



# Coronavirus COVID-19

BC Centre for Disease Control | BC Ministry of Health



## Safe Handling of Bodies of Deceased Persons with Suspected or Confirmed COVID-19

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Ministry of Health



BC Centre for Disease Control

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



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## Purpose

This document provides provincial guidance to protect the safety of workers handling COVID-19 suspected or positive decedents, inform standardized operating procedures and address specific COVID-19 considerations with respect to the care of the body after death.

In recognition that communication of the decedent's COVID-19 status and related details may not include complete and/or reliable information, **ALL** bodies must be handled diligently using the precautions outlined below.

## Background

The spread of COVID-19 from a living person happens at close contact (within 2 meters) from respiratory droplets produced when an infected person coughs or sneezes<sup>1</sup>. This is consistent with the mechanism by which influenza and other common respiratory pathogens are spread. This route of transmission is of less concern when handling human remains or performing post mortem procedures, however, there may be spread by contact or inhalation, especially if there is full post mortem examination (autopsy) of a body.

The evidence base regarding the risks of COVID-19 transmission from handling the bodies of deceased persons suspected or confirmed to have COVID-19 is in the very preliminary stages of development. In the interim, it is appropriate to handle all deceased persons in accordance with the much more robust body of evidence that exists for cases of influenza.

**The potential risk of COVID-19 transmission is considered low if appropriate precautions are taken.**

Key COVID-19 risk factors relate to<sup>2</sup>:

- (1) Direct contact with human remains or bodily fluids where the virus is present; and
- (2) Direct contact with contaminated fomite (e.g., equipment and environmental surfaces).

## General Recommendations

- Instruct employees to stay at home if they are sick to avoid spreading illness to others.
- Ensure all employees practice diligent hand hygiene at all times.
  - Wash hands regularly with plain soap and water for at least 20 seconds or use alcohol-based hand sanitizer with at least 70% alcohol content.
  - Antibacterial soap is NOT required for COVID-19.
- Practice cough etiquette. Cough into your elbow or cover your mouth and nose with a disposable tissue when you sneeze. Immediately dispose of all used tissues in an appropriate waste bin and wash your hands right away.
- Do not touch your eyes, nose or mouth with unwashed hands.
- Do not share food, drinks, unwashed utensils, cigarettes, vaping devices, joints or bongs.

- Post signs in your facility to encourage hand hygiene among all staff: <http://www.bccdc.ca/health-professionals/clinical-resources/covid-19-care/signage-posters>
- Maintain a physical distance of two meters from others whenever possible: <http://www.bccdc.ca/health-info/diseases-conditions/covid-19/prevention-risks/physical-distancing>
- Post signs in your facility promoting physical distancing: [http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID19\\_PhysicalDistancingPoster.pdf](http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID19_PhysicalDistancingPoster.pdf)

## Precautionary Strategies

Personal protective equipment (PPE) is one part of an overall precautionary strategy to minimize the risk and spread of disease<sup>3</sup>.

- Perform a Point of Care Risk Assessment (PCRA) prior to all interactions with the deceased.
- Individuals not wearing PPE should avoid all unnecessary contact with the deceased<sup>2</sup>.
- Workers must follow Routine Practices<sup>4</sup>, which includes the appropriate use of PPE, performing diligent hand hygiene with plain soap and water or alcohol-based hand sanitizer (70% alcohol content), appropriate cleaning and disinfecting of equipment and appropriate environmental cleaning.
  - For more information about Routine Practices, please see: <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/routine-practices-precautions-healthcare-associated-infections.html>
- Workers should always wear disposable gloves and long-sleeved, fluid-resistant gowns when handling the deceased<sup>2</sup>.
- If the Point of Care Risk Assessment determines a risk for splashes from the patient's body fluids or secretions onto the worker's body or face, then a fluid-resistant procedure/surgical mask and eye protection should also be worn.
- Post-mortem examinations may carry a higher risk for aerosol-generating medical procedures (AGMPs)<sup>2</sup>. Accordingly, an N95 respirator should be worn in addition to gloves, gown and eye protection. Diligent hand washing is essential.
- All single use PPE should be immediately disposed of in an appropriate receptacle, unless indicated otherwise by organizational guidelines.

## COVID-19 Testing: Staff and Household Members

Testing for COVID-19 is recommended for anyone with cold, influenza or COVID-19-like symptoms, even mild ones. If an individual has no symptoms, they do not require a test. A health care provider may also decide whether a person requires testing.

