

 **HotDoc** | CPD WEBINAR

Flu Vaccine Clinical Update 2024




HOSTED BY
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aapm
Australian Association of
Practice Management
excellence in healthcare management

AAPM Approved 2024
5 CPD Points


Wed 27 Mar
12:30pm AEDT



In the spirit of reconciliation, HotDoc acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community.

We pay our respect to their elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.

Before we begin -

- This session is being recorded & you will be sent a link 4-6 hours after this session has concluded with the recording & resources
- Find all links to additional resources including the slides are in the “related content” section on your console/ screen
- Your CPD certificate will be accessible at the 40 minute mark, you can access via the certificate icon on your console 
- Have a play around with the console/ icons on your screen, it's an interactive experience

Declarations

Advisory Board Member – Seqirus, Pfizer, GSK, Sanofi Pasteur
Honoraria received from Seqirus, Sanofi Pasteur, MSD and Seqirus
Adelaide PHN Immunisation Coordinator



Session Outline

- Brief overview of influenza disease and expectation in 2024
- Discuss 'at risk' groups, vaccine choice and recommendations and the National Influenza Program
- Practicalities
 - Setting up a flu clinic
 - Standing medication orders
- Adverse events following vaccination
- Tips and tricks

Influenza

- What is influenza?
 - Respiratory disease caused by influenza virus infection¹
 - Influenza virus are type A, type B and type C
 - Highly infectious
 - Estimated R_0 in community is 1.2 to 2.4, school settings 2.8 – 16.9
- Influenza infection can cause a wide spectrum of disease
 - Asymptomatic
 - Malaise, chills, myalgia, cough, sneezing, headache, nasal discharge, anorexia
 - Fever, febrile convulsions, otitis media, GI symptoms
 - Serious complications

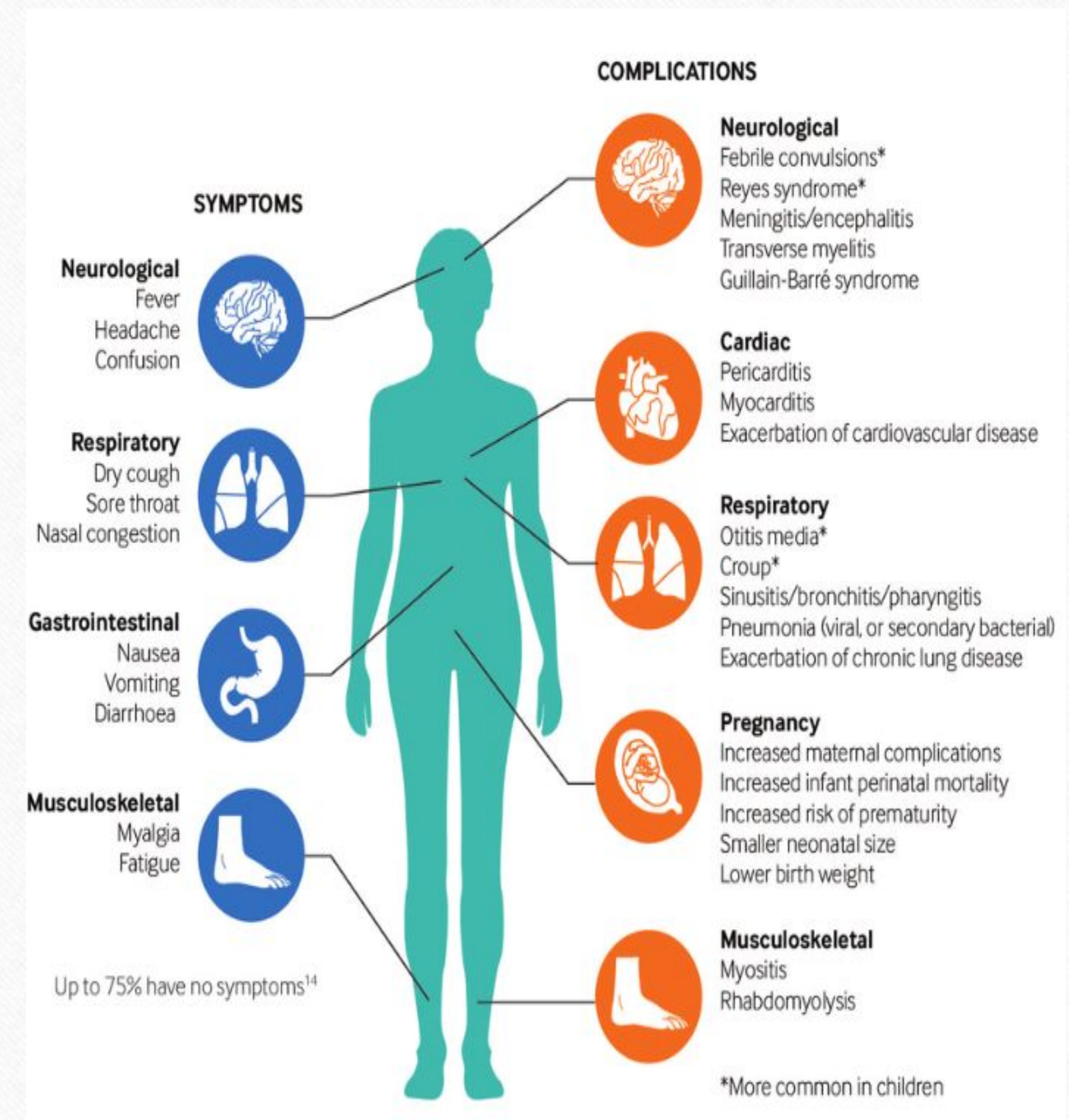
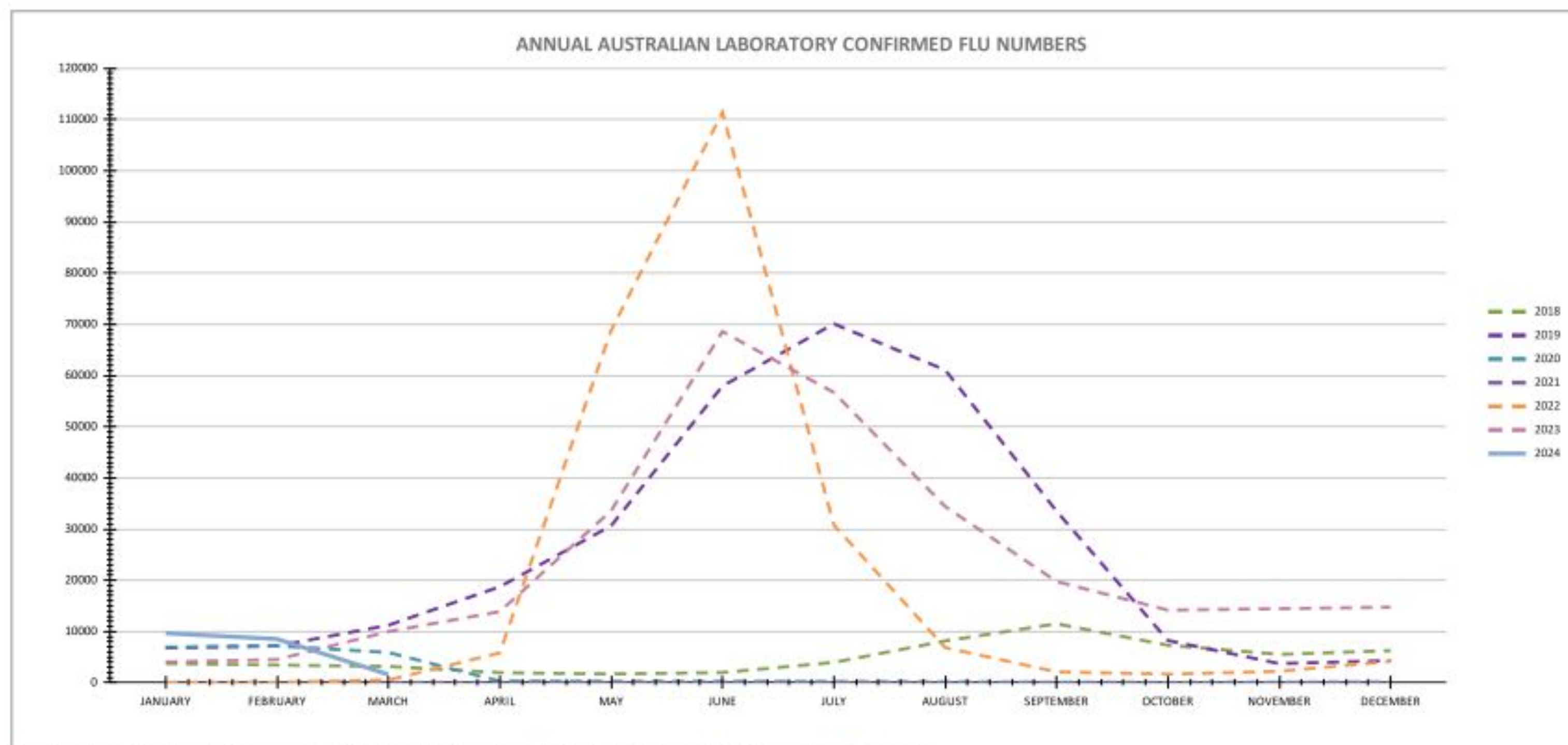


