

Influenza Immunisation

Provider Toolkit

2019

Department of Health Tasmania

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April 2019

Checklist Timeline

Due	Action	Complete ✓
End of March	Discard 2018 flu vaccine stock	
	Identify at-risk and eligible patients for National Immunisation Program (NIP) and state-funded (6 months to less than five years) immunisation programs – calculate how many vaccines are required for each cohort for your first order. The number of orders per month for flu vaccine is not restricted.	
	Check your fridge capacity to store the vaccines	
8 April	Place your first vaccine order. Send communications to all patients reminding them of the importance of having a flu vaccine and commencement of the program from mid to late April	
Mid to late April	First vaccine order delivered	
	Start taking bookings for flu vaccine	
	Display flu campaign posters in your clinic	
	Commence flu immunisation clinics	
	Report all immunisations to the Australian Immunisation Register (AIR)	
	Report any adverse events following immunisation (AEFI) for children less than five years to the Public Health Hotline (1800 671 738). Report all other AEFI to the Therapeutic Goods Administration (TGA) at https://www.tga.gov.au/	
Mid-May	Review patient vaccine uptake – send reminders to patients who have not attended for immunisation and continue to order according to stock on hand and demand	

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Introduction

There was exceptionally high demand for the flu vaccine across Australia in 2018. This toolkit was developed by NSW Health and adapted by Public Health Services Tasmania to assist providers with managing the implementation of their flu immunisation program in 2019.

Flu vaccines are also available on the private market. If you are a pharmacy in Tasmania, flu vaccines must be ordered through your wholesaler. Please ensure people with contraindications or precautions to vaccination are referred to a medical practitioner and persons eligible for influenza vaccine under the National Immunisation Program (NIP) are advised that they may obtain free vaccine from a GP.

2019 NIP Flu Vaccines

The following table provides information on age-appropriate NIP vaccines for 2019:

2019 INFLUENZA VACCINES AVAILABLE UNDER THE NIP, BY AGE					
Before administering an influenza vaccine, CHECK you have the correct vaccine for the person's age					
Registered age group	Quadrivalent Vaccines				Trivalent vaccine (for age ≥65 years only)
	FluQuadri Junior 0.25mL (Sanofi)	Fluarix Tetra 0.50mL (GSK)	FluQuadri 0.50mL (Sanofi)	Afluria Quad 0.50mL (Seqirus)	Fluad 0.50mL (Seqirus)
<6 months	X	X	X	X	X
6 to 35 months (<3 years)	✓	✓*	X	X	X
≥3 years to <5 years	X	✓	✓	X	X
≥5 years to <65 years	X	✓	✓	✓	X
≥65 years	X	✓	✓	✓	✓ (recommended)

*Note that Fluarix Tetra is a 0.50mL dose for children aged 6 to 35 months

Note: In 2019 Afluria Quad (0.50mL) can be administered from 5 years of age (previously 18 years and over) and Fluarix Tetra (0.50mL) can be administered from 6 months of age (previously 3 years and over).

Influenza vaccines are also available on the private market. In 2019 Fluad is the only NIP funded vaccine for those aged 65 and over. Fluzone High Dose vaccine, which is also registered for people aged 65 and over, is available for private purchase.

What are Trivalent (TIV) and Quadrivalent (QIV) Influenza Vaccines?

There are two main types of influenza virus that cause disease in humans: A and B. Currently there are two influenza A subtypes and two influenza B lineages that are circulating globally.

Influenza A – subtypes	Influenza B – lineages
A/H1N1pdm09	Victoria
A/H3N2	Yamagata

Influenza virus strains included in the quadrivalent 2019 seasonal influenza vaccines are:

- A (H1N1): an A/Michigan/45/2015 (H1N1)pdm09 like virus
- A (H3N2): an A/Switzerland/8060/2017 (H3N2) like virus
- B: a B/Colorado/06/2017 like virus (not included in the trivalent vaccine)
- B: a B/Phuket/3073/2013 like virus

In 2019 there is a new A strain (H3N2) and a new strain for the B Victoria lineage.

