

For ease in reference, new information and content changes are highlighted.

Background:

- Variants of concern (VOCs) are those with a mutation in the SARS-CoV-2 genome where there is convincing evidence that it will have an impact on public health and the health care system, including impacts on transmission, virulence, and vaccine efficacy.
- The emergence of new variants better adapted to human-to-human transmission is expected.
- More transmissible strains are more difficult to control, and may require stronger or additional public health measures.
- Lower prevalence of COVID-19 will delay emergence of new variants, and allow a large number of Manitobans to be vaccinated if/when they do.
- Current VOC's include:
 - B.1.1.7: First identified in the United Kingdom (UK)
 - B.1.351: First identified in South Africa
 - P.1: First identified in Brazil
- Information is rapidly evolving on their impacts, with emerging evidence on increased risk of death from B.1.1.7, and increased risk of vaccine escape and reinfection with the E484 mutation found in B.1.351 and P.1.
- Early anecdotal evidence from Ontario suggests a shorter incubation period.

This Appendix details updated case and contact management guidance for all cases of COVID-19 in relation to the control of VOC's, as well as additional guidance for VOC screen positive cases.

Laboratory Measures:

SARS-CoV-2 Variants of Concern (VOC) screening has been implemented in Manitoba. The PCR screening test assesses whether key mutations from the VOC's are present. Screening for the variant first identified in the UK began the week of February 1, with screening for the variants first identified in Brazil and South Africa following. The PCR screen was developed to detect these specific mutations, but does not assess for mutations in other sites, and may also detect mutations in the same region of the genome in circulating strains. Screening results were initially considered preliminary and sent to the National Microbiology Lab (NML) for confirmatory sequencing. With increased prevalence of VOC's and validation of results, routine sequencing of all screen positives is being discontinued. Targeted sequencing will continue.

Cadham Provincial Laboratory (CPL) is screening all positives, or representatives of all positives (for example, in a household or community cluster). Screening results from CPL are anticipated to be available within 1-2 days of a confirmed positive result or when received for processing from another lab.

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In addition, COVID-19 samples have been and continue to be submitted for genome sequencing per the Canadian COVID-19 Genomics Network's framework for ongoing surveillance of circulating strains in Canada. Priority samples to be sent for sequencing include:

- International travellers
- Contacts of international travellers
- Suspected reinfection
- Severe acute COVID-19 in individuals <50 years old without significant comorbidities
- Vaccinated individuals with subsequent lab confirmed COVID-19
- Known or suspected super-spreading events
- Geographic sampling in sub-regions with pronounced increase in case notification rate
- Outbreaks or clusters

Requests for sequencing in the above priority groups can be made through MOH's and regional epidemiologists, who will forward the request to Cadham Provincial Laboratory. Requests should be made for lab confirmed COVID-19 cases only. Note that sequencing by NML, when requested, may take up to two weeks.

As of late April 2021, B.1.1.7 has become the predominant strain of COVID-19 in the province. Only a selection of the cases screening positive for B.1.1.7 will continue to be sequenced. All samples that screen positive for non-B.1.1.7 will be sequenced. As well, to maintain a high degree of vigilance, positive samples from all travelers and transport workers, as well as most health care worker and educators will be sequenced regardless of their screen result.

All cases will no longer be informed if they have a positive screen or sequencing indicating B.1.1.7, as this now represents the most predominant strain and does not have any clinical implications for management. The additional notification step and investigation checks for B.1.1.7 will no longer occur in most region. Regions where the proportion of VOC's remain low may continue to do this notification for B1.1.7. Reporting of B.1.1.7 be limited to population-based reports, and not be included in school-based reports where individual cases could be identified.

For other variants of concern or variants of interest (e.g. P.1, B.1.351), notification of cases would still occur with positive screen results (or if screen unspecified). However, the notification process is streamlined to only include minimum information required to communicate the result, with an opportunity to provide more information on contacts/source only if indicated.

Updated Contact Management for All COVID-19 Cases:

Enhanced identification of contacts is now recommended for all cases, including non-VOC strains.

- Use a **lower threshold for identifying close contacts** requiring self-isolation (quarantine).

