

# Vaccination Guidelines

## 《What is influenza ?》

Influenza (also called flu) is a respiratory illness caused by influenza virus. The symptoms of influenza infection include fever, upper respiratory tract symptoms (cough, sore throat or runny nose), headache, muscle aches, joint pain and fatigue. Most flu patients can recover within a week, but few of them may develop pneumonia and serious complications that could lead to death.

## 《How is influenza transmitted?》

The transmission of the virus is mainly from person to person through coughing or sneezing. People may also become infected by touching surfaces contaminated by flu virus and then touching their mouth or nose. Infected people may spread the virus to others from 1 day before to approximately 3~7 days after symptom onset. Children tend to shed the virus for a longer period of time.

## 《Why should students get vaccinated?》

According to researches, school-aged children and teenagers are the first group being attacked during the flu season. Since flu is easily and quickly transmitted among them, they are more likely to become carriers spreading flu virus. Vaccinate students against influenza not only decrease transmission among students and reduce medical expenditures, but can also diminish the spread of virus to other population, thereby protecting other high-risk groups and the whole community.

## 《Vaccine components》

Influenza vaccine is an inactive vaccine and cannot give you the flu. The flu vaccine strains change each year to match the strains that are most likely to circulate. The 2023-2024 tetravalent seasonal influenza vaccine will contain:

### Egg-based Vaccines

- an A/Victoria/4897/2022 (H1N1)pdm09-like virus;
- an A/Darwin/9/2021 (H3N2)-like virus;
- a B/Austria/1359417/2021 (B/Victoria lineage)-like virus; and
- a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.

### Cell-based Vaccines

- an A/Wisconsin/67/2022 (H1N1)pdm09-like virus;
- an A/Darwin/6/2021 (H3N2)-like virus;
- a B/Austria/1359417/2021 (B/Victoria lineage)-like virus; and
- a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.

## 《Vaccine dosage and administration》

Children older than 6 months of age should receive 0.5mL vaccine per dose. Children 6 months through 8 years of age need 2 doses, at least 4 weeks apart if they have never received influenza vaccine before. Children 6 months through 8 years of age need only 1 dose if they have previously received any doses of influenza vaccine. Children 9 years and older need only 1 dose. Influenza vaccine can be administered in different sites at the same time (or any time interval) with any another vaccine(s). Government-funded influenza vaccines were manufactured by Adimmune corporation and Medigen Vaccine Biologics Corp in Taiwan, Sanofi Pasteur in France and Seqirus in Germany. In school-based influenza immunization programs, every student gets only one dose of vaccine.

### 《Vaccine effectiveness》

In adults over the age of 18, the vaccine is approximately 41% effective in preventing hospitalization due to confirmed influenza, and over 82% effective in preventing severe cases of influenza needing intensive care. The effectiveness of the vaccine in children and adolescents between the ages of 6 months and 18 years is generally equivalent to that in adults. Its effectiveness varies from year to year depending on a number of factors, including how well the vaccine “matches” the actual strains circulating in the community. Protection from the vaccine is achieved two weeks after vaccination, and will last for 6 months to one year.

### 《Vaccine contraindications》

1. Anyone with an allergy to any component of the vaccine.
2. Anyone who has had severe allergic reaction to previous dose(s) of influenza vaccine.

### 《Vaccine precautions》

1. Moderate or severe acute illness with or without fever.
2. Infants younger than 6 months of age are not recommended to receive the influenza vaccine.
3. Guillain–Barré syndrome within 6 weeks following a previous dose of influenza vaccine.
4. Persons with other medical conditions as evaluated by doctor.

### 《Side effects and vaccine safety issues》

Vaccine, like any medications, could have side effects such as severe allergic reaction (anaphylaxis), but the risk is extremely low. Influenza vaccine is generally well tolerated. Possible side effects include pain, redness and/or swelling at the injection site, or mild fever, muscle aches or headache for a day or two. Rarely, an allergic response or even anaphylactic shock (difficulty in breathing, asthma, dizziness, fast heartbeat, etc.) may occur. In 1976, the swine flu vaccine was associated with a severe paralytic illness called Guillain-Barré Syndrome (GBS). Flu vaccines since then have not been clearly linked to GBS.

Current studies show that the incidence rate of having allergic reactions among people with an egg allergy who receive an egg-based influenza vaccine is not significantly higher. Based on international recommendations, people with an egg allergy can safely receive flu vaccines.

### 《Fainting after vaccination》

Fainting is a temporary loss of consciousness usually triggered by pain or anxiety. Sometimes people faint after vaccination, especially adolescents. Scientific evidence shows that fainting is due to the vaccination process but not to the vaccines themselves. Fainting itself is generally not serious, but harm from related falls or other accidents can cause injury. Therefore, students should sit or lay down when receiving vaccination, and be observed for 30 minutes afterwards. Students who faint after vaccination generally recover within a few minutes and should be carefully observed until he/she regains consciousness. If he/she does not recover as expected, contact local emergency medical services.