

Cleaning and Disinfecting for Respiratory Infectious Diseases (RIDs)



Introduction

This tip sheet provides cleaning and disinfecting guidance to employers and workers. Cleaning and disinfecting are different activities that [work together](#) to reduce the risk of respiratory infectious disease transmission. They provide additional protection when [layered](#) with other workplace controls and public health measures.

Employers must do everything practicable to protect the health and safety of their workers. In all cases, the requirements of your jurisdictional public health authorities and [occupational health and safety regulators](#) must be followed.

Also refer to the following additional guidance on cleaning and disinfecting:

- [Sanitation and Infection Control for Cleaning Staff](#) (CCOHS)
- [Use household chemicals safely](#) (PHAC)

Respiratory Infectious Diseases and Surfaces

Respiratory infectious diseases can spread when an infected person breathes, speaks, sings, shouts, coughs, or sneezes, and releases respiratory particles. These respiratory particles can land on and contaminate surfaces. Spit or nasal discharge can also contaminate surfaces, for example if an infected person sneezes into their hand or wipes their nose, and then touches a surface with unwashed hands.

Respiratory infectious diseases may then spread to others when another person touches a contaminated surface, and then touches their mouth, nose, or eyes (mucous membranes) with unwashed hands.

Touching contaminated high-touch surfaces and using shared objects can increase the risk of respiratory infectious disease transmission in the workplace, so it is important for employers to protect their workers and others by developing a cleaning and disinfecting program. Cleaning and disinfecting high-touch surfaces and objects can remove and kill infectious particles to reduce the spread of respiratory infectious diseases through contaminated surfaces and objects.

Develop a Cleaning and Disinfecting Program

- Perform a [risk assessment](#) before implementing new cleaning and disinfecting procedures or updating existing ones. Avoid creating new hazards
- Develop a written procedure for reference and training
- Create a schedule for cleaning and disinfecting
- Record the cleaning and disinfecting activities through checklists, digital record, or other similar methods
- Make sure the program includes shared areas such as kitchens, washrooms, break rooms, reception areas, meeting rooms, congregate housing, elevators, and vehicles
- Identify and list the frequently touched surfaces and shared objects in your workplace that are most likely to be contaminated, such as:
 - Light switches, door handles, control buttons, counters and tabletops, chairs, railings, payment devices, automated teller machines (ATMs), vending machines, computers/tablets/touchscreens, keyboards and mice, phones, pens or pencils, faucets, taps, toilets/flush levers, sanitizer dispensers, water bottle refill stations, steering wheels, dashboards, and switches
- High-touch surfaces and shared objects should be cleaned and disinfected more often than lower risk ones, as well as when visibly dirty, or between users
- If renting or loaning equipment to clients, visitors, or others, clean and disinfect the equipment between users. Consider having a designated location for returning used equipment. Where possible, have users bring their own equipment such as listening devices, strollers, or sports equipment
- Consider how to effectively clean and disinfect soft furnishings and objects such as cushions and soft toys. Reduce the use of soft-surfaced objects as much as possible

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- Properly wash dishes, glasses, cutlery, etc. between users or use disposable ones that are discarded after each use
- Keep items that have been cleaned and disinfected or washed separate from potentially contaminated objects and surfaces
- Have a separate program for washing potentially contaminated clothing and linens, if applicable:
 - Encourage workers to wear clean clothing each day. Soiled clothes and uniforms should be washed before they are worn again, either at home or by a laundry service
 - Transport soiled items in a sealed container to the washing facility and do not shake them out before adding them to the washing machine
 - Machine wash laundry using the hottest water setting, use laundry detergent and dry thoroughly
 - Keep clean items separate from soiled ones

Provide Supplies

- Provide adequate cleaning and disinfecting supplies and make sure they are accessible. In some instances, it may be useful to provide disinfecting wipes to customers, including for disinfecting gym equipment or casino games
- Inspect soap, hand sanitizer, and paper towel dispensers. Make sure they are functional and resupplied as needed
- Make sure that requirements for supplying [personal protective equipment \(PPE\)](#) are met. [Who pays for PPE](#) varies by jurisdiction
- When working with chemicals, workers should wear appropriate gloves, eye protection such as goggles or a face shield, an apron, and suitable footwear. In some cases, respiratory protection may be required. Refer to the product manufacturer's instructions or safety data sheet (SDS) for details
- Replace garbage bins with no-touch or foot-activated receptacles
- Line garbage cans with bags for safe and convenient disposal of contaminated items, such as used PPE, tissues, and cleaning materials

Train and Educate

Provide workers with training and education on:

- How respiratory infectious diseases spread
- Cleaning and disinfecting procedures
- The importance of following the product manufacturer's instructions or SDS to make sure the product cleans or disinfects effectively
- Chemical safety:
 - Proper ventilation of the work area (e.g., open windows or doors, run exhaust fans)
 - Safe handling and disposal
 - Safe product storage, such as keeping containers away from ignition sources and incompatible chemicals
 - Appropriate PPE for the product being used
- How to properly wear, remove, work with, inspect, and care for PPE (if workers are required to wear it), and to understand its limitations
- When and how to perform [hand hygiene](#), such as before and after cleaning or wearing PPE
- Other health and safety training requirements for your jurisdiction, such as understanding the [Workplace Hazardous Materials Information System \(WHMIS\)](#) and [safety data sheets](#) for any hazardous products that workers are expected to use

Clean Before Disinfecting

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Cleaning is the act of removing debris and residues from dirty surfaces and objects. It does not necessarily destroy pathogens (bacteria, viruses, and other microscopic organisms that cause disease) but can remove some during the cleaning process.

