CDC Influenza Division Key Points October 21, 2016

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Summary Key Points

- The most recent <u>FluView</u> report indicates that overall flu activity in the United States remains low at this time.
- Flu is unpredictable. It's not possible to say when the 2016-2017 flu season will begin, how severe it will be or what viruses will predominate.
- Each flu season, flu causes millions of illnesses, hundreds of thousands of hospitalizations and thousands or sometimes tens of thousands of deaths.
- The Centers for Disease Control and Prevention (CDC) recommends annual flu vaccination for everyone 6 months and older by the end of October, if possible.
- This season only injectable flu vaccines (flu shots) are recommended. The nasal spray vaccine should not be used.
- A flu vaccine is your best defense against getting the flu.
- While flu vaccine can vary in how well it works, vaccination can reduce flu illnesses, doctors' visits, and missed work and school due to flu, as well as prevent flu-related hospitalizations.
- Getting a flu vaccine yourself also can protect people around you who are more vulnerable to serious flu complications, like pregnant women, older people, young children and people with certain chronic conditions like asthma or diabetes. Flu can be more serious for these people and you can help protect them by getting vaccinated yourself.
- The composition of this season's vaccine has been updated to better match circulating viruses.
- Both four-component (quadrivalent) and three-component (trivalent) flu vaccines are available this season. Trivalent flu vaccine is designed to protect against three different flu viruses; quadrivalent protects against those three viruses plus an additional influenza B virus.
- CDC has not expressed a preference for any one flu shot over another. The important thing is to get vaccinated.
- It takes about two weeks after vaccination for protection to set in.
- Now is a good time to get vaccinated.

- Manufacturers report having shipped more than 120 million doses of flu vaccine as of October 13, 2016.
 http://www.cdc.gov/flu/professionals/vaccination/vaccinesupply.htm
- The original total projected supply of vaccine in the United States this season was between 157 million and 168 million doses of injectable flu vaccine.
- Early season supply projections can differ from the actual number of vaccine doses distributed at the end of the season based on a number of factors.
- Go to http://vaccine.healthmap.org/ or www.cdc.gov/flu to find a location near you where you can get vaccinated.

Summary of Influenza Virus Laboratory Data

- Laboratory data can give a general indication of how well the vaccine might work.
- Global laboratory data to date continue to indicate that most circulating influenza viruses are similar to the reference vaccine viruses recommended for the 2016-2017 U.S. vaccines.
- No significant antigenic drift has been identified.
- This suggests that vaccination with Northern Hemisphere influenza vaccine should offer protection against the majority of circulating viruses.
- CDC will continue to carefully look at the results of laboratory studies of currently circulating influenza viruses to look for any evidence that viruses are changing.
- Laboratory results are published weekly in FluView, along with surveillance information related to influenza activity.
- FluView is available at http://www.cdc.gov/flu/weekly/fluactivitysurv.htm.
- CDC also will conduct vaccine effectiveness studies to tell how well the vaccine is actually protecting against illness.

FluView Activity Update

According to the FluView report for the week ending October 15, 2016, flu activity is low overall in the continental United States, with only Guam reporting widespread flu activity. Influenza A (H3) viruses were most commonly reported during week 41. While the timing of influenza activity varies and is unpredictable, flu activity often begins to increase in October. CDC recommends that everyone 6 months of age and older get an annual flu vaccine before the end of October, if possible. Below is a summary of the key flu indicators for the week ending October 15, 2016:

- For the week ending October 15, the proportion of people seeing their health care provider for influenza-like illness (ILI) was 1.2%. This is below the national baseline of 2.2%. All 10 regions reported ILI below their region-specific baseline levels.
- Puerto Rico experienced low ILI activity. New York City and all 50 states experienced
 minimal ILI activity. The District of Columbia did not have sufficient data to calculate
 an activity level. ILI activity data indicate the amount of flu-like illness that is
 occurring in each state.
- Widespread flu activity was reported by Guam. Local flu activity was reported by one state (New Hampshire). Sporadic flu activity was reported by the District of Columbia, the U.S. Virgin Islands, and 41 states (Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Florida, Georgia, Hawaii, Idaho, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nevada, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming). No activity was reported by 8 states (Alabama, Delaware, Illinois, Kansas, Mississippi, Nebraska, Rhode Island, and South Carolina). Geographic spread data show how many areas within a state or territory are seeing flu activity. Puerto Rico did not report.
- Influenza-associated hospitalization data from the Influenza Hospitalization Surveillance Network (FluSurv-NET) for the 2016-2017 influenza season will be updated weekly starting later this season.
- The proportion of deaths(http://www.cdc.gov/flu/weekly/#S2) attributed to pneumonia and influenza (P&I) was 5.4% for the week ending October 1, 2016 (week 39). This percentage is below the epidemic threshold of 6.4% for week 39 in the NCHS Mortality Surveillance System.
- No influenza-associated <u>pediatric deaths (http://www.cdc.gov/flu/weekly/#S3)</u> were reported to CDC this week.
- Nationally, the percentage of <u>respiratory specimens</u> testing positive for influenza viruses in clinical laboratories during the week ending October 15 was 1.3%.
- Regional clinical laboratory data percentages ranged from <0.1% to 4.0% for the most recent three weeks.

- No genetic or antigenic characterization data is available yet for viruses collected after October 1, 2016. This information will be updated weekly beginning later in the season.
- For viruses collected between May 22–September 30 2016, antigenic and/or genetic characterization shows that the majority of the tested viruses remain similar to the recommended components of the 2016-2017 Northern Hemisphere vaccines.
- No antiviral resistance data is available for specimens collected after October 1, 2016. From May 22-September 30, 2016, however, CDC tested 191 specimens (18 influenza A (H1N1)pdm09, 107 influenza A (H3N2), and 66 influenza B viruses) for resistance to the neuraminidase inhibitors antiviral drugs. While the vast majority of the viruses that have been tested in recent months are sensitive to oseltamivir, zanamivir, and peramivir, one (5.6%) influenza A (H1N1)pdm09 viruses showed resistance to oseltamivir and peramivir. A total of 14 influenza A (H1N1)pdm09 viruses were tested for zanamivir susceptibility and all were susceptible. None of the 107 influenza A (H3) and 66 influenza B viruses were found to be resistant to either oseltamivir, zanamivir, or peramivir. Antiviral resistance data will be updated weekly starting later in the season.

<u>FluView (http://www.cdc.gov/flu/weekly/fluactivitysurv.htm)</u> is available – and past issues are archived (http://www.cdc.gov/flu/weekly/pastreports.htm) – on the CDC website.

Note: Delays in reporting may mean that data changes over time. The most up to date data for all weeks during the 2016-2017 season can be found on the current FluView(http://www.cdc.gov/flu/weekly/).