

ENVIRONMENTAL SCAN

(ARCHIVED) COVID-19 Public Health Measures Related to the Delta Variant

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Key Findings

- While some jurisdictions have not implemented any changes to public health measures in response to the Delta variant (i.e., Denmark and United States [US]), other jurisdictions have (i.e., England, Finland, France, Germany, Ireland, Israel, Italy, Netherlands and Norway). Examples of public health measures to address the Delta variant include:
 - Pausing, delaying, or modifying re-opening plans (e.g. England, France, Norway)
 - Accelerating the vaccine rollout and/or modifying the timing and type of vaccine for second doses) (e.g., England, Germany, Ireland, Italy)
 - Introducing travel bans/restrictions (e.g., Finland, Germany, Israel)
 - Impose/re-impose stricter public health measures such as indoor mask mandates (e.g., Israel, Netherlands)
 - Introduce additional resources such as enhanced testing, contact tracing, genomic sequencing, and monitoring (e.g., England, Italy)
- It is important to consider the epidemiological and vaccination context in which the public health measures are taking place.

Background

The Coronavirus Disease (COVID-19) variant Delta (B.1.617.2) was classified as a variant of concern (VOC) in Canada on May 14, 2021.¹ Current evidence suggests that the Delta variant may have higher transmissibility and secondary attack rates, and higher risk of hospitalization.² A pre-print study from the United Kingdom (UK) noted that a reduction in vaccine effectiveness of about 20% for preventing symptomatic infection after one dose of the Pfizer-BioNTech or AstraZeneca vaccines compared to the B.1.1.7 (Alpha) variant. The vaccine effectiveness at three weeks after the second dose of the Pfizer-BioNTech and AstraZeneca vaccines was 60% and 33%, respectively.³ Epidemiological data from Ontario indicate that Delta has replaced Alpha as the dominant strain of SARS-CoV-2 in the province.⁴ With Ontario entering Stage 2 of the Reopening Ontario roadmap on June 30, 2021 and continuing reopening in the coming weeks,⁵ case declines may slow or cases may increase if reopening allows more Delta transmission. Additionally, the Chief Public Health Officer of Canada has warned that with the increased transmissibility and severity of the Delta variant, resurgence of COVID-19 is still possible if easing of public health measures proceeds too quickly and in-person contact rates across the community increase significantly.⁶ Similarly, The European Centre for Disease Prevention and Control (ECDC) has recommended that “non-pharmaceutical interventions should be maintained at a level sufficient to contain community transmission of Delta until greater shares of the population are fully vaccinated, in order to avoid a resurgence of cases with a possible increase in hospitalisations and mortality”.⁷ Therefore, it is important to consider the impact of Delta and considerations for reopening in the province of Ontario.

The purpose of this document is to describe public health measures that have been implemented in select jurisdictions in response to Delta variant. This information will help inform how best to move forward with the re-opening of Ontario in the context of the Delta variant.

Methods

A rapid jurisdictional scan of epidemiological and vaccination context, and documentation of public health measures implemented in response to the Delta VOC was conducted between July 2-5, 2021 for select jurisdictions (i.e., Denmark, England, Finland, France, Germany, Ireland, Israel, Italy, Norway, and the US). An additional search was conducted on July 12, 2021 for the Netherlands. Records were obtained through online searches of recent policies, media articles, government websites, official press and reports.

Findings

This section provides a brief overview of COVID-19 epidemiology, vaccination status, and changes to public health measures (to address the Delta variant) for select jurisdictions. Jurisdictions are described in alphabetical order below.

