# **INFORMATION**

# **COVID-19 vaccination and pregnancy**

This information sheet is intended to supplement the discussion on possible COVID-19 vaccination with your doctor. It is not a substitute for that discussion. Please read it through carefully before getting the vaccination.

## The general COVID-19 situation

- Over 98% of people in Switzerland have by now had some contact with the coronavirus. The resulting pre-existing immunity gives persons with no risk factors very good protection from developing a severe case of COVID-19. In addition, infection with the Omicron virus variants generally results in milder illness than was the case with earlier variants.
- For pregnant women, too, the Omicron virus variants pose a lower risk of developing severe COVID-19 than previous variants did. The risk of giving birth prematurely following a COVID-19 infection while pregnant is much smaller now than it was during the pandemic. This is due partly to the levels of pre-existing immunity now present in most of the population and partly to the milder impact of the Omicron variants.
- Also with the Omicron variants, pregnancy carries a slightly higher risk of developing severe COVID-19, of pregnancy complications and/or of premature birth in the event of coronavirus infection.
- The vaccination will only protect around one in three persons who receive it from infection for the first few months following its administration. But it will in particular protect persons with risk factors from developing severe COVID-19.

## Is vaccination recommended for pregnant women?

Yes, because the vaccination reactivates and improves immune protection. If you are pregnant, getting the vaccination will improve your individual protection from developing severe COVID-19 and from pregnancy complications, and will also protect your child. But the benefits of the vaccination are not the same for all:

- If you are pregnant and have a chronic condition (for definition, see back), you are strongly advised to get a COVID-19 vaccination because, owing to your pre-existing condition, you are at greater risk of developing severe COVID-19. Getting vaccinated can reduce this risk for several months.
- If you are pregnant and have no risk factors, your risk of developing severe COVID-19 is significantly lower than for pregnant women with risk factors. You will still benefit from a vaccination, because this will slightly improve your protection.

### What vaccine should be used?

An mRNA vaccine that has been modified in the light of the current virus variants is preferably recommended. Numerous studies have shown mRNA vaccines to be both safe and effective during pregnancy.

## What side effects can the vaccination have?

The side effects that the COVID-19 vaccination has been seen to have with pregnant women are the same as in the general population. The commonest of these are reactions at the injection site (pain, redness and/or swelling), headache and fatigue. Muscle and joint pain and general symptoms such as chills, feeling feverish or a high temperature may also occur.

In very rare cases severe side effects may develop such as a severe allergic reaction or inflammation of the heart muscle or the outer lining of the heart (which is usually mild and easily treatable).

Further side effects may also be felt, with symptoms of varying durations. If you experience any severe or unexpected condition following a COVID-19 vaccination, contact a doctor, a pharmacist or the place you received your vaccination.

#### When should the vaccination be administered?

The ideal time for a COVID-19 vaccination is between mid-October and December. It can be administered from six months after the last COVID-19 vaccination or known coronavirus infection. Other vaccinations containing inactivated vaccines (such as the flu vaccination, which is recommended for all pregnant women) can also be administered before, at the same time as or after a COVID-19 vaccination. The recommendation is for the vaccination to be administered from the second trimester (i. e. after the 12<sup>th</sup> week of pregnancy) onwards. But it can also be administered in the first trimester.

# Who pays for the vaccination?

Information on the coverage of the costs of vaccinations and vaccines by compulsory health insurance will be found (in German, French and Italian) on the FOPH webpage: www.bag.admin.ch/okp-praevention

# Any further questions?

If so, please discuss these with the specialist administering your vaccination. This information sheet is not a substitute for a discussion on such vaccination with a medical professional.


Persons aged 16 years and over with the following chronic diseases have an increased risk of developing severe COVID-19 or have an increased risk of complications:

# 1. High blood pressure (hypertension)

- Arterial hypertension with end-organ damage
- Therapy-resistant arterial hypertension

### 2. Cardio-vascular diseases

#### 2.1 General criteria

- Patients with dyspnea of functional class NYHA II–IV and NT per BNP > 125 pg/ml
- Patients with at least 2 cardio-vascular risk factors (one of which is diabetes or arterial hypertension)
- Prior stroke and/or symptomatic vasculopathy
- Chronic renal insufficiency (Stage 3, GFR <60ml/min)</li>

#### 2.2 Other criteria

### 2.2.1 Coronary heart disease

- Myocardial infarction (STEMI and NSTEMI) in the past 12 months
- Symptomatic chronic coronary syndrome despite medical treatment (irrespective of any prior revascularisation)

## 2.2.2 Disease of the heart valves

- Moderate or serious stenosis and/or regurgitation in addition to meeting at least one general criterion
- Any surgical or percutaneous valve replacement in addition to meeting at least one general criterion

### 2.2.3 Cardiac insufficiency

- Cardiomyopathy with any cause
- Pulmonary arterial hypertension

#### 2.2.4 Arrhythmia

- Auricular fibrillation with a CHA2DS2-VASc score of at least 2 points
- Prior implant of pacemaker (incl. ICD and/or CRT implantation) in addition to meeting one general criterion

## 2.2.5 Adults with congenital heart disease

Congenital heart disease according to the individual assessment of the attending cardiologist

#### 3. Diabetes

 Diabetes mellitus, with long-term complications or a HbA1c of > 8%

## 4. Chronic pulmonary and respiratory diseases

- Chronic obstructive lung diseases GOLD Grade II-IV
- Pulmonary emphysema
- Uncontrolled asthma, in particular serious bronchial asthma
- Interstitial lung diseases / pulmonary fibrosis
- Active lung cancer
- Pulmonary arterial hypertension
- Pulmonary vascular disease
- Active sarcoidosis
- Cystic fibrosis
- Chronic lung infections (atypical mycobacteriosis, bronchiectasis, etc.)
- Ventilated patients
- Diseases with severely reduced lung capacity

## 5. Diseases/Therapies that weaken the immune system

- Serious immunosuppression (e.g. HIV-infection with a CD4+ T cell number of < 200µl)</li>
- Neutropenia (<1'000 neutrophils/µI) for ≥1 week
- Lymphocytopenia (<200 lymphocytes/µl)</li>
- Hereditary immunodeficiencies
- Use of medication that suppresses the immune defences (such as long-term use of glucocorticoids (prednisolone equivalent > 20 mg/day), monoclonal antibodies, cytostatics, biologics etc.)
- Aggressive lymphomas (all entities)
- Acute lymphatic leukaemia
- Acute myeloid leukaemia
- Acute promyelocytic leukaemia
- T-cell prolymphocytic leukaemia
- Primary lymphomas of the central nervous system
- Stem cell transplantation
- Amyloidosis (light-chain (AL) amyloidosis)
- Chronic lymphatic leukaemia
- Multiple myeloma
- Sickle-cell disease
- Bone marrow transplant
- Solid organ transplant
- Individuals on a transplant waiting list

#### 6. Cancer

- Cancer undergoing medical treatment

#### 7. Obesity

- Patients with a body-mass index (BMI) of 35 kg/m<sup>2</sup> or more

#### 8. Liver disease

- Cirrhosis of the liver

## 9. Kidney disease

- Chronic renal insufficiency with a GFR < 60ml/min