Frequently asked questions
Seasonal influenza vaccination programme 2020/21
Facts about influenza

Influenza causes hundreds of deaths and thousands of hospitalisations every year in Ireland.

It’s especially important this influenza season that we prevent morbidity and mortality from influenza, and reduce the burden on our health services from influenza so we are not overwhelmed with dual outbreaks of influenza and COVID-19. Patients with influenza and COVID-19 co-infection are likely to have worse outcomes.

Influenza vaccine is the best protection against influenza for at-risk groups and health care workers.

Contents

Introduction 2
How long does the influenza season last? 2
What seasonal influenza vaccines will be available this year? 2
What is the composition of this year’s seasonal influenza vaccines? 2
Is influenza vaccine effective? 3
How long does it take influenza vaccine to work? 3
Who should receive influenza vaccine? 3
Who should NOT receive QIV? 4
Can people with egg allergy receive QIV? 4

Influenza vaccine in pregnancy 5
Why do pregnant women need influenza vaccine? 5
Is it safe to give QIV to pregnant women? 5
At what stage of pregnancy should women receive QIV? 5
Should a woman who was pregnant at the end of the 2019-20 campaign, who received influenza vaccine then, and who has not yet delivered her baby receive 2020-2021 influenza vaccine now? 5
Can pertussis vaccine be given at the same time as influenza vaccine? 5
How many doses of QIV are required? 6
Can QIV be given at the same time as other vaccines? 6
Why can QIV not be given at the same time as PCV13 in children aged 12-23 months? 6
Are there any side effects from QIV vaccination? 7
Where is QIV available? 7

Pneumococcal Polysaccharide Vaccine 7
Which pneumococcal vaccines are recommended in Ireland? 7
Who should be vaccinated with PPV23? 8
Who should not receive PPV23? 8
Are there any side effects from vaccination? 8
How often is vaccination with PPV23 required? 9
When is a 3rd dose of PPV23 required? 9
Can PPV23 vaccine be given at the same time as influenza vaccine? 9
Where to look for further information 9

Seasonal influenza vaccination programme 2020/21 14
Quadrivalent live attenuated influenza vaccine (LAIV) and Quadrivalent inactivated influenza vaccine (QIV) 14
Is influenza vaccine effective?
Influenza vaccine effectiveness varies from year-to-year among different age and risk groups and according to different types of influenza vaccine. It can depend on the match between the predicted vaccine virus used to produce the vaccine and the viruses that will circulate this season. In general, current influenza vaccines tend to work better against influenza B and influenza A (H1N1) viruses and offer lower protection against influenza A (H3N2) viruses. Influenza vaccines usually reduce the risk of infection by 40-60%. Influenza vaccines also reduce the severity of illness, complications from influenza, reduce influenza-related hospitalisations, and admissions to critical care units. See factsheet at https://www.cdc.gov/flu/about/qa/vaccineeffect.htm

How long does it take influenza vaccine to work?
The vaccine starts to work within 2 weeks.

Who should receive influenza vaccine?
Vaccination is recommended for:
a) People aged 65 years or older.
b) All pregnant women at any stage of pregnancy.
c) Children aged 2-12 years (NEW). Children aged 2-12 years should receive LAIV. QIV should be given if LAIV is contraindicated. Please refer to information on LAIV which is included in this booklet.
d) Those aged 6-23 months and 13 to 64 years who are at increased risk of Influenza-related complications:
• People with chronic illness requiring regular medical follow up, e.g. chronic heart disease, chronic liver disease, chronic neurological disease, chronic renal failure, chronic respiratory disease, diabetes mellitus, or haemoglobinopathies.
• Patients with immunosuppression due to disease or treatment such as cancer patients, those with asplenia or hyposplenism.
• Patients with any condition that can compromise respiratory function (e.g. spinal cord injury, seizure disorder, or other neuromuscular disorder) especially those attending special schools/day centres.
• Children with moderate to severe neurodevelopmental disorders such as cerebral palsy and intellectual disability.
• Children on long-term aspirin therapy.
• People with morbid obesity (Body mass index >40).
• Residents of nursing homes, old people’s homes, and other long-stay facilities where rapid spread is likely to follow introduction of infection.
• People with Down Syndrome.
Influenza vaccine in 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.
• Influenza in pregnancy is associated with miscarriage, premature birth, and reduced foetal growth and stillbirth.
• Premature birth can lead to long-term medical and social consequences.
• Vaccination during pregnancy provides 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 the highest rates of hospitalisation and death from influenza.

