



An Oifig Náisiúnta
Imdhíonta
National
Immunisation Office

Influenza FAQ

2026/2027

Influenza vaccination programme
autumn/winter 2026/2027



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Annual influenza vaccination is strongly recommended for those aged 60 years and older, those with underlying conditions that increase the risk of serious illness, all children aged 2 to 17 years, all pregnant women, and all healthcare workers. Ideally, the influenza vaccine should be given early in the influenza season, before influenza begins to spread in our communities.

The following information has been developed to support healthcare professionals who are administering influenza vaccines and health professionals who are responding to queries about influenza vaccines for the 2026/2027 influenza season.

The information has been divided into the following sections

- **Section 1: General Information on the HSE Seasonal influenza vaccination programme 2026/2027**
- **Section 2A: Inactivated Influenza Vaccine (IIV)**
- **Section 2B: IIV and Pregnancy**
- **Section 3 Adjuvanted (Enhanced) Inactivated Influenza Vaccine (aIIV)**
- **Section 4: Live Attenuated Influenza Vaccine (LAIV)**
- **Section 5: Co-administration of vaccines**

Visit www.hse.ie/flu for information for people getting influenza vaccines.

Section 1: General Information Seasonal influenza vaccination programme

When should the flu vaccine be given?

The flu vaccine is recommended every year as soon as it is available. Getting the flu vaccine at the start of the flu season, before flu begins to spread, provides the best available protection from flu and can help to stop the spread of flu infection.

How long does the influenza season last?

The influenza season usually starts at the beginning of October and lasts until the end of April.

Why is the flu vaccine recommended every year?

The flu vaccine changes every year to match the expected circulating strains - therefore you need a flu vaccine every year.

What seasonal influenza vaccines will be available this year?

The 2026/2027 HSE seasonal flu vaccination programme will offer four influenza vaccines:

- **Standard** inactivated influenza vaccines (**IIV**). IIVs are injectable influenza vaccines recommended for all adults aged 60-64 years, children aged 6 months to less than 2 years, children aged 2 to 17 years with a contraindication to receiving LAIV, and adults aged 18-59 years in eligible groups
 - Brands available: **Influvac sub-unit** supplied by Viartis, or **Vaxigrip** supplied by Sanofi.
- **Live Attenuated Influenza Vaccine (LAIV)**, a nasal spray vaccine, recommended for those aged 2-17 years.
 - Brand available: **Fluenz** nasal spray suspension influenza vaccine (live attenuated, nasal) manufactured by AstraZeneca Pharmaceuticals (Ireland) DAC
- **Adjuvanted (enhanced)** inactivated influenza vaccine (**aIIV**). aIIV is an injectable influenza vaccine recommended by the National Immunisation Advisory Committee (NIAC) **only for those aged 65 years and older**.
 - Brand available: **Fluad** supplied by Seqirus. This is an injectable vaccine.

What is the composition of this year's seasonal influenza vaccines?

Vaccines recommended by the World Health Organisation (WHO) are prepared each year using virus strains similar to those considered most likely to circulate in the forthcoming season.

B/Yamagata lineages are no longer circulating (last detected March 2020) and are unlikely to cause future epidemics. Therefore, WHO has concluded that the inclusion of a B/Yamagata antigen component of influenza vaccine is no longer warranted. Trivalent live attenuated vaccines were introduced in the 2024/2025 season and offer the same level of protection against the two A and one B flu virus strains as the quadrivalent live vaccine.

The WHO recommends that trivalent vaccines for use in the 2026-2027 northern hemisphere influenza season contain the following:

- A/Missouri/11/2025 (H1N1)pdm09-like virus;
- A/Darwin/1454/2025 (H3N2)-like virus; and
- B/Tokyo/EIS13-175/2025 (B/Victoria lineage)-like virus

See WHO recommendations [here](#) (you will be directed to the WHO website).

Is influenza vaccine effective?

The efficacy and effectiveness of influenza vaccines depend on the vaccine type, age and immune status of the vaccine recipient, prior influenza vaccination or infection, and the similarity between the circulating influenza virus strains and those included in the seasonal vaccine.

In adults, IIV show variable effectiveness by season and strain, but consistently reduce influenza-related complications and hospitalisations.

LAIV contains live attenuated viruses and mimics natural infection, which induces more durable immune memory, thereby potentially offering better long-term protection to children than inactivated influenza vaccines. Furthermore, LAIV is thought to provide broader protection and potentially offer better protection against strains that have undergone antigenic drift.

Overall, despite seasonal and inter-individual variation in the effectiveness of influenza vaccines, vaccination consistently reduces the overall risks associated with influenza infection both for the vaccinated person and their contacts.

Read [this factsheet](#) from the European Centre for Disease Prevention and Control for more information on seasonal influenza and flu vaccines (you will be directed to the ECDC website).

How long does it take the influenza vaccine to work?

The vaccine starts to work within 2 weeks.

Who should receive an influenza vaccine?

