Introduction

This tip sheet is for employers, managers, workers, and volunteers who provide emergency services outside of a hospital setting, including paramedics, emergency medical technicians (EMTs), rescuers, firefighters, and police officers.

Respiratory infectious diseases (RIDs), such as COVID-19, influenza, and respiratory syncytial virus (RSV), are caused by pathogens (germs). Many people who get sick with respiratory infectious diseases experience mild symptoms and recover fully. Still, some vulnerable individuals (e.g., immunocompromised, older, pregnant, etc.) are at risk of severe complications and death.

Infected individuals can spread pathogens through respiratory particles when they cough, sneeze, speak, sing, shout, or breathe. Some infected people display no symptoms but are still contagious (asymptomatic). People can become infected when they inhale particles that contain pathogens or by touching contaminated surfaces and then touching their eyes, nose, or mouth 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 the Canadian Centre for Occupational Health and Safety (CCOHS) for general respiratory infectious disease prevention practices:

- Respiratory Infectious Diseases: Health and Safety Resources
- Protect Yourself and Others: Control Measures for Respiratory Infectious Diseases (RIDs)

Specific Tips for Emergency Services

- Install sanitizer dispensers in high-traffic areas including the main entrance, break rooms, administration offices, and inside vehicles and keep them well stocked
- Train workers to follow the World Health Organization's "Your 5 moments for hand hygiene" approach to hand cleaning:
  - (1) before touching a patient
  - (2) before any clean or aseptic procedure is performed
  - (3) after exposure to body fluid
  - (4) after touching a patient
  - (5) after touching a patient's surroundings
- Notify workers, visitors, patients, and the public about any health and safety measures that apply to them using the most effective methods such as posters, emails, or websites
- Apply infection prevention and control practices, as applicable
- Follow the guidance published by the governing body relevant to the profession, if applicable
- Continually assess emergency workers' respiratory infectious disease exposure risk levels, which are increased when:
  - In close contact or providing direct services to an individual who has a respiratory infectious disease
  - Performing aerosol-generating medical procedures
  - There is an increase in community transmission
- Consider limiting the use of equipment to one worker, especially when it is difficult to clean and disinfect. If equipment must be shared, instruct users to clean and disinfect the equipment before and after use, especially when changing users
- Provide contactless methods for documents and payments such as electronic background checks, complaint forms, missing person reports, and burn permits

- Clean and disinfect the inside of vehicles each time drivers or riders change, focusing on high-touch surfaces like keys, door handles, seats, seatbelts, arm rests, buttons, stalks, switches, touch screens, dashboard, steering wheels, and gear shifts
- Provide workers with adequate supplies of personal protective equipment (PPE) and cleaning and disinfecting products
- Request that workers change into a clean uniform daily
- Considerations while responding to emergencies:
    - Have dispatchers attempt to determine if any individuals present at the location of the emergency have symptoms of a respiratory infectious disease. Make sure that information is relayed to the responding emergency workers
    - Provide masks to workers that can be offered to individuals they are interacting with
    - After interacting with an individual who has, or is suspected to have, a respiratory infectious disease, clean and disinfect all equipment and surfaces touched by the person such as medical devices and equipment, stretchers, and restraints
    - If contact with illicit drugs is possible, train workers TO AVOID using hand sanitizer. Some hand sanitizers contain alcohol, which may increase the absorption of fentanyl and other hazardous substances through the skin. Make sure workers wear and remove protective gear safely and wash hands and exposed skin with soap and water
- It may be necessary to perform aerosol-generating procedures such as intubation or CPR for patients who have a respiratory infectious disease. If those procedures must be performed, make sure that they are done with additional precautions in place to minimize the transmission of the respiratory infectious disease:
    - Wear additional protective gear such as a respirator, face shield, gloves, and gown
    - Thoroughly clean and disinfect the equipment and ventilate the space after the procedure
- Considerations for workers on 24-hour shifts (where workers eat, sleep, train, and respond to emergencies as a team):
    - Improve the ventilation of living and sleeping quarters between shifts by opening windows and doors and leaving the space vacant for a short time
    - Change bed linens between users, if sharing beds
    - Clean and disinfect all high-touch surfaces and objects such as fitness equipment, door handles, controls, tools, rescue equipment, and vehicle interiors before the next team arrives

