

## Information

### Vaccination against Chickenpox (varicella)

Chickenpox is a highly contagious illness caused by the varicella zoster virus, and is widespread throughout the world. It is spread by direct body contact or via the air (airborne droplet infection). About 2 weeks after becoming infected, the typical rash begins to appear, mostly accompanied by fever. Small, isolated red patches quickly turn into lentil-sized blisters filled with fluid. These become cloudy, dry out and form a scab after a few days. Typically, the spots are intensely itchy.

Normally, someone with chickenpox is most infectious 2 days before the rash appears until 5 days after the last fresh blisters have formed. After the rash has healed, the virus remains dormant in the nerve cells (ganglia) in the bone marrow and brain. It can become reactivated and cause shingles (zoster), mostly in much older patients and in persons with weakened immune systems.

Serious complications during chickenpox, for example bacterial superinfections of the skin, inflammations of the brain or lungs are rare in healthy children. In contrast, adolescents and adults have a significantly higher risk of complications. Particularly at risk are all unprotected patients whose immune system is weakened, be it due to a congenital or an acquired dysfunction, or one caused by medication. For children with leukemia, chickenpox can even be fatal.

Chickenpox is also dangerous for pregnant women if they have neither had chickenpox nor had been vaccinated against it. Chickenpox infections during the first 20 weeks of pregnancy can cause serious birth defects in the unborn child. If an unprotected mother becomes ill with chickenpox around the time of birth (5 days before and up to 2 days after giving birth), a chickenpox infection contracted by the newborn can be life-threatening. Even for premature babies of protected mothers, an infection during the first six weeks of life is dangerous.

When newborn babies and patients with a weakened immune system catch chickenpox, antiviral drugs can be administered to avoid serious complications. However, only timely vaccination provides real protection against all types of disease progression caused by varicella infections.

### Vaccine

The vaccine consists of live but weakened varicella zoster viruses, which then reproduce in the body. The vaccine is injected under the skin (subcutaneous injection). The vaccination against chicken pox can be given from the age of (9 to) 12 months.

Your doctor can tell you about the start of the vaccine protection. According to the state of knowledge today, booster shots are not required after 2 varicella vaccinations.

### Who should be vaccinated?

Within the framework of the vaccination schedule, the chickenpox vaccination is recommended for all children and should normally be given between 11 and 14 months of age. In order to ensure a safe level of immunity, children are vaccinated again between 15 and 23 months of age. However, the second dose can be given as early as (4 to) 6 weeks after the first. Children who have only been vaccinated once should receive a catch-up dose. The vaccination can be performed either along with the vaccinations against measles, mumps and rubella (MMR vaccination), or 4 weeks later at the earliest.

If the following individuals have not gone through chickenpox yet, and have not been vaccinated either, then the 2-dose vaccination is generally recommended for:

- Children and adolescents up to their 18th birthday,
- Women intending to have a child,
- (Newly employed) staff in childcare facilities for pre-school children (e.g.

kindergarten),

- Medical staff, especially in birthing units, pediatrics, oncology, intensive care and those caring for patients with immune deficiencies.

In addition, the vaccination is recommended for all vulnerable individuals for whom an infection would be particularly dangerous, or who could spread chickenpox to people at risk. These are primarily tumor patients, patients with serious atopic dermatitis and those scheduled for surgery or treatments that weaken the immune system (immunosuppressive therapy), such as prior to organ transplants, or those with severe kidney diseases. Moreover, it is imperative for persons who are in close contact with these patients (family members, or careers), as well as the medical staff, to be vaccinated.

Under certain circumstances, the vaccination can still provide protection even if administered a few days after infection. In these cases, please consult a doctor immediately.

### **Who should not be vaccinated?**

A person suffering from an acute illness with more than 38.5°C fever and requiring treatment should not be vaccinated. Persons who are allergic to components in the vaccine must not be vaccinated. In general, individuals with a weakened immune system are also not vaccinated. Exceptions are possible and necessary under certain circumstances. The varicella vaccination should not be given during a pregnancy, since a theoretical risk for the child by the vaccination virus exists in the womb. For the same reason, pregnancy should be avoided for a period of at least 1 month after vaccination. However, a vaccination administered accidentally during a pregnancy is not a reason for abortion.

So as not to jeopardize the success of the vaccination, it is not administered within at least three months after receiving either immunoglobulin or a blood transfusion.

In all these cases, the vaccinating doctor will be happy to advise you on how you can best protect yourself from varicella infection.

### **After the vaccination**

The vaccinated person (vaccinee) does not need to take special care, but higher than usual physical exertion should be avoided for 1 to 2 weeks after vaccination. The vaccinating physician should be informed before vaccination of any tendencies towards circulatory problems or sudden onset allergic reactions.

In extremely rare cases, vaccine viruses can be transmitted to susceptible contacts. This is why persons with a severely weakened immune system and non-immune pregnant women should avoid contact with vaccinated persons who have reacted to the vaccination with isolated chickenpox blisters. They should avoid such contact until 5 days after the appearance of the last fresh blisters.

Since there is a theoretical risk of Reye syndrome, no salicylates (e.g. aspirin) should be taken for a period of 6 weeks after the vaccination.

