Your Child's Immunisations

A guide for parents

Babies born on or after 1 October 2024

www.immunisation.ie

Childhood Immunisations

Choosing to vaccinate your child is one of the most important things you can do to protect them from serious illness.

Vaccination is safe and effective, and all vaccines are free of charge from your GP (doctor).

The vaccines in the Childhood Immunisation Programme protect your child against 14 different infectious diseases. The page opposite shows what vaccines your child will get and at what age they should get them.

This guide will tell you:

- Why it is important for your child to get every vaccine, and to get the vaccines on time,
- What you can expect with each visit, and
- What to expect after your child gets their vaccines.

This guide will also answer some other questions you may have about your child's vaccines.

At the back of this booklet, you will find:

- A magnet with the timetable for your child's vaccines. It is useful to put this somewhere easy to see (such as on your fridge) to remind you when a vaccine visit is due.
- Your child's immunisation passport. Please keep this safe and bring it to each visit so it can be filled in and kept up to date.

Contact your GP practice to book your child's next vaccination visit.

Age	Visit	Vaccines
2 months	Visit 1	6 in 1+PCV+MenB+Rotavirus 3 Injections+Oral Drops
4 months	Visit 2	6 in 1+MenB+Rotavirus 2 Injections+Oral Drops
6 months	Visit 3	6 in 1+PCV 2 Injections
	No Rotavirus vaccine on or after 8 months 0 days	
12 months	Visit 4	MMR+MenB+Chickenpox 3 Injections
13 months	Visit 5	6 in 1+MenC+PCV 3 Injections

Page 2 explains the above abbreviations.

Childhood Immunisation Schedule

ALL THE IMMUNISATIONS LISTED ARE FREE AT YOUR GP

Five visits to your GP (doctor) to be fully vaccinated.

Your child needs five visits to their GP to be fully vaccinated. Please bring your child's immunisation passport to each visit. This is at the back of this booklet.

6 in 1	Diphtheria, haemophilus influenzae B (Hib), hepatitis B, pertussis (whooping cough), polio and tetanus
PCV	Pneumococcal conjugate
Rotavirus	Rotavirus oral vaccine
MenB	Meningococcal B
MMR	Measles, mumps, rubella
Chickenpox (varicella)	Chickenpox
MenC	Meningococcal C

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In Ireland, all the recommended immunisations for your child are free.

Remember

Your child needs five visits to your GP (doctor) to complete their course of vaccines and be protected against 14 serious infectious diseases.

2 months
Visit 1

4 months
Visit 2

What happens before immunisation?

Before your child is immunised, your GP or General Practice Nurse will check with you that your child is well and able to get the vaccines. If you have any questions about your child's immunisations, ask your GP or General Practice Nurse before your child is immunised. You can also get more information from your Public Health Nurse at your local HSE health clinic.

There are very few reasons why your child should not get a vaccine.

Should I give my child anything before the immunisation?

You can offer your child their usual milk a few minutes before their immunisation. This has been shown to help to reduce pain.

At the 2- and 4-month vaccine visits, your child will get rotavirus oral vaccine. You can feed your child at any time before or after this vaccine.

Get the vaccine on time every time

6 months	12 months	13 months
Visit 3	Visit 4	Visit 5

2 months Visit 1

You should arrange to visit your GP for your baby's first vaccines at 2 months of age. The HSE will also write to you to remind you to visit your GP for your first immunisation visit.

What vaccines will my child get at 2 months of age?

When your child is 2 months, they will get four vaccines:

1. The 6 in 1 vaccine to protect against diphtheria, haemophilus influenzae B (Hib), hepatitis B, pertussis (whooping cough), polio and tetanus;
2. The MenB vaccine to protect against meningococcal B disease;
3. The PCV vaccine to protect against pneumococcal disease; and
4. The rotavirus oral vaccine to protect against rotavirus disease.

The rotavirus oral vaccine is given as drops into your child's mouth. The other vaccines are given as injections in your child's legs.

Watch how your GP or General Practice Nurse gives the rotavirus oral drops to see how best you can give liquid infant paracetamol to your child.

Remember

Your child needs **four** more visits to your GP to get all their vaccines and to be fully protected against serious diseases. Please bring your child's immunisation passport to each visit.

What can I expect after vaccination?

Your child may have a sore leg or fever (temperature of 38 °C or higher), especially after the MenB vaccine. This is why we recommend that you give your child **three doses** of liquid infant paracetamol after the first visit (at 2 months of age).

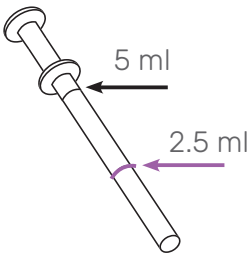
Liquid infant paracetamol		2-month visit
Dose 1	2.5 mls (60 mg)	At the time of injection
Dose 2	2.5 mls (60 mg)	4-6 hours after dose 1
Dose 3	2.5 mls (60 mg)	4-6 hours after dose 2

If your child still has a fever, give a fourth dose of 2.5 mls (60 mg) 4 to 6 hours after the third dose.

If you are worried about your child, please contact your GP, General Practice Nurse, or Public Health Nurse for advice.

What happens next?

Make an appointment with your GP (doctor) for your child's 4-month vaccines. It's a good idea to put a reminder in your phone or write the date of your child's next appointment on a calendar.



4 months Visit 2

What vaccines will my child get at 4 months of age?

