‘Flu update 23/24’

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Learning outcomes

Re visit immunisation principles

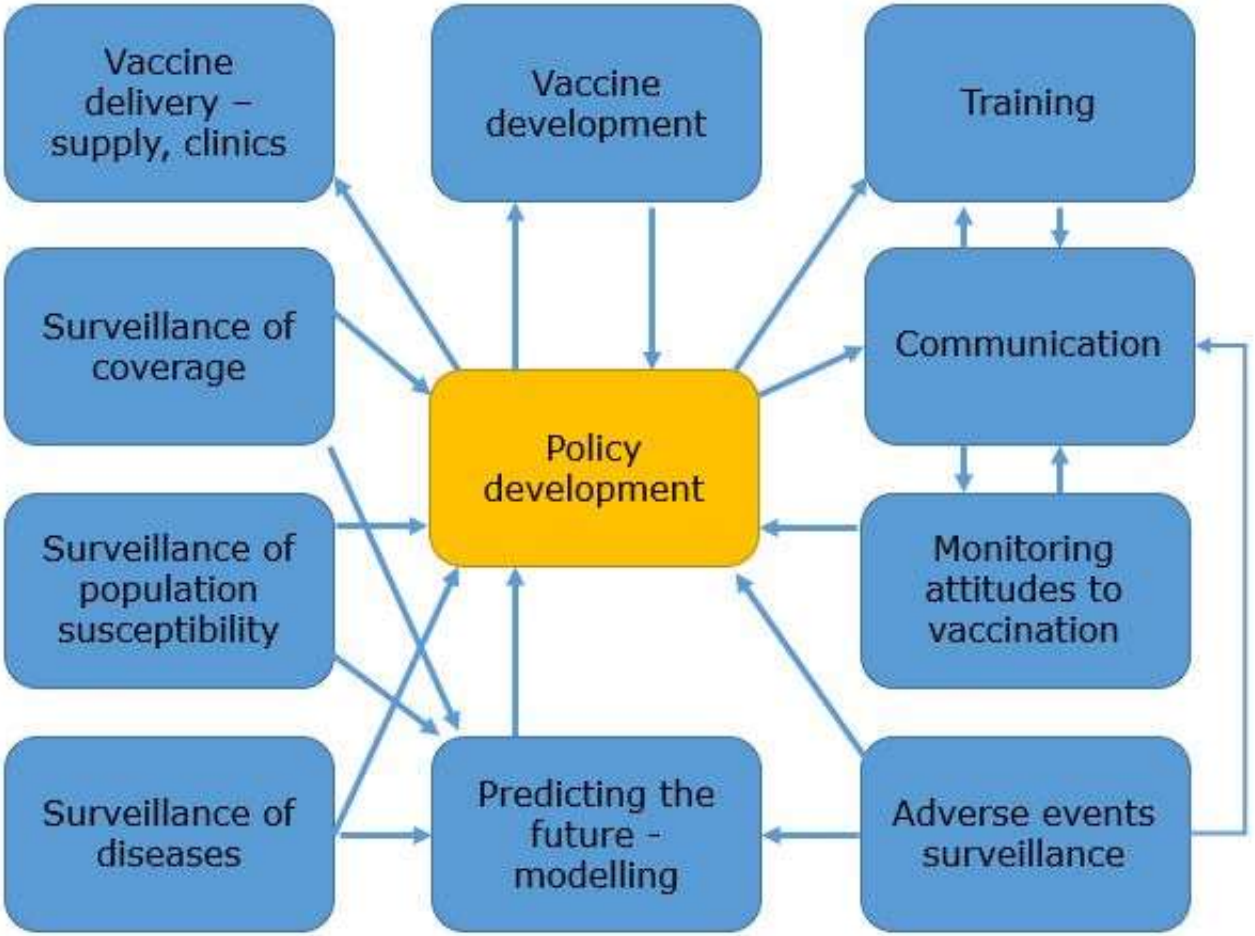
Consider this year's risk groups and your immunisation techniques

Familiarise yourself with vaccine types

Understand the medico legal frameworks of using POMs and other medicolegal issues

Think about vaccine storage and ordering

What are your learning needs??



Immunisation principles

Flu vaccination

Flu vaccination is one of the most effective interventions we have to reduce pressure on the health and social care system this winter. We are still seeing the impact of COVID-19 on the NHS and social care, and this coming winter we may be faced with co-circulation of COVID-19 and flu again. We understand that planning this year is still challenging with the uncertainties of staff absences, illness and COVID 19. However, it is more important than ever to make every effort to deliver flu vaccination.

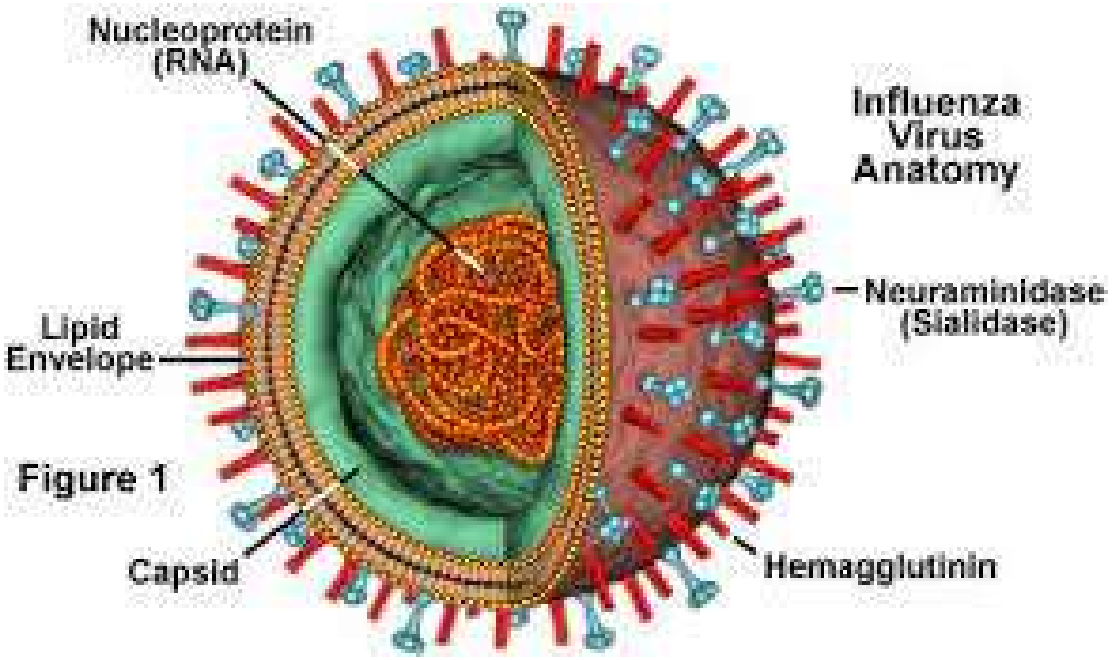
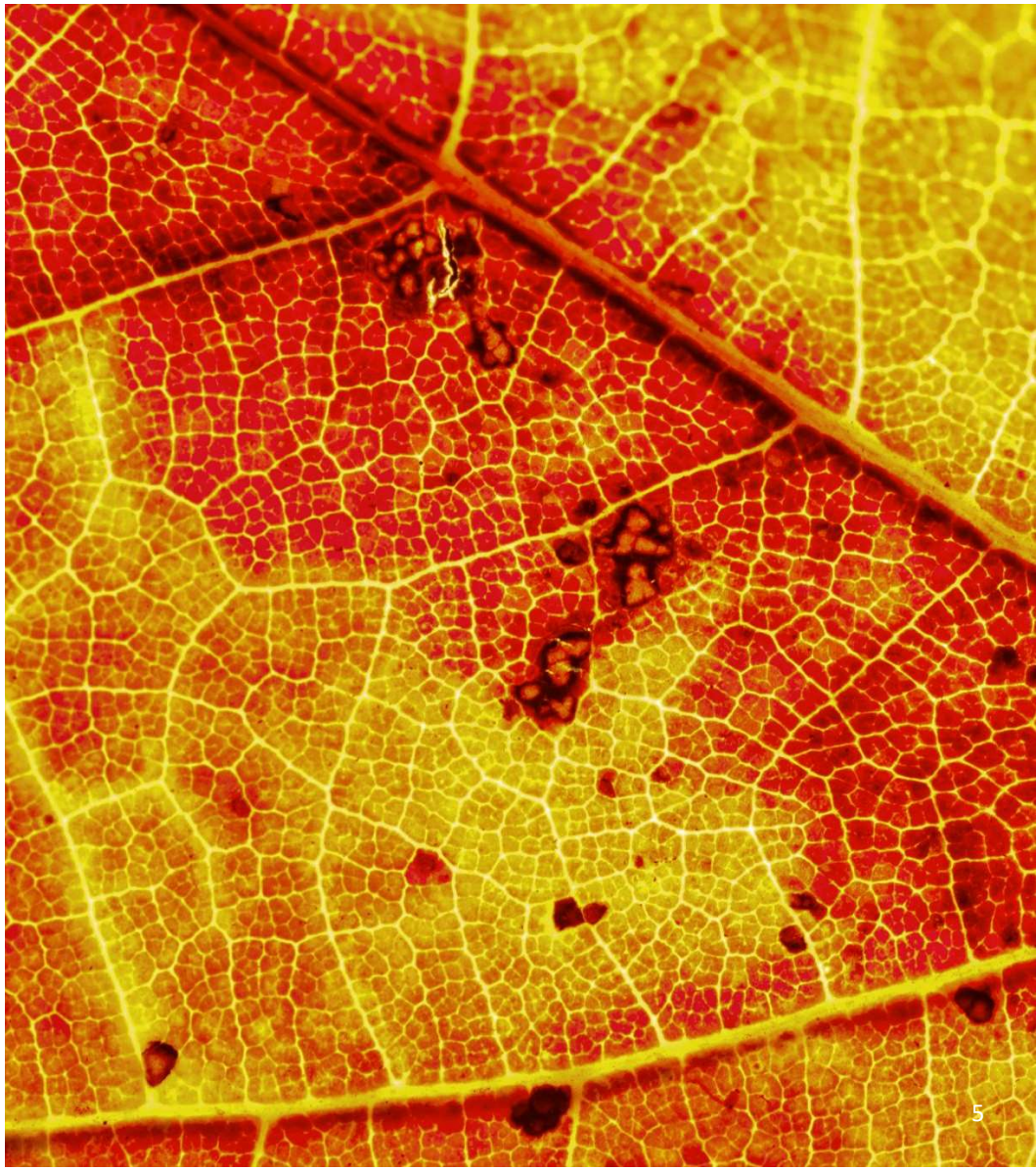


Figure 1

Flu 2

Those most at risk from flu are also most vulnerable to COVID-19 and other winter illnesses such as norovirus.. We must do all we can to help protect them this winter. We anticipate that concerns about COVID-19 and other winter viruses may increase demand for flu vaccination in all groups this year, and some in at risk groups may still find it hard to attend.



