



Mae Brechu yn achub bywydau
Vaccination saves lives



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Protect your child with the diphtheria, tetanus, pertussis and polio (4-in-1) vaccine

This leaflet explains the 4-in-1 vaccine (DTaP/IPV or dTaP/IPV).

Key facts

Protect your child's health

Vaccination is one of the best ways to protect your child from serious illnesses. The 4-in-1 vaccine helps protect against:

- diphtheria
- tetanus
- pertussis (whooping cough), and
- polio.



Scan me for more information on 4-in-1

! As protection from baby vaccinations can fade over time, it is important for your child to get their 4-in-1 vaccine for long-term protection.

Vaccination is important

Before vaccines, many children in the UK caught diphtheria, tetanus, pertussis, or polio every year. Vaccination has reduced these cases and saved many lives.

It is important to vaccinate to stop these diseases from coming back.

When to get the vaccine

Your child should get their 4-in-1 vaccination at their routine appointment at **three years and four months**.

What does the 4-in-1 vaccine help protect against?

Diphtheria

Diphtheria is a serious disease that usually begins with a sore throat and a raised temperature (fever). It can quickly lead to breathing problems and may damage the heart and nerves. In severe cases, it

may cause death. Diphtheria spreads by coughs and sneezes or close contact with an infected person.

Diphtheria is rare in the UK. However, it is possible to catch it while travelling to other countries.

Fact! Before the diphtheria vaccine was introduced to the UK, there were up to 70,000 cases of diphtheria and up to 5,000 deaths a year.

Tetanus

Tetanus affects the body's nerves, causing muscle spasms and breathing problems. It is a severe disease that can lead to serious health problems if not treated quickly. It's caused by germs found in soil or manure that enter the body through open cuts or burns. Tetanus cannot spread from person to person.

Pertussis (whooping cough)

Pertussis, more commonly known as whooping cough, is an infection that affects the lungs and airways. Symptoms tend to develop in stages, starting with mild, cold-like symptoms. These can be followed by more severe symptoms, before an improvement.

Whooping cough can cause long bursts of coughing and choking, which make it hard to breathe. The 'whoop' noise is caused by gasping for breath after each period of coughing. Young babies don't always do this, which can make it difficult to recognise the disease.

Symptoms of whooping cough can last for two to three months. Babies under the age of one are at the greatest risk of serious illness and are at risk of dying from the disease.

Before the whooping cough vaccine was introduced, the average number of suspected cases reported each year in the UK was 120,000. In the year before the vaccine was introduced, 92 children died. Whooping cough spreads easily and can be caught by breathing in tiny droplets that are released into the air when people with the disease cough or sneeze.

Polio

Polio is a virus that can affect your nerves. It can cause permanent muscle weakness, usually in the legs. If polio affects the chest muscles or the brain, it can lead to very serious health problems.

You can catch polio if you come into contact with the poo of someone who is infected, or by breathing in droplets from their coughs or sneezes.

Fact! In 1988, polio paralysed more than 1,000 children worldwide every day.

Before the polio vaccine was introduced, there were as many as 8,000 cases of polio in the UK in years when there were epidemics. Thanks to the vaccination's ongoing success, the UK hasn't seen a natural polio infection in over 30 years. The last case was reported in 1984. This is why it is important to vaccinate to stop diseases such as polio from coming back.

Why does my child need to be vaccinated at this age?

The 4-in-1 vaccine is given to children when they are three years and

four months old. This vaccine boosts the protection from the 6-in-1 vaccines they had as babies (which included protection against diphtheria, tetanus, whooping cough, polio, Haemophilus influenzae type b (Hib) and hepatitis B).

Since the protection from baby vaccinations can fade over time, it is important for your child to get their 4-in-1 vaccine.

When you take your child for their vaccinations, it is important to make sure all their other vaccinations are up to date.

How will I know when my child's vaccinations are due?

Children are sent an appointment for their routine 4-in-1 vaccination at three years and four months old. Most GP surgeries and health centres run special vaccination clinics for children. If you change your address, please let your GP surgery know.

What happens at the appointment?

The practice nurse or GP will explain about the vaccinations and answer your questions. In children over the age of 12 months, injections are usually given in the upper arm.

Write down any questions you have and ask the health professional at the vaccination appointment.

