Prepare Now for 2019-20 Flu Season

When Labor Day rolls around, it’s time to start thinking about getting your flu shot in the fall. Flu season begins in October and lasts until spring.

Why Vaccinate?

Seasonal influenza (flu) is a contagious, potentially life-threatening respiratory illness. Public health officials recommend annual vaccination for children starting at 6 months old and all adults, including pregnant women, unless they have a condition that precludes safe administration.

Vaccination helps prevent the spread of illness to family members, co-workers and vulnerable populations such as the elderly, infants and people with certain health conditions who have a higher risk of serious complications such as pneumonia.

The more people who get vaccinated, the greater the protection afforded. This is referred to as herd or group immunity. Vaccines promote the development of antibodies that provide protection against infection beginning about two weeks after vaccination.

The vaccine does not cause the flu. However, some people may experience discomfort from the shot and/or relatively mild, short-lived symptoms such as fatigue, muscles aches, headache, low fever or gastrointestinal upset. With vaccination, it’s still possible to get sick after being exposed to a flu virus, but symptoms are likely to be milder.

The 2018-19 flu season in the U.S. was the longest in a decade and characterized as moderately severe. The U.S. Centers for Disease Control and Prevention (CDC) estimates influenza virus infection caused 37.4 to 42.9 million symptomatic illnesses; 17.3 to 20.1 million medical visits; 531,000 to 647,000 hospitalizations; and 36,400 to 61,200 deaths.

What’s In the Vaccine?

In a rare move earlier this year, the World Health Organization (WHO) and the U.S. Food and Drug Administration (FDA) postponed decisions about composition of the vaccine in order to recommend the most effective formula possible. Viruses change over time, and experience with prevalent viruses and research on emerging strains must be carefully evaluated.
For 2019-2020, trivalent (three-component) vaccines are recommended to contain:

- A/Brisbane/02/2018 (H1N1) pdm09-like virus (updated)
- A/Kansas/14/2017 (H3N2)-like virus (updated)
- B/Colorado/06/2017-like (Victoria lineage) virus

Quadrivalent (four-component) vaccines are recommended to contain these three viruses plus B/Phuket/3073/2013-like (Yamagata lineage) virus.

WHO selected H1N1 and both B components on Feb. 21, 2019, but delayed a decision on an H3N2 vaccine component for another month. The FDA’s Vaccines and Related Biological Products Advisory Committee approved selection of the H3N2 component on March 22.

In turn, manufacturers had to delay the start of production. While public health officials and manufacturers say total vaccine supply will be adequate for the season, available quantities may be impacted at the start of workplace and community campaigns. It’s still worthwhile to get vaccinated even as the season progresses in order to be protected.

**Administering the Vaccine**

Most people get a flu shot in the upper-arm muscle. This season live attenuated influenza vaccine (LAIV) using nasal spray may be offered as an alternative with guidance from a medical professional. LAIV was not recommended in some previous seasons because of concerns about low effectiveness against H1N1-like viruses.

Most influenza vaccines are prepared by injecting viruses into fertilized eggs, where they are incubated to allow them to replicate. Virus-containing fluid is harvested from the eggs. For flu shots, viruses are inactivated (killed) and virus antigen is purified. For nasal spray vaccine, candidate viruses are attenuated (weakened) and put through a different production process.

A life-threatening allergic reaction to the vaccine, such as difficulty breathing, is rare. People with an egg allergy, those who have had a previous reaction to a flu shot, or who have had Guillain-Barré Syndrome, a paralyzing illness, are advised to get medical advice before getting vaccinated.

**Preventing the Flu**

Infection control experts consider annual vaccination as the first line of defense against the flu. Other prevention methods include:

- Frequent hand washing with soap and water (minimum of 20 seconds)
- Using alcohol-based hand sanitizer when water is not available
- Covering one’s mouth when coughing or sneezing and throwing soiled tissues away
- Disinfecting surfaces such as countertops, phones and door handles
- Avoiding close contact with people who have symptoms (at least 3 feet away)
- Staying home from work when feeling ill (24 hours after fever is gone)
- Promoting a healthy immune system with exercise, good nutrition and quality sleep

Workplace infectious disease management may include using personal protective equipment such as gloves, gown, mask, eye protection, total face shield and safe injection practices. Surgical masks or respirators may be used to help reduce the spread of disease via airborne or droplet contamination.