Flu 3

- All those eligible should be given flu vaccination as soon as possible so that individuals are protected when flu begins to circulate.

- Providers should aim to schedule their immunisation services to match vaccine supply, usually from September, and complete vaccination by the end of November, where possible

Flu 4

- In general practice there are DES and ES specifications and these require a proactive call and recall system to contact all at risk patients. Various methods for this should be considered such as letter, email, phone call, text or social media and during face to face interactions if the opportunity arises, to encourage people to attend for their vaccination.

Flu 5

- GP practices should also proactively call 2- and 3-year-olds. **PRIORITISE** this group in the 23-24 season. This year the national Childhood Health Information System (CHIS) service specification has been revised to include issuing an early communication to advise parents/carers of all eligible 2- and 3 year-olds that they should access the flu vaccination from their GP practice.
- These communications are designed to support local call and recall initiatives.
- It is important that all children are given early protection through the flu vaccine, and GP practices should aim to complete flu vaccination by the end of November at the latest

Eligibility for 23/24

- aged 2 and 3 years on 31 August 2023
- eligible school aged children – reception, years 1 -11
- those aged 6 months to under 65 years in clinical risk groups
- pregnant women
- all those aged 65 years and over
- those in long-stay residential care homes
- carers, those in receipt of carer's allowance or main carer of an older or disabled person
- close contacts of immunocompromised individuals
- frontline health and social care staff

Additional groups including home schooled children

1. The annual flu vaccination programme letter ("annual flu letter") of 25 May 2023 is hereby amended to reflect the addition to the programme of secondary school-aged children in Years 7, 8, 9, 10 and 11 (including home-schooled and other children not in mainstream education). Providers should ensure they commence vaccinations as early as possible after the flu vaccine becomes available and complete by 15 December 2023 in line with the other school aged cohorts already announced.

2. As set out in the annual flu letter, the live attenuated influenza vaccine (LAIV) should be offered to eligible children aged from 2 years to less than 18 years of age unless contraindicated or where parents object to LAIV on the grounds of its porcine gelatine content. Where LAIV is unsuitable, children should be offered the injectable cell-based Quadrivalent Influenza Vaccine (QIVc). Children's vaccines will be available to order through ImmForm.

3. This year at present 50-63 year olds are not included as a cohort.

Those aged 65 years and over	Those aged 18 to 64 years in eligible groups
Adjuvanted quadrivalent influenza vaccine (aQIV) / recombinant quadrivalent influenza vaccine (QIVr)	Cell-based quadrivalent influenza vaccine (QIVc) / recombinant quadrivalent influenza vaccine (QIVr)
Cell-based quadrivalent influenza vaccine (QIVc) – only when every attempt to use aQIV or QIVr has been exhausted – evidence of this may be requested by the commissioner before reimbursement is agreed	Egg-grown quadrivalent influenza vaccine (QIVe) -only when every attempt to use QIVc or QIVr has been exhausted – evidence of this may be requested by the commissioner before reimbursement is agreed

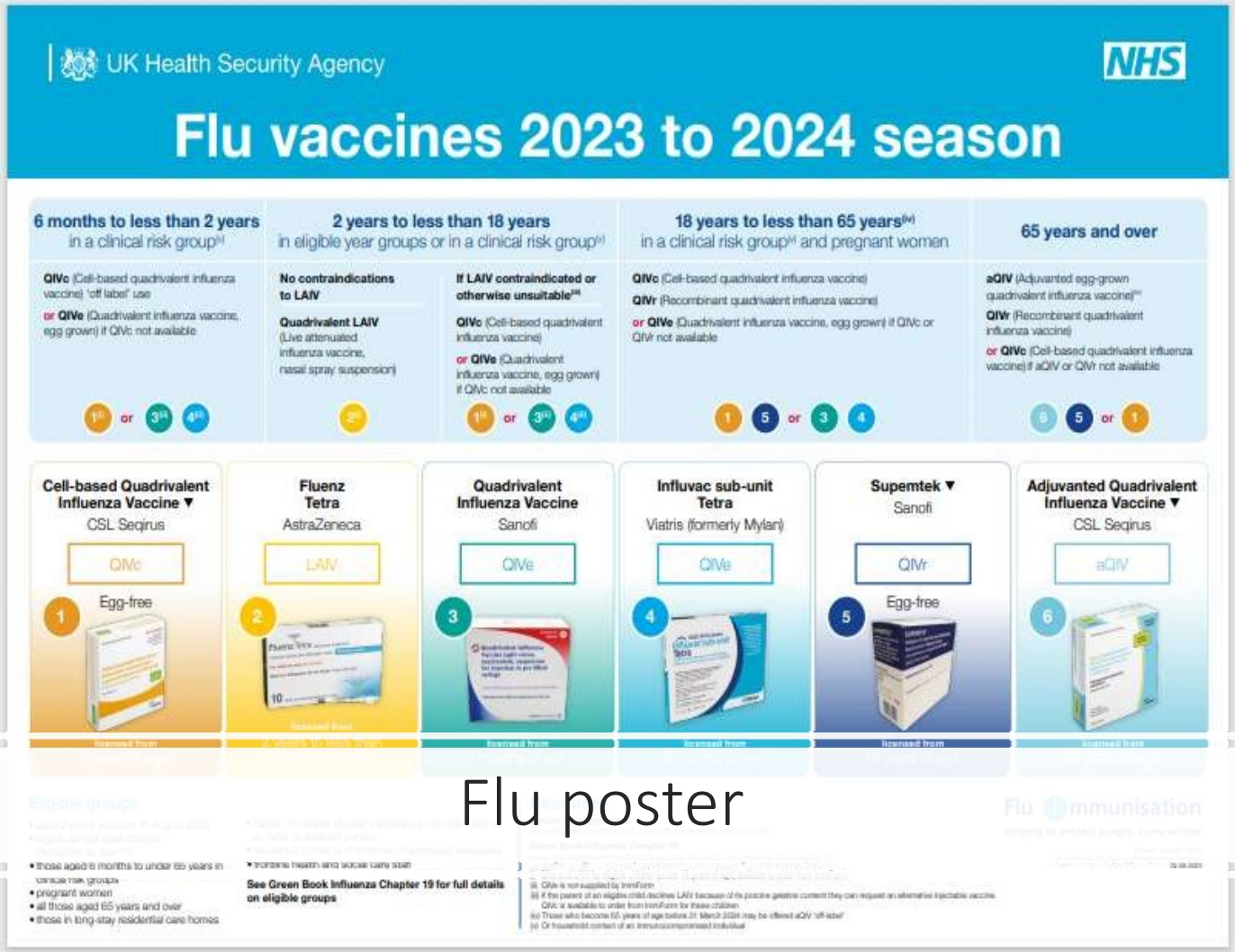
Vaccine	Manufacturer	Licensed from age
Cell-based Quadrivalent Influenza Vaccine (QIVc) ▼ [footnote 1] [footnote 2], Egg-free	CSL Seqirus	licensed from 2 years of age
Fluenz Tetra, live attenuated influenza vaccine (LAIV) [footnote 1]	AstraZeneca	licensed from 2 years to under 18 years of age
Quadrivalent Influenza Vaccine, egg-grown (QIVe) [footnote 3]	Sanofi	licensed from 6 months of age
Influvac sub-unit Tetra, Quadrivalent Influenza Vaccine, egg-grown (QIVe) [footnote 3]	Viatris (formerly Mylan)	licensed from 6 months of age
Supemtek ▼, recombinant Quadrivalent Influenza Vaccine (QIVr) [footnote 2] Egg-free	Sanofi	licensed from 18 years of age
Adjuvanted Quadrivalent Influenza Vaccine ▼ (aQIV) [footnote 2]	CSL Seqirus	licensed from 65 years of age

Summary table influenza vaccines for 2023/24

Programme	Age/Risk group	Preference	If the preferred vaccine is not available
Routine	≥65 years	aQIV, QIVr, QIV-HD	QIVc
	18-64 years in risk groups	QIVc or QIVr	QIVe
	2-17 years	LAIV	
	2-17 years in risk groups but unable to have LAIV†	QIVc	QIVe
	6 months-2 years in risk groups	QIVc (off label)	QIVe
Enhanced‡	50-64 years	QIVc or QIVr	QIVe

† LAIV the vaccine of choice for the children's programme 2-17 year olds

‡ Advised as a temporary cohort during the COVID -19 pandemic influenza 2020/21, 2021/22 and 2022/23 seasons. Policy for 2023/24 to be confirmed.


