

## Measles

MU Patient Education Series

## Definition:

Measles (Rubeola) is a highly contagious viral infection of the respiratory system that is caused by the moribillivirus. The name "measles" comes from the Middle English "maselen" meaning "many little spots" characteristic of the rash. The word "rubeola" refers specifically to the reddish color of the rash.

## CAUSES:

Measles can be easily spread from person to person through coughing and sneezing of an infected person. You can spread the virus to others from 4 days before the rash starts until 4 days after the rash appeared. The virus can live on surfaces for several hours. As the infected particles enter the air and settle on surfaces, anyone within close proximity can become infected with the measles virus. In fact, if a person has measles, 9 out of 10 of his close contacts will get it too, unless they are protected. If you have had measles, you can't get it again. Most people born before 1957 and the introduction of the vaccine have had measles.

## SIGNS/SYMPTOMS:

The symptoms of measles generally appear about seven to 14 days after a person is infected. Measles typically begin with:

- High fever
-Cough
-Runny nose
-Red, water eyes (conjunctivitis)
- Two or three days after symptoms begin, tiny white spots (Koplik spots) may appear inside the mouth
-Three to five days after symptoms begin a rash breaks out

The rash usually begins as flat red spots that appear on the face at the hairline and spread downward to the neck, trunk, arms, legs, and feet. Small raised bumps may also appear on top of the flat red spots. The spots may become joined together as they spread from the head to the rest of the body. When the rash appears, a person's fever may spike to more than $104^{\circ}$ Fahrenheit.

After a few days, the fever subsides and the rash fades.
About three out of 10 people who get measles will develop on or more complications including pneumonia, ear infections, or diarrhea. Complications are more common in adults and young children.

According to the Centers for Disease Control and Prevention, in 201138 percent of children younger than 5 years old who had measles in the United State had to be treated in the hospital.

## Treatment/CARE:

There is no prescription medication to treat measles. The virus and symptoms typically disappear within two to three weeks. However, your doctor may recommend:

- Medicine to relieve fever and muscle aches. Read and follow all instructions on the label
- Rest and plenty of fluids.
- Humidifier to ease a cough and sore throat
- Stay away from other people as much as you can so that you don't spread the disease. Anyone who has measles should stay out of school, day care, work, and public places until at least 4 days after the rash first appeared.
- Your doctor may suggest vitamin A supplements if your child has measles


## PREVENTION:

Before the early 1960's measles was a childhood disease that everyone contracted before they were 20 years old. The first measles vaccine was introduced in 1963 and the incidence of measles in the United States began to decline. A strong push to vaccinate continued and in the year 2000 measles was declared as being eliminated or no longer considered endemic in the United State. So many people have been vaccinated that the disease basically died out in this country.

Unfortunately, this has led to a false sense of security and has led to increasing numbers of people to opt out of vaccinations leaving them vulnerable to infection. The problem is that measles is very prevalent in other parts of the world and people appear to forgotten the negative impact of this infection.

From January 1 to January 30, 2015, 102 people from 14 states were reported to have measles. Public health officials are on an all-out campaign to remind people that measles is still around and prevalent in many other parts of the world and can cause serious illness. Even in developed countries for every
thousand children who get measles, one to three of them die despite the best treatment. Visitors from abroad or Americans that have traveled abroad can easily bring measles back into the U.S.

In this most recent resurgence of the disease, the CDC has noted that the majority of adults and children that have been reported did not get vaccinated or don't know whether they have been vaccinated. This is not a problem with the measles vaccine not working. This is a problem of the measles vaccine not being used.

REFERENCES:

1. Transcript for CDC Telebriefing: Measles in the United States, 2015. Centers for Disease Control website. http://www.cdc.gov/media/releases/2015/t0129-measles-in-us.html. Accessed February 2, 2015.
2. Measles: What you should know. APIC website. http://www.apic.org/For-Consumers/Monthly-alerts-for-consumers/Article?id=measles-what-you-should-know . Accessed February 2, 2015.
3. Measles Vaccination. Center for Disease Control website. http://www.cdc.gov/measles/vaccination.html . Accessed February 2, 2015.

## DISCLAIMER:

Medline does not practice medicine, and no information presented on this website is medical advice or intended as a substitute for the advice of a physician. All information on this website concerning medical conditions is from publicly available sources.