Consider the Risks

Respiratory infectious disease transmission is increased when individuals are exposed to several risks at once, such as when:

- Working in crowded, poorly-ventilated indoor spaces
- Person-to-person interactions are long and frequent
- Sick individuals are present in the workplace
- No access to cleaning facilities and products
- Shared surfaces and objects are touched frequently
- Seasonal increases in respiratory infectious disease hospitalizations or cases occur

Consider all possible respiratory infectious disease exposure scenarios in your setting and perform a risk assessment. 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 regularly (at least annually or whenever something changes) to check your control methods are still effective.

Sample questions to ask during a respiratory infectious disease risk assessment:

- Are indoor spaces properly ventilated?
- Where do individuals gather?
- What activities require interactions, communication, or touching shared objects?

- How long and frequent are interactions between people?
- What are the high-touch surfaces and shared objects?
- Which workers are more vulnerable?
- Do individuals normally participate in activities that create respiratory particles (e.g., singing, shouting, etc.)?
- Are people expected to stay in an enclosed space for an extended duration?
- Does a sick leave policy exist that encourages ill workers to stay home?

Control Measures

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

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

The selected control measures must be based on the assessed risk to workers. Each workplace and even workers within the same workplace can have different risk levels. Workers at high risk of serious complications may require accommodation.

Consider creating an emergency preparedness and response plan that provides guidance on preventing, detecting, and responding to respiratory infectious diseases in the workplace. It can be written in the form of policies and procedures.

Vaccination

Vaccines work by stimulating an immune response from the body to help protect people from serious diseases.

- Consider promoting respiratory infectious disease vaccination among eligible workers, if available
- Consider providing support for workers:
  - To attend local vaccination clinic appointments if these times occur during work hours
  - Experiencing temporary side effects from vaccination
- Maintain workplace controls and personal protective measures even if most workers are fully vaccinated

Ventilation

Good indoor ventilation decreases the concentration of pathogens in the air and is one of the most effective workplace control measures against respiratory infectious diseases.

- Ventilate indoor spaces appropriately according to the number of occupants and types of activities
- Open windows and doors to the outside if it is safe to do so
- 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 at low speed or for two hours at maximum airflow before and after buildings are occupied
- Continuously run local exhaust fans in washrooms and kitchens that vent to the outside to help remove contaminated air
- Make sure that air circulation or cooling fans do not direct airflow from person to person
- If ventilation cannot be improved, consider using portable air filtration units with high-efficiency particulate air (HEPA) filters
- Keep indoor humidity between 30% and 50%

Refer to Indoor Ventilation for Respiratory Infectious Diseases (RIDs) for further guidance and information.

Hygiene Measures

Controlling the release of respiratory particles and having clean hands are effective strategies for reducing the spread of respiratory infectious diseases.

- Encourage proper hand hygiene and respiratory etiquette
- Provide hand washing stations or hand sanitizer dispensers (with a minimum 60% alcohol content) in high-traffic areas. Regularly check and restock dispensers
- Encourage everyone to wash or sanitize their hands at appropriate times:
  - Before and after touching personal protective equipment or a mask
  - After touching shared or high-touch items, equipment, and surfaces
  - Before and after eating or handling food
  - After coughing, sneezing, or blowing their nose
  - After shaking someone's hand
  - After using the washroom
- Discourage individuals from touching their eyes, nose, mouth, or mask especially with unwashed hands
- 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 lined waste containers
  - No touch methods of tracking worker attendance such as key cards or electronic messaging

Cleaning and Disinfecting

Depending on the surface type and environmental conditions, pathogens can remain on objects for a few hours to days.

- Clean and disinfect the workplace regularly
- 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 regularly

Refer to Cleaning and Disinfecting for Respiratory Infectious Diseases (RIDs) for further guidance and information.