UK Health Security Agency
NHS
Flu vaccines 2023 to 2024 season
6 months to less than 2 years
in a clinical risk group
2 years to less than 18 years
in eligible year groups or in a clinical risk group
18 years to less than 65 years
in a clinical risk group and pregnant women
65 years and over
Cell-based Quadrivalent Influenza Vaccine
CSL Seqirus
QIVc
Egg-free
Fluenz Tetra
AstraZeneca
LAIV
Quadrivalent Influenza Vaccine
Sanofi
QIVe
Influvac sub-unit Tetra
Viatris (formerly Mylan)
QIVe
Supemtek
Sanofi
QIVr
Egg-free
Adjuvanted Quadrivalent Influenza Vaccine
CSL Seqirus
aQIV
See Green Book Influenza Chapter 19 for full details on eligible groups

Flu poster

Clinical risk groups

- increasing flu vaccine uptake in clinical risk groups is important because of increased risk of death and serious illness if people in these groups catch flu
- for a number of years only around half of patients aged 6 months to under 65 in clinical risk groups have been vaccinated
- vaccine uptake for all clinical risk groups needs to improve
- aim of the flu programme for 2023 to 2024 is to demonstrate a 100% offer to all eligible patients and to achieve at least the uptake levels of 2022 to 2023 for each cohort
- strategies to improve vaccine uptake should be tailored to each risk group to ensure optimum uptake of vaccine in each of them.
- further information on flu vaccination for those with learning disabilities can be found on the GOV.UK website

  www.gov.uk/government/publications/flu-vaccinations-for-people-with-learning-disabilities/flu-vaccinations-supporting-people-with-learning-disabilities

Secondary school aged children and refusals

The secondary school-aged children will be offered immunisation through the school age immunisation service. Secondary school children will be offered vaccination as far as it is possible to do so, with primary schools and secondary schools offered vaccination as well e.g. years 1-11. This will be commissioned via the school age service specification.

The live attenuated influenza vaccine (LAIV) should be offered to children in secondary school unless contraindicated or where parents object to LAIV on the grounds of its porcine gelatine content. Where LAIV is unsuitable, children should be offered the injectable cell-based Quadrivalent Influenza Vaccine (QIVc) if aged 2 years to less than 18 years. Children's vaccines will be available to order through the ImmForm website.

Co-administration of vaccines

- Providers are encouraged to align delivery of the flu vaccination programme with other commissioned vaccination programmes for which the patient may be eligible (for instance shingles, pertussis, or pneumococcal vaccines) where it is clinically acceptable, operationally feasible, and where the patient is content. Where co-administration may not be feasible providers must make every effort to encourage individuals to take up the offer of every vaccine they are eligible for.

WHO strain recommendations

- The WHO recommends that quadrivalent vaccines for use in the 2023-2024 northern hemisphere influenza season contain the following:

- **Egg-based vaccines**
- an A/Victoria/4897/2022 (H1N1)pdm09-like virus;
- an A/Darwin/9/2021 (H3N2)-like virus; and
- a B/Austria/1359417/2021 (B/Victoria lineage)-like virus; and
- a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.
- **Cell culture- or recombinant-based vaccines**
- an A/Wisconsin/67/2022 (H1N1)pdm09-like virus;
- an A/Darwin/6/2021 (H3N2)-like virus;
- a B/Austria/1359417/2021 (B/Victoria lineage)-like virus; and
- a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus

GP patient group	2022 to 2023 vaccine uptake	2021 to 2022 vaccine uptake	2020 to 2021 vaccine uptake	2019 to 2020 vaccine uptake	2018 to 2019 vaccine uptake
Aged 65 years and over	79.9%	82.3%	80.9%	72.4%	72.0%
In clinical risk group	49.1%	52.9%	53.0%	44.9%	48.0%
Pregnant women	35.0%	37.9%	43.6%	43.7%	45.2%
Aged 50 to 64 years not in risk group [footnote 2]	40.6%	45.7%	35.2%	N/A	N/A
Aged 2 years old	42.3%	48.7%	55.3%	43.4%	43.8%
Aged 3 years old	45.1%	51.4%	58.0%	44.2%	45.9%

Eligible school-aged children	2022 to 2023 vaccine uptake (Reception to Year 9) [footnote 1]	2021 to 2022 vaccine uptake (Reception to Year 11)	2020 to 2021 vaccine uptake (Reception to Year 7)	2019 to 2020 vaccine uptake (Reception to Year 6)	2018 to 2019 vaccine uptake (Reception to Year 5)
All eligible groups	51.2%	51.7%	61.7%	60.4%	60.8%
Primary school (Reception to Year 6)	55.9%	57.4%	62.5%	60.4%	N/A

- **Table 3: Influenza vaccine uptake for secondary school-aged children (provisional data for 2022 to 2023 and final end of season data 2021 to 2022 and 2020 to 2021)**

SCHOOL YEAR	2022 TO 2023 [FOOTNOTE 1]	2021 TO 2022	2020 TO 2021
Year 7 (11 to 12 years)	43.5%	48.2%	55.5%
Year 8 (12 to 13 years)	39.4%	45.4%	N/A
Year 9 (13 to 14 years)	37.5%	42.0%	N/A
Year 10 (14 to 15 years)	N/A	41.8%	N/A
Year 11 (15 to 16 years)	N/A	38.7%	N/A
All secondary school age (Year 7 to Year 11)			

- **Table 4: Influenza vaccine uptake for health care workers (provisional data for 2022 to 2023 and final end of season data between 2021 to 2022 and 2018 to 2019)**

	2022 to 2023 vaccine uptake	2021 to 2022 vaccine uptake	2020 to 2021 vaccine uptake	2019 to 2020 vaccine uptake	2018 to 2019 vaccine uptake
Frontline healthcare workers	49.9%	61.4%	76.8%	74.3%	70.3%

Data collection and checks-during the ‘flu season you can …

- see their uptake by eligible groups
- compare themselves with other anonymous general practices or areas
- validate the data on point of entry and correct any errors before data submission
- view data and export data (including ethnicity) into Excel, for further analysis
- make use of automated data upload methods (depending on the general practices system supplier used at GP practices)
- access previous years’ data to compare with the current performance

Quiz for you

- How many types of ' flu virus are there?
- Why can we not use the same vaccine each year?
- Name 3 absolute contra-indications to vaccines.
- And 5 relative contra-indications or precautions?
- What do you we need to avoid when storing vaccines?
- Who cannot give 'flu vaccines?
- Who can give consent to a vaccine?

Scenario

- Mr Brown brings his wife for her ‘flu jab. She is confused and agitated today . Who can give consent for this vaccine to be given?

Adjuvanted influenza vaccine (aQIV)

- Adjuvanted trivalent influenza vaccine (aTIV) was used in the UK in the 2018 to 2019 and 2019 to 2020 flu seasons in 65y and over age group and was used widely elsewhere. It has been used for 20 years and over 93 million doses have been distributed worldwide and it has an excellent safety record
- Adjuvanted vaccines have higher immunogenicity and effectiveness than non-adjuvanted, normal dose vaccines in older people
- An adjuvanted quadrivalent vaccine (aQIV) has replaced aTIV. This vaccine contains two subtypes of Influenza A (H3N2 and H1N1pdm09) and two type B virus
- an adjuvant (MF59) has been added to the vaccine to enhance the immune response to counter the effect of **immunosenescence** (age related reduction in immune response)
- MF59 adjuvant is an oil-in-water emulsion of squalene oil which is a naturally occurring substance found in humans, animals and plants. In humans, it is made in the liver and circulates in the bloodstream
- aQIV is made using an egg-based manufacturing process

Quadrivalent influenza cell culture vaccine (QIVc)

- QIVc (Flucelvax TETRA) was first licenced in the US in 2016 and was licensed in the UK in December 2018
- Flucelvax TETRA is a quadrivalent vaccine containing two subtypes of Influenza A (H3N2 and H1N1pdm00) and both B virus lineages. As the vaccine contains both lineages of B viruses it may provide better protection against circulating flu B strain(s) than trivalent flu vaccines
- QIVc has a similar safety profile to other flu vaccines (similar rate and type of adverse reactions reported). More than 100 million doses of cell-based vaccine have been distributed worldwide with no serious safety concerns
- the cell-based vaccine manufacturing process uses an animal cell line (Madin-Darby Canine Kidney, or MDCK) to grow the influenza virus rather than the traditional egg based manufacturing methods
- this manufacturing process eliminates the risk of egg-adaptation and may result in the vaccine containing virus that is a closer match to wild-type circulating flu viruses
- Flucelvax tetra is licenced for use in those aged 2 years and over and is egg free

QIVr

- Supemtek (QIVr) is a quadrivalent flu vaccine made using recombinant DNA technology
- it does not require the use of, or growth of flu virus during the manufacturing process which means that the antigen in the vaccine cannot adapt or mutate and should therefore be an exact match to the flu A and B strains contained in the vaccine
- it also contains 3 times the amount of flu virus antigen contained in the other flu vaccines currently used in the UK in order to enhance the immune response made to it
- the type and rates of local and systemic reactions following vaccination with Supemtek are similar to those seen following vaccination with other flu vaccines (injection site tenderness, headache, fatigue, muscle ache and joint pain)
- since eggs are not required to grow the flu virus, cell-based flu vaccines contain no egg and they also do not contain any live virus, antibiotics or gelatine

