

# Measles



Measles is highly infectious and can lead to serious complications and, on rare occasions, it can be fatal. Because measles is so infectious, very high coverage (over 95%) with two doses of the Measles Mumps and Rubella (MMR) vaccine is necessary to eliminate it. Measles continues to circulate in many countries around the world and there are currently several large outbreaks in countries across Europe where MMR vaccine uptake has been low. Until measles elimination is achieved globally we will continue to see imported cases of measles to the United Kingdom (UK). The good news is that all the evidence supports the fact that global measles eradication is feasible and cost-effective.

Measles can infect **around 9 out of 10** non-immune (those who are unvaccinated or have not previously been infected with the measles virus) people exposed to it and can lead to serious complications. Anyone who hasn't had two doses of the MMR vaccine and has not had measles in the past can catch it.

The MMR vaccine is the safest and most effective way for parents to protect their children against measles, mumps and rubella.

## SIGNS AND SYMPTOMS

Symptoms of measles include:

- A high temperature
- A runny or blocked nose
- Sneezing
- A cough
- Red, sore, watery eyes
- Small white spots on the inside of the cheeks and on the back of the lips a few days later.
- A rash which starts on the face and behind the ears before spreading to the rest of the body. The spots of the measles rash are sometimes raised and join together to form blotchy patches.

Complications include; ear infection, diarrhoea, dehydration, pneumonia, encephalitis, convulsion and disease of the central nervous system.



**IF YOUR CHILD HAS SYMPTOMS OF MEASLES , INCLUDING RASH AND FEVER, RING THE GP OR 111 FOR FURTHER ADVICE. DO NOT TAKE YOUR CHILD STRAIGHT FOR MEDICAL ATTENTION AS THIS PUTS OTHERS AT RISK OF CONTRACTING THE VIRUS**

## GET VACCINATED

Routine vaccinations are offered for free on the NHS to all babies and children and millions of doses have been given safely in the UK and around the world. All vaccines are thoroughly tested for safety and are continually monitored after they are introduced.

Parents or guardians of children who are not up to date with their two doses of MMR vaccine should contact their GP practice to book an appointment. If you are unsure of your or your child's vaccination status consult the red book or speak to your GP. It's never too late to catch up. **Find out more at [nhs.uk/MMR](https://www.nhs.uk/MMR)**



## STAY SAFE

**If you're planning to travel outside the UK, you may need to be vaccinated against some of the serious diseases found in other parts of the world.**



In 2022, 37 countries experienced large or disruptive measles outbreaks. Of the countries experiencing outbreaks, 28 were in Africa, six in the Eastern Mediterranean, two in the South-East Asia, and one in the European Region. 2023 has shown a high number of measles outbreaks and cases in Yemen, India, Romania, Pakistan and Nigeria amongst other countries. **Find out more at [nhs.uk/conditions/travel-vaccinations](https://www.nhs.uk/conditions/travel-vaccinations)**

## 5 THINGS YOU MAY NOT KNOW

### 1. Measles is a severe viral illness that is now rare due to the MMR vaccination.

Many people have never seen someone with measles infection and do not know how severe a measles infection can be. In fact, measles can be a severe infection, which cannot be directly treated with antivirals. Complications occur with about 30% of measles infections and can occur in almost every organ system. They range from ear infections, diarrhoea and related dehydration, to severe respiratory infections such as pneumonia and involve sequelae such as blindness or encephalitis (an infection that causes brain swelling). Most measles-related deaths occur due to the complications associated with measles.

### 2. Measles is highly contagious so even a small decline in MMR uptake can lead to a rise in cases.

Since the start of the COVID-19 pandemic in March 2020, there has been a significant drop in the number of parents and carers getting their children vaccinated against MMR and taking up other childhood vaccines. As a result there is an increased risk of outbreak and this is further increased by the ability to travel internationally to countries with low uptake of the MMR Vaccination.

### 3. Having the MMR vaccination protects yourself and others from measles, mumps and rubella.

You should have the vaccine to protect yourself against and others who can't have the vaccine against measles, mumps and rubella. These individuals include unborn babies, infants who are too young to have the vaccine and children/ adults who can't have the vaccine because they have weakened immune systems. Having the MMR vaccination will help to prevent large outbreaks of disease. You should also have the vaccine if you work with young children or care for people as part of your work. Passing on measles to children who are too young to have MMR vaccine or to someone who is already ill, can have very serious consequences for their health.

### 4. Two-doses of the MMR Vaccine are needed to increase protection against measles, mumps and rubella.

Vaccinations remain the best defence against infection. After 2 doses of the MMR vaccination around 99% of people will be protected against measles and rubella. Around 88% of people will also be protected against mumps. People who are vaccinated against mumps, but still catch it, are less likely to have serious complications or be admitted to hospital. Since the MMR vaccine was introduced in 1988, these conditions have become rare in the UK but outbreaks of disease, especially measles, have occurred when the number of people having the vaccine has dropped.

### 5. The scientist inaccurately suggested the link between the MMR Vaccination and autism.

In 1998 a scientist suggested a link between the MMR vaccine, autism and gastrointestinal disease. In 2004 it was discovered that the scientist had financial interests in making this claim. A lawyer who intended to sue vaccine manufacturers hired him and recruited the children for the study. Moreover, the data was falsified: contrary to the reported onset of the symptoms after the vaccination, some of the children already showed symptoms before they were vaccinated. The original article was retracted by the journal but fears caused by the flawed information led to years of lowered vaccine uptake, especially in the UK. As a second consequence, numerous independent studies were conducted in many parts of the world to test the relationship between MMR vaccine and autism. All concluded that there is no such relationship and therefore **the MMR vaccination does NOT cause autism.**

## FURTHER INFORMATION

[MMR \(measles, mumps and rubella\) vaccine - NHS \(www.nhs.uk\)](https://www.nhs.uk)

[Measles - NHS \(www.nhs.uk\)](https://www.nhs.uk)

[Mumps - NHS \(www.nhs.uk\)](https://www.nhs.uk)

[Rubella \(german measles\) - NHS \(www.nhs.uk\)](https://www.nhs.uk)

MMR for all leaflet: <https://www.gov.uk/government/publications/mmr-for-all-general-leaflet>