

Measles



Causative agent

It is caused by a virus called Measles virus.

Clinical features

Measles was a common childhood infection prior to the introduction of measles vaccine. Affected persons will present initially with fever, cough, runny nose, red eyes and white spots inside the mouth. This is followed 3 to 7 days later by a red blotchy skin rash, which usually spreads from face to the rest of the body. The rash usually lasts 4 to 7 days, but can persist for up to 3 weeks leaving with brownish staining and sometimes fine skin peeling. In severe cases, lung, gut and brain can get involved and lead to serious consequences or even death.



Measles infection in pregnancy can result in adverse pregnancy outcomes, including pregnancy loss, preterm birth, and low birth weight, but there is no evidence to support an increased risk of congenital defects. Moreover, neonates who get infected because the mother had measles shortly around the period of delivery are at an increased risk of subacute sclerosing panencephalitis (a very rare but fatal disease of the central nervous system) in later life.

Mode of transmission

This can be transmitted airborne by droplet spread or by direct contact with nasal or throat secretions of infected persons, and less commonly, by articles soiled with nasal or throat secretions.

Measles is one of the most highly communicable infectious diseases. The patient can pass the disease to other persons from 4 days before to 4 days after appearance of the rash.

Incubation period

It usually ranges from 7 to 18 days, but can be up to 21 days.

Management

Affected persons should avoid contact with non-immune persons, especially those with weakened immunity, pregnant women and infants. Although there is no specific treatment, drugs may be prescribed to reduce the symptoms and antibiotics may be used to treat bacterial complications.

Prevention

Maintain good personal hygiene

- Perform hand hygiene frequently, especially before touching the mouth, nose or eyes, after touching public installations such as handrails or door knobs or when hands are contaminated by respiratory secretion after coughing or sneezing. Wash hands with liquid soap and water, and rub for at least 20 seconds. Then rinse with water and dry with a disposable paper towel or hand dryer. If hand washing facilities are not available, or when hands are not visibly soiled, hand hygiene with 70 to 80% alcohol-based handrub is an effective alternative.



- Cover your mouth and nose with tissue paper when sneezing or coughing. Dispose of soiled tissues into a lidded rubbish bin, then wash hands thoroughly.



- When having a fever, rash or respiratory symptoms, wear a surgical mask, refrain from work or school, avoid going to crowded places and seek medical advice promptly.

- Persons infected with measles should stay at home; keep out of Schools/ Kindergartens/ Kindergartens-cum-Child Care Centres/ Child Care Centres/ Workplaces till 4 days from the appearance of rash to prevent spread of the infection to non-immune persons.



Maintain good environmental hygiene

- Regularly clean and disinfect frequently touched surfaces such as furniture, toys and commonly shared items with 1:99 diluted household bleach (mixing 1 part of 5.25% bleach with 99 parts of water), leave for 15 to 30 minutes, and then rinse with water and keep dry. For metallic surface, disinfect with 70% alcohol.
- Use absorbent disposable towels to wipe away obvious contaminants such as respiratory secretions, and then disinfect the surface and neighbouring areas with 1:49 diluted household bleach (mixing 1 part of 5.25% bleach with 49 parts of water), leave for 15 to 30 minutes and then rinse with water and keep dry. For metallic surface, disinfect with 70% alcohol.
- Maintain good indoor ventilation. Avoid going to crowded or poorly ventilated public places; high-risk individuals may consider putting on surgical masks while in such places.

Immunisation

- Vaccination against measles is the most effective preventive measure. Under the Hong Kong Childhood Immunisation Programme, children receive a two-dose course of measles vaccination.
- Pregnant women and women preparing for pregnancy should consult their doctor for advice if they are not sure whether they are immune to measles. Since measles-containing vaccines cannot be given during pregnancy, they are advised not to travel to areas with outbreaks or high incidence of measles if they are not immune to measles.