- Consider all household members close contacts, unless exceptional circumstances exist that eliminate contact within the period of communicability. Transmission risk among household members is higher than other categories of close contacts, and infectivity is high early in the incubation period when isolation precautions may not be implemented.
- Use a lower time threshold for considering significant exposure, and consider time periods over 10 minutes as a significant exposure. If there is uncertainty on the time of exposure, consider a close contact. **OESH – Continue to use Exclusion Criteria to determine if a HCW is exposed to COVID patients, staff or visitors related to their PPE use.**
- Continue to consider anyone with potential direct contact with infectious body fluids or providing care for a case a close contact. This includes being coughed or sneezed on; physical contact such as hugging, kissing, or handshaking; shared items such as drinks, eating utensils, or cigarettes/vapes; or close face to face interaction without a mask.
- **Immunization status:**
 - Individuals who, at the time of the exposure to a case, have received a full series of immunization (i.e. 2 doses for current authorized vaccines), and more than 2 weeks have elapsed since the last dose in the series, are not required to self-isolate (quarantine) if:
 - they are asymptomatic, and
 - do not have a medical condition (e.g. immunocompromised) that would impact vaccine effectiveness.
 - These fully immunized individuals should self-monitor for symptoms of COVID-19 for 14 days following an exposure. If symptoms develop, they should isolate and be tested.
 - The risk of asymptomatic transmission after immunization remains uncertain. Immunization has been shown to prevent symptomatic COVID-19, and symptomatic and pre-symptomatic transmission is thought to have a greater role in transmission than purely asymptomatic transmission.
 - Workers in health care and congregate settings should consult with occupational health or their workplace manager for further guidance.
 - This guidance is consistent with guidance from the CDC¹ and will be updated when new evidence becomes available, or if a COVID-19 variant with impacts on vaccine effectiveness becomes established in Manitoba.
- **Reinfections:** If the individual is asymptomatic and it was less than three months since they were determined to be a confirmed or probable case, they also do not need to self-isolate (quarantine), but should self-monitor for symptoms. Should they develop symptoms of COVID-19, the individual must isolate and should go for COVID-19 testing.

¹ <https://www.cdc.gov/vaccines/covid-19/info-by-product/clinical-considerations.html>

- **Public Health recommends testing all asymptomatic contacts when notification occurs (optional) and at 10 days.** Testing is also recommended for anyone with symptoms as per existing guidelines.
 - Earlier testing is optional to allow earlier identification of asymptomatic cases, and earlier initiation of contact tracing and isolation if positive. This has the potential to reduce further exposures in the household and overall isolation/self-isolation periods for the household. **The first test may not be recommended during times when COVID-19 activity is high and testing capacity is limited.**
 - If tested at day 6 or earlier, repeat testing is recommended at day 10. Contacts should be notified of the recommendation for 2 tests.
 - If tested at day 7 or later, repeat testing is not required. Remote areas with longer turn around times may wish to recommend testing at day 8-10.
 - Testing at day 10 is important to identify asymptomatic cases who develop infection later in the self-isolation period (i.e. longer incubation periods). This avoids asymptomatic cases being removed from isolation when they may be still infectious.

Contact management:

- **If the case isolates in the home:**
 - **If the case is unable to isolate from household contacts:** All household close contacts must also self-isolate (quarantine) for the same duration as the case (minimum 10 days), and must self-isolate (quarantine) for a further 14 days to ensure the virus was not transmitted in the final days of the case's isolation (minimum 24 days). If subsequent cases are identified in the household, this may result in a longer self-isolation (quarantine) period than 24 days for household close contacts.
 - **If the case is able to isolate from household contacts** (e.g. separate living space and washroom and no shared spaces including the kitchen (regardless of cleaning/disinfection practices) or close contact with other household members*)
 - All household close contacts must self-isolate (quarantine) for 14 days following the last exposure to the case, and must be tested at day 10 (earlier testing at day 7 or later is acceptable). The contact must be asymptomatic and have a negative test to remove from isolation at day 14.

If not tested, self-isolation (quarantine) for contacts is extended until 14 days after the case finished their isolation to ensure transmission in the household has not occurred. If subsequent cases are identified in the household, this may result in a longer quarantine period for household close contacts.

*Note that the risk of household transmission remains while the case is isolating in the household, and can occur during contact for food delivery, cleaning dishes, laundry etc. The household should be instructed to avoid contact with the case when delivering/picking up items and ensure mask use, appropriate disinfection, and hand hygiene is followed.

- **If the case does not isolate in the home:**
 - **If the case does not isolate in the home:** All close contacts must self-isolate (quarantine) for 14 days from the last exposure to the case. Testing is recommended on notification and at day 10 (earlier testing at day 7 or later is acceptable). The contact must be asymptomatic, but is not required to be tested to remove from isolation at day 14.

