



Introduction

This document is for employers, managers, and workers in the manufacturing industry including machining and tobacco, textile, clothing, leather, footwear, wood, paper, chemical, pharmaceutical, plastics, rubber, glass, metal, machinery, and electronics manufacturing.

COVID-19 is a contagious disease caused by the SARS-CoV-2 coronavirus. Infected individuals can spread the virus through respiratory particles when they cough, sneeze, breathe, etc. People can become infected when they inhale particles that contain the virus or by touching contaminated surfaces and then touching their face with unwashed hands.

In all cases, follow guidance and requirements from your [local public health authority](#) and your jurisdictional [Occupational Health and Safety \(OHS\) regulator](#).

Refer to guidance from the [Public Health Agency of Canada \(PHAC\)](#) and CCOHS documents for general COVID-19 prevention practices:

- [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](#)

Specific tips for Manufacturing

- Inform workers about any health and safety controls that apply to them using the most effective methods (e.g., posters, training sessions, toolbox meetings, etc.).
- When community COVID-19 transmission risk is high (e.g., high local hospitalizations or COVID-19 cases), consider [actively screening](#) workers entering the workplace even if it is not mandatory in your jurisdiction.
- Ensure that workers [passively screen](#) themselves for COVID-19 symptoms and inform their manager if they begin feeling sick while working.
- Workers that do not pass the screening should not be allowed to access the workplace or work with others in person. They should inform their supervisor and follow the isolation requirements in their jurisdiction, if applicable. Consider offering sick leave for COVID-19 related illness and do not penalize workers who must miss work to isolate, quarantine, or recover.
- Consider allowing workers to work remotely if they do not need to be physically present in the workplace (e.g., administrative staff).
- Install transparent physical barriers between workers, where appropriate (i.e., where workers face each other such as in screening areas, when receiving or returning tools, etc.).
- Spread workstations apart to maximize physical distance. Avoid having workstations which require workers to face each other.
- Encourage workers to maximize physical distance (at least 2 metres distance whenever possible) from others (e.g., during meetings, when working around others, delivering products, receiving supplies, etc.). When physical distance cannot be maintained, workers should adopt other protective measures such as wearing a mask and practising good hand hygiene.
- When the risk of COVID-19 transmission is high, consider implementing a cohort system (i.e., dedicated groups of workers). Cohorts should:
 - Be scheduled to work the same shifts and do most activities together, including work and taking breaks



- Be assigned to a single site or building, if possible
- **Avoid** mingling with other cohorts
- If possible and applicable, modify tasks to reduce worker exertion and heavy breathing (e.g., using machinery, reducing weight of loads, reducing the pace of work, etc.).
- If vehicles are used (e.g., for deliveries) workers should:
 - Open vehicle windows if weather permits or set the ventilation system to use outside air instead of recirculating air when there is more than one individual per vehicle
 - Wash or sanitize hands before or upon entering the vehicle
 - Open doors and windows for several minutes before vehicle occupants change
- If possible, assign individual tools and equipment to each worker (e.g., computers, machinery, etc.).
- Install sanitizer dispensers in high traffic and high-touch areas (e.g., entrances, workshop floor, break rooms, etc.).
- Clean and disinfect high-touch objects and surfaces after use (e.g., tools and equipment that are being shared with others throughout the day) or at a scheduled frequency (e.g., doorknobs, handrails, physical barriers, etc.).
- Consider tagging objects that have been disinfected and keeping them separate from those that may be contaminated.
- Assign workers their own personal protective equipment, if possible. Wash or disinfect equipment between wearers if sharing cannot be avoided.
- Consider requiring that workers wear suitable masks if risk of COVID-19 transmission is high, even if mask wearing isn't mandatory in your jurisdiction (preferably respirators or medical masks). The respirator or mask used must not lower the level of protection needed from workplace hazards (e.g., a worker must not wear an N95 respirator while performing a task which requires a full facepiece respirator, as identified in the risk assessment).

Consider the Risks

The risk of [COVID-19 transmission](#) is increased when individuals are exposed to several risks at once, such as:

- When person-to-person interactions are longer and more frequent.
- In crowded spaces, especially when people cough, sneeze, or exhale forcefully.
- In poorly ventilated spaces with other people.
- When people have inadequate hand hygiene, respiratory etiquette, or do not have access to cleaning facilities and products.
- When shared surfaces and objects are touched frequently.
- When community COVID-19 hospitalizations or cases are high or increasing.
- When sick individuals are allowed to stay in the workplace.
- When individuals are exposed to several risks at once.
- When other risks are high and workplace health measures are relaxed (e.g., dropping indoor mask wearing requirements, requiring all workers to return to the workplace, etc.).

