

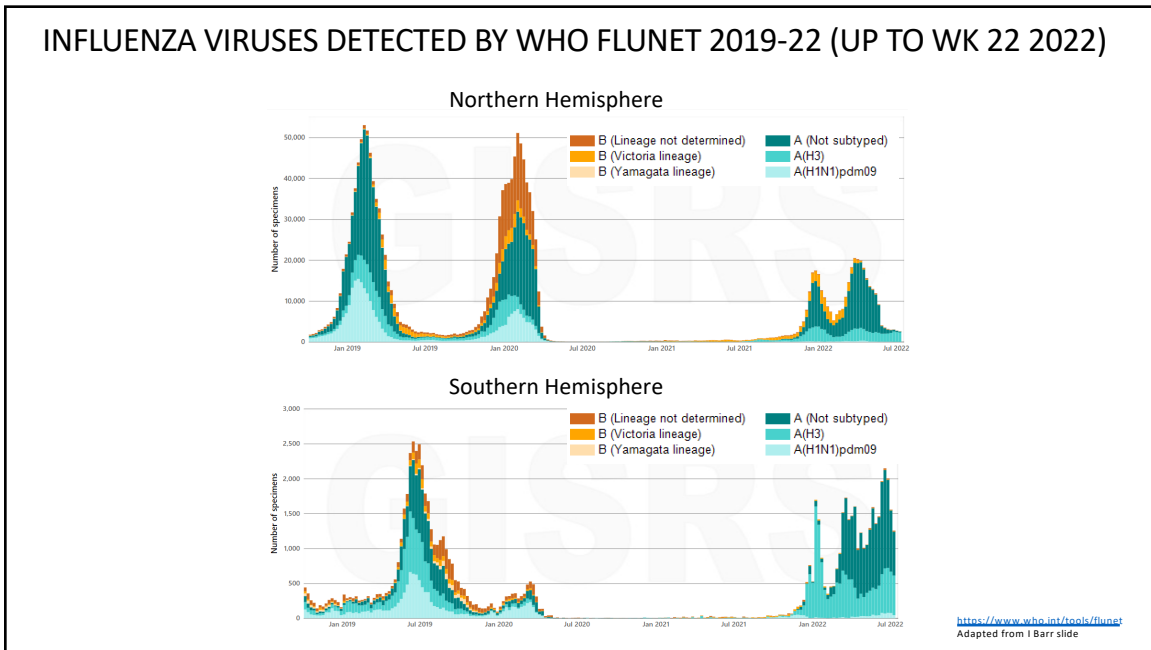


SH22 INFLUENZA AUSTRALIA– WHAT DOES IT MEAN ?
JONATHAN ANDERSON MD MPH PHD
 Executive Medical Director International Regions (AsiaPac & Europe)

1 | ON THE FRONT LINE



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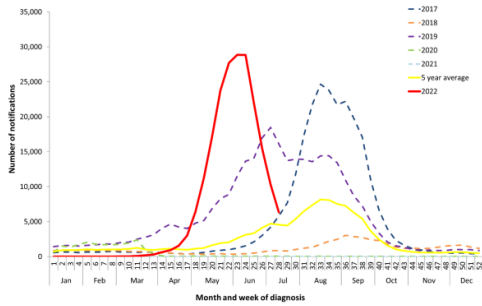


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SH 22: AUSTRALIA

Notifications of laboratory-confirmed influenza in Australia
by month and week of diagnosis¹
(01 January 2017 to 17 July 2022)

Figure 4. Notifications of laboratory-confirmed influenza, Australia, 01 January 2017 to 17 July 2022, by month and week of diagnosis²