Denmark

EPIDEMIOLOGICAL CONTEXT

- As of July 1, 2021, the weekly confirmed COVID-19 cases per 100,000 people were 31.2 (down from 118.1 on June 2, 2021), but has started to increase since then.⁸
- As of June 25, 2021, the GISAID tracking of variants site reported 11.2% of cases were “VOC Delta* G/452R.V3 (B.1.617+) first detected in India” in the previous four weeks.⁹

VACCINATION CONTEXT

- As of July 2, 2021, 57% of the population had received at least one dose of a COVID-19 vaccine and 34% were fully vaccinated.¹⁰

PUBLIC HEALTH MEASURES TO ADDRESS THE DELTA VARIANT

- No apparent adjustments to the current overview of restrictions in response to the Delta variant.¹¹ Also no apparent changes to national vaccination plans.¹²

England

EPIDEMIOLOGICAL CONTEXT

- As of June 27, 2021, the rate of cases in a 7-day period per 100,000 people was 172.8 (up from 23.6 on May 22, 2021) and has been steadily increasing since then.¹³
- In England, as of July 2, 2021 there were 3,424 cases of the B.1.617.2 variant (an increase of 2,111 cases since May 12, 2021); 418 cases of the B.1.617 variant (and increase of 50 cases since May 12, 2021) and 13 cases of B.1.617.3 (an increase of 2 cases since May 12, 2021).¹⁴

VACCINATION CONTEXT

- As of June 30, 2021, 65.4 million doses¹⁵ (116 doses per 100 people)¹⁶ of the COVID-19 vaccine had been administered. As of June 30, 2021, 66.8 % of the population had received at least one dose of the COVID-19 vaccine¹⁷ and 49.4% were fully vaccinated.¹⁸

PUBLIC HEALTH MEASURES TO ADDRESS THE DELTA VARIANT

- Stage 4 re-opening has been paused until July 19, 2021 to accelerate vaccinations. Second doses are now administered 8 weeks after the first dose for people over age 40 to provide the strongest protection against Delta variant sooner.¹⁹
- Additional supports to suppress Delta variant transmission have been rapidly deployed in areas where it is spreading fastest.²⁰⁻²⁵ Supports include:²⁰
 - Additional resources to help local authorities with testing, logistics, planning and workforce to assist with testing, door-to-door visits to engage with residents and other activities – these may come from the Surge Rapid Response Teams, from military aid or other sources depending on requirements
 - Wastewater testing samples being prioritised for sequencing
 - Specialist communications support to increase awareness and focus engagement with marginalized groups
 - Maximizing vaccine uptake by expanding existing channels, developing new capacity and increasing local and tailored communications to reach different communities
 - Supervised in-school testing and discretion to reintroduce face coverings in indoor communal areas and classrooms in schools if they and directors of public health decide it is appropriate
 - Surge testing and enhanced contact tracing
 - Enhanced monitoring (genomic sequencing, genotype assay testing)²⁰

- To help stop the spread of the Delta variant, the general public are encouraged to:²⁶
 - Get both doses of the vaccine when you are offered it, and encourage others to do so
 - Participate in surge testing in your local area, whether you are vaccinated or not
 - Self-isolate immediately if you have any symptoms of COVID-19 (a high temperature, a new, continuous cough or a loss or change to your sense of smell or taste) or if you have tested positive for COVID-19²⁶
- In the areas where Delta is spreading fastest (e.g., Bedford, Birmingham, Blackburn, Blackpool, Cheshire East, Cheshire West and Chester, Manchester, Lancashire, Leicester, Liverpool, North Tyneside, and Warrington) the public are encouraged to:²⁶
 - Take particular caution when meeting anyone outside your household or support bubble (e.g., keeping two metres apart)
 - Meet outside rather than inside where possible
 - Minimize travel in and out of affected areas
 - Get tested twice a week for free and isolate if you are positive
 - Continue to work from home if you can
 - Refer to local health advice for your area²⁶

Finland

EPIDEMIOLOGICAL CONTEXT

- As of July 1, 2021, the weekly confirmed COVID-19 cases per 100,000 people were 22.5 (down from 86.2 on March 21, 2021, but up from a low of 8.7 on June 17, 2021).⁸
- As of May 24, 2021, the GISAID tracking of variants site reported 0% of cases were “VOC Delta* G/452R.V3 (B.1.617+) first detected in India” in the previous four weeks.⁹ However, a media report from June 29, 2021 reports that following months of steady declines in cases, COVID-19 cases have started to rise in the previous week, largely due to football fans returning from St. Petersburg, Russia.²⁷ This has likely initiated the spread of Delta variant; however, no exact case numbers of the Delta variant have been reported at this time.