QIVe- not available this year

- the egg-grown quadrivalent influenza vaccine (QIVe) protects against 4 strains of flu: 2 A types and both B types
- this vaccine can be considered for use in at risk adults and pregnant women aged less than 65 years if the recommended vaccines are not available. Any impact of egg adaptation is likely to be limited to influenza seasons dominated by well-matched H3N2 strains
- JCVI supports a preference for QIVc and QIVr over QIVe

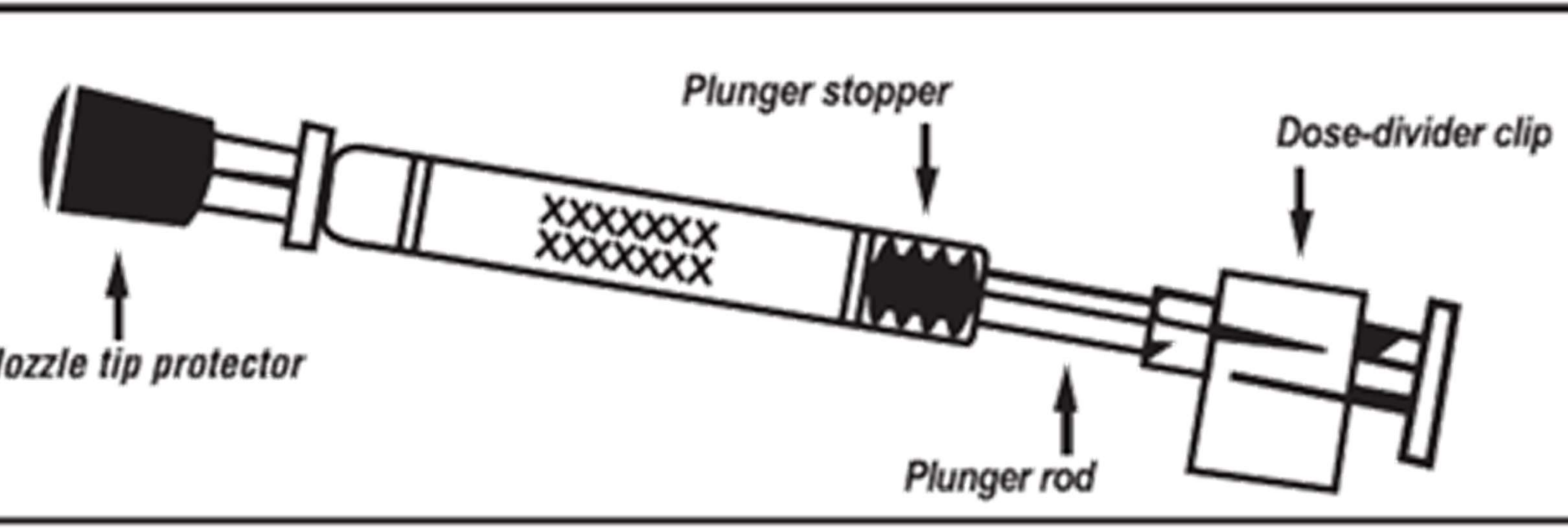
Live attenuated influenza vaccine (LAIV)

- a live attenuated intranasal spray is the recommended vaccine for the childhood flu programme
- the live attenuated (weakened) influenza vaccine (LAIV) has been shown to be more effective in children compared with inactivated influenza vaccines
- it may offer some protection against strains not contained in the vaccine as well as to those that are and has the potential to offer better protection against virus strains that have undergone antigenic drift
- since this vaccine is comprised of weakened whole live virus, it replicates natural infection which induces better immune memory (thereby offering better long-term protection to children than from the inactivated vaccines)
- in addition to being attenuated, the live viruses in LAIV have been adapted to cold so that they cannot replicate efficiently at body temperature
- LAIV has a good safety profile in children aged two years and older

Inactivated influenza vaccine for children contraindicated to receive LAIV

- children for whom LAIV is medically contraindicated should be offered a suitable alternative inactivated flu vaccine
- for children in clinical risk groups under 18 years of age where LAIV is contraindicated or otherwise unsuitable:
  - **QIVc** should ideally be offered to children aged 2 years and over who access the vaccine through general practice. Where QIVc vaccine is unavailable, GPs should offer QIVe unless contraindicated
  - Also to those 2 years and under although off licence
- if the inactivated vaccine supplied by PHE is not used, please be aware that not all inactivated flu vaccines are licensed for children and some contain too much ovalbumin for egg allergic children
- always check SmPC for vaccine suitability before administration


SCHOOL AGE CHILD



THINGS TO REMEMBER

Number of doses

- 2 doses of the **inactivated** flu vaccines are required to achieve adequate antibody levels in younger children
- however, a **single dose of LAIV** should provide protection to previously unvaccinated healthy children
- only modest additional protection provided by a second dose of LAIV
- only children aged 6 months to less than 9 years who are in clinical risk groups or who are a household contact of an immunosuppressed individual who have not received flu vaccine previously should be offered a second dose of LAIV, given at least 4 weeks apart (if no contraindications – otherwise offer inactivated vaccine)
- healthy children under 9 years who cannot receive LAIV due to contraindications and those whose parents request they receive IIV instead of LAIV should be offered a single dose, even if they have not previously received influenza vaccine

Contraindications to flu vaccination

- there are very few individuals who cannot receive any flu vaccine
- **where LAIV cannot be given to a child, it is likely that inactivated vaccine could be given instead**
- where there is doubt, expert advice should be sought promptly so that the period the individual is left unvaccinated is minimised

Contraindications for all flu vaccines:

- confirmed anaphylactic reaction to a previous dose of flu vaccine
- confirmed anaphylactic reaction to a component of flu vaccine (for example to gelatine in LAIV) or residue from the manufacturing process (gentamicin), except egg proteins (see slide on egg allergy)

Additional contraindications for LAIV :

- clinically severely immunocompromised due to a condition or immunosuppressive therapy such as:
- acute and chronic leukaemias
- lymphoma
- HIV infection not suppressed by highly active antiretroviral therapy (HAART)
- cellular immune deficiencies
- high dose corticosteroids
- receiving salicylate therapy e.g. aspirin
- known to be pregnant

- Also contraindications for children with acute and severe asthma - see specific slide

Egg allergy in adults

- Adults with egg allergy can be immunised in any setting using:
- the cell-based quadrivalent inactivated egg-free vaccine (QIVc) **or**
- the recombinant quadrivalent inactivated egg-free vaccine, (QIVr) **or**, **if neither of these 2 vaccines are available:**
- an inactivated flu vaccine with an ovalbumin content less than 0.12µg/ml (equivalent to less than 0.06µg per 0.5ml dose).
- Adults with severe anaphylaxis to egg which has previously required intensive care should be offered an egg-free vaccine or, if this is not possible, referred to a specialist for assessment with regard to receiving immunisation in hospital

Precautions to flu vaccination

- Acutely unwell/severe febrile illness:
  - defer until recovered
- Heavy nasal congestion:
  - defer live intranasal vaccine until resolved or, if the child is in a risk group, consider inactivated flu vaccine to provide protection without delay
- Use with antiviral agents against flu:
  - LAIV should not be administered at the same time or within 48 hours of cessation of treatment with flu antiviral agents
  - administration of flu antiviral agents within 2 weeks of administration of LAIV may adversely affect the effectiveness of the vaccine

Acute and severe asthma

- children with asthma on inhaled corticosteroids may safely be given LAIV irrespective of the dose prescribed
- however, LAIV is not recommended for children and adolescents currently experiencing an acute exacerbation of symptoms including
  - those who have had increased wheezing and/or
  - needed additional bronchodilator treatment in the previous 72 hours

Such children should be offered a suitable inactivated influenza vaccine to avoid a delay in protection

- children who require regular oral steroids for maintenance of asthma control, or have previously required intensive care for asthma exacerbation should only be given LAIV on the advice of their specialist
- as these children may be at higher risk from influenza infection, those who cannot receive LAIV should receive a suitable inactivated influenza vaccine

- children with significant asthma and aged under 9 years who have not been previously vaccinated against influenza will require a second dose (of either LAIV or inactivated vaccine as appropriate)

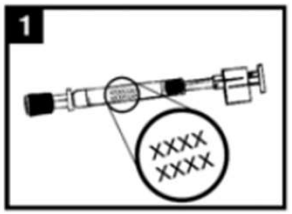
Egg allergy in children

- Children with clinical risk factors that contraindicate the live flu vaccine, for example children with immunosuppression or severe asthma, who also have egg allergy, should be offered:
- the quadrivalent inactivated egg-free vaccine, QIVc* or
- an inactivated flu vaccine (QIVe) with a very low ovalbumin content (less than 0.12µg/ml) if it is not possible to give QIVc
- Children with a history of severe anaphylaxis to egg which has previously required intensive care, should be referred to specialists for immunisation in hospital. They may still be able to have LAIV in the hospital setting as this remains the preferred vaccine for this age group and the intranasal route is less likely to cause systemic reactions.
- *The JCVI has advised that egg-allergic children aged less than 2 years should be offered the egg-free vaccine, QIVc. This is an off-label recommendation (as it is licensed from 2 years of age) which is supported by unpublished data which shows that QIVc is as immunogenic as, and has a very similar safety profile, to QIVe in children less than 2 years old.

Salicylate therapy and LAIV

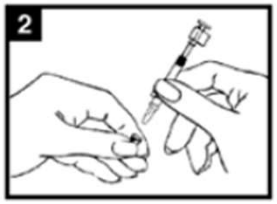
- children and adolescents who are receiving salicylate therapy (e.g. aspirin) (other than for topical treatment of localised conditions such as in skin creams for verrucae) should not be given LAIV
- this is because of the association of Reye's syndrome with salicylates and wild-type influenza infection
- Reye's syndrome has been reported following the use of salicylates during wild-type influenza infection
- because of the theoretical risk of Reye's syndrome following administration of the LAIV to children on aspirin therapy or other salicylate-containing medicine, they should not be given LAIV and should instead be offered an inactivated flu vaccine
- Reye's syndrome is a very rare disorder that can cause serious liver and brain damage. If not treated promptly, it may lead to permanent brain injury or death

Administering Fluenz tetra



Check expiry date

Product must not be used after date on applicator label.



