

Recommended complementary vaccination against pneumococci.

Children often become ill, especially with viral infections in the autumn and winter months. These are accompanied by a runny nose, fever, cough, diarrhoea, vomiting or skin rash. Most of the time, these illnesses are benign and no one thinks of vaccinating against them. However, some infectious diseases can be far more dangerous, and can lead to serious complications, or may prove fatal in spite of the best of treatments. In some cases, it is possible to protect one's child from these risks by teaching his/her immune system to defend itself. Vaccines contain weakened or killed pathogens or their components, to which the body reacts as though it were a natural infection by building up its defences. By responding to the harmless vaccine, the immune system learns how to render the most dangerous microbes harmless, thereby avoiding the disease and its complications. Each time a child is protected against an infectious disease, he/she no longer risks contaminating other children or his/her entourage. In this way, the greater the number of children vaccinated, the more rare the diseases become. The vaccination of children and adolescents is one of the greatest successes of preventive medicine.

Pneumococcal vaccination protects against disease with potentially serious or even fatal complications.

Pneumococci are bacteria which can cause various diseases differing in their severity: from unpleasant but not life-threatening middle ear infections, through more dangerous lung infections, to life-threatening disease such as meningitis and blood poisoning. As a result of the introduction of vaccination against *Haemophilus influenzae b* (Hib), the risk of bacterial meningitis decreased considerably for young children. Pneumococcal infections are now the leading cause of severe bacterial diseases. It is estimated that every year in Switzerland there are 70 cases of severe disease (meningitis, blood poisoning), 1,600 cases of pneumonia, 27,000 cases of middle ear infection and 1–3 deaths in children under the age of 5 years caused by pneumococci. The conjugate vaccine against pneumococci provides 95% protection against severe diseases, 70% protection against pneumonia and 50% protection against middle ear infections.

Vaccination is needed as early as possible to protect your child against pneumococci.

In the first few years of life, your child is at particular risk from severe, so-called invasive pneumococcal infections (meningitis, blood poisoning). The risk already begins only a few weeks after birth, as antibodies that were transmitted by the mother to the child before birth rapidly decline, even if the child is being breast-fed. Severe pneumococcal infections can be treated, for example by having the child in the hospital, but often the treatment comes too late, or damage resulting from the disease can handicap children or adolescents for the rest of their life. The vaccination should therefore be given as early as possible. Three vaccine doses are necessary in order to protect young children. They can be given at the same time as the basic vaccinations, at the age of 2, 4 and 12 months.

It is important to keep to this recommended vaccine schedule, in order to obtain early and sustained protection. In healthy children, the risk of pneumococcal infections decreases from the age of 2 years. However, some children are at increased risk and should be protected against pneumococci with additional vaccinations. Your doctor will inform you if this applies to your child.

Not vaccinating against pneumococci has its risks.

With the basic Hib vaccination, the number of cases of meningitis could be reduced by half. However, Hib vaccination has no effect on the second most important cause of very serious bacterial infections in children: pneumococci. This risk can only be limited with the complementary pneumococcal vaccination.

Conjugate vaccine against pneumococci.

In this vaccine (Prevenar®), the sugar components of the pneumococcal capsule are bound to a protein. This 7-valent vaccine (vaccine against 7 types) can already be administered from the age of 2 months. The protective effect that it provides against so-called invasive infections such as meningitis is excellent (>90%). This vaccine covers around 60% of the relevant pneumococci affecting small children in Switzerland. The vaccine is administered by intramuscular injection. It contains aluminium phosphate, an adjuvant substance which boosts the immune response, but no mercury.

Side effects of vaccination against pneumococci.

The conjugate vaccine was developed especially for infants. It is generally well tolerated. Fever (in 1–2 children out of 10) and reactions such as swelling, pain and redness (in 1–2 out of 10 children) have been described as side effects. Fever of over 39°C is observed in 1–3 children out of 100. If the fever is very high, it can trigger convulsions. For this reason, it is important to check the child's temperature after the vaccination. These unpleasant but transient and harmless side effects are by far outweighed by the benefits of pneumococcal vaccination. Serious side effects after pneumococcal vaccination are extremely rare (1 in 100,000 to 1 in 1 million). Other problems have been reported after infant vaccination. They are extremely rare (1 in 100,000 or 1 in 1 million), such that it is difficult to say whether the vaccination is their cause or not. What is important to stress is that vaccines do not weaken the infants' immune system and that they do not increase the risks of developing allergies or other diseases later in life. If there is any special problem that worries you, do not hesitate to ask your doctor.

Cost of the pneumococcal vaccination.

This vaccination is considered as so important by the health authorities that its cost is covered by the basic health insurance.

Your doctor recommends the pneumococcal vaccination for the health of your child.

The pneumococcal vaccination is recommended to all children for whom parents want optimal protection. Serious pneumococcal diseases represent a risk for small children, which can be prevented in infancy with a vaccine known to be safe and effective. In countries where the vaccination is already established, an impressive decrease of pneumococcal diseases in vaccinated children has already been observed. As vaccinated children may no longer be possible sources of infection for others, the pneumococcal vaccination even has a measurable positive effect on adult contact persons (e.g. the grandparents).

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Doctor's Stamp



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