Nova Scotia Interim Guidance: Public Health Measures of cases and contacts associated with Novel Coronavirus (COVID-19)

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The goal of the COVID-19 response in Nova Scotia is to limit severe illness and death from COVID-19 through high COVID-19 vaccine coverage and other proportionate public health measures, while minimizing overall morbidity and mortality from other harms, particularly among vulnerable populations.

Strategies to achieve this goal include:

- Recommending public health measures to reduce transmission of COVID-19 to and between persons who are at high risk of severe outcomes of COVID-19 disease
- Refining of testing criteria to identify cases of COVID-19 who would benefit from early intervention including therapeutics
- Identifying and managing cases of COVID-19 in settings where people may be at higher risk of severe COVID-19 disease outcomes
- Maximizing COVID-19 vaccine coverage including all recommended doses in all populations
- Modifying measures appropriately as the epidemiology and vaccine coverage change while minimizing societal disruption, considering the ethical principles of the least restrictive means and proportionality, as well as equity.

This guidance is based on current available scientific evidence and expert opinion and is subject to change as new information on transmissibility, epidemiology and vaccine effectiveness becomes available. In interpreting and applying this guidance, it is important to recognize that the health, disability, economic, social, or other circumstances faced by some individuals and households may limit their ability to follow the recommended measures. This may necessitate adapted responses in some situations.

Symptoms of COVID-19

COVID-19 presents with varied clinical features. Clinical presentation and symptoms of COVID-19 (see PHAC clinician guide or PHAC COVID-19 symptoms) vary in frequency and severity. Commonly reported symptoms may be broadly categorized as “common”, “less frequent” and “rare”. Asymptomatic infection also occurs. To date, there is no comprehensive list of symptoms that has been validated to have a high specificity or sensitivity for COVID-19. Symptoms may present differently in infection with variants of concern or at different age groups and symptomology with Omicron has been less well documented.

Diagnostic Testing

The Nova Scotia Health Authority and IWK Health laboratories perform and report positive, negative, and indeterminate PCR tests for COVID-19. COVID-19 Variant of Concern screening or genomic lineage determination is carried out on a representative proportion of positive tests as resources permit. In addition, rapid antigen detection tests (RADT) are available for point of care testing in persons who are symptomatic of COVID-19. A single RADT positive should be treated as a true positive, however those who test positive with a RADT and are at higher risk for severe disease or live or work in settings that are at higher risk for severe disease (as defined below) can choose to confirm their result with a PCR test. If the PCR test is negative, then the individual is not considered positive and should not be managed as a case.

Treatment

Clinical management of the case (whether in the home or in an acute care setting) is based on the case's condition and underlying risk factors such as vaccine status. Clinical treatments are evolving and are beyond the scope of this document. Canadian guidance on treatment can be found here COVID-19 treatments - Canada.ca

Definitions

Recent natural immunity

If an individual has tested positive for SARS-CoV-2 via PCR or RADT, short-term natural immunity to COVID-19 disease is thought to last for 90 days following the end of their infectious period. With the emergence of Omicron, there is uncertainty about the duration of natural immunity and rare re-infections have been noted during the 90-day post-infectious period, with increasing likelihood of reinfection the longer it has been since the initial infection.

At Risk for Severe Disease

The evidence regarding individuals who are most at risk for severe disease continues to evolve. The most up-to-date list can be found under the "Who is considered high risk" tab of the NSH COVID-19 Testing webpage: COVID-19 Testing | Nova Scotia Health Authority (nshealth.ca).

Persons living in the following congregate settings are also considered at higher risk for severe disease:

- Long-term care facilities (LTCF)
- Disability support programs, including residential care facilities
- Senior congregate living facilities (e.g., retirement homes)
- Acute care
- Correctional facilities
- Shelters and transition homes

Infectious period

The time period that a case is infectious remains uncertain, particularly with newer variants of concern (VOCs). A case is most infectious in the few days prior to and after their symptom onset or the collection date of their positive specimen if asymptomatic.