VACCINATION CONTEXT

- As of July 2, 2021, 4,322,972 doses (78 doses per 100 people) of the COVID-19 vaccine had been administered. As of July 2, 2021, 60% of the population had received at least one dose of a COVID-19 vaccine and 19% were fully vaccinated.¹⁰

PUBLIC HEALTH MEASURES TO ADDRESS THE DELTA VARIANT

- While COVID-19 cases in Finland have not increased significantly in the past few weeks, there have been increases in cases associated with football fans returning from Euro 2020 football event in St. Petersburg, Russia.²⁸ For example, there were 947 new COVID-19 cases reported in Finland between June 21 and 7, 2021 which is over 400 cases more than the week before.²⁸ The Finnish Institute for Health and Welfare recommends that all passengers returning from Russia get tested for COVID-19 72 hours after returning to Finland and avoid social contacts until getting the test results.²⁹
- No other restrictions related to Delta have been identified. Finland restrictions have continued to ease within the previous weeks with easing of restrictions of the food and beverage industry and at public events.^{30,31}

France

EPIDEMIOLOGICAL CONTEXT

- As of July 1, 2021, the weekly confirmed COVID-19 cases per 100,000 people were 20.2 (down from 341.8 on April 18, 2021), but has since started to increase slightly.⁸
- As of June 21, 2021, the GISAID tracking of variants site reported 10.9% of cases were “VOC Delta* G/452R.V3 (B.1.617+) first detected in India” in the previous four weeks.⁹ As of July 2, 2021 the French Health Minister announced that Delta variant represents around one third of COVID-19 cases in France.³²

VACCINATION CONTEXT

- As of July 2, 2021, 54,483,343 doses (81 doses per 100 people) of the COVID-19 vaccine had been administered. As of July 2, 2021, 51% of the population had received at least one dose of a COVID-19 vaccine and 31% were fully vaccinated.¹⁰
- A news report from July 4, 2021 reported that less than 60% of nursing home workers and less than 64% of hospital workers have been vaccinated in France, prompting discussion around mandating vaccinations for healthcare workers.³³

PUBLIC HEALTH MEASURES TO ADDRESS THE DELTA VARIANT

- The French government announced on June 30, 2021 that lifting of COVID-19 restrictions in the Landes region of Southwest France would be delayed until July 6, 2021 due to the high presence of the Delta variant in that region.^{33,34}

Germany

EPIDEMIOLOGICAL CONTEXT

- As of July 1, 2021, the weekly confirmed COVID-19 cases per 100,000 people were 4.8 (down from 173.7 on April 26, 2021).⁸
- As of June 28, 2021, the GISAID tracking of variants site reported 25.3% of cases were “VOC Delta* G/452R.V3 (B.1.617+) first detected in India” in the previous four weeks.⁹ According to the Robert Koch Institute (RKI) health agency, in the week of July 20, 2021, the Delta variant accounted for 37% percent of infections in Germany and was expected to account for half of all infections the week of July 1, 2021.³⁵

VACCINATION CONTEXT

- As of July 2, 2021, 55% of the population had received at least one dose of a COVID-19 vaccine and 37% were fully vaccinated.¹⁰
- Due to the rapid spread of the Delta variant, on July 2, 2021, the Standing Commission on Vaccination recommended that individuals who received a first dose of AstraZeneca should get their second dose from mRNA vaccine (e.g., Pfizer-BioNTech or Moderna) regardless of age.³⁶ They suggest that combining vector and mRNA vaccines is "clearly superior" to the immune response after two doses of AstraZeneca.³⁶
- Health Minister noted that Germany needed to accelerate its vaccination rollout in response to the Delta variant rapidly spreading throughout Europe; the government has pledged to deliver five million doses to vaccination centres across the country in the first week of July.³⁷

PUBLIC HEALTH MEASURES TO ADDRESS THE DELTA VARIANT

- To limit the spread of the more contagious Delta variant, Germany issued new travel restrictions for individuals entering the countries from 'various variant areas' (according to the Robert Koch Institute).³⁷ Germany restricted entry from Portugal and Russia on June 29, 2021. Only German citizens and residents are allowed to re-enter the country and they must go through a mandatory 14-day quarantine (even for those who are fully vaccinated).³⁷