When your child is 4 months, they will get three vaccines:

1. The 6 in 1 vaccine (this is the same vaccine that your child got when they were 2 months);
2. The MenB vaccine to protect against meningococcal B disease (this is the same vaccine that your child got when they were 2 months); and
3. The rotavirus oral vaccine to protect against rotavirus disease (this is the same vaccine that your child got when they were 2 months).

The rotavirus oral vaccine is given as drops into your child's mouth. The other vaccines are given as injections in your child's legs.

What can I expect after vaccination?

Your child may have a sore leg or fever (temperature of 38 °C or higher) especially after the MenB vaccine. This is why we recommend that you give your child **three doses** of liquid infant paracetamol after the 4-month visit.

Remember

Your child needs **three** more visits to your GP to get all their vaccines and to be fully protected against serious diseases. Please bring your child's immunisation passport to each visit.

Liquid infant paracetamol		4-month visit
Dose 1	2.5 mls (60 mg)	At the time of injection
Dose 2	2.5 mls (60 mg)	4-6 hours after dose 1
Dose 3	2.5 mls (60 mg)	4-6 hours after dose 2

If your child still has a fever, give a fourth dose of 2.5 mls (60 mg) 4 to 6 hours after the third dose.

If you are worried about your child, please contact your GP, General Practice Nurse or Public Health Nurse for advice.

What happens next?

Make an appointment with your GP to attend for your child's 6-month vaccines. It's a good idea to put a reminder in your phone or write the date of your child's next appointment on a calendar.

6 months Visit 3

What vaccines will my child get at 6 months of age?

When your child is 6 months, they will get two vaccines:

1. The 6 in 1 vaccine (this is the same vaccine that your child got when they were 2 months and 4 months old); and
2. The PCV vaccine (this is the same vaccine that your child got when they were 2 months old).

The vaccines are given as injections in your child's legs.

What can I expect after vaccination?

Your child may have a sore leg or fever (temperature of 38 °C or higher) after vaccination. **Your child does not need three doses of liquid infant paracetamol after this visit because they have not had the MenB vaccine.**

If your child has a high temperature:

1. Give them plenty to drink.
2. If they are uncomfortable, give them liquid infant paracetamol to bring their fever down. Talk to your pharmacist about giving medicine to your child and always read the label.
3. Trust your instincts, and if you are worried about your child after they have received their vaccines, speak to your GP or your General Practice Nurse.

More information about caring for your child with a high temperature can be found at **MyChild.ie** or in the *MyChild 0 to 2 years* book.

Remember

Your child needs **two** more visits to your GP to complete their course of vaccines and be fully protected against serious diseases. Please bring your child's immunisation passport to each visit.

If you are worried about your child, please contact your GP (doctor), General Practice Nurse, or the Public Health Nurse for advice.

What happens next?

Make an appointment with your GP to attend for your child's 12-month vaccines. It is a good idea to put a reminder in your phone or write the date of your child's next appointment on a calendar.

12 months Visit 4

You should arrange to visit your GP for your child's immunisations at 12 months of age. The HSE will also write to tell you about the vaccines that your child will get at their fourth visit at 12 months and at their fifth visit at 13 months.

What vaccines will my child get at 12 months of age?

When your child is 12 months old, they will get three vaccines:

1. The MMR vaccine to protect against measles, mumps and rubella;
2. The chickenpox (varicella) vaccine; and
3. The MenB vaccine booster (this is the same vaccine that your child got when they were 2 months and 4 months of age).

These vaccines are given as injections, usually in your child's legs.

What can I expect after vaccination?

Your child may have a sore leg or fever (temperature of 38 °C or higher) after vaccination.

After the MMR:

Your child may get 'mini measles' – a mild rash with fever 6–10 days after vaccination. Your child cannot pass 'mini-measles' on to anyone else.

Your child may get ‘mini mumps’ – swelling of the glands under their jaw – three weeks after vaccination. Your child cannot pass ‘mini-mumps’ on to anyone else.

After the chickenpox (varicella) vaccine:

Sometimes children get a mild rash with a few spots after the chickenpox vaccine. This can happen 5–26 days after vaccination. The spots are usually where they got the injection, but they can be on other parts of the body. The rash goes away on its own and does not need treatment.

You can read more at **www.immunisation.ie**

Remember

Your child needs **one** more visit to your GP to get all their vaccines and to be fully protected against serious diseases. Please bring your child's immunisation passport to each visit.

As your child is now older, they do not need to routinely get three doses of paracetamol after the MenB vaccine.

If your child has a high temperature (38 °C or higher):

1. Give them plenty to drink.
2. If they are uncomfortable, give them liquid infant paracetamol to bring their fever down. Talk to your pharmacist about giving medicine to your child and always read the label.
3. Trust your instincts, and if you are worried about your child after they have received their vaccines, speak to your GP, General Practice Nurse or your Public Health Nurse.

More information about caring for your child with a high temperature can be found at **MyChild.ie** or in the *MyChild 0 to 2 years* book.

What happens next?

Make an appointment with your GP to attend for your child's 13-month vaccines. It's a good idea to put a reminder in your phone or write the date of your child's next appointment on a calendar.

13 months Visit 5

What vaccines will my child get at 13 months of age?

When your child is 13 months, they will get three vaccines:

- The 6-in-1 vaccine (this is the same vaccine that your child got at 2 months, 4 months and 6 months of age);
- The MenC vaccine to protect against meningococcal C disease; and
- The PCV vaccine (this is the same vaccine that your child got when they were 2 months and 6 months of age).

These vaccines are given as injections, usually in your child's legs.

What can I expect after vaccination?

Your child may have a sore leg or a fever (temperature of 38 °C or higher) after vaccination.

