

# Varicella (Chickenpox) Vaccine

Vaccines have saved more lives in Canada than any other medical intervention. Vaccines help the immune system recognize and fight bacteria and viruses that cause serious diseases.

**Varicella (chickenpox) is a vaccine preventable disease.**

The virus that causes varicella (*Varicella zoster*) is very contagious and spreads easily from person to person through the air by sneezing and coughing or by direct contact with the fluid in the blisters.

## What are the symptoms of varicella?

A fever followed by a red, itchy rash starting on body within 2 weeks after exposure. The rash begins as red spots and become fluid-filled blisters that gradually crust over. The rash lasts 3 to 4 days, but new crops of blisters develop every 2 to 3 days. Varicella is more severe in teenagers, adults and those with weakened immune systems.

## What are complications from having varicella?

Pneumonia (lung infection), bacterial skin, soft tissue and bone infections, necrotizing fasciitis ('flesh-eating disease'), toxic shock syndrome and encephalitis (swelling of the brain) causing convulsions, deafness or brain damage. About 1 in 5,000 adults and 7 in 100,000 infants can die. Complications are more common in newborns, adolescents, adults and immunocompromised individuals, who are at risk of severe varicella and death. If a pregnant woman gets varicella, it causes the baby to have a low birth weight, eye problems, skin scarring, arm and leg complications, abnormal brain development, or die if the mother is infected during the baby's birth. The virus can re-activate and cause shingles (herpes zoster). Individuals who have never had chickenpox can get infected if they are exposed to someone who has shingles.

## How can varicella be prevented?

- Be immunized. When you and your child are immunized, you help protect others as well.
- Practice good hygiene (e.g., handwashing).
- Cover your mouth when coughing and your nose and mouth when sneezing to prevent direct contact with droplets from the nose or throat.

## Who can get this vaccine for free?

- Children at 12 and 18 months of age (usually combined with measles, mumps and rubella vaccine).
- If your child had varicella before their first birthday, **they still need this vaccine** as they likely have not developed long lasting immunity and could get chickenpox again.
- Non-immune people born since January 1, 1993 (check with Public Health for details).

- Select employed non-immune healthcare employees and post-secondary healthcare students.
- Non-immune women of childbearing age, before they are pregnant or after they have a baby.
- Some non-immune adults and children who have weak immune systems from a disease or medical therapy. Check with your medical specialist if you can get this vaccine.
- **NOTE: A reported history of having chickenpox is not acceptable as evidence of immunity for people born since January 1, 2003.** The vaccine is recommended **unless you have documented proof of immunity from a blood test that you had varicella at 1 year of age or older.** There is no harm in immunizing a person who may be immune but do not know it.

## Who should not get this vaccine?

- Persons who have a serious acute illness, with or without a fever, should delay immunization.
- People who had a life-threatening reaction to a previous dose of varicella-containing vaccine, or any components of the vaccine.
- Children younger than 1 year old.
- People with a family history of congenital or hereditary immunodeficiency whose immune status is unknown unless approved by a specialist.
- Those with a weak immune system (because of medicine or a health condition) unless a doctor's permission is given.
- Pregnant women.
- People with active, untreated tuberculosis (TB).

## Precautions:

- Women planning to become pregnant within one month of immunization.
- People younger than 18 years old who take salicylates (ASA or aspirin) need to be monitored by their specialist, as salicylates should be avoided for 6 weeks after varicella vaccination.
- People who have received a blood transfusion or other blood products within the past 11 months should check with their doctor or public health nurse before receiving the vaccine.
- People who have recently taken antiviral drugs.

## Other Considerations:

- If you need another live vaccine, get it at the same time or you must wait 4 weeks before receiving the other live vaccine.
- If you need a TB test or TB blood work, get it at the same time as the varicella vaccine, or delay testing for 4 weeks.

## What are common reactions to this vaccine?

**Vaccines are very safe and effective. It is much safer to get the vaccine than to get this disease.**

- **Temporary** reactions may include:
  - A fever. Monitor your child and treat their fever (at least 6 to 8 hours after immunization) if they are uncomfortable, refusing fluids and not sleeping.
  - Soreness, swelling, redness and rash where the needle was given.
  - Nausea, vomiting, diarrhea or decreased appetite.
  - Headache, dizziness, fussiness, tiredness.
  - A varicella-like (blister) rash 5 to 26 days after getting immunized. People who have this rash rarely spread the vaccine virus to others. To prevent possible viral spreading, cover the rash until the blisters have dried and crusted over.

Use **Acetaminophen** (Tylenol®, Tempra®) or **Ibuprofen** (Advil®, Motrin®) to treat fevers and pain in children and adults. **Never give ASA** (Aspirin®) to anyone younger than 18 years old because of the serious risk of Reye's syndrome.

It is important to stay in the clinic for 15 minutes after getting any vaccine because there is an extremely rare possibility of a life-threatening allergic reaction called anaphylaxis. This may include hives, difficulty breathing, or swelling of the throat, tongue or lips. This reaction can be treated, and occurs in less than one in one million people who get the vaccine. **If this happens after you leave the clinic, get medical attention or call 911 right away.**

## Who should you report reactions to?

Report any adverse or unexpected reactions to your local public health nurse, your doctor, nurse practitioner or call 811 as soon as possible.

### Talk to a public health nurse:

- If you have questions or concerns about your or your child's reaction to an immunization.
- If you or your child had to go to a doctor, a hospital or to a health centre with a symptom that might be related to immunization.

## What does varicella vaccine contain?

**VARIVAX® III** contains the Oka/Merck strain of the varicella zoster virus (live, attenuated), sucrose, hydrolyzed gelatin, urea, sodium chloride, monosodium L-glutamate, sodium phosphate dibasic, potassium phosphate monobasic, potassium chloride, water, residual components of MRC-5 cells including DNA and protein, and trace quantities of neomycin and fetal bovine serum from MRC-5 culture media. Thimerosal-free. Latex-free.

**VARILRIX®** contains the Oka strain of the varicella zoster virus (live, attenuated), amino acids, lactose, mannitol, sorbitol and water, and traces of neomycin sulphate. Thimerosal-free. Latex-free. This vaccine is only for severely immunocompromised individuals and requires specialist approval.

## Mature Minor Consent

It is recommended that parents/guardians discuss consent for immunization with their children. Efforts are first made to get parental/guardian consent for immunizations. However, children at least 13 years of age up to and including 17 years of age, who are able to understand the benefits and possible reactions for each vaccine and the risks of not getting immunized, can legally consent to or refuse immunizations in Saskatchewan by providing mature minor informed consent to a healthcare provider.

Provincial immunization fact sheets are available at [www.saskatchewan.ca/immunize](http://www.saskatchewan.ca/immunize).

**For more information, contact your local public health office, your physician, nurse practitioner, HealthLine online or by calling 811**

References: [Canadian Immunization Guide](#). Product monographs (VARILRIX® 2019; VARIVAX® III, 2023).