

# OU Health Measles Frequently Asked Questions

## What is measles and how does it spread?

Measles, also known as rubeola, is a highly contagious viral infection that primarily affects the respiratory system. It can cause serious health complications, especially in young children and the immunocompromised.

Measles spreads through the air when an infected person coughs, sneezes, or talks. The virus can live on surfaces or in the air for up to two hours. About 90% of people close to an infected person who are not immune will become infected.

## Why is measles considered highly contagious?

Measles is the most contagious virus known to humans. Each infected individual can potentially infect another 18 people, and they can each go on to infect another 18. This is why outbreaks can quickly escalate.

## What are the symptoms of measles?

Symptoms of measles include:

- Fever: Often high and persistent.
- Dry cough: A common early symptom.
- Runny nose: Often with sneezing.
- Conjunctivitis: Swollen and red eyes.
- Rash: A red-brown skin rash that starts on the face and spreads to the rest of the body 3-5 days after the first symptoms start.
- Koplik's spots: Tiny bluish-white spots inside the mouth.
- General malaise: Feeling tired and unwell.
- Loss of appetite: Reduced desire to eat.
- Photophobia: Sensitivity to light.

Immunocompromised patients may present without a rash or with an atypical rash.

## Who is at risk for measles?

Measles can affect individuals of all ages, but certain groups are more vulnerable to severe complications, including:

- Unvaccinated individuals: Anyone who has not received the measles vaccine or has not previously had the disease.
- Infants and young children: Especially those too young to be vaccinated.
- Pregnant women: Measles can lead to complications such as premature birth or low birth weight.
- People with weakened immune systems: This includes individuals with conditions like leukemia or HIV infections.
- Adults older than 20 years of age: They can also experience severe complications, including hospitalization.

### **What are the complications of measles?**

In addition to its common symptoms, measles can lead to several serious complications, including:

- Hospitalization: 1 in 5 unvaccinated people in the U.S. with measles is hospitalized.
- Pneumonia: 1 in 20 children with measles gets pneumonia, the leading cause of death from measles in young children.
- Encephalitis: 1 in 1,000 children with measles develop encephalitis, leading to convulsions and potential deafness or intellectual disability.
- Death: 1 to 3 in 1,000 children with measles die from respiratory and neurologic complications.
- Pregnancy: Measles can cause premature birth or low birth weight in unvaccinated pregnant women.
- Long-term immune system damage: Making individuals more susceptible to other infections.

### **Who is considered high-risk for measles?**

Certain groups of people are at higher risk for measles and its complications, including:

- Unvaccinated individuals: Anyone who has not received the measles vaccine or has not previously had the disease.
- Infants and young children: Especially those too young to be vaccinated.
- Pregnant women: Measles can lead to complications such as premature birth or low birth weight.
- People with weakened immune systems: This includes individuals with conditions like leukemia or HIV infections.

### **How can measles be prevented?**

Measles can be prevented by getting the measles vaccine, avoiding close contact with infected individuals, practicing good hand hygiene, disinfecting surfaces, staying informed about outbreaks, and maintaining a healthy lifestyle.

### **What vaccine protects from measles?**

The best way to protect yourself from measles is by getting the measles, mumps, and rubella (MMR) vaccine. The MMR vaccine is highly effective in preventing measles, with two doses providing about 97% protection. There is also the MMRV vaccine, which protects against measles, mumps, rubella, and varicella (chickenpox). This vaccine is only licensed for use in children who are 12 months through 12 years of age.

### **How effective is the MMR vaccine in preventing measles?**

The MMR vaccine is highly effective. A dose administered after 12 months of age results in immunity in 93% of people, and the second dose increases immunity to 97%.

### **What are the MMR vaccination recommendations for children?**

Children should receive two doses of the MMR (measles, mumps, rubella) vaccine. The first dose should be given at 12 to 15 months of age, and the second dose at 4 to 6 years of age. In outbreak settings, children can receive a dose at 6 months of age for protection. If they receive an early dose, they will still need two more doses according to the typical schedule.

### **What are the MMR vaccination recommendations for immunocompromised individuals?**

Individuals with compromised immune systems should consult with their healthcare provider before receiving the MMR vaccine. Generally, live vaccines like MMR might need to be deferred until immune function has improved. All family and close contacts of immunocompromised individuals should receive two doses of the MMR vaccine separated by 28 days, unless they have other presumptive evidence of immunity.

### **Can pregnant women receive the MMR vaccine?**

Pregnant women should not receive the MMR vaccine because it is a live virus vaccine. Women who are planning to become pregnant should ensure they are up to date with the MMR vaccine before conception. It is recommended to avoid becoming pregnant for at least 4 weeks (28 days) after receiving the MMR vaccine.