Consider all possible COVID-19 exposure scenarios in your setting and perform COVID-19 [risk assessments](#). Develop or use an existing [risk assessment form](#) to document and evaluate all work setting characteristics, activities, and job roles. It is good practice to review your assessment on a regular basis to make sure your control methods are effective.

Sample questions to ask during a COVID-19 risk assessment:

- Are indoor spaces properly ventilated?
- Where do individuals gather?
- What activities require interactions, communication, or touching shared objects?
- How long, frequent, and physically close are interactions between people?



- Are people able to maintain adequate physical distance from each other?
- Which workers are at higher risk?
- What are the high-touch surfaces and shared objects?
- Do individuals normally participate in activities that create respiratory droplets (e.g., singing, shouting, etc.)?
- Are people expected to stay in an enclosed space for an extended duration?

Control Measures

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

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 hazards or negatively impact existing safety controls. Review and adjust measures as necessary in consultation with the health and safety committee or representative.

Create and implement a written workplace [COVID-19 safety plan](#) supported by the risk assessment. A written plan may be legally required by the jurisdiction in which you operate. Refer to local authorities for details on what must be included in the plan, if it needs to be posted, etc.

Implement policies and programs to [accommodate](#) workers, particularly those who are at [high risk](#) of severe disease or outcomes (i.e., immunocompromised, have chronic medical conditions, or are older) from a COVID-19 infection.

Communication and Training

Communicate new and updated workplace controls and applicable public health measures to all workers in languages they understand. Specific training requirements and recommendations may vary depending on your jurisdiction. Allow workers the opportunity to ask questions and share concerns. Respond to questions and provide feedback within a reasonable time.

Train workers on COVID-19 specific topics such as:

- How to identify and respond to [COVID-19 symptoms](#).
- What to do if exposed and how to [get tested for COVID-19](#).
- How and when to report COVID-19 illness.
- Information on vaccines and options for [vaccination](#).
- How to prevent the spread of COVID-19 and [protect themselves](#) at work.
- Ways to stay informed using [reputable sources](#).
- When to clean, and how to safely use cleaning and disinfecting products.
- How to properly wear, handle, and care for personal protective equipment and masks.
- Information on mental health support services, including an employee assistance program (EAP), if available.
- For additional information on communication and training, refer to [COVID-19 Communication and Training](#) – CCOHS.

Post appropriate signs (e.g., [about COVID-19](#), [preventing the spread of infections](#), [hand washing technique](#), occupancy limits, encouraging physical distancing, screening poster, [mask wearing requirement](#), etc.) where they can be seen by workers and visitors, such as:

- At entrances.
- Where mask use is mandatory or recommended.
- Near high-touch surfaces.
- In washrooms, changerooms, and break rooms.
- In doorways and walkways.
- Additional locations, as needed.



Screening and Contact Tracing

The spread of COVID-19 can be reduced by:

- Screening: keeping individuals who may be infected with COVID-19 out of the workplace.
- Contact tracing: identifying and notifying people exposed to the virus and offering advice.

Screen individuals who enter the workplace, if required by your local jurisdiction. Consider having a screening program even when it is not required as an additional measure to protect your workers.

- Determine which type of screening your worksite requires: passive or active.
 - Passive screening requires individuals to self-monitor and self-report possible illness or exposure to COVID-19.
 - Active screening requires individuals to respond to questions about signs or symptoms of infection, recent possible COVID-19 exposures, or recent travel outside of Canada.
- Allow individuals that pass the screening to access the workplace. Deny access to anyone who does not pass the screening.
- Have workers who do not pass the screening contact their supervisor. The supervisor should instruct them to return (or stay) home and follow local public health guidance which may include isolation, testing for COVID-19, or contacting their healthcare provider or public health authority.
- Determine if you are required to implement contact tracing. If so, maintain a list of all individuals (for which contact tracing applies) entering the workplace, including their names, contact information, and time spent in the workplace. This information should be provided to the local public health authority if requested for the purpose of contact tracing. All information must be safely stored and destroyed as required by privacy legislation.
- For additional information on screening and contact tracing, refer to:
 - [Screening for COVID-19](#) – CCOHS.
 - [COVID-19: Contact Tracing](#) – CCOHS.

