

# Generic Disinfection Procedures for Coronavirus Contamination

## Version 1.1

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The following are generic procedures for the disinfection of buildings where coronavirus (infectious agent causing COVID-19) contamination may be present. This is a work in progress and will be updated as needed. *These procedures must be used in conjunction with customized procedures for specific site conditions, cleaning products and methods, under the oversight of an infection control and/or occupational hygiene specialist.* The procedures are intended to supplement existing cleaning/disinfection practices and COVID-19 prevention measures such as use of appropriate hand-hygiene procedures to prevent spread of the virus and cross-contamination within a building.

Disinfection shall be conducted as follows:

1. Screen personnel who will engage in disinfection operations to ensure that they:
  - a. Do not have symptoms of flu or colds
  - b. Have not travelled outside of Canada in the past 14 days
  - c. Have not been told to self-isolate because of close contact with someone who is ill or has travelled outside Canada

Keep record of above information for all personnel entering the area/building.

2. Personnel are to maintain a 2 meter distance from building occupants. Where feasible, building occupants should remain in separate rooms from cleaning personnel.
3. Ensure that before they engage in disinfection operations, all personnel have received training on use and application of disinfectant products, use of personal protective equipment (PPE), personal hygiene including hand washing techniques and avoiding touching face, and personal decontamination/disinfection procedures.
4. Arrange with building owner or their designate for access to building and locations for unloading of contractor equipment and supplies and a staging area for donning and doffing of PPE.
5. Determine whether building occupants will be present and where they will be located in relation to the cleaning areas. Take measures to ensure that occupants are not exposed to contaminants and cleaning products.
6. Post signs at entrances to the cleaning areas warning that cleaning is under way and those who enter must be protected.

7. Supply and install alcohol-based hand-rub station in staging area. Preferably the station also has access to hand washing facilities. Personnel must wash hands in accordance with recommended practice or use hand-rub station prior to donning PPE and prior to leaving the building. Donning and doffing activities in the staging area must be separated by a barrier and/or a physical distance of at least 2 meters.
8. Supply and properly don following PPE:
  - a. Disposable virus-impervious full-body coveralls with hood and shoe covers,
  - b. Protective gloves appropriate to the cleaning products used. Don two pairs of gloves – one inside of sleeve cuffs of coveralls and one that covers cuff of sleeves. Ensure no skin is exposed.
  - c. Fit-tested full-facepiece respirator or half-facepiece respirator with eye protection. The respirator will be equipped with P100 cartridges that also, where necessary, provide protection from the chemicals contained in the cleaning products.
9. Follow additional procedures that may be required for entry/exit into work areas (PPE, hygiene practices, etc.) and cleaning processes required for sensitive environments (food processing, pharmaceutical production, daycare, healthcare facilities, etc.).
10. Vacuum flooring surfaces, soft and/or porous surfaces, and settled dust on hard/other surfaces using a vacuum cleaner equipped with a HEPA-filter (unit must be certified by aerosol challenge test). Vacuuming of surfaces must be done with overlapping runs to ensure entire surface is vacuumed. If surfaces are soiled/dirty, clean with detergent and water before disinfecting. Do not use any dry dusting, wiping, sweeping or mopping methods.
11. Supply a DIN- or EPA-registered disinfectant (effective virucide for COVID-19), associated applicators, and cleaning tools/materials. Disinfectant shall be free of noxious odours and must be compatible with disinfectants currently used in the building to prevent potential formation of harmful byproducts due to mixing of chemicals. Disinfectant shall not negatively affect the air quality in the building. Application of disinfectant shall not cause any damage to building finishes and equipment. Proposed disinfectant shall be subject to review and approval by ECOH and the building owner prior to use.
12. Apply disinfectant uniformly to ensure entirety of surface is treated. Overlap disinfectant application and apply/wipe in both directions, 90 degrees to each other, to ensure complete and uniform application on walls, floors, desks, counters, chairs/benches, etc. Use application method approved by manufacturer. Follow manufacturer's instructions with regard to disinfectant contact time after application. Do not re-use wipes that may have been contaminated.
13. Disinfect all surfaces - walls, doors, handles, radiator/ventilation grilles, sinks, fixtures, windows, window frames and ledges, blinds, partitions/dividers, equipment, and furniture up to an approximate height of 7'. Disinfect floor after all other items have been cleaned. Do not re-enter a disinfected area from an undisinfected area to prevent cross-contamination. If an area must be re-entered, or if other personnel enter the area after disinfection, disinfect the affected floor area and any other touch points.

14. If spraying, use low pressure spraying methods to prevent aerosolization of contaminated materials.
15. Turn ventilation system off during cleaning. Do not use air blowers or compressed air.
16. If disinfection of ventilation equipment is needed, use only a disinfectant approved for ventilation system use in accordance with manufacturer's directions. If disinfecting HVAC equipment, install disinfectant fogging device up-stream of heating/cooling coils while HVAC system is operating. Apply disinfectant to used filter media prior to removal of filters and sealing of filters in waste bags for removal. If disinfection of ventilation ducts is required, retain specialist HVAC cleaning contractor.
17. Apply disinfectant to carpets and fabric/soft surfaces and leave in place. Do not soak seating surfaces – apply disinfectant in a manner that will allow sufficient drying between disinfection and use of seating surfaces.
18. Disinfect furniture and exterior of equipment. Take care when disinfecting computers, phones and other electronic or moisture-sensitive equipment. Apply disinfectant to cleaning cloth, rather than direct application of disinfectant on equipment, and wipe down all exposed/accessible surfaces. Paper and other items contained within cabinets or storage containers will not typically require decontamination, however, entire exterior of cabinets and containers shall be cleaned/disinfected.
19. Clean/disinfect tools and any equipment prior to removal from an area. Alternatively, tools and equipment can be placed in a clean bag for transport to next area.
20. If there has been a known instance of COVID-19 infection in a specific location, if possible, close off the location from the ventilation system and the rest of the facility. If possible, open windows and/or doors to achieve natural ventilation. Leave the location undisturbed for at least 24 hours before entry. Then clean using the methods described above.
21. Do not re-use drop sheets. After use, and prior to removal, apply disinfectant to drop sheet and place in waste bag. Apply disinfectant to floor area under drop sheets after removal.
22. Place all waste materials, including general waste, used PPE, soiled cleaning materials and used filters, in sealed bags and wipe sealed bags with disinfectant. They may be disposed of in regular waste containers but must not be compacted. Do not store bags inside building.
23. Remove PPE in a clean area as follows:
  - a. Wash or sanitize gloves and exterior surfaces of PPE
  - b. Remove first pair of gloves – turning inside out and place in waste bag
  - c. Remove disposable coveralls – carefully pull back head covering and unzip coveralls, pull sleeves inside out and roll down suit inside out
  - d. Remove shoe covers by grasping with coveralls
  - e. Place and seal suit and boot covers in waste bag
  - f. Sanitize gloves
  - g. Remove respirator

- h. Seal P100 filter cartridges with tape if to be reused
  - i. Clean/disinfect respirator and store in clean container.
  - j. Remove second pair of gloves – turning inside out and place in waste bag
  - k. Wash or sanitize hands and wipe or wash face – conduct this step at least 2 metres away from other personnel who are doffing PPE
24. Before leaving area/building, wash hands using required hand hygiene technique or disinfect hands with alcohol-based hand-rub.

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