Image:
https://www.researchgate.net/figure/Symptoms-and-complications-of-influenza-Complicated-influenza-is-defined-as-an-infection_fig1_311499723

Influenza 2023

- The 2023 Flu Season was one of the worst season on record since 2019¹.
- H1N1 was the dominant circulating A strain but 40% of notifications were B strain



Reference: These statistics are taken from the Aust Government Department of Health, National Notifiable Diseases Surveillance System

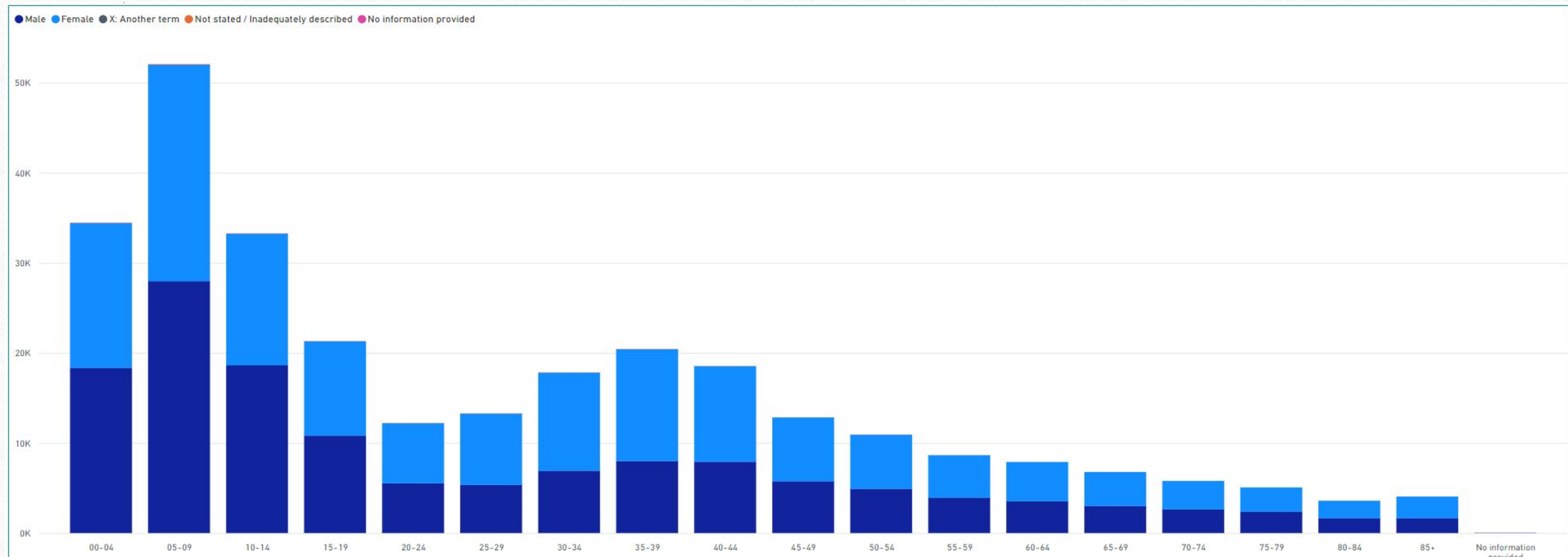
Ref: 1. 2023 Flu Season Summary:

<https://ausvacs.com.au/2024-flu-vaccination-proposal/2023-flu-season-summary/#:~:text=The%202023%20Flu%20Season%20was,rates%20are%20improved%20for%202024.>

Ref: 2. Graph <https://www.immunisationcoalition.org.au/wp-content/uploads/2024/03/MAIN-Aust-Flu-Stats-worksheet-2024.xlsx-PDF-2.pdf>

Influenza 2023

- 376 influenza-associated deaths¹
- 3,696 sentinel hospital admissions
- 256 (7%) were admitted directly to ICU.

