

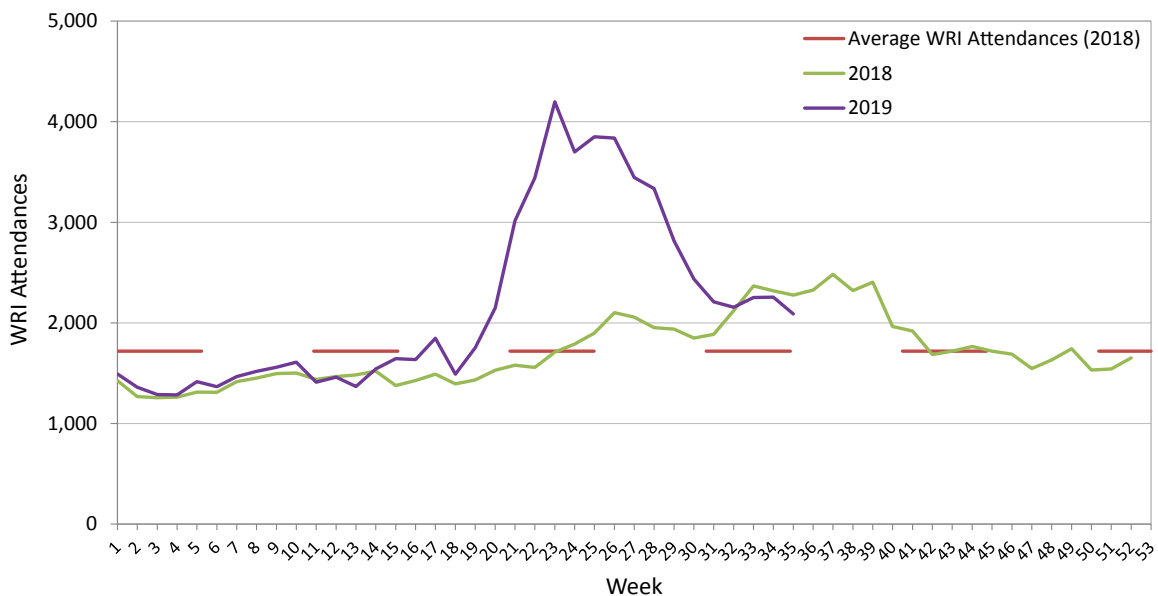


Fortnightly snapshot: Winter respiratory illness and influenza data

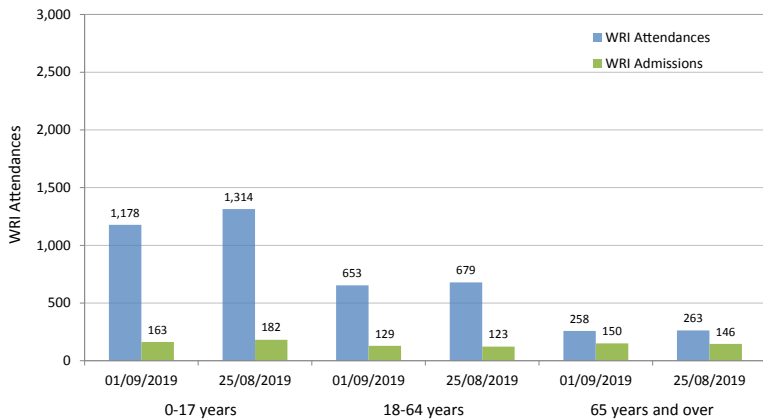
Last updated Tuesday 3 September 2019

The following report provides the most current information on laboratory-confirmed influenza infection and winter respiratory illness (WRI). WRI figures are compiled from hospital ED attendance ICD (International Classification of Diseases) codes and will include influenza infections and also other causes of illness that present with similar symptoms. Key information is presented below, and will be updated fortnightly, to provide an overview on the influenza season in Western Australia.

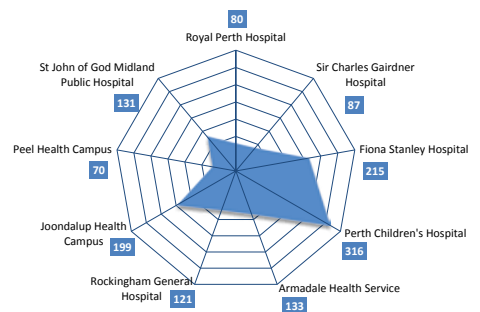
Winter Respiratory Illness (WRI) attendances at all EDs, by week, compared to same week in previous years



WRI attendances and admissions at all EDs, by age group, for current and previous week