The trivalent influenza vaccines (TIV) cover the same two influenza A viruses in the QIVs; and one influenza B virus.

To continue to provide the best possible protection for those 65 years and over, an enhanced trivalent vaccine, Flud® (Seqirus), is being supplied under the NIP for those aged 65 years and over. Flud and Fluzone High-Dose are clinically equivalent.

The composition of flu vaccines for the Southern Hemisphere is reviewed in September each year by the World Health Organization, and then subsequently determined by the Australian Influenza Vaccine Committee.

Get Prepared for 2019:

2019 Influenza Immunisation Campaign

Government programs promoting the 2019 Influenza Immunisation Program will commence in April. Providers may schedule clinics once vaccine supplies are received.

For pharmacies and practices that will be ordering flu vaccines through their wholesaler, it is recommended that flu vaccine be administered from mid-April/May onwards in accordance with the advice provided in the “Timing of Immunisation” section.

Government Funded Vaccine Ordering

Providers can place orders in the vaccine online ordering system from 8 April 2019 (deliveries will commence around mid-April once vaccine is available). Please note that the vaccine warehouse is in Victoria and deliveries will not arrive on a Monday.

You will be asked to report how many vaccines you have in stock when placing all flu vaccine orders.

The number of orders per month for flu vaccine is not restricted.

You should consider the following when placing your first flu vaccine order:

- Calculate how many vaccines your service can provide each day and estimate how many vaccines are needed to maintain stock levels until the next delivery.
- Check your vaccine fridge storage capacity.
- Vaccine brands are age specific. Order vaccine brands appropriate for your patient age cohorts. For example, consider how many patients are aged over 65, children aged 6 months to less than 5 years, Aboriginal people aged 6 months and over, pregnant women, and medically at-risk individuals?
- When placing subsequent orders, calculate how much vaccine you need for your remaining patient cohorts.
- Remember that children aged under 9 years require 2 doses at least 4 weeks apart in their first year of ever receiving a flu vaccine.

Online Ordering System Messaging

Messages regarding changes to flu vaccine stock availability and any ordering restrictions will be regularly communicated to you via faxstream or the online ordering system. It is important to regularly check for new communications during the flu immunisation program.

Vaccine Delivery

Deliveries of funded vaccine will commence around mid-April 2019, depending on availability of vaccines from the Australian Government. Advice on delivery dates for private market flu vaccines should be sought from wholesalers.

Clearly label your flu vaccine stock to minimise the risk of inappropriate administration.

2019 Influenza Vaccine Basket Labels

<p>2019 INFLUENZA VACCINE</p> <p>6 months to less than 3 years</p> <ul style="list-style-type: none">• FluQuadri Junior 0.25mL	<p>2019 INFLUENZA VACCINE</p> <p>6 months to less than 3 years</p> <ul style="list-style-type: none">• FluQuadri Junior 0.25mL
<p>2019 INFLUENZA VACCINE</p> <p>6 months to 64 years</p> <ul style="list-style-type: none">• Fluarix Tetra 0.50mL	<p>2019 INFLUENZA VACCINE</p> <p>6 months to 64 years</p> <ul style="list-style-type: none">• Fluarix Tetra 0.50mL
<p>2019 INFLUENZA VACCINE</p> <p>3 years to 64 years</p> <ul style="list-style-type: none">• FluQuadri 0.50mL	<p>2019 INFLUENZA VACCINE</p> <p>3 years to 64 years</p> <ul style="list-style-type: none">• FluQuadri 0.50mL
<p>2019 INFLUENZA VACCINE</p> <p>5 years to 64 years</p> <ul style="list-style-type: none">• Afluria Quad 0.50mL	<p>2019 INFLUENZA VACCINE</p> <p>5 years to 64 years</p> <ul style="list-style-type: none">• Afluria Quad 0.50mL
<p>2019 INFLUENZA VACCINE</p> <p>65 years and over</p> <ul style="list-style-type: none">• Fludac 0.50mL	<p>2019 INFLUENZA VACCINE</p> <p>65 years and over</p> <ul style="list-style-type: none">• Fludac 0.50mL

Who Should You Target for Funded Vaccines?

