

Live attenuated influenza (flu) vaccine

What is the live attenuated influenza vaccine?

The live attenuated influenza vaccine (LAIV) is made from weakened influenza viruses. It protects against infection from influenza viruses and is given as a nasal spray. The vaccine does not protect against other viruses that cause colds or gastroenteritis (vomiting and diarrhea). In addition to LAIV, there are inactivated influenza vaccines available in B.C. The inactivated vaccines are made of killed influenza viruses or parts of the viruses and are given by injection. For more information, visit [HealthLinkBC File #12d Inactivated influenza \(flu\) vaccine](#). The vaccines are approved by Health Canada.

In B.C., influenza vaccines are usually available beginning in October. For your best protection, get immunized as soon as possible. You can find information on booking an appointment to get immunized on the Government of British Columbia's website at www2.gov.bc.ca/gov/content/health/managing-your-health/immunizations/flu.

Who should get the vaccine?

Influenza vaccines are available at no charge and recommended for everyone 6 months of age and older. Those younger than two years of age will need to receive the inactivated influenza vaccine given by injection. LAIV, or another influenza vaccine, is especially recommended for those at high risk of serious illness from influenza. This includes:

- All children two years to less than 5 years of age
- Children 5 to 17 years of age with certain medical conditions, including:
 - asthma, chronic obstructive pulmonary disease or cystic fibrosis
 - Kidney disease, chronic liver disease such as hepatitis, diabetes, cancer or anemia
 - Health conditions causing difficulty breathing, swallowing or a risk of choking on food or fluids, such as people with severe brain damage, spinal cord injury, seizures or neuromuscular disorders
 - Those who are very obese

Indigenous children may be at increased risk of serious illness from influenza due to health inequities resulting from colonialism.

Children 5 to 17 years of age who are household contacts of those who are at high risk of serious illness from influenza should also get the vaccine. A list of those at high risk of serious influenza illness is provided in [HealthLinkBC File #12d Inactivated influenza \(flu\) vaccine](#).

Adults 18 to 59 years of age with intense fear of needles may get LAIV if they are unwilling to get the inactivated influenza vaccine. However, the inactivated influenza vaccine is recommended for adults because it provides better protection against influenza infection than the live vaccine in this age group.

How is the vaccine given?

LAIV is given as a spray into both nostrils. Children 9 years of age and older need one dose of vaccine. Children 2 to 8 years of age who have never received an influenza vaccine need two doses given 4 weeks apart. The second dose improves their level of protection.

What are the benefits of getting the vaccine?

The vaccine is the best way to protect against influenza, a serious and sometimes fatal infection. When you get immunized, you help protect others as well by reducing the spread of the influenza virus.

What are the possible reactions after the vaccine?

LAIV contains weakened influenza viruses and may cause mild influenza symptoms, but these are much milder than those due to influenza infection. Symptoms may include a runny or stuffy nose, cough, sore throat and fever.

Other symptoms can include:

- Headache
- Decreased appetite
- Weakness
- Muscle soreness
- Chills
- Vomiting
- Stomach ache
- Irritability

Acetaminophen (e.g. Tylenol®) or ibuprofen (e.g. Advil®) can be given for fever or soreness. ASA (e.g. Aspirin®) should not be given to anyone under 18 years of age due to the risk of Reye Syndrome.

For more information on Reye syndrome, visit [HealthLinkBC File #84 Reye syndrome](#).

It is important to stay in the clinic for 15 minutes after getting any vaccine. There is an extremely rare possibility of a life-threatening allergic reaction called anaphylaxis. This happens in less than one in a million people who get the vaccine. Symptoms may include hives, difficulty breathing, or swelling of the throat, tongue or lips. If this reaction occurs, your health care provider is

prepared to treat it. Emergency treatment includes administration of epinephrine (adrenaline) and transfer by ambulance to the nearest emergency department. If symptoms develop after you leave the clinic, call **9-1-1** or the local emergency number.

Guillain-Barré Syndrome (GBS) is a rare condition that can result in weakness and paralysis of the body's muscles. It most commonly occurs after infections. In rare cases, GBS can also occur after some vaccines. GBS may be associated with influenza vaccine in about one per million recipients.

Always report serious or unexpected reactions to your health care provider.

After getting the influenza vaccine, you might be contacted to participate in a study monitoring the safety of the vaccine. To learn more about the CANVAS study please visit <https://canvas-network.ca>.

Who should not get the live attenuated influenza vaccine?

Children less than two years of age, and people who are pregnant, or planning to become pregnant, should not get the vaccine.

Speak with your health care provider if your child:

- Has an immune system weakened by disease or medical treatment
- Has severe asthma or active wheezing
- Had a life-threatening reaction to a previous dose of influenza vaccine, or any part of the vaccine (people with egg allergies can be safely immunized)
- Developed GBS within 8 weeks of getting any influenza vaccine without another cause being identified
- Is required to take Aspirin® or ASA for long periods of time due to a medical condition

People who will have contact with anyone who has a very weak immune system, such as a bone marrow transplant patient, within two weeks of

being immunized should receive the inactivated influenza vaccine. If such contact can be avoided, they may receive LAIV.

There is no need to delay getting immunized because of a cold or other mild illness. However, if you have concerns speak with your health care provider.

What is influenza?

Influenza is an infection of the respiratory system caused by the influenza virus. A person with influenza is at risk of other infections, including viral or bacterial pneumonia, which is an infection of the lungs.

Influenza spreads easily from person-to-person through coughing, sneezing, or having face-to-face contact. The virus can also spread when you touch tiny droplets from a cough or sneeze on another person or object and then touch your eyes, mouth or nose before washing your hands.

Mature minor consent

It is recommended that parents or guardians and their children discuss their consent for immunization. Children under the age of 19, who are able to understand the benefits and possible reactions for each vaccine and the risk of not getting immunized, can legally consent to or refuse immunizations. For more information on mature minor consent visit [HealthLinkBC File #119 The Infants Act, mature minor consent and immunization](#).

For more information

For more information, visit the following HealthLinkBC Files:

- [HealthLinkBC File #12a Why seniors should get the inactivated influenza \(flu\) vaccine](#)
- [HealthLinkBC File #12b Facts about influenza \(the flu\)](#)
- [HealthLinkBC File #12c Influenza \(flu\) immunization: Myths and facts](#)
- [HealthLinkBC File #12d Inactivated influenza \(flu\) vaccine](#)



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