



I. Background

The American Enterprise Institute (AEI) issued a report for adapting a public health strategy to transition from a lockdown to reopening the economy while limiting the epidemic spread of COVID-19. Cities can move to this phased approach when they are able to safely diagnose, trace, and isolate cases and their contacts (Phase I). Some physical distancing measures and limitations will need to be considered to prevent mass transmission and a “risk-adjusted” strategy in order to protect vulnerable populations (e.g. continue to limit gatherings in the community). In every pandemic, there has been a decrease in cases after the initial peak. Within months, however, a second outbreak, often larger than the first occurs. The only way to prevent this second wave and a resulting lockdown is to build a robust public health system to enhance containment through testing, tracing and tracking those contacts (T3). Exposed individuals must be isolated. This can be done at home if the environment minimizes exposure to others. Alternatively, the positive individual can be offered other accommodation for the duration of their infectivity (see attached Isolation protocol).

II. Proposal

Planning for each phase should begin now so the infrastructure is in place when it is time to transition. AEI defined criteria for when to consider relaxing restrictions in an area in Phase II:

- A sustained reduction in cases for at least 14 days (i.e., one incubation period)
- Hospitals are safely able to treat all patients requiring hospitalization without resorting to crisis standards of care
- The city/county is able to test all people with COVID-19 symptoms, *and*
- The city/county is able to conduct active monitoring of confirmed cases and their contacts.

Local leaders should begin gradually easing physical distancing measures with sufficient time between phases when they have reinforced and increased surveillance for new cases (diagnostic testing and tracing). “General physical distancing should still be the norm: teleworking, maintaining hygiene and respiratory etiquette, wearing a mask in public, regularly disinfecting high-touch surfaces, and initially limiting social gatherings to fewer than 50 people (AEI).” Phase II is not a return to normal and the public will need to prepare to live with the pandemic for many more months. European governments have begun the transition and case studies are provided below.

III. Recommendation

The PHAC strongly recommends that in order to re-open responsibly, rapid diagnostic and antibody testing should become more widespread and available; containment will depend on aggressive contact tracing efforts. Transmission will decrease with dedicated isolation of exposed and infected residents. To move away from dependence on social distancing as our primary line of defense, we must invest in significant efforts to identify infections, spread, exposure and immunity and strong data management. Public infrastructure and community surveillance will be essential to responding to a resurgence during the traditional season of respiratory viruses this fall.

IV. Resources

- National Coronavirus Response: A Road Map to Reopening [see pages 2-3]
- Coronavirus: Lockdowns are not best way to tackle COVID-19, says top WHO adviser
- Dr. Anthony Fauci on How Life Returns to Normal
- How will we know when it’s time to reopen the nation?
- CDC Director: ‘Very Aggressive’ Contact Tracing Needed For U.S. To Return To Normal
- A Bold Response to the COVID-19 Pandemic



Source: American Enterprise Institute

Title: National Coronavirus Response: A Road Map to Reopening

Date: March 28, 2020

This report provides a road map for navigating through the current COVID-19 pandemic in the US. It outlines specific directions for adapting our approach away from sweeping mitigation strategies as we limit the epidemic spread. They also suggest measurable milestones for identifying when we can make these transitions and start reopening for businesses and families.

Phase I: Slow the Spread

Goals of Phase I

- Slow the transmission by reducing the effective reproduction number of infections
- Increase testing capacity to accommodate the ability to test everyone with symptoms and their close contacts
- Ensure the health care system has the capacity to safely treat both COVID-19 patients and others requiring care

Steps required in Phase I

1. Maintain Physical Distancing

- Close community gathering spaces where people congregate indoors; cancel or postpone meetings and mass gatherings
- Promote telework for nonessential employees
- Urge the public to limit unnecessary domestic or international travel
- Shut dining areas but encourage restaurants to provide takeout and delivery services
- Issue stay-at-home advisories in hot spots where transmission is particularly intense
- Monitor community adherence to physical distancing and stay-at-home advisories
- Encourage the public to wear masks

2. Increase Diagnostic Testing Capacity and Build Data Infrastructure for Rapid Sharing of Results

- Same-day, point-of-care testing to identify cases, including those with asymptomatic and mild infections
- Testing capacity should be sufficient to test:
 - Hospitalized patients (rapid diagnostics are needed for this population)
 - Health care workers and workers in essential roles
 - Close contacts of confirmed cases
 - Outpatients with symptoms in doctors' offices