If your child has a fever:

- Give them plenty to drink.
- If they are uncomfortable, give them liquid infant paracetamol to bring their fever down. Talk to your pharmacist about giving medicine to your child and always read the label.

- Trust your instincts, and if you are worried about your child after they have received their vaccines, speak to your GP, General Practice Nurse or your Public Health Nurse.

More information about caring for your child with a high temperature can be found at **MyChild.ie** or in the *MyChild 0 to 2 years* book.

Your child has now completed the childhood immunisation schedule. Their next routine immunisations will be due when they are aged 4-5 years, in Junior Infants class in school. Keep your child's immunisation passport safe for future vaccinations.

Immunisation and why it is so important for your child to get their vaccines

What is immunisation?

Immunisation is a simple, safe and effective way to protect your child against certain diseases. The risks from having these diseases are much greater than the risk of any minor side effects from immunisation.

What causes infection?

Infections are caused by germs entering the body:

- Through cuts,
- When we breathe in, or
- When we swallow.

The germs can then cause diseases such as meningitis (inflammation of the lining around the brain), pneumonia (a lung infection) or septicaemia (blood poisoning).

What is an infectious disease?

This is a disease that spreads from one person to another, usually through coughs and sneezes. Some people 'carry' the germs in their body but are not sick themselves.

For example, 1 in 10 of us carry meningococcal germs, but only 1 in 10,000 gets sick with meningitis or septicaemia.

Other examples of infectious diseases include measles, whooping cough, diphtheria and polio.

How does my child's body fight infection?

When germs enter your child's body, your child's immune system makes 'antibodies' to the germs. Antibodies do two things:

1. They attack and destroy the germs. However, it takes time for the body to make enough antibodies. Sometimes the germs may damage your child's body before the antibodies can destroy them.

2. The antibodies stay in your child's body to protect them against infections. If the same germs try to infect your child again, the antibodies will destroy them before they have a chance to make your child sick.

This way of dealing with germs is called 'natural immunity'. It is why most people get diseases like measles or chickenpox only once, even though they might be exposed to them many times.

The problem with getting natural immunity from germs is that your child has to get sick before they develop immunity. In fact, some germs could make your child very sick or even kill them before their body could produce enough antibodies to destroy the germs. This is why we give vaccines to protect your child against these germs.

How do vaccines work?

When your child is given a vaccine, their body responds by making antibodies in the same way as if they had caught the disease, but without them getting sick. The antibodies that your child's body makes then stay in their body to protect them against the actual disease.

How long do vaccines take to work?

It usually takes **a few weeks** for vaccines to work, so your child will not be protected immediately.

Why does my child need more than one dose of a vaccine?

Most vaccines need to be given several times to build up long-lasting protection. For example, a child who gets only one or two doses of the whooping cough vaccine is only partly protected against whooping cough and may still catch the disease.

This is why it is so important that your child completes all five visits to the GP and gets all their immunisations.

When your child reaches school age, they will get more doses of some vaccines to give them even better long-term protection.

The childhood immunisation schedule explained

Why are vaccines given at such an early age?

Young children are most at risk of getting these diseases and need to be protected as early as possible. For example, children younger than 6 months are at the highest risk of serious complications of whooping cough (6 out of 10 children in this age group need to go into hospital, and 9 out of 10 deaths from whooping cough are in this age group).

Also, the rotavirus oral vaccine can only be given to children under 8 months of age. This is because in very rare cases a child can get a blockage in the gut if the vaccine is given later.

The MMR and chickenpox vaccines are the exception. They are not usually given to children under 12 months because they may not work properly in young children.

Your child needs to get the vaccines at the right age so that they are protected from serious diseases when they are most vulnerable.

Why are so many vaccines given together?

Some parents worry that giving several combined vaccines at once will overload their child's immune system or that the vaccines may not work properly.

There is nothing to worry about, as your child's immune system can easily cope with vaccines. Studies have shown that vaccines are just as safe and effective when they are given together as when they are given separately.

By getting several vaccines at the same time, your child is protected at a younger age and needs fewer injections. For example, if your child received single injections of the measles, mumps and rubella vaccines instead of the combined MMR vaccine, they would have to have three injections instead of one.

Your child needs a number of vaccines to get the best protection, so it is important to complete the course of vaccines.

Will immunisations still work if my child doesn't get the vaccines at the right time?

Yes. Most of these vaccines can be given at any age, and a child who misses one injection in a course of injections does not have to start again. But your child will not be fully protected until they get all the vaccines.

The exception is the rotavirus vaccine, which can only be given to children under 8 months of age.

What will happen if my child doesn't get the vaccines at all?

One of two things could happen:

1. Your child may never come into contact with the germs that cause these diseases and so would not become ill, or
2. Your child may come into contact with the germs, either as a child or as an adult. If they do, there is a good chance they will get the disease.

If your child gets the disease, they could be:

- Mildly ill and have to stay inside for a few days, or
- Very sick and have to go into hospital or, at worst, die.

Your child could also spread the diseases to others who are not protected, such as children who are too young to be vaccinated. Many people could get very sick and some could die if not enough people in your community are protected.

What are my child's chances of being exposed to these diseases?

Some of these diseases are very rare in Ireland today, so the chances of exposure are small, but others are still fairly common. **Also, even though some of the diseases are rare in Ireland, they are common in other countries,** so your child could get those diseases while travelling abroad.

Don't assume that your child is completely safe from diseases, even the rare ones. Many of these diseases are still common in other countries.

With increased travel to and from these countries, it is possible that these diseases will happen in Ireland. If there are not enough people immunised, there could be epidemics in which many people will get the disease and some will die.