The HSE recommends influenza vaccine for:

- People aged 60 years or older.
- All pregnant women at any stage of pregnancy.
- Children aged 2-17 years.
- Those aged 6-23 months and 18 to 59 years who are at increased risk of influenza- related complications including those with:
 - Cancer
 - Chronic heart disease, Chronic kidney disease, Chronic liver disease, Chronic neurological disease, Chronic respiratory disease
 - Diabetes and other metabolic disorders, including inherited metabolic disorders
 - Haemoglobinopathies
 - Immunocompromise due to disease or treatment
 - Body mass index $\geq 40\text{kg/m}^2$
 - Serious mental health conditions
 - Children and adults with Down syndrome
 - Children with moderate to severe neurodevelopmental disorders
 - Children on long term aspirin therapy
- All those aged 18 years and older living in residential care facilities for older people and other long stay facilities
- Healthcare workers
- Household contacts and carers of people at increased risk of influenza related complications
- People in close, regular contact with pigs, poultry or waterfowl

Reporting adverse events

Reporting suspected adverse reactions to vaccines is important to ensure the continuous monitoring of safety. Healthcare professionals are encouraged to report any suspected adverse reaction to the Pharmacovigilance section of the Health Products Regulatory Authority (HPRA).

If you think, you or your child have had a side effect after receiving a vaccine, you can report it to the Health Products Regulatory Authority ([HPRA](http://www.hpra.ie)) at www.hpra.ie. Your doctor, nurse, pharmacist or a family member can also report the side effect to the HPRA.

The name of the vaccine and batch number, where known, should be included. For serious or severe suspected adverse reactions, as much information as possible is requested.

Section 2A: Inactivated Influenza Vaccine (IIV)

Who should NOT receive IIV?

IIV should NOT be given to:

- Those with a history of anaphylaxis to a previous dose of influenza vaccine or any of its constituents.

Precautions:

- Acute severe febrile illness (temperature > 38°C) – defer until recovery.
- Egg allergy (see next question)
- Patients on combination checkpoint inhibitors (e.g. ipilimumab plus nivolumab) because of a potential association with immune-related adverse reactions.
- Neutropenia is not an absolute contraindication to influenza vaccination
 - People with chronic neutropenia and primary autoimmune neutropenia can receive influenza vaccine unless otherwise contraindicated
 - Among people receiving chemotherapy, vaccine responses may be sub-optimal and vaccine should be administered at the point of least immunosuppression, for example before the start of a chemotherapy cycle. For people with chemotherapy-induced severe neutropenia ($\leq 0.5 \times 10^9/L$), vaccination should be deferred to avoid precipitating a febrile episode that may result in unnecessary investigations and treatment
- IIV should be separated from pneumococcal conjugate vaccine (PCV13) by at least 1 week for children aged 12-23 months because of a slightly increased risk of febrile convulsions if the vaccines are given at the same time in this age group.

Visit www.hpra.ie to read the licensed information about the vaccine: Summary of Product Characteristics (SmPC) and Patient Information Leaflet (PIL). (you will be directed to the HPRA website).

Can people with egg allergy receive IIV?

Those with confirmed egg anaphylaxis or egg allergy can be given this influenza vaccine in a primary care or school setting with the exception of those who have required admission to ICU for a previous severe anaphylaxis to egg.

Those requiring an influenza vaccine who have had a previous ICU admission for a severe anaphylaxis to egg should be referred for specialist assessment with regard to vaccine administration in hospital.

How many doses of IIV are required?

Table 1 summarises the doses of inactivated influenza vaccine required.

Table 1: Dose of IIV

Group	Dose
Children aged 6 months to <9 years*	Two doses 4 weeks apart, if - receiving influenza vaccine for the first time or - vaccination history is unknown
Post hematopoietic stem cell or Post solid organ transplant	Two doses 4 weeks apart, if receiving influenza vaccine for the first time post-transplant
Cancer patients who receive the vaccine while on chemotherapy and who complete their treatment in the same season**	Two doses 2nd dose at least four weeks after completion of treatment and at least 4 weeks after 1st dose (regardless of influenza vaccination in previous seasons)
All others	One dose

*Note that children aged 2-17 years will be offered LAIV; only those for whom LAIV is contraindicated should receive IIV.

**If the lymphocyte count is $> 1.0 \times 10^9/L$

Are there any side effects from IIV vaccination?

IIV	
Local:	Injection site pain, tenderness and swelling are very common in young children. Injection site pain is very common in adults.
General:	Irritability, drowsiness and myalgia are very common in young children. Headache, myalgia and malaise are very common in adults.
Very rare:	Immediate allergic reactions. Very rare reports of Guillain-Barré syndrome (GBS) have been observed in the post-marketing setting following influenza vaccination. The incidence cannot be estimated from known data. The risk of GBS following influenza infection is several times greater than that following influenza vaccination.

Source: [NIAC](#) Immunisation guidelines chapter 11

For more information on adverse reactions after Vaxigrip or Influvac Sub-unit read the licensed information about the vaccine; the Summary of Product Characteristics (SmPC) and Patient Information Leaflet (PIL), by visiting www.hpra.ie (you will be directed to the HPRA website).

How do I give IIV?

- Only licensed for those aged 6 months and over.
- Suspension for injection in prefilled syringes.
- The vaccine should be allowed to reach room temperature before use. Shake before use. Inspect visually prior to administration. The vaccine should not be used if foreign particles are present in the suspension.
- The vaccine, after shaking gently, is a colourless clear liquid.
- A dose is 0.5ml given by intramuscular injection into the anterolateral thigh (children 6-35 months old) or deltoid (from 36 months of age).

