

Influenza

FREQUENTLY ASKED QUESTIONS

This fact sheet provides responses to common questions about influenza viruses and seasonal influenza vaccines. More detailed information about influenza viruses and the available influenza vaccines can be found in the NCIRS factsheet [Influenza vaccines for Australians: information for vaccination providers.](#)

Questions about influenza virus and influenza vaccines

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- Q2. Is it worth getting the influenza vaccine? I'm a healthy person and have heard that influenza isn't serious.
- Q3. If the influenza vaccine is recommended for everyone then why can only certain people get it for free?
- Q4. I'm travelling to the northern hemisphere and it's influenza season at my destination. How do I protect myself from influenza while travelling?
- Q5. Does the influenza vaccine work? I've had the vaccine before and I still got sick that year.

Questions about the safety of influenza vaccines

- Q6. I've heard one of the side effects after having the vaccine is getting sick with influenza. Is that true?
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- Q9. I've been told to get the influenza vaccine when pregnant to protect me and my baby. Is this safe?
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- Q11. Are there any rare side effects that have been associated with the influenza vaccine?

Questions about influenza virus and influenza vaccines

Q1. What's the difference between influenza and the common cold?

Influenza is a respiratory illness that occurs following an infection with influenza viruses. Influenza is often referred to as 'the flu'. Sometimes the term 'the flu' is used incorrectly to describe the common cold, other respiratory viruses, or even gastrointestinal illnesses. This is because their symptoms can be similar to those caused by influenza. There are many different viruses

and some bacteria that can cause these symptoms. The influenza vaccine will only protect you from the influenza virus.

The following table compares symptoms from the common cold and influenza and shows on average how frequently the symptoms affect people. Usually influenza is more severe and lasts longer than a cold or other viral respiratory illness.

Cold	Symptom	Influenza
☹	Fever	☹☹☹
☹	Headache	☹☹☹
☹☹	General aches and pains	☹☹☹
☹☹	Tired and weak	☹☹☹
☹	Extreme fatigue	☹☹☹
☹☹☹	Runny, stuffy nose	☹☹
☹☹☹	Sneezing	☹☹
☹☹☹	Sore throat	☹☹☹
☹☹	Chest discomfort, coughing	☹☹☹

☹ = rarely; ☹ ☹ = sometimes; ☹ ☹ ☹ = often

References

Eccles R. Understanding the symptoms of the common cold and influenza. *The Lancet Infectious Diseases* 2005;5:718-25.

Nichol KL, Lind A, Margolis KL, et al. The effectiveness of vaccination against influenza in healthy, working adults. *New England Journal of Medicine* 1995;333:889-93.

Table adapted from: Immunize Canada, 2010. Is it a cold or influenza? Available from: www.immunize.ca/sites/default/files/resources/176e.pdf (Accessed May 2017)

Q2. Is it worth getting the influenza vaccine? I'm a healthy person and have heard that influenza isn't serious.

Most Australians who get influenza are quite sick for a few days with fever, aches and pains, and sore throat, and then recover without lasting effects (*see Q1*). However, influenza can be very serious in some people, causing hospitalisation or even death. Each

year approximately 85 deaths and 4,800 hospitalisations due to influenza are reported. Many cases of influenza don't get identified so the true impact of influenza is much greater.

Even if a person does not get severely ill from influenza, it's still a big inconvenience to their lives. For example, influenza can cause people to miss time from childcare, school or work either because they are too sick to attend or have to take time off to care for a sick child. They may need to buy medications, visit the doctor or even the hospital. One study has shown that parents of children younger than 3 years of age missed an average of 3 days of work to stay home and care for their sick child. The estimated cost to the Australian healthcare system for GP visits and hospitalisations was \$115 million per year for each year between April 2000 and March 2006.

In addition to protecting you from influenza, vaccination also helps to protect people around you. If you don't catch influenza then you cannot spread the infection. It is particularly important to protect vulnerable people who cannot receive the vaccine themselves such as young babies less than 6 months old and those who have low immunity.

You can think of the influenza vaccine as a seatbelt. When used properly, a seatbelt reduces the likelihood that you'd be injured in a car accident. However, they aren't perfect and won't prevent all injuries. Like a seatbelt, the influenza vaccine isn't perfect because the flu strain chosen to be in the vaccine each year needs to match the one that is circulating in the community. However, the vaccine will reduce your chances of getting influenza and its potentially serious complications including death.

References

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Rasmussen SA, Jamieson DJ, Uyeki TM. Effects of influenza on pregnant women and infants. *American Journal of Obstetrics and Gynecology* 2012;207:S3-S8.

