UK Health Security Agency

NHS

A guide to vaccinations

for children aged 18 months

for children born on or after 1 July 2024

Features the combined measles, mumps, rubella and chickenpox vaccine and immunisation schedule from January 2026

Complete your course

Routine vaccinations start with a priming dose as a baby. **Get your child's boosters at the right age, or soon after, to help provide life long protection.**

DTaP/IPV/Hib/HepB vaccine

Your baby should be immunised with DTaP/IPV/Hib/HepB vaccine when they are 8, 12 and 16 weeks old.

The DTaP/IPV/Hib/HepB (6 in 1) vaccine protects against 6 different diseases:

- diphtheria
- tetanus
- pertussis (whooping cough)
- polio
- Haemophilus influenzae type b (Hib)
- hepatitis B

Your child should have their fourth dose of 6 in 1 vaccine at 18 months (alongside a dose of MMRV). This will help to extend their protection against these diseases until their next booster due at around 3 years and 4 months of age.

Effectiveness of the DTaP/IPV/Hib/HepB (6 in 1) vaccine

Studies have shown that DTaP/IPV/Hib/HepB vaccine is very effective in protecting your baby against these 6 serious diseases. There are 2 types of 6 in 1 vaccine, called Vaxelis and Infanrix hexa. Your baby may receive either of these vaccines and you can read more in the patient information leaflets.

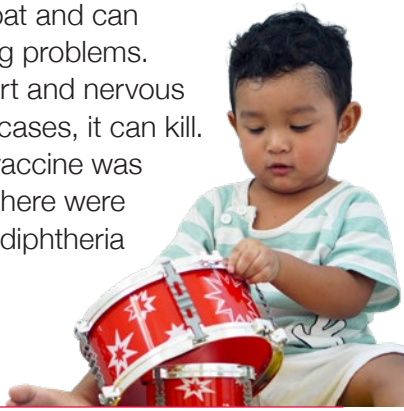
Infanrix:
www.medicines.org.uk/emc/product/2586/pil

Vaxelis: https://assets.publishing.service.gov.uk/media/659d4ca5aaae22000d56dc77/FOI_22-895_PDF_attachment__3_.pdf

Further doses are needed to extend protection into adulthood. The vaccine given at 3 years and 4 months will help to extend protection against diphtheria, tetanus, pertussis and polio over their school years. The vaccine given at 14 years of age will help to protect them against tetanus, diphtheria and polio as adults.

Diphtheria

Diphtheria is a serious disease that usually begins with a sore throat and can quickly cause breathing problems. It can damage the heart and nervous system and, in severe cases, it can kill. Before the diphtheria vaccine was introduced in the UK, there were up to 70,000 cases of diphtheria a year, causing up to 5,000 deaths.



Tetanus

Tetanus is a disease affecting the nervous system which can lead to muscle spasms, cause breathing problems and can kill. It is caused when germs that are found in soil and manure get into the body through open cuts or burns. Tetanus cannot be passed from person to person.

Pertussis (whooping cough)

Whooping cough is a disease that can cause long fits of coughing and choking, making it hard to breathe. Whooping cough can last for up to 10 weeks. Babies under one year of age are most at risk from whooping cough. For these babies, the disease is very serious and it can kill. It is usually not so serious in older children.

Before the pertussis vaccine was introduced, around 120,000 of cases of whooping cough were reported each year in the UK. In the year before the vaccine was introduced 92 children died of whooping cough.

Polio

Polio is a virus that attacks the nervous system and can cause permanent paralysis of muscles. If the paralysis spreads to the chest muscles it can affect breathing. Some people with polio will die.

Before the polio vaccine was introduced, there were as many as 8,000 cases of polio in the UK in epidemic years. Because of the continued success of the polio vaccination, there have been no cases of natural polio infection in the UK for over 40 years (the last case was in 1984).

Hib

Hib is an infection caused by Haemophilus influenzae type b bacteria. It can lead to a number of major illnesses such as blood poisoning (septicaemia), pneumonia and meningitis. The Hib vaccine only protects your baby against the type of meningitis caused by the Haemophilus influenzae type b bacteria – it does not protect against any other causes of meningitis.

The illnesses caused by Hib can kill if they are not treated quickly. Before the Hib vaccine was introduced, there were about 800 cases of Hib in young children every year. Since the vaccine has been introduced, the number of children under 5 years of age with Hib has fallen by 99%.

Hepatitis B

Hepatitis B is an infection of the liver caused by the hepatitis B virus. In children, the infection can persist for many years and can sometimes lead to complications such as scarring of the liver (cirrhosis), and liver cancer.

