## Measles

Measles is highly contagious viral disease that causes a large number of deaths worldwide. The disease is transmitted by infectious droplets that can float in the air for several hours.

The disease occurs worldwide. Population density and access to vaccination influence its occurrence. Before the introduction of vaccination, measles epidemics occurred every 2 to 5 years and lasted 3 to 4 months. Measles was for many years the most common infectious disease in Slovenia. Since 1968, when compulsory measles vaccination was introduced in Slovenia, the number of measles cases has started to decline. The last measles epidemic in Slovenia was in 1994/95. In recent years, Slovenia has seen only sporadic imported cases of the disease, which cause a few secondary cases.

#### The cause

The causative agent of measles is the measles virus.

#### **Transmission**

The disease is transmitted directly or indirectly by infectious droplets of secretions from the nose and throat of the infected person (sneezing, coughing). A measles patient is infectious for about four days before the onset of the rash and for another four days after the onset. The disease is most rapidly transmitted in environments such as kindergartens, schools, mass events.

## Incubation period and the course of the disease

It takes about 10 days from infection to first symptoms, which can be 7 to 18 days. The onset is sudden, with high fever, severe headache, fatigue, runny nose, conjunctivitis and cough. This is followed by the appearance of a rash in the mouth on the soft palate, tongue, palate. On the second and third day of the disease, the characteristic 'Koplik spots' appear, which are small white spots found on the mucous membranes opposite the molars. On the 14<sup>th</sup> day after infection, a rash appears on the skin that lasts up to seven days. Patients are severely ill and have a high fever when the rash forms.

People who recover from measles are permanently protected against the disease.

Infants and immunocompromised people are at the highest risk of complications and death. Complications occur in about 30% of cases. The disease in new-borns and infants can cause severe diarrhoea with dehydration. Children can also suffer from otitis media and severe pneumonia, which is the most common cause of death. Less commonly, inflammation of the central nervous system can also develop as a complication.

### Susceptibility

Anyone who has not had measles or who has not been successfully protected by vaccination is susceptible to measles.

#### **Treatment**

Only supportive care is available, and the patient must rest and drink enough fluids to prevent dehydration. Antibiotics are only needed for bacterial complications of measles (otitis media, pneumonia, etc.).

### **Prevention**

Measles can be prevented by vaccination. Two doses of the vaccine are needed for protection.

# Additional documents:

- Notice to persons who have been in contact with a measles patient and need protective antibodies
- Notification of measles outbreak