Q3. If the influenza vaccine is recommended for everyone then why can only certain people get it for free?

The influenza vaccine is available free of charge via the government-funded Australian National Immunisation Program (NIP) for certain groups of people who are at greatest risk of severe influenza or more likely to get complications from influenza than the general population. This includes the elderly, Aboriginal and Torres Strait Islander Australians, pregnant women and people with certain underlying medical conditions.

Since 2005, decisions on what vaccines are provided for free, and for whom, are made following a process that involves the Pharmaceutical Benefits Advisory Committee. This ensures any government spending on a health intervention is cost-effective. This is important as there is a limited amount of money that is available for healthcare in Australia and these funds need to be used to bring about the greatest benefit for the whole population.

However, individuals who are not eligible for influenza vaccine on the NIP will still benefit from vaccination (see Q2). *The Australian Immunisation Handbook*, the national clinical guideline advising on the safest and most effective use of vaccines in Australia, recommends the influenza vaccine from 6 months of age. Influenza vaccines can be purchased for around \$10–20 each.

References

Australian Government Department of Health, Immunise Australia Program. Influenza (flu). 2017. www.immunise.health.gov.au/internet/immunise/publication.nsf/Content/immunise-influenza (Accessed May 2017).

Australian Technical Advisory Group on Immunisation (ATAGI). *The Australian immunisation handbook*. 10th ed (2017 update). Canberra: Australian Government Department of Health; 2017.

Nolan TM. The Australian model of immunization advice and vaccine funding. *Vaccine* 2010;28:A76-A83.

Q4. I'm travelling to the northern hemisphere and it's influenza season at my destination. How do I protect myself from influenza while travelling?

Depending on the time of year and destination, travellers may be exposed to the influenza virus at any time throughout the year. The influenza season in the southern hemisphere is mostly during the months of April to September; in the northern hemisphere, influenza activity occurs during October to April. Influenza activity has been reported throughout the year in the tropics.

Travellers may be exposed to the influenza virus while travelling regardless of their destination. Travellers in large tourist groups or involving travel in confined circumstances for days to weeks, such as on a cruise ship, are at particular risk of influenza. Infection can be acquired either before departure or from travel to areas of the world where influenza is currently circulating.

Everyone who wants to be protected from influenza should get an influenza vaccine during autumn, prior to the start of the season, according to their age and risk. There is no additional advice for those travelling.

References

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Marti F, Steffen R, Mutsch M. Influenza vaccine: a travelers' vaccine? *Expert Review of Vaccines* 2008;7:679-87.

Steffen R. Influenza in travelers: epidemiology, risk, prevention, and control issues. *Current Infectious Disease Reports* 2010;12:181-5.

Q5. Does the influenza vaccine work? I've had the vaccine before and I still got sick that year.

There have been many research studies that have shown the effectiveness of the influenza vaccine. It takes 2 weeks for the vaccine to become effective and for immunity to develop after vaccination. However, how well the influenza vaccine works can vary between different people and in different years, as it depends on several factors.

For example, the age and health of the person receiving the influenza vaccine can impact how effective it is. Influenza vaccination can prevent illness in about 50–60% of healthy adults under the age of 65, although this figure varies year by year. A growing amount of evidence suggests similar levels of protection in young

children. However, people with an underlying medical condition, such as those with low immunity or the elderly, do not respond as well to the influenza vaccine as healthy adults and so the level of protection they get from the vaccine may be less. Importantly, among high-risk individuals such as nursing home residents, the vaccine prevents pneumonia and hospitalisation due to influenza. Because of the higher risk of severe influenza in the elderly, any protection provided by vaccination against influenza is worthwhile.

Because the vaccine is not 100% effective, it means a small proportion of people may catch the virus after getting the vaccine. However, in many instances, people may think they have caught influenza after being vaccinated but that is not the case. For example, often people catch influenza before getting the influenza vaccine but their symptoms don't appear until shortly after being vaccinated, making them think the vaccine didn't work, or even (mistakenly) that the vaccine made them sick (*see Q6*).

Similarly, a person who is vaccinated against influenza may catch a different virus that is mistaken for influenza (*see Q1*). For instance, respiratory syncytial virus (RSV) is a virus that causes symptoms similar to

influenza, spreads in the community at the same time influenza does, and can cause severe illness and complications just like influenza.

References

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Questions about the safety of influenza vaccines

Q6. I've heard one of the side effects after having the vaccine is getting sick with influenza. Is that true?

