## Measles Fact Sheet

1. What is measles? - Measles is an acute viral infectious disease. It begins with a fever that lasts for a couple of days, followed by a cough, runny nose and conjunctivitis (pink eye). A raised, red rash starts on the face and spreads down the back and chest out to the arms and legs. 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. Infected individuals are usually contagious for four days before and four days after the rash begins. Measles is spread by airborne infected droplets from sneezing or coughing, contaminated objects and direct contact with nasal or throat secretions of infected persons. The measles virus is present in the mucus from the nose and throat of infected people. When they sneeze or cough, mucus droplets spray into the air and those droplets remain 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 twenty percent of the people who get measles will also get an ear infection, diarrhea, or even pneumonia. One out of 1,000 people with measles will develop encephalitis (inflammation of the brain) and about one out of 1,000 will die.

## 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 likely had the disease, itself.
6. Can Measles be prevented? - Measles can be best 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. Two doses of measles vaccine are routinely recommended for all children. Measles vaccine is available in combination with the vaccines for mumps and rubella (german measles), (MMR) or combined with mumps, rubella and varicella (chickenpox) vaccine (MMRV). The first dose of measles vaccine should be given on or after the first birthday. Routinely vaccination is scheduled at 12 to 15
months of age. The second dose of MMR or MMRV is routinely given at ages 4 to 6 years of age, before the child enters Kindergarten or first grade. .
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 vaccination program began, an estimated 3 to 4 million persons in the United States were infected with measles each year, of whom, an average of 450 died. Widespread use of measles vaccine has led to a greater than $99 \%$ reduction in measles cases in the U.S. However, measles is still 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 a few years.
9. What kind of vaccine is given to prevent measles? - MMR and MMRV are attenuated (weakened) live virus vaccines. This means that after injection, the viruses grow and cause harmless infection in the vaccinated person with very few, if any clinical symptoms. The person's immune system fights the infection caused by these weakened viruses and immunity develops which lasts throughout that person's life against exposure to the circulating wildtype virus.
10. How effective is MMR vaccine? - Approximately $95 \%$ of children vaccinated at 12 months of age with a single dose of MMR or MMRV will develop good immunity to measles. . More than $99 \%$ of persons who receive two doses of measles vaccine, with the first dose administered no earlier than the first birthday, develop evidence of measles immunity.
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 and/or veterinarian for specific clinical information related to you or your animal.

