



Mumps Virus

Essential Information



Mumps Virus

Origins

Mumps is a contagious respiratory infection caused by the mumps virus, which infects the upper respiratory tract. People infected with mumps usually develop a characteristic swelling of the jaw and puffy cheeks, which is a result of swollen salivary glands (parotitis). The swelling can occur on one or both sides of the face. The mumps virus is a large enveloped virus (120-450 nm genome size) that is part of the paramyxovirus family.

The infection is primarily spread through saliva or mucus from an infected person's mouth, nose, or throat. The virus replicates in the upper respiratory tract and lymph nodes and is spread through direct contact with respiratory secretions or saliva or indirectly through contact with contaminated surfaces.

Infections with mumps used to be quite common, but due to the availability of a vaccine starting in 1967, in developed countries the number of cases has dropped significantly. In the US, there are usually less than 500 cases per year, but in some years there are a few thousand cases. The MMR (Measles, Mumps, and Rubella) vaccination is typically given to children in 2 doses prior to age six and is 88% effective in preventing infection.

Mumps outbreaks can happen at any time of the year, but often occur in the winter and spring. Close personal contact increases the risk of an infected person transmitting the virus to a non-immunized person. Mumps is not known to infect animals nor to be transmitted via animals.





Diagnosis

A person infected with mumps will develop symptoms from 12-25 days after infection, with symptoms most commonly seen 16-18 days after infection. The initial symptoms include:

- Fever
- Headache
- Muscle aches
- Tiredness
- Loss of appetite
- Swollen and tender salivary glands under the ears (one or both sides)

Swelling usually peaks in 1-3 days after symptom onset as the virus becomes present in the blood in large quantities at the same time and then takes the following 7-10 days to resolve. Most people who develop mumps recover completely in a few weeks and have mild or no symptoms and often do not know they have the disease. Complications such as encephalitis, meningitis, and deafness, while rare, can occur. Prior to widespread vaccination, complications were much more common. Complications from a mumps infection resulting in death in developed countries are extremely rare.

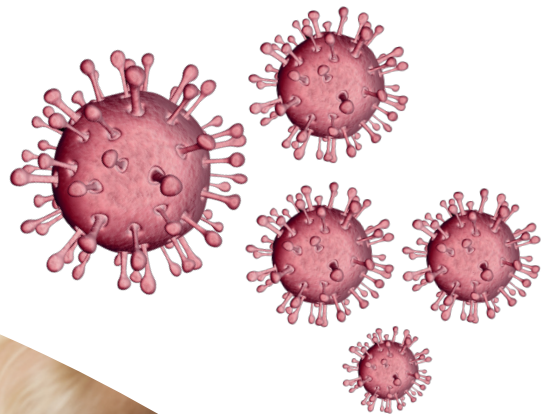
Many of the initial symptoms likely to present early in the illness are often seen in patients with other commonly occurring diseases (except for the swollen salivary glands), such as influenza. Diagnosis and treatment should only be performed by a trained physician who can rule out other potential diseases.

Method of Transmission/ Contagiousness

The infection is primarily spread through saliva or mucus from an infected person's mouth, nose, or throat by:

- Coughing, sneezing, or talking
- Shared personal items, such as dishware and eating utensils

Infection is also believed to occur, with unknown frequency, through contact with contaminated objects. Droplets of respiratory secretions from an infected person can settle on surfaces and objects, where people can pick the virus on their hands and by touching their mouth, nose, or eyes, become infected.



Prevention

Vaccination: The MMR (Measles, mumps, and rubella) vaccination is to be given to children in 2 doses prior to age six and is 88% effective in preventing infection once both doses are completed. The mumps vaccination was originally developed in 1967. While a mumps vaccination (delivered as part of the MMR vaccination) has a high degree of effectiveness in protecting people from getting mumps, no vaccine is 100% effective. There is always a chance that vaccinated people of any age can still become infected with mumps. Mumps is common across the world, especially in countries that do not immunize their citizens.

Reduce Contact: Non-immunized people should avoid or minimize contact with people who have an active mumps infection for at least 5 days after swelling peaks. If around an infected person, avoiding touching your eyes, nose, and mouth can help prevent infection.

Transmission Based Precautions: When a person infected with mumps is being treated in a hospital, they will generally be put into a single room or cohorted to reduce the risk of transmission to other patients. Healthcare workers entering the patient's room will observe droplet and contact precautions in addition to standard precautions even if the healthcare workers have been immunized.

Hand Hygiene: While the virus that causes mumps is not believed to be primarily spread through "hand to hand" or "hand to surface to hand" contact, it still is believed to be a route of infection. Frequent hand washing with soap and water or the use of alcohol hand gel reduces the risk of this type of transmission.

Respiratory Hygiene: People with mumps should cover their mouth with a tissue or use their elbow when they cough or sneeze. Dispose of the tissue once used. They should wash their hands or use alcohol hand gel after sneezing or coughing. As this virus is primarily transmitted via respiratory secretions and saliva, infected people should take steps to protect those around them that are not immunized.

Surface Cleaning/Disinfection: While the virus that causes mumps is not believed to be primarily transmitted via environmental surfaces, it is a potential source of transmission and an environmental hygiene program should always include regular cleaning and disinfection of commonly touched environmental surfaces (door handles, light switches, elevator buttons, keyboards, phone, etc.) because the virus can live for several hours on environmental surfaces and the risk posed by environmental surfaces can be reduced through proper cleaning and disinfection. When cleaning and disinfecting, avoid spraying or splashing as this can further spread the virus.



Protocol for Sick Staff Members: Staff members with active mumps infections should stay away from work until cleared by a doctor to return or at least 5 days after swelling peaks.

Good Health Practices: Practicing good health is also helpful in preventing the development of many illnesses. The strength of a person's immune system is often related to their overall health. Get plenty of sleep, eat healthy, be physically active, manage stress, and drink plenty of fluids to keep your immune system strong.

References and useful websites

Much of the Information used in the development of this brochure was taken from the sites and article listed below.

<http://www.cdc.gov/mumps/>

<http://www.who.int/topics/mumps/en/>





Diversey has been, and always will be, pioneers and facilitators for life. We constantly deliver revolutionary cleaning and hygiene technologies that provide total confidence to our customers across all of our global sectors. Led by Dr. Ilham Kadri, President & CEO, and headquartered in Charlotte, North Carolina, USA, Diversey employs approximately 9,000 people globally, generating net sales of approximately \$2.6 billion in 2017.

For more information, visit www.diversey.com or follow us on social media.

