



London Health Sciences Centre

Infection Prevention and Control

Measles Q & A

Infection Prevention and Control and Occupational Health
Services

What is measles?

- Measles is a highly contagious viral illness that occurs worldwide

What are the signs and symptoms of measles? How long does it take to become symptomatic after exposure?

- If you are **not** immune, after an exposure to measles it takes between 7-21 days (average of 10 days) to become symptomatic.
- Early symptoms are similar to having a cold; fever, watery red eyes, runny nose and a cough
- Small red spots with bluish-white centers inside mouth appear two or three days later
- About 3-5 days after the initial symptoms a red mottled rash will appear and start on the face and hairline and spreads down the body before spreading to the arms, hands, legs and feet

How does it spread?

- Through the air when a person who is infected breathes, coughs, sneezes or talks.
- It may also spread through direct contact with fomites contaminated with secretions from the nose and throat of a person who is infected.
- The measles virus can persist in the air for up to two hours after a person who is infected has left the space.
- AIRBORNE precautions should be used for patients with confirmed or suspected measles.

Wasn't measles eradicated from Canada? Why are we concerned now?

- Measles was declared eliminated from Canada in 1998, meaning it was no longer considered endemic (routinely circulating) in the country due to herd immunity.
- Herd immunity is achieved when 95% of the population is immune to measles.
- Decline in measles vaccinations and increase in vaccine hesitancy are factors attributed to this resurgence and the main concern now is that measles outbreaks are occurring in Ontario, often linked to unvaccinated/under vaccinated communities.
- Measles is highly contagious, and it can spread quickly in areas with low immunization coverage.

What can you do to prevent the spread of measles?

- The best prevention for measles is vaccination – assess patient vaccination and offer if not immune.
- If measles is suspected, have the patient wear a mask and immediately transport them to a negative pressure room on airborne precautions.
- Staff to wear an N95 fit tested respirator for entry to the patient's room.
- Keep the room door shut at all times.
- Contact IPAC to notify.
- Testing – NP or throat PCR swab and Measles IgG IgM serology.
- Adherence to IPAC practices; hand hygiene, point of care risk assessment and donning and doffing PPE correctly.

How do I know I am immune to measles?

- If you have either had measles before, were born before 1970, or had two doses of measles vaccine then you are considered immune.
- You can confirm this with bloodwork that shows antibodies to measles.

If I am exposed am I at risk?

- If you are immune then you have almost 100% protection from getting measles. After exposure there are no restrictions.
- Measles is very contagious so approximately 90% of people who are not immune and are exposed get measles.
 - o It may be transmitted in public spaces with very little exposure time and no direct face to face contact.

If I am exposed, what do I do?

- 1) Verify your immune status.
- 2) If you have only had one dose of vaccine it is advised to get a second dose as soon as possible. One dose is 85-95% protective, 2 doses provides close to 100% protection.
- 3) If you are not immune to measles you will be at high risk of getting measles. You will be required to isolate from day 5 of exposure to day 21 after the exposure and monitor for symptoms.
 - a. If you receive the vaccine within 3 days after the exposure, the measles vaccine reduces the risk of severe infection.
 - b. Anyone less than a year of age, pregnant, or immunocompromised, would be eligible to receive immunoglobulin. This needs to be given within 6 days from the exposure. Call your local public health unit for further information.

If exposed and immunocompromised, do I need to do anything differently?

- Verify your immune status
 - o If you have 2 doses of measles vaccine, history of measles, confirmatory bloodwork that shows antibodies to measles, or born before 1970, you would be considered immune.
 - o Even immunocompromised patients that have received vaccines prior will have immune protection
- Some severely immunocompromised individuals will be eligible for immunoglobulin as added protection regardless of immune status. This can be discussed with public health or your health care provider.

If someone is suspected to have measles, how do we confirm it?

- Send both NP or throat PCR swab (measles PCR) AND
- Measles serology IgG and IgM

What if I develop symptoms for measles?

- Do not attend work while sick
- Assess your immunity
- Contact your health care provider

- Once assessed, contact OHSS

If I've received measles immunoglobulin because I was not immune and was exposed, what should I monitor for?

- You may have pain at the injection site.
- Fever or allergic reaction are possible side effects.
- If you get a fever, URTI symptoms or rash, it may be measles infection or injection related.
 - o Children less than one month of age would be advised to come back to Children's Hospital if they have a fever to be assessed. CALL CHILDRENS EMERGENCY DEPARTMENT BEFORE ARRIVAL so they can prepare for airborne isolation.
- For all patients who have received measles immunoglobulin (Ig)
 - o They cannot receive any measles or varicella vaccine for six months after having the measles Ig
 - o Airborne precautions are required from day 5 after the exposure to day 28 after the exposure
- For all patients who have received IVIG as measles prevention
 - o They cannot receive any measles vaccine for 8 months after having the measles Ig dose

For more information:

[Statement from the Chief Public Health Officer of Canada on the Increase in Measles Cases and the Risk to People in Canada - Canada.ca](#)

[Measles | Public Health Ontario](#)

- [Measles in Ontario](#)

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