Source: NNDSS

- <https://www1.health.gov.au/internet/main/publishing.nsf/Content/cda-surveil-of-flu-flucurr.htm?File/flu-08-2022.pdf> (Accessed July 2022)
- <https://www.abc.net.au/news/2022-05-30/where-to-get-free-flu-jabs/101109700> (Accessed May 2022)
- <https://amp.theguardian.com/australia-news/2022/jun/01/australians-in-hospital-emergency-departments-waiting-days-for-ward-beds-as-health-system-overwhelmed> (Accessed June 2022)
- <https://www.paho.org/en/news/14-06-2022-covid-19-cases-rise-american-countries-also-face-threat-seasonal-flu-hurricanes-paho> (Accessed June 2022)
- <https://bancos.salud.gob.ar/recursos/boletin-integrado-de-vigilancia-n596-https://bancos.salud.gob.ar/recursos/boletin-integrado-de-vigilancia-n596-se-142022e-142022> (Accessed June 2022)
- <https://infobae.com/en/2022/03/16/flu-cases-increased-in-argentina-at-an-unusual-time-of-year/> (Accessed June 2022)

3 | ON THE FRONT LINE

Total 204,911 notifications YTD (popn Australia 25m)

From Mid-April 2022 weekly number of notifications of laboratory-confirmed influenza exceeded the 5 year average¹



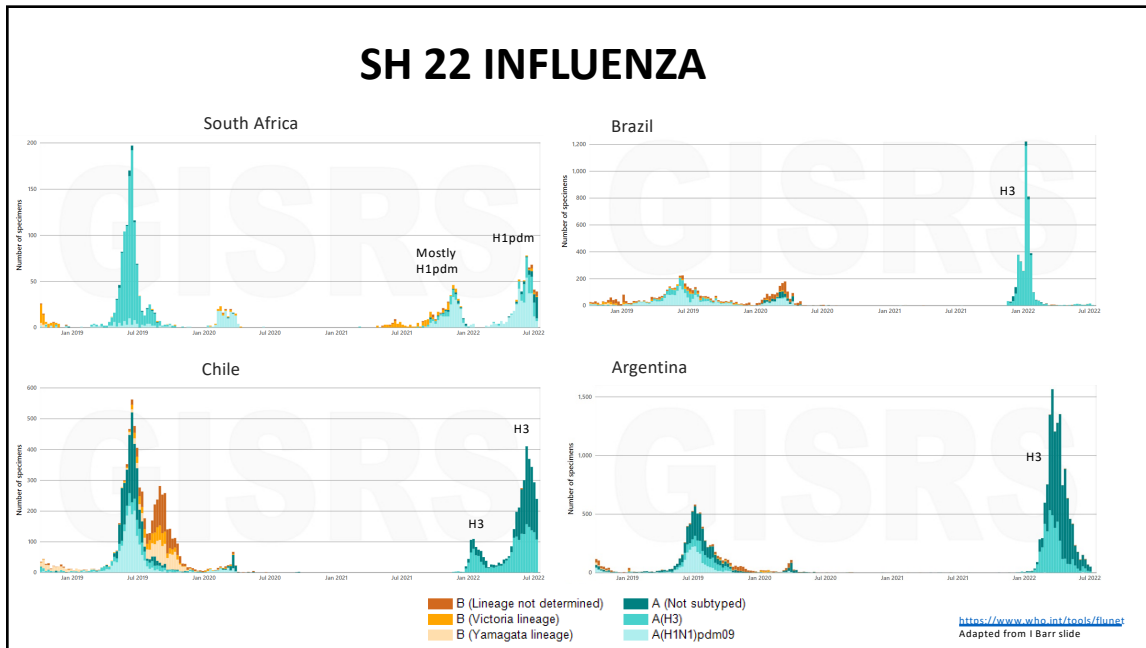
Prompted Australian State health authorities to provide free flu shots to all to reduce infections and help ease pressure on strained health system.^{2,3}

Argentina, Brazil, Chile, Peru, and Colombia are also seeing a significant and earlier rise in influenza cases and have reported more hospitalizations than usual due to influenza.^{4, 5, 6}