Can the vaccine be given if my child is unwell on the day of the appointment?

If your child is ill with a raised temperature (fever) on the day the vaccination is due, delay the appointment until they are better. If your child has a minor illness without a fever, such as a cold, they should have the vaccination as normal.

Are there any other reasons why the vaccine should not be given?

Very few children cannot have the 4-in-1 vaccination. The vaccine should not be given to children who have had a serious (life-threatening) allergic reaction to:

- a previous dose of the vaccine, or
- any ingredient in the vaccine.

If your child:

- has a bleeding disorder (such as haemophilia, where their blood does not clot properly), or
- has ever had a seizure that wasn't caused by a fever

Speak to your GP, practice nurse or health visitor before they have any vaccination.

What if I miss the appointment?

You should cancel an appointment if you can't make it. If you do miss the appointment or have to delay the vaccination, make a new appointment as soon as possible. The vaccination can still be given, but your child will be without protection for longer.

! Remember, it's important to catch up on missed vaccinations. If your child has missed a vaccination and is older than the recommended age for it, talk to your GP, practice nurse or health visitor.

Does the vaccine have any side effects?

Millions of doses of the vaccine have been used and it has a very good safety record.

Like all medicines, vaccines can cause side effects. Most of these are mild and do not last long, and not everyone gets them. Vaccine side effects are minor compared to getting seriously ill from the diseases.

The most common side effects include:

- pain, redness or swelling at the injection site
- diarrhoea
- tiredness, and
- fever.

Very rare side effects

Rarely, people can have a severe reaction soon after the vaccination, which causes breathing difficulties and may cause them to collapse. This is called an anaphylactic reaction, and it can also happen with other medicines and food. These reactions are extremely rare, affecting less than one in a million people. Staff who give vaccinations are trained to manage these reactions.

People who have an anaphylactic reaction can be successfully treated and usually recover within a few hours.

See the back page of this leaflet for further details on:

- the vaccine, including all possible side effects, and
- reporting suspected side effects through the Yellow Card scheme.

If you have any questions about side effects, you can ask the person giving your child the vaccine.

What should I do if my child feels unwell after the vaccination?

If your child has a fever and feels unwell after the vaccination, they can take liquid paracetamol or ibuprofen. Read the instructions on the bottle carefully and give the correct dose for your child's age. We don't recommend taking these medicines before the 4-in-1 vaccination to prevent a fever.

! Remember - children under 16 should not take medicines that contain aspirin.

If you are worried about your child after the vaccination you should speak to your health visitor, GP or practice nurse. You can also contact NHS Wales by calling **111**. Calls to NHS 111 Wales are free from landlines and mobile phones.

Can my child still get these infections if they are vaccinated?

The 4-in-1 vaccination is one of the most effective ways to prevent

severe illness from diphtheria, tetanus, whooping cough and polio. No vaccine is 100% effective, so it is still important to know the signs and symptoms of these diseases, even if you or your child are vaccinated.

For more information about diphtheria, tetanus, whooping cough and polio go to:

NHS 111 Wales - Health A-Z : Diphtheria (external site)

NHS 111 Wales - Health A-Z : Tetanus (external site)

NHS 111 Wales - Health A-Z : Whooping cough (external site)

NHS 111 Wales - Health A-Z : Polio (external site)

The information in this leaflet is correct at the time of publication. For the most up-to-date information, please visit

phw.nhs.wales/vaccines

Further information

If you have any questions or want more information, you can go to **111.wales.nhs.uk** (external site), talk to your doctor or nurse, or contact NHS 111 Wales by calling **111**.

You can find out more information on vaccines offered in Wales at **phw.nhs.wales/vaccines**

To find out more about the vaccine, including its contents and possible side effects, go to **medicines.org.uk/emc** (external site). You will need to enter the name of the vaccine in the search box. You can also see the patient leaflet online.

You can find the name of the vaccine at **phw.nhs.wales/4in1vaccine**

You should report suspected side effects online at **www.mhra.gov.uk/yellowcard** (external site), by downloading the Yellow Card app, or by calling **0800 731 6789** (Monday to Friday, 9am to 5pm).

To find out how the NHS uses your information, go to **111.wales.nhs.uk/AboutUs/Yourinformation** (external site).



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