

Frequently Asked Questions about Measles and Measles Outbreaks

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Public Health Efforts

What is the Utah Department of Health (UDOH) doing to prevent the spread of measles in Utah?

The UDOH is working with local health departments, school districts, hospitals, community partners, and the Centers for Disease Control and Prevention to ensure that all persons who have been exposed to measles are contacted and provided appropriate information about vaccination, exclusion, quarantine and medical care.

What should I do if I don't know my vaccination status or I never had the MMR vaccine?

Individuals who may have been exposed to measles and have not been vaccinated should stay home (no work, church, shopping or recreational activities); specifically those who have been contacted by health officials and those students who were excluded from school due to lack of vaccination.

The MMR vaccine may prevent disease if given with 72 hours of exposure to measles. Immune globulin (IG) may prevent or reduce severity of disease if given within six days of exposure.

It is very important to follow the directions given by your healthcare provider and public health in order to protect your own health, and the health of those around you.

Where can I find information about my vaccination record or my child's vaccination record?

Contact your healthcare provider to get information on your family's immunization records. The Utah Immunization Information System (USIIS) is a state-wide immunization database that contains vaccination records of children and some adults. You may contact the Utah

Immunization Program at 801-538-9450 or the Utah Immunization Hotline at 1-800-275-0659 to request a search for immunization records in USIIS.

Disease Information

What is measles?

Measles is a highly infectious respiratory disease caused by the measles virus.

What are the symptoms of measles?

Measles symptoms include rash, high fever, cough, runny nose, and red, watery eyes. These symptoms usually appear within 7-18 days from exposure to an infected person and last about a week. The disease can also cause severe illness and complications, such as diarrhea, ear infections, pneumonia, encephalitis (brain infection), seizures, and death. These complications are more common among children under five years or age and adults over 20 years of age.

How is measles spread?

Measles spreads easily. When an infected person sneezes or coughs, droplets containing the virus spray into the air. Those droplets can land in other people's noses or throats when they breathe or if they put their fingers in their mouth or nose after handling an infected surface. The measles virus can survive for two hours in air or on surfaces.

It is also important to know that people with measles are infectious (can spread the disease) from four days before to four days after the rash appears. Thus, an infected person can spread the disease before knowing he or she is infected.

Who is at highest risk for getting measles?

People at highest risk are those who are unvaccinated, pregnant women, infants under six months of age, and those with weakened immune systems.

Can a person be a "carrier" of measles and spread it to others?

No. Persons exposed to measles must develop measles to spread it to others. Measles is spread by infected persons or from being exposed to a closed area after a person infected with measles occupied the area in the previous two hours. Once the infectious period is over, the person cannot infect other individuals.

Is measles common in other parts of the world? What is the risk to U.S. residents?

Measles is a common disease in many countries throughout the world. It is possible that people from other countries who visit the United States could be ill with measles. To prevent getting measles from overseas visitors, U.S. residents should make sure they have been appropriately vaccinated.

Vaccine Recommendations

How can I protect my child and myself against measles?

The best protection against measles for individuals and the community is through routine immunization with MMR vaccine, if you or your child has not previously had the measles disease. The MMR vaccine is a combined vaccine that protects against measles, mumps, and rubella. In almost all cases, people who receive the MMR vaccine are protected against measles. However, in rare cases, people who get the vaccine can still become infected with measles if exposed to the virus. Two doses of MMR vaccine provide full protection against measles to 99 out of every 100 persons vaccinated.

Vaccination within 72 hours of exposure to measles in unvaccinated persons can provide protection against measles in some cases. If immunization status is unknown, vaccination in an immune person is not harmful.

Immune globulin (IG) *may* prevent or reduce the severity of disease if given within six days of exposure to measles.

Measles vaccine is available through pediatricians, family physicians, local health departments and community health centers. For a list of local health departments, visit http://www.ualhd.org/members.html.

