Seasonal Influenza Vaccine Campaign 2022/23

HSE National Immunisation Office

12 September 2022
Welcome and Introductions

Dr Lucy Jessop
19:00-19:05  Introductions, Impact of Flu and Flu Activity

19:05-19:20  Flu vaccines available for flu season 2022/23:
    Quadrivalent Influenza Vaccine (QIV)
    Dose, Administration, Contraindications and Precautions
    Live Attenuated Influenza Vaccine (LAIV)
    Dose, Administration, Contraindications and Precautions

19:20-19:25  Recommended groups for flu vaccine; who is included and who is not?

19:25-19:27  COVID-19 vaccines and the flu vaccine

19:28-19:30  ICT System for Recording Flu and PPV23

19:30-19:35  Available resources for vaccinators including information on HSELand training

19:35-19:45  FAQs to NIO from clinicians in 2020/21 flu season

19.45-20.00  Q&A close
Effects of Influenza

- Although infection may be asymptomatic in up to 75% of cases, influenza outbreaks result in significant morbidity.

- The illness is more severe in the elderly, in those with chronic heart or lung disease, in children aged <4 years or with cerebral palsy and in pregnant women.

- Eighty to 90% of reported deaths from influenza occur in the elderly, mainly from secondary bacterial pneumonia, but also from exacerbations of underlying disease e.g. chronic obstructive pulmonary disease or cardiac disease.
Importance of the flu vaccine

During the 2017/2018 influenza season which was a severe influenza season:

- Sentinel GP influenza-like illness (ILI) consultation rates were higher than in the previous five seasons, peaking at 110.8 per 100,000 population

- 4,713 cases of influenza were hospitalised and 191 were admitted to Critical Care Units. The highest admission rates were amongst adults aged 65 years and over

- The number of deaths in notified influenza cases was 255. These deaths occurred in both community and hospital settings

- 223 confirmed influenza outbreaks were reported
Although there was no flu circulating in Ireland during 2020/21 due to public health restrictions in place, flu activity returned in Ireland during 2021/22 as restrictions eased.

Flu cases in Ireland between week 40 2021 - week 20 2022:

- 2,197 confirmed flu cases: 2,185 influenza A (399 A (H3), 8 A(H1)pdm09 and 1,771 A not subtyped), 11 influenza B and 1 with influenza type not reported. Median age was 32 years (interquartile range 21-64 years).
- 523 cases were admitted into hospital
- 15 cases of flu in people admitted into critical care.

For 2021/22, widespread flu activity was reported from several countries in the European Region also. Therefore, flu is expected to circulate this season and flu activity during 2022/23 could be different due to society being more open.
Summary of the flu surveillance data from Australia:

- From mid-April to mid-July 2022, the weekly number of notifications of laboratory-confirmed influenza reported in Australia has exceeded the 5 year average.

- Since commencement of seasonal surveillance in April 2022, there have been 1,708 hospital admissions due to influenza reported across sentinel hospitals sites, of which 6.5% were admitted directly to ICU.

- In 2022 to date, people aged 5–9 years, children aged younger than 5 years, and people aged 10–19 years have the highest notification rates.

- **The impact for the season to date is low- moderate**

- The majority of flu samples tested are characterised as antigenically similar to the corresponding vaccine components.

Caution is advised comparing Australian data to previous seasons; due to changes to testing and surveillance systems during the COVID-19 pandemic.

Source: Australian Influenza Surveillance Report No 07 - fortnight ending 28 August 2022
What does this mean for Ireland for Autumn/Winter 2022/23?

- Flu activity during 2022/23 is expected due to society being more open
- Would be prudent to improve vaccination rates this season especially in children

The latest WHO surveillance report (13/06/2022) states:

“Countries are recommended to prepare for the co-circulation of influenza and SARS-CoV-2 viruses. They are encouraged to enhance integrated surveillance to monitor influenza and SARS-CoV-2 at the same time, and step-up their influenza vaccination campaign to prevent severe disease and hospitalizations associated with influenza. Clinicians should consider influenza in differential diagnosis, especially for high-risk groups for influenza, and test and treat according to national guidance.”

