

< Back to Health A to Z

MMR (measles, mumps and rubella) vaccine

The MMR vaccine is a safe and effective combined vaccine.

It protects against 3 serious conditions caused by viruses:

- measles
- mumps
- rubella (german measles)

These conditions are very infectious. They can easily spread between unvaccinated people and lead to serious problems. For example, meningitis, hearing loss and problems during pregnancy.

2 doses of the MMR vaccine provide the best protection.

When children can get the MMR vaccine

The MMR vaccine is part of the childhood vaccination schedule in Ireland.

Babies and children get:

- dose 1 from a GP when they are age 12 months
- dose 2 at school when they are age 4 to 5 (in junior infants)

In Donegal, Sligo and Leitrim, a GP gives dose 2.

If you have any questions about the vaccine, you can ask your GP or public health nurse for advice.

If you are travelling to another country

Babies age 6 to 11 months can get an MMR vaccine before travelling to another country.

You can get the vaccine for free from your GP. Try to get the vaccine at least 2 weeks before you travel.

Babies under age 6 months cannot get the MMR vaccine. But they still have any protection that was passed on during pregnancy.

If your baby gets an MMR vaccine before age 12 months, this does not change the regular vaccination schedule.

This means they still need to get the doses at age:

- 12 months
- 4 to 5 years (in junior infants)

If your child missed a dose

It's best to have vaccines on time. But you can still catch up on most vaccines if you miss them.

If your child missed dose 1 at 12 months, ask your GP if they are giving catch-up vaccines. Your child can then get dose 2 at school when they are age 4 to 5.

If your child is age 5 or older and has missed either of the 2 MMR doses, you can:

- ask your GP if they are giving catch-up vaccines
- contact your local health office

MMR vaccine for older children and adults

Anyone who has not had 2 doses of the MMR vaccine can get the vaccine.

If you were born in Ireland before 1978, you may not need the MMR vaccine. You are likely to have immunity against measles.

It is important to get the vaccine if you:

- are under 25
- live in shared or crowded accommodation
- live with vulnerable people who do not have immunity and cannot get the vaccine for example, people with a weak immune system, pregnant women or babies under age 1 year
- were born outside of Ireland and do not have immunity to measles
- are a healthcare worker with direct patient contact
- plan to get pregnant avoid getting pregnant for 1 month after the vaccine, <u>vaccines to get</u> <u>before pregnancy</u>
- plan to travel abroad to an area where there is a measles outbreak or regular cases of measles

If you cannot find your vaccination records, it will not harm you to have the MMR vaccine again.

You can get the vaccine through your GP. They will tell you when to get dose 2.

Who should not get the vaccine

You should not get the MMR vaccine if you:

- had a severe allergic reaction (anaphylaxis) to a previous MMR vaccine
- had a severe allergic reaction to any part of the vaccine for example, gelatin in the MMRVaxPro MMR vaccine
- had a severe allergic reaction to an antibiotic called neomycin
- are pregnant avoid becoming pregnant for 1 month after having the MMR vaccine
- have a weak immune system for example, if you are receiving chemotherapy

If you have a condition or take medicine that affects your immune system, check with your GP. They can tell you if it's safe for you to get the MMR vaccine. Make sure that the people you are in close contact with had 2 doses of the vaccine.

When to delay getting the vaccine

Delay getting the vaccine if you:

- are ill with a high fever wait until you feel better
- had the varicella (chickenpox) vaccine in the past 4 weeks
- had a recent blood transfusion or blood products
- are on a high dose of medicines called corticosteroids (steroids)
- are having any treatment with chemotherapy or radiotherapy
- have any illness or disease that weakens the immune system

Most babies age 12 months and older can get dose 1 of the MMR vaccine. If you took infliximab or other monoclonal antibody treatments during pregnancy or breastfeeding, your GP or specialist can tell you the best time to get your baby's MMR vaccine.

If you are not sure, check with your GP. They can tell you if you or your baby can get the vaccine.

Giving consent for vaccination

Anyone under 16 must attend their vaccination with a parent or legal guardian.

A parent or legal guardian must be there in person to give consent. You need to give consent for each dose.

The vaccinator can answer questions you might have about the vaccine.

How the MMR vaccine is given

The MMR vaccine is given as 2 doses of a single injection into the muscle of the upper arm or thigh.

You need 2 doses of the vaccine to have full protection.

After your MMR vaccine

You need to wait for 15 minutes after the vaccine. This is to make sure that you feel well before you leave.

If you have had a severe allergic reaction (anaphylaxis) in the past, you'll need to wait 30 minutes.

Effectiveness of the MMR vaccine

The MMR vaccine is very effective.