Is it safe to give QIV to pregnant women?
Yes – inactivated influenza vaccine is not a live vaccine and is considered very safe in pregnancy. It has been given to millions of pregnant women and has not caused any harm to women or their babies.

At what stage of pregnancy should women receive QIV?
The vaccine can be given to pregnant women at any stage of pregnancy.

Should a woman who was pregnant at the end of the 2019-20 campaign, who received influenza vaccine then, and who has not yet delivered her baby receive 2020-2021 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.

Can pertussis vaccine be given at the same time as influenza vaccine?
Yes. Both vaccines can be given at the same time.
Note: Pertussis vaccine is recommended between 16-36 weeks.
How many doses of QIV are required?

Table 1 summarises the doses of quadrivalent inactivated influenza vaccine required.

<table>
<thead>
<tr>
<th>Group</th>
<th>Dose</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>Those aged 9 and older</td>
<td>Two doses 4 weeks apart, if • receiving influenza vaccine for the first time post-transplant</td>
</tr>
<tr>
<td>Cancer patients who receive the vaccine while on chemotherapy and who complete their treatment in the same season*</td>
<td>Two doses 2nd dose on completion of treatment at least 4 weeks after 1st dose (regardless of influenza vaccination in previous seasons)</td>
</tr>
<tr>
<td>All others</td>
<td>One dose</td>
</tr>
</tbody>
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* If the lymphocyte count is ≥1.0 x10^9/L

Note that children aged 2-12 years will be offered LAIV; only those for whom LAIV is contraindicated should receive QIV. See the section in this booklet on LAIV for further details.

can QIV be given at the same time as other vaccines?
Influenza vaccine can be given at the same time as other vaccines e.g. PPV23 and Tdap. The only exception is with PCV13 for children aged 12-23 months. See below for further details.

Why can QIV 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).

Are there any side effects from QIV vaccination?
The most commonly reported adverse reactions are pain at the injection site, localised redness and swelling at the injection site, myalgia and headache (≥1/10).
Serious allergic reactions are very rare.
Further details are available from the Summary of Product Characteristics (SmPC) available at www.hpra.ie

Where is QIV available?
The influenza vaccine is available either from a GP or pharmacist.
This season, the vaccine and consultation are free for all people who are recommended to get the influenza vaccine, regardless of whether they have a medical card or doctor only card or not. The relevant occupational health department may also provide the vaccine to healthcare workers.

Pneumococcal Polysaccharide Vaccine

Which pneumococcal vaccines are recommended in Ireland?
Two vaccines are recommended to prevent pneumococcal disease:

- **Pneumococcal conjugate vaccine (PCV13)**
  This vaccine is included in the routine childhood immunisation schedule.
The National Immunisation Advisory Committee also recommends PCV13 for some at-risk groups.
See Immunisation Guidelines for Ireland.

- **Pneumococcal polysaccharide vaccine (PPV23)**
  This vaccine contains purified polysaccharide from 23 of the most common capsular types of streptococcus pneumoniae. This vaccine is recommended for those aged 65 years and older and at risk adults and children over 2 years of age.
PPV23 is not recommended for children under 2 years of age due to an inadequate antibody response in young children.
Who should be vaccinated with PPV23?

- Everybody aged 65 years and over.
- Those aged over 2 years who have any of the following:
  - Asplenia or splenic dysfunction.
  - Cancer patients.
  - Candidates for, or recipients of, a cochlear implant.
  - Children <5 years with a history of invasive pneumococcal disease, irrespective of vaccine history.
  - Chronic heart, respiratory or liver disease.
  - Chronic renal disease or nephrotic syndrome.
  - Complement deficiency (especially C1-C4).
  - CSF leaks either congenital or complicating skull fracture or neurosurgery, intracranial shunts.
  - Diabetes mellitus.
  - Down syndrome.
  - Immunosuppression conditions due to disease or treatment (e.g. some B and T-cell disorders, HIV infection, leukaemia, lymphoma, Hodgkin’s disease) and those receiving immunosuppressive therapies or corticosteroids.
  - Intracranial shunt.
  - Haematopoietic stem cell transplant, solid organ transplant.

Vaccination is not recommended for healthy young adults, as there is little risk of pneumococcal infection.

Who should not receive PPV23?

PPV23 should NOT be given to those with a history of anaphylaxis to a previous dose of the vaccine or any of its constituents.

