Measles FAQ

General Measles

What is measles?

Measles is a highly contagious respiratory disease that can cause serious illness. Measles is caused by a virus that normally grows in the back of the throat and in the cells that line the lungs. Measles spreads very easily when an infected person breathes, coughs or sneezes.

What are the symptoms of measles?

- Fever (may spike to more than 104° F)
- Cough
- Runny nose
- Red, watery eyes (Pink eye)
- Bluish/white spots on the inside of the mouth may appear before or on first day of the rash
- Rash starting on the face and spreading down to the rest of the body

An infected individual can spread measles to 9 out of 10 people nearby who are not protected.

People can spread measles before they show symptoms. Symptoms usually last 7-10 days.

When do symptoms start?

Symptoms usually appear within 14 days after exposure, although they may occur as early as 7 or as late as 21 days after exposure. The measles rash doesn't usually appear until 2–5 days after the fever begins.

What does the measles rash look like?

- Rash usually develops 2-5 days after onset of symptoms
- Small raised or flat bumps that may join together as rash spreads
- Usually starts on the face, along the hairline, or behind the ears
- Spreads downward to the chest and back, and then to the arms and legs
- Not usually itchy
- Rash usually lasts 5-6 days

How is measles diagnosed?

For someone to be diagnosed with measles they must have symptoms, a laboratory test, or have been exposed to someone with measles.

When is someone contagious with measles?

Someone who has measles is contagious 4 days before and 4 days after their rash begins.

How serious is measles?

Measles is a serious disease. Nearly 1 to 3 of every 1,000 children who become infected with measles will die from respiratory and neurologic complications.

What are possible complications from measles?

Diarrhea is the most common complication of measles (occurring in 8% of cases), especially in young children. This can lead to severe dehydration which can be life threatening. Ear infections occur in 7% of reported cases. Pneumonia is the most common cause of death from measles in young children. Pneumonia, occurring in 6% of reported cases, accounts for 60% of measles-related deaths. About 1 out of 1,000 cases will develop acute encephalitis, an inflammation of the brain. This serious complication can lead to permanent brain damage. Measles during pregnancy increases the risk of premature labor, miscarriage, and low-birth-weight infants. There can also be long term risks that occur years after a measles infection, including nervous system infections and the continued risk for brain swelling. Measles can be especially severe in people with compromised immune systems. Measles is more severe in malnourished children, particularly those with vitamin A deficiency. In developing countries, the fatality rate may be as high as 25%. Complications from measles are more common among young children (less than five years), adults (older than 20 years), pregnant people, and people with weakened immune systems.

Who is at risk of measles?

Anyone who has not been immunized or had measles in the past is at risk. Babies younger than 12 months are at risk because they are too young to have been vaccinated.

How do I protect my baby who is under 12 months old?

Newborns have some natural immunity from their mothers, if the mother was vaccinated, for the first few months of their life. If parents or caregivers have not gotten the MMR vaccine or had measles in the past, they should get vaccinated. It is important to make sure people who are around your new baby do not expose your baby to measles. Under certain circumstance, infants six months of age may receive one dose of measles containing vaccine. This dose does not count towards the two-dose series.

Measles, Mumps, Rubella (MMR) Vaccine & Immunity

How is measles prevented?

The measles, mumps, and rubella (MMR) vaccine is very safe, effective and the best protection against measles. Two doses of MMR vaccine are about 97% effective at preventing measles. One dose is about 93% effective.

Who needs the measles vaccine (MMR)?

Everyone should be vaccinated with the MMR vaccine that does not have immune protection to measles (from vaccination records, a blood test, or documentation of a past measles infection).

