

CDC Influenza Division Key Points

December 28, 2015

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Summary Key Points

- The latest FluView report indicates that there have been some increases in flu activity in the United States.
- Reports of influenza-like-illness are above the national baseline for the first time this season. (See section "[FluView Activity Update](#)" for more information.)
- Also this week, CDC is reporting the fourth flu-associated pediatric death of the 2015-2016 season. (See section "[Influenza-Associated Pediatric Deaths](#)" for more information.)
- However, most states are still experiencing minimal, sporadic flu activity.
- The U.S. flu season is just getting started.
- The past three flu seasons have started early. The timing of the current flu season so far is more typical. Most often flu peaks during the month of February.
- While flu seasons vary in their timing, duration and intensity, it is likely that there are still many weeks of flu activity ahead of us.
- Laboratory analysis of recently circulating flu viruses indicates that most circulating viruses remain similar to the 2015-2016 influenza vaccine viruses.
- The similarity between vaccine viruses and circulating viruses is one factor that can influence how well the vaccine works.
- With most of the flu season still to come, getting a flu vaccine now can still protect you from illness this season.
- Each flu season, flu causes millions of illnesses, hundreds of thousands of hospitalizations and thousands or sometimes tens of thousands of deaths.
- CDC recommends annual flu vaccination for everyone 6 months and older.
- While flu vaccine can vary in how well it works, a flu vaccine is our best defense against getting the flu.
- Vaccination can reduce flu illnesses, doctors' visits, and missed work and school due to flu, as well as prevent flu-related hospitalizations.
- Flu vaccine is designed to protect against all of the common circulating seasonal flu viruses.

- 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 143.3 million doses of flu vaccine as of December 11, 2015.
- Go to <http://vaccine.healthmap.org/> or www.cdc.gov/flu to find a location near you where you can get vaccinated.

FluView Activity Update

According to this week's FluView report, seasonal influenza activity increased slightly in the United States. While influenza A (H3N2) viruses have been most common since October 1, in the past two weeks, influenza A (H1N1)pdm09 viruses have predominated. The vast majority of circulating flu viruses analyzed this season remain similar to the vaccine virus components for this season's flu vaccines. CDC recommends an annual flu vaccine for everyone 6 months of age and older. If you have not gotten vaccinated yet this season, you should get vaccinated now. Below is a summary of the key flu indicators for the week ending December 19, 2015:

- For the week ending December 19 the proportion of people seeing their [health care provider](#) for influenza-like illness (ILI) is 2.2%, which is above the national baseline (2.1%). Four of 10 regions (Regions 2, 3, 4 and 6) reported ILI at or above their region-specific baseline levels. This is the first time this season that ILI has been at or above the national baseline. One way that CDC measures the length of the influenza season is the number of consecutive weeks during which ILI is at or above baseline.
- One state (South Carolina) experienced high ILI activity. Puerto Rico and two states (New Jersey and Texas) experienced moderate ILI activity. New York City and three states (Alabama, Georgia, and Virginia) experienced low ILI activity. 44 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.
- No states reported widespread influenza activity. Guam, Puerto Rico and five states (Kentucky, Maryland, Minnesota, North Carolina, and Pennsylvania) reported regional activity. The U.S. Virgin Islands and fourteen states (Alabama, Arizona, Connecticut, Idaho, Indiana, Iowa, Massachusetts, Nevada, New Hampshire, New Jersey, New Mexico, Oregon, Texas, and Virginia) reported local influenza activity. The District of Columbia and 27 states reported sporadic influenza activity. No influenza activity was reported by four states (Delaware, Illinois, Mississippi, and Rhode Island). Geographic spread data show how many areas within a state or territory are seeing flu activity.

