

Measles Fact Sheet

1. **What is measles?** – Measles is caused by the measles virus. It begins with a fever that lasts for a couple of days, followed by a cough, runny nose, and conjunctivitis (pink eye). The illness starts with a runny nose, watery eyes, cough, and high fever. After 2 or 3 days, tiny white spots appear in the mouth. After 2 more days, a raised, red rash starts on the face and spreads down the body and out to the arms and legs. The rash usually lasts 4 to 7 days. Symptoms start about 10 days after exposure and last from 1 to 2 weeks. After about five days, the rash fades in the same order it appeared.
2. **How is measles spread?** - Measles is highly contagious for one week before and one week after the rash begins. Measles is spread by infected droplets during sneezing or coughing, contaminated objects, and direct contact with nasal or throat secretions of infected persons. The measles virus resides in the mucus in the nose and throat of infected people. When they sneeze or cough, droplets spray into the air and the droplets remain active and contagious on infected surfaces for up to two hours.
3. **Are serious complications possible?** - Measles itself is unpleasant, but the complications are dangerous. Six to 20 percent of the people who get the disease will get an ear infection, diarrhea, or even pneumonia. One out of 1000 people with measles will develop encephalitis (inflammation of the brain) and about one out of 1000 will die. Encephalitis (inflammation of the brain) can lead to convulsions, deafness, or mental retardation. Measles can cause miscarriages or premature delivery in pregnant women.
4. **Who is at increased risk of becoming infected with measles?**
 - a. Infants who are too young to have been immunized (less than 1 year of age),
 - b. Persons who received immune globulin around the same time as when they were vaccinated against measles,
 - c. Persons who were vaccinated with an inactivated vaccine (available from 1963-1967) and have not been revaccinated, and
 - d. Those who refused vaccination, or are from a part of the world where there is low vaccination coverage.
5. **What about older persons?** - Persons born before 1957 are generally considered immune because they probably had the disease.
6. **Can measles be prevented?** - Measles can be prevented through vaccination. Pennsylvania's immunization law requires that all children attending school or licensed day care centers have a record of immunization against measles. The measles vaccine is combined with the

vaccines for mumps and rubella (German measles) and is known as the MMR vaccine. Measles vaccine is given to toddlers when they are 12 to 15 months of age. A second MMR is required for all schoolchildren.

7. **What do I do if I know I have been exposed?** - People exposed to someone who has measles should consult their health care provider immediately. If they have not been vaccinated, measles vaccine can help prevent infection if it is given within three days of exposure. Immune globulin may help others if it can be given within six days of exposure.
8. **Why is vaccination necessary?** - Before the measles vaccine became available, there were approximately 450,000 measles cases and an average of 450 measles-associated deaths were reported each year. Widespread use of measles vaccine has led to a greater than 99% reduction in measles cases in the United States compared with the pre-vaccine era. However, measles is common in other countries where it spreads rapidly and can be easily brought into the U.S. If vaccinations were stopped, measles would return to pre-vaccine levels in the U.S. and hundreds of people would die from measles-related illnesses.
9. **What kind of vaccine is given to prevent measles?** - The MMR vaccine prevents measles and two other viral diseases — mumps and rubella. These three vaccines are safe given together. MMR is an attenuated (weakened) live virus vaccine. This means that after injection, the viruses grow, and causes a harmless infection in the vaccinated person with very few, if any symptoms. The person's immune system fights the infection caused by these weakened viruses and immunity develops which lasts throughout that person's life.
10. **How effective is MMR vaccine?** - More than 95% of the people who receive a single dose of MMR will develop immunity to all three viruses. A second gives immunity to almost all of those who did not respond to the first dose.
11. **For more information about measles:** <http://www.cdc.gov/vaccines/vpd-vac/measles/faqs-dis-vac-risks.htm>

This fact sheet provides general information. Please contact your physician for specific clinical information.