It is not possible for the influenza vaccine to give you influenza. This is because all influenza vaccines in use in Australia are 'inactivated' which means the vaccine is only made with the outside 'shell' of the influenza virus, and it is not alive or functioning like a whole virus. Think of it as like the outside shell of a car without the motor – it looks like a car but doesn't actually run.

Sometimes the normal responses the body has to getting the vaccine (i.e. side effects) are similar to the early signs of influenza which can make people think they have gotten influenza from the vaccine. For example, the expected side effects of the vaccine are swelling, redness and pain at the injection site but also fever, tiredness and muscle aches which also occur when you get influenza (*see Q1*). However, these side effects are a sign that the vaccine is triggering an immune response, which is what it is designed to do. The symptoms can start within a few hours of being

vaccinated and sometimes last 1–2 days but then go away on their own once your body has successfully made an immune response to the vaccine which will protect you from influenza virus.

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Nichol KL, Margolis KL, Lind A, et al. Side effects associated with influenza vaccination in healthy working adults: a randomized, placebo-controlled trial. *Archives of Internal Medicine* 1996;156:1546-50.

Q7. I've heard influenza vaccine causes seizures or convulsions in young children. Is that true?

Febrile seizures (or convulsions) can be triggered by fever of any cause. A small proportion of children (2–4%) are susceptible to febrile seizures until 6 years of age. The seizures themselves usually last around 1 or 2

minutes and loss of consciousness is possible. Nearly all children who have a febrile seizure, regardless of the cause, will recover quickly without any ongoing effects or permanent neurological (brain) damage.

Influenza itself can cause fever which may result in febrile seizures. Febrile seizures related to fever after influenza vaccination are uncommon and occur in less than 1 in every 1,000 children who receive the vaccine.

In Australia in 2010, higher than expected numbers of fever and febrile convulsions following influenza vaccination were detected in children under 5 years of age, particularly children under 3. Upon investigation, the reports were linked to only one manufacturer's influenza vaccine (Seqirus [previously bioCSL] Fluvax and Fluvax Junior). The use of this vaccine in Australia was suspended while further investigations by the Therapeutic Goods Administration (TGA) were undertaken. The investigations revealed that the issue was likely caused by the manufacturing process used by bioCSL at the time. This vaccine is no longer registered by the TGA for use in children under 5 years of age and the Australian Technical Advisory Group on Immunisation (ATAGI) recommends the use of alternative influenza vaccine brands in children up to 9 years of age. Seqirus has added 'warning labels' to the packaging of Fluvax vaccine and provides labels for vaccine refrigerators as a safety precaution to ensure this vaccine is not inadvertently administered to children.

Enhanced safety monitoring systems for influenza vaccines introduced in recent years, such as [AusVaxSafety](#), have confirmed that influenza vaccine is safe in children under 5 years of age, with low rates of fever and medical attendance reported after vaccination.

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[following-2010-seasonal-trivalent-influenza-vaccination](#) (Accessed May 2017)

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Q8. What is being done in Australia to make sure vaccines are safe to give to the public?

Reviewing and monitoring the safety of vaccines is included at all stages of the vaccine development process, from initial lab-based research, vaccine registration including authorities for use, recommendations on use of the vaccine, and then ongoing surveillance once the vaccine is being used in the population.

The TGA is responsible for registering vaccines for use in Australia. To ensure their safety and efficacy, vaccines are evaluated using the most up-to-date research and testing information available. Independent medical and scientific advice on the safety, quality and efficacy of vaccines is provided by experts who make up the Advisory Committee on Vaccines (ACV). Once vaccines are registered and in use, the TGA continues to monitor their safety and effectiveness through a national monitoring system. The system includes reporting of adverse events by health authorities, immunisation providers, doctors, consumers and vaccine manufacturers. If the TGA receives information that there are safety concerns about a vaccine, the issue is investigated immediately. As part of the investigation, the TGA seeks vaccine safety advice from the ACV.

Another important body is the Australian Technical Advisory Group on Immunisation (ATAGI). This group advises the government on existing, new and emerging vaccines in relation to their effectiveness and use in Australian populations. ATAGI produces *The Australian Immunisation Handbook*, the national clinical guideline advising on the safest and most

effective use of vaccines in Australia. ATAGI and the ACV work together with other bodies on matters relating to the implementation of immunisation policies, procedures and vaccine safety.

References

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Therapeutic Goods Administration (TGA). Advisory Committee on Vaccines (ACV). Available from: www.tga.gov.au/committee/advisory-committee-vaccines-acv-0 (Accessed May 2017)

Q9. I've been told to get the influenza vaccine when pregnant to protect me and my baby. Is this safe?