What is gamma or immune globulin? Do I need it?

Immune globulin is a type of temporary protection that *may* prevent or reduce the severity of measles if given within six days of exposure to an infected person. People who are at risk for severe illness and complications from measles, such as infants younger than 12 months of age, pregnant women without evidence of measles immunity, and people with severely compromised immune systems, should receive IG.

At what age should children get the MMR vaccine?

Children should receive the first dose of MMR vaccine at 12-15 months of age and the second dose at 4-6 years of age (or no earlier than 28 days after the first dose). Older children who have not been vaccinated should receive two doses of MMR vaccine at least 28 days apart.

<u>During an outbreak</u>, children between 6-12 months of age who have been exposed to measles *may* be vaccinated with MMR vaccine. This dose will not be counted as the first dose of MMR typically given at 12-15 months of age and will have to be repeated on or after 12 months of age. Discuss this with your child's healthcare provider to determine if this is appropriate for your child.

Do adults need to be vaccinated against measles?

All U.S adults born during or after 1957 should also get at least one dose of MMR vaccine, unless they can show they either had the vaccine or measles disease or have a blood test that shows they are immune to measles. For certain groups of adults (for example, those who provide healthcare), two doses of MMR vaccine are necessary to be considered fully vaccinated. More

specific recommendations for measles vaccination are available at http://www.cdc.gov/vaccines/vpd-vac/measles/default.htm.

Some adults who were vaccinated for measles years ago as children may now be susceptible to the virus. Previously immunized adults should talk to their healthcare provider about their immune status and possibly getting a measles booster or blood test to check for immunity.

Can adults who were previously vaccinated still get the measles?

Yes. Adults who received one dose of measles vaccine may have some protection against the virus, but are considered susceptible and may still contract a milder version of measles. That's because with the passage of time, a person's protection from childhood vaccines may decrease.

Natural boosting comes from being exposed to a person with measles. That exposure creates antibodies and strengthens the body's ability to later fight off an infection. Over time, the body's memory cells may forget if not exposed to disease and have reduced ability to fight off infections.

Are there people who should not get the MMR vaccine?

Yes, some people should not get MMR vaccine or should wait before getting it. This includes persons with allergies to components of the vaccine and those with medical conditions that preclude vaccination. If you have further questions, discuss them with your healthcare provider.

Where can I get the MMR vaccine or blood test to check for immunity?

Measles vaccine is available through pediatricians, family physicians, local health departments and community health centers. For a list of local health departments, visit http://www.ualhd.org/members.html.

In addition to your personal healthcare provider, you may contact your Local Health Department to make an appointment for the immunity blood test.

Can pregnant women get the MMR vaccine?

No. The MMR is a live-virus vaccine and should not be given to pregnant women because of the "theoretical" risk of transmission of the vaccine virus to the fetus. Women can receive the MMR vaccine right after birth.

What if a pregnant woman was vaccinated with the MMR vaccine?

If a live-virus vaccine, such as the MMR, is inadvertently given to a pregnant woman, or if a woman becomes pregnant within four weeks after vaccination, she should talk to her healthcare provider about the potential effects on the fetus. Since live-virus vaccines pose a "theoretical" risk to the fetus, vaccination is not ordinarily an indication to terminate the pregnancy.

Can a breastfeeding woman get the MMR vaccine?

Yes. Breastfeeding is NOT a contraindication to MMR vaccination of the woman or the breastfeeding child.

What are the risks to the baby if a pregnant woman gets measles?

Measles during pregnancy increases the risk of premature labor, miscarriage, and low-birth-weight infants, although birth defects have not been linked to measles exposure.

School Vaccination Requirements

Is the MMR vaccine required for children in Utah schools?

Yes. All children, kindergarten through grade 12, are required to have two doses of the MMR vaccine.

Is the MMR vaccine required for children in childcare facilities?

