



MEASLES FAQ: General information for the public

Q: Am I protected against measles?

A: CDC considers you protected from measles if you have written documentation (records) showing at least **one** of the following:

- You received **two** doses of measles-containing vaccine, and you are a(n)—
 - School-aged child (grades K-12)
 - Adult who will be in a setting that poses a high risk for measles transmission, including students at post-high school education institutions, healthcare personnel, and international travelers
- You received **one** dose of measles-containing vaccine, and you are a(n)—
 - Preschool-aged child
 - Adult who will not be in a high-risk setting for measles transmission
- 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

Q: What should I do if I'm unsure whether I'm immune to measles?

A: 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 do not have written documentation of measles immunity, you should get vaccinated with measles-mumps-rubella (MMR) vaccine. 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 will take two doctor's visits. There is no harm in getting another dose of MMR vaccine if you may already be immune to measles (or mumps or rubella).

Q: I've been exposed to someone who has measles. What should I do?

A: Immediately call your doctor and let him or her know that you have been exposed to someone who has measles. Your doctor can:

- Determine if you are immune to measles based on your vaccination record, age, or laboratory evidence, and
- 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, MMR vaccine or a medicine called immune globulin may help reduce your risk developing measles. Your doctor can help to advise you and monitor for signs and symptoms of measles.

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

Q: I think I have measles. What should I do?

A: Immediately call your doctor and let him or her know about your symptoms you are having. Your doctor can:

- Determine if you are immune to measles based on your vaccination record or if you had measles in the past, and
- Make special arrangements to evaluate you, if needed, without putting other patients and medical office staff at risk.

Q: My doctor or someone from the health department told me that I have measles. What should I do?

A: If you have measles, you should stay home for four days after you develop the rash. Staying home is an important way to not spread measles to other people. Talk to your doctor to discuss when it is safe to return.

You should also:

- Cover your mouth and nose with a tissue when you cough or sneeze and put your used
- Tissue in the trash can. If you don't have a tissue, cough or sneeze into your upper sleeve or
- Elbow, not your hands.
- Wash your hands often with soap and water.
- Avoid sharing drinks or eating utensils.
- Disinfect frequently touched surfaces, such as toys, doorknobs, tables, counters.

Call your doctor if you are concerned about your symptoms.

Q: How effective is the measles vaccine?

A: The measles vaccine is very effective. One dose of measles vaccine is about 93% effective at preventing measles if exposed to the virus. Two doses are about 97% effective.

Q: Could I still get measles if I am fully vaccinated?

A: Very few people—about three out of 100—who get two doses of measles vaccine will still get measles if exposed to the virus. Experts aren't sure why. It could be that their immune systems didn't respond as well as they should have to the vaccine. But the good news is, fully vaccinated people who get measles are much more likely to have a milder illness. And fully vaccinated people are also less likely to spread the disease to other people, including people who can't get vaccinated because they are too young or have weakened immune systems.

Q: Do I ever need a booster vaccine?

A: No. CDC considers people who received two doses of measles vaccine as children according to the U.S. vaccination schedule protected for life, and they do not ever need a booster dose. Adults need at least one dose of measles vaccine, unless they have evidence of immunity. 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, and international travelers.

If you're not sure whether you were vaccinated, talk with your doctor.

Q: How common was measles in the United States before the vaccine?

A: Before the measles vaccination program started in 1963, about 3 to 4 million people got measles each year in the United States. Of those people, 400 to 500 died, 48,000 were hospitalized, and 4,000 developed encephalitis (brain swelling) from measles.

Q: What are the vaccine coverage levels like in the United States?

A: Nationally, the rates of people vaccinated against measles have been very stable since the Vaccines for Children (VFC) program began in 1994. In 2016, the overall national coverage for MMR vaccine among children aged 19—35 months was 91.1%. However, MMR vaccine coverage levels continue to vary by state, with MMR coverage levels of <90% observed in 2016 in several states and local areas. At the county or lower levels, vaccine coverage rates may vary considerably. Pockets of unvaccinated people can exist in states with high vaccination coverage, underscoring considerable measles susceptibility at some local levels.

Q: Where do cases of measles that are brought into the United States come from?

A: Travelers can bring measles into the United States from any country where the disease still occurs or where outbreaks are occurring including Europe, Africa, Asia, and the Pacific. Worldwide, the 19 cases of measles per 1 million persons are reported each year; about 89,780 die. In recent years, many measles cases came into the United States from common U.S. travel destinations, such as England, France, Germany, and India. During 2014, many measles cases came from the Philippines and Vietnam.

Q: Why have there been more measles cases in the United States in recent years?

A: In 2008, 2011, 2013, 2014, and 2015, states reported more measles cases compared with previous post-elimination years. CDC experts attribute this to:

- More measles cases than usual in some countries to which Americans often travel (such as England, France, Germany, India, the Philippines and Vietnam), and therefore more measles cases coming into the US, and/or
- More spreading of measles in U.S. communities with pockets of unvaccinated people

Q: Has measles been eliminated from the United States?

A: Yes. In 2000, the United States declared that measles was eliminated from this country. The United States eliminated measles because it has a highly effective measles vaccine, a strong vaccination program that achieves high vaccine coverage in children, and a strong public health system for detecting and responding to measles cases and outbreaks.

Q: What does “measles elimination” mean?

A: CDC defines measles elimination as the absence of continuous disease transmission for 12 months or more in a specific geographic area. Measles is no longer endemic (constantly present) in the United States.

Q: If measles is eliminated, why do people still get it in the United States?

A: Every year, unvaccinated travelers (Americans or foreign visitors) get measles while they are in other countries and bring measles into the United States. They can spread measles to other people who are not protected against measles, which sometimes leads to outbreaks. This can occur in communities with unvaccinated people.

Most people in the United States are protected against measles through vaccination. So measles cases in the U.S. are uncommon compared to the number of cases before a vaccine was available. Since 2000, when public health officials declared measles eliminated from the U.S., the annual number of people reported to have measles ranged from a low of 37 people in 2004 to a high of 667 people in 2014.

Q: Is measles a concern for the United States?

A: Yes. Since measles is still common in many countries, travelers will continue to bring this disease into the United States. Measles is highly contagious, so anyone who is not protected against measles is at risk of getting the disease. People who are unvaccinated for any reason, including those who refuse vaccination, risk getting infected with measles and spreading it to others. And they may spread measles to people who cannot get vaccinated because they are too young or have specific health conditions.

Q: Could measles ever re-establish itself in the United States?

A: Yes, measles could become endemic (constant presence of a disease in an area) in the United States again, especially if vaccine coverage levels drop. This can happen when people

- Forget to get vaccinated on time,
- Don't know that they need a vaccine dose (this is most common among adults), or
- Refuse vaccines for religious, philosophical or personal reasons.
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Research shows that people who refuse vaccines tend to group together in communities. When measles gets into communities with pockets of unvaccinated people, outbreaks are more likely to occur. These communities make it difficult to control the spread of the disease. And these communities make us vulnerable to having the virus re-establish itself in our country.

High sustained measles vaccine coverage and rapid public health response are critical for preventing and controlling measles cases and outbreaks.

Q: Will the United States ever get rid of measles completely?

A: Yes, it's possible. The first step is to eliminate measles from each country and region of the world. Once this happens, there will be no place from which measles can spread.

All member states in the six World Health Organization regions have committed to eliminating measles by the year 2020. Once every country eliminates a disease, health officials consider the disease "eradicated" from the world.