Although the number of children living with the hepatitis B virus is low in the UK, the vaccine has been offered to children at higher risk since the 1980s. In 2017, hepatitis B vaccine was added to the routine immunisation programme so that all children can benefit from protection against this virus.

3 doses of the 6 in 1 vaccine provides long lasting protection against infection with hepatitis B, but not to other forms of hepatitis.

How is the vaccine given

The vaccine is injected into the muscle of the child's thigh or upper arm.

After vaccination with DTaP/IPV/Hib/HepB or 6 in 1 vaccine

Your child might get some side effects, which are usually mild, including:

- redness, swelling or tenderness where they had the injection
- being a bit miserable for up to 48 hours after having the injection
- developing a mild fever
- a small lump where your child had the injection; this may last for a few weeks but will slowly disappear

If you think your child is having any other reaction to the DTaP/IPV/Hib/HepB vaccine and you are concerned about it, talk to your doctor, practice nurse or health visitor.

MMRV vaccine

The MMRV vaccine protects your child against measles, mumps, rubella and chickenpox (varicella). From January 2026 it replaces the MMR (measles, mumps and rubella) in the immunisation schedule.

Two doses of MMRV will be offered to all children at their 12 and 18 month appointments. If your child had an MMR at their 12 month appointment, they will be given their first MMRV at 18 months and their second and final MMRV at 3 years 4 months.

If your child had an MMRV at their 12 month appointment, they will be given their second and final MMRV at 18 months.

Types of MMRV vaccine

The MMRV vaccine contains weakened versions of living measles, mumps, rubella and chickenpox (varicella) viruses. Because the viruses are weakened, they do not spread easily to other people.

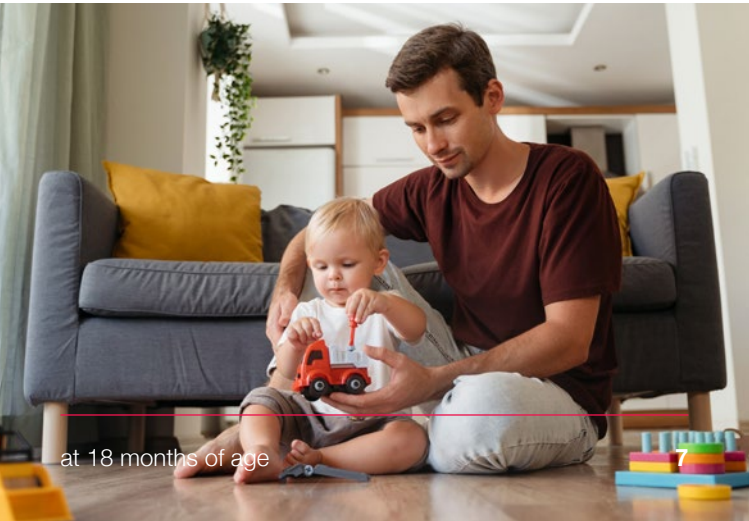
There are 2 MMRV vaccines which work equally well: **ProQuad** and **Priorix Tetra**. ProQuad contains porcine gelatine (gelatine from pigs) and Priorix Tetra does not. If you want your child to have the vaccine without gelatine, talk to your practice nurse or GP.

Further information is available in the patient information leaflets.

ProQuad:
www.medicines.org.uk/emc/product/101444/pil

Priorix Tetra:
www.medicines.org.uk/emc/product/101321/pil

Guide to vaccines and porcine gelatine: GOV.UK.



How is the vaccine given

The vaccine is injected into the muscle of the child's thigh or upper arm.

Effectiveness of the MMRV vaccine

Since MMR vaccine was introduced in 1988, cases of measles, mumps and rubella have all fallen to extremely low levels. MMRV offers the same protection as MMR, but adds protection against chickenpox. In countries where children already get the chickenpox vaccine, cases of chickenpox have also fallen dramatically. MMRV has been used for over 10 years in several countries and has a good safety record.

Measles

Measles is caused by a virus that spreads very easily. Nearly everyone who catches it will have a high fever, a rash and generally be unwell. Children often have to spend about 5 days in bed and could be off school for 10 days. Adults are likely to be ill for longer. It is not possible to tell who will be seriously affected by measles. Around 1 in every 5 people with measles will be admitted to hospital. The complications include chest infections, fits, encephalitis (infection of the brain) and brain damage. In very serious cases, measles can kill.

Before the introduction of measles vaccine in 1968, around 500,000 cases and a 100 deaths occurred in epidemic years. In 1987 (the year before the MMR vaccine was introduced in the UK), 86,000 children caught measles and 16 died.