Why is the flu vaccine important for people aged 60 years and over?

People aged 60 years and over are more at risk of severe illness, hospitalisation or death from flu. The flu vaccine provides the best available protection against the serious complications of flu.

Where is IIV available?

The influenza vaccine is available from participating GP practices or pharmacies.

Section 2B: IIV and Pregnancy

Why do pregnant women need influenza vaccine?

Influenza vaccination protects women during and after pregnancy.

- Pregnancy increases the risk of complications from influenza due to alterations in heart rate, lung capacity and immunological function.
- Vaccination during pregnancy can provide passive immunity to infants up to the first 6 months of life, when babies are too young to receive the influenza vaccine. Infants under 6 months have a higher rate of hospitalisation from influenza.

Is it safe to give IIV to pregnant women?

Yes. Pregnant women are advised the IIV vaccine. The IIV is an inactivated influenza vaccine; it is not a live vaccine. It has been given to millions of pregnant women and is considered very safe in pregnancy.

At what stage of pregnancy should women receive IIV?

The vaccine can be given to pregnant women at any stage of pregnancy during influenza season.

Should a woman who was pregnant at the end of the 2025/2026 influenza season, who received influenza vaccine then, and who has not yet delivered her baby receive 2026/2027 influenza vaccine now?

Yes. [The National Immunisation Advisory Committee](#) (NIAC) has recommended that in these instances that the pregnant woman receives a further dose of influenza vaccine. This is because there is a new strain in this season's vaccine and immunity from the first dose could have waned. (you will be directed to the HIQA website)

Can pertussis vaccine be given at the same time as influenza vaccine in Pregnancy?

Yes. Both vaccines can be given at the same time.

Note: Pertussis vaccine is recommended between 16-36 weeks of pregnancy.

Section 3: Adjuvanted Inactivated Influenza Vaccine (aIIV)

What vaccine is recommended for people aged 65 years and older?

The [National Immunisation Advisory Committee](#) (NIAC) recommends the adjuvanted (enhanced) inactivated influenza vaccine for all those aged 65 years and older. This enhanced influenza vaccine is called Fluad.

What is Fluad?

Fluad is an injectable influenza vaccine that is recommended for all those aged 65 years and older. It protects against three strains of the influenza virus expected to circulate this flu season as recommended by the WHO.

It is an inactivated vaccine-meaning it does not contain any live virus. It also contains an adjuvant (an ingredient) to improve its effectiveness.

Why is the enhanced flu vaccine recommended for everyone aged 65 years and older?

If you are 65 years and older you are at higher risk of serious illness from flu. As we get older our immune system may not respond as well to vaccines. The enhanced vaccine is designed to help the immune system respond better to give stronger protection against flu.

How do adjuvanted vaccines improve the effectiveness of the vaccine?

Adjuvanted vaccines contain an extra ingredient called an 'adjuvant' that increases the immune response, compared with standard vaccines. Adjuvants have been used safely in vaccines for many years.

The adjuvant used in Fluad is MF59, which contains squalene, a naturally occurring substance found in humans, plants and animals.

Who should not get the Flud vaccine?

allIV should **NOT** be given to:

- Those with a history of anaphylaxis to a previous dose of influenza vaccine or any of its constituents.

Precautions:

- Acute severe febrile illness (temperature > 38°C) – defer until recovery.
- Egg allergy (see next question)
- Patients on combination checkpoint inhibitors (e.g. ipilimumab plus nivolumab) because of a potential association with immune-related adverse reactions.
- Neutropenia is not an absolute contraindication to influenza vaccination
 - People with chronic neutropenia and primary autoimmune neutropenia can receive influenza vaccine unless otherwise contraindicated
 - Among people receiving chemotherapy, vaccine responses may be sub-optimal and vaccine should be administered at the point of least immunosuppression, for example before the start of a chemotherapy cycle. For people with chemotherapy-induced severe neutropenia ($\leq 0.5 \times 10^9/L$), vaccination should be deferred to avoid precipitating a febrile episode that may result in unnecessary investigations and treatment

Visit www.hpra.ie to read the licensed information) about the vaccine: Summary of Product Characteristics (SmPC) and Patient Information Leaflet (PIL). (*you will be directed to the HPRA website*).

Can Flud be given to people with an egg allergy?

Adjuvanted IIV vaccine may contain traces of ovalbumin.

Those with confirmed egg anaphylaxis or egg allergy can be given this influenza vaccine in a primary care setting with the exception of those who have required admission to ICU for a previous severe anaphylaxis to egg.

Those requiring this vaccine who have had a previous ICU admission for a severe anaphylaxis to egg should be referred for specialist assessment with regard to vaccine administration in hospital.

What are the known side effects after the Fluad vaccine?

aIIV	
Local:	Injection site pain is very common.
General:	Fatigue, headache, myalgia and arthralgia are very common. Nausea, loss of appetite, diarrhoea, fever and influenza like illness are common. Lymphadenopathy and vomiting are uncommon. A higher incidence of mild post-immunisation reactions has been reported with adjuvanted compared to non-adjuvanted influenza vaccines.
Very rare:	Immediate allergic reactions. Very rare reports of Guillain-Barré syndrome (GBS) have been observed in the post-marketing setting following influenza vaccination. The incidence cannot be estimated from known data. The risk of GBS following influenza infection is several times greater than that following influenza vaccination.