Vaccination remains the best protective measure for prevention of flu.
Flu Vaccines Available in 2022/23

Dr Aparna Keegan
# Flu vaccines

The 2022/2023 HSE seasonal influenza vaccination programme flu vaccines available

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Vaccine Type</th>
<th>Age</th>
<th>Manufacturer</th>
<th>Storage</th>
<th>Shelf Life</th>
</tr>
</thead>
</table>
| Quadrivalent Influenza Vaccine (split virion, inactivated) | - **Non-live quadrivalent influenza vaccine, QIV**  
- cultured in fertilised hens’ eggs  
- split virion, inactivated  
- prefilled syringe for intramuscular injection | From 6 months  | Sanofi Pasteur   | Influenza vaccines should be stored at +2 to +8°C.  
If a vaccine has been frozen, it should not be used. | (1 Year) Until end of season |
| Influvac Tetra                | - **Non-live quadrivalent influenza vaccine, QIV**  
- cultured in fertilised hens’ eggs  
- surface antigen, inactivated  
- prefilled syringe for intramuscular injection | From 6 months  | Mylan            |                                              | (1 Year) Until end of season    |
| Fluenz Tetra                  | - quadrivalent live attenuated influenza vaccine, LAIV  
- produced in Vero cells and cultured in hens’ eggs  
- nasal spray suspension  
- live attenuated | 24 months to less than 18 years | AstraZeneca AB |                                              | 18 weeks                        |
Quadrivalent Influenza Vaccine (split virion, inactivated)

Influvac Tetra

Fluenz Tetra
Quadrivalent Influenza Vaccine

• Only licensed for those aged 6 months and over.

• Suspension for injection in prefilled syringes- boxes of 10.

• 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 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).
# Quadrivalent Influenza Vaccine

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of doses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children aged 6 months to &lt;9 years</td>
<td>Two doses 4 weeks apart, if • receiving influenza vaccine for the first time or • vaccination history is unknown</td>
</tr>
<tr>
<td>Patients post haematopoietic stem cell transplant or post solid organ transplant</td>
<td>Two doses 4 weeks apart, if receiving influenza vaccine for the first time post-transplant</td>
</tr>
</tbody>
</table>
| Cancer patients who receive the vaccine while on chemotherapy and who complete their treatment in the same season* | Two doses  
Second dose at least 4 weeks after completion of chemotherapy and at least 4 weeks after 1st dose (regardless of influenza vaccination in previous seasons) |
| All others                                                           | One dose                                                                                           |

* If the lymphocyte count is ≥1.0 x10⁹ /L
QIV contraindications

Quadrivalent Influenza Vaccine

- Anaphylaxis following a previous dose of influenza vaccine or any of its constituents. Read the manufacturer’s Summary of Product Characteristics (SmPC) to see the list of ingredients.

- Those with severe neutropoenia (absolute neutrophil count <0.5 × 10^9/L) should not receive any vaccines, to avoid an acute vaccine related febrile episode. This dose not apply to those with primary autoimmune neutropenia who can get the flu vaccine unless other contraindications.

- Patients on combination checkpoint inhibitors (e.g. ipilumumab plus nivolumab) should not receive any influenza vaccines, because of a potential association with immune related adverse reactions.
Quadrivalent Influenza Vaccine

• Acute severe febrile illness, defer until recovery.

• If influenza vaccine is recommended for children aged 12-23 months of age, it should be separated from PCV vaccine 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.

• Egg Allergy:
  • 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 non-live 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.
Fluenz Tetra - Live Attenuated Influenza Vaccine (LAIV)

- Supplied in a box containing 10 single applicators
- Pre-filled nasal applicator
- Each applicator contains 0.2ml nasal suspension
- Ready to use. No reconstitution or dilution needed
- Pale yellow, clear to opalescent; small white particles can appear
How many doses of LAIV are required?