### **Possible localised and general reactions to the vaccination**

As well as achieving the intended immunity to protect from the illness, about 20 percent of vaccinated persons, particularly adults after the 2<sup>nd</sup> vaccine dose, will temporarily experience some redness or painful swelling at the injection site. This is the body's normal way of dealing with the vaccine. Approximately every 10<sup>th</sup> vaccinated person (vaccinee) will experience a slight to moderate temperature. In 1 to 3 percent, a very mild form of chickenpox (vaccination illness) occurs within 1 to 4 weeks after vaccination, including isolated blisters and fever. In patients with a weakened immune system, these symptoms are more severe and occur more frequently. This means that, as a rule, these individuals should not receive this vaccine. It should, however, be given to children with leukemia in remission (a period of time without symptoms).

**What about vaccination complications?**

Complications are unintended effects beyond usual vaccine reactions and affect the vaccinated person's health significantly. Allergic reactions after varicella vaccination are very rare. Vaccinations for chickenpox must not be given if there is a framycetin/neomycin intolerance. Isolated cases of sudden onset of allergic reactions including anaphylactic shock, shingles and pneumonia in healthy individuals and people with a weakened immune system have been reported in the literature. Similarly, only isolated cases of transmission from a vaccinated person with vaccine illness (skin rash) to a contact person – mostly with a weakened immune system – have been reported as well as a transient decline in platelets. A causative connection with other disorders of the neurological system that appeared at the same time as the varicella vaccination, which was reported in rare cases, is also questionable.

**Physician's advice on possible side effects**

In addition to this information leaflet, your doctor is offering a personal consultation.

If, after a vaccination, symptoms occur that go beyond the rapidly subsiding localized and general reactions described above, the vaccinating doctor will also be available to advise you.

You can contact the vaccinating doctor here:

**Disclaimer**

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Name \_\_\_\_\_

Name

**Vaccination against chickenpox***Schutzimpfung gegen Windpocken*

Please find enclosed an information leaflet about the vaccination against chickenpox. It contains essential information about illnesses that can be prevented through the vaccination, the vaccine used and the vaccination itself. It also describes reactions to the vaccination and possible complications.

*Anliegend erhalten Sie ein Merkblatt über die Durchführung der Schutzimpfung gegen Windpocken. Darin sind die wesentlichen Angaben über die durch die Impfung vermeidbare Krankheit, den Impfstoff, die Impfung sowie über Impfreaktionen und mögliche Impfkomplicationen enthalten.*

Before the vaccination is administered, we request the following additional information:

*Vor Durchführung der Impfung wird zusätzlich um folgende Angaben gebeten:*

1. Does the person to be vaccinated have an immunodeficiency (congenital, acquired or caused by medication)?

*Besteht bei dem Impfling eine Immunmangelkrankheit (erworben, angeboren, durch Medikamente bedingt)?*

Yes (*Ja*)

No (*Nein*)

2. Does the patient have any known allergies?

*Ist bei dem Patienten eine Allergie bekannt?*

Yes (*Ja*)

No (*Nein*)

If yes, which ones?: \_\_\_\_\_

*wenn ja, welche?*

3. Did the person to be vaccinated receive immunoglobulin or a blood transfusion in the last 3 months?

*Hat der Impfling in den vergangenen drei Monaten ein Immunglobulin erhalten oder wurde eine Bluttransfusion vorgenommen?*

Yes (*Ja*)

No (*Nein*)

4. For vaccinations of women of childbearing age: are you currently pregnant?

*Bei Impfung von Frauen im gebärfähigen Alter: Besteht zurzeit eine Schwangerschaft?*

Yes (*Ja*)

No (*Nein*)

If you would like to know more about the vaccination against chickenpox, please ask the vaccinating physician.

*Falls Sie noch mehr über die Schutzimpfung gegen Windpocken wissen wollen, fragen Sie den Impfarzt!*

Please bring your vaccination record to your vaccination appointment.

*Zum Impftermin bringen Sie bitte das Impfbuch mit!*

**Declaration of consent***Einverständniserklärung***to vaccinate the person listed below against chickenpox (varicella)***zur Durchführung der Schutzimpfung gegen Windpocken (Varizellen)*

Name of person to be vaccinated: \_\_\_\_\_

*Name des Impflings*

Date of birth: \_\_\_\_\_

*geb. am*

I have read the information leaflet, and have received detailed information about the vaccination during the consultation with my physician.

*Ich habe den Inhalt des Merkblatts zur Kenntnis genommen, und bin von meinem Arzt/meiner Ärztin im Gespräch ausführlich über die Impfung.*

 I have no further questions.

*Ich habe keine weiteren Fragen.*

 I give my consent to the recommended vaccination against chickenpox

*Ich willige in die vorgeschlagene Impfung gegen Windpocken ein.*

 I decline the vaccination. I have been informed about the possible disadvantages of declining to be vaccinated.

*Ich lehne die Impfung ab. Über mögliche Nachteile der Ablehnung dieser Impfung wurde ich informiert.*

Notes: *Vermerke* \_\_\_\_\_Place and date: *Ort, Datum* \_\_\_\_\_

\_\_\_\_\_  
Signature of person to be vaccinated  
or his/her legal guardian

*Unterschrift des Impflings bzw. des Sorgeberechtigten*

\_\_\_\_\_  
Doctor's signature

*Unterschrift des Arztes/der Ärztin*