
Mumps

Frequently Asked Questions

1. What is mumps?

Mumps is an acute viral infection caused by the rubulavirus, also known as mumps virus. It is sometimes called 'infectious parotitis', as it causes painful swelling of the parotid and or salivary glands.

2. How is mumps spread?

Mumps spreads from person to person via droplets of saliva or mucus of an infected person. The virus may also spread indirectly through contact with contaminated surfaces that an infected person may have touched. A person who is exposed to mumps may develop signs and symptoms 16 - 18 days after exposure to an infected individual (incubation period). People with mumps are usually considered most infectious from up to seven days before, and until five days after the onset of parotitis. It is therefore recommended that persons with mumps remain in quarantine for 5 days after the swelling of the parotids begin.

3. What are the signs and symptoms of mumps?

The initial or prodromal symptoms of mumps include headache, malaise, loss of appetite and fever. This is followed by an earache and characteristic pain and swelling of the parotid gland, which can occur within a day of the initial symptoms. The affected gland will continue to swell over the next 2 to 3 days and is usually accompanied by severe pain. Most people will have involvement of both parotid glands, but in approximately one quarter of patients with parotitis, mumps will only affect one side. The symptoms of pain, fever and tenderness usually resolve soon after the swelling of the parotids stop. The parotid glands take approximately one week to return to their normal size.

Parotitis occurs in 60 - 70% of individuals infected with the virus. Some of the complications of mumps include meningitis, orchitis (inflammation of the testes), oophoritis (inflammation of the ovaries), pancreatitis, meningoencephalitis and deafness. Deafness, in one or both ears, can become permanent in approximately one in 20 000 reported cases of mumps.

4. Who is at risk for mumps?

Mumps is generally a mild childhood disease, mostly affecting children between 5 – 9 years of age. However, younger and older children as well as adults, can become infected with mumps. People who have had mumps are usually protected for life against another mumps infection. However, second occurrences of mumps do rarely occur.

5. How can I prevent mumps?

Safe and effective vaccines against mumps have been available since the 1960s. The 'measles, mumps and rubella' (MMR) vaccine is a combination of live attenuated (weakened) measles, mumps and rubella viruses. It is **not** part of the Expanded Program for Immunization (EPI) for South Africa and is therefore only available in the private sector. The first dose of MMR should be given to children 12 –15 months of age and the second dose should be given at 4 – 6 years of age. In some instances, the MMR vaccine can result in swelling of the parotids which can be confused with mumps. Adverse events following immunisation (AEFI) can be reported using the MedSafety mobile application which can be downloaded using this link: <https://medsafety.sahpra.org.za/>.

6. **What should be done if someone is exposed to a person infected with mumps?**

There is no post-exposure prophylaxis for mumps infection. If a person who has not been vaccinated against mumps or not had mumps in the past, is exposed to someone with active mumps infection, they can develop disease.

7. **How is mumps infection diagnosed?**

Mumps is often diagnosed on the basis of the patient's clinical presentation. The diagnosis may be confirmed by the detection of IgM antibodies to the mumps virus in a blood specimen submitted to a laboratory. Alternatively, a four-fold rise in IgG antibodies in serum specimens taken 2 weeks apart confirms the diagnosis. The NHLS Immunology laboratory conducts mumps antibody testing on blood specimens only. Specimens should be labelled 'Braamfontein Immunology Laboratory, NHLS', and the test 'Mumps ELISA' should be requested. Healthcare workers may call the laboratory on 011 489 9194 for further information on testing. Additionally, a reverse-transcriptase PCR test may also be done to detect mumps virus RNA in clinical specimens. The Tygerberg NHLS Virology Department offers this test and can be contacted on 021 938 4330. Most private laboratories also test for mumps serology and PCR.

8. **How is mumps treated?**

There is no cure for mumps, only supportive treatment (bed rest, fluids, analgesia and fever reduction).

9. **Where can I find more information?**

- a. Health care workers can call the NICD Hotline for after hours and emergency medical advice and assistance 0800 212 552.
- b. Other informative websites include www.who.int, www.immunize.org and www.cdc.gov/vaccine/pubs/surv-manual/chpt09-mumps.html