- Licensed documentation
  - all previously unvaccinated children =>2 doses 4 weeks apart
- Evidence of adequate efficacy after one dose of LAIV in healthy children
- NIAC recommends 1 dose for healthy children
- UK and Finland also recommend 1 dose for healthy children

<table>
<thead>
<tr>
<th>Group</th>
<th>Age</th>
<th>Previous vaccination</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medically at risk</td>
<td>2 to 8 years</td>
<td>Have never had <em>any</em> influenza vaccine</td>
<td>Two doses 4 weeks apart</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Have had <em>any</em> influenza vaccine before</td>
<td>One dose</td>
</tr>
<tr>
<td></td>
<td>9 to 17 years</td>
<td>Not relevant</td>
<td>One dose</td>
</tr>
<tr>
<td>Healthy</td>
<td>2 to 17 years</td>
<td>Not relevant</td>
<td>One dose</td>
</tr>
</tbody>
</table>
Steps in intranasal administration of LAIV

Step 1
- Only take 1 applicator out of the fridge at a time
- Check expiry date

Step 2
- Remove the nozzle tip protector
- Do not remove dose divider clip

Step 3
- Place tip of applicator inside RIGHT nostril (child in upright sitting position)
- Advise the child to breathe normally. There is no need to inhale or sniff.
Steps in intranasal administration of LAIV

Step 4
Depress plunger quickly until dose divider clip prevents further administration

Step 5
Pinch and remove dose divider clip

Step 6
• Insert applicator inside the LEFT nostril
• Depress plunger as quickly as possible until all the vaccine has been given

• Dispose of nasal applicator in sharps bin
• Record vaccine administration
LAIV contraindications

• Anaphylaxis following a previous dose of influenza vaccine or any constituents (except ovalbumin – see precautions)

• Those with severe neutropenia (absolute neutrophil count $< 0.5 \times 10^9/L$) to avoid an acute vaccine related febrile episode. This dose not apply to those with primary autoimmune neutropenia who can get the flu vaccine unless other contraindications

• Those on combination checkpoint inhibitors (e.g. ipilimumab plus nivolumab) because of a potential association with immune related adverse reactions
LAIV contraindications (cont.)

- Asthma
  - if an acute exacerbation of symptoms, increased wheezing and/or additional bronchodilator treatment in the last 72 hours
  - Severe asthma if on regular oral steroids or have had previous ICU/Critical care for asthma, seek advice
- Significant immunosuppression due to disease or treatment
- Children who live with severely immunosuppressed persons (e.g. post haematopoietic stem cell transplant)
- Concomitant use of aspirin/salicylates
- Influenza antiviral medications within the previous 48 hours
- Pregnancy
- Those post cochlear implant until the risk of a CSF leak has resolved - consult with the relevant specialist
- Those with a cranial CSF leak

QIV should be given if LAIV is contraindicated (provided not contraindicated)
The following are **not** contraindications to LAIV

- Asymptomatic HIV infection
- Children receiving:
  - topical or inhaled corticosteroids
  - low dose systemic corticosteroids
  - replacement therapy corticosteroids
    (e.g. for adrenal insufficiency)
LAIV precautions

• Defer until recovered from an acute severe febrile illness

• Egg Allergy
  • NIAC advises LAIV has a low ovalbumin content of \( \leq 0.024 \) micrograms per dose, therefore it can be given to children with confirmed egg anaphylaxis or egg allergy in a primary care setting or school setting.
  • The exception is children who have required ICU admission for a previous severe anaphylaxis to egg who should be given LAIV in hospital
  • LAIV is the preferred vaccine for children who have required admission to ICU for a previous severe anaphylaxis to egg as the intranasal route is less likely to cause systemic reactions; it should be given in hospital.
LAIV after vaccination

- Paracetamol or ibuprofen can be given for common side effects

- Avoid
  - aspirin/ salicylates for 4 weeks unless medically indicated (Reye’s syndrome reported after salicylate use during wild-type influenza infection)
  - Influenza antiviral medication for 2 weeks
Flu vaccines can be ordered from the HSE National Cold Chain Service using the online ordering system ordevaccines.ie

Ordering for flu vaccine will open from 12th September:

• **Cycle 1** of flu vaccine deliveries will occur between 19th September – 30th September. Only QIV will be available.