If your child is not immunised, they are at a greater risk of getting these infections when they are older. Some infections are more serious in teenagers or adults than in children. For example, mumps in teenage boys or young men may cause swelling of the testicles, and they may not be able to have children. If a woman catches rubella during the early stages of pregnancy, her child may have major birth defects. Also, measles can be more serious in adults.

Do vaccines always work?

Vaccines work most of the time, but not always. Most childhood immunisations protect at least 9 out of 10 (90% to 99%) of the children who get them, but sometimes a child will not respond to certain vaccines.

This is another reason why it's important for all children to be immunised. A child who does not respond to immunisation depends on the immunity of others around them for protection. Your child could be infected by a child who hasn't been immunised.

Get the vaccine on time every time

How effective are vaccines?

Vaccine	Percentage of children immune after getting the recommended doses of vaccine
Chickenpox (Varicella)	86 to 98%
Diphtheria	97%
Hepatitis B	80 to 100%
Hib	95 to 100%
MMR	95%
MenB	88%
MenC	90%
Pertussis (whooping cough)	75 to 90%
Pneumococcal (PCV)	90%
Polio	99%
Rotavirus (oral)	82 to 94%
Tetanus	Almost 100%

In a school of 1,000

No MMR vaccine ✗

- 1,000 cases of measles
- 40 children get pneumonia
- 50 children get an ear infection
- 1-2 children die

Vaccinated with MMR ✓

- 50 cases of measles
- 2 children get pneumonia
- 2-3 children get an ear infection

Vaccine contents and safety

What is in vaccines?

Vaccines contain:

- Active ingredients (the vaccine itself), and
- Additives such as preservatives and stabilisers.

Active ingredients

Some vaccines are made from tiny amounts of the same germs that cause infections. However, the germs in vaccines are either killed or weakened. This means they won't make your child sick and are safe to use.

Additives

Vaccines may contain:

- A small amount of preservative to protect the vaccine from contamination;
- Other additives to make sure that the active vaccine ingredient is evenly mixed throughout the injection mixture; or
- A small amount of aluminium salt, which helps the body to respond better to the vaccine.

The level of additives in vaccines is very low and within internationally recommended levels. These additives do not cause any serious health problems in infants and young children.

None of the vaccines used in the national immunisation programme contain mercury (thiomersal).

Are vaccines safe?

The vaccines used in Ireland are safe. All medicines can cause side effects, but with vaccines these are usually mild, like a sore arm or leg after the injection, or a slight fever (temperature of 38 °C or higher). Serious side effects to vaccines are extremely rare.

Research from around the world shows that immunisation is the safest way to protect your child's health. Your GP or General Practice Nurse can discuss the benefits of vaccines, and any side effects, with you before giving your child their vaccines.

Who regulates vaccines in Ireland?

All the recommended vaccines used to protect children in Ireland are licensed by the **Health Products Regulatory Authority** (HPRA) or the European Medicines Agency. They are licensed for use only when they have been shown to be both safe and effective.

Where can I find out more about the vaccines used in Ireland?

You can find out more in the:

- *Patient Information Leaflet* (PIL), which gives a list of ingredients; and
- *Summary of Product Characteristics* (SmPC), which contains more detailed information, particularly in Sections 2 and 6.1.

These documents are available on the following websites:

- www.medicines.ie
- www.hpra.ie/homepage/medicines/medicines-information/finda-medicine
- https://www.ema.europa.eu/en/homepage

You will need to know the name of the vaccines to search these websites. The product name of each vaccine is available on our website: www.immunisation.ie.

What about the scare stories?

Vaccines do not cause autism. However, when things happen to our children around the same time as they are immunised, we can wrongly believe that there is a link.

In 1998, a controversial UK study was published by Andrew Wakefield claiming a link between the MMR vaccine and autism. This study has been shown to be false.

Autism is something children are born with. But the signs of autism usually become noticeable later, at about the same time that children are given the MMR vaccine. The MMR vaccine does not cause autism. Because most children get immunised, those who have conditions such as autism will probably have been immunised as well. Many studies have been done to see if children who have been immunised are more likely to have autism. These studies have found no link between autism and the MMR vaccine.

Research into the MMR vaccine

Extensive research into the MMR vaccine, involving thousands of children, was carried out in the UK, the USA, Sweden and Finland. This research showed that there is no link between MMR and autism.

A 2019 study of over 650,000 children born in Denmark found no increased risk of autism after receiving the MMR vaccine. In 2014, a group of researchers in Australia studied more than 1 million children. They also found no link between the MMR and autism.

Other studies in the UK in 1999 and Denmark in 2002 also found that there was no link between MMR vaccine and autism.

Common questions about immunisation

If you are worried about whether your child is fit to be immunised, talk to your GP (doctor), General Practice Nurse or Public Health Nurse.

Are there any children who should not get these vaccines?

Very few. Your child should not get the vaccine if they have had a very severe reaction (anaphylaxis) to that vaccine or any part of it.

Rotavirus

Your child should not get rotavirus oral vaccine if they:

- Are 8 months of age or older;
- Have a history of blocked gut (intussusception);
- Have a diagnosis of severe combined immunodeficiency (SCID);
- Have a problem with their gastrointestinal tract (gut) that could increase the risk of a blocked gut;
- Have a sugar intolerance (fructose , sucrose-isomaltase deficiency or glucose galactose malabsorption); or
- If their mothers took certain biological medications (for example infliximab) throughout the pregnancy and during breastfeeding.

Are there any reasons to delay immunisation?