People who get Fluad may experience more of the mild side effects such as increased redness at the injection site, a sore arm, or muscle aches compared to standard IIV's.

Source: [NIAC](#) Immunisation guidelines chapter 11

For more information on adverse reactions after Fluad read the licensed information about the vaccine; the Summary of Product Characteristics (SmPC) and Patient Information Leaflet (PIL), by visiting www.hpra.ie (you will be directed to the HPRA website).

How many doses of Fluad are required?

NIAC recommend that all those aged 65 years and older require 1 dose of aIIV per influenza season.

How to use Fluad?

Fluad comes in pre-filled syringes.

The normal appearance of Fluad is a milky-white suspension.

A single dose (0.5ml) of Fluad is administered intramuscularly into the deltoid muscle.

Gently shake before use.

After shaking, the normal appearance of the vaccine is a milky-white suspension.

Visually inspect the contents of each pre-filled syringe for particulate matter and/or variation in appearance prior to administration.

If either condition is observed, do not administer the vaccine.

If the Inactivated Influenza Vaccine (IIV) has been given to a person aged 65 years and over, do they need to be revaccinated with the recommended Fluad vaccine?

No, if someone has already received a dose of standard IIV they do not need revaccinating with Fluad.

Can Fluad vaccine be given to those under the age of 65 e.g. immunocompromised people?

No. NIAC recommend Fluad only for those aged 65 years and older.

Where can I get the adjuvanted flu vaccine?

It is available from participating pharmacies and GP surgeries for adults aged 65 years and over.

What if aIIV is not available?

IIV is recommended if aIIV is not available

Section 4: Live Attenuated Influenza Vaccine (LAIV)

Why is influenza vaccine recommended for all children aged 2 – 17 years?

[NIAC](#) has recommended the nasal influenza vaccine for children to prevent cases of influenza in children and in the wider community.

For 2026/2027, LAIV is available free of charge for all children aged 2 to 17 years inclusive. If LAIV is contraindicated for someone aged 2-17 years, IIV should be given.

Influenza can cause serious illness in children, particularly those in younger age groups, and vaccination reduces this risk. Additionally, vaccinating children will also decrease transmission to others and so reduce morbidity and mortality in those in the clinical risk groups and older adults.

Are children at risk of influenza?

Influenza virus can cause illness in people of all ages. The risk of severe disease and complications is increased in young children.

Additionally, children can contribute to the burden of influenza in all age groups. Compared to adults, children are more likely to transmit influenza infection to others. Children can transmit influenza for 10 or more days (compared to 6 days for adults) increasing spread of the disease. Children attending day-care centres and schools are likely to transmit influenza in the community.

Vaccinating as many children as possible against influenza will reduce their rates of infection and associated complications and will limit the spread of influenza infection in the community including to those vulnerable to severe infection.

What symptoms of influenza do children have?

Common symptoms include a sudden onset of fever, chills, headache, muscle and joint pain and extreme fatigue, a dry cough, sore throat and stuffy nose. Young children may develop gastrointestinal symptoms such as vomiting and diarrhoea.

Infection may be asymptomatic.

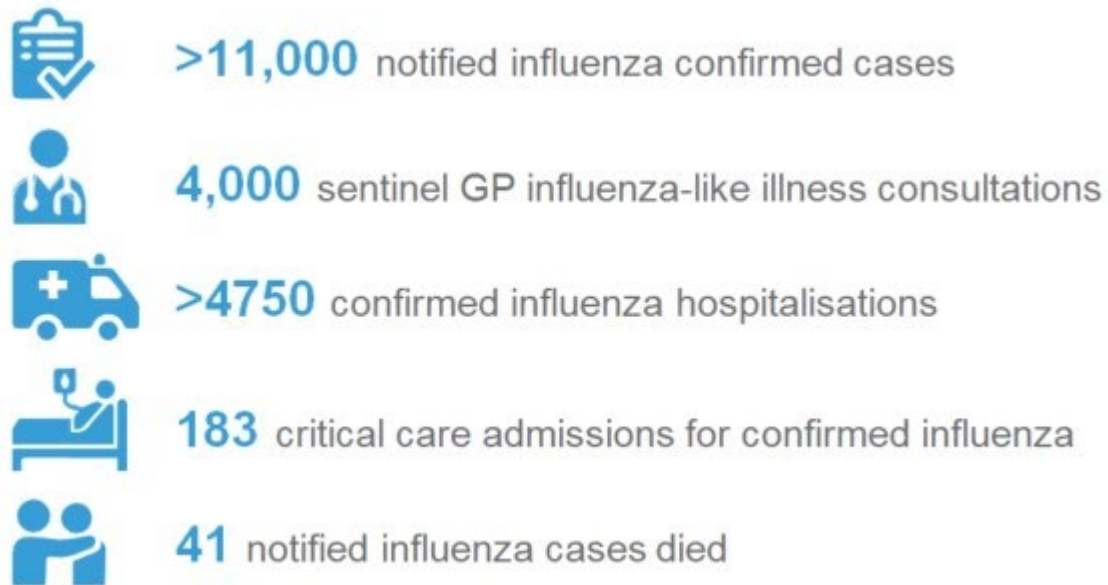
Common complications are bronchitis, otitis media, sinusitis and secondary bacterial pneumonia.