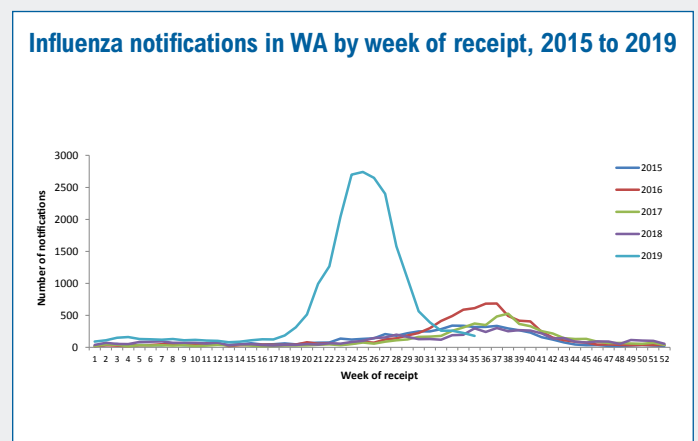
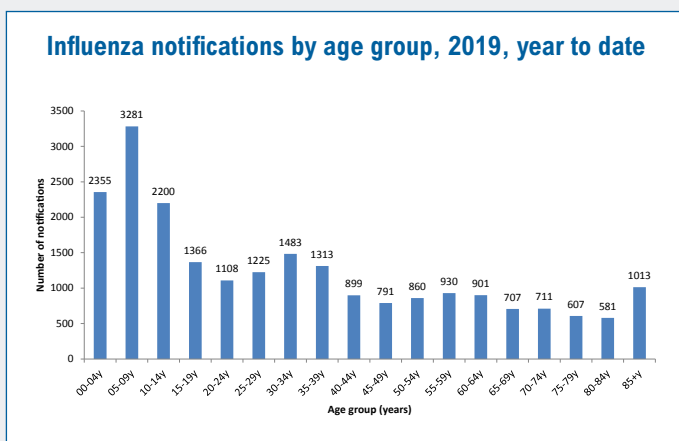
Metropolitan ED WRI attendances by hospital, for the week ending 1.09.2019



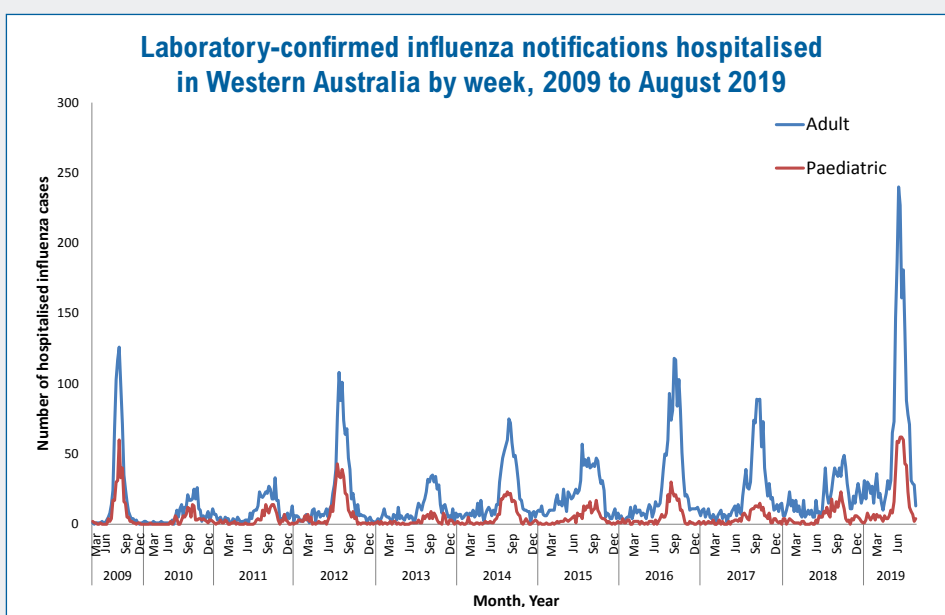
ED attendances weekly activity: www.health.wa.gov.au/emergencyactivity/weekly/attendances.cfm

Influenza Fortnightly Update

Influenza notification data extracted by date of receipt of notification		2019 Year to Date	2018 Same Period
Laboratory-confirmed influenza infections	Notifications	22,331	3,238
	Hospitalisations	3,118	600
	Reported Deaths	77	12
Influenza vaccinations administered as recorded in the Australian Immunisation Register	Age group	2019 Year to Date	2018 Same Period
	6 months < 5 yrs	51.3%	19.2%
	≥ 65 yrs	61.6%	47.5%
		2019 Year to Date	Total 2018
Influenza vaccine doses distributed	National Immunisation Program/WA-funded	793,652	557,762



Notifications for laboratory-confirmed influenza infections received by the Department of Health (DoH) to 2/09/2019.



