



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 instead of by injection. 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, see [HealthLinkBC File #12d Inactivated Influenza \(Flu\) Vaccine](#). All of the vaccines are approved by Health Canada.

In B.C., influenza vaccines are usually available in October. For your best protection, get immunized as soon as possible. Speak with your health care provider to find out when and where the vaccines are available.

Who should get the vaccine?

In the 2022-23 influenza season, influenza vaccine is available at no charge for infants and children 6 months of age and older. Those younger than 2 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 2 years to less than 5 years of age
- Children 5 to 17 years of age with certain medical conditions, including:
 - Heart or lung disorders that require regular medical care, such as mild to moderate 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

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 18-59 years of age with intense fear of needles may also 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.

How is the vaccine given?

LAIV is given as an intranasal spray into both nostrils. Children 9 years of age and older need 1 dose of vaccine. Children 2 to 8 years of age who have never received a seasonal influenza vaccine need 2 doses. The second dose of vaccine is important to raise their level of protection and should be given 4 weeks after the first dose.

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, see [HealthLinkBC File #84 Reye Syndrome](#).

It is important to stay in the clinic for 15 minutes after getting any vaccine because there is an extremely rare possibility, less than 1 in a million, of a life-threatening allergic reaction called anaphylaxis. This 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.

It is important to always report serious or unexpected reactions to your health care provider.

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 1 per million recipients.

Who should not get the live attenuated influenza vaccine?

Children less than 2 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 Guillain-Barré Syndrome (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
- Is receiving an immune checkpoint inhibitor to treat cancer. This may affect when they should get the vaccine

People who will have contact with anyone who has a very weak immune system, such as a bone marrow transplant patient, within 2 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 touches your eyes, mouth or nose before washing your hands.

What is the Influenza Prevention Policy?

B.C. has an Influenza Prevention Policy to protect high risk people from influenza. Health care workers are required to get immunized against influenza or wear a mask when they are in patient care areas during the influenza season. Students, volunteers and visitors to health care facilities and other patient care locations are also expected to wear a mask if they did not get an influenza vaccine.

Mature Minor Consent

It is recommended that parents or guardians and their children discuss 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 see [HealthLinkBC File #119 The Infants Act, Mature Minor Consent and Immunization](#).

For More Information

For more information, see 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](#)

For more information on immunizations visit ImmunizeBC at <https://immunizebc.ca/>.



BC Centre for Disease Control
Provincial Health Services Authority

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