



Welcome to Bulletin 43 from the HSE National Immunisation Office which highlights changes in clinical guidance for the COVID-19 vaccination programme.

# COVID-19 vaccines for people with immunocompromise associated with a sub-optimal response to vaccination

The RCPI National Immunisation Advisory Committee (NIAC) have recommended that people with immunocompromise due to disease or treatment at the time of vaccination, should receive the following COVID-19 vaccines:

- A primary course of a COVID-19 vaccine e.g. 2 doses of Comirnaty® or Spikevax®
- An additional dose of COVID-19 vaccine if aged 5 years and older (to extend the primary vaccination course) AND
- If they are aged 16 years and older, a booster dose of a COVID-19 vaccine

#### Conditions associated with immunocompromised are outlined below:

Underlying condition	Very high risk	High risk
Cancer	Receiving or within 6     weeks of receiving     systemic cytotoxic     chemotherapy, targeted     therapy, monoclonal     antibodies or     immunotherapies     Receiving treatment or     pending treatment for a     haematological cancer     Undergoing or within 6     weeks of surgery or     radical radiotherapy for     lung or head and neck     cancer     Advanced/ metastatic     cancer	Haematological <sup>1</sup> - within 5 years of treatment
Chronic kidney disease	On dialysis, or eGFR <15ml/min	eGFR <30ml/min
Immunocompromise due to disease or treatment	Severe e.g. Transplantation: - Listed for solid organ or haematopoietic stem cell transplant (HSCT) - Post solid organ transplant at any time - Post HSCT within 12 months	Other e.g. High dose systemic steroids <sup>2</sup> HIV, not on treatment or CD4 count
	Genetic diseases: - APECED2 - Inborn errors in the interferon pathway - Some B and T cell deficiencies	
	Treatment e.g., - Cyclophosphamide, Rituximab, Alemtuzumab, Cladribine or Ocrelizumab in the last 6 months	

<sup>&</sup>lt;sup>1</sup> Includes e.g., leukaemia, lymphomas, blood dyscrasias or other malignant neoplasms affecting the bone marrow or lymphatic systems

- Adults and children ≥10kg: ≥40mg/day for more than 1 week, or ≥20mg/day for 2 weeks or longer
- Children <10 kg: 2mg/kg/day for 2 weeks or longer





<sup>&</sup>lt;sup>2</sup> The following doses of prednisolone (or equivalent dose of other glucocorticoid) are likely to be immunosuppressive:





COVID-19 vaccines for people with immunocompromise associated with a sub-optimal response to vaccination (continued from page 1)

#### Timing of the additional dose

The additional dose is recommended:

- 28 days after the primary course for children aged 5-11 years
- 2 months after the primary course for people aged 12 years and older

If someone has had breakthrough COVID-19 infection since their last dose they should wait at least 3 months before receiving their additional dose.

#### **Timing of the booster dose**

**A booster dose** is recommended only for people aged 16 years and older at least 3 months after an additional dose. If someone has had breakthrough COVID-19 infection since their additional dose, they should wait at least 3 months before receiving their booster dose.

Refer to the Quick Reference Guide for COVID-19 Vaccines for the most up to date

interval recommendations:

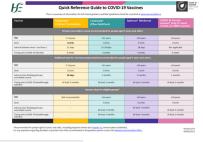
See Quick Reference Guide

Refer to the COVID-19 Chapter from the Immunisation Guidelines for Ireland from NIAC for additional information:

dditional See NIAC chapter

Read the NIAC Advice to CMO:

Read more here



#### **Frequently asked questions**



Why is an additional dose recommended for people with immunocompromise due to disease or treatment?

Data indicates that those with severe immunocompromise do not have adequate protection following a primary COVID-19 vaccine course. There is evidence that protection can be enhanced by an additional dose.

**Read NIAC advice here** 



What's the difference between the additional dose and a booster dose for people who are immunocompromised?

The additional dose of COVID-19 vaccine is an extended primary vaccination course. Data indicates that those with severe immunocompromise do not have adequate protection following a primary COVID-19 vaccine course. There is evidence that protection can be enhanced by an additional dose. This additional dose is part of the primary vaccination course (an extended primary vaccination course).

The booster dose is required to enhance protection against severe disease because of waning immunity and reduced protection against the Omicron variant strain after primary vaccination.









