

Coronavirus COVID-19

BC Centre for Disease Control | BC Ministry of Health



HOW YOU CAN SLOW THE SPREAD OF COVID-19

Take care of others by taking care of yourself.

Wash your hands, don't touch your face, and stay home if you are sick.

Stay at Home and Physically Distance

Stay at home whenever you can. Maintain 2 meters distance from those outside of your household.

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

April 28, 2020

This document provides provincially standardized exposure criteria to assess risk for health care workers (HCWs) exposed to COVID-19 patients while at work. It aims to support 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 [BCCDC Public Health Management of Cases and Contacts Associated with Novel Coronavirus \(COVID-19\) in the Community Interim Guidance](#).

This guidance is summarized in the *BC 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.

The recommendations in this document may change and will be amended as more information and evidence becomes available on the virus causing COVID-19.

Who to screen:

- ✓ All HCWs who have been in *close contact*¹ with a confirmed COVID-19 patient while providing direct patient care without consistent and *appropriate Personal Protective Equipment (PPE)*² as per the [COVID-19 PPE Allocation Framework](#).

Factors Influencing Exposure Risk:

The following list of factors (not exhaustive) should be considered by Workplace Health and Safety (WHS), Infection Prevention and Control (IPC) and/or Public Health (PH) when conducting case-by-base risk assessments, as they can increase or decrease the level of risk in a given exposure scenario:

- Duration of exposure (exposure time longer than 15 mins can increase risk, **brief interactions**³ may have lower risk).
- Type of interaction (a patient interview has lower risk than a cough-inducing procedure).
- Extent of body contact (contact with infectious body fluids, particularly oral and respiratory secretions can increase risk).
- Clinical presentations of patient symptoms (coughing and severe illness can increase risk).
- Patient wearing a mask properly for the entirety of the interaction (can lower risk).
- HCW not following proper practices of donning (putting on) and doffing (taking off) PPE [[see BCCDC posters](#)].
- HCW not performing diligent **hand hygiene**⁴.
- PPE was soiled, damp, damaged or inconsistently worn (can increase risk).
- Other individual and context-based factors.



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If you have fever, a new cough, or are having difficulty breathing, call 8-1-1.

Non-medical inquiries (ex. travel, physical distancing): 1-888-COVID19 (1888-268-4319) or text 604-630-0300



Exposure Risks and Recommendations:

NO RISK:

In No Risk scenarios, an HCW is not considered a close contact.

No Risk includes the following scenarios:

- HCW and patient were 2 metres apart from each other for the entire duration of the interaction.
- A brief interaction that lasted less than 15 minutes (may be cumulative, i.e., multiple interactions).
- HCW consistently wore ALL appropriate PPE.
- HCW who had NO direct or close contact with a patient.
- HCWs that may have walked by a patient.
- HCW who had NO entry to the patient's room.

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

LOW-RISK EXPOSURES:

Low-risk exposures are scenarios where transmission of COVID-19 from a patient is possible due to close contact without appropriate PPE, however the patient was wearing a mask. Surgical or procedure masks worn by the patient can effectively reduce respiratory secretions from contaminating others and the environment^{a,b}.

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

- HCW did NOT wear any appropriate PPE, however, the patient DID wear a mask.
- HCW did NOT wear gown and gloves, and did NOT engage in extensive body contact with the patient's body fluids, but HCW DID wear a mask and eye protection.
- HCW did NOT wear a surgical mask or eye protection, however, the patient DID wear a mask.
- HCW wore surgical mask when performing an AGMP.

Recommendations for Low-Risk Exposures:

- If HCW asymptomatic -> staff may **continue to work** with appropriate PPE and must **self-monitor**⁵ daily for symptoms for 14 days after the date of exposure.
- If HCW develops **symptoms**⁶ -> they must be **excluded** from work and **self-isolate**⁷ until cleared for return to work, they must **notify** their supervisor/delegate and **get tested** (follow the health authority's specific processes for testing or call the PWHCC to report and arrange testing).

* **If an HCW develops symptoms while at work**, they should immediately put on a mask (if they were not already), finish or transfer any essential services they were providing, and self-isolate at home.

^a 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.

^b 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*.



HIGH-RISK EXPOSURES:

High-risk exposures are scenarios where an HCW's nose, eyes or mouth were exposed to potentially infectious substances and transmission of COVID-19 was 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 surgical mask and the patient did NOT wear a mask, and had an active cough or a cough-inducing procedure performed on the patient (e.g. swabbing).
- HCW did NOT wear eye protection, and the patient did NOT wear a mask, and had an active cough or a cough-inducing procedure performed on the patient (e.g. swabbing).
- HCW did NOT use appropriate PPE when performing an AGMP (including NOT wearing an N95 respirator or 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;
 - PPE was damaged;
 - Hand hygiene was not adequately performed.

Recommendations for High-Risk Exposures:

- If HCW asymptomatic and deemed **essential**⁸ -> **continue** to work with **additional precautions**⁹ and **self-monitor** daily for symptoms for 14 days after the date of exposure.
- If HCW asymptomatic and deemed **non-essential** -> **exclude** staff from work; the HCW must **self-isolate** for 14 days after the date of exposure, **notify** their supervisor/delegate and **self-monitor** daily for symptoms.
- If HCW develops symptoms* -> continue to **self-isolate** until cleared for return to work, **notify** their supervisor/delegate, and **get tested** (follow the health authority's specific processes for testing or call the PWHCC to report and arrange testing).