Ireland

EPIDEMIOLOGICAL CONTEXT

- As of July 1, 2021, the weekly confirmed COVID-19 cases per 100,000 people were 54.4 (down from a rate of 80.2 on March 30, 2021, but up from a low of 43.2 on June 14, 2021), and has started to increase slightly.⁸
- As of June 24, 2021, the GISAID tracking of variants site reported 5.7% of cases were "VOC Delta* G/452R.V3 (B.1.617+) first detected in India" in the previous four weeks.⁹

VACCINATION CONTEXT

- As of July 2, 2021, 50% of the population had received at least one dose of a COVID-19 vaccine and 20% were fully vaccinated.¹⁰
- Revised advice from the National Immunisation Advisory Committee (NIAC) noted that the dose interval for the AstraZeneca vaccine should be reduced to 4 weeks and that those aged 18-49 years who wish to opt for earlier vaccination can be offered either the AstraZeneca or the Janssen vaccine, subject to consent. This will be reviewed from a planning, operational and clinical perspective in the coming days.³⁸

PUBLIC HEALTH MEASURES TO ADDRESS THE DELTA VARIANT

- On June 30, 2021, the Government of Ireland announced the next phase of re-opening will be based on a cautious approach with an emphasis on lower-risk activities due to the incidence of the Delta variant in Ireland posing significant risk, particularly to those who are not yet fully vaccinated.³⁸
- From July 5, 2021, public health measures are as follows:³⁸

- As planned, outdoor events to a maximum of 200 people will be permitted for most venues, and up to 500 people in venues with capacity greater than 5,000 with appropriate protective measures
- No limit on number of people for household visits if all are fully vaccinated or had a confirmed COVID-19 infection in the last nine months
- Unvaccinated households may have visitors from one other unvaccinated households
- Weddings already planned may proceed with 50 guests permitted with protective measures
- Funerals will continue to be limited to 50 people. Wakes in private homes are for family only, and related family gatherings must adhere to current household mixing restrictions.
- Individuals should continue to work from home when possible
- Indoor activities, such as organized events, return of service in bars and restaurants, group training, exercise and dance will not proceed, pending the implementation of a system to verify vaccination or immunity
- The Government will devise an implementation plan by July 19, 2021, following further consideration and consultation with relevant sectors.³⁸
- The Government advises avoiding non-essential travel, and related penalties will remain in place until July 18, 2021. From July 19, 2021 this will be changed to allow citizens to travel safely and in accordance with public health guidance and restrictions. Subject to the prevailing public health situation, Ireland will operate the European Union (EU) Digital COVID Certificate (DCC) for travel originating within the EU/EEA.³⁸

Israel

EPIDEMIOLOGICAL CONTEXT

- As of July 1, 2021, the weekly confirmed COVID-19 cases per 100,000 people were 18.8 up from a low of 1.3 on June 18, 2021), and has continued to increase since then.⁸
- A media report from June 25, 2021 stated that preliminary findings by Israeli health officials suggest about 90% of new infections were likely caused by the Delta variant (about half of them are children under the age of 16 who have not yet been vaccinated).³⁹

VACCINATION CONTEXT

- As of July 2, 2021, 62% of the population had received at least one dose of a COVID-19 vaccine and 57% were fully vaccinated.¹⁰
- The Ministry of Health recommends the vaccination of youth ages 12 to 16.⁴⁰

PUBLIC HEALTH MEASURES TO ADDRESS THE DELTA VARIANT

- While the indoor mask mandate was dropped on June 15, 2021,⁴¹ due to rising infections as of June 25, 2021, masking is again required anywhere except outdoors, save for the permanent place of residence.⁴² The Ministry of Health also recommends wearing masks in large outdoor gatherings.⁴²

- Masking is not required in the following cases, among others:⁴²
 - A minor under 7 years old
 - A person who is unable to wear a mask due to disability
 - A person staying in a closed or separated room without another person
 - Two workers regularly sharing a room
 - A person engaging in physical activity⁴²
- As of June 29, 2021, Israeli travelers aged 16 and older will be required to fill in a declaration form before leaving Israel, stating that they do not intend to travel to any of the destinations prohibited by the regulations for leaving Israel.⁴³
 - The government also approved an extension of the regulations on the travel ban to destinations with the highest COVID-19 risk, save for exceptions, until July 11, 2021. Travelling to prohibited destinations in violation of the regulations shall constitute a criminal and administrative offense and shall incur a fine of for each traveller returning from these destinations.

