

IMMUNISATION

# Young people and immunisation



Be wise - immunise

# Immunisation

The safest and best way to protect yourself against serious infectious diseases is by immunisation - developing immunity after receiving a vaccine.

In Northern Ireland the childhood immunisation programme has meant that diseases such as diphtheria, tetanus, polio and measles have almost disappeared. However, these diseases could come back so it is extremely important to keep your immunity topped up.

This leaflet tells you about the routine immunisations that are offered to all young people before they leave school. It is important that young people have all of these vaccines.

Once you have completed the full

course of immunisations, you will normally be protected for life. Later in life however you may need further boosters or immunisations for certain jobs or before travelling to certain countries (where these serious infectious diseases are still common).

Before leaving school all young people will be offered the following immunisations:

- tetanus and diphtheria booster;
- polio booster.

In addition, young people who have no record of immunisation against meningitis C and measles, mumps and rubella (MMR) may be offered these immunisations as well. If you have missed any other immunisations, your GP can check and give you the ones you have missed.



# Why immunise?

All of the vaccines used for these routine immunisations are very safe. They are effective in preventing disease and have extremely low risk of side effects. The diseases, on the other hand, are serious and may result in death. The table below compares the side effects of the vaccines

with the diseases. From this it can be seen it is much better to have the vaccine than risk getting the disease. Any vaccine can cause allergic reactions. These are very rare about 1 in 100,000 immunisations. Although they can be worrying, treatment leads to a rapid and full recovery.

Disease	Effects of disease	Side effects of vaccine
<b>Vaccine: Tetanus and diphtheria (Td) booster (single injection in the upper arm)</b>		
Tetanus	<p>Tetanus germs are found in the soil and can enter the body through a cut or burn. Tetanus causes very painful, uncontrollable muscle spasms. These cause "lockjaw", lead to breathing difficulties and can be so severe they result in spinal or bone fractures. Complications include heart problems, pneumonia and coma.</p> <p>Tetanus leads to death in 1 in 3 cases.</p>	<p>You may get pain and redness at the injection site. More extreme swelling is rare.</p> <p>General reactions, such as high temperature, feeling unwell, muscle pains and headache, are uncommon and usually last only a day or two.</p>
Diphtheria	<p>Diphtheria usually begins with a severe infection in the throat and can progress quickly to difficulty with breathing. The infection releases a toxin, which damages the heart and the nervous system. This leads to pneumonia, heart failure and respiratory failure, and in severe cases will kill.</p> <p>Prior to vaccination, there were up to 1,500 cases per year in Northern Ireland.</p> <p>Diphtheria leads to death in 1 in 10 cases.</p>	<p>You may get pain and redness at the injection site.</p> <p>Feeling unwell, high temperature and headache may occasionally occur for a short time.</p> <p>No known serious side effects.</p>

Disease	Effects of disease	Side effects of vaccine
<b>Vaccine: Polio booster (drops into the mouth)</b>		
Polio	<p>Polio is a virus that attacks the nervous system and can paralyse the muscles. Paralysis can lead to serious breathing difficulties and even death. Many survivors are permanently paralysed. Polio can also cause meningitis.</p> <p>Prior to vaccination there were up to 300 cases per year in Northern Ireland.</p> <p>Polio leads to death in 1 in 20 children and 1 in 4 adults infected.</p>	<p>Extremely rarely the polio vaccine can cause paralysis - 1 in 2<sup>1</sup>/<sub>2</sub> million doses. This would be 1 case in 25 years in Northern Ireland.</p> <p>The polio vaccine contains live polio virus which may be passed into your faeces for up to six weeks after you've been immunised. Always wash your hands thoroughly after going to the toilet, especially after having the polio booster.</p>
<b>Vaccine: Meningitis C (single injection in the upper arm)</b>		
Meningococcal group C	<p>Meningitis is an inflammation of the lining of the brain and the spinal cord. It is caused by a number of different viruses or bacteria, and this vaccine protects against one of them. The meningococcal group C bacteria causes meningitis and blood poisoning (septicaemia). These can lead to permanent brain damage and can also kill. The most common long-term effects are skin scars, blindness, hearing loss, seizures, limb amputations and brain damage.</p> <p>Blood poisoning causes death in 1 in 5 cases.</p> <p>Meningitis causes death in 1 in 15 cases.</p>	<p>Redness, swelling and pain at the injection site are fairly common.</p> <p>Occasionally high temperature and headaches may occur.</p> <p>Fits have been reported very rarely but are not known to cause any long-term problems.</p>

