

Seasonal Influenza Vaccination

Every year, influenza (flu) is estimated to cause between 9.3 million and 45 million illnesses, leading to 12 000 to 61 000 deaths in the US.

Impact of Influenza Vaccination

The seasonal influenza vaccine is the single most powerful tool to protect individuals from influenza and decrease the overall effect of the virus on public health. The 2 main factors that contribute to the health effect of a seasonal influenza vaccine are its effectiveness and how many people choose to be vaccinated.

Even when both the vaccine effectiveness and the number of people vaccinated are low, the vaccine still has major public health benefits. For example, in 2018-2019, the vaccine efficacy was 29% and only 49% of people in the US opted to receive the vaccine, but the Centers for Disease Control and Prevention (CDC) estimates that it still prevented 4.4 million flu illnesses, 58 000 hospitalizations, and 3500 deaths. The more people vaccinated in a population, the larger effect the vaccine has even when vaccine effectiveness is low.

In 2020, there is concern for influenza and coronavirus disease 2019 (COVID-19) epidemics happening together, so widespread influenza vaccination is of heightened importance.

Who Should Get the Influenza Vaccine?

The CDC advises that everyone 6 months of age or older get a flu vaccine every year, with few exceptions. The vaccine is considered especially important for individuals at risk of severe disease, including children younger than 2 years, adults older than 65 years, people with a suppressed immune system, pregnant women, and anyone with chronic lung, heart, kidney, or liver disease.

Influenza vaccination has been shown to be safe and effective in pregnant women and does not increase the risk of miscarriage. Despite this, only about half of pregnant women are vaccinated each year. Pregnant women and their fetuses are at high risk of severe complications of flu, so vaccination in this population is strongly recommended.

When Is the Best Time to Get a Flu Shot?

It takes about 2 weeks for the body to have a complete response to the flu vaccine, so you should be vaccinated at least 2 weeks before influenza is circulating widely. Protection decreases slowly over time,

Which influenza vaccines are available?

The choice of vaccine depends on age, which vaccines are locally available, and personal preference.



Standard-dose inactivated influenza vaccine	• Approved for anyone older than 6 mo • Most widely used vaccine
Live-attenuated influenza vaccine (nasal spray vaccine)	• Approved for people aged 2 to 49 y • Good choice for people who prefer to avoid needles • People with a suppressed immune system should avoid this vaccine
High-dose inactivated influenza vaccine and Adjuvanted inactivated influenza vaccine	• Approved for people older than 65 y • Stimulate a more robust immune response • Slightly increased side effects such as pain at the injection site and muscle aches • Slightly increased protection from influenza
Recombinant influenza vaccine and Cell culture influenza vaccine	• Created without egg products • Safe for anyone with egg allergy

so late September through mid-October is generally a good time to receive a flu vaccine.

Does the Influenza Vaccine Protect Against COVID-19?

The flu vaccine does not provide protection against COVID-19. Many candidate vaccines for COVID-19 are under investigation but none are currently available.

FOR MORE INFORMATION

Centers for Disease Control and Prevention
www.cdc.gov/flu/prevent/keyfacts.htm

+ To find this and other JAMA Patient Pages, go to the Patient Information collection at jamanetworkpatientpages.com. A Patient Page on [influenza prevention](#) was published in *JAMA Pediatrics* on November 25, 2019.

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