What's new with the flu vaccine season 2018-2019?

If you tried to get a **Flu Mist** vaccine for the past couple of years, you know that it wasn't available. It did not seem to be effective, so it was removed from use. It has been reconfigured to improve the efficacy. The CDC's Advisory Committee on Immunization Practices (ACIP) is allowing it to be re-released for the 2018-2019 season.

There are many versions of the flu shot. Some contain 3 strains of flu protection, others have 4 strains. Use of each is dependent on age and other factors. There is only one version of nasal spray flu vaccine, **the Flu Mist.**

Flu Vaccine Season 2018- 2019 ACIP Recommendations:

- Everyone over 6 months of age who does not have a contraindication to vaccination should get a flu vaccine.
- No preference is given for one vaccine product over another, if it is age appropriate and there are no contraindications. (See Controversy for details on this.)
- Children under 10 years of age who have never had a flu vaccine should get two doses this year.
- If vaccine supply is limited, high risk people should get priority. This includes:
- children 6-59 months
- adults over 50 years
- those with chronic diseases
- immunocompromised persons
- pregnant women
- American Indians and Alaska Natives
- morbidly obese people
- residents of long-term care facilities

For the full report of recommendations, see MMWR: Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices—United States, 2018–19 Influenza Season.

The big questions that may be on your mind:

1. When's the best time to get a flu vaccine?

The CDC recommends starting to vaccinate as soon as it's available (usually August or September) and to have the vaccine given by Halloween.

It's not hard to see the logistical problems of vaccinating essentially everyone in the two months of September and October.

Some of the problems getting masses vaccinated:

- Getting the vaccine itself. Recently flu shots have started to be delivered around the country. They seemed to show up first at big chain pharmacies before doctor's offices. There aren't any shortages this year so far, but not everyone can get all their vaccine orders at once.
- The Flu Mist hasn't been approved for shipping yet, so no one has that at this time. If you're hoping to get it, you'll have to wait. No approval date has been announced as far as I know.
- I've heard that some Vaccine for Children (VFC) programs haven't even opened their ordering for the year. (Most flu vaccines are ordered in January or February for the next vaccine season, but VFC programs are state run and vary in rules.) If your child will require a VFC vaccine, you will likely have to wait until your clinic has them in stock, even if they have other flu vaccines.
- Many years there are shortages. Those are hard to anticipate but are another reason not to turn down a vaccine if it's offered.
- Having extra personnel skilled in giving flu vaccines available is difficult when they're needed to perform typical work. Giving vaccines takes time. There's a lot behind the scenes that needs to be done and documented in addition to the time of getting people prepared for the shot itself. And we all have seen the kids who put up a good fight, which means the nurse can't quickly give the shot.
- There are always time conflicts getting to a place that offers flu shots. Work, school and activity schedules are busy. It can be hard getting everyone in the family to a place that has the right vaccine for each person at a time that you're not busy.

What if you aren't vaccinated by Halloween?

There will be many who continue to be vaccinated in November and beyond. It is recommended to continue vaccinating until the vaccine supply is gone or the season ends. The flu season can possibly last through May in the Northern Hemisphere.

Will an early flu vaccine last long enough?

I'm asked this question often. I've been told by several parents that they want to wait to get the shot for their family until October to optimize the protection during flu season.

While this sounds good in theory, I'm afraid that some of these people may miss the opportunity to be vaccinated before the flu hits.

Although we say that it tends to hit in January in my area, it can hit at any time. I've already heard of one case of Flu A in another local pediatric practice.

All vaccines take time to become effective, so waiting until you hear that it's in the community is already too late in some respects. We often have more than one peak of flu activity each year, so still get the vaccine!

The effectiveness of the flu vaccine does decrease over time, but it's estimated to last about 6 months. Unfortunately, our season can last up to 8 months, so there is no perfect time.

What if we got our flu shot later in the season last year? Is it still good?