Prepare the applicator

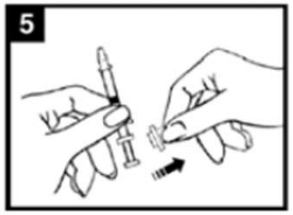
Remove rubber tip protector. Do not remove dose-divider clip at the other end of the applicator.

Position the applicator

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

Depress the plunger

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

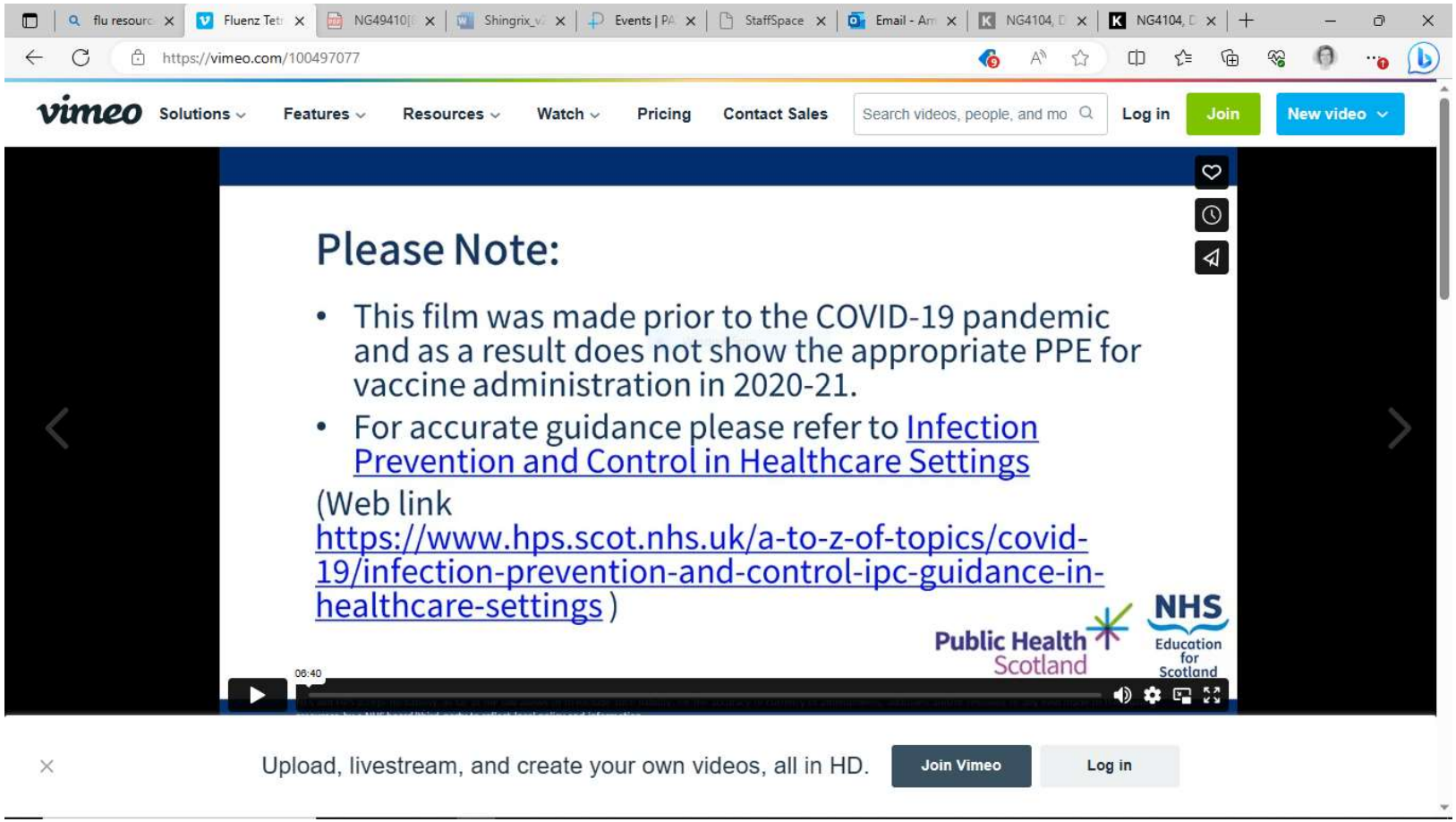


Remove dose-divider clip

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

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.


https://vimeo.com/100497077
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Solutions
Features
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Search videos, people, and mo
Log in
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New video
Please Note:
• This film was made prior to the COVID-19 pandemic and as a result does not show the appropriate PPE for vaccine administration in 2020-21.
• For accurate guidance please refer to Infection Prevention and Control in Healthcare Settings
(Web link https://www.hps.scot.nhs.uk/a-to-z-of-topics/covid-19/infection-prevention-and-control-ipc-guidance-in-healthcare-settings)
Public Health Scotland
NHS Education for Scotland
06:40
Upload, livestream, and create your own videos, all in HD.
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Facts about
Fluenz™ Tetra
(nasal spray, suspension influenza vaccine (live attenuated, nasal))

Pre-administration checklist

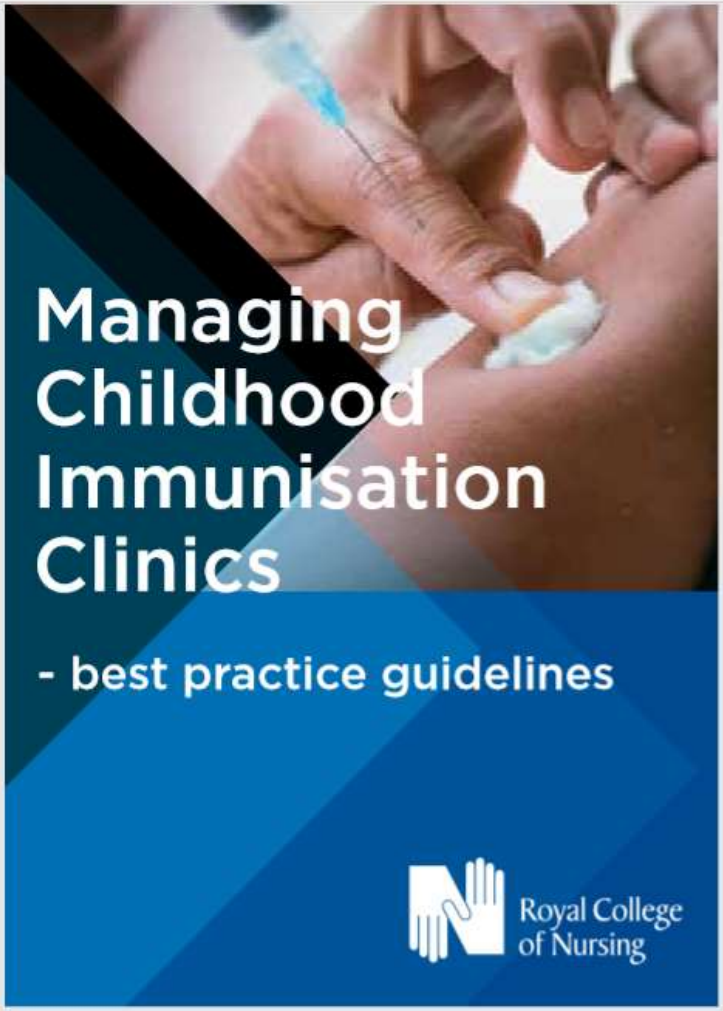
This checklist is to be used as a guide and does not substitute clinical judgement.
The use of Fluenz Tetra should be based on official recommendations.
The following 8 questions should be asked **before** Fluenz Tetra is administered:

