TOPIC: THE IMPACT OF REOPENING AND THE LIFTING OF COVID-19 RESTRICTIONS

Information finalized as of May 12, 2021.^a

This Briefing Note was completed by the Research, Analysis, and Evaluation Branch (Ministry of Health) based on information provided by members of the COVID-19 Evidence Synthesis Network. Please refer to the <u>Methods</u> section for further information.

<u>Purpose</u>: This briefing note provides a summary on the impact of reopening and the lifting of COVID-19 restrictions.

Key Findings and Implications:

• How Restrictions are Lifted

- Scientific evidence based on modelling studies suggest that reopening or lifting of COVD-19 restrictions are dependent on COVID-19 case rates, hospitalization rates, and the progress of vaccination programs. It is generally reported that gradual release strategies (i.e., ending lockdowns through multiple staggered releases) are effective in avoiding the resurgence of future COVID-19 waves.
 - A modelling study examining the effectiveness of lockdowns on SARS-CoV-2 epidemic progression in New Zealand, France, Spain, Germany, the Netherlands, Italy, the UK, Sweden, and the US indicated that an early-onset lockdown followed by gradual de-confinement resulted in a rapid reduction in COVID-19 cases and a rapid recovery time compared with other countries that had an abrupt deconfinement period which resulted in a prolonged plateau of COVID-19 infections, with elevated R₀ and non-ending recovery.
 - Most Canadian provincial reopening plans had been developed prior to vaccine roll-out and benchmark the lifting of public-health measures on COVID-19 case numbers and hospitalizations.
- Guidance from jurisdictions is consistent in suggesting that: low number and isolated cases, robust public health capacity and monitoring systems (i.e., test, trace, and isolate cases), adequate health system capacity, education and empowerment of members of society to participate in pandemic control, and preventing importation of cases are all necessary criteria for lifting COVID-19 restrictions and avoiding unintentional negative impacts.

• The Order of Lifting Restrictions

- Most countries have not indicated how they will lift public-health measures for vaccinated individuals or once specific proportions of their populations are vaccinated, with the exception of Israel and the US which have increased their vaccination rates significantly between January – February 2021.
 - All Canadian provincial governments indicated that vaccinated individuals must continue to follow public-health measures.

The Impact of Lifting Restrictions

 Modelling studies reporting on the impact of reopening or lifting public health restrictions suggest that if public health measures (physical distancing, isolation, contact tracing, testing/screening) are not maintained and gradual de-confinement or release strategies are not implemented, case numbers and the resurgence of future waves are likely to occur.

Implications for Ontario:

 Ontario demonstrated rapid and uncontrolled case growth, ICU hospitalization, and the re-introduction of stricter public health measures or postponement of further reopening after COVID-19 restrictions were lifted.

^a This briefing note includes current available evidence as of the noted date. It is not intended to be an exhaustive analysis, and other relevant findings may have been reported since completion.

Supporting Evidence

<u>Table 1</u> below summarizes scientific evidence and jurisdictional experiences on the impact of reopening and the lifting of COVID-19 restrictions. In terms of jurisdictional experience, information is presented on Australia, Canada (British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, Nova Scotia, Prince Edward Island, Newfoundland and Labrador, Yukon, Northwest Territories, Nunavut), Chile, China, Denmark, England, France, Germany, India, Ireland, Israel, New Zealand, the United Kingdom (UK), and the United States (US). At this time, there is limited information published on the actual, observed impacts and unintended negative consequences of reopening or lifting public health measures during the COVID-19 pandemic.

Additional details are provided in <u>Table 2</u> (scientific evidence on the impact of reopening and the lifting of COVID-19 restrictions) <u>Table 3</u> (Canadian experiences on the impact of reopening and the lifting of COVID-19 restrictions), and <u>Table 4</u> (international experiences on the impact of reopening and the lifting of COVID-19 restrictions) in the Appendix.

Table 1: Summary of Scientific Evidence and Jurisdictional Experiences on the Impact of Reopening and the Lifting of COVID-19 Restrictions

Scientific	How Restrictions are Lifted
Evidence	$_{\odot}$ Most scientific evidence based on modelling studies suggest that reopening or lifting
	of COVD-19 restrictions are dependent on the case rates and the progress of
	vaccination programs. It is generally suggested that gradual release strategies (i.e.,
	ending lockdowns through multiple staggered releases) are effective to avoid
	resurgence of COVID-19 waves. ¹
	 The Order Restrictions are Lifted
	\circ No information identified.
	 Impact of Lifting Restrictions
	$_{\odot}$ Modelling study evidence suggests that public health measures (i.e., social
	distancing, increased testing) should be implemented alongside a gradual release of
	strategies. For example:
	A modelling study quantifying the pace at which European countries can lift
	restrictions without overwhelming their health-care systems reported that any
	premature lifting of restrictions may cause another wave with high COVID-19
	incidence and ICU admissions. Early relaxations can significantly increase
	morbidity and mortality rates, as a fraction of the European population has not
	been vaccinated and thus remains susceptible.
	A modelling study examining the effectiveness of lockdown on SARS-CoV-2
	epidemic progression in New Zealand, France, Spain, Germany, the Netherlands,
	Italy, the UK, Sweden, and the US indicated that an early-onset lockdown
	followed by gradual de-confinement resulted in a rapid reduction in COVID-19
	cases and a rapid recovery time compared with other countries that had an
	abrupt de-confinement period which resulted in a prolonged plateau of COVID-19
	Intections, with elevated R_0 and non-ending recovery.
	A modelling study examining the emicacy of two potential lockdown release strategies, using the LIK nonulation as a test ease, concluded that to provent the
	sualcyles, using the OK population as a lest case, concluded that to prevent the
	off release strategy (i.e. lockdown is lifted for the entire population
	simultaneously, but can subsequently be reinstated when necessary)
	Simulation subsequently be reliable when he here so y).
	opeomodity, the study suggests releasing approximately han the population two to

	four weeks from the end of an initial infection peak, then waiting another three to		
	four months to allow for a second peak before releasing everyone. ¹		
International	How Restrictions are Lifted		
Scan	 Case rates remain the major determining factor for lifting public-health measures for 		
	most countries, regardless of the level of vaccination;		
	 China's CDC, in particular, recommends that prevention and control measures 		
	should continue to be implemented to prevent a resurgence of the pandemic,		
	protoctive affect of COVID 19 vaccines for individuals, and the possibility of		
	transmission when herd immunity has not yet been built.		
	$_{\odot}$ Israel introduced new measures for vaccinated residents once the proportion of the		
	population received at least one dose of COVID-19 vaccine surpassed 50%; and		
	o In the US, several states have reportedly lifted restrictions based on high rates of		
	vaccination and decreasing rates of hospitalizations. ²		
	 The Order Restrictions are Lifted 		
	$_{\odot}$ Most countries have not indicated how they will lift public-health measures for		
	vaccinated individuals or once specific proportions of their populations are		
	vaccinated, with the exception of Israel and the US which have increased their		
	vaccination rates significantly within the last two months;		
	o III Isidei, a Green Pass system was introduced in rate reprudry 2021 that allows fully vaccinated (one week after last dose) or those recovered from COVID-19 to		
	enter specific businesses with a "green pass/certificate" and photo ID and as of		
	March 7, 2021, fully vaccinated Israeli residents do not have to guarantine after		
	entering the country;		
	 Israel has announced mutual agreements with both Cyprus and Greece which allow 		
	fully vaccinated Israeli residents to travel freely between these countries;		
	$_{\odot}$ On 9 March 2021, the US CDC announced modified public-health measures for fully		
	vaccinated individuals in the US that permit indoor gatherings with other fully		
	vaccinated people without wearing masks, indoor gatherings with unvaccinated people from one other household without masks if none of the unvaccinated		
	people from one other household without masks if none of the unvaccinated		
	activities even if the individual has been around someone with COVID-19, and fourine		
	they have symptoms or live in a group setting), and		
	$_{\odot}$ The US CDC's recommendations for fully vaccinated people were updated on March		
	10, 2021 with changes to visitation restrictions of post-acute care facilities and work		
	restriction policies for asymptomatic health care personnel, and quarantine policies		
	for asymptomatic residents and patients. ²		
	Impact of Lifting Restrictions		
	 The United Kingdom (up to Dec 31, 2020) and Chile showed rapid and uncontrolled 		
	case growth, hospitalizations, and re-introduction of stricter public health measures		
	or postponement or further reopening after COVID-19 restrictions were lifted.		
	(UK B 1 1 7) and Chile P 1 lineage) 3		
Canadian	How and What Order Restrictions are Lifted		
Scan	 Canada's Federal/Provincial/Territorial Special Advisory Committee on COVID-19 		
	provided guidelines for a measured approach to easing public-health restrictions		
	since April 2020, however, these guidelines have not been revised considering		
	vaccination-related factors;		