Communication and Training

Communicate new and updated workplace controls and personal protective 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 specific topics related to respiratory infectious diseases, such as:

- How to identify and respond to the symptoms
- What to do if they become sick
- Reporting requirements
- Information on vaccines and options for vaccination, if possible
- How to prevent the spread of the respiratory infectious disease and protect themselves at work
- When to clean and disinfect, and how to safely use cleaning and disinfecting products
- How to properly wear, handle, and care for personal protective equipment and masks
- Ways to stay informed using reputable sources

Post appropriate signs (e.g., Responding to Respiratory Infectious Diseases (RIDs) in the Workplace, Prevent the Spread of Infections, Masks and Respirators in the Workplace: Source Control or PPE?, etc.) where they can be seen by workers and visitors, such as:

- At entrances
- Near high-touch surfaces
- In washrooms, changerooms, and break rooms
- In doorways and walkways
- On notice boards

For further guidance and information, refer to Communication and Training for Respiratory Infectious Diseases (RIDs).

Screening

Different screening methods can be used to identify people who could spread respiratory infectious diseases to others. Appropriate actions can be taken when screening identifies contagious individuals.

Screening is not usually required in most workplaces. When conducting active screening, people are screened before being allowed entry. Passive screening can be used in all workplace settings where individuals self-monitor and respond accordingly if they begin feeling sick. Assess your risk and determine if active or passive screening (or both) is right for your workplace.

Individuals who do not pass the screening should take appropriate actions, such as leaving the workplace or wearing a properly fitted mask if they cannot leave immediately.

Refer to Screening for Respiratory Infectious Diseases (RIDs) for further guidance and information.

Responding to Respiratory Infectious Diseases in the Workplace

Take appropriate actions to prevent the spread of a respiratory infectious disease when a sick individual is in the workplace. The risk is increased when multiple people are sick at the same time, and an emergency response may be necessary.

- When any person experiences symptoms of a respiratory infectious disease while in the workplace:
  - Ask that they 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
  - If it is a worker, also suggest that they seek medical care
- Call 911 for medical assistance if symptoms are life-threatening. If it is a worker, also notify their emergency contact

- Refer to your jurisdictional government department responsible for health and safety and workers' compensation board for reporting requirements, if required
- Consider having a sick leave policy to support workers who are sick. Support may include paid or unpaid sick leave
- Develop and implement an emergency response plan to handle respiratory infectious disease outbreaks

Refer to Responding to Respiratory Infectious Diseases (RIDs) in the Workplace and the Emergency Response Planning Guide for further guidance and information.

Personal Protective Equipment (PPE)

Protective equipment for respiratory infectious diseases includes respirators, medical masks, eye protection, gloves, and gowns.

- Eye protection (safety glasses, goggles, or face shields) may be worn to protect from splashes. Note: face shields do not provide respiratory protection and cannot replace masks
- Protective equipment policies for respiratory infectious diseases must not interfere when a higher level of protection is needed for a task
- Workers may need protective equipment for protection from respiratory infectious diseases if they are:
  - Providing direct care or medical treatment to a person who has a respiratory infectious disease, such as COVID-19
  - Using cleaning and disinfecting products
  - Performing tasks in crowded, poorly ventilated indoor settings, and at higher risk of serious complications from respiratory infections
  - Providing emergency first aid

For further guidance and information, refer to Personal Protective Equipment (PPE) for Respiratory Infectious Diseases (RIDs).

Mask Wearing

A mask is a good option to prevent the spread of respiratory particles.

- Mask wearing can be encouraged as an additional measure when there is a high risk of respiratory infectious disease spread
- Masks may be required in some settings where there are individuals at higher risk of serious complications from respiratory infections
- Masks should be well-constructed, well-fitting, properly worn and cover the nose, mouth, and chin
- Masks should not be worn by anyone 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

Refer to Masks for Protection from Respiratory Infectious Diseases for further guidance and information.

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.