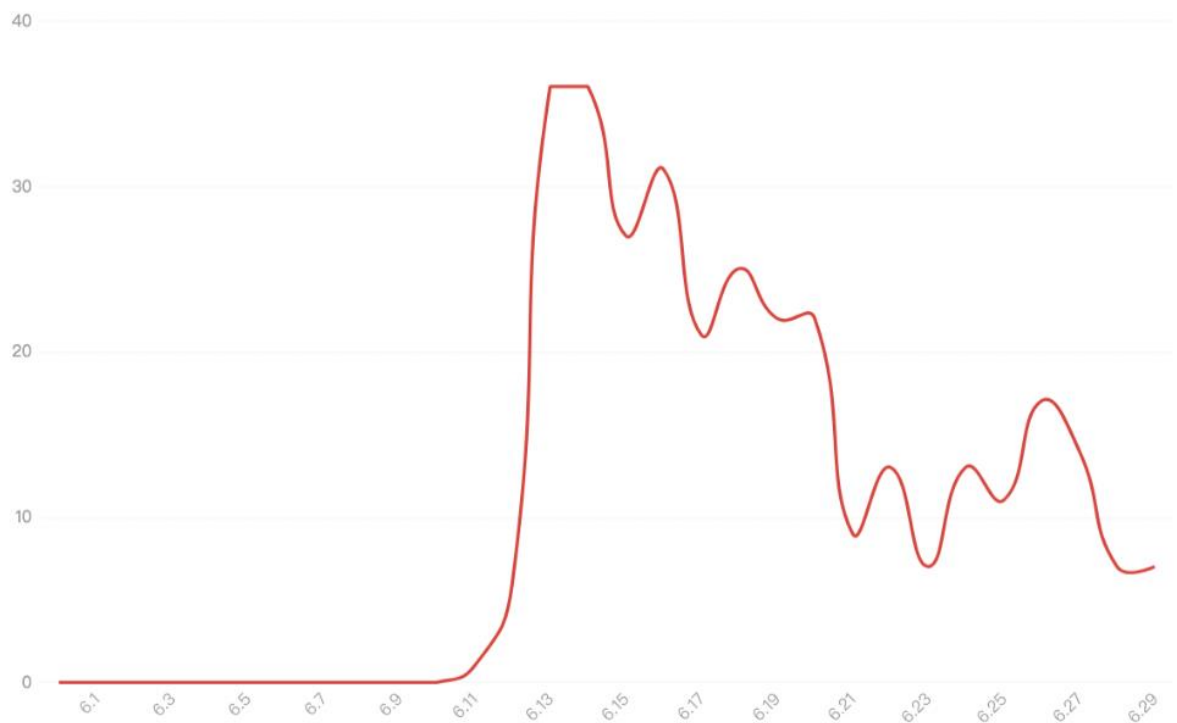
更新至 2020.06.30 23:26

📄 数据说明

Current Cases 现有确诊	Total Cases 累计确诊	Total Recovered 累计治愈	Total Deaths 累计死亡
323 昨日+6	919 昨日+7	587 昨日+1	9 昨日+0

北京 新增确诊趋势 Beijing: No. of new Cases

单位: 例



Baidu (2020) ¹⁵⁵

On 16 Jun Beijing restricted movement in 30 housing estates where cases had been found, ordered all schools in the area to close, entertainment outlets to close, people to work from home or stagger shifts and required that people leaving the city must be tested for the virus. Initial reports suggested cases were linked to food markets, eleven were shut and almost 300 others deep cleaned.^{156,157} On Jun 17, it was reported that cases from Beijing were linked to cases in other provinces (Zhejiang, Hebei, Sichuan, Liaoning).¹⁵⁸

China believes that the virus strain from Beijing is one from Europe or US.¹⁵⁹ China initially raised concern that the virus may have come from contaminated frozen fish (salmon from Norway) and halted imports.¹⁶⁰ WHO stated that the suggestion infections were caused by the importing or packaging of salmon was only a "hypothesis" that needs to be explored.¹⁶¹

On 19 June the Chief Epidemiologist reported that Beijing has controlled the epidemic as the city has seen a decline in confirmed cases. Research and sampling have been conducted at the market, which showed that infected seafood vendors outnumbered vendors with positive results in beef, mutton and other sections. Those seafood vendors tend to show COVID-19 symptoms earlier than other workers. The seafood section was also found to be more contaminated by the virus.¹⁶²

June 19, Dongcheng district required all graduating students in junior and senior high schools to get tested before they can take the entrance exams.¹⁶³

June 19, security inspection stations were set up on the city's highway toll booths, giving departure permission only to travellers with recent negative test reports.¹⁶⁴

On 22 June, China announced a nationwide campaign to inspect all fresh products coming from "high-risk countries". This came after closing a Pepsi plant and banning some chicken imports from the US, stating cases had been found linked to these localities.¹⁶⁵

On June 28 it was reported that Anxin county, 150 kilometres from Beijing, will be "fully enclosed and controlled", with the same strict measures as were imposed in Wuhan. Businesses in Anxin county had supplied freshwater fish to the Beijing food market.¹⁶⁶

By 11 July, people could enter and leave the capital freely without being tested for the virus if they were from low risk areas. At this time all of the country's medium and high-risk areas were in Beijing, so people outside from Beijing could freely enter the capital.¹⁶⁷

Exit Strategy

The mantra, "resuming work, resuming production", overarched the reopening approach. However, there are micro-policies in areas of China and also an individual's own restrictions are based on their individual risk.¹⁶⁸

As with many countries, China is developing a vaccine to support its exit strategy. Ad5-nCoV was developed by Academy of Military Medical Sciences and CanSino Biologics and at the end of June was authorised for use for the military. CanSino said that candidates had been through 2 phases of clinical trials and indicated it was 'safe' and there was 'relatively high' immune response to the antigen.¹⁶⁹

Tracking, tracing, testing and isolation

The Alipay Health Code is a health monitoring and QR colour code system that generates individualised QR codes in three colour codes of green, yellow or red. The codes are refreshed daily based on an individual's current location, travel history, basic health information, and the individual ticking a box to indicate if they have been in contact with an outpatient or anyone hospitalised in the last 14 days.^{170,171} QR colour codes are refreshed daily.¹⁷² Residents who want to go outside, to use public transport or to enter public spaces have to download a QR code or get a special pass to prove they are healthy (green code).¹⁷³ People may lose their green code if they went somewhere that a confirmed case had also visited and then face controls on their movement.¹⁷⁴

China's National Health Commission launched a WeChat mini program for citizens to see the infection risk level of an area. The program also allows users to check if they used the same public transport as the confirmed cases during the last two weeks. Like the QR code system, "green" are low-risk areas, "yellow" are medium-risk areas, and "red" are high-risk areas. Risk levels are assessed based on the number of new cases. This system affects the colour code given to individuals.¹⁷⁵

- Low-risk areas – areas with no confirmed cases or no new confirmed cases for 14 consecutive days.
- Medium-risk areas – those with new confirmed cases within 14 days, but the total new cases are no more than 50; or with cumulatively more than 50 confirmed cases, but no cluster epidemic within 14 days.
- High-risk areas –those where the cumulative number of confirmed cases have exceeded 50 cases, and a cluster epidemic was recorded within the last 14 days.

Areas where cases emerge are subjected to mass testing efforts. In May and June mass testing was carried out on Wuhan, Mudanjiang and Ezhou.¹⁷⁶ Doctors, nurses and healthcare staff also get tested.¹⁷⁷

Although restrictions are easing, many provinces and cities still have in place community 'close-off' style management which means: ¹⁷⁸

- A reduction of exit/entry access to the community.

- Access control of visitors and visiting vehicles: ID check/registration, temperature measurement at gate, delivery service is to be picked up at the gate of community etc.
- If there are confirmed cases in a certain community, there might be a closure of certain units/areas for quarantine depending on the severity of the local outbreak.
- Isolation of people with mild symptoms in centres instead of their homes.¹⁷⁹

In high-density accommodations (eg worker dorms, prisons, nursing homes) new joiners have to undergo 14 days quarantine and COVID-19 testing. Visitors are encouraged to tele-visit or practice contactless visiting.¹⁸⁰

All arriving international passengers are tested to screen for the coronavirus, expanding a programme that previously only applied to those coming from heavily affected countries.¹⁸¹ From 28 Mar, all inbound travellers undergo 14-days strict quarantine at designated facilities or at home. COVID-19 testing is reported to be undertaken of travellers.^{182,183}

Entrances to hospitals are split into different sections (Triage and Fever clinics) with strict management of visitors.¹⁸⁴

China had a mass testing approach to areas with confirmed cases. For example, testing all of Wuhan in May.¹⁸⁵ Also mass testing in Beijing in June in response to 67 cases identified.¹⁸⁶

In June Beijing increased testing capacity to 300,000 tests per day compared with 40,000 in March. Beijing took samples from 2.95 million people between June 12 and June 22.¹⁸⁷

Beijing deployed almost 7,000 medical staff and volunteers. However, in June laboratories struggled to keep up with processing the samples, creating backlogs, with results taking as long as 10 days to be returned. The government has advised residents to “be rational” about tests, saying that only those from high-risk areas or who are planning to leave the city need to be swabbed.¹⁸⁸

Masks

China published guidelines on 17 Mar, stating that masks should be worn in crowded places, such as offices, shopping malls, restaurants, meeting rooms and workshops, lifts and public transport. Also, that people should wear a mask and keep a spare mask (surgical mask for one-time use) and wear it when in higher-risk situations and in close contact with others (less than 1 meter). Those with family in quarantine are also advised to wear masks in the home.¹⁸⁹

Though May mask wearing in public places was around 80%.¹⁹⁰

Sudden deaths from wearing masks during exercise have been reported: three students (from across China) have died wearing masks during running and sports through breathing difficulty which lead to hypoxia.¹⁹¹ In May a man in Wuhan also died from exercising in the park wearing a mask; doctors have advised not to wear masks when exercising.¹⁹²

Public places and gatherings

Many cities in China have strict restrictions against social gatherings.¹⁹³

Transport

Those who do not wear masks are not allowed to take the train. All network operation stations will be implementing “temperature measurement” stations at the entrance. Only people with normal temperature are allowed to enter the station.¹⁹⁴

Travel restrictions between regions were eased based on risk assessment.

From 8 June, business travellers between Singapore and China were exempted from serving a quarantine period of 14 days. However, among other conditions, travellers must agree to be tested and bear the cost. If found to be infected upon landing in Singapore or China, they will be hospitalised and will pay for their own treatment. Provinces in the initial agreement were limited to - Shanghai, Tianjin, Chongqing, Guangdong, Jiangsu, Zhejiang.¹⁹⁵

China had an airline “reward” or “curb” approach. The reward was that if no passengers in their flight test positive for 3 consecutive weeks, they get to increase their flight frequency from 1 flight per week to 2 flights to mainland China, following the passenger density requirements per flight. If the total number of passengers in one flight tested positive is above 5, the airline had to stop their flight to mainland China for 1 week. If the number reaches above 10 for 1 flight, the airline had to stop their flights to mainland China for 4 weeks.¹⁹⁶

Places of worship

Most places of worship moved to online services.

Business

As businesses returned to work, they instituted new practices with the aim of preventing a second wave of infections. 98.6% of large companies and 76% of medium and small companies had reopened by May 2020. Measures include capping the number of people in restaurants and public places and limiting the number of workers on site.¹⁹⁷

Education

Schools returned and provinces with low numbers of cases could opt not to wear masks in school. Schools are required to have a part-time or full-time health worker attached.¹⁹⁸

There was concern that case numbers increased in late March due to travellers returning from other countries,¹⁹⁹ which reportedly reduced after China put in place restrictions on entry and quarantine measures.²⁰⁰

Issues

One of the early issues was around freedom of speech. On 30 Dec Dr Li Wenliang, 34, a doctor at a Wuhan hospital, privately messaged a group of doctors highlighting concern around a virus that seemed similar to SARS, this message was then shared more widely. He and seven others were summoned to the Public Security Bureau where he signed a letter stating that he had been "making false comments" that had "severely disturbed the social order". Dr Li returned to work and contracted the virus on 8 Jan. On 31 Jan, he published his experience with the letter on social media, which was then widely spread on social media. On 4 Feb, the Chinese Supreme People's Court said that he and others should not have been punished. Dr Li subsequently died on 7 Feb. Dr Li's death triggered widespread demands for freedom of speech the hashtag #wewantfreedomofspeech gained over 2 million views and over 5,500 posts within 5 hours (before being censored).^{201,202}

It has been reported that the first case of someone suffering from COVID-19 can be traced back to Nov 17, although it is possible that there were earlier cases.²⁰³ The timeframe of the emergence of COVID-19 has been debated. In June 2020, a paper from Harvard speculated the virus may have been spreading as early as August 2019. Satellite imagery of hospital parking lots and search engine queries such as ‘cough and diarrhoea’ were analysed to

suggest this date point.²⁰⁴ However, China dismissed the findings, stating it was based on superficial observations.²⁰⁵

The exact origin of the virus is unknown and is a focus of debate.²⁰⁶ There is a hypothesis that the source was a research facility in Wuhan that had been carrying out research on bat coronaviruses, China refutes this.^{207,208} On Apr 29, Australian Prime Minister, Scott Morrison, called for an independent investigation into the origin of the novel coronavirus, stating that “it would seem entirely reasonable and sensible that the world would want to have an independent assessment of how this all occurred, so we can learn the lessons and prevent it from happening again,” this angered China.²⁰⁹ On May 18, at a World Health Assembly gathering, over 120 countries called for an independent investigation into where the virus came from and how it started its initial spread in China. President Xi of China reversed his previous opposition and agreed to support the WHO investigating.²¹⁰

The role of the WHO in the pandemic (particularly the early phase) and its relationship with China has also been a point of contention. With some, such as President Trump, stating that the WHO was “China-centric” and “a puppet of China”, that the WHO “gave us a lot of very bad advice, terrible advice” and were “wrong so much and always on the side of China”.²¹¹

There have also been differing views regarding the long-term strategy of the suppression and elimination strategy in China. That the virus will simply resurface once lockdown measures are eased and borders reopen. “There's no question they suppressed the outbreak,” but once the restrictions are lifted, “it'll come roaring right back,” Mike Osterholm, Center for Infectious Disease Research and Policy, University of Minnesota. There have also been concerns over human rights regarding the strict lockdown measures and use of private data.²¹²

Another key issue is China disinformation and censorship, identified as key risks by an EU special report in May.²¹³



Direct report content:

- “In line with our previous analysis, China’s general aim of controlling the narrative on COVID-19 and deflecting any criticism of the country is still present. China – “having made sacrifices to buy time for the rest of the world” – is portrayed as a responsible and transparent actor in the pandemic and a model for other countries to follow. In parallel, where established facts or prevailing narratives could be seen as unfavourable to China or could support criticism of Chinese authorities there seems to be the effort of creating doubt in relation to those. For example, creating doubts about China’s role in the COVID-19 outbreak and countering international calls for an independent inquiry into the origins of the outbreak of the virus in China. At the same time, there has been a shift towards more directly challenging and mocking the US administration and its response to the pandemic. China’s state-run media has been implying a US cover-up and demanding answers from the country.”
- “Freedom House has stated in their overview of Chinese activities that “since March, coordinated and covert attempts by China-linked actors to manipulate information—particularly regarding COVID-19” have been detected in a number of countries, with content often delivered in local languages. The analysis also highlights a departure from Beijing’s more traditional model of positive propaganda combined with suppression of criticism. That expanding nature of the Chinese influence toolbox – including a more confrontational tone and “Russian-style disinformation tactics” – has been also noted by other analysts and illustrated by various cases mentioned in our current and previous reports.”

- “Looking at China, there are media reports of strengthening suppression of information about China’s handling of the COVID-19 outbreak. An increasingly strong enforcement of internet censorship goes beyond merely blocking or deleting unwanted information from online platforms and includes intimidation, detainment and other real world reprisals against internet users by security officials. Concerning China’s domestic media, Reporters Without Borders (RSF) has stated that “Beijing has used the crisis to further tighten its control of the media, banning the publication of any reports that question how it has been managed. This has been made easier since state and privately-owned media organizations are all strictly controlled by the Communist Party”. China is ranked 177th out of 180 countries in RSF’s 2020 World Press Freedom index.”
- “19 foreign journalists have been expelled or forced to leave China in the past 12 months”, the majority of them during the COVID-19 pandemic. In the case of three Wall Street Journal reporters, COVID-19 related coverage was invoked as the justification for the expulsion by the Chinese authorities. Restrictions on foreign correspondents limit the availability of independent information that could be useful in understanding and assessing the measures taken in bringing the outbreak under control in the first country severely affected. Expulsions of foreign journalists is, however, a long-term the issue that goes beyond the COVID-19 crisis. The Foreign Correspondents’ Club of China (FCCC) annual survey for 2019 also found that “Chinese authorities increasingly use the threat of expulsion and visa denial to retaliate and warn against critical foreign coverage; summon journalists to meetings with officials; and harass Chinese citizens who work for the foreign press.”

The pandemic has also triggered geo-political incidents. For example, with Australia over calls to investigate the origin of the virus, with the US over the role of the WHO and linked to wider trade wars.

There were also tensions that developed on the Himalayan border area between India and China, which resulted in a clash with fatalities on both sides.²¹⁴ However this may not be associated with the pandemic as tensions have existed previously.

Public Opinion

Throughout May public opinion has been just under 90% in support of the government’s handling of the situation.²¹⁵

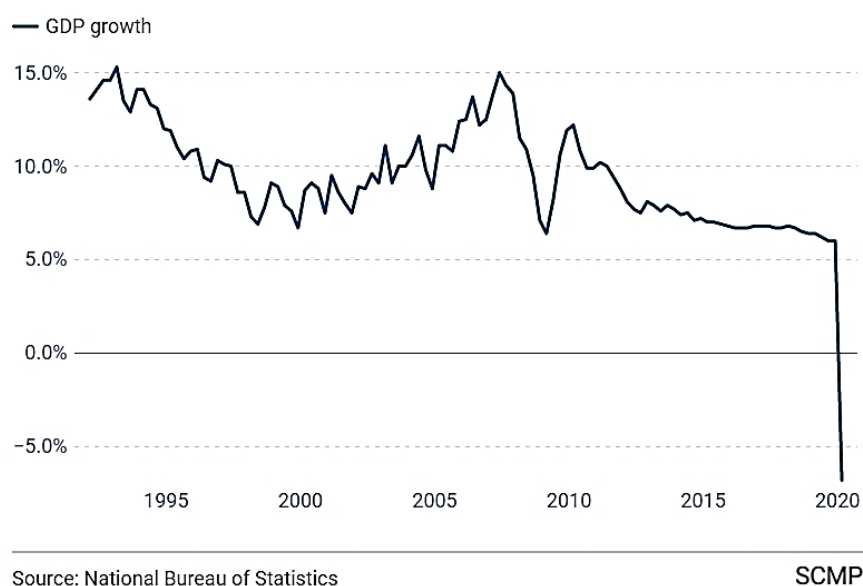
Economic Impact

On 17 Apr, it was reported that China’s economy shrank 6.8% in the three first months of 2020, the country’s first such contraction on record.²¹⁶

The International Monetary Fund estimated in April that China’s economic growth rate could be around 1.2 per cent in 2020.²¹⁷

China Development Bank provided 360 billion yuan (US\$50.4 billion) for the Greater Bay Area (mega city cluster of nine southern mainland cities, Hong Kong and Macao).²¹⁸ On May 28, President Xi announced a 4 trillion yuan (US\$559 billion) financial rescue plan, the largest in its history.²¹⁹

China's GDP growth, quarterly



Wider impacts

Increases in divorces and domestic violence have been concerns across all countries. Shanghai-based publication Sixth Tone reported that police in one county along the Yangtze River in central Hubei province, near where the pandemic began in Wuhan, received 162 reports of domestic violence in February—three times that of the year before.²²⁰ There have also been reports of increases in couples seeking divorces after the early phase of the pandemic.²²¹

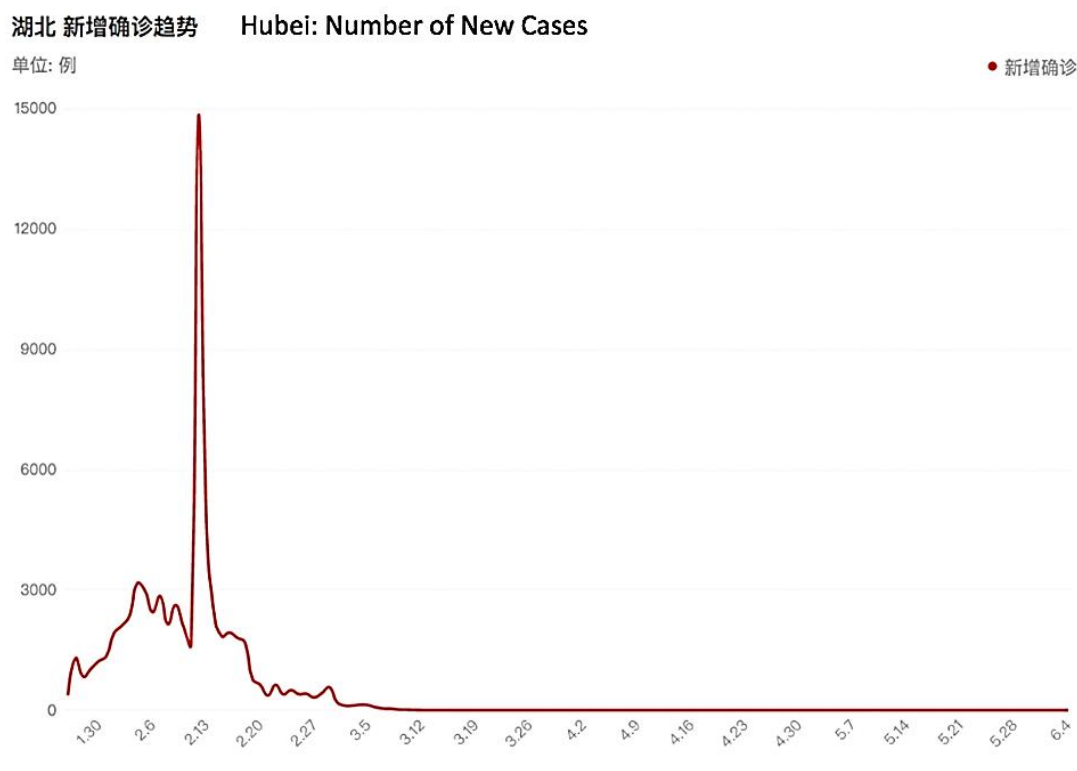
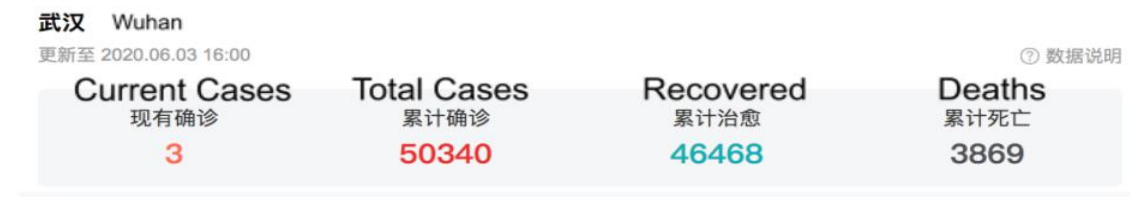
Wuhan, Hubei, China

Background

In Dec 2019 there was an emerging cluster of people with atypical pneumonia in Wuhan, Hubei Province, who would later be identified as COVID-19 infections. On 10 Jan, the first death and 41 confirmed cases of the novel COVID-19 viral infections were reported.

By 16 Apr 2020, there were 50,333 reported cases and 3,869 deaths; however, doubts around the data accuracy and case definitions have been expressed.^{222,223} On 10 May, Wuhan reported its first case of COVID-19 for a month, a 89 year old male, and several of his family members and community were also reported to be asymptomatic.²²⁴

As at end of May 2020, Wuhan accounts for the majority of the 4,634 deaths and 83,022 infections reported in mainland China.^{225,226}



Baidu (2020)²²⁷

Cases rose from Jan to mid-Feb and then declined through Feb and early Mar.

Mobility

Research suggests that the lockdown of Wuhan reduced inflow into Wuhan by 76.64%, outflows from Wuhan by 56.35%, and within-Wuhan movements by 54.15%.²²⁸

Data on Wuhan mobility levels at the end of May identified hotspots as the business districts, railway stations, airport, waterfront area, and tourist Attractions, suggesting lockdown measures are eased.²²⁹

Seroprevalence

As at 10 April, reportedly 10% of the population had antibodies.²³⁰

A small sampling study in China found seropositivity in Wuhan varied between 3.2% and 3.8% in different sub-cohorts (testing was between 9 Mar - 10 Apr).²³¹

Lockdown Summary

On 23 Jan 2020, a lockdown in Wuhan and other cities in Hubei province was announced.²³²

Exit Strategy

Towards the end of March Wuhan gradually restarted transport and some businesses.

After Wuhan reported its first full week with no new infections, shopping malls were re-opened. Some people in "epidemic-free" residential compounds were allowed to leave their homes for two hours.²³³ Communities are classified as "epidemic-free" if a residential compound has had no confirmed coronavirus cases for at least 14 days, and no suspected cases or residents who have had close contact with a confirmed case.

Suggesting case numbers were low, on 20 Mar, 43 hospitals in Wuhan resumed normal hospital services. 20,000 consultations and 18,000 hospital beds are opened back up.²³⁴

Wuhan gradually moved out of total lockdown officially at midnight on 8 Apr (after 76 days of lockdown), although schools and some other sectors remained shut.²³⁵ On 2 June, Hubei dropped from medium risk to low risk.²³⁶

Tracking, tracing, testing

Residents from Wuhan with a "green code" will be allowed to travel after 8 Apr.²³⁷ The city's order also called for a complete tracking of asymptomatic cases, reinfected patients and those who entered Wuhan from outside of Hubei province.²³⁸

After new cases emerged in May, it was reported that China would be undertaking mass testing of Wuhan residents, prioritising vulnerable groups and residential compounds.²³⁹

From 5 to 10 May, Wuhan identified 6 new cases of COVID-19 at a new potential cluster after 35 days of no new cases. In order to identify asymptomatic carriers, Wuhan commenced mass testing of the population from mid-May, with the aim of preventing a second wave. Wuhan City conducted a "10 days battle" to test all 10 million citizens for COVID-19 from 11 May, using 53 testing facilities and 211 swabbing facilities. Testing was through pooling of samples where the swabs of 10 - 20 people are combined into a single test. If the test of the pooled sample is positive, then individuals are re-tested separately, if all are negative then the group is efficiently confirmed as negative.²⁴⁰ Residents that did not get tested previously will need to be tested, with priority given to those staying in previously virus affected areas, older residential areas and densely populated residential areas.²⁴¹ On 2 June it was reported that 300 un-infectious asymptomatic cases were identified from 9.9 million citizens tested (China does not count people infected but with no symptoms as confirmed cases, these cases are categorised as asymptomatic). The testing cost 900 million yuan (\$126 million).²⁴²

After testing both 300 new asymptomatic cases and 1174 close contacts, swabs from their toothbrush, cup, masks and towels, scientists concluded that those asymptomatic cases are not infectious. 300 asymptomatic cases out of 9,899,828 total people is 0.0303%.²⁴³

Ezhou is a neighbouring city to Wuhan, and from 11 June to 17 June, its population will be mass tested for the virus. During this period, those that volunteer to get tested, 50% testing fees will be covered by the city government. Ezhou is the third city to undergo mass testing (Wuhan > Mudanjiang > Ezhou).²⁴⁴

Wuhan citizen had to fulfil the “four must” before entering areas with very vulnerable populations (eg estates with high numbers of older people): identification, contact numbers / ways to contact, temperature checked, wearing of masks.²⁴⁵

Isolation

From June 6, people who arrived in Beijing from Hubei no longer need to go through a 14-day observation at home or in designated facilities.²⁴⁶

Masks

Mandatory mask wearing was established a day before lockdown and has continued.²⁴⁷ The Wuhan municipal government issued a notice on 22 Jan that masks must be worn in public places and that all employees of state agencies, enterprises and institutions must wear masks while on duty.²⁴⁸

Public places and gatherings

8 Apr, public parks opened, visitors had to show their QR health code, wear masks, measure their temperatures and maintain a distance of 1.5m from other people. Anybody with fever was not allowed to enter and will be taken to a quarantine area. Visitors had to provide their contact numbers when they buy park tickets for contact tracing purposes.^{249,250}

22 Apr, Wuhan Zoo opened. QR health code also required for entry.²⁵¹

1 May, football fields in Wuhan sports center opened for timed sessions. QR health codes required for access and contact numbers must be left. Mask wearing was required during sports and people had to sanitise their hands (however, there have been cases reported of the dangers of mask wearing during strenuous exercise). After each session staff disinfected seats and equipment. Visitors were advised to change their mask and disinfect their hands before leaving.^{252, 253}

Transport

On 25 Mar 2020, public buses started to resume service. Three days later some trains resumed operations.²⁵⁴

On 15 Apr 2020, the Vice Mayor of Wuhan announced that the city aims to fully resume their currently partial rail, flight and freight operations by the end of April. Taxi services will restart in an orderly manner and operations at ports in the city will be restored by the end of April.²⁵⁵

Volunteers in hazmat suits sprayed public spaces with disinfectant (chlorine dioxide) in preparation for residents returning to work.²⁵⁶

On 6 June, Wuhan rail resumed its services to Beijing. Temperature check, wearing a mask and disinfectant are required.²⁵⁷

On June 6, the first direct flight since the lockdown took off from Wuhan and flew to Beijing.²⁵⁸

Places of worship

Pastor Huang Lei leads a Christian church in Wuhan and stated that the church was closed and transferred online.²⁵⁹ Temples (eg Guiyuan temple) has not reported being open yet.²⁶⁰

Business

Stores within “epidemic free” compounds were allowed to open between 9am and 6pm early on in the easing.

In April in Wuhan, there was some reopening of manufacturing and office work, but the service sector was badly affected – gyms and cinemas remain closed and the food sector delivery only.²⁶¹ 10,641 large-scale factories and businesses in the city reopened as of 3 Apr, accounting for 91.4% of the total.²⁶²

On 7 Apr, all McDonald’s outlets in Hubei province reopened for takeaway services with increased cleaning and all staff wore masks and took their temperatures daily.²⁶³

In May, any cities in China, likely including Wuhan, had not yet reopened cinemas and bars.²⁶⁴

In June, Hubei’s culture and tourism minister announced that they currently do not have plans to boost tourism from other provinces of China. They predict travelling or tourism from now to next year will be local tourism “Hubei’s people travel to Hubei”.²⁶⁵

Restaurants in medium and high-risk areas shortened operating hours and only had take-away services. In low risk areas restaurants took temperatures, wore masks and customers disinfected shoes and hands, and undertook e-transactions and safe distancing. Ventilation was recommended and regular disinfection. Staff wore masks and were not permitted to mingle with their colleagues or engage in gathering after work.²⁶⁶

In enclosed areas with large amounts of people and movement with poor ventilation (eg theatre, dancing hall, chess room, cultural theatre, internet-cafe, bar, karaoke, indoor swimming pool) Wuhan and other provinces’ governments could gauge and decide if such places could open.²⁶⁷

In June, night markets returned with mask wearing (not social distancing), food mainly eaten standing up (limited seating).²⁶⁸

Education

On 6 May, schools reopened in Wuhan for senior school; return dates have not yet been confirmed for junior and middle school students.²⁶⁹

- Staff and students have to wear masks.
- Students and staff must all have been tested for COVID-19 before going back to school
- Education facilities are disinfected.
- Some schools spaced out their desks and organised smaller class sizes.
- Students walk in single file through thermal scanners at the entrance, no one with a high temperature is allowed in.
- Some schools arranged staggered arrival times for teachers and students.

20 May, Wuhan reopened school for secondary 3 students (age 15), and classrooms will limit 20 to 30 students maximum. The class is split into A and B, where the teacher will be physically in one class and virtually in another (taking turns). Students must wear masks throughout the day and can only remove them during lunch. Students are to carry an extra mask as well. Schools will not be using the aircon for ventilation purposes. Lunch will be sent to them and to be consumed in classrooms. If lunchboxes are disposable, students will throw

them into the designated bin after lunch. If lunchboxes are reusable, students will return it to a bin that is sent for disinfection.²⁷⁰

Schools in Wuhan adopt a “1+2” strategy: 2 health workers (1 doctor and 1 “quarantine specialist” undefined) attached to a school.²⁷¹

From 8 June academics (professors and research students) returned to Universities. Before entering they have to undergo disinfection, certify their identity, scan their QR Health Code and take their temperature. In dorms only one person will be allowed to stay in one.²⁷²

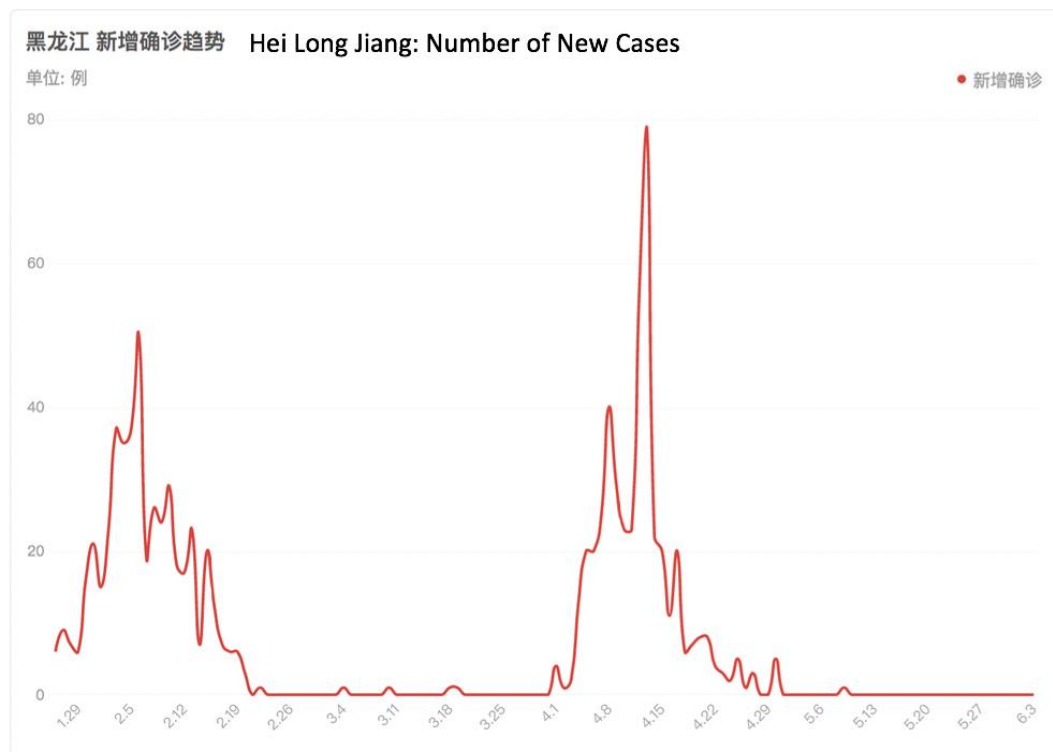
Suifenhe, Heilongjiang, China

Background

Suifenhe is a city on the eastern edge of China's border with Russia in Heilongjiang province. Since 27 Mar, regular and charter flights between Russian airports and other countries were suspended with the exception of the flights evacuating the Russian nationals from abroad.²⁷³ As a result of travel restrictions, and concern over the escalating COVID-19 epidemic in Russia, Chinese nationals made their way to this border city to return to China. China initially allowed nationals to return, but this resulted in an influx of COVID-19 cases and the hospital system becoming reportedly overwhelmed. The border was closed on 7 Apr.²⁷⁴

As of 13 Apr, Suifenhe reported 322 imported cases, out of a total of 872 cases and 13 deaths.^{275,276}

Data on daily case reporting is mainly available at province level. As at June 2:²⁷⁷

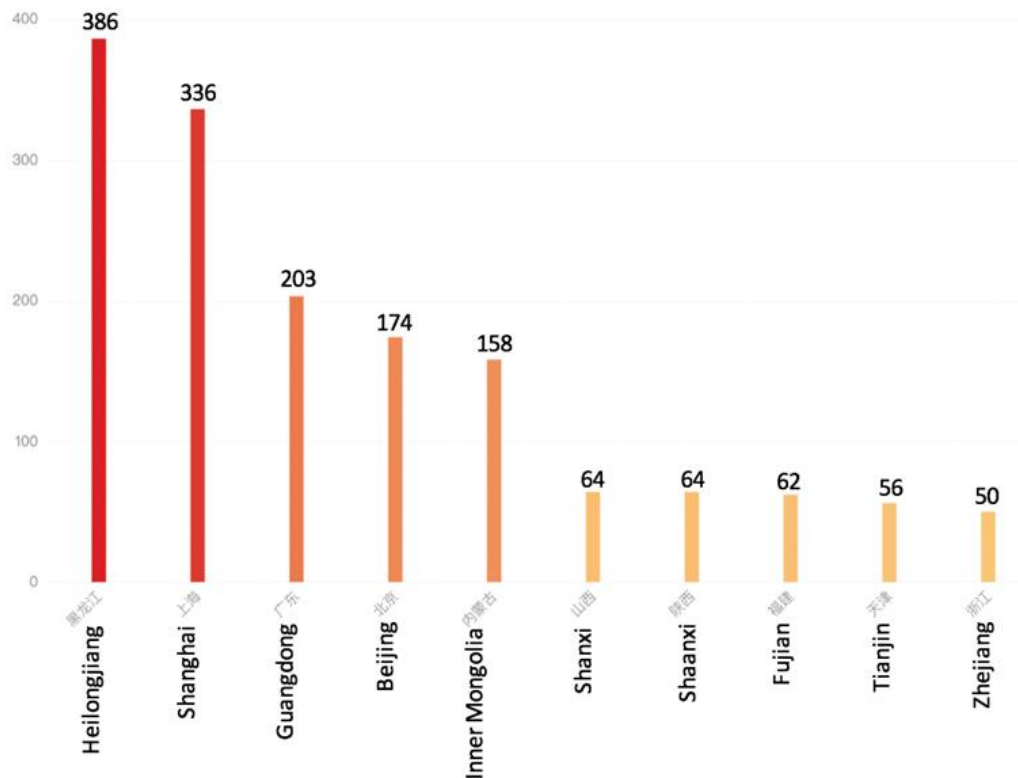


Baidu (2020)

There were two peaks, one in early February (likely travellers from Wuhan at Chinese New Year) and the second in early April (imported cases from Russia).

境外输入累计确诊省Top10 Total no. of imported cases (Top 10 Provinces)

单位: 例



Baidu (2020)²⁷⁸

Lockdown Summary

Suifenhe went into lockdown on 8 Apr.²⁷⁹ The border closed to people but transport of cargo continued. The Chinese government offered 5,000 RMB (\$700) rewards to locals who report illegal border crossings.²⁸⁰

One person per house could shop for essentials every three days.²⁸¹ Masks were mandated worn.²⁸²

Healthcare workforce and facilities were ramped up. A 600-bed makeshift hospital was constructed in a converted office building, and six additional buildings were designated as isolation facilities.²⁸³

In late April Hubei provincial authorities mobilised medical supplies and protective gear valued at 30 million yuan (\$4.3 million) and delivered them to Heilongjiang province to help it fight the epidemic.²⁸⁴

Exit Strategy

The lockdown followed the approach used in Wuhan and it is likely the exit strategy will also follow that of Wuhan. Chinese netizens have labelled Suifenhe “Little Wuhan”.²⁸⁵

Following the mass population testing in Wuhan, Mudanjiang (Suifenhe is in Mudanjiang) conducted mass testing of 658,772 citizens from 1 to 7 June and identified 19 asymptomatic cases.²⁸⁶

A video conference was held in mid-May to prepare for reopening of schools (kindergarten, primary, secondary).²⁸⁷

From 1 June to 7 June, Universities in Heilongjiang (Suifenhe included) gradually reopened, prioritising graduating students who need to complete final year thesis / research. The universities decide when to return non-graduating students.²⁸⁸

From 3 May, in-dining was suspended but takeaway allowed. Bars, karaoke bars, clubs and pools remained closed.²⁸⁹

All businesses are required to take preventive measures such as scanning health QR codes, doing routine temperature checks, and social distancing and wearing masks.²⁹⁰

Over 6,000 small and medium sized businesses in Heilongjiang received RMB 33.81 Billion (~SGD \$6 billion) in support.²⁹¹

Issues

Some Chinese nationals were unable to return before the border closed and are stranded in Russia. There is differing approaches on the Chinese and Russian side of the border which may lead to escalating tensions.²⁹²

Shanghai, China

Background

By 26 May Shanghai reported 669 confirmed cases and 7 deaths.²⁹³ Cases in May are low, derived from travellers returning.

As at June 4:²⁹⁴

上海 Shang Hai

更新至 2020.06.04 13:39

数据说明

Current Cases 现有确诊	Total Cases 累计确诊	Recovered 累计治愈	Deaths 累计死亡
5 昨日+0	673 昨日+0	661 昨日+0	7 昨日+0

上海 新增确诊趋势 Shang Hai: Number of New Cases

单位: 例

● 新增确诊



Baidu (2020)

There were two peaks, one in early February (likely travellers from Wuhan at Chinese New Year) and the second in early April (imported cases).

Lockdown Summary

On 10 Feb, Shanghai went into partial lockdown, with measures including stricter controls on the movement of residents and vehicles, compulsory mask-wearing, entry restrictions and mandatory temperature checks, and shutting down leisure and other non-essential community services.

Exit Strategy

On 23 Mar, Shanghai lowered its emergency response level from the highest level 1 to level 2.²⁹⁵

Masks

On 18 Mar, the city dropped the requirement to wear masks at home, outdoors, and well-ventilated places, a practice police had previously enforced with drones or robots.^{296,297}

Shanghai Health Promotion Center advocated social distancing and avoiding places where people gather, also wearing of masks in crowded public places. Masks are not required when walking, cycling or exercising outdoors where there are few people.²⁹⁸ Those at higher-risk (older people and those with chronic disease or immune deficiency) are advised to wear masks when out.²⁹⁹

Public places and gatherings

10 Mar, public parks (eg Shanghai Haiwan National Forest Park, Guangfulin Park) reopened. Opening hours adjusted to 8am-5pm and there is a limit on visitors of 50% of maximum occupancy, and there is temperature taking and mask wearing.³⁰⁰

16 Mar, sports complexes reopened. Visitors and employees have to scan their QR health code, take their temperature, wear masks and keep a distance of 1.5m.³⁰¹

Social distancing was advised. When going out for sightseeing or dining, people were encouraged to make an appointment in advance or understand the ticketing process as far as possible to reduce the likelihood of waiting with a crowd.³⁰²

Transport

After the downgrade of their emergency response level on 22 Mar, transportation services in the city gradually returned to normal. Buses travelling to other cities, except those to Wuhan, the centre of China's outbreak, were encouraged to resume full operations.³⁰³

Places of worship

Churches mainly kept to online services.³⁰⁴

Business

Shanghai's industrial production dropped 17.4% year on year. The six major industries of information technology, automotive, refinery, fine steel, set equipment and biomedicine declined 16.6%.³⁰⁵

28 Feb restaurants and cafes opened. Employers track staff travel history, staff who are unwell must self-quarantine for two weeks. Customers' temperatures are taken and hand sanitiser provided. Customers could only take off their masks when eating. Restaurants were required to prevent crowds (eg $100\text{m}^2 < 50$ people).^{306,307}

28 Mar, cinemas gradually reopened (with discounts to encourage customers).³⁰⁸

Some tourist attractions and entertainments opened for a brief period in March, these closed again due to concerns of increased transmission.³⁰⁹

To restart the economy and make up for losses, Shanghai announced a two-month shopping festival with promotions (developing online platforms) and extended opening hours across museums, eateries and bookstores to re-establish the night-time economy.³¹⁰

11 May, Shanghai Disney reopened to limited visitors (a third of the usual level). QR codes provided by all guests on entry, with only green code holders permitted entry to the

resort.^{311,312} Tickets sold out rapidly. As well as limited visitor numbers, the park increased cleaning, mandated mask wearing, cancelled parades or crowd forming indoor events, and the children's play zones remained closed.³¹³

Regular ventilation of indoor environments was recommended, masks in crowded indoor areas, social distancing and electronic payment.³¹⁴

The new edition of Shanghai reviving city plan from 2 June 2020 will further include indoors attractions such as concert halls, bars etc. However, travel agencies and online promotions like "flight + hotel" are still not available. Standard distancing rules still apply at all attractions. Wearing of mask and distancing of 1m.³¹⁵

Cultural theatres reopened in early June, but only for 30% occupancy.³¹⁶

From 3 June community clubs reopened and gyms.³¹⁷

The pandemic caused disruption to business such as bars, restaurants, culture and entertainment. In order to revive the night-life economy, Shanghai held night-life festivals, the first was on 6 Jun. The night festival involved night tours, shopping, dining, reading and live shows - bars, museums, bookstores, shopping malls and landmark commercial complexes opened with extended business hours.³¹⁸ Stall holders wore masks and gloves, and used disinfectant, masks and wet tissues were available for visitors. The number of people was also restricted.³¹⁹

Education

Apr 27, students in their final year of middle and in high school returned to classrooms. Schools have temperature screening on entrance, have set aside rooms for isolating students with "abnormal temperatures", have put in place social distancing policies and students must wear masks.^{320,321}

On 2 Jun, Primary 1,2,3 will resumed. However, parents and students could choose between physically going to school or e-learning from home.³²² Staggered start times and mask wearing were required.³²³

Schools in Shanghai ramped up their "mental easing/preparation" classes to ease students into the curriculum. Not only students but their parents as well, as parents might worry if their child is safe and healthy. Hence, schools also prepared online meeting for parents to update on school rules and curriculum for ease of mind.³²⁴

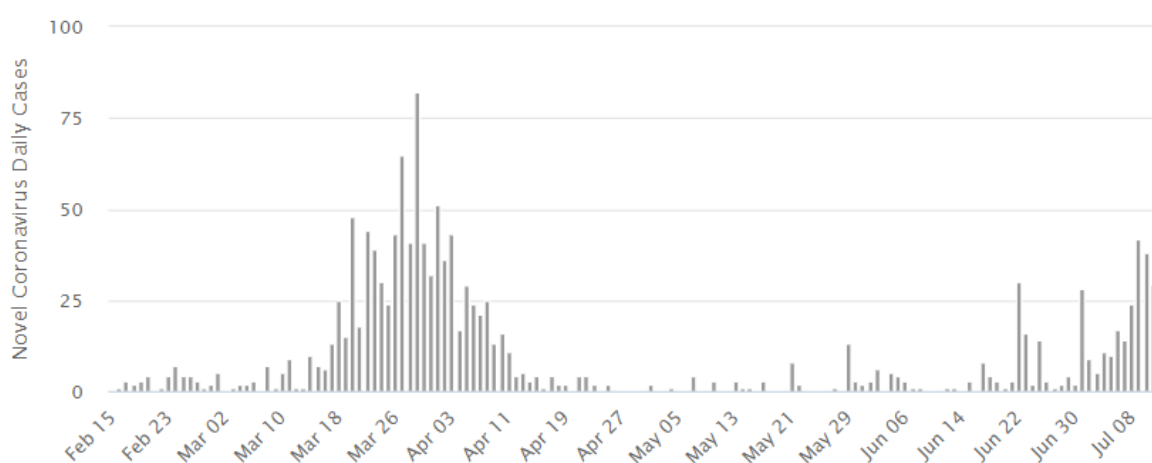
Hong Kong

Background

Hong Kong, a Special Administrative Region of China has a population of 7.4 million people within 1,110 km², is one of the world's most densely populated areas.³²⁵

The first imported case was confirmed on 23 Jan, and the first suspected local transmission case was reported on 30 Jan.³²⁶ As of 18 May, there were 1,056 cases and 4 deaths.³²⁷ However, Hong Kong then experienced a rise in cases from people returning to Hong Kong from abroad.³²⁸ Cases rose towards the end of March and then declined, there was over two weeks straight where no cases were recorded and then low numbers of cases some linked to imported cases and others with no identifiable link to previous cases.³²⁹

Through May cases were predominantly imported.³³⁰ However there was a cluster of unknown sources.³³¹ As at 13 July there were reportedly 1,470 confirmed cases and 7 deaths.³³²



Worldometer (2020)

A rise in cases in early July was thought to be linked to insufficient testing and lax surveillance of those exempted from quarantine (eg sea crews).³³³

Mobility

Google mobility data varied through April, but there was around 30-40% decline in mobility in transit stations, 30% decline in workplaces, 30% decline in retail and recreation.³³⁴

Seroprevalence

No information has been found so far.

Lockdown Summary

25 Jan, Preparedness and Response Plan raised to Emergency Response Level. This resulted in cancelling large events, working at home if possible, temperature screening at restaurants and offices, closing schools, increasing mask supplies and improving capacity of quarantine and screening at borders.³³⁵

After the surge in cases from travellers in mid-Mar, Hong Kong tightened border controls with a mandatory 14-day quarantine for all travellers entering from 19 Mar for the next 3 months.³³⁶ Hong Kong then went on to ban all non-locals arriving towards the end of Mar.³³⁷

Mid to end of Mar saw the establishment of regular disinfection of transport, extended testing through primary care surveillance, closure of non-essential public services, and banning of alcohol sales in restaurants and bars.^{338,339,340}

Restaurants were ordered to keep tables at least 1.5m apart and put up physical shields between tables to reduce the spread of infection and take temperatures and contact details of customers.³⁴¹

End of Mar, cinemas, party rooms and gyms were ordered to close, this was later extended to include mahjong parlours, karaoke lounges and nightclubs.³⁴² By early Apr, gatherings of more than four people were banned and beauty services shut.

In July, health experts stated that “if there is an increase in local cases again, the government is likely to reinstate stricter social-distancing measures” a “lift and suppress strategy, depending on the seriousness of the local situation”.³⁴³

In response to increasing cases and unlinked cases, new measures were introduced on 7 - 13 July.^{344,345,346}

- Require passengers from high-risk countries to produce test result showing they are free of COVID-19 before boarding flight to Hong Kong;
- Strategy for the return of residents from countries deemed as carrying a high risk of infection, such as Pakistan, India, Nepal, Bangladesh and South Africa;
- Foreign domestic workers required to undergo pre-boarding coronavirus screening before flying to Hong Kong. Their employers must arrange 14-day mandatory quarantine on arrival at designated hotels in the city.
- Testing of all air and shipping crew members arriving in Hong Kong;
- Visits to elderly care facilities and non-acute hospitals and rehabilitation centres suspended;
- Restaurants must operate at max capacity of 60%. Ban on dine-in service from 6pm until 5am, with only four people allowed per table in restaurants. Diners must wear the covering when not eating, all food and drink will be banned at cinemas.
- Closure of bars and 12 other types of premises, including gyms, karaoke lounges, as well as Ocean Park and Hong Kong Disneyland;
- Encouraging workers in public transport, elderly care and catering industries to undergo testing after most of the new local cases were linked to catering or taxi sectors;
- All public transport passengers required to wear masks, with offenders facing up to HK\$5,000 fine;
- Scale back public gatherings from 50 people to four.

Exit Strategy

Tracking, tracing, testing

Mask-wearing, increased cleaning of common surfaces, social distancing, public awareness, contact tracing and quarantining were key components in the first phase of the response against COVID-19. This has been augmented with more widespread testing and testing of high-risk groups. Testing capacity is increasing to 7,000 a day.³⁴⁷

After new cases emerged in May, after a period of two weeks with no cases, there was the decision to extend testing to residents in the apartment blocks where the cases were

located, airport workers (viewed as at risk of coming into contact with imported cases), and those in high-density shared accommodation (eg psychiatric patients and nursing homes).³⁴⁸

Arrivals to Hong Kong as at 19 May was around 100 a day; all are tested for COVID-19.³⁴⁹

Hong Kong's aimed to reduce the cost of private testing by introducing more competition. As at June, the price range is HK\$985 (US\$127) to HK\$3,500 (US\$452).³⁵⁰

Three-week streak of zero local infections ended after two cases were confirmed on 5 July. These cases prompted health experts to call for stricter testing measures for those exempted (airline and cruise ship crews).³⁵¹

From July 10 all travellers from countries viewed as high-risk were required to produce certificates showing they have tested negative for COVID-19 before they arrived (Pakistan, India, Nepal, Bangladesh and South Africa). One of the biggest concerns was limited quarantine centre capacity.³⁵²

As at July 7, Hong Kong had undertaken more than 360,000 tests (48,000 per million people).³⁵³

Self-administered saliva tests were believed to be in use.³⁵⁴

Isolation

Hong Kong had reportedly 5,000 plus places in quarantine facilities (a hotel, empty housing blocks and holiday camps), therefore most self-quarantined at home.³⁵⁵ From mid-Mar, technology was used to monitor home quarantine, with locally developed electronic wristbands and mobile apps to enable real-time location sharing.³⁵⁶

The Hong Kong Union of Employment Agencies estimated up to 10,000 maids were expected to arrive over the summer as governments in the Philippines and Indonesia gradually resumed normal operations and started to issue more travel permits. Health officials in Hong Kong were looking for cheap hotels to quarantine an expected influx of thousands of domestic helpers, but the use of government facilities was ruled out.³⁵⁷

Masks

In response to Oct protests, Hong Kong banned the wearing of face masks in public. The government did not repeal the ban, but residents started wearing masks in large numbers and helping the most vulnerable communities obtain them.³⁵⁸ Through May over 80% wore masks in public places.³⁵⁹

Public places and gatherings

On 2 June, after 16 days of no local cases, a cluster of 9 was stated as the reason for extending social distancing measures and banning more than 8 gathering until 18 June.³⁶⁰

June 1 there was the reopening of all performance venues, including City Hall, the Hong Kong Cultural Centre, the Hong Kong Coliseum and Queen Elizabeth Stadium for rehearsals and performances not with audiences (at least until 15 Jun), half capacity is also in operation.³⁶¹

From 19 June, Hong Kong allowed public gatherings of up to 50 people.³⁶²

From 20 June, leisure facilities reopened (outdoor pitches, some basketball courts and volleyball courts). From 22 June, pay for sports facilities reopened, and museums and cultural venues resumed normal hours.³⁶³

From 30 June, social-distancing rules limiting public gatherings in Hong Kong to no more than 50 people remained unchanged. However, seating capacity at concert halls to places of worship or bars increased to 80% (from 50%).³⁶⁴

Transport

Mask wearing is common practice on public transport.

Transit services at the airport partly resumed on Jun 1. Anyone arriving at the airport was not allowed into the city until they took a COVID-19 test. Those found to be positive were quarantined.³⁶⁵

One passenger was stranded in Hong Kong International Airport for three months due to transit restrictions during the crisis.³⁶⁶

Talks to set up a health code system that certifies residents who are virus-free, exempting them from a 14-day quarantine when travelling one way across the border.³⁶⁷

Places of worship

The ban on more than four people gathering means that services are streamed online.

From 19 June, there was the resumption of wedding banquets.³⁶⁸ Wedding banquets held in catering premises could be attended by more than 50 people. Wedding banquets at religious premises were not subjected to gathering size limits, although the total number of attendees must not exceed half of the original seating capacity. The 50-person limit would apply to other venues.³⁶⁹

Business

May, after a month of working from home, civil servants returned to government offices.

On May 7, entertainment and establishments such as cinemas, beauty parlours and gyms have also gradually reopened.³⁷⁰

On May 26 karaoke lounges, nightclubs, saunas and party rooms were allowed to reopen, but with restrictions – not more than four people at each table in nightclubs, which must operate at half their usual capacity, no more than eight people in a room in karaoke lounges and party venues.³⁷¹

Work being undertaken to restart the meetings, conventions, exhibition and cruise industries that spend higher levels than tourists.³⁷²

From June 19, there was easing of customer limits for restaurants, and the maximum number of people per room in karaoke lounges doubled from eight to 16. But tables still had to be kept 1.5 metres (five feet) apart. For bars, pubs and nightclubs the restriction limiting tables to groups of four people was eased to allow eight per table. Live performances could also resume, but entertainers must wear masks or maintain a distance from the audience.³⁷³

On June 18, Hong Kong's Disneyland reopened to a reduced number of visitors and increased cleaning.³⁷⁴

Education

Among parents surveyed, 95.4% in February and 93.7% in March agreed or strongly agreed that school closure was needed as a control measure for COVID-19 in Hong Kong.³⁷⁵

From 27 May classes for Secondary 3 to Secondary 5 students resumed. The younger pupils of grades Primary 4 to Secondary 2 went back to school on June 8, and Kindergarten 3 to Primary 3 on June 15.³⁷⁶

From 20 May, international and private schools reopened after nearly four months. Under a phased class-resumption plan, international schools were the first to reopen because of their different curriculum and early summer break. To reduce the risk of infection, students were required to sit one metre apart in class, will not share stationery, submit a health and travel declaration, and have their temperature checked daily. Schools also installed new sterilised mats, thermal cameras and hand sanitisers for infection control.³⁷⁷

Most of Hong Kong's 150,000 senior secondary students returned to school on 27 May after four months. Students wore masks during class, kept one metre apart, and avoided gatherings.³⁷⁸

Hong Kong has 2,500 cross-border senior secondary pupils, 1,800 of whom had said that they would return to campus to attend face-to-face classes. Nearly 300 cross-border pupils were held at the border due to problems with COVID-19 test arrangements and identification of documents. This led to school heads calling for an early opening of Hong Kong's checkpoints with mainland China to ease the commuting pains of cross-border senior secondary students.³⁷⁹

Extra-curricular classes were the subject of 273 complaints received by the Consumer Council after providers demanded students accept online versions rather than provide refunds.³⁸⁰

At least four educational institutions suspended face-to-face classes on 7 July - including two institutions where students were infected.³⁸¹ On July 10 it was announced that summer break would start early in mid-July due to rises in cases.³⁸²

Issues

In the aftermath of the recent political unrest, there was a general mistrust of the government which influenced the populace's reception for the government's initial responses.³⁸³ Despite the lack of confidence amid distrust of the Hong Kong government during the protest period, residents have generally been compliant to the various social distancing measures implemented, possibly influenced by the SARS outbreak when Hong Kong was one of the hardest hit, which had almost one-third of global deaths.^{384,385} "People are quite cautious now when they face a major outbreak of an infection," says David Hui, director of the Stanley Ho Center for Emerging Infectious Diseases at the Chinese University of Hong Kong. The precautions have been so effective, he says, that the city's annual flu season has also been dramatically reduced.³⁸⁶

In late May China proposed a national security law that would cover Hong Kong. This prompted large-scale protests, counter to social distancing rules.³⁸⁷ National security laws to take effect from 30 June.

On 11 May, protesters returned to the streets, with 250 arrested.³⁸⁸ Some protesters have raised concerns that gathering restrictions remain in order to suppress pro-democracy rallies.³⁸⁹

On 27 May, Hong Kong police made more than 300 arrests and fired pepper pellets to disperse protesters in the financial district.³⁹⁰

Public Opinion

Throughout May 73-77% perceive that the national situation related to COVID is improving.³⁹¹

Economic Impact

Hong Kong was still being affected by protests when the pandemic emerged. In Apr, the IMF lowered its projection for Hong Kong's economic growth in 2020 to minus 4.8% from minus 1.2% because of the pandemic and forecast that unemployment would go from 3% to 4.5%.³⁹² In April, the government announced a package of measures to support individuals and businesses affected by COVID-19, amounting to HK\$287.5 billion.³⁹³

Unemployment was reported to be 5.2% in May, but higher in specific industries – tourism 9%, food and beverage 12%, construction 10%. The government has an employment support scheme, paying 50% of salaries for six months capped at HK\$9,000. ³⁹⁴ By June unemployment was recorded to be 5.9%.³⁹⁵

Consumer spending has dropped. In May, sales of jewellery, watches and clocks fell 70% from the same month last year, while medicines and cosmetics saw a 62% decrease, clothing saw a 35.6% decline and electrical goods 5.1%. Supermarket sales increased by 7.3% and furniture by 6.5%.³⁹⁶

Exports fell 7.4% in May.³⁹⁷

The mandatory quarantine restrictions ended the freedom to live in Shenzhen while working in Hong Kong, affecting many who used to cross the border every day for work and increasing joblessness.³⁹⁸

Airlines were severely affected by the pandemic, the Hong Kong government provided US\$5 billion in financial support to Cathay Pacific.³⁹⁹

Wider impacts

There was a 44% reduction in influenza transmission in Hong Kong after Chinese New Year, due to school closures but also social distancing, increased hygiene measures and face mask use.⁴⁰⁰

There have been disruptions in mental health support. A number of suicides in older adults were reported between January and April.⁴⁰¹

Concerns were raised regarding the mental health of elderly care home residents. Geriatric specialist Dr Kong Tak-kwan coined this the “loneliness epidemic”. This problem is worse for elderly with dementia who are likely to have lower resilience to difficult situations and are afraid of change.⁴⁰² The mental health of younger people who had been socially isolated for months is also an increasing concern.⁴⁰³

Study found that quarter of Hong Kong residents on regular care duties for loved ones during pandemic felt that they did not have sufficient knowledge to undertake care tasks.⁴⁰⁴

Cyberbullying cases reportedly rose during the pandemic, including harassment, intimidation, defamation and other attacks.⁴⁰⁵

Mobility

Google mobility data varied through Apr as Vietnam reopened. At the start of Apr, there was around an 80% decline in mobility in transit stations, 30% decline in workplaces, 70% decline in retail and recreation. Mobility increased steadily through to May but has not yet returned to baseline levels.⁴¹²

Seroprevalence

(No information found)

Lockdown Summary

A May YouGov survey found 88 percent of Vietnamese thought that the situation was improving and 97 percent trusted the government's handling of the epidemic.⁴¹³

Since Dec 2019, Vietnam was alert to a potentially new pneumonia virus and the first cases were found during the Chinese New Year 23-29 Jan (travellers from Wuhan or their contacts).

Vietnam established a national rapid response Taskforce Group (24 members from across 23 Ministries) on 30 Jan which provided leadership and worked to the shared goal to fight the virus regardless of the economic impacts in the short-term and not to leave anyone behind. The Taskforce did not await WHO guidance to act and continually sought to analyse their own data and evidence.

Large events were stopped at the end of Jan, including national festivals and gatherings after the Tet holiday (Vietnamese New Year). End of Jan also saw: the suspension of all flights from China; suspension of tourist visas to foreigners who have been in China; enhanced control of Vietnam-China border; and 14-day mandatory quarantine for all travellers who have come from COVID-19 affected areas in China. This was followed by border closures to other high-risk countries (eg countries with over 50 cases a day), and quarantine was also established. This was after finding 73 flights had COVID-19 patients, following which there was full quarantine of 34 flights (passengers were found through rapid contract tracing using local teams).

There was ongoing public communication and education via government app and openness to the public regarding cases. Media and social media coverage were at a high level and sustained from early Feb onwards.⁴¹⁴ Vietnam also made a pop music video that was widely shared.⁴¹⁵

On 19 March, Vietnam launched a fundraising campaign to buy medical supplies and PPE for people working with COVID-19 patients. By 5 April, more than 2.1 million donations had been sent via a text message platform.⁴¹⁶

Schools and universities shut in early Jan. Social distancing was promoted – stay home and keep distance from others. 16 Mar there was enforcement of mask wearing at public places; crowds over 50 people discouraged; entertainment services closed.

End of Mar saw implementation of social distancing, working from home, closing churches, suspension of public transport and minimising car use.⁴¹⁷

Population mobility decreased progressively before lockdown, which was officially between 1-22 April.

Exit Strategy

From late Apr onwards measures were eased; however, religious gatherings, festivals, and sporting events remain banned. In addition, bars, pubs, beauty salons, and karaoke bars remain closed.⁴¹⁸

Tracking, tracing, testing

There was early identification and isolation of cases.

From 280 cases, 64% of cases had no symptoms early on, and 43% remained asymptomatic. 27.5% of transmissions were found to have occurred pre-symptomatically.⁴¹⁹ This demonstrated the need for early identification of potential cases before further transmission.

Vietnam bought 200,000 tests from South Korea, but then developed its own test kits.⁴²⁰ Four institutes undertook testing early on, and this has been expanded to 120. As at mid-May ~300,000 test have been completed (1 positive per 1000 test).

Imported cases that had travelled by plane were identified and all those on the plane were tracked and quarantined. There was early screening at the border, and from the end of Mar all inbound travellers were required to go through quarantine centres for 14 days. All are RT-PCR tested. 200,000 people were quarantined in the first 100 days.

Contact tracing was in place early on and when community transmission is identified, there is targeted lockdown of the area. First lockdown of an area was mid-Feb; a community was closed where there was community transmission from 7 people returning from Wuhan.

Second lockdown was a street in Hanoi, from someone returning from London and community transition from beyond home.

A Government SMS notification system was put in place through all mobile phone providers on 3 Feb, and a mobile phone app for contact tracing and symptom reporting was launched on 8 Feb. The app is to aid contact tracing, but it is mainly labour intensive, supported by local district teams.

From 29 May, those with flu or severe acute respiratory disease symptoms at hospitals and medical facilities in Ho Chi Minh City, alongside patients returning from abroad for treatment, will undergo COVID-19 testing. Vietnam has not granted entry for people from overseas yet, but those entering with diplomatic, official passports or for special economic projects will be quarantined for 14 days.⁴²¹

Mobile app NCOVI was developed by Vietnam's Ministry of Information and Communications (MIC). This lets the public update their health status daily. It also shares 'hotspots' of new cases and gives its users 'best practices' for staying healthy.⁴²²

Isolation

There is isolation of all confirmed cases and contacts, regardless of their symptoms or test results.

Cases and contacts quarantined placed in centres (eg military camp and hotels). Internet connection, SIM cards and food provided.

Hospitals are assigned to COVID-19, separating out the cases so that other healthcare work can be carried out.

Masks

Mask wearing is common. On 1 Feb, the government inspected pharmacies and withdrew business licenses of those which increased prices of face masks, hand sanitizers and

medical gloves. More than 1200 drug stores were penalised and over 313,000 face masks were seized in just three days.⁴²³

Through April and May 80% said that they wear a mask in public places.⁴²⁴

Counterfeit masks have been a concern.⁴²⁵

Public places and gatherings

May, the public gathering limit raised to 30 people from the previous 20.⁴²⁶

Gyms, sports and public beaches reopened, but with social distancing restrictions.⁴²⁷

Transport

On 6 May - relaxed social distancing guidelines on planes, buses, taxis, and ships. Public buses in Ho Chi Minh City resumed with a limit of 20 passengers per bus.⁴²⁸ Domestic flights resumed 23 Apr.⁴²⁹

Vietnam suspended international flights on March 25. In June, Vietnam set out a plan to allow resumption of flights to and from countries that have no cases for 30 days with priority destinations including Guangzhou China, Japan, South Korea, Laos and Cambodia.⁴³⁰

On June 12, Vietnam granted special entry for 331 Chinese experts, business managers and high-skilled workers. This followed representation of the Chinese Embassy in Hanoi to the Vietnamese Government Office on June 2.⁴³¹

On June 23, Japan and Vietnam eased travel restrictions “partially and gradually” between the two countries.⁴³²

Flights to and from China resumed on 13 July. Priority was being given to Vietnamese stranded overseas, foreign experts, specialists and students.⁴³³

Places of worship

Religious activities in Vietnam were allowed to resume from May 8 but with preventive measures for large gatherings.⁴³⁴

Business

People returned to work, but in a “new normal” with a high degree of precaution. Entertainment sector remained closed in early reopening.

Manufacturing, service sector and key tourism sites resumed (eg Ha Long Bay and Bai Tu Long Bay from 1 May).⁴³⁵

Vietnam will resume issuing e-visas for citizens from 80 countries under the amended Law on Immigration from 1 July 2020. Eligible countries include Belgium, Germany, India and South Korea, across 29 land and sea border gates. This comes after the suspension of visa issuance to all foreigners since 18 March 2020.⁴³⁶

The Vietnamese government have a campaign to encourage domestic tourist “Vietnamese people travel to Vietnam destinations” until the end of the year. In May, airlines, travel agencies and resorts offered discounts to revive tourism.⁴³⁷

Education

Staggered re-opening from 4 May (closures lasted ~3 months).

Kindergartens and primary schools were reopened on 11 May, with temperature taking and half-days implemented. This came after 288 infections, no deaths, and no community spread for nearly a month.⁴³⁸

Issues

There is a lack of medical equipment (ventilators in ICU) and lack of personal protective equipment (masks and gowns) for medical staff in the hospitals.

Vietnam's response to COVID-19 had been praised by many countries. In May, the World Economic Forum stated that four factors contributed to its success - quick strategic testing, aggressive contact tracing, effective public communications and swift development of testing kits.⁴³⁹

On June 26, Vietnam chaired an online summit of the Association of Southeast Asian Nations (ASEAN). The pandemic was the main focus of the summit - "It has swept away the successes of recent years ... threatening the lives of millions of people," Vietnam's Prime Minister Nguyen Xuan Phuc said. The moves of China in the South China Sea were also discussed - Vietnam's Prime Minister stated that "strategic problems between big countries had become clear and had deepened".⁴⁴⁰

Public Opinion

At the end of Mar, about 62% thought the government was doing the "right amount" in response to the situation.⁴⁴¹

Though April and May public support for the government's handling of the situation rose from 80 to 98% and stayed at a high level, over 80% perceive that the situation is improving.⁴⁴²

Economic Impact

The International Monetary Fund forecasted that Vietnam's economic growth may slow down to 2.7 percent this year due to the pandemic, but may pick up to 7 percent in 2021.⁴⁴³

On 12 Mar, the country's central bank stated it would support credit organisations to restructure debt payment deadlines and cut borrowing interest rates and allow exemption for enterprises affected by the pandemic. It was stated that over 44,000 customers with a total debt of VND222 trillion (US\$9.51 billion) would benefit from this program. On 31 Mar, the government discussed a welfare measure where those in need would receive an aid of 1,000,000 VND per person per month.⁴⁴⁴

Vietnam's Ministry of Finance outlined a 15.84 trillion dong (S\$970 million) cut in corporate income tax for small-sized enterprises to help overcome the impact of the pandemic.⁴⁴⁵

It was reported on 5 June that more than 5 million Vietnamese lost their jobs or worked fewer hours in the first four months of 2020. 80% of workers in the informal sector had to stop working with the social distancing measures imposed. The number of jobs lost each month was estimated to be 80,000 - 90,000.⁴⁴⁶

The strict nationwide lockdown took a toll on the tourism and hospitality industry particularly. Bui Vien Street in Ho Chi Minh City was once filled with restaurants and bars that are now gone and local people who rely on tourism are struggling to get by.⁴⁴⁷ In late June the government stated it had no plans to open up to international tourists yet over fears that doing so could lead to a second wave of infections. "There is no story of rushing to open the doors," Prime Minister Nguyen Xuan Phuc said in a statement. "Vietnam is not yet ready to welcome back international tourists. Foreign experts, high level workers and investors into Vietnam are welcomed but will be closely monitored."⁴⁴⁸

Vietnam recorded a first-quarter GDP growth of 3.82 percent, the lowest in a decade. As many as 18,600 companies temporarily suspended business during this period.⁴⁴⁹

Businessman Hoang Tuan Anh is installing "free rice ATMs" across the country to help around 5 million people affected by the coronavirus. The ATMs, which give out 1.5kg (3.3lbs) of rice at a time, became so popular he is building more around Vietnam.⁴⁵⁰

Wider impacts

Reduced accidents reported and reduction in other infectious diseases.

There was a pause in the childhood immunisation programme. GAVI Vaccine Alliance and the government ramped up immunisations after lockdown.⁴⁵¹

South Korea

Background

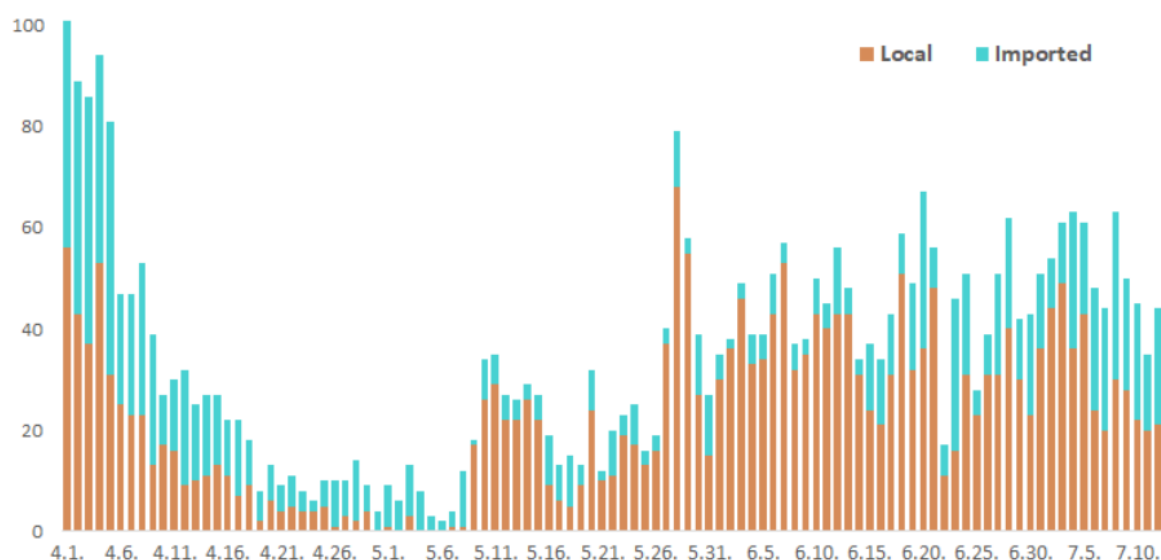
South Korea reported its first case on 20 Jan. As of 13 July, there were 13,479 confirmed cases, including 289 deaths.⁴⁵²

63.5% of reported cases in the early phase of the epidemic epicentre of Daegu. Cases peaked late Feb and then steadily declined to single digit case numbers by the end of Apr.⁴⁵³

At the end of May and early June clusters were linked to nursing homes, call centres, logistic centres, places of worship, clubs and bars, work seminars, sports clubs, military bases and schools.^{454,455,456,457}

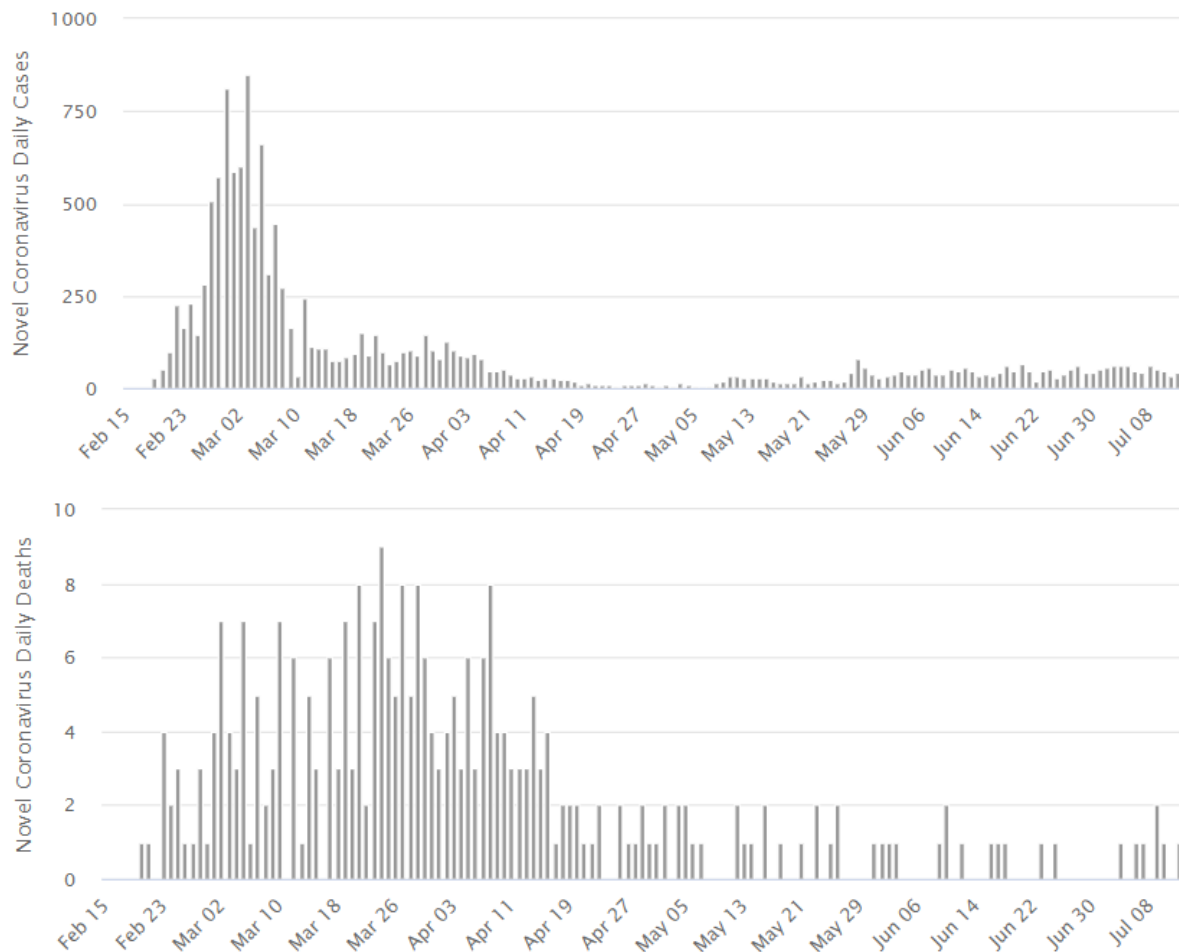
Following the rise in cases and sporadic clusters in the capital, residents in Seoul were urged to stay home by Ministry of Health officials (on 11 June). Government officials are reluctant to put in place stricter distancing rules due to the impact on the economy.⁴⁵⁸

On 22 June, Health Authorities stated that a “second wave” of infections is occurring in Seoul, stemming from a holiday in May.⁴⁵⁹



Source: KCDC (2020)

Cases can be influenced by testing availability and strategy; looking at deaths from COVID-19 can be a more accurate way of viewing an outbreak (although there is a lag from infection to death).



Worldometer (2020)

A slight rise in cases was reported from 9 May, linked to nightclubs, particularly those catering to the lesbian, gay, bisexual, and transgender community.^{460,461}

On 15 June 2020, it was reported that among 618 confirmed cases in the two weeks prior, 10.2% were unlinked cases. This inability to track the sources of new cases is complicating attempts to prevent secondary and tertiary infections, in addition to the issues resulting from nearly half of all coronavirus infections in Korea being asymptomatic.⁴⁶² A rise in imported cases was also reported in late June.

At the end of June, South Korea health authorities were the first in the world to announce that the country had entered a second wave, focused around the capital and apparently triggered by gatherings over a May holiday. However, there is a lack of consensus as to what constitutes a “second wave” and the WHO has avoided using this term to define South Korea’s status. At the point of announcing the second wave, South Korea had reported 62 cases on that day (40 local transitions and 22 imported cases).⁴⁶³

Mobility

Google mobility data varied through April and showed only limited reductions in mobility. At the start of April there was around a 20% decline in mobility in transit stations, little decline in workplaces (2%), and 20% decline in retail and recreation. Mobility by the end of April was close to baseline levels.⁴⁶⁴

Seroprevalence

No information has been found so far.

Lockdown Summary

On 24 Feb, Daegu and Cheongdo were declared “special care zones”. All military bases were locked down after three soldiers tested positive. Additionally, self-quarantine orders were issued to 9,000 members of the Shincheonji Church, where an outbreak was identified.⁴⁶⁵

In Daegu, officials urged residents to stay at home and aggressively warned them to take precautions if staying open for business. Unlike China, there was no movement restriction on the people. The government’s approach was to meticulously monitor for infections while allowing the city to continue running. While public transport continued to operate, every commuter’s temperature is taken, and public transport is regularly sanitised by cleaners.⁴⁶⁶

At the height of the outbreak, hospitals were overwhelmed, prompting authorities to change their strategy from contact tracing to mitigating its impact and preventing deaths. This was done in a nationwide fashion and included closing schools and concerts. However, the government stopped short of introducing a lockdown possibly due to its political unpopularity.⁴⁶⁷

“Trace, test and treat” was the initial strategy, which kept cases under control through Jan and Feb. South Korea experienced a rise in cases from imports from the US and Europe in late Feb and into Mar, which resulted in implementation of social distancing measures.

Schools closed from 24 Feb, with school reopening dates repeatedly delayed through March and April.⁴⁶⁸ South Korean kindergartens closed and most universities converted to online learning.⁴⁶⁹

South Korea implemented an “intensive social distancing policy” on 21 Mar, initially for 15 days, but was extended multiple times.⁴⁷⁰ This included cancelling concerts, festivals and sporting events, and preventing other gatherings in places such as at nightclubs or churches.

As of 8 Apr, nonessential travel by foreigners into South Korea has been restricted.⁴⁷¹ All travellers must adhere strictly to a compulsory 2-week quarantine.

After initial easing of measures on May 6, Seoul reimposed restrictions on May 29 in response to cases. This was due to end two weeks later; however, cases continued to rise in June and the restrictions were extended. South Korean Prime Minister Chung Sye-kyun also stated that the government was considering additional measures to prepare for a second wave of the pandemic (in Seoul).⁴⁷² Public facilities including museums and parks remained closed, while companies were advised to operate flexible work systems and strictly follow social distancing guidelines. Entertainment establishments such as bars and clubs and cram schools were recommended to suspend their businesses. Two more medical centers to treat patients with less severe symptoms opened in Gyeonggi.⁴⁷³

Exit Strategy

The country officially moved from ‘social distancing’ to ‘everyday life quarantine’ from 6 May.⁴⁷⁴

"Until treatments and vaccines are developed, we will never know when the Covid-19 crisis could end, and until then, we will have to learn how to live with Covid-19," Yoon Taeho, Health Ministry (May 2020).⁴⁷⁵

South Korea eased some guidelines around 20 Apr, after reporting case numbers in the twenties and teens for a few weeks and the occasional day with single digit case numbers.⁴⁷⁶

The government emphasised "everyday life quarantine" and issued guidelines covering most aspects of daily life. Measures include washing hands for 30 seconds, keeping a 2m distance from other people, taking time off from work if feeling unwell (eg 3 to 4 days), and twice daily home ventilating.⁴⁷⁷

Tracking, tracing, testing

"Trace, test and treat" remained the core strategy.

To aid targeted measures the government accessed personal data, including CCTV footage, GPS tracking data from phones and cars, credit card transactions and immigration entry information. The authorities made public the information on hot-spots, so anyone who may have been exposed could get tested.⁴⁷⁸

Screenings were free for anyone displaying symptoms of infection or close contacts of a recently confirmed case. Those who are worried about the risk of infection can also get tested for US\$135 at hundreds of clinics or 50 drive-through stations across the country. The large amounts of data collected allowed authorities to uncover clusters of infection to target their quarantine and disinfection efforts. The scale of testing has also been shown to be the most influential factor in affecting the fatality rate of the virus.⁴⁷⁹

Tests were processed in 6 hours but transport delays meant results were usually back in 1-2 days. Testing and treatment are paid for by the government, but the individual would have to pay for general check-ups, X-rays and other expenses.⁴⁸⁰

Drive-through occurred in the early phase of the epidemic, but faced logistical difficulties in securing large areas for the long line of vehicles. Subsequently the government initiated walk-through screening centres - a one-person screening booth that separates doctors and patients.⁴⁸¹

From 3 Jan to 18 May, South Korea had tested more than 753,000 people for the virus. The nightclub cluster (Itaewon cluster) that emerged in May shows the scale of testing. As of 18 May, 170 cases were linked to the cluster, 89 were infected after visiting Itaewon clubs and bars, while the rest were people who came into contact with the 89, including friends, relatives and colleagues. More than 65,000 people were tested in connection with these cases.⁴⁸²

Further clusters developed at the end of May. Many new infections traced to Itaewon came from a sub-cluster of infections surrounding a private teacher who visited an Itaewon club. The instructor initially did not come forward to state he had symptoms, delaying the tracing of his students and their acquaintances.⁴⁸³

In June, South Korea mandated QR code-based registration of visitors at bars, clubs and other entertainment facilities.⁴⁸⁴

In June, South Korea promoted the "K-quarantine 3T international standardization" model through submitting 18 different measures for testing, tracing and treating the outbreak to the International Organization for Standardization (ISO). The "3T" stands for testing, tracing and treating Covid-19.⁴⁸⁵

Isolation

Patients with COVID-19 who show moderate symptoms were sent to repurposed facilities and spaces for medical support and observation.