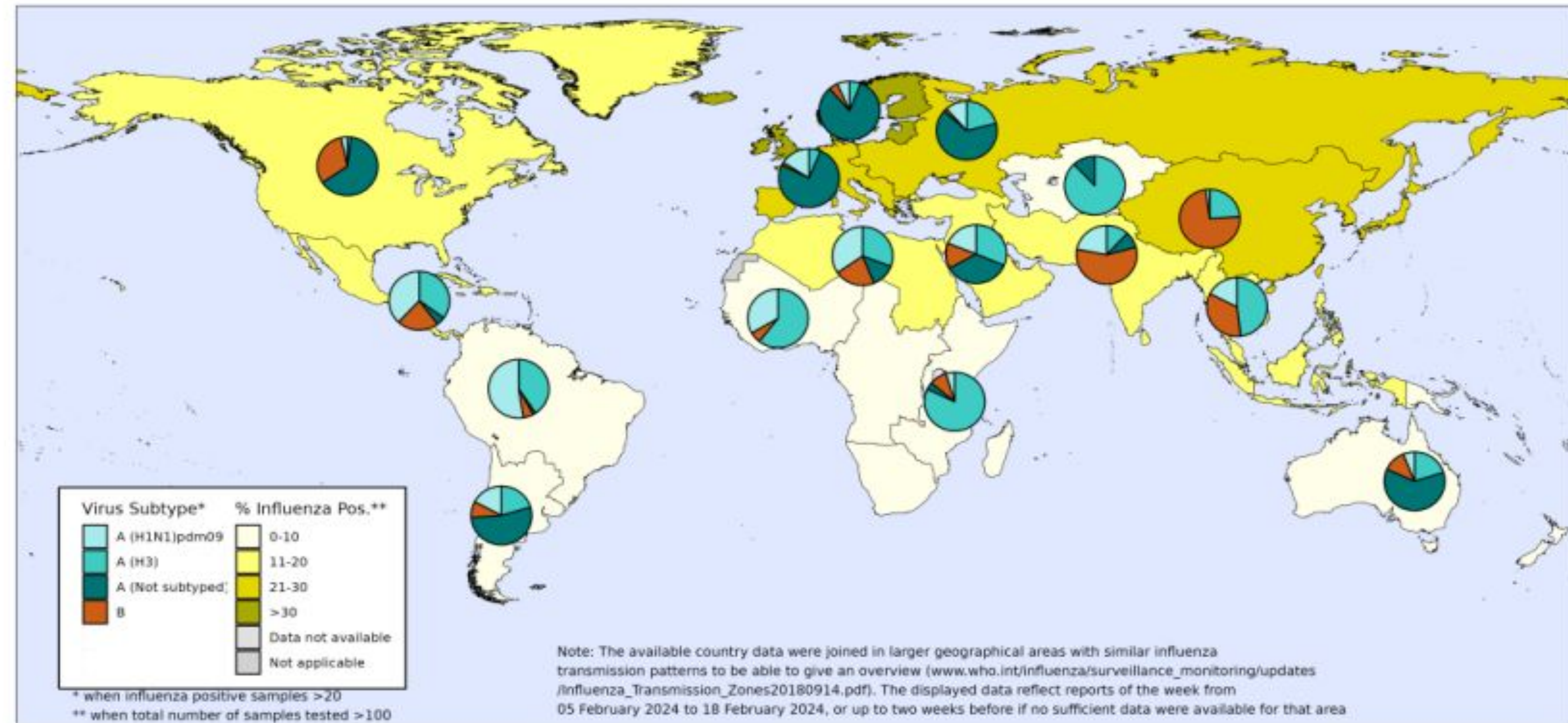


Ref: 1. Australian Influenza Surveillance Report – 2023 End of Season Summary: <https://www.health.gov.au/sites/default/files/2023-12/aisr-2023-national-influenza-season-summary.pdf>

Ref: 2. Graph <https://nindss.health.gov.au/pbi-dashboard/>



Percentage of respiratory specimens testing positive for influenza, by influenza transmission zone.¹ Map generated on 01 March 2024. (The displayed data reflect reports of the weeks from 05 February 2024 to 18 February 2024 or up to two weeks before if insufficient data were available for an area for that period.)

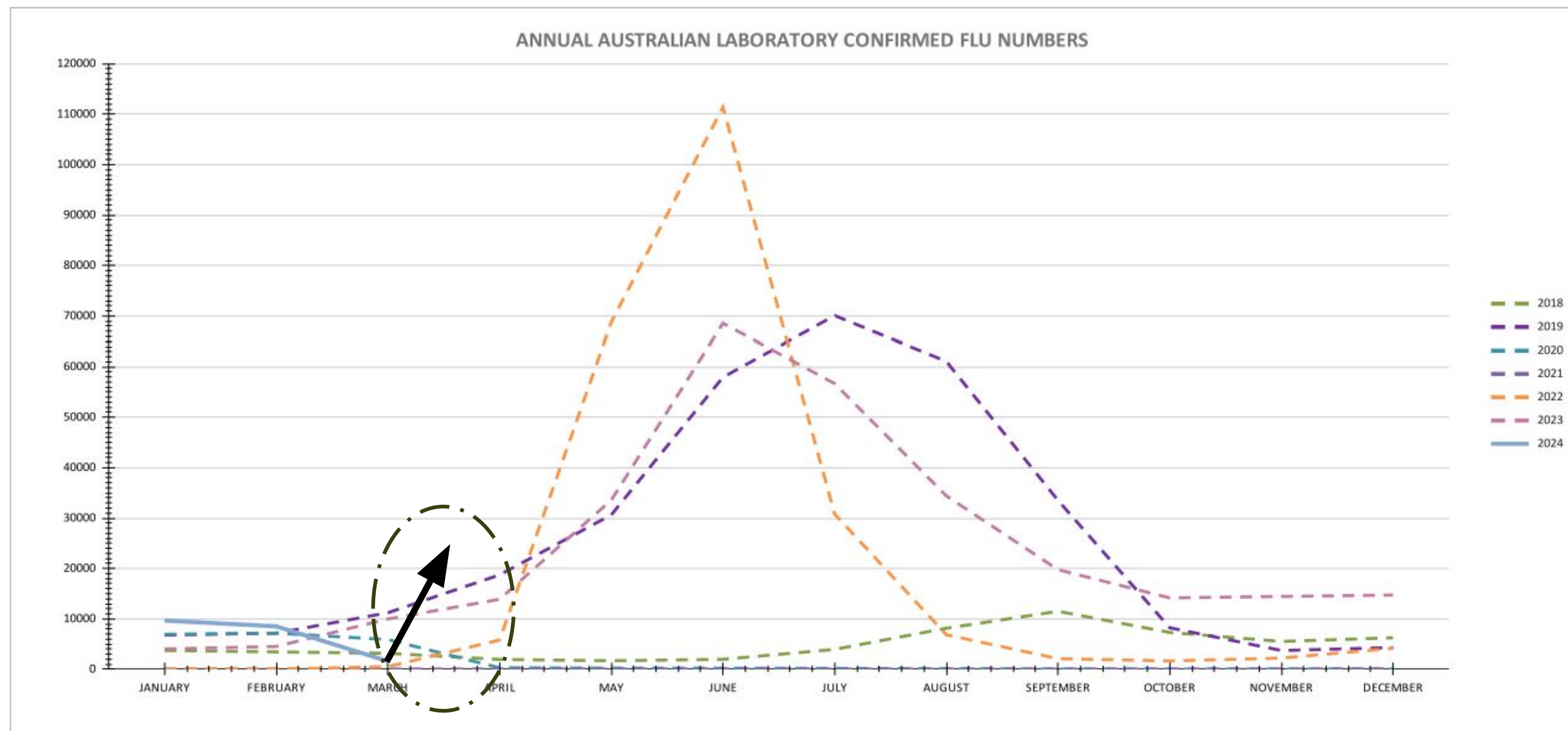


The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.