Identify your at-risk and eligible patients and remind them about the importance of having an annual flu vaccine. (See Appendix 2 for NIP eligibility and below for state-funded eligibility). In addition to your existing practice software recall/reminder process, consider using your practice webpage, social media (Facebook/Twitter) and your practice noticeboards to promote your flu immunisation program.

Aboriginal and Torres Strait Islander people

From 2019 flu vaccine is funded under the NIP for ALL Aboriginal and Torres Strait Islander people from 6 months of age.

Offer other appropriate vaccines at the same time, for example Pneumovax 23 (50 years and over) and Zostavax (70-79 years of age) vaccines.

Children 6 months to less than 5 years

Influenza vaccine is funded under the National Immunisation Program (NIP) for:

- Aboriginal or Torres Strait Islander children, and
- Children with a medical condition(s) that increases the risk for severe influenza.

The Tasmanian Government is funding the vaccine for all other children aged 6 months to less than 5 years in 2019.

All children under 9 years of age should have two doses at least 4 weeks apart in the first year of receiving the flu vaccine. Both doses are funded. In subsequent years, one dose of vaccine per year is required.

In 2019, three childhood vaccines will be available for different age ranges:

- FluQuadri Junior (0.25mL): 6 months to less than 3 years
- Fluarix Tetra (0.50mL): 6 months to 64 years
- FluQuadri (0.50mL): 3 years to 64 years

Even healthy children are vulnerable to catching the flu. Compared with older children and adults, infants and children aged less than five years, including those without pre-existing medical conditions, are more likely to get severe influenza infection, resulting in hospitalisation.

Please consider active initiatives to improve vaccine uptake in the 6 month to less than 5 year old age cohort. Use reminder/recall systems to send letters, SMS messages or emails to parents of children in your practice advising them of the opportunity to have their child immunised.

Pregnant Women

Influenza immunisation during pregnancy has been shown to be safe and effective. Immunisation during pregnancy protects pregnant women from influenza and its complications in pregnancy and is the best way to protect newborns against influenza during the early months of life. The timing of immunisation depends on the time of the year, vaccine availability and the anticipated duration of immunity. Influenza vaccine can be given at any stage of pregnancy. It can be given at the same time as the pertussis vaccine but should not be delayed if the winter influenza season has begun or is imminent.

Did you know?

Offering vaccine, or recommending vaccine, by an antenatal care provider is one of the strongest predictors of vaccine uptake by pregnant women and should be a routine part of antenatal care.

Medically at-Risk Patients

Flu vaccine is funded under the NIP for children and adults with medical risk factors such as severe asthma, lung or heart disease, low immunity or diabetes. Refer to The Australian Immunisation Handbook for more information at:

immunisationhandbook.health.gov.au/vaccine-preventable-diseases/influenza-flu

People ≥65 Years of Age

Fluad is a TIV and is the only enhanced vaccine provided under the NIP in 2019 for people ≥65 years of age. Note that after shaking, the normal appearance of Fluad is a milky-white suspension.

Fluad has been specifically designed to create a greater immune response amongst the elderly, who are known to have a weaker response to immunisation.

Another TIV brand (Fluzone) is available on private prescription.

TIVs have been specifically designed to create a greater immune response in those aged 65 years and older and are recommended in preference to the QIVs for this age group where available. Both TIV brands are equally effective. People aged 65 years and over should only receive a QIV or a TIV – not both.

Fluad contains an adjuvant which boosts the immune system's response to the vaccine and provides better protection for people aged 65 years and over.