Less commonly, meningitis, encephalitis, meningoencephalitis and influenza pneumonia are seen.

What are the rates of influenza infection in children?

It is estimated that up to 10% of children under 15 years of age attend their GP with influenza in an average season. Incidence rates are highest in the younger age groups.

Figure 1: Burden of paediatric influenza on the Irish health system 2009/10-2018/19



Source: HPSC

In Ireland, in 2025/2026 the highest age specific rates for hospitalised influenza cases were in those aged 80 years and older, and those aged <5 years.

What is the Live Attenuated Influenza Vaccine (LAIV)?

Live attenuated influenza vaccine (LAIV)—trivalent is a reassortant influenza virus vaccine containing antigens from two type A and one type B virus strains, produced in Vero cells and cultured in hens' eggs. The vaccine is provided as a nasal spray suspension. LAIV viruses cannot cause influenza as they are cold adapted and cannot replicate efficiently at body temperature.

LAIV has been offered to children in Ireland since 2020.

The name of the trivalent LAIV vaccine available for the 2026/2027 influenza vaccination programme is Fluenz and it is manufactured by AstraZeneca.

For information on the vaccine contents please see the licensed documentation which can be found on www.hpra.ie. (you will be directed to the HPRA website)

How long has LAIV been in use?

LAIV was first licensed in 2003 and since then millions of doses have been given to children across the world.

What other countries give LAIV to children?

LAIV has been given to children over many years in the USA, UK, Canada, and countries in the EU.

How effective is LAIV?

In children, LAIV provides seasonally variable protection against influenza-associated hospitalisations and GP presentations.

LAIV contains live attenuated viruses and mimics natural infection, which induces more durable immune memory, thereby potentially offering better long-term protection to children than inactivated influenza vaccines. Furthermore, LAIV is thought to provide broader protection and potentially offer better protection against strains that have undergone antigenic drift.

Who should receive LAIV?

LAIV is offered to all children age 2 to 17 years inclusive as part of the 2026/2027 HSE seasonal influenza vaccination programme.

Children who are 2 years on the date of vaccination are eligible to receive LAIV.

Children who are 17 years on the date of vaccination are eligible to receive LAIV.

For this age group LAIV is recommended (unless contraindicated). IIV should only be given to children if LAIV is contraindicated.

How long does LAIV take to work?

Like IIV, LAIV takes about two weeks to provide protection against the three influenza strains in the vaccine.

How many doses of LAIV are required for healthy children?

Children not in a medically at risk group require one dose of LAIV.

Why is only one dose of LAIV required for healthy children and not two doses as per the licensed information?

Post marketing effectiveness studies have shown:

Adequate efficacy after one dose of LAIV.

A second dose of LAIV is of little added benefit to healthy children.

[NIAC](#) has recommended that all healthy children should receive a single dose of LAIV. *(you will be directed to the HIQA website)*

How many doses of LAIV are recommended for a child in a medically at risk group?

- **Children in a medically at risk group aged 2 to 8 years inclusive,**
 - who have not had any influenza vaccine before **require two doses of LAIV, 4 weeks apart**
 - who have received at least one previous dose of any influenza vaccine, require one dose of LAIV
- **Children in a medically at risk group aged 9 to 17 years inclusive**
 - require one dose of LAIV regardless of their previous vaccination history

Schedule for live attenuated influenza vaccine (LAIV)

Group	Age	Previous vaccination	Dose
Medically at risk	2 to 8 years	Have never had any influenza vaccine	Two doses 4 weeks apart
		Have had any influenza vaccine before	One dose
	9 to 17 years	N/A	One dose
Healthy	2 to 17 years	N/A	One dose

What groups are medically at risk and require 2 doses of LAIV if they are aged 2-8 years and have not received a dose of an influenza vaccine before?

Previously unvaccinated children aged 2 to 8 years inclusive with the following medical conditions require two doses of LAIV, 4 weeks apart:

- Cancer
- Chronic heart disease, Chronic renal failure, Chronic liver disease, Chronic neurological disease, Chronic respiratory disease
- Diabetes mellitus and other metabolic disorders, included inherited metabolic disorders
- Haemoglobinopathies
- Immunocompromise due to disease or treatment
- Body Mass Index $\geq 40\text{kg/m}^2$
- Serious mental health conditions
- Children and adults with Down syndrome
- Children with moderate to severe neurodevelopmental disorders

Who should not receive LAIV?

Contraindications

- Anaphylaxis following a previous dose of influenza vaccine or any of its constituents (other than ovalbumin – see Precautions)
- Significant immunosuppression due to disease or treatment (e.g. acute/chronic leukaemia, lymphoma, HIV positive not on highly active antiretroviral therapy, cellular immune deficiency, high dose steroids $>0.5\text{mg/kg/day}$ in children $<40\text{kgs}$ or on other immunosuppressive drugs)
- Children who live with severely immunosuppressed persons requiring isolation (e.g. post haematopoietic stem cell transplant)
- Asthma
 - Acute exacerbation of symptoms, increased wheezing and/or additional bronchodilator treatment in the last 72 hours
 - Seek specialist advice if on regular oral steroids or previous critical care admission
- Taking systemic aspirin or other salicylates as Reye's syndrome has been reported following the use of salicylates during wild-type influenza infection
 - Salicylates should also not be used for four weeks after vaccination unless medically indicated
 - LAIV may be administered to children and adolescents receiving topical salicylate therapy for treatment of localised conditions
- Influenza antiviral medication.
 - LAIV should be delayed if a child has taken influenza antiviral medication within the previous 48 hours.
 - Antiviral medication should be avoided for 2 weeks post vaccination as it may affect the response to the vaccine
- Pregnancy or breastfeeding