Data source: Global Influenza Surveillance and Response System (GISRS), FluNet (www.who.int/flu-net)
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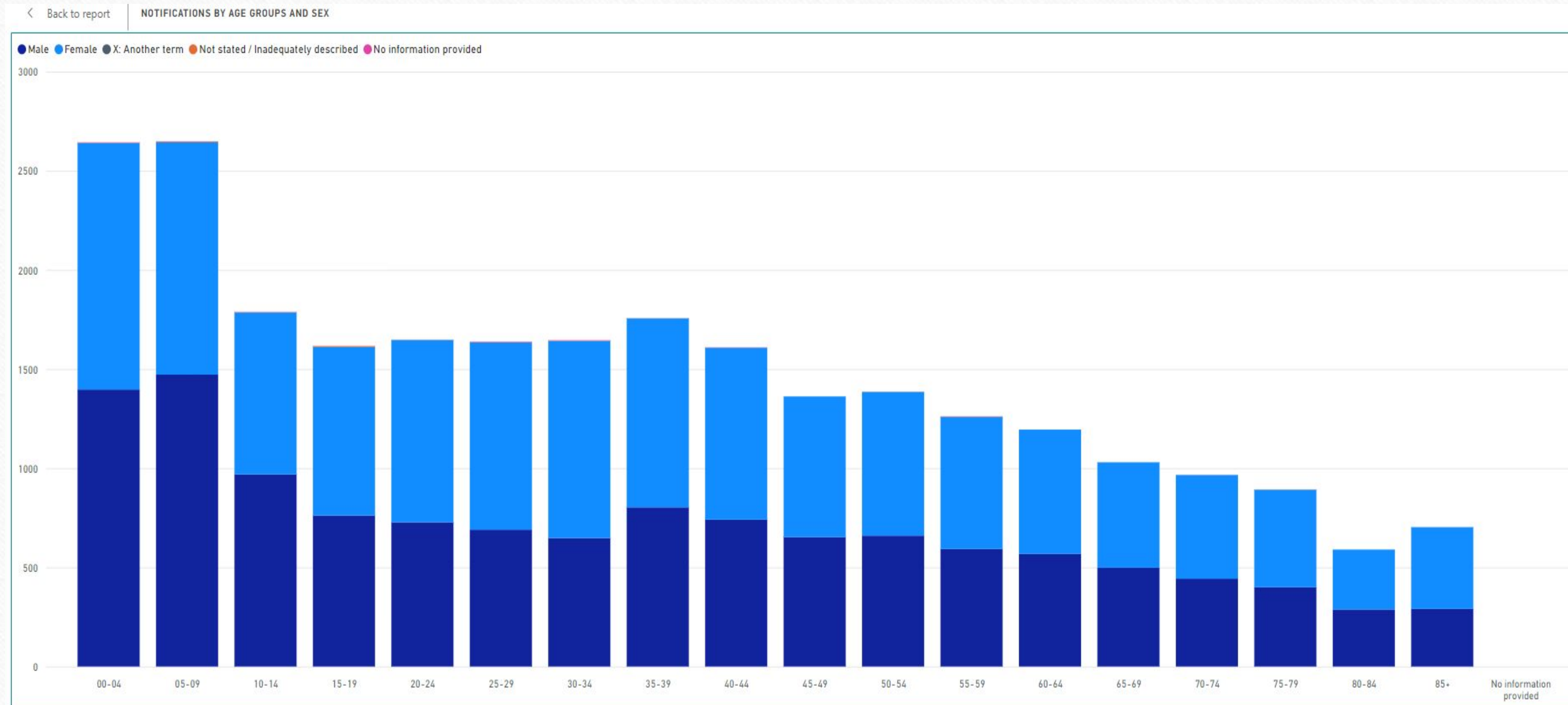
Influenza 2024



Reference: These statistics are taken from the Aust Government Department of Health, National Notifiable Diseases Surveillance System

Ref: <https://www.immunisationcoalition.org.au/wp-content/uploads/2024/03/MAIN-Aust-Flu-Stats-worksheet-2024.xlsx-PDF-2.pdf> Accessed 14th March 2024

Influenza 2024



Source Accessed 23rd March 2024: <https://nindss.health.gov.au/pbi-dashboard/>

Vaccine choices 2024



Australian Government
Department of Health
and Aged Care

AUSTRALIAN TECHNICAL ADVISORY
GROUP ON IMMUNISATION (ATAGI)
CLINICAL ADVICE

Issue date: March 2024

STATEMENT ON THE ADMINISTRATION OF SEASONAL INFLUENZA VACCINES IN 2024

Table 1. Seasonal influenza vaccines registered and available for use in Australia in 2024, by age

Vaccine	Vaxigrip Tetra 0.5 mL (Sanofi)	Fluarix Tetra 0.5 mL (GSK)	Flucelvax Quad 0.5 mL (Seqirus)	Afluria Quad 0.5 mL (Seqirus)	FluQuadri 0.5 mL (Sanofi)	Influvac Tetra 0.5 mL (Viatris)	Fluad Quad 0.5 mL (Seqirus)	Fluzone High-Dose Quad 0.7 mL (Sanofi)
Registered age group								
6 months to <5 years	✓	✓	✓	X	✓	✓	X	X
≥5 to <60 years	✓*	✓*	✓*	✓	✓	✓	X	X
≥60 to <65 years	✓*	✓*	✓*	✓	✓	✓	X	✓
≥65 years	✓	✓	✓	✓	✓	✓	✓	✓

Ticks indicate the age at which a vaccine is registered and available. Crosses indicate that the vaccine is not available for that age group. White boxes indicate availability for free under the NIP.

* NIP funding only for Aboriginal and Torres Strait Islander people, pregnant women and people who have certain medical conditions.

Always check age and brand

Do your 3 vaccine checks before administering!

1. at the fridge
2. with the patient
3. just prior to administration

NIP Flu Vaccines 2024

National Immunisation Program influenza vaccines by age group

Check you have the correct vaccine for your patient's age.

