

# MEASLES

February 2015

## What is measles?

Highly contagious and acute viral disease caused by the measles virus. Humans are the only natural host for the measles virus.

Outbreaks continue to occur when unimmunized people become infected and infect others who are not immunized.

## What are the incubation and contagious periods?

Incubation period: 8 to 12 days from exposure to onset of signs or symptoms

Contagious period: From 1 to 2 days before the first signs or symptoms appear (4 days before the rash) until 4 days after the appearance of the rash.

## How is it spread?

Respiratory (droplet) route: Contact with large droplets that form when a child talks, coughs, or sneezes. These droplets don't stay in the air; they travel less than 3 feet and fall onto the ground. Most common route.

Airborne route: Breathing small particles containing the virus floating in the air. These particles first come from a child's respiratory secretions as droplets after a cough or a sneeze. They dry out quickly in the air or fall onto surfaces, then dry out and attached to dust particles, which become suspended again in the air.

## How do you control it?

Measles is a vaccine-preventable disease. **Follow** the most recent immunization recommendations. Measles, mumps, and rubella (MMR) vaccine is given at 12 months, and a second MMR vaccine is recommended at 4 to 6 years of age. A combined MMR with the varicella vaccine (MMRV) is available.

*Remember: Contact your local public health department if you have questions or to report a case in your site.*

## Signs and Symptoms:

- **Fever, cough, runny nose, and red, watery eyes.**
- **Small red spots in mouth (called Koplik spots).**
- **Appearance of rash at hairline spreading downward over body.**
- **May have diarrhea or ear infection as a complication.**

**Note: Complications may be serious and result in pneumonia, brain inflammation, convulsions, deafness, mental retardation, or death.**

[Source: National Center for Immunization and Respiratory Diseases, Division of Viral Diseases](#)



## Exclusion:

- Measles is a highly communicable illness for which routine exclusion of infected children is warranted.
- Unimmunized people who have been exempted from measles immunization for medical, religious, or other reason, if not immunized with 72 hours of exposure, should be excluded from the group care setting until at least 21 days after the onset of rash in the last case of measles.
- Immunoglobulin may prevent or modify measles disease in an unimmunized susceptible person if given within 6 days of exposure, especially infants younger than 6 months, pregnant women, and those with immune deficiency.

**Review** immunization status of all children and staff members.

**Exclude** infected children until they are no longer contagious (4 days after the rash). Because measles viruses are spread by the airborne route, infected children should not be cared for in any child care area (eg, a special room for children who are ill).

**Exclude** exposed children who have not been immunized (or who are incompletely immunized for their age) until they become immunized. If they are not immunized because of an accepted exemption from immunization, continue to exclude them until the health department determines it is safe for them to return. A single case of measles anywhere in the United States is considered to be a reportable outbreak.

**Use** good hand-hygiene technique at all times and routine infection control measures.

### What are the roles of the teacher/caregiver and the family?

**Report** the infection to the staff member designated the child care program or school for decision-making and action related to care of ill children. That person in turn alerts possibly exposed family and staff members to watch for symptoms.

**Report the infection to the health department.** If the health professional who makes the diagnosis does not inform the health department that the child who has the infection is a participant in a child care program or school, this could lead to a delay in controlling the spread.

**Review and ensure** that all children have received the MMR vaccine according to current immunization recommendations.

**Ensure** that staff members who have had fewer than 2 doses of vaccine are properly immunized, unless documented to have had the disease or were born before 1957 (presumed immune).

**Exclude** exposed children with weakened immune systems and who have not received MMR vaccine. (Infants younger than 12 months are too young to have been immunized against measles.)

### Readmit to group setting?

4 days after beginning of rash

21 days after the onset of rash in the last case of measles — (unimmunized children and caregivers)

When the child is able to participate and staff members determine that they can care for the child without compromising their ability to care for the health and safety of the other children in the group

*Adapted from the Managing Infectious Diseases in Child Care and Schools, 3rd Edition. 2013*