

MUMPS FACT SHEET

Overview

Mumps is a disease caused by a virus. It is characterized by swelling of the salivary glands that lasts at least two days. Symptoms of mumps were first described by Hippocrates in the fifth century BC.

Signs and Symptoms

Symptoms of mumps begin about 16-18 days after infection and include:

- Swelling and tenderness of one or both salivary glands, usually the parotid glands located just below the front of the ear/jaw;
- Fever;
- Headache;
- Muscle aches;
- Tiredness; and
- Loss of appetite.

Causes and Transmission

Mumps is spread by direct contact with or by inhaling droplets that contain the virus. Although mumps virus has been found in saliva from seven days before onset of salivary gland swelling to nine days afterwards, a person is most infectious between two days before and five days after swelling. People with mumps virus infection may not have any symptoms, but may still be able to spread the disease to others.

Risk Factors

Those at highest risk of mumps infection are people with no or incomplete immunization for mumps. People who have very prolonged and close contact with a case of mumps may also become infected, even with complete vaccination.

Complications

Mumps can occasionally cause complications, especially in adults. Complications include:

- Inflammation of the testicles (orchitis) in males who have reached puberty, but rarely does this lead to fertility problems;
- Inflammation of the tissue covering the brain and spinal cord (meningitis);
- Inflammation of the ovaries (oophoritis) and/or breasts (mastitis) in females who have reached puberty; and
- Deafness.

Tests and Diagnosis

Mumps is usually suspected when a patient has symptoms of mumps, especially swelling of the parotid or salivary gland(s). To confirm the diagnosis, a buccal (cheek) swab can be collected to test for the virus. Sometimes blood can be tested for antibodies, but this method may not be reliable.

Treatments

There is no specific treatment for mumps, and most patients recover completely in a few weeks.

Prevention

Immunization against mumps is the best way to prevent becoming infected. Two doses of mumps vaccine, given at 12-15 months and at 4-6 years of age, is recommended.

Persons previously vaccinated with 2 doses of a mumps virus-containing vaccine who are identified by public health authorities as being part of a group or population at increased risk for acquiring mumps because of an outbreak should receive a third dose of a mumps virus-containing vaccine to improve protection against mumps disease and related complications.

In the United States, two types of vaccines for mumps are available:

- MMR – combination of vaccines for measles, mumps and rubella (German measles)
- MMRV – combination of vaccines for measles, mumps, rubella and varicella (chickenpox)

In accordance with Pennsylvania Department of Health regulations, any attendee or staff member of a school or daycare who has mumps must be excluded from school or daycare for five days from the onset of symptoms or until swelling has resolved.

Disease Patterns

Prior to widespread vaccination, mumps frequently caused outbreaks in military personnel and was one of the most common causes of aseptic (viral) meningitis and deafness in childhood. Outbreaks in the 21st century have primarily been associated with congregate settings, such as schools and colleges or universities where close contact is common.

Although mumps is reported throughout the year, it is more commonly seen in late winter and spring.

Additional Information

Centers for Disease Control and Prevention: <http://www.cdc.gov/mumps/>

Epidemiology and Prevention of Vaccine-Preventable Diseases book (Pink Book),
mumps chapter: <http://www.cdc.gov/vaccines/pubs/pinkbook/mumps.html>

This fact sheet provides general information. Please contact your physician for specific clinical information.

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