

Canadian Centre for Occupational Health and Safety 🍁 Centre canadien d'hygiène et de sécurité au travail

Diseases, Disorders and Injuries

Measles

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What is measles?

Measles is a contagious infectious disease caused by the measles virus. It infects the respiratory tract and spreads throughout the body. Measles can cause severe illness, complications, and death. Although it is most common in children, anyone can become infected.

Measles can be prevented with vaccination. Cases in Canada usually occur when unvaccinated or non-immune people travel abroad to countries where measles is circulating, become infected, and bring measles into Canada. However, some cases can also be acquired by unvaccinated or non-immune people in community settings such as social events, daycares, or healthcare settings.

What are the symptoms of measles?

Symptoms of measles can begin 7 to 21 days after exposure. Initial symptoms include:

- Fever
- Malaise
- Cough
- Runny nose
- Conjunctivitis (pink eye)

White spots, known as Koplik spots, may appear in the mouth or the throat 2 to 3 days after symptoms start.

A rash, which typically starts on the face and spreads to the rest of the body, usually appears 3 to 7 days after infection and can last 4 to 7 days.

Most people recover from measles in 2 or 3 weeks if there are no complications.

Complications of measles can include:

- Ear infections
- Diarrhea
- Respiratory failure
- Encephalitis (inflammation and swelling of the brain)
- Blindness
- Deafness
- Intellectual disability
- Death

Complications are most common in people who are <u>pregnant</u>, people under the age of 5 or over 30, and people who are immunocompromised.

How is measles transmitted?

The measles virus spreads by:

- Breathing in the air in an area where an infected person is present or was recently present
- Having direct contact with respiratory secretions, such as mucus and saliva, from the nose or mouth of an infected person
- Touching a surface or object contaminated with the virus and then touching your eyes, nose, or mouth with unwashed hands

Measles is very contagious. The virus can stay in the air or on surfaces for up to 2 hours after an infected person leaves the area.

People infected with measles can transmit the virus from 4 days before the rash to 4 days after the rash develops.

How is measles treated?

There is no treatment for measles. Treatment aims to manage symptoms and complications of the disease. Hydration, a healthy diet, rest, and vitamin A supplements may be recommended. Medications may be given to help prevent or reduce the effects of complications such as pneumonia or ear infections.

What occupations are at risk?

People who are unvaccinated or non-immune in these occupations are at highest risk of contracting measles:

- Healthcare workers
- Emergency service providers such as paramedics and police services
- Teachers and other workers in childcare facilities and schools
- Laboratory workers
- Workers who travel outside of Canada for work such as airline crew members
- Airport workers

However, measles can be transmitted to any worker who may be near infected people, regardless of their occupation.

How can measles be prevented in the workplace?

The best way to prevent measles is through vaccination. In Canada, the measles vaccine is available as a measles-mumps-rubella (MMR) or measles-mumps-rubella-varicella (MMRV) vaccine. Most adults born before 1970 are presumed to have immunity from a previous exposure when they were younger, while most adults born in or after 1970 would have received a measles vaccine. Booster doses are not necessary for people who are immune (either through vaccination or a confirmed infection). Speak to a healthcare provider to confirm your vaccination status.

Along with vaccination, the risk of measles can be reduced by implementing <u>infection</u> <u>prevention and control principles</u> in the workplace, which can include:

- Early identification and isolation of people with measles
- Avoiding contact with people with measles, if possible
- If avoiding contact with a suspected or confirmed case of measles is not possible, only individuals who are assumed to be immune should have contact
- Regular <u>cleaning and disinfecting</u> of surfaces, objects, or equipment, including doorknobs, tables, and toys that may be contaminated with bodily fluids

- Proper hand hygiene
- Wearing <u>personal protective equipment (PPE)</u> such as a fit-tested N95 respirator when working with individuals with a suspected or confirmed case of measles, or disposable nitrile gloves when in contact with bodily fluids

Anyone <u>travelling outside of Canada</u> for work should review the Government of Canada's <u>travel advice and advisories</u> for their destination for measles and visit a travel health clinic or health care provider at least 6 weeks before travel.

What should I do if I think I have been exposed or have measles?

If you believe you have been exposed to measles, contact your healthcare provider or local public health authority right away.

Inform your employer. Determine if it is necessary to isolate from others to help prevent the spread of the virus. Employers may also decide to keep others out of areas where a person with known or suspected measles has been for several hours until the air and environmental surfaces are no longer an exposure hazard.

If you develop measles symptoms, even mild symptoms, isolate yourself at home and contact a healthcare provider immediately. Do not go to a healthcare facility without calling ahead to make sure they are aware that you may have measles.

Where can I get more information about measles?

More information is available from:

- <u>Measles</u> from the Government of Canada
- Measles from the World Health Organization
- Measles (Rubeola) from the Centers for Disease Control and Prevention (CDC)

(*We have mentioned these organizations as a means of providing a potentially useful referral. You should contact the organization(s) directly for more information about their services. Please note that mention of these organizations does not represent a recommendation or endorsement by CCOHS of these organizations over others of which you may be aware.)

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