Patients with mild symptoms and close contacts measured their own temperatures and self-quarantined for two weeks. Local monitoring teams called twice a day to ensure that quarantine orders were adhered to. Breaching quarantine measures result in a 3 million won (US\$2500) fine. A bill may also be passed to increase the fine to 10 million won and a one-year jail term.⁴⁸⁶

Citizens and those entering the country used the app to report health status. A similar app tracks those who were under quarantine and could flag up if people left quarantine with their phone.⁴⁸⁷

Guidance initially stated that those who recover must be tested negative twice before they are fully discharged. Based on research of viral infectivity, people no longer need to test negative for the virus before returning to work or school after they have recovered from their illness and have completed their period of isolation.⁴⁸⁸

At the end of June, the government further eased the standard for releasing COVID-19 patients from hospitals amid growing concerns about a possible lack of beds for other patients. The new standard allowed asymptomatic patients to be released from quarantine 10 days from the day of diagnosis. Previously, patients were released only when they were symptom-free and had two negative test results on 2 consecutive days.⁴⁸⁹

Masks

People are asked to wear face masks and maintain physical distance in public places.⁴⁹⁰

Public places

There are thermal imaging cameras in the entrances to major buildings. Hand sanitisers are available in many common use areas (eg lifts, subway).⁴⁹¹

On 11 June, health authorities warned against seniors gathering in packed rooms without windows, saying if they do end up in such settings, they mustn't eat or sing, and must wear a face mask and use hand sanitizer.⁴⁹²

Transport

Transport remained open and disinfected on a daily basis, along with a full cleaning of the stations and platforms. The staff were protected with hand sanitiser stations, gloves and masks. They also measured the temperature of employees before and after each shift.⁴⁹³

From 26 May, there was a nationwide "no mask, no ride" policy for taxi and bus passengers launched.⁴⁹⁴

From 27 May, there was the establishment of mandatory face mask-wearing for all flight passengers on local and international flights.⁴⁹⁵

From 1 June, foreign residents that leave and then re-enter must submit medical reports detailing whether they have symptoms on their return and obtain a permit to return.⁴⁹⁶

In response to a rise in imported cases (on 20 June 23 out of the 67 reported cases were visitors from Pakistan or Bangladesh), South Korea enacted a temporary ban on non-scheduled flights from countries where the virus is widely spreading, with the exception of critical business trips or visits by government officials.⁴⁹⁷

From July 13, arrivals from Bangladesh, Pakistan, Kazakhstan and Kyrgyzstan were obligated to hand in health certificates proving they had tested negative for COVID-19 on a PCR test. Strict quarantine regulations on arrivals from Pakistan and Bangladesh were also in place.⁴⁹⁸

Places of worship

Churches reopened 26 Apr, worshippers must wear masks and abide by safe distancing.⁴⁹⁹

On 1 June, KCDC reported more than 20 new coronavirus infections from Protestant churches in Incheon and Gyeonggi. Contact tracing showed the infections appeared to have stemmed from a pastor who visited nearly 10 different churches holding services.⁵⁰⁰

Subsequently, KCDC urged faith communities to refrain from gathering and switch to non-face-to-face meetings.⁵⁰¹

In late June, Daegu announced that it was seeking 100 billion won (USD\$82.3 million) in damages from Shincheonji Church and its leader. The city office said Daegu suffered nearly 146 billion won in economic damages from the cluster and warned that a second compensation claim against Shincheonji was under review.⁵⁰²

The government put in place enhanced guidelines aimed at churches and religious facilities as clusters traced to religious gatherings continued to be reported into July. Churches were banned from offering group meals, and had to install quick response code-based registration. Church goers were also asked to refrain from praying out loud or singing together, and had to wear face masks and keep a distance. Any violators faced a fine of up to 3 million won.⁵⁰³

Public facilities and gatherings

Areas that positive cases visited were disinfected. Large-scale disinfection measures were common.⁵⁰⁴ Around 20 Apr, outdoor public facilities, such as recreation forests, could reopen as long as they adhere to requirements.⁵⁰⁵

Parks, sports stadiums, museums and libraries reopened 6 May, large gatherings and events, as well as rallies, were also allowed if organisers take measures against infections.⁵⁰⁶

Museums, parks, and art galleries in Seoul closed again from 28 May for two weeks following a spike of new cases.⁵⁰⁷

Business

Some bars and gyms reopened on 25 Apr, mask wearing and completion of contact tracing forms was required to enter. Those with a travel history or who have had contact with COVID-19 patients or exhibit symptoms of COVID-19 within the last 14 days were banned from entering.⁵⁰⁸ Shops also reopened (eg Apple).⁵⁰⁹

However, after a cluster was found on 8 May, bars and nightclubs in Seoul were ordered to close until 8 Jun.^{510, 511}

Starting June, the South Korean government required entertainment establishments such as clubs, bars, and singing rooms to keep QR code-based customer logs for better contact tracing. This came after tracing difficulties in the Itaewon nightclub cluster occurred as many patrons made false statements about their personal details in visitor logs.⁵¹²

At the end of May, start of June, clusters were identified at call centres, logistics and distribution centers. These were then shut.⁵¹³

Daegu hospital returned to normal operations on 15 June, after 100 days of postponing non-essential treatment.⁵¹⁴

The number of weekend movie goers in Korea reached 316,929 (6-7 June), up sharply from the 152,284 tallied from a week earlier (30-31 May) attributed to a discount coupon event by

KOFIC as part of the Korean government's 17-billion-won (\$13.8 million) fund to support the coronavirus-hit film industry.⁵¹⁵

Convenience store lunch boxes became more popular for workers and students.⁵¹⁶

Health authorities allowed family members to visit patients in nursing homes and care facilities from July 1 (these were shut down in March) – visits took place in entrances or outside. Reservations were required and disinfection of hands, wearing of masks and plastic gloves compulsory. Plastic barriers are also to be installed where possible.⁵¹⁷

Education

Around 20 Apr, cram schools and essential qualification tests or recruitment exams were permitted to take place.⁵¹⁸

Starting 6 Apr, the government started the staggered reopening of various cohorts of students, with the oldest students starting first. Instead of physically going to schools, however, home-based learning was implemented with online lessons.⁵¹⁹ The youngest resume only on 20 Apr, with kindergartens and childcare closed indefinitely.⁵²⁰

The new academic year was delayed by more than five weeks before schools switched to online learning from Apr 9. High school seniors were the first to return to school on May 13, while the rest followed in phases through May and early June. Schools carried out regular cleaning, temperature checks and all students were required to wear face masks except when eating.⁵²¹

20 May, schools reopened for high school seniors with guidance that included protocols to trigger epidemiological investigation response teams in local government, daily health monitoring, hygiene measures, social distancing, and mask wearing. To prevent COVID-19 transmission in schools testing laboratories were to process samples of high school students with highest priority and asked for timely notice of test results.⁵²²

Two students with COVID-19 were reported on 20 May, resulting in 75 high schools closing to await guidance on whether it was safe to reopen.⁵²³ On 25 May a 6-year-old student in Seoul tested positive triggering local school closures.⁵²⁴

The start of face-to-face classes at 561 schools nationwide on 27 May 2020 was postponed as COVID-19 continues to spread. More than two million students were scheduled to return to school.⁵²⁵

Some parents were concerned about their children returning to school, Education Minister Yoo Eun-hae announced the increase in the number of permissible "absentee days" so that students could stay at home. Schools in higher risk areas were strongly advised not to fill classrooms with more than two-thirds of students by adopting a shift-like attendance schedule.⁵²⁶

519 schools in the Seoul metropolitan area closed on 3 June 2020 amid fears of COVID-19 transmission as new clusters linked to churches emerged. The vast majority of schools nationwide did not close, however, and went ahead with the next phase of returning students (leaving only fifth, sixth and seventh graders studying online).⁵²⁷

Fifth, sixth and seventh graders returned to school on 8 June, completing the three-week phased reopening of schools.⁵²⁸

At the end of June, students in Seoul requested refunds and improved grading systems.⁵²⁹

Issues

One reason South Korea may not have opted for a full lockdown is that civil liberties are deeply rooted in the country's culture, and such a move could be seen as infringing on citizens' civil liberties, potentially causing significant social unrest.⁵³⁰

The self-isolation and social distancing were adopted by Koreans on their own. These measures work in strong part due to the culture of cooperation and discipline in the Korean people.⁵³¹ The South Korean government also stated that transparent and timely information updates to the public build public trust in the government and made the people more likely to act rationally for the sake of the community. The Vice Health Minister warned the population to not let their guard down as some containment measures are relaxed.⁵³²

There were worries about the efficacy of e-learning, and if schools had sufficient infrastructure, technology, and experience. Concerns on the ability of computer servers to support such a large number of users were raised, particularly the speed of internet, which potentially has an impact on e-learning. Problems of accessibility were raised about students from low income families who may not be able to afford to participate in e-learning, because of the cost of computers and tablets and high-speed internet. This was mitigated by local education offices loaning out equipment to support online learning, although it was unclear whether there was equipment to support the shortage.⁵³³

Of concern was the opening and then closing of bars and clubs in Seoul after a cluster emerged. Also, to note was the link to the LGBT community nightclubs and that officials were facing challenges in finding those who may be infected due to stigma surrounding homosexuality and discrimination, including job loss and hate speech.⁵³⁴ The cases linked to mainly gay nightclubs in Itaewon triggered a "firestorm of online harassment and intimidation targeting LGBT people" according to Human Rights Watch.⁵³⁵

Cases linked to e-commerce distribution centers led to some fear of online shopping.⁵³⁶

In March, Tedros Adhanom Ghebreyesus of the WHO called on other countries around the world to "apply the lessons learned in [South] Korea and elsewhere" in their own battles against the coronavirus.⁵³⁷

UN Secretary General Antonio Guterres praised South Korea on April 30, stating that "the Republic of Korea has been extremely successful in addressing COVID-19". He also praised their progress on climate change.⁵³⁸ Stephan Klingebiel, Director of UN Development Programme's Global Policy Centre in Seoul, attributed the country's success to self-discipline, effective measures and testing.⁵³⁹

Public Opinion

South Koreans view health as the main priority, over economy. 64% of South Koreans agreed that the government's highest priority should be saving as many lives as possible, even if the economy sustains more damage.⁵⁴⁰

Economic Impact

Although keeping businesses open in South Korea allowed for economic activity to continue while flattening the curve, South Korea might still suffer from the global economic damage.⁵⁴¹ The IMF forecasted that South Korea will see its GDP go from 2% in 2019 to minus 1.2% in 2020 and rebound to 3.4% in 2021.⁵⁴² South Korea has outlined an economic support plan worth 100 trillion won (\$116 billion). The government has set up an emergency loan scheme for smaller businesses and 210,000 applied in the first three weeks of its operation.⁵⁴³

In May the unemployment rate was at 4.5%, the highest in the past decade.⁵⁴⁴

Seoul explored the extension of emergency relief funds to foreigners living in the capital (up to 100,000 households). The city government passed an extra budget bill that includes a 50 billion won (\$41.5 million) increase in the emergency account for relief money. This came after the National Human Rights Commission issued a recommendation to not discriminate against foreigners in regards to COVID-19 emergency relief funds.⁵⁴⁵

Wider impacts

As at June, there were 370,000 consultation requests for depression related to the pandemic. The number of sign-ups on Mabo, a Korean meditation app, doubled from April to June. Trost, a psychology consultation app that connects professional therapists with users through chat saw a rapid growth of male users over 40, when young women in their 20s and 30s used to be the main user group.⁵⁴⁶

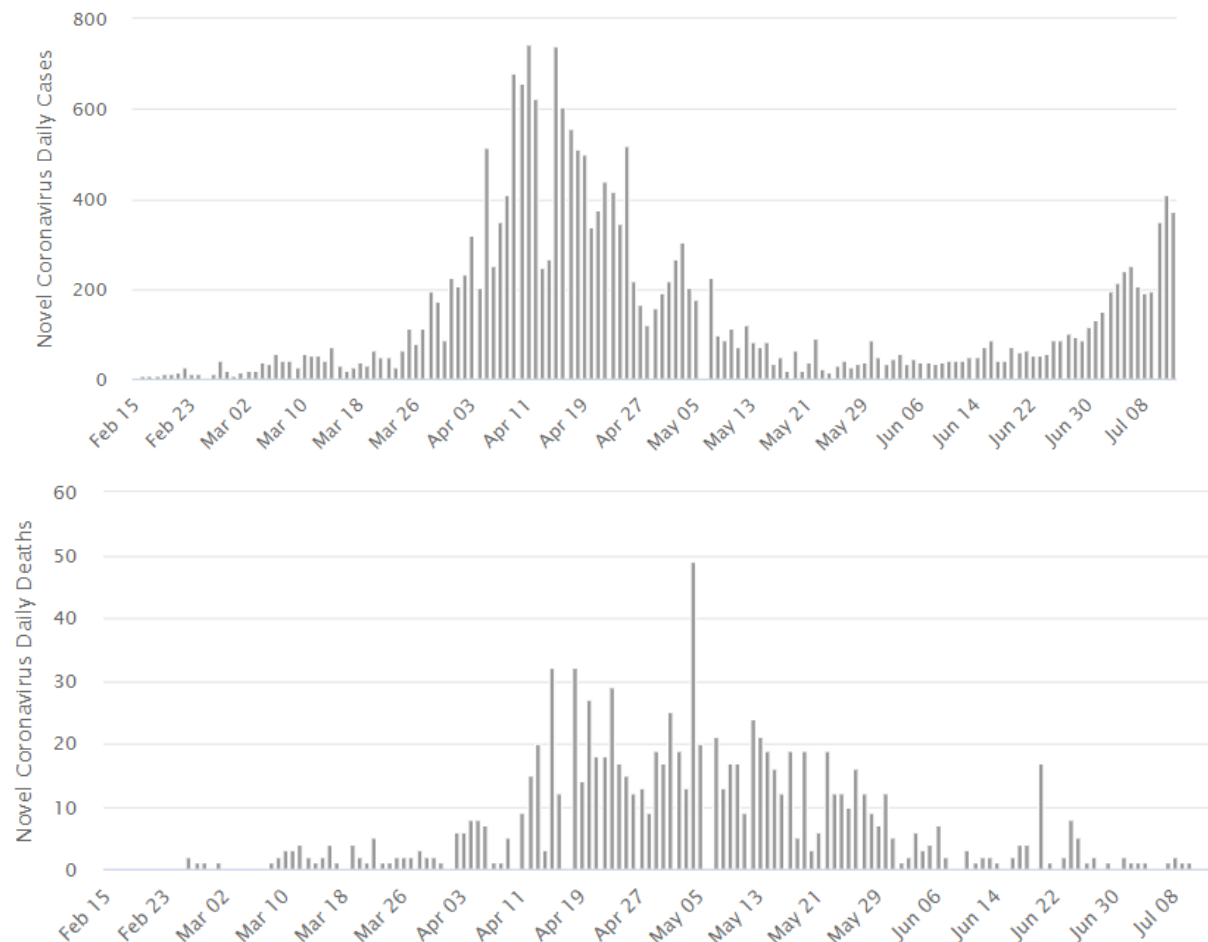
Hokkaido, Japan

Background

As of 13 July, Japan had reported 21,502 confirmed cases and 982 deaths.⁵⁴⁷

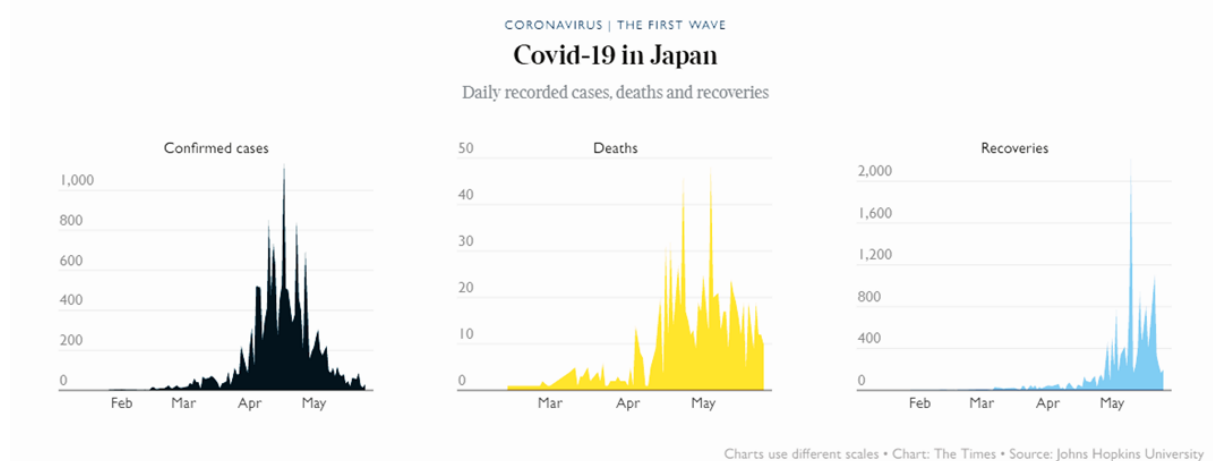
Hokkaido, a popular resort, in late Feb became the first place in Japan to declare a state of emergency due to increasing COVID-19 cases. The annual snow festival attracted more than 2 million people. Many were Chinese tourists, on holiday for the Lunar New Year.⁵⁴⁸

Epidemiological data for Hokkaido was unable to be located, below are reported cases across Japan. Cases rose in the first two weeks in Japan, declined to some extent at towards the end of Apr, but rose and fell again. The trend is inconsistent.



Source: Worldometer (2020)

Cases can be influenced by testing availability and strategy, looking at deaths from COVID-19 can be a more accurate way of viewing an outbreak (although there is a lag from infection to death).



Source: Times (2020)⁵⁴⁹

Cases continued to emerge in Tokyo and Hokkaido through May and June. In Hokkaido, clusters emerged among older people visiting karaoke cafes.⁵⁵⁰

In the first week in July, Tokyo reported more than 100 cases daily for 6 straight days. This brought the total number of cases in the capital to 6,973, with 325 deaths. Cases were predominantly young people in their 20s and 30s, many of whom frequented nightclubs.⁵⁵¹ The Tokyo Governor stated that “the number of people in their 20s and 30s among new infections is extremely high.... This is concerning because young, asymptomatic people could unknowingly infect those who are at greater risk of developing serious symptoms.”⁵⁵² New cases were also reported in other areas of Japan in July, such as the Kanagawa Prefecture.⁵⁵³

In July, cases were reported from the US Marine Base in Okinawa.⁵⁵⁴

Mobility

Google mobility data shows that through April there was around an 50% decline in mobility in transit stations, little decline in workplaces (10%), and 30% decline in retail and recreation.⁵⁵⁵

Seroprevalence

A sampling study of 1,000 outpatients in Kobe, Japan from Mar 31 to Apr 7 found prevalence of 2.7%.⁵⁵⁶

In June, Tokyo reported 0.1% positive for antibodies, Osaka 0.17% and Miyagi 0.03%. Samples were collected from a total of about 8,000 people in the three regions.⁵⁵⁷

Lockdown Summary

On 28 Feb there were 66 confirmed cases in Hokkaido, with rising case numbers. The governor declared a state of emergency – schools, businesses and restaurants shut.⁵⁵⁸

During the state of emergency, respective governors were allowed to order the closures of facilities such as schools, cinemas, departments stores as well as ban the gathering of large crowds. Essential services continue to operate.⁵⁵⁹ The state of emergency did not rely on enforcement such as fines and arrests for noncompliance but instead relies on the deep-rooted Japanese tradition of respect for authority.⁵⁶⁰

By mid-March new daily cases in Hokkaido were in low single digits and zero on some days.

On 19 Mar the state of emergency was lifted in Hokkaido, and at the beginning of Apr, schools re-opened. However, after 26 days a new state of emergency was put in place due to rising cases.⁵⁶¹

“Now I regret it, we should not have lifted the first state of emergency,” Dr Kiyoshi Nagase, chairman of the Hokkaido Medical Association.⁵⁶²

Japan had lifted a state of emergency in 39 out of 47 prefectures in mid-May, due to falls in infections. As at May 14, the order still applied in Tokyo, Osaka and Hokkaido.⁵⁶³

There was a seven-week national state of emergency put in place on April 7, and schools, department stores, shopping malls and movie theaters were closed. Many citizens worked from home during the week and stayed in on weekends. Restaurants and bars either shut their doors or switched to takeout only, for shorter hours.⁵⁶⁴

Exit Strategy

It has been reported in the media that to ease restrictions three criteria were considered:

- Number of new cases
- Capacity to provide medical services
- Efficiency of monitoring systems, such as polymerase chain reaction testing capacity.

One of the numerical targets proposed by a government panel of experts for lifting the emergency in the remaining prefectures is whether infections have fallen below 0.5 new cases per 100,000 people over the previous week.⁵⁶⁵

On 25 May the state of emergency ended across Japan; the Prime Minister cautioned that this did not mean that COVID was gone from Japan and that people should continue following stringent social distancing guidance.⁵⁶⁶

Prefectures have their own plans for reopening: for example, in Tokyo, schools, gyms and museums reopen in the first phase, while restaurants will be allowed to open to 10pm (from 8pm). In the second phase, retail stores handling nonessential items will reopen, along with cram schools, theatres and fitness clubs. The third stage will involve reopening confined spaces such as internet cafes, game arcades, pachinko parlors, and karaoke bars.⁵⁶⁷

On 2 July, the Tokyo government said it would move away from numerical targets and rely more on expert advice to rein in the virus and avert further economic slowdown – there will be an evaluation system based on seven criteria. These include total active infections, number of patients in serious condition and available hospital capacity.⁵⁶⁸

Japan was led by an advisory panel in the first phase of the epidemic, in May the government stated that it would invite economic experts to its advisory panel to study how to balance infection containment measures with restarting social and economic activities.⁵⁶⁹

The panel was replaced in early July by a new advisory board, which was tasked with reviewing steps taken so far. The board is led by Kiyoshi Kurokawa, a physician who has served a variety of government posts and chaired a commission on the Fukushima nuclear disaster. Concerns from business led Economy Minister Yasutoshi Nishimura to disband the original group last week and pledged to reassemble it with members from various specialties including economists. "In the 'with corona' era, we do need political leadership to balance public health and the economy," Tomoya Saito, Director of the National Institute of Public Health.⁵⁷⁰

At the end of June, the Tokyo Governor announced a revision to the city's guidelines on monitoring the ongoing spread of the novel coronavirus, putting more weight on the city's

health care system capacity. The original guidelines put forward in May focused on new and untraceable cases measured on a weekly basis, as well as the number of COVID-19 patients in the city's hospitals. The updated guideline, which began on 1 July, focused on 7 criteria:⁵⁷¹

1. The number of new patients.
2. The number of new patients with an unknown infection route and its growth rate.
3. The positivity rate of COVID-19 testing.
4. The number of hospitalised patients.
5. The number of phone calls made to a designated Tokyo Fire Department number consulting about a fever.
6. The number of instances that it took more than 20 minutes to be taken to a hospital by ambulance, or five or more hospitals denied a request to accommodate a patient.
7. The number of patients in serious condition.

With the rise in cases in July in Tokyo, a Japanese government's spokesman stated that the possibility of again declaring a state of emergency remains an option, but only "in a worst-case scenario." While the current situation doesn't necessitate a return to the state of emergency, "we need to stay cautious and pay close attention" to how it develops in order to both prevent the disease from spreading and keep socioeconomic activities moving along.⁵⁷²

Japan considered a package of law revisions to strengthening the control measures of authorities, such as the ability to sanction those refusing to follow business suspension or quarantine orders. This came as governments of some prefectures issued business suspension orders to pachinko parlors (gambling slot machines) which ignored the orders and continued to operate.⁵⁷³

Tracking, tracing, testing and isolation

Japan had a trace and isolate "cluster-based approach", based on the hypothesis that some individuals cause a high number of cases and form a cluster. Each cluster is tracked to the original infection source and persons with high transmissibility were isolated to prevent the spread of infection. Therefore, broad population testing was not undertaken, but rather pinpoint testing.⁵⁷⁴ Japan tested a small percentage of its population due to infrastructural challenges. The lack of expanded testing made it difficult to identify community transmission and health sector transmission.⁵⁷⁵

Japan's testing protocols advised doctors to "only recommend a test if the patient has pneumonia." In Tokyo, as of 30 April, just 10,981 people have been tested for Covid-19. Of those, just over 4,000 were positive.⁵⁷⁶ Government guidelines then stated that people should only consult a public health center about getting tested if they had a fever of at least 37.5°C for four consecutive days. They also suggested the elderly should have cold symptoms for two straight days before seeking a consultation. Guidelines were then further updated to state that both the young and the elderly should consult health centers immediately if they have relatively mild cold symptoms for four days or longer.⁵⁷⁷

Testing criteria according to the Tokyo Metropolitan Government's COVID-19 information website in July: ⁵⁷⁸

Relatively mild cold-like symptoms like fever and cough:

- If pregnant or have higher risk for serious illnesses, call the doctor immediately
- Others, call after 4 days of continued symptoms

Severe symptoms like shortness of breath, severe fatigue, high fever:

- Call doctor immediately

If the individual does not have a primary care doctor, they can call the 24-hour COVID-19 Consultation Hotline or the Tokyo COVID-19 Call Centre (with support in foreign languages such as English, Chinese and Korean).⁵⁷⁹

From March 6, COVID-19 screenings were covered by the national health insurance in an effort to increase testing. The tests were initially already free, but doctors needed the approval of local public health centers to administer them using public funding.⁵⁸⁰

As of 15 June, the Tokyo Metropolitan Government released a roadmap for Tokyo's new normal, outlining plans to expand testing systems throughout Tokyo to 100 COVID-19 outpatient facilities and 38 PCR centres in 46 municipalities, up from 80 outpatient facilities and 16 PCR centres in 16 municipalities as of end April. Testing capacity was also increased to a maximum of 10,000 tests per day, from 3,100 tests per day in April. Different testing methods were rolled out in addition to PCR testing with nasal and throat swabs, such as PCR testing using saliva samples and introduction of antigen testing kits.⁵⁸¹

Japanese citizens and foreigners who have travelled abroad were also asked to self-quarantine for 14 days and to watch for symptoms.

On June 19, Japan released COCOA (COVID-19 Contact-Confirming Application) its coronavirus contact tracing app for iOS and Android. The app relies on Apple's and Google's co-developed exposure notification platform, using Bluetooth to help determine whether users have come into close contact with others who have tested positive for COVID-19.⁵⁸² However, there have been concerns about the privacy protections of the app that may hinder its download rate and hence effectiveness.⁵⁸³

Japan's COVID-19 contact-tracing app was downloaded more than 4 million times in the first 2 weeks of its launch on 19 June. Health ministry official Yasuyuki Sahara said while there was no target number for downloads, "we want to make as many people as possible to use this app".⁵⁸⁴

Those who test positive were given a code to enter into COCOA, other users who potentially made close contact with them were then notified.⁵⁸⁵

Osaka developed their own new and unique prefectural-run QR code system to track infections. This system allows owners and managers of restaurants, bars and nightclubs to register their business data with the prefecture, which then sends them a QR code that customers can scan for contact tracing.⁵⁸⁶

Treating

If an individual has mild symptoms, he/she had to have them consistently for 4 days before calling the doctor or COVID-19 hotline to be assessed for testing. If positive, the individual was admitted to a designated medical institution or lodging facility to receive treatment. If negative, the individual was asked to rest at home and see a doctor as necessary. If their symptoms did not improve, individuals were instructed to consult their doctor or the Tokyo COVID-19 Consultation Hotline.⁵⁸⁷

In June, the Tokyo Metropolitan Government stated it would increase the number of beds for patients with mild to moderate symptoms.⁵⁸⁸

Masks

Japan traditionally has a high level of mask wearing, particularly so if someone is unwell.⁵⁸⁹ From mid-March to May, mask wearing in public places went from 60% to 85%.⁵⁹⁰

Public places and gatherings

As areas reduce their case numbers, there is gradual easing of measures. Venues such as libraries, schools, museums and parks reopened on the condition that social distancing measures were in place.

From July 10, the maximum number of people allowed at an indoor venue rose to 5,000 (from 1,000). The venues should not exceed 50 percent capacity.⁵⁹¹

Transport

As people returned to work, there were concerns that the crowded trains may be an infection risk.⁵⁹² Japan lifted its final restrictions on inter-prefecture travel on 19 June, allowing passengers to travel via rail and air across the country. Although the government lifted the nationwide state of emergency in late May, people had been advised to avoid all nonessential travel to and from Tokyo and its surrounding prefectures of Chiba, Kanagawa and Saitama, as well as Hokkaido.⁵⁹³

Borders remain closed to many countries.⁵⁹⁴ Japan had planned to ease travel restrictions in summer by letting in up to around 250 foreign travellers per day from Australia, New Zealand, Thailand and Vietnam. Japan currently has an entry ban in place for 111 countries and regions, with foreign travellers who have been to any of these areas within the last two weeks being turned away.⁵⁹⁵ Travellers to and from the country will be required to undergo testing for COVID-19 and submit a trip itinerary.⁵⁹⁶

Hokkaido University professor Hiroshi Nishiura and International University of Health and Welfare professor Koji Wada raised concerns that “border control measures cannot be perfect” and a rise in arrivals from abroad will increase the risk of a new wave of infections.⁵⁹⁷

In July, Japan established testing centers outside three major airports, Haneda and Narita near the capital and Kansai in Osaka Prefecture, as well as in cities, to enable a relaxation of its travel restrictions. The facilities were intended to test people entering from abroad. Previously airport testing stations conducted about 1,000 tests per day, with results confirmed in around one or two days later. The additional facilities increased the number of tests that can be performed daily to over 4,000, with health authorities also hoping to reduce virus testing times to a few hours using new methods.⁵⁹⁸

Places of worship

Some religious institutions decided to close and do online services, others conducted services for small groups with social distancing.⁵⁹⁹

Business

After lifting the state of emergency, working from home is encouraged by some businesses and only workers that need to be present should go into work (eg manufacturing).⁶⁰⁰ The lifting of the state of emergency on 25 May saw many people resuming their daily commutes and work; there is no limit to passenger numbers and no social distancing requirements.⁶⁰¹

From June 19 clubs and bars reopened and had to keep a record of their customers' names and contact information and enforce social distancing rules.⁶⁰²

The tourism industry is adapting. An example is Sakura Jozankei Zen, a hotel that lets guests reserve entire houses, which opened in May on the outskirts of Sapporo, Hokkaido. The hotel has gained popularity as guests can stay at the houses without coming into contact with other individuals at the accommodation. In addition, check-in and check-out processes were conducted through a tablet, and food was served in a special area within the guest rooms.⁶⁰³

Education

From May the government encouraged schools to reopen gradually by holding classes in smaller groups (priority to 1st and 6th graders in elementary school and seniors in junior high school).⁶⁰⁴ Schools that have reopened request students to wear masks and wash their hands with soap at regular intervals. Safe distancing is observed during meal times.⁶⁰⁵

An online survey found almost 60% of respondents aged 17 to 19 felt there were inequalities in education during the pandemic, with some noting a lack of online classes in some schools during the closures.⁶⁰⁶

Issues

In the first phase, Japan conducted fewer tests than other countries, which made it difficult to predict if the virus is truly contained or at the foot of a major outbreak. In this phase, Japan reported a low mortality rate and did not experience the explosive increase in infections in other countries.

The Japanese government was criticised for low testing rates and guidelines for testing – that people should only consult a public health center about getting tested if they had a fever of at least 37.5 (99.5 F) for four consecutive days. They also suggested the elderly should have cold symptoms for two straight days before seeking a consultation.

While the government initially stated that it had the capacity to do 3,800 tests a day, only 5,700 were actually carried out from Feb 18 to 23. That included the tests on all aboard the Diamond Princess.⁶⁰⁷

“For every one who tests positive, there are probably hundreds with mild symptoms,” said Masahiro Kami, chair of the Medical Governance Research Institute in Tokyo, and a practicing doctor. “Those with mild symptoms are not being tested.”⁶⁰⁸

In response to concerns the health ministry released new guidelines to say that both the young and the elderly should consult health centers immediately if they have relatively mild cold symptoms for four days or longer.⁶⁰⁹

Commentators have reflected that the relatively low case and death rate in Japan may be due to weight and lifestyles, the culture of viewing non-binding requests as law, wearing facemasks when ill, bowing as greetings, and regular hand washing. It has also been noted that Japanese people worship in small groups.⁶¹⁰

In the first phase, Japan avoided a major lockdown, partly because their post-war constitution protects human rights in view of civil rights abuses during the pre-war Meiji era.⁶¹¹ Japan’s strategy, which relied on public cooperation and voluntary compliance, has been criticised as lax for not punishing those who do not adhere to stay-home requests.⁶¹²

Under Japan's post World War Two constitution, the government can't order companies to close, but did encourage working from home where possible. According to Google mobility data, traffic to workplaces decreased just 27% compared to the 70-80% target set out by the government (as of Apr 26).⁶¹³ However, many businesses remained open during the state of emergency, as their owners could not afford not to open – in early June cases were linked to bars and clubs that remained open.⁶¹⁴

In May, it was reported that call centres remained open as working from home was not strictly enforced and there were data security concerns. Clusters have begun at these call centres. To mitigate the spread of the virus, companies reduced the number of call operators and installing partitions.⁶¹⁵

Similar to other countries, elderly care facilities in Japan were reported to be struggling to prevent infections among residents. Barato Acacia Heights care home in Sapporo saw around 70 percent of residents infected - with 71 confirmed cases as of 30 May 2020, of whom 15 have died. The facility may have faced delays in finding hospitals that would accept the infected residents.⁶¹⁶

Elections were undertaken on July 5, candidates in Tokyo focused on two topics: the countermeasures needed to prevent a second wave of novel coronavirus infections in Tokyo, and whether the capital is able to host the 2020 Olympic and Paralympic Games.⁶¹⁷

During June the number of confirmed cases in Tokyo increased, Tokyo Gov. Yuriko Koike said at a news conference that “this does not indicate the arrival of a second wave”. Experts such as Haruo Ozaki, chair of the Tokyo Medical Association were also hesitant to escalate concern.⁶¹⁸

The number of people who brought their domestic waste directly to Numanohata Clean Center, a waste treatment facility in Tomakomai, Hokkaido, increased 37 percent to 4,624 in May compared with the same period the previous year. The number of vehicles coming to the facility reached a record high in May, with the site charging only ¥140 to dispose of 10 kilograms of unnecessary items. According to a survey from the Nihon Keizai Shimbun, “throwing away and cleaning household items” was the top activity for people staying at home during the state of emergency.⁶¹⁹

Public Opinion

From mid-March to May, 30-40% supported the government’s handling of the pandemic, over 80% perceived that the situation is improving.⁶²⁰

57.5% expressed discontent with steps taken so far by the government, while 34.1% approved, according to the telephone survey conducted by Kyodo News for three days from 8 May 2020. Many said they feel insecure about their futures with stalling economic activity.⁶²¹

In May, 76% of Japanese agreed that the government’s highest priority should be saving as many lives as possible, even if the economy sustains more damage. 24% agreed on the converse view, that the government should save jobs and restart the economy than to take every precaution possible.⁶²²

In May a Kekst CNC tracker that sampled 1000 adults in Japan found more than a third expected to lose their job due to the pandemic. They were also critical of government, with 58% saying they have become less confident in central government. Only 13% say they thought the government gave business the support it needs.⁶²³

In a research report by The Economist, Japan scored 2.89 points out of 4 points in its novel coronavirus response index and was in the “fair” category of the assessment by the Economist Intelligence Unit. The assessment covered virus response measures in advanced countries. The country did poorly in terms of the number of virus detection tests, but scored highly for markers like its healthcare system and death toll.⁶²⁴

Economic Impact

Japan has reported that the economic impact is on a level with that seen after the 2011 earthquake and tsunami and the 2008 global financial crisis. In April, the IMF lowered its projection for Japan's economic growth in 2020 to minus 5.2% from 0.7% because of the pandemic and forecast that unemployment would go from 2.4% to 3%.⁶²⁵

Japan and the International Olympic Committee decided to postpone the July 2020 Tokyo games for a year.⁶²⁶

Hokkaido relies on agriculture and tourism; the industries have been devastated. Farmers have been hard hit and an estimated 50 food processing companies went bankrupt.⁶²⁷ The Hokkaido governor and Sapporo mayor have requested the central government compensate bars and restaurants for lost earnings if they close to adhere with the emergency declaration.⁶²⁸

By May, more than 35 percent of households experienced reductions in income, while more than 50 percent expect income cuts and 47 percent of workers fear losing their jobs.⁶²⁹

The government introduced a stimulus package worth ¥117.1 trillion (\$1.1 trillion) to help businesses and households cope with the economic effects of the coronavirus pandemic. The stimulus is on top of the first stimulus package, which was also worth ¥117.1 trillion.⁶³⁰

Confidence among large Japanese companies in the April-June period hit the lowest level in 11 years amid the pandemic, a joint survey by the Finance Ministry and Cabinet Office showed on 11 June 2020.⁶³¹

Wider impacts

Delays at family courts, including the coordination of meetings between parents and children living apart and divorce mediation.⁶³²

A survey found that the state of national emergency heightened emotions, particularly anger and was more prevalent in husbands compared to wives.⁶³³

The shift to working from home in Japan affected household electricity bills. An estimate based on a study in June suggested they rose by ¥3,500 on a monthly basis, an increase of 60%.⁶³⁴

New York, USA

Background

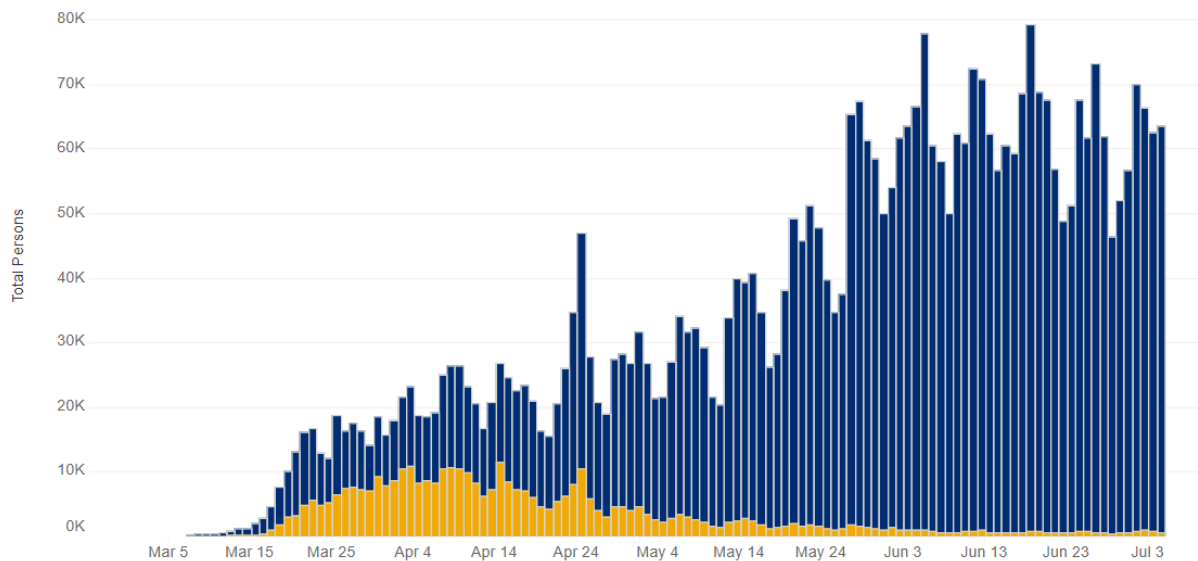
New York State (NY) recorded 427,638 cases and 32,403 deaths as of 13 July. In early June Queens, Kings and the Bronx were the worst affected and recorded 58% of all deaths in the county in May and June.⁶³⁵

Daily Totals: Persons Tested and Persons Tested Positive

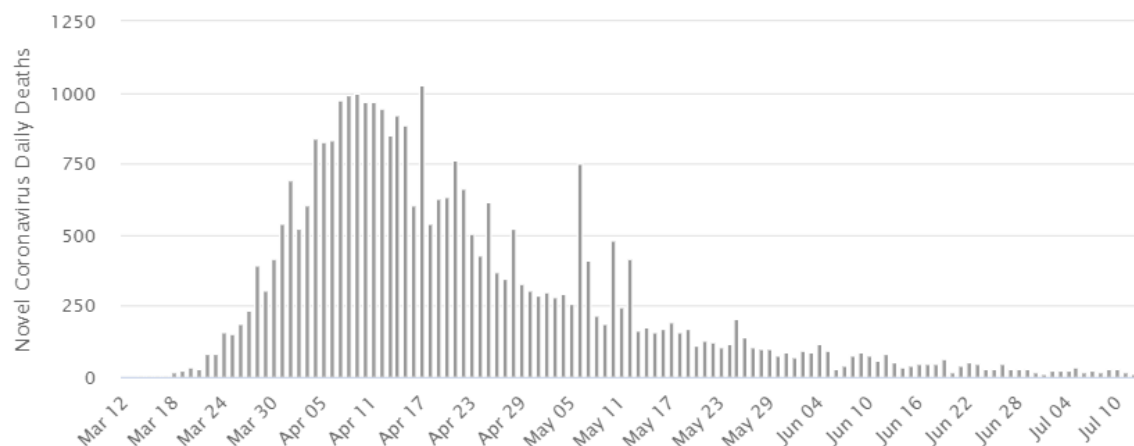
■ Total Persons Tested ■ Total Tested Positive

Hover over a bar to see details

Time Period
Earlier Data



Cases can be influenced by testing availability and strategy, looking at deaths from COVID-19 can be a more accurate way of viewing an outbreak (although there is a lag from infection to death). The graph below shows a clear peak and then decline in deaths.



Source: New York County (2020)

As at June 22, there were 24,725 deaths reported, 90% had at least one comorbidity, 58% were male.⁶³⁶

Mobility

Google mobility data shows that through April, there was around a 70% decline in mobility in transit stations, 50% in workplaces, and 50% in retail and recreation.⁶³⁷

As New York City entered Phase 2 of reopening on 22 June, subway cars had relatively few riders for the start of the workweek, and parks in business districts were sparsely populated during the usual lunch rush.⁶³⁸

Seroprevalence

In April, antibody testing survey found 14% of the population had antibodies.⁶³⁹

Antibody testing survey at churches in lower-income New York City communities and communities of colour found 27% tested positive for COVID-19 antibodies, compared with 19.9% of New York City's overall population.⁶⁴⁰

In New York, preliminary results of an ongoing state survey of people approached outside of grocery and big-box stores found 13.9% of those tested state-wide had coronavirus antibodies, and 21.2% in New York City in mid-April; this would give an IFR of 1.08%.⁶⁴¹

Lockdown Summary

On 22 Mar, New York State on PAUSE (Policies Assuring Uniform Safety for Everyone) executive order went into effect restricting the operations of all nonessential businesses.⁶⁴²

Grocery stores, pharmacies and utility services continued to operate while restaurants were allowed to open for delivery orders.⁶⁴³ Businesses that were still allowed to operate had to implement rules to keep distancing of 6 feet and non-compliances were subject to civil fines and mandatory closure. Gatherings of any size were prohibited; outdoor solitary exercise was allowed and public transport was still running. Schools closed.

The state also implemented “Matilda’s Law” - named for the former First Lady of New York, Matilda Cuomo – to protect the most vulnerable populations, including individuals age 70 and older, those with compromised immune systems and those with underlying illnesses. The measure requires those individuals stay home and limit home visitation to immediate family members or close friends in need of emergency assistance and if it is necessary to visit such individuals then visitors should get pre-screened by taking their temperature.⁶⁴⁴

As of 16 Apr, the stay-at-home order had been extended to 15 May, together with other states.⁶⁴⁵ This state-led initiative runs contrary to the President’s guidelines which advocate the loosening of restrictions. New executive orders issued to take effect on 17 Apr 2020 now require masks or face coverings to be worn in public, including in public and private transport.⁶⁴⁶

Several Presidential proclamations led to US-wide restrictions on entry into the US from China (from 31 Jan), Iran (from 29 Feb), EU (from 11 Mar), UK and Ireland (from 14 Mar), and Brazil (from 24 May). Citizens returning from these countries were required to self-isolate for 14 days.⁶⁴⁷

Exit Strategy

Governors around the US listed four factors that were important in deciding when to reopen the economy, viz the degree of control over new cases, testing and tracing capabilities, ability to handle a resurgence, and the existence of good social distancing protocols in the workplace.⁶⁴⁸

On 4 May, Governor Cuomo presented criteria to meet before reopening:^{649, 650}

14-Day Decline in Hospitalizations OR under 15 new hospitalizations (3-day avg)	14-Day Decline in Hospital Deaths OR fewer than 5 deaths (3-day avg)	New Hospitalizations (Under 2 per 100k residents - 3 day rolling avg)	Share of Total beds available (threshold of 30%)	Share of ICU beds available (threshold of 30%)	30 per 1k residents tested monthly (7 day avg of new tests per day)	At least 30 contact tracers per 100k residents
--	---	---	---	---	--	--

- The infection rate is sufficiently low
- The health care system has the capacity to absorb a potential resurgence in new cases
- Diagnostic testing capacity is sufficiently high to detect and isolate new cases
- Robust contact-tracing capacity is in place to help prevent the spread of the virus

The New York plan for phased reopening is based on the following principles:

- Do No Harm and Strengthen the Healthcare System - New York will continue to control the rate of infection and build out the strategic stockpile of PPE and other medical equipment.
- Testing and Contact Tracing - The state is working with federal partners to rapidly scale up testing. A new state-of-the-art contact tracing program was launched by NYS with the partnership of former Mayor Mike Bloomberg, Bloomberg Philanthropies and Johns Hopkins University.
- 12 Point Plan for Phased Return of Business - Governor Cuomo outlined guidelines that will help regions create individual plans based on facts and data to re-open New York.

The 12 Point Plan (some of the following overlap with categories in next section, so are not repeated in following section):

1. CDC Guidelines - CDC Guidelines: Based on CDC recommendations, regions must experience a 14-day decline in hospitalisations and deaths on a 3-day rolling average. Regions with few COVID cases cannot exceed 15 new total cases or 5 new deaths on a 3-day rolling average. A region must have fewer than two new COVID patients admitted per 100,000 residents per day.
2. Priority Industries for Re-opening: Businesses in each region will re-open in phases.
 - Phase One: Construction, manufacturing and wholesale supply chain, select retail using pickup only
 - Phase Two: Professional services, finance and insurance, retail, administrative support, real estate and rental leasing
 - Phase Three: Restaurants and food service, hotels and accommodations
 - Phase Four: Arts, entertainment and recreation, education
3. Business Precautions: Each business and industry must have a plan to protect employees and consumers, make the physical work space safer and implement processes that lower risk of infection in the business.
4. Building Health Care Capacity: To maintain the phased re-opening plan, each region must have at least 30 percent total hospital beds and ICU beds available after elective surgeries resume. This is coupled with the new requirement that hospitals have at least 90 days of PPE stockpiled

5. **Testing Regimen:** Regions must implement a testing regimen that prioritises symptomatic persons and individuals who came into contact with a symptomatic person, and conducts frequent tests of frontline and essential workers. Each region must have the capacity to conduct 30 diagnostic tests for every 1,000 residents per month. Regions must maintain an appropriate number of testing sites to accommodate its population and must fully advertise where and how people can get tested. The region must also use the collected data to track and trace the spread of the virus.
6. **Tracing System:** Regions must have a baseline of 30 contact tracers for every 100,000 residents, and additional tracers based on the projected number of cases in the region. The region must also monitor the regional infection rate throughout the re-opening plan.

Private Kit: Safe Paths app is available, developed by teams at Harvard University and MIT. Users share their location data and see if they crossed paths with a positive person. Individuals who test positive can select to share their location data with health officials, who can then make it public to other users.⁶⁵¹
7. **Isolation Facilities:** Regions must present plans to have rooms available for people who test positive for COVID-19 and who cannot self-isolate.
8. **Regional Coordination:** Regions must coordinate the re-opening of schools, transportation systems, testing and tracing with other surrounding regions
9. **Re-imagining Tele-Medicine**
10. **Re-imagining Tele-Education**
11. **Regional Control Rooms:** Each region must monitor businesses and regional indicators during the phased re-opening, including hospital capacity, rate of infection and PPE burn rate.
12. **Protect and Respect Essential Workers:** Regions must continue to ensure protections are in place for essential workers.

New York has brought in international experts to help advise the state's reopening plan. Dr Michael T. Osterholm, Director of the Center for Infectious Disease Research and Policy at the University of Minnesota and Dr Samir Bhatt, Senior Lecturer at Imperial College London will help analyse data and metrics throughout New York's reopening process.⁶⁵²

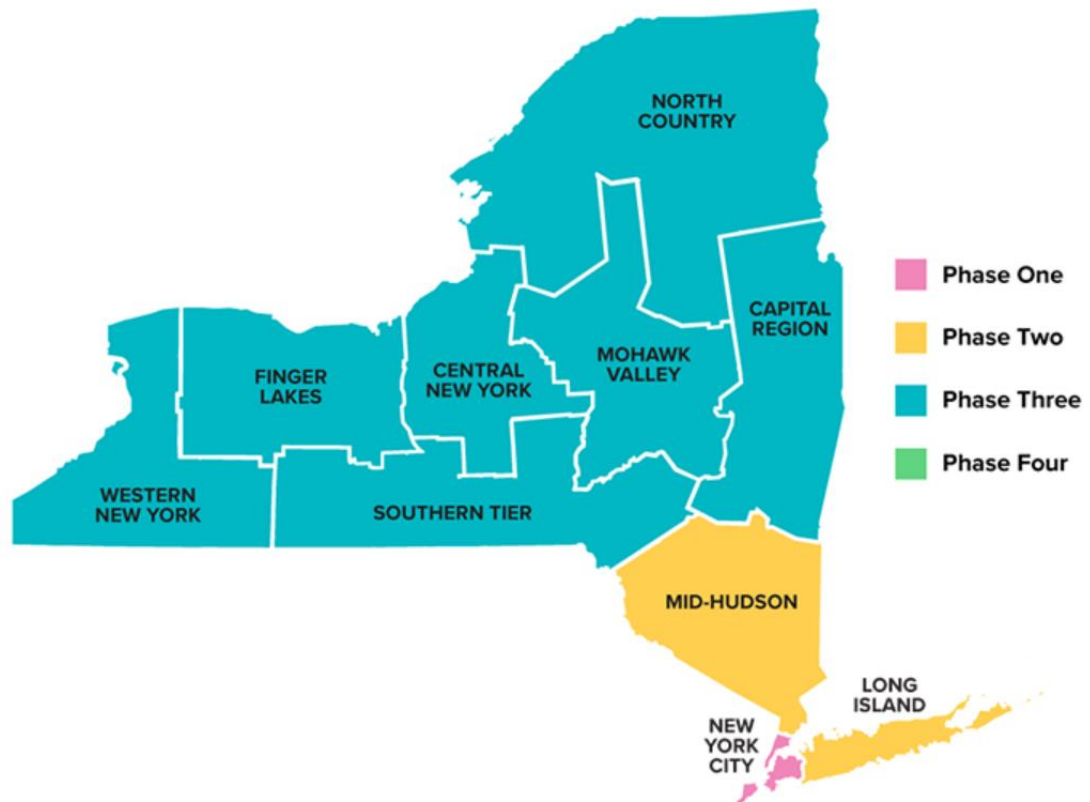
Industry guidance was made available in early June for reopening through the different phases. These include recommendations for workplaces such as the construction industry, retail, manufacturing, offices, real estate and so on.⁶⁵³

Areas reopened at different times from 20 May onwards.⁶⁵⁴ In June an "Early Warning Monitoring Dashboard" was implemented, this tracks the following metrics by regions of NYS:⁶⁵⁵

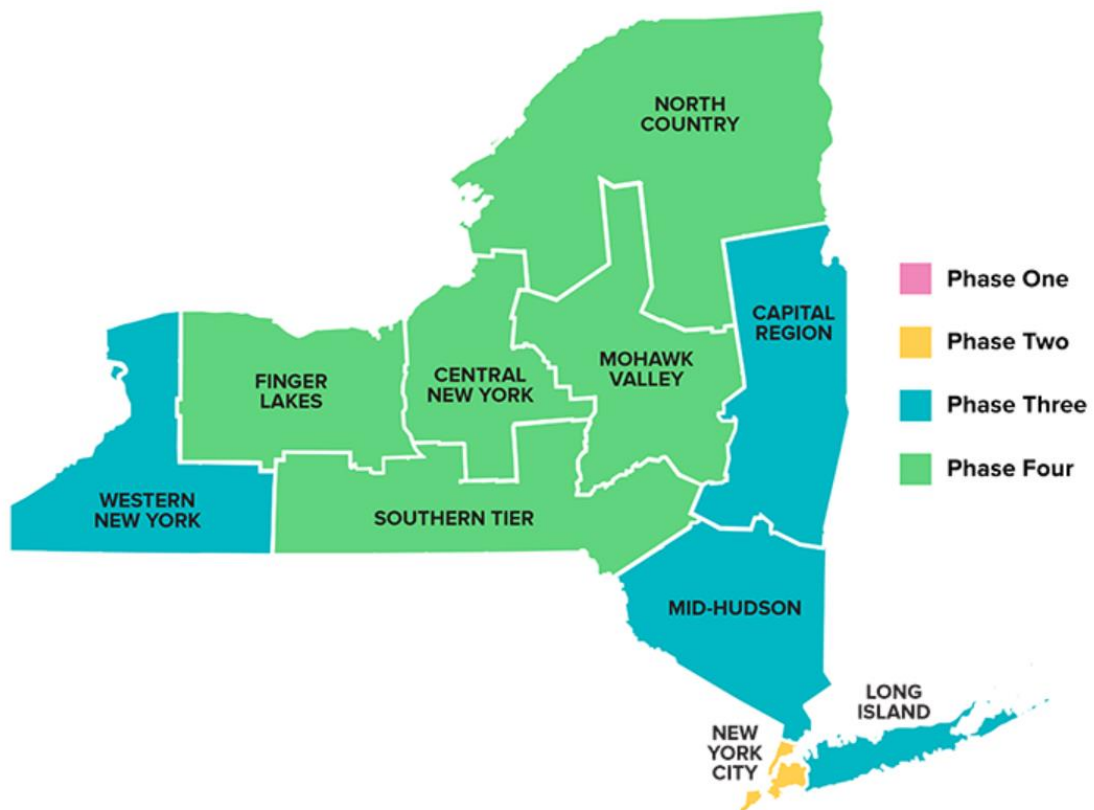
Testing/Tracing Targets		New Infections		Severity of Infection	Hospital Capacity	
Maintain 30 per 1,000 Diagnostic Tests	Maintain Required Case and Contact Tracing Capacity	% Positive Tests per Day (7-Day Rolling Avg)	New Cases per 100K (7-Day Rolling Avg)	Gross New Hospitalizations per 100k (7-Day Rolling Avg)	Share of Total Hospital Beds % Available (7-Day Rolling Avg)	Share of ICU Beds % Available (7-Day Rolling Avg)

New York City entered phase 1 of reopening on June 8; up to 400,000 workers began returning to construction and manufacturing jobs. Retail stores also opened for curbside and in-store pickup.⁶⁵⁶

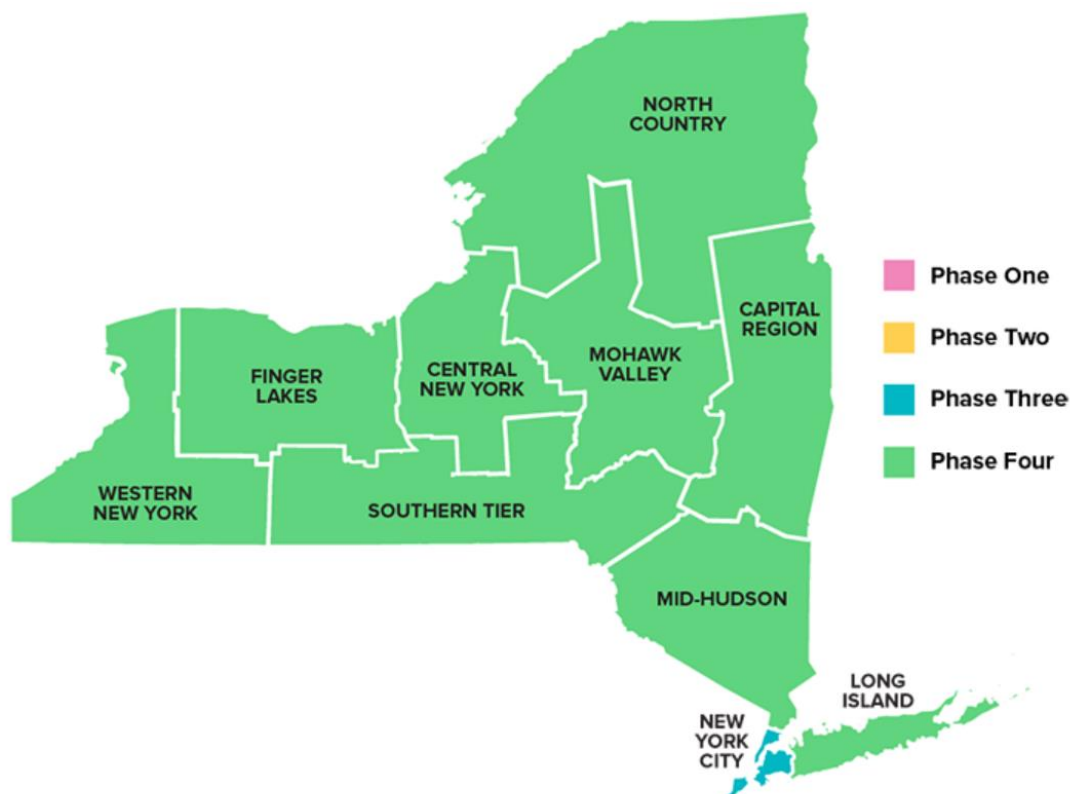
Phases as at 22 June 2020.



Phases as at 29 June 2020



Phases as at 13 July 2020



(forward.ny.gov)

Tracking, tracing, testing and isolation

See 12-point plan above.

NY Governor Andrew Cuomo supported the view that more widespread testing should be carried out and more supplies and operational capabilities be available before the economy reopens, a situation yet to be reached.⁶⁵⁷ He issued an executive order for all laboratories in New York to increase testing numbers as part of his move to “un-pause New York”.⁶⁵⁸

On 2 March, Governor Andrew Cuomo announced the Wadsworth Center had partnered with hospitals to expand surge testing capacity to 1,000 tests per day.⁶⁵⁹ By March 11, partnerships were announced with 28 private labs to increase testing capacity.⁶⁶⁰ FDA approval for these labs was obtained shortly after, increasing the state's testing from 3,000 to about 6,000 tests per day.⁶⁶¹

The first drive-through testing centre was announced on March 13.⁶⁶² Through April testing was standardised and prioritised through an Executive Order that required the establishment of a single, statewide coordinated testing prioritisation process.⁶⁶³

From July 1, testing was made available to all New Yorkers statewide.⁶⁶⁴ Testing criteria evolved to become increasingly broader. Initially, anyone with symptoms could be tested and those in residential care homes, this later expanded to those who had had close contact with cases and frontline workers. On May 10, Governor Cuomo signed an Executive Order requiring testing of all personnel of nursing homes and adult care facilities twice a week. In the following month, more than 425,000 nursing home staff tests were processed and 6,500 positive results identified (half within New York City).⁶⁶⁵ In May, 24 temporary testing sites in higher-risk communities were established, such as in low-income communities and communities of colour.⁶⁶⁶

Individuals who fit prioritisation categories and who did not have access to testing could call the New York State COVID-19 Hotline or visit a website to be screened for eligibility, and if eligible, have an appointment set up at one of the State's Testing Sites.⁶⁶⁷ Results were generally returned within one to two days.⁶⁶⁸

Through April antibody testing increased. A state-wide antibody testing survey commenced on 20 Apr to understand the level of immunity before reopening businesses.⁶⁶⁹

From June 8, ten additional testing spots were established in hotspot areas (predominantly low income and minority communities).⁶⁷⁰

Test & Trace Corps initiative was launched in June. On June 21, after 3 weeks of operation, contact tracing service reported that 94% of people testing positive were picking up calls, but less than half (42%) were sharing who they had been in contact with.⁶⁷¹

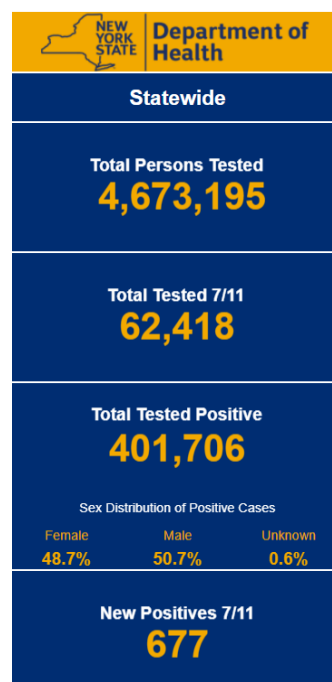
At the end of June, Governor Cuomo partnered with New Jersey Governor Murphy and Connecticut Governor Lamont to create a joint travel advisory for individuals traveling from states with significant community spread of COVID-19, requiring a quarantine for 14 days when visiting their states.⁶⁷² This quarantine applies to any person arriving from a state with a positive test rate higher than 10 per 100,000 residents over a 7-day rolling average or a state with a 10% or higher positivity rate over a 7-day rolling average.⁶⁷³

In July individuals traveling to New York from the following states were required to quarantine for 14 days - Alabama, Arkansas, Arizona, California, Delaware, Florida, Georgia, Iowa, Idaho, Kansas, Louisiana, Mississippi, North Carolina, Nevada, Oklahoma, South Carolina, Tennessee, Texas, and Utah.⁶⁷⁴

New York state announced on May 10 that all nursing home staff members must be tested twice a week for COVID-19, and hospitals may not discharge any COVID-19 patient to a nursing home until the patient tests negative.⁶⁷⁵

May 19, New York State testing capacity reached 40,000 diagnostic tests per day, and 700 testing sites.⁶⁷⁶

As at 13 July:⁶⁷⁷



Treating

People with symptoms were advised to stay home and get tested. If positive, individuals had to stay home for at least 10 days.⁶⁷⁸

Isolation could be discontinued for home-based cases when:⁶⁷⁹

- It has been at least 10 days after symptom onset;
- It has been 10 days after first positive diagnostic test, for asymptomatic patients.

For hospitalised patients, isolation could be discontinued when:

- It has been at least 10 days after symptom onset or test-based strategy (fever-free, temperature less than 100.4 degrees Fahrenheit or 38.0 degrees Celsius for at least 3 days without use of antipyretics, plus have resolving symptoms).
- It has been 14 days after first positive diagnostic test, for asymptomatic patients or test-based strategy.

Doctors could recommend longer periods of isolation due to underlying health conditions or based on the course of illness. Some essential workers, such as nursing home staff, who had or may have COVID-19 had to wait longer before returning to work.

The Isolation Hotel Program was available to those who were not able to self-isolate. This is used when people do not have space in their own home to stay 6 ft away from others, there is only a shared bathroom, or someone vulnerable lives in the same home. The program, including food, linens, and local phone service, is free for eligible New Yorkers. This program is also eligible for New Yorkers working in hospitals and other care settings who cannot isolate where they live and wish to reduce the risk of transmission at home.⁶⁸⁰

Masks

Governor Cuomo issued executive orders for strict enforcement of mask-wearing.⁶⁸¹ In the US, mask wearing in public places went from around 5% in mid-March to close to 70% by the end of May.⁶⁸²

In June it was stated that “A New York State mandate requires everyone to wear a face covering when outside their home if unable to maintain at least 6 feet of distance from others.”⁶⁸³

Public places and gatherings

Beaches opened on 22 May, ahead of Memorial Day weekend (swimming was not permitted), small gatherings of up to ten socially distanced people were also permitted.^{684,685}

From the end of June, regions in phase four were permitted to hold social gatherings of up to 50 people; and indoor religious gatherings were allowed at up to 33 percent of the indoor site's capacity.⁶⁸⁶

State outdoor pools across New York opened for the July 4 weekend with safe-opening rules.⁶⁸⁷

Transport

From 6 May, there was daily disinfection of subway trains between 1am and 5am, temporarily halting the 24-hour service.⁶⁸⁸

Airports remained open, but with 95% reduction in traffic.⁶⁸⁹

As the state reopened, it sent over one million masks, as well as 500,000 2 oz. bottles of sanitizer to the Metropolitan Transportation Authority.⁶⁹⁰

Concern was raised at end of June regarding out-of-state visitors from hot spots bringing the virus back to New York.⁶⁹¹

Places of worship

From 21 May, religious gatherings of up to 10 people were allowed as long as participants wore masks and practiced social distancing. The state also allowed drive-in and parking lot services.⁶⁹² From early June places of worship were allowed to reopen with 25 percent occupancy and social distancing protocols as part of phase two of reopening.⁶⁹³

The Supreme Court refused a request from a church in California to block enforcement of state restrictions on attendance at religious services. President Trump announced that he would categorise churches as essential places that provide essential services, and stated that “governors need to do the right thing and allow these very important, essential places of faith to open right now, for this weekend (for 30 May). If they don’t do it, I will override the governors.”⁶⁹⁴

Business

See phases outlined above.

On 27 May, Mayor Bill de Blasio announced that New York will begin to enforce a “take out, don’t hang out” policy in nine “bar-heavy” neighbourhoods: the Upper East Side, Hell’s Kitchen, the East Village, the West Village, the Lower East Side, Williamsburg, Long Island City, Astoria, and City Island.⁶⁹⁵

Governor Andrew Cuomo announced on 24 May that New York’s professional sports teams could resume their training camps, under the condition that the teams adhere to social-distancing protocol.⁶⁹⁶

26 May, the Stock Exchange trading floor reopened - only a quarter of the normal number of traders were allowed to return, they were requested to avoid public transport, have their temperature taken, wear masks and follow strict social distancing rules. Transparent barriers were also in place to keep people apart.⁶⁹⁷

As New York City looked toward Phase 1 of reopening on June 8, state officials ensured the city’s 11 public hospitals and more than 100 private hospitals had “surge and flex” capacity to deal with a potential second spike.⁶⁹⁸

1 June, dentists reopened subject to state guidance on safety and social distancing.⁶⁹⁹

Following issues around groups not abiding by measures in entertainment establishments, in late June Governor Cuomo signed an Executive order stating that businesses selling alcohol that were violating the reopening guidelines could result in immediate loss of their liquor license and a shutdown order; the areas immediately outside their locations were also the responsibility of the business.⁷⁰⁰

In late June, hospitals and group homes were allowed to accept visitors at their discretion, while following state guidelines including time-limited visits and requiring visitors to wear PPE and be subject to symptom and temperature checks.⁷⁰¹

Gov. Andrew Cuomo issued an executive order on 27 June making New Yorkers ineligible for COVID-19 paid sick leave benefits if they voluntarily travel to high-risk states. The governor’s office described high-risk states as having positive test rates higher than 10 per 100,000 residents, or higher than a 10% positive test rate over a seven-day rolling average.⁷⁰²

Mayor Bill de Blasio announced on 1 July, that indoor dining will not be allowed when New York City reaches Phase 3. Gov. Andrew Cuomo said the postponement of indoor dining in

the city is happening due to a slip of citizen compliance and local government enforcement of mask-wearing directives and social distancing guidelines.⁷⁰³

New York's Mid-Hudson region entered Phase 4 reopening on July 7, which includes low-risk indoor and outdoor activities, like museums and zoos. Phase 4 was supposed to include movie theaters, malls and gyms, but this was not the case as medical experts worry about the indoor spread of coronavirus during sweating, even with masks.⁷⁰⁴

In New York City, nail salons and other personal care services, including spas, tanning salons and tattoo parlors reopened on July 7, along with dog parks, basketball and tennis courts. But businesses had to limit capacity to 50%, disinfect work stations for every new customer, and ensure mask wearing at all times. Indoor dining, which was initially included in the Phase 3 plan, was postponed.⁷⁰⁵

Andrew Cuomo announced mall reopening on July 10 in Long Island regions in Phase 4, but only those with enhanced COVID-19 removal filters.⁷⁰⁶

Education

Plans for reopening schools were developed on how to reopen safely in Sept.⁷⁰⁷ Concerns were raised in June around how to safely open.⁷⁰⁸

Governor Andrew Cuomo stated that New York State will decide whether schools will reopen in the fall during the first week of August.⁷⁰⁹ However the Mayor stated that New York City students will return to school in the fall with a "blended learning" model: "blended learning simply means at some points in the week you're learning in person in the classroom, at other points in the week you're learning remotely," ... "For the vast majority of kids in the vast majority of schools, you'll be going to school to the classroom either two days a week or three days a week, depending on the week."⁷¹⁰

Medical schools were allowed to reopen on June 22 and socially distanced graduations of up to 150 people were allowed from June 26. Schools will be allowed hold drive-in and drive-through graduation ceremonies.⁷¹¹

The Department of Health approved a plan to reopen more than 3,000 child care centers on 13 July. Masks and social distancing were required, and capacity capped at no more than 15 children to a room. Students and staff undergo daily health screenings, and rooms cleaned daily.⁷¹²

Issues

Epidemiologists have pointed to New York City's density and its role as an international hub of commerce and tourism to explain why the virus has spread so rapidly. Early on, there was confusion over the federal response, including significant problems with the expansion of testing, which made it far harder to see the scale of the outbreak.⁷¹³

Dr. Thomas R. Frieden, the former head of the Centers for Disease Control and Prevention and former commissioner of the city's Health Department mentioned that if the state and city had adopted widespread social-distancing measures a week or two earlier, including closing schools, stores and restaurants, then the estimated death toll from the outbreak might have been reduced by 50 to 80 percent. New York mandated those measures after localities in states including California and Washington had done so.⁷¹⁴

Governor Cuomo and Mayor de Blasio disagreed on the school closures. The mayor announced the extension of the closure through the rest of the academic year, which will add to the pressure on educators and parents already struggling to convert to online learning. Governor Cuomo asserted however that there has been no such decision, and that this should be decided by the state to allow for proper coordination in the region. This was similar

to the disagreement on the implementation of a “shelter-in-place” order that limits non-essential travel.⁷¹⁵

There were issues around the national and state interactions. For example, on 24 May the Trump administration announced a new testing strategy, which held individual states responsible for planning and carrying out testing. The strategy was criticised by public health experts and Democratic leaders stating that the strategy runs the risk of states competing with one another and may create inequities between them.⁷¹⁶

There was also blame passed between Governor Cuomo and President Trump surrounding the discharging elderly patients into nursing homes. 4,300 COVID-infected elderly patients were placed into nursing homes under a state directive that was based on national agency guidance.⁷¹⁷

On April 15, President Trump accused New York City of inflating its number of deaths from COVID-19 after a revised count added more than 3,700 fatalities. The city reports deaths of people who were never tested or hospitalised for the virus, but whose death appeared to be due to COVID-19 symptoms. The death certificates for these victims list the cause of death as “COVID-19 or an equivalent.” This category accounts for thousands of people who died at home before they could be tested. This is in line with CDC guidance that says COVID-19 can be listed as a probable or presumed cause of death if a person’s infection was not officially confirmed but “the circumstances are compelling within a reasonable degree of certainty.”⁷¹⁸

In June Andrew Cuomo also questioned death data, calling the process of assigning cause of death “fairly random.” In May, the governor also questioned the use of “probable” deaths in public tallies, noting that New York would keep these deaths from its total counts, even though many states and New York City post them publicly. Public health experts say the method used to count deaths from a disease like COVID-19 is decades-old and some amount of uncertainty is simply part of the process. “Everything is so politically charged, people are looking for excuses to question the data,” said Robert Anderson, who runs the mortality statistics branch of the CDC and Prevention’s National Center for Health Statistics.⁷¹⁹

On May 25, George Floyd, a 46-year-old black man died in Minneapolis after a white police officer pressed his knee to Floyd’s neck for almost nine minutes while Floyd was handcuffed face down in the street. This sparked mass protests in the US and beyond. Governor Cuomo said the protests could threaten the state’s progress in containing the spread of the virus. “I know a lot of the protesters are so annoyed they don’t want to hear about COVID anymore... ‘COVID is yesterday’s news.’ No, COVID is still a problem. COVID still kills also, so be mindful and respectful of that.”⁷²⁰ The Governor also urged protesters to wear masks properly over both nose and mouth.⁷²¹

On 13 and 14 June crowds outside bars prompted New York governor Andrew Cuomo to urge businesses and the public to abide by reopening guidance and social distancing.⁷²²

On July 6, New York Governor Andrew Cuomo stated that President Donald Trump should not be a “co-conspirator” of the virus and acknowledge the “major problem” it poses as cases spiked in dozens of states after some rushed to reopen.⁷²³

Public Opinion

In the US, from mid-March to May, 40-50% supported the government’s handling of the pandemic, just over 40% perceive that the situation is improving.⁷²⁴

Economic Impact

The economy has been affected by the lockdown. The fall in total retail sales in March was the largest seen in almost three decades.⁷²⁵ In April, there was a record number of people registering as unemployed.⁷²⁶ Economic packages such as the Paycheck Protection Program have been launched to help small businesses survive, but there were initial problems with the application of these grants and loans and the sheer number applying reaching the allocated level early on.^{727,728}

To tackle these issues, the Governor put into place several measures including aid for schools affected by closure and the waiver of waiting period for health insurance claims.⁷²⁹

New York will also be receiving at least \$40 billion from the COVID-19 relief package from the US Senate.⁷³⁰

In May/June, New York borrowed more than \$1.1 billion from the federal government to pay unemployment claims triggered by the coronavirus pandemic.⁷³¹

The forecast is that the unemployment rate at the end of 2020 will be at 9.3% and reduce to 5.5% by 2022. “Nearly 20 million jobs have been lost on net since February,” Jerome H. Powell stated, Chair of the Federal Reserve.⁷³²

Wider impacts

It was announced on 25 May that the families of state and city workers who died fighting the coronavirus outbreak will receive line-of-duty benefits. These workers include transit workers, emergency medical workers, police officers, and firefighters. The benefits will include funeral costs and 66 percent of the worker's salary.⁷³³

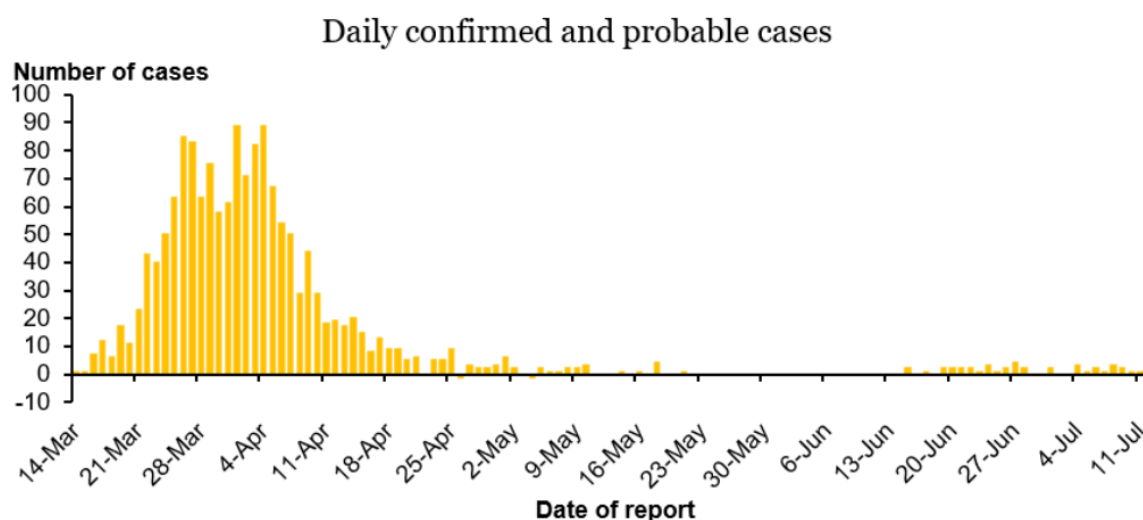
End of June saw growing concern over how New Yorkers who were still unemployed would pay their rent, increasing their risk of getting evicted by landlords and made homeless.⁷³⁴

New Zealand

Background

As of 13 July, there were 1,544 confirmed and probable cases and 22 deaths. Case numbers peaked and then plateaued at the end of Mar through to the start of Apr, then fell to single digit cases by the end of Apr, with some days reporting no cases. Single digit cases were still being reported into May.⁷³⁵

On June 16, New Zealand reported two cases, ending a run of 24 days with no new cases. Both were imported cases from the UK (via Doha and Brisbane).⁷³⁶ Further imported cases were identified from US, Australia and India in late June.



New confirmed and probable cases over time, as at 9.00 am, 13 July 2020

Source: NZ Ministry of Health (2020)

Mobility

Google mobility data shows that through April mobility was low; there was around an 80% decline in mobility in transit stations, 70% in workplaces, and over 80% in retail and recreation. Towards the end of April and into early May, mobility remained low - transit stations were still at -68% and workplaces -40%, retail and recreations at -70%.⁷³⁷

Seroprevalence

No information has been found so far.

Lockdown Summary

A maximum Level Four lockdown was implemented from 26 Mar to 23 Apr. Only essential services ran and movement was restricted.⁷³⁸ These strict measures were imposed at a time when there were only 102 cases and no deaths.⁷³⁹

Exit Strategy

“Our elimination strategy is a sustained approach to keep it out, find it and stamp it out. We do this through: controlling entry at the border; disease surveillance; physical distancing and hygiene measures; testing for and tracing all potential cases; isolating cases and their close contacts; and broader public health controls depending on the alert level we are in.”⁷⁴⁰ – May 8

New Zealand has an Alert Level system.⁷⁴¹

	ALERT LEVEL 1	ALERT LEVEL 2	ALERT LEVEL 3	ALERT LEVEL 4
OUTCOME	Keep out global pandemic. Population prepared for increase in alert levels if necessary.	Physical distancing and restrictions on gatherings to address sporadic cases or a cluster in New Zealand.	Further restrictions on activities, including at workplaces and socially, to address a high risk of transmission within New Zealand.	Strong restrictions to limit all people movement and contact to contain community transmission and outbreaks.
SUMMARY	Be prepared, and be vigilant. Border measures are in place. Public health measures in place, but no physical distancing is needed.	Businesses open, but physical distancing applies. Gatherings limited.	Stay at home, other than for essential personal movement, and going to work/school. Stay in extended bubble, which can now include close family or caregivers.	Stay at home, other than for essential personal movement and doing essential work. Stay in immediate household bubble.

Prime Minister Jacinda Ardern announced details on moving between the Alert Levels prior to the move to enable businesses and individuals to plan. The details of Alert Level 3 were announced on 16 Apr, highlighting that, while there will be loosening of restrictions, there should still be heightened vigilance by the community and emphasised the necessity of the stringent measures currently in place to continue despite the huge economic impact.⁷⁴²

The country moved to Alert Level 3 on 27 Apr. On 13 May, New Zealand moved to Alert Level 2. Social distancing and hygiene measures were emphasised throughout.⁷⁴³

Prime Minister Jacinda Ardern stated that from 9 June the country would move to Alert Level 1 and all COVID-19 measures in the country will be lifted, except border restrictions, declaring that the virus had been eliminated from the country.⁷⁴⁴ Under level 1, there is no requirement for physical distancing or limits on the number of people allowed in places like bars, clubs, churches, and sports venues.⁷⁴⁵ The first weekend at Alert Level 1 (13 and 14 June) New Zealanders went to sports fixtures, clubs and malls. There was minimal mask wearing or hand sanitiser.^{746,747}

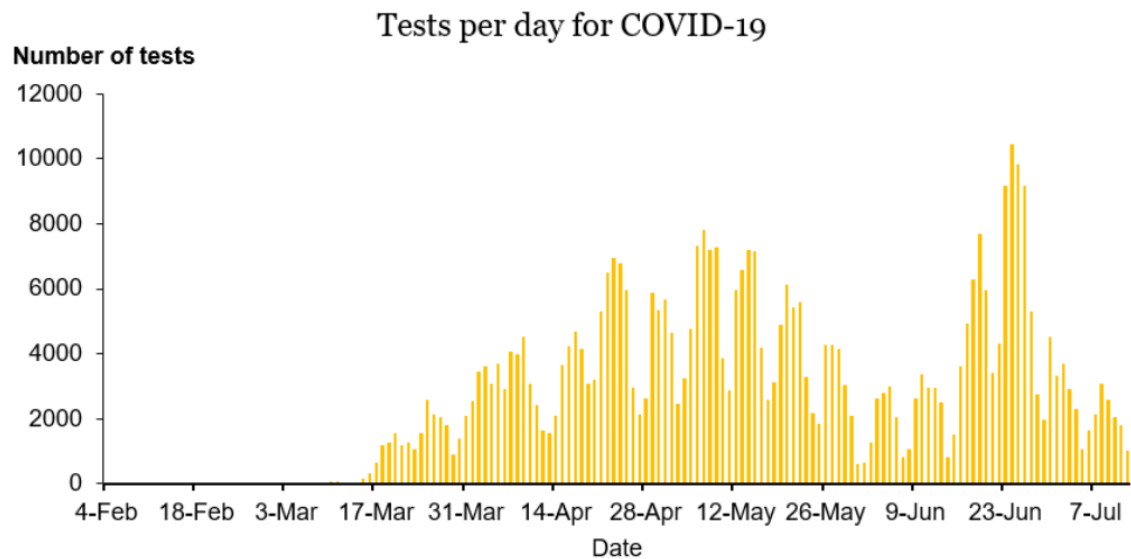
Tracking, tracing, testing and isolation

General public health advice: Regularly disinfect surfaces; wash and dry hands, cough and sneeze into elbow, don't touch face; people with cold or flu symptoms must stay at home and ring Healthline or their GP.

There was ongoing contact tracing for all confirmed and probable new cases of COVID-19, with appropriate isolation measures put in place. In June, the head of planning of the World Health Organisation for the Western Pacific region, Dr Matthew Griffith, urged New Zealand to further develop its contact tracing systems, in case there is another outbreak.⁷⁴⁸ A review by Allen & Clarke, commissioned by the Ministry of Health, found that the operations of Auckland, Hawke's Bay and Southern public health units has a reliance on manual processes and a lack of communication between units and the National Contact Tracing Centre. This is because the units did not often use the National Close Contact Tracing Centre, nor the government's tracing software, which delayed their ability to identify clusters.⁷⁴⁹

At the end of May, the New Zealand Government launched a tracing app "NZ COVID Tracer", and "Āwhina" app to help health workers access the information they need about COVID-19.^{750,751} Some businesses have also set up their own apps for contact tracing.⁷⁵² The NZ COVID Tracer app recorded 522,000 registrations by 8 June.⁷⁵³ The NZ COVID Tracer is used to check in to places by scanning the official Ministry of Health QR codes.⁷⁵⁴

There is testing of potential cases of COVID-19 for people who meet the case definition (i.e. displaying symptoms). Tests took place at dedicated Community-Based Assessment Centres or designated practices. Random testing within communities (including for people who are asymptomatic) was carried out locally to inform understanding on the spread of the virus in certain areas. From 22 January to 7 June 2020, 294,848 tests were carried out (1,891 was the 1 June to 7 June 2020 weekly average).⁷⁵⁵



Tests per day for COVID-19, to 12 July 2020.

Lab testing for COVID-19 as at 9.00 am 13 July

	Tests	Date
Total tested yesterday	1,043	12 July 2020
7-day rolling average	2,051	6 July to 12 July 2020
Total tested to date	429,643	22 January to 12 July 2020
Supplies in stock*	277,256	13 July 2020

On June 23, New Zealand government stated it was considering additional testing and monitoring of flight attendants, particularly for those travelling from the west coast of the United States.⁷⁵⁶

At the end of June, doctors stated that there had been a surge in demand for community testing after cases in quarantine visited a hospital, shelving plans to close Wellington's community testing centres.⁷⁵⁷

On June 28, Northern Region Health Coordination Centre lead Dale Bramley said that since the last community case of the virus was reported more than a month ago, more than 50,000 tests have been carried out across Auckland and all of them have come back negative. The only COVID-19 cases were people who have recently returned from overseas who have been caught at the border.⁷⁵⁸ COVID-19 testing for every person with a cough or cold symptom has been dropped by the Ministry of Health and instead focus on those at highest risk. The high-risk group includes anyone who has recently:

- Had contact with an infected person
- Been overseas
- Had direct contact with someone who had been overseas
- Worked on an international aircraft or ship
- Worked at an airport or isolation facility

The move was expected to end the huge demand for tests in some areas as the cold and flu season hit (end of June).⁷⁵⁹

The change in criteria created some confusion. Several people have been turned away by community testing centres - despite being sent there by doctors. Auckland's health authorities said the priority for testing centres was people who met the ministry's new Higher Index of Suspicion for COVID-19. Lower risk people could still be swabbed but would have to be assessed by their GP.⁷⁶⁰ Tests results generally take 2 days to be returned.⁷⁶¹

Self-isolation is recommended for those who display relevant symptoms of COVID-19, test positive for COVID-19, or have been in close contact with someone who tests positive for COVID-19, including quarantine/managed isolation for those who have been overseas in the last 14 days. Quarantine facilities were also available for those who do not have sufficient capacity to self-isolate effectively.

Mild cases can self-isolate and be monitored at home, more severe cases were hospitalised.⁷⁶² Patients under investigation, and probable cases should be accommodated in a single room. If confirmed, they could be cohorted with other confirmed cases.⁷⁶³

Cases at home could come out of isolation 10 days after symptom onset or where symptoms had resolved 48 hours before. Severe cases could come out of isolation 10 days after discharge or where symptoms had resolved 48 hours before.⁷⁶⁴

Every person who arrived in New Zealand was isolated from other people in New Zealand for a minimum period of 14 days. They then had to test negative for COVID-19 before they could go into the community. The New Zealand government arranged for hotels to be used for managed isolation and quarantine for people arriving in the country.⁷⁶⁵

Difference between "managed isolation" and "quarantine":

Managed isolation: "If people do not have symptoms of COVID-19 on arrival, they will be placed in a managed isolation facility. They may not leave their facility unless they have applied for and received an exemption from isolation from health officials. However, they can go for walks under the condition they do not have contact with other people in the community."⁷⁶⁶

Quarantine: "If people do have symptoms of COVID-19 on arrival, or test positive after arrival, they will be placed in a quarantine facility. These people will be unable to leave their room."⁷⁶⁷

At the end of June proper protocols were not followed and two people were allowed to leave managed isolation (visiting a family member in hospital) before they were tested. Both subsequently tested positive and were put in self-isolation.⁷⁶⁸ The two new cases arrived in New Zealand on Jun 7 from the UK (via Doha and Brisbane) and were in an isolation facility in Auckland. They were given special permission to leave the facility to visit an end-of-life patient in Wellington.⁷⁶⁹ Prime Minister Jacinda Ardern said the circumstances surrounding the announcement of the two new cases were not considered acceptable by the Government.⁷⁷⁰ Professor of Medicine in the Faculty of Medical and Health Sciences at the University of Auckland Des Gorman called the decision to let the two people leave isolation without being tested for the virus "completely unacceptable".⁷⁷¹ The Government suspended all compassionate exemptions for travellers until assurances were provided from the Ministry of Health that the procedures were more robust.⁷⁷²

Ports of Auckland kept the shore leave ban even though under official rules for alert level 1, crews at sea for more than 14 days who have not declared illness were allowed to disembark with no health checks required. This came after several cases of crew members arriving and reporting illness.⁷⁷³

A review of New Zealand's managed isolation and quarantine facilities was ordered by PM Jacinda Ardern after reports of people mixing in isolation facilities and others leaving quarantine without being tested. On June 28 the review reported that it found the system is under "extreme stress" as more and more New Zealanders return home. The review found "resources required to support the managed isolation and quarantine function have failed to keep pace with the increased volume of returnees".⁷⁷⁴

Prior to 9 June, there was no requirement for those leaving facilities to be tested as everyone had to undergo 14 days of mandatory isolation.⁷⁷⁵ The Ministry of Health was unable to reach at least 58% of the people who left managed isolation untested between 9 and 16 June (2159 people). In addition, 51 of the 55 people who had been granted compassionate exemptions to leave managed isolation had not been tested.⁷⁷⁶ This situation was followed by the Minister of Health resigning from his role on 2 July 2020 – he had also previously breached the strict stay-at-home rules several times.⁷⁷⁷

From 18 June, participants in more than a dozen sporting events and workers in 60 infrastructure projects qualified to fly into New Zealand, but will still have to undergo 14-day managed isolation.⁷⁷⁸

Auckland's isolation facilities reached capacity on June 21, with 4,272 New Zealanders in managed isolation and almost 900 more expected to arrive in the country in the next two days. In response, two new facilities in Rotorua were set up, and the government is looking at other regions to see if there were other facilities to accommodate future arrivals.⁷⁷⁹

People in managed isolation facilities have access to mental health support and primary healthcare.⁷⁸⁰

The minister in charge of managed isolation, Megan Woods, said about \$80 million had been spent so far on the compulsory 14-day isolation period for every returning New Zealander, with nearly \$300 million budgeted to keep the system running for the rest of the year. Government officials flagged the possibility of requiring people to contribute to their own isolation costs back in April, as they anticipated the return of tens of thousands of New Zealanders.⁷⁸¹

With daily cases being caught in isolation facilities and high numbers of New Zealanders returning home, those returning report feel less welcome. Some people online called for flights from global hotspots to be scrapped completely, to limit the numbers of those returning home, or that they should pay the entire quarantine cost.⁷⁸²

As at July 7, the government and Air New Zealand agreed to put a temporary hold on new bookings in the short term, as well as looking at aligning daily arrivals with the capacity available at managed isolation facilities to ensure New Zealanders arriving home can be safely placed in a managed isolation or quarantine facility.⁷⁸³ The minister in charge of managed isolation, Megan Woods, said the government was looking at a booking system for returning New Zealanders in order to manage the flow of people. Woods mentioned that as at July 8 there were currently 5,787 people in managed isolation and capacity for 6378.⁷⁸⁴

A 32-year-old man, who arrived from India left his managed isolation to go to the supermarket in central Auckland for 70 minutes on July 7.⁷⁸⁵ Megan Woods said that "Things have changed, even in the last week and a half, in terms of the range of incidents we are seeing, in terms of non-compliance. In the beginning, we had a very compliant population who came in ... and we didn't have people who were attempting to climb fences or slip through gaps when they saw an opportunity." Asked why people's attitudes had changed, Woods said: "I don't have insight into each and every individual in those facilities but one

thing I would observe is that they are probably looking out their windows and seeing a level 1 world operating when they are living in level 4, which is quite different."⁷⁸⁶

The government implemented a permanent police presence at every managed isolation and quarantine facility in New Zealand from July 9.⁷⁸⁷

On July 9, a man was arrested after he cut through a fence to break out of a managed isolation facility in Hamilton. Police said it was believed the individual left the Distinction Hotel for about half an hour, between about 6.30pm and 7pm yesterday and went to a liquor store.⁷⁸⁸

Health Minister Chris Hipkins defended the managed isolation system, saying the third escape this week did not represent a failure of the system. "Nearly 30,000 people have been through quarantine and managed isolation facilities since the COVID-19 response began and we are talking about three cases here. The vast majority of people in these facilities are good law-abiding people who are coming home, who are doing the right thing. I don't accept that people knowingly and willingly breaking the law necessarily represents a failure of the system, these are not prisons, these are hotels."⁷⁸⁹

A person in their 60s broke a window and escaped from an Auckland isolation hotel on July 10, the fourth escape from a facility in a week.⁷⁹⁰

The government is relooking at reinstating compassionate leave from managed facilities.⁷⁹¹

Masks

Healthy people in the community were not required to wear a face mask.⁷⁹²

Public places and gatherings

Under Alert Level 3 people continued to stay in household "bubbles" (the people in a home), but could expand their "bubble" to reconnect with close family, or bring in caregivers, or support isolated people. Emphasis was on protecting the bubble if extended. If anyone in the bubble feels unwell, they should self-isolate from everyone else in the bubble.

