New Jersey Department of Health
Vaccine Preventable Disease Program
EXPOSED TO MEASLES?
Date: November 2018

With the recent outbreak of measles occurring in the United States, New Jersey residents may be notified by public health authorities, or their healthcare provider, that they have unknowingly been exposed to a case of measles or suspected measles. We understand that you may have questions or concerns. The purpose of this document is to help explain what is considered an exposure and what you need to do if you have been told that you have been exposed to measles.

Exposure

How do people get measles?

Measles is easily spread from person to person. When an infected person talks, coughs or sneezes, the virus is released into the air and enters another person’s body through the nose, mouth or throat. People can also become sick if they come in contact with the mucus or saliva (spit) from an infected person. The measles virus can live on contaminated surfaces and in the air for up to two hours. If other people breathe the contaminated air or touch the contaminated surface, then touch their eyes, noses, or mouths, they can become infected. Measles may be transmitted from 4 days before through 4 days after rash onset.

What does it mean to be “exposed” to measles?

“Exposed” means you’ve been in a situation where you can catch the virus from someone who already has measles. For example, you can be exposed to the measles virus by being in the same room, home, office, or waiting room with someone who has measles or by being there up to 2 hours after the person with measles has left. People are less likely to get sick with measles if they have been appropriately vaccinated. Approximately 90 percent of susceptible people will get measles if they are exposed to someone with the disease.

What is immunity?

Immunity means protection from disease. People who may have been exposed to measles, need to show proof of immunity.
How do you know if someone is immune to measles (for non-healthcare workers only)?

Generally, a person is considered immune if they:

1. Had measles in the past, and have laboratory confirmation to prove it, OR
2. Have laboratory evidence (a blood test that shows whether the body has antibodies to fight off the virus) of immunity, OR
3. Have written documentation of adequate vaccination with measles-containing vaccine in the past (often given as MMR [measles, mumps, and rubella] vaccine)
   - One or more doses of a measles-containing vaccine administered on or after the first birthday for preschool-age children and adults not at high risk
   - Two doses of measles-containing vaccine for school-age children and adults at high risk, including college students, health care personnel, and international travelers, OR
4. Were born before 1957
   - Adults born before 1957 are likely to have had measles disease as a child and are generally (but not always) considered not to need vaccination

http://www.cdc.gov/measles/hcp/#immunity

Why are people born before 1957 considered immune?

People born before 1957 lived through several years of epidemic measles before the first measles vaccine was licensed. As a result, these people are very likely to have had the measles disease. Surveys suggest that 95% to 98% of those born before 1957 are immune to measles. Note: The "1957 rule" applies only to measles and mumps—it does NOT apply to rubella.

Do people who received MMR in the 1960s need to have their dose repeated?

Not necessarily. People who have documentation of receiving LIVE measles vaccine in the 1960s do not need to be revaccinated. People who were vaccinated prior to 1968 with either inactivated (killed) measles vaccine or measles vaccine of unknown type should be revaccinated with at least one dose of live attenuated measles vaccine. This recommendation is intended to protect those who may have received killed measles vaccine, which was available in 1963-1967 and was not effective.

What should I do if I’m unsure whether I’m immune to measles?

If you’re unsure whether you’re immune to measles, you should first try to find your vaccination records or documentation of measles immunity. Another option is to have a doctor test your blood to determine whether you’re immune, but this option is likely to cost more and may take two doctor’s visits.

How can I locate my immunization records?

Contact your healthcare provider regarding your past immunization history. Schools, colleges, prior employers, or the military (if you were enlisted) may also have records of your immunization history. If you are, or have been, pregnant your obstetrician’s office may have also tested you for measles when they tested you for rubella. You may also be included in your state’s immunization registry.

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What should I do if I (or my child) have come into contact with someone who has measles?

- **Call** your healthcare provider as soon as possible to discuss your exposure so special arrangements can be made for you to be evaluated without putting other patients and medical office staff at risk. A person infected with measles can be infectious **before** they have any symptoms of the disease. Your healthcare provider is the best person to determine if you are immune to measles based on your vaccination record and any medical conditions you might have.
- If you or your child are not immunized, you may be advised to stay home (quarantine) and away from work, school, and public places for 21 days to ensure you/your child do not become infected and pass measles to others.
- If you have not been vaccinated, measles vaccine may help prevent disease if given within 72 hours of first exposure. Immune globulin (a blood product containing antibodies to the measles virus) may prevent or lessen the severity of measles if given within 6 days of first exposure.
- If you are immunized, or have other proof of immunity to measles, you do not need to be quarantined and may continue with your normal activities.

**About Measles Vaccine**

**How well does the measles vaccine work?**

The measles vaccine works extremely well. If 1,000 people each get 2 doses of measles vaccine, about 997 of them will be protected against measles (immune).

Getting 2 doses of vaccine is important, because some people (about 2-5 per 100) do not become protected (immune) after just one dose of vaccine.

**Does the measles vaccine protect against other diseases too?**

In the USA, measles vaccine is almost always given as a combination with vaccine against 2 other viruses: mumps and rubella. This combination vaccine is called MMR (measles, mumps, and rubella) and it gives protection against all 3 viruses.

**What are the risks from MMR (measles, mumps, and rubella) vaccine?**

A vaccine, like any medicine, is capable of causing serious problems, such as severe allergic reactions. The risk of MMR vaccine causing serious harm, or death, is extremely small. Getting MMR vaccine is much safer than getting any of these three diseases. Most people who get MMR vaccine do not have any problems with it.

