

Coronavirus COVID-19

BC Centre for Disease Control | BC Ministry of Health



Recommendations for Risk Assessment and Management of Health-Care Worker Exposures to COVID-19 Patients: Interim Guidance for the Provincial Workplace Health Call Centre

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This document provides provincially standardized exposure criteria to assess the risk to health-care workers (HCWs) exposed to COVID-19 patients while at work. The guidance supports health authorities and the Provincial Workplace Health Call Centre (PWHCC) to effectively screen and manage HCW exposures and provides recommendations for appropriate measures based on exposure risk level. HCWs exposed in the community should be managed as per the [B.C. Centre for Disease Control's \(BCCDC\) interim public health management guidance](#).

Approved COVID-19 vaccines in Canada are safe, effective and will protect HCWs and patients. HCWs are recommended to be immunized for COVID-19 as they may be at a higher risk of exposure to communicable diseases in the workplace. Visit the [BCCDC COVID-19 vaccine](#) webpage to learn more.

HCWs (clinical and non-clinical) must comply with all applicable [orders](#) from the provincial health officer.

The recommendations in this document may change as more information and evidence becomes available on COVID-19.

Who to Assess

- ✓ **All HCWs who have been in close contact^{1, a} with a confirmed COVID-19 patient while providing direct patient care without consistently using appropriate personal protective equipment (PPE)²**

Factors Influencing Exposure Risk

The following list of factors should be considered by workplace health and safety (WHS), infection prevention and control (IPC) and/or public health when conducting case-by-case risk assessments, as they can increase or decrease the level of risk in a given exposure scenario:

- Duration of exposure (e.g., exposure time longer than 15 minutes (may be cumulative) can

^a Definitions of key terms are numbered and available in the Definitions section of this document.



- increase risk, **brief interactions²** may lower risk).
- Type of interaction (e.g., a patient interview with physical distancing has lower risk than a cough-inducing procedure).
 - Extent of body contact (e.g., extensive contact with infectious body fluids, particularly oral and respiratory secretions, can increase risk).
 - Clinical presentations of patient symptoms (e.g., coughing and severe illness can increase risk).
 - PPE worn being soiled, damp, damaged or inconsistently worn can increase risk.
 - Patient wearing a mask^b properly for the entirety of the interaction can lower risk.
 - Proper practice of donning (putting on) and doffing (taking off) of PPE [[see BCCDC posters](#)] can lower risk.
 - Diligent **hand hygiene³** can lower risk.
 - Other individual and context-based factors.

Documented COVID-19 immunization(s) received prior to exposure may be taken into account, on a case-by-case basis, as part of a comprehensive assessment of the exposure and risk of onward transmission.

Exposure Risks and Recommendations

This guidance is summarized in the *B.C. Health-Care Worker COVID-19 Exposures Risk Assessment Tool* in [appendix A](#). The *COVID-19 Exposure Tracking Form* in [appendix B](#) can be used to track exposures.

NO RISK

In no risk scenarios, a HCW is not considered a close contact.¹

The following scenarios are considered no risk:

- HCW consistently wore ALL appropriate PPE.⁴
- HCW had NO direct or close contact with a patient.
- HCW had NO entry to the patient's room.
- HCW may have walked by a patient.
- HCW and patient were at least two metres apart from each other for the entire duration of the interaction.
- A brief interaction¹ that lasted less than 15 minutes (may be cumulative, e.g., multiple interactions).

These HCWs are not required to exclude themselves from work and no further follow-up is required from WHS/public health after assessment. They should follow the general precautions recommended for all HCWs, including self-assessing for symptoms prior to working.

LOW-RISK EXPOSURES

Low-risk exposures are scenarios where COVID-19 transmission from a patient is possible due to close contact without the use of appropriate PPE. However, certain aspects mitigate that risk, such as the

^b In this document, 'mask' refers to a medical grade mask.

patient wearing a mask. Medical masks worn by the patient can effectively reduce respiratory secretions from contaminating others and the environment.^{c,d}

Low-risk exposures include the following scenarios when providing direct care to a COVID-19 patient:

- HCW did NOT wear any of the appropriate PPE. However, the patient DID wear a mask.
- HCW did NOT wear a gown and gloves and did NOT engage in extensive body contact with the patient’s body fluids. However, HCW DID wear a mask and eye protection.
- HCW did NOT wear a mask or eye protection. However, the patient DID wear a mask.
- HCW wore a mask and eye protection when performing an [aerosol-generating medical procedure](#) (AGMP) (i.e., HCW did NOT wear an N95 respirator or equivalent).