2024 NIP-funded eligibility

Age group	Quadrivalent influenza vaccines (QIVs)			
	Fluad® Quad 0.50 mL (Seqirus)	Fluarix® Tetra 0.50 mL (GSK)	Flucelvax® Quad 0.50 mL (Seqirus)	Vaxigrip Tetra® 0.50 mL (Sanofi)
6 months to <5 years	DO NOT USE	✓	NOT FUNDED	✓
5 to <65 years	DO NOT USE	✓	✓	✓
65 years and over	✓	NOT FUNDED	NOT FUNDED	NOT FUNDED

Flu Vaccination

- Australian Immunisation Handbook, WHO and CDC recommends annual influenza vaccination for **everyone ≥6 months of age but is funded for:**

- Pregnant women
- Individuals with Chronic Medical Conditions
- Children 6 months to <5 years of age
- Patients who identify as Aboriginal and Torres Strait Islander
- Individuals who are 65 years of age and older

Medical Conditions

Category	Example medical conditions
Cardiac disease	Congenital heart disease, congestive heart failure, coronary artery disease
Chronic respiratory condition	Suppurative lung disease, bronchiectasis, cystic fibrosis, chronic obstructive pulmonary disease, chronic emphysema, severe asthma (requiring frequent medical consultations or the use of multiple medicines)
Immunocompromising condition	HIV infection, malignancy, immunocompromise due to disease or treatment, asplenia or splenic dysfunction, solid organ transplant, haematopoietic stem cell transplant, CAR T-cell therapy
Haematological disorder	Haemoglobinopathies
Chronic metabolic disorder	Type 1 or 2 diabetes, amino acid disorders, carbohydrate disorders, cholesterol biosynthesis disorders, fatty acid oxidation defects, lactic acidosis, mitochondrial disorders, organic acid disorders, urea cycle disorders, vitamin/cofactor disorders, porphyria
Chronic kidney disease	Chronic kidney disease stage 4 or 5
Chronic neurological condition	Hereditary and degenerative CNS diseases, seizure disorders, spinal cord injuries, neuromuscular disorders, conditions which increase respiratory infection risk
Long-term aspirin therapy in children aged 5 to 10 years	These children are at increased risk of Reye's syndrome following influenza infection

Factors Impacting Influenza Vaccine Effectiveness



Patient Factors

Reduced immune response to the vaccine²

e.g. immunosenescence (declining immune function in the elderly)

Adjuvant & high-antigen vaccines¹



Viral Factors

Potential for vaccine-virus mismatch³

e.g. antigenic drift (natural mutation in circulating flu strains)

Universal vaccines??⁴



Vaccine Factors

Potential for vaccine-virus mismatch⁵

e.g. egg-adaptation (changes introduced during egg-based manufacturing)

Non egg-based vaccines⁵

Utilisation Factors

e.g. lack of patient demand and/or provider recommendation leading to under-vaccination^{6,7}

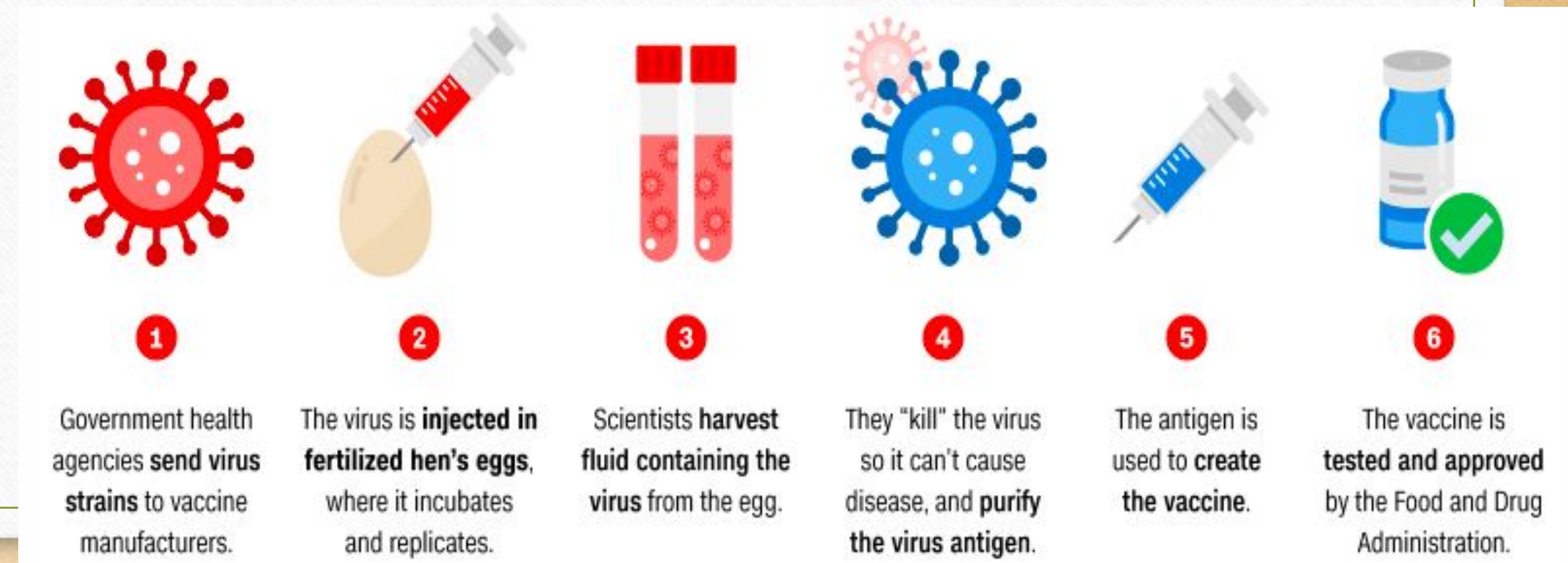
1. ATAGI. Australian Immunisation Handbook, Australian Government Department of Health, Canberra, 2018, immunisationhandbook.health.gov.au. Accessed Sept 2020.

2. McElhaney JE. Aging Health. 2008;4(6):603-13. 3. Ansaldi et al. Vaccine. 2010;s8:4123-29. 4. Nachbagauer R et al. Annu Rev Med. 2020;71:315-27. 5. Skowronski DM et al.

PLoS One. 2014;9(3):e92153. 6. Menzies RI et al. Med J Aust. 2017;206(6):238-239. 7. Rao S et al. Hosp Pediatr. 2016;6(9):513-519.