Recognizing there is variability in a case's infectious period, cases are considered infectious in the 48-hour period prior to their symptom onset (or collection date of their positive specimen if asymptomatic) until 7 full days after the start of symptoms (or collection date of their positive specimen if asymptomatic). In addition, the case should be clinically improving with no fever for at least 24 hours.

Individuals exposed to SARS-CoV-2 (i.e., Exposure to SARS-CoV-2)

An individual is considered to be exposed to SARS-CoV-2 if they meet at least one of the following criteria for exposure during a COVID-19 case's infectious period (see definition above):

- Provided direct physical care to a case of COVID-19, or handled a SARS-CoV-2 specimen, without consistent and appropriate use of recommended PPE and infection prevention and control practices.
- Was exposed to a case's respiratory secretions (e.g., kissing, sharing food/drinks/cosmetics, sharing cigarettes/vaping devices), including the case's caregiver, intimate partner, child receiving care from the case, etc. At MOH discretion, sustained face-to-face contact may be assessed as an exposure.

- Interacted with a case when there is a sufficient level of risk during the interaction that it is reasonably possible that exposure occurred.
    - A risk assessment should be performed based on the **Table 1: Risk of exposure** below. The table represents higher and lower levels of a spectrum of risk. *Note that some items may fall in the middle of the spectrum (i.e., a 3-layer non-medical mask with a filter may fall between a non-medical mask with fewer than 3 layers and a medical N95 mask) and therefore some professional judgement is warranted.*
    - In general, the more items fall toward the higher risk categories, the more likely it is that exposure occurred. However, the presence of even one or two particularly high-risk items (i.e., the case coughed or sneezed when neither individual was wearing a mask) can be reasonably assumed to constitute exposure.

Table 1: Risk of exposure

	Higher Risk of Exposure	**Lower Risk of Exposure**
Mask use	No individuals wearing mask Improperly worn mask Non-medical mask with fewer than 3 layers	All individuals wearing mask Properly worn mask Medical mask (low risk) or fit-tested medical N95 respirator (very low risk)
Eye protection/Face shield use	Symptomatic/infected person not wearing a mask HCW not wearing eye protection	Symptomatic/infected person wearing a mask HCW wearing eye protection
Size and ventilation of space	Indoor space Space is closed/small Space is poorly ventilated	Outdoor space Space is open/large Space is well ventilated
Proximity of interaction	No distance between individuals	At least 2 metres between individuals
Activity during interaction	Singing or shouting Sharing meals or personal items Case actively coughs/sneezes	Quiet conversation No sharing of meals or personal items No case coughing/sneezing
Type of contact	Direct physical contact	Non-physical contact
Duration of contact	15+ minutes	Fleeting duration

Case Management (confirmed/probable cases)

Case Definition

https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/national-case-definition.html

This case definition is for surveillance case counting purposes only and not for lab testing criteria.

Surveillance Guidelines

https://novascotia.ca/dhw/populationhealth/surveillanceguidelines.asp

Public Health response to confirmed cases of COVID-19:

While a Medical Officer of Health (MOH) may, under appropriate circumstances, issue an order to a case of COVID-19 under Section 32 of Nova Scotia's *Health Protection Act, 2004*, in general Public Health will not be involved in case management in settings outside of long term care facilities (LTCFs).

For guidance on case management in LTCFs, consult:

- For routine operations: COVID-19 Management in Long Term Care Facilities (LTCFs) *Directive* Under the Authority of the Chief Medical Officer of Health

- For case management and during outbreak: Guidance for COVID-19 Case Management and Outbreak Control in Long Term Care Facilities (LTCFs)

Guidance for higher risk congregate living settings other than LTCFs

While operators of higher risk congregate living settings (CLSs) should manage COVID-19 according to organizational policies that consider the guidance below, Public Health may be consulted when additional assistance is required. Congregate living settings, by nature of being shared living spaces, are at higher risk for significant transmission of COVID-19 and some populations who live in these settings may be at higher risk of severe outcomes from COVID-19. Additional guidance is provided for CLSs to assist in balancing the increased risk in these environments.

