



**CHILDHOOD IMMUNISATION PROGRAMME
FACTSHEET**

The purpose of this factsheet is to provide information about the childhood immunisation programme.

Why do we vaccinate children?

Vaccination is one of the greatest breakthroughs in modern medicine. No other medical intervention has done more to save lives and improve quality of life. Serious diseases such as smallpox and polio have been eradicated in Europe and the UK. Many of the diseases that we vaccinate against within the childhood immunisation programme are rare but if children are not vaccinated they will return with a vengeance. There have been a number of new immunisation programmes for children since 2013 including rotavirus, nasal flu and meningitis B vaccines. Research into new vaccines continues and there will be many more potentially lifesaving vaccines in years to come.

What are the current* childhood vaccinations and when should they be given?

When	Diseases protected against
8 weeks old	Diphtheria, tetanus, pertussis (whooping cough), polio, Haemophilus influenzae type b (Hib) and Hepatitis B (6 in 1 vaccine)
	Pneumococcal
	Meningococcal group B (MenB)
	Rotavirus
12 weeks old	Diphtheria, tetanus, pertussis, polio, Hib and Hepatitis B
	Rotavirus
16 weeks old	Diphtheria, tetanus, pertussis, polio, Hib and Hepatitis B
	Pneumococcal
	MenB
1 year old	Hib and MenC
	Pneumococcal
	Measles, mumps and rubella (German measles) (MMR)
	MenB
2 - 3 years old and children in Reception and school years 1, 2, 3, 4, 5 & 6 (Sept 2019)	Influenza (each year from September)
3 years 4 months old or soon after	Diphtheria, tetanus, pertussis and polio
	Measles, mumps and rubella (German measles)
Girls aged 12 to 13 years	Cervical cancer caused by human papillomavirus (HPV) From September 2019, boys will also be eligible for HPV vaccination
Fourteen years old	Tetanus, diphtheria and polio
	Meningococcal groups A, C, W and Y disease

***Please note immunisation schedules may change, the above schedule was correct when this fact sheet was written (June 2019).**

To ensure that you have the current schedule please go to:

<https://www.gov.uk/government/publications/immunisation-schedule-the-green-book-chapter-11>

Which diseases do the childhood vaccinations protect against?

Diphtheria: a potentially fatal contagious bacterial infection that mainly affects the nose and throat and sometimes the skin

Pertussis (whooping cough): a highly contagious bacterial infection of the lungs and airways. It causes repeated coughing bouts that can last for two to three months and can make babies and young children very ill

Polio: a serious viral infection causing temporary or permanent paralysis which can be life-threatening

Tetanus: a serious but rare condition caused by bacteria getting into a wound. The bacteria can quickly multiply and release a toxin that affects the nerves, causing symptoms such as muscle stiffness and spasms

Haemophilus Influenza Type B (HIB): a bacterium that can cause a number of serious illnesses, particularly in young children, including meningitis (an infection which affects the brain and spinal cord), septicaemia (a kind of blood poisoning), pneumonia (inflammation of the lungs) and pericarditis (infection of the lining of the heart)

Hepatitis B: an infection of the liver caused by a virus that is spread through blood and body fluids. In children, it can persist for years and may eventually cause serious liver damage

Pneumococcal infections: can lead to pneumonia, septicaemia and meningitis. These infections can cause permanent brain damage or death

Meningococcal infections (including Men B & Men ACWY): can be very serious, causing meningitis and septicaemia, which can lead to severe brain damage, amputations and death

Rotavirus infection: a highly infectious stomach bug that typically strikes babies and young children, causing an unpleasant bout of diarrhoea, sometimes with vomiting, tummy ache and fever. Some children may be admitted to hospital with severe dehydration

Measles: a highly infectious viral illness that produces cold like symptoms, sore eyes, high temperatures and a red-brown blotchy rash. It can lead to serious complications such as pneumonia and encephalitis (inflammation of the brain).