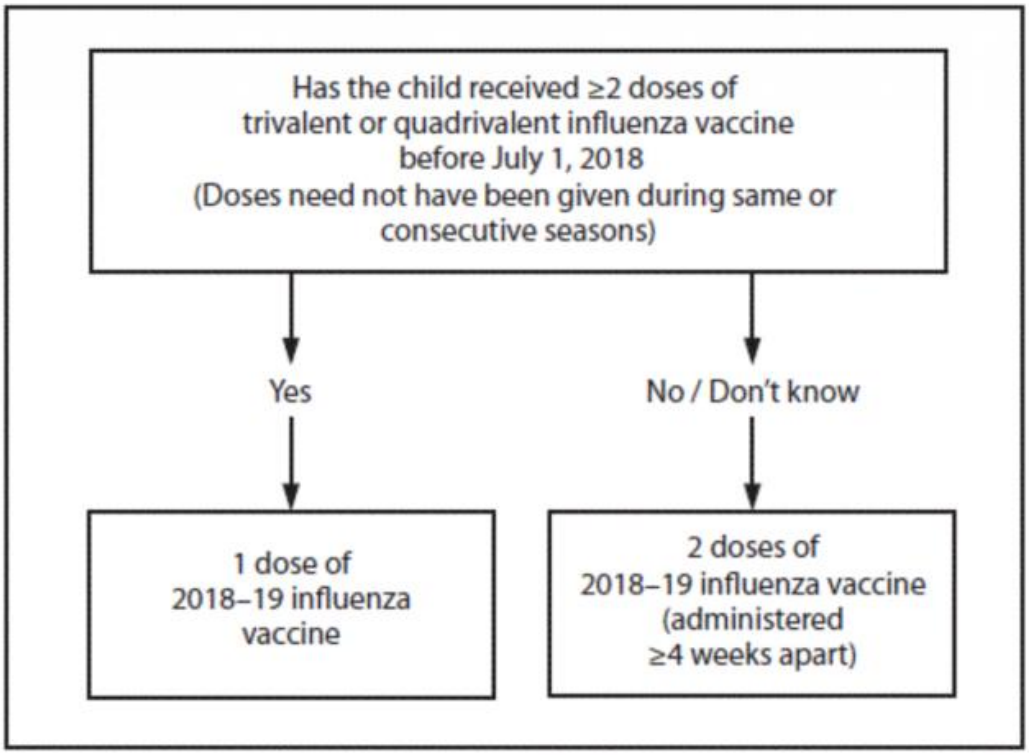
Each year the strains in the flu vaccines are updated to reflect the anticipated strains of influenza that will circulate. It's important to get a new flu vaccine each season. Even if your child got a flu shot in May 2018, he should get another this Fall or Winter.

Who needs a second vaccine?

It is not recommended to get a second flu shot later in the season for most people.

Children under 9 years of age getting vaccinated for the first time need their primer dose and a booster dose at least 4 weeks later. Children who have previously received ≥2 total doses of influenza vaccine at least 4 weeks apart before July 1, 2018, require only one dose for 2018–19. The 2 doses of influenza vaccine do not have to have been administered in the same season or consecutive seasons. If they had only 1 flu vaccine before July 1, 2018, they need 2 doses this season.

FIGURE. Influenza vaccine dosing algorithm for children aged 6 months through 8 years — Advisory Immunization Practices, United States, 2018–19 influenza season



Grohskopf LA, Sokolow LZ, Broder KR, Walter EB, Fry AM, Jernigan DB. Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices—United States, 2018–19 Influenza Season. MMWR Recomm Rep 2018;67(No. RR-3):1–20. DOI: http://dx.doi.org/10.15585/mmwr.rr6703a1

2. Will Flu Mist work?

Unfortunately, we won't really know until the season is well underway. Every year we must wait to learn if the flu vaccine is effective. The effectiveness varies from year to year.

Flu Mist History

The Flu Mist was first approved in 2003. It was a welcome addition to the flu vaccine lineup because there are no needles needed. It seemed to be very effective initially. In 2014, the CDC's Advisory Committee on Immunization Practices (ACIP) even gave it preferential status because it seemed to be more effective than the flu shot version.

The very next year ACIP reversed its decision due to very poor performance of the H1N1 strain in the Flu Mist in the United States. (This didn't seem to be a problem everywhere.) Flu Mist was removed from the market for two years as scientists tried to figure out why it didn't work well so they could remedy the problem.

This Year's Flu Mist

Testing of the new version shows that the new H1N1 LAIV strain (A/Slovenia) performed significantly better than the 2015-16 strain (A/Bolivia). Does this mean that it will perform better this season? We really don't know, but in February 2018, ACIP voted to bring back the newly formulated Flu Mist for the 2018-2019 season.

In years past it was recommended for anyone who had received the Flu Mist to avoid contact with immunocompromised people for 7 days. It is no longer considered to be a risk to most immunocompromised people to be around a recently vaccinated person. If the immunocompromised state is severe enough to require a protected environment, avoidance for 7 days after Flu Mist continues to be recommended.

Controversy

While most of the experts on the ACIP panel voted in favor to bring the Flu Mist back based on the study results, some members were not in agreement. They still worry that the Flu Mist may not perform well to during the flu season.

The CDC official position states no preference between the Flu Mist and the shot version, if the vaccine is age appropriate and there are no contraindications, such as allergy or chronic disease. The shot is available for all ages over 6 months old, but the Flu Mist is only for 2 – 49-year-old.