	 Most provincial reopening plans had been developed prior to vaccine roll-out and benchmark the lifting of public-health measures on COVID-19 case numbers and hospitalizations, at least until there is evidence that vaccinations are having an impact on these factors within their populations; and All provincial governments have indicated that vaccinated individuals must continue to follow public-health measures.²
Ontario Scan	 How Restrictions are Lifted No information identified. The Order Restrictions are Lifted From February 10–March 8 Public Health Units moved into various tiers of a reopening framework. In 21 health units, the incidence was above 25 to 39.9 per 100,000 seven day average during the week of March 6.4,5,6,7 Impact of Lifting Restrictions Ontario (up to Dec 31, 2020) showed rapid and uncontrolled case growth, hospitalizations, and re-introduction of stricter public health measures or postponement of further reopening after COVID-19 restrictions were lifted. Variants of concern were the dominant strains of SARS-CoV-2 in these jurisdictions (Ontario B.1.1.7).³

Methods

The COVID-19 Evidence Synthesis Network is comprised of groups specializing in evidence synthesis and knowledge translation. The group has committed to provide their expertise to provide high-quality, relevant, and timely synthesized research evidence about COVID-19 to inform decision makers as the pandemic continues. For more information, please contact the <u>Research</u>, <u>Analysis and Evaluation Branch</u> (<u>Ministry of Health</u>).

- McMaster Health Forum. (2021). <u>When and in what order can COVID-19-related public-health</u> measures be lifted (or stringency be reduced) as vaccination rates and seasonal temperatures increase?
- Ontario Agency for Health Protection and Promotion (Public Health Ontario). (2021). <u>Lockdown</u> duration and re-opening including considerations for COVID-19 variants of concern.
- Ontario Health. (2021). Impacts of Reopening and Lifting COVID-19 Restrictions: A Jurisdictional Scan.

Table 2: Scientific Evidence on the Impact of Reopening and Lifting COVID-19 Restrictions

Jurisdiction	Description of Study	The Order and How Restrictions are Lifted	Impact of Lifting Restrictions
Modelling Study ⁸ France <u>Di Domenico</u> <u>et al., 2020</u>	 This study proposed possible exit strategies from lockdowns in Île de France and estimated their effectiveness using modelling. 	 Different types and durations of social distancing were simulated, including progressive and targeted strategies, with large-scale testing. 	 The study concluded that lifting the lockdown with no exit strategy would lead to an additional wave overwhelming the health care system; however, intensive forms of social distancing along with extensive case finding and isolation would allow the partial release of the lockdown without exceeding health care demand and capacity.
Modelling Study ⁹ India <u>Gupta et al.,</u> <u>2020</u>	 This study used modelling to simulate lockdown relaxation scenarios and increased testing in India. 	No information identified.	• The study found that as lockdowns are relaxed, other measures need to be scaled up. When lower levels of social distancing are coupled with increased testing, similar levels of outbreak control are achieved compared to aggressive social distancing measures.
Modelling Study ¹⁰ US <u>Liu et al.,</u> <u>2020</u>	 This study modelled the spread of COVID-19 under different reopening strategies using data from the US. 	 The study estimated the rates of new COVID-19 cases under different scenarios with varying levels of social distancing. No further information identified. 	• The study found that if social distancing was eliminated, the number of COVID-19 cases would increase significantly. Therefore, the study suggests that reasonably high levels of social distancing need to be maintained during the reopening of the economy.
Modelling Study ¹¹ China <u>Sun et al.,</u> <u>2020</u>	This study conducted a patch modelling study in Hubei, China. The study examined two scenarios: 1) changing contact rates within each patch at different time points, and 2) different time of lifting the lockdown in Hubei with various contact rates.	No information identified.	The study concluded that if strict interventions (i.e., keeping contact rates relatively low) were implemented after work resumption there would be little effect on the epidemic in the Hubei province, if the contact rate increases to higher levels after work resumption, another outbreak may appear. They conclude that strict interventions for maintaining the contact rate at a relatively low level is critical to avoid a second outbreak of after work resumption or lifting the lockdown in Hubei province.
Modelling Study ¹²	This modelling study examined the effectiveness of lockdown on SARS-CoV-2 epidemic progression in nine different countries (New	Gradual de-confinement. No further information identified.	The study found that countries that had an early- onset lockdown followed by gradual de- confinement resulted in a rapid reduction in

Jurisdiction	Description of Study	The Order and How Restrictions are Lifted	Impact of Lifting Restrictions
International <u>Mégarbane et</u> <u>al., 2021</u>	Zealand, France, Spain, Germany, the Netherlands, Italy, the UK, Sweden, and the US).		COVID-19 individuals and a rapid recovery time compared with other countries that had an abrupt de-confinement period which resulted in a prolonged plateau of COVID-19 infections, with elevated R ₀ (4.9 and 4.4, respectively) and non- ending recovery. The study concluded that a gradual de-confinement out of lockdown allowed for shortening the COVID-19 pandemic. However, it also noted that that the effect on health care utilization and demand and fatalities remains to be determined.
Modelling Study ¹² UK <u>Rawson et</u> <u>al., 2020</u>	 This study conducted a modelling study examining the efficacy of two potential lockdown release strategies, using the UK population as a test case. 	 A gradual release strategy (i.e., end the lockdown of the public from quarantine through multiple staggered releases). No further information identified. 	 The study concluded that to prevent recurring spread of COVID-19, a gradual release strategy is preferable to an on-off release strategy (i.e., lockdown is lifted for the entire population simultaneously, but can subsequently be reinstated when necessary). Specifically, the authors suggest releasing approximately half the population two to four weeks from the end of an initial infection peak, then wait another three to four months to allow for a second peak before releasing everyone. The authors also note that lockdown should not be ended until the number of new daily confirmed cases reaches a sufficiently low threshold.
Modelling Study ¹³ International <u>Glass, 2020</u>	 This study modelled various levels of lockdown relaxation/re-opening in six countries (France, Germany, Italy, Spain, the UK, and the US). 	No information identified.	 The results demonstrate that a 50% relaxation in lockdown measures could result in large second waves in all countries if further measures were not put in place; however, a 25% relaxation of lockdown measures could lead to slow the decline in cases in all countries except the US where a 25% relaxation would result in a second wave.
Modelling Study ¹⁴ European Countries <u>Bauer et al.</u>	 This modelling study quantified at which pace European countries can lift restrictions without overwhelming their health-care systems. The analyzed scenarios range from immediately lifting restriction (accepting high mortality and morbidity) to reducing case numbers until test- trace-and-isolate programs facilitate control. In 	 The specific time evolution of the lifting of restrictions is dependent on the progress of the vaccination program. Therefore, a steady lifting of restrictions may start April/May 2021, when the vaccination rate in Europe gains speed. If vaccinations, however, stalls more than assumed in the model, the lifting of restrictions would have 	The study found any premature lifting of restrictions causes another wave with high COVID-19 incidence and full ICUs. Moreover, the increase in freedom gained by these premature strategies is only transient because once ICU capacity is reached, restrictions would have to be reinstated. Simultaneously, these early relaxations