- Those post cochlear implant until the risk of a Cerebrospinal fluid (CSF) leak has resolved. Consult with the relevant specialist
- Those with a cranial CSF leak

The following are **NOT** contraindications to LAIV in children aged 2-17 years:

- living with human immunodeficiency virus (HIV) who are receiving antiretroviral therapy and attaining viral suppression
- receiving topical or inhaled corticosteroids or low-dose systemic corticosteroids
- receiving corticosteroids as replacement therapy, such as for adrenal insufficiency

Precautions

- Defer until recovered from an acute severe febrile illness
- Egg allergy (see next question)
- Receiving combination checkpoint inhibitor therapy such as ipilimumab plus nivolumab, because of a potential association with immune-related adverse reactions
 - Consult with the relevant specialist who may opt to administer influenza vaccine following an individual risk benefit assessment
- Neutropenia is not an absolute contraindication to influenza vaccination
 - People with chronic neutropenia and primary autoimmune neutropenia can receive influenza vaccine unless otherwise contraindicated
 - Among people receiving chemotherapy, vaccine responses may be sub-optimal and vaccine should be administered at the point of least immunosuppression, for example before the start of a chemotherapy cycle. For people with chemotherapy-induced severe neutropenia ($\leq 0.5 \times 10^9/L$), vaccination should be deferred to avoid precipitating a febrile episode that may result in unnecessary investigations and treatment
- IIV is preferred in certain decompensating inherited metabolic disorder. LAIV is recommended in those with stable, non-decompensating inherited metabolic disorders without associated immunocompromise such as phenylketonuria, homocystinuria, galactosaemia, and some lysosomal storage disorders. If there is uncertainty about whether a child's diagnosis is considered a decompensating metabolic disorder, advice should be sought from a treating specialist

Visit www.hpra.ie to read the licensed information) about the vaccine: Summary of Product Characteristics (SmPC) and Patient Information Leaflet (PIL). (*you will be directed to the HPRA website*).

Can people with egg allergy receive LAIV?

As LAIV has an ovalbumin content less than 0.024 micrograms per 0.2ml dose, it can be given to children with confirmed egg anaphylaxis or egg allergy in a primary care or school setting with the exception of those who have required admission to ICU for a previous severe anaphylaxis to egg.

LAIV is the preferred vaccine for children aged 2 to 17 years who have required admission to ICU for a previous severe anaphylaxis to egg as the intranasal route is less likely to cause systemic reactions. They should be given LAIV in hospital.

What if LAIV is contraindicated?

IIV should be given if LAIV is contraindicated. Check that there are no contraindications to IIV

Does LAIV contain porcine gelatin?

LAIV contains porcine gelatin as a stabiliser.

Can a child taking daily steroids for conditions other than asthma receive LAIV?

Yes. Children receiving topical or inhaled corticosteroids, low dose systemic corticosteroids or replacement therapy corticosteroids can be given LAIV.

What vaccine should I use if the child is living with/in close contact with someone who is immunocompromised?

There is a theoretical potential risk of transmission of the live attenuated flu virus in LAIV to very severely immunosuppressed contacts (for example patients who have had a bone marrow transplant who require total isolation) for one to two weeks following vaccination.

[The NIAC guidelines advise](#) that children who live with severely immunocompromised persons requiring isolation (e.g. post haematopoietic stem cell transplant) should not receive the LAIV. This is a precautionary measure.

Any child living with a person who is immunocompromised by treatment or disease may have the LAIV vaccine unless the person has to live in a total isolation room.

LAIV is contraindicated in a child living with someone who is severely immunocompromised and requires isolation such as a person who has had a haematopoietic stem cell transplant. Such a child should be given IIV.

Should immunocompromised children or staff be excluded from school when LAIV is being administered?

Excluding children or staff from school during the period when LAIV is being offered is not necessary.

The only exception to this would be if the person were extremely immunocompromised (for example a person who has just had a bone marrow

transplant). These people are normally advised not to attend school/work because of the more definite and higher risk of them acquiring other infections.

What about virus shedding?

Vaccinated children can shed the attenuated virus for a few days after vaccination but the virus does not survive for long outside the body.

Although vaccinated children are known to shed virus a few days after vaccination, the vaccine virus that is shed is less able to spread from person to person than the natural infection. The amount of virus shed is normally below the levels needed to pass on infection (transmit) to others and the virus does not survive for long outside of the body. This is in contrast to natural flu infection, which spreads easily during the flu season. In schools using vaccine, therefore, the overall risk of influenza transmission is reduced by having a large number of children vaccinated.

