

# Teenage immunisations

for ages 14 to 18



**i**mmunisation

the safest way to protect yourself

# Introduction

This guide is for teenagers aged 14 to 18, and their parents. It explains:

- about the immunisations that are given to teenagers, usually when they are still at school;
- why these immunisations are needed;
- what side effects they might have.

The guide also answers some of the most common questions about these immunisations.

If you have any questions or want more information, talk to your school nurse, or the doctor or nurse at your GP surgery. You can also visit [www.publichealth.hscni.net](http://www.publichealth.hscni.net) or [www.nidirect.gov.uk/immunisation-vaccines](http://www.nidirect.gov.uk/immunisation-vaccines)



## Why do we need immunisation?

The national immunisation programme has meant that dangerous diseases such as tetanus, diphtheria and polio have practically disappeared in the UK. But these diseases could come back – they are still around in Europe and throughout the world. That's why it's so important for you to protect yourself. In the UK most of these diseases are kept at bay by the high immunisation rates.

## How do vaccines work?

Vaccines contain a small part of the bacterium or virus that causes a disease, or tiny amounts of the chemicals the bacterium produces. Vaccines work by stimulating the body's immune system to make antibodies (substances to fight infections and diseases). So if you come into contact with the infection, the antibodies will recognise it and protect you.

### Protecting yourself means protecting others

When enough of the population are protected from a specific disease by a vaccination, this helps prevent the spread of that infection in the community. This is called herd protection. By having a vaccine, you can help to protect your friends and family who may be vulnerable or who cannot be vaccinated and reduce the likelihood of an outbreak of disease.

## Tetanus, diphtheria and polio (Td/IPV) vaccine

Td/IPV, given in one single injection, boosts the protection you got as a child against tetanus (T), diphtheria (d) and polio (IPV – inactivated polio vaccine).

### What diseases will Td/IPV prevent?

#### Tetanus

Tetanus is a painful disease that affects the muscles and can cause breathing problems. It affects the nervous system and can kill. Tetanus is caused when germs found in soil and manure get into the body through open cuts or burns. It cannot be passed from person to person but is always present in the soil.

## Diphtheria

Diphtheria is a serious disease that usually begins with a sore throat and can quickly develop to cause problems with breathing. It can damage the heart and nervous system, and in severe cases it can kill. Before the diphtheria vaccine was introduced, there were up to 1,500 cases of diphtheria each year in Northern Ireland.

## Polio

Polio is a virus that attacks the nervous system and can permanently paralyse the muscles. If it affects the chest muscles or the brain, polio can kill. Before the polio vaccine was introduced, as many as 1,500 cases of paralytic polio occurred each year in Northern Ireland.

## **If I was immunised against tetanus, diphtheria and polio as a child, am I still protected?**

You may still have some protection, but you need this booster to complete your routine immunisations and give you long-term protection.

## **How many boosters do I need to have?**

You need a total of five doses of tetanus, diphtheria and polio vaccines to build up and keep your immunity. You should have had:

- the first three doses as a baby;
- the fourth dose when you were between three and five years old, before you started school;
- the fifth dose now.

You should not normally need more than five doses of tetanus, diphtheria or polio vaccine during your lifetime, but you may need additional doses of the vaccines if you are visiting certain countries. Check with the nurse at your GP surgery.

***If you think you may have missed any of your doses,  
talk to the school nurse or your doctor.***

# The MenACWY vaccine

## What is meningococcal disease?

Meningococcal disease is a rare but life-threatening disease caused by meningococcal bacteria which are divided into several groups. The most common are A, B, C, W and Y. Infants, young children, teenagers and young adults have the highest risk of meningococcal disease. Meningococcal disease can cause meningitis and septicaemia.

## What are meningitis and septicaemia?

Meningitis is dangerous swelling of the lining around the brain and spinal cord. It can be the result of infection with bacteria or a virus or as a result of injury. Septicaemia is when bacteria enter the bloodstream and cause blood poisoning. Both of these conditions can trigger sepsis. Sepsis is an overwhelming and life-threatening immune response to any infection and can lead to tissue damage, organ failure and death.

## Why is the MenACWY vaccine being offered to me now?

The MenACWY vaccine protects against meningococcal group A, C, W and Y disease. Recently, there has been a large increase in meningococcal group W disease in the UK, resulting in several deaths among infants and teenagers. As an older teenager, you are at higher risk of getting meningococcal group W disease, so you need to get vaccinated to protect yourself.

Meningococcal group C disease is now rare since MenC vaccination was introduced in 1999. However protection from the dose of MenC vaccine given to babies declines in teenage years, which is why you need a booster dose. The MenACWY vaccine will give you protection against meningococcal groups A, W and Y and boost your protection against MenC disease. Vaccination also reduces the risk of you carrying the bacteria and so protects other people around you.



