

Vaccinations for children in Switzerland

KEY POINTS

Vaccinations protect children

Vaccinations are the most effective way of protecting children against various potentially severe illnesses, and against possible complications of these conditions. They work by imitating natural infections – but without causing disease symptoms – and inducing an immune response in the body. Some parents are concerned about possible serious side effects of vaccinations. Vaccination will only be recommended if the benefits associated with the prevention of illnesses and complications far outweigh any vaccine-related risks. It should be borne in mind that diseases of childhood still cause deaths in Switzerland as a result of failure to vaccinate or inadequate vaccine coverage.

Protecting your own child and other children

By complying with vaccine recommendations, you are also helping to control the spread of dangerous infectious diseases. Examples of successful disease control include the global eradication of smallpox (achieved by 1980) and the widespread elimination of polio. Thanks to vaccination campaigns around the world, polio is also expected to be eradicated globally in the near future. As long as a disease has not completely disappeared, the pathogen will continue to circulate. If immunisation is then neglected, the disease may break out again. The more children are vaccinated, the more rarely these diseases will occur overall. This means that, as well as protecting your own children, vaccinations protect others who cannot be vaccinated because of their age or for other (medical) reasons.

Effectiveness of vaccinations

The proportion of cases in which vaccination triggers an immune response is never 100%, but the success rate for the basic vaccinations recommended for children is generally over 90%. It is thus possible in principle – though rare in practice – for a child to contract a disease despite being vaccinated against it.

Vaccination: where and when?

Vaccination against different diseases is recommended at specific ages. In most cases several doses of a vaccine are required at specific intervals (see page 3 of the vaccination schedule). Vaccinations that are not carried at the recommended time can be made up for later. In Switzerland children are usually vaccinated by their paediatrician or family doctor.

Costs of vaccinations

The costs of the recommended basic and additional vaccinations are covered by the compulsory health insurance scheme (subject to deductible and co payment requirements).

Vaccination against human papillomavirus (HPV) is free of charge if it is carried out as part of a cantonal programme. Vaccinations recommended for risk groups are generally covered by compulsory health insurance.

CATEGORIES OF RECOMMENDED VACCINATIONS

Basic vaccinations

Basic vaccinations are of fundamental importance for the health of each individual and provide essential protection for the population as a whole. Accordingly, the Swiss vaccination schedule includes certain basic vaccinations for all children. These include vaccinations against:

- diphtheria, tetanus and pertussis (whooping cough)
- invasive infections caused by *Haemophilus influenzae* de type b
- polio
- hepatitis B
- pneumococcal disease
- measles, mumps and rubella (German measles)
- human papillomavirus (HPV) for girls
- varicella (chickenpox)

Additional vaccinations

Recommended, in addition, are vaccinations providing individual protection against rare but serious and sometimes fatal diseases.

For example, vaccinations against:

- meningococcal disease caused by groups A, C, W and Y
- human papillomavirus (HPV) for boys

Vaccinations for risk groups

Certain vaccinations are only recommended for particular risk groups, for example vaccinations against:

- tick-borne encephalitis (TBE)
- hepatitis A
- tuberculosis
- seasonal influenza



VACCINATION – Yes or No?

ANSWERS TO FREQUENTLY ASKED QUESTIONS

Thanks to sustained vaccination efforts and modern vaccines, diseases of childhood have now become rare or, in some cases, disappeared altogether. But if vaccination coverage is inadequate, such diseases may re-emerge at any time, posing risks to children and adults. Parents decide whether their children are to be vaccinated or not. These are important, personal decisions. In some cases, vaccinations designed to protect children against illnesses are a subject of intense debate. Faced with contradictory information, parents are unsure whether vaccinations are really beneficial for their children. Below, we provide answers to a number of frequently asked questions.

Why do the first vaccinations have to be given so soon after birth?

The natural immunity received by infants in the form of antibodies from their mother only lasts for a few months, whether they are breast-fed or not. In addition, it provides only limited protection against various illnesses. As a result, very young infants can contract diseases such as whooping cough or serious bacterial infections caused by *Haemophilus influenzae* or pneumococci. The course of these illnesses is often much more severe in the first year of life than in older children. In order to protect children against these diseases, vaccinations need to be given as early as possible. If vaccinations are delayed, infants are left vulnerable to the risk of developing diseases with potentially serious consequences. For example, while children usually only face a substantial risk of tetanus when they start to crawl or walk, timely protection can only be ensured by starting vaccinations at the age of 2 months, since three doses are required.

Don't vaccinations overwhelm the immature immune system of infants and toddlers?

After birth, infants progressively develop their own immune system, protecting them against a wide variety of diseases. Infants and toddlers have to fight against pathogens on a daily basis. The immune system is able to defend the body against a large number of microbes simultaneously. Combination vaccines, offering comparable efficacy and safety to individual vaccines, mean that fewer injections are required to provide basic immunisation – saving your child unnecessary discomfort. Vaccines play only a minor role in the daily disease-fighting activity of the child's immune system.

Isn't "experiencing" disease important for the child's development?

