Measles Fact Sheet

Measles is a highly contagious rash illness caused by a virus.

Although measles has been relatively rare in the United States, it remains a leading cause of death among young children worldwide. Measles is usually thought of as a childhood disease, but people of any age can get it. Complications of measles include diarrhea, otitis media (inflammation of the middle ear), pneumonia (lung infection), encephalitis (inflammation of the brain), seizures, and death. Complications are most common in children younger than 5 years of age and adults 20 years of age and older.

Measles is spread from person-to-person by airborne droplets and direct contact with infected respiratory secretions.

The highly contagious virus can be found in the air after someone who is infected with measles coughs or sneezes. The virus can also be spread by direct contact with infected nasal or throat secretions. The virus can remain contagious on surfaces and suspended in the air for up to 2 hours. A person can spread measles from 4 days before to 4 days after the rash develops. Anyone with measles should not attend childcare, school, work, or other public places until they are no longer contagious.

Symptoms to look for include:

- Rash that starts on the face and neck and then spreads. The rash fades in the order in which it appears.
- High fever
- Runny nose
- Red, watery eyes
- Cough (sometimes like Croup)
- Small red spots, with blue and white centers inside the mouth (Koplik spots)

Symptoms such as fever, cough, and watery eyes may occur within 8 to 12 days after exposure. It usually takes 14 days (range 7-18 days) after exposure to develop a rash.







Laboratory testing is needed to confirm a measles infection.

People who think they have measles should contact a doctor or local health department immediately to be tested. Measles is diagnosed by a history of exposure to the disease, symptoms, and laboratory testing of the blood.

There is no specific treatment for measles.

Treatment of patients with measles is supportive care which consists mainly of good nutrition, fluids, and medications for symptoms such as acetaminophen (Tylenol) for fever. Antibiotics may be prescribed for treating eye or ear co-and superinfections.

Measles can be prevented with a measles vaccine.

The best way to protect against measles is to receive the measles, mumps, and rubella (MMR) vaccine. Please refer to the later sections of the article for a more detailed discussion of the measles vaccine. For additional information about measles vaccine, please visit: http://www.cdc.gov/vaccines/Pubs/vis/default.htm.

A person in close contact with someone who has measles should be notified of the exposure, determine if they are susceptible to measles infection, and receive treatment if necessary. Vaccines given within 72 hours or Immune Globulin (IG) given within 6 days of measles exposure may provide protection from developing measles or minimize illness severity. Close contacts may include:

- Persons who live in the same house:
- Persons who have done medical treatments such as mouth-to-mouth resuscitation or intubation;
- Close social contacts in child and daycare settings, schools, work, or extracurricular activities; or
- Persons who were exposed during travel to countries/areas in which measles is endemic.

Measles Vaccination

The best way to protect against measles is to receive the measles, mumps, and rubella (MMR) vaccine.

Available Vaccines for adults: MMR

- Contains a combination of measles, mumps, and rubella vaccines.
- Two MMR vaccines are available for use in the United States: M-M-R II and PRIORIX. Both are recommended similarly and considered interchangeable.

Recommendations

Both MMR vaccines may be given at the same time as other vaccines. Your healthcare provider can give you more information about each and which is best to receive.

Younger Children—Need 2 doses of measles vaccine are recommended for children starting at 12 to 15 months of age. The vaccine is given as part of the measles-mumps-rubella (MMR) vaccine. The 2nd dose may be given at any age at least 4 weeks after the 1st dose. The MMR vaccine is required for all Maryland, West Virginia, and Virginia (public) school children in Kindergarten through Grade 12.

Older children, **adolescents**, & **adults**— Need 1 or 2 doses of MMR vaccine if they don't have evidence of immunity demonstrated by measles titers, a blood test for measles antibodies. Doses should be separated at least 28 days apart. If immunity status is unknown or if vaccinated between 1963- 1967, measles titers can be checked, or a booster may be given. There is no harm in receiving an MMR booster and is safe even if you are already immune. Women should not get the vaccine if they are pregnant or plan to get pregnant within 4 weeks after getting the vaccine.

Anyone traveling internationally—Should be fully vaccinated before traveling.

After exposure to measles, mumps, or rubella

If you don't have immunity against these diseases and become exposed to them, talk with your doctor about getting MMR vaccine. It is not harmful to get MMR vaccine after being exposed to measles, mumps, or rubella. Doing so may possibly prevent later disease.

Receiving an MMR vaccine within 72 hours of initially being exposed to measles may provide protection or result in milder symptoms. In other cases, you may be given a medicine called immunoglobulin (IG) within 6 days of being exposed to measles. This also may provide protection against the disease or result in milder illness symptoms. Check with your doctor or local health department for more information and advice.

One dose of MMR vaccine is:	Two doses of MMR vaccine are:
93% effective against measles	97% effective against measles
72% effective against mumps	86% effective against mumps
97% effective against rubella	

Possible side effects

Most people don't have any side effects from the vaccine. The side effects that do occur are usually mild, and may include:

- Soreness, redness, or swelling where the vaccine was given.
- Fever

- Mild rash
- Temporary pain and stiffness in the joints

More serious side effects are rare. These may include high fever leading to a seizure. For additional information please visit: https://www.cdc.gov/measles/index.html

Information Adapted from: WWW.cdc.gov/measles and health.maryland.gov