

# MUMPS

## Human pathogen information sheet – vaccinations keep you safe!

### What is mumps?

Mumps, also known as epidemic parotitis, is an infectious disease caused by the mumps virus, which occurs only in humans. Mumps is particularly characterised by inflammation and swelling of the parotid glands. This infectious disease occurs worldwide at any time of the year and may affect people of any age. Thanks to vaccination, the incidence of mumps infections in Germany is rapidly declining, but they nevertheless occur, in particular in unvaccinated persons.

### How is mumps transmitted?

#### *From human to human*

Mumps viruses are only transmitted between humans. When coughing, sneezing or talking, the pathogens can spread through the air and be inhaled in the form of small droplets of saliva. Transmission can also take place by direct contact with saliva, for example when kissing. Transmission via objects contaminated with saliva, such as shared tableware, is less common.

### What symptoms do the patients show?

Early signs of the disease include flu-like symptoms such as fatigue, lack of appetite, headache, pain in the arms and legs as well as fever. A typical symptom is the painful, inflammatory swelling of the parotid glands, which may occur on one or on both sides. The swelling usually persists for about three to eight days. The salivary glands in the mandible and/or under the tongue as well as the adjacent lymph nodes may also be enlarged. In at least one-third of the cases, the infection causes no or few symptoms. Especially children under the age of five often only produce symptoms similar to those of a common cold. For this reason, mumps goes undetected in many cases.

The risk of developing *complications* or late effects increases with age. Up to ten percent of all patients develop meningitis, which may manifest itself by severe headache, neck stiffness and vomiting. A less common complication is inflammation of the brain, which may cause lasting damage such as paralysis and can even have a fatal outcome in isolated cases. One in 20,000 patients may suffer hearing impairment or deafness. About one in three male patients after puberty develop orchitis as a result of mumps, which manifests itself by another rise in body temperature and tenderness on pressure affecting one or both testicles, and may cause a limitation to or, in rare cases, loss of fertility. In women, inflammation of the mammary glands or ovaries is also possible. Inflammation of the pancreas may occur as another complication.

### What is the incubation period and how long are you contagious?

The first symptoms usually appear 16 to 18 days after the infection; however, incubation periods of 12 to 25 days are also possible. There is a risk of infection one week before to nine days after the swelling of the parotid glands. The risk is highest two days before to four days after the onset of the disease. Affected persons can be contagious even if they show no or few symptoms.

### Who is most at risk?

Anyone who has never had mumps or is not fully vaccinated can contract the disease. The risk of complications is higher in adolescents and adults than it is in children. People who have overcome mumps are usually immune against another infection for life.

### What should I do if I fall ill?

- ▶ If you experience the above-described symptoms or suspect that you have mumps, you should consult a doctor immediately.
- ▶ There is no specific therapy for a mumps infection. Only the symptoms can be treated, for example by using pain relievers or fever reducers.
- ▶ To protect others from becoming infected, ill persons should limit their contact with other people as far as possible.

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### What should I do if I fall ill?

- ▶ Mumps infections are subject to the regulations of the German Prevention of Infection Act. Persons diagnosed with or suspected to have mumps are temporarily prohibited from attending or working at community facilities such as schools or nurseries. This also applies to persons who share a household where an infection has been diagnosed or is suspected, if they have not yet had the infection or are not fully vaccinated. Affected persons must inform the community facility.
- ▶ Since mumps infections must be reported, both the doctor and the community facility will notify the competent health authority. The competent health authority or the doctor will determine when the affected person may resume attending or working at the community facility.

### How can I protect myself?

#### Vaccination

The Standing Committee on Vaccination (STIKO) at the Robert Koch Institute recommends vaccination against mumps. Immunisation takes place using a so-called MMR polyvalent vaccine, which also provides protection against measles and rubella. A single vaccine against mumps is not available in Germany.

- ▶ A two-stage vaccination is recommended **for children**. The first vaccination should take place at the age of 11 to 14 months and the second vaccination no earlier than 4 weeks after the first one and no later than reaching 24 months of age. A practical approach is to give the first MMR vaccination during the child's U6 early diagnosis exam. The first MMR vaccination can already be given when the child is aged 9 months if the child is to be admitted to a community facility before it is 11 months old.
- ▶ **For children and adolescents who have not been vaccinated**, immunisation should be completed with two vaccinations as quickly as possible.
- ▶ **For persons having direct contact with patients or who work in community facilities or in educational facilities for young adults, and who were born after 1970**, a one-time vaccination against mumps is recommended if they were not immunised or were immunised only once against mumps in childhood, or if their vaccination status is unclear.

Contacts of mumps patients who do not have protection against mumps should receive an MMR vaccination as a "stop-gap" vaccination within 3 days wherever possible.

**Important to know:** In rare cases, a mumps infection may also occur after complete, two-stage vaccination.

### Where can I find out more?

Your local health authority can provide you with further advice and information. Since mumps infections must be reported, they will also have the latest information and be very experienced in dealing with the disease.

More (specialist) information is also available online from the Robert Koch Institute ([www.rki.de/mumps](http://www.rki.de/mumps)).

For more information about infection prevention, please visit the website of the Federal Centre for Health Education ([www.impfen-info.de](http://www.impfen-info.de)).



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