- **Children** – Children should receive two doses of MMR vaccine, starting with the first dose at 12-15 months of age and the second dose at 4-6 years of age. A second dose may be given 28 days following the first dose if the child is 12 months of age or older.
- **Older children, adolescents, and adults** – People who were born after 1957 who do not have evidence of immunity against measles should get either 1 or 2 doses of MMR vaccine. MMR vaccination is especially important for healthcare professionals, international travelers, and other specific groups.
- **International Travelers** – Anyone traveling internationally should be fully vaccinated before traveling. Infants 6-11 months old should get one dose of the MMR vaccine before travel, then should receive two additional doses after their first birthday.

Should pregnant people get the measles vaccine (MMR)?

Pregnant people should not get the MMR vaccine. Pregnant people who need the vaccine should wait until after giving birth. People should avoid getting pregnant for four weeks after getting the MMR vaccine. Pregnancy testing is not required for child-bearing females to receive vaccination for measles.

Is the measles vaccine safe?

Research has shown that the measles vaccine (MMR) is safe and very effective. Getting vaccinated is much safer than getting any of the diseases the vaccine protects against.

Does the MMR vaccine cause autism?

Vaccines do not cause autism. In fact, studies have shown that there is no link between receiving vaccines and developing autism. Scientists have carefully studied the MMR shot and no studies have found a link between autism and the MMR vaccine.

Are there side effects from the vaccine?

Most children do not have side effects from the shot. Like any medication, the measles vaccine (MMR) may cause side effects, most of which are mild:

• Pain and redness at the injection site

• Fever

• Mild rash

• Swollen glands in the cheek or neck

Rare side effects include high fever which could cause a seizure.

Am I immune to measles?

- 2 doses of the MMR vaccine is approximately 97% effective against measles
- 1 dose of the MMR vaccine is approximately 93% effective against measles
- With documentation of immunity to measles you are considered immune
- With documentation of past measles infection you are considered immune
- If you were born before 1957, you are acceptable evidence of immunity

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. If you are not able to locate you records, you may receive a dose of MMR if you are not currently required to quarantine and do not have a contraindication to vaccination with a live virus vaccine (such as pregnancy or a severe immune disorder). 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 it may take some time to get the result.

How can I locate my immunization records?

Contact your health care provider or local health department regarding your past immunization history. Schools, colleges, prior employers, or the military 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 immunity to measles when they tested you for immunity to rubella. You may also be included in your state's immunization registry.

Can someone get measles more than once?

No.

Am I protected if I had "German Measles", "3-day Measles", or "Soft Measles"?

No, if you previously had "German Measles", "3-day Measles", or "Soft Measles" you have protection against Rubella not Measles. However, if you have a history of "10-day Measles" or "Hard Measles" you are protected against measles.

Measles Exposure

What is considered "Exposed"?

Exposed to measles means you've been in a situation where you can catch the virus from someone who is infected with measles. For example, you can be unknowingly exposed to the measles virus by being in the same room, home, or office. The measles virus can remain in an area for up to 2 hours after the person with measles has left.

What you should do if exposed to a person with measles:

Stay home and immediately call your healthcare provider or local health department and let them know that you have been exposed to someone who has measles. Your healthcare provider can:

o Check to see if you have been vaccinated against measles.

o Make special arrangements to evaluate you, if you develop symptoms consistent with measles, without putting other patients and medical staff at risk.

What is quarantine?

Quarantine means **staying at home and away from others** in your house while **monitoring for symptoms**. Do not go to public areas including to work, school, daycare, or any public areas (including the grocery store, drug store). If you require food, or medications, arrange for contactless delivery. Separate yourself from others who may live in your home and visitors, including using a separate bathroom, if available. Quarantine separates people who were exposed to an infected individual with measles in the time period when they could become ill. People who were exposed to measles may spread measles to others even before they have symptoms themselves. Quarantine helps prevent measles from spreading in the community. For measles, quarantine is 21 - 28 days from the last exposure to a person with measles.

Who needs to quarantine?

People who were exposed to measles and do not have immune protection to measles (from vaccination records, birth before 1957, a blood test, or documentation of a past measles infection).

How do I monitor for symptoms of measles?