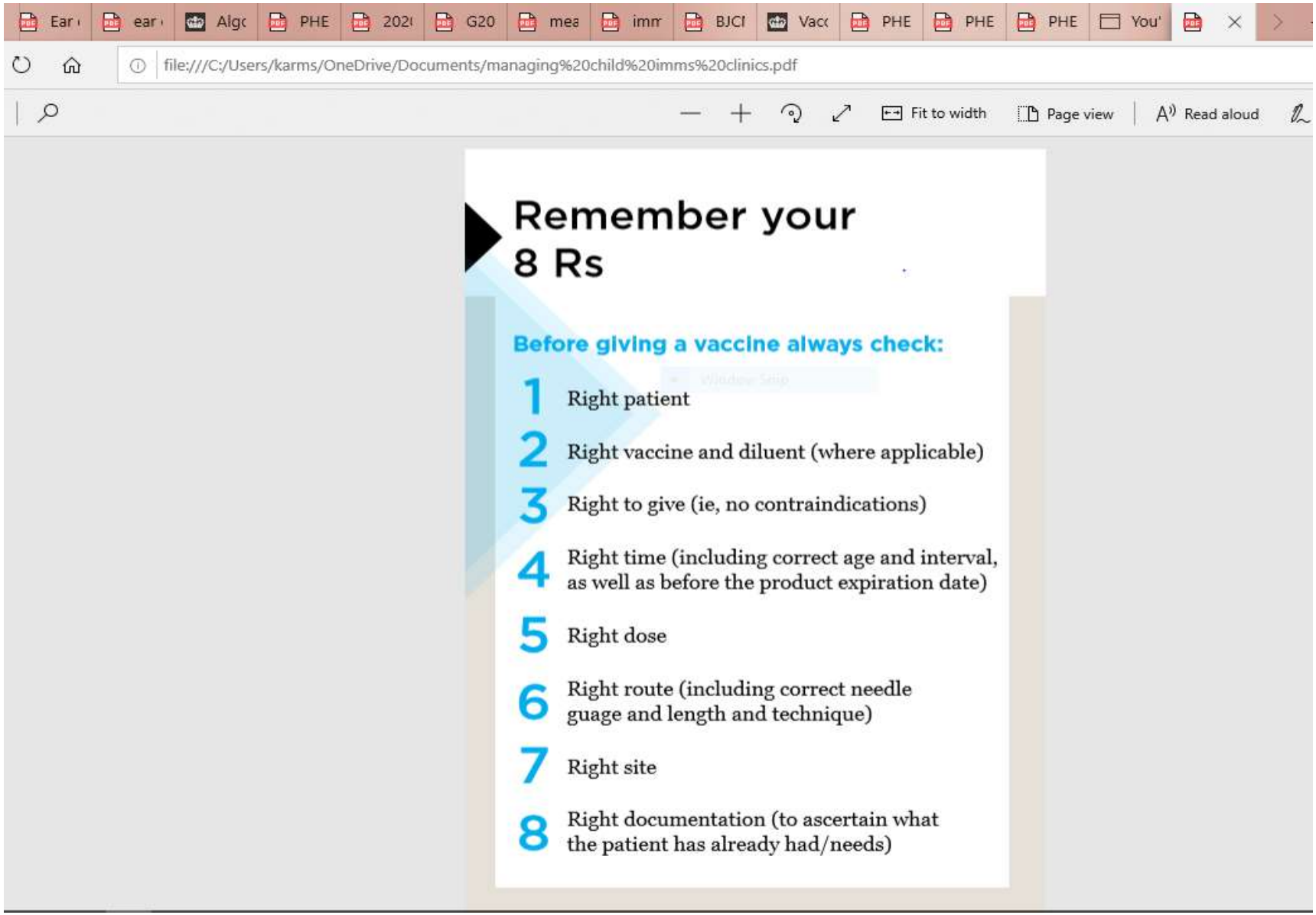
1. Age – Is the recipient at least 24 months and less than 18 years old?
2. Is the recipient allergic to any of the following?
   - Severe allergic reaction (e.g. anaphylaxis) to eggs or to egg proteins (e.g. ovalbumin)
   - Gentamicin
   - Gelatine (porcine, Type A)
   - Sucrose
   - Potassium dihydrogen phosphate
   - Arginine hydrochloride
   - Monosodium glutamate monohydrate
   - Water for injections
   - Dipotassium phosphate
3. Is the recipient clinically immunodeficient?
4. Is the recipient in close contact with people who are severely immunodeficient?
5. Does the recipient have severe asthma or active wheezing?
6. Is the recipient on salicylate therapy (e.g. aspirin)?
7. Is the recipient pregnant or breastfeeding?
8. Is the recipient receiving influenza antivirals?

The following screens will take you through the reasons why.

This checklist can be printed from the resource section.

View Prescribing Information




Ear
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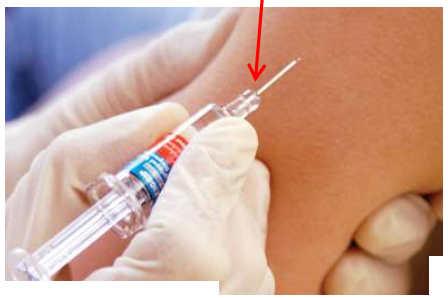
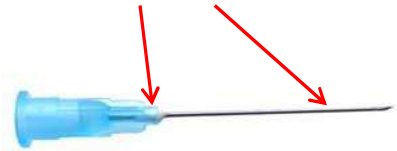
file:///C:/Users/karms/OneDrive/Documents/managing%20child%20imms%20clinics.pdf
Fit to width
Page view
Read aloud
Remember your 8 Rs
Before giving a vaccine always check:
1 Right patient
2 Right vaccine and diluent (where applicable)
3 Right to give (ie, no contraindications)
4 Right time (including correct age and interval, as well as before the product expiration date)
5 Right dose
6 Right route (including correct needle guage and length and technique)
7 Right site
8 Right documentation (to ascertain what the patient has already had/needs)

Aseptic Non Touch Technique for all injections

1) Wash hands.

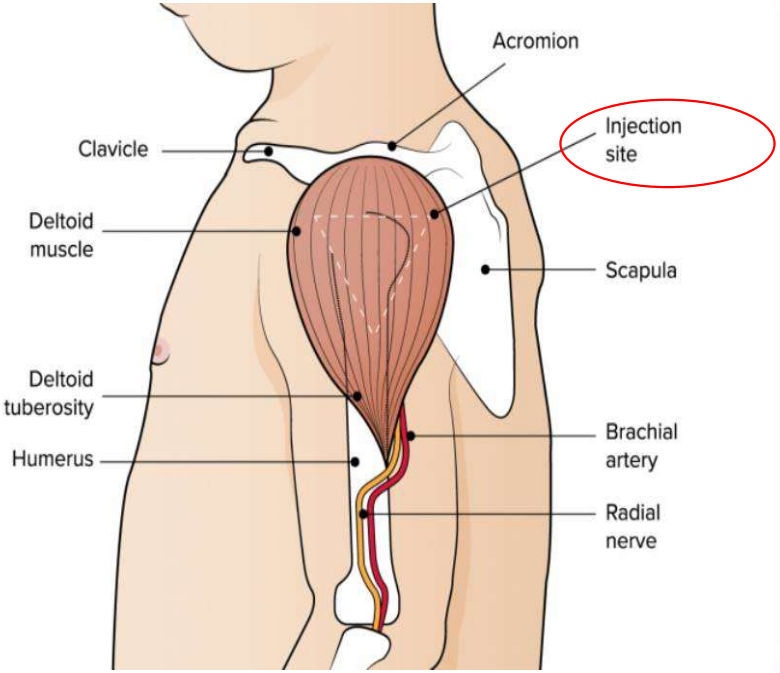
2) Avoid touching key parts

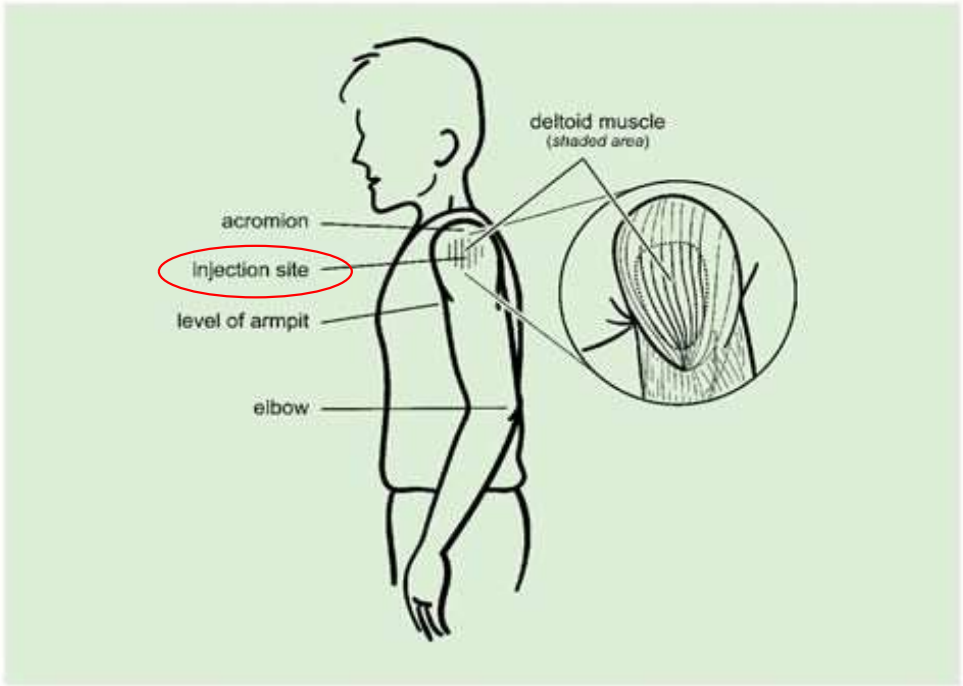




Drawing up from amps/ vials

The deltoid muscle (upper arm)





- https://immunisationhandbook.health.gov.au/resources/handbook-figures/figure-anatomical-markers-used-to-identify-the-deltoid-injection-site

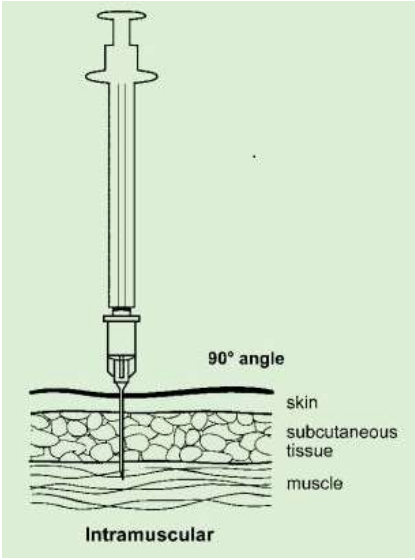
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/147915/Green-Book-Chapter-4.pdf
p28

Vaccine administration continued

- Skin does not need to be specially cleaned prior to vaccination. If it is visibly dirty then water is sufficient to clean it.
- Plasters are not generally needed to cover injection sites but can be used if necessary. Gentle pressure with a gauze swab can be applied following vaccination if bleeding occurs.

