Influenza & pneumococcal vaccination campaign 2019-20

It's a lifesaver.

Frequently asked questions for healthcare professionals

www.hse.ie/flu
Facts about flu.

- Flu causes death and hospitalisation every year.
- Flu vaccine is the best protection against flu for at risk groups and health care workers.
- You need to get flu vaccine every season as the viruses change every year.
- Flu vaccine contains killed viruses - it cannot give you flu.
- Healthcare workers are up to 10 times more likely to get flu.
- Healthy people can have flu without any obvious symptoms and pass it on.
Introduction

These Frequently Asked Questions (FAQs) provide details on seasonal influenza and pneumococcal polysaccharide vaccines and who should receive them.

Check it out to see what vaccines your patients need.

What seasonal influenza vaccine will be available this winter?

This year the HSE has procured the Sanofi Pasteur Quadrivalent Influenza Vaccine (split virion, inactivated).

<table>
<thead>
<tr>
<th>Quadrivalent Influenza Vaccine (split virion, inactivated)</th>
<th>Manufacturer</th>
<th>Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quadrivalent Influenza Vaccine (split virion)</td>
<td>Sanofi Pasteur</td>
<td>Pre-filled syringes. Boxes of 10 or single</td>
</tr>
</tbody>
</table>
Flu Vaccine 2019-20

What is the composition of this year’s seasonal influenza vaccine?

The World Health Organization (WHO) has recommended that this year’s influenza vaccine contains protection against the following strains:

- an A/Brisbane/02/2018 (H1N1)pdm09-like virus;
- an A/Kansas/14/2017 (H3N2)-like virus;
- a B/Colorado/06/2017-like virus (B/Victoria/2/87 lineage); and
- a B/Phuket/3073/2013-like virus (B/Yamagata/16/88 lineage).


Is the vaccine effective?

Influenza vaccine remains the best protection against influenza and is recommended by all major expert bodies including the World Health Organization, Centers for Disease Control and Prevention, European Centre for Disease Prevention and Control and the National Immunisation Advisory Committee of the Royal College of Physicians of Ireland.

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 flu vaccines tend to work better against influenza B and influenza A(H1N1) viruses and offer lower protection against influenza A(H3N2) viruses. See factsheet at [https://www.cdc.gov/flu/about/qa/vaccineeffect.htm](https://www.cdc.gov/flu/about/qa/vaccineeffect.htm)

Vaccine effectiveness (for all influenza vaccines) for the 2018/2019 influenza season was estimated to be 47%.

How long does it take the vaccine to work?

The vaccine starts to work within 2 weeks.
Who should receive seasonal influenza vaccine?

Influenza vaccine can significantly reduce the risk of cardiovascular events including myocardial infarction and stroke.

Vaccination is strongly recommended for:

- Persons aged 65 and over
- Pregnant women (vaccine can be given at any stage of pregnancy)
- Adults and children aged 6 months and older with a long-term health condition such as:
  - Chronic heart disease, including acute coronary syndrome
  - Chronic liver disease
  - Chronic renal failure
  - Cancer patients
  - Chronic respiratory disease, including chronic obstructive pulmonary disease, cystic fibrosis, moderate or severe asthma or bronchopulmonary dysplasia
  - Chronic neurological disease including multiple sclerosis, hereditary and degenerative disorders of the central nervous system
  - Diabetes mellitus
  - Down syndrome
  - Haemoglobinopathies
  - Morbid obesity i.e. body mass index of 40 or over
  - Immunosuppression due to disease or treatment, including asplenia or splenic dysfunction and cancer patients
- Children aged 6 months and older:
  - with moderate to severe neurodevelopmental disorders such as cerebral palsy and intellectual disability
  - on long-term aspirin therapy (because of the risk of Reyes syndrome)
- Residents of nursing homes and other long stay institutions
- Healthcare workers including all GP practice staff
- Carers and household contacts of people with increased medical risk
- People with regular contact with pigs, poultry or water fowl
Who should NOT receive seasonal influenza vaccine?

Seasonal influenza vaccine should NOT be given to those with a history of anaphylaxis to a previous dose of flu vaccine or any of its constituents.

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

Precautions:

Acute severe febrile illness (temperature $\geq 38^\circ$C) – defer until recovery.

Visit www.hpra.ie to read the licensed information (Patient Information Leaflet (PIL)) about the vaccine.

Why do pregnant women need seasonal influenza vaccine?

The World Health Organization has stated that pregnant women are the highest priority group for seasonal influenza vaccination.

- 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 premature birth and reduced foetal growth.
- 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.

Many pregnant women are unaware they are at high risk of influenza and its complications.

Is it safe to give seasonal influenza vaccine to pregnant women?

Yes – the 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 seasonal influenza vaccine?

Seasonal influenza vaccine should be given to pregnant women at any stage of pregnancy.
If a woman is pregnant during two flu seasons should she receive two flu vaccines?
Yes – The National Immunisation Advisory Committee (NIAC) has recommended that in these instances the pregnant woman should also receive the flu vaccine recommended for the second flu season. 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.

