

Measles: What you need to know



Measles is a contagious viral disease that occurs worldwide. The virus responsible for measles spreads through the air, respiratory droplets, or direct contact with the nasal or throat secretions of infected individuals. The incubation period typically lasts around 10 days but can be as long as 18 days.

Symptoms

Symptoms typically appear 7-21 days post-infection and develop into a rash that lasts 4-7 days.

Initial symptoms

- Fever; cough; runny nose; and red, watery eyes

After 2-3 days

- Small white spots may emerge inside the mouth and throat

After 3-7 days

- Rash resembling small red spots on the face that spreads down the body to the arms and legs

Complications

Otitis media (common), bronchopneumonia, encephalitis, myocarditis and pericarditis (rare).

At-risk populations

People travelling to areas where measles is endemic, patients who are immunocompromised (e.g., those with AIDS, lymphoma or other malignancies, and those receiving T cell-suppressive medications), pregnant patients, and people with vitamin A deficiency or poor nutritional status.



Treatment

If a patient develops symptoms, recommend they isolate at home immediately. There is no specific antiviral treatment for measles.

Symptom relief	<ul style="list-style-type: none">• Offer antipyretics/analgesics for fever or comfort
Supportive measures	<ul style="list-style-type: none">• Encourage ample fluid intake• Encourage sufficient rest
Minimization of spread	<ul style="list-style-type: none">• Emphasize frequent handwashing with soap and water for at least 20 seconds• Suggest using an alcohol-based hand sanitizer when soap and water are unavailable



Measles: What you need to know



Prevention

Stress the importance of staying up to date on vaccinations.

In Canada, there are 2 types of measles-containing vaccines authorized for use:

measles-mumps-rubella (MMR)

- Priorix (live attenuated), GlaxoSmithKline
- M-M-R II (live attenuated), Merck

measles-mumps-rubella-varicella (MMRV)

- Priorix-Tetra (live attenuated), GlaxoSmithKline
- ProQuad (live attenuated), Merck

Vaccination recommendations



Vaccines are especially important in cases of local outbreaks, increased risk of exposure to the virus or when travelling to high-risk areas.

- Infants between **6 and 11 months** of age should receive 1 dose of a measles-containing vaccine when travelling to high-risk areas.
- Children and adolescents between **1 and 19 years** of age should receive 2 doses of a measles-containing vaccine.
- Adults born in or **after 1970** should ensure they have received 2 doses of a measles-containing vaccine; if they have not, they should do so. Those born **before 1970** are generally presumed to have acquired natural immunity to measles and likely have received at least 1 dose of a measles-containing vaccine. If they are not immune and are travelling to an area where measles is a concern, they should receive 1 dose.



Measles-containing vaccines are generally not recommended for:

- people who are pregnant
- infants under 6 months of age
- those with weakened immune systems

During a measles outbreak



- Infected individuals should attempt to prevent transmission to others by isolating for 4 days after the appearance of the rash.
- Postexposure management with the MMR vaccine or immunoglobulin (Ig) may be appropriate for those without immunity depending on the time since the exposure occurred and risk-status of the exposed individual.
- In the situation of an outbreak, it may be appropriate for children to receive a measles-containing vaccine as early as 6 months old.

References:

1. Government of Canada. Measles: symptoms and treatment [internet]. January 8, 2024. Available from: www.canada.ca/en/public-health/services/diseases/measles.html.
2. Government of Canada. Measles: for health professionals [internet]. February 27, 2024. Available from: www.canada.ca/en/public-health/services/diseases/measles/health-professionals-measles.html.
3. Centers for Disease Control and Prevention. Measles [internet]. August 18, 2021. Available from: www.cdc.gov/vaccines/pubs/pinkbook/meas.html#complications.
4. Knowles S. Viral skin rashes [internet]. September 25, 2018. Available from: <https://cps.pharmacists.ca>. Subscription required.
5. Canadian Pharmacists Association. Immunization resources [internet]. November 16, 2022. Available from: <https://pharmacists.ca>. Subscription required.