Standard Quadrivalent Influenza Vaccine

- Egg-based technology
 - **vaccines recommended for everyone 6 months and older**
 - Vaxigrip Tetra
 - Fluarix Tetra
 - FluQuadri
 - Afluria Quad
 - Influvac Tetra
 - **vaccines recommended for anyone 5 years of age and older**
 - Afluria Quad
 - **vaccine recommended for ≥ 60 years**
 - Fluzone High Dose Quadrivalent
 - **vaccine recommended for ≥ 65 years**
 - Fludad® Quad



Flucelvax Quad - Cell-Based Quadrivalent Influenza Vaccine

- Cell-based technology
 - Propagated in MDCK cells
 - Eliminates egg-adaptation
- Recommended for anyone 6 months and older
- NIP for eligible individuals aged 5- to 64-year-olds
- Private market for non-eligible individuals
- **Patients ≥ 65 years - both the adjuvanted (Fluad® Quad) and high dose influenza vaccine (Fluzone High Dose Quadrivalent) are preferentially recommended over standard influenza vaccine.**



Fluzone High-Dose – High Dose Quadrivalent Influenza Vaccine

- Private market only in 2024
- Fluzone High-Dose Quadrivalent is indicated for use in persons 60 years of age and older
 - Contains 4 times the antigen of a standard dose of flu vaccine¹
 - Provides better protection for those with immunosenescence than a standard QIV
 - 24.2% better protection against laboratory confirmed influenza compared to a standard dose vaccine²
- **Patients ≥65 years - both the adjuvanted (Fluad® Quad) and high dose influenza vaccine (Fluzone High Dose Quadrivalent) are preferentially recommended over standard influenza vaccine.**



Fluad Quad – Adjuvanted Quadrivalent Influenza Vaccine

- NIP only – **not** available on the private market
- Funded for persons 65 years of age and older
 - Provides better protection for those with immunosenescence than a standard QIV
 - Adjuvanted vaccine - MF59C.1 adjuvant



Flu vaccination effectiveness

The efficacy and effectiveness of influenza vaccines of similar composition depend on the¹:

- age and immunocompetence of the vaccine recipient
- degree of similarity between the virus strains in the vaccine and those circulating in the community

Studies have found:

- quadrivalent standard-dose egg-based influenza vaccines were about 54% to 59% effective against laboratory-confirmed influenza
- Vaccine effectiveness is approximately 65% against laboratory-confirmed influenza in children aged 6–59 months in a season when the vaccine and circulating strains are well matched

Flu Vaccination efficacy

Studies have found:

- In large post-licensure studies of community-dwelling adults aged ≥ 65 years, adjuvanted influenza vaccine was between 4.7% and 33% more effective in preventing hospitalisation from influenza or pneumonia than standard influenza vaccine
- High-dose influenza vaccine was also found to be between 2.0% and 27.0% more effective in preventing hospitalisation from influenza or pneumonia than standard-dose egg-based influenza vaccines in large post-licensure studies of adults aged ≥ 65 years
- Studies have generally shown that cell-based influenza vaccine has similar effectiveness against laboratory-confirmed influenza to standard-dose egg-based influenza vaccine. For some influenza seasons, the cell-based vaccines had a small observed increased benefit in protection against influenza-associated hospitalisations.

WHY?

- Reduce strain on health system resources
- Reduce risk of infection, pneumonia hospitalisation, MI, death
- Reduce risk of loss of function
- Reduce risk of chronic disease worsening
- Loss of productivity, work, social activities, childcare
- Reduce suffering
- Protect loved ones
- Pregnant women - self and baby
- HCWs *primum non nocere*
- Travellers: cruise, airplanes, Hajj...travel bubbles

WHY NOT?

- It gives me the flu
- The doctor didn't recommend it to me
- I meant to but I didn't get around to it
- "I never get the flu" "it's just a cold"
- There's not much flu going around so infection risk is low...
- I don't believe in flu vaccines / I heard it doesn't work very well
- I don't want side effects
- I don't like needles / Allergic / Vaccine refuser
- Cost or No vaccine available

Influenza vaccine coverage 2023

- 9 million Australians received a flu vaccine (1st March – 3 October 2023)

Influenza vaccination % coverage* - by jurisdiction - all people

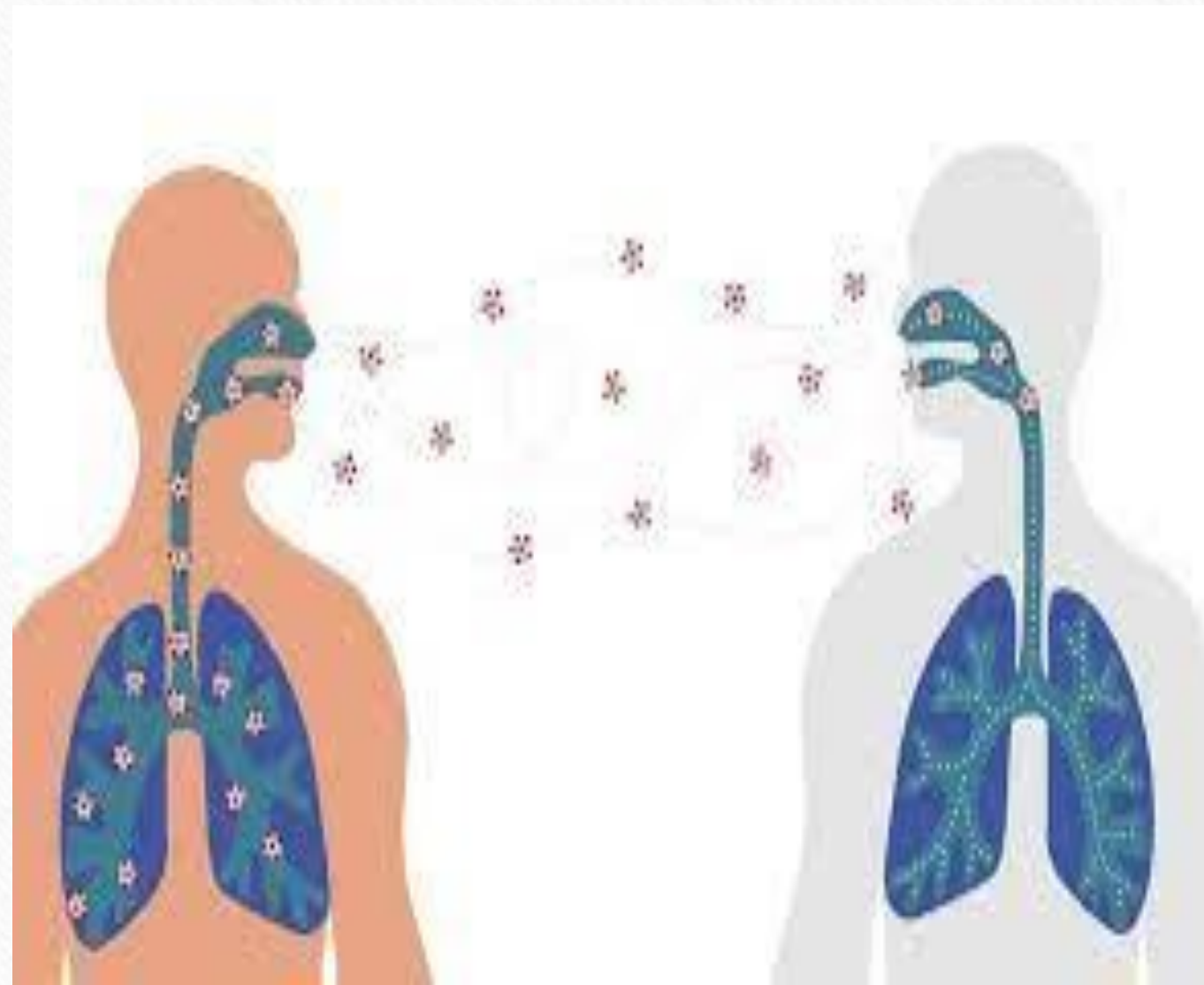
	ACT	NSW	VIC	QLD	SA	WA	TAS	NT	AUS
6 mo - < 5 yrs	50.0	26.8	32.0	23.9	28.0	27.3	32.9	32.2	28.3
5 - < 15 yrs	24.4	14.9	17.1	14.7	15.6	18.6	16.2	14.1	16.1
15 - < 50 yrs	32.7	20.6	24.8	20.4	25.0	21.7	24.7	21.9	22.4
50 - < 65 yrs	46.1	34.1	38.5	36.1	40.7	37.4	44.5	27.2	36.8
≥ 65 yrs	67.3	60.3	64.0	63.5	68.1	64.3	70.1	36.3	63.1