Influenza notifications received by WA DOH for patients who were recorded as having a hospital admission and confirmed influenza infection with a specimen collection date before the end of the current reporting week on 25/08/2019. Paediatric notifications were defined as individuals less than 18 years of age.

Notes:

- WRI has previously been referred to as Influenza-like Illness (ILI). The name has been revised to help reduce confusion. WRI is captured by hospital ED attendance coding and includes influenza and other causes of illness that give clinically similar symptoms on presentation.

Data limitations:

- The notification data reflects only laboratory-confirmed cases of influenza. The true number of infections is likely to be substantially higher, as not all persons with influenza illness will be tested. Interpretation of influenza notifications should therefore emphasise the trends, not the specific numbers.
- The number of deaths reported is not a true reflection of the mortality due to influenza, as many influenza-associated deaths result from exacerbations of underlying medical conditions. Because the patient may not have been tested for influenza, or the death may occur well after the initial influenza infection, influenza may not be recorded on the death certificate.



Influenza season overview

How is the current flu season tracking in comparison to previous years?

The 2019 influenza season began approximately two months earlier than usual. Similarly, it appears to be ending earlier – around the time that previous seasons peaked.

A record number of cases was notified this year but of these cases, a lower proportion were hospitalised or died than in previous years.

It is not clear why the influenza season started earlier this year than every other year since 2009.

What have been the dominant influenza strains this year?

Influenza A/H3N2 has comprised the largest proportion of influenza viruses sub-typed. A/H3N2 viruses are often associated with more severe clinical illness; however, at this time, there is no information to indicate that the A/H3N2 influenza virus circulating in Western Australia is more severe than A/H3N2 viruses from previous seasons.

How do people know whether they have influenza or just a bad cold?

The symptoms of influenza can overlap with other illnesses common in winter. Symptoms that are more common with influenza that can help distinguish the flu from ordinary colds and coughs include:

- fever
- severe fatigue
- general aches and pains
- cough
- vomiting and diarrhoea (in children).

Vaccine availability

Is there a shortage of influenza vaccine?

There is currently no shortage of *government-funded* influenza vaccine.

What is the difference between government and private-sector vaccines?

Government-funded vaccines

The Commonwealth and State governments fund influenza vaccine to enable those at risk of greatest harm from influenza illness to access free influenza vaccine.

The **Commonwealth Government** provides this free vaccine under its National Immunisation Program (NIP) for:

- people 65 years and older
- pregnant women (at any stage of pregnancy)
- Aboriginal people 6 months and older
- people with underlying medical conditions which place them at risk of serious influenza infection and complications.

The **WA Government** funds a vaccine for children aged 6 months to 5 years.

Both NIP and WA Government-funded vaccines are distributed in Western Australia by the WA Department of Health.

Private sector vaccines

Those who are not eligible for a free vaccine under either of the government programs are still encouraged to get vaccinated against the flu but they will need to source the vaccine privately – either through their GP or, if they are over 10 years, from a local pharmacy.

If I am ineligible for government funded-vaccine but I have private health insurance, can I claim for my flu shot?

If you have private health insurance it is certainly worth checking with your insurer to see if you are covered for influenza vaccination. Most health insurance policies will cover some or all of the cost of vaccination.

What advice do you have for families who are worried because they have kids aged 5-18 and can't access vaccine?

If a child has a pre-disposing medical condition that places them at increased risk of serious influenza illness they are eligible for NIP-procured influenza vaccine.

If the child is not at increased risk of serious illness parents should continue checking with local GPs and pharmacies to ascertain availability of private stock.

Is everybody given the same vaccine?

No. The recommended vaccine varies by age. Persons under 65 years of age should receive the quadrivalent (four-strain) vaccine. Those 65 years of age and older should receive the trivalent (three-strain) vaccine which has been specially formulated to enhance the immune response in older individuals.

The **quadrivalent** influenza vaccines contain the following four viral strains:

- an A/Michigan/45/2015 (H1N1)pdm09-like virus
- an A/Switzerland/8060/2017 (H3N2)-like virus
- a B/Colorado/06/2017-like virus (B/Victoria/2/87 lineage)
- a B/Phuket/3073/2013-like virus (B/Yamagata/16/88 lineage).

The **trivalent** influenza vaccines contain the following three viral strains:

- an A/Michigan/45/2015 (H1N1)pdm09-like virus;
- an A/Switzerland/8060/2017 (H3N2)-like virus; and
- a B/Phuket/3073/2013-like (B/Yamagata/16/88 lineage).