Italy

EPIDEMIOLOGICAL CONTEXT

- As of July 1, 2021, the weekly confirmed COVID-19 cases per 100,000 people were 8.4 (down from 263.1 on March 24, 2021), and has remained steady since then.⁸
- As of June 26, 2021, the GISAID tracking of variants site reported 25.6% of cases were “VOC Delta* G/452R.V3 (B.1.617+) first detected in India” in the previous four weeks.⁹

VACCINATION CONTEXT

- As of July 2, 2021, 57% of the population had received at least one dose of a COVID-19 vaccine and 32% were fully vaccinated.¹⁰

PUBLIC HEALTH MEASURES TO ADDRESS THE DELTA VARIANT

- Italy launched a travel health certificate on June 17, 2021, to facilitate travel within the country and in Europe. Citizens can obtain a digital health certificate electronically proving that the holder has been vaccinated against the COVID-19, has tested negative, or has recovered from it.^{44,45}
- However, a media report from June 29, 2021 indicated that due to the Delta variant, it is likely regulations for the travel health certificate may be altered in the near future.⁴⁵ The Higher Health Institute of Italy (ISS) together with other Italian health experts and the European Centre for Disease Prevention and Control (ECDC) have urged for more testing, tracing, sequencing, and renewed efforts to increase the vaccination rate due to Delta.
- Per the June 28, 2021, COVID-19 Weekly Monitoring Report, The Ministry of Health states extensive tracking and sequencing should be undertaken in light of the Delta variant causing increased cases in other European countries.⁴⁶ The Ministry is encouraging achieving high vaccination coverage and the completion of vaccination cycles to prevent further recurrences of episodes of increased circulation caused by emerging variants of the virus with greater transmissibility.

- Based on ECDC data and forecasts, existing Delta variant outbreaks, and current vaccination coverage, the Ministry notes the importance of remaining alert and continuing to apply and comply with the necessary measures to prevent an increase in circulation of the virus.^{46,47}
- While not specific to the Delta variant, a recent Ministry of Health FAQ page notes in order to limit the spread of new variants, Italy has ordered specific public health actions:⁴⁸
 - Strengthen laboratory surveillance against new SARS-CoV-2 variants
 - Provide guidance to implement research and contact management activities of suspected/confirmed COVID-19 cases for variant infection
 - Limit the entry into Italy of travellers from the countries most affected by the variants
 - Carry out rapid prevalence surveys to correctly estimate the diffusion of variants in our country
 - Arrange containment measures (red areas) in the most affected areas of the country, including at the municipal level

Netherlands

EPIDEMIOLOGICAL CONTEXT

- As of July 10, 2021, the weekly confirmed COVID-19 cases per 100,000 people were 182.7.⁴⁹ This rate has been rising significantly since June 30, 2021 (24.6 cases per 100,000 people).
- During the week of June 21, 2021 62.1% of cases were of the Alpha variant and 35.6% were of the Delta variant.⁵⁰

VACCINATION CONTEXT

- As of July 12, 2021, 17,191,580 doses (99 doses per 100 people) of the COVID-19 vaccine had been administered. As of July 12, 2021, 65% of the population had received at least one dose of a COVID-19 vaccine and 39% were fully vaccinated.⁵¹

PUBLIC HEALTH MEASURES TO ADDRESS THE DELTA VARIANT

Due to the recent rise in COVID-19 infections the government has implemented additional measures as of July 10, 2021.⁵² Most of these recent cases were due to individuals who became infected in places where large groups of people party and go out. Additionally, the Delta variant appears to have led to more cases of disease than previously thought. The new measures effective from July 10 to August 13, 2021 include:⁵³

- **Catering:** The catering industry is open, as long as everyone has a fixed seat that is 1.5 metres away from each other. All catering closes daily from midnight to 6 am and entertainment (e.g., live performances and loud music) is prohibited.
- **Discos and nightclubs:** are closed.
- **Sit at events and venues for culture and sports:** Events, cultural locations, spectators at professional sports competitions, sports and youth activities are accessible provided everyone has a fixed seat 1.5 metres from each other.