Measles is one of the most infectious diseases in the world. A cough or a sneeze, from an infected person, can spread the measles virus over a wide area. If your child is not protected, the chance of catching measles is extremely high if you come near to anyone who has or is developing measles.

Mumps

Mumps is caused by a virus which can lead to fever, headache and painful, swollen glands in the face, neck and jaw. It can result in permanent deafness, viral meningitis (infection of the lining of the brain) and encephalitis. Rarely, it causes painful swelling of the testicles in males and the ovaries in females. Mumps lasts about 7 to 10 days. Before the MMR vaccine was introduced, about 1,200 people a year in the UK went into hospital because of mumps. Mumps is spread in the same way as measles.

Rubella

Rubella is also caused by a virus. In children it is usually mild and can go unnoticed. It causes a short-lived rash, swollen glands and a sore throat.

When a pregnant woman catches rubella it can affect their unborn baby, causing serious damage to their sight, hearing, heart and brain. This condition is called congenital rubella syndrome (CRS). When the infection is caught in the first 3 months of pregnancy it causes damage to the unborn baby in 9 out of 10 cases.

In the 5 years before the MMR vaccine was introduced, about 43 babies a year were born in the UK with congenital rubella syndrome.

Rubella is spread in the same way as measles and mumps.

Chickenpox

Chickenpox is a very infectious disease caused by the varicella zoster virus. It is very common in young children and causes a fever and an itchy, spotty rash. These spots can be painful

and appear all over the body. Some children have serious complications including chest infection, fits, and encephalitis. It is more severe in adults, especially pregnant women and people with weakened immune systems.

Later in life, the chickenpox virus can re-activate and cause a painful rash. This is called shingles. It is worse in older people and in people with weakened immune systems.

After vaccination with MMRV

Your child may be sore at the injection site for the first couple of days. The 4 viruses in the vaccine act at different times and sometimes produce side effects that are milder forms of the symptoms caused by the diseases themselves. These mainly occur after the first dose. Side effects after the second dose are even less common and usually milder.

- the measles part of the vaccine starts to work 6 to 10 days after the immunisation. About 1 in 10 children may develop a fever (see section below on treating and preventing fever). Some develop a measles-like rash which is not infectious
- the mumps and rubella parts of the vaccine start to work 2 to 3 weeks after the immunisation. A small number of children will have swelling of the face or pains in the joints. These are not infectious
- the chickenpox part of the vaccine starts to work from 3 to 4 weeks after immunisation. Some children will develop a few chickenpox-like spots at the site of the injection. The spots may contain infectious virus and should be covered. As long as the spots are covered children can go to nursery as normal

Side effects after the second dose are less common and usually milder.

Less common side effects

Very rarely, children may get a rash of small bruise-like spots in the 6 weeks after the vaccination. This is usually caused by the measles or rubella parts of the vaccine.

If you see spots like these, take your child to the doctor to be checked. The doctor will tell you how to deal with the rash.

Fewer than one child in a million develops encephalitis (swelling of the brain) after the MMRV vaccine. However, if a child who has not been vaccinated catches measles, the chance of developing encephalitis is between 1 in 200 and 1 in 5,000. If your child has symptoms of encephalitis, such as fits, confusion, difficulty speaking or loss of conscious, seek urgent medical advice.

I am concerned about overloading my child's immune system

Giving your child more than one vaccine at the same age will not overload their immune system. From birth, a baby's immune system protects them from the germs that surround them. Studies show it is safe to have several vaccinations at the same time.

I am worried my child will be upset by having injections

Your child may cry and be upset for a few minutes, but they will usually settle down after a cuddle.

Parents and carers can report suspected side effects of vaccines and medicines through the Yellow Card Scheme.

This can be done by visiting **yellowcard.mhra.gov.uk** or by calling the Yellow Card hotline on **0800 731 6789**. You can also use the QR code or by downloading the Yellow Card app.

SCAN ME

Fever

A fever is a temperature over 37.5°C.

Fevers are quite common in young children, but are usually mild. If your child's face feels hot to the touch and they look red or flushed, they may have a fever.

You should check their temperature with a thermometer.

Treating and preventing fever

Keep your child cool by:

- making sure they don't have too many layers of clothes or blankets on
- giving them plenty of cool drinks

A dose of infant liquid paracetamol may help make a child with fever feel better. Read and follow the instructions on the bottle very carefully. You may need to give another dose 4 to 6 hours later.

Fits and febrile seizures or convulsions

Young children with a fever of any cause may suffer a seizure (fit). This is called a febrile convulsion, and it is common. 1 in 25 children will have a febrile convulsion before they turn 5. Usually, children recover quickly and there are no long-term consequences.