The AAP (American Academy of Pediatrics) stance on the Flu Mist is that it should only be used when the shot version is refused or unavailable. They will continually monitor the flu vaccine effectiveness patterns and may change their recommendation. If your child is worried about giving the shot, check out ways to make shots less scary.

3. What about egg allergy?

For several years now egg allergy is not considered a contraindication to flu vaccines. Despite this, people still think they cannot be vaccinated due to an allergy.

Severe allergic reactions to vaccines, although rare, can occur at any time, even in without a history of previous allergic reaction. The person giving flu vaccines should be able to identify and equipped to handle any allergic reaction.

Different influenza vaccines contain different amounts of egg components, so it is important to discuss the history of egg allergy with the person who will give the flu vaccine.

Recommendations for those with Egg allergy:

- People with a history of egg allergy who have only had hives after exposure to egg should receive influenza vaccine. Any version that is age appropriate can be used.
- People who have required epinephrine after eating egg or who have had angioedema, respiratory distress, lightheadedness, or recurrent vomiting are considered higher risk with influenza vaccination. They still may receive an age appropriate influenza vaccine, but it should be done in a health care setting, such as a medical clinic or hospital. They should not get the vaccine at a community drive, such as in a school or church setting. Vaccine administration should be supervised by a health care provider who is able to recognize and manage severe allergic reactions.
- A previous severe allergic reaction to influenza vaccine, regardless of the component suspected of being responsible for the reaction, is a contraindication to vaccinating with that vaccine in the future. This does not include the typical reactions of redness at the injection site, fever, or muscle aches.
- No observation period is recommended specifically for egg-allergic people. If there is concern, a 15-minute observation period after any vaccine can be done. This is commonly done in the adolescent age group due to their high risk for passing out after any needle – shots or blood draws.

4. What if you're traveling internationally?

Influenza season varies by location. In the US, we tend to think of it as a winter thing, but it can happen during our summer months elsewhere. Flu is seen in the fall and spring in addition to the winter months in Kansas.

In the Northern Hemisphere it tends to hit between October and May. The Southern Hemisphere's season tends to be April through September.

Even the types of influenza that circulates can vary by location. These types affect the type of vaccine that is used in that location.

It's recommended to be vaccinated against influenza at least 2 weeks before traveling to any location during their flu season. This can be difficult if there is not any flu vaccine in your area. It can also be difficult to find the correct strains of flu vaccine in your location.

Talk to your physician or a travel clinic to see what is needed and available.

5. Doesn't the flu shot cause the flu?

No. No it doesn't.

Flu is a very dangerous illness that results in many people requiring hospitalization. Each year previously healthy children and adults die from influenza.

The symptoms people get after flu shots often could be explained by many viruses. They are not the flu. If they really are flu symptoms, it is because the vaccine didn't have time to take effect or it was a strain not included in the vaccine.

There is no plausible way that the injectable flu vaccine can cause the flu. There is no live virus in the injectable vaccine that can lead to flu disease. Injectable flu vaccines are made in two ways. Either the vaccine is made with flu vaccine viruses that have been 'inactivated' and are not infectious or with no flu vaccine viruses at all.

The most common side effects from the influenza shot are soreness, redness, tenderness or swelling where the shot was given. Low-grade fever, headache and muscle aches also may occur, but interestingly these same symptoms occur with placebo shots too.

How do we know it doesn't cause illness?

Studies like this one in adults have compared side effects of a flu shot to side effects of a placebo with saline (salt water). The only differences in symptoms was increased soreness in the arm and redness at the injection site among people who got the flu shot. There were no differences in terms of body aches, fever, cough, runny nose or sore throat. These all can occur during the time frame that the flu vaccine is typically recommended. It's just a coincidence if you "get sick" after getting the vaccine.

Studies in children are lacking. Ethically it is difficult to study this, since it would require not giving some children a potentially lifesaving vaccine if they receive the placebo.

What about the Flu Mist?

The Flu Mist is a live virus. It can cause congestion and symptoms like a very mild case of the flu.

Flu Mist can cause mild illness, but it prevents (or hopefully will prevent) significant flu disease symptoms.

6. What if you get the flu?

I'll write separately about how to treat the flu and flu-like symptoms.

You can guess what it will say based on what I've written previously about fever being scary, how to treat coughs, and Tamiflu.

7. Why bother, since the flu shot isn't effective.

The effectiveness of the flu vaccine is never perfect, but it's better than nothing. For more on this, see The flu shot doesn't work.

This Flat Stanley spent time in our office one flu vaccine season. Given the paucity of good stock photos of people getting vaccines, I chose this one to highlight the point of few photo choices. And I think it's fun.