Did you know?

Should a person ≥65 years of age advise you that they have already received a 2019 QIV influenza vaccine, there is no need to administer a TIV influenza vaccine.

The risk of mild to moderate injection site reactions may be greater for those aged 65 years and over receiving a TIV. TIVs are not registered for use in people younger than 65 years. TIV effectiveness and safety has not been assessed in younger populations.

Offer other appropriate vaccines at the same time, for example Pneumovax 23 (50 years and over) and Zostavax (70-79 years of age) vaccines.

Other Patients

All patients aged ≥ 5 years of age who are not eligible for funded flu vaccine should be advised that they can purchase private market flu vaccine. These vaccines are available from authorised pharmacist immunisers (for certain age groups) and GPs.

Influenza Outbreaks in Aged Care Facilities

- Respiratory viral infections occur frequently in Aged Care Facilities (ACF).
- These can be caused by a range of viruses, and infection may vary in severity from trivial to potentially life threatening.
- In those who develop symptoms of “Influenza Like Illness” (ILI*), influenza infection should be excluded, particularly during the influenza season or if an outbreak is suspected.
- *ILI is defined as the sudden onset of at least one of:
 - Cough (new or worsening), sore throat, shortness of breath
- And, at least one of:
 - Fever or feverishness, malaise, headache, myalgia
- To exclude or confirm influenza collect a nasopharyngeal swab (using a red topped “flocked” swab) and place this into the liquid transport media provided.
- Packs containing 5 swabs will be provided to ACFs on request from NW/Launceston/Hobart Pathology, to ensure that the swabs remain “in date”.
- Three or more cases of ILI or confirmed influenza in residents or staff over a 72 hour period suggest an influenza outbreak. Public Health should be informed. Please call the Public Health Hotline – 1800 671 738
- In the setting of an influenza outbreak further cases of ILI are assumed to be due to influenza and should be treated as such. No clinical or public health benefit is derived from continuing to test those with ILI in a confirmed ACF influenza outbreak, unless discussed with the treating clinician or Public Health.

Management of influenza outbreaks in ACFs

Public Health recommend the *Guidelines for the Prevention, Control and Public Health Management of Influenza Outbreaks in Residential Care Facilities in Australia*

<http://www.health.gov.au/internet/main/publishing.nsf/Content/cdna-flu-guidelines.htm>

If you have patients in aged care facilities, please discuss influenza planning with the facility prior to the influenza season. Consider section 6.2.9, “Antiviral medication during an outbreak”. The appendices contain an outbreak preparedness checklist and an antiviral treatment and prophylaxis decision-making tool.

Optimum Time for Immunisation

Annual immunisation before the onset of each influenza season is recommended. The peak of influenza activity can vary from season to season. Typically, it occurs between June and September in Tasmania.

The Australian Technical Advisory Group on Immunisation (ATAGI) advises that optimal protection occurs in the three to four months following immunisation. Therefore, immunisation from mid-April/May onwards is likely to result in peak immunity during the flu season.

It is never too late to receive a vaccine since influenza can circulate all year round. Immunisation should continue to be offered if influenza viruses are circulating and a valid vaccine (before expiration date) is available.

Other considerations for vaccine timing:

- Pregnant women should be immunised at the earliest opportunity. In accordance with the Australian Immunisation Handbook, the 2019 influenza vaccine can be given to pregnant women if the 2018 vaccine was given earlier in the pregnancy. Women under the care of a private obstetrician should have their flu immunisation status assessed as they may not have received it from their obstetrician.
- People travelling to a country where flu is circulating can be immunised two weeks before travel if they haven't already received the 2019 vaccine.
- Young children aged 6 months to under nine years require two doses in their first year of immunisation (given at least four weeks apart). Both doses are funded. Ideally offer vaccine to these children as soon as stock becomes available. Should a child not receive two doses in their first year, they only require one dose the following year.