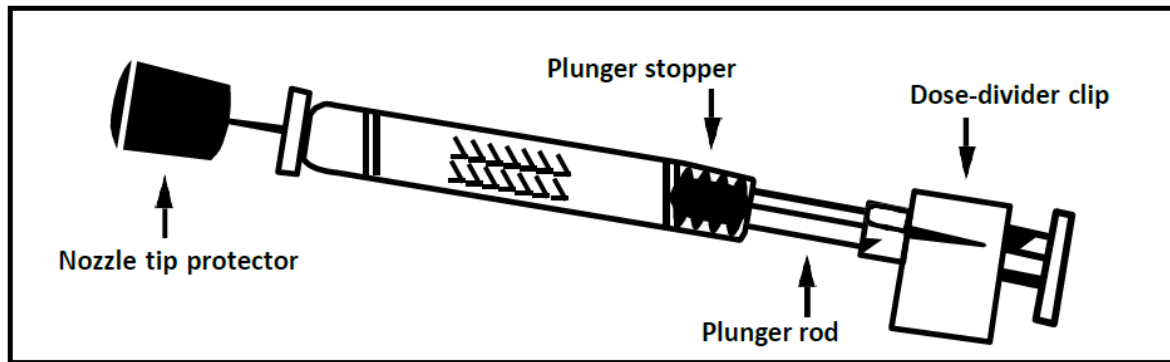
There has been extensive use of the vaccine over many years; transmission of the vaccine virus to healthcare workers has not been reported.

LAIV administration

How is the LAIV presented?

Each vaccine comes as a prefilled nasal applicator. Each applicator contains 0.2ml nasal suspension.

Figure 2: Fluenz presentation



The nasal applicator is ready to use - no reconstitution or dilution is required.

The nasal suspension is colourless to pale yellow, clear to opalescent. Small white particles may be present.

What is the expiry date of LAIV?

LAIV has a very short shelf life. The expiry date must be checked before administration.

The expiry date is written on the side of the nasal applicator as a day, month and year and is the last date the vaccine can be administered.

What is one dose of LAIV?

One dose of LAIV is 0.2ml administered in divided doses into each nostril i.e. 0.1ml in each nostril.

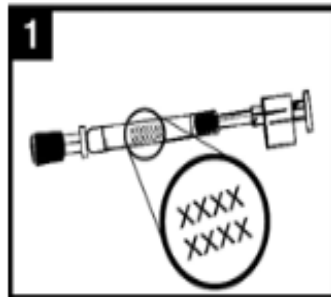
How is LAIV administered?

LAIV is administered intranasally as a divided dose in both nostrils (total dose of 0.2ml administered as 0.1ml in each nostril).

LAIV must not be injected or given orally.

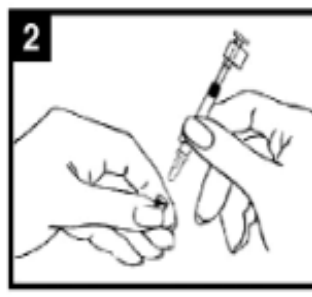
Any unused medicinal product or waste material should be disposed of in accordance with local requirements for medical waste.

Figure 3: Fluenz administration



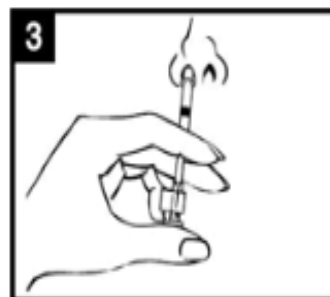
1 Check expiry date

Product must not be used after date on applicator label.



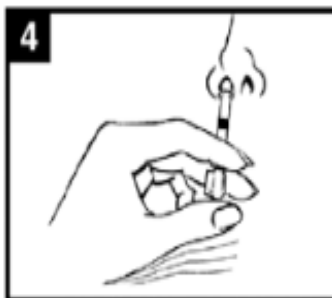
2 Prepare the applicator

Remove nozzle tip protector. Do not remove dose-divider clip at the other end of the applicator.



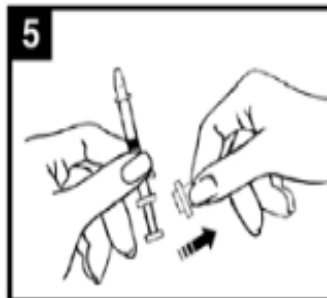
3 Position the applicator

With the patient in an upright position, place the tip just inside the nostril to ensure Fluenz is delivered into the nose.



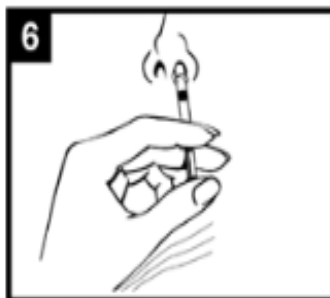
4 Depress the plunger

With a single motion, depress plunger as **rapidly as possible** until the dose-divider clip prevents you from going further.



5 Remove dose-divider clip

For administration in the other nostril, pinch and remove the dose-divider clip from plunger.



6 Spray in other nostril

Place the tip just **inside the other nostril** and with a single motion, depress plunger as **rapidly as possible** to deliver remaining vaccine.

What are the side effects of LAIV?

LAIV	
Local:	Nasal congestion is very common.
General:	Malaise and decreased appetite are very common. Headache, myalgia and fever are common. Fever is no more frequent than that following other recommended childhood vaccines, is generally mild and resolves in a few days.
Very rare:	Immediate allergic reactions. Very rare reports of Guillain-Barré syndrome (GBS) have been observed in the post-marketing setting following inactivated influenza vaccination. The incidence following live influenza vaccination is not known.