3. Ensure Functioning of the Health Care System

- Ensure hospitals can expand capacity to 5–7 critical care beds per 10,000 adults with adequate staffing
- Expand access to 5–7 ventilators per 10,000 adults with adequate staffing
- Maintain access to acute-care hospital beds of at least 30 per 10,000 adults
- Facilities should have a plan for how the beds would be flexed with oxygen and other medical supplies
- N95 respirators for hospital staff expected to have direct contact with COVID-19 patients
- Disposable procedural or surgical masks for all other clinical personnel in any health care setting

4. Massively Scale Contact Tracing and Isolation and Quarantine.

- Current CDC guidelines recommend seven days of isolation
- Surge the existing public-health workforce to conduct case finding and contact tracing
- Enable rapid reporting to health authorities
- Develop and field a technological approach to enable rapid data entry, reporting, and support for isolation, quarantine, and treatment of affected individuals
- Offer Voluntary Local Isolation and Quarantine



How do you move from Phase I to Phase II?

A city/county can safely proceed to Phase II when:

- A sustained reduction in cases for at least 14 days (i.e., one incubation period)
- Hospitals are safely able to treat all patients requiring hospitalization without resorting to crisis standards of care
- The city/county is able to test all people with COVID-19 symptoms, *and*
- The city/county is able to conduct active monitoring of confirmed cases and their contacts.

Phase II: Reopen

Goals of Phase II

- Lift strict physical distancing measures in a concerted and careful fashion
- Allow the vast majority of businesses and schools to open
- Continue to control transmission so we do not revert back to Phase I

Steps required in Phase II

1. Implement individual interventions

- Every confirmed case should be isolated either at home, in a hospital, or (voluntarily) in a local isolation facility
- People awaiting test results should be advised to quarantine until their results are returned
- Close contacts of confirmed cases should be traced and placed under home or central quarantine
- Diagnostic tests should be immediately administered to any close contacts who develop symptoms

2. Begin to relax physical distancing measures

- Physical distancing measures and limitations on gatherings will still need to be in place
- Public hygiene will be sharply improved, and deep cleanings on shared spaces should become more routine.
- Shared surfaces will be more frequently sanitized, among other measures.
- Continue to actively identify and isolate people with the disease and their contacts
- Public will initially be asked to limit gatherings to fewer than 50 people wherever possible
- People will initially be asked to wear fabric nonmedical face masks while in the community
- Majority of schools, universities, and businesses can reopen
- Teleworking should continue where convenient
- As children return to school and daycare (i.e., high-contact settings) and people return to high-density workplaces, leaders of these organizations should continue to review and implement physical distancing measures

3. Special care for vulnerable populations

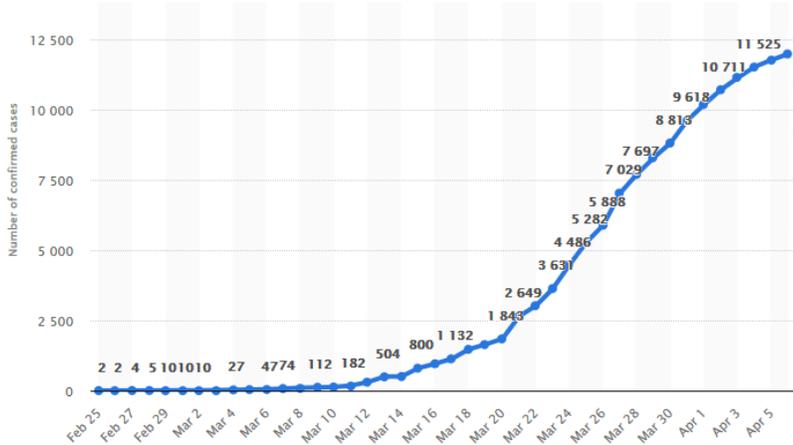
- For older adults (those over age 60), those with underlying health conditions, and other populations at heightened risk from COVID-19, continuing to limit time in the community will be important
- Long-term-care facilities need to maintain high levels of infection prevention and control and limit visitors
- If treatment becomes available, high-risk and vulnerable populations should be prioritized to receive it

4. Identify those who are immune

- Serology is a method used to identify evidence of immunity in someone who has recovered from infection. With accurate and widely available serological testing, we can identify people who are immune and therefore no longer vulnerable to infection.
- People who are immune could:
 - 1) Return to work,
 - 2) Serve in high-risk roles such as those at the front lines of the health care system
 - 3) Serve in roles that support community functioning for people who are still physically distancing