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SH 22 INFLUENZA

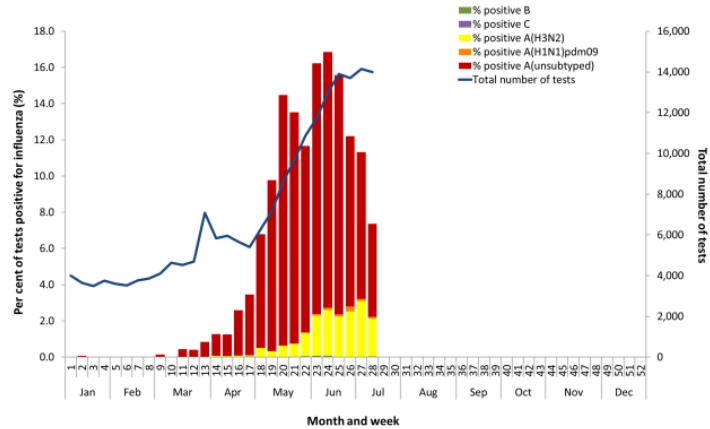


<https://www.who.int/tools/fluinet>
Adapted from I Barr slide

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TESTING AUSTRALIA

Figure 5. Proportion of sentinel laboratory tests positive for influenza and total number of specimens teste 01 January to 17 July 2022, by subtype and week*



Source: Sentinel lat

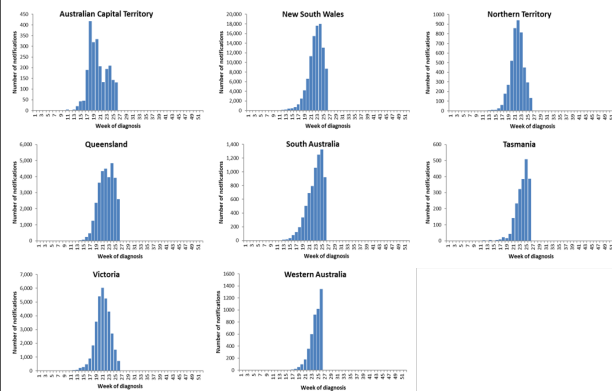


5 | ON THE FRONT LINE

www1.health.gov.au/internet/main/publishing.nsf/Content/cda-surveil-ozflu-flucurr.htm#current

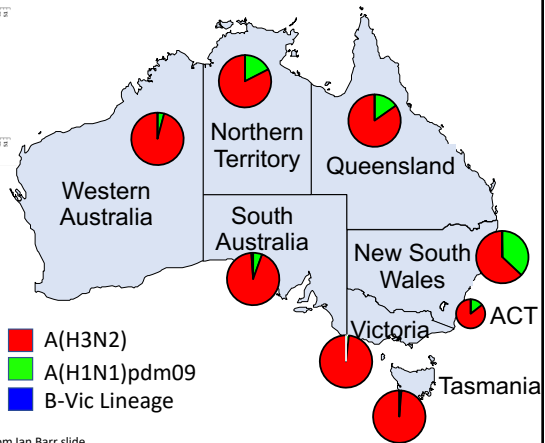
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STATE AND TERRITORY EPIDEMIOLOGY AUSTRALIA SH22