After 2 doses:

- around 99% of people are protected against measles and rubella
- around 88% of people are protected against mumps

Protection starts within 2 weeks of having the vaccine.

People who get the vaccine but still catch mumps are less likely to:

- · have serious complications
- be admitted to hospital

Side effects of the MMR vaccine

The MMR vaccine is very safe.

Most side effects are mild and do not last long.

The area where the needle goes in may look red or swollen and feel sore for 2 to 3 days.

Some babies or young children may feel a bit unwell or develop a high temperature for about 2 or 3 days. This can happen around 7 to 11 days after the injection.

But the possible complications of the conditions are much more serious.

Common side effects of the MMR vaccine

The MMR vaccine protects against 3 conditions. This means there are 3 separate vaccines within a single injection. This means different side effects can happen at different times.

Measles vaccine side effects

Around 6 to 10 days after the injection, some people get a very mild form of measles.

This includes:

- a rash
- a high temperature
- loss of appetite
- · feeling unwell for about 2 or 3 days

These symptoms are not infectious. You cannot pass anything on to non-vaccinated people.

Mumps vaccine side effects

Around 3 to 4 weeks after the injection, 1 in 50 children develop a mild form of mumps. This includes swollen glands in the cheeks, neck or under the jaw. It can last for up to 2 days.

These symptoms are not infectious. You cannot spread mumps to other people.

Rubella vaccine side effects

Some adult women experience painful, stiff or swollen joints for up to 3 days. This can happen around

1 to 3 weeks after the injection.

Rare side effects of the MMR vaccine

Rare side effects of the MMR vaccine include bruise-like spots and seizures (fits).

Bruise-like spots

In rare cases, some people may get a small rash of bruise-like spots about 2 weeks after having the MMR vaccine.

This side effect is linked to the rubella vaccine. It is called idiopathic thrombocytopenic purpura (ITP).

ITP develops in 1 in every 24,000 doses of the MMR vaccine given. The risk of developing ITP from measles or rubella infection is far greater than from having the vaccine.

ITP usually gets better without treatment. But get advice from your GP as soon as possible.

Seizures (fits)

There's a small chance of having a seizure 6 to 11 days after the MMR vaccine. This can be caused by having a high temperature in response to the measles vaccine virus.

Having a seizure after the MMR vaccine is rare. They happen in about 1 in every 1,000 doses given.

You are more likely to have a seizure because of a measles infection than after the MMR vaccine.

Allergic reactions to the MMR vaccine

It's rare for anyone to have a serious allergic reaction to a vaccine. If this does happen, it's usually within minutes.

Vaccinators have training to deal with allergic reactions and treat them immediately. With fast treatment, you or your child will make a good recovery.

Get medical care immediately if you:

- have difficulty breathing
- feel dizzy
- have a fast heartbeat or a skin rash

These could be a sign of an allergic reaction. But severe allergic reactions are rare.

Gelatine and neomycin allergies

Let your doctor or nurse know if you or your child has had severe allergic reactions to:

gelatine

an antibiotic called neomycin

Egg allergies

The MMR vaccine is safe for anyone with a severe egg allergy.

This is because the MMR vaccine is grown on chick cells, not the egg white or yolk.

The MMR vaccine is not linked to autism

There's no evidence of any link between the MMR vaccine and autism. Many studies have investigated this.

MMR vaccine ingredients

The brands of MMR vaccine used in Ireland are Priorix and MMRVaxPro.

The main ingredient of the MMR vaccine is a small amount of weakened measles, mumps and rubella viruses.

The MMR vaccine does not contain mercury (thiomersal).

MMRVaxPro contains porcine gelatine. This keeps the vaccine safe and effective during storage.

Having vaccines that contain porcine gelatin is allowed under Islamic and Jewish laws.

Statement from the Irish Council of Imams (PDF, 82.3KB, 2 pages)

Letter from Rabbi Abraham Adler (PDF, 8.7KB, 1 page)

You can find a full list of ingredients in the patient information leaflet for the vaccine.

How to find your patient information leaflet online

Page last reviewed: 7 March 2024 Next review due: 7 March 2027

HSE Live - we're here to help

Monday to Friday: 8am to 8pm

Saturday: 9am to 5pm Sunday: Closed Bank holidays: Closed

Freephone: 1800 700 700

From outside Ireland: <u>00 353 1 240 8787</u>

HSE Facebook HSE Instagram

<u>SE TikTok</u>
SE YouTube
SE LinkedIn
SE X (Twitter)
omplaints and feedback
<u>mergencies</u>
<u>ookie settings</u>
<u>pokie statement</u>
<u>ocessibility</u>
rivacy statement
<u>sclaimer</u>
Health Service Executive