At Alert Level 2 recreation activities were allowed, at first keeping to 10 people.

From May 29, New Zealand allowed gatherings of up to 100 people, compared to the previous limit of 10 people, in an attempt to renormalise life.

Transport

At Alert Level 2 travel between regions allowed. Recreation activities were also allowed, at first keeping to 10 people.

Air New Zealand flights from Auckland to Shanghai, China resumed on June 22, with one return service operating weekly. Before the COVID-19 pandemic the airline operated seven services per week.⁷⁹³

On June 22, New Zealand extended a ban on cruise ships arriving in the country and tightened measures for visitors to exit quarantine, after reporting more coronavirus cases linked to overseas travel.⁷⁹⁴

Places of worship

At Alert Level 3, the only permitted gatherings of up to 10 people were for funerals and tangihanga, and wedding ceremonies (not receptions).⁷⁹⁵ From May 29, larger church services were permitted.

Business

In Alert Level 3, workplaces could open if workers could not work from home. Customers were not allowed on premises, and businesses could trade without physical contact with customers (e.g. through phone/online orders, delivery, pick-up and drive-through). 1 metre distancing was required.

At Alert Level 3, takeaway reopened with pre-ordered contactless pick up or home delivery. Real estate opened, the agent can enter people's homes, but not have customers in the office. Construction businesses also started to work again but strict hygiene measures were put in place.

At Alert Level 2, all businesses could open to customers if they can do it safely. Cafes, restaurants, bars and pubs reopened with reduced capacity due to social distancing measures.⁷⁹⁶ Bars didn't reopen until May 21, a decision that was prompted in part by the experience in South Korea.⁷⁹⁷

Cafes and restaurants allowed to serve more customers from May 29. Community sports were also allowed to restart.⁷⁹⁸

Education

In Alert Level 3, education opened for children up to Year 10. Tertiary education facilities opened for limited activities involving small groups of up to 10 people where the members of the group can maintain physical distancing. Examples of these limited activities include campus research that can't be done off campus, lab work, and practical hands on learning such as trades courses.

At Alert Level 2, tertiary education facilities, schools and Early Learning Centres opened for all ages. On 18 May schools reopened with social distancing and hygiene measures.⁷⁹⁹

Issues

Critics expressed concern that these stringent measures will heavily impact the economy and the tourism industry which provides the largest share in foreign exchange earnings.⁸⁰⁰

Some public health experts commented that the measures in New Zealand were an "over-reaction" and petitioned to decrease the alert level. Another scientist refuted their claims, arguing that the lag time in mortality means that the number of deaths would rise with time and the virus is not less harmful than previously thought.

In a WHO news conference on the coronavirus pandemic on 9 May 2020, WHO Health Emergencies Programme executive director Dr Michael Ryan said they had seen several countries who have been "very systematic with a very comprehensive strategy" to fight the disease, including New Zealand.⁸⁰¹

The government came under pressure around border and quarantine controls after cases were found to have been allowed to leave facilities on compassionate grounds.⁸⁰²

The business community want the reopening of borders to be a priority for economic survival.⁸⁰³

Public Opinion

In May, support for Prime Minister Jacinda Ardern's Labour Party soared to 56.5% (from 40% at the start of the pandemic).⁸⁰⁴

A survey of 1191 parents undertaken by the University of Otago, Christchurch in May found just under 80% thought it was "likely" or "very likely" their child would catch COVID-19 if schools were to reopen when there is widespread community transmission of the

coronavirus. More than 60% of those surveyed said they were either "extremely", "very" or "somewhat" worried about their children catching COVID-19 at school.⁸⁰⁵

A survey found that, during the pandemic, nearly 80 percent of respondents felt it was important to develop political, economic and social ties with the region, up from 67 percent prior to the pandemic.⁸⁰⁶

Economic Impact

In April, the IMF lowered its projection for New Zealand's economic growth in 2020 to minus 7.2% from 2.2% because of the pandemic and forecast that unemployment would go from 4.1% to 9.2%.⁸⁰⁷

Based on different scenarios, it was reported in April that New Zealand unemployment rate may go from 4-5% to about 13%, but up to 25% if the Alert Level 4 was maintained longer.⁸⁰⁸

Some services were particularly affected; for example, the closing of borders essentially grounded Air New Zealand, and in April it announced it was laying off 3,500 employees.⁸⁰⁹

The Reserve Bank of New Zealand announced a NZ\$30 billion monetary stimulus and provided additional liquidity to the business sector that gives banks the ability to access term funding.⁸¹⁰

On 25 May, the Government announced a new temporary payment for New Zealanders who had lost their jobs due to the pandemic, with the aim of helping them to find new employment or for retraining.⁸¹¹

On 28 May, the Government announced a multimillion-dollar funding boost to help the arts sector recover.⁸¹² On June 26 it set aside millions of dollars to support the tourism industry.⁸¹³

Modelling by Tourism New Zealand showed that domestic tourism is unlikely to fill the gap left by international visitors, but may partly sustain the sector.⁸¹⁴ By June 21, more than 300 businesses had applied for the Strategic Tourism Assets Protection Programme, part of the government's \$400 million tourism recovery package, targeted to protect strategic tourism assets.⁸¹⁵

Exports have also been impacted, such as venison – about 18,000kg of venison was unable to be exported by the end of July. This will be distributed to thousands of New Zealand families.⁸¹⁶

A review by S&P Global said that the recession would be uneven across the Asia Pacific region and New Zealand would be among the countries to escape with less permanent damage due to well-targeted economic stimulus and good management of the pandemic.⁸¹⁷

Wider impacts

From April a weekly health and wellbeing survey was undertaken. Baseline data was not available for most of the questions asked in the survey, so it is not possible to determine if the responses are due solely to the COVID-19 situation, or if they are normal for the responders. Results from 21 May:⁸¹⁸

- Ninety per cent of respondents said their general health was good, very good or excellent. This was similar to the most recently published results of the New Zealand Health survey; in 2018/19, 86 percent of respondents said their health was good, very good or excellent.
- Ninety-nine per cent could support the wellbeing of children under 15 years in their household (1 percent say they are finding this difficult)

- Ninety-five per cent were able to pay basic living costs (5 percent said they were struggling to do this)
- Ninety-nine per cent were getting along with other members of their household (1 percent said they are getting along badly or very badly)
- Seventy-five per cent of respondents said they were satisfied with life
- Thirty-one per cent reported feeling lonely or isolated at times in the week before they were surveyed
- Eight per cent reported depressive or anxiety related symptoms (down from 14 percent in week one) in the week before they were surveyed. (This may not represent an increase from usual levels of feelings of anxiety and depression amongst the general population)

The University of Auckland's Professor Richie Poulton led a review on mental health needs as a result of the situation, outlining that demand for mental health services could double as a result of the pandemic situation and he called for a fast redesign of services to meet the need and community led approaches.⁸¹⁹ Robyn Shearer, the deputy-director general for mental health and addiction, said Budget 2019 provided over \$455 million over four years in primary and community mental health support. The Government also allocated an extra \$15 million in mental wellbeing support through its COVID-19 response initiatives.⁸²⁰

A New Zealand Asian Mental Health and Well-being report, commissioned by charity Asian Family Services, found high levels of anxiety and nervousness, as well as racism against Asian New Zealanders.⁸²¹

Many non-essential health services were on pause during the lockdown, which led to impacts. For example, New Zealand's eye bank stopped collecting donations for several weeks leading to a mismatch between supply and demand.⁸²²

By June, there were just under 70 complaints to the authorities about traders falsely advertising products as protecting against the coronavirus, including cure and prevention claims such as ozone therapy as a disinfectant for living areas, to lanyards coated in chlorine dioxide that provide a protective barrier to viruses and bacteria.⁸²³

A study by the Ngāi Tahu initiative, Tokona Te Raki, has found that Māori were more likely to be impacted economically because they were over-represented in industries affected by the pandemic and had less employment security.⁸²⁴

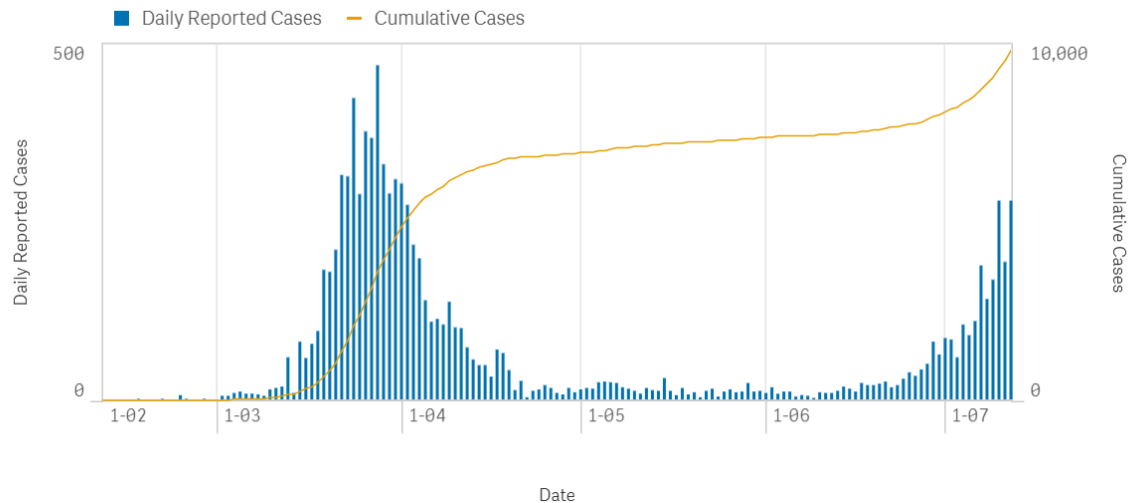
On June 18, Queenstown social services called for government support, saying they were buckling under mounting pressure. Close to 8,000 people were at risk of job losses in the Queenstown Lakes due to the impact of border closures. Most of them were migrants who can't return home or access government support. Central Lakes Family Service social worker Heather Clay said "We are exhausted, having worked near 24/7 for 12 weeks. The people we are assisting are now also exhausted, afraid and losing hope, they need to be given the means to support themselves so they're less dependent on our services."⁸²⁵

Australia

Background

As of 13 July, a total of 9,797 cases of COVID-19 have been reported in Australia, including 108 deaths. Case numbers increased towards the end of Mar, plateaued and then declined from early April.⁸²⁶

Source: Department of Health, States & Territories Report 12/7/2020



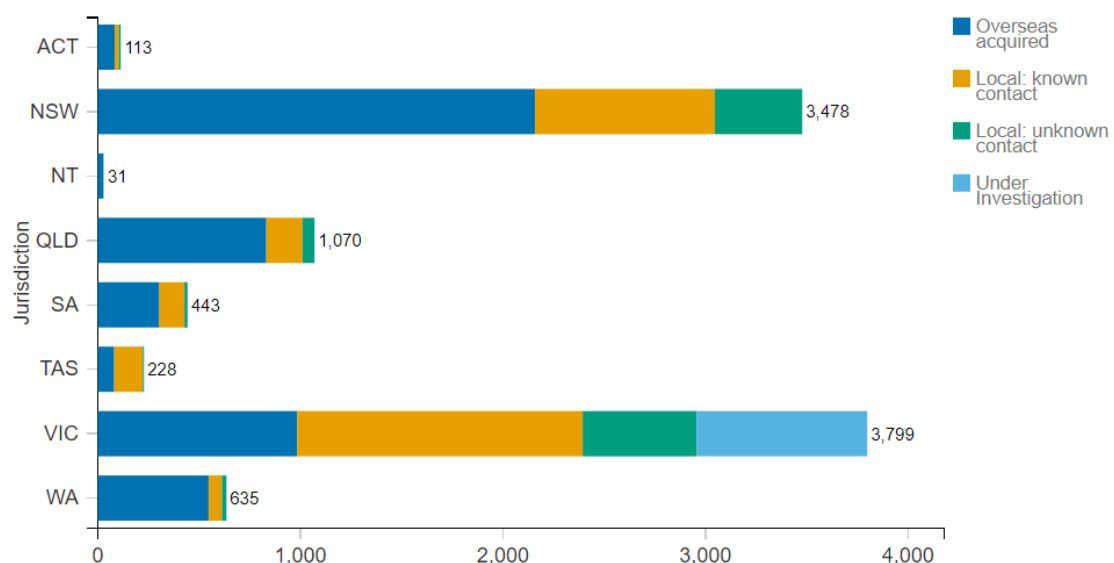
Source: Australian Ministry of Health (2020)

After restrictions eased on June 1, the number of new cases were referred to as an “ongoing trickle”, by Dr Katherine Gibney from the Doherty Institute and Royal Melbourne Hospital. Half were imported and half local. As at June 16, all but one of the 61 cases over recent days were in NSW and Victoria.⁸²⁷

On June 24, Australia recorded its first coronavirus death in a month, an 80-year-old man died in Victoria and had tested positive for COVID-19.⁸²⁸

Case levels vary across states and territories.

Source: Department of Health, States & Territories Report 12/7/2020

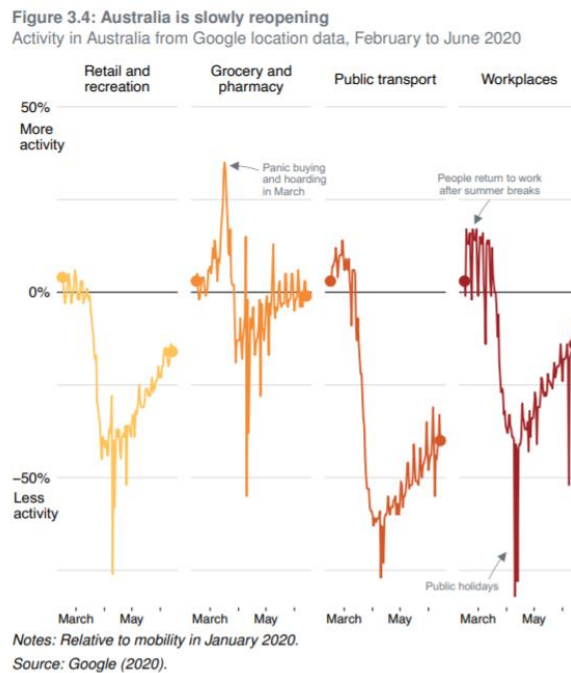


Mobility

Google mobility data shows that through April, there was around a 50% decline in mobility in transit stations, 30-40% decline in workplaces, and 40% decline in retail and recreation.⁸²⁹

From early June, several companies, including Google, Apple and Citymapper, made available public de-identified data from their mapping and other location-based apps to track traffic flow across cities, states and countries. Mobility varies based on levels of restrictions in place.⁸³⁰

In June, rush hour traffic in Melbourne was still 30% below baseline.⁸³¹



Source: Grattan Report.⁸³²

Seroprevalence

No information has been found so far.

Lockdown Summary

A National Cabinet was formed in mid-March, comprising the Prime Minister and the leaders of each state and territory government.⁸³³

20 March borders were closed to all foreigners.⁸³⁴

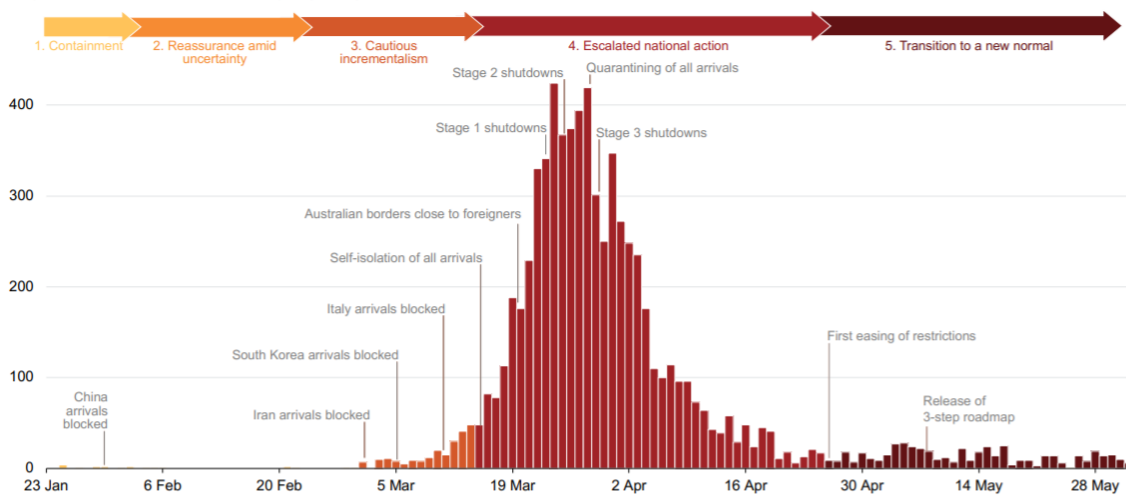
Australia's lockdown measures started on 23 Mar with the closure of most non-essential services, banning large gatherings, and encouragement of the working from home.⁸³⁵

Industries such as construction, barbers and fast food chains were allowed to continue.⁸³⁶

Individual states and cities added varying additional measures. On 16 Apr, social distancing policies were announced for at least four weeks.⁸³⁷

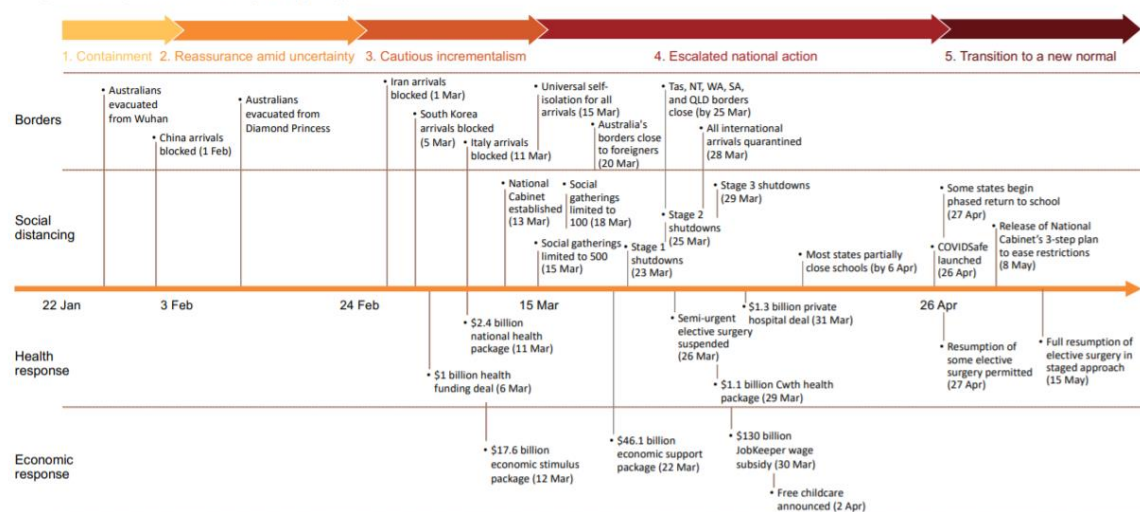
Each state has different case numbers and autonomy to put in place measures, and consequently restrictions vary from state to state.⁸³⁸

Figure 2.1: The five phases of Australia's response
Daily new COVID-19 cases in Australia by response phase



Notes: Only major lockdown events shown in grey. Data current as at 1 June 2020.
Source: Grattan analysis of data collated by Evershed et al (2020).

Figure 2.4: A timeline of Australia's major COVID-19 policies
Categories of response measures by each policy phase



Source: Grattan Institute's Coronavirus Announcements Tracker.

The Grattan report charts the Australian experience of the pandemic through to June 2020.⁸³⁹

At the end of June, fears around renewed lockdowns in Victoria prompted panic-buying and imposing purchase limits. The Victorian government requested the commonwealth to provide more than 300 Australian Defence Force troops. The military will help with enforcement in quarantine hotels and setting up more testing clinics.⁸⁴⁰

On July 1, New South Wales said residents of the 10 locked down areas in neighbouring Victoria would face six months in jail or an A\$11,000 (S\$10,614) fine if they attempt to cross the border.⁸⁴¹

Exit Strategy

There is an emphasis on personal responsibility. The Deputy Chief Medical Officer said Australians would have to take responsibility for enforcing their own social distancing measures, as well as businesses and venue operators, to prevent a second wave of infections.⁸⁴²

Australia has a three-step plan to gradually ease restriction; more details for stages two and three to be announced once the country moves through stage one. The government aims to reach stage three by July.⁸⁴³

Stage 1: Schools restaurants and cafes will be allowed to re-open; as well as libraries, playgrounds and community centers. Gatherings will be limited to ten people. Local and regional travel is allowed, whilst inter-state travel will remain prohibited.

Stage 2: Gatherings of up to 20 people, with gyms, cinemas and amusement parks to reopen. Some inter-state travel will be allowed.

Stage 3: Full resumption of businesses and interstate travel. Gatherings of up to 100 people will be allowed.

National Cabinet endorsed medical advice from the Australian Health Protection Principal Committee which sets out conditions to support decision making on the relaxation of restriction measures. These include:⁸⁴⁴

- Surveillance plan, enabled with adequate resources
- Community adherence to public health measures
- Modelling and better understanding of the characteristics and transmission of the virus
- Capacity to conduct testing more broadly
- Contact-tracing capacity in the workforce and technology to support
- Health system and PPE capacity

Each state has full autonomy for easing restrictions and moving through the stages outlined.⁸⁴⁵ There is variation from state to state.⁸⁴⁶ There can be tension between states in their varying approach.

While the prime minister, Scott Morrison, has said Australia is pursuing a strategy of “suppression” and not “elimination” of the virus, commentators have stated that “it’s really the states driving the public health response ... and they’re going for zero.”⁸⁴⁷

After a surge in cases, the Victorian government announced on June 21 it will extend its state of emergency for at least four more weeks and ramp up its police enforcement of lockdown rules. The surge has also prompted neighbouring South Australia to reconsider its decision to reopen its border, while Queensland has declared all of greater Melbourne a hotspot.⁸⁴⁸

The record high of 191 new coronavirus cases on 7 July prompted the Victorian Premier, Daniel Andrews, to reintroduce stage three restrictions across all of metropolitan Melbourne. The restrictions were introduced from 11.59pm on 8 July 2020 and will last for six weeks.⁸⁴⁹ Under the new restrictions there are only four reasons to leave home:⁸⁵⁰

- To shop for food and essential goods or services
- To provide care, for compassionate reasons or to seek medical treatment
- To exercise or for outdoor recreation
- For work or study, if this can’t be done from home

He also announced the state’s border closure with New South Wales from midnight on 7 July for 6 weeks.⁸⁵¹ In addition, some 3,000 residents in 1,345 units were placed into “hard lockdown” for at least 5 days on the afternoon of 4 July. The decision was in response to 24 coronavirus cases that have been diagnosed in the two estates. Under ‘hard lockdown’,

residents will not be allowed to leave their units under almost any circumstances for at least five days. The only exceptions were if a person is granted express permission by authorities to receive care at a medical facility, or to leave their home for compassionate reasons or in an emergency.⁸⁵² According to residents on the estate, there were no interpreters, no social workers and no medical staff in this first wave of government response. Community leaders had not been informed or consulted. Residents arrived home only to be told they would not be allowed out again.⁸⁵³ Residents in nine housing towers now in hard lockdown in Melbourne say they have been forced to establish their own support network rather than rely on the government for essential supplies or information. Residents were angry at Victoria health department for failing to deliver supplies, providing out-of-date food and sending pork to Muslim families.⁸⁵⁴

Victorian premier, Daniel Andrews, told reporters that a number of Victoria's cases through late May and early June had been linked through genomic testing to an infection control breach in the hotel quarantine program.⁸⁵⁵

Tasmania has extended its state of emergency until 31 August, in response to the Melbourne outbreak, but will consider reopening its borders to other states.⁸⁵⁶

Tracking, tracing, testing and isolation

As at 21 June, over 2,041,000 tests have been conducted nationally. Of those tests conducted 0.4% have been positive.⁸⁵⁷

The surge in confirmed cases in Victoria increased demand for testing on 22 June, where people seeking to get tested were forced to wait up to three hours or turned away altogether. This raised concerns of "sick people driving around town trying to find a site".⁸⁵⁸

On 24 Apr, the government released a contact tracing application. As at 3 May 16% of the population had downloaded it, the target is 40%.⁸⁵⁹ Five weeks after the app was launched, NSW Health has confirmed it has barely used the app. Partly that is due to the low levels of community transmission, cases where the source of the outbreak is not known.⁸⁶⁰

The Digital Transformation Agency found that Australia's Covidsafe coronavirus tracing app works poorly on locked iPhones, picking up only between 0% to 25% of all Bluetooth pings. This highlights the ongoing problems with the app's ability to exchange Bluetooth handshakes between phones, which were crucial for recording close contacts for contact tracing.⁸⁶¹

In early July, contact tracers in Victoria had downloaded data 99 times off the Covidsafe app, corresponding to the 99 people who were using the app and tested positive for the coronavirus, but there were still no reported close contacts identified using the app.⁸⁶²

At the end of June, in response to rising case numbers, more than 1,000 public health workers, including the Australian Defence Force medics, will door-knock two Victorian suburbs at the heart of the latest outbreak to offer free testing.⁸⁶³ It was reported that lapses in quarantines for returning travellers in Melbourne may have led to the increase in cases.⁸⁶⁴

Source: Department of Health, States & Territories Report 12/07/2020

Jurisdiction	Total tests conducted	Positive tests (%)
Australia	3,075,488	0.3%
ACT	36,632	0.3%
NSW	1,039,385	0.3%
NT	16,962	0.2%
QLD	421,738	0.3%
SA	173,296	0.3%
TAS	57,132	0.4%
VIC	1,125,414	0.3%
WA	204,929	0.3%

March testing criteria focused on whether someone had returned from overseas, been in contact with a case, been in a high-risk environment or had severe symptoms.⁸⁶⁵ In late April, there was an expansion of testing criteria across Australia to all people with mild symptoms of COVID-19.⁸⁶⁶

Mass testing in Victoria suburbs in June – the target was to test 10,000 a day to understand how the virus was spreading.⁸⁶⁷

Treating

If symptoms were severe the individual was hospitalised and isolated from other patients to prevent further spread of the virus. Mild to moderate cases self-isolate at home for at least 10 days from when symptoms emerged, and 72 hours (or 3 days) after symptoms are gone. Public health officers contact positive cases at home every day to check on individuals' condition. People who have had contact with positive cases need to isolate themselves for 14 days from contact (this includes contact in the 48 hours before symptoms first appeared).⁸⁶⁸

Masks

Masks were advised for those who were unwell or those self-isolating or suspected of having COVID-19.⁸⁶⁹ From mid-March to June, 10-20% wore masks in public places.⁸⁷⁰

Mask wearing is generally not recommended - this advice has been the same since the pandemic began. However, the government has said that if in a region where community transmission is occurring, and if physical distancing is difficult to maintain, face masks can provide some extra protection.⁸⁷¹ By July, criteria expanded further to include people who have been in areas of community transmission.⁸⁷²

Testing is free, paid by Medicare.⁸⁷³ Testing is carried out in hospitals, GP clinics, airports, drive-throughs and other pop-up locations.⁸⁷⁴ Results take one to two days to be returned.⁸⁷⁵

In July, Victorian Premier Daniel Andrews asked people in Melbourne to wear masks in public when they can't social distance, in a major shift in health policy in the state and across Australia. However, Prime Minister Scott Morrison said it was "not a broad recommendation" across the country.⁸⁷⁶

Public places and gatherings

From mid-May small gatherings were allowed.^{877,878}

Victoria announced on June 20 it would reinstate tighter restrictions on home and public gatherings after double-digit increases in cases for a fourth consecutive day. The limit of 5 people visiting a household was reimposed and will last until Jul 12 (it was previously up to 20).⁸⁷⁹

Transport

Border reopening remains a point of contention, particularly in states that usually receive high numbers of tourists from abroad.⁸⁸⁰ From 17 Jun, South Australia opened borders to travellers from Western Australia, the Northern Territory and Tasmania without quarantine. All national borders will be lifted on July 20.⁸⁸¹

From June 16, some states eased social distancing guidance – limits on train carriages in NSW increased to 68 people per train carriage, up from 36. On buses, 23 people were able on board at one time up from 12. Capacity on ferries went from 245 to 450.⁸⁸²

Due to surges in cases in Victoria, the New South Wales premier warned people not to travel to hotspots in Victoria, and to reconsider travel to Melbourne unless essential.⁸⁸³ By June 30, the premier of South Australia, Steven Marshall, announced that the state will not be reopening its borders as planned on 20 July. He said the decision was made on the basis of concerns about the recent outbreak in Melbourne and that there may be exceptions for travellers coming from NSW and the ACT.⁸⁸⁴

On July 10, Australia announced that it would reduce the rate of international arrivals by more than half – with at least 4,000 fewer Australians returning home each week – and states would charge people for compulsory two-week hotel quarantine.⁸⁸⁵

Places of worship

Some reopened in mid-May. On June 15, further easing of measures were announced in many Australian states, encompassing easing of measures around funerals and religious ceremonies.⁸⁸⁶

Business

Mid to end of May restaurants, shops and retail opened.

Several Australian states eased social distancing restrictions further on 1 June 2020, allowing restaurants to host more people and public attractions to reopen.⁸⁸⁷

All purchase restrictions, including those on cleaning products and cooking items, put in place at Woolworths were removed on June 15.⁸⁸⁸

On June 15, further easing of measures were announced in many Australian states, encompassing easing of measures around cinemas, gyms and sporting stadiums.⁸⁸⁹

Education

The reopening of schools was encouraged by Prime Minister Morrison, quoting research showing that children were at low risk of transmitting the virus. However, some ministers from the individual states were still advising children to remain at home.⁸⁹⁰ Many schools across Australia reopened from mid-May – some with phased reopening. Schools with cases identified were closed again (eg in Melbourne and Sydney).^{891,892, 893,894}

Issues

An epidemiologist from University of Otago commented that Australia is tackling the problem with a “suppression” approach, compared to neighbouring New Zealand which is using an “elimination” approach. He estimates that the looser measures in Australia will also mean that the lockdown would last longer, at least 6 and possibly up to 18 months. It is hard to compare which measures, Australia’s or New Zealand’s, would be more effective due to insufficient data.⁸⁹⁵

The epidemiologist also advised that the government should concentrate on improving the efficiency of contact-tracing to tackle rapidly growing clusters and collecting more data on the prevalence of the virus in groups at-risk before any changes to lockdown measures.⁸⁹⁶

About 2,700 Ruby Princess cruise passengers were allowed to disembark freely in Sydney on 19 March 2020, despite some showing symptoms. The cruise ship became Australia's largest single source of infection up to June 2020. About 700 cases and 22 deaths were linked to the ship. On 15 April 2020, the NSW Government launched a Special Commission of Inquiry to investigate the experience, and a Senate Select Committee began to investigate the case. NSW Police will also investigate what was known about the potential cases before the ship was allowed to dock.⁸⁹⁷

There were increasing tensions between Australia and China, marked by several diplomatic disputes - Australia calling for an independent inquiry into the origins of the virus, China imposing tariffs on some Australian imports and warning citizens and students about travel and study in Australia.⁸⁹⁸

There were concerns raised that Australia could see a rise in cases after a Black Lives Matter protester tested positive. In mid-June health authorities added a lack of taste and smell to the list of coronavirus symptoms as they make a fresh appeal for people to come forward for testing.⁸⁹⁹

Public Opinion

From mid-March to early June, support for the government's handling of the situation went from just over 60% to just under 90%, just over 80% perceive that the situation is improving.⁹⁰⁰

A poll found 93% believed that the situation has been handled very or fairly well so far. A majority assess the performance of local national authorities far more favourably than that of the World Health Organization (WHO). Confidence that chief medical officers, state and territory governments and the federal government were doing a good job was extremely high (92%, 86% and 82% respectively).⁹⁰¹

Scott Morrison's approval rating increased through the pandemic, going from 39% in Jan to 65% in June. Polling suggests Australians have increased their trust in politics and institutions because of the management of the pandemic by the nine governments of the federation.⁹⁰²

A June poll found 63% of 1,079 respondents believe a second wave in Australia is either very or quite likely as a consequence of restrictions being eased. More than 60% of the sample believe that international travel will take between one and two years, or possibly more than two years, to return without restrictions.⁹⁰³

Economic Impact

IMF projects a -6.7% decline in real GDP.⁹⁰⁴ The unemployment rate is expected to go from around 6% to 10%.⁹⁰⁵ The government rescue package is estimated to equate to 11% of GDP.⁹⁰⁶

Australia entered its first recession for 29 years after GDP fell by 0.3% in the March quarter, with the impact of bushfires and the pandemic ending the nation's uninterrupted run of economic growth.⁹⁰⁷

The Organisation for Economic Cooperation and Development's forecast the unemployment rate would hit 7.4% in 2020 and 7.6% in 2021. In the "double-hit" scenario where Australia is hit by a second wave of infections, unemployment would reach 7.6% in 2020 and 8.8% in

2021.⁹⁰⁸ Other economic forecasters suggest an unemployment rate of 14.8%, this discrepancy comes from methodology used.⁹⁰⁹

A paper prepared by the Brotherhood of St Laurence and the Nous Group found that nearly a third of people who have lost work or had hours cut as a result of the pandemic were aged 51 to 65 – fuelling “rapid growth” in the number of mature-age, low-income Australians who may fall through the cracks of government support. Another study by Australian National University found the proportion of Australians not able to meet their regular housing costs jumped from 6.9% in April to 15.1% in May, with young people the hardest hit.⁹¹⁰

The Commonwealth Government estimated the lockdown was costing Australia’s economy about \$4 billion each week.⁹¹¹

Speaking at the CEDA State of the Nation summit, Prime Minister Scott Morrison said “over \$100 billion of economic activity” has been lost this year. In addition, around 1.6 million Australians were on unemployment benefit (jobs from hospitality, retail and tourism being particularly impacted).⁹¹²

As clusters of cases emerged in Victoria in late June, Prime Minister Scott Morrison called on states to continue easing restrictions, insisting the country’s economy cannot remain idled. Morrison ruled out a blanket extension of a A\$60 billion (US\$41.1 billion) wage subsidy scheme beyond its scheduled end in September.⁹¹³

A \$250m support package for Australia’s arts and cultural sectors was announced at the end of June, including \$90m in government-backed concessional loans to fund new productions.⁹¹⁴

Wider impacts

The Cancer Council says up to 10% have put off cancer screening during the pandemic (7,000 cancers that could potentially be diagnosed later stage). In Apr and May there was a 60% reduction in the number of prostate-specific antigen (PSA) tests undertaken. Royal Australian College of GPs have also stated declines in chronic disease check-ups. Fewer people were calling for emergency help with chest pains, for example in Melbourne there was a 30% decline in ambulance call outs for chest pains in Apr and fewer patients receiving cardiac interventions such as stents.⁹¹⁵

A survey of nearly 4000 found that weight control and emotional wellbeing have been impacted.⁹¹⁶

Australian companies were “shocked” to experience price-gouging and had trouble accessing critical supplies to make medicines and personal protective equipment in early 2020, prompting calls for Australia to build up its ability to manufacture critical drugs “without reliance on opaque and fragile offshore supply chains”.⁹¹⁷

In late June, there were concerns about attitudes towards migrants and blaming them for rises in cases, as well as misinformation within migrant communities - “There are people who use social media from their country of origin or amongst their network of friends as their primary source of information,” Prof Brett Sutton said on Wednesday. “A lot of it tells them that it’s all rubbish messaging from the government.”⁹¹⁸

In response to the Victoria surge in cases and lockdowns in July, former national mental health commissioner Professor Ian Hickie of the University of Sydney, criticised the government’s “top-down” approach to lockdowns, suggesting it eroded the sense of community among Australians. Hickie said rather than flooding streets with police, the government should have worked with local community leaders, such as religious leaders, teachers, sports teams and trusted community groups, to ensure communities worked

together. He also advocated for more information to be available to the public in order to build trust.⁹¹⁹

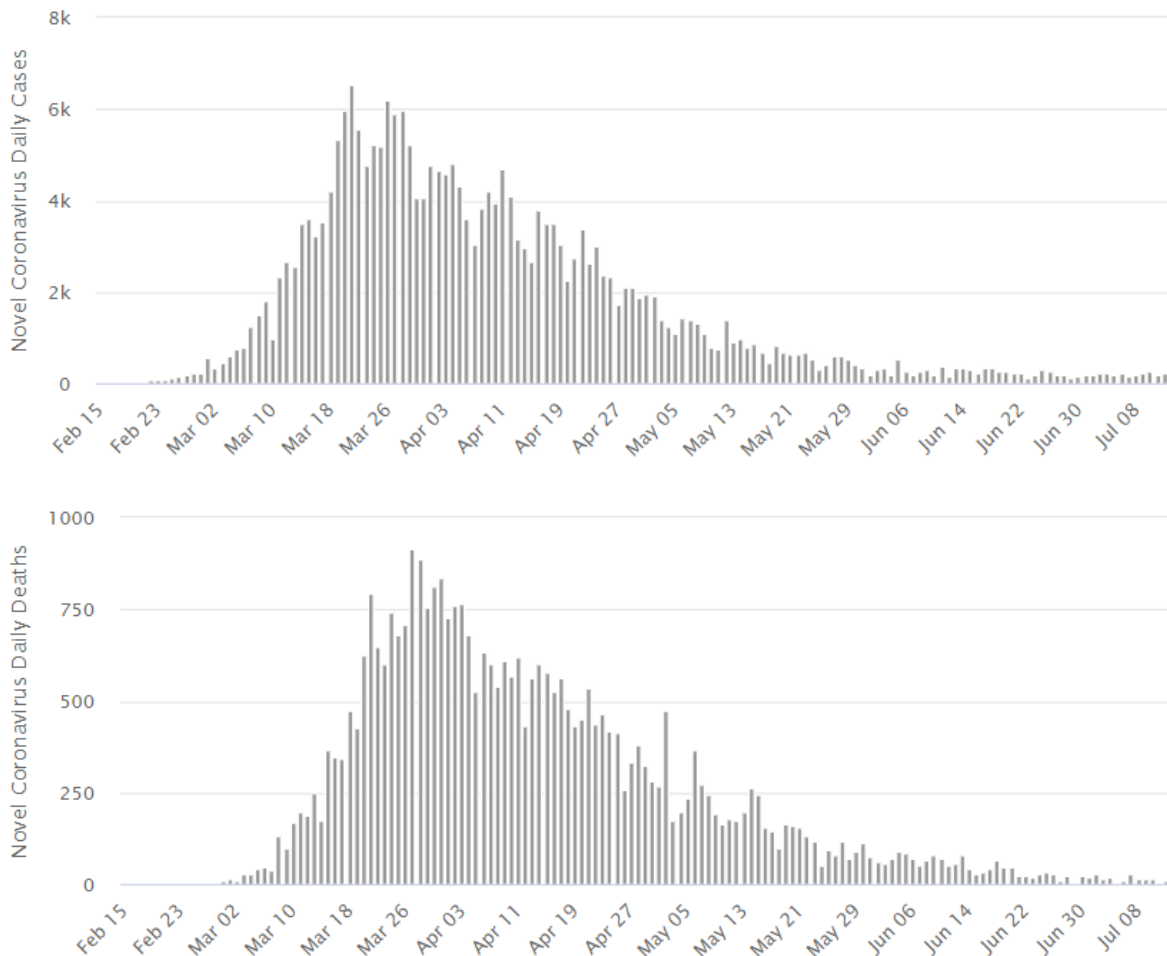
Italy

Background

Although the first case was not reported until mid-Feb, water samples take on 18 Dec found traces of the virus.⁹²⁰

As of 13 July, the number of confirmed cases in Italy was 243,061 cases with 34,7954 deaths. Cases peaked in mid-Mar and then gradually declined over two months. Daily case numbers were still around a thousand in mid-May.⁹²¹

Italy has experienced a slowing trend in deaths in May that continued through summer.



Source: Worldometer (2020)

As of 25 May 2020, 1.1% of deaths were aged under 50 years and more than 57% were over 80. Nearly half of new cases in May were registered at nursing homes. 96% of the country's virus fatalities had previous medical conditions. 68% of deaths had high blood pressure, 30% had diabetes and 28% heart disease.⁹²²

Mobility

Google mobility data shows that through April, there was around an 80% decline in mobility in transit stations, 70% decline in workplaces, and 90% decline in retail and recreation. Since May there have been gradual increases in mobility, although as at 13 May there was still a 60% reduction in baseline mobility for transit stations, 40% reduction in workplaces and 60% reduction in recreation and retail.⁹²³

Seroprevalence

Research suggested that by the end of April 2.4-9% of healthy adults had evidence of seroconversion from blood donor samples.⁹²⁴

A sample of approximately 10,000 residents of Bergamo between 23 Apr - 3 Jun found 57% had antibodies to COVID-19. Bergamo was one of the hardest hit areas and some of the samples were from people who were quarantined.⁹²⁵

Lockdown Summary

Italy's nationwide lockdown started on 10 Mar, expanding on a smaller lockdown that started with the northern regions on 23 Feb. Measures included inter-regional travel restrictions, suspension of events, closing of commercial businesses, closing restaurants at 6 pm, mandating distances between diners, and mandating of social distancing. Streets and public spaces emptied, with many only going out to work if they could not work from home.⁹²⁶ Italy's lockdown was extended to 3 May.⁹²⁷

In late June, the army was sent in to secure a virus "red zone" north of Naples with almost 50 cases. Some 700 people have been ordered to remain indoors in four council housing blocks in Mondragone - 60km north of Naples on the coast in the Campania region - since Monday, while local health authorities test them for the virus.⁹²⁸

Exit Strategy

On 4 May, Italy entered an era "of responsibility and coexistence with the virus".^{929,930} Regions in Italy were within a national integrated approach to easing measures.

At the start of July, it was reported that Italy will likely extend a state of emergency beyond July 31.⁹³¹

Tracking, tracing, testing and isolation

Italy has diary, an app that stores all the locations and people that the user has met during the incubation period. If confirmed as a case the user can decide to export data into the public area. This contribution is rewarded with Worth One Minute (WOM) certificates that can be used as vouchers and discounts in stores and services. The reward mechanism contributes to social cohesion and compliance. There were also queue visibility apps to support social isolation.⁹³²

Italy released a mobile app, "Immuni" (immune), on 1 June 2020 for contact tracing in four regions before extending it to the whole country, despite widespread resistance due to concerns about invasion of privacy. The app uses Bluetooth technology.⁹³³ As at June 12, Italy, the app had reportedly had 2.2 million downloads.⁹³⁴

People are required to self-isolate at home if they have symptoms.⁹³⁵

In Feb, Italian health officials changed testing criteria from anyone in contact with a case to just those with symptoms.⁹³⁶ Tests are funded by the government and free to the individual.⁹³⁷

In April, drive through testing was implemented in Northern Italy.⁹³⁸

A mass-testing study that tested residents of Vò, a town of 3,000 inhabitants near Venice found that it allowed them to identify and quarantine people before they showed signs of infection and stop the further spread of coronavirus.⁹³⁹ The study found that 40% of cases showed no symptoms - suggesting that asymptomatic cases are important in the spread of the pandemic.⁹⁴⁰

In May, Italy started testing a representative sample of 150,000 people in 2,000 cities to understand the extent of its COVID-19 epidemic.⁹⁴¹

In July, Italy announced plans to monitor wastewater nationwide for a possible early warning about any renewed outbreak of COVID-19 infections. The wastewater-monitoring project will focus on priority sites such as tourist resorts in a first phase starting in July. It will be expanded in October with a surveillance network extended to all Italian cities.⁹⁴²

Treating

A COVID-19 positive individual is considered recovered after the resolution of symptoms (fever, rhinitis, cough, sore throat, difficulty breathing, pneumonia) and after two negative swab tests 24 hours apart. Those well enough to stay at home the isolation period is 14 days and people should self-isolate from family members if possible.⁹⁴³

Masks

As of May 4, it was mandatory to wear masks in closed spaces that are accessible to the public, including transport, and when safe distancing cannot be guaranteed. Children under six years of age, as well as people with disabilities do not have to wear masks.⁹⁴⁴

Public places and gatherings

Parks opened in the early phase and people could exercise outdoors without restrictions or police checks (at any distance from home) as long as they follow social distancing of at least one metre.

Social gatherings between small groups of relatives, as well as funerals and weddings between limited groups of people were allowed to resume in mid-May.

Social distancing measures and face mask requirements remain in place in closed public spaces, and bans on large-scale meetings remain, with smaller "static" gatherings allowed only on the condition that social distancing is respected.⁹⁴⁵

Transport

Face coverings must be worn on public transport. Buses, metro services and other public transport in Italy will have a maximum number of passengers set during peak traffic times to respect the distance of one metre between people.

In early reopening people were advised against travel except for shopping for food or medicine, for proven work-related reasons, health reasons or emergencies. Travel from one municipality to another was permitted first, but the ban on travel between different regions of Italy continues, except for proven work matters, health reasons and extraordinary circumstances. Movement restrictions were relaxed on 4 May.⁹⁴⁶

On June 3, Italy lifted travel restrictions on movement between regions.⁹⁴⁷ Borders also reopened to tourists on 3 June.⁹⁴⁸

In June, quarantine for visitors arriving in Italy continued, except for those entering from the EU and signatories to the passport-free Schengen zone.⁹⁴⁹

From June 11, the requirement for airlines to seat passengers at least a metre apart was dropped, so long as the plane was equipped with a HEPA (High Efficiency Particulate Air) filter. Mask wearing was compulsory and on longer-haul flights must be replaced every four hours. Airlines are instructed to disallow passengers from bringing large cabin bags on board to minimise passengers' movement when accessing overhead lockers. Passengers must fill out a self-certification form before each flight, declaring that they do not have COVID-19 or any of its main symptoms.⁹⁵⁰

Italy has seen a surge in bicycle sales since the government ended its coronavirus lockdown as people steer clear of public transport and respond to government incentives to help the environment. According to sector lobby Ancma, some 540,000 bikes have been sold nationwide since shops across the country reopened in early May, a 60 per cent increase in the first month compared to the same period in 2019. The government has offered to contribute up to €500 (US\$562.70) for city-dwellers who buy traditional or "pedal-assisted" electric bicycles.⁹⁵¹

In July, there was a ban on travellers from specific countries due to case rises: Armenia, Bahrain, Bangladesh, Brazil, Bosnia Herzegovina, Chile, Kuwait, North Macedonia, Moldova, Oman, Panama, Peru and the Dominican Republic.⁹⁵²

Places of worship

Catholic Church masses resumed from 18 May, but with strict social distancing and wearing of face masks. Funerals were allowed with a maximum of 15 people attending, ideally outdoors.⁹⁵³

Business

Factories opened in early phase.

Bars and restaurants were allowed to open for takeaway in May.

18 May, economic activity restarted.⁹⁵⁴ Bars and restaurants reopened, but with reduced capacity with tables further apart and plastic shields to separate customers. Hairdressers, shops, museums and libraries also reopened and sports teams were able to hold group training.⁹⁵⁵

Borders reopened to tourists on 3 June with hotels reopening. Sicily has announced that it will subsidise travel for international and domestic tourists once it is safe to return.⁹⁵⁶

Italy's football league competition restarted on 20 June.⁹⁵⁷

From June 15, cinemas and theatres reopened, with a limit of 200 people in cinemas or museums, regardless of venue size.⁹⁵⁸

From June 25, amateur contact sports, including team sports were allowed to restart. Nightclubs were allowed to open from July 14.⁹⁵⁹

Education

Schools plan to reopen in September.⁹⁶⁰

Issues

In February, experts at the World Health Organization and Italy's Health Ministry said in interviews that it was possible that Lombardy had created an inflated perception of the threat by including in case totals people who tested positive for the virus but who had not gotten sick. But many scientists say that attempting to track even mild cases of the virus is essential to containing its spread.⁹⁶¹

Early data validity was likely an issue and facet of testing criteria and capacity. In March, "A ratio of one certified case out of every 10 is credible," was stated by Angelo Borrelli, the head of the Civil Protection Agency.⁹⁶²

On March 8, the World Health Organization praised Italians' "genuine sacrifices" after the government put a quarter of the population under lockdown to try to halt the spread of the novel coronavirus. "The government & the people of Italy are taking bold, courageous steps

aimed at slowing the spread of the #coronavirus & protecting their country & world," WHO director-general Tedros Adhanom Ghebreyesus said in a tweet.⁹⁶³

WHO Director-General's remarks on Italy's handling of pandemic: "...one of the lessons of the pandemic is that no matter what situation a country is in, it can be turned around. It's never too late. As you know, in March, Italy and Spain were the epicenter of the pandemic. At the peak of its epidemic, Spain had almost 10,000 cases a day, and Italy had more than 6,500 cases. But both countries brought their epidemics under control with a combination of leadership, humility, active participation by every member of society, and implementing a comprehensive approach."⁹⁶⁴

Northern Italy saw a rise in cases around 12 May, health officials are waiting to see the direction of case numbers to determine if a partial lifting of lockdown restrictions on May 4 led to a rise in cases.⁹⁶⁵

Coinciding with reopening of borders to tourists, in early June, Alberto Zangrillo, the head of the San Raffaele Hospital in Milan in the northern region of Lombardy stated that the virus was losing its potency and has become much less lethal.⁹⁶⁶ WHO and some scientists said there is no evidence to support this assertion.⁹⁶⁷

On June 2, Italian opposition parties and hundreds of supporters held an anti-government rally in Rome.⁹⁶⁸

June 6, reports of hundreds of Italian far-right extremists and football fans held a rally in Rome, calling on the government to resign over its handling of the crisis; this became violent.⁹⁶⁹

On June 10, families of COVID patients that died filed their complaints at the prosecutors' offices in Italy's northern city of Bergamo, denouncing serious failures by local politicians and health officials in handling the pandemic.⁹⁷⁰ Italian Prime Minister Giuseppe Conte said he will be questioned by prosecutors over the handling of the outbreak in Bergamo, one of the areas worst hit by the epidemic.⁹⁷¹

In a survey of Italy's 1,356 nursing homes, 77% reported a lack of masks and gloves during the epidemic, while 34% said they did not have enough doctors and nurses. Around 21% had not received sufficient information on how to deal with the virus and 26% said they had difficulty isolating those who tested positive.⁹⁷²

In April, Italy banned migrant rescue ships from docking in its ports until Jul 31 due to the pandemic. It transferred all those saved at sea onto large ferries which must wait off its coast. After saving more than 200 people stranded at the end of June, the Sea-Watch 3 charity boat arrived on Sunday in the Sicilian town of Porto Empedocle – 28 tested positive.⁹⁷³

Andrea Crisanti, professor of microbiology at Padua University, said that new cases are probably people who are being infected by self-isolating family members at home. Crisanti said, instead of telling people with mild symptoms to self-isolate at home, authorities should have set up centres to separate them from their families.⁹⁷⁴

An order by Governor Luca Zaia says that until the end of July hospitals must tell the public prosecutor's office of anyone refusing admission after testing positive. Anyone returning to Veneto, which includes the city of Venice, must also be given two compulsory swab tests if they are returning from a business trip outside the European Union or a non-Schengen country.⁹⁷⁵

In July, there were reported instances of discrimination. Residents of Codogno, in Lodi province, the first town in the country's badly affected Lombardy region to be quarantined,

have claimed attempts to book holidays elsewhere in Italy were rebuffed after they revealed they would be travelling from a former “red zone”. At the same time, tensions rose on packed beaches and resulted in confrontations over safe distancing.⁹⁷⁶

Public Opinion

From mid-March to early June, support for the government’s handling of the situation has fluctuated above and below 70%, over 80% perceive that the situation is improving.⁹⁷⁷

Economic Impact

The IMF forecast that Italian gross domestic product would shrink 9.1 per cent in 2020.⁹⁷⁸ Italy announced a €400 billion (US\$430 billion) stimulus to help businesses affected by the lockdown.⁹⁷⁹ Italy already had a public debt before the pandemic and a prolonged lockdown will continue to shrink the economy, pushing many more businesses to the brink of bankruptcy.⁹⁸⁰ Half of their citizens have started applying for income relief aid.⁹⁸¹ Prime Minister Conte faces pressure from the leaders of the various Italian regions who are eager to reopen businesses.

Economists forecast a rise in the jobless rate to 9.5%.⁹⁸²

France and Germany proposed a €500 billion recovery fund to support the European Union's economy.⁹⁸³

Even as travel restrictions are lifted throughout Europe, reluctance to travel outside national borders remained high. About 3.5 million people in Italy depend on tourism for their livelihoods.⁹⁸⁴

Italian Prime Minister Giuseppe Conte will likely seek parliament’s approval for about 10 billion euros (\$11 billion) in extra spending soon in an attempt to revive the economy. The funds will help finance the government’s furlough program, a guarantee fund for small and medium-sized companies, resources for towns and regions as well as European Union initiatives. This comes even as Italy has one of the world’s highest debt burdens, and the expenditure will widen the budget deficit this year to 11% of gross domestic product from the current estimate of 10.4%.⁹⁸⁵

Wider impacts

A survey found eight in 10 Italians reported needing psychological support to overcome the mental health impacts of the pandemic.⁹⁸⁶

Youth unemployment was at 20.3% in June, and concerns were raised that this risk stoking discontent with the status quo and boosting support for populist and euro-sceptic political parties.⁹⁸⁷

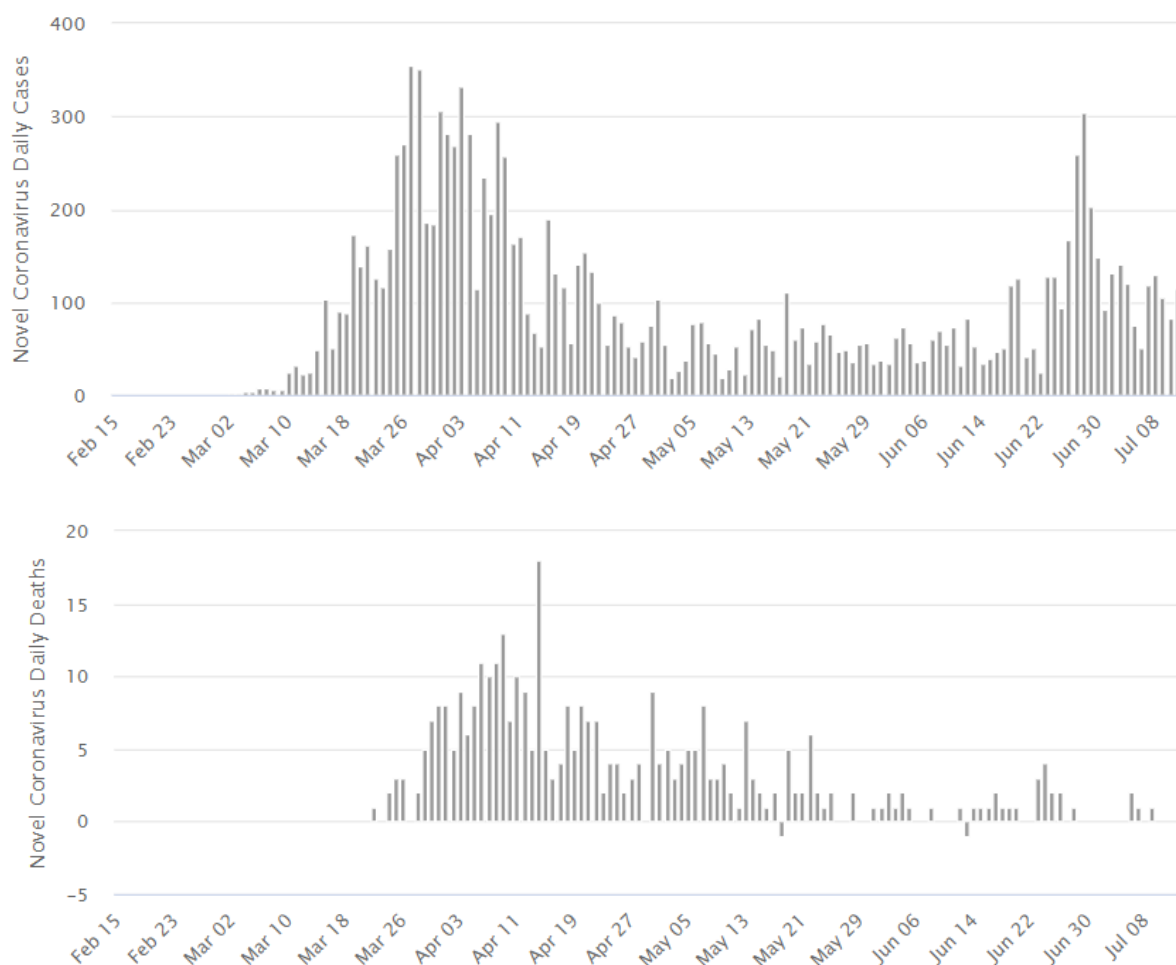
Italy’s Health Ministry on Tuesday released the results of the anonymous survey of 6,800 people who voluntarily responded to an online questionnaire March 24-April 3. Of the 6,800 people who participated, 3,245 reported having children under age 18. Among those with children under age 6, 65% reported their children suffered behavior problems and regression. The most common problems cited were increased irritability, sleep issues and separation anxiety. Some respondents also reported their children wept inconsolably. Of respondents with children aged 6-18, 71% reported their children also displayed problems including anxiety and shortness of breath. Adolescents had particular trouble going to sleep and waking up, sleep disturbances that researchers termed a sort of “domestic jet lag.”⁹⁸⁸

Czech Republic

Background

As of 13 July, there were 13,174 confirmed cases and 352 deaths from COVID-19. Cases peaked at the end of March and then gradually fell to around 50-20 reported cases a day in May. Reported cases rose again in late June.⁹⁸⁹

There was an increase in confirmed cases around 26-28 June; this reflected large-scale testing in parts of the country with local hotspots, including at a mine in the Moravian Silesian Region and a car parts factory in the Liberec Region.⁹⁹⁰ Health Minister Adam Vojtěch stated that this did not represent a second wave.⁹⁹¹



Worldometer (2020)

Mobility

Google mobility data shows that through April there was around a 40% decline in mobility in transit stations, 40% decline in workplaces and 50% decline in retail and recreation. There were gradual increases through early May.⁹⁹²

Seroprevalence

27,000 people were tested for anti-bodies, and only 107 positive cases were found. The rate of infection in different geographic locations ranged from 0-5% in the worst affected regions. In Prague, Brno and Litoměřice it was less than 0.6%.⁹⁹³

Lockdown Summary

The Czech Republic declared a state of emergency on 12 Mar.⁹⁹⁴ The state of emergency has been extended to 17 May.⁹⁹⁵

Mass gatherings were banned from 10 Mar onwards, and eventually so were all public gatherings. The nationwide quarantine started on 16 Mar, with mandatory use of face masks in public from 19 Mar. Schools, universities and cultural institutions, including theatres, museums, cinemas, and all nonessential services were closed for the following 30 days.⁹⁹⁶ All public and private events with more than 30 people were also banned. People were only allowed to leave their homes for essential services, to and from work, visiting family and bringing family to healthcare facilities. Enhanced quarantine restrictions were also imposed for 14 days in two towns and 19 villages in the Olomouc region in western Czech Republic.

At the end of June, the Czech Health Ministry developed a regional risk-map which used a ten-point scale and colours. Zero (white) is no coronavirus cases, one to three (grey) are districts with low risk of infection, four to six (orange) are districts with risk of community spread and increasing number of new cases. Red colour, or seven and eight on the scale, means community spread of the virus with a negative trend and a risk of infection for threatened groups of the population. Black, or nine and ten on the scale, means the highest risk, including a growing number of hospitalisations.⁹⁹⁷

On June 26, Karviná in the Moravian-Silesian Region, where a spike of cases was reported led to restrictions being imposed. These measures include a ban on visiting hospitals or social care facilities, a limit of 100 people at public events, and an 11pm curfew for pubs and restaurants. In the entire Moravian-Silesian Region facemasks must be worn on public transport, in enclosed spaces and at events for over 100.⁹⁹⁸

Exit Strategy

7 Apr, the Czech government eased some measures of the 30-day nationwide quarantine after three weeks.⁹⁹⁹

Tracking, tracing, testing and isolation

In March, tests were only performed when infection was suspected.¹⁰⁰⁰ Tests are paid out-of-pocket. From 19 May, the Czech Health Ministry capped the cost of a coronavirus test at exactly 1674 crowns (70.85 USD). Tests can be undertaken at hospitals, health institutes, and private laboratories.¹⁰⁰¹

The Czech government adopted a phased exit. The Czech government has outlined that they are taking the “smart quarantine” approach, focusing on early detection and testing, leading to isolation in quarantine of as many potentially infected people as possible.¹⁰⁰² For example, on 25 Mar there was a local outbreak of mine workers. Mass testing on miners and their families identified 212 cases, and over 1,000 people have been quarantined. As a result, local restrictions remain in the mine area (Darkov region).¹⁰⁰³

A new form of “Smart Quarantine 2.0”, a national smart quarantine programme focused on COVID-19, will be acquired by the Ministry of Health for CZK 200 million. The system can be expanded to track data on 1,000 infected persons a day, an increase from the current 400.¹⁰⁰⁴

Czech Republic has Mapy.cz app that alerts citizens of potential high-risk encounters through location sharing. Developers are also working to include algorithms to allow identifying cases of probable contacts with a positive infected person. There are also queue visibility apps to support social isolation.¹⁰⁰⁵

Treating

COVID-19 positive people with mild symptoms self-isolate at home. Non-compliance could be punished retrospectively, with a fine of up to CZK 3 million. Public health stations and the Police of the Czech Republic are working together on compliance with the controls. Severe cases are taken to hospitals.¹⁰⁰⁶

Masks

From 19 Mar, all individuals outside of their home were required to cover their mouth and nose with either a medical mask, self-made mask or scarf.¹⁰⁰⁷ There has been a high level of compliance and home-made mask making; the Czech motto is “your mask protects me, my mask protects you”.¹⁰⁰⁸ From 25, May Czechs no longer needed to wear face masks in most public spaces when alone, masks will still be required on public transport, in theatres, cinemas and when outside with someone not from their own home (also must be 2m away).^{1009,1010}

From 15 Jun, it was no longer compulsory to wear face masks outside even when in close proximity to others.¹⁰¹¹ The requirement to wear face masks at indoor locations, including shops and public transport, would be removed from July 1.¹⁰¹²

On June 29, the Ministry of Health stated that facemasks will remain mandatory in the Prague metro and during indoor events after 1 July.¹⁰¹³

From 1 July, it will only be compulsory to wear facemasks at health facilities in most parts of the Czech Republic. However, masks must be worn on public transport in Karviná in the Moravian-Silesian Region, where a spike of cases was reported.¹⁰¹⁴

Public places and gatherings

From May, gatherings are allowed in groups of up to ten individuals.¹⁰¹⁵ Weddings and cultural or religious events of fewer than 100 people are also reported to be allowed.¹⁰¹⁶

The number of people permitted at events went from 300 on May 25 to 500 on June 8, and will rise to 1,000 on June 22. A two-meter distance must be kept between people, and organisers must provide disinfectants at event entrances.

From June 15, if the area can be divided into more sectors, up to 2,500 people could part in the event. However, participants cannot move from one sector to another and the set minimum distance must be kept from others.¹⁰¹⁷

From June 22 a maximum of 1,000 can attend sports training and matches. However, this easing of measures does not apply to the Karviná and Frýdek-Místek regions which are dealing with local outbreaks.¹⁰¹⁸

Transport

14 Apr, essential overseas travel permitted, with mandatory quarantine for 14 days after returning.

2 May the foreign minister announced that it was the government's intention to have the country's international borders opened by July. 11 May, border crossings opened to all passengers, which were previously limited to commuters and road freight transport. Operational hours remain between 5am to 11pm. International bus and rail services gradually resumed and non-EU seasonal workers allowed to enter the country.¹⁰¹⁹

From 26 May, cross-border travel without having to undergo mandatory quarantine was allowed for citizens of Hungary, Slovakia and the Czech Republic whose stay does not exceed 48 hours (ie commuters).¹⁰²⁰ Citizens of EU member states and citizens with long-

term residence in the EU can also enter for 72 hours for “substantiated” reasons such as business trips or visits to close family. They are required to produce a negative COVID-19 test and declare their residence plans during their time in the country.¹⁰²¹

From June 15, the Czech Republic allowed travel without restrictions or the need for a negative COVID-19 test to 19 “safe” countries that include Bulgaria, Estonia, Finland, Croatia, Iceland, Cyprus, Liechtenstein, Lithuania, Latvia, Hungary, Germany, Norway, Poland, Austria, Romania, Greece, Slovakia, Slovenia, and Switzerland. However, residents returning from “medium-risk” countries including Belgium, Denmark, France, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, and Spain, and “high-risk” countries including the UK and Sweden will continue to require a negative COVID-19 test.¹⁰²²

From 15 Jun, Czech Railways restored all long-distance and almost 98 percent of regional trains on its lines.¹⁰²³

From 15 Jun, direct flights from Prague to Belgrade, Brussels, Budapest, Košice, Keflavik, Manchester, and Munich resumed. Within a week, expanded to 17 destinations operated by 12 airlines.¹⁰²⁴

On June 22, Czech Republic revised its “traffic-light map”, lowering Belgium from medium-risk to low-risk, allowing residents of the country to now travel into Czech Republic without restrictions. Sweden, Portugal, and Poland’s Silesia province remain in the list of high-risk regions, meaning visitors must have a valid reason (work or family) to enter the Czech Republic, and anyone coming from those regions needs to produce a negative COVID-19 test.¹⁰²⁵

From July 1, the Czech Republic added eight non-EU countries to its list of low-risk travel destinations. The countries are: Canada, Serbia, Montenegro, Australia, New Zealand, Thailand, Japan, and South Korea. Czech residents returning to the Czech Republic from these countries may do so without the need for quarantine or a negative COVID-19 test.¹⁰²⁶

On July 3, Slovenia, Latvia and Estonia took the Czech Republic off their list of safe countries for travel. Czechs entering these countries would be required to go into a two-week quarantine or produce a negative COVID-19 test no older than 36 hours.¹⁰²⁷

Places of worship

From 18 May, the National Church (Folkekirken) and other religious communities opened places of worship to the public - at least one-meter social distancing between people. In situations where there can be an elevated risk of infection, for example at a church service where people are singing, there should be at least two meters distance (masks are not required).¹⁰²⁸ From June 22, a maximum of 1,000 people could attend religious services and weddings.¹⁰²⁹

Business

9 Apr crafts markets, construction material shops, ironmongeries and shops providing sale and service of bicycles reopened. Driving schools, fitness centres, libraries and shops of up to 2,500 square meters reopened.¹⁰³⁰

27 Apr, shops up to 200 square meters that are not located in large shopping centres opened, as well as zoos.¹⁰³¹

11 May, beer gardens, restaurant gardens, outside cafes, hairdressers, malls, cinemas (social distancing is required) and other businesses reopened.^{1032,1033,1034}

25 May, all shops and other establishments opened and indoor areas of restaurants, zoos, and castles.¹⁰³⁵ Hotels, outdoor campsites and other accommodation reopened and taxis operated again from 25 May.

From 8 June up to 500 people could attend public events like theatrical performances or religious gatherings. Mass events indoors and outdoors as well as weddings and services are also permitted. Museums, galleries, exhibition halls, chateau, castles, and other historical landmarks can operate with up to 500 people, but social distancing guidelines must be followed. Sports training or matches on indoor and outdoor sports fields can allow up to 500 people to attend. At cinemas, theatres, and concert halls, organisers no longer have to leave empty seats in the audience to force social distancing measures, though face masks remain mandatory in indoor spaces.¹⁰³⁶

From 8 June, restaurants' outdoor spaces and gardens could serve guests past 11pm, but indoor spaces must close at 11 pm.¹⁰³⁷

From June 22, swimming pools, zoos, castles, monuments and museums were permitted to reopen without any restrictions on the number of visitors. Safe distancing was no longer required at restaurants, and children's corners can be opened at shopping malls. Spas could carry out group procedures without the limit of 10 people.¹⁰³⁸

The OKD company suspended mining in all mines in the Karviná area of north Moravia from 3 July after about 20% of employees testing positive for COVID-19 during blanket coronavirus testing in its mines.¹⁰³⁹

Education

Schools opened from May, but in shifts of smaller groups.¹⁰⁴⁰ 4 May, universities reopened.¹⁰⁴¹

High school graduation and entry exams held after 1 June. High schools planned to reopen in September.¹⁰⁴²

From 8 June, students in the second stage of primary school and all secondary school grades, including high school, can now take part in classes again.¹⁰⁴³

Issues

The European Commission expressed concerns, warning the members of the European Union to coordinate their exits from lockdowns.¹⁰⁴⁴

Tensions with China escalated in response to Czech Senate President Miloš Vystrčil announcing that he will lead a delegation of political, business and scientific leaders to Taiwan in August. China responded that there would be repercussions to businesses.¹⁰⁴⁵

Public Opinion

A survey found that the majority (70%) of Czech citizens consider what the Czech state has done against the spread of coronavirus to be appropriate, and half consider measures to support the economy to be appropriate.¹⁰⁴⁶

One in ten Czechs suspected they have had coronavirus based on their symptoms. More than 70% of Czechs reduced their public transport use, and about two-thirds reduced shopping in physical stores. The vast majority of Czech residents surveyed – more than 90% – said that they wore face masks in public during May. A total of 40% said that they made their own face masks for use.¹⁰⁴⁷

Economic Impact

IMP forecasts a -6.5% decline in GDP for 2020.¹⁰⁴⁸ The government stated that the 3% unemployment rate could increase by 5% in 2020.¹⁰⁴⁹

Czech manufacturing production fell by 34% in April compared to the previous year; the main decline was in car production (down 80%).¹⁰⁵⁰

The Czech government Antivirus support packages were extended from end May to end of Aug. Antivirus A package, provides 80% of the wages to workers in quarantine, and the wages of the employees of firms that had to close over the epidemic, but limited to 39,000 CZK per employee a month. Antivirus B compensates 60 percent of the wages, up to 29,000 CZK per person a month, for firms whose operation was limited as a result of the outage of raw materials, workforce or demand. Based on another provision (Antivirus C), now discussed by the Senate, the state will write-off the social insurance contributions to small firms for three months.¹⁰⁵¹

On 24 June the Czech government stated that the total recovery package amounted to CZK 1.15 trillion, 20.8 percent of the country's GDP.¹⁰⁵²

Wider impacts

In the first three months of the year there were 350 cases of expulsions of abusers from their own homes. However, watchdog groups warn that these figures do not reflect the full extent of the issue as many cases go unreported.¹⁰⁵³

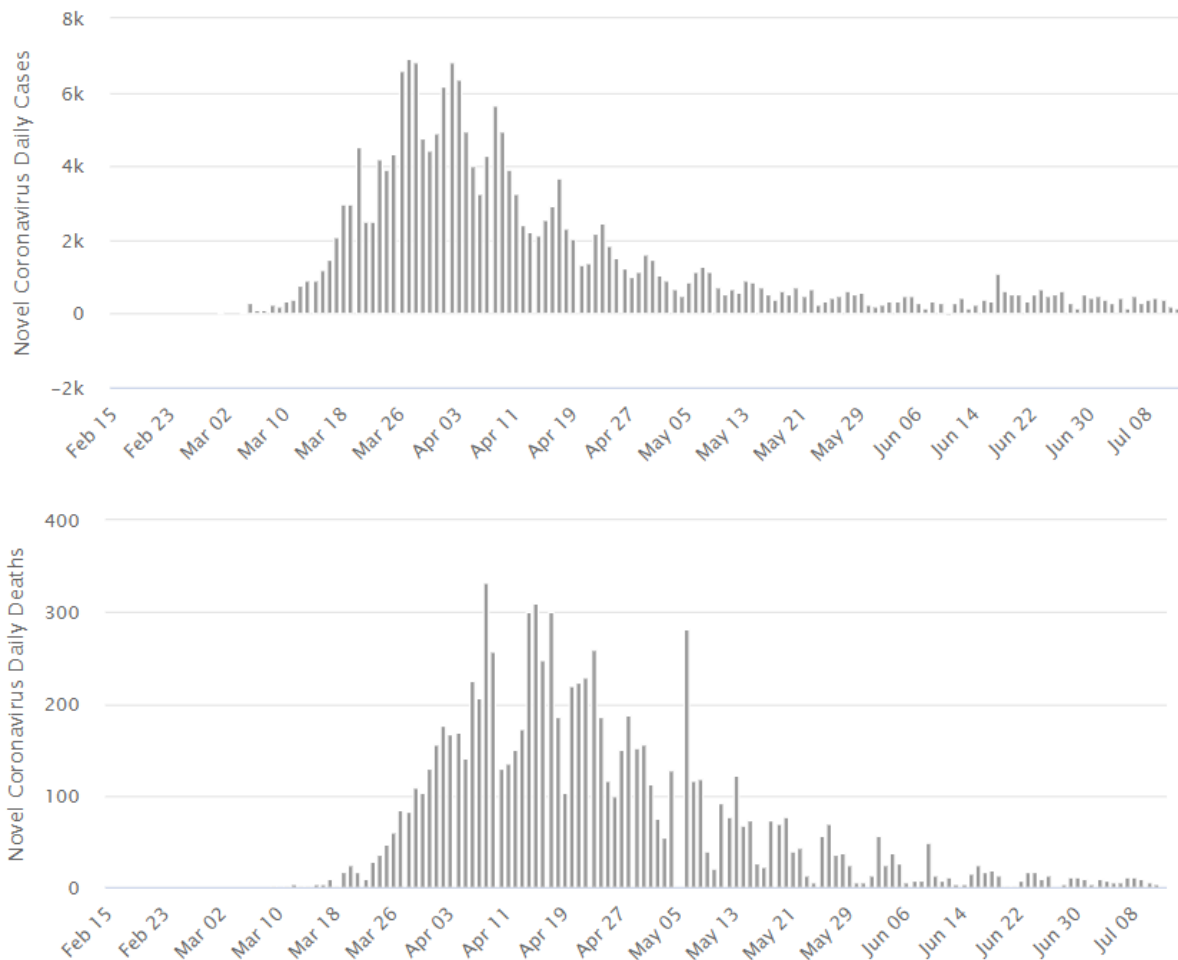
Germany

Background

As of 13 June, Germany had 199,950 confirmed cases and 9,134 deaths.

Cases peaked and plateaued from late Mar through to early Apr; cases steadily declined and reached another plateau of between around 500 to 100 cases a day through June.¹⁰⁵⁴

In June, clusters were linked to religious worship, nursing homes, hospitals, facilities for asylum seekers and refugees, meat processing plants and logistics companies.¹⁰⁵⁵



Worldometer (2020)

Since reopening and allowing gatherings there have been clusters of cases.¹⁰⁵⁶

Similar to other countries, Germany experienced an outbreak at an abattoir / meat processing plant. On 18 June it was reported that more than 650 people tested positive for the virus at the meat processing plant in Gütersloh.¹⁰⁵⁷ By June 28 it was apparent that infections from employees and associates of the meat processing plant had spread to the community.¹⁰⁵⁸

German virologist Christian Drosten warned of a second coronavirus wave in Germany if strong action is not taken to combat the spread. He was concerned that outbreaks, such as that in North Rhine-Westphalia, will lead to the further spread of the virus in the wider community. He also mentioned that there are clear signs in places, including Berlin, that the virus is coming back and great caution is required to prevent a second wave of infections.¹⁰⁵⁹

Mobility

Google mobility data shows that through April there was around a 50% decline in mobility in transit stations, 40% decline in workplaces and 50% decline in retail and recreation, with gradual increases through early May.¹⁰⁶⁰

Seroprevalence

The municipality of Gangelt was one of the early epidemics in Germany. Preliminary serology results from a sample of households found that 14% of the people tested had the antibodies for the coronavirus and an additional 1% were still infected with it, suggesting an IFR of 0.37%.¹⁰⁶¹

Lockdown Summary

Germany's National Pandemic Plan describes the responsibilities and measures of the health care system in case of an epidemic. Epidemic control is shared by federal authorities (Robert Koch Institute) and by the states. Each state also has its own plan.

Germany started its lockdown on 14 Mar. Non-essential services closed. Restaurants could only provide delivery and take-away.

People were only allowed to leave their homes for essential purposes, such as work-related reasons, physical exercise, health reasons or to purchase essential supplies, such as food and medicine. This remains the case in Baden Württemberg, Bavaria, Berlin, Brandenburg, Mecklenburg West Pomerania, Saarland, Saxony, and Saxony-Anhalt.¹⁰⁶²

On June 20, the state leader in North Rhine-Westphalia announced that parts of the state could face a new lockdown after over 1,000 new cases were confirmed at a slaughterhouse in Gütersloh. Schools closed as a precautionary measure.¹⁰⁶³

By June 24, two districts in North Rhine-Westphalia re-entered a full lockdown after an outbreak in a meat processing plant. Around 640,000 people in the neighbouring districts of Gütersloh and Warendorf were not allowed to meet in groups larger than two. Museums, cinemas, gyms, swimming pools and bars had to close. However, church services are allowed. This lockdown will be until June 30 but may be extended.¹⁰⁶⁴

On June 29 it was reported that excluding employees of the meat facility - who accounted for the vast majority of infections - Gütersloh district had a rate of 22.5 infections per 100,000 residents over the past seven days, and Warendorf had just 5.4 per 100,000 inhabitants. However, including workers, those rates are significantly higher: Gütersloh district's rate rises to 112.6, far more than the 50 per 100,000 threshold. Warendorf's figure increases to 22, enabling the district to exit restrictions on June 29.¹⁰⁶⁵

The measures put in place in Gütersloh, were due to expire on June 30 but were extended by a week to July 7 "as a precaution". However, restrictions in the neighbouring district of Warendorf, which was also placed under lockdown were lifted on 30 June.¹⁰⁶⁶

Exit Strategy

Germany's federal states, under an agreement with the government, have control of timing the reopening and will enact an "emergency break" if infections surge.¹⁰⁶⁷

6 May the federal government handed authority for relaxing restrictions over to state governments. Relaxation of restrictions are outlined below.^{1068,1069,1070,1071}

Tracking, tracing, testing and isolation

Germany used widespread testing early on, leveraging its high numbers of private laboratories. This enabled tracking of the virus's spread.¹⁰⁷²

The following groups of people are tested in Germany:¹⁰⁷³

- Symptomatic people
- People who have been in close contact with cases
- Residents of care facilities and patients
- Personnel in hospitals and inpatient and outpatient care facilities
- Community facility staff and residents in the event of outbreaks
- Mass testing parts or the entire population (including asymptomatic persons) in areas where a 7-day incidence of at least 50 per 100,000 has occurred.

Pool tests are carried out in daycare centres or schools, in hospitals or nursing homes, or in community accommodation such as asylum seekers' homes and prisons, if cases have arisen there.

The costs of the tests are borne by the health insurance companies. For tests ordered by the public health service, statutory health insurance also covers the costs for people who are privately or not insured. It usually takes 24 hours, sometimes up to two days, for the result to be available after sampling.¹⁰⁷⁴

Cities have developed temporary testing centres and drive-in testing centres - which can accept patients after they are referred by local health authorities.¹⁰⁷⁵

Germany initially started to develop its own app for tracking and tracing, but switched to what is viewed as a decentralised approach supported by Apple and Google (ie away from centrally held data).¹⁰⁷⁶ The app, developed by software company SAP and Deutsche Telekom, is intended to enable infected individuals to voluntarily share their data.¹⁰⁷⁷ The app was made available for download for IOS and Android in mid-June.¹⁰⁷⁸

Violation of quarantine of positive cases can result in a maximum prison sentence of up to two years or a steep fine. The health authorities check the quarantine by calling the affected person's home to talk to the patient and check how they are doing.¹⁰⁷⁹

Specific areas are locked down, based on cases (eg increases associated with local meatpacking centers in the states of North Rhine-Westphalia and Schleswig-Holstein).¹⁰⁸⁰

On June 16, more than 50 people were confirmed to be infected and hundreds placed on quarantine after an outbreak in Berlin. The district mayor said it was easy for the virus to spread in blocks of flats, especially where there are cramped conditions.¹⁰⁸¹

Health authorities needed police reinforcement to maintain lockdown conditions at a tower block in Goettingen, where around 700 people had been placed under quarantine, after a riot broke out on 20 June as some people tried to get out.¹⁰⁸²

On 28 June, the southern German state of Bavaria announced that it would offer coronavirus testing for all residents. The state pays for tests that are not covered by public health insurance. Bavaria is the first German state to offer universal testing.¹⁰⁸³

Treating

Mild cases are asked to self-isolate at home, so long as there is no-one in the high-risk category living there. Severe cases are treated in the hospitals.¹⁰⁸⁴

Masks

27 Apr, wearing masks (non-medical) while using public transport and shopping was made mandatory in all states.^{1085,1086}

In mid-March less than 5% wore masks in public places, after 27 April, this went to over 60%.¹⁰⁸⁷

Airport authorities and operators have drafted a proposal of safety measures for airports. The draft focuses on the use of face masks in airports especially in areas where it is difficult to maintain a 1.5 metre distance. The only exception to the mask requirement would be zones where passports are checked and children under six.¹⁰⁸⁸

In July, the state of Mecklenburg-Western Pomerania was considering ending compulsory mask wearing in August due to a low coronavirus infection rate. Other states in north Germany were also considering ending mask wearing.¹⁰⁸⁹

Public places and gatherings

Private meetings with people from two different households permitted from May 15.

30 Apr the government announced that more non-essential establishments, including museums, zoos, memorials, galleries and botanic gardens, would be allowed to reopen in the coming days. The exact timing of the easing of these restrictions will vary from state to state. Major events prohibited at least until 31 Aug.¹⁰⁹⁰

Germany extended social distancing rules (which were originally to be in place until June 5) to June 29.¹⁰⁹¹

It was announced on June 17 that Germany would extend a ban on large events until at least the end of October in an attempt to avoid a new wave of infections. Protests and demonstrations continued to be allowed, but authorities have to ensure that risks of infections are reduced.¹⁰⁹²

Transport

Borders to Switzerland, France and Austria reopened from 15 June. Hotels reopened on 25 May, and large events such as festivals scheduled to return after August. The 16 states reopened at different times depending on circumstances.¹⁰⁹³

Germany allowed travel from EU countries plus Britain, Iceland, Norway, Switzerland and Liechtenstein from late June.¹⁰⁹⁴

Germany extended a travel ban for non-European countries until Aug 31, as well as strongly advising against any cruises due to higher risks of virus transmission.¹⁰⁹⁵

Places of worship

10 May, churches held services following social distancing rules, using hand sanitiser and wearing of masks. No singing was allowed.

In May, more than 40 people who attended a Baptist church in Frankfurt confirmed as cases. Church officials say they followed social distancing rules and disinfected the building ahead of the service.¹⁰⁹⁶

On 24 May, around 800 Muslims prayed in the carpark of a store to mark the end of Ramadan. Worshippers followed Germany's rules that children under 12 should be left at home and people must keep physically apart.¹⁰⁹⁷ Churches in Berlin also opened to Muslim worshippers unable to fit into their mosque under new social distancing rules where worshippers must maintain a distance of 1.5m.¹⁰⁹⁸

Business

20 Apr, reopening of shops up to a size of 800 square meters (under strict hygiene requirements).

6 May all shops could open, although masks must be worn and social distancing maintained. Hairdressing also allowed.

15 May, Bundesliga football was allowed to resume (without fans watching).

9 to 22 May, pubs and restaurants are planned to reopen with 50% capacity and health regulations. 18 May, beer gardens reopened with controlled health regulations. Overnight stays also permitted for work-related travel.¹⁰⁹⁹

End of June there was an outbreak at Tönnies factory, Europe's largest meat-processing plant, involving more than 1,500 of its workers. About 7,000 people were placed in quarantine, and schools and kindergartens in the region forced to close until at least after the summer holidays. Health authorities have accused Tönnies of breaking regulations around physical distancing that were introduced to dampen the spread of coronavirus.¹¹⁰⁰

Education

4 May schools began reopening, initially for students in their final years of primary or secondary school. However, the school situation may be changed, with small groups, face masks, and social distancing rules for school buses. Additionally, the reopening of schools and nurseries falls under the jurisdiction of the states in Germany's federalised system. A nationwide concerted reopening of schools would require consensus across all 16 states.

Issues

Chancellor Angela Merkel is cautiously loosened restrictions, warning that Germany is not "out of the woods".¹¹⁰¹ She urged Germany to stay disciplined and not be counterproductive by lifting measures too hastily, underscoring that the effects of the early first steps of loosening restrictions can only be seen in two weeks. The European Commission has also warned the members of the European Union to coordinate their exits from lockdowns.¹¹⁰²

There has been conflict between Chancellor Angela Merkel's alliance and her political opponents, who cited that the restrictions that she has put into place were too excessive, and criticised her for not lifting the measures sooner. There have been numerous protests against the lockdown measures implemented.¹¹⁰³

There was also tension between the national government and federal governments. Germany closely monitored the R0 number and has a threshold set at 50 cases per 100,000 people for reimposing "emergency break" restrictions; however, some epidemiologists view this as too high.¹¹⁰⁴

Another example is Thuringia's premier, Bodo Ramelow, announced his state would end both the mandatory wearing of face masks and the limits on the number of people allowed to gather within the next two weeks. Ramelow said his plans were justified because Thuringia had one of the lowest coronavirus rates in Germany.¹¹⁰⁵

Katie Smallwood, a WHO emergency official, said countries like Germany, Switzerland and others that may ease restrictions including on bars, discos and other social hubs must have robust disease detection, testing and tracing systems in place first, to mitigate a potential "second wave" where the epidemic might re-emerge.¹¹⁰⁶ Similar to other countries, Germany has experienced clusters in environments more susceptible to viral transmission (eg meat processing plants).¹¹⁰⁷

On May 23, demonstrations were held across Germany as part of a protest movement against the lockdown restrictions. The rallies have been held weekly since the start of April, but numbers are increasing each week.¹¹⁰⁸

People from Gütersloh and Warendorf were targeted with insults and vandalism after the two districts were placed under new coronavirus lockdowns due to a recent outbreak in a slaughterhouse in North Rhine-Westphalia. Several German states also said that they will turn away would-be tourists from the affected districts.¹¹⁰⁹

Amazon workers in Germany went on strike on June 29, to denounce the so-called lack of transparency by Amazon after workers tested positive for COVID-19.¹¹¹⁰

Public Opinion

From mid-March to early June, support for the government's handling of the situation has fluctuated around 70%, and during this time perception that the situation is improving went from around 50 to 60%.¹¹¹¹

Economic Impact

IMF forecasts a -7.0% decline in GDP for 2020. The IMF also estimated a 3.9% unemployment rate in Germany for 2020, up from 3.2% last year.¹¹¹²

Unemployment is a growing concern, predicted to rise to about 3 million by the end of 2020. Almost one in five companies surveyed is likely to reduce staff, of which at least half of all restaurants and hotels indicated they cut jobs due to more than two months of restrictions.¹¹¹³

Businesses expect to take nine months on average before operations return to normal after the pandemic. Some businesses, such as those in travel, hospitality and car manufacturing expected lengthier recoveries, while aviation expects normalisation to take 16 months. Germany is currently experiencing its worst economic performance since 1990.¹¹¹⁴

Germany's economic support package is around 5% of GDP.¹¹¹⁵

Germany cut value-added tax on restaurant meals from 19% to 7% for a year to help restaurants losses caused by lockdown and social distancing measures.¹¹¹⁶

Germany agreed a 1.1 trillion euro package in March – loan guarantees, subsidies and a shorter-hours programme to avoid job cuts. In June it agreed a 130 billion euros stimulus package - value-added tax will be temporarily cut, families will receive 300 euros per child, those who purchase electric cars will benefit from a 6,000 euros rebate. Companies in sectors hardest hit (eg hospitality, tourism and entertainment), will receive bridging support worth 25 billion euros from June to August, up to 80 per cent of fixed operating costs could be reimbursed if revenues fall by more than 70 per cent compared to a year ago.¹¹¹⁷

Latest data showed that the unemployment rate in Germany has rose to 6.3 per cent in May from 5.8 per cent in April.