• **Cycle 2** of flu vaccine deliveries will occur between 3rd October – 14th October. LAIV and QIV will be available.

During the flu season flu vaccines will continue to be delivered to sites fortnightly.

**Note:**

• Quantities available to order are based on last year’s quantity.

• Check your NCCS calendar for order cut-off deadline for each cycle.
Flu vaccine storage

- Influenza vaccines should be stored at +2°C to +8°C.

- Keep the pre filled syringes in the outer carton in order to protect from light.

- Sensitive to heat and cold.
  - Heat speeds up the decline in potency of most vaccines –reducing shelf life.

- Do not freeze. If a vaccine has been frozen, it should not be used.
  - Freezing may cause increased reactogenicity and a loss of potency for some vaccines and can also cause hairline cracks in the container, leading to contamination of the contents.
Eligible Groups for 2022/23 HSE Influenza vaccination programme

Dr Aparna Keegan
Recommended groups for vaccination

- All children aged 2-17 years at the time of vaccination
- Persons aged 65 and older
- Pregnant women (vaccine can be given at any stage of pregnancy)
- Healthcare workers including all General Practice and pharmacy staff
- Residents of nursing homes and other long stay institutions
- Carers and household contacts of people with increased medical risk**
- People with regular contact with pigs, poultry or water fowl

Those aged 6 to 23 months and aged 18-64 years with:
- Chronic heart disease including acute coronary syndrome
- Chronic liver disease
- Chronic neurological disease including multiple sclerosis, hereditary and degenerative disorders of the central nervous system
- Chronic renal failure
- Cancer patients
- Chronic respiratory disease, including chronic obstructive pulmonary disease, cystic fibrosis, moderate or severe asthma or bronchopulmonary dysplasia
- Diabetes mellitus
- Down syndrome
- Haemoglobinopathies
- Immunosuppression due to disease or treatment, including asplenia or splenic dysfunction and cancer patients
- Morbid obesity, i.e. body mass index of 40 or over
- On long-term aspirin therapy (because of the risk of Reyes syndrome)
- With any condition (e.g. cognitive dysfunction, spinal cord injury, seizure disorder, or other neuromuscular disorder) that can compromise respiratory function especially those attending special schools/day centres
- With moderate to severe neurodevelopmental disorders such as cerebral palsy and intellectual disability
Recommended groups for vaccination (cont.)

- Only those who are in the HSE’s target eligible groups for influenza vaccine should receive influenza vaccine supplied by the HSE’s national cold chain service.

- Anyone who is in an eligible group for the HSE-supplied vaccine should not be charged a fee for the administration of the vaccine even if they do not have a medical or GP visit card.

- **Reminder about eligibility around household contacts and carers.**
  - Only household contacts or carers of people who have an underlying chronic health condition or have Down syndrome are eligible to receive an influenza vaccine.
  - A carer is described as someone who is providing an ongoing significant level of care to a person who is in need of care in the home due to illness or disability or frailty e.g. those in receipt of a carer’s allowance.