#### **Comirnaty® (Pfizer BioNTech)**

There are 2 Comirnaty® (Pfizer BioNTech) vaccines available in Ireland.

Appearance of vial	Name of vaccine	Licensed for	Available from
COMIRNATY  Serile concentration  OVID-19 mRNs  Coses after discord date	Comirnaty® (Pfizer BioNTech)	12 years and older only	HSE vaccination clinics and participating GP practices and participating Pharmacies
Philer-BioNTech COVID-19 Vaccine Desir 1 Postar Vaccine Service 1 Postar Vaccine Service 1 Postar Vaccine Service 1 Vacc	Comirnaty® (10 micrograms/dose concentrate) for children aged 5-11	5-11 year olds <b>only</b>	HSE vaccination clinics only

Children aged 5-11 years should only receive the Comirnaty® 10 microgram/dose formulation (orange cap).

This vaccine is only available from HSE vaccination clinics.

It is NOT AVAILABLE IN GENERAL PRACTICE OR PHARMACIES.

DO NOT administer the vaccine for those 12 years and older (purple cap) to children aged 5-11 years.

# How can you ensure the right formulation of Comirnaty® is given to the appropriate age group?

The following checks are routinely recommended before COVID-19 vaccination:

- ✓ Is this a primary course, an additional dose for a person who is immunocompromised?
- ✓ Is this a booster dose?
- ✓ What is the age of the person?
- ✓ Is vaccination recommended for this age group?
- ✓ What is the recommended vaccine for this age-group?
- ✓ What is the recommended dose?
- What is the recommended interval since the last dose?
- ✓ Has this person had COVID-19 infection? What is the recommended interval since COVID-19 infection?

Refer to the Comirnaty® (Pfizer/BioNTech) Vaccine Formulations Guide before administering a Comirnaty® vaccine (see table on next page)

See more here

Read frequently asked questions for vaccinators on Comirnaty 10 microgram/dose concentrate formulation for children aged 5-11

Read FAQs here

See also clinical guidance for vaccinators

Read more here









# Comirnaty® (Pfizer/BioNTech) Vaccine Formulations Guide

A Quick Reference Guide to dosing, dilution, and storage information.

(Refer to <a href="www.immunisation.ie">www.immunisation.ie</a> and Summary of Product Characteristics for full guidance)





Formulation	12 years and older Dilute to use	5-11 year olds Dilute to use
Vial	Multi-dose Vial	Multi-dose Vial
Vial Cap Colour	Purple Plastic Cap	Orange Plastic Cap
Dosage	30 mcg (Thirty microgram)	10 mcg (Ten microgram)
Dilution	Dilution required	Dilution required
Amount of Diluent Needed Per Vial	1.8ml	1.3ml
Vial Size	2ml	2ml
Doses per Vial	6 doses per vial (after dilution)	10 doses per vial (after dilution)
Injection Volume per Dose	0.3ml	0.2ml
Fill Volume per Vial	0.45ml	1.3ml
Refrigeration Storage Time (+2°C to +8°C)	1 month (within shelf life)	Up to 10 Weeks (within shelf life)
Room Temperature (≥8°C to +30°C)	Up to 2 hours prior to dilution	Up to 12 hours prior to dilution
After Dilution (+2°C to +30°C)	Discard by 6 hours after dilution	Discard by 12 hours after Dilution
Package Size	195 vials	10 vials

For any questions regarding deviation in practice from that recommended in the guidance please contact the National Immunisation Office .







# Comirnaty® (Pfizer BioNTech) (continued from page 5)

#### Children with additional needs

Some children getting their COVID-19 vaccine may need:

- more time at their appointment
- a quieter appointment time with fewer people

If a child has additional needs, parents and guardians are advised to call HSELive to arrange one of these options.

Freephone: <u>1800 700 700</u>

#### **Shelf-life of Comirnaty®**

Since 10 September 2021 a new shelf-life at <u>Ultra-Low Temperature</u> storage conditions is approved in the European Union (EU) for Comirnaty (purple cap). The Product Information was updated with the new shelf-life for the <u>frozen vial</u>. The shelf- life was extended from 6 months to 9 months. The storage conditions remain unchanged (-90°C to -60°C).