The German government plans to take on €218.5 billion in new debt this year to pay for a stimulus to help the country recover. This will lift Germany's overall debt burden to around 77 percent of GDP.¹¹¹⁸

Impacts of lockdowns are beyond economics (eg delays in cancer treatments, suicides, domestic violence, excess deaths).

Wider impacts

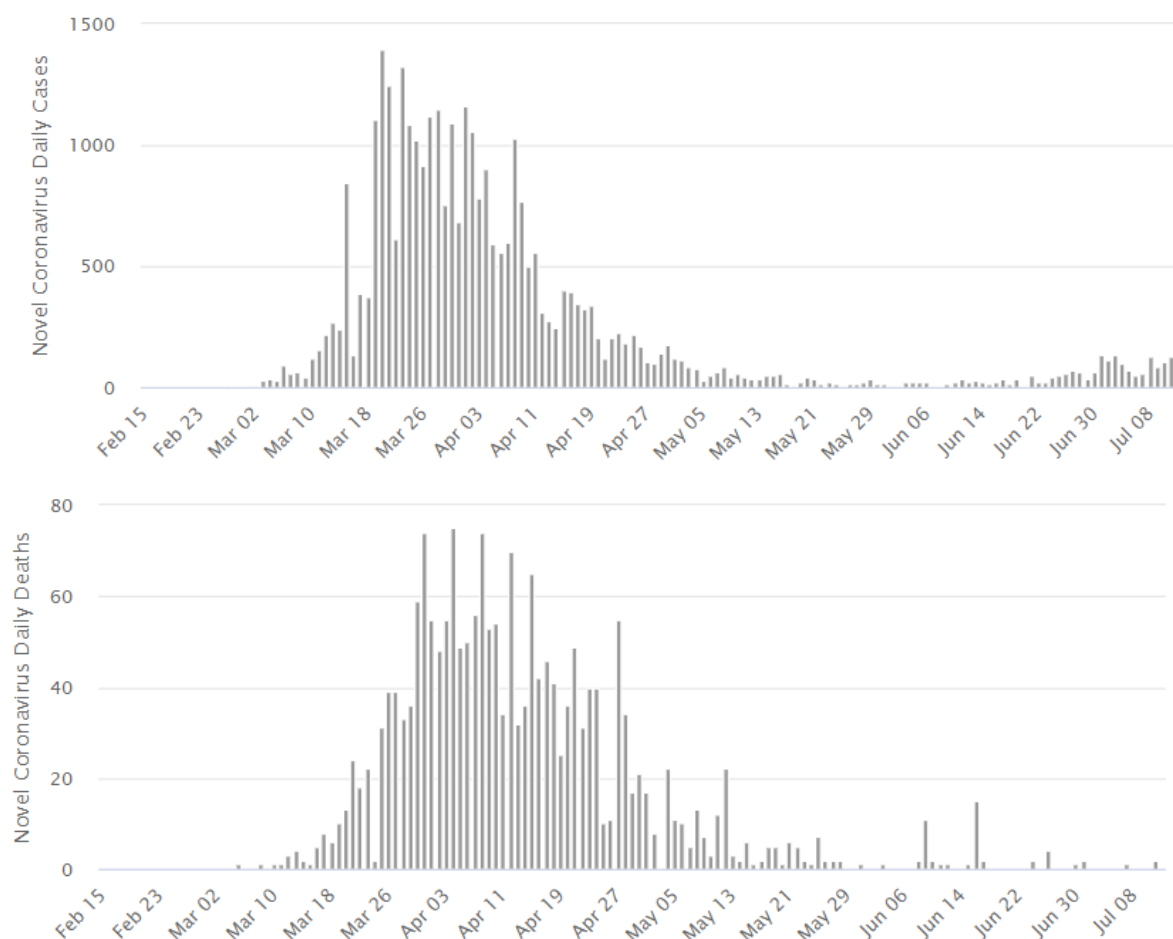
In April, there was an increase in deaths by 5% compared to the previous 5 years.¹¹¹⁹

Switzerland

Background

The first case was recorded on 28 Feb. Cases peaked and plateaued at the end of Mar and early Apr, then slowly declined to under 50 cases a day in the second week in May.

As of 13 July, there were 32,883 reported cases and 1,968 deaths.¹¹²⁰



Worldometer (2020)

On 25 June, a man who had visited a nightclub in Zurich tested positive for Covid-19. Five other people who were with him at the club also tested positive on 26 June. 300 people were ordered into quarantine as a result of the outbreak.¹¹²¹

Mobility

Google mobility data shows that through April there was around a 50% decline in mobility in transit stations, 40% decline in workplaces and 70-80% decline in retail and recreation. There were gradual increases through early May, but not returning to baseline levels.¹¹²²

Passenger numbers have increased very gradually, and in June were around 55% of normal capacity in regional trains and 45% on intercity trains.¹¹²³

Seroprevalence

Preliminary serology results from a random survey of people from Geneva found an infection rate of 5.5%, and an IFR of 0.8% (6 Apr).¹¹²⁴ This study continues on a weekly basis;

seroprevalence increased to 6.1% in the second, and to 9.7% in the third week. 5-19 year olds had 6% seroprevalence, 20-49 year olds 8.5% and those 50 and older 3.7%.¹¹²⁵

Lockdown Summary

Switzerland's pandemic response is based on the advice of a Task Force, comprising researchers from across the Swiss scientific community and chaired by the president of the National Research Council of the Swiss National Science Foundation.¹¹²⁶ The Task Force is supported by ten expert groups that focus on the urgent and time-critical issues, including clinical care; data and modelling; diagnostics and testing; digital epidemiology; economy; ethics; legal; social; exchange platform; infection prevention and control; public health; and vaccines and vaccination strategies.¹¹²⁷

On 13 Mar, the temporary closure of schools and universities was announced. The government was reluctant to close schools, holding that older people were more at risk.¹¹²⁸ This changed when the European Centre for Disease Prevention cited school closure as a necessary measure based on consideration of the uncertainty in the evidence of children in transmitting the disease, the need for day care for children, the impact on nursing staff and the potential to increase transmission to vulnerable grandparents.¹¹²⁹

On 6 Mar, the Swiss Federal Council declared an "extraordinary situation" (equivalent to a state of emergency).¹¹³⁰ The Swiss Army called up reservist soldiers and officers, which lead to some infections within barracks.¹¹³¹ The closure of bars, shops and other gathering places was announced on 16 Mar. Food shops, pharmacies, (a reduced) public transport and the postal service remained open.¹¹³²

Large gatherings were banned in Feb and on 21 Mar there was a ban on gatherings of more than five people and anyone standing closer than two metres to others risked a fine of CHF100. The latter announcement came after Switzerland case numbers increase by nearly 1,000 in a single day to over 4,800 cases.¹¹³³

Switzerland also banned all people entering Switzerland, with the exception of those from the Principality of Liechtenstein.¹¹³⁴

Exit Strategy

A Swiss-developed decentralised contact tracing app DP-3T, will launch on May 13 in a pilot phase "for a certain group of the population" through to the end of the month. The app uses Bluetooth to allow smartphones to communicate with each another anonymously. If a person tests positive for coronavirus, all the people with whom that person was in contact in previous days (less than two metres proximity for more than 15 minutes) are alerted via the app to isolate themselves and get tested.¹¹³⁵ Public support for the app fell in line with infections declining.¹¹³⁶

With thousands of tests being carried out per day, Switzerland has one of the highest per-capita rates of testing in the world and is planning on extending testing with contact tracing as measures ease.¹¹³⁷

Initially, people who wanted to be tested needed to be showing multiple symptoms of the virus while also having underlying conditions which placed them at a greater risk of the virus. These criteria were expanded to anyone with symptoms of acute respiratory illness being tested, regardless of whether or not they have a fever. In addition, people who have lost their sense of taste and smell or those with muscle pains should also be tested for the virus. Testing was also carried out on elderly individuals with acute confusion or deterioration in general health without other etiology. Doctors were encouraged to test people without symptoms in hospitals, nursing homes and retirement facilities in order to prevent the spread

of the virus in the facility. There was also a hotline to call for testing, before being directed to a testing facility.¹¹³⁸

Testing was usually in a hospital or medical centre, some cantons put in place drive-through testing (after medical referral) and mobile testing facilities that can visit nursing homes and other care facilities.¹¹³⁹

As well as testing of suspected cases, there is was also testing of individuals notified by the SwissCovid app.¹¹⁴⁰

The Swiss National COVID-19 Science Task Force recommended that the costs for tests be assumed by the federal government, which was implemented from 25 June. Prior to this, costs were split between health insurers and local government cantons, which led to inconsistency in charging and the risk that people would be reluctant to get themselves tested if they had to bear the costs themselves.¹¹⁴¹

The cost of tests for SARS-CoV-2 is a flat rate of 169 francs, and of antibody tests at a rate of 113 francs. Antibody tests are not recommended at the present time (July).¹¹⁴²

If the test is positive and the individual only has mild symptoms then they self-isolate at home until 48 hours after symptoms disappear. Severe cases are hospitalised.¹¹⁴³

Face masks are not mandatory, but are recommended when social distancing (2m) is not possible (eg on public transport and in some shops).¹¹⁴⁴ As at June, only 5% wore masks on public transport.¹¹⁴⁵ Public support for mask wearing fell in line with infections declining.¹¹⁴⁶

Switzerland announced the schedule of easing measures up to June in order for individuals and businesses to plan. The following are the key points outlined by the Federal Council and Federal Office of Public Health.^{1147,1148}

- Moving from one phase to the next depends on there being no significant increase in cases.
- Sufficient time has to be allowed between each phase so that the effects can be observed. The criteria are the number of new infections, hospital admissions and deaths, and hospital occupancy rates.
- Once cases fall sufficiently, tracing of infection chains will recommence and an extended testing strategy put in place. A contact tracing concept and an app providing information about contacts with infected persons will be developed.
- The rules on hygiene and social distancing continue to be important and will remain in place.
- People at especially high risk will be advised to continue to stay at home.

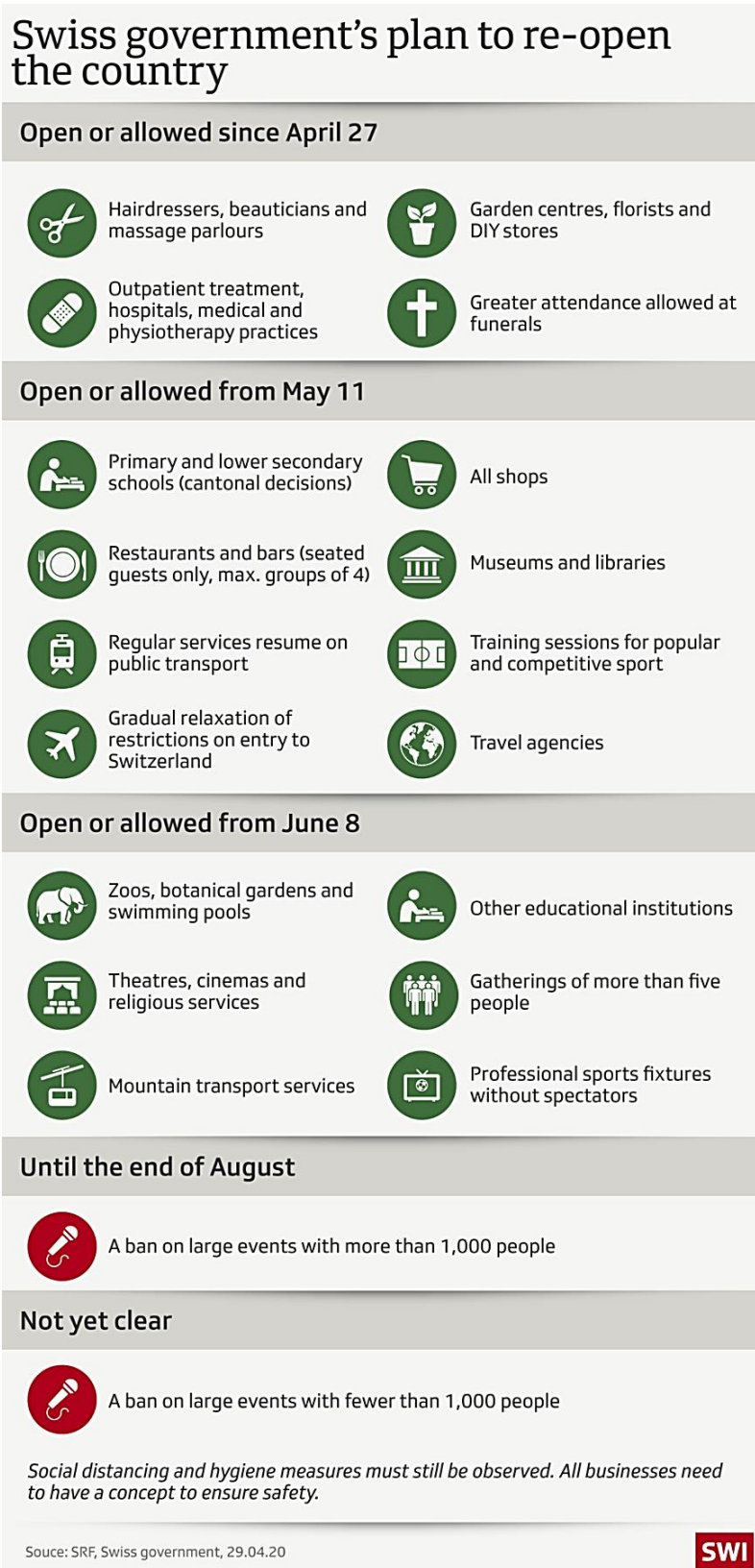
The Government considered various risk factors in determining which measures to ease, eg contact and movement of people, the number of people at high risk affected, and the ability of businesses to take precautionary measures. It also evaluated the economic benefits of the individual phases.

Through easing of measures, the rules on hygiene and social distancing will be continually emphasised and those over the age of 65 or who have an underlying medical condition are strongly recommended to stay home unless visiting the doctor.

During a government meeting on 29 Apr meeting, it was concluded that the 11 May plans to further ease restrictions will proceed, with shops, markets, compulsory schools as previously announced, and the additional museums, libraries, restaurants and sports training sessions set to reopen too. Strict social distancing measures are still in place. Country entry

restrictions have been eased, with the processing of applications sent in before 25 Mar, and allowing for family reunification.¹¹⁴⁹

The decision on 8 Jun reopening will be confirmed on 27 May.



Reopening followed the figure above.

Contact details from customers of restaurants and bars are asked for (people are not required to give them). Public transport returned to the standard timetable, with the recommendation that people wear face masks at rush hour.¹¹⁵⁰

Gatherings of up to 30 people were allowed from May 30, up from a previous limit of 5. Summer camps, cinemas, theatres and concert halls were permitted to reopen after a decision to allow public events of up to 300 people from June 6 was announced.¹¹⁵¹

A minimum personal space of 4m² per customer is necessary on dance floors in bars and clubs. Clubbers can apply for a digital Swiss Night Pass that will help nightclubs and bars meet the government's requirement to register attendance for contact tracing purposes.¹¹⁵²

Border crossings to and from Germany, France and Austria reopened from 15 June.¹¹⁵³

On June 14, the Swiss government allowed travel between Switzerland and all European Schengen states as well as Iceland, Norway, Liechtenstein and the United Kingdom. However, all passengers on direct flights from Sweden to Switzerland were required to be tested for fever.¹¹⁵⁴

The Swiss Football League resumed on June 19 after being suspended on February 23. Matches will take place behind closed doors.¹¹⁵⁵

June 19, there was further relaxation of restrictions and power will also be handed back to the cantons.¹¹⁵⁶ As of June 22, most of the measures had been lifted. Only the ban on large-scale events remained in place until the end of August.¹¹⁵⁷

From June 22, safe distancing was reduced from 2 metres to 1.5 metres. Wearing a mask on public transport was recommended, and compulsory during large events. The current midnight curfew for restaurants and nightclubs was lifted and the obligation to be seated.¹¹⁵⁸

From June 22, the government dropped the recommendation to work from home.¹¹⁵⁹

From June 29, long-distance international train services between Switzerland and Italy resumed, after being suspended since March due to the coronavirus outbreak and subsequent lockdown. Services resumed at 50 percent capacity, before expanding in mid-August and later to full capacity in mid-September.¹¹⁶⁰

At the end of June, the Swiss government agreed to cover the costs for an average of 8,000 medical tests for coronavirus infections daily for a total of about CHF290 million in the year 2020. This is an effort to encourage the population to participate in prevention efforts.¹¹⁶¹

Switzerland imposed a mask requirement on public transport from July 6. Everyone aged 12 or over must wear a mask in public transport. Masks were not compulsory in shops or supermarkets on a federal level, but two cantons made masks mandatory in shops.¹¹⁶² After the government ordered face masks to be worn on public transport, Swiss airline decided to voluntarily follow this precaution on its aircraft.¹¹⁶³

The Swiss government is against imposing nationwide lockdown restrictions if a second wave occurs. Its future response will centre around a cantons level approach.¹¹⁶⁴

By mid-June, the number of infections started to increase again after Switzerland lifted many of its lockdown restrictions, triggering concerns about a second wave. Canton Ticino, which was badly affected due to its proximity to Italy, announced on July 3 that gatherings of more than 30 people were prohibited. Bars and clubs had a limit of 100 people (the limit for nightclubs and pubs for the whole of Switzerland was 300).¹¹⁶⁵

The Federal Office of Public Health published a list of 29 countries posing a high risk of coronavirus infection. From July 6, travellers entering Switzerland from these countries were required go into quarantine for ten days. These countries include: Argentina, Armenia,

Azerbaijan, Bahrain, Belarus, Bolivia, Brazil, Cape Verde, Chile, Colombia, the Dominican Republic, Honduras, Iraq, Israel, Kosovo, Kuwait, Moldova, North Macedonia, Oman, Panama, Peru, Qatar, Russia, Saudi Arabia, Serbia, South Africa, Sweden, the Turks and Caicos Islands and the United States.¹¹⁶⁶

On July 20, citizens from the following countries, deemed as "safe", will be able to enter Switzerland with no quarantine or entry restrictions: Algeria, Australia, Canada, Georgia, Japan, Morocco, Montenegro, New Zealand, South Korea, Rwanda, Thailand, Tunisia and Uruguay, as well as the EU states not belonging to the Schengen area (Bulgaria, Croatia, Cyprus, Ireland and Romania).¹¹⁶⁷

Issues

The aim was to open as soon as possible and as slowly as necessary to avoid a more damaging stop-and-go policy.¹¹⁶⁸

A survey showed support for mandatory mask wearing.¹¹⁶⁹ In April there was a shortfall of masks and the government sought to purchase masks. Masks were prioritized for health care. There was an increase in local companies supplying masks domestically as time went on.¹¹⁷⁰

Katie Smallwood, a WHO emergency official, said countries like Germany, Switzerland and others that may ease restrictions including on bars, discos and other social hubs must have robust disease detection, testing and tracing systems in place first, to mitigate a potential "second wave" where the epidemic might re-emerge.¹¹⁷¹

Similar to other countries, protests occurred in early June against the death of an African-American man in police custody in the US.¹¹⁷²

On 22 June it was reported that health experts warned of a new outbreak due to the lifting of the state of emergency in Switzerland. Head of the government's COVID-19 Task Force, Professor Matthias Egger warned that there is a risk that the number of cases will increase sharply in the near future, especially since a functioning surveillance system for the whole country still does not exist and it is unclear if contact tracing is well established.¹¹⁷³ Professor Egger warned that a second wave could hit in summer, instead of the previously predicted autumn, if measures were not extended.¹¹⁷⁴

Public Opinion

Three weeks into the measures, the public view shifted, with most believing that the health system could cope and that the economic concerns were increasing. People wanted to see an easing of the strict rules and were increasingly supportive of digital tools (tracing apps) to enable this to happen.¹¹⁷⁵

Several hundred demonstrators protested against the lockdown in Swiss cities in the first few weekends of May.¹¹⁷⁶ However, a survey carried out across the country revealed only 36 percent supporting the timetable for lifting lockdown, with 42 percent saying that the government was moving "too fast".¹¹⁷⁷

In May, public confidence in political leadership was over 60%; however, there is unease about loss of personal freedoms. In addition, fears of a negative impact on the economy remain high, while concerns about suffering from virus-related health problems have declined.¹¹⁷⁸

Economic Impact

IMF forecasted a -6.0% decline in GDP for 2020.¹¹⁷⁹ Switzerland's unemployment rate went from 2.5% in Mar to 3.4% by May, and is expected to reach 4% next year. Switzerland made 14.2 billion francs available to the state unemployment insurance system.¹¹⁸⁰

Switzerland's economy shrank 2.6 percent during the first three months of the year compared to the previous quarter. The overall decline was steeper than expected.¹¹⁸¹

According to Switzerland's central bank, Switzerland's economy is expected to shrink by around six percent in 2020.¹¹⁸²

Wider impacts

No information has been found so far.

Denmark

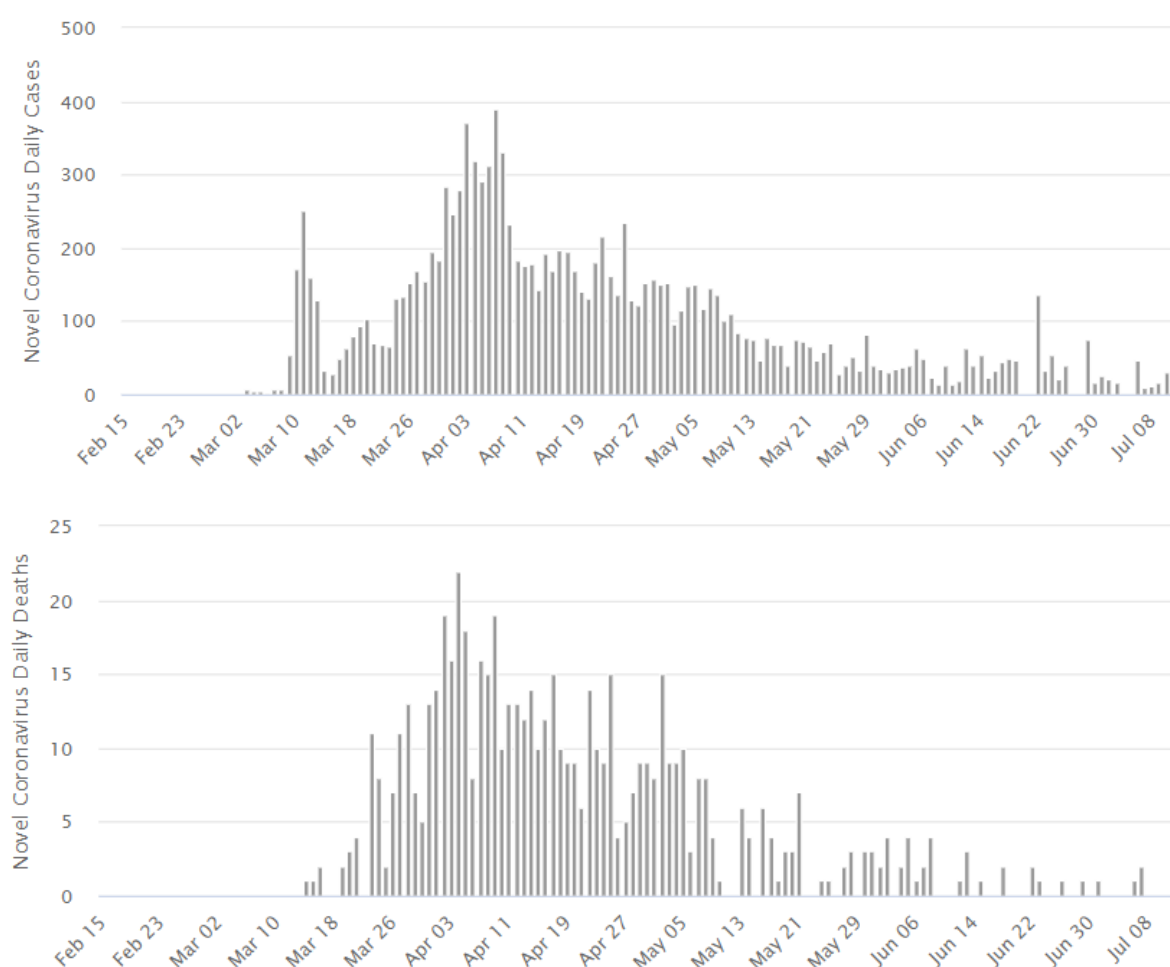
Background

Denmark's first recorded case was on 27 Feb. As at 8 June, there were 11,948 confirmed cases and 589 deaths.¹¹⁸³ There appear to be three main peaks, gradually declining; however as in May, it appears more of a plateau of cases.

Restrictions eased in mid-Apr, preliminary reopening was reported to have not resulted in an increased spread of infection, but that there is no indication of the cause (eg could be due to high compliance with physical distance and hygiene advice, or whether it is possibly due to biological conditions, such as weakening of virulence).¹¹⁸⁴

In mid-June, Denmark has had its first outbreak of coronavirus since lifting the lockdown in May, with 34 people testing positive in Hjørring in the far northwest coast of Jutland.¹¹⁸⁵

As at 13 July, Denmark had 12,946 confirmed cases and 609 deaths.



Worldometer (2020)

Denmark saw three clusters emerge at the end of June. One of the outbreaks stemmed from a confirmed case involving a person who was among 15,000 people who took part in the Black Lives Matter demonstration in Copenhagen on June 7. The other outbreak was in north Jutland, which saw the most of new coronavirus cases out of any municipality over the second week of June. The third cluster stemmed from a passenger plane that arrived at Copenhagen from Pakistan on June 6. Six people on that flight have subsequently tested positive for coronavirus.¹¹⁸⁶

Mobility

Google mobility data shows that through April there was around a 40% decline in mobility in transit stations, 40% decline in workplaces and 30% decline in retail and recreation. There were gradual increases through early May, but not returning to baseline levels.¹¹⁸⁷

Seroprevalence

A sample of just under 10,000 blood donors from April 6 to April 17, 2020 found overall seroprevalence was 1.7%, this was higher in the capital at 3%.¹¹⁸⁸

Lockdown Summary

From 13 Mar, Denmark was among the first European countries to introduce a lockdown. Gatherings were limited to 10 people, nonessential public work stopped, schools closed, working at home was implemented and borders shut. Although bars, gyms and hairdressers closed, many shops remained open. It was strongly recommended that grandparents not take care of their grandchildren.^{1189,1190} Testing efforts were increased.

From 14 Mar, borders were closed except for foreigners leaving Denmark, Danish citizens and residents returning, and people with an essential reason for their visit.

Exit Strategy

Tracking, tracing, testing and isolation

COVIDmeter allows users to input and monitor coronavirus symptoms, and Mobile Proximity App tracks the spread of the virus.¹¹⁹¹

Denmark's coronavirus app Smittestop was made available for download from June 18. The app notifies users if they came within a metre of contact for more than 15 minutes with someone who tested positive for COVID-19. The notification of the risk of infection will not include the name of the person who has the virus.¹¹⁹²

Denmark change testing criteria from only severe cases to anyone with symptoms.¹¹⁹³ By May Denmark had the capacity to test about 20,000 people a day, half through the network of 16 pop-up tent facilities, and half through hospital laboratories. On May 11, there were 16,391 tested; however, the number has since fallen each day due to fewer cases. This led to authorities allowing people to order tests without a medical referral.¹¹⁹⁴ All adults in Denmark could make an appointment on their own for a COVID-19 test. Tests centres were been established across Denmark. Results returned within 1-2 days.^{1195,1196}

As at June, Denmark had testing centres at Copenhagen Airport and at its southern border with Germany so that all Danes returning from overseas trips can immediately test themselves for free on their return.¹¹⁹⁷

Treating

Severe cases were hospitalised. Mild cases are self-isolated at home and aimed to stay away from family members. Those unable to self-isolate at home, or who have a high-risk individual at home, are asked to contact the municipality who assists with out-of-home quarantine stays. Isolation can end 48 hours after symptoms end - a loss of smell and taste are exempt as these symptoms may linger for a long time.¹¹⁹⁸

Masks

The Danish Health Authority has from the start of the pandemic advised the general public against wearing face masks in public. This is because of unproven benefits of mask policies as well as the difficulty of sourcing supplies in face of shortages. They assert that wearing

masks creates a false sense of security and does not enforce hygiene practices such as regular hand washing, which they view as more effective measures.¹¹⁹⁹

Less than 5% wear masks in public places.¹²⁰⁰

Public places and gatherings

The social distancing requirement was changed from 2m to 1m from May 10.¹²⁰¹

The limit on public gatherings was increased from 10 to 50 on 8 June.¹²⁰²

Large gatherings of 500 people or more are banned until Sept.¹²⁰³

On 21 June, Danish football played the first league match with crowds in the stands since March. In Denmark, crowds have been limited to 500 since the lockdown, but the game on 21 June was given special dispensation to host 3,000. Supporters were asked to stay two metres apart.¹²⁰⁴

Transport

From May there was an air travel agreement between Greenland and Denmark.¹²⁰⁵

Germany opened its borders to travellers from Denmark on 16 June. Denmark relaxed its border controls for German citizens on 15 June.¹²⁰⁶

On June 18, Denmark announced criteria for opening its borders, which includes a low number of coronavirus infections and robust enough testing capacities. From June 27, travel was allowed to so-called open countries or those with fewer than 20 infected persons per 100,000 inhabitants per week. Among the countries meeting the criteria so far are France, Greece, Italy, the Netherlands and Spain. Sweden and Portugal do not meet the criteria. However, travel will be allowed to the Swedish regions of Scania, Halland or Blekinge. The Foreign Ministry discouraged unnecessary trips to Ireland and the UK.¹²⁰⁷

Travel guidelines were published on June 25. Travel to the UK, Ireland, Malta, Portugal, Romania and all of Sweden (except the region of Västerbotten) was only recommended if “strictly necessary” for Danish residents, and tourists from these countries will be barred from Denmark. Travel to and from other EU and Schengen countries was permitted without restriction.¹²⁰⁸

From July 2, Denmark allowed entry to citizens of six select non-EU countries, but advised against non-essential travel to nations outside of Europe. These countries included: Australia, Canada, Japan, New Zealand, South Korea and Thailand.¹²⁰⁹

Places of worship

From May 18, churches were allowed to open but social distancing rules protocols must be adhered to.¹²¹⁰

Business

From 20 Apr, courts, hairdressers, tattoo parlours, beauticians, dentists and opticians were permitted to reopen. Driving lessons were also allowed. Each has new health guidelines to follow (eg sanitising card readers and door handles after each customer touches it).¹²¹¹

11 May, Denmark’s retail sector resumed.¹²¹² 18 May, restaurants and cafes resumed - although there were restrictions on the number of people and opening hours.¹²¹³

From 8 Jun the government allowed an increased physical presence in public workplaces and full opening of television broadcasters, gatherings of up to 10 as well as the reopening of the following activities:^{1214,1215}

- Museums, theatres, art galleries, cinemas, aquariums

- Outdoor amusement parks
- Zoos and botanical gardens
- Summer activities for children and young people
- Public sector organisations facing bottle necks
- Full opening of public research activities
- Adult education sectors for the unemployed
- Language schools
- Indoor sports and other group activities (such as evening classes)

Swimming pools, gyms, children playgrounds and water parks reopened from 8 June.¹²¹⁶

From June 11, more visitors were allowed in nursing homes, hospitals, and psychiatric facilities.¹²¹⁷

Education

15 Apr, children aged 11 and younger returned to schools and nurseries, albeit with adapted approaches to facilitate social distancing as well as stricter cleaning regimes. Government regulations required schools to make sure the children were split into smaller groups (sitting 2m apart), wash their hands immediately upon arrival and at least every two hours, and that contact surfaces like sinks, toilet seats and door handles are disinfected twice daily. School leaders reported that parents were supportive of the return to school and that a key factor for opening was that parents could work and also that children needed to be educated and have the social interaction.¹²¹⁸ However, because younger pupils spilled over into secondary school space to enable social distancing, there was a challenge as to how to return older pupils to schools.¹²¹⁹

18 May, children aged 12-16 returned to school, as well as exam students.¹²²⁰

Issues

An Infectious Diseases scientist in Denmark commented that the phased reopening has not worsened the spread of the virus.¹²²¹

Public Opinion

According to a poll reported in April, 86% of Danes approved of the government's approach and the communication with the public. For example, Denmark's Prime Minister statement that the easing of measures would be slow and cautious and likened them to "walking a tightrope" but that, as the spread of the virus seems to be under control, it was critical to restart the economy as soon as possible.¹²²²

From mid-March to early June, support for the government's handling of the situation has consistently been over 80%. During this time perception that the situation is improving also stayed at 80%.¹²²³

Economic Impact

IMF forecasted a 6.5% decline in GDP for 2020.¹²²⁴ Unemployment was at 2.2% in the first quarter of 2020, and forecast to rise to 3.3% by the end of 2020.¹²²⁵

Wider impacts

Calls to shelters, typically from people asking for a place to stay immediately due to domestic violence, rose sharply in lockdown.¹²²⁶

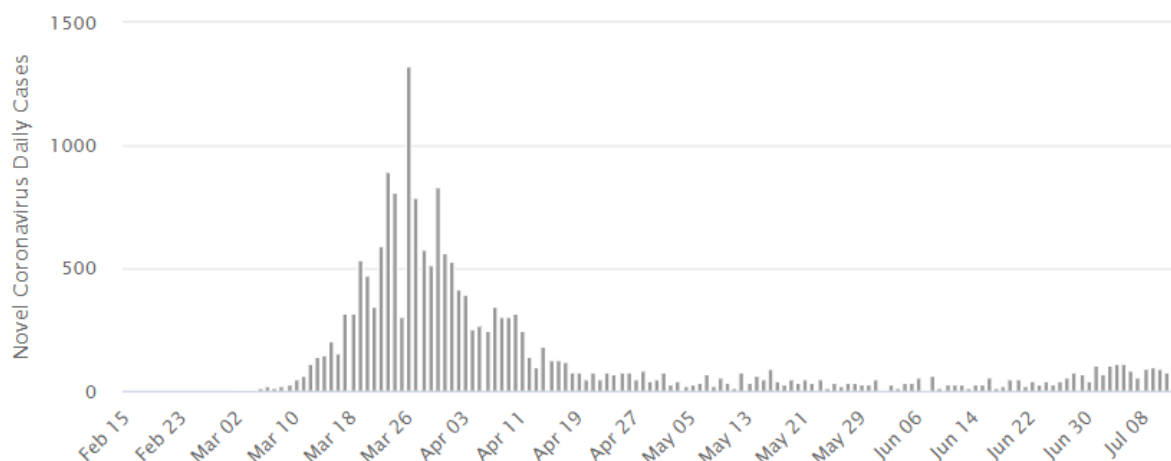
In June, mink at a farm in Denmark were found to be infected with the new coronavirus and all 11,000 of the animals there were culled, shortly after the virus was found at 13 mink farms in the Netherlands, where about 570,000 mink have been ordered culled. “The government has decided, on a precautionary principle, that the infected mink stock will be culled to minimize the risk of potential spread of the disease,” the Danish Veterinary and Food Administration said in a statement.¹²²⁷ In July, the Danish Veterinary and Food Administration found the virus had infected another mink farm in Hjørring Municipality. Test results show that more than 50 percent of the herd were infected with COVID-19 and about 5,000 mink were killed.¹²²⁸

Austria

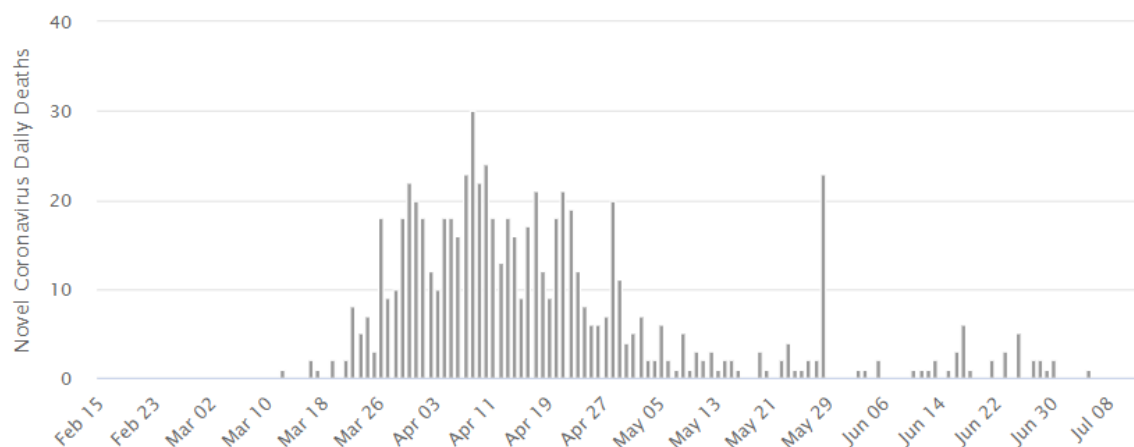
Background

The first case was recorded on 25 Feb. As 8 June, there were 16,902 confirmed cases and 672 deaths.¹²²⁹ Cases rose to a peak at the end of Mar and then declined. Cases towards mid-May vary day by day from 70 down to 10 cases. There are inconsistent case numbers.

As of 13 July, there were 18,897 confirmed cases and 708 deaths.



Daily deaths are not consistent as some are announced as groups after investigating deaths outside of hospitals and so on.



Worldometer (2020)

Austria has a 250-mile border with Italy, which had Europe's first large-scale coronavirus outbreak. The Tyrolean ski resort seems to have been the first large-scale outbreak and seeded cases in numerous other countries.¹²³⁰ By mid-March, infections were doubling every three days and there was a peak of 966 new cases on 26 Mar.¹²³¹

A study (in which the government randomly sampled 1,500 of the population for levels of infection) suggested that less than 1% of the country's population was "acutely infected" with coronavirus by the beginning of April.¹²³²

On July 1, Austria registered 114 new coronavirus cases – the highest since mid-April. Most of the new cases were traced to a cluster in Upper Austria around a Free Church in Linz. Another cluster in Salzburg developed around a meeting of the Rotary club, with 33 active

cases. Authorities also warned of a potential cluster developing, where 10 people working for a construction firm tested positive for the virus.¹²³³

Mobility

Google mobility data shows that through April there was around a 60% decline in mobility in transit stations, 40% decline in workplaces and 40% decline in retail and recreation. There were gradual increases through early May, but not returning to baseline levels.¹²³⁴

Seroprevalence

4.71% of people in the 27 communities with a relatively high number of known coronavirus infections had antibodies as at 25 April 2020.¹²³⁵

More than 42% of people in Ischgl were found to have antibodies. This is an Austrian ski resort that was an early hotspot. Only 15 percent of those who tested positive for antibodies had been aware they had contracted the virus. Of children in the group 27% were found to have antibodies. There were also slightly more cases in men than in women.¹²³⁶

According to a report from Sweden's Public Health Agency, teachers and teaching assistants were not over-represented in Sweden's confirmed coronavirus cases when compared to other occupational groups. For preschool teachers and upper secondary school teachers, the calculated relative risk was lower than average, while for assistants and secondary school teachers it was slightly higher. Medical and care workers were excluded from the report. Taxi and bus drivers were hit hardest by coronavirus compared to other professions.¹²³⁷

Lockdown Summary

Austria had a clear testing strategy to reduce transmission. Anyone with symptoms could call a hotline and a medical expert would assess them. If COVID-19 was suspected, then a mobile healthcare professional came to the person's door to administer the test. This kept cases out of hospitals, of concern because there were issues with hospital waiting times.¹²³⁸

The government stated it preferred a 'containment-access' approach rather than seek to acquire 'herd immunity'.¹²³⁹

On 10 Mar, schools and universities were shut, and public gatherings were banned.¹²⁴⁰ On 13 Mar, Tyrolean authorities placed the town in quarantine.¹²⁴¹ The following day, a nationwide lockdown was ordered and people could only leave homes if key workers, to buy food or get medications, to assist other people, or exercise alone or with those living in the same home. People were allowed to exercise as many times as they wished, so long as they abided by social distancing rules.¹²⁴²

Exit Strategy

In the first week of April, Austria's crisis management team (comprising the Chancellor, Vice-Chancellor, Health Minister and Interior Minister) outlined the phased approach to reopening.¹²⁴³

The government reserved the right to pull the "emergency brake" at any time and reverse the openings if the numbers demand it.¹²⁴⁴

Tracking, tracing, testing and isolation

Austria tested all people who are symptomatic. If there is a reasonable suspicion of a positive case then the costs of the testing are borne by the government.¹²⁴⁵

There is a tracing app developed by the Red Cross (called “Stopp Corona”), there have been discussions around privacy. Stopp Corona app uses Bluetooth along with Apple and Google's new API to help trace coronavirus contacts.¹²⁴⁶

People are asked to self-isolate for 14 days if they have symptoms.¹²⁴⁷

Treating

Those with mild symptoms and close contacts self-quarantine at home for 14 days. Severe cases are hospitalised.

Control of compliance with the quarantine ("segregation") is the responsibility of the district administrative authority. Any violations can be fined up to 1450 euros.¹²⁴⁸

Masks

By 1 Apr, it became compulsory to wear face masks (eg basic nose and mouth coverings) in supermarkets. This was later extended to include public transport.¹²⁴⁹ Mask wearing in public places was mandatory from April 6 and safe distancing of 1m from anyone not living in the same house.¹²⁵⁰

Wearing face masks was no longer be mandatory in shops from 15 June. However, covering the mouth and nose will still be mandatory in public transport, health facilities and in places where social distancing rules are hard to keep.¹²⁵¹

From July 9, mask-wearing was reintroduced in shops, stores, restaurants, bars and official buildings in Upper Austria due to a spike in the number of coronavirus cases in the region around the state capital of Linz, linked to a Free Church and meat-processing plants in the area.¹²⁵²

Public places and gatherings

May 1, meetings of a maximum of 10 people in public spaces permitted, as long as a minimum distance of one metre is kept.¹²⁵³

From 15 May, zoos opened.¹²⁵⁴ From 29 May, tourist attractions, recreational facilities and public swimming pools opened, provided that a minimum distance of one metre can be kept.¹²⁵⁵

From May 29, events of up to 100 people were allowed. From July 1, events up to 250 people were allowed. From August 1, events up to 500 people were allowed and, when specific criteria are met, this will be increased to 1,000.¹²⁵⁶

The 100th Salzburg Festival in August is to go ahead – instead of the originally planned 200 events over 44 days, there will be more than 100 over the course of 30 days.¹²⁵⁷

Transport

From 4 June, cross-border travel was allowed to neighbouring countries that have declines in infections (Germany, Switzerland, Liechtenstein, Czech Republic, Slovakia and Hungary). Travellers from these countries won't need to go into quarantine or present a negative COVID-19 test result. However, as at 3 June, travellers going to and coming from Italy will still have to undergo COVID-19 restrictions.¹²⁵⁸

From June 16, Austria allowed entry to travellers from 31 countries without restrictions, including Italy, Greece, Croatia and most of Europe. However, some exceptions include Sweden, Spain, Portugal and the United Kingdom. Travellers from these countries are required to show a negative coronavirus test or undergo a two-week home quarantine.¹²⁵⁹

On 24 June, Austria's foreign office advised against all but essential travel to North Rhine-Westphalia, after a meat processing plant in the state became the centre of a major outbreak.¹²⁶⁰ The travel warning for people travelling from North Rhine-Westphalia that was issued on June 24 was withdrawn on June 29. However, the ban remained in place on the Gütersloh district of North Rhine-Westphalia. People from Gütersloh have to present a negative coronavirus test that is less than 48 hours old before being allowed to enter Austria.¹²⁶¹

The Austrian Foreign Ministry issued a travel warning for the countries of the Western Balkans due to rising coronavirus cases in the region. The countries include Serbia, Montenegro, Bosnia & Herzegovina, North Macedonia, Albania and Kosovo. Travellers coming from these countries to Austria need to self-quarantine for 14 days or show a negative COVID-19 test result.¹²⁶²

Places of worship

Religious services resumed on 15 May under strict conditions and safety precautions (about two metres of safety distance, 10 square metres per person, mouth-nose protection, disinfection and entry controls). Up to 30 people were permitted to attend a funeral.¹²⁶³

Business

On 14 Apr, small shops under 400 square metres as well as hardware stores and garden centres opened. Wearing masks is compulsory in shops, with a maximum of one person per 20 square metres.¹²⁶⁴

From 1 May, all shops opened with one person allowed in per 10m² (a change from 20m²).¹²⁶⁵

From 1 May, all public offices opened.¹²⁶⁶

May 1, the advice was to continue to work from home if possible. If the employee is categorised as in a high-risk group then the employee could either arrange for safety at work (eg a larger room or a specific work environment to minimise the risk of infection), work from home if possible, or if these are not possible then the employee should be released from employment; the costs of the financing are borne at federal level.¹²⁶⁷

From 15 May, restaurants and other premises offering seating reopened with restrictions of having a maximum of four adults with their children sat at one table, a minimum distance of one metre was required between tables (does not apply to persons sitting at the same table). Staff with customer contact must wear mouth-nose protection.¹²⁶⁸

From May 15, restaurants, cafes and bars are permitted to reopen and stay open until 11pm. However, the number of customers must be limited and customers are required to cover their mouth and nose with a mask or fabric.¹²⁶⁹

Formula One restarted with two races with, no fans present, on July 5 and 12.¹²⁷⁰

From July 1, all sports, both indoors and outdoors, were permitted. Masks are no longer mandatory for waiters and waitresses in restaurants and bars, hotels and eateries can offer buffets. Prostitution was permitted and brothels were allowed to reopen. Events with fewer than 250 people could take place indoors and outdoor events with fewer than 500 people could take place.¹²⁷¹

From August 1, night bars and discos in Austria were permitted to open again with up to 60% capacity and a maximum of 200 guests, with closing time at 4:00 in the morning.¹²⁷²

Education

Schools continued with home-schooling until mid-May. Examinations and research at universities continued to take place.¹²⁷³

Gradual resumption of schooling through May and early June, prioritising some years, undertaking shifts and cleaning stepped up.¹²⁷⁴

Schools in five districts closed from July 3 due to rising case numbers locally.¹²⁷⁵

Issues

Despite lifting of lockdown measures, businesses are not experiencing their usual turnover, as people still stay away from crowded places amidst fear of contracting the virus.¹²⁷⁶

A survey found that 98% felt that quarantine in crisis areas was appropriate, and 97% judged keeping a distance, the ban on events and the wearing of a face mask to be appropriate. However, 44% considered the measure of leaving the house only in exceptional cases to be inappropriate – especially for people with pre-school age children (56%). 64% reported good mental well-being, but among people with critical pre-existing conditions (classified as a risk group), only 33% stated that their mental well-being was good.¹²⁷⁷

Economic Impact

IMF forecast -7.0% decline in GDP for 2020.¹²⁷⁸

Unemployment was at 8.7% in the first quarter of 2020, and forecast to rise to 12.8% by the end of 2020.¹²⁷⁹

The Austrian federal government presented a package worth €500 million to provide aid for the F&B industry that has been particularly hard hit by the coronavirus pandemic. The package consists of tax relief and also support and incentives.¹²⁸⁰

Austrian Airlines has been given a 600 million Euro rescue package.¹²⁸¹

According to the Austrian central bank, Austrian economic output was forecast to shrink by 7.2 per cent this year if there is no second coronavirus wave in the autumn, but even a resurgence milder than the first outbreak would deepen that to 9.2 per cent.¹²⁸²

In July, the EU economic forecast for Austria predicted a coronavirus-induced recession of -7.1% this year (2020) and a recovery of +5.6% in the next (2021).¹²⁸³

Wider impacts

330 excess deaths from all causes were reported between March 23 and April 5, of which 57% were due to COVID-19.¹²⁸⁴

Sweden

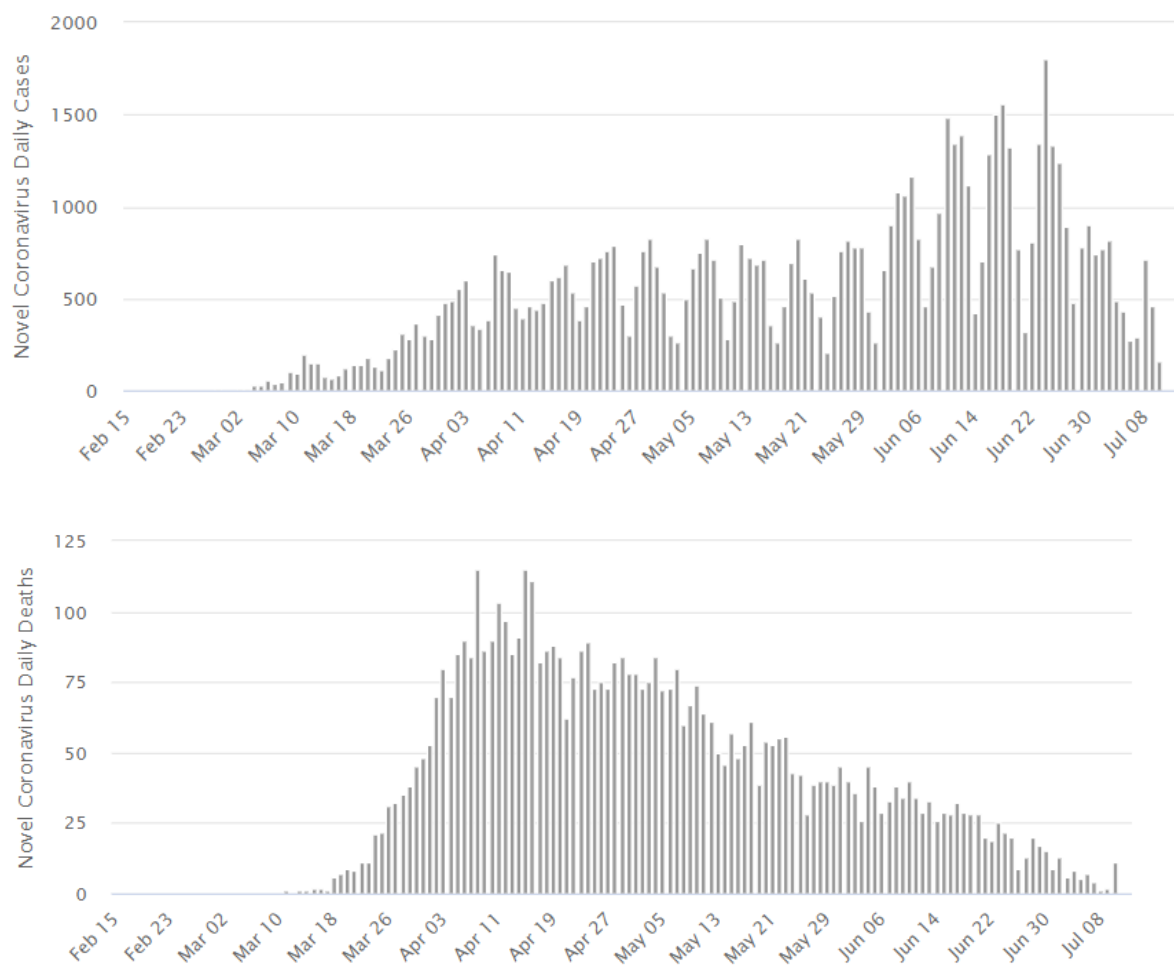
Background

Sweden's first case of COVID-19 was confirmed on January 31, 2020, when a traveller returning from Wuhan tested positive.

Cases rose through the end of Mar and have continued to usually report between 500 and 750 cases a day in May.

On 26 May, Ann Linde, Sweden's Foreign Minister stated "Transmission is slowing down, the treatment of COVID-19 patients in intensive care is decreasing significantly, and the rising death toll curve has been flattened," and that "this is not a sprint, it's a marathon."

As at 13 July, Sweden had recorded 74,898 confirmed cases and 5,526 deaths.¹²⁸⁵

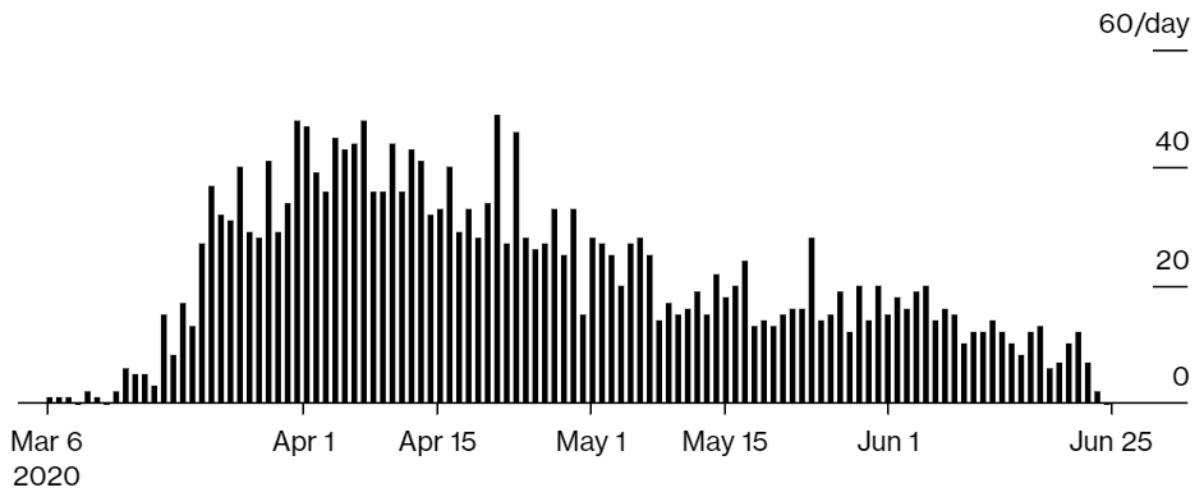


Source: Worldometer (2020)

Intensity Waning

Sweden sees decline in new intensive care cases

■ New Covid-19 intensive care cases



Source: The Public Health Agency of Sweden

Source: Bloomberg (2020) ¹²⁸⁶

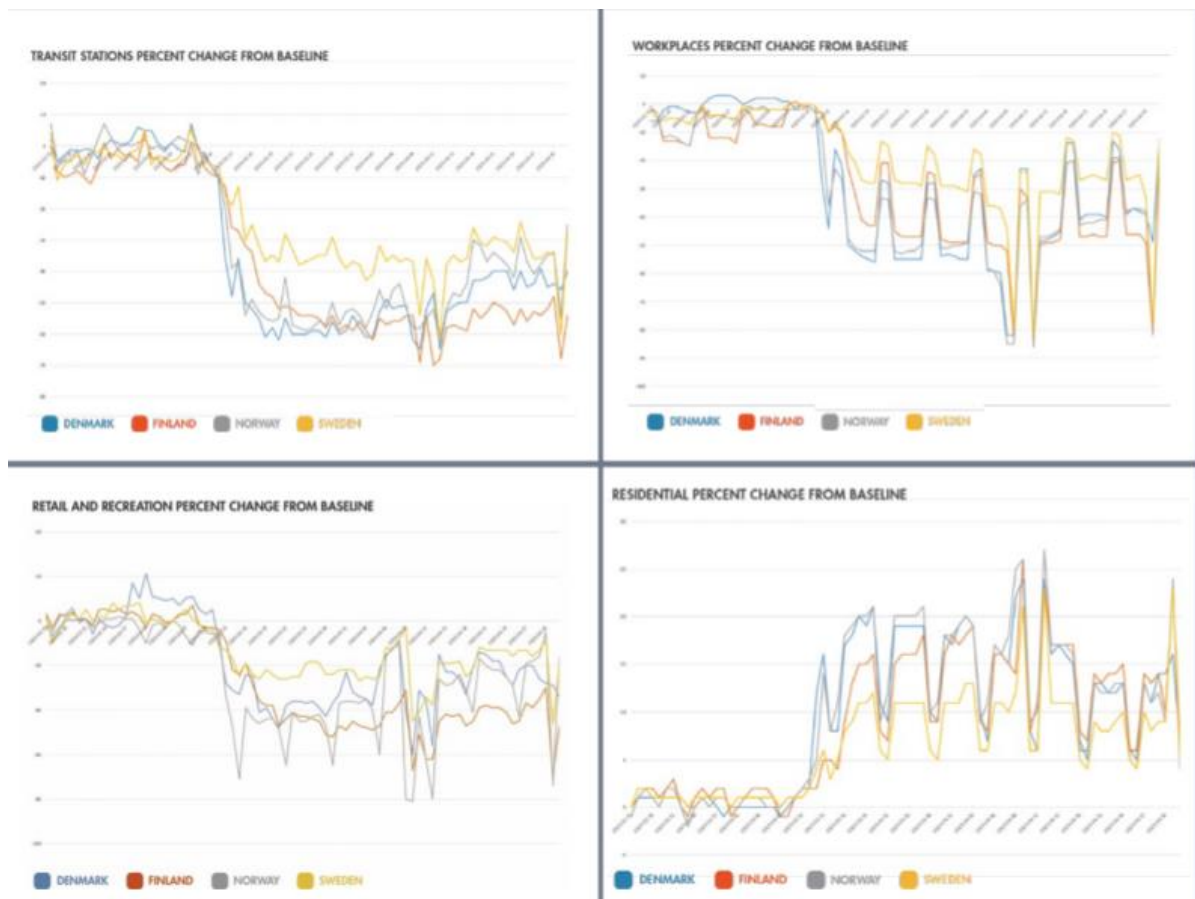
For the first week of June, Sweden recorded no excess mortality compared to the average of the past five; the last week in May the only demographic with excess mortality were people aged 90 and above.¹²⁸⁷

In early July the rate of infection had declined and the number of patients in intensive care fell. Health authorities said that the decline in infection rates were an effect of citizens keeping up the social distancing.¹²⁸⁸

Mobility

Google mobility data varied through April, but there was around 30-40% decline in mobility in transit stations, 30% decline in workplaces and 30% decline in retail and recreation. These levels have remained stable and only a small increase noted in retail and recreation (still around -20% compared to baseline).¹²⁸⁹

Sweden's mobility dropped to similar levels of other Nordic countries.



Source: Ellingsen T, Roine J (2020)¹²⁹⁰

Seroprevalence

Antibody analysis of 1,104 samples found that the largest proportion of positive antibody tests was in Stockholm. A total of 7.3 percent of the blood samples collected from people in Stockholm were positive in the antibody study, which can be compared with a total of 4.2 percent in Skåne and 3.7 percent in Västra Götaland. The numbers reflect the state of the epidemic earlier in April, as it takes a few weeks for the body's immune system to develop antibodies. Antibodies were most common among people between 20 and 64 years. In total, 6.7 percent of the samples in this group were positive, which can be compared with 4.7 percent in the age group 0-19 years and 2.7 percent in the age group 65-70 years.¹²⁹¹

The State Epidemiologist stated that these numbers support the modelling undertaken and that testing carried out in May should show that 20% of Stockholm have had COVID-19. Results are awaited.^{1292,1293}

Antibodies were found in 6.1% of the samples collected nationwide in the week ending May 24.¹²⁹⁴

Lockdown Summary

Sweden is an outlier in terms of its strategy to manage COVID-19, as it has not gone for a lockdown. The strategy is to reduce the pace of the COVID-19 virus's spread - to 'flatten the curve' so that large numbers of people do not become ill at the same time. By limiting the spread of the virus, the Government aims to relieve pressure on the health care system and protect people's lives, health and jobs. Measures are also weighed against their effects on society and public health in general.¹²⁹⁵

That is not to say that Sweden has not had any restrictions.

The Public Health Agency of Sweden is responsible for providing recommendations based on evidence and expert opinions.¹²⁹⁶ From Mar, the government advised anyone unwell to stay home (especially if working with high-risk groups), to work from home when possible, avoid crowded places, table service only in bars and restaurants and to increase the space between people. The government also advised that people above 70 should stay at home.

The Public Health Agency of Sweden recommended that everyone with symptoms of COVID-19 take a test in order to find out if they have a current COVID-19 infection. Testing is also recommended in contact tracing or screening. A medical assessment is needed to access tests. The government covers the cost of the test.^{1297,1298}

Positive cases and anyone who has been, or is suspected to have been, exposed to the disease underwent self-quarantine at home. Severe cases were hospitalised.¹²⁹⁹

The Swedish government rolled out a ban on visits to elderly care homes on April 1 and it was to be in effect until the end of June. It was extended again until August 31st.¹³⁰⁰

From 17 Mar Sweden recommended all universities and schools for children over the age of 16 to close. Schools up to the 9th grade, as well as preschools remain open. Schools for over 16s and universities recommended to use distance learning.

From 27 Mar, gatherings for more than 50 banned (from 500 allowed since 11 Mar).

Nightclubs were not required to close and continued to operate but the clubs must ensure that guests can keep an arm's length distance from each other.¹³⁰¹

A key aspect of the strategy is personal responsibility and trust; for example, people with symptoms are asked to self-isolate and there is no checking or surveillance. Social distancing measures are mainly based on personal responsibility and not legally enforceable. In Apr, about half of the workforce was working, public transport use fell 50% and there was a 70% reduction in transport in the capital.¹³⁰²

On 7 April, the Government proposed new powers into the Communicable Diseases Act. The temporary amendment will apply from 18 Apr until 30 Jun 2020. It allowed the government to temporarily limit gatherings, close shopping centres, suspend transport and redistribute medicines and medical equipment.¹³⁰³

The entry ban to the EU via Sweden has been in place since mid-March and was due to end on 8 June. However, it was extended until June 30, in line with recommendations of the European Commission. The entry ban applies to foreign citizens travelling to Sweden from all countries in the world except other EU member states, the United Kingdom, Norway, Iceland, Liechtenstein and Switzerland.¹³⁰⁴

Exit Strategy

"This crisis may continue for a long time, and in order for the measures to work over time, people need to understand and accept them." Government Office of Sweden.¹³⁰⁵

Sweden did not put in place an official lockdown, based on recognising that the crisis will be part of society for some time and that there needs to be a sustainable approach with the population supportive of ongoing social distancing and hygiene approaches – it was reported that 70-80% support the strategy.¹³⁰⁶

Testing was prioritised for hospitalised patients, health workers and older people with suspected COVID-19. The aim was to prioritise the most vulnerable and the most exposed groups in the society. Anyone who is ill with symptoms of cold or flu was advised to stay at home in order to minimise the risk of spreading the disease to others. This group was not prioritised for testing. The county medical officers also adapted strategies for testing to local

conditions.¹³⁰⁷ Testing is being expanded to identify cases and the next phase will include immunity testing for staff in critical frontline activities.¹³⁰⁸

In Stockholm, coronavirus testing was made available to all citizens from 15 June, free of charge. The testing criteria was expanded to include everyone who has symptoms of the coronavirus, but those who think they may have had the illness and have been healthy for at least two weeks will also be able to receive an antibody test.¹³⁰⁹

At the end of Apr, Sweden launched an app to aid mapping of the spread of infection through a symptom tracker. The symptom tracker app was developed by doctors and researchers at King's College in London and Guys and St Thomas' Hospitals and health science company ZOE Global Ltd.¹³¹⁰

Mask wearing was not advised; Swedish health authorities recommended keeping a distance, washing hands, not touching the face, and staying at home if unwell. There is a concern that wearing face masks would make people follow these guidelines less strictly. Prime minister Stefan Löfven stated - "there is a risk of a false sense of security, that you believe that you can't be infected if you wear a face mask." The Public Health Agency also states on its website that wearing a mask could increase the chances of face touching, because of itchiness and adjusting the cloth. Every time hands touch eyes, nose or mouth, the risk of being infected with the coronavirus increases.¹³¹¹

During the outbreak, less than 5% wore masks in public places.¹³¹²

Restaurants, bars, schools and businesses remained opened. Gyms took additional precautions by limiting how many people can occupy enclosed areas, encouraging people to keep a safe distance from each other, and sanitising equipment.¹³¹³

Some churches moved online, and then returned to services after Easter – with no more than 50 people, due to gathering restrictions.¹³¹⁴

From June 13, symptom-free people were allowed to travel within Sweden.¹³¹⁵

Sweden's Foreign Ministry issued new guidance on international travel on 17 June, giving the green light to travel to ten countries from July. The countries are Belgium, Croatia, France, Greece, Iceland, Italy, Luxembourg, Portugal, Switzerland and Spain. For countries within the EU/EEA other than the ten countries, the advice against non-essential travel continues to apply until at least July 15. The ministry has extended advice against non-essential travel to countries outside the EU/EEA until August 31.¹³¹⁶

Issues

The hypothesis is there will not be significantly more Swedes dead at the end of the pandemic than if the country had initiated stricter distancing protocols, but the looser approach will keep the number of cases from spiking when lockdowns are lifted. There is also the view that this approach may prevent the negative outcomes of a long economic pause and societal lockdown.¹³¹⁷

The approach might have been influenced by demographics; more than 50% of households are single-person and Sweden has a relatively low population density of about 25 people per square kilometre (compared to 205 in Italy and 259 in UK).¹³¹⁸

As at Apr 15, Sweden had a COVID-19 death rate of 118 per million inhabitants, compared with their neighbours of Denmark at 55 and Finland at 15 (both had lockdowns start in mid-March). This has led to criticism from neighbouring countries and some academics.¹³¹⁹

"Partly that we are on different places on the exposition curve, partly that we in Sweden, unfortunately, have had a large spread of contagion in elderly homes, something you have

*not seen in the other Nordic countries. And this we, of course, continue to analyse, why Swedish elderly homes have been exposed so much compared to other countries. But if we compare Sweden with Belgium, the US and a number of other countries our death rates are rather low." Anders Tegnell, Sweden's Chief Epidemiologist.*¹³²⁰

At the end of Mar 2,300 academics and scientists signed an open letter to the Swedish government, calling for tougher measures to protect the health system.¹³²¹

The government was criticised for not closing schools and only children who are ill themselves stay home. Some students have been kept home by anxious parents.¹³²²

On 3 June, Anders Tegnell reflected that "if we were to encounter the same illness with the same knowledge that we have today, I think our response would land somewhere in between what Sweden did and what the rest of the world has done," but going on to underline "we basically still think that is the right strategy for Sweden". He warned it was too early to say whether the lockdowns had worked or not: "we know from history during the last three or four months that this disease has a very high capacity to start spreading again."^{1323,1324}

On June 24, Anders Tegnell spoke on a Swedish podcast, stating that restricting movement and lockdowns seen across much of the globe can create other problems, including increased domestic abuse, loneliness and mass unemployment. Key quotes from the broadcast:¹³²⁵

- "It was as if the world had gone mad, and everything we had discussed was forgotten."
- "The cases became too many and the political pressure got too strong. And then Sweden stood there rather alone."
- "In the same way that all drugs have side effects, measures against a pandemic also have negative effects."
- "At an authority like ours, which works with a broad spectrum of public health issues, it is natural to take these aspects into account."
- "I'm looking forward to a more serious evaluation of our work than has been made so far."
- "There is no way of knowing how this will end."
- In the same interview, he also reiterated advising against using face masks, arguing there's little scientific evidence they work, citing a recent French study.

On June 26, Tegnell won a public victory against the WHO, after stating that WHO had made a "total mistake". The WHO had initially placed Sweden in a group of 11 countries where it said "accelerated transmission has led to very significant resurgence that, if left unchecked, will push health systems to the brink". The WHO then amended its assessment, and said Swedish infection rates are in fact "stable". It linked the high number of cases to an increase in testing.¹³²⁶

To learn from the experience, Sweden will launch an inquiry before the summer. Prime Minister Stefan Lofven made the announcement, amid concern over nursing home deaths and testing levels.¹³²⁷

Swedish strategy aims to be more sustainable than sudden and severe lockdowns, and better in the longer-term.¹³²⁸

The fatality rate in Sweden was reported to be around 0.6 percent, but with variations between age groups. The fatality rate among the over 70-year-olds is approximately 4.3 percent, as compared to only 0.1 percent of cases for those under 70.¹³²⁹

Public Opinion

From mid-March to early June, support for the government's handling of the situation was consistently around 50-60%; during this time perception that the situation was improving was between 45-55%.¹³³⁰

In April, more than 80% of Sweden's residents thought that Sweden's approach is the right one. Many Swedes also believed that the approach was logical in the context of the country's history, culture, and values.¹³³¹

An Ipsos poll of 1,191 Swedes showed that in June, 45% had "strong confidence" in authorities' ability to handle the crisis. That compared with 56% in April, while those who had "little confidence" rose from 21% to 29%. 57% had "strong confidence" in the Public Health Agency, down from 69% in April.¹³³²

Economic Impact

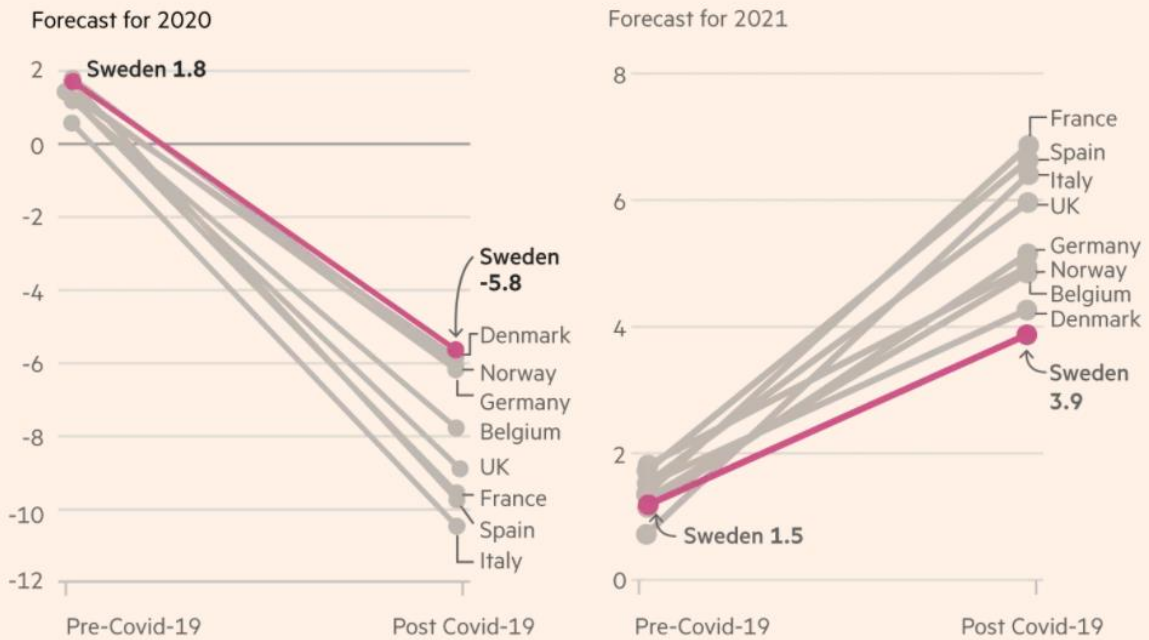
In Apr, the IMF lowered its projection for Sweden's economic growth in 2020 to minus 6.8% from 1.2% because of the pandemic and forecast that unemployment would go from 6.8% to 10.1%.¹³³³

Swedish government emergency budget of up to 300 billion kronor outlined subsidies for workers, loans to businesses and tax deferrals.¹³³⁴

The Government, the Centre Party and the Liberal Party developed a crisis package for jobs and transition, in the expectation that more people will become unemployed. This included adapting the unemployment insurance to reduce the wait and to increase the amount. In addition, job flexibility and grants for the creation of "green jobs" to enable subsidised employment, primarily in the area of nature and forest conservation. Funding for distance learning at higher education institutions expanded - anyone who is made unemployed will be able to use these courses.¹³³⁵

Sweden's economy will suffer less as a result of its light-touch lockdown

Annual % change in gross domestic product



Source: Consensus Economics
© FT

The Swedish government expected Swedish economy to shrink by six percent in 2020, instead of by around seven percent as projected in April. Sweden saw a slight gross domestic product growth of 0.1 percent in the first quarter of the year, but there were indications of a significant drop in the second quarter, and then a slight improvement in the second half of 2020.¹³³⁶

Wider impacts

No information has been found so far.

Acknowledgement

We are grateful to the following for their assistance on the review of articles:

Eugene Kuek Jun Rong

Tan Kit Yung

Natalie Goh Huay Kim

Ho Yi Jie

John Tan Wen Yu

Lee Pei Yu

Zander Tay Yong Hong

Aaron Ho Kwun Hang

References

- ¹ WHO (2020) Pneumonia of unknown cause – China, Disease outbreak news. 5 January 2020. Available at: <https://www.who.int/csr/don/05-january-2020-pneumonia-of-unknown-cause-china/en/> (accessed 13.7.2020)
- ² WHO (2020) WHO COVID19 Timeline. Available at: <https://www.who.int/news-room/detail/27-04-2020-who-timeline---covid-19> (accessed 15.6.2020)
- ³ CDC (2020) Interim Clinical Guidance for Management of Patients with Confirmed Coronavirus Disease (COVID-19). Updated May 20, 2020. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html> (accessed 28.5.2020)
- ⁴ WHO (2020) Obesity and overweight. Available at: <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight> (accessed 28.5.2020)
- ⁵ Our World in Data (2020) Obesity. Available at: <https://ourworldindata.org/obesity#there-is-a-10-fold-difference-in-death-rates-from-obesity-across-the-world> (accessed 27.5.2020)
- ⁶ Our World in Data (2020) Age Structure. Available at <https://ourworldindata.org/age-structure> (accessed 27.5.2020)
- ⁷ UNCTAD (2020) Coronavirus: Can policymakers avert a trillion-dollar crisis. March 9, 2020. Available at: <https://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=2300> (accessed 25.3.2020)
- ⁸ UNCTAD (2020) Coronavirus: Can policymakers avert a trillion-dollar crisis. March 9, 2020. Available at: <https://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=2300> (accessed 25.3.2020)
- ⁹ IMF (2020) The Great Lockdown: Worst Economic Downturn Since the Great Depression. April 14, 2020. Available at: <https://blogs.imf.org/2020/04/14/the-great-lockdown-worst-economic-downturn-since-the-great-depression/> (accessed 17.4.2020)
- ¹⁰ CDC (2017) Get Your Workplace Ready for Pandemic Flu. Centres for Disease Control and Prevention. US. Available at: <https://www.cdc.gov/nonpharmaceutical-interventions/pdf/gr-pan-flu-work-set.pdf> (accessed 14.2.2020)
- ¹¹ Neiman (undated) Challenges for Businesses. Neiman Foundation for Journalism Harvard. <https://nieman.harvard.edu/wp-content/uploads/pod-assets/microsites/NiemanGuideToCoveringPandemicFlu/PandemicPreparedness/ChallengesForBusinesses.aspx.html> (Accessed 17.2.2020)
- ¹² UN IASC (2020) Interim Briefing Note Addressing Mental Health and Psychosocial Aspects of COVID-19 Outbreak. Available at: <https://interagencystandingcommittee.org/iasc-reference-group-mental-health-and-psychosocial-support-emergency-settings/interim-briefing> (accessed 24.4.2020)
- ¹³ Rajkumar RP (2020) COVID-19 and mental health: A review of the existing literature Asian J Psychiatr. 2020 Aug; 52: 102066. Published online 2020 Apr 10. doi: 10.1016/j.ajp.2020.102066. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7151415/> (accessed 24.4.2020)
- ¹⁴ Quartz (2020) The psychology of coronavirus fear—and how to manage it. March 10, 2020. Available at <https://qz.com/1812664/the-psychology-of-coronavirus-fear-and-how-to-overcome-it/> (accessed 09.04.2020)
- ¹⁵ Huang et al (2020) Generalized anxiety disorder, depressive symptoms and sleep quality during COVID-19 outbreak in China: a web-based cross-sectional survey Psychiatry Res. 2020 Apr 12: 112954. doi: 10.1016/j.psychres.2020.112954 Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7152913/> (accessed 24.4.2020)
- ¹⁶ Bo, H et al (2020) Posttraumatic stress symptoms and attitude toward crisis mental health services among clinically stable patients with COVID-19 in China. Psychological Medicine, 1-7. doi:10.1017/S0033291720000999 (accessed 10.04.2020)
- ¹⁷ Sun L, et al (2020) Prevalence and risk factors of acute posttraumatic stress symptoms during the COVID-19 outbreak in Wuhan, China. Available at: <https://www.medrxiv.org/content/10.1101/2020.03.06.20032425v1> (accessed 30.4.2020)
- ¹⁸ McKinsey (2020) How to rebuild and reimagine jobs amid the coronavirus crisis. April. Available at: <https://www.mckinsey.com/industries/public-sector/our-insights/how-to-rebuild-and-reimagine-jobs-amid-the-coronavirus-crisis> (accessed 24.4.2020)
- ¹⁹ Pew Research Center (2020) People financially affected by COVID-19 outbreak are experiencing more psychological distress than others. March 30, 2020. Available at <https://www.pewresearch.org/fact-tank/2020/03/30/people-financially-affected-by-covid-19-outbreak-are-experiencing-more-psychological-distress-than-others/> (accessed 01.04.2020)
- ²⁰ Holt-Lunstad J et al (2015) Loneliness and social isolation as risk factors for mortality: a meta-analytic review. Perspect Psychol Sci. 2015 Mar;10(2):227-37. doi: 10.1177/1745691614568352. Available at: <https://journals.sagepub.com/doi/10.1177/1745691614568352> (accessed 30.4.2020)
- ²¹ Engadget (2020). The psychological impact of COVID-19 isolation, as explained by scientists. March 27, 2020. Available at: <https://www.engadget.com/2020-03-27-psychological-impact-covid-19-isolation.html> (accessed 13.04.2020)
- ²² Hämmig O et al (2020) Health risks associated with social isolation in general and in young, middle and old age PLoS One. 2019; 14(7): e0219663. Published online 2019 Jul 18. doi: 10.1371/journal.pone.0219663 PMID: PMC6638933 PMID: 31318898. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6638933/> (accessed 30.4.2020)
- ²³ Today (2020) The Big Read in short: Why some seniors find it hard to stay at home Read more at <https://www.todayonline.com/big-read-short-why-some-seniors-find-it-hard-stay-home>. Available at: <https://www.todayonline.com/big-read-short-why-some-seniors-find-it-hard-stay-home> (accessed 5.5.2020)
- ²⁴ Ibid UN IASC (2020)
- ²⁵ WHO (2020) Mental health and psychosocial considerations during the COVID-19 outbreak. 18 March 2020. Available at: https://www.who.int/docs/default-source/coronaviruse/mental-health-considerations.pdf?sfvrsn=6d3578af_10&ua=1 (accessed 24.4.2020)
- ²⁶ Lancet Editorial (2020) Mental health and COVID-19: change the conversation. May 4, 2020 [https://doi.org/10.1016/S2215-0366\(20\)30194-2](https://doi.org/10.1016/S2215-0366(20)30194-2) Available at: [https://www.thelancet.com/pdfs/journals/lanpsy/PIIS2215-0366\(20\)30194-2.pdf](https://www.thelancet.com/pdfs/journals/lanpsy/PIIS2215-0366(20)30194-2.pdf) (accessed 15.6.2020)
- ²⁷ UN News (2020) UN chief calls for domestic violence 'ceasefire' amid 'horrifying global surge'. April 6, 2020. Available from: <https://news.un.org/en/story/2020/04/1061052> (accessed 9 Apr 2020)
- ²⁸ Bloomberg (2020) China's Divorce Spike Is a Warning to Rest of Locked-Down World. March 31, 2020. Available from: <https://www.bloomberg.com/news/articles/2020-03-31/divorces-spike-in-china-after-coronavirus-quarantines> (accessed 9 Apr 2020)
- ²⁹ UNESCO (2020) COVID-19 Educational Disruption and Response. Available at: <https://en.unesco.org/covid19/educationresponse> (accessed 4.5.2020)

- ³⁰ VoxEU (2020) Schools, skills, and learning: The impact of COVID-19 on education. April 1, 2020. Available at: <https://voxeu.org/article/impact-covid-19-education> (accessed 6 Apr 2020)
- ³¹ Guardian (2020) Concern as heart attack and stroke patients delay seeking help. Available at: <https://www.theguardian.com/world/2020/apr/16/coronavirus-concern-heart-attack-stroke-patients-delay-seeking-help> (accessed 4.5.2020)
- ³² Lazzerini M et al (2020) Delayed access or provision of care in Italy resulting from fear of COVID-19. Lancet. [https://doi.org/10.1016/S2352-4642\(20\)30108-5](https://doi.org/10.1016/S2352-4642(20)30108-5) (accessed 4.5.2020)
- ³³ Bhangu A (2020) Elective surgery cancellations due to the COVID-19 pandemic: global predictive modelling to inform surgical recovery plans. COVIDSurg Collaborative. NIHR Global Health Research Unit on Global Surgery. Available at: <https://bjssjournals.onlinelibrary.wiley.com/doi/abs/10.1002/bjs.11746> (accessed 28.5.2020)
- ³⁴ YouGov (2020) Latest round-up of YouGov's coronavirus survey results.
- ³⁵ Changi Airport (2020) Available at: <https://www.changiairport.com/corporate/our-expertise/air-hub/traffic-statistics.html> (accessed 31.3.2020)
- ³⁶ SCMP (2020) 5 million left Wuhan before lockdown, 1,000 new coronavirus cases expected in city. January 26, 2020. Available at: <https://www.scmp.com/news/china/society/article/3047720/chinese-premier-li-keqiang-head-coronavirus-crisis-team-outbreak> (accessed 31.3.2020)
- ³⁷ Asia One (2020) Thousands left Wuhan for Singapore, Hong Kong, Bangkok, Tokyo. January 28, 2020. Available at: <https://www.asiaone.com/asia/thousands-left-wuhan-singapore-hong-kong-bangkok-tokyo> (accessed 31.3.2020)
- ³⁸ Worldometer (2020) Singapore. Available at: <https://www.worldometers.info/coronavirus/country/singapore/> (accessed 26.5.2020)
- ³⁹ Straits Times (2020) Singaporean woman who went to work at childcare centre in Tampines among new Covid-19 cases. 25 May 2020. Available at: <https://www.straitstimes.com/singapore/health/548-new-covid-19-cases-in-singapore-3-are-citizens-and-prs> (accessed 26.5.2020)
- ⁴⁰ Straits Times (2020) New high of 626 Covid-19 patients discharged; 2 men who died from other causes found to have the virus. May 12, 2020. Available at: <https://www.straitstimes.com/singapore/health/884-new-covid-19-cases-in-singapore-bringing-total-in-singapore-past-24000> (accessed 26.5.2020)
- ⁴¹ Straits Times (2020) Patient who recovered from Covid-19 dies of heart disease. June 24, 2020. Available at: <https://www.straitstimes.com/singapore/patient-who-recovered-from-covid-19-dies-of-heart-disease> (accessed 13.7.2020)
- ⁴² Straits Times (2020) S'porean worker at Shatec is only community case among 178 new cases. 13 July 2020. Available at: <https://www.straitstimes.com/singapore/sporean-worker-at-shatec-is-only-community-case-among-178-new-cases> (accessed 13.7.2020)
- ⁴³ ICA (2020) Quarterly Births & Deaths Statistics. Available at: <https://www.ica.gov.sg/news-and-publications/statistics> (accessed 25.6.2020)
- ⁴⁴ MOH (2020) COVID-19 Local Situation Reports. May 25, 2020. Available at: <https://www.moh.gov.sg/covid-19/situation-report> (accessed 26.5.2020)
- ⁴⁵ MOH (2020) COVID-19 Local Situation Reports. May 25, 2020. Available at: <https://www.moh.gov.sg/covid-19/situation-report> (accessed 26.5.2020)
- ⁴⁶ MOH (2020) COVID-19 Local Situation Reports. May 25, 2020. Available at: <https://www.moh.gov.sg/covid-19/situation-report> (accessed 26.5.2020)
- ⁴⁷ The Straits Times (2020) Coronavirus: Experts warn against letting guard down as community cases inch up 30 June 2020 Available at: <https://www.straitstimes.com/singapore/experts-warn-against-letting-guard-down-as-community-cases-inch-up> (accessed on: 30.6.2020)
- ⁴⁸ The Straits Times (2020) Coronavirus: Experts warn against letting guard down as community cases inch up 30 June 2020 Available at: <https://www.straitstimes.com/singapore/experts-warn-against-letting-guard-down-as-community-cases-inch-up> (accessed on: 30.6.2020)
- ⁴⁹ Google (2020) COVID-19 Community Mobility Reports. May 2020. Available at: <https://www.google.com/covid19/mobility/> (accessed 21.5.2020)
- ⁵⁰ NCID (2020) Three national-level seroepidemiological studies to determine level of COVID-19 infection in Singapore. Available at: <https://www.ncid.sg/News-Events/News/Pages/Three-national-level-seroepidemiological-studies-to-determine-level-of-COVID-19-infection-in-Singapore.aspx> (accessed 3.6.2020)
- ⁵¹ Straits Times (2020) Wuhan virus: MOH sets up multi-ministry taskforce, advises against non-essential trips to Wuhan. Available at: <https://www.straitstimes.com/singapore/health/wuhan-virus-3-more-suspected-cases-in-singapore-avoid-non-essential-travel-to-wuhan> (accessed 27.5.2020)
- ⁵² YouTube (2020) Sg Gov. COVID-19 (Coronavirus Disease 2019): Tips on Protecting Yourself Feb 10, 2020. Available at: <https://www.youtube.com/watch?v=ICrFWD1FRJ4> (accessed 27.5.2020)
- ⁵³ MOM (2020) Advisory on safe distancing measures at the workplace Issued on 13 March 2020 Updated as of 20 March and 26 March 2020. Available at: <https://www.mom.gov.sg/covid-19/advisory-on-safe-distancing-measures> (accessed 27.5.2020)
- ⁵⁴ MOH (2020) Circuit breaker to minimise further spread of COVID-19. April 3, 2020. Available at: <https://www.moh.gov.sg/news-highlights/details/circuit-breaker-to-minimise-further-spread-of-covid-19> (Accessed 8.4.2020)
- ⁵⁵ Straits Times (2020) Over 7,000 written advisories issued to those who breached Covid-19 safe distancing measures. April 7, 2020. Available at: <https://www.straitstimes.com/singapore/day-1-of-shutdown-more-than-7000-written-advisories-issued-to-those-who-breached-safe> (accessed 8.4.2020)
- ⁵⁶ Straits Times (2020) Coronavirus: Inter-agency taskforce to provide support to foreign workers, dormitory operators. April 7, 2020. Available at: <https://www.straitstimes.com/singapore/manpower/coronavirus-inter-agency-taskforce-to-provide-support-to-foreign-workers> (accessed 8.4.2020)
- ⁵⁷ Straits Times (2020) About 5,000 foreign workers to be tested for Covid-19 in next few days, even those who are well but are contacts of confirmed cases. April 14, 2020. Available at: <https://www.straitstimes.com/singapore/health/about-5000-foreign-workers-to-be-tested-for-covid-19-in-the-next-few-days-even> (accessed 15.4.2020)
- ⁵⁸ Straits Times (2020) Available at: <https://www.straitstimes.com/singapore/spore-to-lift-circuit-breaker-measures-from-june-2-in-three-gradual-phases> (accessed 26.5.2020)
- ⁵⁹ The Straits Time (2020) Coronavirus: S'pore to start phase 2 reopening on June 19; F&B dine-in, social gatherings of up to 5 people allowed 15 June 2020 Available at: <https://www.straitstimes.com/singapore/coronavirus-spore-to-start-phase-2-reopening-on-june-19-dining-in-public-social-gatherings> (accessed on: 15.06.2020)