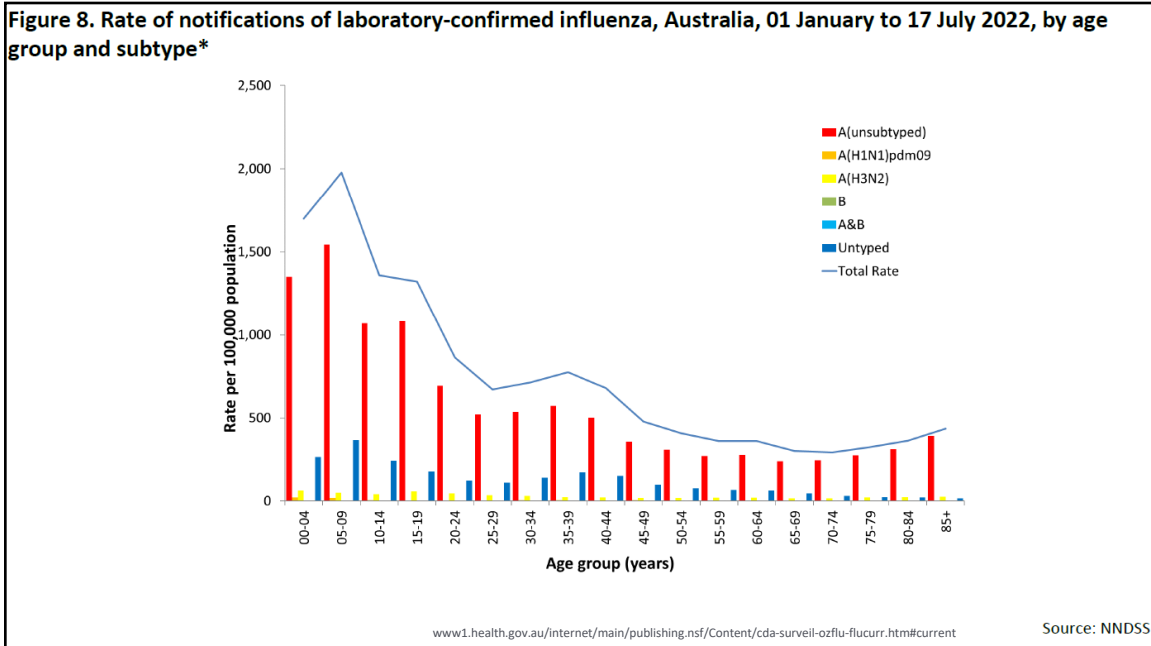
NNDSS Lab confirmed cases

There has been some variation in subtype circulation by state

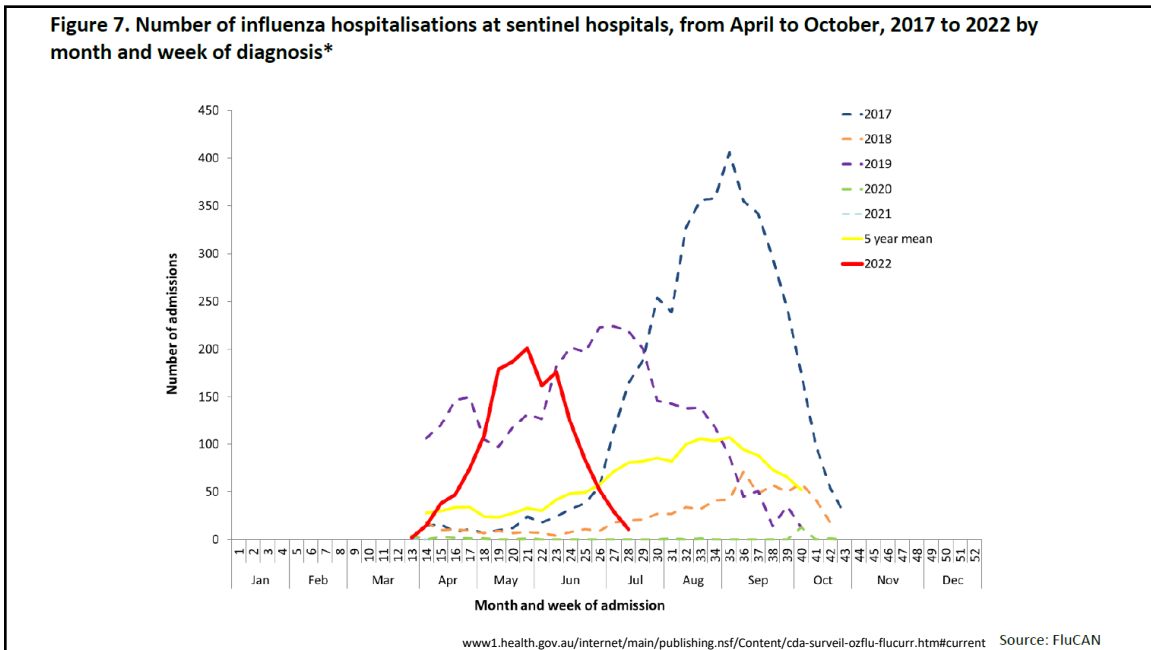


www1.health.gov.au/internet/main/publishing.nsf/Content/cda-surveil-ozflu-flucurr.htm#current & adapted from Ian Barr slide

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Qld's largest hospital in emergency 'code yellow' for 20 days straight

The Royal Brisbane and Women's Hospital activated a 'code yellow' internal emergency alarm that lasted for 20 days straight last year.

NSW inquiry into ambulance ramping

The inquiry comes as NSW hospitals are operating under extreme stress after more than two years of the COVID-19 pandemic as a third wave takes off and a rampant winter flu season puts unprecedented pressure on health resources.

Hospitals hit pause on some surgeries as doctor says delays are 'torture'