Mumps: a contagious viral infection causing painful swellings at the side of the face, headaches, joint pain and high temperatures

Rubella (German measles): a viral infection that produces a red-pink skin rash, swollen glands and a high temperature. If a pregnant woman catches the infection during the first 20 weeks of her pregnancy, it can affect the development of her baby

Influenza: a common infectious viral illness which produces cold-like symptoms, high temperatures, headaches and general aches and pains. Most people will recover from flu but those with existing medical conditions, such as liver and heart disease, may develop complications and some may die

Human Papilloma virus: is the name for a group of viruses that affect your skin and areas in your body such as the cervix. Some types of HPV can cause genital warts and changes to the cells in the cervix which can lead to cervical cancer

Are childhood vaccinations safe?

Vaccines are thoroughly tested for safety before they are made routinely available to the population. The safety of each vaccine is continually monitored, even after it has been introduced. The Medicines and Healthcare products Regulatory Agency (MHRA) is responsible for checking the safety of vaccines and they continually collect information on vaccine safety and suspected side effects.

How do vaccines work?

Vaccines work by making us produce antibodies to fight disease without actually infecting us with the disease. If the vaccinated person then comes into contact with the disease itself, their immune system will recognise it and immediately produce the antibodies they need to fight it. Newborn babies are already protected against several diseases because antibodies have passed to them from their mothers via the placenta. This is called passive immunity. They will be provided with some protection until they are able to have their own vaccinations.

What are the common side effects of vaccinations for children under 5 years of age?

- Some babies may have some swelling, redness or a small hard lump where the injection was given that can last for 2-3 days
- Some babies get a fever; a fever is a temperature over 37.5°C
If the baby has a fever: the parent should make sure the baby does not have too much clothing or bedding on them, give them plenty of cool fluids but should **not** put them in a bath, sponge them down or put a fan on them
- **MenB:** Fever is common when the MenB vaccine is given at two and four months. The parent will be advised by the nurse or doctor to give infant paracetamol suspension following the vaccination
- **MMR:** After six to ten days, the measles vaccine starts to work and may cause a fever, a measles-like rash, and loss of appetite but the child is not infectious to others.
After two to three weeks, the mumps vaccine may cause fever and swollen glands in some children. After 12 - 14 days rubella vaccine may cause a brief rash and a slightly raised temperature. A further rash may occur 6 weeks after the injection.

If parents are worried about their child, they should be advised to speak to their doctor or call the NHS on 111.

For more information see the NHS leaflet 'What to expect after vaccinations':

<https://www.gov.uk/government/publications/what-to-expect-after-vaccinations>

Myths about vaccination

It is a MYTH:

1. That a child's vaccinations have to be avoided or delayed if they have a mild illness without a fever, such as a cough or cold, or if they have an allergy, such as asthma, hay fever or eczema
2. That a baby's vaccinations have to be avoided or delayed if they were premature
3. That a baby's vaccinations have to be avoided if they have a history of seizures (fits that occur due to a fever) or epilepsy (a condition that causes repeated seizures), or there is a family history of such conditions
4. That vaccination can overload a baby's immune system. In fact, only a tiny fraction of a baby's immune system is used by childhood vaccines and they come into contact with many more bugs in their daily life
5. That homeopathy can be used as an alternative to vaccinations to protect children against potentially serious infections. In fact, there is no evidence that homeopathy can protect children against disease and illness
6. That it is unsafe for babies to go swimming around the time of a vaccination. In fact, babies can go swimming at any time before and after their vaccinations

6 in 1 Vaccination

The 6-in-1 vaccine is one of the first vaccines a baby will have. It is given as a single injection to protect the baby against six serious childhood diseases: diphtheria, tetanus, whooping cough (pertussis), polio, Hib (Haemophilus influenzae type b) and Hepatitis B. The 6 in 1 vaccine is given at 8 weeks, 12 weeks and 16 weeks of age and the baby requires all three doses to ensure adequate protection.

When the child reaches three years and four months of age they will be given a booster vaccine (pre-school booster) to protect the child against diphtheria, tetanus, pertussis (whooping cough) and polio.

At 14 years of age the child will be given a further vaccination (teenage booster) to protect them against tetanus, diphtheria and polio.

Parents should be encouraged to take their children to all immunisation appointments and avoid delaying them where possible.