Disease	Effects of disease	Side effects of vaccine
<b>Vaccine: Measles, mumps, rubella (MMR) (single injection in the upper arm)</b>		
Measles	<p>Measles is caused by a highly infectious virus which can result in a high temperature and a rash. Complications of measles include ear infections, chest infections, fits, respiratory problems and meningitis/encephalitis (inflammation of the brain). In severe cases measles can kill.</p> <p>Measles causes death in 1 in 2,500-5,000 cases.</p>	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.
Mumps	<p>Mumps is a viral infection that leads to swelling of the glands in the face and the neck. Prior to vaccination, mumps was the biggest cause of viral meningitis in children.</p> <p>Mumps can cause deafness usually with partial or complete recovery. Mumps infection may also cause inflammation of the testicles in teenage boys and men, and inflammation of the ovaries in teenage girls and women.</p>	About three weeks after the injection you might occasionally get a mild form of mumps as the mumps part of MMR kicks in.
Rubella (German measles)	<p>Rubella (German measles) is generally a very mild infection which is caused by a virus. However, if it is caught during pregnancy, especially early in pregnancy, it can cause miscarriage or major health problems for the unborn baby such as blindness, deafness, heart problems or brain damage. Rubella can also cause inflammation of the brain and can affect blood clotting.</p>	About two weeks after 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.

# Meningitis

The meningitis C vaccine protects against one type of meningitis and blood poisoning. There are other types for which there are no vaccines so it is important to still watch out for the signs and symptoms.

Meningitis can cause swelling of the lining of the brain. The same germs may also cause blood poisoning (septicaemia). If untreated both diseases may be fatal.

Early symptoms may be similar to colds and flu.

These include:

- raised temperature (37.5°C and above);
- fretfulness;
- vomiting;
- refusal to eat.

A person with meningitis or septicaemia can become very ill within hours.

## Some of the important signs to look out for include:

- stiffness in the neck - can they touch their forehead to their knee?
- drowsiness or confusion;
- severe headache;
- dislike of bright light;
- red or purple spots/marks that do not fade under pressure (see photo). These can appear anywhere on the body.

**A person who becomes ill with any of these important signs should be seen by a doctor or taken to the nearest hospital accident and emergency department immediately.**

For further information on meningitis contact:

Meningitis Research Foundation  
Tel: 028 9032 1283 or 24-hour helpline  
080 8800 3344 or  
National Meningitis Trust  
24-hour helpline: Lo-call 0845 6000 800.



*If a glass tumbler is pressed firmly against a septicaemic rash the rash will not fade. You will be able to see the rash through the glass. If this happens get a doctor's help immediately.*

# After immunisation



If you do feel slightly unwell after your immunisations or suffer from any of the mild side effects mentioned in the table, you could take a painkiller such as paracetamol. Remember to follow the instructions on the packet or ask your pharmacist's advice.

Never give aspirin to children under 16 years of age.

If you are particularly worried call the doctor.

# When should the vaccines not be given?

There are very few medical reasons why the vaccines should not be given. These include:

- a high fever on the day the vaccination is due;
- a severe allergic reaction to a previous vaccine. Please discuss with the doctor or nurse.

You should also let the school doctor or nurse know if you or anyone in the family:

- has a serious disease which can lower immunity such as leukaemia;
- is receiving treatment which can lower their immunity.

**Young women who think they might be pregnant should speak in private to their school doctor or nurse, GP or a teacher before being immunised.**



If you would like any further information or would like to speak to someone about immunisation contact your school nurse or doctor or your own GP. Alternatively visit the DHSSPS website on [www.dhsspsni.gov.uk/publichealth](http://www.dhsspsni.gov.uk/publichealth) or the national immunisation website on [www.immunisation.nhs.uk](http://www.immunisation.nhs.uk)



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