

CDC Influenza E-Brief

June

2012

In This Issue

- A Late and Mild Flu Season** 1
- Why Was Flu So Late and Mild This Year** 2
- International Spotlight: Laos Launches Seasonal Flu Vaccination Program**..... 2
- Information on H3N2 Variant Influenza A Viruses** 2
- People with Heart Disease* and Those Who Have Had a Stroke Are at Increased Risk of Complications from Influenza**..... 3



A Late and Mild Flu Season

The 2011–2012 influenza season began late and was relatively mild compared to many previous seasons. While flu season is variable in timing and severity, it usually occurs between October and May and most often peaks in February. Typically “flu season” is said to “begin” when certain key flu indicators remain elevated for a number of consecutive weeks. One of these indicators is the percent of respiratory specimens testing positive for flu. Another such indicator is levels of influenza-like-illness (ILI) reported to CDC by a nationwide network of thousands of medical providers.

This season, ILI in the United States remained low through January and did not exceed baseline – and then only slightly -- until mid-March. ILI stayed above baseline for just one week in March and has not exceeded baseline again. ILI nationally was low despite the fact that high percentages of respiratory specimens tested positive for influenza in parts of the country from early February until late May. High percentages of respiratory specimens testing positive for flu point to the occurrence of high flu activity or flu outbreaks. While these localized influenza outbreaks occurred from February through late May, they were never prolonged or extensive enough to raise the national level of ILI substantially during this time. This is the first time since CDC started this kind of ILI surveillance that the percentage of patient visits for ILI exceeded baseline (was elevated) during only one week of the season. In previous seasons, ILI has remained above baseline for between 8 and 20 weeks, with an average of 13 weeks at or above baseline each season since this type of surveillance began in 1997-1998. In terms of ILI, this also is the lowest “peak” ever recorded.

Other indicators were low as well. As of May 25, 2012, 26 pediatric deaths occurring during the 2011–2012 season had been reported to CDC. These are deaths in children younger than 18 who test positive for influenza reported by states to CDC. Pediatric deaths became reportable in this way in 2004. This is the lowest number of pediatric deaths reported during a season since record-keeping began. Previously, pediatric mortality has ranged from a low of 46 deaths during the 2005–2006 season, to a high of 282 deaths reported during the 2009–2010 season, which included pediatric deaths occurring during the 2009 H1N1 pandemic.

Subscribe to the Influenza E-Brief on CDC Washington's website:
www.cdc.gov/washington/flu_ebrief.html

National Center for Immunization and Respiratory Diseases
Influenza Division



Why Was Flu So Late and Mild This Year

This is the latest and mildest flu season on record since 1981–1982 when the number of respiratory specimens testing positive for influenza and the percentage of deaths attributed to pneumonia or influenza were also uncharacteristically low. It is not possible to compare ILI data from that season, however, since the current ILI surveillance system began in the 1997–98 season. The reason for the mildness and lateness of the season isn't certain but it is likely that a number of factors together contributed, including: a mild winter; the fact that most of the influenza viruses circulating this season were similar to those that have circulated for the past two seasons; and, that most circulating viruses were similar to the viruses that the 2011–2012 vaccine was designed to protect against. The low levels of virus "drift" (change) for two consecutive years and steadily increasing influenza vaccination coverage in the country likely contributed to broad levels of immunity in the population.

CDC Flu Recommendations

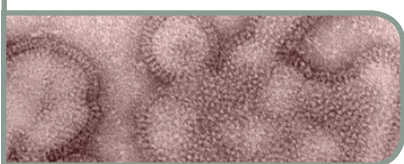
CDC recommends that everyone six months and older get an **annual flu vaccine**. This season, an estimated 132 million doses of influenza vaccine were distributed in the United States. Information about vaccine uptake (vaccine doses administered) will be available in the coming months.

In addition to universal vaccination, CDC also recommends the use of **influenza antiviral medications** as a second line of defense against the flu. The benefits of antiviral drugs for treatment of influenza have been documented for some time and there is increasing evidence to support that conclusion.

International Spotlight: Laos Launches Seasonal Flu Vaccination Program

On April 24, 2012, the Lao People's Democratic Republic (Lao PDR, or Laos), a small and relatively resource-poor southeast Asian country, launched a seasonal influenza vaccination program to protect adults at high risk of serious flu-related complications, including health care workers and pregnant women, in that country. The program is the product of a six-year collaboration between CDC, the World Health Organization (WHO) and the Lao Ministry of Health to develop the country's influenza public health capacities. This year's vaccine was provided [Walgreens](http://news.walgreens.com/article_display.cfm?article_id=5577) http://news.walgreens.com/article_display.cfm?article_id=5577, which donated 375,000 doses of influenza vaccine directly to Lao PDR.