Watch for symptoms such as fever, cough, congestion, red and itchy eyes, and rash. To monitor for fever, use a thermometer twice a day, once in the morning and once at night and record temperatures. Inform your healthcare provider or local health department if you develop symptoms. If you develop symptoms you would be in isolation (please see below).

Are there other things that can be done to limit the spread?

Yes, handwashing and masking can help reduce the spread within a household or at a medical facility if necessary. It is important for people to wash their hands often with soap & water, especially after coughing, sneezing, blowing their nose, or handling materials such as tissues, diapers, and used masks. An alcohol-based hand sanitizer can 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 chance 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.

What can I do to protect myself from the risk of measles infection and complications after I have been exposed to measles if I do not have immune protection to measles?

You may be eligible to receive an MMR vaccine or immune globulin.

Who can get an MMR vaccine after exposure?

- If you have one MMR you should get a 2nd dose of MMR vaccine within 3 days of your exposure.
- If you have NOT been vaccinated for measles and do NOT have documentation of immunity to measles or documentation of past measles infection:
    - If you are **NOT** pregnant, do **NOT** have a weakened immune system, and are **at least 6 months old** and were exposed within the last 3 days (72 hours), you should get a dose of MMR vaccine.

What is immune globulin?

Human Immune Globulins (IG) are blood products used to provide antibodies for the short-term prevention of some infectious diseases, including measles. If IG is administered within six days of initial measles exposure, it may provide some protection against measles or modify the symptoms of individuals without immunity to measles.

***Note: If IG is administered, the monitoring and quarantine period is extended to 28 days.

Who can get immune globulin?

Individuals who are at risk for severe disease and complications from measles (e.g., infants <12 months of age, pregnant women without evidence of measles immunity, and severely immunocompromised persons regardless of vaccination status because they might not be protected by the vaccine) should receive immunoglobulin (IG). Please refer to the IDCM for more information or consult your healthcare provider.

If someone has Measles

What you should do if you suspect you have measles:

Stay home and immediately call your healthcare provider or local health department and let them know that you may have measles. Your healthcare provider can:

- Make special arrangements to evaluate you, if needed, without putting other patients and medical staff at risk.

Provide your local public health department with:

- Clinical information (symptoms and onset dates)
- Travel history (within 21 days of symptom onset)
- Contacts/ places visited during your infectious period

What is isolation?

Isolation separates people who are sick with measles during their infectious period from people who are not sick to prevent further spread of disease. Isolation means **staying at home and away from everyone in your home**, including using a separate bathroom, if available. Individuals should isolate at the first sign or symptoms even before a rash appears after being exposed to a known case through the four days after rash onset, especially if they are unvaccinated and know transmission is occurring in the community.

If you are in isolation do not go anywhere, including to work, school, daycare, or any public areas (including the grocery store, drug store). If you require food, or medications, arrange for contactless delivery. If you develop concerning symptoms/ complications or experience a medical emergency, call your health care provider immediately, and let them know you have measles and are needing care before arriving. Do not use taxis or public transportation, if you are traveling by ambulance inform the 9-1-1 operator and EMS team prior to arrival.

What if someone in my family has measles?

They should stay isolated from you and others in the household for 4 days after their rash first appeared. This includes not sharing common spaces such as bathrooms, kitchens, living rooms. All individuals in the household should review their immune status (immunization status or confirmation of measles in the past). Frequent hand washing with soap and water for 20 seconds and disinfecting high-touch surfaces can help reduce the spread within a household.

Is there a treatment for measles?

There is no specific treatment for measles. People with measles need bed rest, fluids, and control of fever. Patients with complications may need treatment specific to their symptoms.

How long is a person with measles contagious?

Measles is highly contagious and can be transmitted from 4 days before the rash becomes visible to 4 days after the rash appears.

Should I get the MMR vaccine after having measles?

Even if you developed a measles infection, it is worth having the MMR vaccination once you have recovered, as it also protects against future infections with rubella and mumps.