Precautions:
- Acute severe febrile illness – defer until recovery.
- Pregnancy: PPV23 can be given if there is an urgent need for protection.

Are there any side effects from vaccination?

The most commonly reported adverse reactions are localised redness and swelling at the injection site (>10%).

Further information is available from the Summary of Product Characteristics www.hpra.ie

How often is vaccination with PPV23 required?

Revaccination is not normally required. Revaccination with PPV23 can produce severe local reactions especially if given within 5 years of previous injection.

Aged 65 and older

Those aged 65 years and older who have never previously received PPV23 require one dose only. No further doses are required regardless of immune status. For those who received a previous dose of PPV23 at less than 65 years of age, a once only booster vaccine is recommended 5 years after the first vaccine.

Less than 65 years of age

One booster vaccine is recommended 5 years after the first PPV23 vaccine for those whose antibody levels are likely to decline rapidly e.g. asplenia, haemoglobinopathies, complement deficiency (especially C1-C4), chronic heart, respiratory or liver disease, chronic renal disease or nephrotic syndrome.

If PPV23 was given during chemotherapy or radiotherapy a further dose of PPV23 vaccine is recommended 3 months after treatment.

When is a 3rd dose of PPV23 required?

Adults whose antibodies are likely to decline rapidly should receive two doses of PPV23 while aged less than 65.

They will need a third dose of PPV23 when they turn 65 provided at least five years have passed since their last dose of PPV23.

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.

Where to look for further information

Further information regarding seasonal influenza vaccines and pneumococcal vaccines can be found on the following websites;

National Immunisation Office
PPV23 vaccine information www.immunisation.ie

Immunisation Guidelines for Ireland

Health Protection Surveillance Centre
www.hpsc.ie

Health Products Regulatory Authority
www.hpra.ie

Be Winter Ready
www.winterready.ie

Visit https://www.hpra.ie/homepage/medicines/medicines-information/vaccines to read the licensed information about influenza or PPV23 vaccines.
Pneumococcal Polysaccharide Vaccine (PPV23) Algorithm for Vaccination

- Asplenia or splenic dysfunction (splenectomy, sickle cell disease, coeliac syndrome); chronic renal, heart, lung, liver disease, diabetes mellitus, complement deficiency, immunosuppressive conditions; CSF leak, cochlear implant recipients or candidates for implants; children < 5 years with history of invasive disease.
- Revaccination not indicated for any person who has received a dose of PPV 23 at age ≥65 years.
- If vaccination has been given during chemotherapy or radiotherapy revaccination 3 months after treatment is indicated.
- Those with no spleen, with splenic dysfunction, immunosuppression including HIV infection, nephrotic syndrome, renal transplant or chronic renal disease.

Healthy Person ≥65 years

- Previously vaccinated with PPV23?
  - No
    - Aged ≥65 years at the time of the last vaccination?*
      - No → Vaccination not indicated at this time
      - Yes → Has a condition in which antibody levels are likely to decline**
    - Yes → Have 5 years elapsed since first dose?‡
      - No → Vaccine not indicated at this time
      - Yes → Vaccination indicated
  - Yes → Vaccination indicated

At Risk Person* < 65 years

- Previously vaccinated with PPV23?
  - No
    - Has a condition in which antibody levels are likely to decline**
      - Yes → Vaccination indicated
      - No → Vaccination not indicated at this time
    - No → Previously vaccinated with PPV23?
      - Yes → Vaccination indicated
      - No → Aged ≥65 years at the time of the last vaccination?*
        - No → Vaccination not indicated at this time
        - Yes → Has a condition in which antibody levels are likely to decline**

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* Asplenia or splenic dysfunction (splenectomy, sickle cell disease, coeliac syndrome); chronic renal, heart, lung, liver disease, diabetes mellitus, complement deficiency, immunosuppressive conditions; CSF leak, cochlear implant recipients or candidates for implants; children < 5 years with history of invasive disease.

^ Revaccination not indicated for any person who has received a dose of PPV 23 at age ≥65 years.

‡ If vaccination has been given during chemotherapy or radiotherapy revaccination 3 months after treatment is indicated.

** Those with no spleen, with splenic dysfunction, immunosuppression including HIV infection, nephrotic syndrome, renal transplant or chronic renal disease.
Flu vaccine 2020/21

0-6 MONTHS

Not recommended

6-23 MONTHS

In clinical at-risk group?