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

In all cases where an HCW develops symptoms or is confirmed to have COVID-19, follow the Interim Guidance on Return to Work for Health Care Workers with Symptoms of COVID-19 to determine when staff can discontinue self-isolation.



Operational Considerations:

Given the constraints on the health system due to COVID-19, each health authority has identified essential staff that can be exempt from the requirement to self-isolate and continue working in key departments. If an HCW has a critical function in providing patient care and there are enough people absent from that critical function that it will compromise the ability to provide care in certain settings, operations leadership has the authority to allow staff to work if asymptomatic with the additional precautions listed above. Asymptomatic HCWs can continue to work even if they have had an exposure to a COVID-19 patient after options to improve staffing levels have been exhausted and in consultation with the WHS programs.

As the situation evolves and more information becomes available, the recommendations in this document may change. Further, some recommendations may become impractical and burdensome for implementation by health authorities. Contact tracing and retrospective risk assessment could divert resources from other important infection prevention and control and workplace health activities. Health authorities may decide to shift their focus towards asking HCWs to self-report any exposures and breaches, while self-monitoring for symptoms of COVID-19. Health authorities can develop a plan for when staff report ill and are unable to work, to ensure continuity of services in key departments.

Definitions:

- 1. Close contact:**
 - HCW that provided direct care within 2 metres of a patient without consistent and appropriate PPE for more than 15 minutes (may be cumulative, i.e., multiple interactions).
 - HCW that had close face-to-face contact (within 2 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., being coughed or sneezed on, touching used tissues with bare hands, accidental spills) without consistent and appropriate PPE.
- 2. Appropriate PPE when providing direct care to a confirmed or suspected COVID-19 patient:** As defined in the [COVID-19 PPE Allocation Framework](#). Contact and droplet precautions, including a surgical/procedure mask, eye protection (goggles or face shield), gown and gloves. If performing an Aerosol Generating Medical Procedure (AGMP), airborne precautions, including a fit-tested N95 respirator, eye protection, gown and gloves.
- 3. Brief interaction:** Brief interactions may include momentarily entering the patient 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 room immediately after the patient was discharged.
- 4. Hand hygiene:** Hand hygiene should be performed using the proper technique [[see BCCDC poster](#)] and whenever indicated, paying particular attention to during and after removal of PPE, and after leaving the patient care environment.
- 5. 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's guide to self-monitoring](#).



6. **Symptoms of COVID-19:** Fever, cough, sneezing, sore throat, and in severe cases, difficulty breathing. Other symptoms may include: Muscle aches, fatigue, sore throat, headache, loss of appetite, chills, runny nose, nausea and vomiting, diarrhea, loss of sense of smell or taste. See [BCCDC Symptoms](#) page for an up-to-date list of symptoms.
7. **Self-isolate:** Staying home and avoiding situations where one could come in contact with others. See [BCCDC's guide to self-isolation for those who may have been exposed but do not have symptoms](#); and [Self-isolation for those who have COVID-19 or respiratory symptoms](#).
8. **Essential staff:** HCWs that have a critical function in providing patient care (including long-term care workers that are imperative for patient care delivery). Operations leadership of health facilities have established lists of essential workers which allows staff to work if asymptomatic while following additional precautions (listed directly below) for 14 days to reduce the risk they could pose to patients, clients, colleagues or the public.
9. **Additional precautions:**
 - Self-monitor daily for signs and symptoms of illness;
 - Self-isolate at home on days when not required at the workplace.
 - Wear a surgical mask at all times and in all areas of the workplace;
 - Adhere to infection prevention and control protocols including diligent hand hygiene, cough etiquette, and the use of personal protective equipment when delivering patient care as per the [COVID-19 PPE Allocation Framework](#);
 - To the extent practical, reduce close contact with other HCW by maintaining a 2-metre separation and avoid 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

STEP 1: Determine HCW PPE level

STEP 2: Determine patient exposure scenario

STEP 3: Determine risk level

STEP 4: Implement recommended measures

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	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)*	Wore mask	LOW RISK	<p>If HCW asymptomatic,</p> <ol style="list-style-type: none"> CONTINUE to work SELF-MONITOR for symptoms for 14 days
	NO mask		
No surgical 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 surgical mask	-		
No PPE	Wore mask	HIGH RISK	<p>If HCW asymptomatic and essential:</p> <ol style="list-style-type: none"> CONTINUE to work WITH PRECAUTIONS (wear mask at all times, practice physical distancing) SELF-MONITOR for symptoms for 14 days
	NO mask		
No surgical mask/ No eye protection	NO mask	HIGH RISK	<p>If HCW asymptomatic and non-essential:</p> <ol style="list-style-type: none"> EXCLUDE from work + SELF-ISOLATE for 14 days NOTIFY supervisor/delegate SELF-MONITOR for symptoms
	Active cough		
Perform AGMP + No N95 respirator/ No eye protection	-	HIGH 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

HCW and patient were more than 2m apart during entire interaction

Patient-provider interaction lasted less than 15 minutes (may be cumulative)

Patient wore a mask during entire interaction

Patient did NOT wear a mask

Patient had active cough or cough-inducing procedure performed (e.g. swabbing)

*Risk level may increase for not wearing gloves and gown if there was extensive body contact with the patient's body fluids.



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"/> Surgical or procedure mask <input type="checkbox"/> N95 respirator for AGMP <input type="checkbox"/> Eye protection (goggles 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 mask <input type="checkbox"/> No 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):	

Recommendations for Risk Assessment and Management of Health Care Worker Exposures to COVID-19 Patients:
 Interim Guidance for the Provincial Workplace Health Call – April 28, 2020