Jurisdiction	Description of Study	The Order and How Restrictions are Lifted	Impact of Lifting Restrictions
	general, the age-dependent vaccination roll-out	to be delayed proportionally. In such a slowdown,	will significantly increase morbidity and mortality
	implies a transient decrease in the average age	the total number of cases and deaths until the end	rates, as a fraction of the population has not yet
	of ICU patients and deaths by about seven	of the vaccination period increases accordingly.	been vaccinated and thus remains susceptible. In
	years.	Thus, the authors conclude that cautious lifting of	contrast, maintaining low case numbers avoids
		restrictions and a fast vaccination delivery is	another wave, and still allows to lift restrictions
		essential to reduce death tolls and promptly	steadily and basically at the same pace as with
		increase freedom.	high case numbers.

Table 3: Canadian Experiences of Reopening and Lifting COVID-19 Restrictions

Jurisdiction	How Restrictions are Lifted	The Order Restrictions are Lifted
Pan-Canadian ²	 On <u>30 April 2020</u>, Canada's Federal/Provincial/Territorial Special Advisory Committee on COVID-19 released recommendations for the lifting of restrictive public-health measures. The Special Advisory Committee released a set of seven criteria and 13 indicators to help inform government decisions on the readiness for transition of any measures, which are as follows: COVID-19 transmission is controlled 	 Canada's Federal/Provincial/Territorial Special Advisory Committee recommended that, in the first phase of lifting restrictive public health measures: 1) some non-essential businesses be able to open; 2) daycare and education settings/camps be able to operate/open; 3) additional outdoor activities/recreation be able to resume; 4) non-urgent health care services be able to resume; and 5) small critical cultural ceremonies be permitted.
	 Indicator 1.1: Number of cases, hospitalizations, intensive-care unit admissions and deaths per day Indicator 1.2: Reproduction number, absolute and relative changes in cases, hospitalizations, and deaths Sufficient public-health capacity is in place to test, trace and isolate all cases Indicator 2.1: Testing capacity Indicator 2.2: Resources to trace contacts Indicator 2.3: Ability to isolate all cases Indicator 2.4: Ability to quarantine all contacts Expanded health care capacity exists: the incidence ofnew cases should be maintained at a level that the health system can manage including substantial clinical care capacity to respond to surges Indicator 3.1: Critical care capacity Indicator 3.2: Availability of personal protective equipment Supports are in place for vulnerable groups/communities and key populations to minimize outbreak risks Indicator 4.1: Availability of guidance for staff and residents to prevent transmission among vulnerable groups/settings Indicator 4.2: Number, size and status of outbreaks in high vulnerability settings 	 It was also recommended that, as governments develop plans to gradually lift restrictions, areas of focus should include: i) protecting the health of Canadians; ii) easing restrictions gradually; iii) protecting highrisk groups; iv) ensuring our public health capacity remains strong to prepare for and respond to future waves of the pandemic; and v) supporting a broad range of economic sectors. Specific conditions for lifting public-health measures were also proposed: Some non-essential business able to be open Core personal practices supported to the extent possible Maintain physical distancing whenever possible Efforts directed towards preventing the entry of sick individuals Employ physical barriers and other engineering controls Increase environmental cleaning Daycare and education settings/camps to operate/open Maintain the provision of online learning as an option for students vulnerable to the impacts of COVID-19 Core personal practices supported

Jurisdiction	How Restrictions are Lifted	The Order Restrictions are Lifted
	 Workplace preventive measures are established to reduce risk Indicator 5.1: Availability of guidance for workers and employers to prevent transmission of COVID-19 in the workplace Indicator 5.2: Number of workplace outbreaks Avoiding risk of inportation cases Indicator 6.1: Number of international travel related cases Engage and support communities to adjust to the new normal Indicator 7.1: Communications strategies in place It is recommended that the transition between public health measures be slow, gradual, and tailored to jurisdictional contexts with sufficient time between each phase to detect changes. While lifting measures, the core personal public-health practices (staying informed, being prepared and following public-health practices (staying informed, being prepared and following public-health advice, practising good hygiene, maintaining physical distancing, increased cleaning and ventilation of public spaces, staying away from others if symptomatic or ill, staying at home if at high risk of severe illness, wearing masks, and reducing non-essential travel) should be enforced. 	 Screening for all staff and students/campers Maintain physical distancing as much as possible Staff and students/campers at higher risk of severe illness remain at home Environmental cleaning Consider non-medical masks Additional outdoor activities/recreation to resume Core personal practices supported to the extent possible Maintain physical distancing between members of different households when participating in outdoor recreation No large gatherings Only allow sports that can maintain physicaldistancing No sharing of equipment and/or clean equipmentin between each use Non-urgent health care services to resume Core personal practices supported Physical distancing measures in place Scheduling to protect patients at higher risk ofsevere illness Environmental cleaning Small critical cultural ceremonies to take place Core personal practices supported Scheduling to protect supported Scheduling to protect patients at higher risk ofsevere illness Environmental cleaning Small critical cultural ceremonies to take place Core personal practices supported Screening of individuals prior to entering the gathering Persons at higher risk of severe illness should not attend Physical distancing should be maintained Limit size of gathering No receptions or buffet meals Ceremonies are held outdoors when possible The Government of Canada's Federal/Provincial/Territorial Special Advisory Committee which included recommended progressions for different setting, service and activities. The recommended progressions included in this document were: i) settings for vulnerable populations (closed settings with populations at higher risk for se

Jurisdiction	How Restrictions are Lifted	The Order Restrictions are Lifted
		 outdoor spaces; v) indoor sports, recreation, and community spaces; vi) gatherings of families and friends and mass gatherings; and vii) transportation and travel: The progressions were broken down into the current state of the measure, step one (near-term), step two (short-term), step three (medium-term), step four (longer-term), and step five (significant population immunity). The steps range from continue (as per current state) to lift all conditions.
British Columbia ²	 On <u>6 May 2020</u>, the Government of British Columbiareleased a living guidance document, titled the 'British Columbia Restart Plan' The Restart Plan stated that for different organizational sectors to move forward, they will be asked to develop enhanced protocols aligned with Public Health and Safety Guidelines that will be reviewed by the Provincial Health Officer. The British Columbia government webpage stated that public health measures are to be eased based on consideration of the following: i) 14-day incubation period in relation to policy changes; ii) the number of confirmed and recovered COVID-19 cases; iii) monitoring whether outbreaks are connected to their location, size and severity; and iv) how other jurisdictions are responding to the pandemic. 	 The British Columbia Restart Plan included four phases for lifting public health measures: Phase 1 – Essential services operating during COVID-19 Essential health care and health services, law enforcement, public safety, first responders, and emergency-response personnel, vulnerable population providers, critical infrastructure, food and agriculture service providers, transportation, industry and manufacturing, sanitation, communications and information technology, financial institutions, non-health essential service providers. Phase 2 – Under enhanced protocols Restoration of health services (re-scheduling elective surgery, medically related service), retail sector, hair salons, barbers and other personal service establishments, in-person counselling, restaurants, cafes, pubs, museums, art galleries, libraries, office-based worksites, recreation/sports, parks, beaches and outdoor spaces, childcare. Phase 3 – Under enhanced protocols
		 Phase 4 – Conditional on at least one of: wide vaccination (community immunity) or broad successful treatments Activities requiring large gatherings, international tourism
Alberta ²	 The government of Alberta is easing public health restrictions based on hospitalization benchmarks defined in the province's reopening plan, '<u>A Path</u> <u>Forward'</u>, as well as the growth rate of cases and the growth of variants of concern. 	 The stepped phases of Alberta's reopening plan, '<u>A PathForward'</u>, are: Step 1 (<600 hospitalizations) eases restrictions for restaurants, indoor fitness, and children's sport and performance activities
	 There is no indication that vaccinations in the province factor into the reopening plan. 	 Step 2 (<450 hospitalizations) eases restrictions in libraries, events facilities, collegiate recreation activities, and retail Step 3 (<300 hospitalizations) eases restrictions in adult-team sports,