Recommendations for low-risk exposures:

Symptoms	Immunization status	Recommendations for low-risk exposures
Asymptomatic	Not applicable*	Self-monitor ⁶ for symptoms for 14 days after the last date of exposure. HCW may continue to work with appropriate PPE and IPC measures.
Develops symptoms ⁷	Not applicable*	Self-isolate ⁸ until cleared for return to work . Notify supervisor/delegate. Get tested (follow the health authority’s specific processes for testing or call the PWHCC to report and arrange testing).

*Immunization status does not impact the recommendations for low-risk exposures.

HIGH-RISK EXPOSURES

High-risk exposures are scenarios where a HCW’s nose, eyes or mouth were exposed to potentially infectious substances while providing direct patient care and transmission of COVID-19 is likely.

High-risk exposures include the following scenarios when providing direct care to a COVID-19 patient:

- HCW did NOT wear any of the appropriate PPE and the patient did NOT wear a mask.
- HCW did NOT wear a mask or eye protection and the patient did NOT wear a mask and had an active cough, or a cough-inducing procedure was performed on the patient (e.g., swabbing).
- HCW did NOT wear an N95 respirator or mask during an AGMP.
- HCW did NOT wear eye protection during an AGMP.
- Other exposures dependent on factors that can influence exposure risk (listed above). For example:
 - HCW did NOT wear gown and gloves and had extensive body contact with the patient’s body fluids.

^c Leung, N. H., Chu, D. K., Shiu, E. Y., Chan, K. H., McDevitt, J. J., Hau, B. J., ... & Seto, W. H. (2020). Respiratory virus shedding in exhaled breath and efficacy of face masks. *Nature Medicine*, 1-5.

^d Ng, K., Poon, B. H., Puar, T. H. K., Quah, J. L. S., Loh, W. J., Wong, Y. J., ... & Raghuram, J. (2020). COVID-19 and the risk to health care workers: a case report. *Annals of internal medicine*.

- PPE was damaged or not worn properly.
- Hand hygiene was not adequately performed.

Recommendations for high-risk exposures:

Symptoms	Immunization status	Recommendations for high-risk exposures
Asymptomatic	Fully immunized ⁵	Self-monitor for symptoms for 14 days after the last date of exposure. HCW may continue to work with appropriate PPE and IPC measures.
	Partially immunized or unimmunized ⁵	Self-isolate for 10 days after the last date of exposure.* Notify supervisor/delegate. Self-monitor daily for symptoms for 14 days after the last date of exposure.
Develops symptoms ⁷	-	Self-isolate until cleared for return to work . Notify supervisor/delegate. Get tested. Follow the health authority’s specific processes for testing or call the PWHCC to report and arrange testing.

*Exceptions⁹ may be made by the medical health officer (MHO) or their delegate for asymptomatic HCW considered critical on a case-by-case basis by a health-care operational lead. See definition 9 below for more information. Exempted HCWs may continue to work while following the additional measures¹⁰ listed below including wearing a medical mask at all times.

HCW that are self-monitoring following a high-risk exposure should follow the additional measures¹⁰ listed below and avoid contact with those who are at risk of developing more severe disease or outcomes from COVID-19.

Health-care facilities should have a **low threshold** for evaluating symptoms and testing symptomatic HCW with high-risk exposures.

In all cases where a HCW develops symptoms or is confirmed to have COVID-19, follow the [Interim Guidance on Return to Work for Health-Care Workers](#) and any further WHS guidance to determine when the HCW can discontinue self-isolation.

Definitions

1. Close contact:

- HCW that provided direct care within two metres of a patient without consistent and appropriate PPE for more than 15 minutes (may be cumulative, e.g., multiple interactions).
- HCW that had close face-to-face contact (within two metres) with a case for more than 15 minutes up to 48 hours prior to symptom onset.
- HCW that had direct contact with infectious body fluids of a patient (e.g., was coughed or sneezed on, touched used tissues with bare hands, had accidental spills) while not using consistent and appropriate PPE.

