



STATEMENT ON THE ADMINISTRATION OF SEASONAL INFLUENZA VACCINES IN 2018

It is important to read this statement in conjunction with the current online version of *The Australian Immunisation Handbook* available on the [Immunise Australia](http://www.immunise.health.gov.au) website (www.immunise.health.gov.au).

Overview of key points and updates for 2018

- Annual vaccination is the most important measure to prevent influenza and its complications.
- Annual influenza vaccination is recommended for all persons ≥ 6 months of age.
- For adults aged ≥ 65 years, in addition to the quadrivalent influenza vaccines (QIVs), two higher-immunogenicity trivalent influenza vaccine (TIV) formulations (one a 'high-dose' vaccine and another containing an adjuvant) are available and NIP-funded.
 - These TIVs are preferentially recommended over QIVs for adults aged ≥ 65 years. However, there is no preference for use between either of these two TIVs.
 - There is an increased likelihood of injection site reactions and systemic symptoms with these two TIVs, but no increase in the risk of severe adverse effects compared with standard TIVs.

Table 1. Seasonal influenza vaccines available for use in Australia in 2018, by age

Vaccine	Quadrivalent					Trivalent (for age ≥ 65 years only)	
	FluQuadri Junior 0.25 mL (Sanofi)	FluQuadri 0.50 mL (Sanofi)	Fluarix Tetra 0.50 mL (GSK)	Afluria Quad 0.50 mL (Seqirus)	Influvac Tetra 0.50 mL (Mylan)	Fluzone High-Dose 0.50 mL (Sanofi)	Fluad 0.50 mL (Seqirus)
<6 months	x	x	x	x	x	x	x
6 to 35 months (<3 years)	✓	x	x	x	x	x	x
≥ 3 to 17 years	x	✓	✓	x	x	x	x
≥ 18 years	x	✓	✓	✓	✓	x	x
≥ 65 years	x	✓	✓	✓	✓	✓	✓

Influenza virus strains included in the 2018 southern hemisphere seasonal influenza vaccines:

- A (H1N1): an A/Michigan/45/2015 (H1N1)pdm09 like virus
- A (H3N2): an A/Singapore/INFIMH-16-0019/2016(H3N2) like virus
- B: a B/Phuket/3073/2013 like virus
- B: a B/Brisbane/60/2008 like virus (not included in the TIVs)

New influenza vaccine formulations available for 2018

- Age restrictions apply to all registered vaccine brands (Table 1).
- Fluzone® High-Dose and Fluad® are higher-immunogenicity TIVs, formulated to provide increased protection against influenza for older people (aged ≥ 65 years) as compared with standard TIVs (Note: standard dose TIVs are no longer available in Australia).

- These TIVs offer potential increased protection, especially against influenza A/H3N2 which is more common and severe in the elderly. The benefit is likely to offset any loss of protection against the alternative B lineage not in the vaccine. If either of these TIVs is not available, then a QIV should be used. The use of multiple types of vaccines (e.g. an adjuvanted TIV with a standard QIV) has not been studied.
- For these TIVs, approximately 30% of recipients reported injection site reactions compared to approximately 20% of recipients of standard TIVs. The majority of reactions were mild or moderate in severity.
- Fluzone® High-Dose and Flud® are not suitable for use in pregnant women or children.

Timing of vaccination

- Annual vaccination before the onset of each influenza season is recommended. The period of peak influenza circulation is typically June to September for most parts of Australia.
- While protection is generally expected to last for the whole season, optimal protection against influenza occurs within the first 3 to 4 months following vaccination.
- It is never too late to vaccinate since influenza can circulate all year round. Vaccination should continue to be offered as long as influenza viruses are circulating and a valid vaccine (before expiration date) is available.
- Revaccination later in the same season for individuals who have already received vaccination is not recommended, although not contraindicated.

Influenza vaccination for pregnant women

- Influenza vaccine is recommended in every pregnancy, preferably prior to the onset of the influenza season. If not already given during pregnancy, influenza vaccination can occur concurrently with the pertussis vaccine in the third trimester. Influenza vaccination during pregnancy also provides protection to the infant.
- The 2018 influenza vaccine can be given to a pregnant woman even if a 2017 influenza vaccine has been given earlier within the current pregnancy.

Eligibility for influenza vaccines funded by the National Immunisation Program (NIP)

- Annual influenza vaccination is recommended, but not NIP-funded, for all persons ≥6 months of age. Influenza vaccines are funded on the NIP in 2018 for the following groups due to their increased risk of complications from influenza:
 - Aboriginal and/or Torres Strait Islander persons aged 6 months to <5 years or ≥15 years
 - All adults aged ≥65 years
 - All persons aged ≥6 months who have certain medical conditions which increase the risk of influenza disease complications; for example, severe asthma, lung or heart disease, low immunity or diabetes (refer to *The Australian Immunisation Handbook*)
 - Pregnant women (during any stage of pregnancy)

Table 2. Medical conditions associated with an increased risk of influenza disease complications and for which individuals are eligible for free vaccination under the NIP*

Category	Vaccination strongly recommended for individuals with the following conditions
Cardiac disease	Cyanotic congenital heart disease, congestive heart failure, coronary artery disease
Chronic respiratory conditions	Severe asthma, cystic fibrosis, bronchiectasis, suppurative lung disease, chronic obstructive pulmonary disease, chronic emphysema
Chronic neurological conditions	Hereditary and degenerative CNS diseases, seizure disorders, spinal cord injuries, neuromuscular disorders
Immunocompromising conditions	Immunocompromised due to disease or treatment, asplenia or splenic dysfunction, HIV infection
Diabetes and other metabolic disorders	Type 1 or 2 diabetes, chronic metabolic disorders
Renal disease	Chronic renal failure
Haematological disorders	Haemoglobinopathies
Long-term aspirin therapy in children aged 6 months to 10 years	These children are at increased risk of Reye syndrome following influenza infection

* Please refer to the current online version of *The Australian Immunisation Handbook* available on the [Immunise Australia website](http://www.immunise.health.gov.au) (www.immunise.health.gov.au) for advice on persons who are strongly recommended to receive annual influenza vaccination but not eligible for NIP-funded influenza vaccines.