- Influenza-associated hospitalization data from the Influenza Hospitalization Surveillance Network (FluSurv-NET) for the 2015-2016 influenza season will be updated weekly starting later this season.
- The [proportion of deaths](#) attributed to pneumonia and influenza (P&I) based on the NCHS Mortality Surveillance System and the 122 Cities Mortality Reporting System is below system-specific epidemic thresholds.
- One influenza-associated pediatric death occurred and was reported to CDC during the week ending December 19 (week 50). This death was associated with an influenza A virus for which no subtyping was performed. A total of four influenza-associated pediatric deaths have been reported to CDC during the 2015-2016 season to date.
- Nationally, the percentage of [respiratory specimens](#) testing positive for influenza viruses in clinical laboratories during the week ending December 19 was 2.9%. For the most recent three weeks, the regional percentage of respiratory specimens testing positive for influenza viruses in clinical laboratories ranged from 0.5% to 5.1%.
 - During the week ending December 19, 211 (56.7%) of the influenza-positive tests reported to CDC by clinical laboratories were influenza A viruses and 161 (43.3%) were influenza B viruses.
- The most frequently identified influenza virus type reported by public health laboratories during the week ending December 19 was influenza A, with influenza A (H1N1)pdm09 viruses predominating.
 - During the week ending December 19, 43 (78.2%) of the 55 influenza-positive tests reported to CDC by public health laboratories were influenza A viruses and 12 (21.8%) were influenza B viruses. Of the 37 influenza A viruses that were subtyped, 14 (37.8%) were H3 viruses and 23 (62.2%) were A (H1N1)pdm09 viruses.
 - Cumulatively from October 4-December 19, 2015, influenza A (H3) viruses were predominant in three of the four age groups ranging from 47.1% (ages 25-64 years) to 79.1% (ages 65 years and older). Influenza A (H1N1)pdm09 viruses were predominant in the 0-4 years age group (37.3%).
- CDC has characterized 155 specimens (34 influenza A (H1N1)pdm09, 105 influenza A (H3N2) and 16 influenza B viruses) collected in the U.S. since October 1, 2015.
 - All 34 (100%) influenza A (H1N1)pdm09 viruses were antigenically characterized as similar to A/California/7/2009, the influenza A (H1N1) component of the 2015-2016 Northern Hemisphere vaccine.
 - All 105 H3N2 viruses were genetically sequenced and all viruses belonged to genetic groups for which a majority of viruses antigenically characterized were similar to cell-propagated A/Switzerland/9715293/2013, the influenza A (H3N2) component of the 2015-2016 Northern Hemisphere vaccine.
 - A subset of 66 H3N2 viruses also were antigenically characterized; 65 of 66 (98.5%) H3N2 viruses were similar to A/Switzerland/9715293/2013 by HI testing or neutralization testing.

- All nine (100%) of the B/Yamagata-lineage viruses were antigenically characterized as similar to B/Phuket/3073/2013, which is included in both the 2015–16 Northern Hemisphere trivalent and quadrivalent vaccines.
- All seven (100%) of the B/Victoria-lineage viruses were antigenically characterized as similar to B/Brisbane/60/2008, which is included in the 2015–16 Northern Hemisphere quadrivalent vaccine.

Since October 1, 2015, CDC has tested 27 influenza A (H1N1)pdm09, 126 influenza A (H3N2), and 29 influenza B viruses for resistance to the neuraminidase inhibitors antiviral drugs. While the vast majority of the viruses that have been tested are sensitive to oseltamivir, zanamivir, and peramivir, one influenza A (H1N1)pdm09 virus that showed resistance to oseltamivir and peramivir (but was sensitive to zanamivir) has been reported this influenza season.

[FluView](#) is available – and past issues are [archived](#) – 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 2015-2016 season can be found on the current [FluView](#)

Influenza-Associated Pediatric Deaths

- One pediatric death was reported this week, bringing the total number of flu-associated deaths to four for the 2015-2016 season.
- Because of confidentiality issues, CDC does not discuss or give details on individual cases.
- This death is a somber reminder of the danger flu poses to children.
- The single best way to protect against seasonal flu and its potential severe consequences in children is to get a seasonal flu vaccine each year.
- Vaccination is especially important for children younger than 5 years of age and children of any age with a long-term health condition like asthma, diabetes and heart disease and neurological and neurodevelopmental diseases. These children are at higher risk of serious flu complications if they get the flu.
- Yearly vaccination also is especially important for people in contact with high risk children in order to protect the child (or children) in their lives from the flu. In particular, children younger than 6 months are too young to be vaccinated themselves but are at high risk of flu complications if they get sick so the people around them should get vaccinated to protect the infant.

- Some children 6 months through 8 years of age require 2 doses of influenza vaccine. Children in this age group who are getting vaccinated for the first time will need two doses. Some children who have received influenza vaccine previously also will need two doses this season. A health care provider should be consulted to determine whether two doses are recommended for a child.
- Flu-related deaths in children younger than 18 years old should be reported through the Influenza-Associated Pediatric Mortality Surveillance System. The number of flu-associated deaths among children reported during the 2015-2016 flu season will be updated each week and can be found at www.cdc.gov/flu/weekly/#S3.
- Since 2004, when pediatric deaths associated with influenza infection became a nationally notifiable condition, the number of deaths reported to CDC each year has ranged from 37 (2011-2012 season) to 171 deaths (2012-2013 season).
- Last season, 148 influenza-associated pediatric deaths were reported to CDC.