2. **Brief interaction:** Brief interactions may include momentarily entering the patient's room without direct contact with the patient or their body fluids; A brief conversation at the triage desk with a patient not wearing a mask; or entering the patient's room immediately after the patient was discharged.
3. **Hand hygiene:** Hand hygiene should be performed using the proper technique [[see BCCDC poster](#)] and, whenever indicated, paying particular attention during and after removal of PPE, and after leaving the patient care environment.
4. **Appropriate PPE when providing direct care to a confirmed or suspected COVID-19 patient:** Medical mask, eye protection, gown and gloves. If performing an [aerosol-generating medical procedure](#) (AGMP) or based on a [point-of-care risk assessment](#), put on a fit-tested N95 respirator or equivalent, eye protection, gown and gloves.
5. **For the purpose of post-exposure management, a HCW is considered fully immunized or temporarily protected and may self-monitor after a high-risk exposure if any one of the following criteria are met:**
 - Fully immunized: **Two dose vaccine series completed** (e.g., Pfizer-BioNTech, Moderna, AstraZeneca/COVISHIELD) – It has been more than seven days after receiving their second dose.
 - Fully immunized: **Single dose vaccine series completed** (e.g., Janssen/Johnson & Johnson) – It has been more than 21 days after receiving their dose.
 - Temporarily protected: **Prior lab-confirmed infection with no vaccine** – It has been 90 days or less since recovery (end of infectious period).
 - Temporarily protected: **Prior lab-confirmed infection with one dose of vaccine** – It has been more than seven days after receiving their first dose.

All other HCWs are considered partially immunized or unimmunized and must self-isolate for 10 days and self-monitor for symptoms for 14 days after a high-risk exposure. This includes HCWs with only one dose of vaccine in a two dose series, no vaccine doses or prior infection more than 90 days ago and no vaccine.

Note: The above are general guidelines. The MHO or their delegate may ask a HCW to self-isolate on a case-by-case basis based on consideration of the factors listed above, including disease severity, immunocompromised status and other factors.

6. **Self-monitor:** Monitoring oneself for the appearance of symptoms, particularly fever and respiratory symptoms such as coughing or shortness of breath. Take and record temperature daily and avoid the use of fever-reducing medications (e.g., acetaminophen, ibuprofen) as much as possible, as these medications could mask an early symptom of COVID-19. See [BCCDC guidance on what to do if you are a close contact of a person with COVID-19](#).
7. **Symptoms of COVID-19:** See [BCCDC's COVID-19 symptoms](#) page for an up-to-date list of symptoms. **If a HCW develops symptoms while at work**, they should immediately put on a mask (if they were not already wearing one), finish or transfer any essential services they were providing and self-isolate at home.
8. **Self-isolate:** Staying home and avoiding situations where one could come in contact with others.

Refer to the [BCCDC's self-isolation page](#) and the handout on [what to do if you are a close contact of a person with COVID-19](#).

9. Exceptions for requirements to self-isolate for critical HCWs must be determined on a case-by-case basis by the MHO or their delegate, at the request of a health-care operational lead. Any exemptions must consider the following:

- a. The HCW is considered critical to patient safety and care delivery during this period by their operational lead.
- b. The HCW has a role that cannot be fulfilled by an alternate staff member and all staffing options have been exhausted.
- c. The HCW's duties require them to be on-site during this period.
- d. The benefit of return to work outweighs the risk of possible transmission, considering individual factors including disease severity and immunocompromised status, with appropriate consultation with public health, WHS and IPC, as required.
- e. The HCW follows the additional measures¹⁰ listed below.

10. Additional measures:

- Wear a mask at all times and in all areas of the workplace.
- Self-monitor daily for signs and symptoms of illness.
- Conduct duties virtually whenever possible.
- If partially immunized or unimmunized, self-isolate at home on days when not required at the workplace.
- Adhere to IPC protocols, including diligent hand hygiene, respiratory hygiene and the use of PPE when delivering patient care as per provincial or health authority guidance.
- To the extent practical, reduce close contact with other HCWs by maintaining a two metre physical distance and avoiding shared spaces.
- Avoid close contact with others when travelling to and from work and between shifts.
- Avoid any unnecessary visits to public establishments.
- Follow any additional institutional policies or guidance.

Appendix A: BC Health-Care Worker COVID-19 Exposures Risk Assessment Tool

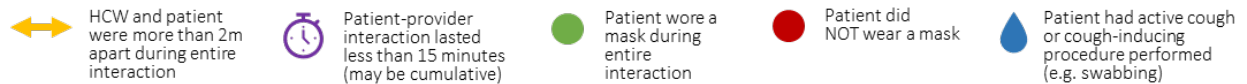
This tool is also available at the following link: http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID19_HCW_ExposuresRiskAssessmentTool.pdf

BC Health-Care Worker Exposures Risk Assessment Tool

This tool provides a summary of the provincial guidance on health-care worker exposures to COVID-19. For complete information, visit BCCDC *Risk assessment and management of health-care workers exposed to COVID-19 patients*.