### **I don't know if I am vaccinated for measles or if I have immunity.**

To determine if you are immune to measles, you can check for the following:

- **Vaccination Records:** If you have written documentation showing that you received two doses of a measles-containing vaccine (such as the MMR vaccine), you are considered protected.
- **Laboratory Confirmation:** A laboratory test can confirm if you had measles at some point in your life or if you are immune to measles.
- **Birth Year:** If you were born before 1957, you are generally considered immune to measles, as it was common before the vaccine was available.

If you are unsure about your immunity, it is recommended to get vaccinated with the MMR vaccine. There is no harm in getting another dose of the vaccine even if you may already be immune.

### **Am I protected against measles?**

You are considered protected if you have written documentation showing at least one of the following:

- You received two doses of measles-containing vaccine.
- A laboratory confirmed that you had measles at some point in your life.
- A laboratory confirmed that you are immune to measles.
- You were born before 1957.

### **I am an adult now but only got one dose of the measles vaccine as a child. Do I need a second dose?**

If you were born after 1957, one dose of the measles vaccine is sufficient to be considered protected from measles. Certain adults may need two doses. Adults who are going to be in a setting that poses a high risk for measles transmission should make sure they have had two doses separated by at least 28 days. These adults include:

- Students at post-high school education institutions.
- Healthcare personnel.
- International travelers.
- People who public health authorities determine are at increased risk for getting measles during a measles outbreak.

If you're not sure whether you are up to date on the measles vaccine, talk with your healthcare provider.

### **Who do I call if I want a vaccine?**

If you are not vaccinated for measles or have natural immunity (born before 1957) and you would like to get vaccinated for measles, please contact your primary care provider. If you do not have a primary care provider, please visit [www.OUHealth.com/PrimaryCare](http://www.OUHealth.com/PrimaryCare) to learn more. You can book an appointment online.

### **Can Vitamin A help treat or prevent measles?**

Vitamin A cannot prevent measles, but it may help manage the illness in infants and children, especially in severe cases or those with low vitamin A levels. Most people get enough vitamin A from foods like carrots, bell peppers, fish, broccoli, yogurt, and chicken. However, some may need supplements. Since vitamin A can build up in the body and cause toxicity, especially during pregnancy, it's important to consult a healthcare provider before taking additional vitamin A.

### **I've been exposed to someone who has measles. What should I do?**

Immediately call your healthcare provider and let them know that you have been exposed to someone who has measles. Your healthcare provider can:

- Determine if you are immune to measles based on your vaccination record, age, or laboratory evidence.
- Make special arrangements to evaluate you, if needed, without putting other patients and medical office staff at risk.
- If you are not immune to measles, the MMR vaccine or a medicine called immune globulin may help reduce your risk of developing measles. Your healthcare provider can advise you and monitor you for signs and symptoms of measles.

If you are not immune and do not get the MMR vaccine or immune globulin, you should stay away from settings where there are susceptible people (such as schools, hospitals, or childcare) until your healthcare provider says it's okay to return. This will help ensure that you do not spread it to others.

### **I think I have measles. How do I get tested?**

If you think you have measles, contact your healthcare provider or local or state health department. Testing typically involves a nasal or throat swab, similar to COVID testing. Serology testing detects specific IgM antibodies in serum specimens collected within the first few days of rash onset. It is also possible to detect measles through urine specimens.

### **What are the isolation rules if I have measles?**

If you suspect you have measles, it's crucial to follow isolation guidelines to prevent spreading the virus to others. Infected individuals should be isolated from others to prevent the spread of the virus. This includes staying in a separate room and avoiding contact with others, especially those who are not immune. Measles is extremely contagious because particles are very small and can stay in the air for up to two hours after a contagious person has been in an area.

### **Are there at-home treatments for measles?**

If you suspect you have measles, it is important to contact a healthcare provider immediately. They can provide a proper diagnosis and additional guidance. If you do have measles, it's important to focus on relieving symptoms and supporting recovery. Here are some recommendations:

- Rest: Ensure plenty of rest to help the body recover.
- Hydration: Drink plenty of fluids to stay hydrated.
- Fever Management: Use over-the-counter medications like ibuprofen or acetaminophen to reduce fever.
- Dim Lights: Keep the lights dim to help with photophobia (sensitivity to light).
- Clean Eyes: Use gentle cotton swabs to keep the eyes clean.
- Humidifier: Run a humidifier to soothe the airways.

### **Why does my healthcare provider need to tell the Oklahoma State Department of Health that I have measles?**

Measles is an immediately notifiable condition in Oklahoma. Healthcare providers must report suspected or confirmed cases to the OSDH, which helps in tracking and controlling the spread of the disease.

### **Where can I find local measles updates?**

The Oklahoma State Department of Health (OSDH) provides regular updates on measles cases and outbreaks on their website. This can help residents stay informed about the current situation. You can learn more at [Oklahoma.gov/health/measles](https://oklahoma.gov/health/measles).

### **How can I find out about potential public exposure to measles?**

The OSDH posts potential public exposure notices on their website. This information is crucial for individuals who may have been in contact with infected persons. You can learn more at [Oklahoma.gov/health/measles](https://oklahoma.gov/health/measles).