- ⁶⁰ Today (2020) Given low adoption rate of TraceTogether, experts suggest merging with SafeEntry or other apps. May 8, 2020. Available at: <https://www.todayonline.com/singapore/given-low-adoption-rate-tracetoegether-experts-suggest-merging-safeentry-or-other-apps> (accessed 27.5.2020)
- ⁶¹ Straits Times (2020) Businesses ensure safe distancing, contact tracing measures in place. May 12, 2020. Available at: <https://www.straitstimes.com/singapore/businesses-ensure-safe-distancing-contact-tracing-measures-in-place> (accessed 27.5.2020)
- ⁶² Straits Times (2020) Wearable device for Covid-19 contact tracing to be rolled out soon, may be issued to everyone in Singapore. June 5. Available at: <https://www.straitstimes.com/politics/parliament-wearable-device-for-contact-tracing-set-to-be-issued-tracetoegether-does-not-work> (accessed 10.6.2020)
- ⁶³ South China Morning Post (2020) Singapore to give out coronavirus tracing devices called TraceTogether Tokens. 9 June 2020 Available at: <https://www.scmp.com/news/asia/southeast-asia/article/3088146/singapore-give-out-coronavirus-tracing-devices-called> (accessed on: 11.6.2020)
- ⁶⁴ The Straits Time (2020) More to be tested for Covid-19 as phase two begins 19 June 2020 Available at: <https://www.straitstimes.com/singapore/health/more-to-be-tested-for-covid-19-as-phase-two-begins> (accessed on: 22.6.2020)
- ⁶⁵ Straits Times (2020) Vulnerable seniors begin receiving TraceTogether tokens from Sunday. June 28, 2020. Available at: <https://www.straitstimes.com/singapore/vulnerable-seniors-begin-receiving-tracetoegether-tokens-from-sunday> (accessed 29.6.2020)
- ⁶⁶ Straits Times (2020) Coronavirus: 40,000 daily tests have to be done in strategic, coordinated way, says Lawrence Wong. May 8, 2020. Available at: <https://www.straitstimes.com/singapore/coronavirus-40000-daily-tests-have-to-be-done-in-a-strategic-coordinated-way-says-lawrence> (Accessed 27.5.2020)
- ⁶⁷ Straits Times (2020) Coronavirus: Singapore's testing rate of 49,000 tests per million people among highest in the world. May 19, 2020. Available at: <https://www.straitstimes.com/singapore/health/coronavirus-singapores-testing-rate-among-highest-in-world-over-281000-tests-done> (accessed 27.5.2020)
- ⁶⁸ CNA (2020) Singapore reports 517 new COVID-19 cases, including 15 asymptomatic cases in the community. June 4, 2020. Available at: <https://www.channelnewsasia.com/news/singapore/covid-19-jun-4-community-cases-15-citizens-pr-dormitory-12803108> (accessed 4.6.2020)
- ⁶⁹ The Straits Times (2020) Close to 200 clinics able to test for Covid-19 10 June 2020 Available at: <https://www.straitstimes.com/singapore/health/close-to-200-clinics-able-to-test-for-covid-19> (accessed on: 10.6.2020)
- ⁷⁰ The Straits Times (2020) Close to 200 clinics able to test for Covid-19 10 June 2020 Available at: <https://www.straitstimes.com/singapore/health/close-to-200-clinics-able-to-test-for-covid-19> (accessed on: 10.6.2020)
- ⁷¹ The Straits Time (2020) More to be tested for Covid-19 as phase two begins 19 June 2020 Available at: <https://www.straitstimes.com/singapore/health/more-to-be-tested-for-covid-19-as-phase-two-begins> (accessed on: 22.6.2020)
- ⁷² ZaoBao (2020) 原以为与沙斯相似 梁玉心坦承当初有点低估新冠病毒 22 June 2020 Available at: <https://www.zaobao.com.sg/znews/singapore/story20200622-1062921> (accessed on: 23.6.2020)
- ⁷³ SG (2020) Advisory on COVID-19 (Coronavirus Disease 2019) Available at: <https://www.visitsingapore.com/about-singapore/traveller-information/novel-coronavirus-pneumonia-advisory/> (accessed 27.5.2020)
- ⁷⁴ Today Online (2020) Explainer: What the different types of Covid-19 isolation facilities are and how you can volunteer at them. April 28, 2020. Available at: <https://www.todayonline.com/singapore/explainer-what-different-types-covid-19-isolation-facilities-are-and-how-you-can-volunteer> (accessed 27.5.2020)
- ⁷⁵ Straits Times (2020) Self-sufficient 'bubbles' and other strategies to curb future outbreaks in Singapore. June 4, 2020. Available at: <https://www.straitstimes.com/politics/self-sufficient-bubbles-and-other-strategies-to-curb-future-outbreaks> (accessed 4.6.2020)
- ⁷⁶ SG Gov (2020) Questions about the dedicated SHN facilities for returnees answered. June 17, 2020. <https://www.gov.sg/article/questions-about-the-dedicated-shn-facilities-for-returnees-answered> (accessed 16.7.2020)
- ⁷⁷ Straits Times (2020) Coronavirus: Mandatory for all in Singapore to wear mask when out, except for kids under 2 and those doing strenuous exercise. April 14, 2020. Available at: <https://www.straitstimes.com/singapore/coronavirus-mandatory-for-all-to-wear-a-mask-when-out-with-exceptions-for-kids-under-2-and> (accessed 15.4.2020)
- ⁷⁸ SG Gov (2020) How to redeem the new reusable mask. May 22, 2020. Available at: <https://www.gov.sg/article/when-should-i-wear-a-mask> (accessed 27.5.2020)
- ⁷⁹ Ministry of Health Singapore (2020) Guidance for use of masks and face shields 1 June 2020 Available at: <https://www.moh.gov.sg/news-highlights/details/guidance-for-use-of-masks-and-face-shields> (accessed on: 13.7.2020)
- ⁸⁰ YouGov (2020) Latest round-up of YouGov's coronavirus survey results.
- ⁸¹ The Straits Time (2020) Coronavirus: S'pore to start phase 2 reopening on June 19; F&B dine-in, social gatherings of up to 5 people allowed 15 June 2020 Available at: <https://www.straitstimes.com/singapore/coronavirus-spore-to-start-phase-2-reopening-on-june-19-dining-in-public-social-gatherings> (accessed on: 15.06.2020)
- ⁸² The Straits Time (2020) Coronavirus: S'pore to start phase 2 reopening on June 19; F&B dine-in, social gatherings of up to 5 people allowed 15 June 2020 Available at: <https://www.straitstimes.com/singapore/coronavirus-spore-to-start-phase-2-reopening-on-june-19-dining-in-public-social-gatherings> (accessed on: 15.06.2020)
- ⁸³ Asia Nikkei (2020) Singapore bars voting by COVID-19 patients and those in quarantine. Available at: <https://asia.nikkei.com/Politics/Singapore-election/Singapore-bars-voting-by-COVID-19-patients-and-those-in-quarantine> (accessed 2.7.2020)
- ⁸⁴ The Straits Time (2020) S'pore GE: No physical rallies for election campaign, candidates to get TV airtime for constituency political broadcasts 18 June 2020 Available at: <https://www.straitstimes.com/politics/spore-ge-no-physical-rallies-for-election-campaign-candidates-to-get-tv-airtime-for> (accessed on: 22.6.2020)
- ⁸⁵ Straits Times (2020) Singapore GE2020: ELD to thoroughly review what went wrong on Polling Day. July 13, 2020. Available at: <https://www.straitstimes.com/politics/singapore-ge2020-eld-to-thoroughly-review-what-went-wrong-on-polling-day> (accessed 16.7.2020)
- ⁸⁶ The Straits Times (2020) Libraries to reopen on July 1 with shorter operating hours, timed entry and limited capacity 24 June 2020 Available at: <https://www.straitstimes.com/lifestyle/arts/libraries-to-re-open-on-july-1-with-shorter-operating-hours-timed-entry-and-limited> (accessed on: 30.6.2020)
- ⁸⁷ Yahoo! News (2020) All indoor sports halls to close on Sunday after COVID-19 case found amid large badminton group 27 June 2020 Available at: <https://sg.news.yahoo.com/all-indoor-sport-halls-to-close-on-sunday-after-covid-19-case-found-amid-large-badminton-group-073611747.html> (accessed on: 30.6.2020)

- ⁸⁸ Straits Times (2020) Approved travellers on new Singapore-China 'fast lane' need not serve quarantine but must do Covid-19 swab tests. June 3, 2020. Available at: <https://www.straitstimes.com/singapore/health/new-rules-including-covid-19-pre-departure-and-post-arrival-tests-set-for-essential> (accessed 4.6.2020)
- ⁸⁹ Telegraph (2020) British families shut out of Singapore home during months-long pandemic lockdown. Many foreigners are stranded due to the city state's quarantine measures. Available at: <https://www.telegraph.co.uk/news/2020/06/12/british-families-complain-shut-singapore-lockdown/> (accessed 15.6.2020)
- ⁹⁰ Straits Times (2020) Stranded overseas, foreigners await return. June 17, 2020. Available at: <https://www.straitstimes.com/singapore/manpower/stranded-overseas-foreigners-await-return> (accessed 2.7.2020)
- ⁹¹ Facebook (2020) Getting Back Home To SG private Group. Available at: <https://www.facebook.com/groups/541094413507820/> (accessed 2.7.2020)
- ⁹² Straits Times (2020) Travellers entering Singapore to pay for Covid-19 tests. June 15, 2020. Available at: https://www.straitstimes.com/singapore/travellers-entering-spore-from-june-18-will-be-tested-before-end-of-their-stay-home-notice?cx_testId=20&cx_testVariant=cx_2&cx_artPos=1#cxrecs_s (accessed 16.6.2020)
- ⁹³ Straits Times (2020) SIA passengers can now transit through Changi Airport from more places in China, Japan, South Korea 22 June 2020 Available at: <https://www.straitstimes.com/singapore/transport/sia-passengers-can-now-transit-through-changi-airport-from-more-places-in-china> (accessed on: 23.6.2020)
- ⁹⁴ Ministry of Culture, Community and Youth (2020) Gradual resumption of religious activities. 25 May 2020. Available at: <https://www.mccy.gov.sg/about-us/news-and-resources/press-statements/2020/may/gradual-resumption-of-religious-activities> (accessed 26.5.2020)
- ⁹⁵ The Straits Times (2020) Coronavirus: Government columbaria to reopen in phase 2 after more than two months' closure 16 June 2020 Available at: <https://www.straitstimes.com/singapore/coronavirus-government-columbaria-to-re-open-in-phase-2-after-more-than-two-months-closure> (accessed on 16.6.2020)
- ⁹⁶ The Straits Times (2020) Friday prayers in mosques to resume from June 26 with online booking system, limited to 50 people a session 21 June 2020 Available at: <https://www.straitstimes.com/singapore/friday-prayers-to-resume-from-june-26-with-online-booking-system-limited-to-50-people-a> (accessed on: 22.6.2020)
- ⁹⁷ MOM (2020) Available at: New Resources to Provide Better Care for Migrant Workers. Available at: <https://www.mom.gov.sg/newsroom/press-releases/2020/0527-new-resources-to-provide-better-care-for-migrant-workers> (accessed 3.6.2020)
- ⁹⁸ South China Morning Post (2020) Coronavirus: Singapore chatbot helps doctors monitor migrant workers' health in real time 11 June 2020 Available at: <https://www.scmp.com/news/asia/southeast-asia/article/3088547/coronavirus-singapore-chatbot-helps-doctors-monitor> (accessed on: 11.6.2020)
- ⁹⁹ The Straits Time (2020) Coronavirus: S'pore to start phase 2 reopening on June 19; F&B dine-in, social gatherings of up to 5 people allowed 15 June 2020 Available at: <https://www.straitstimes.com/singapore/coronavirus-spore-to-start-phase-2-reopening-on-june-19-dining-in-public-social-gatherings> (accessed on: 15.06.2020)
- ¹⁰⁰ Straits Time (2020) First weekend of phase 2: Up to 80% jump in shipper traffic at popular malls. 22 June 2020 Available at: <https://www.straitstimes.com/singapore/first-weekend-of-phase-2-up-to-80-jump-in-shopper-traffic-at-popular-malls> (accessed on: 23.6.2020)
- ¹⁰¹ Straits Times (2020) Wildlife parks, integrated resorts among attractions that can reopen from July 1: STB. 29 June 2020. Available at: <https://www.straitstimes.com/singapore/wildlife-parks-integrated-resorts-among-attractions-to-reopen-from-july-1-stb> (accessed 29.6.2020)
- ¹⁰² Channel News Asia (2020) Hotels can apply to reopen for staycation bookings 4 July 2020 Available at: <https://www.channelnewsasia.com/news/singapore/hotels-can-apply-to-reopen-for-staycation-bookings-stb-covid-19-12899606> (accessed on: 13.7.2020)
- ¹⁰³ Channel News Asia (2020) COVID-19: Cinemas can reopen on Jul 13 with maximum of 50 patrons per hall 4 July 2020 Available at: <https://www.channelnewsasia.com/news/singapore/covid-19-cinemas-can-reopen-jul-13-limit-50-patrons-12899264> (accessed on: 13.7.2020)
- ¹⁰⁴ Facebook (2020) Lawrence Wong, May 25, 2020. Available at: https://www.facebook.com/story.php?story_fbid=3814648301909818&id=192130117495006 (accessed 26.5.2020).
- ¹⁰⁵ The Straits Time (2020) Coronavirus: S'pore to start phase 2 reopening on June 19; F&B dine-in, social gatherings of up to 5 people allowed 15 June 2020 Available at: <https://www.straitstimes.com/singapore/coronavirus-spore-to-start-phase-2-reopening-on-june-19-dining-in-public-social-gatherings> (accessed on: 15.06.2020)
- ¹⁰⁶ The Straits Times (2020) Home-based learning set to be regular part of schooling post Covid-19, says Education Minister Ong Ye Kung 28 June 2020 Available at: <https://www.straitstimes.com/singapore/education/home-based-learning-set-to-be-regular-part-of-schooling-post-covid-19-says> (accessed on: 30.6.2020)
- ¹⁰⁷ MOM (2019) Foreign workforce numbers. Singapore Available at: <https://www.mom.gov.sg/documents-and-publications/foreign-workforce-numbers> (accessed 16.3.2020)
- ¹⁰⁸ MOH (2020) COVID-19 Local Situation Report. May 25, 2020. Available at: <https://www.moh.gov.sg/docs/librariesprovider5/local-situation-report/situation-report-25-may-2020.pdf> (accessed 26.5.2020)
- ¹⁰⁹ Bloomberg (2020) How Singapore Flipped From Virus Hero to Cautionary Tale. April 21, 2020. Available at: <https://www.bloomberg.com/news/articles/2020-04-21/how-singapore-flipped-from-virus-hero-to-cautionary-tale> (accessed 26.5.2020)
- ¹¹⁰ TIME (2020) Singapore Was a Coronavirus Success Story—Until an Outbreak Showed How Vulnerable Workers Can Fall Through the Cracks. April 29, 2020. Available at: <https://time.com/5825261/singapore-coronavirus-migrant-workers-inequality/> (Accessed 4.6.2020)
- ¹¹¹ MOH (2020) Available at: <https://www.moh.gov.sg/covid-19> (accessed 4.6.2020)
- ¹¹² FP (2020) Singapore Is Trying to Forget Migrant Workers Are People. May 6, 2020. Available at: <https://foreignpolicy.com/2020/05/06/singapore-coronavirus-pandemic-migrant-workers/> (accessed 4.6.2020)
- ¹¹³ BloombergQuint (2020) Maybe Racism Caused the Covid-19 Crisis. June 4, 2020. Available at: <https://www.bloombergquint.com/gadfly/maybe-racism-prisons-inequality-caused-the-covid-19-crisis> (accessed 4.6.2020)
- ¹¹⁴ CNA (2020) COVID-19: Singapore to build new dormitories with improved living standards for migrant workers. June, 1, 2020. Available at: <https://www.channelnewsasia.com/news/singapore/covid-19-singapore-new-dormitories-foreign-workers-conditions-12792538> (accessed 4.6.2020)

- ¹¹⁵ TIME (2020) Singapore Was a Coronavirus Success Story—Until an Outbreak Showed How Vulnerable Workers Can Fall Through the Cracks. April 29, 2020. Available at: <https://time.com/5825261/singapore-coronavirus-migrant-workers-inequality/> (Accessed 4.6.2020)
- ¹¹⁶ Channel News Asia (2020) 78 more migrant workers dormitories cleared of COVID-19: MOM 30 June 2020 Available at: <https://www.channelnewsasia.com/news/singapore/migrant-workers-dormitories-covid-19-mom-12886172> (Accessed on: 13.7.2020)
- ¹¹⁷ Straits Times (2020) Covid-19 has stressed social fault lines in Singapore: Grace Fu. May 31, 2020. Available at: <https://www.straitstimes.com/singapore/covid-19-has-stressed-social-fault-lines-in-spore-grace-fu> (accessed 4.6.2020)
- ¹¹⁸ MOM (2020) 89 Work Passes Revoked for Breach of Entry Approval and Stay-Home Notice Requirements. March 21, 2020. Available at: <https://www.mom.gov.sg/newsroom/press-releases/2020/0321-89-work-passes-revoked-for-breach-of-entry-approval-and-stay-home-notice-requirements> (accessed 4.6.2020)
- ¹¹⁹ The Independent (2020) Foreigners who violate safe distancing rules will have work passes revoked “regardless of nationality”: MOM. June 2, 2020. Available at: <http://theindependent.sg/foreigners-who-violate-safe-distancing-rules-will-have-work-passes-revoked-regardless-of-nationality-mom/> (accessed 4.6.2020)
- ¹²⁰ Today (2020) Four fined, jailed for breaching stay-home notices or quarantine orders. May 20, 2020. Available at: <https://www.todayonline.com/singapore/four-fined-jailed-breaching-stay-home-notice-or-quarantine-orders> (accessed 4.6.2020)
- ¹²¹ CNA (2020) Nine students fined for gathering for tea and study in overcrowded apartment during circuit breaker. June 3, 2020. Available at: <https://www.channelnewsasia.com/news/singapore/covid-19-coronavirus-nine-students-fined-gathering-tea-study-12800046> (accessed 4.6.2020)
- ¹²² Straits Times (2020) 7 charged with offences under Covid-19 regulations in Robertson Quay incident. June 2, 2020. Available at: <https://www.straitstimes.com/singapore/courts-crime/7-charged-with-allegedly-flouting-circuit-breaker-regulations-at-robertson> (accessed 4.6.2020)
- ¹²³ Straits Times (2020) Coronavirus: 58 fines issued to businesses and individuals in first week of post-circuit breaker Phase 1. 10 June. Available at: https://www.straitstimes.com/singapore/coronavirus-58-fines-issued-to-businesses-and-individuals-in-first-week-of-post-circuit?cx_testId=20&cx_testVariant=cx_1&cx_artPos=9#cxrecs_s (accessed 10.6.2020)
- ¹²⁴ Today (2020) 50-year-old public servant arrested for sharing classified information on post-circuit breaker plans. June 15. Available at <https://www.todayonline.com/singapore/50-year-old-public-servant-arrested-sharing-classified-information-post-circuit-breaker> (accessed 15.6.2020)
- ¹²⁵ YouGov (2020) Two thirds of Singaporeans believe government is doing enough for migrant workers. May 14. Available at: <https://sg.yougov.com/en-sg/news/2020/05/14/two-thirds-singaporeans-believe-government-doing-e/> (accessed 15.6.2020)
- ¹²⁶ YouGov (2020) Two thirds of Singaporeans believe government is doing enough for migrant workers. May 14. Available at: <https://sg.yougov.com/en-sg/news/2020/05/14/two-thirds-singaporeans-believe-government-doing-e/> (accessed 15.6.2020)
- ¹²⁷ IMF (2020) World Economic Outlook, April 2020. Available at: <https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020> (accessed 17.4.2020)
- ¹²⁸ Straits Times (2020) MAS eases Singdollar policy in measured move as economy braces for recession. March 30, 2020. Available at: <https://www.straitstimes.com/business/economy/mas-sets-zero-appreciation-path-for-singdollar-at-lower-level-in-easing-move> (accessed 31.3.2020)
- ¹²⁹ Straits Times (2020) Singapore heads for worst recession since independence; economy to shrink by 7 to 4% on Covid-19 impact. May 26, 2020. Available at: <https://www.straitstimes.com/business/economy/spore-to-sink-into-deeper-recession-than-expected-2020-growth-forecast-cut-to> (accessed 26.5.2020)
- ¹³⁰ CAN (2020) Commentary: Were you fired or retrenched? Your employer may not tell you the difference. May 13, 2020. Available at: <https://www.channelnewsasia.com/news/commentary/fired-or-retrenched-benefits-mom-claims-regulations-labour-12724152> (accessed 26.5.2020)
- ¹³¹ Straits Times (2020) 4th Budget sets aside \$33b more to help workers, businesses. Available at: <https://www.straitstimes.com/politics/4th-budget-sets-aside-33b-more-to-help-workers-businesses> (accessed 27.5.2020)
- ¹³² The Straits Times (2020) 95,000 employers to get \$450 million in wage credit payouts by June 30 Available at: <https://www.straitstimes.com/singapore/95000-employers-to-get-450-million-in-wage-credit-payouts-by-june-30> (accessed on: 11.6.2020)
- ¹³³ Straits Times (2020) Singapore's total employment sees biggest decline ever in first quarter. 15 June 2020. Available at: <https://www.straitstimes.com/singapore/manpower/singapores-total-employment-sees-biggest-decline-ever-in-first-quarter> (accessed 16.6.2020)
- ¹³⁴ Straits Times (2020) In full: DPM Heng Swee Keat's \$33b Fortitude Budget speech. May 26, 2020. Available at: <https://www.straitstimes.com/politics/in-full-dpm-heng-swee-keats-33b-fortitude-budget-speech> (accessed 27.5.2020)
- ¹³⁵ Strait Times (2020) Coronavirus: More cases of family violence during circuit breaker; police to proactively help victims. May 14, 2020. Available at: <https://www.straitstimes.com/singapore/courts-crime/coronavirus-more-cases-of-family-violence-during-circuit-breaker-police-to> (accessed 27.5.2020)
- ¹³⁶ Straits Times (2020) Coronavirus: Hospitals in Singapore may resume elective procedures in gradual manner. May 15, 2020. Available at: <https://www.straitstimes.com/singapore/health/hospitals-may-resume-elective-procedures-in-gradual-manner> (accessed 27.5.2020)
- ¹³⁷ Straits Times (2020) Mental health fallout: How Covid-19 has affected those in Singapore. May 9, 2020. Available at: <https://www.straitstimes.com/singapore/health/mental-health-fallout> (accessed 27.5.2020)
- ¹³⁸ BBC (2020) The Chinese doctor who tried to warn others about coronavirus. 6 Feb, 2020. Available at: <https://www.bbc.com/news/world-asia-china-51364382> (Accessed 15.6.2020)
- ¹³⁹ Guardian (2020) 'Hero who told the truth': Chinese rage over coronavirus death of whistleblower doctor. Feb 7, 2020. Available at: <https://www.theguardian.com/global-development/2020/feb/07/coronavirus-chinese-rage-death-whistleblower-doctor-li-wenliang> (accessed 17.6.2020)
- ¹⁴⁰ WHO (2020) WHO COVID19 Timeline. Available at: <https://www.who.int/news-room/detail/27-04-2020-who-timeline---covid-19> (accessed 15.6.2020)
- ¹⁴¹ WHO (2020) WHO COVID19 Timeline. Available at: <https://www.who.int/news-room/detail/27-04-2020-who-timeline---covid-19> (accessed 15.6.2020)
- ¹⁴² WHO (2020) WHO COVID19 Timeline. Available at: <https://www.who.int/news-room/detail/27-04-2020-who-timeline---covid-19> (accessed 15.6.2020)
- ¹⁴³ WHO (2020) WHO COVID19 Timeline. Available at: <https://www.who.int/news-room/detail/27-04-2020-who-timeline---covid-19> (accessed 15.6.2020)

- ¹⁴⁴ WHO (2020) Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19) 16-24 Feb. Available at: <https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf> (accessed 15.6.2020)
- ¹⁴⁵ WHO (2020) Coronavirus disease 2019 (COVID-19) Situation Report – 31. Feb 20, 2020. Available at: <https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200220-sitrep-31-covid-19.pdf> (accessed 15.6.2020)
- ¹⁴⁶ Fortune (2020) 5 reasons coronavirus statistics seem inconsistent. Feb 2020. <https://fortune.com/2020/02/24/coronavirus-statistics-who-data-transparency/> (accessed 17.6.2020)
- ¹⁴⁷ BBC (2020) Coronavirus: Why China's claims of success raise eyebrows. April 7, 2020. Available at: <https://www.bbc.com/news/world-asia-china-52194356> (accessed 17.6.2020)
- ¹⁴⁸ BBC (2020) Coronavirus: China outbreak city Wuhan raises death toll by 50%. April 17, 2020. Available at: <https://www.bbc.com/news/world-asia-china-52321529> (accessed 15.6.2020)
- ¹⁴⁹ Personal correspondence with a frontline infectious disease Professor in Wuhan 17.04.2020.
- ¹⁵⁰ The Diplomat (2020) COVID-19: Trouble on the China-Russia Border. May 5, 2020. Available at: <https://thediplomat.com/2020/05/covid-19-trouble-on-the-china-russia-border/> (accessed 11.5.2020)
- ¹⁵¹ WHO (2020) Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19) 16-24 Feb. Available at: <https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf> (accessed 15.6.2020)
- ¹⁵² Channel News Asia (2020) Remote Chinese city hit by COVID-19 after weeks of feeling safe. Apr 16 2020. Available at: <https://www.channelnewsasia.com/news/asia/remote-chinese-city-hit-by-covid-19-after-weeks-of-feeling-safe-12647726> (accessed 18.04.2020)
- ¹⁵³ Statista (2020) Number of novel coronavirus COVID-19 infection, death and recovery cases in Greater China as April 17, 2020, by region. Apr 17 2020. Available at <https://www.statista.com/statistics/1090007/china-confirmed-and-suspected-wuhan-coronavirus-cases-region/> (accessed 17.04.2020)
- ¹⁵⁴ Sina News (2020) 北京丰台花乡地区升级为疫情高风险地区 14 June 2020 Available at: <https://news.sina.com.cn/c/2020-06-14/doc-iirczymk6957874.shtml> (accessed on: 16.6.2020)
- ¹⁵⁵ Baidu (2020) 疫情实时大数据报告 Beijing 30 June 2020 Available at: https://voice.baidu.com/act/newpneumonia/newpneumonia/?from=osari_pc_3&city=%E5%8C%97%E4%BA%AC%E5%8C%97%E4%BA%AC (accessed on: 30.6.2020)
- ¹⁵⁶ Bloomberg (2020) Beijing Shuts Schools to Stem Virus as Cases Spread Beyond City. June 16, 2020. Available at: <https://www.bloomberg.com/news/articles/2020-06-16/beijing-struggles-to-stem-virus-as-cases-spread-beyond-capital> (accessed 17.6.2020)
- ¹⁵⁷ South China Morning Post (2020) Coronavirus: Beijing municipal government orders partial lockdown for city and elevates emergency response amid latest outbreak 16 June 2020 Available at: <https://www.scmp.com/news/china/society/article/3089187/beijing-reports-new-local-coronavirus-cases-testing-xinfadi> (accessed on: 17.6.2020)
- ¹⁵⁸ Sina News (2020) 浙江河北四川辽宁 4 省出现北京确诊关联病例 17 June 2020 Available at: <https://finance.sina.com.cn/roll/2020-06-17/doc-iircuyvi8947441.shtml> (17.6.2020)
- ¹⁵⁹ Sina News (2020) 病毒专家：北京疫情传染性似高于武汉 但中国防控经验已足够丰富 16 June 2020 Available at: https://k.sina.cn/article_5305757517_13c3f6f4d02000x30u.html (accessed on 16.6.2020)
- ¹⁶⁰ Straits Times (2020) Salmon suppliers say China has halted imports after coronavirus found at Beijing market June 15, 2020. Available at: <https://www.straitstimes.com/asia/east-asia/china-reports-49-more-coronavirus-cases-as-beijing-tests-thousands> (accessed 17.6.2020)
- ¹⁶¹ SCMP (2020) CORONAVIRUS WHO downplays 'hypothesis' linking salmon to Beijing's latest coronavirus outbreak. June 16, 2020. Available at: <https://www.scmp.com/video/coronavirus/3089227/who-downplays-hypothesis-linking-salmon-beijings-latest-coronavirus> (accessed 17.6.2020)
- ¹⁶² China Daily (2020) Expert: Beijing's outbreak controlled 19 June 2020 Available at: https://enapp.chinadaily.com.cn/a/202006/19/AP5eebf50da3109daf6c7703cb.html?fbclid=IwAR0tN7kIldwuzn2-If5HVJTF5BGv4Wa9zPHmBTMVjhWfPVTWCWY_JPnqmCvU (accessed on: 22.6.2020)
- ¹⁶³ China Daily (2020) Expert: Beijing's outbreak controlled 19 June 2020 Available at: https://enapp.chinadaily.com.cn/a/202006/19/AP5eebf50da3109daf6c7703cb.html?fbclid=IwAR0tN7kIldwuzn2-If5HVJTF5BGv4Wa9zPHmBTMVjhWfPVTWCWY_JPnqmCvU (accessed on: 22.6.2020)
- ¹⁶⁴ China Daily (2020) Expert: Beijing's outbreak controlled 19 June 2020 Available at: https://enapp.chinadaily.com.cn/a/202006/19/AP5eebf50da3109daf6c7703cb.html?fbclid=IwAR0tN7kIldwuzn2-If5HVJTF5BGv4Wa9zPHmBTMVjhWfPVTWCWY_JPnqmCvU (accessed on: 22.6.2020)
- ¹⁶⁵ CNA (2020) China bans some US chicken, shuts Pepsi plant to fight coronavirus. June 22, 2020. Available at: <https://www.channelnewsasia.com/news/asia/china-bans-us-chicken-shuts-pepsi-plant-covid-19-coronavirus-12856592> (accessed 22.6.2020)
- ¹⁶⁶ Medical x press (2020) China puts half a million people in lockdown as Beijing fights new cluster. Available at: <https://medicalxpress.com/news/2020-06-million-lockdown-beijing-virus-cluster.html> (accessed 29.6.2020)
- ¹⁶⁷ South China Morning Post (2020) Coronavirus: Beijing eases travel limits after five days of no new cases. 11 July 2020 Available at: <https://www.scmp.com/news/china/society/article/3092796/coronavirus-beijing-eases-travel-limits-after-five-days-no-new> (accessed on 13.7.2020)
- ¹⁶⁸ China Briefing (2020) China's Travel Restrictions due to COVID-19: An explainer. May 8, 2020. Available at: <https://www.china-briefing.com/news/chinas-travel-restrictions-due-to-covid-19-an-explainer/> (accessed 11.5.2020)
- ¹⁶⁹ South China Morning Post (2020) China's military becomes world's first to use experimental coronavirus vaccine 29 June 2020 Available at: <https://www.scmp.com/news/china/science/article/3091093/chinese-military-approves-use-experimental-coronavirus-vaccine> (accessed on: 30.6.2020)
- ¹⁷⁰ Guardian (2020) China to lift travel restrictions in Hubei after months of coronavirus lockdown. March 24, 2020. Available at: <https://www.theguardian.com/world/2020/mar/24/china-to-lift-travel-restrictions-in-hubei-after-months-of-coronavirus-lockdown> (accessed 25.3.2020)
- ¹⁷¹ The Star (2020) People in China need a green light from Alibaba app to move around country. March 23, 2020. Available at: <https://www.thestar.com.my/tech/tech-news/2020/03/23/people-in-china-need-a-green-light-from-alibaba-app-to-move-around-country> (accessed 25.3.2020)

- ¹⁷² The Star (2020) People in China need a green light from Alibaba app to move around country. March 23, 2020. Available at: <https://www.thestar.com.my/tech/tech-news/2020/03/23/people-in-china-need-a-green-light-from-alibaba-app-to-move-around-country> (accessed 25.3.2020)
- ¹⁷³ BBC (2020) Coronavirus: People of Wuhan allowed to leave after lockdown 2020. Apr 8 2020. Available at: <https://www.bbc.com/news/world-asia-china-52207776> (accessed 17.04.2020)
- ¹⁷⁴ South China Morning Post (2020). Wuhan waits for coronavirus lockdown to end, but controls on movement likely to remain in force. Apr 05 2020. Available at: <https://www.scmp.com/news/china/society/article/3078459/wuhan-waits-coronavirus-lockdown-end-controls-movement-likely> (accessed 17.04.2020)
- ¹⁷⁵ China Briefing (2020) China's Travel Restrictions due to COVID-19: An Explainer. May 8, 2020. Available at: <https://www.china-briefing.com/news/chinas-travel-restrictions-due-to-covid-19-an-explainer/> (accessed 11.5.2020)
- ¹⁷⁶ The Paper China (2020) 继武汉后，湖北又一地开展集中核酸检测！9 June 2020 Available at: https://www.thepaper.cn/newsDetail_forward_7768129 (accessed on: 11.6.2020)
- ¹⁷⁷ Huan Qiu (2020) 湖北：除武汉外其他 16 市州学生在校可不戴口罩 25 May 2020 Available at: <https://china.huanqiu.com/article/3yNWTmmbuqr> (accessed on: 27.5.2020)
- ¹⁷⁸ International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.international.sos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)
- ¹⁷⁹ Deccan Herald (2020) Lessons from Wuhan in containing the coronavirus: Wear masks, no home quarantine for patients. April 13, 2020. Available at: <https://www.deccanherald.com/international/world-news-politics/lessons-from-wuhan-in-containing-the-coronavirus-wear-masks-no-home-quarantine-for-patients-824810.html> (accessed 11.5.2020)
- ¹⁸⁰ Huan Qiu (2020) 湖北：除武汉外其他 16 市州学生在校可不戴口罩 25 May 2020 Available at: <https://china.huanqiu.com/article/3yNWTmmbuqr> (accessed on: 27.5.2020)
- ¹⁸¹ Channel News Asia (2020) China sees drop in new COVID-19 cases; all new cases imported. Mar 23 2020. Available at: <https://www.channelnewsasia.com/news/asia/coronavirus-covid-19-china-cases-toll-imported-12566264> (accessed 18.04.2020)
- ¹⁸² China Daily (2020) Inbound Shanghai travellers to undergo quarantine. Mar 28 2020. Available at: <https://www.chinadaily.com.cn/a/202003/26/WS5e7c8433a3101282172824b8.html> (accessed 18.04.2020)
- ¹⁸³ Zocalo (2020) A letter from Shanghai, where a powerful system of control prevails over COVID-19. Available at: <https://www.zocalopublicsquare.org/2020/04/24/letter-shanghai-covid-19-life-lockdown/ideas/dispatches/> (accessed 11.5.2020)
- ¹⁸⁴ Huan Qiu (2020) 湖北：除武汉外其他 16 市州学生在校可不戴口罩 25 May 2020 Available at: <https://china.huanqiu.com/article/3yNWTmmbuqr> (accessed on: 27.5.2020)
- ¹⁸⁵ CCTV News (2020) 新发地市场附近银地家园小区居民开始进行核酸检测 14 June 2020 Available at: <http://m.news.cctv.com/2020/06/14/ARTIK3UApRn5Gf36Ksi5Kj3E200614.shtml> (accessed on 16.6.2020)
- ¹⁸⁶ Economic Times (2020) COVID-19: China begins mass testing in Beijing as 67 new cases appear Available at: <https://economictimes.indiatimes.com/news/international/world-news/covid-19-china-begins-mass-testing-in-beijing-as-67-new-cases-appear/articleshow/76379858.cms> (accessed 18.6.2020)
- ¹⁸⁷ Reuters (2020) Beijing coronavirus testing to enter 'fast track' as cases mount. June 23, 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-china-testing-idUSKBN23U17V> (accessed 24.6.2020)
- ¹⁸⁸ Straits Times (2020) Coronavirus: Beijing struggles to keep up with processing swab tests 22 June 2020 Available at: <https://www.straitstimes.com/asia/east-asia/coronavirus-beijing-struggles-to-keep-up-with-processing-swab-tests> (23.6.2020)
- ¹⁸⁹ National Health Commission (2020) Mask Guidelines. March 17, 2020. Available at: <http://www.nhc.gov.cn/jkj/s3577/202003/0a472cc09e744144883db6a74fe6e760.shtml> (assessed 12.5.2020)
- ¹⁹⁰ YouGov (2020) Latest round-up of YouGov's coronavirus survey results.
- ¹⁹¹ Sina Sports (2020) 6 May News Report. Available at: <https://sports.sina.com.cn/run/2020-05-06/doc-iirczymk0086171.shtml> (accessed 14.5.2020)
- ¹⁹² Sina (2020) 18 May 2020 Available at: https://k.sina.com.cn/article_1686546714_6486a91a020012r8d.html (accessed on: 19.5.2020)
- ¹⁹³ Time (2020) Wuhan Reports First New Coronavirus Cases Since Lockdown Lifted. May, 11, 2020. Available at: <https://time.com/5835175/wuhan-new-coronavirus-cases/> (accessed 12.5.2020)
- ¹⁹⁴ Wuhan local government (2020) 23 March 2020. Available at: http://www.Wuhan.gov.cn/sy/whyw/202004/t20200414_998907.shtml (accessed 12.5.2020)
- ¹⁹⁵ The Straits Times (2020) Approved travellers on new Singapore-China 'fast lane' need not serve quarantine but must do Covid-19 swab tests 3 June 2020 Available at: <https://www.straitstimes.com/singapore/health/new-rules-including-covid-19-pre-departure-and-post-arrival-tests-set-for-essential> (accessed on: 4.06.2020)
- ¹⁹⁶ Xinhuanet (2020) Available at: http://www.xinhuanet.com/fortune/2020-06/04/c_1126072524.htm (accessed 4.6.2020)
- ¹⁹⁷ CGTN (2020) As countries struggle to reopen, here is what China is doing. May 1 2020. Available at: <https://news.cgtn.com/news/2020-05-01/As-countries-struggle-to-reopen-here-is-what-China-is-doing-Q8SfFcWfKg/index.html> (accessed 5.5.20)
- ¹⁹⁸ Huan Qiu (2020) 湖北：除武汉外其他 16 市州学生在校可不戴口罩 25 May 2020 Available at: <https://china.huanqiu.com/article/3yNWTmmbuqr> (accessed on: 27.5.2020)
- ¹⁹⁹ BBC (2020) Coronavirus: Wuhan to ease lockdown as world battles pandemic. available at: <https://www.bbc.com/news/world-asia-china-52016139> (accessed 25.3.2020)
- ²⁰⁰ Guardian (2020) Japan and South Korea tighten borders as US faces up to 200,000 Covid-19 deaths. March 30, 2020. Available at: <https://www.theguardian.com/world/2020/mar/30/japan-and-south-korea-tighten-borders-as-us-faces-up-to-200000-covid-19-deaths> (accessed 31.3.2020)
- ²⁰¹ BBC (2020) The Chinese doctor who tried to warn others about coronavirus. 6 Feb, 2020. Available at: <https://www.bbc.com/news/world-asia-china-51364382> (Accessed 15.6.2020)
- ²⁰² Guardian (2020) 'Hero who told the truth': Chinese rage over coronavirus death of whistleblower doctor. Feb 7, 2020. Available at: <https://www.theguardian.com/global-development/2020/feb/07/coronavirus-chinese-rage-death-whistleblower-doctor-li-wenliang> (accessed 17.6.2020)
- ²⁰³ SCMP (2020) Coronavirus: China's first confirmed Covid-19 case traced back to November 17. March 13, 2020. Available at: <https://www.scmp.com/news/china/society/article/3074991/coronavirus-chinas-first-confirmed-covid-19-case-traced-back> (Accessed 8.4.2020)

- ²⁰⁴ Nsoesie E et al (2020) Analysis of hospital traffic and search engine data in Wuhan China indicates early disease activity in the Fall of 2019. Available at: <https://dash.harvard.edu/handle/1/42669767> (accessed 11.6.2020)
- ²⁰⁵ The Straits Times (2020) Coronavirus may have been spreading in China in August, Harvard research indicates 9 June 2020 Available at: <https://www.straitstimes.com/asia/east-asia/coronavirus-may-have-been-spreading-in-china-in-august-harvard-research-indicates> (accessed on: 9.06.2020)
- ²⁰⁶ BBC (2020) Coronavirus: Is there any evidence for lab release theory? May 1, 2020. Available at: <https://www.bbc.com/news/science-environment-52318539> (accessed 11.5.2020)
- ²⁰⁷ BBC (2020) Coronavirus: Trump accuses WHO of being a 'puppet of China'. May 19, 2020. Available at: <https://www.bbc.com/news/health-52679329> (Accessed 15.6.2020)
- ²⁰⁸ BBC (2020) Coronavirus: Is there any evidence for lab release theory? May 1, 2020. Available at: <https://www.bbc.com/news/science-environment-52318539> (accessed 15.6.2020)
- ²⁰⁹ Guardian (2020) China bristles at Australia's call for investigation into coronavirus origin. April 29, 2020. Available at: <https://www.theguardian.com/world/2020/apr/29/australia-defends-plan-to-investigate-china-over-covid-19-outbreak-as-row-deepens> (accessed 15.6.2020)
- ²¹⁰ Forbes (2020) China's Xi Jinping Supports WHO Investigation Into Coronavirus Origins. May 18, 2020. Available at: <https://www.forbes.com/sites/nicholasreimann/2020/05/18/chinas-xi-jinping-supports-who-investigation-into-coronavirus-origins/#6973876b331e> (accessed 15.6.2020)
- ²¹¹ BBC (2020) Coronavirus: Trump accuses WHO of being a 'puppet of China'. May 19, 2020. Available at: <https://www.bbc.com/news/health-52679329> (Accessed 15.6.2020)
- ²¹² Kupferschmidt K, Cohen J (2020) Can China's COVID-19 strategy work elsewhere? Science 06 Mar 2020: Vol. 367, Issue 6482, pp. 1061-1062 DOI: 10.1126/science.367.6482.1061. Available at: <https://science.sciencemag.org/content/367/6482/1061> (accessed 15.6.2020)
- ²¹³ EUDisInfo (2020) EEAS SPECIAL REPORT UPDATE: SHORT ASSESSMENT OF NARRATIVES AND DISINFORMATION AROUND THE COVID-19 PANDEMIC (UPDATE 23 APRIL – 18 MAY) Available at: <https://euvsdisinfo.eu/eeas-special-report-update-short-assessment-of-narratives-and-disinformation-around-the-covid19-pandemic-updated-23-april-18-may/> (Accessed 15.6.2020)
- ²¹⁴ BBC (2020) India-China clash: 20 Indian troops killed in Ladakh fighting. June 17, 2020. <https://www.bbc.com/news/world-asia-53061476> (accessed 17.6.2020)
- ²¹⁵ YouGov (2020) Latest round-up of YouGov's coronavirus survey results.
- ²¹⁶ The Guardian (2020). China economy shrinks for first time as Wuhan COVID-19 death toll is increased by 1300. Apr 17 2020. Available at: <https://www.theguardian.com/world/2020/apr/17/china-economy-shrinks-record-wuhan-covid-19-death-toll-rises-50-percent> (accessed 17.04.2020)
- ²¹⁷ SCMP (2020) China pledges largest-ever economic rescue package to save jobs and livelihoods amid coronavirus. May 28, 2020. Available at: <https://www.scmp.com/economy/china-economy/article/3086569/china-pledges-largest-ever-economic-rescue-package-save-jobs> (Accessed 15.6.2020)
- ²¹⁸ Caixing Global (2020) China Business Digest: Wuhan Finds 206 New Asymptomatic Infections; \$50 Billion of Financing for Greater Bay Area. 26 May.2020. Available at: <https://www.caixinglobal.com/2020-05-26/china-business-digest-wuhan-mass-testing-finds-206-asymptomatic-infections-investors-weigh-impact-of-expanded-us-sanctions-on-chinese-firms-101559030.html> (accessed 27.5.2020)
- ²¹⁹ SCMP (2020) China pledges largest-ever economic rescue package to save jobs and livelihoods amid coronavirus. May 28, 2020. Available at: <https://www.scmp.com/economy/china-economy/article/3086569/china-pledges-largest-ever-economic-rescue-package-save-jobs> (Accessed 15.6.2020)
- ²²⁰ Bloomberg (2020) China's Divorce Spike Is a Warning to Rest of Locked-Down World. March 23, 2020. Available at: <https://www.bloomberg.com/news/articles/2020-03-31/divorces-spike-in-china-after-coronavirus-quarantines> (accessed 29.6.2020)
- ²²¹ Sixth Tone (2020) Spousal Distancing: The Chinese Couples Divorcing Over COVID-19. April 3, 2020. Available at: <https://www.sixthtone.com/news/1005435/spousal-distancing-the-chinese-couples-divorcing-over-covid-19> (accessed 29.6.2020)
- ²²² National Health Commission of the People's Republic of China (2020). Wuhan amends data on confirmed COVID-19 deaths, cases. Apr 17 2020. Available at http://en.nhc.gov.cn/2020-04/17/c_79285.htm (accessed 17.04.2020)
- ²²³ The Economist (2020) China's data reveal a puzzling link between covid-19 cases and political events. April 7, 2020. Available at: <https://www.economist.com/graphic-detail/2020/04/07/chinas-data-reveal-a-puzzling-link-between-covid-19-cases-and-political-events> (accessed 8.4.2020)
- ²²⁴ Business Insider (2020) Wuhan reported its first new coronavirus case in more than a month. May 10, 2020. Available at: <https://www.businessinsider.sg/wuhan-reports-first-new-coronavirus-case-in-over-a-month-2020-5?r=US&IR=T> (accessed 11.5.2020)
- ²²⁵ Reuters (2020) No new COVID sufferers, 300 asymptomatic, after Wuhan-wide tests June 2, 2020. Available at: <https://uk.reuters.com/article/uk-health-coronavirus-china-wuhan/no-new-covid-sufferers-300-asymptomatic-after-wuhan-wide-tests-idUKKBN23915T> (accessed 3.6.2020)
- ²²⁶ Baidu (2020) 疫情实时大数据报告 (Wuhan) 3 June 2020 Available at: https://voice.baidu.com/act/newpneumonia/newpneumonia/?from=osari_pc_3&city=%E6%B9%96%E5%8C%97-%E6%AD%A6%E6%B1%89 (accessed on: 3.06.2020)
- ²²⁷ Baidu (2020) 疫情实时大数据报告 (Hubei) Available at: https://voice.baidu.com/act/newpneumonia/newpneumonia/?from=osari_pc_3&city=%E6%B9%96%E5%8C%97-%E6%B9%96%E5%8C%97 (accessed on: 5.06.2020)
- ²²⁸ Fang H et al (2020) Human Mobility Restrictions and the Spread of the Novel Coronavirus (2019-nCoV) in China PIER Working Paper No. 20-011. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3559382 (accessed 22.5.2020)
- ²²⁹ Hubei Provincial Health Committee (2020) 21 May 2020. Available on the 武汉战疫 WeChat Mini Program. (accessed 21.5.2020, 1537hrs)
- ²³⁰ Straits Times (2020) The world is still far from herd immunity for coronavirus, studies show. May 29, 2020. Available at: https://www.straitstimes.com/world/the-world-is-still-far-from-herd-immunity-for-coronavirus-studies-show?xtor=CS3-18&utm_source=STiPhone&utm_medium=share&utm_term=2020-05-29%2012%3A05%3A24 (accessed 29.5.2020)
- ²³¹ Xu X et al (2020) Seroprevalence of immunoglobulin M and G antibodies against SARS-CoV-2 in China. Nat Med Available at: <https://doi.org/10.1038/s41591-020-0949-6> (accessed 8.6.2020)

- ²³² Personal correspondence with a frontline infectious disease Professor in Wuhan 17.04.2020.
- ²³³ BBC (2020) Coronavirus: People of Wuhan allowed to leave after lockdown 2020. Apr 8 2020. Available at: <https://www.bbc.com/news/world-asia-china-52207776> (accessed 17.04.2020)
- ²³⁴ China Government (2020) 全国医疗秩序正在恢复 21 March 2020 Available at: http://www.gov.cn/xinwen/2020-03/21/content_5493798.htm (accessed on: 17.6.2020)
- ²³⁵ Business Insider (2020). Wuhan ended its 76-day coronavirus lockdown last week – here's how Wuhan residents are reacting. Apr 14 2020. Available at: <https://www.businessinsider.sg/coronavirus-wuhan-china-lockdown-ending-2020-4?r=US&IR=T> (accessed 17.04.2020)
- ²³⁶ Sina News (2020) 全国都是低风险！07 June 2020 Available at: <https://finance.sina.com.cn/wm/2020-06-07/doc-iircuyvi7135788.shtml> (accessed on: 7.06.2020)
- ²³⁷ BBC (2020) Coronavirus: Wuhan to ease lockdown as world battles pandemic. available at: <https://www.bbc.com/news/world-asia-china-52016139> (accessed 25.3.2020)
- ²³⁸ South China Morning Post (2020). Wuhan waits for coronavirus lockdown to end, but controls on movement likely to remain in force. Apr 05 2020. Available at: <https://www.scmp.com/news/china/society/article/3078459/wuhan-waits-coronavirus-lockdown-end-controls-movement-likely> (accessed 17.04.2020)
- ²³⁹ Bloomberg (2020) Wuhan to Test Whole City of 11 Million as New Cases Emerge. May 11, 2020. Available at: <https://www.bloomberg.com/news/articles/2020-05-11/china-s-wuhan-sees-first-new-virus-cases-since-lockdown-lifted> (accessed 12.5.2020)
- ²⁴⁰ Ifeng (2020) News Site (in Chinese) 21 May 2020 Available at: <https://news.ifeng.com/c/7wfCH00iCf2> (accessed on: 23.5.20)
- ²⁴¹ Wuhan mass Virus Testing 10 Questions and Answers. Available at: http://wjw.wuhan.gov.cn/xwzx_28/ (accessed 20.5.2020)
- ²⁴² Reuters (2020) No new COVID sufferers, 300 asymptomatic, after Wuhan-wide tests June 2, 2020. Available at: <https://uk.reuters.com/article/uk-health-coronavirus-china-wuhan/no-new-covid-sufferers-300-asymptomatic-after-wuhan-wide-tests-idUKKBN23915T> (accessed 3.6.2020)
- ²⁴³ Government China (2020) 武汉：300 名无症状感染者病毒培养结果全为阴性 9 June 2020 Available at: http://www.gov.cn/xinwen/2020-06/09/content_5518124.htm (accessed on: 9.06.2020)
- ²⁴⁴ The Paper China (2020) 继武汉后，湖北又一地将开展集中核酸检测！9 June 2020 Available at: https://www.thepaper.cn/newsDetail_forward_7768129 (accessed on: 11.6.2020)
- ²⁴⁵ Huan Qiu (2020) 湖北：除武汉外其他 16 市州学生在校可不戴口罩 25 May 2020 Available at: <https://china.huanqiu.com/article/3yNWTmmbuqr> (accessed on: 27.5.2020)
- ²⁴⁶ CGTN (2020) COVID-19: First flight from Wuhan to Beijing since lockdown takes off. June 9, 2020. Available at: <https://news.cgtn.com/news/2020-06-09/COVID-19-First-flight-from-Wuhan-to-Beijing-since-lockdown-takes-off-Rbn7ohfhwA/index.html> (accessed 10.6.2020)
- ²⁴⁷ Straits Times (2020) Why everyone wears a mask in China amid coronavirus outbreak. April 2, 2020. Available at: <https://www.straitstimes.com/asia/east-asia/why-everyone-wears-a-mask-in-china> (accessed 11.5.2020)
- ²⁴⁸ Xinhua Net (2020) 22 Jan 2020 Available at: http://www.xinhuanet.com/local/2020-01/22/c_1125495538.htm (accessed 12.5.2020)
- ²⁴⁹ Wuhan Botanical Garden, Chinese academy of sciences April 10 2020 Available at: http://www.whiob.ac.cn/zt/yingqingzt/kydt2020/202004/t20200412_5538088.html (accessed 12.5.20)
- ²⁵⁰ Bendibao April 9 2020. Available at: <http://wh.bendibao.com/tour/202049/109889.shtm> (accessed 12.5.20)
- ²⁵¹ Wuhan Government April 22 2020 Available at: http://english.wh.gov.cn/H_1/NWP/202004/t20200424_1109391.shtml (accessed 13.5.2020)
- ²⁵² Wuhan Sports Center May 1 2020 Available at: <http://www.wuhansport.com/index.php/index-view-aid-1844.html> (accessed: 13.5.2020)
- ²⁵³ Sina Sports (2020) 6 May News Report. Available at: <https://sports.sina.com.cn/run/2020-05-06/doc-iirczymk0086171.shtml> (accessed 14.5.2020)
- ²⁵⁴ Cable News Network (2020). China lifts 76-day lockdown on Wuhan as city reemerges from coronavirus crisis. Apr 07 2020. Available at: <https://edition.cnn.com/2020/04/07/asia/coronavirus-wuhan-lockdown-lifted-intl-hnk/index.html> (accessed 17.04.2020)
- ²⁵⁵ Channel News Asia (2020). Wuhan to fully resume rail, flight and freight ops by end April. Apr 17 2020. Available at: <https://www.channelnewsasia.com/news/asia/china-s-wuhan-to-fully-resume-rail-flight-and-freight-ops-by-end-12644206> (accessed 17.04.2020)
- ²⁵⁶ Channel News Asia (2020) China reports 31 new COVID-19 cases, Wuhan urges vigilance as residents prepare to return to work. 03 Apr 2020. Available at: <https://www.channelnewsasia.com/news/asia/covid-19-china-wuhan-coronavirus-deaths-work-travel-12604702> (accessed 17.04.2020)
- ²⁵⁷ News China (2020) 武汉铁路部门恢复开行进京高铁 06 June 2020 Available at: <https://m.gmw.cn/baijia/2020-06/06/1301267348.html> (accessed on: 9.6.2020)
- ²⁵⁸ Sina News (2020) 9 日起武汉至北京客运航班复航 每天一个往返航班 8 June 2020 Available at: <https://finance.sina.com.cn/china/gncj/2020-06-09/doc-iircuyvi7425718.shtml> (accessed on 9.06.2020)
- ²⁵⁹ Open Doors USA (2020) Chinese pastor from Wuhan: 'The virus can't stop us'. March 18, 2020. Available at: <https://www.opendoorsusa.org/christian-persecution/stories/chinese-pastor-from-wuhan-the-virus-cant-stop-us/> (accessed 14.5.2020)
- ²⁶⁰ Bendibao April 21 2020 Available at: <http://wh.bendibao.com/tour/2020421/110407.shtm> (accessed: 13.5.2020)
- ²⁶¹ CNN (2020) Wuhan shows the world that the end of lockdown is just the beginning of the Covid-19 crisis. April 30 2020. Available at: <https://edition.cnn.com/2020/04/29/asia/wuhan-coronavirus-lockdown-analysis-intl-hnk/index.html> (accessed 5.5.20)
- ²⁶² Cable News Network (2020). China lifts 76-day lockdown on Wuhan as city reemerges from coronavirus crisis. Apr 07 2020. Available at: <https://edition.cnn.com/2020/04/07/asia/coronavirus-wuhan-lockdown-lifted-intl-hnk/index.html> (accessed 17.04.2020)
- ²⁶³ McDonalds China 30 March 2020 Available at: <https://www.mcdonalds.com.cn/news/20200330-Restaurants-Hubei-Reopened>

(accessed 13.5.20)

²⁶⁴ Time (2020) Wuhan Reports First New Coronavirus Cases Since Lockdown Lifted. May, 11, 2020. Available at: <https://time.com/5835175/wuhan-new-coronavirus-cases/> (accessed 12.5.2020)

²⁶⁵ ChinaNews (2020) 湖北：尚不具备推动省外境外来鄂旅游条件 29 May 2020 Available at: <http://www.chinanews.com/gn/2020/05-29/9198304.shtml> (accessed on: 1.06.2020)

²⁶⁶ Hubei Provincial center for disease control and prevention (2020) 湖北省新型冠状病毒肺炎疫情防控常态化防控指引 26 May 2020 Available at: http://www.hbcdc.cn/index.php/index-view-aid-8619.html?from=timeline&isappinstalled=0#_Toc40722230 (accessed on: 5.06.2020)

²⁶⁷ Hubei Provincial center for disease control and prevention (2020) 湖北省新型冠状病毒肺炎疫情防控常态化防控指引 26 May 2020 Available at: http://www.hbcdc.cn/index.php/index-view-aid-8619.html?from=timeline&isappinstalled=0#_Toc40722230 (accessed on: 5.06.2020)

²⁶⁸ CGTN (2020) Wuhan's night market spring to life 2 June 2020 Available at: <https://news.cgtn.com/news/2020-06-02/Wuhan-s-night-markets-spring-to-life> (accessed on 8.06.2020)

²⁶⁹ CAN (2020) Students in China's virus epicentre Wuhan return to school. May 6, 2020. Available at: <https://www.channelnewsasia.com/news/world/students-wuhan-china-covid-19-coronavirus-return-to-school-12706776> (accessed 11.5.2020)

²⁷⁰ Wuhan Municipal Health Commission (2020) 19 May 2020 Available at: http://www.wh.gov.cn/sy/whyw/202005/t20200519_1323249.shtml (accessed: 19.5.2020)

Wuhan Municipal Health Commission (2020) 16 May 2020 Available at: http://wjw.wuhan.gov.cn/ztzl_28/fk/tzgg/202005/t20200516_1321675.shtml (accessed: 18.5.2020)

²⁷¹ Huan Qiu (2020) 湖北：除武汉外其他 16 市州学生在校可不戴口罩 25 May 2020 Available at: <https://china.huanqiu.com/article/3yNWTmmbgr> (accessed on: 27.5.2020)

²⁷² China News (2020) 湖北高校毕业生开始分批有序返校 8 June 2020 Available at: <http://www.chinanews.com/gn/2020/06-08/9206628.shtml> (accessed on: 9.06.2020)

²⁷³ The Russian Government (2020) Government meeting on measures to prevent the spread of coronavirus in Russia and reduce its impact on economy. Mar 26 2020. Available at: <http://government.ru/en/news/39277/> (accessed 18.04.2020)

²⁷⁴ The Diplomat (2020) COVID-19: Trouble on the China-Russia Border. May 5, 2020. Available at: <https://thediplomat.com/2020/05/covid-19-trouble-on-the-china-russia-border/> (accessed 11.5.2020)

²⁷⁵ Channel News Asia (2020) Remote Chinese city hit by COVID-19 after weeks of feeling safe. Apr 16 2020. Available at: <https://www.channelnewsasia.com/news/asia/remote-chinese-city-hit-by-covid-19-after-weeks-of-feeling-safe-12647726> (accessed 18.04.2020)

²⁷⁶ Statista (2020) Number of novel coronavirus COVID-19 infection, death and recovery cases in Greater China as April 17, 2020, by region. Apr 17 2020. Available at <https://www.statista.com/statistics/1090007/china-confirmed-and-suspected-wuhan-coronavirus-cases-region/> (accessed 17.04.2020)

²⁷⁷ Baidu (2020) 疫情实时大数据报告 (HeiLongJiang) Available at: https://voice.baidu.com/act/newpneumonia/newpneumonia/?from=osari_pc_3&city=%E9%BB%91%E9%BE%99%E6%B1%9F-%E9%BB%91%E9%BE%99%E6%B1%9F (accessed on: 4.06.2020)

²⁷⁸ Baidu (2020) 疫情实时大数据报告 Available at: https://voice.baidu.com/act/newpneumonia/newpneumonia/?from=osari_pc_3 (accessed on: 5.06.2020)

²⁷⁹ The Jakarta Post (2020) China's Wuhan lockdown ends, but another begins as local coronavirus cases rise. April 8 2020. Available at: <https://www.thejakartapost.com/news/2020/04/08/chinas-wuhan-lockdown-ends-but-another-begins-as-local-coronavirus-cases-rise.html> (accessed 17.04.2020)

²⁸⁰ The Diplomat (2020) COVID-19: Trouble on the China-Russia Border. May 5, 2020. Available at: <https://thediplomat.com/2020/05/covid-19-trouble-on-the-china-russia-border/> (accessed 11.5.2020)

²⁸¹ BBC (2020). Coronavirus in Suifenhe: Remote border lock downs as China opens up. Apr 9 2020. Available at: <https://www.bbc.com/news/world-asia-china-52225475> (accessed 18.04.2020)

²⁸² Suifenhe Government (2020) Available at: <http://www.suifenhe.gov.cn/contents/1962/80548.html> (accessed 12.5.2020)

²⁸³ The Diplomat (2020) COVID-19: Trouble on the China-Russia Border. May 5, 2020. Available at: <https://thediplomat.com/2020/05/covid-19-trouble-on-the-china-russia-border/> (accessed 11.5.2020)

²⁸⁴ China Daily (2020) Hubei sends antiviral supplies to Heilongjiang. Apr 16 2020. Available at: <https://www.chinadaily.com.cn/a/202004/16/WS5e9799bca3105d50a3d16834.html> (accessed 18.04.2020)

²⁸⁵ The Diplomat (2020) COVID-19: Trouble on the China-Russia Border. May 5, 2020. Available at: <https://thediplomat.com/2020/05/covid-19-trouble-on-the-china-russia-border/> (accessed 11.5.2020)

²⁸⁶ China News (2020) 牡丹江全民核酸排查：658772 人筛出 19 名无症状感染者 June 2020 Available at: <http://www.chinanews.com/gn/2020/06-08/9206711.shtml> (accessed on: 9.06.2020)

²⁸⁷ Heilongjiang Daily (2020) 17 May 2020 Available at: <http://www.suifenhe.gov.cn/contents/4/82676.html> (accessed: 19 May 2020)

²⁸⁸ SuiFenHe Government (2020) 黑龙江高校学生返校复课时间确定 19 May 2020 Available at: <http://suifenhe.gov.cn/contents/1961/82720.html> (accessed: 27.5.2020)

²⁸⁹ NBD (2020) 牡丹江市最新通告：3 日零时起，全市餐饮服务单位暂停堂食，进入商场、超市等场所须扫码、测温、戴口罩. 3 May 2020. Available at: <http://www.nbd.com.cn/articles/2020-05-03/1430620.html> (accessed on: 5.6.2020)

²⁹⁰ NBD (2020) 牡丹江市最新通告：3 日零时起，全市餐饮服务单位暂停堂食，进入商场、超市等场所须扫码、测温、戴口罩. 3 May 2020. Available at: <http://www.nbd.com.cn/articles/2020-05-03/1430620.html> (accessed on: 5.6.2020)

²⁹¹ Sina News (2020) 疫情期间黑龙江省 6000 多家企业获得贷款支持 338.1 亿元 5 June 2020 Available at: <https://finance.sina.com.cn/roll/2020-06-05/doc-iiirczymk5401723.shtml> (accessed on: 9.06.2020)

²⁹² The Diplomat (2020) COVID-19: Trouble on the China-Russia Border. May 5, 2020. Available at: <https://thediplomat.com/2020/05/covid-19-trouble-on-the-china-russia-border/> (accessed 11.5.2020)

²⁹³ Statista (2020) Confirmed, death and recovery cases of COVID-19 in Greater China 2020, by region

- Published by Lai Lin Thomala, May 26, 2020. Available at: <https://www.statista.com/statistics/1090007/china-confirmed-and-suspected-wuhan-coronavirus-cases-region/> (accessed 27.5.2020)
- ²⁹⁴ Baidu (2020) 疫情实时大数据报告 (HeiLongJiang) Available at: https://voice.baidu.com/act/newpneumonia/newpneumonia/?from=osari_pc_3&city=%E9%BB%91%E9%BE%99%E6%B1%9F-%E9%BB%91%E9%BE%99%E6%B1%9F (accessed on: 4.06.2020)
- ²⁹⁵ Reuters (2020) Shanghai downgrades emergency alert level as coronavirus spread subsides. March 23, 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-china-shanghai/shanghai-downgrades-emergency-alert-level-as-coronavirus-spread-subsides-idUSKBN21A07Z> (accessed 11.5.2020)
- ²⁹⁶ Nature (2020) "We need to be alert": Scientist fear second coronavirus wave as China's lockdowns ease. Mar 30 2020. Available at: <https://www.nature.com/articles/d41586-020-00938-0> (accessed 18.04.2020)
- ²⁹⁷ National Health Commission (2020) Public Science: Guide to wearing facemask. Mar 18 2020. Available at: <http://www.nhc.gov.cn/jki/s3577/202003/0a472cc09e744144883db6a74fe6e760.shtml> (accessed 18.04.2020)
- ²⁹⁸ Chain News (2020) Available at: <https://www.chainnews.com/articles/978379807784.htm> (accessed 12.5.2020)
- ²⁹⁹ 23 March 2020 Available at: <https://sh.sina.cn/news/2020-03-23/detail-iimxyqwa2571028.d.html?from=wap> (accessed 12.5.2020)
- ³⁰⁰ Bendibao March 12 2020 Available at: <http://sh.bendibao.com/tour/202033/218121.shtm> (accessed:13.5.2020)
- ³⁰¹ General administration of Sports China March 20 2020 Available at: <http://www.sport.gov.cn/n14471/n14480/n14517/c945613/content.html> and <http://www.sport.gov.cn/n14471/n14480/n14517/c945612/content.html> (accessed:13.5.2020)
- ³⁰² Chain News (2020) Available at: <https://www.chainnews.com/articles/978379807784.htm> (accessed 12.5.2020)
- ³⁰³ Shine (2020) Transport services accelerating to normal operation as health emergency response downgraded. Mar 28 2020. Available at: <https://www.shine.cn/news/metro/2003285261/> (accessed 18.04.2020)
- ³⁰⁴ Example - International church of Shanghai. Available at: <https://icshq.org/icshqorg/> (accessed: 13.5.20). Trinity Shanghai Available at: trinityshanghai.org (accessed: 12.5.20)
- ³⁰⁵ Shine (2020) Shanghai's GDP falls 6.7% during pandemic. April, 4, 2020. Available at: <https://www.shine.cn/biz/economy/2004206655/> (accessed 11.5.2020)
- ³⁰⁶ Sina News March 1 2020 Available at: <https://tech.sina.com.cn/roll/2020-03-01/doc-iimxyqvz6970534.shtml> (accessed: 15.3.20)
- ³⁰⁷ Shanghai Municipal Commission of Commerce February 28 2020 Available at: <http://www.sh.gov.cn/zxxxqk/20200228/0023-247825.html> (accessed:15.3.20)
- ³⁰⁸ People (2020) 26 March 2020 Available at: <http://sh.people.com.cn/n2/2020/0326/c350122-33906317.html> (accessed: 18.5.20)
- ³⁰⁹ Booloop (2020) Theme parks and museums are gradually reopening across China, as attractions temporarily shut down in the US and Europe amid the global outbreak of coronavirus. Available at: <https://blooloop.com/features/asian-attractions-coronavirus/> (accessed 5.5.20)
- ³¹⁰ Shine (2020) Shopping festival to boost city's economy. April, 23, 2020. Available at: <https://www.shine.cn/biz/economy/2004236869/> (accessed 11.5.2020)
- ³¹¹ Straits Times (2020) Disney takes \$1.98b hit from coronavirus, to reopen Shanghai Disneyland next week. May 6, 2020. Available at: <https://www.straitstimes.com/business/companies-markets/disney-takes-198b-hit-from-coronavirus-to-reopen-shanghai-disneyland-next> (accessed 6.5.2020)
- ³¹² Booloop (2020) Theme parks and museums are gradually reopening across China, as attractions temporarily shut down in the US and Europe amid the global outbreak of coronavirus. Available at: <https://blooloop.com/features/asian-attractions-coronavirus/> (accessed 5.5.20)
- ³¹³ Forbes (2020) Shanghai Disneyland Reopens Monday May 11 - "Sold Out Well In Advance". Available at: <https://www.forbes.com/sites/mikevorhaus/2020/05/09/shanghai-disneyland-reopens-monday-may-11-sold-out-well-in-advance/#3c6c08ec3e10> (accessed 11.5.2020)
- ³¹⁴ Chain News (2020) Available at: <https://www.chainnews.com/articles/978379807784.htm> (accessed 12.5.2020)
- ³¹⁵ Shanghai Government (2020) 复工复产复市指南 6.0 版发布 6 月 2 日起可恢复托育等线下培训 20 May 2020 Available at: <http://www.shanghai.gov.cn/nw2/nw2314/nw2315/nw4411/u21aw1445262.html> (accessed: 28.5.2020)
- ³¹⁶ Sina News (2020) 时隔 127 天，上汽·上海文化广场正式归来！30 May 2020 Available at: https://k.sina.cn/article_1737737970_6793c6f202000x15g.html?cre=wappage&mod=r&loc=3&r=9&rfunc=7&tj=none (accessed on: 3.06.2020)
- ³¹⁷ The Paper (2020) 今天起，九亭镇社区文化活动中心开放区域再扩大 3 June 2020 Available at: https://m.thepaper.cn/baijiahao_7673295 (accessed on: 4.06.2020)
- ³¹⁸ Xinhuanet (2020) Shanghai kicks off night festival to boost night economy. Available at: http://www.xinhuanet.com/english/2020-06/07/c_139119880.htm (accessed 8.6.2020)
- ³¹⁹ Shine (2020) New Bund pedestrian street markets boost nightlife economy 7 June. Available at: <https://www.shine.cn/news/metro/2006079726/> (accessed 8.6.2020)
- ³²⁰ CNA (2020) Students return to class in Shanghai and Beijing as COVID-19 lockdown eases. Apr, 27. Available at: <https://www.channelnewsasia.com/news/asia/china-students-covid-19-schools-open-shanghai-beijing-12679872> (accessed 6.5.2020)
- ³²¹ CAN (2020) COVID-19: New back-to-school realities as students return to classrooms in Shanghai. May 7, 2020. Available at: <https://www.channelnewsasia.com/news/asia/covid-19-coronavirus-china-shanghai-school-12712112> (accessed 11.5.2020)
- ³²² Shanghai Government (2020) 17 May 2020 Available at: <http://www.shanghai.gov.cn/nw2/nw2314/nw2315/nw4411/u21aw1445160.html> (accessed: 19.5.2020)
- ³²³ Shanghai Observer (2020) 复课日·闵行平阳小学低年级 587 人入学，37 人申请在家学习 02 June 2020 Available at: <https://export.shobserver.com/baijiahao/html/254953.html> (accessed on: 4.06.2020)
- ³²⁴ Shanghai Government (2020) 学校送“神兽”返校调适锦囊 重返课堂家校结合做好心理准备 Available at: <http://www.shanghai.gov.cn/nw2/nw2314/nw2315/nw4411/u21aw1445446.html> (accessed: 28.5.2020)
- ³²⁵ World Population Review (2020) Hong Kong Population 2020. March, 2020. Available at: <https://worldpopulationreview.com/countries/hong-kong-population/> (accessed 19.3.2020)

- ³²⁶ Centre for Health Protection, Department of Health (2020) Latest situation of cases of COVID-19. March 17, 2020. Available at: https://www.chp.gov.hk/files/pdf/local_situation_covid19_en.pdf (accessed 17.3.2020).
- ³²⁷ Worldometer (2020) Available at: <https://www.worldometers.info/coronavirus/#countries> (accessed 1.4.2020)
- ³²⁸ South China Morning Post (SCMP) (2020) Coronavirus: Hong Kong and Singapore seen as safe harbours by US, South Asian travellers. March 18, 2020. Available at: <https://www.scmp.com/week-asia/health-environment/article/3075816/coronavirus-hong-kong-and-singapore-seen-safe-harbours>. (accessed 19.03.2020)
- ³²⁹ CAN (2020) Commentary: Hong Kong will keep its chin up this COVID-19 outbreak and enjoy the small things. May 19, 2020. Available at: <https://www.channelnewsasia.com/news/commentary/coronavirus-covid-19-cases-infections-hong-kong-restrictions-12741642> (accessed 19.5.2020)
- ³³⁰ South China Morning Post (2020) Coronavirus: health experts suggest relaxing restrictions as city records one imported Covid-19 case. 27 May 2020. Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3086320/coronavirus-hong-kong-records-least-one-imported> (accessed on: 27.5.2020)
- ³³¹ South China Morning Post (2020) Coronavirus: Hong Kong goes week without any local cases of Covid-19, but source of Sha Tin cluster still unknown 11 June 2020 Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3088602/coronavirus-hong-kong-goes-week-without-any-local> (accessed on: 11 June 2020)
- ³³² Worldometer (2020) Available at: <https://www.worldometers.info/coronavirus/#countries> (accessed 1.4.2020)
- ³³³ South China Morning Post (2020) Coronavirus: Hong Kong Covid-19 testing and quarantine flaws blamed for new wave of infections 9 July 2020 Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3092407/coronavirus-hong-kong-covid-19-testing-and> (accessed on: 13.7.2020)
- ³³⁴ Google (2020) COVID-19 Community Mobility Reports. May 2020. Available at: <https://www.google.com/covid19/mobility/> (accessed 21.5.2020)
- ³³⁵ Hong Kong Government Press Release (2020): CE announces activation of Emergency Response Level in relation to novel coronavirus infection. January 26, 2020. Available at <https://www.info.gov.hk/gia/general/202001/26/P2020012600087.htm> (accessed 19.3.2020)
- ³³⁶ South China Morning Post (SCMP) (2020) Coronavirus: imported cases threaten Hong Kong's efforts to contain disease as 25 infections confirmed in one day. March 18, 2020. Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3075731/coronavirus-imported-cases-surge-eight-more-test>. (accessed 19.03.2020)
- ³³⁷ The Straits Times (2020) Coronavirus: HK to ban entry of most non-residents and sale of alcoholic drinks at F&B outlets. March 23, 2020. Available at: <https://www.straitstimes.com/asia/east-asia/coronavirus-hong-kong-to-ban-all-tourist-arrivals-weighs-suspension-of-alcohol-sales> (accessed 23.03.2020)
- ³³⁸ Hong Kong Government News (2020) Public services to be adjusted. March 23, 2020. Available at: https://www.news.gov.hk/eng/2020/03/20200321/20200321_195107_148.html?type=category&name=covid19 (accessed 23.03.2020)
- ³³⁹ The Straits Times (2020) Coronavirus: HK to ban entry of most non-residents and sale of alcoholic drinks at F&B outlets. March 23, 2020. Available at: <https://www.straitstimes.com/asia/east-asia/coronavirus-hong-kong-to-ban-all-tourist-arrivals-weighs-suspension-of-alcohol-sales> (accessed 23.03.2020)
- ³⁴⁰ SCMP (2020) Coronavirus: Hong Kong's private clinics set to launch Covid-19 testing, but infection risks, potential stigma has many in sector wary. March 9, 2020. Available at <https://www.scmp.com/news/hong-kong/health-environment/article/3074315/coronavirus-hong-kongs-private-clinics-now-able> (accessed 18.3.2020)
- ³⁴¹ CNA (2020) Commentary: Hong Kong will keep its chin up this COVID-19 outbreak and enjoy the small things. May 19, 2020. Available at: <https://www.channelnewsasia.com/news/commentary/coronavirus-covid-19-cases-infections-hong-kong-restrictions-12741642> (accessed 19.5.2020)
- ³⁴² SCMP (2020) Coronavirus: Hong Kong may shorten stays at quarantine centres to free up rooms as health care system comes under strain. March 31, 2020. Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3077756/coronavirus-hong-kong-confirms-32-new-covid-19> (accessed 1.4.2020)
- ³⁴³ South China Morning Post (2020) Coronavirus: Hong Kong's three-week streak of zero local infections ends, as authorities consider tightening rules on test exemptions. 5 July 2020 Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3091872/coronavirus-two-new-local-covid-19-cases-reported> (accessed on: 13.7.2020)
- ³⁴⁴ South China Morning Post (2020) Hong Kong battling third wave of coronavirus infections as city confirms 14 new cases 7 July 2020 Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3092174/coronavirus-third-wave-fears-escalate-hong-kong> (accessed on: 13.7.2020)
- ³⁴⁵ South China Morning Post (2020) Coronavirus: Hong Kong's local infections hit daily record high, triggering return to tighter social-distancing rules. 9 July 2020 Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3092459/coronavirus-least-15-more-covid-19-cases-detected> (accessed on: 13.7.2020)
- ³⁴⁶ South China Morning Post (2020) Coronavirus: Hong Kong Unveils most sweeping social distancing rules yet as 52 new cases emerge 14 July 2020 Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3092920/coronavirus-hong-kong-toughen-social-distancing> (accessed on: 14.7.2020)
- ³⁴⁷ ST (2020) Coronavirus: Hong Kong's leader Carrie Lam denies extended crowd ban is political move. May 19, 2020. Available at: <https://www.straitstimes.com/asia/east-asia/coronavirus-hong-kongs-leader-carrie-lam-denies-extended-crowd-ban-is-political-move> (accessed 19.5.2020)
- ³⁴⁸ SCMP (2020) Wider testing now essential after Hong Kong's latest coronavirus infections. May 14, 2020. Available at: <https://www.scmp.com/comment/opinion/article/3084284/wider-testing-now-essential-after-latest-covid-19-infections> (accessed 19.5.2020)
- ³⁴⁹ SCMP (2020) How the untold story of quarantine monitoring has taken Hong Kong closer to winning the Covid-19 fight. April 24, 2020. Available at: <https://www.scmp.com/comment/opinion/article/3081224/how-untold-story-quarantine-monitoring-has-taken-hong-kong-closer> (accessed 19.5.2020)
- ³⁵⁰ South China Morning Post (2020) Hong Kong eyes lowering costs of Covid-19 tests, but cross-border health certificate plan for mainland still in limbo. June 16, 2020. Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3089302/hong-kong-eyes-lowering-costs-covid-19-tests> (accessed: 17.6.2020)
- ³⁵¹ South China Morning Post (2020) Coronavirus: Hong Kong's three-week streak of zero local infections ends, as authorities consider tightening rules on test exemptions. 5 July 2020 Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3091872/coronavirus-two-new-local-covid-19-cases-reported> (accessed on: 13.7.2020)
- ³⁵² South China Morning Post (2020) Coronavirus: Hong Kong to require passengers from "High-risk" countries to test negative before flying as city records 38 new covid-19 cases 10 July 2020 Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3092675/coronavirus-hong-kong-require-passengers-high> (accessed on: 13.7.2020)

- ³⁵³ South China Morning Post (2020) Hong Kong battling third wave of coronavirus infections as city confirms 14 new cases 7 July 2020 Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3092174/coronavirus-third-wave-fears-escalate-hong-kong> (accessed on: 13.7.2020)
- ³⁵⁴ The Government of the Hong Kong Special Administrative Region (2020) Early testing and detection 9 July 2020 Available at: <https://www.coronavirus.gov.hk/eng/early-testing.html> (accessed on: 13.7.2020)
- ³⁵⁵ SCMP (2020) How the untold story of quarantine monitoring has taken Hong Kong closer to winning the Covid-19 fight. April 24, 2020. Available at: <https://www.scmp.com/comment/opinion/article/3081224/how-untold-story-quarantine-monitoring-has-taken-hong-kong-closer> (accessed 19.5.2020)
- ³⁵⁶ Hong Kong Government News (2020) Tech approach to home quarantine. March 16, 2020. Available at https://www.news.gov.hk/eng/2020/03/20200316/20200316_202554_111.html?type=category&name=wuhan&tl=t (accessed 18.3.2020)
- ³⁵⁷ South China Morning Post (2020) Coronavirus: cheap hotel rooms sought in Hong Kong to quarantine domestic helpers as thousands expected to arrive in coming months. June 16, 2020. Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3089173/coronavirus-cheap-hotel-rooms-sought-hong-kong> (accessed: 17.6.2020)
- ³⁵⁸ Vox (2020) How masks helped Hong Kong control the coronavirus. May 18, 2020. Available at: <https://www.vox.com/2020/5/18/21262273/coronavirus-hong-kong-masks-deaths-new-york> (accessed 19.5.2020)
- ³⁵⁹ YouGov (2020) Latest round-up of YouGov's coronavirus survey results.
- ³⁶⁰ The Straits Times (2020) Local coronavirus outbreak in Hong Kong sparks warnings after 9 infected 2 June 2020 Available at: <https://www.straitstimes.com/asia/east-asia/coronavirus-local-outbreak-in-hong-kong-sparks-warnings-after-9-infected#Echobox=1591070307> (accessed on: 3.06.2020)
- ³⁶¹ SCMP (2020) Coronavirus: no new cases of Covid-19 in Hong Kong as government gives entertainment venues go-ahead to reopen. Available at: <https://www.scmp.com/news/hong-kong/politics/article/3086043/coronavirus-more-hong-kong-businesses-reopen-city-eases> (accessed 27.5.2020)
- ³⁶² South China Morning Post (2020) Coronavirus: Hong Kong to allow public gatherings of up to 50 people and scrap patron limits on restaurants. June 16, 2020. Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3089215/coronavirus-hong-kong-let-groups-50-people-meet> (accessed: 17.6.2020)
- ³⁶³ SCMP (2020) Coronavirus: a day after rare Covid-19 death, Hong Kong records three imported cases on Sunday, health authorities say. June 21, 2020. Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3089967/coronavirus-day-after-rare-covid-19-death-hong> (accessed 22.6.2020)
- ³⁶⁴ South China Morning Post (2020) Coronavirus: Hong Kong cap on public gatherings extended, though word on macau-mainland travel bubble expected soon. 30 June 2020 Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3091163/coronavirus-hong-kong-social-distancing-rules> (accessed on: 30.6.2020)
- ³⁶⁵ CNA (2020) Hong Kong airport to resume limited transit services. May 26, 2020. Available at: <https://www.channelnewsasia.com/news/asia/hong-kong-airport-limited-transit-services-resume-covid-19-12769776> (accessed 27.5.2020)
- ³⁶⁶ South China Morning Post (2020) How the coronavirus crisis has left Hong Kong transit passengers stranded in the airport for days, weeks, months on end. 29 June 2020 Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3091088/how-coronavirus-crisis-has-left-hong-kong-transit> (accessed on: 30.6.2020)
- ³⁶⁷ South China Morning Post (2020) Coronavirus: Cross-border families urge Hong Kong government to include them in quarantine exemption scheme. June 16, 2020. Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3089301/coronavirus-cross-border-families-urge-hong-kong> (accessed: 17.6.2020)
- ³⁶⁸ South China Morning Post (2020) Coronavirus: Hong Kong to allow public gatherings of up to 50 people and scrap patron limits on restaurants. June 16, 2020. Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3089215/coronavirus-hong-kong-let-groups-50-people-meet> (accessed: 17.6.2020)
- ³⁶⁹ South China Morning Post (2020) Coronavirus: Hong Kong to allow public gatherings of up to 50 people and scrap patron limits on restaurants 16 June 2020 Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3089215/coronavirus-hong-kong-let-groups-50-people-meet> (accessed on: 23.6.2020)
- ³⁷⁰ CNA (2020) Commentary: Hong Kong will keep its chin up this COVID-19 outbreak and enjoy the small things. May 19, 2020. Available at: <https://www.channelnewsasia.com/news/commentary/coronavirus-covid-19-cases-infections-hong-kong-restrictions-12741642> (accessed 19.5.2020)
- ³⁷¹ SCMP (2020) Coronavirus: no new cases of Covid-19 in Hong Kong as government gives entertainment venues go-ahead to reopen. Available at: <https://www.scmp.com/news/hong-kong/politics/article/3086043/coronavirus-more-hong-kong-businesses-reopen-city-eases> (accessed 27.5.2020)
- ³⁷² SCMP (2020) Coronavirus: no new cases of Covid-19 in Hong Kong as government gives entertainment venues go-ahead to reopen. Available at: <https://www.scmp.com/news/hong-kong/politics/article/3086043/coronavirus-more-hong-kong-businesses-reopen-city-eases> (accessed 27.5.2020)
- ³⁷³ South China Morning Post (2020) Coronavirus: Hong Kong to allow public gatherings of up to 50 people and scrap patron limits on restaurants. June 16, 2020. Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3089215/coronavirus-hong-kong-let-groups-50-people-meet> (accessed: 17.6.2020)
- ³⁷⁴ Reuters (2020) Hong Kong's Disneyland to reopen on June 18 after coronavirus break. June 15, 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-hongkong-disneylan-idUSKBN23M0BQ> (accessed 18.6.2020)
- ³⁷⁵ Usher Institute, University of Edinburgh (2020) SlidePack from presentation. Public health measures to slow the community spread of COVID-19 in Hong Kong. Ben Cowling, Co-Director WHO Collaborating Centre for Infectious Disease Epidemiology and Control, School of Public Health, The University of Hong Kong, Hong Kong. 17 April 2020. Available at: https://www.ed.ac.uk/files/atoms/files/20200417_ui_covid19_webinar_hong_kong_ben_cowling_smaller.pdf (accessed 20.5.2020)
- ³⁷⁶ The Straits Times (2020) Hong Kong relaxes more social distancing measures, as schools prep for reopening. 26 May 2020. Available at: <https://www.straitstimes.com/asia/east-asia/hong-kong-to-reopen-karaoke-parlours-resume-airport-transits> (accessed on: 27.5.2020)
- ³⁷⁷ South China Morning Post (2020) Coronavirus: some Hong Kong pupils return to school after four months of Covid-19 closures. 20 May 2020. Available at: <https://www.scmp.com/news/hong-kong/education/article/3085210/coronavirus-some-pupils-finally-return-school-hong-kong> (accessed on: 27.5.2020)
- ³⁷⁸ South China Morning Post (2020) Hong Kong pupils return to class with protests and coronavirus on their minds. 27 May 2020. Available at: <https://www.scmp.com/news/hong-kong/education/article/3086248/hong-kong-pupils-return-class-protests-and-coronavirus> (accessed on: 27.5.2020)

³⁷⁹ South China Morning Post (2020) Hong Kong school heads call for early opening of border checkpoints to ease commute woes of mainland students. June 15, 2020. Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3089061/coronavirus-nerve-and-excitement-abound-cross> (accessed: 17.6.2020)

³⁸⁰ South China Morning Post (2020) Hong Kong classes that shifted to web amid Covid-19 left trail of complaints: consumer watchdog. June 15, 2020. Available at: <https://www.scmp.com/news/hong-kong/education/article/3089146/hong-kong-classes-shifted-web-amid-covid-19-left-trail> (accessed: 17.6.2020)

³⁸¹ South China Morning Post (2020) Coronavirus: Hong Kong reviewing Covid-19 strategy, some classes suspended amid fresh threat. 7 July 2020 Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3092134/coronavirus-six-more-covid-19-cases-hong-kong> (accessed on: 13.7.2020)

³⁸² South China Morning Post (2020) Hong Kong Third wave: school heads prepared for half-day classes, social distancing to stay in place amid Covid-19 surge. 10 July 2020 Available at: <https://www.scmp.com/news/hong-kong/politics/article/3092721/hong-kong-third-wave-school-heads-prepared-half-day-classes> (accessed on: 13.7.2020)

³⁸³ The Lancet (2020) Are high performing health systems resilient against the COVID-19 pandemic? March 06, 2020. Available at: [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)30551-1/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30551-1/fulltext). (accessed 19.03.2020)

³⁸⁴ CNBC (2020) Hong Kong residents are least optimistic in 25 years, poll shows. March 20, 2019. Available at <https://www.cnbc.com/2019/03/20/hong-kong-residents-are-least-optimistic-in-25-years-poll-shows.html> (accessed 19.3.2020)

³⁸⁵ Time (2020): What We Can Learn From Singapore, Taiwan and Hong Kong About Handling Coronavirus. Available at <https://time.com/5802293/coronavirus-covid19-singapore-hong-kong-taiwan/> (accessed 19.3.2020)

³⁸⁶ The Straits Times (2020): Coronavirus: Singaporeans out in force over the weekend despite social distancing measures. March 14, 2020. Available at <https://www.straitstimes.com/singapore/health/coronavirus-singaporeans-out-in-force-over-the-weekend-despite-social-distancing> (accessed 19.3.2020)

³⁸⁷ BBC (2020) Hong Kong ramps up security ahead of controversial bill reading. 27 May 2020. Available at: <https://www.bbc.com/news/world-asia-china-52816115> (accessed 27.5.2020)

³⁸⁸ CAN (2020) Commentary: Hong Kong will keep its chin up this COVID-19 outbreak and enjoy the small things. May 19, 2020. Available at: <https://www.channelnewsasia.com/news/commentary/coronavirus-covid-19-cases-infections-hong-kong-restrictions-12741642> (accessed 19.5.2020)

³⁸⁹ ST (2020) Coronavirus: Hong Kong's leader Carrie Lam denies extended crowd ban is political move. May 19, 2020. Available at: <https://www.straitstimes.com/asia/east-asia/coronavirus-hong-kongs-leader-carrie-lam-denies-extended-crowd-ban-is-political-move> (accessed 19.5.2020)

³⁹⁰ China Daily Hong Kong (2020) Anthem bill: Over 300 arrested in renewed violence in HK. 27 May 2020. Available at: <http://www.chinadailyhk.com/article/131831#Over-300-arrested-as-police-guard-LegCo-debating-anthem-bill> (accessed on: 27.5.2020)

³⁹¹ YouGov (2020) Latest round-up of YouGov's coronavirus survey results.

