



Measles

Reportable to local or state health department.

Consult the health department before posting or distributing the Parent/Guardian fact sheet.

Measles (also called rubeola, red measles, or hard measles) is a very contagious and serious rash illness that may be prevented by vaccination. Measles is a rare disease in Minnesota. Once measles cases occur, there may be spread to persons or groups of people who have not been vaccinated.

School health and childcare provider information

Cause

Measles virus.

Symptoms

The first symptoms seem like the beginning of a cold with a high fever, red and watery eyes, runny nose, and cough. Tiny white spots (Koplik spots) may appear inside the mouth. A flat red rash appears on the second to fourth day, usually beginning on the face (along the hairline), then spreading down the trunk and down the arms and legs. The fever may still be present after the rash starts and may spike to more than 104° F. Complications of measles are more common among children younger than 5 years of age, adults 20 years of age and older, and people with weakened immune systems. These complications can include diarrhea, ear infection, pneumonia, and encephalitis (inflammation of the brain).

Spread

Measles virus is spread when an infected person coughs, sneezes, or breathes out tiny droplets with measles virus into the air and another susceptible person breathes them in. The virus can sometimes float in the air and infect others for approximately two hours after a person with measles leaves a room. Also spread to susceptible persons by touching contaminated objects and then touching one's eyes, nose, or mouth. Measles is highly contagious and may infect 9 out of 10 who are exposed and not immune to measles.

Incubation

It takes from 8 to 12 days from the time a person is exposed until cold-like symptoms begin. The time from exposure to when the rash starts is usually 14 days, but may range from 7 to 21 days.

Contagious period

From 4 days before to 4 days after the rash starts.

Measles

Exclusion

Childcare and School: Until 4 days after the rash appears. A child with measles should stay at home during this time period and not have any visitors.

Exclude unvaccinated children and staff who are not vaccinated within 72 hours of exposure or given immune globulin (IG) within 6 days of exposure. Susceptible children and staff who do not receive the above prophylaxis may be excluded for 21 days after the onset of rash in the last person who developed measles. Recommendations for exclusion should be done in collaboration with your local/state public health department.

Diagnosis

A rash may occur with many viral illnesses. If measles is suspected, swabs from the throat or nose should be collected and a blood test for measles antibody should be done 3 to 5 days after rash begins.

Persons who have been exposed to measles should contact their health care provider if they develop cold-like symptoms with a fever and/or rash. They should not go to any health care facility without first calling to notify the clinic of their exposure. Suspected cases will be kept separate from others to prevent further spread.

Treatment

There is no specific treatment for measles.

Prevention

- Minnesota state law requires that all children 15 months of age or older enrolled in a childcare setting or school be vaccinated against measles on or after their first birthday or have a legal exemption. Measles vaccine is usually combined with mumps and rubella vaccine (MMR) and given at 12-15 months of age. A second MMR vaccine is recommended at 4 to 6 years of age but may be given as soon as four weeks after the first dose. Two doses or a legal exemption are required for kindergarten and seventh grade enrollment.
- Health care providers may choose to vaccinate children 6-12 months of age early if the child will be traveling internationally or during an outbreak.
- Unvaccinated persons who have been exposed to measles should call their health care provider or local public health clinic as soon as possible to be vaccinated or receive immune globulin (IG).
 - If measles vaccine is given within 72 hours of exposure, it may provide some protection. Encourage parents/guardians to notify their childcare provider or school when their child is vaccinated so their records can be updated.
 - Immune globulin (IG), if given within 6 days of exposure, can prevent or make the symptoms of measles milder. This should be strongly considered for contacts younger than one year of age, pregnant people who have never had measles or measles vaccine, and persons with a weakened immune system.
- Cover nose and mouth with a tissue when coughing and sneezing or cough/sneeze into your sleeve. Dispose of used tissues in the trash.

Measles

- Wash hands thoroughly with soap and warm running water after contact with secretions from the nose or mouth or handling used tissues. **Thorough handwashing is the best way to prevent the spread of communicable diseases.** If soap and water are not available, use an alcohol-based hand sanitizer.
- Clean and sanitize mouthed toys, objects, and surfaces at least daily and when soiled (see Section 2).

For more information, call Hennepin County HSPHD-Epidemiology at (612) 543-5230 or call your local health department.

Additional information about measles can be found at [Measles - MN Dept. of Health](#).

Hennepin County Public Health
Epidemiology
612-543-5230
epi-envhlth@hennepin.us

Updated May 2025