Case Study: Austria

I. Timeline of COVID-19 Cases in Austria



Population: 8.9 million
 Cases: 13,555
 Deaths: 319
 Recovered: 6,064

Source: Statista and Johns Hopkins University

II. Indicators of government response

Start	# New Cases	Description	Measurement
2/24	0	Public info campaigns	Launched hotline, CCTV, web
3/10	51	Restrictions on international travel	Ban on travel to Austria, some exceptions made, quarantine for Austrian citizens
3/12	115	Closings of schools and universities	Required closing
3/15	205	Closing of public transport	Public transport open but only essential workers allowed to use
3/16	156	Closings of workplaces	Required closing
3/16	156	Cancelling public events	Events completely prohibited
3/16	156	Restrictions on internal movement	Curfew imposed. Allowed to leave the house to go to work, to make urgent errands such as to buy groceries, to help other people in need and to go for a walk or exercise
3/23	680	Testing policy	Symptomatic & medically vulnerable people are tested
3/23	680	Contract tracing	Once a case has been confirmed, contacts are determined, informed and may be put into quarantine

Source: University of Oxford

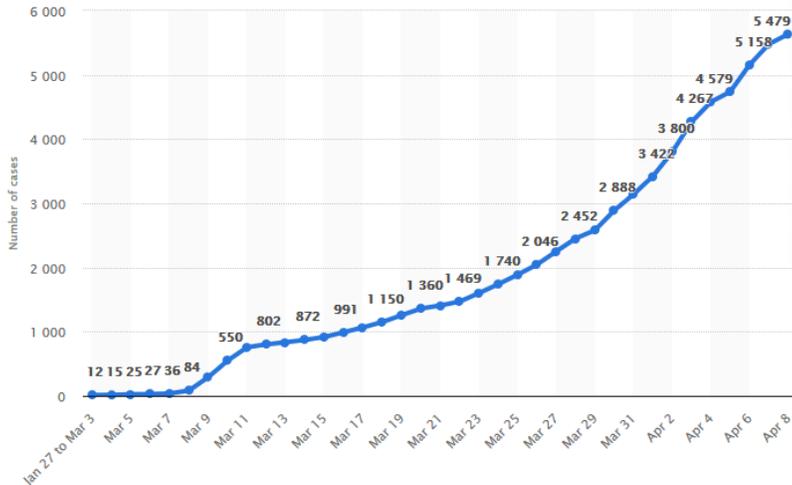
III. Exit plan measures

Chancellor Sebastian Kurz laid out his [plan](#) for a “step-by-step” re-opening:

- Two-week phases
- Mandatory masks (scarves and shawls) on public transport, in supermarkets, and in the stores that are due to re-open
- April 14th open small stores (≤4,300 sq ft) with one shopper per 215 sq ft and parks
- May 1st bigger stores, salons and malls
- Mid-May restaurants, hotels, gyms and bars
- Schools are going to remain closed
- July for public events
- Border closures and travel bans will probably be the last measures lifted

Case Study: Denmark

I. Timeline of COVID-19 Cases in Denmark



Population: 5.7 million
 Cases: 6,014
 Deaths: 247
 Recovered: 1,929

Source: Statista and Johns Hopkins University

II. Indicators of government response

Start	# New Cases	Description	Measurement
2/27	0	Contract tracing	Limited contact tracing
3/10	172	Closing of public transport	Recommended closing. Encouraged avoiding peak periods to reduce crowds.
3/11	252	Testing policy	Only people hospitalized with severe signs of respiratory illness or shortness of breath will be tested. If you show symptoms but not severe, you will likely not be tested.
3/11	252	Restrictions on international travel	Ban on high risk regions, closed borders
3/12	160	Public info campaigns	Official print material outlining information
3/13	128	Closings of workplaces	Required closing for non-essential public sector employees (health sector, the elderly care sector and the police excluded)
3/16	57	Closings of schools and universities	Required closing including daycares, primary and universities
3/18	92	Cancelling public events	Prohibited events involving more than 10 people in both indoor and outdoor and applies to both public and private events.
3/18	92	Restrictions on internal movement	Closed night clubs, bars, pubs, hookah cafes, restaurants and cafes, shopping centers and stores with close contact such as hairdressers etc. Restaurants and cafes offer take-away.