Household members:

- All household members of close contacts should also self-isolate (quarantine) until the close contact tests negative at day 10 (minimum 7 days) or later. *(Note this applies to household members of close contacts where a case is not isolating in the home. If a case is isolating in the home, all household members are considered close contacts.)*
 - If the contact is not tested, household members should be advised to self-isolate (quarantine) until the contact finishes their self-isolation (quarantine) period and remains asymptomatic. If the contact is not tested, household members (contacts of the contact) are encouraged to be tested after the contact's self-isolation (quarantine) period is completed.
 - Exemptions from self-isolation (quarantine) are allowed if the household member is asymptomatic and:
 - Fully immunized (i.e. it has been at least two weeks since their last dose),
OR
 - Recently infected (i.e. previous COVID-19 infection in the last 3 months).
 - Exemptions are also allowed for household members **(who are not fully immunized or recently infected)** who are essential workers required to wear PPE at work if:
 - everyone in the household is **asymptomatic, including the close contact, AND**
 - they self-isolate (quarantine) when not at work, AND
 - the close contact can self-isolate (quarantine) from the essential worker in the household.
 - All individuals exempt from self-isolation (quarantine) requirements, should continue to self-monitor for symptoms, and isolate immediately if any develop and go for testing.
- **Reinfections and those fully immunized:** Follow guidelines in this document for management of exposures in individuals who have been previously infected with COVID-19, or are fully immunized. They should self-monitor for symptoms for 14 days from the last exposure, and be advised to use all precautions to avoid further exposure to the case during the isolation period if in the household. They should be advised to call the Provincial COVID Line if they develop symptoms.
- Active monitoring should occur daily if feasible for all cases and contacts, including recommendations for contact testing on notification and at day 10 if they remain asymptomatic. Household contacts should be advised they cannot complete their self-isolation (quarantine) at day 14 until negative test results are known, otherwise their self-isolation (quarantine) period is extended as documented above.

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- All VOC cases should be strongly encouraged to use AIA facilities to minimize the transmission risk.
 - Document in RL6 and follow the usual protocol of notifying the site OHN, Bernice, Mandy and Gayle.

Table of Comparisons Between Routine and VOC Guidelines

Routine Guidelines	Additional VOC Guidelines
Cases	
<p>Enhanced identification of contacts is recommended for all cases.</p> <p>Cases must isolate for a minimum of 10 days – follow guidelines for removal of isolation precautions.</p> <p>OHNs: If source unknown, implement backward contact tracing where possible to identify potential source, followed by forward contact tracing to identify additional contacts. Recommend testing of other individuals exposed to same source, or suspected source if not yet tested.</p> <p>Active daily monitoring should occur for all cases. If capacity exceeded, use SMS where possible to supplement calls.</p>	<p>OHNs: VOC positive screen - to ensure all close contacts are identified.</p> <ul style="list-style-type: none"> • Determine if source identified. If unknown or stage not complete, review documentation or re-interview to determine if additional information can be determined. • On notification of the case, review the contacts identified to date and determine whether any additional contacts are identified. <p>Strongly encourage all VOC cases to use AIA.</p>
Contacts	
<p>Close Contacts include:</p> <ul style="list-style-type: none"> • Lower exposure threshold for identifying close contacts within 2M/6ft to 10 minutes cumulative without use of appropriate PPE. If uncertain on time, consider a close contact. • All household members of a case are considered close contacts, regardless of measures used by the case to isolate within the home, unless in a separate and independent suite. • Anyone with potential direct contact with infectious body fluids (without the appropriate use of recommended personal protective equipment, or providing care for a case (without PPE). OESH Screeners and OHNs: Use Exclusion Criteria for Guidance. • Anyone who has had a close range conversation with 	<p>Close Contacts:</p> <p>OHNs: Contacts do not need to be notified of the VOC results as there is no change to their management.</p> <p>OHNs: Notify any new close contacts identified through enhanced measures, including:</p> <ul style="list-style-type: none"> • re-interview of case for all contacts <p>Lab Testing Follow routine guidelines.</p>

a case or has been in settings where a case engaged in singing, shouting, or heavy breathing (e.g., exercise), without masks. OESH Screeners and OHNs: Use Exclusion Criteria for Guidance.

