

# Measles, Mumps and Rubella (MMR)

your questions answered



The Health Boards Executive

*Working Together for Health*



# MMR

## Measles, Mumps and Rubella Vaccine your questions answered

The decision to immunise your child is never simple. Information can often be confusing, made worse by stories in the press and on TV. This leaflet aims to help you by giving you the facts behind the headlines. If you need more information, please talk to your GP, Public Health Nurse or Practice Nurse.

### What is MMR?

MMR vaccine protects your child against measles, mumps and rubella (German measles). It is given to children at 12-15 months and again at age 4-5 years in junior infants in Primary School. It may also be given in 6th class in Primary School if the child has not already had two doses. The second dose protects anybody who did not respond to the first dose.

- Measles can be a serious illness that the vaccine prevents. There are often complications from measles and it can still kill.
- Mumps vaccine prevents mumps, which was the biggest cause of viral meningitis in children.
- Rubella vaccine prevents babies being badly damaged if their mother catches rubella (German Measles) when pregnant.

MMR can prevent these diseases in a combined injection.

## What are the side-effects of MMR?

MMR contains three separate vaccines in one injection. The vaccines have different side-effects at different times.

- About a week to 10 days after the MMR some children become feverish and they may develop a measles-like rash and go off their food. This is because the measles part of the vaccine is starting to work.
- About three to four weeks after the injection a child might occasionally get a mild form of mumps as the mumps part of MMR kicks in.
- In the six weeks after the MMR your child may, very rarely, get a rash of small bruise-like spots which may be caused by the measles or rubella parts of the immunisation. This usually gets better on its own, but if you see spots like this, show them to your doctor.

Very rarely, children can have severe allergic reactions straight after any immunisation (about 1 in 100 000 immunisations for MMR). Signs of a serious allergic reaction include difficulty breathing, hoarseness, or wheezing, hives, paleness, weakness, a fast heart beat or dizziness, and swelling of the throat. If the child is treated quickly, he or she will recover fully. People giving immunisations are trained to deal with allergic reactions.

The table on the following page compares the serious effects of the disease and reactions to MMR.

condition	children affected after the natural diseases	children affected after the first dose of MMR
Febrile convulsions (fits that may occur when a child has a high fever)	1 in 200 (measles)	1 in 1000
Meningitis (inflammation of the lining of the brain) encephalitis (inflammation of the brain)	1 in 1000 (measles, mumps, encephalitis) 1 in 20 (mumps meningitis) 1 in 6000 (rubella encephalitis)	Less than 1 in 1 million
ITP (Idiopathic thrombocytopenic purpura) - Conditions affecting blood clotting	1 in 3000 (rubella) 1 in 6000 (measles)	1 in 22 000
Severe allergic response (anaphylaxis)	-	1 in 100 000
SSPE (subacute sclerosing panencephalitis) - a delayed complication of measles that causes brain damage and death	1 in 8000 (children who get measles under 2)	0
Death	1 in 2500 to 1 in 5000 (measles - higher in children under 1) 1-2 in 1000 notified cases of measles in recent years	0

## What about reports of links between autism and MMR? Is this really a risk?

No, autism was well known long before MMR was ever used in this country. Autism, a disorder causing behavioural and language problems, is recognised more often now than in the past. Information from the UK shows that the increases in the cases of autism were going on before MMR was introduced. There was no sudden increase in autism when MMR was introduced. Parents often first notice the signs of autism around the time MMR is usually given. This does not mean that one causes the other.

Extensive research into this possibility shows that there is no link between MMR and autism. These research studies have been carried out in the UK, the USA, Sweden and Finland, and involve thousands of children. Experts from around the world, including the World Health Organization, have agreed that there is no link between MMR and autism.

## What about reports of links between MMR and bowel disease?

It has been suggested that measles viruses, either from the natural disease or the vaccine, might stay in the bowel and cause bowel disease. But bowel disease is no more common in immunised people than in people who have not been immunised. Again, there have been many studies that cannot find a link with the vaccine. Experts from around the world, including the World Health Organization, also came to the conclusion that the evidence is firmly against any link between measles and MMR vaccines and bowel disease.

## Have children been followed up long enough after MMR to know it's safe?

In the USA, MMR has been given for nearly 30 years. Worldwide over 500 million doses have been used in over 90 countries and the vaccine has an excellent safety profile. In Finland where children have been given up to two doses of MMR since 1982, reactions reported after MMR were followed up. Researchers found no deaths or permanent damage linked to the vaccine. The World Health Organization describes MMR as a *'highly effective vaccine which has such an outstanding safety record'*.

## Wouldn't it be better for children to have the vaccines separately?

No, giving the vaccines separately would leave children exposed to measles or mumps or rubella for longer. These can be serious or even fatal diseases. It would also mean giving children six injections instead of two. It has been said that giving the three vaccines together overloads children's immune systems. This is not the case. Children's immune systems make excellent responses, naturally protecting them against these diseases. No country in the world recommends MMR be given as three separate vaccines. The World Health Organization advises against using separate vaccines because they would leave children at risk for no benefit.

### **MMR—the safest way to protect your child**

- Evidence from around the world is against any link between MMR and autism or bowel disease.
- MMR protects children from three illnesses that can be very serious. It may be harmful to give the vaccines separately.

## MMR—the facts

- MMR vaccine protects children against measles, mumps and rubella.
- In nearly 30 years, over 500 million doses of MMR have been given in over 90 countries. It has an excellent safety record.
- The evidence is against any link between MMR and autism or bowel disease.
- The practice of giving the vaccines separately may be harmful. It leaves children open to the risk of catching measles, mumps or rubella.
- In countries where MMR is available, not one recommend giving the vaccines separately.
- Measles is a highly infectious disease and it kills and disables children and adults.
- Three children died after low uptake of MMR led to an outbreak of measles in Dublin in 2000.
- Mumps was the leading cause of viral meningitis in children before the MMR vaccine was introduced. Now it is virtually eliminated.
- The damage rubella can do to unborn babies is devastating – in many cases pregnant women catch rubella from their own or their friend's children.
- **MMR protects your child and your family against measles, mumps and rubella. If children go unprotected, they are at risk from these diseases.**

If you missed your MMR appointment, you can get the immunisation at any time, **free of charge**.

Please ask your GP, Public Health Nurse or Practice Nurse for more information or visit any of the following websites:

[www.hebe.ie](http://www.hebe.ie)  
[www.ndsc.ie](http://www.ndsc.ie)  
[www.doh.ie](http://www.doh.ie)  
[www.shb.ie](http://www.shb.ie)  
[www.mwhb.ie](http://www.mwhb.ie)  
[www.whb.ie](http://www.whb.ie)

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