The extension in the Expiry Date on the vial and on the printed paperwork from NCCS is solely due to an extension in shelf-life in <u>Ultra-Low Temperature freezer</u>.

Comirnaty (purple cap) SmPC states Thawed vial **1 month at 2°C to 8°C** within the 9-month shelf life.

The **Use Before** has not changed. There was no extension to the **Use Before** date which is the applicable date for storage of the vials at  $+2^{\circ}$ C to  $+8^{\circ}$ C.

The vials that you have in stock will have a printed expiry date but this is only applicable if stored in ULT freezers. While this date has been extended by 3 months, this is not applicable to the **Use Before** recommended for the thawed vials.

**Please note:** any expired vaccines, including COVID-19 vaccines must be given to the NCCS driver at your next scheduled delivery so they can be returned to the NCCS and should not be disposed of locally.

See GP Vaccine Return form here

# New e-learning module on HSeLanD Communicating with people who are hesitant about vaccines

We have developed a new e-learning module to support you in communicating with people who may be hesitant about vaccines.

The e-learning module is called "Talking about Immunisation" and is available from www.hseland.ie









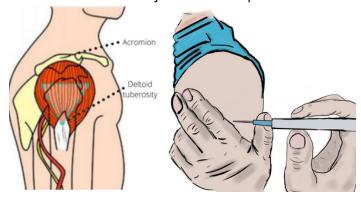


#### **Reminder about IM Injection Technique**

All vaccinators must be competent in IM injection technique which includes correct landmarking of the injection site to ensure the vaccine is given in the correct area of the Deltoid muscle.



Below is a reminder of IM injection technique. Note: COVID-19 vaccine should be given IM only.



Summary sheet outlining the IM injection technique

Click here

When vaccinating children aged 5-15 years, the same intramuscular injection technique should be followed as for adults.

The injection site must be landmarked correctly to avoid injury associated with administration of the vaccine in the wrong site.

Several supporting documents, training videos and modules are available on correct IM injection technique.



Watch Training video

Click here

Training is also included in HSELand modules

**Click here** 

More IM Injection Technique materials

**Click here** 

Please contact your clinical lead or line manager if you need additional support or training.









# Comirnaty® (10 micrograms/dose concentrate) for children aged 5-11

#### **Clinical Trial and Real World Data**

We have developed a new webpage and will be adding to it as additional information becomes available:

**Click here** 



#### **Frequently asked questions**



#### Who is recommended to receive a booster dose of COVID-19 vaccine?

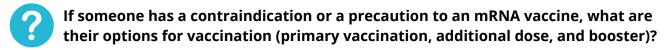
The RCPI National Immunisation Advisory Committee (NIAC) recommends a booster dose of COVID-19 vaccine for people aged 16 years and older who have an interval of:

- at least 3 months since their last dose of COVID-19 vaccine OR
- at least 3 months since they tested positive for COVID-19



#### Can a booster dose of COVID-19 vaccine be given to 12-15 year olds?

No. The NIAC have not recommended a booster dose of COVID-19 vaccine for 12-15 year olds.



For individuals who have a contraindication or precaution to an mRNA vaccine (including pregnant women), consideration can be given to a viral vector vaccine. COVID-19 vaccine Janssen is available through HSE vaccination clinics. Note that COVID-19 vaccine Janssen is licensed and recommended from the age of 18 years only.



After COVID-19 infection, vaccines can be administered from when the person finishes the recommended period of isolation. The exception to this is COVID-19 vaccines (information about intervals between COVID-19 disease and a COVID-19 vaccine is available from the <u>Quick Reference Guide</u>).

If the vaccinee has an acute febrile illness, the vaccination should be delayed until recovery.

**Download Quick Reference Guide** 

# Read COVI

#### Stay up to date with the latest advice

Read COVID-19 Frequently Asked Questions for Health Professionals

See more here

Complete the e-learning Programme on HSELand

See more here

See also clinical guidance for vaccinators

Read more here







#### **Pneumococcal polysaccharide vaccine**

Pneumococcal infection is responsible for 50% of community acquired pneumonia and bacteraemia where the overall mortality rate can be as high as 25%. It can also cause a wide variety of other infections including sinusitis, osteomyeltitis, bronchitis and otitis media.