- Privately procured stock must be administered to those not included on the list and who wish to be vaccinated. This is a private arrangement.
<table>
<thead>
<tr>
<th>Age group</th>
<th>No. vaccinated</th>
<th>Pop Proj 2021 M2F2 estimate</th>
<th>% Uptake</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-12 years</td>
<td>140,376</td>
<td>745,669</td>
<td>18.8</td>
</tr>
<tr>
<td>13-17 years</td>
<td>38,986</td>
<td>335,563</td>
<td>11.6</td>
</tr>
<tr>
<td>2-17 years</td>
<td>179,362</td>
<td>1,081,232</td>
<td>16.6</td>
</tr>
<tr>
<td>18-49 years</td>
<td>224,871</td>
<td>2,169,073</td>
<td>10.4</td>
</tr>
<tr>
<td>50-64 years</td>
<td>236,146</td>
<td>879,370</td>
<td>26.9</td>
</tr>
<tr>
<td>65 and over</td>
<td>560,209</td>
<td>743,087</td>
<td>75.4</td>
</tr>
<tr>
<td>Overall ≥2 years and over</td>
<td>1,200,588</td>
<td>4,872,762</td>
<td>24.6</td>
</tr>
<tr>
<td>≥6months*-64 years with medical risk condition</td>
<td>186,231</td>
<td>na</td>
<td>-</td>
</tr>
<tr>
<td>≥6months*-17 years with medical risk condition</td>
<td>268</td>
<td>na</td>
<td>-</td>
</tr>
<tr>
<td>≥18-64 years with medical risk condition</td>
<td>185,963</td>
<td>na</td>
<td>-</td>
</tr>
<tr>
<td>Pregnant women</td>
<td>18,600</td>
<td>na</td>
<td>-</td>
</tr>
</tbody>
</table>
Healthcare worker uptake

Uptake figures for flu vaccination amongst healthcare workers (HCWs) in 2021/22 was estimated through a point prevalence survey under taken by the HPSC.

**HPSC-Survey-Hospital-based HCW Uptake**

- In 2021/22 overall uptake among the 47 participating hospitals (three of which were non-HSE/private) was 64.0% (range: 47.6 - 71.8%). Uptake was highest among medical & dental staff (78.8%) and lowest among other patient and client care staff (50.7%).
- In 2020/21 overall uptake among the 52 participating hospitals (three of which were non-HSE/private) was 71.0%

**HPSC-Survey-LTCF-based HCW Uptake**

- In 2021/22 uptake among those 214 managed/staff/funded by the HSE was 55.2% (range 48.4- 65.6%); among the 79 non-HSE/privately-run entities uptake was 55.1% (range 30.3%- 76.4%).
- In 2020/21 Uptake among those 225 managed/staff/funded by the HSE was 66.3%; among the 197 non HSE/privately-run entities uptake was 60.9%
Healthcare workers

- Up to 75% of people with influenza will have no symptoms—but they can transit infection. This means that healthcare workers can spread can spread infection when they have no symptoms.

- Healthcare staff are up to 10 times more likely to get influenza compared to the general population. It is estimated that at least 20% of healthcare workers are infected with influenza every year and many continue to work despite being ill, which increases the risk of spread of influenza to their colleagues and patients.

- During hospitalisation, patients in general are 5-35 times more likely to acquire influenza if exposed to infected patients or healthcare workers.

- Institutions with high levels of healthcare worker immunisation in Europe have shown reduced rates of influenza-like illness, hospitalisation and deaths from influenza in the elderly, and a reduction in healthcare worker sick leave.

Everyone working in a healthcare setting should get the flu vaccine including:

- medical, nursing and allied health professionals including those working in residential disability services
- medical, nursing and allied health students including those working in residential disability services
- general support staff
- dental personnel
- hospital porters and cleaners
- ambulance personnel
- carers and home helps
- all GP and pharmacy staff
- agency staff who fall into the above categories
Influenza in children

- Up to 10% of all children under 15 attend GP with influenza.

- **Common complications of influenza in children are:** Bronchitis, Otitis media, Sinusitis and Secondary bacterial pneumonia.

- **Less commonly:** Meningitis, Encephalitis and Primary influenza pneumonia.

- Children < 5 years high risk of complications therefore recommended for vaccination by WHO.