Very few. If your child has a high fever, wait until your child is better. However, infants and children with minor coughs and colds, or those on antibiotics, can be immunised safely and effectively.

You should talk to your GP before your child gets the MMR or chickenpox (varicella) vaccines if they are:

- On high-dose steroids,
- Receiving chemotherapy or radiotherapy, or
- Taking medications or suffering from a disease that affects their immune system.

Your GP might advise postponing the MMR or chickenpox (varicella) vaccines.

What if my child was premature, had a low birth weight or had jaundice?

It is important that premature babies are protected from infectious diseases, as they are more at risk of certain infections. In general, premature babies should be immunised as normal.

If your child had a very low birth weight, you should talk to your paediatrician (a doctor who has special training in medical care for children) about the child's immunisation needs.

If your child weighed less than 3.5 kg (7 lb 7 oz) at their 6-week check, you should tell your GP or General Practice Nurse so they can reweigh your child at the 2-month visit and tell you the correct amount of paracetamol to give your child after their MenB vaccine.

What if my child has a serious disease?

It is very important that children with serious diseases are immunised, because they are often more at risk from complications of infections.

Children living with conditions like cerebral palsy or who have Down Syndrome should get their immunisations at the usual times.

However, care is needed if your child's illness, or its treatment, may lower their immunity. Talk to your GP (doctor) about immunisation if your child:

- Has cancer,
- Has severe combined immunodeficiency (SCID),
- Has any other immune deficiency, or
- Is taking medicines which may reduce their ability to fight infection.

Speak to your GP if your child has received a blood transfusion or any blood products. Your GP will tell you when your child should receive their MMR and chickenpox (varicella) vaccines.

What if my child has asthma, eczema or hay fever?

Children with asthma, eczema or hay fever should be immunised. Children taking steroids by inhaler or in a low-dose steroid cream should be immunised as normal. If you have any questions, talk to the GP or General Practice Nurse giving the vaccines.

Can my child get the MMR vaccine if they are allergic to eggs?

Yes. Children who are allergic to egg can safely get the MMR vaccine in the GP surgery. If your child simply dislikes eggs or has diarrhoea or stomach pains after eating eggs, they should still get their MMR vaccine.

Even children with a severe egg allergy should get the MMR vaccine.

What if my child has epilepsy?

If your child has epilepsy and their condition is stable, they should be immunised. Children with a family history of fits or epilepsy should also be immunised as normal.

What if my child has had febrile convulsions (fits)?

Some children get febrile convulsions (fits) if they have a fever.

As some children get a fever after the MenB vaccine which is given at 2 months and 4 months of age (visits 1 and 2), we recommend that you give your child liquid infant paracetamol after this vaccine. See page 9 for more details on how to give this.

If your child gets a fever after the vaccines at 6, 12 and 13 months of age (visits 3, 4 and 5), you can also give them liquid infant paracetamol. Always follow the directions on the package.

If your child has had febrile convulsions before, please follow the advice you have been given by your child's paediatrician about how to manage a high temperature.

Trust your instincts and speak to your GP or your General Practice Nurse if you are worried about your child after their vaccinations. Visit **MyChild.ie** for advice on how to care for your child with a high temperature.

What if my child has recently had, or is due to have, surgery?

They should still be immunised. Having surgery is not a reason to put off immunisation, and a recent immunisation is not a reason to put off surgery. However, if your child had surgery for a gut problem, they may not be able to have the rotavirus oral vaccine at 2 and 4 months of age.

What if my child is on antibiotics?

Children who are on antibiotics can usually receive their vaccines at the usual time, once they are not very unwell with a temperature of 38 °C or higher. Speak to your GP or your General Practice Nurse if you have questions about your child's antibiotics.

What if my child has already had one of these diseases?

You should still immunise your child. It is important that your child is protected against all the diseases that the vaccine covers, even if the child has caught one of the diseases before.

Children under 1 year may not get enough natural immunity following illness, so they should still be immunised.

Can my child be immunised while they are in close contact with a pregnant woman?

Yes. There is no problem with this. In fact, immunising your child will protect the pregnant woman from being exposed to diseases like rubella, measles and chickenpox.

If you are pregnant and you are not immune to chickenpox (you've never had a chickenpox infection or a chickenpox vaccine before), we recommend that your child gets the chickenpox (varicella) vaccine at the usual time. This will help to protect you from being exposed to chickenpox.

Sometimes after the chickenpox (varicella) vaccine, children can develop a mild rash with a few spots. The rash goes away on its own and does not need treatment. If you are pregnant and not immune to chickenpox, and your child develops this rash after vaccination, please visit **www.immunisation.ie** for advice. You can also find advice there if your child develops a rash after the chickenpox vaccine and there is a newborn baby at home whose mother is not immune to chickenpox.

Should my child get vaccines while they are in close contact with someone with a very weak immune system?

Yes. It is very important to vaccinate your child. This will help protect the person with a very weak immune system (e.g. someone taking chemotherapy treatment for cancer) from infectious diseases like measles and chickenpox.

Sometimes children get a rash with spots after the chickenpox (varicella) vaccine. The rash goes away on its own and does not need treatment. If your child develops this rash after vaccination and is living with a person with a very weak immune system, please visit **www.immunisation.ie** for advice.

Do some children also need other vaccines?

Yes. Some children may need other vaccines as they are more at risk of infection. These include children who have had their spleens removed or who have cystic fibrosis; an immune deficiency; chronic heart, lung, liver or kidney disease; sickle cell disease; diabetes or any long-term illness. Talk to your GP about this.