Pregnant women are much more likely to have influenza vaccine and pertussis vaccine if a health care professional recommends it.

What about people with egg allergy?
Those with confirmed egg anaphylaxis and non-anaphylactic egg allergy can be given an influenza vaccine with an ovalbumin content <0.1 micrograms per dose.

Sanofi Pasteur Quadrivalent Influenza Vaccine (split virion, inactivated) contains less than 0.1 micrograms ovalbumin per dose and so can be administered in accordance with the Table below.

<table>
<thead>
<tr>
<th>History</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-anaphylactic egg allergy without severe asthma</td>
<td>Seasonal influenza vaccine with ovalbumin content. &lt;0.1 micrograms per dose, in primary care, with observation for 60 minutes.</td>
</tr>
<tr>
<td>Egg anaphylaxis or egg allergy and severe asthma</td>
<td>Refer to hospital specialist for vaccination with seasonal influenza vaccine with ovalbumin content &lt;0.1 micrograms per dose. Skin testing is NOT necessary and vaccine should be given as a single dose with observation for 60 minutes.</td>
</tr>
</tbody>
</table>

NB. As for all vaccinations, facilities should be available and staff trained to recognise and treat anaphylaxis.
Is there gelatin or porcine gelatin in the flu vaccine?
No there is no gelatin or porcine gelatin in the flu vaccine

What is the dosage of seasonal influenza vaccine?

*Seasonal influenza vaccine is not licensed for use in children under 6 months of age.*

Everyone i.e. children aged 6 months and older and adults require a full dose (0.5ml) of Sanofi Pasteur Quadrivalent Influenza Vaccine (split virion, inactivated)

How many doses of seasonal influenza vaccine are required?

*Children under 9 years of age AND those in specific at-risk groups require TWO doses of vaccine if receiving it for the first time.*

If two doses of seasonal influenza vaccine are required the second should be given 4 weeks after the first. (Except cancer patients on chemotherapy).

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Dose</th>
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<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</td>
</tr>
<tr>
<td>Those aged 9 and older&lt;br&gt;• post haematopoietic stem cell transplant&lt;br&gt;• post solid organ transplant</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><strong>Two doses;</strong> 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>
</table>
How many doses of seasonal influenza vaccine should a child aged 2 years with a chronic cardiac condition get if they have NOT received the vaccine before?

This child should receive 2 doses of seasonal influenza vaccine - the second dose of seasonal influenza vaccine should be given 4 weeks after the first.

Can seasonal influenza vaccine be given at the same time as other vaccines?

Seasonal influenza vaccine can be given at the same time as other vaccines e.g. PPV23 and Tdap. The exception is children aged 12-23 months and PCV13. See the following question for further details.

Why can’t seasonal influenza vaccine be given at the same time as PCV13 in children aged 12-23 months?

In children aged 12-23 months of age it may be prudent to separate PCV13 and seasonal influenza vaccines 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 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).

How long does the influenza season last?

The influenza season usually starts at the beginning of October and lasts until the end of April. Any woman who becomes pregnant during the influenza season should be given the vaccine.
Where is the Influenza Vaccine available?

Adults in an at-risk group including pregnant women and children aged 10 years or older can get the flu vaccine either from a GP or pharmacist.

Younger children in an at-risk group can get the flu vaccine from their GP.

The vaccine and consultation are free for those with a medical card of GP visit card.

For those who do not have a medical card, the vaccine is free but they may be charged for a consultation fee.

Occupational health departments and peer vaccinators provide the vaccine to healthcare workers.

Pneumococcal Polysaccharide Vaccine

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 (splenectomy, sickle cell disease, haemoglobinopathies, coeliacdisease)
  - 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 children and younger 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.
* Asplenia or splenic dysfunction (splenectomy, sickle cell disease, coeliac syndrome); chronic 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.
Pneumococcal Vaccine (PPV23) for Vaccination

**Previously vaccinated with PPV23?**

- **At Risk Person* < 65 years**
  - No
  - Yes

- **Has a condition in which antibody levels are likely to decline**
  - Yes
  - No

* Needs vaccination at this time

**At Risk Person* < 65 years**

- Chronic renal, heart, lung, liver disease, diabetes mellitus, complement deficiency, immunosuppressive conditions; CSF leak, cochlear implant recipients or candidates for implants; child < 5 years with history of invasive disease.
- Revaccination not indicated for any person who has received a dose of PPV23 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.
Are there any side effects from vaccination?
The most commonly reported adverse reactions are localised redness and swelling at the injection site (>10%).

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.
A once only booster vaccine is recommended 5 years after the first vaccine for those who received a previous dose of PPV23 at less than 65 years of age.

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, hyposplenism, immunosuppression including HIV infection, chronic renal disease, nephrotic syndrome or renal transplant.
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 the PPV23 vaccine be given at the same time as the 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
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 www.hpra.ie or scan the QR code to read the licensed information (Patient Information Leaflet (PIL)) about the influenza or PPV23 vaccine.

Flu Vaccine  PPV Vaccine