- In community settings, advise caregivers and household members who are concerned they may have COVID-19 because the decedent had respiratory symptoms (i.e., cough, fever, difficulty breathing) to use the online COVID self-assessment tool (<https://bc.thrive.health/>). The self-assessment tool will help determine if they need further assessment for COVID-19 testing by a health care provider or at a local collection centre.

Learn more here: <http://www.bccdc.ca/health-info/diseases-conditions/covid-19/testing>

## Preparations at Site of Death in Health Care Facilities and Community Settings (e.g., Homes)

- Follow Routine Practices and, at minimum, wear gloves and a gown, if available.
- Manage each situation on a case-by-case basis, balancing the rights of the family with the risks of exposure to infection<sup>5</sup>.
- Apply principles of cultural sensitivity. If loved ones of the deceased wish to view the body before or after removal from the isolation room or area in a health care facility, they may be allowed to do so<sup>5</sup>.
- The cultural context of the local community should also be respected<sup>5</sup>.
- Provide adequate explanation to the family on all key decisions.
- If indicated, provide PPE to the family, along with instruction for its proper use<sup>5</sup>.
- Those observing the preparation of the body should maintain a 2-meter distance.
- See additional details (below) regarding protections for mourners.

## Preparations in Remote and Isolated Communities

- Bodies may be kept in the home immediately after death. If left untouched, these bodies are not a transmission risk to others.
- Where funeral service personnel are not available, community members may move the body. Direct contact should be avoided unless absolutely necessary.
- See additional details (below) regarding the safe transportation and handling of dead bodies.
- In contexts where mortuary services are not standard or reliably available, or where it is usual for ill people to die at home, please see the World Health Organization's [Infection Prevention and Control for the Safe Management of a Dead Body in the Context of COVID-19](#) for guidance.

## Transporting the Deceased

- Follow Routine Practices and, at minimum, wear a gown and gloves, if available.
- Place the decedent into a clean, leak-proof 0.4 MIL (or greater) body bag following viewing on the unit or ward.
- Place the occupied body bag on a clean transport gurney, with no items placed outside of the body bag.
- Remove PPE and perform hand hygiene.
- Put on a new pair of gloves.
- Use a new cloth or wipe to clean and disinfect the body bag. Use cleaning and disinfectant products that are commonly used in health care settings (see Table 1, below).
  - To avoid contaminating your cleaning solution, do NOT re-dip the dirty cloth back into the cleaning solution. Use clean cloths each time. This may require using a large number of cloths.
- Use a new cloth/wipe to clean and disinfect the handles and any other surfaces on the gurney or transport equipment that may have been contaminated.
  - To avoid contaminating your cleaning solution, do NOT re-dip the dirty cloth back into the cleaning solution. Use clean cloths each time. This may require using a large number of cloths.
- Remove gloves and perform hand hygiene.
- Put on a new pair of gloves to transport the body. Additional PPE is not required, unless the Point of Care Risk Assessment determines otherwise.
- Follow standard organizational procedures in moving the body to the funeral home or the designated storage location within facility (e.g., mortuary, refrigerated crypt, enclosed care space or temporary surge location) for pick-up by a funeral home or transfer service.
- Complete all of the processes outlined in your organization's SOPs for caring for the deceased that have not been addressed above.

## Environmental Cleaning and Disinfection and Waste Management

- In health care facilities, follow standard organizational guidelines and processes regarding environmental cleaning and disinfection of the patient area, handling of linens and waste management.

For non-health care settings:

- Cleaning and disinfection of surfaces<sup>6</sup>
  - Advise caregivers and household members to clean all surfaces in the decedent's room or surfaces used by the decedent.
  - Disinfect surfaces using common household disinfectants. If none are available, see Table 1 below for alternatives.
- Wash laundry thoroughly<sup>6</sup>

- Laundry and clothing used by the decedent should be placed in a laundry basket with a plastic liner. The basket should be cleaned and disinfected after use.
- Wash clothing with regular laundry soap using the warmest water temperature allowed. Follow washing instructions on all clothing labels.
- Clean your hands with plain soap and water or alcohol-based hand rub immediately after doing the laundry.
- Put waste into regular garbage bins<sup>6</sup>.
  - When emptying wastebaskets, take care to not touch used tissues with your hands.
  - Line wastebasket with a plastic bag to make waste disposal easier and safer.
  - Clean your hands with soap and water after emptying waste baskets.