³⁹² IMF (2020) World Economic Outlook, April 2020. Available at: <https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020> (accessed 17.4.2020)

³⁹³ HK Govt (2020) Fight the Virus Together: Support Hong Kong Together. Available at: <https://www.coronavirus.gov.hk/pdf/fund/CE-Measure-12-eng.pdf> (accessed 19.5.2020)

³⁹⁴ South China Morning Post (2020) Coronavirus: Hong Kong's jobless rate rises to 5.2 percent, highest in more than a decade, as pandemic hammers economy. 19 May 2020 Available at: <https://www.scmp.com/news/hong-kong/politics/article/3084984/coronavirus-labour-minister-expects-more-90-cent-hong-kong>

³⁹⁵ South China Morning Post (2020) Hong Kong unemployment hits 15-year high, with 5.9 per cent out of work. June 16, 2020. Available at: <https://www.scmp.com/news/hong-kong/politics/article/3089230/hong-kong-unemployment-continues-rise-slower-rate-carrie> (accessed: 17.6.2020)

³⁹⁶ South China Morning Post (2020) Hong Kong retail shrinks by a third in May but rate of decline improves as coronavirus crisis stabilises. 30 June 2020 Available at: <https://www.scmp.com/news/hong-kong/hong-kong-economy/article/3091262/hong-kong-retail-shrinks-third-may-rate-decline> (accessed on: 30.6.2020)

³⁹⁷ South China Morning Post (2020) Hong Kong exports continue to slump, falling 7.4 percent in May, as pandemic and China-US ties hammer demand. 29 June 2020 Available at: <https://www.scmp.com/news/hong-kong/hong-kong-economy/article/3091053/hong-kong-exports-continue-slump-falling-74-cent> (accessed on: 30.6.2020)

³⁹⁸ South China Morning Post (2020) No more cross-border commuting: as coronavirus pandemic brings Hongkongers back from mainland, some end up homeless, jobless, needing help. May 23, 2020. Available at: <https://www.scmp.com/news/hong-kong/society/article/3085559/no-more-cross-border-commuting-coronavirus-pandemic-brings> (accessed: 17.6.2020)

³⁹⁹ Channel News Asia (2020) Hong Kong government to lead US\$5 billion COVID-19 rescue package for Cathay Pacific 9 June 2020 Available at: <https://www.channelnewsasia.com/news/business/hong-kong-government-cathay-pacific-rescue-package-12818602> (accessed on 11.6.2020)

⁴⁰⁰ Usher Institute, University of Edinburgh (2020) SlidePack from presentation. Public health measures to slow the community spread of COVID-19 in Hong Kong. Ben Cowling, Co-Director WHO Collaborating Centre for Infectious Disease Epidemiology and Control, School of Public Health, The University of Hong Kong, Hong Kong. 17 April 2020. Available at: https://www.ed.ac.uk/files/atoms/files/20200417_ui_covid19_webinar_hong_kong_ben_cowling_smaller.pdf (accessed 20.5.2020)

⁴⁰¹ SCMP (2020) To soften the mental health impact of coronavirus, Hong Kong must take better care of the vulnerable. Available at: <https://www.scmp.com/comment/opinion/article/3083457/soften-mental-health-impact-coronavirus-hong-kong-must-take-better> (accessed 27.5.2020)

⁴⁰² South China Morning Post (2020) Coronavirus: Hong Kong's care homes keep Covid-19 at bay, but 'loneliness epidemic' strikes elderly residents as family members keep away. June 13, 2020. Available at: <https://www.scmp.com/news/hong-kong/society/article/3088775/coronavirus-hong-kongs-care-homes-keep-covid-19-bay> (accessed: 17.6.2020)

⁴⁰³ South China Morning Post (2020) So hard to get Hong Kong's 'hidden youth' to leave home, now pandemic drives them into isolation again. May 30, 2020. Available at: <https://www.scmp.com/news/hong-kong/society/article/3086617/so-hard-get-hong-kongs-hidden-youth-leave-home-now-pandemic> (accessed: 17.6.2020)

⁴⁰⁴ South China Morning Post (2020) Coronavirus: quarter of Hongkongers on regular care duties for loved ones during pandemic, with many feeling out of their depth, research reveals. June 15, 2020. Available at: <https://www.scmp.com/news/hong-kong/health-environment/article/3088998/coronavirus-quarter-hongkongers-regular-care> (accessed: 17.6.2020)

- ⁴⁰⁵ South China Morning Post (2020) Experts blame protests, pandemic for spike in complaints of cyberbullying, online harassment 11 July 2020 Available at: <https://www.scmp.com/news/hong-kong/society/article/3092666/experts-blame-protests-pandemic-spike-complaints> (accessed on: 13.7.2020)
- ⁴⁰⁶ Usher Institute, University of Edinburgh (2020) Dr Pham Quang Thai, Vice Head of Epidemiology Department, National Institute of Hygiene and Epidemiology NIHE, Vietnam. Webinar 8: Addressing COVID-19 in Vietnam: Progress to date and future priorities. YouTube Seminar. Available at: <https://www.youtube.com/watch?v=wibA34w8Xyo&feature=youtu.be> (Accessed 19.5.2020) Slides available at: https://www.ed.ac.uk/files/atoms/files/usher_institute_covid19_webinar_addressing_covid-19_in_vietnam-progress_to_date_and_future_priorities_dr_thai.pdf (accessed 19.5.2020)
- ⁴⁰⁷ Thai PQ et al (2020) The first 100 days of SARS-CoV-2 control in Vietnam. PrePrint. Available at: <https://www.medrxiv.org/content/10.1101/2020.05.12.20099242v1.full.pdf> (accessed 20.5.2020)
- ⁴⁰⁸ Xinhua (2020) Vietnam's COVID-19 cases increase to 326. May 25, 2020. Available at: http://www.xinhuanet.com/english/2020-05/25/c_139086702.htm (accessed 27.5.2020)
- ⁴⁰⁹ VN Express (2020) Repatriate from Kuwait latest Covid-19 case in Vietnam. June 17, 2020. Available at: <https://e.vnexpress.net/news/news/repatriate-from-kuwait-latest-covid-19-case-in-vietnam-4113030.html> (accessed: 17.6.2020)
- ⁴¹⁰ Vietnam Insider (2020) Vietnam marks 64th straight day without Covid-19 community infection 19 June 2020 Available at: <https://vietnaminsider.vn/vietnam-marks-64th-straight-day-without-covid-19-community-infection/> (accessed on: 23.6.2020)
- ⁴¹¹ Worldometer (2020) Available at: <https://www.worldometers.info/coronavirus/#countries> (accessed 1.4.2020)
- ⁴¹² Google (2020) COVID-19 Community Mobility Reports. May 2020. Available at: <https://www.google.com/covid19/mobility/> (accessed 21.5.2020)
- ⁴¹³ VN Express (2020) Vietnamese have great confidence in Covid-19 recovery: survey. 23 May 2020. Available at: <https://e.vnexpress.net/news/news/vietnamese-have-great-confidence-in-covid-19-recovery-survey-4103560.html> (accessed on: 27.5.2020)
- ⁴¹⁴ Viet-Phuong La et al (2020) Policy Response, Social Media and Science Journalism for the Sustainability of the Public Health System Amid the COVID-19 Outbreak: The Vietnam Lessons. Sustainability 2020, 12(7), 2931; Available at: <https://doi.org/10.3390/su12072931> (accessed 20.5.2020)
- ⁴¹⁵ YouTube (2020) Jealous Coronavirus. Vietnamese Health Dept. Available at: <https://www.youtube.com/watch?v=V9YirNgAzXI&feature=youtu.be> (accessed 8.6.2020)
- ⁴¹⁶ World Economic Forum (2020) Here are 4 ways Viet Nam has managed to control COVID-19. May 29, 2020. Available at: <https://www.weforum.org/agenda/2020/05/vietnam-control-covid-19/> (accessed 8.6.2020)
- ⁴¹⁷ UCA (2020) Vietnam launches lockdown to fight Covid-19. March 31, 2020. Available at: <https://www.ucanews.com/news/vietnam-launches-lockdown-to-fight-covid-19/87594> (accessed 22.5.2020)
- ⁴¹⁸ Vietnam Briefing (2020) Vietnam Business Operations and the Coronavirus: Updates. May 19, 2020. Available at: <https://www.vietnam-briefing.com/news/vietnam-business-operations-and-the-coronavirus-updates.html/> (accessed 20.5.2020)
- ⁴¹⁹ Thai PQ et al (2020) The first 100 days of SARS-CoV-2 control in Vietnam. PrePrint. Available at: <https://www.medrxiv.org/content/10.1101/2020.05.12.20099242v1.full.pdf> (accessed 20.5.2020)
- ⁴²⁰ World Economic Forum (2020) Here are 4 ways Viet Nam has managed to control COVID-19. May 29, 2020. Available at: <https://www.weforum.org/agenda/2020/05/vietnam-control-covid-19/> (accessed 8.6.2020)
- ⁴²¹ VN Express (2020) HCMC to screen all flu patients for Covid-19. 22 May 2020. Available at: <https://e.vnexpress.net/news/news/hcmc-to-screen-all-flu-patients-for-covid-19-4103666.html> (accessed on: 27.5.2020)
- ⁴²² World Economic Forum (2020) Here are 4 ways Viet Nam has managed to control COVID-19. May 29, 2020. Available at: <https://www.weforum.org/agenda/2020/05/vietnam-control-covid-19/> (accessed 8.6.2020)
- ⁴²³ Viet-Phuong La et al (2020) Policy Response, Social Media and Science Journalism for the Sustainability of the Public Health System Amid the COVID-19 Outbreak: The Vietnam Lessons. Sustainability 2020, 12(7), 2931; Available at: <https://doi.org/10.3390/su12072931> (accessed 20.5.2020)
- ⁴²⁴ YouGov (2020) Latest round-up of YouGov's coronavirus survey results.
- ⁴²⁵ The ASEAN Post (2020) Less Crime In A Pandemic?. June 12, 2020. Available at: <https://theaseanpost.com/article/less-crime-pandemic> (accessed: 17.6.2020)
- ⁴²⁶ Vietnam Briefing (2020) Vietnam Business Operations and the Coronavirus: Updates. May 19, 2020. Available at: <https://www.vietnam-briefing.com/news/vietnam-business-operations-and-the-coronavirus-updates.html/> (accessed 20.5.2020)
- ⁴²⁷ Vietnam Briefing (2020) Vietnam Business Operations and the Coronavirus: Updates. May 19, 2020. Available at: <https://www.vietnam-briefing.com/news/vietnam-business-operations-and-the-coronavirus-updates.html/> (accessed 20.5.2020)
- ⁴²⁸ Vietnam Briefing (2020) Vietnam Business Operations and the Coronavirus: Updates. May 19, 2020. Available at: <https://www.vietnam-briefing.com/news/vietnam-business-operations-and-the-coronavirus-updates.html/> (accessed 20.5.2020)
- ⁴²⁹ International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.internationalsos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)
- ⁴³⁰ Channel News Asia (2020) Covid-19: Vietnam plans to resume flights to some virus-free countries 9 June 2020 Available at: <https://www.channelnewsasia.com/news/asia/vietnam-resume-flights-covid-19-free-countries-12818806> (accessed on: 11.6.2020)
- ⁴³¹ VN Express (2020) Vietnam grants special entry for 331 Chinese workers. June 15, 2020. Available at: <https://e.vnexpress.net/news/news/vietnam-grants-special-entry-for-331-chinese-workers-4116047.html> (accessed: 17.6.2020)
- ⁴³² Vietnam Insider (2020) Travel from Japan to Vietnam will partially resume this week 23 June 2020 Available at: <https://vietnaminsider.vn/travel-from-japan-to-vietnam-will-partially-resume-this-week/> (accessed on: 23.6.2020)
- ⁴³³ VN Express International (2020) Vietnam set to resume flights to China 13 July 2020 Available at: <https://e.vnexpress.net/news/news/vietnam-set-to-resume-flights-to-china-4129760.html> (accessed on: 14.7.2020)
- ⁴³⁴ Vietnam Briefing (2020) Vietnam Business Operations and the Coronavirus: Updates. May 19, 2020. Available at: <https://www.vietnam-briefing.com/news/vietnam-business-operations-and-the-coronavirus-updates.html/> (accessed 20.5.2020)
- ⁴³⁵ Vietnam Briefing (2020) Vietnam Business Operations and the Coronavirus: Updates. May 19, 2020. Available at: <https://www.vietnam-briefing.com/news/vietnam-business-operations-and-the-coronavirus-updates.html/> (accessed 20.5.2020)
- ⁴³⁶ VN Express (2020) Vietnam to resume e-visa issuance to 80 countries. 27 May 2020. Available at: <https://e.vnexpress.net/news/news/vietnam-to-resume-e-visa-issuance-in-july-4105848.html> (accessed on: 27.5.2020)
- ⁴³⁷ The Straits Times (2020) Bargain holidays for Vietnamese as focus turns to domestic tourism. 25 May 2020. Available at: <https://www.straitstimes.com/asia/se-asia/bargain-holidays-for-vietnamese-as-focus-turns-to-domestic-tourism> (accessed on: 27.5.2020)

- ⁴³⁸ Channel News Asia (2020) Vietnam reopens kindergartens, primary schools after easing COVID-19 curbs. 11 May 2020. Available at: <https://www.channelnewsasia.com/news/asia/covid-19-vietnam-reopens-schools-after-easing-curbs-12721158> (accessed on: 27.5.2020)
- ⁴³⁹ World Economic Forum (2020) Here are 4 ways Vietnam has managed to control COVID-19 29 May 2020 Available at: <https://www.weforum.org/agenda/2020/05/vietnam-control-covid-19/> (accessed on: 11.6.2020)
- ⁴⁴⁰ CNA (2020) COVID-19: Vietnam PM warns of economic calamity at ASEAN summit. June 26, 2020. <https://www.channelnewsasia.com/news/asia/covid-19-vietnam-pm-warns-economic-calamity-asean-summit-12872750> (accessed 29.6.2020)
- ⁴⁴¹ Viet-Phuong La et al (2020) Policy Response, Social Media and Science Journalism for the Sustainability of the Public Health System Amid the COVID-19 Outbreak: The Vietnam Lessons. Sustainability 2020, 12(7), 2931; Available at: <https://doi.org/10.3390/su12072931> (accessed 20.5.2020)
- ⁴⁴² YouGov (2020) Latest round-up of YouGov's coronavirus survey results.
- ⁴⁴³ Vietnam Briefing (2020) Vietnam Business Operations and the Coronavirus: Updates. May 19, 2020. Available at: <https://www.vietnam-briefing.com/news/vietnam-business-operations-and-the-coronavirus-updates.html/> (accessed 20.5.2020)
- ⁴⁴⁴ Viet-Phuong La et al (2020) Policy Response, Social Media and Science Journalism for the Sustainability of the Public Health System Amid the COVID-19 Outbreak: The Vietnam Lessons. Sustainability 2020, 12(7), 2931; Available at: <https://doi.org/10.3390/su12072931> (accessed 20.5.2020)
- ⁴⁴⁵ The Straits Times (2020) Vietnam plans \$970m tax cut for small businesses amid coronavirus pandemic. 25 May 2020. Available at: <https://www.straitstimes.com/business/economy/vietnam-plans-970m-tax-cut-for-small-businesses-amid-coronavirus-pandemic> (accessed on: 27.5.2020)
- ⁴⁴⁶ NhanDan (2020) Over 5 million jobs in Vietnam hurt by coronavirus outbreak 4 June 2020 Available at: <https://en.nhandan.org.vn/business/item/8733602-over-5-million-jobs-in-vietnam-hurt-by-coronavirus-outbreak.html> (accessed on: 4.06.2020)
- ⁴⁴⁷ South China Morning Post (2020) Life under lockdown: tourist street in Vietnam hit hard by shutdown to stop Covid-19 30 June 2020 Available at: <https://www.scmp.com/video/scmp-films/3091162/life-under-lockdown-tourist-street-vietnam-hit-hard-shutdown-stop-covid-19> (accessed on: 30.6.2020)
- ⁴⁴⁸ Bangkok Post (2020) Virus-free Vietnam still bars foreign tourists 25 June 2020 Available at: <https://www.bangkokpost.com/world/1940948/virus-free-vietnam-still-bars-foreign-tourists> (accessed on: 30.6.2020)
- ⁴⁴⁹ Vietnam Insider (2020) Pouyuen Vietnam lays off nearly 3000 workers due to Covid-19 impacts 22 June 2020 Available at: <https://vietnaminsider.vn/pouyuen-vietnam-lays-off-nearly-3000-workers-due-to-covid-19-impacts/> (accessed on 23.6.2020)
- ⁴⁵⁰ BBC (2020) Entrepreneur's 'free rice ATMs' for Vietnam's poor. June 16, 2020. Available at: <https://www.bbc.com/news/business-53045955> (accessed: 17.6.2020)
- ⁴⁵¹ World Economic Forum (2020) Here are 4 ways Viet Nam has managed to control COVID-19. May 29, 2020. Available at: <https://www.weforum.org/agenda/2020/05/vietnam-control-covid-19/> (accessed 8.6.2020)
- ⁴⁵² Worldometer (2020) Available at: <https://www.worldometers.info/coronavirus/#countries> (accessed 1.4.2020)
- ⁴⁵³ KCDC (2020) Weekly report on the COVID-19 situation in the Republic of Korea (As of May 2, 2020). Available at: https://www.cdc.go.kr/board/board.es?mid=a30501000000&bid=0031&list_no=367167&act=view (accessed 12.5.2020)
- ⁴⁵⁴ Korea JoongAng Daily (2020) New virus infections emerge in Gyeonggi military unit. 10 Jun 2020. Available at: <https://koreajoongangdaily.joins.com/2020/06/10/national/socialAffairs/coronavirus-covid19-kcdc/20200610190200166.html> (accessed 11.6.2020)
- ⁴⁵⁵ Korea JoongAng Daily (2020) Health care company cluster grows to 29 patients. 5 Jun 2020. Available at: <https://koreajoongangdaily.joins.com/2020/06/05/national/socialAffairs/seoul-covid-gwanak/20200605162800202.html> (accessed 11.6.2020)
- ⁴⁵⁶ Korea JoongAng Daily (2020) Covid-19 infections top 50 for second straight day. 7 Jun 2020. Available at: <https://koreajoongangdaily.joins.com/2020/06/07/national/socialAffairs/coronavirus-covid19-KCDC/20200607181100203.html> (accessed 11.6.2020)
- ⁴⁵⁷ Korea JoongAng Daily (2020) Cluster of 9 breaks out in Seoul's Chinatown. 9 Jun 2020. Available at: <https://koreajoongangdaily.joins.com/2020/06/09/national/socialAffairs/guro-garibongdong-chinese/20200609182600163.html> (accessed 11.6.2020)
- ⁴⁵⁸ The Diplomat (2020) COVID-19 Resurgence Threatens South Korea's Success Story. June 12, 2020. Available at: <https://thediplomat.com/2020/06/covid-19-resurgence-threatens-south-koreas-success-story/> (accessed 12.6.2020)
- ⁴⁵⁹ Straits Time (2020) South Korea says for first time it is battling 'second wave' of coronavirus 22 June 2020 Available at: <https://www.straitstimes.com/asia/east-asia/south-korea-says-for-first-time-it-is-battling-second-wave-of-coronavirus> (accessed on: 23.6.2020)
- ⁴⁶⁰ Worldometer (2020) South Korea Coronavirus Cases. April 18 2020. Available at: <https://www.worldometers.info/coronavirus/country/south-korea/> (accessed 18.4.20)
- ⁴⁶¹ Straits Times (2020) South Korea scrambles to contain new coronavirus outbreak threatening Seoul. May 11, 2020. Available at: <https://www.straitstimes.com/asia/east-asia/south-korea-scrambles-to-contain-new-coronavirus-outbreak-threatening-seoul> (accessed 11.5.2020)
- ⁴⁶² Korea JoongAng Daily (2020) Untraceable virus infections are on the rise, officials warn. June 15, 2020. Available at: <https://koreajoongangdaily.joins.com/2020/06/15/national/socialAffairs/virus-lotte-songpa/20200615192209098.html> (accessed: 16.6.2020)
- ⁴⁶³ Guardian (2020) New Covid-19 clusters across world spark fear of second wave. June 27, 2020. Available at: <https://www.theguardian.com/world/2020/jun/27/new-covid-19-clusters-across-world-spark-fear-of-second-wave> (accessed 29.6.2020)
- ⁴⁶⁴ Google (2020) COVID-19 Community Mobility Reports. May 2020. Available at: <https://www.google.com/covid19/mobility/> (accessed 21.5.2020)
- ⁴⁶⁵ BBC (2020) Coronavirus: South Korea 'emergency' measures as infections increase. February 21 2020. Available at: <https://www.bbc.com/news/world-asia-51582186> (accessed 18.4.20)
- ⁴⁶⁶ The New York Times (2020) In Coronavirus Crisis, Korean City Tries Openness, a Contrast to China. April 10 2020. Available at: <https://www.nytimes.com/2020/02/25/world/asia/daegu-south-korea-coronavirus.html> (accessed 18.4.20)
- ⁴⁶⁷ NPR (2020) How A South Korean City Is Changing Tactics To Tamp Down Its COVID-19 Surge. March 10 2020. <https://www.thetimes.co.uk/article/daegu-in-lockdown-as-coronavirus-outbreak-traced-to-sective-cult-706b25str> (accessed 18.4.20)

⁴⁶⁸ The Straits Times (2020) Back to school next week for South Korea - with online classes. March 31 2020. Available at: <https://www.straitstimes.com/asia/east-asia/back-to-school-next-week-for-south-korea-with-online-classes> (accessed 18.4.20)

⁴⁶⁹ The Straits Times (2020) Back to school next week for South Korea - with online classes. March 31 2020. Available at: <https://www.straitstimes.com/asia/east-asia/back-to-school-next-week-for-south-korea-with-online-classes> (accessed 18.4.20)

⁴⁷⁰ TBS News (2020). Govt Extends Social Distancing Until May 5, But Relaxes Some Rules. April 20, 2020. Available at: http://tbs.seoul.kr/eFm/newsView.do?typ_800=N&idx_800=2391631&seq_800= (accessed 20.04.2020)

⁴⁷¹ Financial Times (2020) Asia struggles to find coronavirus exit strategies. April 10 2020. Available at: <https://www.ft.com/content/04e9c5fe-52b1-4eb8-bf9c-793d71a0524d> (accessed 18.4.20)

⁴⁷² Korea JoongAng Daily (2020) Korea worries about a second wave for virus in Seoul. June 14, 2020. Available at: <https://koreajoongangdaily.joins.com/2020/06/14/national/socialAffairs/second-wave-seoul-virus/20200614183700328.html> (accessed: 16.6.2020)

⁴⁷³ Korea JoongAng Daily (2020) Tougher social distancing in capital area to remain in place indefinitely. June 12, 2020. Available at: <https://koreajoongangdaily.joins.com/2020/06/12/national/socialAffairs/COVID19-social-distancing-coronavirus/20200612154700426.html> (accessed: 16.6.2020)

⁴⁷⁴ China Briefing (2020) China's Travel Restrictions due to COVID-19: An Explainer. May 8, 2020. Available at: <https://www.china-briefing.com/news/chinas-travel-restrictions-due-to-covid-19-an-explainer/> (accessed 11.5.2020)

⁴⁷⁵ Forbes (2020) 6-Year-Old Tests Positive For Coronavirus, Complicating South Korea's School Reopening Plans. May 25, 2020. Available at: <https://www.forbes.com/sites/tommybeer/2020/05/25/6-year-old-tests-positive-for-coronavirus-complicating-south-koreas-school-reopening-plans/#678a6bc16f63> (Accessed 27.5.2020)

⁴⁷⁶ TBS News (2020). Govt Extends Social Distancing Until May 5, But Relaxes Some Rules. April 20, 2020. Available at: http://tbs.seoul.kr/eFm/newsView.do?typ_800=N&idx_800=2391631&seq_800= (accessed 20.04.2020)

⁴⁷⁷ Straits Times (2020) South Korea to reopen schools from May 13 as Covid-19 outbreak tapers off. May 4, 2020. Available at: <https://www.straitstimes.com/asia/east-asia/south-korea-to-reopen-schools-from-may-13-as-covid-19-outbreak-tapers-off> (accessed 6.5.2020)

⁴⁷⁸ Reuters (2020) Special Report: Italy and South Korea virus outbreaks reveal disparity in deaths and tactics. March 12, 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-response-specialre/italy-and-south-korea-virus-outbreaks-reveal-disparity-in-deaths-and-tactics-idUSKBN20Z27P> (accessed 14.3.2020)

⁴⁷⁹ South China Morning Post (2020) South Korea's coronavirus response is the opposite of China and Italy – and it's working. March 14 2020. Available at: <https://www.scmp.com/week-asia/health-environment/article/3075164/south-koreas-coronavirus-response-opposite-china-and> (accessed 18.4.20)

⁴⁸⁰ Central Disaster Management Headquarters (2020) Frequently Asked Questions Available at: http://ncov.mohw.go.kr/en/faqBoardList.do?brdId=13&brdGubun=131&dataGubun=&ncvContSeq=&contSeq=&board_id= (accessed on: 13.7.2020)

⁴⁸¹ The Korea Times (2020) Korea's innovative drive-through, walk-through testing methods highlighted amid COVID-19 9 July 2020 Available at: https://www.koreatimes.co.kr/www/nation/2020/07/119_292219.html (accessed on: 13.7.2020)

⁴⁸² Korea JoongAng Daily (2020) Itaewon cluster under control but officials warn of silent transmission. May 18, 2020. Available at: <https://koreajoongangdaily.joins.com/2020/05/18/socialAffairs/Covid19-coronavirus-cluster/20200518182000274.html> (accessed 20.5.2020)

⁴⁸³ Korea JoongAng Daily (2020) Clusters linked to Itaewon, Samsung Medical Center grow. 24 May 2020. Available at: <https://koreajoongangdaily.joins.com/2020/05/24/socialAffairs/Covid19-virus-coronavirus/20200524184300221.html> (accessed on: 28.5.2020)

⁴⁸⁴ Korea JoongAng Daily (2020) QR code check-ins expand to bars, clubs nationwide. 10 Jun 2020. Available at: <https://koreajoongangdaily.joins.com/2020/06/10/national/socialAffairs/QR-code-entry-log-entertainment-facility/20200610173100090.html> (accessed 11.6.20)

⁴⁸⁵ Korea JoongAng Daily (2020) Gov't pushes for global recognition of 18 'K-quarantine' measures. June 11, 2020. Available at: <https://koreajoongangdaily.joins.com/2020/06/11/national/socialAffairs/iso-covid-kquarantine/20200611185600184.html> (accessed: 16.6.2020)

⁴⁸⁶ Reuters (2020) South Korea warns of deportation, jail for quarantine violators. March 26, 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-southkorea-cases/south-korea-warns-of-deportation-jail-for-quarantine-violators-idUSKBN21D06C> (accessed 20.04.2020)

⁴⁸⁷ Times (2020) How South Korea stopped coronavirus in its tracks. March 24, 2020. available at: <https://www.thetimes.co.uk/article/how-south-korea-stopped-coronavirus-in-its-tracks-jxbnvxw9q> (accessed 25.3.2020)

⁴⁸⁸ KCDC (2020) Findings from Investigation and analysis of re-positive cases. May 19, 2020. Available at: <https://www.cdc.go.kr/board/board.es?mid=a30402000000&bid=0030> (accessed 20.5.2020)

⁴⁸⁹ The Korea Times (2020) Gov't eases standard for releasing virus patients 25 June 2020 Available at: https://www.koreatimes.co.kr/www/nation/2020/07/119_291838.html (accessed on: 1.7.2020)

⁴⁹⁰ TBS News (2020). Govt Extends Social Distancing Until May 5, But Relaxes Some Rules. April 20, 2020. Available at: http://tbs.seoul.kr/eFm/newsView.do?typ_800=N&idx_800=2391631&seq_800= (accessed 20.04.2020)

⁴⁹¹ BBC (2020) Coronavirus in South Korea: How 'trace, test and treat' may be saving lives
By Bicker L. BBC News, Seoul. March 12, 2020. Available at: <https://www.bbc.com/news/world-asia-51836898> (accessed 14.3.2020)

⁴⁹² Korea JoongAng Daily (2020) Old people warned to stay out of airless rooms. June 11, 2020. Available at: <https://koreajoongangdaily.joins.com/2020/06/11/national/socialAffairs/lotte-world-covid-cluster/20200611184800310.html> (accessed: 16.6.2020)

⁴⁹³ UITP (2020) Guardians of mobility: from the front lines in Seoul, South Korea. March 31, 2020. Available at: <https://www.uitp.org/news/guardians-mobility-front-lines-seoul-south-korea> (accessed 11.5.2020)

⁴⁹⁴ The Korea Times (2020) 'No mask, no ride' policy goes smoothly on buses, taxis. 26 May 2020. Available at: https://www.koreatimes.co.kr/www/nation/2020/05/119_290135.html (accessed on: 28.5.2020)

⁴⁹⁵ TBS News (2020) All Flight Passengers Required To Wear Masks From Wednesday. 27 May 2020. Available at: http://tbs.seoul.kr/eFm/newsView.do?typ_800=N&idx_800=3389286&seq_800=20381863 (accessed on: 28.5.2020)

⁴⁹⁶ Korea JoongAng Daily (2020) Foreign residents face new restrictions returning to Korea. 28 May 2020. Available at: <https://koreajoongangdaily.joins.com/2020/05/28/diplomacy/reentry-permits-Justice-Ministry-%EB%B2%95%EB%AC%B4%EB%B6%80/20200528174400239.html> (accessed on: 4.6.2020)

- ⁴⁹⁷ Straits Times (2020) South Korea limits entry for foreigners after new coronavirus cases. June 21, 2020. Available at: <https://www.straitstimes.com/asia/east-asia/south-korea-limits-entry-for-foreigners-after-new-coronavirus-cases> (accessed 22.6.2020)
- ⁴⁹⁸ The Korea Times (2020) Arrivals from 'high-risk nations' required to submit proof of 'negative' virus test results 13 July 2020 Available at: https://www.koreatimes.co.kr/www/nation/2020/07/119_292722.html (accessed on: 13.7.2020)
- ⁴⁹⁹ The Star (2020) S. Korea's big churches reopen with designated seats, size limits. April 26, 2020. Available at: <https://www.thestar.com.my/news/regional/2020/04/26/s-korea039s-big-churches-reopen-with-designated-seats-size-limits> (accessed 6.5.2020)
- ⁵⁰⁰ Korea JoongAng Daily (2020) Clusters break out in small churches. 1 June 2020. Available at: <https://koreajoongangdaily.joins.com/2020/06/01/socialAffairs/virus-coronavirus-Covid19/20200601190300115.html> (accessed on: 4.6.2020)
- ⁵⁰¹ KCDC (2020) The updates on COVID-19 in Korea as of 2 June. (2 June 2020) Available at: <https://www.cdc.go.kr/board/board.es?mid=a30402000000&bid=0030> (accessed on: 4.6.2020)
- ⁵⁰² Korean JoongAng Daily (2020) Daegu sues Shincheonji Church over massive virus cluster 22 June 2020 Available at: <https://koreajoongangdaily.joins.com/2020/06/22/national/socialAffairs/shincheonji-daegu-cluster/20200622180600278.html> (accessed on: 23.6.2020)
- ⁵⁰³ The Korea Times (2020) Gov't to get tougher on churches to contain COVID-19 8 July 2020 Available at: https://www.koreatimes.co.kr/www/nation/2020/07/119_292497.html (accessed on: 13.7.2020)
- ⁵⁰⁴ Yonhap via Reuters (2020) Available at: <https://www.theatlantic.com/photo/2020/03/photos-large-scale-disinfection-efforts-against-coronavirus/607810/> (accessed 14.3.2020)
- ⁵⁰⁵ TBS News (2020). Govt Extends Social Distancing Until May 5, But Relaxes Some Rules. April 20, 2020. Available at: http://tbs.seoul.kr/eFm/newsView.do?typ_800=N&idx_800=2391631&seq_800= (accessed 20.04.2020)
- ⁵⁰⁶ Straits Times (2020) South Korea to reopen schools from May 13 as Covid-19 outbreak tapers off. May 4, 2020. Available at: <https://www.straitstimes.com/asia/east-asia/south-korea-to-reopen-schools-from-may-13-as-covid-19-outbreak-tapers-off> (accessed 6.5.2020)
- ⁵⁰⁷ The Guardian (2020) South Korea re-imposes some coronavirus restrictions after spike in new cases. 28 May 2020. Available at: <https://www.theguardian.com/world/2020/may/28/south-korea-faces-return-to-coronavirus-restrictions-after-spike-in-new-cases> (accessed on: 4.6.2020)
- ⁵⁰⁸ Resident Advisor (2020) Key South Korean venues reopen this weekend after coronavirus-related closures. Apr 25 2020. Available at: <https://www.residentadvisor.net/news/72523> (accessed 5.5.20)
- ⁵⁰⁹ TBS News (2020). Govt Extends Social Distancing Until May 5, But Relaxes Some Rules. April 20, 2020. Available at: http://tbs.seoul.kr/eFm/newsView.do?typ_800=N&idx_800=2391631&seq_800= (accessed 20.04.2020)
- ⁵¹⁰ Business Insider (2020) Seoul officials ordered all bars and nightclubs closed after as many as 40 new COVID-19 cases were linked to them. May 9, 2020. Available at: <https://www.businessinsider.sg/seoul-bars-and-clubs-closed-after-covid-19-cases-linked-2020-5> (accessed 11.5.2020)
- ⁵¹¹ China Briefing (2020) China's Travel Restrictions due to COVID-19: An Explainer. May 8, 2020. Available at: <https://www.china-briefing.com/news/chinas-travel-restrictions-due-to-covid-19-an-explainer/> (accessed 11.5.2020)
- ⁵¹² TBS News (2020) Govt To Require Clubs, Bars To Keep QR Code-Based Customer Logs Under Virus Tracking System. 25 May 2020. Available at: http://tbs.seoul.kr/eFm/newsView.do?typ_800=N&idx_800=3388981&seq_800=20381558 (accessed on: 28.5.2020)
- ⁵¹³ Korea JoongAng Daily (2020) Second Coupang center hit by coronavirus. 28 May 2020. Available at: <https://koreajoongangdaily.joins.com/2020/05/28/socialAffairs/Bucheon-Goyang-Incheon/20200528185300209.html> (accessed on: 4.6.2020)
- ⁵¹⁴ Korea JoongAng Daily (2020) Daegu hospital returns to normal operations. 2 June 2020. Available at: <https://koreajoongangdaily.joins.com/2020/06/02/national/socialAffairs/Daegu-hospital-virus-Keimyung/20200602184500230.html> (accessed on: 4.6.2020)
- ⁵¹⁵ Korea JoongAng Daily (2020) Number of moviegoers doubles from a week earlier. June 9, 2020. Available at: <https://koreajoongangdaily.joins.com/2020/06/09/entertainment/movies/CGV-Yongsan-coronavirus/20200609173800183.html> (accessed: 16.6.2020)
- ⁵¹⁶ Korea JoongAng Daily (2020) Convenience stores improve their meal selection. June 15, 2020. Available at: <https://koreajoongangdaily.joins.com/2020/06/15/business/industry/convenience-stores-%ED%8E%B8%EB%8F%84%EC%8B%9C%EB%9D%BD-%ED%8E%B8%EC%9D%98%EC%A0%90%EB%8F%84%EC%8B%9C%EB%9D%BD/20200615192400261.html> (accessed: 16.6.2020)
- ⁵¹⁷ The Korea Times (2020) Elderly care facilities to open for family visits from July 1 26 June 2020 Available at: https://www.koreatimes.co.kr/www/nation/2020/07/119_291882.html (accessed on: 1.7.2020)
- ⁵¹⁸ TBS News (2020). Govt Extends Social Distancing Until May 5, But Relaxes Some Rules. April 20, 2020. Available at: http://tbs.seoul.kr/eFm/newsView.do?typ_800=N&idx_800=2391631&seq_800= (accessed 20.04.2020)
- ⁵¹⁹ Forbes (2020) South Korea Has Flattened The Curve, But 'Normal' Is Still Some Way Off. April 1 2020. Available at: <https://www.forbes.com/sites/steveprice/2020/04/01/south-korea-has-flattened-the-curve-but-normal-is-still-some-way-off/#c50c924760eb> (accessed 18.4.20)
- ⁵²⁰ Aljazeera (2020) South Korea goes back to school, but classrooms remain empty. April 16, 2020. Available at: <https://www.aljazeera.com/news/2020/04/south-korea-school-classrooms-remain-empty-200415094228841.html> (accessed 19.4.20)
- ⁵²¹ Straits Times (2020) South Korea to reopen schools from May 13 as Covid-19 outbreak tapers off. May 4, 2020. Available at: <https://www.straitstimes.com/asia/east-asia/south-korea-to-reopen-schools-from-may-13-as-covid-19-outbreak-tapers-off> (accessed 6.5.2020)
- ⁵²² KCDC (2020) The updates on COVID-19 in Korea as of 19 May. Available at: <https://www.cdc.go.kr/board/board.es?mid=a30402000000&bid=0030> (Accessed 20.5.2020)
- ⁵²³ Reuters (2020) New infections mar South Korean students' return to school. May 20, 2020. Available at: https://www.reuters.com/article/us-health-coronavirus-southkorea-school/masked-against-coronavirus-south-korean-students-return-to-school-idUSKBN22W0BE?utm_medium=Social&utm_source=Facebook (accessed 21.5.2020)
- ⁵²⁴ Forbes (2020) 6-Year-Old Tests Positive For Coronavirus, Complicating South Korea's School Reopening Plans. May 25, 2020. Available at: <https://www.forbes.com/sites/tommybeer/2020/05/25/6-year-old-tests-positive-for-coronavirus-complicating-south-koreas-school-reopening-plans/#678a6bc16f63> (Accessed 27.5.2020)

- ⁵²⁵ TBS News (2020) Over 560 Schools Nationwide Postpone Start Of Classes Over Virus Clusters. 27 May 2020. Available at: http://tbs.seoul.kr/eFm/newsView.do?typ_800=N&idx_800=3389377&seq_800=20381954 (accessed on: 28.5.2020)
- ⁵²⁶ The Korea Times (2020) Parents doubtful of gov't guidelines on school reopening. 26 May 2020. Available at: https://www.koreatimes.co.kr/www/nation/2020/05/181_290158.html (accessed on: 28.5.2020)
- ⁵²⁷ Korea JoongAng Daily (2020) 519 schools close but vast majority is open. 3 June 2020. Available at: <https://koreajoongangdaily.joins.com/2020/06/04/national/socialAffairs/virus-reopening-incheon/20200604032400278.html> (accessed on: 4.6.2020)
- ⁵²⁸ Korea JoongAng Daily (2020) Korea completes phased school reopening. 8 Jun 2020. Available at: <https://koreajoongangdaily.joins.com/2020/06/08/national/socialAffairs/lotte-world-covid-school/20200608190800159.html> (accessed 11.6.20)
- ⁵²⁹ Korean JoongAng Daily (2020) Ministry doesn't plan to give students money 18 June 2020 Available at: <https://koreajoongangdaily.joins.com/2020/06/18/national/socialAffairs/tuition-tuition-refund-korean-university/20200618183300326.html> (accessed on 23.6.2020)
- ⁵³⁰ Financial Times (2020) Why a Korean cult is at the centre of a huge coronavirus scare. March 3 2020. Available at: <https://www.ft.com/content/5a6d40b2-5c1b-11ea-8033-fa40a0d65a98> (accessed 18.4.20)
- ⁵³¹ The New York Times (2020) In Coronavirus Crisis, Korean City Tries Openness, a Contrast to China. April 10 2020. Available at: <https://www.nytimes.com/2020/02/25/world/asia/daegu-south-korea-coronavirus.html> (accessed 18.4.20)
- ⁵³² Reuters (2020) South Koreans return to work, crowd parks, malls as social distancing rules ease. April 20, 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-southkorea/south-koreans-return-to-work-crowd-parks-malls-as-social-distancing-rules-ease-idUSKBN2220EO> (accessed 20.04.2020)
- ⁵³³ The Straits Times (2020) Back to school next week for South Korea - with online classes. March 31 2020. Available at: <https://www.straitstimes.com/asia/east-asia/back-to-school-next-week-for-south-korea-with-online-classes> (accessed 18.4.20)
- ⁵³⁴ Straits Times (2020) South Korea scrambles to contain new coronavirus outbreak threatening Seoul. May 11, 2020. Available at: <https://www.straitstimes.com/asia/east-asia/south-korea-scrambles-to-contain-new-coronavirus-outbreak-threatening-seoul> (accessed 11.5.2020)
- ⁵³⁵ The ASEAN Post (2020) LGBT+ Community Hit Hard By The Pandemic. May 18, 2020. Available at: <https://theaseanpost.com/article/lgbt-community-hit-hard-pandemic> (accessed: 16.6.2020)
- ⁵³⁶ Korea JoongAng Daily (2020) Online shopping seems less safe as workers get sick. 27 May 2020. Available at: <https://koreajoongangdaily.joins.com/2020/05/27/industry/coupang-market-kurly-coronavirus/20200527171600182.html> (accessed on: 28.5.2020)
- ⁵³⁷ NPR (2020) How South Korea Reined In The Outbreak Without Shutting Everything Down. 26 Mar 2020. Available at: <https://www.npr.org/sections/goatsandsoda/2020/03/26/821688981/how-south-korea-reigned-in-the-outbreak-without-shutting-everything-down> (accessed 11.6.20)
- ⁵³⁸ The Straits Times (2020) UN chief Antonio Guterres praises South Korea's simultaneous fight against coronavirus, climate change. 1 May 2020. Available at: <https://www.straitstimes.com/world/un-chief-praises-south-koreas-simultaneous-fight-against-coronavirus-climate-change> (accessed 11.6.20)
- ⁵³⁹ UN News (2020) First person: South Korea's COVID-19 success story. 1 May 2020. Available at: <https://news.un.org/en/story/2020/05/1063112> (accessed 11.6.20)
- ⁵⁴⁰ World Economic Forum (2020) How is the world dealing with lockdown? This poll has captured the public's mood. 6 May 2020. Available at: <https://www.weforum.org/agenda/2020/05/coronavirus-health-economy-global-survey/> (accessed on: 11.6.20)
- ⁵⁴¹ Al Arabiya (2020) South Korea conquered coronavirus without a lockdown: a model to follow? April 3 2020. Available at: <https://english.alarabiya.net/en/features/2020/04/03/South-Korea-conquered-coronavirus-without-a-lockdown-a-model-to-follow-> (accessed 17.4.20)
- ⁵⁴² IMF (2020) World Economic Outlook, April 2020. Available at: <https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020> (accessed 17.4.2020)
- ⁵⁴³ Business Times (2020) S Korea doubles coronavirus rescue package to 100t won. March 25, 2020. Available at: <https://www.businesstimes.com.sg/banking-finance/s-korea-doubles-coronavirus-rescue-package-to-100t-won> (accessed 25.3.2020)
- ⁵⁴⁴ Nikkei (2020) South Korea unemployment rate surges to 10-year high in May. June 10, 2020. Available at: <https://asia.nikkei.com/Economy/South-Korea-unemployment-rate-surges-to-10-year-high-in-May> (accessed 11.6.20)
- ⁵⁴⁵ The Korea Times (2020) Seoul City moving to pay COVID-19 relief funds to foreigners 30 June 2020 Available at: https://www.koreatimes.co.kr/www/nation/2020/07/281_292092.html (accessed on: 1.7.2020)
- ⁵⁴⁶ Korea JoongAng Daily (2020) June is a turning point. June 10, 2020. Available at: <https://koreajoongangdaily.joins.com/2020/06/10/opinion/fountain/Depressed-Trost-Mabo/20200610201200158.html> (accessed: 16.6.2020)
- ⁵⁴⁷ Worldometer (2020) Japan. Available at: <https://www.worldometers.info/coronavirus/country/japan/> (accessed 12.5.2020)
- ⁵⁴⁸ Time (2020) This Japanese Island Lifted Its Coronavirus Lockdown Too Soon and Became a Warning to the World. April 24, 2020. Available at: <https://time.com/5826918/hokkaido-coronavirus-lockdown/> (accessed 20.5.2020)
- ⁵⁴⁹ Times (2020) Why Japan is ungrateful for its success fighting coronavirus. May 26, 2020. Available at: <https://www.thetimes.co.uk/article/coronavirus-japan-success-covid-19-cases-deaths-dmlfp2swr> (accessed 27.5.2020)
- ⁵⁵⁰ Kyodo News (2020) Tokyo confirms 48 more coronavirus cases, fuels fears of second wave. June 16, 2020. Available at: <https://english.kyodonews.net/news/2020/06/a786d3495372-urgent-tokyo-confirms-48-new-coronavirus-infections-source.html> (accessed: 16.6.2020)
- ⁵⁵¹ The Japan Times (2020) Tokyo reports 106 new coronavirus cases Tuesday, exceeding 100 for sixth day. July 7, 2020. Available at: <https://www.japantimes.co.jp/news/2020/07/07/national/tokyo-reports-106-new-coronavirus-cases/#.XwU0mij7TIU> (accessed on: 08.07.2020)
- ⁵⁵² The Japan Times (2020) Koike urges caution as growing number of Tokyo COVID-19 infections traced to young people. July 3, 2020. Available at: <https://www.japantimes.co.jp/news/2020/07/03/national/tokyo-124-covid-19-cases-youth/#.XwUxISj7TIU> (accessed on: 08.07.2020)
- ⁵⁵³ The Japan Times (2020) Kanagawa reports 31 new COVID-19 cases as Tokyo tops 50 for fifth straight day. June 30, 2020. Available at: <https://www.japantimes.co.jp/news/2020/06/30/national/tokyo-54-coronavirus-yokohama/#.XwUYnyj7TIU> (accessed on: 08.07.2020)

⁵⁵⁴ The Japan Times (2020) 'Several' coronavirus cases detected at U.S. Futenma base in Okinawa. July 7, 2020. Available at: <https://www.japantimes.co.jp/news/2020/07/07/national/coronavirus-us-futenma-base-okinawa/#.XwU0oSj7TIU> (accessed on: 08.07.2020)

⁵⁵⁵ Google (2020) COVID-19 Community Mobility Reports. May 2020. Available at: <https://www.google.com/covid19/mobility/> (accessed 21.5.2020)

⁵⁵⁶ Doi A et al (2020) Seroprevalence of novel coronavirus disease (COVID-19) in Kobe, Japan. Available at: <https://doi.org/10.1101/2020.04.26.20079822> (accessed 8.6.2020)

⁵⁵⁷ The Japan Times (2020) Tokyo logs 0.1% positive rate for coronavirus antibodies. June 16, 2020. Available at: <https://www.japantimes.co.jp/news/2020/06/16/national/science-health/tokyo-coronavirus-antibodies/#.XuhOqKX7TIV> (accessed: 16.6.2020)

⁵⁵⁸ Time (2020) This Japanese Island Lifted Its Coronavirus Lockdown Too Soon and Became a Warning to the World. April 24, 2020. Available at: <https://time.com/5826918/hokkaido-coronavirus-lockdown/> (accessed 20.5.2020)

⁵⁵⁹ International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.internationalsos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)

⁵⁶⁰ Reuters (2020) 'Lockdown', Japan-style: Pressure to conform, not penalties for non-compliance. April 6 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-japan-emergency-ex/lockdown-japan-style-pressure-to-conform-not-penalties-for-non-compliance-idUSKBN21O08J> (accessed 18.4.20)

⁵⁶¹ BBC (2020) Coronavirus lockdown: Lessons from Hokkaido's second wave of infections. April 16 2020. Available at: <https://www.bbc.com/news/world-asia-52305055> (accessed 18.4.20)

⁵⁶² Time (2020) This Japanese Island Lifted Its Coronavirus Lockdown Too Soon and Became a Warning to the World. April 24, 2020. Available at: <https://time.com/5826918/hokkaido-coronavirus-lockdown/> (accessed 20.5.2020)

⁵⁶³ BBC (2020) Coronavirus: State of emergency lifted in most of Japan. May 14, 2020. Available at: <https://www.bbc.com/news/world-asia-52658551> (accessed 20.5.2020)

⁵⁶⁴ Asia Nikkei (2020) Available at: <https://asia.nikkei.com/Spotlight/Coronavirus/Tokyo-bars-and-restaurants-reopen-under-a-clouded-future> (accessed 5.6.2020)

⁵⁶⁵ Japan Times (2020) Japan may lift state of emergency for Osaka, Kyoto and Hyogo this week. May 20, 2020. Available at: <https://www.japantimes.co.jp/news/2020/05/20/national/japan-lift-state-of-emergency-osaka-kyoto-hyogo/#.XsS7DF4zY2w> (accessed 20.5.2020)

⁵⁶⁶ Newsweek (2020) Japan Ends Coronavirus Emergency With 850 Deaths and No Lockdown. May 25, 2020. Available at: <https://www.newsweek.com/japan-ends-coronavirus-emergency-850-deaths-no-lockdown-1506336> (accessed 28.5.2020)

⁵⁶⁷ Asia Nikkei (2020) Available at: <https://asia.nikkei.com/Spotlight/Coronavirus/Tokyo-bars-and-restaurants-reopen-under-a-clouded-future> (accessed 5.6.2020)

⁵⁶⁸ Guardian (2020) Coronavirus Live 2 July 2020. Available at: <https://www.theguardian.com/world/live/2020/jul/02/coronavirus-live-updates-latest-news-new-zealand-health-minister-quits-who-middle-east-us-trump-brazil> (accessed 2.7.2020)

⁵⁶⁹ NHK (2020) Japan to consider partial easing of emergency. Available at: https://www3.nhk.or.jp/nhkworld/en/news/20200512_09/ (accessed 12.5.2020)

⁵⁷⁰ Today Online (2020) As cases in Tokyo surge, Japan gives expert advisory panel a makeover. July 2, 2020. Available at: <https://www.todayonline.com/world/cases-tokyo-surge-japan-gives-expert-advisory-panel-makeover-0> (accessed 13.7.2020)

⁵⁷¹ The Japan Times (2020) Tokyo puts forward new virus monitoring guidelines. June 30, 2020. Available at: <https://www.japantimes.co.jp/news/2020/06/30/national/tokyo-new-coronavirus-monitoring-guidelines/#.XwUYlyj7TIU> (accessed on: 08.07.2020)

⁵⁷² The Japan Times (2020) Japan's return to state of emergency an option, but only in 'worst-case scenario'. July 1, 2020. Available at: <https://www.japantimes.co.jp/news/2020/07/01/national/japans-state-of-emergency-worst-case-scenario/#.XwUvCj7TIU> (accessed on: 08.07.2020)

⁵⁷³ The Japan Times (2020) In Japan, refusal to follow coronavirus requests could become a crime. July 3, 2020. Available at: <https://www.japantimes.co.jp/news/2020/07/03/national/coronavirus-japan-law-revisions/#.XwUwSCj7TIU> (accessed on: 08.07.2020)

⁵⁷⁴ The Diplomat (2020) COVID-19 Strategy: The Japan Model. April 24, 2020. Available at: <https://thediplomat.com/2020/04/covid-19-strategy-the-japan-model/> (accessed 8.5.2020)

⁵⁷⁵ BBC (2020) Coronavirus lockdown: Lessons from Hokkaido's second wave of infections. April 16 2020. Available at: <https://www.bbc.com/news/world-asia-52305055> (accessed 18.4.20)

⁵⁷⁶ BBC (2020) Coronavirus: Japan's low testing rate raises questions. April 30, 2020. Available at: <https://www.bbc.com/news/world-asia-52466834> (accessed on: 08.07.2020)

⁵⁷⁷ The Japan Times (2020) Japanese government, criticized for low testing rates, eases guidelines for seeking virus tests. May 9, 2020. Available at: <https://www.japantimes.co.jp/news/2020/05/09/national/japan-criticism-relaxes-coronavirus-testing-guidelines/#.XwUZxyj7TIU> (accessed on: 08.07.2020)

⁵⁷⁸ Tokyo Metropolitan Government (2020) How to get help if you suspect having COVID-19. 2020. Available at: <https://stopcovid19.metro.tokyo.lg.jp/en/flow> (accessed on: 08.07.2020)

⁵⁷⁹ Tokyo Metropolitan Government (2020) How to get help if you suspect having COVID-19. 2020. Available at: <https://stopcovid19.metro.tokyo.lg.jp/en/flow> (accessed on: 08.07.2020)

⁵⁸⁰ The Japan Times (2020) Coronavirus testing now covered by Japan's national insurance. March 6, 2020. Available at: <https://www.japantimes.co.jp/news/2020/03/06/national/science-health/covid-19-tests-japan-national-insurance/> (accessed on: 08.07.2020)

⁵⁸¹ Tokyo Metropolitan Government (2020) Roadmap to Overcoming COVID-19, Third Edition. June 15, 2020. Available at: <https://www.metro.tokyo.lg.jp/tosei/tosei/news/documents/20200615.pdf> (accessed on: 08.07.2020)

⁵⁸² The Verge (2020) Japan rolls out Microsoft-developed COVID-19 contact tracing app. June 19, 2020. Available at: <https://www.theverge.com/2020/6/19/21296603/japan-covid-19-contact-tracking-app-cocoa-released> (accessed 22.6.2020)

⁵⁸³ The Japan Times (2020) Japan's new contact-tracing app: 'security blanket' or effective tool?. 31 May 2020. Available at: <https://www.japantimes.co.jp/news/2020/05/31/national/japan-contact-tracing-app-privacy-effectiveness/#.Xthllzr7TIU> (accessed on: 4.6.2020)

⁵⁸⁴ The Japan Times (2020) Japan's COVID-19 app reaches 4 million downloads in first week. June 27, 2020. Available at: <https://www.japantimes.co.jp/news/2020/06/27/national/science-health/japan-coronavirus-app-downloads/#.XvmmLCj7TIU> (accessed 29.6.2020)

- ⁵⁸⁵ The Japan Times (2020) Japan ministry issues infection codes for COVID-19 contact tracing app. July 3, 2020. Available at: <https://www.japantimes.co.jp/news/2020/07/03/national/japan-infection-codes-coronavirus-app/#.XwUxmCj7TIU> (accessed on: 08.07.2020)
- ⁵⁸⁶ The Japan Times (2020) Osaka introduces QR contact tracing system as bars and restaurants reopen. 2 June 2020. Available at: <https://www.japantimes.co.jp/news/2020/06/02/national/osaka-introduces-qr-contract-tracing-system-bars-restaurants-reopen/#.XtdOmzr7TIU> (accessed on: 4.6.2020)
- ⁵⁸⁷ Tokyo Metropolitan Government (2020) How to get help if you suspect having COVID-19. 2020. Available at: <https://stopcovid19.metro.tokyo.lg.jp/en/flow> (accessed on: 08.07.2020)
- ⁵⁸⁸ Tokyo Metropolitan Government (2020) Roadmap to Overcoming COVID-19, Third Edition. June 15, 2020. Available at: <https://www.metro.tokyo.lg.jp/tosei/tosei/news/documents/20200615.pdf> (accessed on: 08.07.2020)
- ⁵⁸⁹ The Diplomat (2020) COVID-19 Strategy: The Japan Model. April 24, 2020. Available at: <https://thediplomat.com/2020/04/covid-19-strategy-the-japan-model/> (accessed 8.5.2020)
- ⁵⁹⁰ YouGov (2020) Latest round-up of YouGov's coronavirus survey results.
- ⁵⁹¹ The Japan Times (2020) Japan to ease coronavirus rules and allow events up to 5,000 people. July 7, 2020. Available at: <https://www.japantimes.co.jp/news/2020/07/07/national/coronavirus-events-crowds/#.XwUz-Sj7TIU> (accessed on: 08.07.2020)
- ⁵⁹² CNA (2020) Japan's 'mosh pit' trains spark fear of new coronavirus cases. June 4, 2020. Available at: <https://www.channelnewsasia.com/news/asia/covid-19-coronavirus-japan-trains-new-cases-12803132> (accessed 5.6.2020)
- ⁵⁹³ The Japan Times (2020) Freedom of travel restored across Japan as coronavirus fears ease. June 19, 2020 Available at: <https://www.japantimes.co.jp/news/2020/06/19/national/cross-prefecture-travel-japan-coronavirus/#.XvFqf2j7TIV> (accessed 23.6.2020)
- ⁵⁹⁴ Japan Travel (2020) Covid advisory information. Available at: <https://www.japan.travel/en/coronavirus/> (accessed 5.6.2020)
- ⁵⁹⁵ Kyodo News (2020) Japan to let in 250 foreigners per day under eased travel curbs. 11 Jun 2020. Available at: <https://english.kyodonews.net/news/2020/06/04b42b672fc9-japan-to-let-in-250-foreigners-per-day-under-eased-travel-curbs.html> (accessed on: 11.6.20)
- ⁵⁹⁶ Kyodo News (2020) Japan to require virus testing, itinerary in travel restriction easing. 5 Jun 2020. Available at: <https://english.kyodonews.net/news/2020/06/892041b57919-japan-to-require-virus-testing-itinerary-in-travel-restriction-easing.html> (accessed on: 11.6.20)
- ⁵⁹⁷ The Japan Times (2020) Experts worried by Japan's moves to ease coronavirus entry restrictions. June 15, 2020. Available at: <https://www.japantimes.co.jp/news/2020/06/15/national/experts-worried-japan-ease-coronavirus-entry-restrictions/#.XuhNXEX7TIU> (accessed: 16.6.2020)
- ⁵⁹⁸ The Japan Times (2020) Japan to build virus test centers near airports for overseas travelers. July 2, 2020. Available at: <https://www.japantimes.co.jp/news/2020/07/02/national/japan-airport-coronavirus-test-centers/#.XwUwNjy7TIU> (accessed on: 08.07.2020)
- ⁵⁹⁹ Japan Times (2020) Religious communities in Tokyo adopt new worship styles to tackle COVID-19. Available at: <https://www.japantimes.co.jp/news/2020/03/16/national/japan-religious-communities-coronavirus/#.Xtma3hozY2x> (accessed 5.6.2020)
- ⁶⁰⁰ Japan Times (2020) Toshiba to adopt four-day workweek at its manufacturing plants. Available at: <https://www.japantimes.co.jp/news/2020/05/05/business/corporate-business/toshiba-four-day-workweek-manufacturing-plants/#.XtmiZhozY2w> (accessed 5.6.2020)
- ⁶⁰¹ Asia Nikkei (2020) Available at: <https://asia.nikkei.com/Spotlight/Coronavirus/Tokyo-bars-and-restaurants-reopen-under-a-clouded-future> (accessed 5.6.2020)
- ⁶⁰² The Japan Times (2020) Guidelines for Japan's nightlife businesses unveiled to stem virus spread. June 14, 2020. Available at: <https://www.japantimes.co.jp/news/2020/06/14/national/japan-nightlife-businesses-coronavirus/#.XuhRukX7TIU> (accessed: 16.6.2020)
- ⁶⁰³ The Japan Times (2020) Japanese tourism industry paying extra attention to virus safety to lure crowds back. June 28, 2020. Available at: <https://www.japantimes.co.jp/news/2020/06/28/national/japanese-tourism-industry-coronavirus/#.Xvmjpyj7TIU> (accessed 29.6.2020)
- ⁶⁰⁴ Kyodo News (2020) Workers, parents feel strain as emergency state over virus extended. May 4 2020. Available at: <https://english.kyodonews.net/news/2020/05/3f4c484d0b15-workers-parents-feel-strain-as-emergency-state-over-virus-extended.html> (accessed 5.5.20)
- ⁶⁰⁵ Nikkei (2020) Japan quietly reopens as much of world locks down. March 20 2020. Available at: <https://asia.nikkei.com/Spotlight/Coronavirus/Japan-quietly-reopens-as-much-of-world-locks-down> (accessed 18.4.20)
- ⁶⁰⁶ The Japan Times (2020) Over half of young adults in Japan felt education gap as schools closed over coronavirus. June 19, 2020 Available at: <https://www.japantimes.co.jp/news/2020/06/19/national/education-gap-schools/#.XvFyAmj7TIU> (accessed 23.6.2020)
- ⁶⁰⁷ The Japan Times (2020) Limited virus testing in Japan masks true scale of infection. March 2, 2020. Available at: <https://www.japantimes.co.jp/news/2020/03/02/national/limited-virus-testing-japan/#.XnFpj6gzY2w> (accessed on: 08.07.2020)
- ⁶⁰⁸ The Japan Times (2020) Limited virus testing in Japan masks true scale of infection. March 2, 2020. Available at: <https://www.japantimes.co.jp/news/2020/03/02/national/limited-virus-testing-japan/#.XnFpj6gzY2w> (accessed on: 08.07.2020)
- ⁶⁰⁹ The Japan Times (2020) Japanese government, criticized for low testing rates, eases guidelines for seeking virus tests. 9 May 2020. Available at: <https://www.japantimes.co.jp/news/2020/05/09/national/japan-criticism-relaxes-coronavirus-testing-guidelines/#.XuGvgUX7Q2w> (accessed on: 11.6.20)
- ⁶¹⁰ Times (2020) Why Japan is ungrateful for its success fighting coronavirus. May 26, 2020. Available at: <https://www.thetimes.co.uk/article/coronavirus-japan-success-covid-19-cases-deaths-dmlfp2swr> (accessed 27.5.2020)
- ⁶¹¹ Reuters (2020) 'Lockdown', Japan-style: Pressure to conform, not penalties for non-compliance. April 6 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-japan-emergency-ex/lockdown-japan-style-pressure-to-conform-not-penalties-for-non-compliance-idUSKBN21O08J> (accessed 18.4.20)
- ⁶¹² Bloomberg (2020) 'Toothless' Japan Lockdown Sees Tentative Signs of Success. April 16 2020. Available at: <https://www.bloomberg.com/news/articles/2020-04-16/toothless-japan-lockdown-shows-some-tentative-signs-of-success> (accessed 18.4.20)
- ⁶¹³ Reuters (2020) Call centres expose fault line in Japan's pandemic fight. May 5 2020. Available at: <https://telecom.economictimes.indiatimes.com/news/call-centres-expose-fault-line-in-japans-pandemic-fight/75550663> (accessed 5.5.20)
- ⁶¹⁴ Xinhuanet (2020) Roundup: Young Japanese being hit by new wave of COVID-19 infections in Tokyo. June 4, 2020. Available at: http://www.xinhuanet.com/english/2020-06/04/c_139114733.htm (accessed 5.6.2020)

- ⁶¹⁵ Reuters (2020) Call centres expose fault line in Japan's pandemic fight. May 5 2020. Available at: <https://telecom.economictimes.indiatimes.com/news/call-centres-expose-fault-line-in-japans-pandemic-fight/75550663> (accessed 5.5.20)
- ⁶¹⁶ The Japan Times (2020) Deadly Sapporo coronavirus cluster highlights challenges faced by elderly care homes. 2 June 2020. Available at: <https://www.japantimes.co.jp/news/2020/06/02/national/science-health/sapporo-coronavirus-care-homes/#.XtdPQTr7TIU> (accessed on: 4.6.2020)
- ⁶¹⁷ The Japan Times (2020) As race to govern Tokyo kicks off, Olympics and coronavirus top agenda. June 18, 2020 Available at: <https://www.japantimes.co.jp/news/2020/06/18/national/politics-diplomacy/campaigning-for-tokyo-governor-election-begins/#.XvFzo2j7TIV> (accessed 23.6.2020)
- ⁶¹⁸ The Japan Times (2020) As Tokyo coronavirus cases spike, experts dismiss second wave fears — for now. June 28, 2020. Available at: <https://www.japantimes.co.jp/news/2020/06/28/national/tokyo-coronavirus-second-wave/#.XvmgJSj7TIU> (accessed 29.6.2020)
- ⁶¹⁹ The Japan Times (2020) Waste center swamped as homebound Hokkaido residents declutter. June 26, 2020. Available at: <https://www.japantimes.co.jp/news/2020/06/26/national/hokkaido-waste-center-swamped-decluttering-coronavirus/#.XvmnGSj7TIU> (accessed 29.6.2020)
- ⁶²⁰ YouGov (2020) Latest round-up of YouGov's coronavirus survey results.
- ⁶²¹ Kyodo News (2020) 57% discontent with Japan gov't response to coronavirus outbreak: poll. 10 May 2020. Available at: <https://english.kyodonews.net/news/2020/05/e7dfc2b04376-57-discontent-with-govt-response-to-coronavirus-outbreak-poll.html> (accessed on: 11.6.20)
- ⁶²² World Economic Forum (2020) How is the world dealing with lockdown? This poll has captured the public's mood. 6 May 2020. Available at: <https://www.weforum.org/agenda/2020/05/coronavirus-health-economy-global-survey/> (accessed on: 11.6.20)
- ⁶²³ KEKST CNC (2020) COVID-19 Opinion Tracker - Edition 2. Available at: <https://www.kekstcnc.com/insights/covid-19-opinion-tracker-edition-2> (Accessed 17.6.2020)
- ⁶²⁴ The Japan Times (2020) Japan's coronavirus response rated mediocre by Economist's research unit. June 18, 2020 Available at: <https://www.japantimes.co.jp/news/2020/06/18/national/science-health/coronavirus-response-economist/#.XvF0lWj7TIU> (accessed 23.6.2020)
- ⁶²⁵ Taiwan Focus (2020) IMF adjusts Taiwan's economic growth down to minus 4% in 2020. Available at: <https://focustaiwan.tw/business/202004140025> (accessed 17.4.2020)
- ⁶²⁶ AA (2020) COVID-19: Japanese capital sees spike in new cases. March 26, 2020. Available at: <https://www.aa.com.tr/en/asia-pacific/covid-19-japanese-capital-sees-spike-in-new-cases/1780561> (accessed 30.3.2020)
- ⁶²⁷ Time (2020) This Japanese Island Lifted Its Coronavirus Lockdown Too Soon and Became a Warning to the World. April 24, 2020. Available at: <https://time.com/5826918/hokkaido-coronavirus-lockdown/> (accessed 20.5.2020)
- ⁶²⁸ The Asahi Shimbun (2020) Hokkaido and Sapporo declare fresh joint state of emergency. April 13 2020. Available at: <http://www.asahi.com/ajw/articles/13293772> (accessed 18.4.20)
- ⁶²⁹ The Japan Times (2020) It's time to face the real risks posed by COVID-19. 24 May 2020, Available at: <https://www.japantimes.co.jp/opinion/2020/05/24/commentary/japan-commentary/time-face-real-risks-posed-covid-19/#.Xs4VQGgzZPY> (accessed 27.5.20)
- ⁶³⁰ The Japan Times (2020) Abe Cabinet approves another ¥117 trillion relief package to fend off COVID-19 fallout. 27 May 2020. Available at: <https://www.japantimes.co.jp/news/2020/05/27/business/economy-business/shinzo-abe-cabinet-japan-relief-package-coronavirus/#.Xs8xSWgzZPY> (accessed 28.5.20)
- ⁶³¹ Kyodo News (2020) Japan big-company sentiment tumbles to 11-yr low amid pandemic. 11 Jun 2020. Available at: <https://english.kyodonews.net/news/2020/06/1a97fcb919-urgent-japan-corporate-sentiment-tumbles-to-11-yr-low-amid-pandemic.html> (accessed on: 11.6.20)
- ⁶³² The Japan Times (2020) Coronavirus crisis affecting family court procedures in Japan. June 14, 2020. Available at: <https://www.japantimes.co.jp/news/2020/06/14/national/crime-legal/coronavirus-effect-family-court/#.XuhQ8UX7TIU> (accessed: 16.6.2020)
- ⁶³³ CEPR (2020) COVID-19, mental health, and domestic violence: Evidence from Japan. June 22, 2020. Available at: <https://voxeu.org/article/covid-19-mental-health-and-domestic-violence> (accessed 22.6.2020).
- ⁶³⁴ Nippon (2020) Electricity Bills Rise Amid Work-from-Home Trend in Japan. June 21, 2020. Available at: <https://www.nippon.com/en/japan-data/h00749/electricity-bills-rise-amid-work-from-home-trend-in-japan.html> (accessed 22.6.2020)
- ⁶³⁵ Worldometer (2020) Available at: <https://www.worldometers.info/coronavirus/#countries> (accessed 1.4.2020)
- ⁶³⁶ NY Governor (2020) COVID tracker. 22.6.2020. Available at: <https://covid19tracker.health.ny.gov/views/NYS-COVID19-Tracker/NYSDOHCOVID-19Tracker-Fatalities?%3Aembed=yes&%3Atoolbar=no&%3Atabs=n> (accessed 22.6.2020)
- ⁶³⁷ Google (2020) COVID-19 Community Mobility Reports. May 2020. Available at: <https://www.google.com/covid19/mobility/> (accessed 21.5.2020)
- ⁶³⁸ The New York Times (2020) New Yorkers Can Now Go Back to Offices, but Many Won't. June 22, 2020 Available at: <https://www.nytimes.com/2020/06/22/nyregion/nyc-phase-2-reopening-coronavirus.html> (accessed 23.6.2020)
- ⁶³⁹ New York State Government. (2020) COVID-19 Testing. 2020. Available at: <https://coronavirus.health.ny.gov/covid-19-testing> (accessed on: 09.07.2020)
- ⁶⁴⁰ NY Governor (2020) Amid Ongoing COVID-19 Pandemic, Governor Cuomo Announces Results of State's Antibody Testing Survey at Churches in Lower-Income NYC Communities of Color Show 27 Percent of Individuals Tested Positive for COVID-19 Antibodies. May 20, 2020. Available at: <https://www.governor.ny.gov/news/amid-ongoing-covid-19-pandemic-governor-cuomo-announces-results-states-antibody-testing-survey> (accessed 21.5.2020)
- ⁶⁴¹ Bloomberg (2020) The Coronavirus Isn't Just the Flu, Bro. April 24, 2020. Available at: <https://www.bloomberg.com/opinion/articles/2020-04-24/is-coronavirus-worse-than-the-flu-blood-studies-say-yes-by-far> (accessed 21.5.2020)
- ⁶⁴² NY Governor (2020) Governor Cuomo Issues Guidance on Essential Services Under The 'New York State on PAUSE' Executive Order. Mar 20, 2020. Available at: <https://www.governor.ny.gov/news/governor-cuomo-issues-guidance-essential-services-under-new-york-state-pause-executive-order> (accessed 17.4.2020)
- ⁶⁴³ Newsweek (2020) New York Closes Nonessential Businesses to Combat Coronavirus Outbreak. March 20, 2020. Available at: <https://www.newsweek.com/new-york-executive-order-coronavirus-restrictions-businesses-1493511> (accessed 20.04.2020)
- ⁶⁴⁴ NY Governor (2020) My Forward: A guide to reopening New York and building back better. May. Available at: <https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/NYForwardReopeningGuide.pdf> (accessed 20.5.2020)

⁶⁴⁵ CNBC (2020) New York and other East Coast states extend shutdown of nonessential businesses to May 15, Gov. Cuomo says. Apr 16, 2020. Available at: <https://www.cnn.com/2020/04/16/new-york-and-other-east-coast-states-extend-shutdown-of-nonessential-businesses-to-may-15-gov-cuomo-says.html> (accessed 18.4.2020)

⁶⁴⁶ NY Governor (2020) What You Need to Know. April 19, 2020. Available at: <https://coronavirus.health.ny.gov/home> (accessed 20.04.2020)

⁶⁴⁷ CDC (2020) Travelers Prohibited from Entry to the United States Available at: <https://www.cdc.gov/coronavirus/2019-ncov/travelers/from-other-countries.html> (accessed 5.6.2020)

⁶⁴⁸ Financial Times (2020) Governors continue to defy Donald Trump on reopening plans. Apr 17, 2020. Available at: <https://www.ft.com/content/baad2a7e-94c5-415a-8118-a00bfb23608a> (accessed 17.4.2020)

⁶⁴⁹ New York State (2020) New York Forward Governor Cuomo's Plan to Re-Open New York. Available at: <https://www.governor.ny.gov/programs/new-york-forward> (accessed 5.5.2020)

⁶⁵⁰ NY Governor (2020) My Forward: A guide to reopening New York and building back better. May. Available at: <https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/NYForwardReopeningGuide.pdf> (accessed 20.5.2020)

⁶⁵¹ EGSA (2020) GNSS for Crisis. Available at: <https://www.gsa.europa.eu/GNSS4Crisis> (accessed 13.5.2020)

⁶⁵² New York State (2020) Novel Coronavirus: What you need to know. Available at: <https://coronavirus.health.ny.gov/home> (accessed 8.5.2020)

⁶⁵³ NY governor (2020) Industry Guidance and Reopening Available at: <https://forward.ny.gov/> (accessed 1.6.2020)

⁶⁵⁴ NY Governor (2020) Press Releases. Available at: <https://www.governor.ny.gov/news> (accessed 28.5.2020)

⁶⁵⁵ NY Governor (2020) Early Warning Monitoring Dashboard. Available at: <https://forward.ny.gov/early-warning-monitoring-dashboard> (accessed 1.6.2020)

⁶⁵⁶ The New York Times (2020) N.Y.C. Reopens 100 Days After First Virus Case. 9 Jun 2020. Available at: <https://www.nytimes.com/2020/06/09/nyregion/coronavirus-nyc-reopening.html> (accessed on: 11.6.20)

⁶⁵⁷ The New York Times (2020) Cuomo and Trump Spar Over Coronavirus Aid to New York. Apr 17, 2020. Available at: <https://www.nytimes.com/2020/04/17/nyregion/coronavirus-new-york-update.html> (accessed 18.4.2020)

⁶⁵⁸ NY Governor (2020) Amid Ongoing COVID-19 Pandemic, Governor Cuomo Issues Executive Order Directing All NYS Public and Private Labs to Coordinate with State DOH to Prioritize Diagnostic Testing. Apr 17, 2020. Available at: <https://www.governor.ny.gov/news/amid-ongoing-covid-19-pandemic-governor-cuomo-issues-executive-order-directing-all-nys-public> (accessed 18.4.2020)

⁶⁵⁹ NY Governor (2020) At Novel Coronavirus Briefing, Governor Cuomo Announces State is Partnering with Hospitals to Expand Novel Coronavirus Testing Capacity in New York. March 2, 2020. Available at: <https://www.governor.ny.gov/news/novel-coronavirus-briefing-governor-cuomo-announces-state-partnering-hospitals-expand-novel> (accessed on: 09.07.2020)

⁶⁶⁰ NY Governor (2020) During Novel Coronavirus Briefing, Governor Cuomo Announces New York State Will Contract with 28 Private Labs to Increase Coronavirus Testing Capacity. March 11, 2020. Available at: <https://www.governor.ny.gov/news/during-novel-coronavirus-briefing-governor-cuomo-announces-new-york-state-will-contract-28> (accessed on: 09.07.2020)

⁶⁶¹ NY Governor (2020) After Weeks of Demanding Approval, Governor Cuomo Announces FDA Gives New York State Authority to Conduct All COVID-19 Testing at Public and Private Labs. March 13, 2020. Available at: <https://www.governor.ny.gov/news/after-weeks-demanding-approval-governor-cuomo-announces-fda-gives-new-york-state-authority> (accessed on: 09.07.2020)

⁶⁶² NY Governor (2020) Governor Cuomo Opens the State's First Drive-through COVID-19 Mobile Testing Center in New Rochelle. March 13, 2020. Available at: <https://www.governor.ny.gov/news/governor-cuomo-opens-states-first-drive-through-covid-19-mobile-testing-center-new-rochelle-0> (accessed on: 09.07.2020)

⁶⁶³ The full prioritization process can be found here: https://coronavirus.health.ny.gov/system/files/documents/2020/07/doh_covid19_revisedtestingprotocol_070220.pdf

⁶⁶⁴ New York State Government. (2020) COVID-19 Testing. 2020. Available at: <https://coronavirus.health.ny.gov/covid-19-testing> (accessed on: 09.07.2020)

⁶⁶⁵ NY Governor (2020) Statement from New York State Health Commissioner Dr. Howard Zucker on Successful Nursing Home Testing Program. June 10, 2020. Available at: https://www.health.ny.gov/press/releases/2020/2020-06-10_nursing_home_testing_program.htm (accessed on: 09.07.2020)

⁶⁶⁶ NY Governor (2020) Amid Ongoing COVID-19 Pandemic, Governor Cuomo Launches New Initiative to Expand Access to Testing in Low-Income Communities and Communities of Color. May 9, 2020. Available at: <https://www.governor.ny.gov/news/amid-ongoing-covid-19-pandemic-governor-cuomo-launches-new-initiative-expand-access-testing-low> (accessed on: 09.07.2020)

⁶⁶⁷ New York State Department of Health (2020) Revised Interim Guidance: Protocol for COVID-19 Testing Applicable to All Health Care Providers and Local Health Departments. July 2, 2020. Available at: https://coronavirus.health.ny.gov/system/files/documents/2020/06/doh_covid19_revisedtestingprotocol_053120.pdf (accessed on: 09.07.2020)

⁶⁶⁸ NYC Health and Hospitals (2020) Testing. 2020. Available at: <https://www.nychealthandhospitals.org/test-and-trace/testing/> (accessed on: 09.07.2020)

⁶⁶⁹ NY Governor (2020) Amid Ongoing COVID-19 Pandemic, Governor Cuomo Announces Statewide Antibody Testing Survey Will Begin Tomorrow. April 19, 2020. Available at: <https://www.governor.ny.gov/news/amid-ongoing-covid-19-pandemic-governor-cuomo-announces-statewide-antibody-testing-survey-will> (Accessed 20.04.2020)

⁶⁷⁰ NY Governor (2020) What You Need to Know. 7 June. Available at: <https://coronavirus.health.ny.gov/home> (accessed 8.6.2020)

⁶⁷¹ CBS New York (2020) Contact Tracers In NYC Having Success, But Also Running Into Challenges Gathering Necessary Information. June 21, 2020 Available at: <https://newyork.cbslocal.com/2020/06/21/contact-tracing-new-york-city-coronavirus-covid-19/> (accessed 23.6.2020)

⁶⁷² New York State (2020) Novel Coronavirus: What you need to know. Available at: <https://coronavirus.health.ny.gov/home> (accessed 29.6.2020)

⁶⁷³ NY Governor (2020) Governor Cuomo, Governor Murphy and Governor Lamont Announce Joint Incoming Travel Advisory That All Individuals Traveling from States with Significant Community Spread of COVID-19 Quarantine for 14 Days. June 24, 2020. Available at: <https://www.governor.ny.gov/news/governor-cuomo-governor-murphy-and-governor-lamont-announce-joint-incoming-travel-advisory->

all#:~:text=Governor%20Andrew%20M.%20Cuomo%2C%20New,contact%20within%20the%20identified%20state (accessed 29.6.2020)

⁶⁷⁴ NY Governor (2020) Governor Cuomo Announces Individuals Traveling to New York from Three Additional States Will Be Required to Quarantine for 14 Days. July 7, 2020. Available at: <https://www.governor.ny.gov/news/governor-cuomo-announces-individuals-traveling-new-york-three-additional-states-will-be> (accessed on: 09.07.2020)

⁶⁷⁵ CNA (2020) COVID-19: New York enacts new coronavirus protections for nursing home residents. May 11, 2020. Available at: <https://www.channelnewsasia.com/news/world/covid-19-new-york-enacts-new-coronavirus-protections-for-nursing-12719734> (accessed 12.5.2020)

⁶⁷⁶ New York State (2020) Novel Coronavirus: What you need to know. Available at: <https://coronavirus.health.ny.gov/home> (accessed 8.5.2020)

⁶⁷⁷ NY Governor (2020) COVID Tracker. 13 July 2020. Available at: <https://covid19tracker.health.ny.gov/views/NYS-COVID19-Tracker/NYSDOHCOVID-19Tracker-DailyTracker?%3Aembed=yes&%3Atoolbar=no&%3Atabs=n> (accessed 13.7.2020)

⁶⁷⁸ NYC Health (2020) What New Yorkers Need to Know Now About COVID-19. May 20, 2020. Available at: <https://www1.nyc.gov/assets/doh/downloads/pdf/imm/coronavirus-factsheet.pdf> (accessed on: 08.07.2020)

⁶⁷⁹ NYC Health (2020) Summary of Current New York City COVID-19 Guidance for Quarantine, Isolation and Transmission-Based Precautions. June 28, 2020. Available at: <https://www1.nyc.gov/assets/doh/downloads/pdf/imm/covid-19-provider-quarantine-precautions.pdf> (accessed on: 08.07.2020)

⁶⁸⁰ New York City Government (2020) COVID-19 Hotel Program. 2020. Available at: <https://www1.nyc.gov/site/helpnynyc/get-help/covid-19-hotel-program.page> (accessed on: 08.07.2020)

⁶⁸¹ New York State (2020) Novel Coronavirus: What you need to know. Available at: <https://coronavirus.health.ny.gov/home> (accessed 8.5.2020)

⁶⁸² YouGov (2020) Latest round-up of YouGov's coronavirus survey results.

