



## **Influenza Vaccination – Position Statement**

***Remember that this flu season, it's not just about you!***

***Get your flu shot today and do your part in preventing a more serious flu outbreak for your teammates, friends, family and community.***

### **Key Points:**

- USA Swimming strongly encourages swimmers to receive the flu vaccine annually, which has been shown to be 70-90% effective in the prevention of flu illnesses and may be a potentially lifesaving measure.
- When a large percentage of swimmers on a team are vaccinated, it reduces the amount of virus that can potentially be spread to others on the swim team.
- Those swimmers who have not received the flu vaccine at least 2 weeks prior to arrival for a training camp in Colorado Springs will not be allowed to reside in the dormitory and will instead have to make their own accommodations offsite from the Olympic Training Center.

### **Background: What is the Flu?**

Influenza (Flu) is a serious, contagious respiratory disease caused by a virus. Each year, several million people suffer from flu illnesses, approximately 200,000 people are hospitalized, and approximately 30,000 people die from complications related to flu. Notably, among children born in the last 20 years, vaccinations (in general) will prevent more than 21 million hospitalizations and 732,000 deaths.

Flu may cause sinus infections, bronchitis, and pneumonia. It can cause either mild or severe disease and in the worst scenario, can cause death. The illness can be more severe in swimmers with asthma, even if asthma is mild or symptoms are well-controlled by medication.

Prolonged intense training has been shown to negatively impact various aspects of healthy immune function –especially when exercise is continuous, prolonged (greater than 90 minutes), moderate to high intensity (55-75% VO<sub>2</sub> max), and performed without food intake. Additionally, the stress of competition, and frequent travel especially in collegiate swimmers, can affect normal function of the immune system. Therefore, even healthy swimmers are highly susceptible to flu.

Flu can spread rapidly on swim teams. Swimmers who live, train, eat and constantly interact with one another are at particularly high risk of influenza infection. Infection may spread to other swimmers as close as 6 feet from the infected swimmer through droplets from sneezing, coughing, or even during conversation. A swimmer may also get infected by the flu virus by first touching surfaces or objects that have been infected with the flu virus and subsequently touching their own nose or mouth.

Symptoms typically start 1 to 4 days after the virus enters the body. Swimmers are able to infect other swimmers beginning 1 day *before* their symptoms develop and up to 5 to 7 days *after* they

develop symptoms of the flu. *Therefore, swimmers may be able to pass the virus to others even before they are sick, as well as while they are sick.*

Based on these facts, we strongly encourage swimmers to receive the flu vaccine, which has been shown to be 70-90% effective in the prevention of flu illnesses and may be a potentially lifesaving measure.

**Flu Prevention: These simple measures help prevent the flu:**

- Get your flu vaccine every year.
- Stay home if you are sick.
- Wash hands regularly for at least 20 seconds with soap and water.
- If soap and water are unavailable, use an alcohol based hand sanitizer.
- Do your best to avoid close contact with those who are sick.
- Cover your mouth and nose with a mask when you are in close contact with those who are sick.
- Avoid sharing linens and eating utensils with those who are sick.
- Disinfect dirty areas in your home and locker areas.

**Flu Vaccination Facts:**

- The flu vaccine does NOT cause swimmers to develop the flu illness.
- Those who receive the flu vaccine may have some minor side effects, which last 1-2 days. These are usually a result of your body mounting the proper immune response.
- Most common side effects are minor and include: soreness, redness or swelling at the injection site, hoarseness, sore and itchy eyes, fevers, body aches, headache, itching, and / or fatigue.
- The risk of developing a severe allergic reaction to flu vaccine is exceedingly rare, estimated at less than 1 in 4 million.
- If swimmers who receive the flu vaccine do develop the flu, their course of illness tends to be less severe, complications/hospitalizations are less frequent, and the chance of death is reduced.
- Patients who are allergic to eggs are eligible to receive recombinant flu vaccine.
- While the flu vaccine may not be 100% effective for all swimmers, when a large percentage of swimmers on a team are vaccinated, it reduces the amount of virus that can potentially be spread to others. This can potentially help avoid illnesses in large members of a swim team. This approach indirectly protects unimmunized individuals, including those who cannot be vaccinated for medical reasons or who have a history of life-threatening allergic reactions to previous flu vaccination.
- Getting the vaccination can reduce the number of missed workouts, school / work days and doctor's visits.
- ***Geographical Location and Timing of Vaccination is important:***
  - In the Northern Hemisphere, the flu season can begin as early as October and can last as late as April or May. Flu illnesses are most common in the United States between December and February. However, during some flu seasons, most flu cases have been reported in March. Conversely, in the Southern Hemisphere, the flu season is between April and September.
  - Following vaccination, it takes approximately 2 weeks to develop immunity to the flu virus and reduce susceptibility to flu illnesses.
  - The flu vaccine can be given either before or during the season.

- The optimal time to get vaccinated in the Northern Hemisphere is in either October or November.
- The optimal time to get vaccinated for travel to the Southern Hemisphere is April or May.
- In the event competition is scheduled in the Southern Hemisphere between April and September, and the flu season is severe, the 2018 Southern Hemisphere flu vaccine is recommended as well –provided that the time elapsed between the Northern and Southern Hemisphere vaccines is at least 5 months.
- The degree of immunity to the vaccine reduces at 5-6 months after the initial injection. However, most healthy swimmers do not need to receive an additional vaccination. Some swimmers may request an additional vaccination and it is reasonable to do so, especially if the local flu season is severe.
- Those who have received the previous season’s vaccine before travel during the summer months should receive the new flu vaccine during the following fall or winter.
- The flu vaccine manufactured for the upcoming or current season usually expires the following June. After June, flu vaccines are not available in the United States until the flu vaccine for the next season is produced and made available for vaccination in the fall season.

**Treatment:**

Tamiflu, while not a cure for the flu, is recommended for treatment of flu. During outbreaks within teams, it is important to get teammates and coaches treated since there is often a delay in diagnosing the first team member with flu who may have had symptoms for greater than 48 hours.

**References:**

1. <https://www.cdc.gov/flu/asthma/index.htm>
2. <http://time.com/5052980/flu-season-2017-flu-shot/>
3. <https://www.cdc.gov/flu/prevent/index.html>
4. Gleeson, M. *J Appl Physiol* (1985). Immune Function in Sport and Exercise. 2007 Aug;103(2):693-9.

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