

# Measles

## What is Measles?



Measles is a serious respiratory disease (in the lungs and breathing tubes) that causes a rash and fever. It is very contagious. In rare cases, it can be deadly.

Measles is common in other parts of the world. People with measles can travel into the United States and spread the disease to unvaccinated people including children too young to be vaccinated. Also, unvaccinated U.S. residents can get measles while they are abroad and bring the disease into the United States and spread to others.

## Spread of Disease

Measles spreads when a person infected with the measles virus breathes, coughs, or sneezes. It is very contagious. A person can catch measles just by being in a room where someone with measles has been, up to two hours after that person is gone. Measles can be passed before an infected person develops a rash. Almost everyone who has not had the MMR vaccine will get measles if they are exposed to the virus.

**Measles can be prevented by the MMR (Measles, Mumps, and Rubella) vaccine. Doctors recommend that children get two doses of the MMR vaccine for best protection.**

- The first dose at 12 to 15 months of age
- The second dose at 4 to 6 years of age

**Infants 6 months to 11 months old should have 1 dose of MMR vaccine before traveling to another country.**

## Signs and Symptoms

Measles starts with a fever that can get very high. The symptoms of measles generally appear about seven to 14 days after a person is infected. Some of the other symptoms that may occur are:

- Cough, runny nose, and red eyes
- Rash of tiny, red spots that start at the head and spread to the rest of the body
- Diarrhea
- Ear infection

## Diagnosis

A doctor can usually diagnose measles based on the disease's characteristic rash as well as a small, bluish-white spot on a bright red background — Koplik's spot — on the inside lining of the cheek. However, many doctors have never seen measles, and the rash can be confused with a number of other illnesses. If necessary, a blood test can confirm whether the rash is truly measles.

**Scientists in the United States and other countries have carefully studied the MMR vaccine. No link has been found between autism and the MMR vaccine.**

## Treatment and Complications

No treatment can get rid of an established measles infection. However, some measures can be taken to protect vulnerable individuals who have been exposed to the virus.

**Post-exposure vaccination.** Non-immunized people, including infants 6-11 months may be given the measles vaccination within 72 hours of exposure to the measles virus to provide protection against the disease. If measles still develops, the illness usually has milder symptoms and lasts for a shorter time.

**Immune globulin.** Pregnant women, infants and people with weakened immune systems who are exposed to the virus may receive an injection of proteins (antibodies) called immune globulin. When given within six days of exposure to the virus, these antibodies can prevent measles or make symptoms less severe.

Measles can be dangerous, especially for babies and young children. For some children, measles can lead to:

- Pneumonia
- Deafness
- Lifelong brain damage
- Death

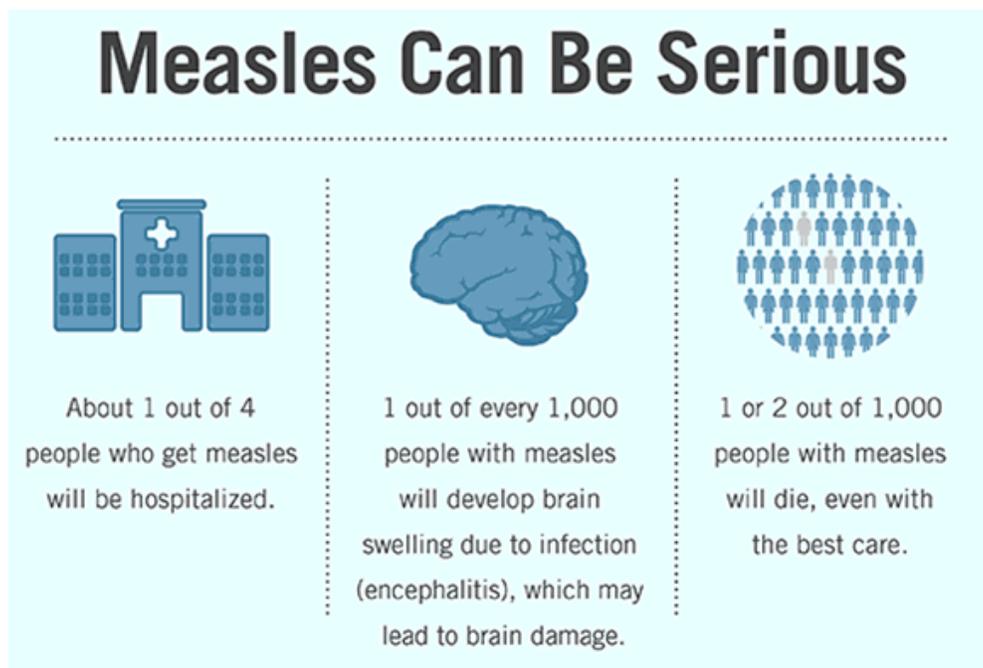
## People at Risk

Risk factors for measles include:

- **Being unvaccinated.** A person who has not received MMR vaccine is much more likely to develop the disease.
- **Traveling internationally.** Traveling to countries where measles is more common increases a person's risk of catching the disease.
- **Having a vitamin A deficiency.** Lack of vitamin A in a person's diet can increase the risk of catching measles and having more severe symptoms.

## Prevention

Measles can be prevented with the MMR (measles, mumps, and rubella) vaccine. In the United States, widespread use of measles vaccine has led to a dramatic reduction in measles cases compared with the pre-vaccine era.



**For more sources of information on this topic visit:**

ST. CLAIR COUNTY HEALTH DEPARTMENT [www.scchealth.co](http://www.scchealth.co)

MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES [www.michigan.gov/mdhhs](http://www.michigan.gov/mdhhs)

CENTERS FOR DISEASE CONTROL AND PREVENTION [www.cdc.gov](http://www.cdc.gov)

THE MAYO CLINIC [www.mayoclinic.org](http://www.mayoclinic.org)