- *Note: Individuals can get Corona tickets through: 1) vaccination (must be 14 days after full vaccination), 2) recovery (proof that you recovered from COVID-19 less than 6 months ago), or 3) test proof (a negative test result less than 40 hours before the event).⁵⁴
- When using the Corona tickets, additional audience members may be present. Everyone has a seat and the venue can only be filled at two thirds capacity.
- **Transfer locations:** No changes for transfer locations such as shops, museums or fairgrounds. These locations are allowed one visitor per 5m².
- **Parties:** The government is appealing that if you are having a party to do it wisely and responsibly; keep parties small and manageable and follow basic rules (e.g., 1.5 metre distancing, hand washing etc.).

United States

EPIDEMIOLOGICAL CONTEXT

- As of July 1, 2021, the weekly confirmed COVID-19 cases per 100,000 people were 26.9 (down from 150.8 on April 14, 2021), and has remained relatively stable since then.⁸
- As of June 29, 2021, the GISAID tracking of variants site reported 32.7% of cases were “VOC Delta* G/452R.V3 (B.1.617+) first detected in India” in the previous four weeks.⁹

VACCINATION CONTEXT

- As of July 2, 2021, 55% of the population had received at least one dose of a COVID-19 vaccine and 47% were fully vaccinated.¹⁰

PUBLIC HEALTH MEASURES TO ADDRESS THE DELTA VARIANT

- No national level public health measures specific to the Delta variant have been identified at this time.

Norway

EPIDEMIOLOGICAL CONTEXT

- As of July 1, 2021, the weekly confirmed COVID-19 cases per 100,000 people were 22.9 (down from 56.6 on May 10, 2021).⁸
- As of June 21, 2021, the GISAID tracking of variants site reported 14.8% of cases were “VOC Delta* G/452R.V3 (B.1.617+) first detected in India” in the previous four weeks.⁹

VACCINATION CONTEXT

- As of July 2, 2021, 49% of the population had received at least one dose of a COVID-19 vaccine and 29% were fully vaccinated.¹⁰

PUBLIC HEALTH MEASURES TO ADDRESS THE DELTA VARIANT

- On July 5, 2021 Norway announced that they would be easing some restrictions on July 5, 2021 but delaying the final phase of reopening the economy until the end of July at the earliest due to concerns about the Delta variant.⁵⁵

- Measures that will remain include: bars and restaurants being limited to table service, limits of 20 people on gatherings in private homes, and restrictions on adult recreational sports; these measures would have been lifted on July 5, 2021 if the government decided to proceed with the fourth and final stage of re-opening.⁵⁵
- Measures that were eased on July 8, 2021 include: 1) allowing more individuals to attend outdoor and indoor public events (provided there is testing for the virus and attendees can need to show certificates of vaccination, or recovery from COVID-19 infection in the past six months), and the most recent negative test result, 2) outdoor events with an unseated audience (e.g., music festivals) are permitted to have 3,000 attendees (an increase from 2,000), and 3) quarantine-free travel permitted from a number of European countries including (e.g., France, Croatia and Italy).⁵⁵

Conclusion

Many jurisdictions have implemented public health measures to address the rise in Delta variant. Examples include: Pausing, delaying, or modifying re-opening plans (e.g. England, France, Norway), accelerating the vaccine rollout and/or modifying the timing and type of vaccine for second doses) (e.g., England, Germany, Ireland, Italy), introducing travel bans/ restrictions jurisdictions (e.g., Finland, Germany, Israel), imposing/re-imposing stricter public health measures such as indoor mask mandates (e.g., Israel, Netherlands), introducing additional resources such as: enhanced testing, contact tracing, genomic sequencing, and monitoring etc. (E.g., England, Italy). Some jurisdictions have not implemented any changes to public health measures in response to the Delta variant (i.e., Denmark and US). It is important to consider the epidemiological and vaccination context in which the public health measures are taking place.

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