

# Mumps Frequently Asked Questions

## What is mumps?

Mumps is an acute viral infection that is spread from person to person. It is a potentially serious disease for children and young adults and is very common in young children not vaccinated against it. Mumps is a **notifiable disease**.

See also: **Mumps frequently asked questions for health professionals/health students**

## Who gets mumps?

Mumps usually occurs in school-aged children, teenagers or young adults, although older people may contract the disease. Most infections in children less than two years are subclinical (no apparent symptoms). Mumps is more common in winter and spring.

## What are the symptoms of infection?

Symptoms of mumps include fever, headache, malaise and swollen, tender salivary glands (usually the parotid gland which is located just below the front of the ear). Mumps often gives the appearance of swollen cheeks or jaw.

Symptoms of mumps begin to appear 14 to 25 days (usually 15-18 days) after exposure in about 30%-40% of infected individuals. Approximately 20% of infected individuals will have no symptoms. An additional 40%-50% may have only non-specific or primarily respiratory symptoms (particularly in children <5 years of age).

Symptoms tend to decrease after one week and have usually resolved after 10 days.

## What complications have been associated with mumps?

Complications of mumps may occur and can include:

- Meningitis - symptomatic meningitis occurs in up to 15% of patients. Adults are more at risk of this complication than children, and boys more commonly infected than girls (3:1 ratio)
- Testicular inflammation (orchitis) - occurs in up to 40% of postpubertal males (sterility is rare). Oophoritis (ovarian inflammation) occurs in approximately 5% of post pubertal females. Mastitis (breast inflammation) has also been reported among females
- Pancreatitis is reported in about 4% of the cases
- Encephalitis (brain inflammation) is rare (reported in 0.02-0.3% of the cases)
- Deafness has been reported in approximately 1 in 20,000 patients

Other complications may include mastitis, arthritis, nephritis, pancreatitis, or myocarditis. Mumps fatality rate is reported at between 1-3 deaths per 10,000 cases.

## Diagnosis of acute mumps infection

Confirmation of mumps infection is possible through a blood or salivary test (an oral fluid sample taken by a swab). These tests detect the level of antibodies to the mumps virus. These tests are usually recommended to provide laboratory confirmation.

### **Is there any treatment for mumps?**

There is no specific treatment for mumps. Treatment should be based on relieving the symptoms.

### **How is mumps spread?**

Mumps is spread from person to person by coughing or sneezing and by direct contact with saliva or discharges from the nose and throat of infected individuals. People infected with mumps may spread the infection to others even when they do not have any symptoms. Mumps virus has been isolated from 7 days before onset of parotitis to 8 days after, but individuals with parotitis are most infectious in the 2-3 days before and the 4-5 days after onset of symptoms.

### **What can be done to prevent mumps?**

Mumps can be prevented by vaccination. In Ireland, mumps vaccine is given as part of the measles-mumps-rubella (MMR) vaccine. MMR uptake rates among children in Ireland remain below the target of 95% required to prevent the spread of mumps. Ensuring high coverage is important to prevent outbreaks occurring.

The MMR vaccine was first introduced in 1988 and in 1992 a second dose of MMR was recommended for children aged 10-14 years. In 1999 the age of the second dose of MMR was lowered to children aged 4-5 years. The introduction of the MMR vaccine has led to a decrease in the number of cases of mumps reported.

All children should be vaccinated with 2 doses of MMR as part of the [routine childhood immunisation programme](#).

### **Infectiousness of mumps – updated guidelines on number of days recommended for exclusion from work/school**

A [publication from the US Centers of Disease Control and Prevention](#) has reported that the risk of transmission from a patient with mumps to a non-immune individual is greatest during the days immediately preceding or following the onset of parotitis onset. The studies reported by CDC looked at mumps virus isolation in saliva or throat swabs of patients with mumps. It is evident that while the mumps virus isolation rates are highest one day before onset of parotitis to one day after onset they have decreased considerably by the fourth-fifth day after disease onset. Mumps viral load was also shown to be extremely low greater than four days after onset of illness. Therefore the risk of transmission after 5 days is now considered low.

Therefore, based on this new evidence, HPSC is now updating its guidance on isolation of individuals with mumps. **Individuals diagnosed with mumps parotitis are advised not to attend school, college or workplace for 5 days after onset of parotid swelling, the period when infectiousness is highest.**

### **Preventing transmission from individuals with mumps**

Individuals with mumps should not attend work, school, college, university or child-care during their infectious period (i.e. for 5 days after onset of parotid swelling) in view of the possibility of transmitting virus to non-immune individuals.

See also: [Mumps frequently asked questions for health professionals/health students](#)

### **Mumps and pregnancy**

It is reported that acquisition of mumps during the first 12 weeks of pregnancy is associated with an increased risk of spontaneous abortion. Malformations following mumps virus infection during pregnancy have not been found. The risks for the mother are the same as for the other adults. Pregnant women should not receive mumps vaccine (i.e. not receive MMR vaccine).

Women who are not pregnant and receive MMR vaccine should avoid pregnancy for one month after vaccination.

### **Further information on mumps is available from:**

- [HPSC: Mumps](#)
- [Immunisation Uptake Statistics for Ireland](#)
- [WHO: Health Topics - Mumps](#)
- [CDC, US: Vaccines & Immunizations - Mumps Immunization](#)
- [Public Health England: Mumps guidance, data and analysis](#)
- [ECDC: Mumps](#)