The following are recommendations which apply to senior congregate living facilities (e.g., retirement homes, private independent living facilities), shelters and transition homes, correctional facilities, and disability support programs including residential care facilities not otherwise covered under the *COVID-19 Management in Long Term Care Facilities (LTCFs) Directive*:

1. It is recommended that residents of a CLS who test positive for SARS-CoV-2 isolate away from others *within their CLS* for a period of 7 days after the onset of their symptoms or from a positive test (if asymptomatic). Symptomatic residents should also isolate away from others within their CLS while awaiting test results. Residents may discontinue isolation away from others after 7 days if symptoms are improving for at least 24 hours and they are afebrile.
    a. This does not preclude a resident from making appropriate temporary living arrangements outside of the CLS for this period.
    b. An alternative risk reduction approach may be appropriate for some CLS. This includes when isolation away from others within the CLS for 7 days is not possible or not agreed to by the resident, or for smaller CLS (12 or fewer residents) where the overall risk for severe disease among residents is similar to the general public (i.e., younger people, immunocompetent individuals). A risk reduction approach includes mitigation strategies such as: the resident isolates away from others for as much and for as many of the 7 days as possible; the resident participates in other prevention measures such as distancing and masking around others; or the resident limits their interaction with others to outdoor settings or very brief periods. While isolation cannot be forced by facility operators, isolation away from others should be encouraged as much as possible in elevated risk settings, which include:
        i. Larger settings (e.g., with 13 or more residents)
        ii. Open layout designs (i.e., in shelters)
        iii. Crowded indoor spaces that have poor ventilation (i.e., only small amounts of fresh air being circulated through open windows, doors, or HVAC systems)
        iv. CLS resident population is at high overall risk for severe disease (i.e., older adults, pregnant persons, immunocompromised individuals, or those with multiple chronic conditions)

2. CLS staff who test positive for SARS-CoV-2 should follow organizational occupational health policies regarding staff management of COVID-19 within their workplace.
    a. In the absence of occupational health policies, or where organizations need guidance to develop these policies, it is recommended that CLS staff who test positive for SARS-CoV-2 are excluded from the workplace for 7 days after the onset of their symptoms or from a positive test (if asymptomatic). Symptomatic staff should also be excluded from the workplace while awaiting test results. Staff may return to work after the 7-day period if their symptoms are improving for at least 24 hours and are afebrile.

Operators and/or regulators of CLSs are recommended to develop organizational and occupational health policies to support the operationalization of these recommendations and to develop contingencies as appropriate to their setting.

For additional information, including information on isolation away from others, the *COVID-19 Guidance Document for Congregate Living Settings* can also be consulted.

Guidance for cases in the general community settings that are not considered at higher risk for severe disease

There are no mandatory measures for case management in general community settings. To achieve the goal of the COVID-19 response in Nova Scotia, the following recommendations are made for those living in the community:

1. Cases that have symptoms that are moderate to severe and/or prevent them from fully participating in usual activities of the day should stay at home when ill, especially when symptoms are acute. When symptoms become mild, they can follow the advice below (bullet 2). They should avoid individuals and settings considered at higher risk for severe disease (as defined above) as indicated in bullet 3.
2. Individuals who have mild symptoms should avoid individuals and settings considered at higher risk for severe disease (as defined above) as indicated in bullet 3 and should mask when in indoor public spaces for a minimum of 7 days after the onset of their symptoms. If symptoms worsen to become moderate to severe and/or prevent them from fully participating in the usual activities of the day, they should follow the advice in bullet 1 above.
3. Cases should avoid individuals and settings considered at higher risk for severe disease (as defined above) for a minimum of 7 days after the onset of their symptoms or from a positive test (if asymptomatic).
4. Individuals whose workplace occupational health policies are stricter than these recommendations should continue to follow workplace policies, where applicable, for return to work after illness.

Follow-up and advice

Public Health may conduct the following activities, where applicable, for those cases who are determined to need follow up:

1. Notify the case or their parent/guardian/close family member of the positive result.

2. Encourage the case to complete Report and Support tool online at https://c19hc.nshealth.ca/self-report/ or by phone at 1-833-797-7772 to be screened for therapeutics eligibility.
3. Collect information from the case or parent/guardian/close family member to investigate risk factors for COVID-19 transmission in vulnerable settings (e.g., work in LTCF, health care providers, etc.). Notify occupational health if the case is a health care worker in a NSH/IWK facility or LTC facility.
4. Provide recommendations on case management, as detailed above depending on the case's living setting, and give information about what to do if symptoms worsen.