For further information please go to:

<https://www.gov.uk/government/publications/immunisations-between-12-and-13-months-of-age>

MMR Vaccination

The MMR vaccine is given as a single injection to babies usually within a month after their first birthday. They will then have a second injection of the vaccine before starting school, around three years and four months of age. The vaccine protects against three separate diseases – measles, mumps and rubella (German measles). The vaccination rates for MMR have decreased in recent years especially for the 2nd dose. It is very important that parents are encouraged to have their children vaccinated for MMR and to ensure that their child has both doses. There has been an increase in the number of measles cases and a few outbreaks locally so it is extremely important that children are vaccinated and protected against this disease that may cause serious complications such as pneumonia, bronchitis (infection of the main airways of the lungs) or encephalitis.

For further information and common questions regarding MMR please go to:

<http://www.nhs.uk/Conditions/vaccinations/Pages/mmr-questions-answers.aspx>

Rotavirus Vaccination

Rotavirus is an oral vaccine against rotavirus infection, a highly infectious stomach bug that typically affects babies and young children, causing diarrhoea, sometimes vomiting, tummy ache and fever. Most children recover at home within a few days, but nearly one in five will need to see their doctor, and one in ten of these end up in hospital as a result of complications such as extreme dehydration. A very small number of children die from rotavirus infection each year. The vaccine is given as two doses for babies aged 8 weeks and 12 weeks and is given as a liquid from a dropper straight into the baby's mouth for them to swallow. Since its introduction into the childhood vaccination programme, the vaccine has prevented more than 70% of cases of rotavirus infection.

For more information please go to:

<https://www.gov.uk/government/publications/rotavirus-qa-factsheet>

Vaccination against meningococcal disease

A vaccine to provide protection against meningitis B was introduced in 2015 and is being offered to babies as part of the routine NHS childhood vaccination programme. The **Men B** vaccine is recommended for babies aged 8 weeks, followed by a second dose at 16 weeks, and a booster at one year of age. The Men B vaccine will protect babies against infection caused by meningococcal group B bacteria, which are responsible for more than 90% of meningococcal infections in young children. Meningococcal infections can be very serious and may cause meningitis and septicaemia (blood poisoning), which can lead to severe brain damage, amputations and in some cases death.

The **Men C** vaccine was previously offered to babies at 12 weeks of age but from the 1st July 2016 it will no longer be given. This is due to the success of the Men C programme which was introduced in 1999 and there are now very few cases of invasive Men C disease.

However babies will receive a vaccination against meningitis C in the **Hib/Men C** vaccine which is a single injection given to one-year-old babies to protect them against haemophilus influenzae type b (Hib) and meningitis C.

Children will also receive a further booster dose against meningitis C as a teenager within Men ACWY vaccine. The Men ACWY vaccine is given by a single injection and protects against four different causes of meningitis and septicaemia – meningococcal A, C, W and Y diseases.

The **Men ACWY** vaccine is given to children aged 14 years in school or community clinics as part of the routine adolescent immunisation programme.

For further information go to:

<http://www.nhs.uk/Conditions/vaccinations/Pages/meningitis-B-vaccine.aspx>

<http://www.nhs.uk/Conditions/vaccinations/Pages/men-acwy-vaccine.aspx>

<http://www.nhs.uk/Conditions/vaccinations/Pages/hib-men-C-booster-vaccine.aspx>

Pneumococcal Vaccination

The pneumococcal vaccine protects against pneumococcal infections which can lead to pneumonia, septicaemia and meningitis. The vaccine protects against 13 strains of the pneumococcal bacterium. Babies receive the pneumococcal vaccine as three separate injections, at 8 weeks, 16 weeks and one year of age.

For further information go to:

<http://www.nhs.uk/Conditions/vaccinations/Pages/pneumococcal-vaccination.aspx>

Children's Flu Vaccination

From September 2018 the school-aged childhood flu vaccination programme will be extended to include those in school years reception, 1, 2, 3, 4, 5 and 6. Children aged 2 and 3 years old continue to be vaccinated against flu by their GP. The vaccine of choice for children is Fluenz Tetra® which is given as a nasal spray. Some children are unable to have the nasal flu vaccine and these children can be offered an injectable flu vaccine.