# Common questions

## How will I be given the vaccines?

You will have one injection for each vaccine in your upper arm. Nobody likes injections, but it is very quick. The needle used is small and you should only feel a tiny pinprick. If you're a bit nervous about having the injection, tell the nurse or doctor before you have it.

## Are there any reasons why I should not be immunised?

There are very few reasons why you should not be immunised. You should let your GP or nurse know if you:

- have a very high temperature or fever;
- have had convulsions or fits;
- have had a bad reaction to any immunisation;
- have had a severe allergy to anything;
- have had a bleeding disorder;
- have had treatment for cancer;
- have any illness that affects the immune system (eg leukaemia, HIV or AIDS);
- are taking any medicine that affects the immune system (eg high dose steroids or treatments given after organ transplant or for cancers);
- are pregnant;
- have any other serious illness.

These don't always mean that you can't be immunised but it helps the doctor or nurse decide which are the best immunisations for you and whether they need to give you any other advice. A family history of illness is never a reason for you not to be immunised.

### Are there any side effects?

It is common to get some swelling and redness where you have the injection. Sometimes a small painless lump develops, but this usually disappears in a few weeks. More serious effects are rare but include fever, headache, dizziness, feeling sick and swollen glands.

If you feel unwell after the immunisation, you can take paracetamol. Read the instructions on the packet carefully and take the correct dose for your age. If necessary, take a second dose four to six hours later. If your temperature is still high after the second dose, speak to your doctor.

*Remember, if you are under 16 you should not take medicines that contain aspirin.*

You should tell your doctor if you suffer from any problem that might be linked to your immunisation.





## Are these the only immunisations I need to have now?

Since 2019 the human papillomavirus (HPV) vaccine has been offered to all young people aged 12 to 13 years (school year 9) to protect against HPV-related cancers including cervical cancer (in girls) and cancers of the mouth, throat, anus and genitals (in boys and girls) and genital warts. For further information see [www.nidirect.gov.uk/articles/hpv-vaccine-adolescents-aged-12-13-years-old](http://www.nidirect.gov.uk/articles/hpv-vaccine-adolescents-aged-12-13-years-old)

*It's a good idea to check with the nurse or doctor that all your immunisations are up to date, eg MMR.*

## The MMR vaccine

MMR protects against measles (M), mumps (M) and rubella (R; German measles).

It's important that you receive two doses of MMR to ensure you are fully protected against measles, mumps and rubella.

If you think this applies to you, you should be offered the second dose at the same time as your Td/IPV and MenACWY. If not, ask your GP or nurse about it.

If you have never had the MMR vaccine, you should have one dose now and another in one months' time.

### Measles, mumps and rubella can all have serious complications.

- Measles can cause ear infections, respiratory problems and meningitis/encephalitis (inflammation of the brain). It has a 1 in 2,500–5,000 chance of causing death.
- Mumps can cause deafness, usually with partial or complete recovery. It can also cause swollen, painful testicles in teenage boys and men, and inflammation of the ovaries in teenage girls and women. Before the MMR vaccine was introduced, it was the biggest cause of viral meningitis in children.
- Rubella can also cause inflammation of the brain and can affect blood clotting. In pregnant women it can cause miscarriage or major health problems for their babies such as blindness, deafness, heart problems or brain damage.



## Are there any reasons why I should not be immunised with MMR?

There are very few reasons why you should not be immunised with MMR, but you should let the doctor or nurse know if you have any of the conditions listed on page 6.

## Does MMR have any side effects?

Side effects after MMR are very rare. About a week to 10 days after the immunisation you may become feverish, develop a measles-like rash and go off your food as the measles part of the vaccine starts to work. You may also get some aches and pains in your joints.

About two weeks after receiving MMR you may, very rarely, get a rash of bruise-like spots due to the rubella part of the immunisation. This usually gets better on its own, but if you see spots like this, show them to your doctor.

About three weeks after the injection you might occasionally get a mild form of mumps as the mumps part of MMR kicks in.

Comparisons between the side effects of MMR and the side effects of measles, mumps or rubella show that the vaccine is far safer than the diseases.

## Where can I find out more about the vaccines?

We have tried to cover the most important points about the vaccines you are being offered in this leaflet. However if you want more information you can get a copy of the patient information leaflet or PIL from the official Medicines website. Visit [www.medicines.org.uk/emc](http://www.medicines.org.uk/emc) and type in the name of the vaccines. Two different vaccines against MMR are used in Northern Ireland so the names of both are provided here, both provide equal protection:

■ Tetanus, diphtheria, polio booster: Revaxis

■ MenACWY vaccine: MenQuadfi

■ MMR vaccine: MMR VaxPRO<sup>1</sup> or Priorix

You can also contact the school nurse to discuss any concerns you may have.

