

# Protect your child against infectious diseases

National Immunisation Programme



Nearly 95% of all children in the Netherlands have been vaccinated against infectious diseases. Better hygiene, better healthcare and vaccinations have reduced deaths due to infectious diseases in the Netherlands to a rare exception. The National Immunisation Programme not only prevents people from dying, but also helps them to avoid many diseases and the risk of disability.



#### What are infectious diseases?

Infectious diseases are caused by bacteria and viruses. These diseases are contagious – some more so, some less so. An infectious disease will usually make you feel 'under the weather' for a couple of days. If your illness grows worse, hospitalisation might be necessary.

In very rare cases, an infectious disease progresses to the point that you could be permanently disabled, or even die. The purpose of the National Immunisation programme is to prevent those serious complications.

## Why are vaccinations so important?

Vaccinations help your body build immunity against pathogenic viruses and bacteria. That will protect you from becoming seriously ill and developing complications. It will also prevent you from infecting other people. If not enough children are vaccinated, bacteria and viruses can spread, making many children sick in a very short time.

## The National Immunisation Programme in the Netherlands

Every country in the world offers vaccinations to children. Each country has its own vaccination schedule. In the Netherlands, children have been offered vaccinations for over 60 years. The vaccinations protect against the following twelve infectious diseases:

### Diphtheria

Diphtheria is a serious throat infection. Children suffering from diphtheria run the risk of suffocating. Diphtheria has been almost completely eradicated in the Netherlands.

### Whooping cough

Whooping cough (pertussis) causes violent coughing fits that can persist for months. Whooping cough in infancy can lead to exhaustion and brain damage. They can even die as a result. Vaccinated children are less likely to become seriously ill from the disease. Vaccination against whooping cough is effective in reducing the risk, but it does not completely eliminate the possibility of infection, and does not provide lifelong protection. That is why whooping cough still occurs in the Netherlands.

#### **Tetanus**

Tetanus leads to violent muscle spasms. Without treatment, tetanus is fatal. Tetanus is not contagious. That means that you cannot catch it from another person. A child can get tetanus if they have been bitten by a pet or other animal, or if street refuse gets into an open wound.

#### Polio

Polio can cause permanent paralysis of the legs, arms and/or respiratory muscles.

#### Hib disease

The Hib bacterium causes serious infections such as blood poisoning (septicaemia), meningitis, epiglottitis, pneumonia or inflammatory arthritis.

#### Hepatitis B

Hepatitis B is an inflammation of the liver. If the disease becomes chronic, hepatitis B can cause atrophy of the liver and liver cancer.

#### Pneumococcal disease

Pneumococci are bacteria which can cause blood poisoning (septicaemia), serious pneumonia and meningitis. Children can also lose their hearing as a result of the infection.

The vaccine is effective against the most common types of pathogenic pneumococci.

#### Mumps

Mumps is an infection that primarily affects the salivary glands. That is why children with the mumps develop swelling in their cheeks and neck. It sometimes leads to meningitis.

#### Measles

Measles is a rash disease involving high fever and an itchy, painful rash. It is often accompanied by ear infection, and sometimes leads to pneumonia or encephalitis that can have fatal results. Measles is highly contagious.

#### Rubella

Rubella is also a rash disease, but the resulting illness is much less serious than measles.



During pregnancy, however, rubella poses a danger to the unborn baby. A baby exposed to rubella before birth could be born with serious defects. To prevent pregnant women from getting infected, boys are also vaccinated against rubella.

## Meningococcal disease

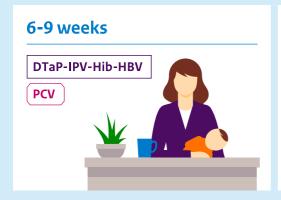
Meningococcal disease is caused by various types of meningococcal bacteria. Children with meningococcal disease can develop meningitis or blood poisoning (septicaemia), which could suddenly become life-threatening. Even if children recover, they can have lifelong problems with hearing loss, learning disabilities and behavioural problems.

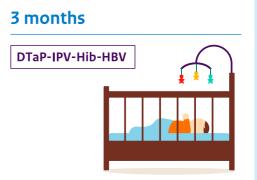
If they develop septicaemia, an arm or leg may sometimes have to be amputated.

#### **HPV**

Human papillomavirus (HPV) is a group of viruses which can cause cervical cancer and other types of cancer. Almost everyone will be infected by one of these viruses at some point in their lives, without even noticing it. The vaccine protects against two types of HPV. These two HPV viruses are the cause of approximately 70% of the cases of cervical cancer.