The age range for this vaccination includes:

2, 3 years of age: DOB 01/09/15 – 31/08/17. All 2 and 3 year olds eligible as part of the universal programme (provided aged 2 or 3 years old on 31st August 2019)

All school-aged children in reception and years 1 to 5: DOB 01/09/08 – 31/08/15

Children in school years reception, 1, 2, 3, 4, 5 and 6 will be offered the vaccination by school health/immunisation teams either in school or in community clinics.

All eligible children should be offered the flu vaccination as they are seen as the “super spreaders” of flu and vaccinating this population may protect those who are more vulnerable within the community. Reaching these children continues to be extremely important, not only for their own protection and to prevent the spread of flu to others, but also to introduce flu vaccination as part of a routine healthcare for children every autumn.

Children who have health problems such as heart and respiratory disease will be eligible for the flu vaccination from 6 months of age. Some will be eligible for the nasal spray but others will require an injectable form of the flu vaccination.

For further information please see:

<https://www.gov.uk/government/publications/protecting-your-child-against-flu>

HPV Vaccination

All girls aged 12-13 years (school year 8) are offered the HPV vaccination to protect themselves against cervical cancer. Cervical cancer is the second most common cancer in women under the age of 35. In 99% of cases, cervical cancer occurs as a result of a history of infection with high-risk types of HPV. From September 2019, the vaccine will also be offered to Year 8 boys. This is because the evidence is clear that the HPV vaccine helps protect both boys and girls from HPV-related cancers

It is estimated that about 400 lives could be saved every year in the UK as a result of vaccinating girls before they are infected with HPV. The HPV vaccine protects against the two types of HPV which between them are responsible for more than 70% of cervical cancers in the UK. The vaccination consists of two injections given at least six, and not more than 24 months apart. If a child misses their HPV vaccinations they can still have it up to their 25th birthday. For further information please see: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/812484/PHE HPV vaccination leaflet.pdf

Additional information outside of the childhood immunisation schedule:

Pertussis (whooping cough) vaccination for pregnant women

Women who are pregnant should be encouraged to attend their GP to be vaccinated against pertussis (whooping cough). They can have the vaccination from 16 weeks of pregnancy and it will protect the baby by passing the immunity through the placenta and will provide protection until they are old enough to be routinely vaccinated against whooping cough at two months of age. Women should be reassured that there is no evidence to suggest that the vaccine is unsafe for their unborn baby.

For further information go to:

<http://www.nhs.uk/conditions/pregnancy-and-baby/pages/whooping-cough-vaccination-pregnant.aspx>

Flu vaccination for pregnant women

Women who are pregnant are also eligible to have a flu vaccination from October to March at any stage of their pregnancy. They should be encouraged to attend their GP surgery to request flu vaccination as early as possible within the flu season. They will benefit from having the flu vaccine because:

- it reduces their chance of getting serious complications from flu, such as pneumonia
- it reduces the risk of having a miscarriage or the baby being born prematurely or with a low birth weight due to flu
- it will help protect the baby, as the baby will continue to have some immunity against flu for the first couple of months of their life

For further information please go to:

<https://www.gov.uk/government/publications/flu-vaccination-leaflet-for-pregnant-women>

RESOURCES

Common questions about vaccinations

<http://www.nhs.uk/chq/Pages/category.aspx?CategoryID=67>

Vaccination timeline

<https://www.gov.uk/government/publications/vaccination-timeline>

Complete vaccination schedule

<https://www.gov.uk/government/publications/routine-childhood-immunisation-schedule>

Vaccination calendar for parents

<http://www.nhs.uk/Tools/Pages/NHsvaccinationplanner.aspx>

A guide to immunisations up to one year of age leaflet

<https://www.gov.uk/government/publications/immunisations-between-12-and-13-months-of-age>

Pre-school immunisations leaflet:

<https://www.gov.uk/government/publications/pre-school-vaccinations-preparing-for-primary-school>

Immunisations for young people leaflet:

<https://www.gov.uk/government/publications/immunisations-for-young-people>

Information on childhood flu including downloadable leaflets:

<http://www.nhs.uk/conditions/vaccinations/pages/child-flu-vaccine.aspx>

OUR CONTACT DETAILS

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