Yes. One dose of the MMR vaccine is required for children at 12-15 months of age. Children younger than 12 months of age cannot be vaccinated *unless they are in an outbreak situation and have been exposed.* Therefore, it is important that other children and close contacts who can be vaccinated receive the MMR vaccine at the recommended age.

Can children attend school or childcare if they have not been vaccinated against measles?

Utah school law allows children in schools and childcare facilities to claim an exemption to vaccines for personal, medical or religious reasons. However, **in the event of an outbreak**, children in schools and childcare facilities who claimed an exemption will be excluded to reduce the potential of contracting measles.

Children who have not been vaccinated and have been exposed to measles will typically be excluded from school or childcare for 21 days after the onset of rash in the last measles case. Defer to your local public health department for specific information.

Evidence of Immunity

What is considered acceptable evidence of measles immunity for children in schools and childcare facilities?

- Utah students in kindergarten through grade 12 must provide written or electronic documentation of two doses of the MMR vaccine on or after 12 months of age and separated by at least 28 days.
- Children attending early childcare facilities are required to have all of the doses of each
 vaccine appropriate for the child's age. The number of MMR doses for children in
 childcare facilities depends on the child's age. Children 12-15 months of age must
 provide written or electronic documentation of at least one dose of the MMR vaccine on
 or after 12 months of age. Older children around 4-6 years of age should have a second
 dose.

Acceptable documentation includes:

 verification of measles immunization by a healthcare provider (healthcare provider signature or health clinic stamp), including month, day, and year each vaccine was administered;

- school or childcare immunization records;
- personal immunization records from a health department;
- electronic immunization records from the statewide immunization registry, Utah Statewide Immunization Information System (USIIS).

NOTES:

- Documentation of immunity through a blood test is not considered proof of immunity for children in Utah schools or childcare facilities.
- During an outbreak, a local health district may enact policies that allow blood tests to be considered as evidence of immunity during the outbreak period. Check with your local public health department for information.
- Each school district is strongly encouraged to develop immunization policies for school staff based on the <u>Utah School and Childcare Employee Immunization</u> Recommendations.

Reentry of Excluded Students During a Measles Outbreak

How can a student who has been excluded be re-admitted to school?

In the event of a measles outbreak, students in school who claimed immunization exemptions and have not received two doses of the MMR vaccine will be excluded from school until they have either received the appropriate vaccination(s) or are no longer considered at risk for contracting or spreading disease.

For measles, the exclusion period is typically 21 days after the date of the last known case of measles rash onset, not the date the student was exposed. Students who were excluded from school due to inadequate MMR vaccination (i.e., received only one dose) may be re-admitted after receiving the 2nd dose of MMR vaccine. Students who receive one dose of MMR vaccine after being exposed or who refuse the 2nd dose will be excluded for the full 21 days.

Vaccine Safety

Is the MMR vaccine safe?

The MMR vaccine has been in use for more than three decades in the U.S., and reports of serious adverse events following vaccination have been extremely rare. As with all vaccines, there can be minor reactions from the MMR vaccine. These reactions might include pain and redness at the injection site, headache, fatigue, or a vague feeling of discomfort.

When reports of severe vaccine-related adverse events are made, they are taken seriously and investigated appropriately. It is important to know that the risk of MMR vaccine causing serious harm or death has been extremely small and that being vaccinated is much safer than getting any of the three diseases (measles, mumps, and rubella) the vaccine protects against.

Resources

For more information about measles, contact your healthcare provider, local health department, community health center or the Utah Department of Health.

Utah Department of Health Bureau of Epidemiology

801-538-6191

http://health.utah.gov/epi/diseases/measles/

Utah Immunization Program

801-538-9450

http://www.immunize-utah.org

Utah Immunization Hotline

1-800-275-0659

Centers for Disease Control and Prevention

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

Utah Local Health Departments

http://www.ualhd.org/members.html

Utah Community Health Centers

http://www.auch.org/community-health-centers/find-a-health-center