

There are new flu vaccines on offer for 2024. Should I get one? What do I need to know?

April 3 2024, by Allen Cheng



Credit: CC0 Public Domain

Influenza is a common respiratory infection. Although most cases are relatively mild, flu can cause more severe illness in young children and older people.

Influenza virtually [disappeared](#) from Australia during the first years of the COVID-19 pandemic when public health restrictions reduced contact between people. Since 2022, it has returned to a seasonal pattern, although the [flu season](#) has started and peaked a few months earlier than before 2020.

It's difficult to predict the intensity of the flu season at this point in the year, but we can sometimes get clues from the northern hemisphere. There, the season [started earlier](#) than usual for the third year running (peaking in early January rather than late February/March), with a similar number of reported cases and hospitalizations to the previous year.

Influenza vaccines are recommended annually, but there are now an increasing number of different vaccine types. Here's what to know about this year's shots, available from [this month](#).

What goes into a flu vaccine?

Like other vaccines, influenza vaccines work by "training" the immune system on a harmless component of the influenza virus (known as an antigen), so it can respond appropriately when the body encounters the real virus.

Influenza strains are constantly changing due to genetic mutation, with the pace of genetic change [much higher](#) than for SARS-CoV-2 (the virus that causes COVID). The strains that go into the vaccine are [reviewed](#) twice each year by the World Health Organization (WHO), which selects [vaccine strains](#) to match the next season's predicted circulating strains.

All current influenza vaccines in [Australia](#) contain four different strains (known as quadrivalent vaccines). One of the strains appeared to [disappear](#) during the COVID pandemic, and the WHO has recently

[recommended](#) dropping this strain from the vaccine. It's expected trivalent (three strain) vaccines will become available in the near future.

What's different about new flu vaccines?

There are eight brands of flu vaccines [available](#) in Australia in 2024. These include egg-based vaccines (Vaxigrip Tetra, Fluarix Tetra, Afluria Quad, FluQuadri and Influvac Tetra), cell-based vaccines (Flucelvax Quad), adjuvanted vaccines (Fluad Quad) and high-dose vaccines (Fluzone High-Dose Quad).

Until recently, the process of manufacturing flu vaccines has remained similar. Since the development of the influenza vaccine in the [1940s](#), influenza viruses were grown in [chicken eggs](#), then extracted, inactivated, purified and processed to make up the egg-based vaccines that are still used widely.

However, there have been several enhancements to influenza vaccines in recent years.

Older people's immune systems tend not to respond as strongly to vaccines. In some flu vaccines, adjuvants (components that stimulate the immune system) are included with the influenza antigens. For example, an adjuvant is used in the Fluad Quad vaccine, recommended for over 65s. Studies [suggest](#) adjuvanted influenza vaccines are slightly better than standard egg-based vaccines without adjuvant in older people.

An alternative approach to improving the [immune response](#) is to use higher doses of the vaccine strains. An example is Fluzone High-Dose Quad—another option for older adults—which contains the equivalent of four doses of a standard influenza vaccine. Studies [suggest](#) the high dose vaccine is better than the standard dose vaccine (without an adjuvant) in preventing hospitalization and complications in older

people.

Other manufacturers have updated the manufacturing process. Cell-based vaccines, such as Flucelvax Quad, use cells instead of eggs in the manufacturing process. Other vaccines that are [not yet available](#) also use different technologies. In the past, [manufacturing issues](#) with egg-based vaccines have reduced their effectiveness. Using an alternative method of production provides some degree of insurance against this in the future.

What should I do this year?

Given indications this year's flu season may be earlier than usual, it's probably safest to get your vaccine early. This is particularly [important](#) for those at highest risk of [severe illness](#), including older adults (65 years and over), those with chronic medical conditions, young children (six months to five years) and Aboriginal and Torres Strait Islander people. Influenza vaccines are also recommended in pregnancy to protect both the mother and the baby for the first months of life.

Influenza vaccines are widely available, including at GP clinics and pharmacies, while many workplaces have occupational programs. For high-risk groups, [four of the vaccines](#) are subsidized by the Australian government through the [National Immunisation Program](#).

In older people, a number of vaccines are now recommended: [COVID](#) and influenza, as well as one-off courses of [pneumococcal](#) and [shingles](#) vaccines. In general, most vaccines can be given in the same visit, but talk to your doctor about which ones you need.

Are there side effects?

All influenza vaccines can [cause](#) a sore arm and sometimes more generalized symptoms such as fever and tiredness. These are expected and reflect the [immune system](#) reacting appropriately to the vaccine, and are mostly mild and short-term. These side effects are slightly more common in [adjuvanted](#) and [high dose](#) vaccines.

As with all medications and vaccines, allergic reactions such as anaphylaxis can occur after the flu vaccine. All vaccine providers are trained to recognize and respond to anaphylaxis. People with egg allergies should discuss this with their doctor, but in general, [studies suggest](#) they can safely receive any (including egg-based) [influenza vaccines](#).

Serious side effects from the influenza vaccine, such as Guillain-Barré syndrome, a neurological complication, are very rare (one case per million people vaccinated). They are [thought](#) to be less common after influenza vaccination than after infection with influenza.

This article is republished from [The Conversation](#) under a Creative Commons license. Read the [original article](#).

Provided by The Conversation

Citation: There are new flu vaccines on offer for 2024. Should I get one? What do I need to know? (2024, April 3) retrieved 2 May 2024 from <https://medicalxpress.com/news/2024-04-flu-vaccines.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private

study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.