

Infrastructure Health and Safety Association Guidance on PPE (cleaning respirators) during COVID-19

Overview

During the COVID-19 (coronavirus) outbreak, we all need to do our part to keep workers, customers and the public safe and healthy so we can stop the spread and prepare to reopen the province, when we are ready.

Below is a set of resources, tips and best practices to help employers and employees prevent the spread of COVID-19 and work together to reopen the province.

Employers and workers in Ontario have certain duties and rights under the Occupational Health and Safety Act (OHSA) and its regulations. Employers should also review and follow any applicable directives and guidance coming from the Chief Medical Officer of Health and Ministry of Health.

Learn more about:

- [workers' rights](#)
- [employers' responsibilities](#)

Best practices

Recognize hazards and assess risks: The first step to controlling risks in a workplace is to identify the risks. This applies to all workplace hazards, not just COVID-19. Identifying and controlling workplace hazards is required of all employers in Ontario under the [Occupational Health and Safety Act](#) and its regulations.

Some important COVID-19 risk information includes how it is spread and what can increase the risk of a worker becoming infected. COVID-19 can be spread at the workplace in two main ways:

1. person to person – by people who are in close contact
2. by surfaces or objects – when people touch their face with contaminated hands

The level of risk in an activity will be related to the number of opportunities for transmission of the virus. This includes how close people come to each other, how many different interactions there are between people, how often people touch surfaces or objects and how long people stay in a space.

It is possible for COVID-19 to be spread by people who do not have any symptoms. This makes effective control measures very important. We must act as if everyone is infected when setting up controls.

The risk of severe health outcomes is not the same for all workers. The risk increases with age and is higher for people with [certain medical conditions](#).

Personal protective equipment (PPE) such as a respirator can help prevent the spread of this virus. Workers may be required to wear a respirator as part of the company's policy and procedures or as part of the controls from a job safety analysis (JSA) for the jobsite. Proper cleaning procedures must be followed to maintain the effectiveness of respirators.

If an employer requires workers to wear a respirator, the employer must have a respiratory protection program in place (O. Reg. 833, s. 9). This program must include instruction and training for the workers on the proper use, care and limitations of the use of a respirator.

Controls:

Infection prevention and control measures prevent the spread of the virus by breaking the chain of transmission. For example, [public health guidance](#) includes staying at least 2 metres away from others which avoids close contact; washing hands removes the virus and prevents people from touching their faces with contaminated hands.

For COVID-19 in the workplace, it is recommended that employers and business owners conduct a risk assessment to determine the most appropriate controls and actions for a particular workplace/situation. Reference the [IHSA's guide](#) on the risk assessment process to help facilitate this and review [Sample 1](#), [Sample 2](#) for examples.

Always start by considering the most effective controls first. It is best to begin by trying to eliminate the hazard – to remove it from the workplace altogether. Where that is not possible, use multiple engineering and administrative controls first to prevent the spread. Protective equipment (including personal protective equipment (PPE) and community protective equipment) should be relied on only where engineering and administrative controls do not sufficiently reduce the risk to workers.

In addition to the above recommendations, employers should determine whether personal protective equipment (PPE)* needs to be part of their hazard control plan. The need for PPE should be based on a risk assessment taking into account environmental conditions and also take into consideration input from the local public health unit. Although proper use of PPE can help prevent some exposures, it should not take the place of other control measures.

- Workers must use personal protective equipment as required by their employer.
- Workers should be trained on the proper use, care and limitations of any required PPE.

*NOTE: Please be reminded that most face coverings (non-medical masks) have not been

tested to a known standard and do not constitute PPE. In some circumstances, face coverings may be used as an effective means of source control, but should not be viewed as an appropriate substitute for physical distancing in the workplace.

It may be necessary to re-use elastomeric half-facepiece respirators or full-facepiece respirators to prevent transmission of microorganisms/coronaviruses to personnel. It is imperative you start with washing/sanitizing your hands prior to donning/doffing as well as during cleaning your respirator to avoid anything being transferred to your face or respirator.

Ensure that all workers have been trained on the proper procedures for cleaning and disinfecting respirators. An adequate supply of cleaning and disinfecting products should be made available for the sanitization of respirators.

Consider using the following general cleaning tips, which are included in the 3M Technical Bulletin referenced below:

- Cleaning is recommended after each use. Nitrile or vinyl gloves, as well as other PPE as indicated, should be worn during cleaning.
- Remove any filters or cartridges and discard them if applicable. Some respirators have a hard plastic case surrounding the filter media. These hard surfaces should be wiped down with a disinfectant. Facepieces may be further disassembled as necessary.
- As per the manufacturer's instructions, inspect facepieces to identify any damage or excessive wear.