Ventilation

- Ventilate indoor spaces appropriately according to the number of occupants and types of activities.
- Open windows and doors to the outside, if possible.
- Maintain ventilation systems and seek advice from a ventilation specialist on possible improvements (e.g., increasing air exchanges per hour, reducing or eliminating recirculated air, or upgrading to air filtration and disinfection).
- If possible, run ventilation systems continuously or for two hours before and after buildings are occupied.
- Run local exhaust fans that vent to the outside to help remove contaminated air.
- Make sure that air circulation or cooling fans do not direct air flow from person to person.
- If ventilation cannot be improved, consider using portable air filtration units with high-efficiency particulate (HEPA) filters.
- Keep indoor humidity between 30% and 50%.
- For additional information on indoor ventilation, refer to:
 - [COVID-19: Guidance on indoor ventilation during the pandemic](#) – Government of Canada.
 - [COVID-19: Improving indoor ventilation](#) – Government of Canada.
 - [Ventilation helps protect against the Spread of COVID-19 \(POSTER\)](#) – Government of Canada
 - [Indoor Ventilation: Guidance During The COVID-19 Pandemic](#) – CCOHS.
 - [Indoor Ventilation During COVID-19 \(video\)](#) - CCOHS.

Physical Barriers

Manufacturing



Install transparent physical barriers to reduce the spread of respiratory particles. Barriers should be:

- Positioned to block the flow of respiratory particles between individuals, especially if the interactions are frequent and less than 2 metres apart.
- Tall and wide enough to cover the breathing zones of both individuals on either side.
- Made from non-porous materials.
- Cleaned and disinfected at least daily.

Carefully plan the placement of barriers. They must **not**:

- Block aisles or exits.
- Negatively impact ventilation.
- Reduce visibility.
- Affect the ability to work safely.
- Completely surround individuals.

For additional information on physical barriers, refer to [Physical Barriers](#) - CCOHS.

Physical Distancing

Physical distancing requires people to:

- Maximize the distance from others (at least 2 metres in all directions) who are not part of their households or groups.
- Avoid non-essential in-person interactions.
- Keep interactions as few and as brief as possible.

Physical distancing measures to consider:

- Follow occupancy limits and physical distancing requirements of local public health or government authorities. Adjust limits according to each space or when requirements change.
- Modify the physical space to make it bigger if possible, such as accessing additional space, providing outdoor space for lines or removing temporary walls.
- Spread workstations apart. Avoid having more than 1 worker at a time at each workstation.
- Avoid having workers face each other, where possible.
- Limit access to seating, sinks, urinals, etc. which are close to each other.
- Modify tasks to allow physical distancing.
- Determine if any employees can work remotely and provide ergonomic support and resources.
- Avoid in-person gatherings such as social events.
- Schedule work to avoid having workers crowd spaces.
- Allow exceptions to distancing guidance in certain circumstances such as assisting a distressed person, providing first aid, or performing Cardiopulmonary Resuscitation (CPR).
- For additional information on physical distancing, refer to [COVID-19 and Physical Distancing](#) - CCOHS.

Hygiene Measures

- Encourage good [hand hygiene and respiratory etiquette](#).
- Provide hand washing stations or hand [sanitizer](#) dispensers (with minimum 60% alcohol content) in high traffic areas. Regularly check and restock dispensers.
- Encourage everyone to wash or sanitize their hands at appropriate times:
 - at the start and end of shift,
 - before eating, drinking, or smoking,



- after touching shared or high-touch items, equipment, and surfaces,
- after using the washroom,
- after coughing or sneezing,
- after cleaning and disinfecting,
- before and after putting on or removing personal protective equipment or a mask.
- Discourage individuals from touching their eyes, nose, mouth, or mask especially with unwashed hands.
- Discourage unnecessary physical contact.
- Reduce the number of shared objects and equipment.
- Do not allow workers to share personal protective equipment or masks.
- Reduce the number of high-touch points by having:
 - Motion activated doors, faucets, toilets, urinals, and lighting.
 - Hand motion or foot pedal activated dispensers (for soap, paper towels, sanitizer, etc.) and plastic lined waste containers.
 - No touch methods of tracking worker attendance such as key cards or electronic messaging.