Children are only vaccinated against a small number of diseases. They still have plenty of opportunities to gain experience of many other illnesses, without running the risk of severe complications. There are no studies demonstrating that children who experience such diseases develop better than those who are vaccinated.

Why do children also need to be vaccinated against diseases which are now extremely rare?

It has often been observed that diseases which are no longer seen in Switzerland, such as polio or diphtheria, as well as outbreaks of whooping cough, measles and rubella, may re-emerge if vaccinations are no longer given or if coverage is inadequate. Before vaccinations began, Switzerland had, on average, 3,000 cases of diphtheria per year, 700 cases of polio, around 200 cases of disease caused by *Haemophilus influenzae* (meningitis, laryngitis), 50 deaths from tetanus, and several dozen cases of birth defects due to rubella infection in pregnancy. As long as a disease has not completely disappeared, the pathogen will continue to circulate. If immunisation is then neglected, the disease may break out again.

All vaccinations involve a degree of risk – why should this be accepted for a healthy child?

No vaccination is completely risk-free, but the risks are much lower than with naturally contracted disease. Serious adverse reactions occur in less than 1 in 100,000 cases. It must always be assessed whether, in particular cases, symptoms such as fever or gastrointestinal disorders are actually attributable to vaccination, since such health problems are common in childhood. For example, among the 60 children in Switzerland, on average, affected by sudden infant death syndrome in the first year of life, several will certainly have been recently vaccinated. But these two events – vaccination and death – are not causally related; they coincide purely by chance. Recent studies indicate that sudden infant death syndrome may actually occur more rarely in vaccinated than in unvaccinated children. Thanks to vaccines, millions of children have already been effectively protected against diseases with potentially serious consequences. Vaccine production and authorisation is strictly regulated by the Therapeutic Products Act and continuously monitored by the Swiss Agency for Therapeutic Products, Swissmedic.



Are there any reasons not to proceed with a vaccination?

Before any vaccination takes place, you should tell your doctor if your child:

- > feels unwell,
- > is taking any medication,
- > has previously shown an reaction to vaccination,
- > has ever had a severe allergic reaction,
- > is immunocompromised,
- > is HIV-positive.

Even though there are very few true contraindications to vaccination, false claims are frequently made in this regard. Discuss this question with your doctor.

Should I also have my child vaccinated against other diseases?

Vaccinations against tick-borne encephalitis (TBE), hepatitis A, rabies, tuberculosis and seasonal influenza, as well as travel vaccinations, are only advisable in particular situations. A safe and effective vaccination against rotavirus-associated diarrhoea is available, but no recommendation has been made concerning its use. Vaccination may be considered before travelling to a country with poor medical facilities. The costs, however, are to be borne by the parents.

VACCINATION SCHEDULE – Children

Recommended basic and additional vaccinations for children

Vaccinations	Basic								Additional		
	Diphtheria Tetanus Pertussis	Polio	<i>Haemophilus influenzae</i> type b	Hepatitis B	Pneumo- coccal disease	Measles Mumps Rubella	HPV girls	Varicella	Meningo- coccal disease	HPV boys	
Age ¹⁾	DTP _a	IPV	Hib	HBV	PCV13	MMR	HPV	VZV	MCV-ACWY	HPV	
2 months	DTP _a	—	IPV	—	Hib	—	HBV ²⁾	PCV13			
4 months	DTP _a	—	IPV	—	Hib	—	HBV ²⁾	PCV13			
9 months							MMR				
12 months	DTP _a	—	IPV	—	Hib	—	HBV ²⁾	PCV13	MMR		
24 months									MCV-ACWY		
4 - 7 years	DTP _a /dT _p _a	—	IPV								
11 - 15 years	dT _p _a ³⁾				HBV ⁴⁾			HPV ⁵⁾	VZV ⁶⁾	MCV-ACWY	HPV ⁵⁾

NB: In the table, each darker shaded entry represents an injection. This will contain a single vaccine (for vaccination against a single pathogen) or a multiple vaccine (for simultaneous vaccination against a number of pathogens).

Abbreviation:

d = reduced dose of diphtheria p_a = reduced dose of pertussis VZV = varicella-zoster virus (chickenpox)
 HPV = human papillomavirus MCV-ACWY = Meningococcal conjugate vaccine for serogroups A, C, W and Y

Notes:

- ¹⁾ Ages are calculated from the date of (full- or pre term) birth.
- ²⁾ Hepatitis B vaccination is recommended in particular for infants.
- ³⁾ dT_p_a booster at the age of 25 and dT booster at the age of 45 and 65, then every 10 years.
- ⁴⁾ Adolescents not previously vaccinated against hepatitis B.
- ⁵⁾ Preferably at the age of 11–14.
- ⁶⁾ Adolescents who have not had chickenpox.

Do you have any questions on vaccinations?

If you have any questions, please contact your doctor or pharmacist, or call the vaccination infoline:

Vaccination infoline 0844 448 448 (advice provided free of charge, national rate applicable for calls within Switzerland)

Additional information on this subject can be found online at www.sichimpfen.ch and www.infovac.ch (only in German/French/Italian). Information on vaccinations recommended for travellers can be found at www.healthytravel.ch.

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