### Alert
Influenza vaccines can change from year to year with regard to which vaccines are registered by the Therapeutic Goods Administration and the indicated ages for each vaccine. Always check annual seasonal influenza statements published by the Australian Technical Advisory Group on Immunisation on health.gov.au website and consult the product information for each vaccine. All children aged 6 months to less than 5 years are now eligible to receive free annual influenza vaccines under the National Immunisation Program (NIP). [1] The dose of influenza vaccines for all ages is 0.5 mL. The 0.25 mL dose for young children is no longer available. [1]

### Indication
Infants ≥6 months of age are strongly recommended to receive annual influenza vaccine. [2] Preterm infants: Provided they are medically stable and there are no contraindications to vaccination, preterm infants should receive vaccines according to the recommended schedule at their chronological age, without correction for prematurity. [3]

### Action
Quadrivalent inactivated influenza virus vaccine. Active immunisation against influenza A, B virus strains (contained in vaccine).

### Drug type
Vaccine

### Trade name
- Vaxigrip Tetra 0.5 mL: All people aged ≥6 months.
- Fluarix Tetra 0.5 mL: All people aged ≥6 months.
- FluQuadri 0.5 mL: All people aged ≥6 months.

### Presentation
- Vaxigrip Tetra 0.5 mL.
- Fluarix Tetra 0.5 mL monodose pre-filled syringe: [All people aged ≥6 months].
- FluQuadri 0.5 mL monodose pre-filled syringe: [All people aged ≥6 months].

### Dose
2 doses at least 4 weeks apart are recommended for children aged 6 months to <9 years receiving influenza vaccine for the first time. [2]

### Dose adjustment
Immunocompromised: All people ≥6 months of age that are immunocompromised are recommended to receive an influenza vaccine every year.

### Maximum dose

### Total cumulative dose

### Route
The intramuscular route is preferred to the subcutaneous route because it causes fewer local adverse events. However, if given subcutaneously, the vaccine does not need to be readministered. [2]

### Preparation
For intramuscular injection, use a 25 gauge 25 mm long needle. Position the limb to relax the muscle that the vaccine is being injected into. Inject into the anterolateral thigh for infants not yet walking. Pierce the skin at a 90° angle, so the needle can be safely inserted to the hub to reach the muscle layer. Inject the vaccine slowly over a count of 5 seconds. It is not necessary to draw back on the syringe plunger before injecting a vaccine. However, if you have done this and a flash of blood appears in the needle hub, withdraw the needle and select a new site for injection. Document all vaccines administered to children in the child’s clinical file and the individual child health record. The parent or carer keeps this record and presents it every time the child sees a health professional. All immunisation encounters including influenza vaccinations need to be recorded by the immunisation provider on the Australian Immunisation Register (AIR). [2]

### Monitoring
Hypersensitivity, including anaphylaxis

### Contraindications
- Anaphylaxis following a previous dose of any influenza vaccine. [2]
- Anaphylaxis following any vaccine component.

### Precautions
Persons with egg allergy, including anaphylaxis, can be safely vaccinated with influenza vaccines that have less than 1 microgram of residual egg ovalbumin per dose. Due to changes in influenza vaccine manufacturing, the majority of influenza vaccines currently used contain less than 1 microgram of ovalbumin per dose. If there is significant parental or health professional anxiety, the vaccine may be administered in primary care settings with a longer waiting period of 30 minutes. [2, 4]

### Drug interactions
Co-administration of 13vPCV (13-valent pneumococcal conjugate vaccine) may increase risk of fever.
### Adverse reactions
Drowsiness or tiredness, muscle aches, localised pain, redness and swelling at injection site, occasionally, an injection-site nodule which may last many weeks (no treatment needed), fever and irritability and poor feeding in infants.

### Compatibility
Should not be mixed with any other vaccine in the same syringe or vial.

### Incompatibility

### Stability
Can remain stable at temperatures up to 12°C for 15 minutes. However, immediate administration is highly recommended.

Follow local cold chain guidelines and Department of Health National Vaccine Storage ‘Strive for 5’ Guidelines for management of vaccines during cold chain breaches. [5]

### Storage
Store at 2°C to 8°C (Refrigerate, do not freeze). Protect from light. Discard if vaccine has been frozen.

### Excipients
**Vaxigrip Tetra:** Each 0.5 mL contains ≤ 0.05 micrograms ovalbumin; ≤ 10.1 picograms neomycin; ≤ 30 micrograms formaldehyde; ≤ 222.5 micrograms octoxinol-9.

**Fluarix Tetra:** Each 0.5 mL contains ≤ 0.05 micrograms ovalbumin; ≤ 5 micrograms formaldehyde polysorbate 80; octoxinol 10.

**FluQuadri:** Each 0.5 mL contains ≤ 100 micrograms formaldehyde, ≤ 250 micrograms octoxinol 9, ≤ 1 micrograms ovalbumin

### Special comments
Children can receive 13vPCV and inactivated influenza vaccine at the same visit if they need both vaccines. [2]

Doses of intramuscular 1:1000 adrenaline for anaphylaxis: [2]

<1 year (approx. 5–10 kg) = 0.05 to 0.1 mL

1–2 years (approx. 10 kg) = 0.1 mL

### Evidence
Refer to full version.

### Practice points
All people ≥6 months of age are strongly recommended to receive annual influenza vaccine. [2]

Two doses at least 4 weeks apart are recommended for children aged 6 months to <9 years receiving influenza vaccine for the first time. [2]

### References
Refer to full version.

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