Source: University of Oxford

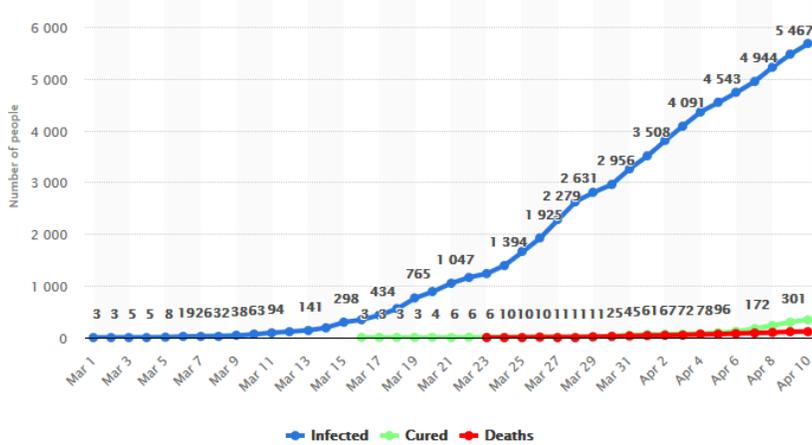
III. Exit plan measures

Prime Minister Mette Fredericksen warned a gradual reopening if citizens abide by government guidelines:

- Gradual, quiet and controlled opening of society
- April 15th care centers and school to reopen so parents can work. Considering splitting classes and the school week in two to allow for better social distancing
- Mid-May bans of public gatherings of more than 10 people
- Restaurants and borders will remain closed
- August for large gatherings

Case Study: Czech Republic

I. Timeline of COVID-19 Cases in Czech Republic



Population: 10.6 million
 Cases: 5,732
 Deaths: 119
 Recovered: 346

Source: Statista and Johns Hopkins University

II. Indicators of government response

Start	# New Cases	Description	Measurement
3/6	11	Public info campaigns	Updates online; recommends national public hotline
3/9	25	Testing policy	All symptomatic ordered to provide a biological sample for testing
3/11	31	Closings of schools and universities	Required closing
3/14	48	Cancelling public events	Permitted to congregate in groups of ≤two persons in public places, except for household members, the performance of an occupation, business or similar activities and attendance at funerals.
3/14	48	Closings of workplaces	Non-essential retail businesses closed: 'grocery stores, pharmacies, drugstores, stores selling electronics, pump stations, shops selling tobacco and newspapers' remain open
3/16	85	Restrictions on international travel	Full border closures go into effect
3/16	85	Restrictions on internal movement	National quarantine announced, with non-essential movement not allowed. People can still go to work, get groceries, and visit family
3/19	205	Closing of public transport	Operation on 39 long-haul train routes restricted.

Source: University of Oxford

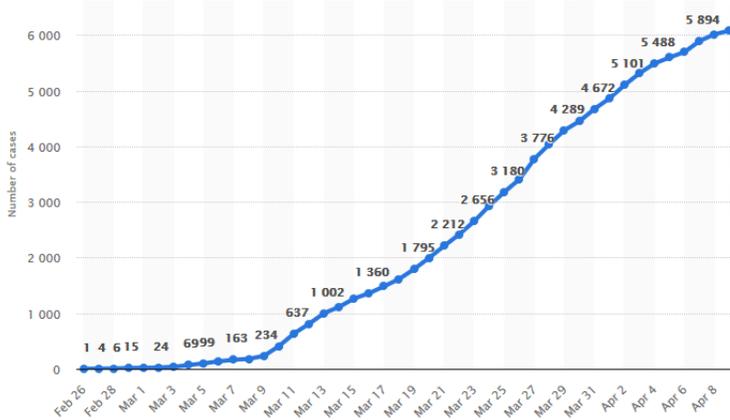
III. Exit plan measures

Prime Minister Andrej Babis extended a state of emergency until the end of April with the following guidelines:

- April 7th residents allowed to cycle, jog and hike without face masks provided they maintain a distance of 6 feet
- Some sports facilities, including tennis courts and golf courses, open if no more than two people play in a group
- April 9th small nonessential shops are allowed to reopen and additional stores after Easter
- Rules relaxed on sporting activities that don't involve the congregation of people — such as running and cycling
- Czechs who need to go abroad can but will need to do a 14-day quarantine upon return
- Borders will remain closed to foreigners
- "Smart quarantine" system that uses data from cell phones and credit cards of infected people, with their consent, to track people they may have been in contact with over the preceding five days

