

# Measles

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■ Cite as: *CMAJ* 2024 April 22;196:E524. doi: 10.1503/cmaj.240415

## 1 Canada has had measles elimination status since 1998 but remains vulnerable to outbreaks

Increased measles activity globally raises the risk of travel-related cases in Canada, which can spread rapidly in underimmunized communities.

## 2 Measles is one of the most highly transmissible viral respiratory illnesses

Measles virus is transmitted by respiratory particles (through inhalation or contact with mucous membranes) at short and long range (e.g., airborne), even if airspace is only briefly shared.<sup>1</sup> Infection prevention and control measures are critical to prevent spread of the pathogen to susceptible contacts. Health care facilities must be called before patient arrival, and patients should be masked and immediately placed in an airborne isolation room, when available. Staff should don personal protective equipment, including an N95 respirator.<sup>2</sup>

## 3 Clinicians should consider measles in patients who have travelled, have been exposed to cases, or have compatible clinical presentations

Measles presents with fever, cough, coryza, and nonpurulent conjunctivitis, with a maculopapular rash that starts on the face about 4 days later and spreads down the body. All patients in whom measles is suspected should have a urine test and either a nasopharyngeal or throat swab collected for virus detection by polymerase chain reaction, in addition to diagnostic serology (both immunoglobulin M and G).<sup>3</sup>

## 4 Ensuring all children are up to date with measles vaccinations is imperative to prevent the return of endemic transmission in Canada

Most measles cases in Canada occur in unvaccinated people, especially children.<sup>4</sup> Routine childhood vaccines missed during the COVID-19 pandemic should be caught up urgently. Vaccine coverage of at least 95% with 2 doses of measles-containing vaccine among age-eligible children is required for population immunity. In Canada, the second dose is given at age 18 months or 4–6 years, depending on province and territory.

## 5 Postexposure prophylaxis can reduce the risk of infection or lessen the severity of measles in susceptible contacts

Measles, mumps, and rubella vaccine given to susceptible contacts aged 6 months or older within 72 hours of exposure to a case reduces the risk of developing measles.<sup>5</sup> Immune globulin is recommended for susceptible contacts at high risk of complications (infants younger than 12 mo, people who are pregnant or immunocompromised) up to 6 days after exposure.<sup>5</sup>

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**Competing interests:** Marina Salvadori is an employee of the Public Health Agency of Canada. Sarah Wilson is an employee of Public Health Ontario. No other competing interests were declared.

This article has been peer reviewed.

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