Elective surgery will be delayed at The Alfred hospital in Melbourne, with non-urgent procedures also being delayed at Western and Monash Health. Bendigo Health and the Royal Melbourne Hospital also confirmed some surgeries would be delayed. The state chair of the Royal Australasian College of Surgeons, Patrick Lo, described delays as a form of psychological torture for patients.

The West Australian

Health | Coronavirus (COVID-19) | Public Health | WA News

COVID in WA: Fiona Stanley, Sir Charles Gairdner and Joondalup hospitals declare code yellow after cases surge

Metro hospitals now have more patients than beds – and more coming

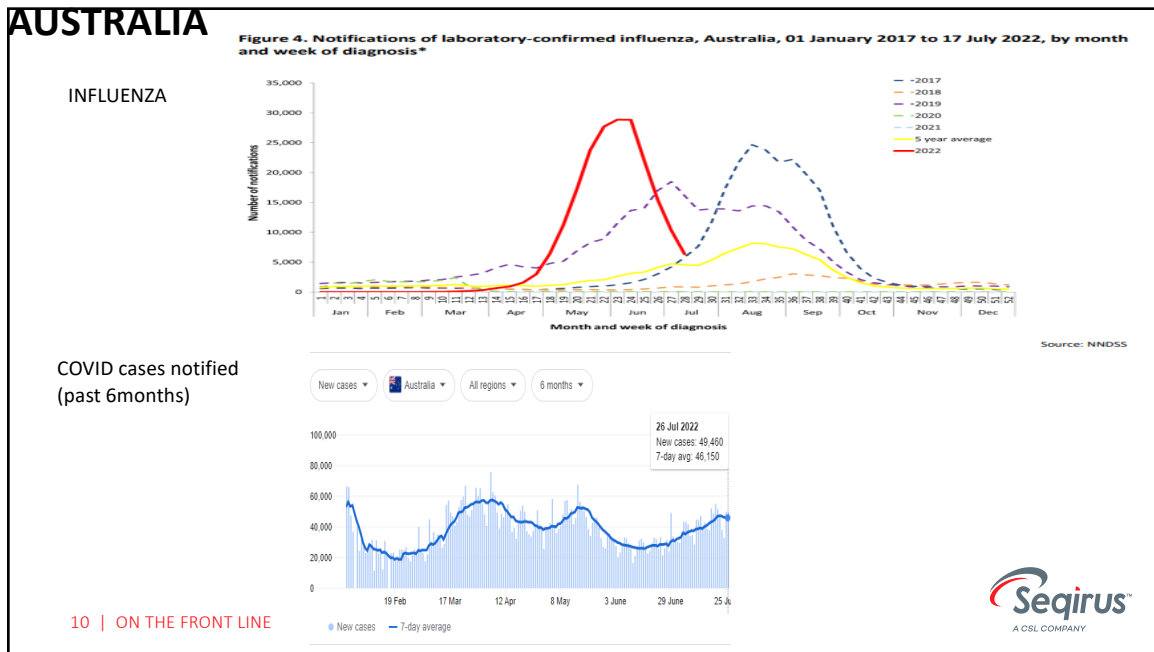
SA Health has run out of metropolitan hospital beds – with the Covid peak yet to hit, and more than 100 people waiting in emergency departments for a ward bed.