Case Study: Norway

I. Timeline of COVID-19 Cases in Norway



Population: 5.4 million
 Cases: 6,314
 Deaths: 113
 Recovered: 32

Source: Statista and Johns Hopkins University

II. Indicators of government response

Start	# New Cases	Description	Measurement
1/31	0	Public info campaigns	Web page, food supply notice
3/12	811	Closings of workplaces	Required closing
3/12	811	Closings of schools and universities	Schools, universities and day-cares closed
3/12	811	Cancelling public events	≤5 people together in public, all large-scale events are banned
3/15	1,265	Restrictions on international travel	Borders close
3/16	1,360	Restrictions on internal movement	Non-essential movement prohibited
3/23	2,656	Closing of public transport	Public transport is maintained for to and from work. Non-essential travel should be avoided
4/1	4,863	Testing policy	People are just asked to stay home and self-isolate when they develop symptoms. The exception is if you are healthcare personnel, if you are over 65 years or if you have been in close contact with a positive

Source: University of Oxford

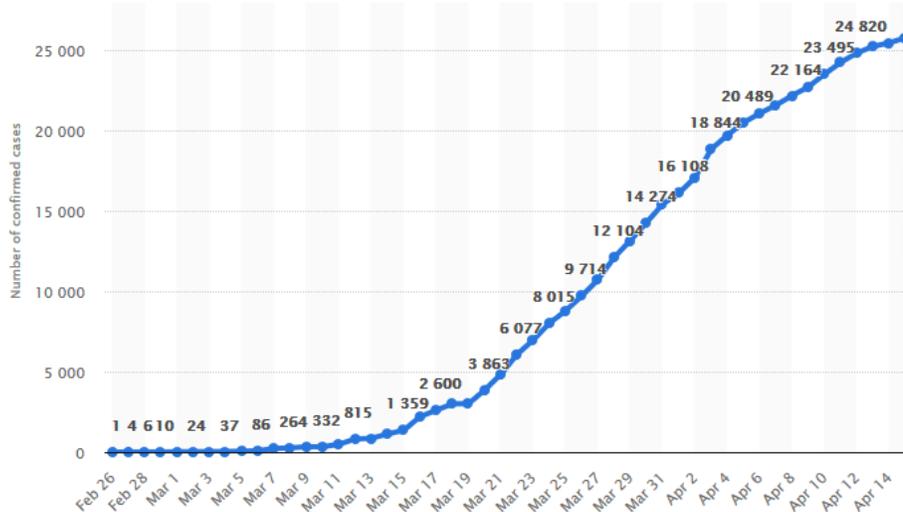
III. Exit plan measures

Prime Minister Erna Solberg has restrictions in place until April 13th but will slowly reopen with the following measures:

- April 20-27, kindergartens open and April 27th, first grade to fourth grade open
- Working from home continues
- Until April 13th, ≤five people in a group – except for members of a family or the same household
- Healthcare professionals working in patient care are prohibited from travelling abroad
- All restaurants, bars, pubs, etc are to remain closed unless they can maintain 3 feet between visitors.
- Food shall not be served buffet-style
- Fitness centers, swimming pools, water parks and similar establishments are to remain closed
- Personal care establishments (hair, skin care, massage, tattooing, piercing) remain closed
- Prohibition against staying at cabins/leisure properties is maintained

Case Study: Switzerland

I. Timeline of COVID-19 Cases in Switzerland



Population: 8.6 million
 Cases: 27,078
 Deaths: 1,336
 Recovered: 16,400

Source: Statista and Johns Hopkins University

II. Exit plan measures

The Federal Council laid out plans to begin to ease the lockdown measures:

- Moving from one phase to the next depends on there being no significant increase in COVID-19 cases
- The criteria are the number of new infections, hospital admissions and deaths, and hospital occupancy rates.
- Phase 1 on April 27: Ease measures on businesses where there is only a low level of direct contact, where precautionary measures can easily be put in place, and where there will be no significant movements of people, including non-urgent medical procedures, hairdressing salons, massage practices, tattoo studios, cosmetic studios, florists, DIY stores, garden centers, car washes, and funerals.
- Phase 2 on May 11: It is planned that schools for children of compulsory-school age, shops and markets will reopen. The Federal Council will decide on whether to proceed with phase three on May 27th.
- Phase 3 on June 8: Upper secondary schools, vocational schools and higher education institutions will be allowed to resume face-to-face teaching. At the same time, entertainment, and leisure establishments such as museums, libraries, botanical gardens and zoos may reopen
- Consistent tracing of infection chains will be resumed: infected persons should be detected, treated and placed in isolation at an early stage, transmission chains should be identified and further transmissions prevented.
- An extended testing strategy, a contact tracing concept and an app providing information about contacts with infected persons will be developed.