During 'flu season', the HSE may recommend that children receive the children's flu vaccine. For children aged over 2 years, this can be given as a spray up the nose.

If you are travelling to another country, remember to find out if your child needs any special vaccines.

If you have any questions or doubts, talk to the GP or General Practice Nurse giving the immunisation.

My child was born in another country. Do they need to be immunised?

Yes. If your child has moved to Ireland, they need to follow the Irish immunisation schedule. This is because your child is now living in Ireland and needs to be protected against diseases that are common in Ireland. Some of these diseases could make your child very sick. You should make an appointment with your GP or your General Practice Nurse, who will tell you what vaccines your child may need.

My child was immunised in another country. Do they need to be immunised in Ireland too?

Yes. You need to take your child's immunisation records to your GP or General Practice Nurse. They will see if there are any vaccines that your child should have to best protect them against diseases more common in Ireland.

I have lost my child's immunisation passport. What should I do?

You can order a new immunisation passport free of charge at www.healthpromotion.ie You will need to contact your GP or Local Health Office to request a list of the vaccines your child has already received.

Immunisation against infectious disease has saved more lives than any other public health activity apart from providing clean water.

Common questions after immunisation

What common reactions can my child get after being vaccinated, and what should I do?

Common reaction	What to do
At 2 and 4 months (visits 1 and 2) Fever (a temperature of 38 °C or higher) is common after the MenB vaccine. You should give liquid paracetamol after the Men B vaccines at 2 and 4 months. Do not wait for your child to develop a fever before you give them paracetamol.	• Give 2.5 mls (60 mg) of liquid infant paracetamol at the time, or shortly after, the vaccine is given. • Give a second dose of 2.5 mls (60 mg) 4–6 hours later. • Give a third dose of 2.5 mls (60 mg) 4–6 hours after the second dose. • Use the syringe in the bottle to measure the dose. • If your child is well but still has a fever, give a fourth dose of 2.5 mls (60 mg) 4–6 hours after the third dose. • If your child weighed less than 3.5 kg (7 lb 7 oz) at their 6-week check, talk to your GP (doctor) about how much infant paracetamol to give.

Common reaction	What to do
Soreness, swelling and redness in the area where the injection was given	• Make sure clothes are not too tight or rubbing against the area where the injection was given.
Mild diarrhoea after the rotavirus oral vaccine	• Give your child plenty of milk and make sure they stay well hydrated. • Wash your hands carefully after changing and disposing of your child's nappy.
At 6, 12 and 13 months (visits 3, 4 and 5) Soreness, swelling and redness in the area where the injection was given	• Give liquid infant paracetamol to relieve aches and pains. Always follow the directions on the package. • Make sure clothes are not too tight or rubbing against the area where the injection was given.
Fever (a temperature of 38 °C or higher) or your child feels much hotter than usual	• Dress your child normally – do not underdress them or overwrap them in clothes. • Give them plenty to drink. • If they are uncomfortable, give them liquid infant paracetamol to bring their fever down. Talk to your pharmacist about giving medicine to your child and always read the label. • Trust your instincts, and if you are worried about your child after they have received their vaccines, speak to your GP or your General Practice Nurse.

Common reaction	What to do
Headache or irritability	• Give liquid infant paracetamol to relieve the aches and pains. Always follow the directions on the package.

Remember

- Give liquid infant paracetamol after your child's vaccines at 2 and 4 months.
- Your child does not routinely need liquid infant paracetamol after their vaccines at 6, 12 and 13 months old. Only give it if your child is uncomfortable with a fever (temperature of 38 °C or higher) or headache or is irritable.
- **If your child is very unwell after getting a vaccine, they may be sick for some other reason.** Trust your instincts, and if you are worried about your child after they have received their vaccines, speak to your GP or your General Practice Nurse.
- Some children get a fever 6 to 10 days after getting the MMR vaccine. If this happens to your child, give liquid infant paracetamol.
- When buying liquid infant paracetamol for your child, ask your pharmacist for a sugar-free liquid that is suitable for your child's age.

Sometimes children get a mild rash with a few spots after the chickenpox (varicella) vaccine. The rash goes away on its own and does not need treatment. If your child gets this rash, you can read more at **www.immunisation.ie**.

Using liquid infant paracetamol over a long time without advice from a doctor may be harmful.

How soon after the rotavirus oral vaccine can I feed my child?

You can feed your child at any time before or after the rotavirus oral vaccine.

What if my child has an allergic reaction to vaccines?

Serious allergic reactions to vaccines are extremely rare. About one child out of one million may have a serious allergic reaction. Serious allergic reactions usually happen within a few minutes of receiving the vaccine.

Signs of a serious allergic reaction include difficulty breathing, hoarseness, wheezing, paleness, weakness, a fast heartbeat, dizziness and swelling of the throat. If the reaction is treated quickly, the child will recover fully. Doctors and nurses who give vaccines are trained to deal with allergic reactions.

Could my child suffer any side effects from the vaccines?

The main side effects from vaccines are tenderness, swelling or pain where the injection was given, or a mild fever. Most of these minor side effects happen in the first day or two after vaccination, and children usually recover within a day or two. Sometimes after the MMR vaccine and after the chickenpox vaccine, children can get a mild rash. These rashes will go away on their own and do not need treatment.

The Health Products Regulatory Authority (HPRA) monitors all reported side effects of vaccines in Ireland. Other countries also monitor side effects. This is so they can detect new or rare side effects quickly and take any action that may be necessary.

If your child has any side effects after vaccination, let your GP (doctor) know so that they can report it to the Health Products Regulatory Authority (HPRA).