Repair or replace facepieces as necessary.

- Clean facepieces (excluding filters or cartridges) by immersing them in a warm cleaning solution and scrubbing them with a soft brush. Water temperature is not to exceed 120°F (49°C). Add neutral detergent if necessary. Do not use cleaners containing lanolin or other oils.
- Disinfect facepieces by soaking them according to the user instructions for the disinfectant being used.
- Rinse facepieces thoroughly with fresh, warm water.
- Air-dry facepieces in a non-contaminated area.
- Inspect and reassemble respirators as described in the user instructions.
- Wash or use disinfectant wipes to clean hands before putting respirator back on when returning from break or lunch.

Note: Respirator components may become damaged over time with prolonged or extended use of disinfecting products.

Proper use and application:

- Follow the limitations of the respirator as per the manufacturer's instructions.
- Ensure proper fitting of the respirator as per the manufacturer's instructions.
- Ensure workers are following the proper policies and procedures for cleaning, maintenance, and use.

- Perform regular inspection and maintenance of the respirator. In the case of an air-purifying respirator, check for end-of-service-life indicators and establish change-out schedules for cartridges, canisters, or filters (pre- and post-use).

Evaluate:

Changes to work procedures or practices related to COVID-19 may affect the way you have routinely managed other risks in the workplace. Thus, it is recommended that you consider the various preventative measures on an ongoing basis, and review and adjust accordingly if they are not working as intended or have created new risks or challenges.

- Use knowledge-based questions to confirm that workers understand the use, care, and cleaning procedures.
- Review your process regularly to identify any opportunities for improvement and to determine if:
 - All workers have been trained on cleaning and disinfection procedures.
 - Workers are donning/doffing and wearing their respirator correctly.
 - Workers have the opportunity to express any questions or concerns about the use of their respirator, and that their questions are answered.
 - Cleaning and disinfection supplies are adequate and available.
- Monitor the workers to ensure they are following the procedure to clean and disinfect the respirator.
- Continuously engage with your workers by communicating recommendations and adjustments with supervisors.
- Continuously monitor the necessary tools, supplies, and equipment needed to meet your control measures and ensure that sufficient supplies are readily available, adequate, and accessible.
- Monitor your health and the health of your workers for symptoms such as for cough, fever, or difficulty breathing. Refer to the Government of Canada Guidelines for more info.

References:

- [Cleaning and disinfecting 3M reusable elastomeric half and full facepiece respirators following potential exposure to coronaviruses](#) (3M Technical Bulletin, January 2020)
- [Respiratory protection](#) (Ch. 15 in IHSA's Construction Health and Safety Manual)

Resources

Stay updated with daily government updates:

- [Government of Ontario](#)
- [Government of Canada](#)
- [Public Health Ontario](#)

For more information, visit: ihsa.ca/COVID-19

Ontario government and agency-issued resources about COVID-19

Develop your COVID-19 workplace safety plan: Learn how you can create a plan to help protect your workers and others from novel coronavirus 2019 (COVID-19).

[Workplace Safety Plan](#)

The [Ontario Ministry of Health](#) is providing consistent updates on the provincial government's response to the outbreak, including:

- status of cases in Ontario
- current affected areas
- symptoms and treatments
- how to protect yourself and self-isolate
- updated Ontario news on the virus

[Public Health Ontario](#) is providing up-to-date resources on COVID-19, including:

- links to evolving public health guidelines, position statements and situational updates
- synopsis of key articles updating on the latest findings related to the virus
- recommendations for use of personal protective equipment
- information on infection prevention and control
- testing information
- other public resources

Other COVID-19 resources

[Health Canada](#) outlines the actions being taken by the Government of Canada to limit spread of the virus, as well as what is happening in provinces and communities across the country. It also maintains a live update of the number of cases by province.

The [World Health Organization](#) is updating the latest guidance and information related to the global outbreak and spread beyond Canadian borders.

It also provides the most up-to-date information on:

- current research and development around the virus
- a COVID-19 situation “dashboard”
- emergency preparedness measures
- live media updates on the spread of the virus

This resource does not replace the *Occupational Health and Safety Act* (OHSA) and its regulations, and should not be used as or considered legal advice. Health and safety inspectors apply the law based on the facts in the workplace.

For more information, visit: ihsa.ca/COVID-19