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 the workplace on a routine schedule.
- Focus on high-touch objects and surfaces (e.g., doorknobs, handles, rails, buttons, light switches, and faucets), which should be cleaned and disinfected more often and when visibly dirty.
- Use approved hard surface disinfecting products.
- Provide adequate cleaning and disinfecting supplies and appropriate personal protective equipment.
- 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.
- Allow adequate time for workers to disinfect any shared equipment between each use.
- After cleaning and disinfecting:
 - Used cleaning cloths, towels, etc. must be properly handled to prevent cross-contamination and laundered or disposed of after every use.
 - Deposit heavily contaminated items into plastic lined waste containers.
 - Dispose of garbage at least daily.
- For additional information on cleaning and disinfection, refer to:
 - [Cleaning and Disinfecting for COVID-19](#) - CCOHS.
 - [Standard Operating Procedure: Disinfection of Touch Points](#) - CCOHS.
 - [List of disinfectants with evidence for use against COVID-19](#) - Government of Canada.
 - [COVID-19: Cleaning and disinfecting](#) - Government of Canada.

Personal Protective Equipment (PPE)

PPE includes such items as respirators, medical masks, eye protection, gloves, and safety footwear.

- Eye protection (safety glasses, goggles, or face shields) may be worn in addition to a mask when in close physical contact with others. Note: face shields do not provide respiratory protection and cannot replace masks.
- COVID-19 PPE policies must not interfere when a higher level of protection is needed for a task.
- Workers may need PPE for COVID-19 protection if they are:
 - Performing tasks that require them to be less than 2 metres from another person.



- Using cleaning and disinfecting products (refer to the manufacturers' safe handling instructions).
- Providing emergency first-aid.
- For additional information on PPE, refer to:
 - [Personal protective equipment \(COVID-19\): Overview](#) – Government of Canada.
 - [COVID-19 and Personal Protective Equipment \(PPE\)](#) – CCOHS.

Mask Wearing

- Follow the mask wearing requirements of your local jurisdiction. If not required, mask wearing should be encouraged as an additional measure when there is a high risk for COVID-19 spread, or when physical distancing is not possible.
- Masks should be comfortable, well-constructed and well-fitting, covering the nose, mouth, and chin.
- Consider using masks with a [transparent window](#) when communicating with people who are deaf or hard of hearing.
- Masks should not be worn by anyone who is unable to remove it without assistance (e.g., due to their age, ability, or developmental status).
- Allow workers to wear masks, even if not required, based on their discretion (e.g., being at risk of more severe disease, working in crowded setting, etc.).
- For additional information on masks, refer to:
 - [Get the Facts on Masks](#) – CCOHS.
 - [COVID-19 mask use: Advice for community settings](#) – Government of Canada.

Vaccination

- Consider creating and implementing a COVID-19 [vaccination policy](#) which meets all applicable government and organizational requirements.
- Discuss any concerns about the COVID-19 vaccination policy with the health and safety committee or representative, and union (if present).
- Provide accommodation to any worker that has a valid exemption.
- Consider providing support for workers:
 - To attend local vaccination clinic appointments if these times occur during work hours.
 - Experiencing temporary side effects from vaccination.
- Before allowing entry to the workplace, request proof or attestation of vaccination from workers, if required by your government authorities or by organizational policy.
- Maintain COVID-19 controls and public health measures as required, even if most workers are fully vaccinated.
- For additional information on vaccination, refer to:
 - [Vaccines for COVID-19](#) – Government of Canada.
 - [The facts about COVID-19 vaccines](#) – Government of Canada.
 - [COVID-19 Vaccines](#) – CCOHS.

COVID-19 Response Plan

- Develop and implement a plan to handle suspected cases of COVID-19 and emergencies.
- When any person [experiences COVID-19 symptoms](#) while in the workplace:
 - Immediately have them wear a mask (preferably a respirator or medical mask, or if neither is available, a well-constructed and well-fitting non-medical mask). A respirator used in this way (i.e., as [source control](#)) may not need to be fit tested.
 - Have them leave as soon as possible.



- If they cannot immediately leave, have them isolate in a designated area, away from others, until they can leave.
- Call **911** for medical assistance if symptoms are life threatening. If it is a worker, notify their emergency contact.
- Refer to your jurisdictional [OHS regulator](#) and [workers' compensation board](#) for requirements regarding reporting, if required.
- Complete an incident report and begin an investigation.
- Refer to guidance from your local public health authority to determine when the worker can return to work.
- Consider updating your sick leave policy to provide support to workers who are or may be sick. Support may include paid or unpaid sick leave, long-term disability, and information on government programs, if available.
- For additional information on COVID-19 response refer to [Responding to COVID-19 in the Workplace](#) - CCOHS.

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.

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.