

Measles

This is an illness caused by infection with the measles virus. Early in the infection, symptoms may include fever, tiredness, cough, sore throat, runny nose, sore eyes and photophobia (discomfort when looking at light). These symptoms usually worsen over three to five days, then a blotchy rash begins on the head and over the next day or two spreads down the entire body (colour plate no. 11). The rash lasts four to seven days. Measles illness usually lasts about 10 days. The cough may be the last symptom to disappear.

Measles is often a severe disease, frequently followed by middle ear infection (7% of cases) or bacterial pneumonia (lung infection) in 6% of cases. In as many as one in every 1000 cases, brain infection occurs, often resulting in death or permanent brain damage. Sometimes brain damage may not appear until many years later.

Complications from measles are more common and more severe in the chronically ill and in very young children.

The diagnosis is suspected from clinical examination and can be confirmed by a blood test, or detection of the virus in urine, throat or eye specimens.

Measles is spread by breathing infected airborne droplets caused by coughing and sneezing, and by contact with hands, tissues and other articles soiled by nose and throat discharges. The virus is very infectious and droplets in the air may infect people entering a room up to two hours after an infected person has left it.

Until the late 1960s almost everyone caught measles during childhood in Australia. As a result almost all people born in Australia before 1966 are immune to measles. The gradual introduction of measles vaccine since then has resulted in the average age of cases in Australia increasing. Most cases now occur in people aged older than 20 years. Outbreaks in recent years have followed the introduction of the virus from outside Australia.

Incubation period

(time between becoming infected and developing symptoms)

Generally 10 – 14 days.

Infectious period

(time during which an infected person can infect others)

From just before the onset of symptoms (about 3 – 5 days before the rash appears) until 4 days after the rash appears.

Treatment

There is no specific antiviral treatment for measles. Complications may require antibiotic therapy. Treatment for the symptoms includes plenty of fluids, a darkened room to rest the eyes and paracetamol for the fever.

! Aspirin should not be given to children under 12 years of age unless specifically recommended by a doctor.

Control of spread

- > Measles is best prevented by the measles-mumps-rubella (MMR) combination vaccine. Two doses of MMR are recommended: one at 12 months and the second at four years of age.
- > If an unimmunised child (over nine months) or adult has contact with measles, infection may be prevented by immediate vaccination (within 72 hours of first contact) with MMR vaccine. If three to seven days since exposure, immunoglobulin may prevent infection.
- > If an infant less than nine months old has contact with measles, the chance of developing measles can be reduced by giving immunoglobulin within seven days of contact. MMR should then be given as close as possible to 12 months of age, but at least three months after giving immunoglobulin.
- > A person with measles should be excluded from contact with unvaccinated persons for at least four days after the onset of the rash. They should stay home from child care, preschool, school or work.

Measles (cont.)

Control of spread cont.

- > Unvaccinated children having contact with a person with measles should be excluded for 14 days from the first day of appearance of rash in the last case. If unvaccinated children are vaccinated within 72 hours of their contact with the virus, they may then return to child care, preschool or school. All immunocompromised children having contact with a person with measles should be excluded until 14 days after the first day of the appearance of rash in the last case.
- > Adults born during or since 1966 are very likely to be susceptible to measles. Unless they have had a medically confirmed infection with measles they should ensure that they have had two documented doses of a measles containing vaccine. This is especially important if they are proposing to travel out of Australia.

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