Jurisdiction	How Restrictions are Lifted	The Order Restrictions are Lifted
		 casinos and bingo halls, more youth recreational activities, indoor social gatherings and events, museums and art galleries, zoos, and places of worship Step 4 (<150 hospitalizations) eases restrictions in amusement parks, concerts and festivals, funeral and wedding receptions, tradeshows, workplaces, and day and night overnight camps Alberta has been in Step 2 since 1 March 2021. The Alberta government advises that individuals who have received the COVID-19 vaccine must still follow all public health measures, including: Following guidelines of when to wear a mask or other personal protective equipment Washing hands often Staying two metres away from others Isolating yourself at home when you are sick Staying home for 14 days after having close contact with someone who has COVID-19 or after returning from travel outside of Canada
Saskatchewan ²	 Saskatchewan released a <u>'Re-Open Saskatchewan' plan</u> in April 2020 that was built on a phased approach to slowly lifting public-health restrictions on businesses and services based on the risk of COVID-19 transmission and socioeconomic factors. Since the government anticipates that the province will not see vaccine available for the general public until mid-2021, all public-health measures will remain in place and those measures will be increased and decreased based on the rates of transmission. There have been no updates to the reopening plan that factor in COVID-19 vaccination-related factors. 	 The government of Saskatchewan's information page responds to <u>several questions</u> related to possible changes to public-health measures for individuals and groups after vaccination: Residents are advised that even if an individual is vaccinated, they must continue to follow all public-health measures in the province. Factors that will be considered before changing public health measures include the number of people vaccinated and how the virus is spreading in communities. Visitations to long-term care and personal-home residents will be lifted based on what is observed with COVID-19 spread in the community.
Manitoba ²	 No relevant information regarding the lifting of public-health measures was identified. 	 The Manitoba COVID-19 vaccine webpage contains a <u>question-and-answer section</u> which addresses questionsregarding individual publichealth measures following vaccination. The guidance states that vaccinated individuals are to continue to adhere to basic hygiene measures (physical distancing, handwashing, mask wearing, staying at home when sick). The guidance notes that even if people have been vaccinated, they still may be able to spread COVID-19 to others.

Jurisdiction	How Restrictions are Lifted	The Order Restrictions are Lifted
Ontario ^{4,5,6,7}	 December 2020, peak Ontario seven-day average incidence approximately 110-115 cases per 100,000 population. December 26, 2020 province-wide lockdown. Hospitalizations (acute inpatient and ICU) peaked at >1,700 in early January 2021. January 18, 2021, first dose vaccines completed in prioritized populations within prioritized public health units (PHUs). From February 10–March 8 Public Health Units moved into various tiers of reopening framework. In 21 health units, the incidence was above 25 to 39.9 per 100,000 7-day average during the week of March 6. COVID-19 hospitalizations decreased (acute inpatient and ICU) and leveled off to approximately 600–800 by early March. ICU occupancy remained between ~350–420 admissions between January 1 and Feb 8, 2021. ICU occupancy remained ~350 from early February to March. Nearly 300,000 Ontarians were fully vaccinated as of March 8, 2021. First doses of vaccines were administered to over 1.5 million prioritized people. 3 April, "emergency brake shutdown" restrictions activated for entire province. 8 April State of Emergency and Stay-at-Home order issued province-wide. 16 April further restrictions on Stay-at-Home introduced. Approximately 36.6% of adult Ontarians received at least one dose of a COVID-19 vaccine by April 26. 	 Case Rates and Variant Spread By February 8, 2021, the Ontario 7-day average incidence was at 69 cases weekly per 100,000 population. In early February, variant cases made up approximately 5–10% of cases, Re = 0.8–0.9. Hospitalizations Declined to approximately 950 by February 8. Case Rates and Variant Spread Daily cases rising ~ 1,500 daily (week of March 11) > 2,000 per day (week of March 25) > 3,000 per day (week of April 1) > 4,000 per day by mid-April Variant cases alone above 25 to 39.9 per 100,000 7-day average incidence by ~mid-March. Hospitalizations 41.7% increase in hospitalizations in 2 weeks (weeks of March 15 and 28). 46% of patients admitted to ICU under age 59 (week or March 15-21). COVID hospitalizations continued to rise steeply from mid-March from ~400 to >2,300 the week of April 23. ICU admissions rose to over 800 over the same time period. Other Impact(s) April 20 provincial directive issued for all hospitals to halt all non-emergent surgeries and non-urgent procedures from Ontario Chief Medical Officer of Health
Quebec ²	• The Quebec <u>COVID-19 vaccination campaign webpage</u> states that "[the] start of vaccination does not mean the end of health measures. It will take several months to protect a sufficiently large proportion of the population with the vaccine."	 The Quebec <u>vaccination question-and-answer webpage</u> states that vaccinated individuals should continue to physically distance, wear a mask, and practice handwashing.
	• The <u>Quebec Immunization Committee recommends</u> that vaccinated individuals are informed about the 14- to 28-day interval required to achieve optimal immunity againstCOVID-19, and advised to maintain individual public-health measures.	
New Brunswick ²	 No relevant information regarding the lifting of public-health measures was identified. 	 No relevant information regarding the lifting of public-health measures was identified.

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Nova Scotia ²	 The <u>Nova Scotia COVID-19 vaccination</u> webpage states that "[until] vaccines are more widely available, we need to continue to follow public health measures to help stop thespread of COVID-19." 	 A frequently asked questions memo regarding Nova Scotia's COVID- <u>19 vaccination</u> roll-out states that individual and governmental public- health measures will remain in place during the current phase of the vaccine roll-out. Vaccinated individuals are advised to wear masks, practise hand hygiene, follow gathering limits, maintain physical distancing, and stay at home when feeling unwell. All travellers (except those from Prince Edward Island) entering Nova Scotia - vaccinated or unvaccinated - are required to self-isolate for 14 days upon arrival to the province.
Prince Edward Island ²	 Prince Edward Island's government is <u>considering the impact that COVID-19</u> <u>vaccinations</u> will have on public-health measures such as isolation, travel restrictions, masking, and testing. Health officials continue to learn new information about the impact of vaccines, including how long the vaccines provide protection against severe disease, their effectiveness against COVID-19 variants, and how well the vaccines prevent someone from spreading COVID-19 to others, even if the person does not get sick. P.E.I. implements <u>circuit-breaker measures</u> based on rates of COVID-19 transmission in the population and <u>eases restrictions</u> once cases are under control. 	 <u>Public-health measures</u> remain in place in P.E.I. for allresidents, regardless of vaccination status, and include self-isolation when entering P.E.I., wearing masks indoors, physical distancing, and getting tested when experiencing COVID-19 symptoms.
Newfoundland and Labrador ²	 Newfoundland and Labrador released its <u>COVID-19</u> immunization plan that outlines the approval process for vaccines, the dose schedule, and their phased approach tovaccinate the population. The immunization plan and its three phases are subject to change with emerging evidence, changes in virus transmission, vaccine availability and coverage rates. The plan states that until more evidence emerges, the population must continue to comply with the <u>Special Measures Order</u> and the <u>public-health guidance for all alert levels</u>, even after vaccination. 	 Until further evidence emerges, the population will continue with the public-health guidance for all alert levels, even after vaccination. The guidance states that vaccinated individuals are to continue wearing masks, practising hand hygiene, following gathering limits, maintaining physical distancing, and stay at home when feeling unwell.
Yukon ²	 As per <u>A Path Forward: Next Steps</u>, the Yukon will be creating a bubble with other jurisdictions in Canada, lifting travel and physical distancing/mask requirements when: There is a high vaccination rate in the Yukon and the other jurisdiction There are less than 10 cases per 100,000 population in the other jurisdiction There are health care and economic partnerships with the other jurisdiction Vaccines are shown to be effective There is a better understanding of COVID-19 variants and jurisdictions are able to better control variants 	 In general, Yukon plans to <u>lift public-health measures</u> when: There is evidence that supports lifting public-health measures Businesses, tourism sites, venues and other facilities have developed and implemented operational plans that allow for safety There is compliance to safety measures that have been implemented To help limit transmission when social gatherings have restrictions eased, a wedding/funeral liaison position willbe created to ensure events take place safely. There will be a return to previous public-health measures if there is a