If my child was unwell after the last dose of vaccine, should they get the next dose?

Some children may be unwell after their vaccination. Usually there is no reason not to finish the course of vaccine. However, if your child had a serious allergic reaction (anaphylaxis), they should not get that vaccine again.

The diseases and the vaccines that protect against them

How serious are these diseases?

Many of these diseases can kill a child or an adult. It's easy to forget how serious they are because they aren't as common as they used to be. We have vaccines largely to thank for that.

These diseases have not changed. They can still cause dehydration, pneumonia, choking, meningitis, brain damage and heart problems in children who are not protected. These diseases still kill children in many parts of the world, even in Ireland.

The next few pages tell you more about the diseases and the vaccines which protect your child against these diseases.

The diseases and the vaccines that protect against them

This table (up to page 49 inclusive) sets out:

- The description of the diseases,
- The effects of the disease, and
- The possible side effects of the vaccine.

Disease	Effect of disease	Side effects of the vaccine
Chickenpox (varicella) – highly contagious virus spread by close contact with an infected person. It causes an itchy, blistering rash and other symptoms, like a fever (temperature of 38 °C or higher) and feeling generally unwell.	• Infection of the rash, • Skin scarring, • Encephalitis (inflammation of the brain), • Pneumonia, • Glomerulonephritis (kidney damage), • Myocarditis (inflammation of the heart), • Hepatitis (inflammation of the liver), or • Coagulopathy (bleeding disorder).	If 1,000 people are immunised: • 100 will have soreness, redness and swelling where the injection was given or will have a fever or irritability. • 30 will develop a mild rash after 5-26 days.
Diphtheria – contagious bacteria spread by close contact with an infected person or carrier and which causes a sore throat and severe breathing difficulties.	If 1,000 people get diphtheria: • 50 will die. The bacteria release a toxin (poison) which can lead to paralysis and heart failure.	If 1,000 people are immunised: • 100 will have discomfort, redness and swelling where the injection was given or will have a fever.

Disease	Effect of disease	Side effects of the vaccine
Haemophilus influenzae type b (Hib) – contagious bacteria spread by close contact with an infected person. It can cause: • **Meningitis** (inflammation of the lining around the brain), • **Epiglottitis** (swelling in the throat that causes choking), • **Septicaemia** (blood poisoning), and • **Osteomyelitis** (infection of the bone).	If 1,000 people get Hib meningitis: • 50 will die. • 250 will have permanent brain damage or deafness. If 1,000 people get Hib epiglottitis (swelling in the throat that causes choking): • 10 will die.	If 1,000 people are immunised: • 200 will have discomfort, redness and swelling where the injection was given. • 20 will have a fever.

Disease	Effect of disease	Side effects of the vaccine
Hepatitis B – contagious virus spread by contact with the blood or other body fluid of an infected person and which causes liver disease. Children have a higher risk of having hepatitis B infection for life.	If 1,000 people get chronic hepatitis B infection: • 250 will die from scarring of the liver (cirrhosis) or liver cancer.	If 1,000 people are immunised: • 100 will have discomfort, redness and swelling where the injection was given or will have a fever.
Measles – highly contagious virus spread by close contact with an infected person and which causes fever, a cough and a rash.	If 1,000 people get measles: • 1 or 2 will die. • 50 will get an ear infection. • 40 will get pneumonia or bronchitis. • 5 will have convulsions (fits). • 160 will get diarrhoea. • 1 will develop encephalitis (inflammation of the brain). For every 10 children who develop encephalitis: • 1 will die. • Up to 4 will have brain damage. 1 in 8,000 children under 2 years of age get SSPE (brain degeneration), which may develop many years after measles and is always fatal.	If 1,000 people are immunised: • 100 will have discomfort, redness and swelling where the injection was given or will have a fever. • 50 will get 'mini measles' 6 to 10 days later. (This is not contagious.) • 1 will have a convulsion (fit). 1 in 10 million will develop encephalitis (inflammation of the brain).

Disease	Effect of disease	Side effects of the vaccine
Meningococcal B (MenB) – contagious bacteria spread by saliva or close contact with an infected person or carrier and which cause meningitis or septicaemia, or both. (The MenB vaccine does not protect against other types of meningitis.)	If 1,000 people get MenB disease: • 50 will die. • 100 people who recover from meningococcal disease will have a major disability such as deafness, brain damage or loss of fingers, toes, hands, feet, arms or legs.	If 1,000 people are immunised: • 500 will have a fever. • 100 will have discomfort, redness and swelling where the injection was given. • 10 will have a high fever.
Meningococcal C (MenC) – contagious bacteria spread by saliva or close contact with an infected person or carrier and which cause meningitis or septicaemia, or both. (The MenC vaccine does not protect against other types of meningitis.)	If 1,000 people get MenC disease: • 50 will die. • 100 people who recover from meningococcal disease will have a major disability such as deafness, brain damage or loss of fingers, toes, hands, feet, arms or legs.	If 1,000 people are immunised: • 50 will have discomfort, redness and swelling where the injection was given or will have a fever. • 500 will become irritable. • 10 will get a tummy upset or vomit.