The risk of febrile seizures following vaccination is approximately 1 in every 1000-2000 children immunised, with the risk being mostly associated with the first vaccination. For comparison, 1 in 43 children who catch measles will have febrile convulsions.

When a child has a seizure within a short time after immunisation, it might not have been caused by the vaccine or the fever. It could be due to an underlying medical condition.

If your baby has a fit after vaccination, you should seek urgent medical advice. If your surgery is closed or if you can not contact your doctor, go straight to the emergency department of your nearest hospital. They may refer your baby to a specialist for advice about further investigations and future vaccinations.

Allergies

Asthma, eczema, hay fever, food intolerances and allergies do not prevent your child having any vaccine in the childhood immunisation programme. If you have any questions, speak to your doctor, practice nurse or health visitor.

The MMRV vaccine can safely be given to children who have had a severe allergy (anaphylactic reaction) to egg. This is because MMRV vaccine is grown on chick cells, not the egg white or yolk.

Reasons why your child may not be able to be immunised

There are very few reasons why children cannot be immunised. Vaccines should not be given to children who have had a confirmed anaphylactic reaction to either a previous dose of the vaccine or to an ingredient of the vaccine. For some vaccines this can include neomycin, streptomycin or polymixin B (antibiotics that may be added to vaccines in very tiny amounts).

Immunosuppressed children

In general, children who are immunosuppressed (have a weakened immune system) should not receive live vaccines. This includes children who have conditions that affect their immune system, such as primary immunodeficiency, or those being treated for cancer or who have had a transplant. Primary immunodeficiencies are very rare diseases that mean you are more likely to catch infections. They are usually caused by a faulty gene and are diagnosed soon after birth.

If you think this applies to your child, you must tell your doctor, practice nurse or health visitor before the immunisation. They will need to get specialist advice on using live vaccines such as MMRV and Bacillus Calmette-Guérin vaccine (BCG).

There are no other reasons why vaccines should definitely not be given.

Routine childhood immunisation programme

Age due	Diseases protected against		Vaccine given
Eight weeks old	Diphtheria, tetanus, pertussis (whooping cough), polio, Haemophilus influenzae type b (Hib) and hepatitis B		DTaP/IPV/Hib/HepB
	Meningococcal group B (MenB)		MenB
	Rotavirus gastroenteritis		Rotavirus
Twelve weeks old	Diphtheria, tetanus, pertussis, polio, Hib and hepatitis B		DTaP/IPV/Hib/HepB
	MenB		MenB
	Rotavirus		Rotavirus
Sixteen weeks old	Diphtheria, tetanus, pertussis, polio, Hib and hepatitis B		DTaP/IPV/Hib/HepB
	Pneumococcal (13 serotypes)		Pneumococcal conjugate vaccine (PCV)
One year old (on or soon after child's first birthday)	Pneumococcal		PCV booster
	Measles, mumps, rubella and varicella (chickenpox)		MMRV[1]
	MenB		MenB booster
Eighteen months of age	**Born before 1 July 2024** No appointment	**Born on or after 1 July 2024** DTaP/IPV/Hib/HepB Measles, mumps, rubella and varicella	DTaP/IPV/Hib/HepB MMRV[1]
Three years four months old or soon after	**Born before 1 July 2024** Diphtheria, tetanus, pertussis and polio Measles, mumps, rubella and varicella	**Born on or after 1 July 2024** Diphtheria, tetanus, pertussis and polio	dTaP/IPV MMRV[1]

1. In the UK, we have 2 MMRV vaccines which work very well. One of them contains porcine gelatine and the other one doesn't. If you would prefer to have the vaccine that does not contain porcine gelatine, talk to your practice nurse or GP. You can view the MMRV vaccine Patient Information Leaflets at: ProQuad: www.medicines.org.uk/emc/product/101444/pil. Priorix Tetra: www.medicines.org.uk/emc/product/101321/pil

Remember to bring your Red book with you to each appointment.

Copies of these booklets are available from your clinic or doctor's surgery. See also **www.nhs.uk/vaccinations**

This leaflet features the immunisation schedule from January 2026.

Complete your course

Having your 18 month old child vaccinated is important to build their protection from infectious disease.

Don't forget your pre-school appointment when your child is 3 years 4 months.

Produced by
UK Health Security Agency

Product code: 1265469BEN001 1p 500K NOV 2026
UK Health Security Agency gateway number: 2025515

This edition features the January 2026 immunisation schedules.

To order or download more copies of this leaflet please visit, **www.gov.uk/public-health-resources** or call 0300 123 1002 (lines are open Monday to Friday 8pm to 6pm)

Please use product code: 1265469BEN001

www.nhs.uk/vaccinations