Jurisdiction	How Restrictions are Lifted	The Order Restrictions are Lifted
	 Education and childcare facilities will have restrictions removed when children can receive COVID-19 vaccinations Recreation facilities will be open once there is a high vaccination rate in the Yukon 	concerning rise in cases.
Northwest Territories ²	 As per NWT's <u>Emerging Wisely</u> plan, public-health measures will be lifted when a large proportion of the population has been vaccinated against COVID-19. Triggers for <u>re-implementing public-health measures</u> include: If cases occur due to violation of public-health protocols There is evidence for community spread There are cluster outbreaks It is not possible to do contact tracing The health system is strained, and service delivery becomes impossible due to surge 	 NWT is currently in <u>Phase 2 of public-health measures</u> In general, Phase 3 will include: Encouraging physical distancing and hand hygiene Keeping infection-control procedures in place Developing altered business plans with limited capacity Workers' Safety and Compensation Commission (WSCC)risk assessments will determine to what extent colleges, adult classes, trade schools and businesses can open
Nunavut ²	 No relevant information regarding the lifting of public-health measures was identified. 	 As of 1 March 2021, Nunavut has <u>announced eased public-health</u> <u>measures</u> for Qikiqtani, Kitikmeot and Kivalliq: Schools will operate under full-time, in-class learning Capacity for halls, conference spaces, theatres and places of worship, food and licensing establishments has been increased to 75% Two-metre distancing has been implemented Capacity for gyms, fitness centres, pools, libraries, museums, and galleries has been raised to 50% As of 9 March 2021, COVID-19 restrictions for Arviat have been eased to allow for <u>outdoor and indoor gatherings with limits</u>, based on availability of vaccine to all residents and there being no evidence of community spread. It is unclear in what order public-health measures will be lifted.

Table 4: International Experiences on the Impacts of Reopening and the Lifting of COVID-19 Restrictions

Jurisdiction	How Restrictions are Lifted	The Order Restrictions are Lifted	Impact of Lifting Restrictions
Australia ²	 Published in November 2020, the Framework for National Reopening highlights specific indicators to guide the lifting of public-health measures in Australia: Step one occurs when there is a green indicator for "new acquired cases" on the Common Operating Picture that lasts for 14 days, and fewer than three reported cases in high-transmission locations or hard-to-reach populations Step two occurs when there is a green indicator for "new acquired cases" that lasts 14 days on the Common Operating Picture, and no reported cases in high-transmission locations or hard-to-reach populations. Step three occurs when only green indicators that last for 14 days are present on the Common Operating Picture. A green indicator refers to fewer than 50 cases per day in the country, and limited geographic spread. 	 In conjunction with the Australian Health Protection Principal Committee, the National Cabinet launched a "<u>3-</u><u>step plan</u>" to help guide the easing of public-health restrictions in Australia. Decisions surrounding the lifting of specific measures are at the discretion of each state or territory. On <u>26 February 2021</u>, the state of Victoria announced that it will be modifying its public-health measures under the new COVIDSafe settings: Face masks are only mandatory in transport (e.g., public transportation, rideshare, and taxis), sensitive settings (e.g., hospitals and long-term care facilities), and certain retail stores. No mandatory face masks in schools, early childhood education, and private study areas. No density limit restriction exist for small operations, provided that they maintain fewer than 25 patrons. Indoor gatherings (e.g., home visits) can now have up to 30 individuals. As of <u>22 February 2021</u>, no changes in public-health restrictions were made for those who have been vaccinated Vaccinated Australians are still required to adhere to physical distancing, appropriate hand hygiene, and gathering limits. International travel regulations remain unchanged. As per <u>Workplace Health and Safety Queensland</u>, both employers and employees are still required to practise COVID-19 infection-control measures even after being vaccinated. 	No information identified.
Chile ^{15,16}	 Chile's vaccine rollout was reported to be one of the early leaders, third behind the UK and Israel. 40% of Chileans received one dose of the vaccine The P.1 variant (first identified in Brazil) was spreading in Chile at the time. Most Chileans have been vaccinated with Sinovac (>90%) 	 No information identified. 	 COVID cases increased and surged to peak of over 9,100 cases per day on April 9, 2021.

Jurisdiction	How Restrictions are Lifted	The Order Restrictions are Lifted	Impact of Lifting Restrictions
	 It was summer holiday while restrictions were beginning to be lifted around December/January. 		
China ²	 On 7 January 2021, <u>China CDC indicated</u> that the prevention and control measures, which include wearing masks, hand hygiene, ventilation and social distancing, should continue to be implemented to prevent pandemic rebound, even though the COVID-19 vaccination campaign has started, given the: Time required to produce protective antibodies for individuals. Limited protective effect of COVID-19 vaccines for individuals. Possibility of transmission when herd immunity has not yet been built. 	 China's State Council Joint Prevention and Control Mechanism against COVID-19 continues to revise a series of COVID-19-related guidance to <u>adjust the public-health</u> <u>measures</u> according to the current pandemic situation (including population and areas with different infection risks) and response mode. On 26 February 2021, China National Health Commission and Ministry of Education <u>developed the</u> <u>third version of prevention and control guidelines against</u> <u>COVID-19 pandemic</u> for daycare/pre-school, primary school, secondary school, colleges and universities in the spring semester, according to the current pandemic situation and characteristics of the school. On 19 January 2021, the guidance on <u>pandemic</u> <u>prevention and control in rural areas in winter and spring</u> was issued. On 18 January 2021, the <u>guidance to further prevent and</u> <u>control the pandemic</u> was issued with 22 measures in seven aspects that considers recent local clusters of cases, the current pandemic response situation in China, and ongoing severe pandemic in other countries, and includes: Strengthening strict quarantine policies for close contacts Strengthening health education about normalized prevention and control measures in rural areas Strengthening health education about normalized prevention and control measures On 12 March 2021, China Ministry of Culture and Tourism issued the guidance on normalized prevention and control against the pandemic in theatres and other entertainment places, that indicates: The cancellation of unified limitation for number of customers in low-risk areas, which is now decided by local governments based on local pandemic 	No information identified.

