Are you protected against measles, mumps and rubella?

You’re not if you haven’t had MMR vaccine.

This leaflet tells you about measles, mumps and rubella and the MMR vaccination which helps protect against all three diseases.
Why is MMR vaccine important?

MMR vaccine protects against three serious infections: measles, mumps and rubella. Around 9 out of 10 young people have received the MMR vaccine in Wales. But the diseases are still a threat.

Measles

Measles is caused by a very infectious virus which can lead to serious and potentially life-threatening complications. Nearly everyone who catches it will have a high fever and a rash, and will be very unwell. One in every 15 people get complications including infection of the lungs (pneumonia) and brain (encephalitis). Measles can kill – in a measles outbreak in Wales in 2013 over 1,200 people were infected, 88 needed hospital treatment and one person died.
Measles is one of the most infectious diseases known so it is very likely that you will get measles at some age if you are not protected by the vaccine.

**Mumps**

Mumps virus causes painful, swollen glands in the face, neck, jaw, a fever and headache. Complications include infection of the brain (encephalitis) and brain covering (meningitis). It can also cause painful swelling of the testicles in males and ovaries in women. Just under half of all males who get mumps related testicular pain and swelling notice some shrinkage of their testicles.

**Rubella**

Rubella (German measles) is also a disease caused by a virus spread by coughs and sneezes. In children it is usually mild and can go unnoticed but may cause a brief rash, swollen glands and a sore throat. But catching rubella while pregnant is very serious for unborn babies. It can seriously damage their sight, hearing, heart and brain. This condition is called congenital rubella syndrome (CRS).

If the mother gets rubella infection in the first three months of pregnancy it causes damage to the unborn baby in nine out of ten cases. In the five years before the MMR vaccine was introduced, about 43 babies a year were born in the UK with congenital rubella syndrome.
When is MMR vaccine offered?

The first dose of MMR vaccine is offered between 12 and 13 months of age. By that age the immunity a baby had from their mother will have faded. The second dose is given at 3 years and 4 months of age before children start school. Both doses are needed to get the best protection.

You can catch up with missed MMR doses at any age.

How will I know when the immunisations are due?

An appointment is sent to the home address when the vaccine is due. Most surgeries and health centres run immunisation clinics for children. If you move house or change address please let the GP practice know.

Anyone born after 1970 who has not had two doses of MMR vaccine can be vaccinated at their GP practice.
Who else should have the vaccine?

Teenagers and young adults
If you have not had two doses of MMR vaccine you are at risk. Contact your GP surgery as soon as possible to arrange to catch up. If you have already had one dose then you will only need one further dose no matter how long ago your first dose was given. If you need two doses then they can be given one month apart.

Women and pregnancy
Rubella can be a very serious infection for unborn babies. If you’re planning to have a baby you should have had two doses of the MMR vaccine. As it is a live vaccine, you can’t have it when pregnant and you should avoid getting pregnant for one month after the vaccine. If you have never had two doses contact your GP surgery now to arrange to catch up.

If you are pregnant or have just had a baby and are not sure if you’ve had two doses of MMR, speak to your midwife or GP or practice nurse at your 6 week postnatal check.

Older adults
Adults born in the UK before 1970 are very likely to have had measles, mumps and rubella as a child, so will already be protected. If you are unsure whether you have had these infections and are concerned discuss with your GP or practice
nurse. Even if you have had the vaccines before, it is safe to give additional doses.

**Moved to the UK?**
If you have moved to live in the UK you may need two doses of MMR. Different countries offer different immunisations and not all use the combined MMR vaccine. If you don’t have a record of the vaccines you have received or are unsure, discuss this with your GP or practice nurse. You may also need other immunisations.

**What happens at the appointment?**
The doctor or nurse will explain about the immunisations and answer any questions. Injections are usually given into the upper arm.

**Can the vaccine be given to someone with allergies?**
Yes. Asthma, eczema, food intolerances and egg allergies do not prevent someone from having the MMR vaccine.

**Are there any reasons why the vaccine should not be given?**
If you or your child are ill with a fever on the day the immunisation is due, delay the immunisations until better. If you or your child has a minor illness without a fever, such as a cold, they should have their immunisations as normal.
There are very few reasons why MMR vaccine cannot be given. The vaccine should not be given to anyone who has had a severe (life threatening) reaction to a previous dose of the vaccine or any ingredient in the vaccine.