Over the years streptococcus pneumoniae has become resistant to many medications making the treatment of pneumococcal infections much more difficult. Prevention of disease through vaccination is now more important than ever.

#### Pneumococcal polysaccharide vaccine (PPV):

PPV 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 2 years of age and older.

# Those with the following conditions are at higher risk of invasive pneumococcal disease and should be vaccinated with PPV23:

- Everybody aged 65 years and over and
- Everybody aged 2 years and over with;
  - Diabetes
  - Chronic lung, heart, liver, or kidney disease
  - Cancer patients under hospital supervision
  - Chronic neurological disease
  - o Children aged 2 to less than 5 years of age with a history of invasive pneumococcal disease
  - Coeliac disease
  - Down Syndrome
  - Cochlear implants or are about to get cochlear implants
  - Immune deficiency because of a disease or treatment, including cancer patients
  - HIV infection
  - Absent spleen or a non-functioning spleen
  - o CSF leaks, either congenital or complicating skull fractures or neurosurgery
  - Intracranial shunt

PPV23 vaccination is **not** recommended for healthy children and adults as they are at low risk of pneumococcal disease.

#### How many doses of PPV are required?

We have developed an algorithm to guide you in determining the numbers of doses required:

See more here

#### Aged 65 years and older

**One** PPV23 pneumococcal vaccine is recommended for anyone aged 65 years or older irrespective of immune status.

#### Aged less than 65 years of age

- One dose is required for those at risk
- **A booster** vaccination is recommended 5 years after the first vaccination for some individuals: those whose antibody levels are likely to decline rapidly e.g. those who have asplenia, hyposplenism, immunosuppression including HIV infection, chronic renal disease, nephrotic syndrome or renal transplant.
- Patients with these conditions who received their dose of PPV23 at less than 65 years of age require one further PPV23 booster at or after 65 years of age (five years after the previous dose)

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



Office PREAMER





#### Seasonal Influenza vaccine

Seasonal influenza vaccination is the best way to protect individuals at risk of severe influenza, and prevent the need for hospital care and treatment in ICU.

It is especially important this season, given the burden on health services, that people at risk of the complications of influenza are protected.

The vaccine and its administrations are free for at-risk groups through GPs and Pharmacies.



Click to find a pharmacy offering flu vaccines



Reminder: This influenza season, the flu vaccination programme has been extended to include people aged 50-64.

Flu vaccine is also strongly recommended for healthcare workers, to protect them and their vulnerable patients against influenza.





**Click for more information** 





#### Website

Visit our website **www.immunisation.ie** regularly for the most up to date information to support vaccinators and health professionals responding to queries.

Our dedicated COVID-19 Vaccination section contains

- Information from the National Immunisation Advisory Committee
- Clinical guidelines
- COVID-19 vaccine studies
- IM injection technique reminders
- Dedicated pages for the licensed COVID-19 vaccines

**Visit here** 

#### **HSeLanD COVID-19 Vaccination Training Programme**

We have developed a HSeLanD training programme for the Children 5-11 COVID-19 vaccination programme.

You can access updates to the National Immunisation Office COVID-19 Vaccination Training Programme for Children 5 to 11, Pfizer, Moderna, and Janssen vaccine through your HSeLanD account.

**Visit HSeLanD** 

We would encourage you to log in and complete the updated content in each programme to refresh your knowledge and ensure you are up to date with your COVID-19 Vaccination Training.

If you have any issues with the platform please contact HSeLand directly.

**Contact HSeLanD** 

#### Do you have queries?

Clinical queries from healthcare professionals can be directed to our HSE email address.

**Send your query** 

Should vaccines be exposed to temperatures outside of parameters please contact the National Immunisation Office pharmacists immediately. Contacts include:

- Mariangela Toma: mobile 087 7575679
- Cliona Kiersey: mobile 087 9915452
- Achal Gupta: mobile 087 4064810

The National Immunisation Office is not involved in the allocation or delivery of COVID-19 Vaccines.

Queries that are not clinical or technical cannot be answered by the National Immunisation Office

Read about the role of the National Immunisation Office in supporting the COVID-19 vaccination programme on our **website**.

Recommendations about COVID-19 vaccine are changing as more information becomes available so please visit our **website** for the most up to date information.



