In the Netherlands many children used to die from infectious diseases against which vaccinations now exist. Because nearly all children in the Netherlands are vaccinated, now these infectious diseases hardly ever occur. Thanks to the National Immunisation Programme all children in the Netherlands can now be vaccinated without charge.

What are infectious diseases?
Infectious diseases are often communicable diseases. They can cause epidemics if children have not been vaccinated against them. Infectious diseases are caused by bacteria and viruses.

95% of all children in the Netherlands have been vaccinated.

Why is vaccination important?
With vaccination you are protecting your child. If we do not vaccinate, the infectious diseases will return. That is why it is important that every child participates in the National Vaccination Programme. The National Vaccination Programme is responsible for approximately 2.5 million vaccinations per year.

Against which diseases are children protected?
In the Netherlands children are protected against 12 serious infectious diseases. The vaccination programme begins when a child is between 6 and 9 weeks old.

Are vaccines safe?
Vaccines are thoroughly tested before they reach the market. Precisely because vaccines are administered to healthy children, they are strictly monitored for adverse effects. A great deal of research is undertaken into the risks with large groups of children (from thousands to millions). From this it is evident that vaccinations are safe. No link has been found between vaccinations by the National Vaccination Programme and such things as brain damage, delayed development, epilepsy, diabetes, autism or cot death.
1. **Diphtheria**
Diphtheria is a serious throat infection. Children who have diphtheria run the risk of suffocating. Diphtheria now hardly ever occurs in the Netherlands. If we stop vaccinating against it, the disease will come back.

2. **Pertussis (whooping cough)**
Whooping cough causes violent coughing fits and can last for months. In babies this can lead to exhaustion and brain damage. They can also die from it. Whooping cough cannot be prevented completely by vaccination, but is less serious in the case of people who have been vaccinated. Because whooping cough still occurs in the Netherlands, it is important to vaccinate new-born babies as soon as possible.

3. **Tetanus**
Tetanus can lead to the cramping of all muscles. Without treatment tetanus is fatal. Tetanus is not contagious. A child can get tetanus if he/she has been bitten by a (domestic) animal or if street refuse enters the wound.

4. **Polio**
Polio is a very serious infectious disease which causes paralysis of legs, arms and respiratory muscles.

5. **Hib disease**
The Hib bacterium causes serious infections such as septicaemia, meningitis, epiglottitis, pneumonia or arthritis.

6. **Hepatitis B**
Hepatitis B is an inflammation of the liver. Chronic hepatitis B can cause atrophy of the liver and liver cancer. The vaccine provides lifelong protection.

7. **Pneumococcal disease**
Pneumococci are bacteria which cause septicaemia, serious pneumonia and meningitis. The child can also become deaf. The vaccine is effective against the most common types of pneumococci.

8. **Mumps**
Mumps is an infection of the salivary glands. That is why children with the mumps have swollen cheeks and neck. Sometimes meningitis results.

9. **Measles**
Measles is a rash disease involving high fever and a rash. Ear infection and pneumonia often result and sometimes encephalitis. Measles is very contagious. Sometimes a child dies from measles.

10. **Rubella**
Rubella is a rash disease. You hardly notice it, but the disease is certainly contagious. During pregnancy rubella is dangerous for the unborn baby. The baby could be born with serious defects.

11. **Meningococcal C disease**
Children with Meningococcal C disease can get meningitis and septicaemia. Once they have been cured, they can have permanent problems with deafness, learning and behaviour problems. And as a result of septicaemia, an arm or leg may sometimes have to be amputated.

12. **HPV**
Human papillomavirus (HPV) is a contagious virus which can cause cervical cancer. The vaccine protects against 2 types of HPV which together are the cause of approximately 70% of the cases of cervical cancer.

---

### Tips for dealing with your child if he/she experiences adverse reactions

- By hugging and distraction the pain is lessened.
- Fever? Make sure that your child is drinking enough fluids.
- Pain at the spot of the injection? Touch the arm or leg as little as possible. Touching can exacerbate the pain.
- Is your child weepy and does he/she have a great deal of pain on the day of the vaccination? In that case you can give paracetamol. Look in the patient information leaflet how much your child may have.
- Sometimes parents are inclined to shake their child. Don’t ever do that. It can cause brain damage.