MMR vaccine contains weakened versions of live measles, mumps and rubella viruses. Individuals who have a weakened immune system (are ‘immunosuppressed’) should not receive live vaccines.

Before receiving the MMR vaccine, you should inform the doctor or nurse if you or your child:

- are immunosuppressed due to treatment for a serious condition, such as a transplant or cancer, or are taking high levels of steroids or medications that significantly affect your immune system.
- have a condition that affects your immune system.
- are pregnant.

**What if I miss the appointment?**

You should cancel an appointment in advance if you can’t make it. If you do miss the appointment or have to delay the immunisation, make a new appointment as soon as possible.
Can the vaccine be given before 12 months of age?

This is not usually done because immunity passed on from the mother can reduce the effectiveness of MMR vaccine. Sometimes the vaccine may be offered to children from 6 months of age, for example before travel to areas where measles is circulating or during an outbreak. Any child given MMR vaccine before the age of 12 months of age should still receive two further routine doses.

If you or your child has missed any MMR immunisation, it’s important to catch up. Talk to your doctor or nurse.

What are the side effects of MMR?

Millions of doses of MMR vaccine have been given worldwide for over 30 years. The vaccine has a very good safety record.

Individuals can sometimes get a sore arm where the injection was given. Some may develop a small lump where the needle was put in and the area around it might also be slightly hot and red. This is normal and may last some weeks. It does not need any treatment.
The vaccine contains weakened types of live measles, mumps and rubella viruses. Because the viruses are weakened, people who have had the vaccine cannot infect other people. The three different viruses in the vaccine act at different times and may produce the following side effects after the first dose:

- Around six to ten days after the immunisation, as the measles part of the vaccine starts to work, about one in ten individuals may develop a fever and some develop a measles-like rash and a loss of appetite.
- About one in every 1000 immunised young children may have a fit caused by a fever. This is called a ‘febrile convulsion’. However, if a young child who has not been immunised gets measles, they are five times more likely to have a fit.
- Rarely, individuals may get mumps-like symptoms (fever and swollen glands) about three weeks after their immunisation as the mumps part of the vaccine starts to work.
- Very rarely, individuals may get a rash of small bruise-like spots in the six weeks after the vaccination. If this occurs get advice from your doctor.

These side effects are usually mild and are less common after the second dose.
Fewer than one in a million develops encephalitis (swelling of the brain) after the MMR vaccine, and there is very little evidence that it is actually caused by the vaccine. However, if an individual catches measles, the risk of developing encephalitis is over 100 times higher, between one in 200 and one in 5000.

Less than one in a million can have a severe reaction soon after vaccination, which causes breathing difficulties and may cause them to collapse. This is called an anaphylactic reaction and can happen with other medicines and food. These reactions are extremely rare and nurses are trained to manage them. People who have an anaphylactic reaction can be successfully treated and usually recover within a few hours.

If you or your child has a raised temperature and appears unwell paracetamol can be given. Read the instructions on the bottle carefully and give your child the correct strength and dose for their age. Remember never give medicines that contain aspirin to children under 16.

You can report suspected side effects of vaccines and medicines through the Yellow Card scheme. You can do this online at [https://yellowcard.mhra.gov.uk](https://yellowcard.mhra.gov.uk) or by calling the Yellow Card scheme hotline on 0808 100 3352 (Monday to Friday, 10am to 2pm).
Is there gelatine in MMR vaccine?

Gelatine is a substance used in a wide variety of foods and medicines including some capsules and vaccines. In the UK we currently use two MMR vaccines called MMRVAXPRO and Priorix. MMRVAXPRO contains porcine gelatine. Priorix does not contain gelatine.
Where can I get more information?

You can find more information on possible side effects and vaccine contents in the patient information leaflets (PILs) or summary of product characteristics (SPCs) available at www.medicines.org.uk/emc/ You will need to put the name of the vaccine (MMRVAXPRO or Priorix) in the search box.

A schedule showing which immunisations are routinely offered in Wales is available from www.nhsdirect.wales.nhs.uk/livewell/vaccinations/Leaflets/

If you have any questions talk to your doctor or nurse or call NHS Direct Wales on 0845 46 47 (or call 111 if this service is available in your area). For more information visit www.nhsdirect.wales.nhs.uk/

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