Source: [NIAC](#) Immunisation guidelines chapter 11

For more information on adverse reactions after Fluenz read the licensed information about the vaccine; the Summary of Product Characteristics (SmPC) and Patient Information Leaflet (PIL), by visiting www.hpra.ie (you will be directed to the HPRA website).

What advice should be given after vaccination?

The child can be given paracetamol or ibuprofen to alleviate common symptoms.

Aspirin or salicylates should not be used for 4 weeks after vaccination unless medically indicated, as Reye's syndrome has been reported following the use of salicylates during wild-type influenza infection.

Influenza antiviral medication should be avoided for 2 weeks post vaccination.

What if the child has a blocked nose?

If a child has a blocked nose, vaccination should be deferred as this may hinder absorption of the vaccine or else IIV administration should be considered.

What if a child sneezes or blows their nose after vaccination?

If the child sneezes or blows their nose after vaccination, the vaccine dose does not need to be repeated. The vaccine is immediately absorbed after administration.

Sneezing or blowing the nose after immunisation with LAIV will not affect immunity and parents and guardians should be reassured the vaccine is still effective if these occur.

What if LAIV is only given into only one nostril (i.e. only half the dose is given)?

If a 0.1 ml dose has been given into only one nostril, it is not necessary to repeat the dose of vaccine as this contains enough attenuated viral particles to induce an immune response.

Is influenza vaccine recommended for younger children?

NIAC recommend IIV for children aged 6 months to less than 2 years in a medically at risk group.

LAIV is only licensed for children from 2 years of age because of the increased risk of wheezing and hospitalisation in younger children.

What if LAIV is given inadvertently to a child who is immunocompromised?

If LAIV is inadvertently given to a child who is immunocompromised, advice should be sought from their treating specialist.

The [Health Products Regulatory Authority](#) should be notified of any suspected adverse reaction (you will be directed to the HPRA website).

What if LAIV is inadvertently given to child less than 2 years of age?

LAIV is contraindicated in children aged less than 2 years of age because of an increase in wheezing and hospitalisation.

If LAIV is inadvertently given to a child less than 2 years of age the parent/guardian should be informed and advised about possible adverse events and to seek medical care if they occur.

The [Health Products Regulatory Authority](#) should be notified of any suspected adverse reaction. (you will be directed to the HPRA website)

A dose of IIV should be given 4 weeks later if the child is in a medically at risk group and requires a second dose of vaccine. If the child has reached 2 years of age in the interim, a second dose of LAIV can be given.

Section 5: Co-administration of vaccines

Injectable influenza vaccines (IIV and aIIV)

- If IIV is recommended for children aged 12-23 months of age, it should be separated from pneumococcal conjugate vaccine (PCV) by at least 1 week. This is because of a slightly increased risk of febrile convulsions if the vaccines are given at the same time in this age group.
- As a precaution for children aged 6 months to 4 years, influenza vaccines should be separated from COVID-19 vaccines by 14 days.
- All influenza vaccines and other vaccines may be administered at the same time or at any interval.
- Co-administered vaccines should be given in different limbs if possible. If administration in separate limbs is not feasible or desired, administration in the same limb, separated by at least 2.5 cm, is appropriate.
- In keeping with international recommendations, seasonal influenza and COVID-19 vaccines should be co-administered where practicable to maximise uptake.
 - A UK study revealed no unexpected safety concerns with co-administration.
 - Vaccinees should be informed there may be a slight increase in short-term mild adverse events after co-administration with a COVID-19 vaccine. These include pain at the site of injection, fatigue, headache and myalgia.

Why can IIV not be given at the same time as PCV13 in children aged 12-23 months?

In children aged 12-23 months of age PCV13 and influenza vaccines should be separated by an interval of at least one week to decrease the risk of febrile seizures occurring.

This is because vaccine safety data from the United States in 2011 reported a small but increased risk of febrile convulsions among children aged 12-23 months who received PCV13 at the same time as inactivated influenza vaccine in the 2010-2011 season (risk approximately 1 in 1,640 vaccinees).

Can PPV23 vaccine be given at the same time as influenza vaccine?

Yes. PPV23 may be given at the same time as influenza vaccine but at a different site. As there is considerable overlap in the target groups for both vaccines, it is appropriate to offer the PPV23 to patients (if indicated) when they attend for their influenza vaccine.

No interval is required if both vaccines are not given on the same day.

Can LAIV be given at the same time as other vaccines?

In children LAIV can be given at the same time or at any time before or after any other live (e.g., MMR or varicella) or non-live vaccine.

As a precaution for children 6 months to 4 years, other vaccines (including flu vaccines) should be separated from COVID-19 vaccines in this age group by 14 days.

Can a person who has had a mastectomy receive a vaccine injection in their arm?

A person who has had a total (simple) mastectomy (without either a sentinel node biopsy or axillary node clearance) and who does not have lymphoedema may have an intramuscular vaccination in to the deltoid muscle.

The decision to administer a vaccine into the arm of a person who has had a simple mastectomy with a sentinel node biopsy needs to be made based on the advice the person was given by the treating clinical team.

The vastus lateralis muscle in the anterolateral thigh may be used if a deltoid site cannot be used.