- Clean visibly dirty surfaces before disinfecting. Dirt can physically block disinfectants from reaching pathogens and may contain materials that make disinfectants less effective
- There are many ways to clean:
 - Hot or cold water (wetting, soaking, jet spray, laundry agitation, flushing)
 - Cleaning products (detergents, liquids, soaps, gels, powders)
 - Scrubbing or wiping (damp cloth, sponge, paper towel, mop)
 - Dry collection (dusting, sweeping)
 - Air (vacuum, high-pressure air stream)

When selecting the appropriate cleaning method(s) for your workplace, consider the following:

- Damp cleaning methods (damp clean cloths and wet mops) are more effective at collecting and containing particles than dry methods (dusting and sweeping).
- Damp cleaning methods are also less likely to distribute respiratory particles carrying pathogens into the air and onto other surfaces
- Replace dry cleaning methods with damp ones where possible
- Cleaning tools, such as brooms, compressed air wands, and pressure washers, create air turbulence that could distribute pathogens further. Avoid using these cleaning methods where possible unless no suitable alternatives are available

Disinfect

Disinfecting is the act of treating a surface or object to destroy or inactivate pathogens. Disinfection is recommended for frequently touched surfaces and shared objects.

- Choose the best way to disinfect:
 - Chemical disinfectants (liquid, spray, soak)
 - Diluted bleach solution
- Choose a disinfectant product with a drug identification number (DIN) on the label. This number means that it has been approved by Health Canada for use
- Follow the disinfectant label instructions. Use the recommended quantity and dilution. Many disinfectants require contact with the surface for a specified amount of time to be effective, for example, 10 minutes
- Allow the surface to air dry or wipe down after the recommended contact time
- Follow the manufacturer's instructions for disinfecting high-touch electronics such as touch screens, pin pads, keyboards, or tablets if liquids can be withstood
- Some materials may be damaged by chemical treatment, in which case steam-sterilization (autoclave) may be a suitable alternative
- Never use hard surface disinfectant products to sanitize your skin. Contact could be hazardous to your health (refer to the product's SDS). Instead, use an alcohol-based hand sanitizer

Using bleach solution:

- If commercial disinfectant cleaning products are unavailable, hard surfaces can be disinfected using a 0.1% sodium hypochlorite (bleach) solution
- This solution can easily be prepared by:
 - Mixing 5 millilitres (1 teaspoon) of household bleach (5% sodium hypochlorite) into 250 millilitres (1 cup) of water, or
 - Mixing 20 millilitres (4 teaspoons) household bleach into 1 litre (4 cups) of water

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- Follow safe procedures when [working with bleach](#):
 - Always add bleach to water, not water to bleach
 - Bleach solutions should be clearly labelled and used shortly after preparation. After 24 hours they lose their disinfectant properties
 - Do not mix bleach with any other chemicals. Mixing bleach with vinegar, glass cleaners, ammonia, alcohol, and other chemicals can release toxic gases
 - Bleach is corrosive. To prevent damage, test surfaces before using a bleach solution
 - Never use bleach or diluted bleach on yourself or others
 - Ensure proper ventilation by opening windows or doors and running exhaust fans, during and after using the product
 - Use goggles or a face shield and rubber gloves (or other types as recommended by the manufacturer) to protect your eyes and skin when using the product
 - Wash your hands with soap and water after cleaning with the product
 - Store bleach in a safe, cool, dry place. Keep away from direct sunlight and heat. Close the cap tightly after each use

Handle Used Materials Carefully

Used cleaning materials such as sponges or paper towels can contain residual chemicals or pathogens, so handle them carefully:

- Perform hand hygiene after cleaning and disinfecting, and after handling used cleaning materials or garbage:
 - Wash hands with soap and water for at least 20 seconds to remove any chemical residue or pathogens that may have contacted the skin
 - If soap and water are not available, use an alcohol-based hand sanitizer containing at least 60% alcohol
- Use dedicated cleaning and disinfecting materials (towels, sponges, mops, etc.) that can be washed and dried completely or disposed of after each use
- Store soiled reusable materials in a closed laundry bag or hamper
- Put used disposable materials and PPE such as paper towels or gloves in a lined garbage bin
- Seal liner bags before disposing of them with regular waste
- Use disposable gloves when handling garbage
- Safely dispose of waste chemicals and empty containers. Some products can harm the environment. Follow the waste disposal laws in your local municipality

For further information on respiratory infectious diseases, including COVID-19, refer to the [Public Health Agency of Canada](#)

Disclaimer: As public and occupational health and safety information may continue to change, local public health authorities should be consulted for specific, regional guidance. This information is not intended to replace medical advice or legislated health and safety obligations. Although every effort is made to ensure the accuracy, currency, and completeness of the information, CCOHS does not guarantee, warrant, represent or undertake that the information provided is correct, accurate or current. CCOHS is not liable for any loss, claim, or demand arising directly or indirectly from any use or reliance upon the information.