Influenza vaccination % coverage* - by jurisdiction - Aboriginal and Torres Strait Islander people

	ACT	NSW	VIC	QLD	SA	WA	TAS	NT	AUS
6 mo - < 5 yrs	30.2	18.4	21.7	16.8	16.7	19.6	27.0	36.0	19.7
5 - < 15 yrs	17.1	12.9	12.7	12.9	12.4	15.3	15.2	22.4	14.1
15 - < 50 yrs	23.5	16.9	19.3	17.5	19.3	17.8	20.9	30.8	19.2
50 - < 65 yrs	43.6	39.5	40.1	38.8	41.1	36.7	50.4	44.5	40.0
≥ 65 yrs	66.8	64.3	64.6	61.0	61.6	55.2	74.9	48.3	61.4

Ref: Australian Influenza Surveillance Report – 2023 End of Season Summary <https://www.health.gov.au/sites/default/files/2023-12/aisr-2023-national-influenza-season-summary.pdf>
 Accessed March 2024

Graph: <https://ncirs.org.au/influenza-vaccination-coverage-data> Accessed March 2024



Virus transmits



Causes illness...
Asymptomatic, mild,
moderate or severe
infection



Complications requiring
ICU admission
.....or a coffin.....



Can HCP's help?

The virus is a problem

Vaccine fatigue, apathy, hesitancy and refusal is a problem

Can HCPs help?

- Do you offer flu vaccine to **EVERY** person over 6 months of age?
- Do you routinely provide opportunistic vaccination?
- Is the nurse able to work with a Standing Medication Order?

Strategies to increase uptake

- Normalize it
- Talk the talk
- Offer it, Recommend it, Promote it and be opportunistic
- Health professional recommendation carries weight!
- Sending a personal invitation to all eligible patients – pre-call rather than re-call
- Make it accessible
 - Nurse-led clinics (SMO's)
 - Fee for service vaccine stock in the fridge
 - Home visiting for elderly, infirmed etc
- Set targets.....and get rewarded
- Consider advertising 'flu vaccination days' with 'the lot' (small gift cards, raffle prizes, lucky dip, pizza parties, costume parties etc.)
- Nominate a CHAMPION or CHAMPIONS in your practice

Standing Medication Orders (SMO's)

- Does your State or Territory allow RN's can work under a Standing Medication (SMO) Order?
- If so, it must be signed by a Medical Officer.
- All RN's working under an SMO must sign that they have read and understood it.
- The RN will be required to undertake the pre-vaccination checklist, discuss risks and benefits, and gain valid consent. The RN may then administer the vaccine or delegate the administration of the vaccine to an EN.
- Check if your State or Territory allows EN's to work under a SMO.
- If the RN is not working under Standing Medication Orders, they **MUST** only administer vaccines with a medical officer ordertherefore the GP will see the patient, undertake the pre-vaccination checklist, discuss risks and benefits, and gain valid consent, and then delegate the administration to the RN or the EN.
- The patient does not need to see the GP, however, there is no avenue to bill Medicare for this activity.....**BUT**, the workforce payments received by accredited practices who are registered for PIP covers the old 'nurse immunisation' item number 10993
- Does your State or Territory allow 'Authorised Immunisers' to work in General Practice?

The Consultation

- Friendly, welcoming, professional, confident
- Watch the cold chain
 - Esky on desk
 - Fridge temp check each time
- The process:
 - follow all the 'Rights' (patient, drug, dose etc)
 - pre-vaccination checklist
 - Is your patient well enough to receive the vaccine?
 - Have they reacted previously to vaccines?
 - Do they have allergies?
 - Do they faint?
 - risks & benefits
 - valid consent
 - Opportunity to ask questions



The Consultation

- AIR check before any vaccine administered
- written medication order (S4 medicine) – 3 vaccine checks
- safe administration – IM – 90° or S/C – 45°
 - Antero-lateral thigh for babies under 12 months of age
 - Alternative site for all age groups
 - Deltoid for individuals over 12 months of age
 - Clinical decision to use all 4 limbs for multiple vaccines
- documentation – take home record, clinical record, AIR
- verbal and written post vaccination advice
 - 15-minute post observation
 - when and how to report an adverse event
- Reminders – other vaccines, health checks, breast/bowel screening
- Be opportunistic – discuss vaccination with accompanying person



Influenza vaccine Adverse Events

- Common side effects of influenza vaccines include:
 - injection site pain, redness, swelling
 - fever, tiredness, body aches (flu-like symptoms).
 - headaches
 - nausea, vomiting, diarrhoea, loss of appetite
- Rare side effects post influenza vaccination, including anaphylaxis are possible:
 - These are **RARE**
 - Remember DRSABCD
 - Anaphylaxis and BLS training and have a kit ready!

The vaccine is your best defense against influenza.
Isn't it worth a shot?

Taking The Flu Shot	Catching Influenza
<ul style="list-style-type: none">• Most people experience:<ul style="list-style-type: none">• Sore Arm (mild)• Some people experience:<ul style="list-style-type: none">• Low Grade Fever• Mild Aches• <i>Flu vaccine has been extensively tested and has an excellent safety record for the past 30+ years, over millions of doses given.</i>	<ul style="list-style-type: none">• Most people experience:<ul style="list-style-type: none">• Fever• Chills• Cough• Body Aches• Fatigue• Headache• Sore Throat• Runny Nose• Some people experience:<ul style="list-style-type: none">• Pneumonia• Death

Summary

- Vaccination is the most important measure to prevent influenza and its complications.
- While protection is generally expected to last throughout the year, the highest level of protection occurs in the first 3 to 4 months after vaccination.
- Vaccination should continue to be offered as long as influenza viruses are circulating, and a valid vaccine (before expiration date) is available. Some vaccine brands have an expiry date of February 2024.
- Always offer non funded vaccines such as High Dose Fluzone and Flucelvax Quad to patients.....it is part of the valid consenting process and ultimately it is their choice.
- Consider increasing access to vaccine by using SMO's to run nurse-led flu clinics.