"The official launch of this vaccination program is clear evidence of the extraordinary progress that the Lao PDR Ministry of Health in collaboration with partners has achieved in detecting, measuring, and ultimately working on prevention of influenza in Laos," said Ann Moen, Influenza Division's Associate Director for Extramural Programs at the CDC. Click here for more: <http://www.cdc.gov/flu/spotlights/vaccination-program-launch-lao.htm>



Information on H3N2 Variant Influenza A Viruses

Since August 2011, a small number of U.S. residents were found to be infected with influenza A variant viruses <http://www.cdc.gov/flu/swineflu/variant.htm>, most of them H3N2v viruses. Investigations suggest that swine-to-human transmission as well as limited human-to-human transmission with

this virus has taken place. While H3N2v viruses have been detected in U.S. swine, it is unknown how widespread they are in swine herds. It is possible that sporadic infections and even localized outbreaks with this virus will continue to occur among people. While there is no evidence of sustained human-to-human transmission, all influenza viruses have the capacity to change and it is possible that this virus may become widespread.

To-date, the severity of illnesses associated with this virus in people has been similar to the severity of illnesses associated with seasonal flu virus infections. Limited serologic studies indicate that adults may have some pre-existing immunity to this virus while

children do not. CDC produced an H3N2v vaccine candidate virus. A precautionary vaccine against H3N2v is in development and will likely be ready for clinical trials in the coming months. CDC is closely monitoring human infections with all novel influenza viruses, including H3N2v viruses, and will provide more information at <http://www.cdc.gov/flu/swineflu/influenza-variant-viruses-h3n2v.htm> as it becomes available.

Mobile Flu App Accepted by Apple's iTunes:

CDC recently developed a FluView influenza-like illness (ILI) activity mobile application to view ILI activity over several weeks and allow on-demand access to state health department

websites for local surveillance information; the app was released on the iTunes app store on March 27, 2012 and is available at <http://itunes.apple.com/gb/app/fluview/id507807044?mt=8>

With this application, you can:

- Explore ILI activity levels across the U.S.
- View ILI trends over several weeks
- Get on-demand access to state health department websites for local surveillance information

One of seven FluView surveillance components is to track information received from the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet). This application displays ILI activity levels based on the percent of outpatient visits in a jurisdiction due to ILI compared to the average percent of ILI visits that occur during weeks with little or no influenza virus circulation (non-influenza weeks).

ILINet consists of more than 3,000 health care providers in all 50 states, the District of Columbia and the U.S. Virgin Islands reporting more than 30 million patient visits each year.

CDC Influenza Interactive Web Tools

New interactive web applications in CDC's influenza surveillance report "FluView," displays information related to flu-related pediatric deaths, influenza like illness (ILI) and ILI and laboratory data on a national and regional level over time.

Here are links to three of the new interactive tools.
<http://gis.cdc.gov/GRASP/Fluview/PedFluDeath.html>

People with Heart Disease* and Those Who Have Had a Stroke are at Increased Risk of Complications from Influenza

People with heart disease and those who have had a stroke are at high risk for developing serious complications from influenza. Among adults hospitalized with the flu during the 2010–2011 influenza season, heart disease was the most commonly-occurring chronic condition; 37 percent of adults hospitalized with the flu during the 2010–2011 influenza season had heart disease. Studies have shown that influenza is associated with an increase of heart attacks and stroke.

*Heart disease includes but is not limited to coronary artery disease [heart attack or myocardial infarction, acute coronary syndrome and angina (chest pain related to heart disease)]. It also includes the following common conditions:

- Heart failure
- Hypertensive heart disease
- Pulmonary heart disease
- Heart valve disorders
- Arrhythmias including atrial fibrillation

<http://gis.cdc.gov/GRASP/Fluview/Main.html>
<http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html>

New Podcast

Dr. Aaron Storms, an Epidemic Intelligence Service (EIS) officer at CDC, discusses his paper about oseltamivir-resistant H1N1 flu. Created: 4/13/2012 by National Center for Emerging and Zoonotic Infectious Diseases (NCEZID). Date Released: 4/17/2012. Series Name: Emerging Infectious Diseases. <http://www2c.cdc.gov/podcasts/player.asp?f=8623595>

InFLUential News, April 2012 Newsletter:

The National Influenza Vaccination Disparities Partnership is a national multi-sector campaign, spearheaded by local influential partners who commit to promote the importance of vaccination uptake among underserved populations. The partnership and this newsletter are supported by the Centers for Disease Control and Prevention (CDC). Read their current newsletter: http://www.cdc.gov/flu/pdf/nivw/nivdp_newsletter_4_2012.pdf

CDC's Immunization Safety Offices answers questions about the flu vaccine:

Dr. Claudia Vellozzi with CDC's Immunization Safety Office answers questions about the safety of flu vaccines. This video is intended for general audiences as well as health care professionals. <http://www.cdc.gov/flu/freeresources/video/flu-vaccine-safety.htm>

- Congenital heart defects

For more: <http://www.cdc.gov/flu/heartdisease/index.htm>

Heart disease is just one factor that can place people at increased risk of influenza-related complications. For a full list of the high risk conditions, see http://www.cdc.gov/flu/about/disease/high_risk.htm.

