

## MEASLES (RUBEOLA)

### What is measles (rubeola)?

Measles is a highly contagious disease caused by a virus. Sometimes it is called the '10-day,' 'hard,' or 'red' measles. This is different than rubella which is sometimes called 'German' or '3-day' measles. People sometimes confuse these diseases.

### What are the symptoms of measles?

The first symptoms usually begin within 8 to 12 days after exposure but can take up to 21 days. The rash usually appears within 14 days of exposure. Measles symptoms usually occur in two stages. In the first stage, most people have a fever, runny nose, redness of the eye(s), and cough. The second stage begins a few days later when a red spotty rash begins to develop on the face and spreads over the entire body. Little white spots, called Koplik's spots, may also be seen on the gums and inside of the cheeks.

### How is measles spread?

**Measles virus spreads very easily** through the air when someone with measles coughs or sneezes, or by direct contact with infected nose or throat secretions.

### How long are people contagious?

People are contagious from 4 days before the rash appears, through 4 days after the rash appears.

### Who gets measles?

Although a person of any age can get measles, it is usually regarded as a childhood disease. Generally, preschool children, adolescents, young adults, and inadequately immunized individuals account for most of the measles cases in the United States. You can only get measles once; a person has permanent immunity after having the disease.

### What treatment is available for people with measles?

There is no specific treatment for measles.

### Do infected people need to be kept home from school, work, or daycare?

It's very important that people with measles stay home from work, school, daycare, and other settings where others could be exposed until at least four days after the rash develops (i.e., returning on the 5<sup>th</sup> day).

### Where can I learn more about possible complications of measles?

Please visit <https://www.cdc.gov/measles/signs-symptoms/index.html> to learn more about complications of measles, which can be more likely in children under 5 years of age, adults over 20 years of age, and people who are pregnant or immunocompromised.

### How can I protect myself and my family from getting measles?

Check your vaccination records to ensure that you and your family have received the recommended doses of the measles-mumps-rubella (MMR) vaccine (see next question). People can also get a blood test (serologic titer) to show that they have had measles infection or vaccination in the past. People born before 1957 are assumed to be immune to measles (although healthcare workers born before 1957 without any other evidence of immunity should consider getting two doses of MMR vaccine).

If you can't find your vaccine records and are not sure whether you have received MMR vaccine before, there is no harm in getting another dose even if you are already immune. Check with your doctor if you are pregnant or planning to become pregnant, have a weakened immune system (or family history of immune system problems), have recently received any blood products or other vaccines, have tuberculosis or a condition that makes you bruise or bleed easily, or have a severe, life-threatening allergy, as some people should not get the vaccine or should wait to get it.

## What are the recommendations for measles vaccination?

- Children should get two doses of measles-mumps-rubella (MMR) vaccine, with the first dose given at 12-15 months old and the second dose given at 4-6 years old.
  - The second dose can be given earlier, as long as it is given at least 28 days after the first dose.
- Adults who are not at an increased risk of measles exposure or transmission (see below) should have at least one documented dose of MMR, if they have no other evidence of immunity.
- Healthcare workers, students at post-high school educational institutions, international travelers, and groups at increased risk during outbreaks should have documentation of two MMR doses, if they have no other evidence of immunity.
- People aged 6 months and older who will be traveling internationally should be protected against measles.
  - Infants 6 through 11 months of age should receive one dose of MMR vaccine.
    - These infants will still need to receive two more doses at 12-15 months and at 4-6 years of age.
  - Children 12 months of age and older should receive two doses of MMR vaccine, separated by at least 28 days.
  - Teenagers and adults who do not have presumptive evidence of immunity against measles should receive two doses of MMR vaccine separated by at least 28 days.

To learn more, visit <https://www.cdc.gov/vaccines/vpd/mmr/public/index.html>.