## Which vaccines will my child receive?







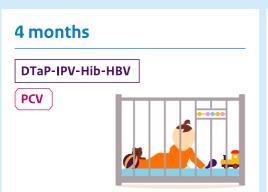


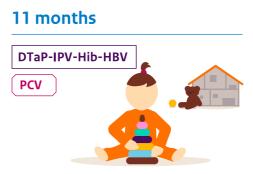
## Meaning of the abbreviations

- D Diphtheria
- aP Pertussis (whooping cough)
- T Tetanus

- IPV Poliomyelitis
- Hib Haemophilus influenzae type b
- HBV Hepatitis B











PCV Pneumococcal disease

Mumps Μ Μ

Measles

R MenACWY **HPV** 

Rubella Meningococcal ACWY disease Human papillomavirus



\* Only for girls

## When will my child receive the vaccinations?

Infants receive their first two vaccinations when they are between 6 and 9 weeks old. Their immune system is already capable of a vigorous response at that age. The timing of the vaccinations has been designed to offer the best protection. Very young babies are extremely vulnerable to infectious diseases such as whooping cough. A child usually receives two injections per visit. The vaccinations are administered in the thigh or upper arm.

### My child is ill. Can my child be vaccinated as scheduled?

If your child is ill or on medication, please consult the physician or nurse at the Well-Baby Clinic. Sometimes it is advisable to postpone the vaccination for a little while.

#### Are vaccines safe?

It is understandable that parents want to know about the contents of a vaccine and whether vaccines are safe for their baby. Before a vaccine is approved for use, it is tested extensively, just like any other medicine. Vaccines are not allowed to be given to children until it is absolutely clear that the vaccine works and is safe. Vaccine safety is also closely monitored while they are used – not just in the Netherlands, but all across the world.

The website of the National Immunisation Programme provides a list of the ingredients used in each vaccine. The information leaflets for the vaccines used in the National Immunisation Programme can also be found on the website.

#### Side-effects of vaccinations

Side-effects are unpleasant for the child and the parents. Some parents are concerned about the side-effects. Vaccinations often have side-effects because they activate the body's immune response. These side-effects are generally mild and will go away on their own. Most of the side-effects start on the day that the vaccination is administered. The side-effects of the vaccination against mumps, measles and rubella (the MMR shot) do not appear until five to twelve days after the injection. The most common side-effect is a mild fever shortly after the vaccination. The spot where the child gets the shot may become a little red or puffy.

## Tips in case of side-effects

- In case of fever, make sure that your child drinks enough fluids
- · Very young infants may be comforted by cuddles and distractions
- If a child is in pain or has a fever, paracetamol might help. Check the information leaflet to see how much your baby is allowed to have
- Avoid touching the arm or leg where the vaccination was administered if possible. Touching the area can make the pain worse

If you are concerned because your child is very sick, or if your child is still listless or feverish after a few days, you can call your family doctor for advice.

## Reporting a side-effect

You can report a side-effect of a vaccination to the doctor or nurse who administered the vaccination. They will then pass on the report of the side-effect to the Lareb Pharmacovigilance Centre. You can also report the side-effect directly to Lareb.

Your report can also be submitted via the website of the National Immunisation Programme.



#### Information about the vaccination

RIVM, the National Institute for Public Health and the Environment, gives parents information about the vaccinations. Shortly after the birth of their child, parents receive a set of vaccination cards for all inoculations until the child is 14 months old. When a child is 4 years old, and again at 9 years old, the parents receive a new invitation for the next vaccination.

When girls are 12 or 13 years old, they receive an invitation for the vaccinations to prevent cervical cancer.

The vaccinations are documented in three places: in the records maintained by the youth healthcare services, on the child's vaccination certificate, and in the national records maintained by RIVM. RIVM uses that information for ongoing quality assessment of the immunisation programme, to send reminders, to provide copies of the vaccination certificates, and to assess the percentage of vaccinated children in the Netherlands. If there is an outbreak of an infectious disease, it is very important to know how many children are protected, so that it becomes clear whether there is a chance that it will get spread and whether government intervention is needed.

## Would you like to know more?

The National Immunisation Programme website provides much more information about various infectious diseases, vaccinations and side-effects. You can also read about how research on side-effects takes place and what happens when you take your child to one of the Well-Baby Clinics.

Website: Rijksvaccinatieprogramma.nl/english/



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National Institute for Public Health and the Environment, RIVM PO Box 1 | 3720 BA Bilthoven The Netherlands www.rivm.nl

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