Reporting to the Australian Immunisation Register

Providers should report all immunisations (including flu vaccines) to the Australian Immunisation Register (AIR). The AIR accepts data for people of all ages. This will ensure complete immunisation records for your patients including the availability of this information in the My Health Record.

How to report influenza immunisations to the Australian Immunisation Register

There are three ways to record information on the AIR:

1. Use your practice management software (PMS). The details you enter will be able to be transferred from your PMS to the AIR.
 - Make sure you are using the latest version of your PMS so you have up to date vaccine codes (contact your software vendor for further information).
 - Ensure you select the correct vaccine that has been given to the patient.
2. Use the AIR site. You can record immunisation details using the Identify Individual and Record Encounter functions.
3. Complete the Australian Immunisation Register – immunisation encounter form.

The Department of Human Services (DHS) has published five AIR eLearning education modules to help immunisation providers understand how to access and use the AIR site and record immunisation episodes. The five modules provide detailed steps and screen shots to help with:

- Registering and requesting access to the AIR site
- Accessing the AIR site for the first time
- Submitting information to the AIR
- Recording overseas immunisations
- Recording immunisation medical exemptions

The modules can be viewed at www.humanservices.gov.au/hpeducation. Additional information on the AIR is available at:

www.humanservices.gov.au/organisations/health-professionals/services/medicare/australian-immunisation-register-health-professionals

To register as an immunisation provider with the AIR: Complete the application form at: www.humanservices.gov.au/organisations/health-professionals/forms/im004 and forward it via email to immunisation@health.tas.gov.au

Practice software: It is recommended that you check if your practice software needs to be updated to enable AIR reporting.

Flu Vaccine Effectiveness

Vaccine effectiveness refers to the reduction in clinical outcomes due to immunisation in the “real world”. These outcomes may include disease incidence, or other measures such as general practice attendance with disease, or hospital admission with disease.

The effectiveness of the influenza vaccine varies from season to season because the vaccine viruses may not completely match the circulating influenza viruses that are infecting people.

In general, influenza vaccine effectiveness has been found to vary between 30-60%. This implies that, on average, an immunised person is 30-60% less likely to experience the outcome being measured (e.g. influenza leading to attendance at a general practice or hospitalisation) than an unimmunised person.

The estimated effectiveness of the vaccine may depend on several factors including the outcome being measured, the age group predominantly affected (vaccine effectiveness is generally lower in older people), and the match between vaccine and circulating influenza strains (generally protection against infection with A/H1N1pdm09 is greater than against A/H3N2).

More information is available at: www.health.gov.au/internet/main/publishing.nsf/Content/cda-surveil-ozflu-flucurr.htm

Flu Vaccine Safety

There is extensive surveillance that demonstrates that the influenza vaccines now used in Australia have an excellent safety profile, including [AusVaxSafety data](#).

More information on AusVaxSafety is available at: www.ncirs.org.au/ausvaxsafety/current-ausvaxsafety-surveillance-data

Egg allergy is not a contraindication to influenza vaccine. People with an egg allergy, including anaphylaxis, can safely receive influenza vaccines.

People with a history of anaphylaxis to egg should:

- receive their influenza vaccine in a medical facility with staff experienced in recognising and treating anaphylaxis
- remain under supervision in the clinic for at least 30 minutes after receiving the vaccine
- receive a full age-appropriate vaccine dose; do not split the dose into multiple injections (for example, a test and then the rest of the dose)

For children with severe egg allergy, immunisation under medical supervision can also be arranged through the Paediatric outpatient clinic at the Royal Hobart Hospital.

Latex allergy: All vaccines supplied under the NIP in 2019 are latex free.

A *flu immunisation decision aid* is available in Appendix I to assist you with conducting a pre-immunisation assessment with your patients.

Report Adverse Events Following Immunisation

Adverse events following immunisation in children under five years should be reported to Public Health Services on 1800 671 738.