If you are concerned about your child because the fever and listlessness lasts longer than 2 days, consult a doctor. Your child’s complaints may also be the result of another illness.
## Vaccination Schedule National Immunisation Programme

### Phase 1

<table>
<thead>
<tr>
<th>Age</th>
<th>Injection 1</th>
<th>Injection 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-9 weeks</td>
<td>DTaP-IPV</td>
<td>PCV</td>
</tr>
<tr>
<td></td>
<td>Hib</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HBV</td>
<td></td>
</tr>
<tr>
<td>3 months</td>
<td>DTaP-IPV</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hib</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HBV</td>
<td></td>
</tr>
<tr>
<td>4 months</td>
<td>DTaP-IPV</td>
<td>PCV</td>
</tr>
<tr>
<td></td>
<td>Hib</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HBV</td>
<td></td>
</tr>
<tr>
<td>11 months</td>
<td>DTaP-IPV</td>
<td>PCV</td>
</tr>
<tr>
<td></td>
<td>Hib</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HBV</td>
<td></td>
</tr>
<tr>
<td>14 months</td>
<td>MMR</td>
<td>MenC</td>
</tr>
</tbody>
</table>

### Phase 2

<table>
<thead>
<tr>
<th>Age</th>
<th>Injection 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 years</td>
<td>DTaP-IPV</td>
</tr>
</tbody>
</table>

### Phase 3

<table>
<thead>
<tr>
<th>Age</th>
<th>Injection 1</th>
<th>Injection 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 years</td>
<td>DT-IPV</td>
<td>MMR</td>
</tr>
</tbody>
</table>

### Phase 4

<table>
<thead>
<tr>
<th>Age</th>
<th>Injection 1</th>
<th>Injection 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 years</td>
<td>HPV*</td>
<td>HPV* (6 months later)</td>
</tr>
</tbody>
</table>

### Meaning of the abbreviations

- **D**: Diphtheria
- **aP**: Pertussis (whooping cough)
- **T**: Tetanus
- **IPV**: Poliomyelitis
- **Hib**: Haemophilus influenzae tye b
- **HBV**: Hepatitis B
- **PCV**: Pneumoccal disease
- **M**: Mumps
- **R**: Rubella
- **MenC**: Meningococcal C disease
- **HPV**: Human papillomavirus

* Only for girls

---

**Will you allow your child to be vaccinated?**

Vaccination provides important protection for your child. You decide for yourself whether you will allow your child to be vaccinated. Go to www.rivm.nl/nip for more information about diseases and vaccinations. You can also put questions to the physician or nurse at the clinic.

**When will your child receive the vaccinations?**

Children are vaccinated from 6 weeks old. For proper protection it is important that your child completes the entire vaccination programme.

**Is my child also protected if he/she has not yet been (completely) vaccinated?**

No, it is important that the entire series is completed. Only then will long-term protection occur. Because nearly all children participate in the National Vaccination Programme, most diseases hardly ever occur now in the Netherlands.

**Can my child be vaccinated if he/she is sick and is using medicines?**

Before the vaccination consult the physician or nurse who administers the vaccination. Sometimes it is better to postpone the vaccination.

**Will your child experience adverse reactions after the vaccination?**

That is possible, but not necessarily so. Children react in different ways to a vaccination. Most adverse reactions begin on the day of the vaccination. Often they are gone within 2 days. In the case of vaccination against mumps, measles and rubella (BMR) the adverse reactions will commence 5 to 12 days after the vaccination.

It is better not to give your child any paracetamol before the vaccination. The vaccine can then work more effectively.

**In what ways do children sometimes have problems after the vaccination?**

- Pain when moving the arm or leg where the vaccine was injected.
- Red spot, a swelling or pain at the spot where the vaccination was injected.
- Listlessness and crying.
- Fever.
- Babies may sleep restlessly or sleep extra long.
- Children from the age of 4 may faint from the tension.
Has your child experienced an adverse reaction?
Refer an adverse reaction to the physician or nurse who administered the vaccination. All adverse reactions are investigated by the Netherlands Pharmacovigilance Centre Lareb. You can also report an adverse reaction directly to www.lareb.nl.

The patient information leaflet
Every vaccine is accompanied by a patient information leaflet which contains information about the vaccination. Current patient information leaflets are available in Dutch on www.rijksvaccinatieprogramma.nl/bijsluiters.

Data about the vaccination
The National Institute for Public Health and the Environment (RIVM) ensures that you are kept informed in a timely manner about vaccinations. The vaccination data are kept by the RIVM in accordance with the Personal Data Protection Act and are only used for the National Vaccination Programme.

Do you want to know more?
Go to www.rivm.nl/nip or ask your question at the physician or nurse at the clinic.

Published by:

National Institute of Public Health and the Environment
PO Box 1 | 3720 BA Bilthoven
The Netherlands
www.rivm.nl/en

January 2016

Committed to health and sustainability