Age-specific rates

- Highest rate of hospitalisation.
- High rates of admission to critical care.

Age specific notification rates/100,000 population for influenza, by hospitalisation status, during the 2018/2019 season, in Ireland.

Source: HPSC
>11,000 notified influenza confirmed cases

>4750 confirmed influenza hospitalisations

183 critical care admissions for confirmed influenza

41 notified influenza cases died
Aim of the influenza vaccination programme for children

- Protect children from influenza related morbidity and mortality
- Less absenteeism from school, sports activities etc.

Children in crèches and schools important drivers of spread of influenza

- Children transmit influenza to others for longer than adults; 10 or more days (compared to 6 days in adults)
- Children attending day-care centres and schools are important transmitters of influenza in the community

Also decrease

- the number of people with influenza
- the number of hospital admissions
- transmission of influenza to the elderly and persons in risk groups
- transmission to health care workers in families with children

Consider engaging with schools and other settings to promote or offer the LAIV to children- resources to be released soon for GPs and Pharmacies.
HSE COVID-19 Programme and Flu Vaccination Programme

Dr Lucy Jessop
COVID-19 vaccines and the flu vaccine

- NIAC advises that flu vaccines may be administered with COVID-19 vaccines (including for children aged 5-11) at the same time or at any interval.

- For residents of HIQA registered Nursing Homes & all housebound patients – from 3rd OCT HSE mobile vaccination teams will offer flu vaccine (regardless of age and if they need COVID-19 booster).

- More information will be provided soon about the COVID-19 vaccine programme and the adapted vaccines.

- There are some **important differences between the current COVID vaccines and the adapted vaccines**, so it is vital that all involved in administering the vaccines are up to date with training and fully competent to give and record them correctly when they become available.
ICT System for Recording Flu and PPV23

Dr Alice Quinn
The HSE vaccination programme will use the ICT system for COVID-19 vaccinations COVAX for capturing immunisation records for flu, as well as PPV23 vaccines.

All HSE flu vaccinations (including vaccination of healthcare workers or patients in all facilities both HSE and private) must be captured on COVAX.

GP patient management systems have been reconfigured and the HSE’s PharmaVax & GPVax system updated to enable:

- COVID-19, Flu and PPV23 vaccination records from GPs and pharmacies to transmit electronically from their software to COVAX.
- COVID-19*, Flu* and PPV23** payment claims to be sent to PCRS team

The PCRS online portal will no longer be used for flu or PPV23 vaccinations from 19th September 2022.

*GPs and Pharmacies, **GPs only
Available resources for vaccinators

Cría Dowling
Communications campaign

To launch in early October 2022 with Flu Awards

Part of the Winter Vaccinations Campaign

Target groups

- Children aged 2 to 17
- At risk groups including pregnant people, those with certain long term medical conditions and older adults
- Healthcare workers

Campaign objectives

1. Achieve target uptake for 2022/2023
2. Give everyone who can the free flu vaccine the information they need to make an informed decision
3. Position HSE as a trusted source of information
Further resources

- Visit www.hse.ie/flu to download information leaflets, posters, videos, FAQs, algorithms and administration guides.

- Information for healthcare professionals is available on: https://www.hse.ie/eng/health/immunisation/hcpinfo/fluinfo/

- E-learning: www.hseland.ie 4 modules: 2xLAIV, QIV, PPV23
  - Course Catalogue -> Clinical Skills -> National immunisation Office -> Influenza (flu) vaccination

- Email us (only for HCP enquiries): immunisation@hse.ie

- National Immunisation Advisory Committee Immunisation Guidelines for Ireland Chapter 11. Available to read from www.immunisation.ie

- Patient Information Leaflet and the Summary of Product Characteristics for each of the vaccines is available from www.hpра.ie
FAQs to NIO from Healthcare Professionals

Muthu Saba
Co-administration

• Co-administration all influenza vaccines and other vaccines* (including COVID-19 vaccines for all ages) may be administered at the same time or at any interval.

