

Measles



Measles is a highly contagious viral disease caused by the measles virus (rubeola). It primarily affects the respiratory system and can cause fever, cough, runny nose, red watery eyes, and a characteristic red rash that spreads from the face to the rest of the body. Despite being vaccine-preventable, measles outbreaks continue to occur across Canada, putting workers at risk, especially those that work in healthcare.

Complications from a measles infection can include ear infections, pneumonia, encephalitis (brain inflammation), and in rare cases, death. Measles is particularly dangerous for pregnant workers, immunocompromised individuals, and those with certain underlying conditions.

Before widespread vaccination, measles caused significant illness and death globally. With effective vaccination programs, Canada had eliminated endemic measles transmission by 1998. However, imported cases and subsequent spread among unvaccinated populations have led to numerous outbreaks in recent years.

Transmission

Measles is one of the most contagious infectious diseases known. The virus can remain airborne for up to two hours after an infected person leaves an area. There are three main ways that the measles virus can infect a person:

1. **Large droplet transmission** – The virus spreads when an infected person coughs, sneezes or talks near another person. Large droplets from saliva travel short distances (about one to two metres) and are deposited on the mucous membranes of the nose, mouth or eyes, causing infection.
2. **Fine droplet or aerosol transmission** – The virus spreads when an infected person coughs, sneezes or talks and the large droplets begin to evaporate, creating very small particles that stay suspended in the air for up to two hours.
3. **Contact transmission** – The virus spreads by direct contact with contaminated hands, skin or objects that are contaminated with the virus.

Measles is most contagious from an infected person from four days before to four days after the rash appears. However, the infected person may not know they have measles during the early infectious period, as symptoms typically begin 7-14 days after exposureⁱ.

Who is affected?

Anyone who is not immune to measles can contract the disease if they are exposed. People are considered protected against measles if they have received two doses of measles-containing vaccine or have laboratory evidence of immunity or laboratory confirmation of previous disease. Health Canada also notes that adults born before 1970 can be presumed to have acquired natural immunity to measlesⁱⁱ.

Due to contact with the general public, certain CUPE members face higher exposure risks, including:

- Health care workers
- Child care workers
- School and educational staff
- Public transit workers
- Municipal service workers
- Frontline customer service personnel

However, during an outbreak, all workers can be exposed in any workplace, particularly in settings with poor ventilation or high-density occupancy.

What to do if exposed

If you believe you have been exposed to measles:

1. Report the exposure immediately to your supervisor AND your union health and safety representative.
2. Document all details of the exposure incident.
3. Contact your healthcare provider to verify your immunity status.
4. If unvaccinated or uncertain status, post-exposure vaccination within 72 hours may provide protection.
5. Monitor for symptoms for 21 days after exposure.
6. If symptoms develop, seek medical attention immediately and notify your workplace.

What can be done to prevent worker exposure?

Employers must implement a measles prevention plan with input from CUPE members through the health and safety committee. The goal must be to eliminate exposure to the infectious virus as much as possible. Methods of control should follow the hierarchy of controls:

Engineering Controls

- Proper ventilation systems with high efficiency particulate air (HEPA) filtration
- Physical barriers where appropriate
- Isolation rooms for suspected cases in healthcare settings
- Adequate space for physical distancing
- Separate entrance, exit and assessment areas in health care workplaces for those with suspected measles

Administrative Controls

- Develop an exposure control plan before an outbreak occurs
- Procedures for prompt identification and isolation of suspected cases
- Policies that encourage sick workers to stay home without penalty
- Pre-employment verification of immunity status for high-risk settings
- Education of workers on measles prevention and control
- Clear protocols for reporting potential exposures
- Good cleaning procedures to reduce contact transmission
- Access to effective hygiene and hand-washing facilities

Personal Protective Equipment (PPE)

Regular surgical masks do not provide adequate protection against measles. Workers in high-risk settings must have proper PPE including:

- Respiratory Protection which includes fit-tested N95 (or equivalent) respirators (or more protective certified respirators)
- Proper training on PPE use, including donning, wearing, removal, and disposal
- Annual fit-testing for respirators

Vaccination

Vaccination is the most effective prevention measure against measles. The measles, mumps, and rubella (MMR) vaccine is safe for most people and provides 97% protection after two doses. Employers should:

- Provide easy access to vaccination for workers
- Cover costs associated with obtaining vaccination
- Provide paid time off for vaccination and recovery if needed
- Develop accommodation plans for workers who cannot be vaccinated for medical reasons

CUPE has always encouraged our members to get vaccinated at their earliest opportunity, for the protection of ourselves, our coworkers, and the members of the public accessing the services our members provide. Everyone who can, should get vaccinated.

CUPE members should speak with their primary medical provider if they have questions or are unsure of their vaccination status.

Strategies for change

The following strategies can help prevent exposure to measles in CUPE workplaces:

- Put measles prevention planning on the joint occupational health and safety committee agenda.
- Demand regularly scheduled cleaning and disinfection of all equipment and facilities.
- Put the issue on the bargaining table, including demands for paid sick leave and vaccination access.
- Sponsor CUPE education on infectious disease prevention in the workplace.
- Create an occupational infectious disease policy for CUPE workplaces.
- Document all potential exposures and employer responses.
- Exercise your right to refuse unsafe work when necessary protections are not in place.

Conclusion

The threat of measles outbreaks demands that employers work with CUPE locals to ensure comprehensive prevention strategies are in place. This fact sheet provides information to assist CUPE members in addressing this hazard. Related information is in the CUPE Health and Safety Guideline, Controlling Infectious Agents in the Workplace.

ⁱ Health Canada: Measles.

<https://www.canada.ca/en/public-health/services/diseases/measles.html>

ⁱⁱ Health Canada. Measles vaccines: Canadian Immunization Guide:

<https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-12-measles-vaccine.html>

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