Lab Testing

Recommend testing all asymptomatic close contacts when contact notification occurs (optional), and at 10 days after the last exposure. Testing is also recommended for anyone with symptoms as per existing guidelines.

- The first test is optional to allow earlier identification of asymptomatic cases, and initiation of contact tracing and isolation if positive. If earlier test is negative, repeat testing at day 10 is still recommended. This test may not be recommended during times when testing capacity is limited.
 - If tested at day 7 or later, repeat testing is not required. Remote areas with longer turn around times may wish to recommend testing between day 8-10.

Self-Isolation (Quarantine)

If case isolates in the home:

- **If the case is unable to isolate from household contacts:** All household close contacts must also self-isolate (quarantine) for the same period (minimum 10 days) as the positive case, and must self-isolate (quarantine) for a further 14 days to ensure the virus was not transmitted in the final days of the case's isolation. If subsequent cases are identified in the household, this may result in a longer self-isolation (quarantine) period for household close contacts.
- **If the case is able to isolate from household contacts** (e.g. separate living space and washroom and no shared space or close contact with other household members): All household close contacts must self-isolate (quarantine) for 14 days following the last exposure to the case, and must be tested at day 10 (earlier testing at day 7 or later is acceptable). The contact must be asymptomatic and have a negative test to remove from isolation at day 14. If not tested, self-isolation (quarantine) is extended until 14 days after the case finished their isolation to ensure transmission in the household has not occurred. If subsequent cases are identified in the household, this may result in a longer self-isolation (quarantine) period for household close contacts.

Self-Isolation (Quarantine)

Follow routine guidelines.

<p>If case does not isolate in the home: All close contacts must self-isolate (quarantine) for 14 days from the last exposure to the case. Testing is recommended on notification and at day 10 (earlier testing at day 7 or later is acceptable). The contact must be asymptomatic, but is not required to be tested to remove from isolation at day 14.</p> <p>Active daily monitoring should occur for all close contacts, including recommendations for testing on notification and at day 10 if they remain asymptomatic. Household close contacts should be advised they cannot complete their self-isolation (quarantine) at day 14 until negative test results are known (self-reported), otherwise their self-isolation (quarantine) period is extended as documented above.</p> <ul style="list-style-type: none"> • Clients should be asked about barriers to testing. Problem solve any barriers to accessing testing. <p>Exemptions From Self-Isolation (Quarantine) Exemption from self-isolation (quarantine) is allowed if the close contact is asymptomatic, and is:</p> <ul style="list-style-type: none"> • fully immunized (i.e. two weeks since their last dose of the vaccine series) at the time of the exposure, AND • do not have a medical condition (e.g. immunocompromised) that would impact vaccine effectiveness, OR • Recently infected (i.e. previous COVID-19 infection in the last 3 months). <p>These individuals should continue to self-monitor for symptoms, and isolate immediately if any develop, and go for testing.</p>	
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Household Members of a Close Contact	
<p>All household members of the close contact should also self-isolate (quarantine) until the close contact tests negative (must be tested at day 7 or later).</p> <p>If the close contact is not tested at day 7 or later, household members of the close contact must also self-isolate (quarantine) for the period of time the contact is required to self-isolate (quarantine), including any extension to self-isolation for household contacts.</p> <p>Exemptions From Self-Isolation (Quarantine) Exemptions from self-isolation (quarantine) are allowed if the household member is asymptomatic and:</p>	<p>Follow routine guidelines.</p>

- Fully immunized (i.e. it has been at least two weeks since their last dose) at the time of the exposure, AND
 - do not have a medical condition (e.g. immunocompromised) that would impact vaccine effectiveness, OR
 - Recently infected (i.e. previous COVID-19 infection in the last 3 months).

Exemptions are also allowed for household members (who are not fully immunized or recently infected) who are essential workers required to wear PPE at work if:

- everyone in the household is **asymptomatic, including the close contact, AND**
 - they self-isolate (quarantine) when not at work, AND
 - the close contact can self-isolate (quarantine) from the essential worker in the household.
 - **This exemption DOES NOT APPLY to essential workers if they have been identified as a close contact.**

All individuals exempt from self-isolation (quarantine) requirements, should continue to self-monitor for symptoms, and isolate immediately if any develop and go for testing.

Exemptions DO NOT APPLY to essential workers if they have been identified as a close contact.

All household members that are exempted should continue to self-monitor for symptoms, and isolate immediately if any develop and go for testing.