• As it is not known if COVID-19 vaccine reactogenicity is increased with coadministration, the vaccines should preferably be given in different limbs.

• 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.

*except PCV for children aged 12-23 months (should be separated by 1 week due to risk of febrile convulsions)
PPV23 vaccine may be given at the same time as influenza vaccine.

PPV vaccine is only needed once at the age of 65 years or over, regardless of any other risk factor. Some people with medical risk factors require PPV under the age of 65.
Expiry date of LAIV

Expiry date of LAIV is much shorter than other vaccines
- 18 weeks after the date of manufacture

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

The expiry date may not necessarily be the last day of the month

Always check the expiry date carefully
**LAIV - what to do if?**

- **Child sneezes or nose drips**
  The vaccine does not need to be repeated
  LAIV immediately absorbed after administration and there is a surplus of attenuated virus particles in the vaccine required for immunity

- **LAIV is only given into one nostril**
  The vaccine does not need to be repeated
  A 0.1 ml dose given into one nostril contains enough attenuated viral particles to induce an immune response

- **All of vaccine is given into same nostril**
  The vaccine does not need to be repeated
The 2022/2023 HSE seasonal vaccination programme will offer:

Quadrivalent **live attenuated influenza vaccine (LAIV)**, nasal application for those aged 2-17 years. Brand available:
- Fluenz Tetra nasal spray suspension Influenza vaccine (live attenuated, nasal) manufactured by AstraZeneca AB

Inactivated **quadrivalent influenza vaccine (QIV)** available for all other eligible populations including those aged 2-17 with contraindications to LAIV (QIV is licensed for those 6 months of age and older). Two brands of injectable vaccine will be distributed and are interchangeable where two doses are required:
- Quadrivalent Influenza Vaccine (split virion, inactivated) manufactured by Sanofi Pasteur
- Influvac Tetra marketed by Mylan

**Adjuvanted Quadrivalent Influenza Vaccine (aQIV) for older adults (aged 65 and over) is not available this season. All older adults are recommended QIV this season.**
NIAC Immunisation Guidelines recommends:

- Those with confirmed egg anaphylaxis or egg allergy can be given 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.

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

- Those requiring non-live 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.
Adverse reactions

Live attenuated quadrivalent influenza vaccine (LAIV)

- **Local:** Nasal congestion is very common.

- **General:** Malaise is very common. Decreased appetite, 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

Note:
- Very rare reports of Guillain-Barré syndrome (GBS) have been observed in the post marketing setting following QIV. Risk of GBS is several times greater following influenza illness than following influenza vaccination

Summary of Product Characteristics for each of the vaccines is available from [www.hpra.ie](http://www.hpra.ie)
Adverse reactions

Non-live QIV

- **Local:** Injection site pain and swelling are very common.

- **General:** Fever, fatigue, myalgia, and irritability in young children are very common. Drowsiness, sweating and arthralgia are common.

- **Very rare:** immediate allergic reactions

Note:
- Very rare reports of Guillain-Barré syndrome (GBS) have been observed in the post marketing setting following QIV. Risk of GBS is several times greater following influenza illness than following influenza vaccination

Summary of Product Characteristics for each of the vaccines is available from [www.hpra.ie](http://www.hpra.ie)
Reminder

• Vaccine recipients should be observed for at least 15 minutes after vaccination. If this is not practicable, vaccine recipients should wait in the vicinity for 15 minutes.

• The availability of protocols, equipment and drugs necessary for management of anaphylaxis should be checked before each vaccination session.

• Post Vaccination Advice:
  • Advise on possible adverse reactions (report any side effects to the HPRA at [www.hpia.ie/report](http://www.hpia.ie/report))
  • It takes around 2 weeks after vaccination to have protection against flu.
  • There is a chance they may still get flu - so it is important to follow public health advice.
Q&A

NIO Panel
Close

Dr Lucy Jessop
HSE National Immunisation Office

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