

# Measles

Measles is an infection caused by the measles virus. It normally affects children, but can occur at any age. It is now rare in the UK due to immunisation. The illness is unpleasant, but most children make a full recovery. However, some children develop serious complications from measles.

## What are the symptoms of measles?

- Fever (high temperature), sore eyes (conjunctivitis), and a runny nose usually occur first.
- Small white spots usually develop inside the mouth a day or so later.
- A harsh dry cough is usual.
- Going off food, tiredness, and aches and pains are usual.
- Diarrhoea is common.
- A red blotchy rash normally develops about 3-4 days after the first symptoms. It usually starts on the head and neck, and spreads down the body. It takes 2-3 days to cover most of the body. The rash often turns a brownish colour and gradually fades over a few days.
- Children are usually quite unwell and miserable for 3-5 days. After this the fever tends to ease, and then the rash fades. The other symptoms gradually ease and go.

Most children are better within 7-10 days. An irritating cough may persist for several days after other symptoms have gone.

Some people mistake rashes caused by other viruses for measles. Measles is not just a mild red rash that soon goes. The measles virus causes an unpleasant, and sometimes serious, illness. The rash is just one part of this illness.

The immune system makes antibodies during the infection. These fight off the virus and then provide lifelong immunity. It is therefore very rare to have more than one bout of measles.

## What are the possible complications of measles?

- Ear infection which causes earache is a common complication.
- A febrile convulsion (fit) occurs in about 1 in 200 cases. This can be alarming, but full recovery is usual.
- Infections of the airways such as bronchitis and croup are common. These are distressing, but are not usually serious.
- Pneumonia (lung infection) is a serious complication that sometimes develops. Typical symptoms include fast or difficult breathing, chest pains, and generally becoming more ill.
- Brain inflammation (encephalitis) is a rare but very serious complication. It occurs in about 1 in 5000 cases. It typically causes drowsiness, headache, and vomiting which starts about 7-10 days after the onset of the rash. Encephalitis may cause brain damage. Some children die from this complication.
- Squint is thought to be more common than usual in children who have had measles. The virus may affect the nerve or muscles to the eye.
- A very rare brain disease called sub-acute sclerosing panencephalitis develops years later in a small number of people who have had measles.

Complications are more likely in children with a poor immune system (such those with leukaemia or AIDS), and in those who are malnourished. This is one reason why measles is still a major problem in some poorer countries. Many malnourished children in the world die when they get measles, usually from a 'secondary' pneumonia.

There are still the occasional reports of children in the UK who die from complications of measles. These children have usually not been immunised.

## What are the treatments for measles?

There is no medicine that kills the measles virus. Treatment aims to ease symptoms until the body's immune system clears the infection.

- Give the child lots to drink. Ice lollies are a useful way of giving extra fluid and keeping cool.
- Give paracetamol liquid (Calpol, Disprol, etc) regularly to ease fever and aches and pains. Ibuprofen is an alternative.
- Keep the child cool.
- Cough remedies have little benefit on the cough.
- Antibiotics do not kill the measles virus, and are not normally advised. They may be prescribed if a complication develops such as a ear infection or pneumonia. This is because in these complications bacteria may add to the infection (secondary bacterial infection). Antibiotics kill bacteria and help in these complications.

## When to see a doctor?

Most children recover. However, you can expect to nurse a miserable child for a few days. A doctor will normally confirm that the illness is measles. See a doctor again if symptoms get worse, or if you suspect a complication (see above). The main symptoms to look out for are:

- Drowsiness.
- Dehydration. This may be developing if the child drinks little, passes little urine, has a dry mouth and tongue, or becomes drowsy.
- Breathing difficulties.
- Convulsion (fit).

## Is measles infectious?

Yes, it is very infectious. It is passed on by coughing and sneezing the virus into the air. It takes 10-14 days to develop symptoms after being infected. You are infectious from a day before symptoms begin until about five days after the rash first appears. Therefore, children with measles should not mix with others and should stay off school for five days after the rash started.

Children immunised against measles are unlikely to catch measles. However, immunisation is not 100% effective. Also, some adults may not be immune, and some children may have a poor immune system. So, it is best to keep children with measles away from school and from others.

## Measles immunisation

Immunisation is offered to all children in the UK. It is part of the MMR (Measles, Mumps and Rubella) vaccine. Two doses are usual - the first aged 15 months and the second about three years later. Immunisation gives good protection, and so measles is now rare in the UK.

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