Intramuscular process:

- identify the correct site for IM injection
- stretch the skin at the site
- insert the needle at a 90° angle far enough to ensure vaccine is delivered into muscle
- depress the plunger
- gently remove the needle
- apply light pressure using gauze or cotton wool if bleeding occurs

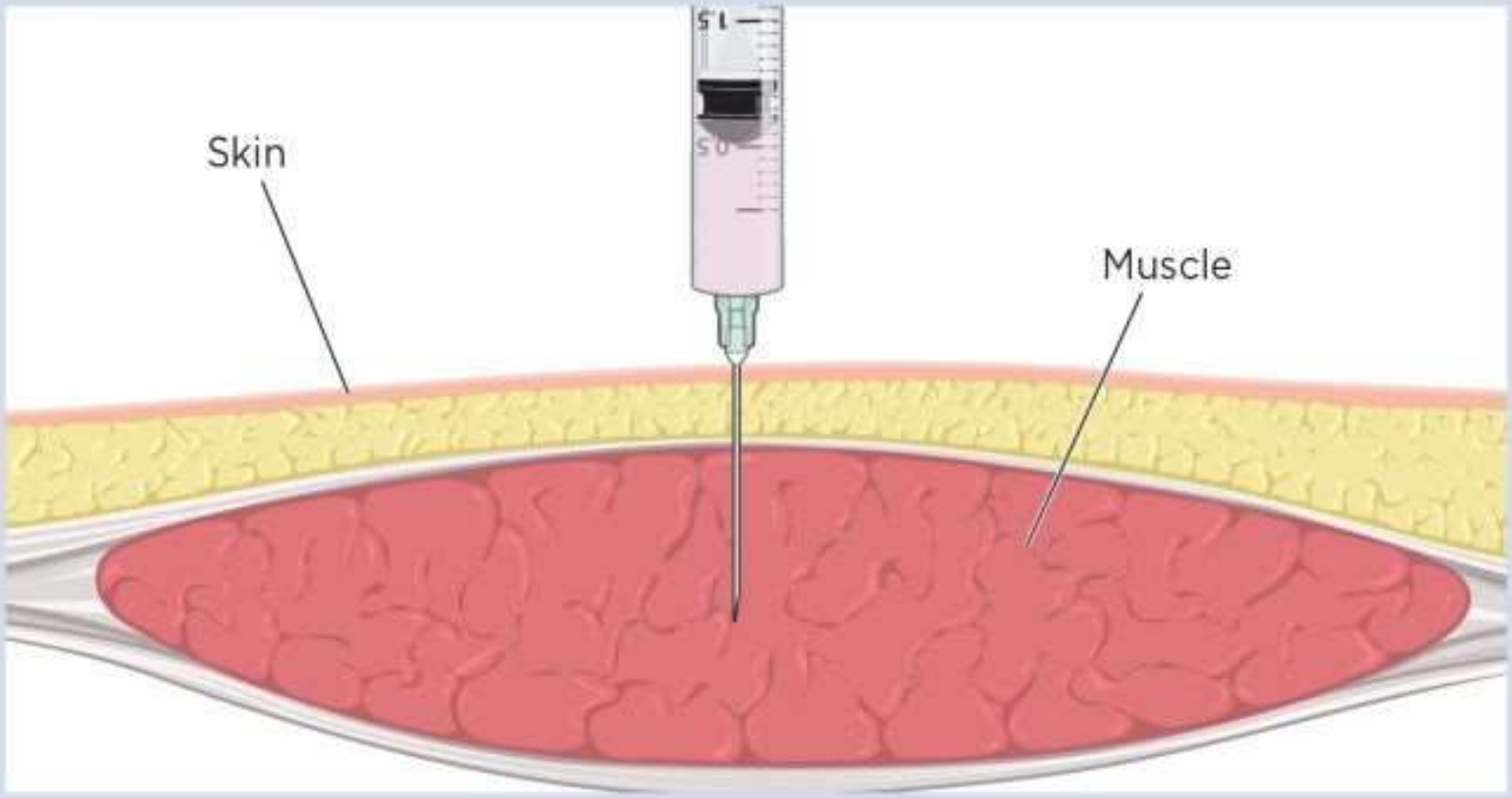



Influenza Vaccine
2013/2014
Influenza vaccine (split virion,
inactivated)
0.5 ml
For i.m. or deep s.c inj

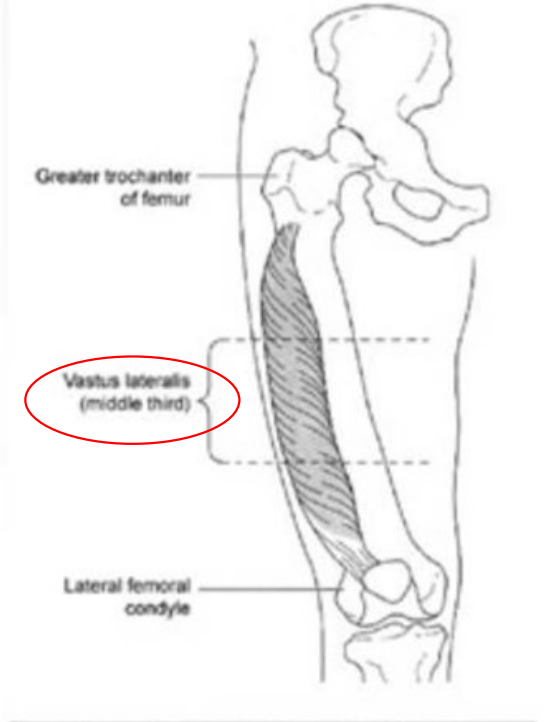
Using the correct injection technique

- it is essential that the correct site and injection technique be used to administer vaccines
- injecting too high into the upper arm might result in a shoulder injury or a frozen shoulder. This leads to pain, weakness and a limited range of motion that can last for months
- injecting too far to the side of the arm or too low on the arm risks injecting into the axillary nerve or the radial nerve
- to avoid shoulder injury, always assess the limb before administering the vaccine to identify the correct site for injection

Fig 3. **The needle should be inserted at 90 degrees and penetrate the muscle layer**



The Vastus lateralis muscle (anterolateral aspect of the thigh)



The vastus lateralis site of the right thigh, used for an intramuscular injection.

www.cdc.gov/vaccines/pubs/pinkbook/vac-admin.html

Infants under one year receive their immunisations into the anterolateral aspect of the thigh because the deltoid muscle is not sufficiently well enough developed at this age.

Although the deltoid muscle is more commonly used in older children and adults as it is quicker and easier to access, the vastus lateralis muscle in the thigh can be used in these age groups if necessary.

Before administering a vaccine

- Before administering a vaccine, the individual should be assessed to ensure that:
- there are no contraindications to the vaccine being given
- they or their carer is fully informed about the vaccine to be given and understand the vaccination procedure
- they or their carer are aware of possible adverse reactions to the vaccine and how to treat them
- they have consented to having the vaccine

•Immunisers should ensure that:

- they have the appropriate knowledge and legal authority to administer the vaccine
- the vaccine has been properly stored and prepared for use and that they know where and how to administer it

	Competency assessment tool for staff administering the flu vaccines	Not applicable to role assigned (NA)	Self-assessment Record: met (M) or needs to improve (NI) (initial and date)	Supervisor review Record: met (M) or needs to improve (NI) (initial and date)
	Part 1: knowledge		**Self-assessment**	**Supervisor review**
1a	Can provide evidence of completion of the flu vaccine specific elearning programme or attendance at a specific, comprehensive flu vaccine training course.			
1b	Has successfully completed and passed a knowledge assessment – either the e-learning course assessment or an end of course test.			
1c	Able to access the online Green Book and other relevant flu vaccine guidance, for example, DHSC/UKHSA/NHS E&I letters (or Scotland, Wales and Northern Ireland equivalents), Vaccine Update, UKHSA Information for Healthcare Practitioners on the flu vaccine programme and so on			
1d	Knows who to contact for advice if unsure about issues such as eligibility for vaccines or action to take if a vaccine error occurs.			
1e	Able to explain the basics of how the different flu vaccines are made, what they contain and why, any contraindications or precautions and possible side effects and how to treat them.			
	Part 2: core skills for immunisation		**Self-assessment**	**Supervisor review**
2a	Is up to date with requirements for anaphylaxis and basic life support (BLS) training (has undertaken within past year or as per employers' stipulations).			

Patients taking anticoagulants or with a bleeding disorder

- Individuals on stable anticoagulation therapy (including individuals on warfarin who are up-to-date with their scheduled INR testing and whose latest INR was below the upper threshold of their therapeutic range) can receive intramuscular vaccination
- if in any doubt, consult with the clinician responsible for prescribing or monitoring the individual's anticoagulant therapy
- Individuals with bleeding disorders may be vaccinated intramuscularly if, in the opinion of a doctor familiar with the individual's bleeding risk, vaccines or similar small volume intramuscular injections can be administered with reasonable safety by this route
- if the individual receives medication/treatment to reduce bleeding, for example treatment for haemophilia, intramuscular vaccination can be scheduled shortly after such medication/treatment is administered
- a fine needle (equal to 23 gauge or finer calibre) should be used for the vaccination, followed by firm pressure applied to the site (without rubbing) for at least 2 minutes
- influenza vaccines licensed for intramuscular or subcutaneous administration may alternatively be administered by the subcutaneous route.
- QIVc (Flucelvax tetra) QIVr (Supemtek) and aQIV (Fluad tetra) are not licensed for subcutaneous administration so should only be administered intramuscularly

Wearing an apron and gloves for imms

- Do check out this link
- https://www.rcn.org.uk/magazines/clinical/2021/july/why-you-dont-always-need-gloves-when-giving-vaccines-covid-19?utm_campaign=1855880_IC-ESEL-163242-2506%20Weekly%20update%209%20July%202021&utm_medium=email&utm_source=dotdigital&dm_i=4JL6,13S08,4727KU,51APC,1

Scenario

- A 25 year old patient with Down's syndrome comes with his carer for his 'flu vaccine. Who can give consent for this vaccine to be given?