YES

QIV 1 dose
(2 doses 4 weeks apart if receiving for first time)

NO

LAIV 1 dose
(2 doses 4 weeks apart if clinically at risk and 2-8 years and first time receiving any influenza vaccine)

2-12 YEARS

Can the child receive LAIV?

YES

QIV 1 dose
(2 doses 4 weeks apart if post transplant or 2-8 years and first time receiving any influenza vaccine)

NO

QIV* 1 dose

13-64 YEARS

In clinical at-risk group?

YES

QIV* 1 dose

65 YEARS AND OLDER

QIV* 1 dose

*2 doses 4 weeks apart

- If receiving vaccine for the first time post haematopoietic stem cell or solid organ transplant
- For cancer patients vaccinated while on chemotherapy and who complete treatment in the same season (regardless of previous influenza vaccination)

QIV: Quadrivalent influenza vaccine (split virion, inactivated)
LAIV: Live attenuated influenza vaccine. Fluenz T etra

0-<6 MONTHS
Not recommended

0-6 MONTHS

Not recommended

6-23 MONTHS

In clinical at-risk group?

YES

QIV 1 dose
(2 doses 4 weeks apart if receiving for first time)

NO

LAIV 1 dose
(2 doses 4 weeks apart if clinically at risk and 2-8 years and first time receiving any influenza vaccine)

2-12 YEARS

Can the child receive LAIV?

YES

QIV 1 dose
(2 doses 4 weeks apart if post transplant or 2-8 years and first time receiving any influenza vaccine)

NO

QIV* 1 dose

13-64 YEARS

In clinical at-risk group?

YES

QIV* 1 dose

65 YEARS AND OLDER

QIV* 1 dose

*2 doses 4 weeks apart

- If receiving vaccine for the first time post haematopoietic stem cell or solid organ transplant
- For cancer patients vaccinated while on chemotherapy and who complete treatment in the same season (regardless of previous influenza vaccination)

QIV: Quadrivalent influenza vaccine (split virion, inactivated)
LAIV: Live attenuated influenza vaccine. Fluenz T etra
### Seasonal influenza vaccination programme 2020/21

**Quadrivalent live attenuated influenza vaccine (LAIV) and Quadrivalent inactivated influenza vaccine (QIV)**

<table>
<thead>
<tr>
<th>LAIV</th>
<th>QIV</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name</strong></td>
<td>Fluenz Tetra (egg based)</td>
</tr>
<tr>
<td><strong>Manufacturer</strong></td>
<td>Astra Zeneca</td>
</tr>
</tbody>
</table>
| **Who** | 2 to 12 years (at the time of vaccination) | In a risk group
- 6 months to less than 2 years
- 13 to 64 years
- 65 and older
- 2 to 12 years if LAIV is contraindicated |
| **What** | • 1 dose (healthy children)
• 2 doses if
  - in a risk group
  - and never had any influenza vaccine before | • 1 dose
• 2 doses if
  - post HSCT or solid organ transplant
  - or 2 to 8 years
  - and never had any influenza vaccine before |
| **How** | Intranasal | Intramuscular |
| **Contra-indications** | • Anaphylaxis following a previous dose of influenza vaccine or any of its constituents (except ovalbumin)
• Severe neutropenia (absolute neutrophil count less than 0.5 x 10⁹/L)
• On combination checkpoint inhibitors (e.g. ipilimumab plus nivolumab) | • Seek specialist advice if on regular oral steroids or previous critical care admission
• Concomitant use of aspirin/salicylates
• Influenza antiviral medication in the previous 48 hours
• Pregnancy
• Significant immunosuppression due to disease or treatment
• Children who live with severely immunosuppressed persons requiring isolation (e.g. post HSCT) |
| **Precautions** | Acute severe febrile illness, defer until recovery | • Children who required critical care admission for a previous severe egg anaphylaxis should be given LAIV in hospital
• No aspirin/salicylates for 4 weeks after vaccine due to risk of Reye's syndrome
• Avoid antiviral medication for 2 weeks after vaccine |
| **Adverse reactions** | Very common or common: Nasal congestion/rhinorrhoea, decreased appetite, malaise, fever, headache and myalgia. (Fever rates similar to those after other childhood vaccines; generally mild and of short duration) | Very common: Injection site pain and swelling, fever, fatigue, myalgia, and irritability in young children. Common: Drowsiness, sweating and arthralgia |

**Very rare:** Immediate allergic reactions.
Guillain-Barré syndrome (risk of GBS following infection is much greater than that post vaccination)