Seasonal flu activity in the United States is high and continues to increase. Flu activity has been elevated for nine weeks.

23.3% of specimens from clinical laboratories tested positive for influenza.

Nationally, influenza B/Victoria viruses are most common followed by H1N1. Predominant viruses vary by region and age group. There is low circulation of H3N2 and B/Yamagata viruses.

5.8% of visits to a health care provider were for influenza-like illness. All 10 regions were above their baselines and continuing to increase.

The overall hospitalization rate is 14.6 per 100,000, which is similar to past seasons at this time.

5.8% of deaths were attributed to pneumonia and influenza, which is below the epidemic threshold.

Five new pediatric flu deaths were reported for the 2019-2020 season during week 1. The total for the season is 32.
2019-2020 U.S. Flu Season: Preliminary Burden Estimates
Jan. 10, 2020, CDC

CDC estimates that, from October 1, 2019, through January 4, 2020, there have been:

- 9.7 million - 14 million flu illnesses
- 4.5 - 6.5 million flu medical visits
- 87,000 - 150,000 flu hospitalizations
- 4,800 - 12,000 flu deaths

You Are Unvaccinated and Got Sick. These Are Your Odds.
Jan. 9, 2020; New York Times

The 2017-18 influenza epidemic was an especially bad one, resulting in an estimated 45 million illnesses nationwide, according to the C.D.C. An estimated 810,000 people were hospitalized and 61,000 people died, including 643 children. The majority of children who die from influenza have not received the flu vaccine.

Even though influenza ranks among the leading killers of Americans, many choose not to vaccinate, believing that the vaccine is dangerous or that it can even cause flu. (The flu vaccine cannot cause the flu because it contains only inactive or, in the case of nasal spray vaccines, weakened viruses, or is made with proteins from a flu virus.)

Try These Tips to Overcome Flu Vaccine Hesitancy

Jan. 9, 2020; American Academy of Family Physicians

Margot Savoy, M.D., M.P.H., shares three tips for how to improve flu vaccination rates:

1. Share that the vaccine is effective. The critical point people miss in news coverage about effectiveness is that even in a poorly matched year, the people most likely to be admitted to the hospital or die from influenza or influenza-related complications continue to be those who were not vaccinated. So, while it may not completely prevent me from getting sick this winter, even during a bad match year, the influenza vaccine clearly protects me from hospitalization and death. That's a win!

2. Share that the flu shot doesn't cause the flu.

3. Offer the nasal spray for people who are afraid of needles. For those who do not qualify for the nasal vaccine, since it is only approved for people ages 2-49, use distraction, cold, or vibration on the site of the injection to ease discomfort.

Researchers Develop Universal Flu Vaccine with Nanoparticles That Protects Against Six Different Influenza Viruses in Mice

Jan. 6, 2020; Georgia State University

A novel nanoparticle vaccine that combines two major influenza proteins is effective in providing broad, long-lasting protection against influenza virus in mice, showing promise as a universal flu vaccine, according to a study by the Institute for Biomedical Sciences at Georgia State University.

Mice were immunized with the nanoparticle vaccine before being exposed to influenza virus, and they were protected against six different strains of the virus. The findings, which suggest this unique vaccine combination has potential as a universal influenza vaccine or component of such vaccines, are published in the journal Advanced Healthcare Materials.
Because standard-dose flu vaccines tend to be merely “moderately” effective, study authors sought to understand whether enhanced vaccines would better protect this community of people aged 65+.

To study the question, Cowling and colleagues recruited approximately 1800 community-dwelling residents of Hong Kong between the ages of 65 and 82 years. Participants were divided into groups to compare the outcomes of people who received the standard vaccine to adjuvanted vaccines.

Analysis showed that all 3 enhanced vaccines (Fluad, FluZone, and FluBlok) led to stronger humoral and cell-mediated immune responses when compared to the standard-dose group. The findings were statistically strong with regard to the influenza A strain.