Actions to support decision making

- There are some actions that can be taken to support and optimise a person's ability to make a decision. These include:

- making reasonable adjustments to facilitate decision making or accommodate individual needs
- using communication tools such as 'Easy Read' leaflets
- speaking with them at their best time of day
- asking someone who the person knows and trusts to speak to them
-
- If an adult does not have capacity and there is no Lasting Power of Attorney (LPA), Welfare Attorney or appointed deputy, a best interest decision will need to be made.

- **Lasting Power of Attorney (LPA):** can be set up by adults over 18 years of age, who have capacity, in order for heath and care decisions to be made once capacity is lost.
- **Welfare attorney/designated decision maker:** is appointed by the individual to make health and personal welfare decisions on their behalf once capacity is lost.
- **Appointed deputy** or welfare guardian from the Court of Protection

Storage of flu vaccine

- **Efficacy, safety and quality may be adversely affected if vaccines are not stored at the temperatures specified in the licence**
- Flu vaccines must be stored in accordance with manufacturer's instructions:
  - store between +2°C and +8°C
  - do not freeze
  - store in original packaging
  - protect from light
- **Check expiry dates regularly:**
  - the LAIV has an expiry date 18 weeks after manufacture – this is much shorter than inactivated flu vaccines
  - it is important that the expiry date on the nasal spray applicator is checked before use

Monitoring the vaccines

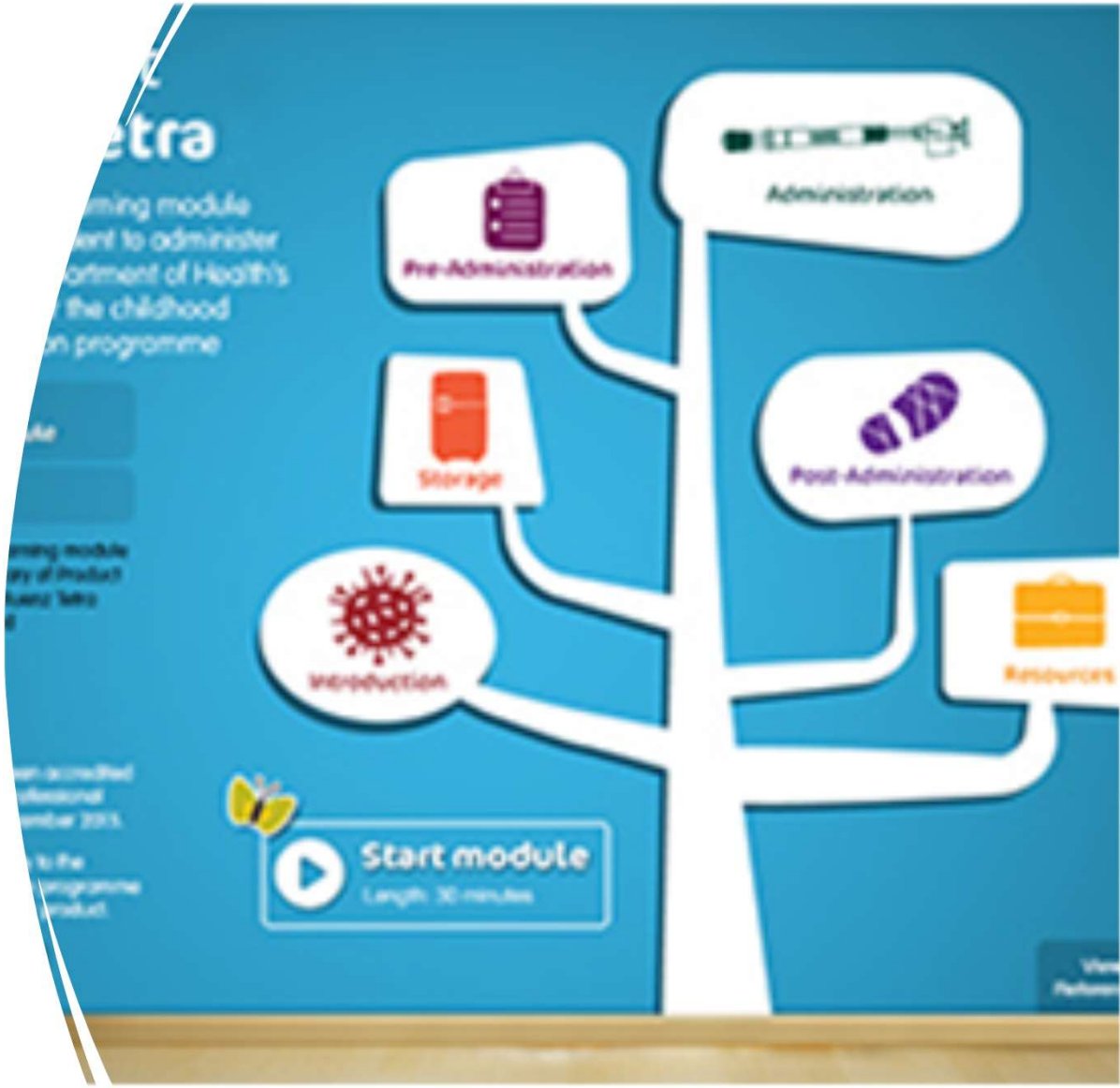
- To protect your patients, you need to protect your vaccines so remember to:
- • Read: take a daily reading of the thermometer's maximum, minimum and current temperatures at the same time every day during the working week
- • Record: record temperatures in a standard fashion, on a standard form and sign each entry on the recording sheet
- • Reset: reset the thermometer after each reading. The thermometers should also be reset when temperatures have stabilized after periods of high activity e.g. restocking
- • React: the person making the recording should take action if the temperature falls outside the +2ºC to +8º C range and document this actio

Three key potential factors that may lead to reduced vaccine effectiveness

Factor	Explanation	Solution
Immunosenescence	Age related reduction in immune response to vaccination	May be addressed by the use of an adjuvanted or higher dose vaccine to boost response in those over 65 years of age against all vaccine strains
Genetic drift of the circulating strain	Genetic changes in the flu virus can create a mismatch between the vaccine virus strains and the circulating wild type strains	The WHO recommendations for the vaccine strains for the forthcoming flu season reflect any changes seen in the circulating flu viruses
Egg adaptation	To produce most flu vaccines, the flu viruses are injected into eggs to generate large amounts of flu virus. However, the viruses adapt to live in the egg, leading to changes in the viruses which means they may not exactly match the circulating virus, thus resulting in reduced vaccine effectiveness	Egg adaptation can be addressed using cell based vaccines which do not require the use of eggs in the manufacturing process

Offering time sensitive vaccines

- Where practices experience high demand on services, it is important to prioritise time sensitive vaccines for babies, children and pregnant women:
- o All routine childhood immunisations offered to babies and infants including vaccines due at one year of age including the first MMR dose
- o All doses of targeted hepatitis B vaccines for at-risk infants should also be offered in a timely manner
- o Pertussis and influenza vaccination in pregnancy
- o Pneumococcal vaccination for those in risk groups from 2 to 64 years of age and those aged 65 years and over (subject to supplies of PPV23 and clinical prioritisation)
- Shingles vaccine



Drivers and barriers to vaccination identified in local insight work

- **Drivers for vaccination:**
- prosocial approach (protection of others)
- protection of self
- community influence
- practicalities: clinic locations, GP access
- information (and sources)
- **Barriers to vaccination:**
- safety concerns
- lack of information
- accessibility of vaccination
- acceptability or practicality of vaccination locations
- vaccine misconceptions
- fertility concerns
- mistrust of government or other official organisations
- The biggest factor in someone's decision is speaking with trusted family and friends, as shown in this survey conducted at an outreach clinic

Medico legal issues

- Name a few…
- Documentation
- Competency
- Duty of care
- Indemnity
- Up to date
- Use of medico-legal frameworks
- Consent

Well – where can I find anything now?

- **Public Health England was replaced by UK Health Security Agency and Office for Health Improvement and Disparities**

Resources

- Flu vaccination for children: leaflets and posters - GOV.UK (www.gov.uk) and other resources linked to this
- Green book – updated chapter
- PGD at UKHSA

Scenarios

- Janice aged 17 is 25/40 through her pregnancy. She is not very good at attending appointments. Does she need any vaccines today and if so which ones? Any other concerns?
- Tommy aged 18 months was premature and has several severe cardiac anomalies. Should he have a ‘flu vaccine? Which one? How many?
- Josie aged 55 has a course of chemotherapy coming up. Should she have a ‘flu vaccine and if so, which one and when?
- Tallulah aged 8 comes for the nasal ‘flu vaccine today. She is fit and well , has asthma and stayed with a friend last night who has a cat – this has made her wheeze. Is Fluenz tetra suitable?

Scenarios 2

- Mr Khan has type 2 diabetes an know he needs some seasonal vaccines. He is 72 years old and feels nauseous when he eats eggs. What are you recommendations for him? He is concerned the vaccine will make him unwell and affect his glucose levels.
- Amir Patel is 5 years old and has come to you with his Mum for an injectable ‘flu vaccine as his Mum does not want him to have Fluenz. He is very disruptive. Discuss.
- Josie has UC and asthma. She also has a learning disability and has been brought by her care today for the flu vaccine. She is 16 years old. How would you proceed?
- Cathy is 64 and would like her ‘flu vaccine today. Can she have it?

Thank you for listening- any questions