

Mumps Investigation in Utah – 2019

May 15, 2019

Background

Mumps has been identified in one unvaccinated adult living in Utah County.

Key Points

- Mumps is a contagious disease caused by a virus. Mumps typically starts with fever, headache, muscle aches, tiredness, and loss of appetite. Symptoms may occur two to three weeks after exposure to the virus and may include swollen, painful salivary glands on one or both sides of the face (parotitis). This is what causes the puffy cheeks and a tender, swollen jaw.
- Utah's five-year average mumps incidence rate is 2.8 cases per 100,000 person years.
 - 2019: To date, nine cases of mumps have been reported in Utah.
- Mumps-containing vaccine is routinely used in only 62% of countries, making the chance of a mumps outbreak due to international travel a constant risk in Utah.
- Mumps can be prevented with the MMR vaccine. Children should get two doses of the MMR vaccine, starting with the first dose at 12 through 15 months of age, and the second dose at 4-6 years of age. Teens and adults should also be up-to-date on their MMR vaccinations.
- Two doses of the MMR vaccine are recommended for international travelers >12 months of age.
- Things you can do to help protect you and your family from illness:
 - Stay current on recommended vaccines. The MMR vaccine can reduce the chance of getting mumps.
 - Watch carefully for the signs of mumps: fever, headache, muscle aches, tiredness, loss of appetite, swollen and tender salivary glands under the ears on one or both sides.
 - **Some people who get mumps do not have symptoms. Others may feel sick but will not have swollen glands.**
 - **If you see signs of mumps in yourself or a family member, contact your healthcare provider and let him/her know you have signs of mumps. Do not go directly to a clinic, emergency room or doctor's office without calling first. This will help them make sure others are not exposed. Follow their instructions about what to do next.**
 - Families are strongly encouraged to know their vaccination status and/or have their healthcare provider review their immunization records. Get vaccinated against the mumps and other vaccine-preventable diseases as appropriate; especially before traveling to other countries.
- For more information on mumps vaccination, contact the Utah Immunization Hotline at 1-800-257-0659.

Frequently Asked Questions Regarding Mumps

Public Health Efforts

1) What is public health doing to prevent the spread of mumps in Utah?

The Utah Department of Health 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 mumps are contacted and provided appropriate information.

Local public health departments are administering the MMR vaccine, as appropriate, to exposed individuals to reduce the spread of mumps infection.

CUPHD conducted a vaccination clinic in Sanpete County on Tuesday, April 16. CUPHD is also working with school district officials to exclude unvaccinated students and faculty in affected schools. Excluded students who are not symptomatic will be allowed to return to school 26 days from the onset of the last identified case or once they receive one MMR vaccine and can provide proper documentation.

2) Where can I get the mumps vaccine or blood test to check for immunity?

In addition to your personal healthcare provider, you may contact your local health department to discuss getting the MMR vaccine or immunity blood test. You can also contact a community health center or local pharmacy to ask about getting the MMR vaccine.

3) What if I am exposed to mumps and don't know my vaccination status or I never had the MMR vaccine?

If you see signs of mumps in yourself or a family member, contact your healthcare provider and let him/her know you have signs of mumps. Do not go directly to a clinic, emergency room, or doctor's office without calling first. This will help them make sure others are not exposed. Follow their instructions about what to do next.

4) 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 statewide 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

1) What is mumps?

Mumps is a highly infectious respiratory disease caused by the mumps virus.

2) What are the sign and symptoms of mumps infection?

Some people may not have any symptoms. Symptoms may include low-grade fever, headache, muscle aches, tiredness, loss of appetite, and swollen and tender salivary glands under the ears on one or both sides. Mumps can also cause inflammation of the testicles in some males, and rarely, sterility. Other rare complications may include deafness and inflammation of the brain and spinal cord (meningitis).

3) How is mumps spread?

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 touching an infected surface.

It is also important to know that people with mumps are infectious (can spread the disease) from two days before through five days after parotitis. This means an infected person can spread the disease before knowing he or she is infected.

4) How can a mumps outbreak happen in the U.S. when so many children are vaccinated?

Although the U.S. may have high vaccination coverage in children, many are still unvaccinated and may get mumps infection. This outbreak serves as a reminder that a person can still get exposed to diseases that have been virtually eliminated in the U.S. and become infected due to unvaccinated and infectious international travelers.