For all other AEFI please report to the Therapeutic Goods Administration (TGA) at:
<https://www.tga.gov.au/>

Data on the safety of influenza vaccines is continuously monitored by the TGA and AusVaxSafety.

Weekly updates are available on the AusVaxSafety website at: www.ausvaxsafety.org.au

Vaccine Storage and Cold Chain Management

Vaccines must always be stored within the recommended temperature range of +2°C to +8°C . Correct storage and handling of vaccines is vital to maintaining vaccine potency and ensuring vaccines are safe and effective for patient administration.

The [National Vaccine Storage Guidelines: Strive for 5 \(current edition\)](#) provide information and advice for vaccine storage management.

If vaccine storage temperatures have been outside the recommended range of +2°C to +8°C, you should follow your cold chain breach protocol. All cold chain breaches must be reported immediately to Public Health on 1800 671 738. There is a public health nurse on call 24/7. You will be provided with advice regarding vaccine disposal and cold chain management.

Useful Resources

Department of Health, Tasmania website
flu.tas.gov.au/about_influenza

Department of Health, Commonwealth website
beta.health.gov.au/health-topics/immunisation

National Centre for Immunisation Research and Surveillance (NCIRS) website
www.ncirs.org.au/health-professionals

Influenza vaccines for Australians – Fact Sheet and FAQs
www.ncirs.org.au/health-professionals/ncirs-fact-sheets-faqs

ATAGI influenza statement 2019
beta.health.gov.au/health-topics/immunisation

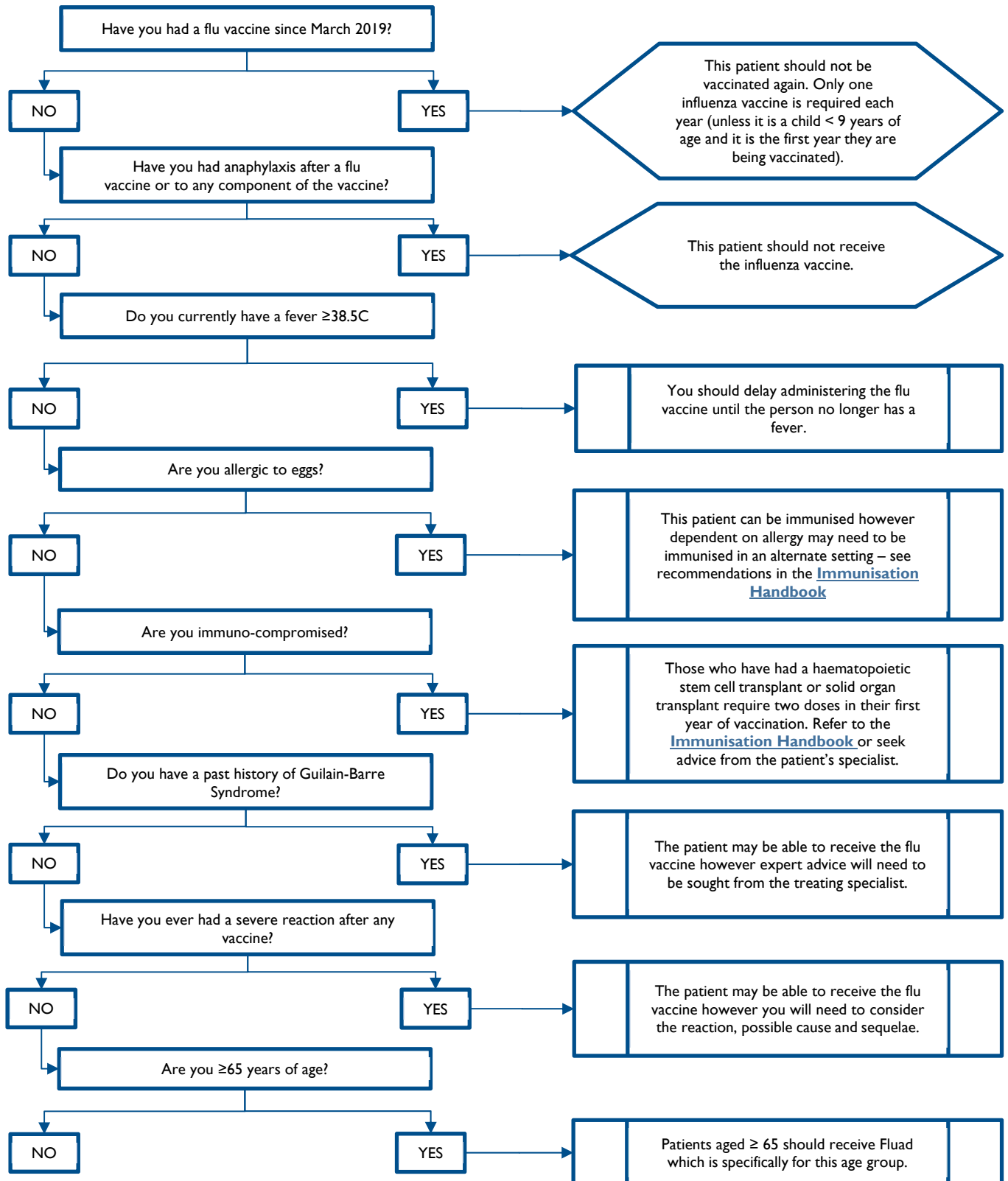
Guidelines for the Prevention, Control and Public Health Management of Influenza Outbreaks in Residential care Facilities
www.health.gov.au/internet/main/publishing.nsf/Content/cdna-flu-guidelines.htm