Jurisdiction How Restrictions are Lifted	The Order Restrictions are Lifted	Impact of Lifting Restrictions
	situation. • The ongoing need to control the scale for large activities • Other public-health measures remain unchanged	
Denmark ² • On February 22, 2021, the Danish government released a plan for gradual reopening. The plan included restrictions implemented on March 1. The current national lockdown was scheduled to expire on February 28, 2021; however, it has been extended until April 5, 2021.	 The maximum number of people who can gather continues to be five people, with the exception of outdoors and certain organized sports activities where 25 people can now gather. In addition to the students in grades zero to four who have already returned to school in-person, as of March 15, 2021, all classes in primary schools, secondary schools and adult education programs in Eastern and Southern Jutland, Funen, Western and Southern Zealand can return with a 50 percent in-person attendance. On the islands without a bridge-connection, all classes in primary schools can return with 100 percent in-person attendance. In all regions, students in grade five to eight and non-graduate students in general upper secondary education institutions can attend outdoor classes once a week. The same applies to graduating students in the regions where 50 percent in-person, students and employees in primary and lower secondary schools are strongly encouraged to be documenting a negative COVID-19 test no older than 72 hours. As of March 15, 2021, stores with a size of 5,000 to 9,999 square metres are allowed to open for maximum 250 customers at the same time (increased from the previous maximum of 5,000 square metres are allowed to open for maximum 250 customers at a time but must ensure that crowds are prevented by establishing a model for reducing the risk of spreading the virus, for instance through pre-booking. Outdoor cultural institutions (e.g., zoological gardens) can reopen with the pre-condition that visitors can document a 	No information identified.

Jurisdiction	How Restrictions are Lifted	The Order Restrictions are Lifted	Impact of Lifting Restrictions
England ²	 Starting on March 8, 2021, England is proceeding as planned with lifting restrictions under the government's four-step "roadmap out of lockdown". All remaining lockdown measures and the roadmap out of lockdown are summarized in Current Status of Public Health Measures and Epidemiology Context in European Jurisdictions. The plan to end England's restrictions is comprised of four steps that began on March 8, 2021, with the fourth step beginning no sooner than June 21, 2021. The government will assess whether it is safe to move from one step to the next using the following four conditions: Vaccine program goes as planned; Evidence shows that vaccines are reducing the number of deaths and hospitalizations Infection rates do not risk a surge in hospital admissions; and New variants do not change the risk of lifting restrictions. 	 The four proposed re-opening stages are described below: Stage One - Starting March 8, 2021: Schools open and outdoor after-school sports allowed All schools and college students back in class Mandatory face masks for secondary school students Some university students return Two people can sit together outdoors Care home residents are allowed one regular visitor Stage One - Starting on March 29, 2021: Six people or two households are allowed to meet outdoors Outdoor sports facilities open and organized sports are allowed Travel outside the local area is allowed The 'stay at home' order is replaced with a 'stay local' message Workers are still encouraged to work from home Stage 2 - Starting April 12, 2021 (at the earliest) Non-essential retail and personal care opens Hospitality outdoors opens (e.g., pubs and restaurants with outdoor seated service) Indoor leisure opens (e.g., gyms, swimming pools) Self-contained holiday locations open (e.g., campsites) Funerals continue with up to 30 people; weddings with up to 15 guests Wider social distancing rules remain in place for public settings International holidays are still not permitted Outdoors, most social contact rules lifted (e.g., rule of six outdoors lifted) Up to 10,000 or 25% capacity (whichever is less) spectators can attend the very largest (i.e., 16,000 people or more) outdoor seated venues like football stadiums Smaller outdoor sport venues are allowed with 4,000 fans or 50% capacity (whichever is less) 	No information identified.

Jurisdiction	How Restrictions are Lifted	The Order Restrictions are Lifted	Impact of Lifting Restrictions
		 Six people or two households can meet indoors Indoor hospitality and hotels open Up to 30 people will be able to attend weddings, receptions, funerals and wakes Possible return of international travel Stage 4 - Before implementing Step 4, ministers will review social distancing and other long-term measures designed to reduce transmission, including the "one metre plus" rule and wearing of face coverings. They will also consider whether to lift the "work from home" guidance, which the government says people should continue to follow until the review has been completed. Starting June 21, 2021 (at the earliest) All legal limits on social contact removed Hope to re-open final closed sectors of the economy (e.g., nightclubs, hospitality) Large events and performances can restart with full audience. 	
France ²	 According to a news source (which was not verified on a government website), the lifting of public-health measuresin France is dependent on the incidence rate in the respective region: High incidence rates are classified by the red designation Average incidence rates are classified by the orange designation Low incidence rates are classified by the green designation Curfew restrictions remain mandated as long as the incidence rate continues to be greater than 200 new COVID-19 cases per 100,000 residents. 	 The <u>Government of France</u> continues to mandate existing measures to residents regardless of vaccination status (i.e., vaccinated individuals must still adhere to publichealth restrictions). As of <u>11 March 2021</u>, France has eased its restrictions to permit travel, "without a compelling reason", to and from the following countries: Australia Japan Israel New Zealand Singapore South Korea United Kingdom In accordance with the High Council for Public Health, infection-control measures have eased in long-term care facilities as of <u>13 March 2021</u>, and activities may <u>include</u>, but are not limited to, indoor and outdoor visits, walks and meals in small groups. 	

Jurisdiction	How Restrictions are Lifted	The Order Restrictions are Lifted	Impact of Lifting Restrictions
Germany ²	 The Government of Germany released a five-stage plan to help ease public-health measures according to COVID-19 incidence rates: In Stage Three and Stage Four, the resumption of certain activities is permitted (e.g., reopening of retail stores, museums, outdoor dining, theatre, and outdoor sports), provided that there is a consistent or decreasing seven-day incidence rate of less than 100 new cases per 100,000 residents; restrictions will further be relaxed if the weekly rate reaches fewer than 50 new cases per 100,000 residents. In Stage Five, the resumption of recreational events and indoor sports will be permitted if there is a consistent or decreasing seven-day incidence rate between 35 and 100 new cases per 100,000 residents. 	 In a press release issued by the German Ethics Council, public-health measures remain unchanged and will not belifted for vaccinated individuals. As of <u>8 March 2021</u>, private gatherings can consist of two households, for a combined total of five individuals. This restriction can be modified and increased to three households for a maximum of 10 individuals, provided that residents are located in a region where the weekly infection rate is lower than 35 new cases per 100,000 residents. 	No information identified.
Israel ²	 Israel's <u>rate of infection dropped 95.8%</u> among people who received both doses of the Pfizer-BioNTech vaccine. Israel is starting to return to routine based on a COVID-19 vaccination roll-out that has now reached <u>almost half</u> of its population. 	 As of 7 March 2021, <u>fully vaccinated Israeli residents do not</u> <u>have to quarantine</u> after entering the country (while unvaccinated individuals are required to isolate in designated hotels or in an alternate location using an electronic bracelet). Up to 3,000 Israelis will be allowed to enter the country per day. All Israeli residents will be able to leave the country (with restrictions to high-morbidity countries). Israel has announced mutual agreements with both <u>Cyprus</u> and <u>Greece</u>, which allow fully vaccinated Israeli residents to travel freely between these countries. As restrictions continue to ease, the Ministry of Health unveiled a "<u>Green Pass</u>" system that allows fully vaccinated (one week after last dose) or those recovered from COVID-19 to enter specific businesses with a "green pass/ certificate" and photo ID (failure to comply will result in a fine). The Green Pass is valid for six months Israeli residents with a "<u>Green Pass</u>" can attend cultural 	No information identified.