When is the best time for people to get vaccinated?

Optimal protection following influenza vaccination lasts between 3 and 4 months. Therefore, based on many previous influenza seasons, the best time for Western Australians to get vaccinated would typically be any time from the beginning of May and before flu season begins. This year the influenza season started unexpectedly early. Fortunately Australian Immunisation Register data shows a sharp increase in uptake of influenza vaccinations in WA just prior to the rapid rise in influenza cases. As long as influenza is circulating it's not too late to get vaccinated.

Is there any point in getting vaccinated if you have already had the flu?

Yes. Many people who think they have had the flu have actually had a cold or other form of respiratory illness. Even if you have had a confirmed influenza diagnosis, vaccination can still protect you from other circulating strains of the virus.

Can I get the flu even if I've been vaccinated?

Yes. Vaccination, while one of the best forms of protection from influenza, is not 100 per cent effective.

Influenza has a number of different strains and the annual flu vaccination covers only the main three or four in circulation so it is always possible you will contract a strain not covered by the vaccine.

Vaccinated people can also contract influenza from strains that are covered by the vaccine. When this occurs, however, they will likely experience milder symptoms and shorter duration of illness.

Influenza data

Is the number of influenza deaths reported by the Department of Health an accurate representation of influenza deaths in the community?

No, it will be a considerable *under-representation* because the Department's figures include only cases where influenza was recorded on the death certificate as the cause of death.

The number of deaths reported is not a true reflection of the mortality due to influenza for reasons including:

- a person may not have been tested for influenza
- many influenza-associated deaths result from exacerbations of underlying medical conditions; the death certificate will record the underlying condition as the cause of death, rather than influenza
- a death may have occurred well after the initial influenza infection and, even though it was influenza was a major contributor to the death, it may not be recorded on the death certificate.

Are there any potential problems in comparing figures from this year's flu season with figures from the same time last year, or in previous years?

Yes. Notwithstanding the fact that any influenza notification figures are likely to be an underrepresentation of the actual number because they represent only those who have been tested for the virus, comparing figures across years is challenging for several reasons including:

- this year's flu season has started two months earlier than previous flu seasons so comparing figures by year-to-date is essentially comparing data for a season well underway in this year to seasons that would have hardly started in prior years
- WA had a particularly mild influenza season last year so comparing this year's data with last year's data will accentuate potential differences
- it is possible that higher numbers of laboratory-confirmed infections now may be, at least in part, a reflection of the greater number of people being tested for influenza than in the past.

Why is the number of notified influenza infections different than the number of WRI illnesses reported?

The WA Health system collects a variety of data on influenza and winter respiratory illness (WRI) for a variety of different purposes. As such it extracts data at varying periods of time, from a variety of sources and using a variety of ICD (International Classification of Diseases) codes.

Notified influenza infection numbers don't capture all cases of influenza; therefore what is important in their interpretation is not the exact number, but the trends they highlight in defining influenza virus activity.

WRI figures reflect illnesses caused by influenza and a wide range of other respiratory pathogens. WRI figures give a better picture of demands being placed upon health care services during the winter illness season.

Can you explain why there are so many cases of influenza A/untyped and is it a new strain of influenza?

'A/untyped' is not a new strain of influenza. It is simply the term given to cases of confirmed influenza A that have not been subtyped.

When swabs are sent to PathWest for influenza testing they are analysed using a variety of tests.

For swabs that test positive for influenza, the tests will always specify the type of influenza – A or B.

Some of the tests will also provide further information about cases of influenza A – they will subtype them, showing whether they are of the H3N2 or H1N1 strain.

A new rapid testing system being used by PathWest called GeneXpert, however, does not subtype cases; it only types the confirmed cases as influenza A or B .

Influenza A cases that are confirmed using the GeneXpert test are, therefore, described as 'influenza A/untyped'.

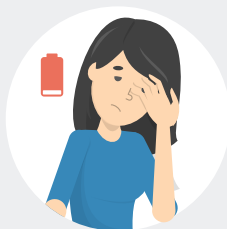
The reason for the increase in cases of Influenza A/untyped is because more doctors are requesting their patients be tested using this rapid test.

Despite these cases not being routinely subtyped, further PathWest investigations have shown that were they to have been subtyped they would likely be in the same proportion as the subtyped cases (ie currently, the majority of cases will be A/H3N2).

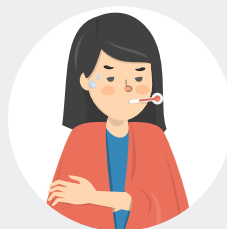
Influenza symptoms



Headache



Weakness



Fever



Cough



Muscle ache



Chest discomfort