Exposure Scenario		Exposure Risk	Recommendation
HCW PPE	PATIENT		
-	2m distance	NO RISK	<p>Not considered a close contact.</p> <p>If HCW asymptomatic,</p> <ol style="list-style-type: none"> CONTINUE to work, follow general precautions for all HCW No further follow-up required by WHS
	Less than 15 mins		
All appropriate PPE ¹	Wore mask	NO RISK	<p>If HCW develops symptoms,</p> <ol style="list-style-type: none"> EXCLUDE from work + SELF-ISOLATE (until cleared for return to work) NOTIFY supervisor/delegate TEST – follow facility process to get tested or contact PWHCC
	NO mask		
No gloves/gown (but wore mask + eye protection) ²	Wore mask	LOW RISK	<p>If HCW asymptomatic:</p> <ol style="list-style-type: none"> SELF-MONITOR for symptoms for 14 days. May continue to work with appropriate PPE and IPC measures.
	NO mask		
No mask/ No eye protection	Wore mask	LOW RISK	<p>If HCW develops symptoms,</p> <ol style="list-style-type: none"> EXCLUDE from work + SELF-ISOLATE (until cleared for return to work) NOTIFY supervisor/delegate TEST – follow facility process to get tested or contact PWHCC
Perform AGMP + Wore mask + eye protection	-		
No PPE	Wore mask	HIGH RISK	<p>If HCW asymptomatic and fully immunized³:</p> <ol style="list-style-type: none"> SELF-MONITOR for symptoms for 14 days. May continue to work with appropriate PPE and IPC measures. <p>If HCW asymptomatic and partially immunized or unimmunized:</p> <ol style="list-style-type: none"> SELF-ISOLATE for 10 days NOTIFY supervisor/delegate SELF-MONITOR for symptoms for 14 days <p><i>Exceptions may be made by the MHO or their delegate for staff considered critical on a case-by-case basis by a health care operational lead. See accompanying guidance document for details.</i></p> <p>If HCW develops symptoms,</p> <ol style="list-style-type: none"> SELF-ISOLATE (until cleared for return to work) NOTIFY supervisor/delegate TEST – follow facility process to get tested or contact PWHCC
	NO mask		
No mask/ No eye protection	NO mask	HIGH RISK	<p>If HCW asymptomatic and partially immunized or unimmunized:</p> <ol style="list-style-type: none"> SELF-ISOLATE for 10 days NOTIFY supervisor/delegate SELF-MONITOR for symptoms for 14 days <p><i>Exceptions may be made by the MHO or their delegate for staff considered critical on a case-by-case basis by a health care operational lead. See accompanying guidance document for details.</i></p> <p>If HCW develops symptoms,</p> <ol style="list-style-type: none"> SELF-ISOLATE (until cleared for return to work) NOTIFY supervisor/delegate TEST – follow facility process to get tested or contact PWHCC
Active cough			
Perform AGMP + No N95 respirator or mask/ No eye protection	-	HIGH RISK	<p>If HCW develops symptoms,</p> <ol style="list-style-type: none"> SELF-ISOLATE (until cleared for return to work) NOTIFY supervisor/delegate TEST – follow facility process to get tested or contact PWHCC



- Appropriate PPE = PPE recommended to provide direct care to COVID-19 patients including a medical mask, eye protection, gown and gloves, and N95 respirator if performing an aerosol-generating medical procedure.
- Risk level may increase for not wearing gloves and gown if there was extensive body contact with the patient's body fluids.
- Fully immunized = More than 7 days after receiving a second dose of vaccine in a two-dose series; OR more than 21 days after receiving a dose in a single dose series. See [guidance](#) (definition 5) for more information.

Appendix B: COVID-19 Exposure Tracking Form

Date:		
Index Case PHN:		DOB:
Exposure location:	Exposure dates:	
Infectious period of index case:		
HCW PPE worn: <ul style="list-style-type: none"> <input type="checkbox"/> Medical mask <input type="checkbox"/> N95 respirator <input type="checkbox"/> Eye protection (goggles, safety glasses or face shield) <input type="checkbox"/> Gloves <input type="checkbox"/> Gown <input type="checkbox"/> None <input type="checkbox"/> Other, specify: 	Patient information (if available): <ul style="list-style-type: none"> <input type="checkbox"/> Wore medical mask <input type="checkbox"/> No medical mask <input type="checkbox"/> Had active cough or cough-inducing procedure performed (e.g., swabbing) <input type="checkbox"/> Was 2m apart for entire interaction <input type="checkbox"/> Interaction lasted less than 15 mins <input type="checkbox"/> Other, specify: 	
Additional information on exposure scenario:		
Exposure risk identified (using Assessment Tool): <ul style="list-style-type: none"> <input type="checkbox"/> No risk <input type="checkbox"/> Low risk <input type="checkbox"/> High risk 	Asked to self-isolate? <ul style="list-style-type: none"> <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, anticipated date of return to work if no symptoms develop (DD/MM/YYYY):	