**Table 1: Disinfecting Agents Known to be Effective Against Coronaviruses.<sup>7,8</sup>**

	Agent and Concentration	Uses
1.	<b>1:100 dilution Chlorine: bleach – sodium hypochlorite (5.25%)</b> 500 ppm solution 10 ml bleach to 990 ml water	Used for disinfecting surfaces and medical equipment (e.g., counters, door knobs, stethoscope, blood pressure cuff). Allow surface to air dry naturally.
2.	<b>1:50 dilution Chlorine: bleach - sodium hypochlorite (5.25%)</b> 1,000 ppm solution 20 ml bleach to 980 ml water	Used for disinfecting surfaces contaminated with bodily fluids and waste (e.g., vomit, diarrhea, mucus, feces) after cleaning with soap and water first). Allow surface to air dry naturally.
3.	<b>Accelerated Hydrogen Peroxide 0.5%</b>	Used for cleaning and disinfecting surfaces and medical equipment.
4.	<b>Quaternary Ammonium Compounds (QUATs)</b>	Used for cleaning and disinfecting of surfaces (e.g., floors, walls, furnishings).

**IMPORTANT NOTES:**

- ➔ *Ensure disinfectant product has a Drug Identification Number (DIN) on its label.*
- ➔ *Follow product instructions for dilution, wet contact time, and safe use (including wearing appropriate protective equipment and having good ventilation).*
- ➔ *Clean visibly soiled surfaces before disinfecting, unless otherwise stated on the cleaning product.*

## Autopsy

This section is particularly relevant for pathologists and morgue attendants.

- If an autopsy is required:
  - Follow organizational guidelines AND
  - Follow the additional infection control guidance in this document AND
  - Follow the autopsy practices relating to possible cases of COVID-19, issued by the Royal College of Pathologists<sup>9</sup>: <https://www.rcpath.org/uploads/assets/d5e28baf-5789-4b0f-acecfe370eee6223/fe8fa85a-f004-4a0c-81ee4b2b9cd12cbf/Briefing-on-COVID-19-autopsy-Feb-2020.pdf>
- In addition to routine PPE, an N95 respiratory should be worn for autopsies due to risk of AGMPs.

## Storage and Preparation of Body Before Burial or Cremation

- The use of rental caskets should be avoided, as it is challenging to properly disinfect reusable parts of rental caskets. This presents an unnecessary risk for the spread of COVID-19.
- When accessing the body from the body bag, place a non-medical face mask or other fabric over the nasal and oral cavities to prevent droplet dispersal during movement of air from the lungs.
- Shrouding and preparation of the body for viewing and/or funeral can be performed by following Routine Practices and wearing gown and gloves.
- Additional considerations while handling the body include, but are not limited to:
  - Avoid unnecessary manipulation that may expel air from lungs.
  - Implement regular environmental decontamination of all surfaces and equipment.

## Embalming

- Additional considerations when embalming:
  - Follow organizational policies.
  - Follow Routine Practices and, at minimum, wear a gown and gloves.
  - If the [Point of Care Risk Assessment](#) (PCRA) determines a risk for splashes, eye protection and a surgical/procedure mask should be worn.
  - When involving embalming procedures with the potential for generating aerosols, ie hydro aspiration, a fit-tested N95 respirator should also be worn.

## Bathing/Dressing of the Body

- It is recommended that only licensed funeral staff or persons trained in PCRA and appropriate PPE bath and dress a body.
- Minimum PPE to bath and dress a body is a gown and gloves.
- Perform hand hygiene with plain soap and water or alcohol-based hand rub afterwards.

## Mourners

- Mourners may view the embalmed body or un-embalmed body.
- If mourners, religious or cultural representatives are to touch the body, they must perform hand hygiene with plain soap and water or alcohol-based hand rub afterwards.
- Encourage loved ones who want to touch the body to avoid touching the facial area and instead consider hand holding, stroking the arm, etc.

## Labeling of the Body

- Do not label a body as COVID-19 positive or negative.
- Labelling can give a false sense of safety. Always remember to follow precautions at all times.

## Burial / Cremation

- Ask if it is important to have staff of the same gender of the deceased prepare the body for burial or cremation.
- The deceased with suspected or confirmed COVID-19 can be buried or cremated as usual<sup>2</sup>.

## References

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