

Measles

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Measles is a highly infectious viral illness, with potentially serious, life-threatening complications. Travel remains an important risk factor for the international spread of measles.

Measles is spread by airborne or droplet (coughing, sneezing, drops from mouth/nose) transmission. Initial symptoms can include fever, runny nose, red, sore eyes (conjunctivitis) and cough. A rash usually then appears after a few days. This starts on the face/head and then spreads over the body, arms and legs in three to four days. People are infectious from the day symptoms first appear to four days after the rash starts. The incubation period (time from exposure to measles virus to symptoms starting) is about ten days but can be between seven and 18 days.

Complications of measles infection can include otitis media (ear infections), diarrhoea and convulsions (fits). Rarely, encephalitis (brain inflammation) or sub-acute sclerosing pan-encephalitis (fatal late onset brain inflammation) can occur. Risk of death from measles complications is age-related and is higher for children younger than one year and adults.

Measles is described as 'endemic' if the disease is commonly reported (continuous transmission) in a defined geographical area for a 12-month period. Measles is endemic in many regions. Damage to health service infrastructure e.g. from conflicts or natural disasters and interrupted routine immunisation programmes increase risk of significant outbreaks.

Limits in national surveillance and reporting systems, together with measles infected people often not having access to healthcare (so not counted as cases), results in an underestimation of measles cases globally. The World Health Organization provides measles data on reported cases. See link to [reported measles and rubella cases and incidence rates by member states](#) (a spreadsheet which downloads to your computer). Data for [European countries is also available from European Centre for Disease Prevention and Control](#).

Many countries worldwide have successfully interrupted measles circulation, but all regions are vulnerable to importing and re-introducing the disease.

Comparing the destination country's measles incidence rate (if available) to the United Kingdom (UK)'s can be useful when considering early measles vaccination (if for children travelling abroad (see below). Information on the [UK measles elimination indicators and status](#) is available from UK Health Security Agency (UKHSA).

NaTHNaC reports some confirmed measles outbreaks worldwide, if they are unexpected or unusual, on the [Outbreak Surveillance](#) section, but does not routinely report measles cases.

Travellers with no history of measles infection or who are unvaccinated or incompletely vaccinated may be at risk from measles when visiting countries reporting cases, especially if staying with friends or family and mixing with local people.

Prevention

All UK travellers should make sure they are up to date with the [measles, mumps and rubella \(MMR\)](#) vaccine, according to [current UK recommendations](#).

Babies are routinely offered the first dose of MMR at one year old (on or within the month after their first birthday).

A second MMR dose is currently given as a pre-school booster at three years and four months. This will be brought forwards to a new routine appointment at 18 months from January 2026. Children turning 18 months on or after 1 January 2026 (born on or after 1 July 2024) will be offered their 2nd MMR dose at 18 months (along with a 4th dose of DTaP/IPV/Hib/HepB vaccine).

Children aged 18 months to three years four months on 1 January 2026 (born on or before 30 June 2024) will remain on the previous schedule and be offered their 2nd MMR dose at three years four months.

Details on measles containing vaccines can be found in [Summary of Product Characteristics \(SPC\), electronic medicines compendium](#).

Infants from six months of age travelling from the UK to measles reporting countries

Babies born to mothers with immunity to measles before pregnancy (either after natural measles infection or from measles vaccination) receive some protection as they develop in the womb. This immunity is temporary and fades in the first year after birth.

Babies from six months of age travelling to measles endemic areas with a high incidence of measles or with a current outbreak, who are likely to be mixing with local people, should receive an early dose of MMR vaccine. As response to MMR in infants is sub-optimal, when the vaccine has been given before one year of age, immunisation with two further doses of MMR should be given at the recommended ages.

Children travelling to a measles endemic area with a high incidence of measles or with a current outbreak who had one dose of MMR at the routine age should have the second dose brought forward to at least one month after the first. If this child is under 15 months of age when they receive this dose, then the routine dose (a 3rd dose) should be given at the recommended age. This is to ensure full, long-term protection.

Ideally, a four-week minimum interval period should be observed between giving a yellow fever vaccine and MMR. Giving these two vaccines together may lead to sub-optimal antibody responses to yellow fever, mumps and rubella antigens. If protection is needed rapidly, then these vaccines should be given at any interval; [UKHSA guidance](#) states an additional MMR dose should be considered and revaccination with yellow fever can also be considered for those at on-going risk.

[UKHSA advice on immunisation against measles](#) is also available for those whose immunisation status is uncertain.

In the UK, measles is a [notifiable disease](#); so any suspected measles cases must be reported to the [local Health Protection Team](#).

Resources

- [Changes to the routine childhood vaccination schedule from 1 July 2025 and 1 January](#)

- [2026 letter - GOV.UK](#)
- [European Centre for Disease Prevention and Control: Monthly measles and rubella monitoring](#)
 - [Measles factsheet - GOV.UK](#)
 - [UKHSA: Immunisation against infectious disease. Measles](#)
 - [UKHSA: Measles symptoms, diagnosis, complications and treatment](#)
 - [UKHSA: Measles guidance, data and analysis](#)
 - [UKHSA: MMR for all, general leaflet](#)
 - [UKHSA: Childhood schedule changes from 1 July 2025: information for healthcare practitioners](#)
 - [World Health Organization: Measles](#)