⁶⁸³ NYC Health (2020) COVID-19 Face Coverings: Frequently Asked Questions. June 8, 2020. Available at: <https://www1.nyc.gov/assets/doh/downloads/pdf/imm/covid-19-face-covering-faq.pdf> (accessed on: 09.07.2020)

⁶⁸⁴ New York State (2020) Novel Coronavirus: What you need to know. Available at: <https://coronavirus.health.ny.gov/home> (accessed 8.5.2020)

⁶⁸⁵ The New York Times (2020) N.Y. Reports Fewer Than 100 Virus Deaths for First Time Since March. 23 May 2020. Available at: <https://www.nytimes.com/2020/05/23/nyregion/coronavirus-new-york-update.html> (accessed 28.5.20)

⁶⁸⁶ New York State (2020) Novel Coronavirus: What you need to know. Available at: <https://coronavirus.health.ny.gov/home> (accessed 29.6.2020)

⁶⁸⁷ NY Governor (2020) Governor Cuomo Announces State Park Swimming Pools to Open July 4th Weekend. July 2, 2020. Available at: <https://www.governor.ny.gov/news/governor-cuomo-announces-state-park-swimming-pools-open-july-4th-weekend> (accessed on: 09.07.2020)

⁶⁸⁸ Bloomberg (2020) NYC to Stop Subways Early Every Morning for Virus Cleaning. May 1, 2020. Available at: <https://www.bloomberg.com/news/articles/2020-04-30/new-york-city-to-stop-subways-overnight-daily-for-disinfection> (accessed 3.5.2020)

⁶⁸⁹ Market Watch (2020) Though renovations and expansions may slow, New York's 3 airports will stay open. May 21, 2020. Available at: <https://www.marketwatch.com/story/though-renovations-and-expansions-may-slow-new-yorks-3-airports-will-stay-open-2020-05-21> (accessed 5.6.2020)

⁶⁹⁰ NY Governor (2020) What You Need to Know. 7 June. Available at: <https://coronavirus.health.ny.gov/home> (accessed 8.6.2020)

⁶⁹¹ CBS New York (2020) As New Yorkers Move Forward With Reopening, Many Worry That Out-Of-State Visitors Will Bring Virus Back. June 22, 2020 Available at: <https://newyork.cbslocal.com/2020/06/22/as-new-yorkers-move-forward-with-reopening-many-worry-that-out-of-state-visitors-will-bring-virus-back/> (accessed 23.6.2020)

⁶⁹² ABC (2020) Coronavirus News: NY to allow religious services of 10 or less people. May 21, 2020. Available at: <https://abc7ny.com/religion/ny-to-allow-religious-services-of-10-or-less-people/6199154/> (accessed 1.6.2020)

⁶⁹³ NY Governor (2020) What You Need to Know. 7 June. Available at: <https://coronavirus.health.ny.gov/home> (accessed 8.6.2020)

⁶⁹⁴ NY times (2020) Supreme Court, in 5-4 Decision, Rejects Church's Challenge to Shutdown Order. 30 May 2020. Available at: <https://www.nytimes.com/2020/05/30/us/supreme-court-churches-coronavirus.html> (Accessed 1.6.2020)

⁶⁹⁵ The New York Daily News (2020) NYC's message to restaurant and bar patrons amid coronavirus: 'Take out, don't hang out' 22 May 2020. Available at: <https://www.nydailynews.com/coronavirus/ny-coronavirus-restaurant-bar-take-out-psa-new-york-city-20200522-egh2hzmivcltms3a7svrex3fm-story.html> (accessed 28.5.20)

⁶⁹⁶ New York Post (2020) Andrew Cuomo: New York sports teams can hold in-state training camps. 24 May 2020. Available at: <https://nypost.com/2020/05/24/andrew-cuomo-new-york-sports-teams-can-hold-in-state-training-camps/> (accessed 28.5.20)

⁶⁹⁷ BBC (2020) Coronavirus: New York Stock Exchange trading floor reopens May 26, 2020. Available at: <https://www.bbc.com/news/business-52803390> (accessed 28.5.2020)

⁶⁹⁸ The New York Times (2020) Cuomo Focuses on Quelling Virus Hot Spots in N.Y.C. Before Reopening. 31 May 2020. Available at: <https://www.nytimes.com/2020/05/30/nyregion/coronavirus-new-york-live-updates.html> (accessed on: 4.6.2020)

⁶⁹⁹ NY Governor (2020) Governor Cuomo Announces Dentists Can Reopen Statewide Tomorrow and Updates New Yorkers on State's Progress During Ongoing COVID-19 Pandemic. 31 May 2020. Available at: <https://www.governor.ny.gov/news/governor-cuomo-announces-dentists-can-reopen-statewide-tomorrow-and-updates-new-yorkers-states> (accessed on: 4.6.2020)

⁷⁰⁰ NY Governor (2020) What You Need to Know. 21 June. Available at: <https://coronavirus.health.ny.gov/home> (accessed 21.6.2020)

⁷⁰¹ NY Governor (2020) What You Need to Know. 21 June. Available at: <https://coronavirus.health.ny.gov/home> (accessed 21.6.2020)

⁷⁰² CBS New York (2020) Cuomo Signs Executive Order Excluding Workers From COVID-19 Paid Sick Leave If They Travel To High-Risk States. June 27, 2020. Available at: <https://newyork.cbslocal.com/2020/06/27/cuomo-signs-executive-order-excluding-workers-from-covid-19-paid-sick-leave-if-they-travel-to-high-risk-states/> (accessed 29.6.2020)

⁷⁰³ CBS New York (2020) New York City Delays Indoor Dining As Coronavirus Cases Climb Across Country. July 1, 2020. Available at: <https://newyork.cbslocal.com/2020/07/01/new-york-city-postpones-indoor-dining/> (accessed on: 09.07.2020)

⁷⁰⁴ CBS New York (2020) Mid-Hudson Region Enters Phase 4 Reopening, But Gyms, Malls And Movie Theaters Still Left Off List. July 7, 2020. Available at: <https://newyork.cbslocal.com/2020/07/07/mid-hudson-region-phase-4-reopening/> (accessed on: 09.07.2020)

- ⁷⁰⁵ CBS New York (2020) Phase 3 Begins In NYC; Salons, Dog Parks, Basketball Courts Among Those To Reopen, Indoor Dining Not Allowed. July 6, 2020. Available at: <https://newyork.cbslocal.com/2020/07/06/new-york-city-phase-3-reopening-nail-salons-spas-tattoo-parlors-dog-parks-basketball-courts/> (accessed on: 09.07.2020)
- ⁷⁰⁶ CBS New York (2020) Gov. Cuomo: Malls With Enhanced COVID-19 Filters Can Reopen In Phase 4 Regions On Friday. July 8, 2020. Available at: <https://newyork.cbslocal.com/2020/07/08/coronavirus-covid-19-long-island-phase-4-reopening-museums/> (accessed on: 09.07.2020)
- ⁷⁰⁷ Bklyner (2020) Decision on New York school reopenings won't be made until July at the earliest, Cuomo says. Available at: <https://bklyner.com/decision-on-new-york-school-reopenings-wont-be-made-until-july-at-the-earliest-cuomo-says/> (accessed 28.5.2020)
- ⁷⁰⁸ CBS New York (2020) Questions Far Outnumber Answers As New York City Considers How To Open Schools In September. 10 Jun 2020. Available at: <https://newyork.cbslocal.com/2020/06/10/new-york-city-public-schools-reopening-richard-carranza-coronavirus-covid-19/> (accessed on: 11.6.20)
- ⁷⁰⁹ NY Governor (2020) Governor Cuomo Announces New York State Will Decide on Fall School Reopening During the First Week of August. July 8, 2020. Available at: <https://www.governor.ny.gov/news/governor-cuomo-announces-new-york-state-will-decide-fall-school-reopening-during-first-week> (accessed on: 09.07.2020)
- ⁷¹⁰ CBS New York (2020) New York City Public Schools Will Reopen With 'Blended Learning' Model In Fall, Mayor Says. July 8, 2020. Available at: <https://newyork.cbslocal.com/2020/07/08/new-york-city-schools-fall-reopen-plan/> (accessed on: 09.07.2020)
- ⁷¹¹ NY Governor (2020) What You Need to Know. 7 June. Available at: <https://coronavirus.health.ny.gov/home> (accessed 8.6.2020)
- ⁷¹² CBS New York (2020) New York City Day Care Centers Allowed To Reopen As Early As Monday. July 7, 2020. Available at: <https://newyork.cbslocal.com/2020/07/07/new-york-city-day-care-reopening/> (accessed on: 09.07.2020)
- ⁷¹³ The New York Times (2020) How Delays and Unheeded Warnings Hindered New York's Virus Fight. April 8, 2020. Available at: <https://www.nytimes.com/2020/04/08/nyregion/new-york-coronavirus-response-delays.html> (accessed on: 09.07.2020)
- ⁷¹⁴ The New York Times (2020) How Delays and Unheeded Warnings Hindered New York's Virus Fight. April 8, 2020. Available at: <https://www.nytimes.com/2020/04/08/nyregion/new-york-coronavirus-response-delays.html> (accessed on: 09.07.2020)
- ⁷¹⁵ The Guardian (2020) Cuomo undercuts De Blasio bid to keep New York schools shut until September. Apr 11, 2020. Available at: <https://www.theguardian.com/us-news/2020/apr/11/cuomo-de-blasio-new-york-schools> (accessed 18.4.2020)
- ⁷¹⁶ The New York Times (2020) 'This Is Not the Hunger Games': National Testing Strategy Draws Concerns. 25 May 2020. Available at: <https://www.nytimes.com/2020/05/25/health/coronavirus-testing-trump.html> (accessed 28.5.20)
- ⁷¹⁷ Fox News (2020) Cuomo attempts to deflect blame of deadly nursing home coronavirus debacle on to Trump. 23 May 2020. Available at: <https://www.foxnews.com/politics/cuomo-blames-trump-nursing-home-debacle-new-york-coronavirus> (accessed on: 11.6.20)
- ⁷¹⁸ CBS News (2020) President Trump accuses New York City of inflating its coronavirus death toll. April 16, 2020. Available at: <https://www.cbsnews.com/news/president-trump-accuses-new-york-city-of-inflating-its-coronavirus-death-toll/> (accessed on: 09.07.2020)
- ⁷¹⁹ The New York Times (2020) Is the Coronavirus Death Tally Inflated? Here's Why Experts Say No. June 19, 2020. Available at: <https://www.nytimes.com/interactive/2020/06/19/us/us-coronavirus-covid-death-toll.html> (accessed on: 09.07.2020)
- ⁷²⁰ CNBC (2020) George Floyd protests threaten New York's coronavirus progress: 'Covid still kills,' Gov. Cuomo says. 2 June 2020. Available at: <https://www.cnbc.com/2020/06/02/george-floyd-protests-threaten-new-yorks-coronavirus-progress-covid-still-kills-gov-cuomo-says.html> (accessed on: 4.6.2020)
- ⁷²¹ CBS New York (2020) Cuomo To Protesters: Wear A Mask, Not A Chin Guard. June 13, 2020. Available at: <https://newyork.cbslocal.com/2020/06/13/cuomo-to-protesters-wear-a-mask-not-a-chin-guard/> (accessed: 16.6.2020)
- ⁷²² Channel News Asia (2020) New York governor urges better enforcement of coronavirus rules. June 16, 2020. Available at: <https://www.channelnewsasia.com/news/world/new-york-governor-enforcement-covid-19-coronavirus-rules-12838600> (accessed: 16.6.2020)
- ⁷²³ Channel News Asia (2020) New York's Cuomo urges Trump to acknowledge COVID-19 as 'major problem'. July 7, 2020. Available at: <https://www.channelnewsasia.com/news/world/new-york-cuomo-trump-acknowledge-covid-19-coronavirus-12907358> (accessed on: 09.07.2020)
- ⁷²⁴ YouGov (2020) Latest round-up of YouGov's coronavirus survey results.
- ⁷²⁵ U.S Census Bureau (2020) ADVANCE MONTHLY SALES FOR RETAIL AND FOOD SERVICES, MARCH 2020. Available at: https://www.census.gov/retail/marts/www/marts_current.pdf (accessed 17.4.2020)
- ⁷²⁶ USA Today (2020) Record 22 million Americans file for unemployment benefits over past month as layoffs continue. Available at: <https://www.usatoday.com/story/money/2020/04/16/coronavirus-more-workers-filed-jobless-claims-layoffs/5136911002/> (accessed 17.4.2020)
- ⁷²⁷ The New York Times (2020) 'Pretty Catastrophic' Month for Retailers, and Now a Race to Survive. Available at: <https://www.nytimes.com/2020/04/15/business/economy/coronavirus-retail-sales.html> (accessed 17.4.2020)
- ⁷²⁸ Forbes (2020) The Paycheck Protection Program Ran Out Of Funding. What's Next For Small Business Owners? Available at: <https://www.forbes.com/sites/advisor/2020/04/16/the-paycheck-protection-program-ran-out-of-funding-whats-next-for-small-business-owners/#730211317440> (accessed 17.4.2020)
- ⁷²⁹ Governor (2020) After Weeks of Demanding Approval, Governor Cuomo Announces FDA Gives New York State Authority to Conduct All COVID-19 Testing at Public and Private Labs. Available at: <https://www.governor.ny.gov/news/after-weeks-demanding-approval-governor-cuomo-announces-fda-gives-new-york-state-authority> (accessed 17.4.2020)
- ⁷³⁰ The Daily Gazette (2020) State to get COVID-19 aid package with up to \$100B. Available at: <https://dailygazette.com/article/2020/03/25/cuomo-fumes-at-covid-19-aid-package-with-up-to-100b-for-new-york> (accessed 17.4.2020)
- ⁷³¹ CNN (2020) New York borrows more than \$1.1 billion to pay unemployment benefits. 4 Jun 2020. Available at: <https://edition.cnn.com/2020/06/04/politics/new-york-unemployment-federal-loan/index.html> (accessed on: 11.6.20)
- ⁷³² The New York Times (2020) Fed Expects Unemployment Rate to Stay High: Live Updates. 11 Jun 2020. Available at: <https://www.nytimes.com/2020/06/10/business/stock-market-today-coronavirus.html> (accessed on: 11.6.20)
- ⁷³³ New York Post (2020) Families of NY workers who died fighting coronavirus will get death benefits. 25 May 2020. Available at: <https://nypost.com/2020/05/25/gov-cuomo-announces-death-benefits-for-ny-coronavirus-workers/> (accessed 28.5.20)
- ⁷³⁴ CBS New York (2020) Growing Concern Pandemic Could Cause Spike In Homeless Population. June 22, 2020 Available at: <https://newyork.cbslocal.com/2020/06/22/growing-concern-pandemic-could-cause-spike-in-homeless-population/> (accessed 23.6.2020)

- ⁷³⁵ NZ Ministry of Health (2020) COVID-19 - current cases. Available at: <https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-current-situation/covid-19-current-cases> (accessed 13.5.2020)
- ⁷³⁶ Channel News Asia (2020) New Zealand confirms two new cases of COVID-19, ending 24-day streak. June 16, 2020. Available at: <https://www.channelnewsasia.com/news/world/new-zealand-covid-19-coronavirus-new-cases-12839078> (accessed: 16.6.2020)
- ⁷³⁷ Google (2020) COVID-19 Community Mobility Reports. May 2020. Available at: <https://www.google.com/covid19/mobility/> (accessed 21.5.2020)
- ⁷³⁸ RNZ (2020) As it happened: Covid-19 updates from NZ and around the world. Apr 17, 2020. Available at: <https://www.rnz.co.nz/news/covid-19/414460/as-it-happened-covid-19-updates-from-nz-and-around-the-world> (accessed 17.4.2020)
- ⁷³⁹ Bloomberg (2020) This Country Says It's on Course to Wipe Out Covid-19. Apr 17, 2020. Available at: <https://www.bloomberg.com/news/articles/2020-04-16/new-zealand-seeks-to-wipe-out-virus-after-early-lockdown-success> (accessed 18.4.2020)
- ⁷⁴⁰ NZ Government (2020) COVID-19: Elimination strategy for Aotearoa New Zealand. 8 May 2020. Available <https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-current-situation/covid-19-elimination-strategy-aotearoa-new-zealand> (accessed 22.6.2020)
- ⁷⁴¹ New Zealand Government (2020) New Zealand COVID-19 Alert Levels. Available at: <https://covid19.govt.nz/assets/resources/tables/COVID-19-alert-levels-detailed.pdf> (accessed 8.5.2020)
- ⁷⁴² RNZ (2020) Covid-19: Prime Minister Jacinda Arden announces details for alert level 3. Apr 16, 2020. Available at: <https://www.rnz.co.nz/news/national/414391/covid-19-prime-minister-jacinda-arden-announces-details-for-alert-level-3> (accessed 17.4.2020)
- ⁷⁴³ New Zealand Government (2020) Alert Level 2. Available at: <https://covid19.govt.nz/alert-system/alert-level-2/> (Accessed 14.5.2020)
- ⁷⁴⁴ NZ Herald (2020) Covid 19 coronavirus: Zero! Bring on level 1 - NZ now Covid-free. Available at: https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12338016 (accessed 8.6.2020)
- ⁷⁴⁵ Channel News Asia (2020) New Zealand could lift all COVID-19 measures by next week: PM Arden. 3 June 2020. Available at: <https://www.channelnewsasia.com/news/world/covid-19-new-zealand-measures-jacinda-arden-12798990> (accessed on: 4.6.2020)
- ⁷⁴⁶ TVNZ (2020) Kiwis celebrate first weekend at Alert Level 1 by flocking to rugby games, clubs and malls. June 13, 2020. Available at: <https://www.tvnz.co.nz/one-news/new-zealand/kiwis-celebrate-first-weekend-alert-level-1-huge-rugby-crowds-dancing-and-shopping> (accessed: 16.6.2020)
- ⁷⁴⁷ Channel News Asia (2020) 'Nobody's wearing masks': Rugby fans return in New Zealand. June 13, 2020. Available at: https://www.channelnewsasia.com/news/nobody-s-wearing-masks-rugby-fans-return-in-new-zealand-12832402?cid=h3_referral_inarticlelinks_24082018_cna (accessed: 16.6.2020)
- ⁷⁴⁸ RNZ (2020) WHO urges NZ to do more work on its contact tracing systems. 11 Jun 2020. Available at: <https://www.rnz.co.nz/news/national/418760/who-urges-nz-to-do-more-work-on-its-contact-tracing-systems> (accessed on: 11.6.20)
- ⁷⁴⁹ RNZ (2020) Covid-19: Public Health Units' ability to identify clusters 'significant point of weakness' - review. June 24, 2020. Available at: <https://www.rnz.co.nz/news/covid-19/419742/covid-19-public-health-units-ability-to-identify-clusters-significant-point-of-weakness-review> (accessed 30.6.2020)
- ⁷⁵⁰ NZ Govt (2020) NZ COVID Tracer app . May 28, 2020. Available at: <https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-health-advice-general-public/contact-tracing-covid-19/nz-covid-tracer-app> (accessed 28.5.2020)
- ⁷⁵¹ NZ Govt (2020) New app puts tailored COVID-19 information in the hands of health workers. May 27, 2020. Available at: <https://www.health.govt.nz/news-media/media-releases/new-app-puts-tailored-covid-19-information-hands-health-workers> (Accessed 28.5.2020)
- ⁷⁵² NewsHub (2020) New Zealand businesses already using COVID-19 contact tracing apps. May 12, 2020. Available at: <https://www.newshub.co.nz/home/money/2020/05/new-zealand-businesses-already-using-covid-19-contact-tracing-apps.html> (accessed 13.5.2020)
- ⁷⁵³ MOH NZ (2020) No active cases of COVID-19. 8 June. Media Release. <https://www.health.govt.nz/news-media/media-releases/no-active-cases-covid-19> (accessed 8.6.2020)
- ⁷⁵⁴ NZ Ministry of Health (2020) How NZ COVID Tracer works Available at: <https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-novel-coronavirus-resources-and-tools/nz-covid-tracer-app/how-nz-covid-tracer-works> (accessed 29.6.2020)
- ⁷⁵⁵ NZ Ministry of Health (2020) COVID-19 - current cases. Available at: <https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-current-situation/covid-19-current-cases> (accessed 13.5.2020)
- ⁷⁵⁶ RNZ (2020) Two new cases of Covid-19 in isolation facilities - Bloomfield. June 23, 2020. Available at: <https://www.rnz.co.nz/news/national/419647/two-new-cases-of-covid-19-in-isolation-facilities-bloomfield> (accessed 23.6.2020)
- ⁷⁵⁷ RNZ (2020) Plans to close testing centres thwarted by new cases. June 23, 2020. Available at: <https://www.rnz.co.nz/news/covid-19/419602/plans-to-close-testing-centres-thwarted-by-new-cases> (accessed 23.6.2020)
- ⁷⁵⁸ RNZ (2020) More than 50,000 Covid-19 tests negative, Aucklanders told. June 28, 2020. Available at: <https://www.rnz.co.nz/news/covid-19/420002/more-than-50-000-covid-19-tests-negative-aucklanders-told> (accessed 30.6.2020)
- ⁷⁵⁹ RNZ (2020) Ministry of Health reintroduces high risk criteria for Covid-19 testing. June 25, 2020. Available at: <https://www.rnz.co.nz/news/national/419774/ministry-of-health-reintroduces-high-risk-criteria-for-covid-19-testing> (accessed 30.6.2020)
- ⁷⁶⁰ RNZ (2020) Covid-19 testing criteria still causing confusion among GPs. July 3, 2020. Available at: <https://www.rnz.co.nz/news/national/420400/covid-19-testing-criteria-still-causing-confusion-among-gps> (accessed on: 13.07.2020)
- ⁷⁶¹ Regional Public Health (2020) Coronavirus (COVID-19) frequently asked questions. May 12, 2020. Available at: <http://www.rph.org.nz/public-health-topics/illness-and-disease/coronavirus-covid-19/faqs/> (accessed on: 10.07.2020)
- ⁷⁶² New Zealand Government Ministry of Health (2020) Updated advice for health professionals: novel coronavirus (COVID-19). July 3, 2020. Available at: https://www.health.govt.nz/system/files/documents/pages/updated-advice-_for-health-professionals-novel-coronavirus-covid-19-3july2020.pdf (accessed on: 10.07.2020)

- ⁷⁶³ New Zealand Government Ministry of Health (2020) Updated advice for health professionals: novel coronavirus (COVID-19). July 3, 2020. Available at: https://www.health.govt.nz/system/files/documents/pages/updated-advice-_for-health-professionals-novel-coronavirus-covid-19-3july2020.pdf (accessed on: 10.07.2020)
- ⁷⁶⁴ New Zealand Government Ministry of Health (2020) Updated advice for health professionals: novel coronavirus (COVID-19). July 3, 2020. Available at: https://www.health.govt.nz/system/files/documents/pages/updated-advice-_for-health-professionals-novel-coronavirus-covid-19-3july2020.pdf (accessed on: 10.07.2020)
- ⁷⁶⁵ New Zealand Government Ministry of Health (2020) COVID-19 – Managed isolation and quarantine. July 3, 2020. Available at: <https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-current-situation/covid-19-border-controls/covid-19-managed-isolation-and-quarantine> (accessed on: 10.07.2020)
- ⁷⁶⁶ New Zealand Government Ministry of Health (2020) COVID-19 – Managed isolation and quarantine. July 3, 2020. Available at: <https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-current-situation/covid-19-border-controls/covid-19-managed-isolation-and-quarantine> (accessed on: 10.07.2020)
- ⁷⁶⁷ New Zealand Government Ministry of Health (2020) COVID-19 – Managed isolation and quarantine. July 3, 2020. Available at: <https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-current-situation/covid-19-border-controls/covid-19-managed-isolation-and-quarantine> (accessed on: 10.07.2020)
- ⁷⁶⁸ New Zealand Herald (2020) Covid 19 coronavirus: Jacinda Ardern updates on containing Covid-19 at the border. June 21, 2020. Available at: https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12341923 (accessed 22.6.2020)
- ⁷⁶⁹ Channel News Asia (2020) New Zealand confirms two new cases of COVID-19, ending 24-day streak. June 16, 2020. Available at: <https://www.channelnewsasia.com/news/world/new-zealand-covid-19-coronavirus-new-cases-12839078> (accessed: 16.6.2020)
- ⁷⁷⁰ TVNZ (2020) PM says circumstances surrounding new Covid-19 cases not considered acceptable by Government. June 16, 2020. Available at: <https://www.tvnz.co.nz/one-news/new-zealand/pm-says-circumstances-surrounding-new-covid-19-cases-not-considered-acceptable-government> (accessed: 16.6.2020)
- ⁷⁷¹ TVNZ (2020) Medical expert calls decision to let two women with Covid-19 leave quarantine with no testing 'completely unacceptable'. June 16, 2020. Available at: <https://www.tvnz.co.nz/one-news/new-zealand/medical-expert-calls-decision-let-two-women-covid-19-leave-quarantine-no-testing-completely-unacceptable> (accessed: 16.6.2020)
- ⁷⁷² TVNZ (2020) Government suspends all compassionate exemptions for travellers. June 16, 2020. Available at: <https://www.tvnz.co.nz/one-news/new-zealand/covid-19-government-suspend-all-compassionate-exemptions-travellers-1-news-understands> (accessed: 16.6.2020)
- ⁷⁷³ RNZ (2020) Auckland port keeps shore leave ban for overseas cargo ship crews. June 19, 2020. Available at: <https://www.rnz.co.nz/news/national/419397/auckland-port-keeps-shore-leave-ban-for-overseas-cargo-ship-crews> (accessed 23.6.2020)
- ⁷⁷⁴ The Guardian (2020) New Zealand's Covid-19 isolation facilities under 'extreme stress', review finds. June 28, 2020. Available at: <https://www.theguardian.com/world/2020/jun/28/new-zealands-covid-19-isolation-facilities-under-extreme-stress-review-finds> (accessed 30.6.2020)
- ⁷⁷⁵ RNZ (2020) Seven days and counting and still no answer from Bloomfield. June 23, 2020. Available at: <https://www.rnz.co.nz/news/covid-19/419673/seven-days-and-counting-and-still-no-answer-from-bloomfield> (accessed 30.6.2020)
- ⁷⁷⁶ RNZ (2020) Covid-19 managed isolation and testing: by the numbers. June 24, 2020. Available at: <https://www.rnz.co.nz/news/covid-19/419745/covid-19-managed-isolation-and-testing-by-the-numbers> (accessed 30.6.2020)
- ⁷⁷⁷ New Zealand Herald (2020) Prime Minister Jacinda Ardern on Health Minister David's Clark's resignation. July 2, 2020. Available at: https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12344935 (accessed 2.7.2020)
- ⁷⁷⁸ RNZ (2020) Border restrictions eased for sportspeople, infrastructure project workers. June 19, 2020. Available at: <https://www.rnz.co.nz/news/national/419417/border-restrictions-eased-for-sportspeople-infrastructure-project-workers> (accessed 23.6.2020)
- ⁷⁷⁹ RNZ (2020) Covid-19: Thousands of NZers in isolation, with hundreds more expected in coming days. June 21, 2020. Available at: <https://www.rnz.co.nz/news/national/419510/covid-19-thousands-of-nzers-in-isolation-with-hundreds-more-expected-in-coming-days> (accessed 23.6.2020)
- ⁷⁸⁰ RNZ (2020) People in managed isolation have access to healthcare - minister Chris Hipkins. July 13, 2020. Available at: <https://www.rnz.co.nz/news/national/421097/people-in-managed-isolation-have-access-to-healthcare-minister-chris-hipkins> (accessed on: 13.07.2020)
- ⁷⁸¹ RNZ (2020) NZers left country during lockdown, returned via stays in managed isolation. June 26, 2020. Available at: <https://www.rnz.co.nz/news/covid-19/419904/nzers-left-country-during-lockdown-returned-via-stays-in-managed-isolation> (accessed 30.6.2020)
- ⁷⁸² RNZ (2020) 'It's not so kind' - rise in hostility towards NZers looking to come home. June 24, 2020. Available at: <https://www.rnz.co.nz/news/covid-19/419757/it-s-not-so-kind-rise-in-hostility-towards-nzers-looking-to-come-home> (accessed 30.6.2020)
- ⁷⁸³ RNZ (2020) Air NZ putting a temporary hold on new international bookings to NZ. July 7, 2020. Available at: <https://www.rnz.co.nz/news/national/420658/air-nz-putting-a-temporary-hold-on-new-international-bookings-to-nz> (accessed on: 13.07.2020)
- ⁷⁸⁴ RNZ (2020) Returning Kiwis in managed isolation: 'There is going to be a limit'. July 8, 2020. Available at: <https://www.rnz.co.nz/news/national/420734/returning-kiwis-in-managed-isolation-there-is-going-to-be-a-limit> (accessed on: 13.07.2020)
- ⁷⁸⁵ RNZ (2020) One new case of Covid-19 in NZ in isolation visited Auckland supermarket. July 8, 2020. Available at: <https://www.rnz.co.nz/news/national/420756/one-new-case-of-covid-19-in-nz-in-isolation-visited-auckland-supermarket> (accessed on: 13.07.2020)
- ⁷⁸⁶ RNZ (2020) Megan Woods on Covid-19 escape: 'Things have changed in terms of non-compliance'. July 8, 2020. Available at: <https://www.rnz.co.nz/national/programmes/checkpoint/audio/2018754084/megan-woods-on-covid-19-escape-things-have-changed-in-terms-of-non-compliance> (accessed on: 13.07.2020)
- ⁷⁸⁷ RNZ (2020) Permanent police presence at Covid-19 isolation facilities from today. July 9, 2020. Available at: <https://www.rnz.co.nz/news/national/420833/permanent-police-presence-at-covid-19-isolation-facilities-from-today> (accessed on: 13.07.2020)
- ⁷⁸⁸ RNZ (2020) Man arrested after cutting through fence to escape Hamilton isolation facility. July 10, 2020. Available at: <https://www.rnz.co.nz/news/national/420919/man-arrested-after-cutting-through-fence-to-escape-hamilton-isolation-facility> (accessed on: 13.07.2020)

- ⁷⁸⁹ RNZ (2020) Covid-19 isolation escapes: 'These are not prisons, these are hotels' - Health Minister. July 10, 2020. Available at: <https://www.rnz.co.nz/news/national/420924/covid-19-isolation-escapes-these-are-not-prisons-these-are-hotels-health-minister> (accessed on: 13.07.2020)
- ⁷⁹⁰ RNZ (2020) Fourth escape from isolation: Person breaks window to get out of Auckland hotel. July 11, 2020. Available at: <https://www.rnz.co.nz/news/national/420999/fourth-escape-from-isolation-person-breaks-window-to-get-out-of-auckland-hotel> (accessed on: 13.07.2020)
- ⁷⁹¹ RNZ (2020) Govt to look at reinstating compassionate leave for those in Covid-19 isolation. July 2, 2020. Available at: <https://www.rnz.co.nz/news/national/420324/govt-to-look-at-reinstating-compassionate-leave-for-those-in-covid-19-isolation> (accessed on: 13.07.2020)
- ⁷⁹² New Zealand Government (2020) COVID-19: Use of face masks in the community Available at: <https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-health-advice-general-public/covid-19-use-face-masks-community> (accessed 4.6.2020)
- ⁷⁹³ TVNZ (2020) Air NZ to resume Auckland to Shanghai flights, starting next week. June 16, 2020. Available at: <https://www.tvnz.co.nz/one-news/new-zealand/air-nz-resume-auckland-shanghai-flights-starting-next-week> (accessed: 16.6.2020)
- ⁷⁹⁴ Reuters (2020) New Zealand extends cruise ship ban, tightens rules to contain virus at border. June 22, 2020 Available at: <https://www.reuters.com/article/us-health-coronavirus-newzealand-cruises/new-zealand-extends-cruise-ship-ban-tightens-rules-to-contain-virus-at-border-idUSKBN23T0JL> (accessed 23.6.2020)
- ⁷⁹⁵ New Zealand Government (2020) Alert Level 3. April 27, 2020. Available at: <https://covid19.govt.nz/alert-system/alert-level-3/> (accessed 3.5.2020)
- ⁷⁹⁶ CNA (2020). Crewcuts and catch-ups as New Zealand COVID-19 lockdown ends. May 14, 2020. Available at: <https://www.channelnewsasia.com/news/world/covid-19-new-zealand-lockdown-end-reopening-12731694> (accessed 18.05.2020)
- ⁷⁹⁷ AP (2020) New Zealand barber snips away at midnight as nation reopens. May 14, 2020. Available at: https://apnews.com/dfdb79d25e99cc2e28e282879553ab65?utm_source=Twitter&utm_campaign=SocialFlow&utm_medium=A_P (accessed 14.5.2020)
- ⁷⁹⁸ Voice of America (2020) More COVID-19 Lockdown Restrictions to Be Eased in New Zealand. 26 May 2020. Available at: <https://www.voanews.com/covid-19-pandemic/more-covid-19-lockdown-restrictions-be-eased-new-zealand> (accessed 28.5.20)
- ⁷⁹⁹ CNA (2020). Back to school for New Zealand kids after COVID-19 lockdown. May 18, 2020. Available at: <https://www.channelnewsasia.com/news/world/back-to-school-for-new-zealand-kids-after-covid-19-lockdown-12745136> (accessed 18.05.2020)
- ⁸⁰⁰ Bloomberg (2020) This Country Says It's on Course to Wipe Out Covid-19. Apr 17, 2020. Available at: <https://www.bloomberg.com/news/articles/2020-04-16/new-zealand-seeks-to-wipe-out-virus-after-early-lockdown-success> (accessed 18.4.2020)
- ⁸⁰¹ TVNZ (2020) World Health Organisation praises New Zealand for its 'very systematic' response to Covid-19 pandemic. 9 May 2020. Available at: <https://www.tvnz.co.nz/one-news/new-zealand/world-health-organisation-praises-new-zealand-its-very-systematic-response-covid-19-pandemic> (accessed on: 11.6.20)
- ⁸⁰² New Zealand Herald (2020) Covid 19 coronavirus: Jacinda Ardern updates on containing Covid-19 at the border. June 21, 2020. Available at: https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12341923 (accessed 22.6.2020)
- ⁸⁰³ RNZ (2020) Border reopening must be priority - Business NZ. June 30, 2020. Available at: <https://www.rnz.co.nz/news/covid-19/420127/border-reopening-must-be-priority-business-nz> (accessed 30.6.2020)
- ⁸⁰⁴ Roy Morgan (2020) PM Jacinda Ardern ascendant as Labour support (56.5%) is now more than double National (26.5%) three months from NZ Election. 1 Jun 2020. Available at: <http://www.roymorgan.com/findings/8429-nz-national%20-voting-intention-may-2020-202006010651> (accessed on: 11.6.20)
- ⁸⁰⁵ TVNZ (2020) Many parents worried children would catch Covid-19 at school after lockdown - survey. June 15, 2020. Available at: <https://www.tvnz.co.nz/one-news/new-zealand/many-parents-worried-children-would-catch-covid-19-school-after-lockdown-survey> (accessed: 16.6.2020)
- ⁸⁰⁶ RNZ (2020) Kiwis keen to strengthen ties with Asia in wake of Covid-19 - survey. June 22, 2020. Available at: <https://www.rnz.co.nz/news/national/419527/kiwis-keen-to-strengthen-ties-with-asia-in-wake-of-covid-19-survey> (accessed 23.6.2020)
- ⁸⁰⁷ IMF (2020) World Economic Outlook, April 2020. Available at: <https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020> (accessed 17.4.2020)
- ⁸⁰⁸ The Spin Off (2020) How Covid-19 will damage the economy, according to Treasury. April 14, 2020. Available at: <https://thespinoff.co.nz/business/14-04-2020/how-covid-19-will-damage-the-economy-according-to-treasury/> (accessed 16.4.2020)
- ⁸⁰⁹ Times (2020) New Zealand lockdown on track to kill off coronavirus outbreak. April 10, 2020. Available at: <https://www.thetimes.co.uk/article/new-zealand-lockdown-on-track-to-kill-off-coronavirus-outbreak-gw7bxtl8b> (accessed 16.4.2020)
- ⁸¹⁰ NZ Treasury (2020) Monthly Economic Indicators March 2020. April 9, 2020. Available at: <https://treasury.govt.nz/publications/mei/monthly-economic-indicators-march-2020-html> (accessed 16.4.2020)
- ⁸¹¹ interest.co.nz (2020) People who lose their jobs could be eligible for a \$250-\$490 a week payment for 12 weeks under a new COVID-19 relief scheme. 25 May 2020. Available at: <https://www.interest.co.nz/news/105188/people-who-lose-their-jobs-could-be-eligible-250-490-week-payment-12-weeks-under-new> (accessed 28.5.20)
- ⁸¹² Radio New Zealand (2020) Govt announces multi-million dollar funding boost to help arts sector recover post-Covid. 28 May 2020. Available at: <https://www.rnz.co.nz/news/national/417751/govt-announces-multi-million-dollar-funding-boost-to-help-arts-sector-recover-post-covid> (accessed 28.5.20)
- ⁸¹³ RNZ (2020) Covid-19: Govt to spend \$85m in Queenstown to help struggling tourism businesses. June 26, 2020. Available at: <https://www.rnz.co.nz/news/covid-19/419925/covid-19-govt-to-spend-85m-in-queenstown-to-help-struggling-tourism-businesses> (accessed 30.6.2020)
- ⁸¹⁴ RNZ (2020) Tourism will return to growth eventually - Tourism NZ modelling. 28 May 2020. Available at: <https://www.rnz.co.nz/news/covid-19/417770/tourism-will-return-to-growth-eventually-tourism-nz-modelling> (accessed on: 4.6.2020)

- ⁸¹⁵ RNZ (2020) Covid-19: Tourism recovery package attracts more than 300 applicants. June 21, 2020. Available at: <https://www.rnz.co.nz/news/national/419502/covid-19-tourism-recovery-package-attracts-more-than-300-applicants> (accessed 23.6.2020)
- ⁸¹⁶ TVNZ (2020) Tonnes of wild Fiordland venison being given to food banks as export market slows. June 15, 2020. Available at: <https://www.tvnz.co.nz/one-news/new-zealand/tonnes-wild-fiordland-venison-being-given-food-banks-export-market-slows> (accessed: 16.6.2020)
- ⁸¹⁷ RNZ (2020) NZ economy predicted to emerge from Covid-19 better than most. June 29, 2020. Available at: <https://www.rnz.co.nz/news/covid-19/420063/nz-economy-predicted-to-emerge-from-covid-19-better-than-most> (accessed 30.6.2020)
- ⁸¹⁸ NZ Govt (2020) COVID-19 Health and Wellbeing Survey results released. May 21, 2020. Available at: <https://www.health.govt.nz/news-media/media-releases/covid-19-health-and-wellbeing-survey-results-released> (accessed 28.5.2020)
- ⁸¹⁹ TVNZ (2020) Need for mental health services could double due to Covid-19, professor says. June 12, 2020. Available at: <https://www.tvnz.co.nz/one-news/new-zealand/need-mental-health-services-could-double-due-covid-19-professor-says> (accessed: 16.6.2020)
- ⁸²⁰ TVNZ (2020) Health officials welcome report calling for mental health service reform post Covid-19. June 13, 2020. Available at: <https://www.tvnz.co.nz/one-news/new-zealand/health-officials-welcome-report-calling-mental-service-reform-post-covid-19> (accessed: 16.6.2020)
- ⁸²¹ RNZ (2020) Survey shows high anxiety and depression among Asian Kiwis. June 29, 2020. Available at: <https://www.rnz.co.nz/news/covid-19/420056/survey-shows-high-anxiety-and-depression-among-asian-kiwis> (accessed 30.6.2020)
- ⁸²² TVNZ (2020) New Zealand's eye bank struggling to fill eye tissue orders post Covid-19 lockdown. June 16, 2020. Available at: <https://www.tvnz.co.nz/one-news/new-zealand/new-zealands-national-eye-bank-struggling-fill-tissue-orders-post-covid-19-lockdown> (accessed: 16.6.2020)
- ⁸²³ TVNZ (2020) Ozone therapy among variety of Covid-19 'cures' being investigated by Commerce Commission. June 15, 2020. Available at: <https://www.tvnz.co.nz/one-news/new-zealand/ozone-therapy-among-variety-covid-19-cures-being-investigated-commerce-commission> (accessed: 16.6.2020)
- ⁸²⁴ RNZ (2020) Covid-19: Māori more likely to be hit hardest economically. June 23, 2020. Available at: <https://www.rnz.co.nz/news/te-manu-korihi/419651/covid-19-maori-more-likely-to-be-hit-hardest-economically> (accessed 23.6.2020)
- ⁸²⁵ RNZ (2020) Queenstown residents 'exhausted, afraid and losing hope'. June 18, 2020. Available at: <https://www.rnz.co.nz/news/national/419335/queenstown-residents-exhausted-afraid-and-losing-hope> (accessed 23.6.2020)
- ⁸²⁶ Australian Government (2020) COVID-19 case numbers and current situation. Available at: <https://www.health.gov.au/news/health-alerts/novel-coronavirus-2019-ncov-health-alert/coronavirus-covid-19-current-situation-and-case-numbers> (accessed 13.5.2020)
- ⁸²⁷ ABC News (2020) Coronavirus infections in Australia rise after restrictions ease, but they're still just a 'trickle', expert says. June 16, 2020. Available at: <https://www.abc.net.au/news/2020-06-16/coronavirus-curve-in-australia-rises-after-restrictions-ease/12360340> (accessed: 16.6.2020)
- ⁸²⁸ The Guardian (2020) Australia records its first Covid-19 death in a month – as it happened. June 24, 2020. Available at: <https://www.theguardian.com/australia-news/live/2020/jun/24/coronavirus-australia-latest-updates-victoria-testing-melbourne-lockdown-hume-moreland-darebin-brimbank-casey-cardinia-live-news> (accessed 30.6.2020)
- ⁸²⁹ Google (2020) COVID-19 Community Mobility Reports. May 2020. Available at: <https://www.google.com/covid19/mobility/> (accessed 21.5.2020)
- ⁸³⁰ The Guardian (2020) Facebook data to show Australians' movement as they emerge from coronavirus lockdown. 3 June 2020. Available at: <https://www.theguardian.com/australia-news/2020/jun/03/facebook-data-to-show-australians-movement-as-they-emerge-from-coronavirus-lockdown> (accessed on: 4.6.2020)
- ⁸³¹ 9News (2020) Coronavirus continues to free up Melbourne's roads at peak times. June 16, 2020. Available at: <https://www.9news.com.au/national/coronavirus-impact-continues-to-free-up-melbournes-traffic-congestion-and-roads/a0f5c3ed-d375-4e78-9e56-ba69f9af0d7a> (accessed: 16.6.2020)
- ⁸³² Grattan (2020) Coming out of COVID-19 lockdown: the next steps for Australian health care by Stephen Duckett. June 2020. Available at: <https://grattan.edu.au/wp-content/uploads/2020/06/Coming-out-of-COVID-lockdown-the-next-steps-for-Australian-health-care.pdf> (accessed 22.6.2020)
- ⁸³³ Grattan (2020) Coming out of COVID-19 lockdown: the next steps for Australian health care by Stephen Duckett. June 2020. Available at: <https://grattan.edu.au/wp-content/uploads/2020/06/Coming-out-of-COVID-lockdown-the-next-steps-for-Australian-health-care.pdf> (accessed 22.6.2020)
- ⁸³⁴ Grattan (2020) Coming out of COVID-19 lockdown: the next steps for Australian health care by Stephen Duckett. June 2020. Available at: <https://grattan.edu.au/wp-content/uploads/2020/06/Coming-out-of-COVID-lockdown-the-next-steps-for-Australian-health-care.pdf> (accessed 22.6.2020)
- ⁸³⁵ Business Insider (2020) Australia and New Zealand have been able to keep their number of coronavirus cases low thanks to early lockdown efforts. Experts say it's 'probably too late' for other countries to learn from them. Apr 17, 2020. Available at: <https://www.businessinsider.sg/experts-australia-new-zealand-examples-how-to-slow-coronavirus-2020-4?r=US&IR=T> (accessed 17.4.2020)
- ⁸³⁶ Bloomberg (2020) This Country Says It's on Course to Wipe Out Covid-19. Apr 17, 2020. Available at: <https://www.bloomberg.com/news/articles/2020-04-16/new-zealand-seeks-to-wipe-out-virus-after-early-lockdown-success> (accessed 18.4.2020)
- ⁸³⁷ 7News (2020) Coronavirus Australia: Scott Morrison reveals three things needed before COVID restrictions ease. Apr 16, 2020. Available at: <https://7news.com.au/lifestyle/health-wellbeing/coronavirus-australia-scott-morrison-reveals-three-things-needed-before-covid-restrictions-ease-c-980428> (accessed 17.4.2020)
- ⁸³⁸ International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.internationalsos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)
- ⁸³⁹ Grattan (2020) Coming out of COVID-19 lockdown: the next steps for Australian health care by Stephen Duckett. June 2020. Available at: <https://grattan.edu.au/wp-content/uploads/2020/06/Coming-out-of-COVID-lockdown-the-next-steps-for-Australian-health-care.pdf> (accessed 22.6.2020)

⁸⁴⁰ The Guardian (2020) Coronavirus Victoria: Woolworths reintroduces purchase limits as military called in to help. June 24, 2020. Available at: <https://www.theguardian.com/world/2020/jun/24/victoria-announces-australias-first-coronavirus-death-in-a-month-as-toll-rises-to-103> (accessed 30.6.2020)

⁸⁴¹ Straits Times (2020) Australian police are probing alleged security lapses at Melbourne hotels used to quarantine overseas arrivals, including claims guards slept with guests. Available at: <https://www.straitstimes.com/asia/australianz/australia-police-probe-quarantine-lapses-including-guards-sleeping-with-guests-in> (accessed 2.7.2020)

⁸⁴² CAN (2020) Australian children slowly resume school as COVID-19 curbs eased. May 11, 2020. Available at: <https://www.channelnewsasia.com/news/world/covid-19-australia-lockdown-ease-nsw-schools-reopen-12720068> (accessed 13.5.2020)

⁸⁴³ International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.internationalsos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)

⁸⁴⁴ Prime Minister of Australia (2020) Update on Coronavirus Measures. May 1, 2020. Available at: <https://www.pm.gov.au/media/update-coronavirus-measures-1may20> (accessed 4.5.2020)

⁸⁴⁵ International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.internationalsos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)

⁸⁴⁶ The Guardian (2020) Australia's coronavirus lockdown rules and restrictions explained: how far can you travel, and can I visit my family or friends? May 18, 2020. Available at: <https://www.theguardian.com/australia-news/2020/may/18/coronavirus-australia-lockdown-rules-travel-restrictions-nsw-victoria-queensland-qlld-wa-sa-act-how-far-can-you-drive-visit-friends-family-parents-covid-19-guidelines> (accessed 18.05.2020)

⁸⁴⁷ Guardian (2020) High risk of coronavirus second wave as Australian shops and workplaces reopen, report says. June 21, 2020. Available at: <https://www.theguardian.com/world/2020/jun/21/high-risk-of-coronavirus-second-wave-as-australian-shops-and-workplaces-reopen-report-says> (accessed 22.6.2020)

⁸⁴⁸ The Guardian (2020) Victoria to extend state of emergency for four more weeks after spike in Covid-19 cases. June 21, 2020. Available at: <https://www.theguardian.com/australia-news/2020/jun/21/victoria-to-extend-state-of-emergency-for-four-more-weeks-after-spike-in-covid-19-cases> (accessed 24.6.2020)

⁸⁴⁹ The Guardian (2020) Coronavirus Victoria: what you need to know about Melbourne's stage 3 lockdown rules. July 13, 2020. Available at: <https://www.theguardian.com/australia-news/2020/jul/13/coronavirus-melbourne-stage-3-lockdown-rules-restrictions-victoria-metropolitan-metro-mitchell-shire-explained-covid-19-what-you-need-to-know> (accessed on: 13.07.2020)

⁸⁵⁰ Victoria State Government, Health and Human Services (2020) Stay at home: Metropolitan Melbourne and Mitchell Shire. 2020. Available at: <https://www.dhhs.vic.gov.au/stay-home-metropolitan-melbourne-and-mitchell-shire-covid-19> (accessed on: 13.07.2020)

⁸⁵¹ The Guardian (2020) Border closes between NSW and Victoria as southern state records largest ever jump in Covid-19 cases. July 6, 2020. Available at: <https://www.theguardian.com/australia-news/2020/jul/06/border-closes-between-nsw-and-victoria-as-southern-state-records-largest-ever-jump-in-covid-19-cases> (accessed on: 13.07.2020)

⁸⁵² The Guardian (2020) What we know about Victoria's coronavirus public housing tower 'hard lockdowns'. July 5, 2020. Available at: <https://www.theguardian.com/australia-news/2020/jul/05/what-we-know-about-victorias-coronavirus-public-housing-tower-hard-lockdowns> (accessed on: 13.07.2020)

⁸⁵³ The Guardian (2020) Melbourne towers' sudden hard lockdown caught police, health workers and residents off-guard. July 5, 2020. Available at: <https://www.theguardian.com/australia-news/2020/jul/05/melbourne-towers-sudden-hard-lockdown-caught-police-health-workers-and-residents-off-guard> (accessed on: 13.07.2020)

⁸⁵⁴ The Guardian (2020) Residents in Melbourne Covid-19 tower lockdown say food supplies have been inadequate. July 6, 2020. Available at: <https://www.theguardian.com/world/2020/jul/06/residents-melbourne-covid-19-tower-lockdown-food-supplies-inadequate> (accessed on: 13.07.2020)

⁸⁵⁵ The Guardian (2020) 'Victorians were suddenly pariahs': how the state's coronavirus outbreak divided Australia. July 3, 2020. Available at: <https://www.theguardian.com/world/2020/jul/03/victorians-were-suddenly-pariahs-how-the-states-coronavirus-outbreak-divided-australia> (accessed on: 13.07.2020)

⁸⁵⁶ The Guardian (2020) NSW-Victoria border control to be in place for at least six weeks as Queensland and SA clamp down. July 9, 2020. Available at: <https://www.theguardian.com/australia-news/2020/jul/09/nsw-victoria-border-control-to-be-in-place-for-at-least-six-weeks-as-queensland-and-sa-clamp-down> (accessed on: 13.07.2020)

⁸⁵⁷ Australian Government (2020) Coronavirus (COVID-19) at a glance. Available at: <https://www.health.gov.au/resources/publications/coronavirus-covid-19-at-a-glance> (accessed 22.6.2020)

⁸⁵⁸ The Guardian (2020) Swamped Victorian coronavirus testing centres forced to turn people away. June 22, 2020. Available at: <https://www.theguardian.com/australia-news/2020/jun/22/swamped-victorian-coronavirus-testing-centres-forced-to-turn-people-away> (accessed 24.6.2020)

⁸⁵⁹ RNZ (2020) Covid-19: Australia fights clusters as parts of country ease restrictions. May 3, 2020. Available at: <https://www.rnz.co.nz/news/world/415720/covid-19-australia-fights-clusters-as-parts-of-country-ease-restrictions> (accessed 3.5.2020)

⁸⁶⁰ News.com.au (2020) Coronavirus: Health department confirms it has barely used Australia's COVIDSafe app. 10 Jun 2020. Available at: <https://www.news.com.au/technology/gadgets/mobile-phones/coronavirus-health-department-confirms-it-has-barely-used-australias-covidsafe-app/news-story/5fe0f08257a8e00759034688150e50c6> (accessed on: 11.6.20)

⁸⁶¹ The Guardian (2020) Australia's Covidsafe coronavirus tracing app works as few as one in four times for some devices. June 17, 2020. Available at: <https://www.theguardian.com/australia-news/2020/jun/17/covid-safe-app-australia-covidsafe-contact-tracing-australian-government-covid19-tracking-problems-working> (accessed 24.6.2020)

⁸⁶² The Guardian (2020) Victoria contact tracers access Covidsafe data 99 times but no identified close contacts reported. July 4, 2020. Available at: <https://www.theguardian.com/world/2020/jul/04/victoria-contact-tracers-access-covidsafe-data-99-times-but-no-identified-close-contacts-reported> (accessed on: 13.07.2020)

⁸⁶³ The Guardian (2020) Coronavirus Victoria: army to door-knock Melbourne hotspot suburbs to offer free Covid-19 testing. June 25, 2020. Available at: <https://www.theguardian.com/world/2020/jun/25/coronavirus-victoria-army-to-door-knock-melbourne-hotspot-suburbs-to-offer-free-covid-19-testing> (accessed 30.6.2020)

⁸⁶⁴ Straits Times (2020) Australian police are probing alleged security lapses at Melbourne hotels used to quarantine overseas arrivals, including claims guards slept with guests. Available at: <https://www.straitstimes.com/asia/australianz/australia-police-probe-quarantine-lapses-including-guards-sleeping-with-guests-in> (accessed 2.7.2020)

⁸⁶⁵ ABC News (2020) How to get a coronavirus test: who is eligible, how many have been done and how are they carried out. March 27, 2020. Available at: <https://www.abc.net.au/news/2020-03-27/coronavirus-covid-19-testing-criteria-eligibility/12097990> (accessed on: 13.07.2020)

⁸⁶⁶ Prime Minister of Australia (2020) UPDATE ON CORONAVIRUS MEASURES. April 24, 2020. Available at: <https://www.pm.gov.au/media/update-coronavirus-measures-24april20> (accessed on: 13.07.2020)

⁸⁶⁷ State of Victoria, Australia, Department of Health and Human Services (2020) COVID-19 suburban testing blitz. June 25, 2020. Available at: https://www.dhhs.vic.gov.au/sites/default/files/documents/202006/2001628_COVID-19_COVID-19%20suburban%20testing%20blitz.pdf (accessed on: 13.07.2020)

⁸⁶⁸ Healthdirect (2020) Seeing a doctor and getting tested for COVID-19. July 2020. Available at: <https://www.healthdirect.gov.au/coronavirus-covid-19-seeing-a-doctor-getting-tested-faqs#results> (accessed on: 13.07.2020)

⁸⁶⁹ Australian Government DH (2020) Information on the use of surgical masks COVID19. Available at: https://www.health.gov.au/sites/default/files/documents/2020/04/coronavirus-covid-19-information-on-the-use-of-surgical-masks_0.pdf (accessed 13.5.2020)

⁸⁷⁰ YouGov (2020) Latest round-up of YouGov's coronavirus survey results.

⁸⁷¹ Australian Government (2020) When should masks be worn in the community, in Australia?. July 9, 2020. Available at: <https://www.health.gov.au/sites/default/files/documents/2020/07/when-should-masks-be-worn-in-the-community-in-australia.pdf> (accessed on: 13.07.2020)

⁸⁷² Australian Government Department of Health (2020) What you need to know about coronavirus (COVID-19). 2020. Available at: <https://www.health.gov.au/news/health-alerts/novel-coronavirus-2019-ncov-health-alert/what-you-need-to-know-about-coronavirus-covid-19#testing> (accessed on: 13.07.2020)

⁸⁷³ Medicare.gov (2020) Coronavirus disease 2019 (COVID-19) tests. 2020. Available at: <https://www.medicare.gov/coverage/coronavirus-disease-2019-covid-19-tests> (accessed on: 13.07.2020)

⁸⁷⁴ Healthdirect (2020) Seeing a doctor and getting tested for COVID-19. July 2020. Available at: <https://www.healthdirect.gov.au/coronavirus-covid-19-seeing-a-doctor-getting-tested-faqs#results> (accessed on: 13.07.2020)

⁸⁷⁵ Australian Government Department of Health (2020) What you need to know about coronavirus (COVID-19). 2020. Available at: <https://www.health.gov.au/news/health-alerts/novel-coronavirus-2019-ncov-health-alert/what-you-need-to-know-about-coronavirus-covid-19#testing> (accessed on: 13.07.2020)

⁸⁷⁶ ABC News (2020) Melbourne residents advised to wear masks for COVID-19 protection following coronavirus outbreak. July 10, 2020. Available at: <https://www.abc.net.au/news/2020-07-10/coronavirus-wearing-mask-advice-to-change-on-vic-covid19-threat/12441828> (accessed on: 13.07.2020)

⁸⁷⁷ Guardian (2020) Two schools in Sydney's east closed after students test positive for Covid-19. Available at: <https://www.theguardian.com/australia-news/2020/may/26/coronavirus-nsw-schools-closed-students-test-positive-covid-19-sydney-east-waverley-moriah-college> (accessed 28.5.2020)

⁸⁷⁸ Times of Israel (2020) Dozens of students, three teachers exposed to virus. Available at: <https://ajin.timesofisrael.com/moriah-primary-student-tests-positive-for-covid-19/> (accessed 28.5.2020)

⁸⁷⁹ CNA (2020) Australian state reinstates restrictions after spike in COVID-19 cases. June 20, 2020. Available at: <https://www.channelnewsasia.com/news/world/covid-19-coronavirus-australia-melbourne-reinstate-restrictions-12854560> (accessed 22.6.2020)

⁸⁸⁰ 9News (2020) More coronavirus restrictions lifted across Australia. June 15, 2020. Available at: <https://www.9news.com.au/national/coronavirus-restrictions-state-by-state-guide-australia-funerals-gyms-borders-explainer/53fa2055-7647-4d5b-bb61-7cd41e30fb17> (accessed: 16.6.2020)

⁸⁸¹ 9News (2020) Coronavirus: South Australia to open borders to travellers from NT, WA and Tasmania from tonight. June 16, 2020. Available at: <https://www.9news.com.au/national/coronavirus-south-australia-borders-reopen-for-nt-wa-tasmania/1807d295-f50c-47dd-bb7d-2b86771313de> (accessed: 16.6.2020)

⁸⁸² 9News (2020) NSW increases public transport limits, nearly doubling capacity. June 16, 2020. Available at: <https://www.9news.com.au/national/coronavirus-nsw-restrictions-state-increases-public-transport-limits-nearly-doubling-capacity-july-1/23c1f11fe-4e7c-44b7-9767-c2ca5ed92dfe> (accessed: 16.6.2020)

⁸⁸³ The Guardian (2020) NSW premier says people should rethink travel to Melbourne amid Covid-19 spike. June 22, 2020. Available at: <https://www.theguardian.com/world/2020/jun/22/gladys-berejiklian-says-people-from-nsw-should-reconsider-travel-to-victoria-melbourne> (accessed 24.6.2020)

⁸⁸⁴ The Guardian (2020) Coronavirus Australia update: SA cancels plan to reopen borders as Victoria considers Melbourne hotspot lockdowns. June 30, 2020. Available at: <https://www.theguardian.com/world/live/2020/jun/30/coronavirus-australia-update-victoria-spike-suburb-lockdown-keilor-downs-albanvale-broadmeadows-brunswick-west-fawkner-reservoir-cyber-crime-national-security-nsw-qld-border-live-news?page=with:block-5efa8d438f084ab719afe15d#block-5efa8d438f084ab719afe15d> (accessed 30.6.2020)

⁸⁸⁵ The Guardian (2020) Scott Morrison says Australia will halve rate of international arrivals during coronavirus crisis. July 10, 2020. Available at: <https://www.theguardian.com/australia-news/2020/jul/10/scott-morrison-says-australia-will-halve-international-arrivals-during-coronavirus-crisis> (accessed on: 13.07.2020)

⁸⁸⁶ 9News (2020) More coronavirus restrictions lifted across Australia. June 15, 2020. Available at: <https://www.9news.com.au/national/coronavirus-restrictions-state-by-state-guide-australia-funerals-gyms-borders-explainer/53fa2055-7647-4d5b-bb61-7cd41e30fb17> (accessed: 16.6.2020)

⁸⁸⁷ Channel News Asia (2020) Australia eases social distancing restrictions as economic recovery efforts intensify. 1 June 2020. Available at: <https://www.channelnewsasia.com/news/world/australia-eases-social-distancing-restrictions-as-economic-recovery-efforts-intensify-12790316> (accessed on: 4.6.2020)

⁸⁸⁸ 9News (2020) Coronavirus: Woolworths lifts last restrictions on items as panic buying subsides. June 15, 2020. Available at: <https://www.9news.com.au/national/woolworths-removes-all-restrictions-on-items-antibacterial-wipes-handwash-frozen-fruit/b65a742e-4c51-4ef9-8493-65a48d4478b6> (accessed: 16.6.2020)

⁸⁸⁹ 9News (2020) More coronavirus restrictions lifted across Australia. June 15, 2020. Available at: <https://www.9news.com.au/national/coronavirus-restrictions-state-by-state-guide-australia-funerals-gyms-borders-explainer/53fa2055-7647-4d5b-bb61-7cd41e30fb17> (accessed: 16.6.2020)

⁸⁹⁰ Daily Mail (2020) Schools open, restaurants allowed to provide table service with customer limits but NO overseas travel: What Australia could look in just four weeks if COVID-19 restrictions are relaxed. Apr 16, 2020. Available at: <https://www.dailymail.co.uk/news/article-8224269/How-Australia-look-COVID-19-lockdown-restrictions-relaxed-May.html> (accessed 18.4.2020)

⁸⁹¹ 9News (2020) Third Victorian school closes after student tests positive for coronavirus. June 16, 2020. Available at: <https://www.9news.com.au/national/coronavirus-third-melbourne-school-closed-after-student-tests-positive/21da4663-d891-4c76-a455-f34eb1e55c8b> (accessed: 16.6.2020)

⁸⁹² 9News (2020) Coronavirus: Another Sydney school closed after employee diagnosed with COVID-19. June 13, 2020. Available at: <https://www.9news.com.au/national/coronavirus-sydney-school--laguna-street-closed-staff-diagnosed/7b62ab88-b717-4e44-8e42-93444adb6f8b> (accessed: 16.6.2020)

⁸⁹³ Guardian (2020) Two schools in Sydney's east closed after students test positive for Covid-19. Available at: <https://www.theguardian.com/australia-news/2020/may/26/coronavirus-nsw-schools-closed-students-test-positive-covid-19-sydney-east-waverley-moriah-college> (accessed 28.5.2020)

⁸⁹⁴ Times of Israel (2020) Dozens of students, three teachers exposed to virus. Available at: <https://ajin.timesofisrael.com/moriah-primary-student-tests-positive-for-covid-19/> (accessed 28.5.2020)

⁸⁹⁵ NZ Herald (2020) Covid 19 coronavirus: New Zealand vs. Australia - do we really want to be like them? Apr 17, 2020. Available at: https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12325474 (accessed 18.4.2020)

⁸⁹⁶ NZ Herald (2020) Watch: Covid 19 coronavirus - Cabinet urged not to play 'Russian roulette' with New Zealanders' health by rushing lockdown decision. Apr 14, 2020. Available at: https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12324530 (accessed 18.4.2020)

⁸⁹⁷ Grattan (2020) Coming out of COVID-19 lockdown: the next steps for Australian health care by Stephen Duckett. June 2020. Available at: <https://grattan.edu.au/wp-content/uploads/2020/06/Coming-out-of-COVID-lockdown-the-next-steps-for-Australian-health-care.pdf> (accessed 22.6.2020)

⁸⁹⁸ BBC (2020) Coronavirus: China warns students over 'risks' of studying in Australia. June 9, 2020. Available at: <https://www.bbc.com/news/world-asia-china-52980637> (accessed 10.6.2020)

⁸⁹⁹ 9News (2020) Virus second wave fears likely as authorities identify new symptoms to watch for. June 16, 2020. Available at: <https://www.9news.com.au/national/coronavirus-second-wave-fears-after-protester-tests-positive-new-symptoms-lack-of-taste-smell/e7d8c99c-5d5d-4029-ab13-fb0becf29f45> (accessed: 16.6.2020)

⁹⁰⁰ YouGov (2020) Latest round-up of YouGov's coronavirus survey results.

⁹⁰¹ Lowy Institute (2020) COVIDPOLL: LOWY INSTITUTE POLLING ON AUSTRALIAN ATTITUDES TO THE CORONAVIRUS PANDEMIC. 14 May 2020. Available at: <https://www.loyyinstitute.org/publications/covidpoll-lowy-institute-polling-australian-attitudes-coronavirus-pandemic> (accessed on: 11.6.20)

⁹⁰² The Guardian (2020) Essential poll: Scott Morrison's handling of Covid-19 continues to win approval. 1 Jun 2020. Available at: <https://www.theguardian.com/australia-news/2020/jun/02/essential-poll-scott-morrison-s-handling-of-covid-19-continues-to-win-approval> (accessed on: 11.6.20)

⁹⁰³ The Guardian (2020) Essential poll: majority of Australians expect second wave of Covid-19 infections. June 22, 2020. Available at: <https://www.theguardian.com/australia-news/2020/jun/23/essential-poll-majority-of-australians-expect-second-wave-of-covid-19-infections> (accessed 24.6.2020)

⁹⁰⁴ IMF (2020) At a glance: Australia. Available at: <https://www.imf.org/en/Countries/AUS> (accessed 22.5.2020)

⁹⁰⁵ Bloomberg Quint (2020) Australia Goes Back to the 1980s With Its Economy Closed to World. May 20, 2020. Available at: <https://www.bloombergquint.com/global-economics/australia-goes-back-to-the-1980s-with-economy-closed-to-world> (accessed 22.5.2020)

⁹⁰⁶ BBC (2020) Coronavirus bailouts: Which country has the most generous deal? May 8, 2020. Available at: <https://www.bbc.com/news/business-52450958> (accessed 22.5.2020)

⁹⁰⁷ The Guardian (2020) Australia enters first recession in 29 years after blow from bushfires and coronavirus. 3 June 2020. Available at: <https://www.theguardian.com/business/2020/jun/03/australia-enters-first-recession-in-29-years-after-blow-from-bushfires-and-coronavirus> (accessed on: 4.6.2020)

⁹⁰⁸ ABC News (2020) OECD calls for extension of coronavirus JobKeeper scheme as it warns Australia's economy could fall by 6.3 per cent. 10 Jun 2020. Available at: <https://www.abc.net.au/news/2020-06-10/coronavirus-oecd-calls-for-extension-to-jobkeeper-gdp/12340832> (accessed on: 11.6.20)

⁹⁰⁹ Business Insider Australia (2020) The official unemployment rate could be more than double what's been reported. Here's why there might be 1.2 million Australians missing. 5 Jun 2020. Available at: <https://www.businessinsider.com.au/australia-unemployed-economy-reopening-jobless-recovery-2020-6> (accessed on: 11.6.20)

⁹¹⁰ The Guardian (2020) Covid-19 recession causing job losses in older workers and housing stress in young. June 29, 2020. Available at: <https://www.theguardian.com/business/2020/jun/30/covid-19-recession-causing-job-losses-in-older-workers-and-housing-stress-in-young> (accessed 30.6.2020)

⁹¹¹ Grattan (2020) Coming out of COVID-19 lockdown: the next steps for Australian health care by Stephen Duckett. June 2020. Available at: <https://grattan.edu.au/wp-content/uploads/2020/06/Coming-out-of-COVID-lockdown-the-next-steps-for-Australian-health-care.pdf> (accessed 22.6.2020)

⁹¹² 9News (2020) Australia at foot of \$100 billion coronavirus mountain. June 15, 2020. Available at: <https://www.9news.com.au/national/australian-economy-lost-100-billion-in-2020-because-of-coronavirus/ddb49594-3147-4288-8eee-0b3d2d4b36a4> (accessed: 16.6.2020)

⁹¹³ CNA (2020) Australia sees biggest daily rise in COVID-19 cases in two months. June 29.6.2020. Available at: <https://www.channelnewsasia.com/news/world/covid-19-australia-victoria-rise-in-cases-restrictions-economy-12879648> (accessed 29.6.2020)

⁹¹⁴ The Guardian (2020) Australian arts and culture to get \$250m rescue package from Morrison government. June 24, 2020. Available at: <https://www.theguardian.com/australia-news/2020/jun/25/australian-arts-and-culture-to-get-250m-rescue-package-from-morrison-government> (accessed 30.6.2020)

⁹¹⁵ ABC (2020) Experts worried people delaying medical tests due to coronavirus will create 'tidal wave' of diagnoses. May 14, 2020. Available at: <https://www.abc.net.au/news/2020-05-14/coronavirus-medical-testing-delays-could-lead-to-future-sickness/12241812> (accessed 28.5.2020)

⁹¹⁶ 9News (2020) New study shows Australians suffering weight gain and emotional hardship due to coronavirus pandemic. June 16, 2020. Available at: <https://www.9news.com.au/national/csiro-study-find-australians-gaining-weight-suffering-decline-emotional-wellbeing-during-coronavirus-lockdown/6a1d71c8-5df3-4d1e-8eaa-778aa9436301> (accessed: 16.6.2020)

⁹¹⁷ The Guardian (2020) Australian drugmakers hit by critical shortages at height of pandemic, inquiry hears. June 25, 2020. Available at: <https://www.theguardian.com/australia-news/2020/jun/25/australian-drug-makers-hit-by-critical-shortages-at-height-of-pandemic-inquiry-hears> (accessed 30.6.2020)

⁹¹⁸ The Guardian (2020) Coronavirus Victoria: experts warn against blaming migrant communities for spreading misinformation. June 27, 2020. Available at: <https://www.theguardian.com/australia-news/2020/jun/28/coronavirus-victoria-experts-warn-against-blaming-migrant-communities-for-spreading-misinformation> (accessed 30.6.2020)

- ⁹¹⁹ The Guardian (2020) 'Victorians were suddenly pariahs': how the state's coronavirus outbreak divided Australia. July 3, 2020. Available at: <https://www.theguardian.com/world/2020/jul/03/victorians-were-suddenly-pariahs-how-the-states-coronavirus-outbreak-divided-australia> (accessed on: 13.07.2020)
- ⁹²⁰ Forbes (2020) When Did The Coronavirus Outbreak Start? Italy Is Latest To Say Earlier Than Previously Thought Available at: <https://www.forbes.com/sites/carlieporterfield/2020/06/19/when-did-the-coronavirus-outbreak-start-italy-is-latest-to-say-earlier-than-previously-thought/#3a2fef5e171f> (accessed 22.6.2020)
- ⁹²¹ Worldometer (2020) Italy. Available at: <https://www.worldometers.info/coronavirus/country/italy/> (accessed 13.5.2020)
- ⁹²² Bloomberg (2020) Italy Says 96% of Virus Fatalities Suffered From Other Illnesses. May 26, 2020. Available at: <https://www.bloomberg.com/news/articles/2020-05-26/italy-says-96-of-virus-fatalities-suffered-from-other-illnesses> (Accessed 28.5.2020)
- ⁹²³ Google (2020) COVID-19 Community Mobility Reports. May 2020. Available at: <https://www.google.com/covid19/mobility/> (accessed 21.5.2020)
- ⁹²⁴ Valenti L et al (2020) SARS-CoV-2 seroprevalence trends in healthy blood donors during the COVID-19 Milan outbreak. PrePrint. Available at: <https://www.medrxiv.org/content/10.1101/2020.05.11.20098442v1> (accessed 21.5.2020)
- ⁹²⁵ Reuters (2020) Over half of people tested in Italy's Bergamo have COVID-19 antibodies. June 9, 2020. Available at: <https://uk.reuters.com/article/uk-health-coronavirus-italy-antibodies/over-half-of-people-tested-in-italys-bergamo-have-covid-19-antibodies-idUKKBN23F2K1> (accessed 9.6.2020)
- ⁹²⁶ NPR (2020) With Italy's Coronavirus Cases Rising Fast, Rome's Streets Go Quiet. March 6, 2020. Available at: <https://www.npr.org/2020/03/06/812904540/with-italys-coronavirus-cases-risingfast-rome-s-streets-go-quiet> (accessed 15.3.2020)
- ⁹²⁷ Channel News Asia (2020). Fearful but impatient, Italy edges toward end of COVID-19 lockdown. April 19, 2020. Available at: <https://www.channelnewsasia.com/news/world/italy-covid-19-lockdown-ending-taskforce-impatient-12657072> (accessed 20.04.2020)
- ⁹²⁸ The Straits Times (2020) Army to secure coronavirus 'red zone' in southern Italy after residents try to escape. June 25, 2020. Available at: <https://www.straitstimes.com/world/europe/army-to-secure-coronavirus-red-zone-in-southern-italy-after-residents-try-to-escape> (accessed 30.6.2020)
- ⁹²⁹ Bloomberg (2020) Conte Apologizes to Italians and Hints at a Faster Reopening. May 1, 2020. Available at: <https://www.bloomberg.com/news/articles/2020-05-01/conte-apologizes-to-italians-and-hints-at-a-faster-reopening> (accessed 3.5.2020)
- ⁹³⁰ The Local (2020) 'Phase two starts now': Italy's PM unveils plan for easing lockdown. Apr 26, 2020. Available at: <https://www.thelocal.it/20200426/breaking-italy-unveils-phase-2-lockdown-measures> (accessed 3.5.2020)
- ⁹³¹ Reuters (2020) Italy likely to extend state of emergency due to coronavirus crisis, PM says. July 10, 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-italy/italy-likely-to-extend-state-of-emergency-due-to-coronavirus-crisis-pm-says-idUSKBN24B19W> (accessed on: 14.07.2020)
- ⁹³² EGSA (2020) GNSS for Crisis. Available at: <https://www.gsa.europa.eu/GNSS4Crisis> (accessed 13.5.2020)
- ⁹³³ Channel News Asia (2020) Italy launches COVID-19 contact-tracing app amid privacy concerns. 2 June 2020. Available at: <https://www.channelnewsasia.com/news/world/coronavirus-covid-19-italy-launch-contact-tracing-app-12794340> (accessed on: 4.6.2020)
- ⁹³⁴ Channel News Asia (2020) COVID-19: Italians embrace tracing app as privacy fears ease. June 12, 2020. Available at: <https://www.channelnewsasia.com/news/world/covid-19-coronavirus-italians-tracing-app-12827728> (accessed: 17.6.2020)
- ⁹³⁵ Salute Gov (2020) FAQ - Covid-19, questions and answers. Available at: <http://www.salute.gov.it/portale/nuovocoronavirus/dettaglioFaqNuovoCoronavirus.jsp?lingua=english&id=230#11> (accessed 5.6.2020)
- ⁹³⁶ ABC News (2020) Italy blasts virus panic as it eyes new testing criteria. February 28, 2020. Available at: <https://abcnews.go.com/Health/wireStory/italy-virus-count-methods-agencys-urging-69254949> (accessed on: 14.07.2020)
- ⁹³⁷ CNN Health (2020) She was asked to pay thousands for her coronavirus treatment, he got a free ride. She's American. He's Italian. May 1, 2020. Available at: <https://edition.cnn.com/2020/05/01/health/health-care-europe-us-medical-bills-coronavirus-intl/index.html> (accessed on: 14.07.2020)
- ⁹³⁸ The Local it (2020) Italy trials drive-through coronavirus testing to ease pressure on hospitals. April 2, 2020. Available at: <https://www.thelocal.it/20200402/italy-trials-drive-through-coronavirus-testing-to-ease-pressure-on-hospitals> (accessed on: 14.07.2020)
- ⁹³⁹ The Guardian (2020) In one Italian town, we showed mass testing could eradicate the coronavirus. March 20, 2020. Available at: <https://www.theguardian.com/commentisfree/2020/mar/20/eradicated-coronavirus-mass-testing-covid-19-italy-vo> (accessed on: 14.07.2020)
- ⁹⁴⁰ World Economic Forum (2020) COVID-19: Study shows 40% of cases in Italian town showed no symptoms. July 2, 2020. Available at: <https://www.weforum.org/agenda/2020/07/italian-town-vo-asymptomatic-coronavirus-covid19-cases-andrea-crisanti/> (accessed on: 14.07.2020)
- ⁹⁴¹ Reuters (2020) Italy launches blood tests to investigate who has had COVID-19. May 14, 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-italy-tests/italy-launches-blood-tests-to-investigate-who-has-had-covid-19-idUSKBN22Q2JJ> (accessed on: 14.07.2020)
- ⁹⁴² Channel News Asia (2020) Italy to monitor sewage in hunt for possible new COVID-19 wave. July 9, 2020. Available at: <https://www.channelnewsasia.com/news/world/italy-to-monitor-sewage-in-hunt-for-possible-new-covid-19-wave-12915508> (accessed on: 14.07.2020)
- ⁹⁴³ Ministero della Salute (2020) FAQ - Covid-19, questions and answers. July 2, 2020. Available at: <http://www.salute.gov.it/portale/nuovocoronavirus/dettaglioFaqNuovoCoronavirus.jsp?lingua=english&id=230#11> (accessed on: 14.07.2020)
- ⁹⁴⁴ Ministero della Salute (2020) FAQ - Covid-19, questions and answers. July 2, 2020. Available at: <http://www.salute.gov.it/portale/nuovocoronavirus/dettaglioFaqNuovoCoronavirus.jsp?lingua=english&id=230#11> (accessed on: 14.07.2020)
- ⁹⁴⁵ The Local It (2020) Here's what changes from Monday as Italy moves into 'phase three'. June 12, 2020. Available at: <https://www.thelocal.it/20200612/heres-what-changes-from-monday-as-italy-moves-into-phase-three> (accessed: 17.6.2020)
- ⁹⁴⁶ International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.internationalsos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)

⁹⁴⁷ CNA (2020) Italy reports 72 new COVID-19 deaths on Saturday, 270 new cases. June 7, 2020. <https://www.channelnewsasia.com/news/world/covid-19-italy-reports-new-deaths-cases-12812108> (accessed 8.6.2020)

⁹⁴⁸ Guardian (2020) Which European countries are easing travel restrictions?. 18 May 2020. Available at <https://www.theguardian.com/travel/2020/may/18/europe-holidays-which-european-countries-are-easing-coronavirus-travel-restrictions-lockdown-measures> (accessed 21.5.2020)

⁹⁴⁹ The Local It (2020) Here's what changes from Monday as Italy moves into 'phase three'. June 12, 2020. Available at: <https://www.thelocal.it/20200612/heres-what-changes-from-monday-as-italy-moves-into-phase-three> (accessed: 17.6.2020)

⁹⁵⁰ The Local It (2020) Face masks, forms and fewer bags: Italy's new rules on flying. June 15, 2020. Available at: <https://www.thelocal.it/20200615/italy-new-rules-on-flying> (accessed: 17.6.2020)

⁹⁵¹ Channel News Asia (2020) Italian cities see bicycle boom after COVID-19 lockdown. June 23, 2020. Available at: <https://www.channelnewsasia.com/news/world/italian-cities-see-bicycle-boom-after-covid-19-lockdown-12863304> (accessed 24.6.2020)

⁹⁵² Ministero della Salute (2020) Covid-19: Italy banning arrivals from 13 at-risk countries. July 10, 2020. Available at: <http://www.salute.gov.it/portale/nuovocoronavirus/dettaglioNotizieNuovoCoronavirus.jsp?lingua=english&menu=notizie&p=dalmistero&id=4958> (accessed on: 14.07.2020)

⁹⁵³ BBC (2020) Coronavirus: How lockdown is being lifted across Europe. May 20, 2020. Available at: https://www.bbc.com/news/explainers-52575313?intlink_from_url=&link_location=live-reporting-storyhttps://docs.google.com/document/d/1BtquiX-4K0R4p0_UZWdpD3IVU4Yz5MVS01o_EJv_gCc/edit (accessed 21.5.2020)

⁹⁵⁴ Salute Gov (2020) FAQ - Covid-19, questions and answers. Available at: <http://www.salute.gov.it/portale/nuovocoronavirus/dettaglioFaqNuovoCoronavirus.jsp?lingua=english&id=230#11> (accessed 5.6.2020)

⁹⁵⁵ BBC (2020) Coronavirus: How lockdown is being lifted across Europe. May 20, 2020. Available at: https://www.bbc.com/news/explainers-52575313?intlink_from_url=&link_location=live-reporting-storyhttps://docs.google.com/document/d/1BtquiX-4K0R4p0_UZWdpD3IVU4Yz5MVS01o_EJv_gCc/edit (accessed 21.5.2020)

⁹⁵⁶ Guardian (2020) Which European countries are easing travel restrictions?. 18 May 2020. Available at <https://www.theguardian.com/travel/2020/may/18/europe-holidays-which-european-countries-are-easing-coronavirus-travel-restrictions-lockdown-measures> (accessed 21.5.2020)

⁹⁵⁷ BBC (2020) Serie A to resume on 20 June, Italy's sports minister confirms. 28 May 2020. Available at: https://www.bbc.com/sport/football/52839425?intlink_from_url=https://www.bbc.com/news/topics/crr7mlg0d2wt/italy&link_location=live-reporting-story (accessed on: 4.6.2020)

⁹⁵⁸ The Local It (2020) Here's what changes from Monday as Italy moves into 'phase three'. June 12, 2020. Available at: <https://www.thelocal.it/20200612/heres-what-changes-from-monday-as-italy-moves-into-phase-three> (accessed: 17.6.2020)

⁹⁵⁹ The Local It (2020) Here's what changes from Monday as Italy moves into 'phase three'. June 12, 2020. Available at: <https://www.thelocal.it/20200612/heres-what-changes-from-monday-as-italy-moves-into-phase-three> (accessed: 17.6.2020)

⁹⁶⁰ BBC (2020) Coronavirus: How lockdown is being lifted across Europe. May 20, 2020. Available at: https://www.bbc.com/news/explainers-52575313?intlink_from_url=&link_location=live-reporting-storyhttps://docs.google.com/document/d/1BtquiX-4K0R4p0_UZWdpD3IVU4Yz5MVS01o_EJv_gCc/edit (accessed 21.5.2020)

⁹⁶¹ The New York Times (2020) Italy, Mired in Politics Over Virus, Asks How Much Testing Is Too Much. February 27, 2020. Available at: <https://www.nytimes.com/2020/02/27/world/europe/italy-coronavirus.html> (accessed on: 14.07.2020)

⁹⁶² CNBC (2020) The total number of Italian coronavirus cases could be '10 times higher' than known tally, according to one official. March 24, 2020. Available at: <https://www.cnbc.com/2020/03/24/italian-coronavirus-cases-seen-10-times-higher-than-official-tally.html> (accessed on: 14.07.2020)

⁹⁶³ Channel News Asia (2020) WHO praises Italy's 'genuine sacrifices' to slow virus. 8 May 2020. Available at: <https://www.channelnewsasia.com/news/world/who-italy-covid-19-praise-genuine-sacrifices-12515928> (accessed on: 11.6.20)

⁹⁶⁴ World Health Organization (2020) WHO Director-General's opening remarks at the media briefing on COVID-19 - 1 July 2020. July 1, 2020. Available at: <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---1-july-2020> (accessed on: 14.07.2020)

⁹⁶⁵ TIME (2020) Italy Sees Big Jump in Confirmed Coronavirus Cases in Hardest-Hit Lombardy Region. May 12, 2020. Available at: <https://time.com/5835795/lombardy-coronavirus-cases-rise/> (accessed 13.5.2020)

⁹⁶⁶ Reuters (2020) New coronavirus losing potency, top Italian doctor says. 1 June 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-italy-virus/new-coronavirus-losing-potency-top-italian-doctor-says-idUSKBN23700Q> (accessed on: 4.6.2020)

⁹⁶⁷ Reuters (2020) WHO and other experts say no evidence of coronavirus losing potency. 2 June 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-who-transmission/who-and-other-experts-say-no-evidence-of-coronavirus-losing-potency-idUSKBN23832J> (accessed on: 4.6.2020)

⁹⁶⁸ Reuters (2020) Italy's opposition parties flout social distancing rules at rally in Rome. 2 June 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-italy/italys-opposition-parties-flout-social-distancing-rules-at-rally-in-rome-idUSKBN2391R7> (accessed on: 4.6.2020)

⁹⁶⁹ BBC (2020) Coronavirus: Far-right Rome protest turns briefly violent. June 6, 2020. Available at: https://www.bbc.com/news/world-europe-52951920?intlink_from_url=https://www.bbc.com/news/topics/crr7mlg0d2wt/italy&link_location=live-reporting-story (accessed: 17.6.2020)

⁹⁷⁰ Anadolu Agency (2020) Families of Italy virus victims ask for justice. 10 Jun 2020. Available at: <https://www.aa.com.tr/en/europe/families-of-italy-virus-victims-ask-for-justice/1872139> (accessed on: 11.6.20)

⁹⁷¹ CGTN (2020) Italy PM says prosecutors to question him over coronavirus response. 11 Jun 2020. Available at: <https://news.cgtn.com/news/2020-06-11/Italy-PM-says-prosecutors-to-question-him-over-coronavirus-response-Re43Ev2PjW/index.html> (accessed on: 11.6.20)

⁹⁷² Channel News Asia (2020) Italian nursing homes lacked tools for COVID-19 onslaught: Survey. June 18, 2020. Available at: <https://www.channelnewsasia.com/news/world/italian-nursing-homes-tools-covid-19-coronavirus-survey-12845890> (accessed 24.6.2020)

⁹⁷³ Channel News Asia (2020) Italy says 28 migrants test positive for COVID-19 on quarantine ship. June 24, 2020. Available at: <https://www.channelnewsasia.com/news/world/covid-19-italy-28-migrants-test-positive-quarantine-ship-12866948> (accessed 30.6.2020)

- ⁹⁷⁴ Aljazeera (2020) Wrong path? Scientist questions Italy's coronavirus strategy. March 31, 2020. Available at: <https://www.aljazeera.com/news/2020/03/wrong-path-scientist-questions-italy-coronavirus-strategy-200330174913147.html> (accessed on: 14.07.2020)
- ⁹⁷⁵ Channel News Asia (2020) People refusing coronavirus treatment may face jail in Italy's Veneto. July 8, 2020. Available at: <https://www.channelnewsasia.com/news/world/people-refusing-coronavirus-treatment-may-face-jail-in-italy-s-veneto-12910866> (accessed on: 14.07.2020)
- ⁹⁷⁶ The Guardian (2020) Coronavirus brings tension and prejudice to Italy's beaches. July 12, 2020. Available at: <https://www.theguardian.com/world/2020/jul/12/coronavirus-brings-tension-prejudice-italy-beaches> (accessed on: 14.07.2020)
- ⁹⁷⁷ YouGov (2020) Latest round-up of YouGov's coronavirus survey results.
- ⁹⁷⁸ IMF (2020) World Economic Outlook, April 2020. Available at: <https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020> (accessed 17.4.2020)
- ⁹⁷⁹ CAN (2020) Italy's daily COVID-19 cases fall sharply, some regions test for signs of immunity. April 7, 2020. Available at: <https://www.channelnewsasia.com/news/world/italy-covid-19-cases-immunity-regions-12615600> (accessed 8.4.2020)
- ⁹⁸⁰ Bloomberg (2020) Italy Looking for Exit From Lockdown's Economic Cul-de-Sac. April 9, 2020. Available at: <https://www.bloomberg.com/news/articles/2020-04-09/italy-desperately-seeks-exit-from-lockdown-s-economic-cul-de-sac> (accessed 17.4.2020)
- ⁹⁸¹ Channel News Asia (2020). Fearful but impatient, Italy edges toward end of COVID-19 lockdown. April 19, 2020. Available at: <https://www.channelnewsasia.com/news/world/italy-covid-19-lockdown-ending-taskforce-impatient-12657072> (accessed 20.04.2020)
- ⁹⁸² Reuters (2020) Italy April jobless rate plunges to 12-year low as people give up work search amid coronavirus crisis. 3 June 2020. Available at: <https://www.reuters.com/article/idUSR1N2C900H> (accessed on: 4.6.2020)
- ⁹⁸³ The Local (2020) Macron and Merkel propose €500 billion plan to relaunch EU economy. 18 May 2020. Available at: <https://www.thelocal.de/20200518/macron-and-merkel-propose-500-billion-plan-to-relaunch-eu-economy> (accessed 03.6.20)
- ⁹⁸⁴ The New York Times (2020) As Italy Reopens, Tour Guides Plead for More Aid, and Tourists. 10 Jun 2020. Available at: <https://www.nytimes.com/2020/06/10/world/europe/italy-coronavirus-tourism.html> (accessed on: 11.6.20)
- ⁹⁸⁵ Bloomberg (2020) Italy's Conte Wants to Stretch Budget Even More to Help Economy. June 17, 2020. Available at: <https://www.bloomberg.com/news/articles/2020-06-16/italy-s-conte-wants-to-stretch-budget-even-more-to-help-economy> (accessed: 17.6.2020)
- ⁹⁸⁶ Guardian (2020) Italy's lockdown has taken heavy toll on mental health, say psychologists. May 21, 2020. Available at: <https://www.theguardian.com/world/2020/may/21/italy-lockdown-mental-health-psychologists-coronavirus#maincontent> (accessed 28.5.2020)
- ⁹⁸⁷ CNBC (2020) 'Truly shocking' youth unemployment in euro zone could fan populism and euroskepticism, economist says. 3 Jun 2020. Available at: <https://www.cnbc.com/2020/06/03/euro-zone-unemployment-hits-7point3percent-in-april-2020.html> (accessed on: 11.6.20)
- ⁹⁸⁸ TIME (2020) Italian Survey Finds Children are More Irritable and Anxious Due to Coronavirus Lockdowns. June 16, 2020. Available at: https://time.com/5854243/coronavirus-lockdown-impact-children/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+time%2Ftopstories+%28TIME%3A+Top+Stories%29 (accessed: 17.6.2020)
- ⁹⁸⁹ Worldometer (2020) Czech Republic. Available at: <https://www.worldometers.info/coronavirus/country/czech-republic/> (accessed 13.5.2020)
- ⁹⁹⁰ Radio Prague International (2020) 260 new cases of Covid-19, highest figure since April 8, recorded Saturday. June 28, 2020. Available at: <https://english.radio.cz/saturday-sees-260-new-cases-covid-19-highest-figure-april-8-8684963> (accessed 30.6.2020)
- ⁹⁹¹ Expats.cz (2020) The Czech Republic's new rise in COVID-19 cases is not a second wave, says Health Minister. June 29, 2020. Available at: <https://news.expats.cz/coronavirus-in-the-czech-republic/the-czech-republics-new-rise-in-covid-19-cases-is-not-a-second-wave-says-health-minister/> (accessed 30.6.2020)
- ⁹⁹² Google (2020) COVID-19 Community Mobility Reports. May 2020. Available at: <https://www.google.com/covid19/mobility/> (accessed 21.5.2020)
- ⁹⁹³ Czech Radio (2020) Czech study shows extremely low level of collective immunity to COVID-19 virus. May 6, 2020. Available at: <https://www.radio.cz/en/section/curaffrs/czech-study-shows-extremely-low-level-of-collective-immunity-to-covid-19-virus> (accessed 21.5.2020)
- ⁹⁹⁴ OSAC (2020) Health Alert: Czech Republic, Nationwide Quarantine Implemented. March 16, 2020. Available at: <https://www.osac.gov/Country/CzechRepublic/Content/Detail/Report/b082f4f9-588b-474c-b692-183714a55c29> (accessed 18.4.2020)
- ⁹⁹⁵ International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.internationalosos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)
- ⁹⁹⁶ OSAC (2020) Health Alert: Czech Republic, Nationwide Quarantine Implemented. March 16, 2020. Available at: <https://www.osac.gov/Country/CzechRepublic/Content/Detail/Report/b082f4f9-588b-474c-b692-183714a55c29> (accessed 18.4.2020)
- ⁹⁹⁷ Expats.cz (2020) Czech Health Ministry to release daily regional COVID-19 risk map from July 1. June 29, 2020. Available at: <https://news.expats.cz/coronavirus-in-the-czech-republic/czech-health-ministry-to-release-daily-regional-covid-19-risk-map-from-july-1/> (accessed 30.6.2020)
- ⁹⁹⁸ Radio Prague International (2020) Facemask requirement eased but new restrictions for area hit by spike in Covid-19 cases. June 29, 2020. Available at: <https://english.radio.cz/facemask-requirement-eased-new-restrictions-area-hit-spike-covid-19-cases-8685046> (accessed 30.6.2020)
- ⁹⁹⁹ The Mayor (2020) Czechia announces alleviation of coronavirus measures. April 8, 2020. Available at: <https://www.themayor.eu/en/czechia-announces-alleviation-of-coronavirus-measures> (accessed 18.4.2020)
- ¹⁰⁰⁰ Ministry of Health of the Czech Republic (2020) Questions and answers in relation to the coronavirus in the Czech Republic. March 6, 2020. Available at: http://www.mzcr.cz/Cizinci/dokumenty/questions-and-answers-in-relation-to-the-coronavirus-in-the-czech-republic_18649_2649_23.html (accessed 13.7.20)
- ¹⁰⁰¹ Expats.cz (2020) Czech Republic caps coronavirus test price to promote summer vacations. May 14, 2020. Available at: <https://news.expats.cz/coronavirus-in-the-czech-republic/czech-republic-caps-coronavirus-test-price-to-promote-summer-vacations/> (accessed 13.7.20)
- ¹⁰⁰² The Mayor (2020) Czechia announces alleviation of coronavirus measures. April 8, 2020. Available at: <https://www.themayor.eu/en/czechia-announces-alleviation-of-coronavirus-measures> (accessed 18.4.2020)

