Measles is one of the world’s most contagious diseases, with the potential to be extremely severe. In 2017, the most recent year for which estimates are available, measles caused approximately 110,000 deaths. Even in high-income countries, complications result in hospitalization in up to a quarter of cases, and can lead to lifelong disability, from brain damage and blindness to hearing loss.

The best protection against the disease is through receiving two doses of the measles vaccine, which is often incorporated with mumps and/or rubella vaccines.

The first sign of measles is usually a high fever, which begins about 10 to 12 days after exposure to the virus and lasts 4 to 7 days. A runny nose, a cough, red and watery eyes, and small white spots inside the cheeks can develop in the initial stage. After several days, a rash erupts, usually on the face and upper neck.

Most measles-related deaths are caused by complications associated with the disease which include blindness, encephalitis (an infection that causes brain swelling), severe diarrhoea and related dehydration, ear infections, or respiratory infections such as pneumonia.

Risk of infection for international travellers
Over recent months, spikes in case numbers have occurred including in countries with high overall vaccination coverage as the disease has spread fast among clusters of unvaccinated people.

Measles is spread by coughing and sneezing, close personal contact or direct contact with infected nasal or throat secretions. The virus remains active and contagious in the air or on infected surfaces for up to 2 hours. It can be transmitted by an infected person from 4 days prior to the onset of the rash to 4 days after the rash erupts.

Unvaccinated young children are at highest risk of measles and its complications. Any non-immune person (i.e. who has not been vaccinated with 2 doses of measles containing vaccine) can become infected.

Travel-related recommendations to prevent the international spread of measles
• Recent outbreaks of measles highlight gaps in protection against the disease among children and adults. All travellers should check that their vaccination status is up-to-date and ensure that they have received two doses of measles vaccine.
• Travellers who are uncertain of their measles vaccination status should receive at least one dose of measles vaccine. WHO recommends that travellers get vaccinated against measles at least 15 days prior to travel.
• Measles vaccine can be co-administered with other vaccines recommended for travellers such as yellow fever vaccine.
• WHO recommends that infants from six months of age receive a supplementary dose of measles vaccine if they are travelling to countries experiencing measles outbreaks. Children between 6 and 9 months of age who receive a supplementary dose of measles vaccine should also receive two doses of measles vaccine at the recommended ages according to the national immunization schedule.
• All travellers should seek advice from their healthcare provider and be aware of the risk of exposure to measles virus as well as transmission and symptoms of the disease.
• Measles vaccines are not recommended for pregnant women.
WHO advice for international travel in relation to measles

Related links

- WHO position paper on measles vaccines
- Immunization schedules
- Measles Disease Outbreak News
- Fact sheet on measles