Mumps outbreaks can still occur in highly vaccinated U.S. communities, particularly in close-contact settings such as schools, colleges, and camps. However, high vaccination coverage helps limit the size, duration, and spread of mumps outbreaks.

5) Who is at highest risk for getting mumps?

People at highest risk are those who are unvaccinated, pregnant women, infants younger than 12 months of age, and those with weakened immune systems.

6) How can I be sure I am not at risk?

If you have received two doses of the MMR vaccine you are considered fully immunized against mumps and *should not* need additional vaccinations. The MMR vaccine is very safe and effective. The mumps component of the MMR vaccine is about 88% effective when a person gets two doses; one dose is about 78% effective. You can get a blood test to check for mumps immunity. Also, if you have had prior mumps illness documented by your doctor, you are considered immune.

7) Can adults who were previously vaccinated still get the mumps?

Yes. Adults and even children who received one dose of the MMR vaccine may have some protection against the virus, but are considered susceptible and may still get a milder version of

mumps. That's because with the passage of time, a person's protection from childhood vaccines may decrease.

NOTE: 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.

Vaccine Recommendations

1) How can I protect myself and my family?

The best protection against mumps for individuals and the community is through routine immunization with the MMR vaccine, if you or your child has not previously had the mumps 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 mumps. However, in rare cases, people who get the vaccine can still become infected with mumps if exposed to the virus.

If you see signs of mumps in yourself or a family member, contact your healthcare provider and let him/her know you have signs of mumps. Do not go directly to a clinic, emergency room, or doctor's office without calling first. This will help them make sure others are not exposed. Follow their instructions about what to do next.

2) Are there people who should not get the MMR vaccine?

Yes, some people should not get the MMR vaccine or should wait before getting it. This includes persons with allergies to components of the vaccine and those with medical conditions (e.g., pregnancy) or who are moderately to severely sick. If you have further questions about whether to get the vaccine, discuss them with your healthcare provider.

3) Why should I get vaccinated if the vaccine doesn't fully protect me?

Even though the vaccine isn't perfect, it remains the best defense we have against mumps infection. People who have received two doses of the MMR vaccine are about nine times less likely to get mumps than unvaccinated people who have the same exposure to the mumps virus. However, some people who receive two doses of the MMR vaccine can still get mumps, especially if they have prolonged, close contact with someone who has the disease. If a vaccinated person does get mumps, they will likely have less severe illness than an unvaccinated person.

Before the U.S. mumps vaccination program started in 1967, mumps was a universal disease of childhood. Since the pre-vaccine era, there has been a more than 99% decrease in mumps cases in the United States.

4) Can I get an immune globulin to protect me if I have not been vaccinated?

No. IG is not effective for reducing the potential of getting mumps after exposure.

Pregnancy Concerns

1) 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 they give birth.

2) 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 with 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.

3) Can a breastfeeding woman get the MMR vaccine?

Yes. The MMR vaccine will not harm a mother or her breastfeeding child.

4) What are the risks to the baby if a pregnant woman gets mumps?

Mumps during pregnancy may increase the risk of premature labor and miscarriage.

School Vaccination Requirements

1) 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.

2) 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. A second dose is recommended at 4-6 years of age.

3) Can children attend school or childcare if they have not been vaccinated against mumps?

Utah 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 may be excluded to reduce the potential of contracting mumps.

Students who have been exempted from mumps vaccination for medical, religious, or other reasons should be excluded until the 26th day after the onset of parotitis in the last person with mumps in the affected school.

Healthcare Workers

1) What should healthcare workers do who have been exposed?

Healthcare personnel who had been previously vaccinated for mumps, but received only one dose of mumps vaccine may continue working following an unprotected exposure to mumps. Healthcare personnel without evidence of immunity should be excluded from the 12th day after the first unprotected exposure to mumps through the 25th day after the last exposure. Healthcare personnel with mumps illness should be excluded for five days after the onset of parotitis.

Unprotected exposures are defined as being within three feet of a patient with a diagnosis of mumps without the use of proper personal protective equipment. Regardless of their immune status, all exposed healthcare personnel should report any signs or symptoms of illness during the incubation period, from 12 through 25 days after exposure.

Vaccine Safety

1) 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 the 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.