Influenza can cause severe disease in pregnant women and young babies. Getting sick with influenza while pregnant can lead to complications such as premature delivery and even perinatal death. Young children, especially those less than 6 months old, are more likely to be hospitalised or die from influenza than older children.

Influenza vaccine is recommended with every pregnancy to protect both the mother and her unborn child against complications from influenza. Babies born to women vaccinated against influenza while pregnant are less likely to be born prematurely or have a low birth weight.

Influenza vaccination protects babies after birth. During pregnancy, protective antibodies are transferred through the placenta, from the mother to the baby. Maternal vaccination prevents influenza hospitalisations in up to 9 out of 10 babies. However, the protection wears off as babies get to 6 months of age, at which time babies can start to receive the vaccine themselves.

Influenza vaccine is safe during pregnancy. A systematic review combining data from multiple studies found no increase in fetal death, spontaneous abortion or congenital malformation after maternal influenza vaccination in pregnancy. Expected adverse events after vaccination, like injection site reactions, do

not occur any more frequently in pregnant women than in non-pregnant women.

References

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Nunes MC, Cutland CL, Jones S, et al. Duration of infant protection against influenza illness conferred by maternal immunization: secondary analysis of a randomized clinical trial. *JAMA Pediatrics* 2016;170:840-7.

Zaman K, Roy E, Arifeen SE, et al. Effectiveness of maternal influenza immunization in mothers and infants. *New England Journal of Medicine* 2008;359:1555-64.

Q10. Can I get the influenza vaccine if I have an egg allergy?

Reactions such as hives, angioedema (a skin reaction with swelling similar to hives), or anaphylaxis (severe allergic reaction) are rare side effects following vaccination for influenza. They can be due to an allergic response to something in the vaccines, such as egg protein.

Although influenza vaccines in Australia are grown in eggs, due to new vaccine manufacturing methods, the amount of material from the egg in the influenza vaccine is small (usually less than 1 microgram of egg protein per dose). Recent studies have shown that people with egg allergy, including egg-induced anaphylaxis, have safely received the influenza vaccine. Even though the risk of anaphylaxis or an adverse event is very low, persons with this type of allergy should be vaccinated by healthcare providers experienced in recognising and treating anaphylaxis.

The Australasian Society of Clinical Immunology and Allergy (ASCIA) guidelines should be referred to for additional information on influenza vaccination of individuals with an allergy to eggs, including risk, dosage and observation period.

References

Australasian Society of Clinical Immunology and Allergy (ASCIA). *Guidelines: Vaccination of the egg-allergic individual*. 2017. Available from: www.allergy.org.au/health-professionals/papers/vaccination-of-the-egg-allergic-individual (Accessed May 2017)

Des Roches A, Paradis L, Gagnon R, et al. Egg-allergic patients can be safely vaccinated against influenza. *Journal of Allergy and Clinical Immunology* 2012; 130:1213-6 e1.

Greenhawt MJ, Li JT, Bernstein DI, et al. Administering influenza vaccine to egg allergic recipients: a focused practice parameter update. *Annals of Allergy, Asthma & Immunology* 2011;106:11-6.

Q11. Are there any rare side effects that have been associated with the influenza vaccine?

Guillain-Barré syndrome (GBS) is a rare disorder in which the immune system damages nerve cells, causing muscle weakness and sometimes paralysis. The symptoms usually last for a few weeks followed by a full or partial recovery. In very rare cases people have died of GBS. The risk of the syndrome increases with age and is greatest for those aged 50 years or older. Diagnosis of GBS is complex and must be made by a doctor.

A small increased risk of GBS was found in people given a specific influenza vaccine in the United States in 1976. Since then, close monitoring has shown that GBS has occurred at a very low rate of less than 1 in 1 million doses of influenza vaccine. Studies suggest that a person is more likely to get GBS from infection with the influenza virus than from the influenza vaccine.

Someone who has a history of GBS has an increased likelihood in general of developing GBS again, and the chance of them coincidentally developing the syndrome following influenza vaccination may be higher than in persons with no history of GBS.

References

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Additional resources for primary medical care/vaccination providers

- National Centre for Immunisation Research and Surveillance (NCIRS) influenza fact sheet www.ncirs.edu.au/assets/provider_resources/fact-sheets/influenza-fact-sheet.pdf
- Australian Technical Advisory Group on Immunisation (ATAGI) advice for immunisation providers regarding the administration of seasonal influenza vaccines in 2017 www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/ATAGI-advice-influenza-vaccines-providers
- Immunise Australia website www.immunise.health.gov.au
- National Immunisation Program schedule www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/national-immunisation-program-schedule