**Mild Problems**
- Fever (up to 1 person out of 6)
• Mild rash (about 1 person out of 20)
• Swelling of glands in the cheeks or neck (rare)

Moderate Problems
• Seizure (jerking or staring) caused by fever (about 1 out of 3,000 doses)
• Temporary pain and stiffness in the joints, mostly in teenage or adult women (up to 1 out of 4)
• Temporary low platelet count, which can cause a bleeding disorder (about 1 out of 30,000 doses)

Severe Problems (very rare)
• Serious allergic reaction (less than 1 out of a million doses)

**What is immunoglobulin (IG) and who needs it?**

IG is a medical way to prevent measles from becoming more serious in some people after they are exposed to the virus. It will be given to some infants <12 months of age, pregnant women, persons with weakened immune systems, and others who for medical reasons cannot get the vaccine. You discuss the risks and benefits of getting immune globulin with your healthcare provider.

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**About Quarantine**

**What is quarantine?**

Quarantine is for non-immune people who have been in contact with someone with measles. It is an important part of stopping measles spreading in the community, especially to high risk people.

Quarantine means staying at home and away from daycare/school/work, group and social activities, sports and recreation events and public places like cinemas and shopping malls.

**Who needs to be quarantined?**

People who have been exposed to someone with measles and are in the period where they could still get sick from it.

**Why is the quarantine period for measles 21 days?**

Although the incubation period (time between being exposed to the measles virus and the appearance of the first symptoms) is usually 10-14 days, sometimes it can take longer from the time someone is exposed to measles until the time they get sick from it. We begin quarantine from day 5 from first exposure and continue through 21 days from last exposure. Quarantine should only occur in consultation with public health authorities, who will be able to help you determine the appropriate dates for quarantine.
If I get the vaccine now, will the quarantine be shorter?

If you were able to receive the vaccine within 72 hours after first exposure to someone with measles, you might not need to be quarantined. However, if you receive the vaccine after 72 hours, you will need to be quarantined for 21 days.

Do household members of a quarantined person need to be vaccinated?

See above: “How do you know if someone is immune to measles?” Household members who are immune to measles do not need vaccine. Household members who are not immune, or are not sure whether they are immune, should consider getting vaccine.

Can anyone come into the house where a person is quarantined?

No. Entering the home where a person is quarantined is highly discouraged. However, in cases requiring caregivers such as a child or the elderly, some individuals will be allowed to enter the household.

Documentation of birth before 1957, two valid measles vaccine doses, or a blood test showing measles immunity will need to be seen by Public Health officials for persons wanting to enter the quarantined home. No others will be allowed to enter.

If I have been exposed to measles, can I spread it to others in my household while I am under quarantine?

If you do not get measles, you cannot spread it to others. However, because you are still in the period where you could become ill, you may not know you are infectious. You can spread the disease up to 4 days before you develop a rash. Therefore, it is best to limit contact with those in your household and they should review their immune status. Please see above: “How do you know if someone is immune to measles?”.

Can the measles virus be transmitted via clothing?

No, measles cannot be spread via clothing.

When an infected person talks, coughs or sneezes, the virus is released into the air and enters another person’s body through the nose, mouth or throat. People can also become sick if they come in direct contact with the mucus or saliva (spit) from an infected person. Also, measles virus can live for up to two hours on a surface or in an airspace where the infected person coughed or sneezed. If other people breathe the contaminated air or touch the infected surface, then touch their eyes, noses, or mouths, they can become infected. A person who is not infected with the measles virus cannot transmit the virus to others or bring it home to family members and friends.

What about handwashing? Wearing a mask?

It is important for people to wash their hands frequently with soap and water, especially after coughing, sneezing, blowing their nose, going to the bathroom, or having contact with moist materials such as
tissues, diapers, and used masks. A minimum of 60% alcohol-based hand sanitizer can also be used instead of soap and water if the hands are not visibly dirty.

If there are other individuals living in the home of the quarantined person who are not immune to measles, the likelihood that they will get sick with measles may be reduced if the quarantined person stays inside their designated room/area, avoids contact with others, and wears a mask when in common rooms.

**Does the quarantined person need to wear a mask when leaving the house?**

The quarantined person should **not** leave the house, except to receive emergency medical care. In this case, yes, the quarantined person should wear a mask. If the quarantined person will not be able to wear the mask at all times because they are a baby or a child, this should be discussed with the medical facility **before** arrival.

**Can pets get infected with measles or spread measles?**

No, pets do not get infected with or spread the measles virus.

**What should I do if I get sick?**

If you become ill with measles-like symptoms, including fever, rash, runny nose, cough, loss of appetite, and “pink eye”, seek medical attention but remember to **call** your health care provider **before** going to the medical office and inform them that you were exposed to someone with measles or that you have symptoms of measles so that special arrangements can be made to prevent exposure to other patients and medical office staff. You should not go to work or school if you are sick.

**Resources**

**New Jersey Department of Health**

https://nj.gov/health/cd/topics/measles.shtml

**Centers for Disease Control and Prevention**

http://www.cdc.gov/measles/

**NJ Local Health Department Directory**

http://www.state.nj.us/health/lh/directory/lhdselectcounty.shtml