Jurisdiction	How Restrictions are Lifted	The Order Restrictions are Lifted	Impact of Lifting Restrictions
		 and sports events, gyms, exhibitions, hotels, tourist areas, and worship houses (with restrictions) Fully vaccinated Israeli residents receive a vaccination certificate one week after receiving the second dose. The certificate expires after six months The certificate is valid only with photo ID (identity card, passport, driver's licence) The General Security Service (GSS) will <u>continue to operate cellular tracing</u> in the event that an individual infected with COVID-19 does not comply with epidemiological investigations, and will cease its use once morbidity is negligible. 	
Israel ¹⁷	No information identified.	 Study period spanned the re-opening, lifting of lockdown restrictions after wave 2 (September 2020) and wave three (January 2021) of COVID-19 infections. B.1.1.7 was the dominant strain during wave three. National vaccination campaign started December 20, 2020 On January 6, 2021 ~25% of eligible people received one dose of vaccines (60+ and health care workers) By February 4 everyone 16+ was eligible for a vaccine, and at that time just shy of 60% of people had one dose, of which nearly 40% had received two doses of vaccine. 	 As the lockdown in September 2020 was lifted: There was an initial increase in new cases, test positivity rates, new hospitalizations and severe cases across all age groups which then started to fall by day 20 after reopening. As the lockdown was lifted on January 8, 2021: The number of new positive cases, new hospitalizations and new severe cases initially increased some, and then began to decline ~10 days after re- opening for > 50 years old. The number of new hospitalization and new severe cases increased

Jurisdiction	How Restrictions are Lifted	The Order Restrictions are Lifted	Impact of Lifting Restrictions
			 for 20–49 years old until 30 days after re-opening. The number of positive tests remained stable until ~30 days after re- opening when it started to decline. There was a larger, earlier decrease in new cases and hospitalization among those >60 years old in the earlier vaccinated cities compared with the later vaccinated ones.
Ireland ²	• Schools: Schools will be partially reopened in March. Junior and senior infants, first and second class (i.e., equivalent to Grades 1 and 2) and Leaving Certificate students (i.e., students who completed the secondary school system) will return on March 1, 2021. This is expected to be followed by a further reopening two weeks later on March 15, 2021 for other primary school pupils and fifth years. Under this plan, though it is yet to be approved by ministers, the remaining secondary school students will not return until after the Easter holidays, on April 12, 2021.	 March 1, 2021 Special schools at 100% capacity Junior and senior infants, 1st and 2nd class (i.e., grades 1 and 3) to return to school Final year Leaving Certificate classes to return to school March 8, 2021 Resumption of the Early Childhood Care and Education (ECCE) programme and return to school of ECCE-age children March 15, 2021 3rd, 4th, 5th and 6th class at primary level 5th year post-primary students to return to school March 29, 2021 Early learning and care, and school-age childcare services to reopen April 12, 2021 1st to 4th years post-primary return to school 	No information identified.
New Zealand ²	 New Zealand has implemented an <u>Alert Level framework</u> that specifies the public-health and social measures and is based on the level of COVID-19 transmission in the country or in a region: Level 1 has very low or no transmission and there are 	 On 13 March 2021, New Zealand's Prime Minister <u>announced</u> that passengers from the island country of Niue could resume quarantine-free travel in New Zealand on 24 March 2021 under certain conditions: Not having been outside Niue or New Zealand in the 	No information identified.

Jurisdiction	How Restrictions are Lifted	The Order Restrictions are Lifted	Impact of Lifting Restrictions
	 no restrictions on domestic transport or workplaces and services. Level 2 is defined by active clusters of cases in one region; physical distancing and face masks are required in public and there are limitations on event facilities with more than 100 people. Level 3 has multiple active clusters in multiple regions; residents are instructed to stay home and within their immediate household bubble, non-essential services are not allowed, and there are restrictions on in-person school. Level 4 has widespread outbreaks and sustained community transmission; all events and gatherings are cancelled, schools are closed, and people are instructed to stay home unless they must go out for essential reasons. All of New Zealand is under Alert Level 1 as of 17 March 2021 and all residents are required to follow the applicablepublic-health measures. There was no evidence found that suggests New Zealand officials are discussing how public-health measures in the public-health measures thatvaccinated individuals should follow compared to unvaccinated individuals. New Zealand began its COVID-19 vaccination in mid-February 2021 and is therefore in the very early stages of its vaccine roll-out. 	 past 14 days Not having contact with a confirmed COVID-19 case within the past 14 days Having maintained physical distancing and worn a facecovering during their travel to New Zealand There is no reasonable grounds to believe that theperson has COVID-19 This decision was made based on Niue's elimination of COVID-19 cases in recent months and its strict border controls. 	
UK ²	 On <u>11 May 2020</u> (last updated 24 July 2020), the UK government released an updated guidance document titled 'Our plan to rebuild: The UK Government's COVID-19 recovery strategy' Lifting of measures are determined by the effective reproduction number and the number of COVID-19 cases at any one time. The following <u>levels</u> are used by the UK Government to guide decisions of their public-health response measures: Level 1 (green): COVID-19 is not present in the UK 	 The <u>guidance document</u> on the UK's COVID-19 recovery strategy outlined three steps to guide the order of the lifting of public-health measures: Step 1: Workers should continue to work from home whenever possible; schools should remain closed, with the exception of vulnerable children or the children of critical workers who would benefit from attending in person; everyone should avoid public transport wherever possible; everyone should wear face-coverings in enclosed spaces where social distancing is not possible; 	 At the end of the summer the chancellor launched an effort to reinvigorate the leisure and hospitality sectors. The VAT cut for hospitality, leisure and tourism businesses and – in particular – the Eat Out to Help Out scheme were designed to encourage

Jurisdiction	How Restrictions are Lifted	The Order Restrictions are Lifted	Impact of Lifting Restrictions
	 Level 2: Number of cases and transmission are low Level 3: Epidemic is in general circulation Level 4: Transmission is high or rising exponentially Level 5 (red): Same as level 4, but there is a risk of health care services being overwhelmed The UK Government released indicators to guide the movement between alert levels Indicator for escalating from alert level one to level two: Are there any confirmed infections that cannot be traced to importation to the UK? Indicator for de-escalating from alert level two to level one: Is there reliable evidence and consensus that COVID-19 is no longer endemic in the UK? Indicators for escalating from alert level two to level three:	 people can spend time outdoors as long as they are not meeting up with people outside of their household and they comply with social distancing and hygiene guidelines; vulnerable populations should take extra precautions and avoid contact with individuals outside of their households; and restrictions to the UK borders to significantly reduce travel Step 2: A phased return for childcare and schools; opening of non-essential retail; permitting cultural and sporting events to take place indoors; and reopening more local public transport subject to strict measures Step 3: open more businesses and premises that have been closed, including personal care, hospitality, public places and leisure facilities 	people to get out, socialize and spend their money with hard-hit businesses. With the benefit of hindsight, it is clear that these policies were not appropriate at a time when there was still a significant risk that greater social interaction, coupled with the planned reopening of schools and universities, increased the risk of a second wave. Even at the time, the Treasury's policies seemed inconsistent with the actions of other departments that were planning on the basis that a second wave was a real possibility.