A useful Australian Government resource *Questions About Vaccination* is available at:
beta.health.gov.au/resources/publications/questions-about-vaccination

AusVaxSafety website at: www.ausvaxsafety.org.au

Appendix I:

Flu Immunisation Decision Aid – Adults



Appendix 2:

Table 1: Medical conditions that are associated with an increased risk of influenza complications and for which individuals are eligible for vaccination under the NIP* Category

ncirs.org.au/sites/default/files/2019-03/Influenza-fact-sheet_25%20Mar%202019_Final.pdf

Category	Vaccination strongly recommended for (but not limited to) people with the following clinical conditions
Cardiac disease	Cyanotic congenital heart disease Congestive heart failure Coronary artery disease
Chronic respiratory conditions†	Severe asthma (for which frequent medical consultations or the use of multiple medications is required) Cystic fibrosis Bronchiectasis Suppurative lung disease Chronic obstructive pulmonary disease (COPD) Chronic emphysema
Chronic neurological conditions†	Hereditary and degenerative CNS diseases† (including multiple sclerosis) Seizure disorders Spinal cord injuries Neuromuscular disorders
Immunocompromising conditions‡	Immunocompromised due to disease or treatment (e.g. malignancy, transplantation and/or chronic steroid use) Asplenia or splenic dysfunction HIV infection
Diabetes and other metabolic disorders	Type 1 diabetes Type 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

* Note: ATAGI also strongly recommends influenza vaccination for people who have the following conditions (but vaccination **is not** funded under the NIP for such people unless they also fall under one of the categories in the table above):

- Down syndrome
- obesity, defined as body mass index (BMI) ≥ 30 kg/m²
- chronic liver disease (defined as histological evidence of fibrosis or cirrhosis, or clinical evidence of chronic liver disease).

Further details are provided here: immunisationhandbook.health.gov.au/vaccine-preventable-diseases/influenza-flu

† People who have any condition that compromises the management of respiratory secretions or is associated with an increased risk of aspiration should be vaccinated.

‡ People with certain immunocompromising conditions (i.e. haematopoietic stem cell transplant, solid organ transplant) receiving influenza vaccine for the first time post transplant are recommended to receive 2 vaccine doses at least 4 weeks apart (irrespective of age) and 1 dose annually thereafter.