



Introduction

This document provides information about the use of physical barriers as a hazard control in the workplace.

In all cases, guidance from [local public health authorities](#) and your jurisdictional [occupational health and safety regulator](#) must be followed.

For general COVID-19 prevention practices, refer to these CCOHS documents:

- [COVID-19 Health and Safety Resources](#)
- [Protect Yourself and Others from COVID-19](#)
- [COVID-19 Health and Safety Planning for Employers](#)
- [COVID-19 Prevention for Workers](#)
- [COVID-19 FAQ](#)

Consider the Risks

The risk of [COVID-19 transmission](#) is increased when:

- Person-to-person interactions are longer and more frequent, especially when less than 2 metres apart.
- Attending crowded or poorly ventilated places.
- Taking part in activities that generate respiratory particles (e.g., when speaking, coughing, etc.).
- People have inadequate hand hygiene, respiratory etiquette, or access to proper hygiene facilities.
- Frequently touching contaminated high-touch surfaces, and shared objects.
- There is a high number of local community COVID-19 cases (or an outbreak).
- COVID-19 vaccination rates among workers, their families, or the local community are low.
- COVID-19 variants which are more transmissible.

Workers may be exposed to a combination of these risks. Consider all possible COVID-19 exposure scenarios in your setting before installing barriers. Each workplace is unique. It is important for employers to assess the risks of COVID-19 spread in their specific workplace and implement appropriate public health measures (e.g. stay home when sick, wearing masks, practicing physical distancing) and hazard controls using the [hierarchy of controls](#) (i.e., elimination, substitution, engineering controls, administrative policies, and the use of personal protective equipment (PPE)).

Control Measures

To provide the highest level of protection to workers, use multiple [public health measures](#) and [workplace controls](#) in a [layered approach](#). No single measure is completely effective alone. Be careful not to create new workplace hazards or negatively impact existing safety controls. Review and adjust measures as necessary in consultation with the workplace health and safety committee or representative.

Meet your legal occupational health and safety obligations by doing everything reasonably possible in the circumstances to protect the health and safety of your workers.

Make sure workers follow the workplace policies on control measures that have been implemented.

Regularly review the effectiveness of the physical barriers and make improvements as necessary.

Use

- A physical barrier is an example of an engineering control. It physically separates people and helps prevent the

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spread of respiratory particles from person-to-person.

- Physical barriers may be used as a hazard control when it is not possible to maintain physical distancing or when there is frequent contact with others (e.g., customers).
- Physical barriers are most effective when interactions are short and infrequent.
- Physical barriers may be used in the workplace at:
 - retail point of sale
 - grocery or dining checkout
 - ticket sale counters
 - public transit driver protection
 - reception desks
 - bank teller counters
 - pharmacy pick up or drop off
- Physical barriers should always be used in conjunction with other COVID-19 control measures (e.g., reduced occupancy, adequate ventilation, use of masks, etc.).

Materials

- Barriers are often made from clear impermeable materials such as:
 - Plexiglass (acrylic)
 - Polycarbonate
 - Vinyl (curtains)
 - Glass (for permanent installations)
- Avoid increasing workplace hazards by installing temporary barriers that are light, flexible, and shatterproof.
- Physical barriers may include curtains, counter-mounted or freestanding barriers and dividers. Walls can also act as barriers and can be built from wood, drywall, steel, or glass.
- Barriers must be constructed from materials that are able to block large respiratory particles. Avoid materials such as plants, porous fabrics, paper, etc.
- In many cases, transparent materials are preferred because they do not obstruct the view of the people on either side of the barrier and are necessary for situations such as driving.
- When selecting a material type for your physical barrier, consider the following properties:
 - Durability and impermeability
 - Scratch and impact resistance
 - Ease of cleaning and disinfecting
 - Local fire code and building code requirements (e.g., use of flame-retardant and non-combustible materials)
 - Workplace-specific hazards (e.g., radiation) that will determine the type of material required for the physical barrier

Dimensions

- Determine if the barrier will be used by people who are sitting or standing.
- The height of the barrier should consider the tallest user and should cover the breathing zones of both people on either side of the barrier.
 - The breathing zone can be thought of as a bubble with a radius of 30 cm (12 inches) extending out in every direction from the mouth and nose.
- Barriers should extend 30 cm above the tallest person's nose and 30 cm below the shortest person's nose.

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- The width of barrier should be at least 60 cm (24 inches), and people should be advised to stay centered on either side of the barrier. A wider barrier may provide better protection, and prevent bypassing the barrier.
- Pass-throughs or openings for objects (e.g., documents, money, payment machines) should be as small as possible and not located in the breathing zone of either person.

Installation

- Consult your facilities manager or building owner and a ventilation specialist before installing barriers. The barriers should be setting-specific and designed to comply with applicable building and fire codes.
- Determine if any municipal construction permits are required before installation.
- Ensure that physical barriers are designed to work with the ventilation or fire protection systems in the space. When installed improperly, especially near ventilation inputs and exhausts, barriers can interfere with air movement, potentially reducing ventilation effectiveness. Consider consulting a ventilation specialist to ensure that barriers do not interfere with the airflow and ventilation of the space.
- Ensure that installation meets accessibility requirements.
- Verify that the barrier is securely installed and cannot tip or fall.
- Physical barriers should never prevent escape in an emergency.
- Verify that travel distance to exits is not increased and that exit paths are not restricted.
- Barriers mounted in vehicles must not interfere with the driver's ability to see. They should not hinder access to controls, or block emergency exit from the vehicle.
- After installation, encourage employees to report any concerns with physical barriers to their supervisor or employer. Employees can also report concerns to their health and safety committee or representative.

Cleaning and Disinfecting

- Viruses can remain on objects for a few hours to days depending on the type of surface and environmental conditions.
- Clean and disinfect both sides of the barrier regularly.
- The frequency of cleaning and disinfecting will depend on the amount of time the barriers are used. For example, barriers used in front of cashiers or bank tellers may become contaminated quickly at busy times.
- The frequency of cleaning and disinfecting will depend on the amount of time the barriers are used. For example, barriers used in front of cashiers or bank tellers may become contaminated more quickly if many people use that workstation.
- Use disinfectants to destroy or inactivate the virus but do not damage the barrier (e.g., scratch or make it opaque). The [disinfectant](#) used should have a drug identification number (DIN), meaning that it has been approved for use in Canada.
- Employees should be trained on the safe use of the cleaning and disinfecting products. Always follow the manufacturer's instructions when using, handling, or storing the product. Review the product's label, and (if applicable) safety data sheet to determine what precautions to follow (e.g., use of personal protective equipment).
- For additional information, refer to the CCOHS resource [Cleaning and Disinfecting](#).

If you or someone you know is in crisis, please contact your local hospital, call 911 immediately, or contact a [Crisis Centre in your area](#).



It is important that mental health resources and support are provided to all workers, including access to an employee assistance program, if available.

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

Note that this guidance is just some of the adjustments organizations can make during a pandemic. Adapt this list by adding your own good practices and policies to meet your organization's specific needs.

Disclaimer: As public and occupational health and safety information is changing rapidly, 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.