Disease	Effect of disease	Side effects of the vaccine
Mumps – contagious virus spread by close contact with an infected person and which causes swollen neck glands and a fever.	If 1,000 people get mumps: • 50 will get viral meningitis. • 1 will get encephalitis (inflammation of the brain). • 300 will get fever, a headache, and swollen salivary glands under the jaw. • 400 men who have mumps will get swollen testicles. 1 in 20,000 will become deaf. Mumps can also rarely cause infertility in men.	If 1,000 people are immunised: • 100 will have discomfort, redness and swelling where the injection was given or will have a fever. • 10 will develop 'mini mumps' in the third week after vaccination. (This is not contagious.) 1 in 10 million may get encephalitis (inflammation of the brain).
Pertussis (whooping cough) – contagious bacteria spread by close contact with an infected person and which cause a 'whooping' cough and vomiting. The disease can last up to 3 months.	If 1,000 people get whooping cough: • 2 will die from pneumonia or brain damage (almost all deaths are in children under the age of 6 months). • 10 will have fits (15 if under 6 months old). • 1 will get encephalitis (inflammation of the brain) (2 if under 6 months old). • 50 will get pneumonia (100 if under 6 months old). • 200 will need to go into hospital.	If 1,000 people are immunised: • 100 will have discomfort, redness and swelling where the injection was given or will have a fever. 4 in 10,000 will cry for more than 3 hours after vaccination. Fewer than 1 in 10,000 will get a convulsion (fit).

Disease	Effect of disease	Side effects of the vaccine
Pneumococcal disease – contagious bacteria spread by close contact with an infected person or carrier, and which cause invasive disease such as: • Pneumonia, • Meningitis, or • Septicaemia (blood poisoning).	If 1,000 people develop invasive pneumococcal disease: • 250 will develop pneumonia. • 250 will develop meningitis. • 100 will die.	If 1,000 people are immunised: • 100 will have discomfort, redness and swelling where the injection was given or will have a fever.
Polio – contagious virus spread by close contact with an infected person or their faeces (poo). It causes fever, headache and vomiting and may progress to paralysis.	If 1,000 people get get polio: • Up to 10 will become paralysed. Of these 10 people with paralysis: - 5 will be permanently paralysed, and - 1 may die.	If 1,000 people are immunised: • 100 will have discomfort, redness and swelling where the injection was given or will have a fever.
Rotavirus – contagious virus spread by close contact with an infected person, nappy changing, coughing and sneezing.	By the age of 5 years children will have had vomiting and diarrhoea from rotavirus. If 1,000 children get rotavirus: • 1,000 get vomiting and diarrhoea. • 3 will need to be admitted to hospital for treatment. Young children need to stay in hospital for an average of 5 days, if they are admitted.	If 1,000 people are immunised: • 100 will have mild diarrhoea. • 10 will have tummy pain. • 10 will have inflamed skin. 1 in 50,000 may have intussusception (blocked gut).

Disease	Effect of disease	Side effects of the vaccine
Rubella (German measles) – contagious virus spread by close contact with an infected person and which causes a rash, fever and swollen glands. It may cause major birth defects in the child if the mother gets rubella in early pregnancy.	If 1,000 mothers develop rubella in early pregnancy: • 900 children will have a major birth defect (such as deafness, blindness, brain damage or heart defects). If people get rubella: • 1 in 3,000 get thrombocytopenia (bruising or bleeding of the skin). • 1 in 6,000 get encephalitis (inflammation of the brain). • 1 in 2 will get a rash and painful swollen glands. More than half of women with rubella get painful joints.	If 1,000 people are immunised: • 100 will have discomfort, redness and swelling where the injection was given or will have a fever. • 50 will get swollen glands, a stiff neck, or joint pains. • 50 will get a rash (which is not contagious). 1 in 25,000 will get bruising or bleeding. 1 in 10 million may get encephalitis (inflammation of the brain).
Tetanus – bacteria from soil which release a toxin and cause painful muscle spasms, convulsions and lockjaw.	If 1,000 people get get tetanus: • 100 will die. The risk is greatest for the very young or old.	If 1,000 people are immunised: • 100 will have discomfort, redness and swelling where the injection was given or will have a fever.

School immunisation programme

Children need to get other vaccines when they are in school to protect them against infectious diseases. Some of these vaccines are booster doses of the vaccines they got as babies.

When your child **starts primary school** they will get two vaccines:

- The 4 in 1 booster to protect against diphtheria, pertussis (whooping cough), polio and tetanus; and
- The MMRV vaccine to protect against measles, mumps, rubella and chickenpox (varicella).

These vaccines are given by a HSE doctor or nurse in school or, in some areas, by your GP.

When your child is in **first year of second-level school,** they will get three vaccines:

- A tetanus, diphtheria and pertussis (whooping cough) booster vaccine;
- A meningococcal ACWY vaccine; and
- HPV vaccine.

These vaccines are given by a HSE doctor or nurse in school.

When these vaccines are given in school, the HSE will let you know the date of immunisations. If your child misses that immunisation in school, the HSE will arrange for your child to be vaccinated at a clinic.

In Ireland, all the recommended childhood immunisations listed in the school immunisation schedule are free.

For more information please see **www.immunisation.ie**

Where can I get more information?

If you have questions about your child's immunisations, it is best to talk with your GP (doctor), General Practice Nurse or your Public Health Nurse.

For general information about immunisation and vaccines, including links to the Immunisation Guidelines for Ireland and immunisation resources in other countries, visit **www.immunisation.ie**

You can also get information about immunisations from:

HSE

National Immunisation Office

Website: www.immunisation.ie

Health Protection Surveillance Centre

Website: www.hpsc.ie

Other useful websites:
www.hpra.ie/homepage/medicines/medicines-information/finda-medicine and https://www.ema.europa.eu/en/medicines

For information about parenting, and your child's health, visit the HSE website MyChild.ie.

The information in this guide is the most up-to-date information available at this time. This booklet was revised in July 2024.

HPO code: HNI01676
July 2024