<sup>1</sup> Contains gelatine from pork. An alternative is available - speak to your doctor or nurse for more information.



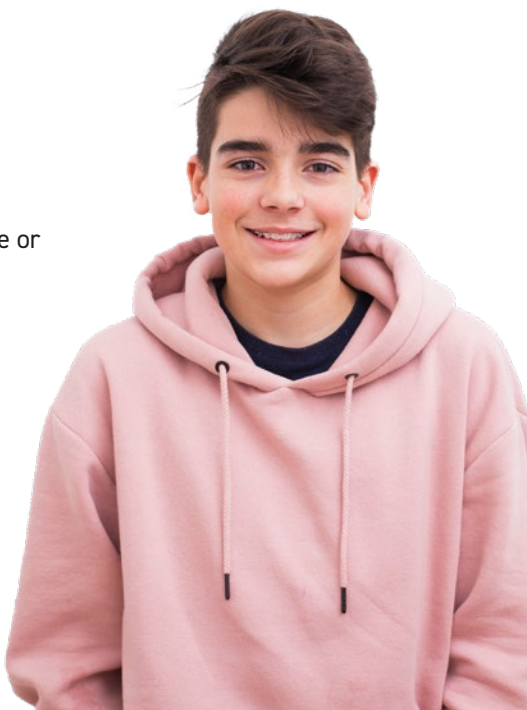
# Knowing about meningitis and septicaemia

Meningococcal bacteria can cause meningitis (inflammation of the lining of the brain) and septicaemia (blood poisoning). Meningitis and septicaemia are both very serious – they can cause permanent disability and death – and the signs can come on quickly so you must get treatment straight away. The MenACWY booster described earlier will only protect against some of the bacteria that cause meningitis and septicaemia but not all of them, so you still need to know the signs and symptoms.

## What should I look for?

In older children, adolescents and adults, the main symptoms of **meningitis** may include:

- a stiff neck (check that they can kiss their knees or touch their forehead with their knees);
- a very bad headache (this alone is not a reason to get medical help);
- a dislike of bright lights;
- vomiting;
- fever;
- being drowsy, less responsive or confused;
- a rash;
- convulsions or seizures;



and the main symptoms of **septicaemia** may include:

- being sleepy, less responsive, vacant, or confused (a late sign in septicaemia);
- severe pains and aches in the arms, legs and joints;
- very cold hands and feet;
- shivering;
- rapid breathing;
- red or purple spots that do not fade under pressure (do the glass test explained below). This is harder to see on dark skin, check inside the eyelids or roof of the mouth, where spots may be more visible;
- vomiting;
- fever;
- diarrhoea and stomach cramps.

It is important to remember that not everyone will develop all the symptoms listed. If an individual develops some of the symptoms listed, especially red or purple spots, get medical help **urgently**. If you can't get in touch with your doctor, or are still worried after getting advice, trust your instincts and take the individual to the emergency department of your nearest hospital.

**Press a glass firmly against the rash. If you can still see the rash through the glass, get a doctor's help immediately.**



Image provided by Meningitis Research Foundation [meningitis.org](http://meningitis.org)



Image provided by Meningitis Now [meningitisnow.org](http://meningitisnow.org)

## Where can I get more information?

Meningitis Research Foundation and Meningitis Now both provide information on meningitis.

Phone Meningitis Now's free helpline on 0808 80 10 388  
Monday to Thursday 9.00am to 4.00pm; Friday 9.00am to  
1.00pm or visit the website at  
[www.meningitisnow.org](http://www.meningitisnow.org)

Phone Meningitis Research Foundation's free helpline on  
080 8800 3344 Monday to Friday 9.00am to 5.00pm,  
email [helpline@meningitis.org](mailto:helpline@meningitis.org) or visit  
[www.meningitis.org](http://www.meningitis.org)

You can also ask your doctor, practice nurse or  
health visitor for advice.



For more details on all  
vaccinations offered in  
Northern Ireland, visit

[www.nidirect.gov.uk/  
immunisation-vaccines](http://www.nidirect.gov.uk/immunisation-vaccines)

This is the current programme and may be slightly  
different from when you were younger. Inside the  
leaflet you will find details of which vaccines you  
should catch up on if you missed out. This can be  
arranged with your GP.

If you would like further information about  
immunisation, visit [www.publichealth.hscni.net](http://www.publichealth.hscni.net)  
or [www.nhs.uk/vaccinations](http://www.nhs.uk/vaccinations)



### Public Health Agency

12-22 Linenhall Street, Belfast BT2 8BS.  
Tel: 0300 555 0114 (local rate).  
[www.publichealth.hscni.net](http://www.publichealth.hscni.net)

Find us on:



This publication is adapted from information originally  
developed by the UK Health Security Agency and is  
used under the Open Government Licence v 3.0