PneumoSmart

PneumoSmart

The *PneumoSmart Vaccination Tool* (herein referred to as "the tool") has been created using the pneumococcal disease vaccination recommendations in the online Australian Immunisation Handbook, and has been developed to assist GPs, medical specialists and other immunisation providers to comply with them. As pneumococcal disease vaccination recommendations change, the tool will be updated by clinical experts at the Immunisation Coalition.

Take Home Messages

- Considerations:
 - ensure age-appropriate vaccine
 - egg based v cell based
 - High-dose vaccine for 60+ (especially if non-NIP eligible at 65 years)
- We are 'seed planters'
- Check, check and check – right vaccine, right age-group
- Strains have changed - importance of getting a shot every year
- 'Normalise' the vaccine
- Have it yourself!
- Keep asking/offering/promoting!
- It's never too late to vaccinate – we don't know what will happen to flu in 2024





Security for Practitioners: How to Think About Cyber Security with Analogies from Healthcare



HOSTED BY
Tristan Lawrence
Head of Security,
Privacy & Reliability
HotDoc



17 April
12:30pm AEST

Quick Consults

Online healthcare from
your regular doctor

- ✓ Safe online care
- ✓ Increase earnings
- ✓ Flexible schedule



A screenshot of the HotDoc mobile app interface. At the top, there's a dark header with the HotDoc logo, a "Logout" button, and a "Show all requests" link. Below this, a request card is shown for "Elizabeth Lemon" with a "Remove Pin" option and a "30 mins ago" timestamp. The patient's details include a birth date of 01/01/1990 and a phone number 0491 570 006. A table lists prescription details: "Lipitor, 10mg" with an "E-Script" delivery method. Patient notes state "I have run out". Contact information includes email "e.lemon@hotdoc.com.au" and address "276 Flinders Street, Melbourne, VIC 3000". The amount charged is "\$20.00". Below the table is a text input field for "Add a note to patient upon action (optional)" with an example: "E.g.: Please make an in-person appt for next renewal". At the bottom of the card are three buttons: a green "Mark as complete" button, a blue "Reassign request" button, and a red "Decline request" button.

Book a Demo





Flu Clinic Kit

[DOWNLOAD NOW](#)

Via the link in the 'related resource' section

Download the TGA approved posters for use in your clinic - via the link below

Read through the new TGA advertising guidelines - see the changes link below

FIGHTING FLU STARTS WITH YOU

2024 INFLUENZA VACCINES AVAILABLE

The **INFLUENZA** vaccine is recommended for people aged 6 months and over and is **FREE** for those most at risk of influenza and its complications*



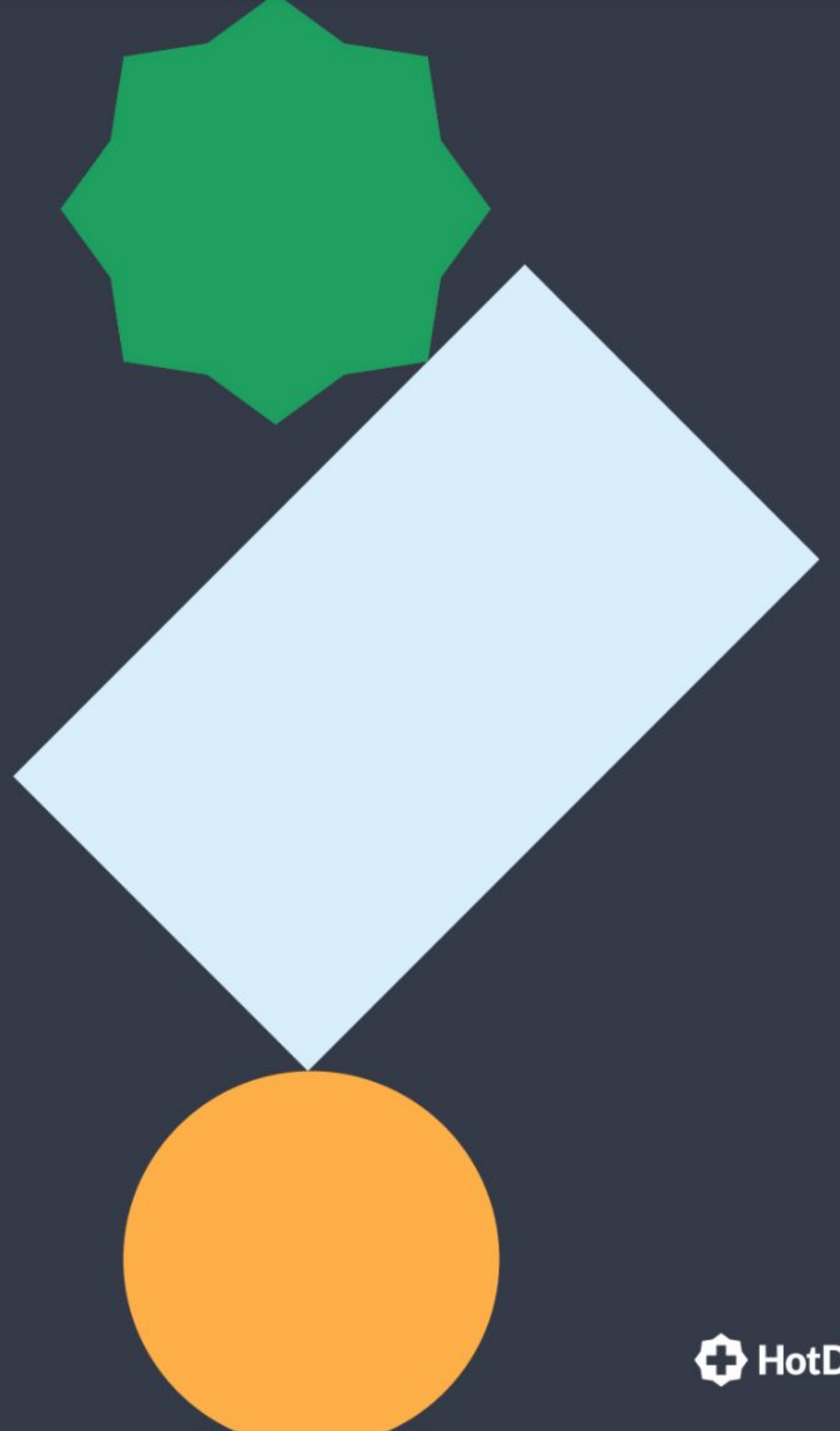
Ask about the flu vaccine today

health.gov.au/flu



* Some states and territories may provide free influenza vaccines for other groups. Speak to your GP or other health professional for more information.

Questions





Thanks for watching!

Find out more about HotDoc here:
practices.hotdoc.com.au