Jurisdiction	How Restrictions are Lifted	The Order Restrictions are Lifted	Impact of Lifting Restrictions
	 a downward trend for the last four weeks? Indicators for escalating from level three to level four: Are there >20,000 confirmed new infections in the UK per day? Is R>1 and/or doubling time less than seven days? Are COVID-19-related hospital and/or ICU admissions and/or total deaths increasing greater than or equal to 50% over the same period? Indicators for de-escalating from level four to level three: Are there estimated to be less than 10,000 new infections per day? Does the national contact tracing system have the capacity to perform contact tracing for all new confirmed infections? Has the community estimate of R been consistently? <1 for at least two to three serial intervals? Has the observed number of new daily COVID-19 infections, hospital admissions, ICU admissions and deaths been on a downward trend for the last four weeks? 		
UK ¹⁸	No information identified.	 B.1.1.7 variant appeared in September 2020. In November 2020 England was in lockdown to reduce COVID-19 incidence. During this time period Wales, Scotland, and Northern Ireland had increasing/decreasing restrictions. On December 2, 2020 lockdown in England was lifted and moved into 3-tiered restriction system (tier 4 is lockdown). In Early December 2020, about one in 20 cases in the northwest region were the B.1.1.7 variant. Approximately two thirds of all cases in London were B.1.1.7 by mid-December. On December 30, 2020 all parts of England moved into either tier three restrictions or lockdown. Wales, Scotland and Northern Ireland were already in lockdown. Vaccination was planned to fully roll out starting January 2021 (Pfizer-BioNTech and Oxford-AstraZeneca vaccines). 	 Many areas saw sharp drops in case numbers (e.g., northwest England, Yorkshire). However, regional differences were observed with some areas having continued increased incidence during lockdown (i.e., Kent). Cases continued to rise in Kent. Rapid increases then took place in Greater London, other parts of the southeast. Primary school reopening in areas worst affected by

Jurisdiction	How Restrictions are Lifted	The Order Restrictions are Lifted	Impact of Lifting Restrictions
			 the variant was postponed (not reopened as planned) in January 2021. As of December 30, 2020 UK, has had more than two million cases and 70,000 deaths.
U\$2	 On 5 March 2021, <u>CNN reported</u> that some states are lifting mask mandates, reopening business sectors, and/or lifting stay-at-home orders or advice. Rationales for lifting business restrictions included high rates of vaccination and decreasing rates of hospitalization Last updated 16 March 2021, MultiState hosts a <u>COVID-19 Policy Tracker</u> to monitor each state's vaccination rollout plan, reopening policies and business restrictions, mask requirements and mandates, travel restrictions, stay-at-home orders, state legislation on COVID-19, and impact of COVID-19 on legislative sessions. Some states provide information on tiered or staggered reopening policies, which may include reopening based on COVID-19 prevalence at the level of state or individual county, rules or protocols for entering subsequent stages/levels/tiers and when they might be triggered. 	 As businesses reopen, the CDC continues to update its Guidance for Businesses & Employers (last updated on 8 March 2021) On 9 March 2021, the CDC announced that the following public-health measures have been lifted, relaxed or modified for those who have been fully vaccinated: Indoor gatherings with other fully vaccinated people are permitted without wearing masks. Gathering indoors with unvaccinated people from one other household without masks is permitted if none of the unvaccinated individuals have an increased risk of severe illness from COVID-19. It is not necessary to self-isolate or get tested if the individual has been around someone with COVID-19 (unless they have symptoms or live in a group setting). On 10 March 2021, the CDC provided updated recommendations with implications for those who are fully vaccinated, including: Relaxing visitation rules for post-acute care facilities, including long-term care facilities. Modifying work-restriction policies for asymptomatic health care personnel and quarantine policies for asymptomatic residents and patients. The New York Times Tracks COVID-19 restrictions and mask mandates for all 50 states as well as Washington, D.C. and Puerto Rico (last updated 15 March 2021): Eight states, Washington, D.C., and Puerto Rico were categorized as 'mixed' in terms of their restrictions for businesses, while 42 states were categorized as "mostlyopen". 	No information identified.

Jurisdiction	How Restrictions are Lifted	The Order Restrictions are Lifted	Impact of Lifting Restrictions
		 Thirty-one states, Washington, D.C., and Puerto Rico have "mandatory" mask mandates, five states were identified as masks being "sometimes required", and 14 states were characterized as having "no restrictions" related to wearing masks. Puerto Rico is currently under stay-at-home orders, while four states currently have stay-at-home advisories and 46 states and Washington, D.C. have no restrictions around stay-at-home orders. 	
		 The CDC provides guidance for reopening and operational procedures during the COVID-19 pandemic across several sectors and services, including <u>childcare</u>, <u>K-12 schools</u>, homeless service providers and <u>employers</u>. 	

REFERENCES

- 1. Ontario Agency for Health Protection and Promotion (Public Health Ontario). (2021). <u>Lockdown duration</u> <u>and re-opening including considerations for COVID-19 variants of concern.</u>
- 2. McMaster Health Forum. (2021). <u>When and in what order can COVID-19-related public-health measures</u> <u>be lifted (or stringency be reduced) as vaccination rates and seasonal temperatures increase?</u>
- 3. Ontario Health. (2021). Impacts of Reopening and Lifting COVID-19 Restrictions: A Jurisdictional Scan.
- 4. Ontario COVID-19 Science Advisory Table. (2021). Ontario Dashboard: Tracking the Third Wave.
- 5. Ontario COVID-19 Science Advisory Table. (2021). Update on COVID-19 Projections.
- 6. Ontario COVID-19 Science Advisory Table. (2021). <u>Update on COVID-19 Projections</u>.
- 7. Ontario COVID-19 Science Advisory Table. (2021). Update on COVID-19 Projections.
- Di Domenico, L., Pullano, G., Sabbatini, C. E., Boëlle, P.-Y., & Colizza, V. (2020). <u>Impact of lockdown on</u> <u>COVID-19 epidemic in Île-de-France and possible exit strategies</u>. *BMC Medicine*, *18*(1), 1–13.
- 9. Gupta, M., Mohanta, S. S., Rao, A., Parameswaran, G. G., Agarwal, M., Arora, M., et al. (2021). <u>Transmission dynamics of the COVID-19 epidemic in India and modeling optimal lockdown exit</u> <u>strategies.</u> *International Journal of Infectious Diseases*, *103*, 579–589.
- 10. Liu, M., Thomadsen, R., & Yao, S. (2020). <u>Forecasting the spread of COVID-19 under different</u> <u>reopening strategies</u>. *Scientific Reports*, *10*(1), 1–8.
- 11. Sun, X., Xiao, Y., & Ji, X. (2020). When to lift the lockdown in Hubei province during COVID-19 epidemic? An insight from a patch model and multiple source data. Journal of Theoretical Biology, 507, 110469.
- 12. Rawson, T., Brewer, T., Veltcheva, D., Huntingford, C., & Bonsall, M. B. (2020). <u>How and when to end</u> the COVID-19 lockdown: an optimization approach. *Frontiers in Public Health*, *8*, 262.
- Glass, D. H. (2020). <u>European and US lockdowns and second waves during the COVID-19 pandemic.</u> *Mathematical Biosciences*, 330, 108472.

- 14. Bauer, S., Contreras, S., Dehning, J., Linden, M., Iftekhar, E., Mohr, S. B., et al. (2021). <u>Relaxing</u> restrictions at the pace of vaccination increases freedom and guards against further COVID-19 waves in Europe. *ArXiv Preprint ArXiv:*2103.06228.
- Taylor, L. (2021). <u>Covid-19: Spike in cases in Chile is blamed on people mixing after first vaccine shot.</u> British Medical Journal Publishing Group.
- 16. University of Chile. (2021). <u>Vaccines against SARS-CoV2 show 56.5 percent effectiveness in</u> preventing infections.
- 17. Rossman, H., Shilo, S., Meir, T., Gorfine, M., Shalit, U., & Segal, E. (2021). <u>COVID-19 dynamics after a</u> <u>national immunization program in Israel.</u> *Nature Medicine*, 1–7.
- Kirby, T. (2021). <u>New variant of SARS-CoV-2 in UK causes surge of COVID-19</u>. *The Lancet Respiratory Medicine*, 9(2), e20–e21.