5. Ongoing monitoring of cases is generally not required by Public Health and the Public Health COVID-19 Response Team may determine if additional monitoring is necessary and the method by which monitoring occurs.
    a. Clinical medical assessment is beyond the scope of Public Health. If a Public Health Nurse is concerned, the case should be advised to seek medical attention or call 911.
6. Provide advice to the case on individual measures including:
    a. Personal hygiene
        i. The case and all members of the household setting should follow good respiratory etiquette and hand hygiene practices.
        ii. Mask use in the home can be considered, especially if living with others at risk for severe disease.
    b. Avoid contact with household members who are at higher risk of severe disease, when reasonable. The case should consider wearing a mask if around household members who are at higher risk for severe disease. Household members at risk for severe disease should also consider wearing a mask if the case cannot fully isolate away from them.
    c. How to be cared for as a case as safely as possible:
        i. Health Care workers
            - Follow direction from Occupational Health and Infection Prevention and Control.
        ii. For caregivers from outside the home, and caregivers within the home at risk of severe disease (and optional for lower risk caregivers within the home):
            - If direct contact care must be provided, the case should wear a mask and follow respiratory etiquette.
            - The caregiver providing direct contact care to the case should wear a medical mask and can consider wearing eye protection when within two metres of the case and should perform hand hygiene after contact**.**
                a. If medical masks are not available for home use, non-medical masks worn by the case, if tolerable, to cover their mouth and nose may prevent respiratory droplets from contaminating others or landing on surfaces. These non-medical masks may also be worn by any household member providing care to a case.
                b. More information on mask use can be found at https://novascotia.ca/coronavirus/masks/.
            - Direct contact with body fluids, particularly oral, and respiratory secretions should be avoided. Use disposable gloves to provide oral or respiratory care, and when handling stool, urine, and waste, if possible. Perform hand hygiene following all contact.
            - Persons in the same household of a case including those caring for a case should monitor themselves for any signs of illness.
            - If possible, anyone who is at higher risk of developing complications from infection should avoid caring for or having close contact with the case. This includes people with underlying chronic or immunocompromising conditions.

Contact Management

In general, Public Health will not be involved in contact management in settings outside of long-term care facilities.

For guidance on contact management in long-term care facilities, consult:

- For routine operations: COVID-19 Management in Long Term Care Facilities (LTCFs) *Directive* Under the Authority of the Chief Medical Officer of Health
- For case management and during outbreak: Guidance for COVID-19 Case Management and Outbreak Control in Long Term Care Facilities (LTCFs)

There are no mandatory or recommended measures for contact management in the general community or in high-risk congregate settings outside of long-term care.

Travelers Entering Nova Scotia

Table 2: Describes recommendations for travelers entering Nova Scotia
International travelers must follow the **Federal Quarantine Act requirements** Information on exemptions for certain individuals (can be found at Visitors, foreign workers and students - Travel restrictions in Canada – Travel.gc.ca). It should also be noted travelers are advised to avoid anyone with chronic conditions or a compromised immune system and older adults. **Contact tracing for airplane passengers and flight crew** There is no direct evidence at present that contacting individual air travelers has facilitated early case finding. Nor is there evidence regarding transmission risk in relation to flight duration.

Appendix 1: PCR Test Eligibility Criteria

For up-to-date PCR testing eligibility, please consult the Nova Scotia Health COVID-19 Testing webpage found at: COVID-19 Testing | Nova Scotia Health Authority (nshealth.ca)

References

Draft Interim Guidance: Public Health Management of cases and contacts associated with the novel coronavirus (COVID-19) in the Community, Public Health Agency of Canada (Revised August 5, 2020 – posting forthcoming)

Coronavirus Disease (COVID-19) Pregnancy, Childbirth and Caring for Newborns: Advice for Mothers During COVID-19, Public Health Agency of Canada (May 4, 2020)