- ¹⁰⁰³ Czech Radio (2020) MINING HALTED AT DARKOV DUE TO CORONAVIRUS OUTBREAK. 25 May 2020. Available at: <https://www.radio.cz/en/section/news/mining-halted-at-darkov-due-to-coronavirus-outbreak> (accessed on: 28.5.2020)
- ¹⁰⁰⁴ Czech Radio (2020) MINISTER: NEW FORM OF SMART QUARANTINE PROJECT TO COST CZK 200 MILLION IN 2020. 24 May 2020. Available at: <https://www.radio.cz/en/section/news/minister-new-form-of-smart-quarantine-project-to-cost-czk-200-million-in-2020> (accessed on: 28.5.2020)
- ¹⁰⁰⁵ EGSA (2020) GNSS for Crisis. Available at: <https://www.gsa.europa.eu/GNSS4Crisis> (accessed 13.5.2020)
- ¹⁰⁰⁶ Ministry of Health of the Czech Republic (2020) What should I do if I am in quarantine? March 29, 2020. Available at: <https://koronavirus.mzcr.cz/en/what-should-i-do-if-i-am-in-quarantine/> (accessed 13.7.20)
- ¹⁰⁰⁷ International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.internationalsos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)
- ¹⁰⁰⁸ USA Today (2020) Coronavirus: Czech Republic imposed a face mask requirement and the U.S should too. April 4, 2020. Available at: <https://www.usatoday.com/story/opinion/2020/04/04/czech-government-implemented-face-mask-requirement-help-combat-coronavirus-column/2940393001/> (accessed 8.5.2020)
- ¹⁰⁰⁹ Reuters (2020) Czechs will not need masks when in open spaces from May 25: government. 11 May 2020. Available at <https://www.reuters.com/article/us-health-coronavirus-czech-masks/czechs-will-not-need-masks-when-in-open-spaces-from-may-25-government-idUSKBN22N21N> (accessed 14.5.2020)
- ¹⁰¹⁰ 9and10news (2020) The Latest: Czech Republic to relax rules on mask wearing. 11 May 2020. Available at <https://www.9and10news.com/i/the-latest-czech-republic-to-relax-rules-on-mask-wearing/> (accessed 14.5.2020)
- ¹⁰¹¹ Expats.cz (2020) As of Monday, face masks no longer need to be worn outside in the Czech Republic. 15 Jun 2020. Available at: <https://news.expats.cz/weekly-czech-news/as-of-monday-face-masks-no-longer-need-to-be-worn-outside-in-the-czech-republic/> (accessed 16.6.20)
- ¹⁰¹² Expats.cz (2020) Czech Republic coronavirus updates, June 19: 118 new cases Thursday, most in two months. Available at: <https://news.expats.cz/coronavirus-in-the-czech-republic/czech-republic-coronavirus-updates-june-19-118-new-cases-thursday-most-in-two-months/> (accessed 22.6.2020)
- ¹⁰¹³ Radio Prague International (2020) Facemasks to remain mandatory on Prague metro, at indoor events. June 29, 2020. Available at: <https://english.radio.cz/facemasks-remain-mandatory-prague-metro-indoor-events-8685041> (accessed 30.6.2020)
- ¹⁰¹⁴ Radio Prague International (2020) Facemask requirement eased but new restrictions for area hit by spike in Covid-19 cases. June 29, 2020. Available at: <https://english.radio.cz/facemask-requirement-eased-new-restrictions-area-hit-spike-covid-19-cases-8685046> (accessed 30.6.2020)
- ¹⁰¹⁵ International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.internationalsos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)
- ¹⁰¹⁶ DW (2020) Coronavirus latest: Hard-hit Europe eases restrictions. 11 May 2020. Available at <https://www.dw.com/en/coronavirus-latest-hard-hit-europe-eases-restrictions/a-53387712> (accessed 14.5.2020)
- ¹⁰¹⁷ Expats.cz (2020) As of Monday, face masks no longer need to be worn outside in the Czech Republic. 15 Jun 2020. Available at: <https://news.expats.cz/weekly-czech-news/as-of-monday-face-masks-no-longer-need-to-be-worn-outside-in-the-czech-republic/> (accessed 16.6.20)
- ¹⁰¹⁸ Expats.cz (2020) Czech anti-coronavirus restrictions on pools and spas eased today, event limit increased to 5,000 people. June 22, 2020. Available at: <https://news.expats.cz/coronavirus-in-the-czech-republic/more-coronavirus-restrictions-eased-but-not-for-the-entire-czech-republic/> (accessed 24.6.2020)
- ¹⁰¹⁹ International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.internationalsos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)
- ¹⁰²⁰ Reuters (2020) Hungary, Slovakia, Czech Republic to mutually open borders. 26 May 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-hungary-borders/hungary-slovakia-czech-republic-to-mutually-open-borders-idUSKBN23223U> (accessed on: 28.5.2020)
- ¹⁰²¹ Czech Radio (2020) GOVERNMENT LOOSENS TRAVEL RESTRICTIONS. 26 May 2020. Available at: <https://www.radio.cz/en/section/news/government-loosens-travel-restrictions--1> (accessed on: 28.5.2020)
- ¹⁰²² Expat.cz (2020) Czech Republic coronavirus updates, June 2: just 34 new cases Monday, travel opened from June 15. 2 Jun 2020. Available at: <https://news.expats.cz/coronavirus-in-the-czech-republic/czech-republic-coronavirus-updates-june-2-just-34-new-cases-monday-travel-opened-from-june-15/> (accessed 03.6.20)
- ¹⁰²³ Expats.cz (2020) From June 15: popcorn at the movies and food at the farmers' market, but what about masks? 15 Jun 2020. Available at: <https://news.expats.cz/weekly-czech-news/from-june-15-popcorn-at-the-movies-and-food-at-the-farmers-market-but-what-about-masks/> (accessed 16.6.20)
- ¹⁰²⁴ Expats.cz (2020) Prague Airport announces resumed routes to 55 destinations, reaching nearly a third of last year's traffic. 15 Jun 2020. Available at: <http://news.expats.cz/czech-tourism/prague-airport-announces-resumed-routes-to-55-destinations-reaching-nearly-a-third-of-last-years-traffic/> (accessed 16.6.20)
- ¹⁰²⁵ Expats.cz (2020) Czech Republic coronavirus updates, June 23: 63 new cases Monday, Belgium upgraded to 'safe' status. June 23, 2020. Available at: <https://news.expats.cz/weekly-czech-news/czech-republic-coronavirus-updates-june-23-63-new-cases-monday-belgium-upgraded-to-safe-status/> (accessed 24.6.2020)
- ¹⁰²⁶ Expats.cz (2020) Czech Republic adds 8 non-EU countries, including Canada and Australia, to safe travel list. June 30, 2020. Available at: <https://news.expats.cz/coronavirus-in-the-czech-republic/czech-republic-adds-8-non-eu-countries-including-canada-and-australia-to-safe-travel-list/> (accessed 06.7.20)
- ¹⁰²⁷ Radio Prague International (2020) Slovenia, Latvia and Estonia take Czech Republic off their list of "safe" countries for travel. July 3, 2020. Available at: <https://english.radio.cz/slovenia-takes-czech-republic-its-list-safe-destinations-travel-8685479> (accessed 06.7.2020)
- ¹⁰²⁸ Corona Denmark (2020) The National Church (Folkekirken) and other religious communities can from May 18th, 2020 again open churches, synagogues, mosques and the like to the public. May 20, 2020. Available at: <https://coronadenmark.dk/2020/05/the-national-church-folkekirken-and-other-religious-communities-can-from-may-18th-2020-again-open-churches-synagogues-mosques-and-the-like-to-the-public/> (accessed 5.6.2020)
- ¹⁰²⁹ Expats.cz (2020) Czech anti-coronavirus restrictions on pools and spas eased today, event limit increased to 5,000 people. June 22, 2020. Available at: <https://news.expats.cz/coronavirus-in-the-czech-republic/more-coronavirus-restrictions-eased-but-not-for-the-entire-czech-republic/> (accessed 24.6.2020)
- ¹⁰³⁰ International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.internationalsos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)

- ¹⁰³¹ The Guardian (2020) Czech Republic opens its borders to citizens after infections decline. Apr 24, 2020. Available at: <https://www.theguardian.com/world/2020/apr/24/czech-republic-opens-borders-citizens-coronavirus-infections-decline> (accessed 3.5.2020)
- ¹⁰³² International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.internationalsos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)
- ¹⁰³³ Reuters (2020) Czechs will not need masks when in open spaces from May 25: government. 11 May 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-czech-masks/czechs-will-not-need-masks-when-in-open-spaces-from-may-25-government-idUSKBN22N21N> (accessed 14.5.2020)
- ¹⁰³⁴ Jakarta Post (2020) Safety screening: Czech cinemas open with new virus rules in place. May 13, 2020. Available at: <https://www.thejakartapost.com/life/2020/05/12/safety-screening-czech-cinemas-open-with-new-virus-rules-in-place.html> (accessed 13.5.2020)
- ¹⁰³⁵ International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.internationalsos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)
- ¹⁰³⁶ Expat.cz (2020) More coronavirus restrictions end today: restaurant gardens can stay open later, no empty seats at cinemas. 8 Jun 2020. Available at: <https://news.expats.cz/weekly-czech-news/more-coronavirus-restrictions-end-today-restaurant-gardens-can-stay-open-later-no-empty-seats-at-cinemas/> (accessed 09.6.20)
- ¹⁰³⁷ Expat.cz (2020) More coronavirus restrictions end today: restaurant gardens can stay open later, no empty seats at cinemas. 8 Jun 2020. Available at: <https://news.expats.cz/weekly-czech-news/more-coronavirus-restrictions-end-today-restaurant-gardens-can-stay-open-later-no-empty-seats-at-cinemas/> (accessed 09.6.20)
- ¹⁰³⁸ Expats.cz (2020) Czech anti-coronavirus restrictions on pools and spas eased today, event limit increased to 5,000 people. June 22, 2020. Available at: <https://news.expats.cz/coronavirus-in-the-czech-republic/more-coronavirus-restrictions-eased-but-not-for-the-entire-czech-republic/> (accessed 24.6.2020)
- ¹⁰³⁹ Expats.cz (2020) OKD suspends mining in Karviná area following COVID-19 outbreaks. July 2, 2020. Available at: <https://news.expats.cz/coronavirus-in-the-czech-republic/okd-suspends-mining-in-karvina-area-following-covid-19-outbreaks/> (accessed 06.7.2020)
- ¹⁰⁴⁰ KPMG (2020) Czech Republic Insights. Available at: <https://home.kpmg/xx/en/home/insights/2020/04/czech-republic-government-and-institution-measures-in-response-to-covid.html> (accessed 8.5.2020)
- ¹⁰⁴¹ International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.internationalsos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)
- ¹⁰⁴² KPMG (2020) Czech Republic Insights. Available at: <https://home.kpmg/xx/en/home/insights/2020/04/czech-republic-government-and-institution-measures-in-response-to-covid.html> (accessed 8.5.2020)
- ¹⁰⁴³ Expat.cz (2020) More coronavirus restrictions end today: restaurant gardens can stay open later, no empty seats at cinemas. 8 Jun 2020. Available at: <https://news.expats.cz/weekly-czech-news/more-coronavirus-restrictions-end-today-restaurant-gardens-can-stay-open-later-no-empty-seats-at-cinemas/> (accessed 09.6.20)
- ¹⁰⁴⁴ Politico (2020) Every European country for itself on coronavirus exit strategy. April 14, 2020. Available at: <https://www.politico.com/news/2020/04/14/europe-coronavirus-exit-strategy-187069> (accessed 20.04.2020)
- ¹⁰⁴⁵ Focus Taiwan (2020) President of Czech Senate announces plans to visit Taiwan. June 9, 2020. Available at: <https://focustaiwan.tw/politics/202006090024> (accessed 10.6.2020)
- ¹⁰⁴⁶ CVVM (2020) Evaluation of reaction of state and its institutions to COVID-19 epidemic - Our society - special - May 2020. June 23, 2020. Available at: <https://cvvm.soc.cas.cz/en/press-releases/political/politicians-political-institutions/5222-evaluation-of-reaction-of-state-and-its-institutions-to-covid-19-epidemic-our-society-special-may-2020> (accessed 24.6.2020)
- ¹⁰⁴⁷ Expats.cz (2020) Czech Republic coronavirus updates, June 17: 47 new cases, Prague Deputy Mayor among them. June 17, 2020. Available at: <https://news.expats.cz/coronavirus-in-the-czech-republic/czech-republic-coronavirus-updates-june-17-47-new-cases-prague-deputy-mayor-among-them/> (accessed 24.6.2020)
- ¹⁰⁴⁸ IMF (2020) At a glance. Available at: <https://www.imf.org/en/Countries/CZE> (accessed 22.5.2020)
- ¹⁰⁴⁹ Reuters (2020) Czech unemployment held at 3% in March, wider trend dependent on April – minister April 5, 2020. Available at: <https://www.reuters.com/article/health-coronavirus-czech-unemployment/czech-unemployment-held-at-3-in-march-wider-trend-dependent-on-april-minister-idUSL8N2BT0C1> (accessed 22.5.2020)
- ¹⁰⁵⁰ ING (2020) Czech Republic: Historic fall in industry. June 8, 2020. Available at: <https://think.ing.com/snaps/czech-republic-historic-fall-of-industry-in-april/> (accessed 10.6.2020)
- ¹⁰⁵¹ Expat.cz (2020) Czech government extends support to small businesses impacted by coronavirus. 9 Jun 2020. Available at: <https://news.expats.cz/coronavirus-in-the-czech-republic/czech-government-extends-support-to-small-businesses-impacted-by-coronavirus/> (accessed 09.6.20)
- ¹⁰⁵² Radio Prague International (2020) Minister: State coronavirus support totals CZK 1.15 trillion. June 24, 2020. Available at: <https://english.radio.cz/minister-state-coronavirus-support-totals-czk-115-trillion-8684644> (accessed 30.6.2020)
- ¹⁰⁵³ Kafkadesk (2020) Czech Republic could see upsurge in domestic violence due to quarantine, warns NGO. 13 Apr 2020. Available at: <https://kafkadesk.org/2020/04/13/czech-republic-could-see-upsurge-in-domestic-violence-due-to-quarantine-warns-ngo/> (accessed 16.6.20)
- ¹⁰⁵⁴ Worldometer (2020) Germany. Available at: <https://www.worldometers.info/coronavirus/country/germany/> (accessed 13.5.2020)
- ¹⁰⁵⁵ Reuters (2020) Germany's coronavirus reproduction rate jumps, indicating rising contagion. June 22, 2020. Available at: <https://uk.reuters.com/article/uk-health-coronavirus-germany/germanys-coronavirus-reproduction-rate-jumps-indicating-rising-contagion-idUKKBN23S0PH> (accessed 22.6.2020)
- ¹⁰⁵⁶ The Guardian (2020) Germany's Covid-19 spikes present fresh challenges as lockdown lifts. 2 Jun 2020. Available at: <https://www.theguardian.com/world/2020/jun/02/germany-covid-19-spikes-present-fresh-challenges-as-lockdown-lifts> (accessed 03.6.20)
- ¹⁰⁵⁷ BBC (2020) Coronavirus: Hundreds of abattoir workers test positive in Germany. 17.6.2020. Available at: <https://www.bbc.com/news/world-europe-53087139> (accessed 18.6.2020)
- ¹⁰⁵⁸ DW (2020) Germany: Gütersloh slaughterhouse infections spread to community. June 28, 2020. Available at: <https://www.dw.com/en/germany-g%C3%BCtersloh-slaughterhouse-infections-spread-to-community/a-53971931> (accessed 29.6.20)
- ¹⁰⁵⁹ The Local (2020) Top virologist warns of a possible second coronavirus wave in Germany. June 24, 2020. Available at: <https://www.thelocal.de/20200624/top-virologist-warns-of-a-second-coronavirus-wave-in-germany> (accessed 29.6.20)
- ¹⁰⁶⁰ Google (2020) COVID-19 Community Mobility Reports. May 2020. Available at: <https://www.google.com/covid19/mobility/> (accessed 21.5.2020)

- ¹⁰⁶¹ Streeck H et al (2020) Preliminary result and conclusions of the COVID-19 case cluster study (Gangelt Municipality). April 9, 2020. Available at: https://www.land.nrw/sites/default/files/asset/document/zwischenenergebnis_covid19_case_study_gangelt_en.pdf (accessed 21.5.2020)
- ¹⁰⁶² International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.internationalsos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)
- ¹⁰⁶³ The Local (2020) NRW leader raises prospect of 'blanket lockdown' after slaughterhouse virus outbreak. June 20, 2020. Available at: <https://www.thelocal.de/20200620/nrw-leader-raises-prospect-of-sweeping-lockdown-after-slaughterhouse-virus-outbreak> (accessed 23.6.20)
- ¹⁰⁶⁴ DW (2020) Germany: Over 600,000 re-enter 'soft lockdown' after Gütersloh meat plant outbreak. June 24, 2020. Available at: <https://www.dw.com/en/germany-over-600000-re-enter-soft-lockdown-after-g%C3%BCtersloh-meat-plant-outbreak/a-53924892> (accessed 29.6.20)
- ¹⁰⁶⁵ BBC (2020) Coronavirus: Gütersloh lockdown extended around meat factory June 29, 2020. Available at: <https://www.bbc.com/news/world-europe-53217861> (accessed 2.7.2020)
- ¹⁰⁶⁶ The Local (2020) Germany extends local coronavirus lockdown in hard-hit district. June 29, 2020. Available at: <https://www.thelocal.de/20200629/germany-extends-local-coronavirus-lockdown-on-hard-hit-district> (accessed 06.7.20)
- ¹⁰⁶⁷ BBC (2020) Coronavirus: Germany reopens shops as lockdown is relaxed. May 6, 2020. Available at: <https://www.bbc.com/news/world-europe-52557718> (accessed 8.5.2020)
- ¹⁰⁶⁸ International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.internationalsos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)
- ¹⁰⁶⁹ BBC (2020) Coronavirus: Germany reopens shops as lockdown is relaxed. May 6, 2020. Available at: <https://www.bbc.com/news/world-europe-52557718> (accessed 8.5.2020)
- ¹⁰⁷⁰ The Guardian (2020) Merket announces plans to reopen schools and shops in Germany. Apr 15, 2020. Available at: <https://www.theguardian.com/world/2020/apr/15/angela-merkel-announces-plans-reopen-schools-shops-germany-coronavirus-lockdown> (accessed 17.04.2020)
- ¹⁰⁷¹ MedicalXpress (2020) A taste of normality as restaurants, churches reopen in Germany. 10 May 2020. Available at <https://medicalxpress.com/news/2020-05-restaurants-churches-reopen-germany.html> (accessed 13.5.2020)
- ¹⁰⁷² Bloomberg (2020) Private Labs Helped Germany Test 1 Million For Covid-19 Virus. April 2, 2020. Available at: <https://www.bloomberg.com/news/articles/2020-04-02/private-labs-helped-germany-test-1-million-for-covid-19-virus> (accessed 13.5.2020)
- ¹⁰⁷³ Robert Koch Institute (2020) National test strategy - who is tested in Germany? June 17, 2020. Available at: https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Teststrategie/Nat-Teststrat.html (accessed 09.7.20)
- ¹⁰⁷⁴ Federal Center for Health Education (2020) Test for SARS-CoV-2 infection. July 3, 2020. Available at: <https://www.infektionsschutz.de/coronavirus/test-auf-sars-cov-2.html#c13296> (accessed 09.7.20)
- ¹⁰⁷⁵ The Local (2020) 'Nip the virus in the bud': How Germany showed Europe the way on coronavirus testing. June 26, 2020. Available at: <https://www.thelocal.de/20200626/how-germany-showed-the-way-when-it-came-to-coronavirus-testing> (accessed 09.7.20)
- ¹⁰⁷⁶ Reuters (2020) Germany flips to Apple-Google approach on smartphone contact tracing. April 26, 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-europe-tech/germany-flips-to-apple-google-approach-on-smartphone-contact-tracing-idUSKCN22807J> (Accessed 13.5.2020)
- ¹⁰⁷⁷ The Local (2020) Everything that changes in June 2020 in Germany. 2 Jun 2020. Available at: <https://www.thelocal.de/20200602/everything-that-changes-in-june-2020-in-germany> (accessed 02.6.20)
- ¹⁰⁷⁸ The Local (2020) Germany gets ready to launch coronavirus tracing app. 8 Jun 2020. Available at: <https://www.thelocal.de/20200608/germany-gets-ready-to-launch-coronavirus-tracing-app> (accessed 09.6.20)
- ¹⁰⁷⁹ The Local (2020) 'Nip the virus in the bud': How Germany showed Europe the way on coronavirus testing. June 26, 2020. Available at: <https://www.thelocal.de/20200626/how-germany-showed-the-way-when-it-came-to-coronavirus-testing> (accessed 09.7.20)
- ¹⁰⁸⁰ Business Insider (2020). At least 6 countries reimposed lockdown measures as new coronavirus cases flared up again. Here's what they looked like.. May 17, 2020. Available at: <https://www.businessinsider.sg/countries-imposed-lockdown-again-after-coronavirus-case-spike-2020-5?r=US&IR=T> (accessed 18.05.2020)
- ¹⁰⁸¹ The Local (2020) More than 350 households ordered to quarantine in Berlin district. June 16, 2020. Available at: <https://www.thelocal.de/20200616/more-than-350-households-ordered-to-quarantine-in-berlin-district> (accessed 23.6.20)
- ¹⁰⁸² Reuters (2020) Germany struggles to impose local coronavirus restrictions. June 21, 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-germany-meat/germany-struggles-to-impose-local-coronavirus-restrictions-idUSKBN23S0KE> (accessed 23.6.20)
- ¹⁰⁸³ DW (2020) Coronavirus: German state's 'massive' testing plan draws skepticism. June 28, 2020. Available at: <https://www.dw.com/en/coronavirus-german-states-massive-testing-plan-draws-skepticism/a-53975351> (accessed 29.6.20)
- ¹⁰⁸⁴ Robert Koch Institut (2020) FOR PATIENTS AND THEIR FAMILIES Self-isolation at home with confirmed COVID-19. May 12, 2020. Available at: https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Quarantaene/Isolierung_Flyer_EN.pdf?__blob=publicationFile (accessed 09.7.20)
- ¹⁰⁸⁵ International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.internationalsos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)
- ¹⁰⁸⁶ BBC (2020) Coronavirus: Germany's states make face masks compulsory. 22 April 2020. Available at <https://www.bbc.com/news/world-europe-52382196> (accessed 13.4.2020)
- ¹⁰⁸⁷ YouGov (2020) Latest round-up of YouGov's coronavirus survey results.
- ¹⁰⁸⁸ The Local (2020) Germany plans to make face masks mandatory at airports. 8 Jun 2020. Available at: <https://www.thelocal.de/20200608/german-airports-plan-to-make-face-masks-mandatory> (accessed 09.6.20)
- ¹⁰⁸⁹ The Local (2020) Northeast Germany considers ending mask wearing in August. July 5, 2020. Available at: <https://www.thelocal.de/20200705/northeast-germany-considers-ending-mask-wearing-in-august> (accessed 07.7.20)
- ¹⁰⁹⁰ International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.internationalsos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)
- ¹⁰⁹¹ The Local (2020) Germany extends coronavirus distance rules to June 29th. 26 May 2020. Available at: <https://www.thelocal.de/20200526/germany-extends-coronavirus-distance-rules-to-june-29th> (accessed 03.6.20)

- ¹⁰⁹² The Straits Times (2020) Germany bans big events until October despite decline in Covid-19 cases. June 17, 2020. Available at: <https://www.straitstimes.com/world/europe/german-abattoir-stops-work-schools-to-close-after-400-coronavirus-cases> (accessed 29.6.20)
- ¹⁰⁹³ Guardian (2020) Which European countries are easing travel restrictions?. 18 May 2020. Available at <https://www.theguardian.com/travel/2020/may/18/europe-holidays-which-european-countries-are-easing-coronavirus-travel-restrictions-lockdown-measures> (accessed 21.5.2020)
- ¹⁰⁹⁴ The Guardian (2020) Global report: Germany to relax travel curbs as Spain mourns Covid-19 victims. 26 May 2020. Available at: <https://www.theguardian.com/world/2020/may/26/global-report-germany-relax-travel-curbs-spain-mourns-covid-19-victims> (accessed 29.5.20)
- ¹⁰⁹⁵ Reuters (2020) Germany to extend virus-related travel ban for non-European countries. June 10, 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-germany-restrictio/germany-to-extend-virus-related-travel-ban-for-non-european-countries-idUSKBN23G2NZ> (accessed 10.6.2020)
- ¹⁰⁹⁶ BBC (2020) Coronavirus: Over 40 Covid-19 cases traced to church service in Germany. 23 May 2020. Available at: <https://www.bbc.com/news/world-europe-52786242> (accessed 29.5.20)
- ¹⁰⁹⁷ BBC (2020) Coronavirus: German Ikea car park used for mass Eid prayer. 26 May 2020. Available at: https://www.bbc.com/news/world-europe-52759511?intlink_from_url=https://www.bbc.com/news/topics/c77jz3md4rdt/germany&link_location=live-reporting-story (accessed 29.5.20)
- ¹⁰⁹⁸ BBC (2020) Ramadan: German church opens doors for Muslim prayers. 23 May 2020. Available at: https://www.bbc.com/news/world-europe-52780600?intlink_from_url=https://www.bbc.com/news/topics/c77jz3md4rdt/germany&link_location=live-reporting-story (accessed 29.5.20)
- ¹⁰⁹⁹ International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.internationalsos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)
- ¹¹⁰⁰ The Guardian (2020) Meat plant must be held to account for Covid-19 outbreak, says German minister. June 22, 2020. Available at: <https://www.theguardian.com/world/2020/jun/22/meat-plant-must-be-held-to-account-covid-19-outbreak-germany> (accessed 23.6.20)
- ¹¹⁰¹ Yahoo News (2020) Merkel issues stark warning as Germany begins opening up. April 19, 2020. Available at: <https://news.yahoo.com/merkel-anxious-germany-begins-opening-103145840.html> (accessed 20.04.2020)
- ¹¹⁰² Politico (2020) Every European country for itself on coronavirus exit strategy. April 14, 2020. Available at: <https://www.politico.com/news/2020/04/14/europe-coronavirus-exit-strategy-187069> (accessed 20.04.2020)
- ¹¹⁰³ CNA (2020) Merkel faces growing criticism over Germany's COVID-19 strategy. Apr 27 2020. Available at: <https://www.channelnewsasia.com/news/world/covid-19-merkel-faces-growing-criticism-germany-12680426> (accessed 4.5.2020)
- ¹¹⁰⁴ CAN (2020) COVID-19 spread accelerates again in Germany. May 10, 2020. Available at: <https://www.channelnewsasia.com/news/world/covid-19-spread-accelerates-again-in-germany-12719184> (accessed 13.5.2020)
- ¹¹⁰⁵ The Guardian (2020) German state causes alarm with plans to ease lockdown measures. 25 May 2020. Available at: <https://www.theguardian.com/world/2020/may/25/german-state-causes-alarm-with-plans-to-ease-lockdown-measures-thuringia-second-wave-coronavirus> (accessed 29.5.20)
- ¹¹⁰⁶ Reuters (2020) WHO official: European deaths spike since March linked to COVID-19. 28 May 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-who-casualties/who-official-european-deaths-spike-since-march-linked-to-covid-19-idUSKBN2341K2> (accessed 29.5.20)
- ¹¹⁰⁷ The Guardian (2020) 'Exploitative conditions': Germany to reform meat industry after spate of Covid-19 cases. 22 May 2020. Available at: <https://www.theguardian.com/environment/2020/may/22/exploitative-conditions-germany-to-reform-meat-industry-after-spate-of-covid-19-cases#maincontent> (accessed 29.5.20)
- ¹¹⁰⁸ CNA (2020) Fresh protests against COVID-19 measures held in Germany. 24 May 2020. Available at: <https://www.channelnewsasia.com/news/world/fresh-protests-against-covid-19-measures-held-in-germany-12764690> (accessed 03.6.20)
- ¹¹⁰⁹ The Local (2020) Merkel slams 'unacceptable' stigma against people in coronavirus hotspots. June 26, 2020. Available at: <http://thelocal.de/20200626/merkel-slams-unacceptable-stigma-against-people-in-virus-hotspots> (accessed 29.6.20)
- ¹¹¹⁰ CNA (2020) Amazon workers in Germany to go on strike over coronavirus infections. June 29, 2020. Available at: <https://www.channelnewsasia.com/news/business/amazon-workers-germany-strike-covid-19-coronavirus-12879292> (accessed 29.6.20)
- ¹¹¹¹ YouGov (2020) Latest round-up of YouGov's coronavirus survey results.
- ¹¹¹² IMF (2020) At a Glance. Available at: <https://www.imf.org/en/Countries/DEU> (accessed 22.5.2020)
- ¹¹¹³ Bloomberg (2020) Virus Is Cracking Germany's Defense Against Jobless Surge. 26 May 2020. Available at: <https://www.bloomberg.com/news/articles/2020-05-26/virus-is-cracking-germany-s-defense-against-unemployment-surge> (accessed 29.5.20)
- ¹¹¹⁴ Reuters (2020) German businesses don't expect quick return to normal: Ifo. 28 May 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-germany-economy/german-businesses-dont-expect-quick-return-to-normal-ifo-idUSKBN2340OS> (accessed 29.5.20)
- ¹¹¹⁵ Bloomberg (2020) Germany's Economic Stimulus: How Big? How Green? How Fair? Read more at: <https://www.bloombergquint.com/global-economics/coronavirus-stimulus-what-will-germany-support>. May 27, 2020. Available at: <https://www.bloombergquint.com/global-economics/coronavirus-stimulus-what-will-germany-support> (accessed 29.5.2020)
- ¹¹¹⁶ Reuters (2020) Germany supports struggling restaurants by slashing their VAT. 28 May 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-germany-restaurant/germany-supports-struggling-restaurants-by-slashing-their-vat-idUSKBN2341S0> (accessed 29.5.20)
- ¹¹¹⁷ CNA (2020) Germany unveils US\$146b stimulus to kickstart coronavirus-hit economy. 4 Jun 2020. Available at: <https://www.channelnewsasia.com/news/business/germany-146b-stimulus-kickstart-covid-19-coronavirus-economy-12802004> (accessed 04.6.20)
- ¹¹¹⁸ The Local (2020) Germany to borrow €218.5 billion to fund coronavirus stimulus. 15 Jun 2020. Available at: <https://www.thelocal.de/20200615/berlin-to-borrow-2185-bln-euros-to-fund-virus-stimulus> (accessed 16.6.20)
- ¹¹¹⁹ DW (2020) Coronavirus: Germany sees increase in excess mortality. 22 May 2020. Available at: <https://www.dw.com/en/coronavirus-germany-sees-increase-in-excess-mortality/a-53537500> (accessed 16.6.20)

- ¹¹²⁰ Worldometer (2020) Switzerland. Available at: <https://www.worldometers.info/coronavirus/country/switzerland/> (accessed 22.5.2020)
- ¹¹²¹ Independent (2020) Coronavirus: Switzerland quarantines 300 after 'superspreader' causes outbreak at nightclub. June 29, 2020. Available at: <https://www.independent.co.uk/news/world/europe/coronavirus-switzerland-quarantine-300-superspreader-outbreak-nightclub-a9589881.html> (accessed 29.6.20)
- ¹¹²² Google (2020) COVID-19 Community Mobility Reports. May 2020. Available at: <https://www.google.com/covid19/mobility/> (accessed 21.5.2020)
- ¹¹²³ Swissinfo (2020) Public transport use still low despite corona easing. 12 Jun 2020. Available at: <https://www.swissinfo.ch/eng/public-transport-use-still-low-despite-corona-easing-45830022> (accessed 16.6.20)
- ¹¹²⁴ HUG (2020) Seroprevalence of COVID-19, first estimate of prevalence of antibodies in a sample of the population of Geneva. University Hospitals of Geneva. Available at: <https://www.hug-ge.ch/medias/communique-presse/seroprevalence-covid-19-premiere-estimation> (accessed 21.5.2020)
- ¹¹²⁵ Stringhini S et al (2020) Repeated seroprevalence of anti-SARS-CoV-2 IgG antibodies in a 2 population-based sample. PrePrint. Available at: <https://doi.org/10.1101/2020.05.02.20088898> (accessed 21.5.2020)
- ¹¹²⁶ Federal Office of Public Health (2020) New coronavirus: Current situation – Switzerland and international Available at: <https://www.bag.admin.ch/bag/en/home/krankheiten/ausbrueche-epidemien-pandemien/aktuelle-ausbrueche-epidemien/novel-cov/situation-schweiz-und-international.html> (accessed 22.4.2020)
- ¹¹²⁷ Swiss National COVID-19 Science Task Force. Available at: <https://ncs-tf.ch/en/mandate> (accessed 22.4.2020)
- ¹¹²⁸ SwissInfo (2020) Switzerland closes its schools to slow virus spread Available at: https://www.swissinfo.ch/eng/covid-19_switzerland-closes-its-schools-to-slow-virus-spread/45614324 (accessed 22.4.2020)
- ¹¹²⁹ ECDC (2020) Rapid risk assessment: Novel coronavirus disease 2019 (COVID-19) pandemic: increased transmission in the EU/EEA and the UK – sixth update. Available at: <https://www.ecdc.europa.eu/en/publications-data/rapid-risk-assessment-novel-coronavirus-disease-2019-covid-19-pandemic-increased> (accessed 22.4.2020)
- ¹¹³⁰ Baker and McKenzie (2020) Switzerland Declares State of Emergency due to COVID-19. Available at: <https://www.bakermckenzie.com/en/insight/publications/2020/03/switzerland-declares-state-of-emergency-covid19> (accessed 22.4.2020)
- ¹¹³¹ CAN (2020) Switzerland drafts in army to fight COVID-19. Available at: <https://www.channelnewsasia.com/news/world/switzerland-drafts-in-army-to-fight-covid-19-12619142> (accessed 22.4.2020)
- ¹¹³² Federal Office of Public Health (2020) New coronavirus: Measures, ordinance and explanations. Available at: <https://www.bag.admin.ch/bag/en/home/krankheiten/ausbrueche-epidemien-pandemien/aktuelle-ausbrueche-epidemien/novel-cov/massnahmen-des-bundes.html> (accessed 22.4.2020)
- ¹¹³³ The Local (2020) Switzerland bans gatherings of more than five people but curfew avoided. Available at: <https://www.thelocal.ch/20200320/switzerland-bans-gatherings-of-more-than-five-people-but-curfew-avoided> (accessed 22.4.2020)
- ¹¹³⁴ Federal Office of Public Health (2020) New coronavirus: Measures, ordinance and explanations. Available at: <https://www.bag.admin.ch/bag/en/home/krankheiten/ausbrueche-epidemien-pandemien/aktuelle-ausbrueche-epidemien/novel-cov/massnahmen-des-bundes.html> (accessed 22.4.2020)
- ¹¹³⁵ Swiss Info (2020) Coronavirus contact tracing app: friend or foe? May 8, 2020. Available at: https://www.swissinfo.ch/eng/covid-19_coronavirus-contact-tracing-app--friend-or-foe-/45746418 (accessed 13.5.2020)
- ¹¹³⁶ Swissinfo (2020) Swiss support wanes for masks and Covid tracing app. 12 Jun 2020. Available at: <https://www.swissinfo.ch/eng/swiss-support-wanes-for-masks-and-covid-tracing-app/45829502> (accessed 16.6.20)
- ¹¹³⁷ SwissInfo (2020) Coronavirus: the situation in Switzerland. May 12, 2020. Available at: https://www.swissinfo.ch/eng/covid-19_coronavirus--the-situation-in-switzerland/45592192 (accessed 13.5.2020)
- ¹¹³⁸ The Local (2020) Coronavirus: Switzerland makes it easier to get tested. April 22, 2020. Available at: <https://www.thelocal.ch/20200422/coronavirus-switzerland-expands-testing-criteria> (accessed 13.7.20)
- ¹¹³⁹ The Local (2020) Coronavirus: Switzerland makes it easier to get tested. April 22, 2020. Available at: <https://www.thelocal.ch/20200422/coronavirus-switzerland-expands-testing-criteria> (accessed 13.7.20)
- ¹¹⁴⁰ Federal Office of Public Health FOPH (2020) Factsheet Covid-19 (novel coronavirus disease) Rules for coverage of the costs of testing for SARS-CoV-2 and of associated medical care. June 25, 2020. Available at: <https://www.bag.admin.ch/bag/en/home/krankheiten/ausbrueche-epidemien-pandemien/aktuelle-ausbrueche-epidemien/novel-cov/regelung-krankenversicherung.html> (accessed 13.7.20)
- ¹¹⁴¹ Federal Office of Public Health FOPH (2020) Coronavirus: Federal government to assume test costs, SwissCovid app to start on 25 June. June 24, 2020. Available at: <https://www.bag.admin.ch/bag/en/home/das-bag/aktuell/medienmitteilungen.msg-id-79584.html> (accessed 13.7.20)
- ¹¹⁴² Federal Office of Public Health FOPH (2020) Coronavirus: Federal government to assume test costs, SwissCovid app to start on 25 June. June 24, 2020. Available at: <https://www.bag.admin.ch/bag/en/home/das-bag/aktuell/medienmitteilungen.msg-id-79584.html> (accessed 13.7.20)
- ¹¹⁴³ Federal Office of Public Health FOPH (2020) New coronavirus: Frequently Asked Questions (FAQs) June 25, 2020. Available at: <https://www.bag.admin.ch/bag/en/home/krankheiten/ausbrueche-epidemien-pandemien/aktuelle-ausbrueche-epidemien/novel-cov/faq-kontakte-downloads/haeufig-gestellte-fragen.html?faq-url=/en/tests/some-laboratories-offer-home-testing-kits-samples-are-taken-home-and-sent-laboratory-be> (accessed 13.7.20)
- ¹¹⁴⁴ SwissInfo (2020) Coronavirus: the situation in Switzerland. May 12, 2020. Available at: https://www.swissinfo.ch/eng/covid-19_coronavirus--the-situation-in-switzerland/45592192 (accessed 13.5.2020)
- ¹¹⁴⁵ Swissinfo (2020) Public transport use still low despite corona easing. 12 Jun 2020. Available at: <https://www.swissinfo.ch/eng/public-transport-use-still-low-despite-corona-easing-45830022> (accessed 16.6.20)
- ¹¹⁴⁶ Swissinfo (2020) Swiss support wanes for masks and Covid tracing app. 12 Jun 2020. Available at: <https://www.swissinfo.ch/eng/swiss-support-wanes-for-masks-and-covid-tracing-app/45829502> (accessed 16.6.20)
- ¹¹⁴⁷ Switzerland Federal Council (2020) Press Release: Federal Council to gradually ease measures against the new coronavirus. Available at: <https://www.admin.ch/gov/en/start/documentation/media-releases.msg-id-78818.html> (accessed 22.4.2020)
- ¹¹⁴⁸ Federal Office of Public Health (2020) New coronavirus: Measures, ordinance and explanations. Available at: <https://www.bag.admin.ch/bag/en/home/krankheiten/ausbrueche-epidemien-pandemien/aktuelle-ausbrueche-epidemien/novel-cov/massnahmen-des-bundes.html> (accessed 22.4.2020)
- ¹¹⁴⁹ The Federal Council (2020) Coronavirus: Federal Council to ease further measures from 11 May. Apr 29, 2020. Available at: <https://www.admin.ch/gov/en/start/documentation/media-releases.msg-id-78948.html> (accessed 4.5.2020)

- ¹¹⁵⁰ SwissInfo (2020) Coronavirus: the situation in Switzerland. May 12, 2020. Available at: https://www.swissinfo.ch/eng/covid-19_coronavirus--the-situation-in-switzerland/45592192 (accessed 13.5.2020)
- ¹¹⁵¹ Reuters (2020) Theatres, cinemas, summer camps to reopen as Swiss relax virus curbs. 27 May 2020 Available at: <https://www.reuters.com/article/us-health-coronavirus-swiss/theatres-cinemas-summer-camps-to-reopen-as-swiss-relax-virus-curbs-idUSKBN2330NV> (accessed 29.5.20)
- ¹¹⁵² Swissinfo (2020) Bars and clubs sector launches tracing tool to revive Swiss nightlife. 29 May 2020. Available at: https://www.swissinfo.ch/eng/party-people-_bars-and-clubs-sector-launch-tracing-tool-to-revive-swiss-nightlife-scene/45793106 (accessed 01.6.20)
- ¹¹⁵³ Guardian (2020) Which European countries are easing travel restrictions?. 18 May 2020. Available at <https://www.theguardian.com/travel/2020/may/18/europe-holidays-which-european-countries-are-easing-coronavirus-travel-restrictions-lockdown-measures> (accessed 21.5.2020)
- ¹¹⁵⁴ Swissinfo (2020) Switzerland re-opens its European borders. July 1, 2020. Available at: https://www.swissinfo.ch/eng/covid-19_what-s-happening-at-swiss-borders-and-airports-/45727184 (accessed 07.7.20)
- ¹¹⁵⁵ The Local (2020) Coronavirus: Football in Switzerland to kick off again on June 19. 29 May 2020. Available at: <https://www.thelocal.ch/20200529/coronavirus-football-in-switzerland-to-kick-off-again-on-june-19> (accessed 01.6.20)
- ¹¹⁵⁶ Swissinfo (2020) Government announces major easing of coronavirus restriction. 27 May 2020. Available at: https://www.swissinfo.ch/eng/no-more-emergency_government-announces-major-easing-of-coronavirus-restrictions/45788336 (accessed 01.6.20)
- ¹¹⁵⁷ Eturebonews (2020) Switzerland to end COVID-19 restrictions next week June 20, 2020 Available at: <https://www.eturbonews.com/574789/switzerland-to-end-covid-19-restrictions-next-week/> (accessed 22.6.2020)
- ¹¹⁵⁸ The Local (2020) UPDATE: What changes in Switzerland today as coronavirus restrictions are eased. June 22, 2020. Available at: <https://www.thelocal.ch/20200619/update-groups-of-up-to-1000-people-are-authorised-in-switzerland-from-june-22nd> (accessed 23.6.20)
- ¹¹⁵⁹ The Local (2020) UPDATE: What changes in Switzerland today as coronavirus restrictions are eased. June 22, 2020. Available at: <https://www.thelocal.ch/20200619/update-groups-of-up-to-1000-people-are-authorised-in-switzerland-from-june-22nd> (accessed 23.6.20)
- ¹¹⁶⁰ The Local (2020) International train connections between Switzerland and Italy to start again this week. June 23, 2020. Available at: <https://www.thelocal.ch/20200623/coronavirus-international-train-connections-between-switzerland-and-italy-to-start-again-this-week> (accessed 29.6.20)
- ¹¹⁶¹ Swissinfo (2020) Government to pay for Covid tests to contain pandemic. June 24, 2020. Available at: <https://www.swissinfo.ch/eng/government-to-pay-for-covid-tests-to-contain-pandemic/45857796> (accessed 29.6.20)
- ¹¹⁶² The Local (2020) Everything you need to know about Switzerland's new compulsory mask requirement. July 2, 2020. Available at: <https://www.thelocal.ch/20200702/coronavirus-everything-you-need-to-know-about-switzerlands> (accessed 07.7.20)
- ¹¹⁶³ Swissinfo (2020) Face masks now compulsory on SWISS flights. July 6, 2020. Available at: <https://www.swissinfo.ch/eng/latest-news/face-masks-now-compulsory-on-swiss-flights/45883700> (accessed 07.7.20)
- ¹¹⁶⁴ Swissinfo (2020) Swiss Covid-19 second wave response plan excludes national lockdown. 14 Jun 2020. Available at: https://www.swissinfo.ch/eng/latest-news/pandemic-response_swiss-covid-19-second-wave-response-plan-excludes-national-lockdown/45830184 (accessed 16.6.20)
- ¹¹⁶⁵ Swissinfo (2020) Rise in new corona cases sparks concern in Switzerland. July 3, 2020. Available at: <https://www.swissinfo.ch/eng/rise-in-new-corona-cases-sparks-concern-in-switzerland/45879414> (accessed 07.7.20)
- ¹¹⁶⁶ Swissinfo (2020) Switzerland publishes list of 'high risk' travel quarantine countries. July 2, 2020. Available at: <https://www.swissinfo.ch/eng/switzerland-publishes-list-of--high-risk--travel-quarantine-countries/45877556> (accessed 07.7.20)
- ¹¹⁶⁷ Swissinfo (2020) Switzerland publishes list of 'high risk' travel quarantine countries. July 2, 2020. Available at: <https://www.swissinfo.ch/eng/switzerland-publishes-list-of--high-risk--travel-quarantine-countries/45877556> (accessed 07.7.20)
- ¹¹⁶⁸ SwissInfo (2020) Switzerland announces plan to lift coronavirus lockdown. Available at: https://www.swissinfo.ch/eng/lockdown-lifting_switzerland-announces-three-stage-return-to-post-covid-normality/45694968 (accessed 22.4.2020)
- ¹¹⁶⁹ The Local (2020). Coronavirus: Why Switzerland opposes making masks compulsory. April 22, 2020. Available at: <https://www.thelocal.ch/20200422/coronavirus-why-switzerland-opposes-making-masks-compulsory> (accessed 13.05.2020)
- ¹¹⁷⁰ Swiss Info (2020). Easing of Covid-19 restrictions highlights Swiss mask shortage. April 17, 2020. Available at: https://www.swissinfo.ch/eng/coronavirus-health-policy_easing-of-covid-19-restrictions-highlights-mask-shortage/45696986 (accessed 13.05.2020)
- ¹¹⁷¹ Reuters (2020) WHO official: European deaths spike since March linked to COVID-19. 28 May 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-who-casualties/who-official-european-deaths-spike-since-march-linked-to-covid-19-idUSKBN2341K2> (accessed 29.5.20)
- ¹¹⁷² Swissinfo (2020) Anti-racism protesters take to streets of Zurich. 1 June 2020. Available at: https://www.swissinfo.ch/eng/george-floyd_-anti-racism-protesters-take-to-streets-of-zurich/45798400 (accessed 02.6.20)
- ¹¹⁷³ The Local (2020) Switzerland has lifted Covid-19 restrictions too quickly, scientist says. June 22, 2020. Available at: <https://www.thelocal.ch/20200622/switzerland-has-lifted-covid-19-restrictions-too-quickly-scientists-say> (accessed 23.6.20)
- ¹¹⁷⁴ The Local (2020) Switzerland of a 'second wave in summer' as coronavirus R-Rate rises above 1. June 18, 2020. Available at: <https://www.thelocal.ch/20200618/switzerlands-coronavirus-r-rate-rises-above-1> (accessed 23.6.20)
- ¹¹⁷⁵ SwissInfo (2020) Swiss concern shifts to economic fallout of coronavirus. Available at: https://www.swissinfo.ch/eng/society/covid-19-monitor_swiss-concern-shifts-to-economic-fallout-of-coronavirus/45671640 (accessed 22.4.2020)
- ¹¹⁷⁶ Swiss Info (2020) Coronavirus: the situation in Switzerland. May 12, 2020. Available at: https://www.swissinfo.ch/eng/covid-19_coronavirus--the-situation-in-switzerland/45592192 (accessed 13.5.2020)
- ¹¹⁷⁷ Al Jazeera (2020). Swiss to see families again as lockdown continues to ease. May 9, 2020. Available at: <https://www.aljazeera.com/news/2020/05/swiss-families-lockdown-continues-ease-200508162145550.html> (accessed 13.05.2020)
- ¹¹⁷⁸ Swiss Info (2020) Swiss fear coronavirus curbs intrude on personal rights. May 7, 2020. Available at: https://www.swissinfo.ch/eng/covid-19-monitor_swiss-fear-coronavirus-curbs-intrude-on-personal-rights/45742998 (accessed 10.6.2020)
- ¹¹⁷⁹ IMF (2020) At a glance, Switzerland. Available at: <https://www.imf.org/en/Countries/CHE> (accessed 22.5.2020)

- ¹¹⁸⁰ Seattle Times (2020) Swiss add \$14B to jobless fund as COVID-related claims soar. May 20, 2020. Available at: <https://www.seattletimes.com/business/swiss-add-14b-to-jobless-fund-as-covid-related-claims-soar/> (accessed 22.5.2020)
- ¹¹⁸¹ The Local (2020) Coronavirus-hit Swiss economy shrinks 2.6 percent in first quarter. 3 Jun 2020. Available at: <https://www.thelocal.ch/20200603/coronavirus-swiss-economy-shrinks> (accessed 10.6.20)
- ¹¹⁸² The Local (2020) How the coronavirus crisis will hit Switzerland's economy in 2020. June 18, 2020. Available at: <https://www.thelocal.ch/20200618/how-the-coronavirus-crisis-will-hit-switzerlands-economy-in-2020> (accessed 29.6.20)
- ¹¹⁸³ Worldometer Available at: <https://www.worldometers.info/coronavirus/> (accessed 22.4.2020)
- ¹¹⁸⁴ SSI (2020) SSI: We don't understand why there are no more infected. May 20, 2020. Available at: <https://nyheder.tv2.dk/samfund/2020-05-20-ssi-vi-forstaar-ikke-hvorfor-der-ikke-er-flere-smittede> (accessed 21.5.2020)
- ¹¹⁸⁵ The Local (2020) Denmark sees first coronavirus outbreak since lockdown lifted. 15 Jun 2020. Available at: <https://www.thelocal.dk/20200615/denmark-sees-first-outbreak-since-lockdown-lifted> (accessed 16.6.20)
- ¹¹⁸⁶ The Copenhagen Post (2020) Denmark has three new 'mini' coronavirus outbreaks. June 16, 2020. Available at: <http://cphpost.dk/?p=114949> (accessed 23.6.20)
- ¹¹⁸⁷ Google (2020) COVID-19 Community Mobility Reports. May 2020. Available at: <https://www.google.com/covid19/mobility/> (accessed 21.5.2020)
- ¹¹⁸⁸ Erikstrup C et al (2020) Estimation of SARS-CoV-2 infection fatality rate by real-time antibody screening of blood donors. PrePrint. Available at: <https://www.medrxiv.org/content/10.1101/2020.04.24.20075291v1.full.pdf> (accessed 21.5.2020)
- ¹¹⁸⁹ BBC (2020) Coronavirus: Why Denmark is taking steps to open up again. April 12. Available at: <https://www.bbc.com/news/world-europe-52226763> (accessed 22.4.2020)
- ¹¹⁹⁰ Politi (2020) New measures against covid-19. Available at: <https://politi.dk/coronavirus-i-danmark/in-english/new-measures-against-covid-19> (accessed 22.4.2020)
- ¹¹⁹¹ MobiHealthNews (2020) Danish Government launches COVIDmeter tracking service as lockdown restrictions are lifted. April 22 2020. Available at: <https://www.mobihealthnews.com/news/europe/danish-government-launches-covidmeter-tracking-service-lockdown-restrictions-are-lifted> (accessed 13.5.2020)
- ¹¹⁹² The Copenhagen Post (2020) Denmark launches coronavirus app Smittestop. June 18, 2020. Available at: <http://cphpost.dk/?p=115021> (accessed 23.6.20)
- ¹¹⁹³ FT (2020) Denmark to test everyone with coronavirus symptoms. Available at: <https://www.ft.com/content/a31e3db9-9e85-4e30-9ce2-210f5ffc4d36> (accessed 22.4.2020)
- ¹¹⁹⁴ The Local (2020) Why has Denmark offered all adults coronavirus tests and how will it work? May 19, 2020. Available at: <https://www.thelocal.dk/20200519/what-is-denmarks-testing-strategy-and-how-will-it-work> (accessed 10.6.2020)
- ¹¹⁹⁵ The Local (2020) Everyone in Denmark can now have a coronavirus test. May 18, 2020. Available at: <https://www.thelocal.dk/20200518/everyone-in-denmark-can-now-have-a-coronavirus-test> (accessed 13.7.20)
- ¹¹⁹⁶ Politi (2020) Testing and infection detection. Available at: <https://politi.dk/coronavirus-i-danmark/teststrategi-og-smitteopsporing> (accessed 13.7.20)
- ¹¹⁹⁷ The Local (2020) Denmark starts offering coronavirus tests at border. 16 Jun 2020. Available at: <https://www.thelocal.dk/20200616/denmark-starts-offering-coronavirus-tests-at-border> (accessed 16.6.20)
- ¹¹⁹⁸ Danish Health Authority (2020) Questions and answers on novel coronavirus. June 25, 2020. Available at: <https://www.sst.dk/en/English/Corona-eng/FAQ#uk-corona-faq-syg> (accessed 13.7.20)
- ¹¹⁹⁹ The Local Denmark (2020). Why is Denmark not recommending face masks to the public? May 11, 2020. Available at: <https://www.thelocal.dk/20200511/why-is-denmark-not-recommending-face-masks-to-the-public> (accessed 12.05.2020)
- ¹²⁰⁰ YouGov (2020) Latest round-up of YouGov's coronavirus survey results.
- ¹²⁰¹ Straits Times (2020) Denmark cuts distancing rule in major step to end Covid-19 lockdown. May 11, 2020. Available at: <https://www.straitstimes.com/world/europe/denmark-cuts-distancing-rule-in-major-step-to-end-lockdown> (accessed 10.6.2020)
- ¹²⁰² AA (2020) Denmark to allow gathering of 50 as virus bans eased. Jun 2020. Available at: <https://www.aa.com.tr/en/europe/denmark-to-allow-gathering-of-50-as-virus-bans-eased/1869600> (accessed 11.6.20)
- ¹²⁰³ International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.internationalosos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)
- ¹²⁰⁴ The Local (2020) Social distancing in the stands: crowd return to Danish football. June 22, 2020. Available at: <https://www.thelocal.dk/20200622/best-experience-of-my-life-danish-fans-hail-crowd-return> (accessed 23.6.20)
- ¹²⁰⁵ International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.internationalosos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)
- ¹²⁰⁶ The Local (2020) Germany opens borders to Danish residents early. 12 Jun 2020. Available at: <https://www.thelocal.dk/20200612/germany-opens-borders-to-danish-residents> (accessed 16.6.20)
- ¹²⁰⁷ The Copenhagen Post (2020) Denmark allows travel to most of Europe. June 19, 2020. Available at: <http://cphpost.dk/?p=115059> (accessed 23.6.20)
- ¹²⁰⁸ The Local (2020) Denmark opens to tourism to and from all but six EU countries. June 26, 2020. Available at: <https://www.thelocal.dk/20200626/denmark-opens-to-tourist-travel-to-and-from-all-but-six-eu-countries> (accessed 30.6.20)
- ¹²⁰⁹ The Copenhagen Post (2020) Denmark allows entry to citizens of six non-EU countries. July 3, 2020. Available at: <http://cphpost.dk/?p=115700> (accessed 07.7.20)
- ¹²¹⁰ Forbes (2020) Denmark, Norway Relax Coronavirus Restrictions But Borders Remain Closed. 8 May 2020. Available at: <https://www.forbes.com/sites/davidnikel/2020/05/08/denmark-norway-relax-coronavirus-restrictions-but-borders-remain-closed/#14dff9954557> (accessed 03.6.20)
- ¹²¹¹ BBC (2020) Coronavirus: Rush for haircuts in Denmark as lockdown eases. Available at: <https://www.bbc.com/news/world-europe-52360452> (accessed 22.4.2020)
- ¹²¹² Fin24 (2020). Denmark to free entire retail sector from lockdown on Monday. May 10, 2020. Available at: <https://m.fin24.com/Economy/World/denmark-to-free-entire-retail-sector-from-lockdown-on-monday-20200510> (accessed 11.05.2020)
- ¹²¹³ International SOS (2020) Travel Restrictions, Flight Operations and Screening. Available at: <https://pandemic.internationalosos.com/2019-ncov/ncov-travel-restrictions-flight-operations-and-screening> (accessed 12.5.2020)
- ¹²¹⁴ Guardian (2020) Which European countries are easing travel restrictions?. 18 May 2020. Available at: <https://www.theguardian.com/travel/2020/may/18/europe-holidays-which-european-countries-are-easing-coronavirus-travel-restrictions-lockdown-measures> (accessed 21.5.2020)
- ¹²¹⁵ The Local Denmark (2020). Denmark to lift most remaining lockdown measures on June 8. May 8, 2020. Available at: <https://www.thelocal.dk/20200508/denmark-to-lift-most-remaining-restrictions-in-early-june> (accessed 12.05.2020)

- ¹²¹⁶ AA (2020) Denmark to allow gathering of 50 as virus bans eased. Jun 2020. Available at: <https://www.aa.com.tr/en/europe/denmark-to-allow-gathering-of-50-as-virus-bans-eased/1869600> (accessed 11.6.20)
- ¹²¹⁷ ECNS (2020) Denmark to further ease COVID-19 restrictions on nursing homes, hospitals. June 10, 2020. Available at: <http://www.ecns.cn/news/society/2020-06-10/detail-ifzwzeax1202761.shtml> (accessed 10.6.2020)
- ¹²¹⁸ 7News (2020) Coronavirus: Denmark's return to school gives glimpse of what classrooms will look like post-lockdown. Available at: <https://7news.com.au/lifestyle/health-wellbeing/denmarks-return-to-school-gives-glimpse-of-what-classrooms-will-look-like-post-lockdown-c-984446> (accessed 22.4.2020)
- ¹²¹⁹ FT (2020) Denmark to test everyone with coronavirus symptoms. Available at: <https://www.ft.com/content/a31e3db9-9e85-4e30-9ce2-210f5ffc4d36> (accessed 22.4.2020)
- ¹²²⁰ BBC (2020) Coronavirus: How lockdown is being lifted across Europe. May 20, 2020. Available at: https://www.bbc.com/news/explainers-52575313?intlink_from_url=&link_location=live-reporting-storyhttps://docs.google.com/document/d/1BtquiX-4KOR4p0_UZWdpD3lVU4Yz5MVS01o_EJv_gCc/edit (accessed 21.5.2020)
- ¹²²¹ The Guardian (2020) Danes and Czechs say easing lockdowns has produced no Covid-19 surge. Apr 30, 2020. Available at: <https://www.theguardian.com/world/2020/apr/30/danes-and-czechs-say-easing-lockdowns-has-produced-no-covid-19-surge> (accessed 5.5.2020)
- ¹²²² BBC (2020) Coronavirus: Why Denmark is taking steps to open up again. April 12. Available at: <https://www.bbc.com/news/world-europe-52226763> (accessed 22.4.2020)
- ¹²²³ YouGov (2020) Latest round-up of YouGov's coronavirus survey results.
- ¹²²⁴ IMF (2020) At a glance, Denmark. Available at: <https://www.imf.org/en/Countries/DNK> (accessed 22.5.2020)
- ¹²²⁵ Brookings (2020) The COVID-19 crisis: How do U.S. employment and health outcomes compare to other OECD countries? June 2, 2020. Available at: <https://www.brookings.edu/research/the-covid-19-crisis-how-do-u-s-economic-and-health-outcomes-compare-to-other-oecd-countries/#cancel> (accessed 12.6.2020)
- ¹²²⁶ Economist (2020) Domestic violence has increased during coronavirus lockdowns. 22 Apr 2020. Available at: <https://www.economist.com/graphic-detail/2020/04/22/domestic-violence-has-increased-during-coronavirus-lockdowns> (accessed 16.6.20)
- ¹²²⁷ Reuters (2020) Mink at Danish farm to be culled after catching coronavirus. June 17, 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-denmark-mink/mink-at-danish-farm-to-be-culled-after-catching-coronavirus-idUSKBN23O1PH> (accessed 23.6.20)
- ¹²²⁸ The Copenhagen Post (2020) National Round-Up: Denmark eases travel restrictions for 'safe' non-EU countries. July 3, 2020. Available at: <http://cphpost.dk/?p=115653> (accessed 07.7.20)
- ¹²²⁹ Worldometer Available at: <https://www.worldometers.info/coronavirus/> (accessed 22.4.2020)
- ¹²³⁰ Business Insider (2020) Austria responded fast and decisively to its coronavirus outbreak, and is now starting to open up again. Here is exactly what happened. April 16, 2020. Available at: <https://www.businessinsider.sg/how-austria-reacted-quickly-and-firmly-to-tackle-coronavirus-crisis-2020-4?r=US&IR=T> (accessed 22.4.2020)
- ¹²³¹ Business Insider (2020) Austria responded fast and decisively to its coronavirus outbreak, and is now starting to open up again. Here is exactly what happened. April 16, 2020. Available at: <https://www.businessinsider.sg/how-austria-reacted-quickly-and-firmly-to-tackle-coronavirus-crisis-2020-4?r=US&IR=T> (accessed 22.4.2020)
- ¹²³² Business Insider (2020) Austria responded fast and decisively to its coronavirus outbreak, and is now starting to open up again. Here is exactly what happened. April 16, 2020. Available at: <https://www.businessinsider.sg/how-austria-reacted-quickly-and-firmly-to-tackle-coronavirus-crisis-2020-4?r=US&IR=T> (accessed 22.4.2020)
- ¹²³³ Metropole (2020) The Coronavirus in Austria & Vienna | Upper Austria Reintroduces Mandatory Mask-Wearing in Shops & Bars. July 7, 2020. Available at: <https://metropole.at/coronavirus-in-austria/> (accessed 07.7.20)
- ¹²³⁴ Google (2020) COVID-19 Community Mobility Reports. May 2020. Available at: <https://www.google.com/covid19/mobility/> (accessed 21.5.2020)
- ¹²³⁵ Statistics Austria (2020) COVID-19 prevalence study: maximum 0.15% of Austrian population infected with SARS-CoV-2. Available at: http://www.statistik.at/web_en/press/123052.html (accessed 8.6.2020)
- ¹²³⁶ Politico (2020) Over 42 percent in Austria's Ischgl have coronavirus antibodies, study finds Available at: <https://www.politico.eu/article/over-42-percent-in-austrias-ischgl-had-coronavirus-antibody-tests-find/> (accessed 26.6.2020)
- ¹²³⁷ The Local (2020) Which professions are over-represented in Sweden's coronavirus statistics? June 25, 2020. Available at: <https://www.thelocal.se/20200625/study-these-are-the-professions-which-are-over-represented-in-swedens-coronavirus-statistics> (accessed 30.6.20)
- ¹²³⁸ Business Insider (2020) Austria responded fast and decisively to its coronavirus outbreak, and is now starting to open up again. Here is exactly what happened. April 16, 2020. Available at: <https://www.businessinsider.sg/how-austria-reacted-quickly-and-firmly-to-tackle-coronavirus-crisis-2020-4?r=US&IR=T> (accessed 22.4.2020)
- ¹²³⁹ Euractiv (2020) Austria's government presents COVID-19 exit schedule. April 7, 2020. Available at: <https://www.euractiv.com/section/coronavirus/news/austrias-government-presents-covid-19-exit-schedule/> (accessed 22.4.2020)
- ¹²⁴⁰ Business Insider (2020) Austria responded fast and decisively to its coronavirus outbreak, and is now starting to open up again. Here is exactly what happened. April 16, 2020. Available at: <https://www.businessinsider.sg/how-austria-reacted-quickly-and-firmly-to-tackle-coronavirus-crisis-2020-4?r=US&IR=T> (accessed 22.4.2020)
- ¹²⁴¹ Politico (2020) The Austrian ski town that spread coronavirus across the Continent. Available at: <https://www.politico.eu/article/the-austrian-ski-town-that-spread-coronavirus-across-the-continent/> (accessed 22.4.2020)
- ¹²⁴² Business Insider (2020) Austria responded fast and decisively to its coronavirus outbreak, and is now starting to open up again. Here is exactly what happened. April 16, 2020. Available at: <https://www.businessinsider.sg/how-austria-reacted-quickly-and-firmly-to-tackle-coronavirus-crisis-2020-4?r=US&IR=T> (accessed 22.4.2020)
- ¹²⁴³ Euractiv (2020) Austria's government presents COVID-19 exit schedule. April 7, 2020. Available at: <https://www.euractiv.com/section/coronavirus/news/austrias-government-presents-covid-19-exit-schedule/> (accessed 22.4.2020)
- ¹²⁴⁴ Euractiv (2020) Austria's government presents COVID-19 exit schedule. Available at: <https://www.euractiv.com/section/coronavirus/news/austrias-government-presents-covid-19-exit-schedule/> (accessed 22.4.2020)
- ¹²⁴⁵ Federal Ministry Republic of Austria – Social Affairs, Health, Care and Consumer Protection (2020) FAQ: Tests and Quarantine. July 3, 2020. Available at: <https://www.sozialministerium.at/Informationen-zum-Coronavirus/Coronavirus---Haeufig-gestellte-Fragen/FAQ--Testungen-und-Quarantaene.html> (accessed 13.7.20)

- ¹²⁴⁶ CNET (2020) MIT Tech Review is keeping tabs on coronavirus apps that are tracking you. May 8, 2020. Available at: <https://www.cnet.com/news/mit-tech-review-is-keeping-tabs-on-coronavirus-apps-that-are-tracking-you/> (accessed 5.6.2020)
- ¹²⁴⁷ IMAT (2020) Austria General Health Risks: Coronavirus COVID-19 Available at: <https://www.iamat.org/country/austria/risk/coronaviruses> (accessed 5.6.2020)
- ¹²⁴⁸ Federal Ministry Republic of Austria – Social Affairs, Health, Care and Consumer Protection (2020) FAQ: Tests and Quarantine. July 3, 2020. Available at: <https://www.sozialministerium.at/Informationen-zum-Coronavirus/Coronavirus---Haeufig-gestellte-Fragen/FAQ--Testungen-und-Quarantaene.html> (accessed 13.7.20)
- ¹²⁴⁹ Euractiv (2020) Austria announces new COVID-19 restrictions. Available at: <https://www.euractiv.com/section/coronavirus/news/austria-announces-new-covid19-restrictions/> (accessed 22.4.2020)
- ¹²⁵⁰ Österreichische Integrationsfonds (2020) Coronavirus: Facts and security regulations in 17 languages. Available at: https://www.integrationsfonds.at/coronainfo/en/?gclid=Cj0KCQjw-r71BRDuARIsAB7i_QPXhliCa5Bs0K3BoP9t0QL2Jv1Pr3YQ0Ap0Nm8is5HUiT3mNOXGk0QaAn43EALw_wcB (accessed 5.5.2020)
- ¹²⁵¹ The Local (2020) Austria to relax mandatory mask rules in coronavirus fight. 30 May 2020. Available at: <https://www.thelocal.at/20200530/austria-to-relax-mandatory-mask-rules-in-coronavirus-fight> (accessed 04.6.20)
- ¹²⁵² Metropole (2020) The Coronavirus in Austria & Vienna | Upper Austria Reintroduces Mandatory Mask-Wearing in Shops & Bars. July 7, 2020. Available at: <https://metropole.at/coronavirus-in-austria/> (accessed 07.7.20)
- ¹²⁵³ Österreichische Integrationsfonds (2020) Coronavirus: Facts and security regulations in 17 languages. Available at: https://www.integrationsfonds.at/coronainfo/en/?gclid=Cj0KCQjw-r71BRDuARIsAB7i_QPXhliCa5Bs0K3BoP9t0QL2Jv1Pr3YQ0Ap0Nm8is5HUiT3mNOXGk0QaAn43EALw_wcB (accessed 5.5.2020)
- ¹²⁵⁴ Österreichische Integrationsfonds (2020) Coronavirus: Facts and security regulations in 17 languages. Available at: https://www.integrationsfonds.at/coronainfo/en/?gclid=Cj0KCQjw-r71BRDuARIsAB7i_QPXhliCa5Bs0K3BoP9t0QL2Jv1Pr3YQ0Ap0Nm8is5HUiT3mNOXGk0QaAn43EALw_wcB (accessed 5.5.2020)
- ¹²⁵⁵ Österreichische Integrationsfonds (2020) Coronavirus: Facts and security regulations in 17 languages. Available at: https://www.integrationsfonds.at/coronainfo/en/?gclid=Cj0KCQjw-r71BRDuARIsAB7i_QPXhliCa5Bs0K3BoP9t0QL2Jv1Pr3YQ0Ap0Nm8is5HUiT3mNOXGk0QaAn43EALw_wcB (accessed 5.5.2020)
- ¹²⁵⁶ Metropole (2020) Coronavirus Updates in English. 4 Jun 2020. Available at: <https://metropole.at/coronavirus-updates-in-english/> (accessed 04.6.20)
- ¹²⁵⁷ DW (2020) Salzburg Festival to be held despite COVID-19 restrictions. 10 Jun 2020. Available at: <https://www.dw.com/en/salzburg-festival-to-be-held-despite-covid-19-restrictions/a-53762751> (accessed 16.6.20)
- ¹²⁵⁸ Metropole (2020) Austria to Open Borders to All Neighbors – Except Italy. 3 Jun 2020. Available at: <https://metropole.at/austria-opens-borders-neighbors-except-italy/> (accessed 04.6.20)
- ¹²⁵⁹ The Local (2020) Austria to reopen border with Italy from mid-June. 10 Jun 2020. Available at: <https://www.thelocal.at/20200610/austria-to-reopen-border-with-italy-from-june-16> (accessed 11.6.20)
- ¹²⁶⁰ DW (2020) Coronavirus latest: Austria bans all but essential travel to German state. June 24, 2020. Available at: <https://www.dw.com/en/coronavirus-latest-austria-bans-all-but-essential-travel-to-german-state/a-53919644> (accessed 29.6.20)
- ¹²⁶¹ The Local (2020) Austria lifts travel warning for German state of North Rhine-Westphalia. June 29, 2020. Available at: <https://www.thelocal.com/20200629/austria-relaxes-general-travel-warning-for-german-state-of-north-rhine-westphalia> (accessed 30.6.20)
- ¹²⁶² Metropole (2020) The Coronavirus in Austria & Vienna | Upper Austria Reintroduces Mandatory Mask-Wearing in Shops & Bars. July 7, 2020. Available at: <https://metropole.at/coronavirus-in-austria/> (accessed 07.7.20)
- ¹²⁶³ Österreichische Integrationsfonds (2020) Coronavirus: Facts and security regulations in 17 languages. Available at: https://www.integrationsfonds.at/coronainfo/en/?gclid=Cj0KCQjw-r71BRDuARIsAB7i_QPXhliCa5Bs0K3BoP9t0QL2Jv1Pr3YQ0Ap0Nm8is5HUiT3mNOXGk0QaAn43EALw_wcB (accessed 5.5.2020)
- ¹²⁶⁴ Euractiv (2020) Austria's government presents COVID-19 exit schedule. April 7, 2020. Available at: <https://www.euractiv.com/section/coronavirus/news/austrias-government-presents-covid-19-exit-schedule/> (accessed 22.4.2020)
- ¹²⁶⁵ Österreichische Integrationsfonds (2020) Coronavirus: Facts and security regulations in 17 languages. Available at: https://www.integrationsfonds.at/coronainfo/en/?gclid=Cj0KCQjw-r71BRDuARIsAB7i_QPXhliCa5Bs0K3BoP9t0QL2Jv1Pr3YQ0Ap0Nm8is5HUiT3mNOXGk0QaAn43EALw_wcB (accessed 5.5.2020)
- ¹²⁶⁶ Österreichische Integrationsfonds (2020) Coronavirus: Facts and security regulations in 17 languages. Available at: https://www.integrationsfonds.at/coronainfo/en/?gclid=Cj0KCQjw-r71BRDuARIsAB7i_QPXhliCa5Bs0K3BoP9t0QL2Jv1Pr3YQ0Ap0Nm8is5HUiT3mNOXGk0QaAn43EALw_wcB (accessed 5.5.2020)
- ¹²⁶⁷ Österreichische Integrationsfonds (2020) Coronavirus: Facts and security regulations in 17 languages. Available at: https://www.integrationsfonds.at/coronainfo/en/?gclid=Cj0KCQjw-r71BRDuARIsAB7i_QPXhliCa5Bs0K3BoP9t0QL2Jv1Pr3YQ0Ap0Nm8is5HUiT3mNOXGk0QaAn43EALw_wcB (accessed 5.5.2020)
- ¹²⁶⁸ Österreichische Integrationsfonds (2020) Coronavirus: Facts and security regulations in 17 languages. Available at: https://www.integrationsfonds.at/coronainfo/en/?gclid=Cj0KCQjw-r71BRDuARIsAB7i_QPXhliCa5Bs0K3BoP9t0QL2Jv1Pr3YQ0Ap0Nm8is5HUiT3mNOXGk0QaAn43EALw_wcB (accessed 5.5.2020)
- ¹²⁶⁹ Reuters (2020) Austria plans to reopen bars and restaurants in easing coronavirus lockdown. 21 Apr 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-austria/austria-plans-to-reopen-bars-and-restaurants-in-easing-of-coronavirus-lockdown-idUSKCN2231J9> (accessed 03.6.20)
- ¹²⁷⁰ The New Paper (2020) Austria government gives green light for two F1 races next month. 1 Jun 2020. Available at: <https://www.tnp.sg/sports/others/austria-government-gives-green-light-two-f1-races-next-month> (accessed 04.6.20)
- ¹²⁷¹ Metropole (2020) The Coronavirus in Austria & Vienna | Upper Austria Reintroduces Mandatory Mask-Wearing in Shops & Bars. July 7, 2020. Available at: <https://metropole.at/coronavirus-in-austria/> (accessed 07.7.20)

- ¹²⁷² Metropole (2020) The Coronavirus in Austria & Vienna | Upper Austria Reintroduces Mandatory Mask-Wearing in Shops & Bars. July 7, 2020. Available at: <https://metropole.at/coronavirus-in-austria/> (accessed 07.7.20)
- ¹²⁷³ Euractiv (2020) Austria's government presents COVID-19 exit schedule. April 7, 2020. Available at: <https://www.euractiv.com/section/coronavirus/news/austrias-government-presents-covid-19-exit-schedule/> (accessed 22.4.2020)
- ¹²⁷⁴ Österreichische Integrationsfonds (2020) Coronavirus: Facts and security regulations in 17 languages. Available at: https://www.integrationsfonds.at/coronainfo/en/?gclid=Cj0KCQjw-r71BRDuARIsAB7i_QPXhliCa5Bs0K3BoP9t0QL2Jv1Pr3YQ0Ap0Nm8is5HUiT3mNOXGk0QaAn43EALw_wcB (accessed 5.5.2020)
- ¹²⁷⁵ Metropole (2020) The Coronavirus in Austria & Vienna | Upper Austria Reintroduces Mandatory Mask-Wearing in Shops & Bars. July 7, 2020. Available at: <https://metropole.at/coronavirus-in-austria/> (accessed 07.7.20)
- ¹²⁷⁶ The Telegraph (2020) Austrian shops deserted as people stay away despite lift of lockdown. April 16, 2020. Available at: <https://www.telegraph.co.uk/news/2020/04/16/austrian-shops-deserted-people-stay-away-despite-lift-lockdown/> (accessed 11.05.2020)
- ¹²⁷⁷ Statistics Austria (2020) COVID-19 prevalence study: maximum 0.15% of Austrian population infected with SARS-CoV-2. Available at: http://www.statistik.at/web_en/press/123052.html (accessed 8.6.2020)
- ¹²⁷⁸ IMF (2020) At a glance, Austria. Available at: <https://www.imf.org/en/Countries/AUT> (accessed 22.5.2020)
- ¹²⁷⁹ Brookings (2020) The COVID-19 crisis: How do U.S. employment and health outcomes compare to other OECD countries? June 2, 2020. Available at: <https://www.brookings.edu/research/the-covid-19-crisis-how-do-u-s-economic-and-health-outcomes-compare-to-other-oecd-countries/#cancel> (accessed 12.6.2020)
- ¹²⁸⁰ Federal Ministry Republic of Austria Finance (2020) Federal government presents €500 million package for restaurants and pubs. 11 May 2020. Available at: <https://www.bmf.gv.at/en/press/press-releases/2020/Mai-2020/Federal-government-presents-%E2%82%AC500-million-package-for-restaurants-and-pubs.html> (accessed 04.6.20)
- ¹²⁸¹ The Local (2020) Austrian Airlines to get '600 million euro rescue package'. 8 Jun 2020. Available at: <https://www.thelocal.at/20200608/austrian-airlines-to-get-600-million-euro-rescue-package> (accessed 11.6.20)
- ¹²⁸² CNA (2020) Austria plans COVID-19 help for jobless, families. 13 Jun 2020. Available at: <https://www.channelnewsasia.com/news/world/austria-plans-covid-19-help-for-jobless-families-12832410> (accessed 16.6.20)
- ¹²⁸³ Metropole (2020) The Coronavirus in Austria & Vienna | Upper Austria Reintroduces Mandatory Mask-Wearing in Shops & Bars. July 7, 2020. Available at: <https://metropole.at/coronavirus-in-austria/> (accessed 07.7.20)
- ¹²⁸⁴ Our World in Data (2020) Excess mortality from the Coronavirus pandemic (COVID-19) 13 Jun 2020. Available at: <https://ourworldindata.org/excess-mortality-covid> (accessed 16.6.20)
- ¹²⁸⁵ Worldometer (2020) Available at: <https://www.worldometers.info/coronavirus/> (accessed 16.4.2020)
- ¹²⁸⁶ Bloomberg (2020) Sweden's Covid Expert Says the World Still Doesn't Understand. June 28, 2020. Available at: <https://www.bloomberg.com/news/articles/2020-06-28/sweden-s-covid-expert-says-the-world-still-doesn-t-understand> (accessed 29.6.2020)
- ¹²⁸⁷ Reuters (2020) Sweden records first week with no excess mortality since pandemic struck. 8 Jun 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-sweden-mortality/sweden-records-first-week-with-no-excess-mortality-since-pandemic-struck-idUSKBN23F1WK> (accessed 10.6.20)
- ¹²⁸⁸ Bloomberg (2020) Swedish Covid Infections Drop After Steady Distancing Patterns. July 7, 2020. Available at: <https://www.bloomberg.com/news/articles/2020-07-07/swedish-covid-infections-drop-after-steady-distancing-patterns> (accessed 08.7.20)
- ¹²⁸⁹ Google (2020) COVID-19 Community Mobility Reports. May 2020. Available at: <https://www.google.com/covid19/mobility/> (accessed 21.5.2020)
- ¹²⁹⁰ Ellingsen T, Roine J (2020) Sweden and the virus: Public policy and the Swedish model, what was the Swedish governments approach to the pandemic and how was it received in Sweden? Preprint from the book "Sweden Through the Crisis", SIR, Stockholm School of Economics Institute for Research.
- ¹²⁹¹ The Swedish Public Health Authority (2020) First results from ongoing study of antibodies to covid-19 virus. May 20, 2020. Available at: <https://www.folkhalsomyndigheten.se/nyheter-och-press/nyhetsarkiv/2020/maj/forsta-resultaten-fran-pagaende-undersokning-av-antikroppar-for-covid-19-virus/> (accessed 21.5.2020)
- ¹²⁹² HardTalk (2020) YouTube, Anders Tegnell, State Epidemiologist, 19 May 2020. Available at: <https://www.youtube.com/watch?v=Bigg34aUJcQ> (accessed 21.5.2020)
- ¹²⁹³ Medicalxpress (2020) 1 in 5 in Stockholm have virus antibodies: Sweden. May 20, 2020. Available at: <https://medicalxpress.com/news/2020-05-stockholm-virus-antibodies-sweden.html> (accessed 5.6.2020)
- ¹²⁹⁴ Bloomberg (2020) Sweden Remains Far From Herd Immunity Despite Softer Lockdown. June 18, 2020. Available at: <https://www.bloomberg.com/news/articles/2020-06-18/sweden-remains-far-from-herd-immunity-despite-softer-lockdown> (accessed 08.7.20)
- ¹²⁹⁵ Government Offices of Sweden (2020) Article from Prime Minister's Office Strategy in response to the COVID-19 pandemic. Published 06 April 2020. Available at: <https://www.government.se/articles/2020/04/strategy-in-response-to-the-covid-19-pandemic/> (accessed 18.5.2020)
- ¹²⁹⁶ Public Health Agency of Sweden (2020) Available at: <https://www.folkhalsomyndigheten.se/the-public-health-agency-of-sweden/communicable-disease-control/covid-19/> (accessed 16.4.2020)
- ¹²⁹⁷ Public Health Agency of Sweden (2020) FAQ about COVID-19 – Testing, vaccination, treatment. June 26, 2020. Available at: https://www.folkhalsomyndigheten.se/the-public-health-agency-of-sweden/communicable-disease-control/covid-19/?exp=72725#_72725 (accessed 13.7.20)
- ¹²⁹⁸ The Local (2020) Sweden's new plan to extend coronavirus testing: Here's how it should work. June 12, 2020. Available at: <https://www.thelocal.se/20200612/sweden-extends-coronavirus-testing-heres-how-it-should-work> (accessed 13.7.20)
- ¹²⁹⁹ Public Health Agency of Sweden (2020) FAQ about COVID-19 – Quarantine and lockdown. May 14, 2020. Available at: https://www.folkhalsomyndigheten.se/the-public-health-agency-of-sweden/communicable-disease-control/covid-19/?exp=72725#_72725 (accessed 13.7.20)
- ¹³⁰⁰ The Local (2020) Sweden extends ban on visits to elderly care homes. June 15, 2020. Available at: <https://www.thelocal.se/20200615/sweden-extends-ban-on-visits-to-elderly-care-homes> (accessed 17.6.20)
- ¹³⁰¹ Folkhalsomyndigheten Public Health Agency of Sweden (2020) FAQ about the new legislation for restaurants, bars, etc. 7 Apr 2020. Available at: <https://www.folkhalsomyndigheten.se/the-public-health-agency-of-sweden/communicable-disease-control/covid-19-new-legislation-for-restaurants-bars-etc/> (accessed 03.6.20)

- ¹³⁰² The Guardian (2020) Critics question Swedish approach as coronavirus death toll reaches 1,000. April 15, 2020. Available at: <https://www.theguardian.com/world/2020/apr/15/sweden-coronavirus-death-toll-reaches-1000> (accessed 16.4.2020)
- ¹³⁰³ Government Offices of Sweden (2020) Article from Ministry of Health and Social Affairs Decisions and guidelines in the Ministry of Health and Social Affairs' policy areas to limit the spread of the COVID-19 virus Published 09 April 2020. Available at: <https://www.government.se/articles/2020/04/s-decisions-and-guidelines-in-the-ministry-of-health-and-social-affairs-policy-areas-to-limit-the-spread-of-the-covid-19-virusny-sida/> (accessed 18.5.2020)
- ¹³⁰⁴ The Local (2020) Sweden extends ban on travel from non-EU countries. June 12, 2020. Available at: <https://www.thelocal.se/20200612/sweden-extends-ban-on-travel-from-non-eu-countries> (accessed 17.6.20)
- ¹³⁰⁵ Government Offices of Sweden (2020) Article from Prime Minister's Office Strategy in response to the COVID-19 pandemic. Published 06 April 2020. Available at: <https://www.government.se/articles/2020/04/strategy-in-response-to-the-covid-19-pandemic/> (accessed 18.5.2020)
- ¹³⁰⁶ HardTalk (2020) YouTube, Anders Tegnell, State Epidemiologist, 19 May 2020. Available at: <https://www.youtube.com/watch?v=Bigg34aUJcQ> (accessed 21.5.2020)
- ¹³⁰⁷ Public Health Agency of Sweden (2020) COVID-19 FAQ. Available at: <https://www.folkhalsomyndigheten.se/the-public-health-agency-of-sweden/communicable-disease-control/covid-19/> (accessed 18.5.2020)
- ¹³⁰⁸ Government Offices of Sweden (2020) Article from Ministry of Health and Social Affairs Decisions and guidelines in the Ministry of Health and Social Affairs' policy areas to limit the spread of the COVID-19 virus Published 09 April 2020. Available at: <https://www.government.se/articles/2020/04/s-decisions-and-guidelines-in-the-ministry-of-health-and-social-affairs-policy-areas-to-limit-the-spread-of-the-covid-19-virusny-sida/> (accessed 18.5.2020)
- ¹³⁰⁹ The Local (2020) How to get your free coronavirus antibody test in Stockholm. June 12, 2020. Available at: <https://www.thelocal.se/20200612/how-to-get-your-free-coronavirus-test-in-stockholm> (accessed 17.6.20)
- ¹³¹⁰ Lund University in Sweden (2020) COVID Symptom Tracker app launched in Sweden. Available at: <https://lunduniversity.lu.se/article/covid-symptom-tracker-app-launched-in-sweden> (accessed 18.5.2020)
- ¹³¹¹ The Local (2020) Why is Sweden not recommending face masks to the public? May 14, 2020. Available at: <https://www.thelocal.se/20200514/explained-why-is-sweden-not-recommending-face-masks-to-the-public> (accessed 18.5.2020)
- ¹³¹² YouGov (2020) Latest round-up of YouGov's coronavirus survey results.
- ¹³¹³ Business Insider (2020) What it's like to go to the gym in Sweden, where lockdowns never happened. May 14, 2020. Available at: <https://www.businessinsider.sg/what-its-like-gyms-in-sweden-where-lockdowns-never-happened-2020-5> (accessed 18.5.2020)
- ¹³¹⁴ Cruxnow (2020) Sweden's approach to pandemic a risk to elderly, minorities, cardinal says. May 8, 2020. Available at: <https://cruxnow.com/church-in-europe/2020/05/swedens-approach-to-pandemic-a-risk-to-elderly-minorities-cardinal-says/> (accessed 18.5.2020)
- ¹³¹⁵ Nordstjernan (2020) Swedish restrictions on domestic travel lifted. Available at: <http://www.nordstjernan.com/news/sweden/9041/> (accessed 23.6.20)
- ¹³¹⁶ The Local (2020) Sweden gives green light to travel to 10 countries from July. June 17, 2020. Available at: <https://www.thelocal.se/20200617/sweden-updates-international-travel-guidance-heres-what-it-means-for-you> (accessed 23.6.20)
- ¹³¹⁷ Medicine Net (2020) Coronavirus COVID-19 (SARS-CoV-2): The Latest News, Updates and Information. April 14, 2020. Available at: https://www.medicinenet.com/coronavirus_covid-19_sars_cov_2_news_updates/article.htm (accessed 16.4.2020)
- ¹³¹⁸ The Guardian (2020) Critics question Swedish approach as coronavirus death toll reaches 1,000. April 15, 2020. Available at: <https://www.theguardian.com/world/2020/apr/15/sweden-coronavirus-death-toll-reaches-1000> (accessed 16.4.2020)
- ¹³¹⁹ Euronews (2020) Is Sweden's COVID-19 strategy working? April 13, 2020 Available at: <https://www.euronews.com/2020/04/12/is-sweden-s-covid-19-strategy-working> (accessed 16.4.2020)
- ¹³²⁰ RTE (2020) Is Sweden's lenient approach to Covid-19 working? April 14, 2020 Available at: <https://www.rte.ie/news/2020/0414/1130498-sweden-approach-coronavirus/> (accessed 16.4.2020)
- ¹³²¹ RTE (2020) Is Sweden's lenient approach to Covid-19 working? April 14, 2020 Available at: <https://www.rte.ie/news/2020/0414/1130498-sweden-approach-coronavirus/> (accessed 16.4.2020)
- ¹³²² The Guardian (2020) Critics question Swedish approach as coronavirus death toll reaches 1,000. April 15, 2020. Available at: <https://www.theguardian.com/world/2020/apr/15/sweden-coronavirus-death-toll-reaches-1000> (accessed 16.4.2020)
- ¹³²³ Bloomberg (2020) Man Behind Sweden's Controversial Virus Strategy Admits Mistakes. June 3, 2020. Available at: <https://www.bloomberg.com/news/articles/2020-06-03/man-behind-sweden-s-virus-strategy-says-he-got-some-things-wrong> (accessed 5.6.2020)
- ¹³²⁴ BBC (2020) Coronavirus: Sweden's Tegnell admits too many died. June 3, 2020. Available at: <https://www.bbc.com/news/world-europe-52903717> (accessed 5.6.2020)
- ¹³²⁵ Bloomberg (2020) Sweden's Covid Expert Says 'World Went Mad' With Lockdowns. June 24, 2020. Available at: <https://www.bloomberg.com/news/articles/2020-06-24/sweden-s-epidemiologist-says-world-went-mad-imposing-lockdowns> (accessed 25.6.2020)
- ¹³²⁶ Bloomberg (2020) Sweden's Covid Expert Says the World Still Doesn't Understand. June 28, 2020. Available at: <https://www.bloomberg.com/news/articles/2020-06-28/sweden-s-covid-expert-says-the-world-still-doesn-t-understand> (accessed 29.6.2020)
- ¹³²⁷ Business Insider (2020) Sweden is rushing to launch a formal inquiry into its no-lockdown coronavirus strategy, as its death rate remains among the world's highest. June 2, 2020. Available at: <https://www.businessinsider.com/coronavirus-sweden-rushes-launch-no-lockdown-assessment-inquiry-deaths-mount-2020-6> (accessed 5.6.2020)
- ¹³²⁸ Bloomberg (2020) Sweden Says Covid Strategy Was Never About Shielding the Economy. June 9, 2020. Available at: <https://www.bloomberg.com/news/articles/2020-06-09/sweden-says-covid-strategy-was-never-about-shielding-the-economy> (accessed 10.6.2020)
- ¹³²⁹ The Local (2020) Sweden's coronavirus fatality rate 0.6 percent, according to new report. June 18, 2020. Available at: <https://www.thelocal.se/20200618/swedens-coronavirus-fatality-rate-06-percent-according-to-new-report> (accessed 23.6.20)
- ¹³³⁰ YouGov (2020) Latest round-up of YouGov's coronavirus survey results.
- ¹³³¹ Quartz (2020) Sweden's very different approach to Covid-19. 28 April 2020. Available at: <https://qz.com/1842183/sweden-is-taking-a-very-different-approach-to-covid-19/> (accessed 09.6.20)
- ¹³³² The Local (2020) Is Swedish trust in authorities starting to falter? June 23, 2020. Available at: <https://www.thelocal.se/20200623/coronavirus-is-swedish-trust-in-authorities-starting-to-falter> (accessed 23.6.20)
- ¹³³³ IMF (2020) World Economic Outlook, April 2020. Available at: <https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020> (accessed 17.4.2020)

-
- ¹³³⁴ The Local (2020) What does the coronavirus mean for the Swedish economy? March 17, 2020. Available at: <https://www.thelocal.se/20200317/what-does-the-coronavirus-mean-for-swedish-economy> (accessed 16.4.2020)
- ¹³³⁵ Government Offices of Sweden (2020) Press release from Ministry of Education and Research, Ministry of Employment, Ministry of Finance. Crisis package for jobs and transition. March 30, 2020. Available at: <https://www.government.se/press-releases/2020/03/crisis-package-for-jobs-and-transition/> (Accessed 16.4.2020)
- ¹³³⁶ The Local (2020) Sweden reports first signs of economic recovery after coronavirus crash. June 18, 2020. Available at: <https://www.thelocal.se/20200618/sweden-reports-first-positive-signs-of-economic-recovery-after-corona-crash> (accessed 23.6.20)