Flu spike, COVID 'double whammy' puts added strain on health system in Queensland regions

Australia sees record COVID-19 cases, hospital admissions due to Omicron variants, influenza as nation's hospitals struggle

Rising flu cases increasing pressure on chronically stretched NT health system

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VACCINE MATCH : AUSTRALIA

- Vaccine match and effectiveness WHOCC (1,668 isolates by HI assay)
- 98.1% influenza A(H1N1) isolates antigenically similar to the corresponding vaccine components (5a1 group)
- 92.4% of influenza A(H3N2) isolates were antigenically similar to the corresponding vaccine components. Some drift from vaccine strains verbally reported at recent NIBSC meeting.
- Four influenza B/Victoria isolate characterised in the year to date were antigenically similar to the corresponding vaccine components.
- No Absolute Vaccine Effectiveness Estimate yet

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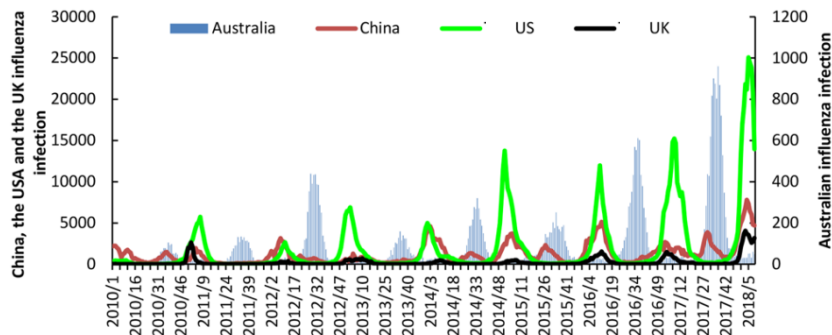
www1.health.gov.au/internet/main/publishing.nsf/Content/cda-surveil-ozflu-flucurr.htm#current



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AUSTRALIAN INFLUENZA RATES KEY FACTOR IN MODEL PREDICTING INFLUENZA ACTIVITY FOR THE FOLLOWING NORTHERN HEMISPHERE SEASON¹

Trends Of Positive Influenza tests
Australia, USA, China, And UK
Between Week 1 2010 And Week 9 2018¹



Seasonal autoregressive integrated moving average (SARIMA) model¹

Australian influenza surveillance + local internet search data to predict NH influenza epidemics

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1. Zhang, Y., Sci Rep 2019 <https://doi.org/10.1038/s41598-019-39871-2>



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CRITICAL TO PLAN WAYS TO REGAIN THE MISSED INFLUENZA IMMUNIZATION OPPORTUNITIES FROM LAST SEASON AND GET BACK TO THE ALL-TIME HIGH OF 172M PEOPLE IMMUNIZED AGAINST INFLUENZA DURING THE 20/21 SEASON.

Influenza immunization remains a critical public health tool to: ^{1,2}



Protect against the potentially devastating impact of influenza



Reduce the risk of co-infection from both influenza and COVID-19



Minimize the burden of influenza on the healthcare system to preserve capacity for COVID-19 patients

1. <https://www.cdc.gov/flu/prevent/teyfacts.html> (Accessed May 2022)
2. <https://www.cdc.gov/mmwr/volumes/70/wr/mm7029a1.htm> (Accessed May 2022)



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QUESTIONS?



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