

CDC INFLUENZA E-Brief

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U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

2013-2014 INFLUENZA MID-SEASON UPDATE

CDC reported in the [February 21 MMWR](#) that this influenza season was more severe than usual for younger and middle-age adults. At that time, people age 18-64 accounted for 61 percent of all hospitalizations from influenza, an increase from the previous three seasons when this age group made up only about 35 percent of all such hospitalizations. Influenza deaths followed the same pattern; more deaths than usual occurred in this younger age group.

Annual vaccination against circulating influenza viruses remains the best strategy for preventing illness from influenza. This update highlights the value of seasonal influenza vaccination and supports ongoing vaccination efforts for all persons aged ≥ 6 months. Antiviral medications continue to be an important adjunct in the treatment and control of influenza and should be used as recommended, regardless of patient vaccination status.

Flu activity remained elevated nationally in February and early March. This season, influenza activity increased initially in the southern states and by the end of December 2013, high influenza activity was seen throughout the United States. During the first 4 weeks of 2014, influenza activity decreased in the southeast and south central areas of the United States, but began increasing in the west and northeast areas. Influenza activity is likely to continue for several more weeks in parts of the country. CDC recommends that people get vaccinated against flu as long as flu viruses are circulating. Influenza seasons are unpredictable and substantial activity has been observed to occur as late as May. For the most up-to-date flu and surveillance activity, please visit <http://www.cdc.gov/flu/weekly/fluactivitysurv.htm>.

SEASONAL INFLUENZA VACCINE & TOTAL DOSES DISTRIBUTED

Currently, manufacturers project 138-145 million doses of flu vaccine to be produced and 134.5 million doses distributed this season.

SEASONAL INFLUENZA VACCINE EFFECTIVENESS

CDC's estimates influenza vaccine effectiveness (VE) to help inform prevention and treatment decisions made by doctors and other health care practitioners during the flu season. CDC's mid-season VE estimates were published on February 20, 2014, in a Morbidity and Mortality Weekly Report entitled: "[Interim Estimates of 2013-14 Seasonal Influenza Vaccine Effectiveness—United States](#)." At the end of the season, CDC will provide a comprehensive estimate of VE that takes into account all of the data collected during the entire season. CDC's mid-season VE estimate was 61% for all age groups (95% confidence interval: 5% to 68%). This VE estimate means that getting a flu vaccine this season reduced the vaccinated population's risk of having to go to the doctor because of the flu by 61% for both children and adults.

Effectiveness against the influenza A 2009 H1N1 virus, which is currently the most common flu virus spreading and causing illness in the United States this season, was estimated at 62% (95% CI: 53% to 71%) for children and adults. During the study period (Dec. 2, 2013 – Jan. 23, 2014), the 2009 H1N1 virus accounted for 98% of flu viruses detected. (Note: There were not enough influenza B or influenza A (H3N2) viruses detected during the study period to make a mid-season estimate of vaccine effectiveness against either of those viruses.) Please visit the CDC webpage [2013-2014 Vaccine Effectiveness](#) for more information.

STUDY OF FLU RELATED DEATHS IN CHILDREN SHOWS EVEN HEALTHY CHILDREN AT RISK

A CDC study published in 2013 titled “Influenza-Associated Pediatric Deaths in the United States, 2004-2012” analyzed reported flu-related deaths in children younger than 18 years over the course of eight flu seasons, from October 2004 through September 2012. Results showed that flu-related deaths occurred in many healthy children, as well as those with one or more underlying health conditions. In addition, most of the children reported to have died during the study period had not received a seasonal flu vaccination. Other results underscore how quickly the flu can progress to becoming life-threatening in children. These findings support CDC’s recommendation that all children 6 months of age and older should receive a flu vaccination each year and parents should seek prompt medical care for all children with flu symptoms. The study is available online from the [Pediatrics website](#) at Influenza-Associated Pediatric Deaths in the United States, 2004-2012.



2014-2015 INFLUENZA VACCINE COMPOSITION

The seasonal influenza vaccine is designed to protect against the influenza viruses that research indicates are most likely to spread and cause illness among people during the upcoming flu season. Flu viruses are constantly changing, requiring an updated vaccine each year. To inform and support the flu vaccine virus selection process, CDC closely monitors the influenza viruses circulating each year, how well the previous season’s vaccine protected against those viruses and whether there is a good candidate vaccine virus that can be used for vaccine production.

The World Health Organization (WHO) recommends influenza vaccine virus compositions twice a year; once for the Northern Hemisphere and once for the Southern Hemisphere. For the United States, the Food and Drug Administration’s Vaccines and Related Biological Products Advisory Committee (VRBPAC) reviews WHO’s recommendation for the Northern Hemisphere and makes an official recommendation for flu vaccines to be used in the United States during the upcoming season. The vaccine viruses recommended by WHO for the 2014-15 Northern Hemisphere influenza season are the same as those for the Northern Hemisphere 2013-14 influenza season and 2014 Southern Hemisphere season. On February 28, 2014, VRBPAC endorsed the WHO Northern Hemisphere recommendation for the U.S. market.



INTERNATIONAL SITUATION UPDATE

First Reported Case of Avian Influenza A (H5N1) Virus Infection in a Human in the Americas.

On January 8, 2014, Canada reported a confirmed case of human infection with a highly pathogenic avian influenza A (H5N1) virus in a patient who died. Laboratory testing in Canada confirmed this virus to be the same as the highly pathogenic avian influenza A (H5N1) viruses that have been reported in poultry in Asia, Africa and Europe and that have resulted in more than 600 reported human infections. This is the first detected case of human infection with highly pathogenic avian influenza A H5N1 virus in North or South America.

The Canadian patient had recently traveled to Beijing, China, where highly pathogenic avian influenza A H5N1 is endemic (ever-present) among poultry. Canadian public health authorities investigated the situation and found that no additional cases of H5N1 in Canada were detected. Canadian public health authorities reported this as an isolated, imported case of H5N1 virus infection.

Highly pathogenic H5N1 viruses have not been detected in people or in animals in the United States. For more information, please visit: [First Reported Case of Avian Influenza A \(H5N1\) Virus Infection in a Human in the Americas](#)

H7N9 CASE DETECTED IN MALAYSIA

On February 12, 2014, The Malaysian Ministry of Health reported a human infection with avian influenza A (H7N9) or “H7N9”. The case reportedly occurred in a traveler from China who had developed symptoms before traveling, making this an “imported” case of H7N9. This is the first case of H7N9 detected outside of China. H7N9 has not been detected in poultry in Malaysia at this time. No evidence of sustained, ongoing person-to-person spread of H7N9 has been found.

Human infections with a new H7N9 virus were first reported in China in March 2013. As of March 10, 2014, there have been a total of 387 cases reported since March 30, 2013 and 123 total deaths in China. Additionally, one case has been reported by Malaysia for a total of 388 global cases of avian influenza A(H7N9). Most H7N9 infections are believed to result from exposure to infected poultry or contaminated environments. The new H7N9 virus has not been detected in people or birds in the United States.

CDC is following the H5N1 and H7N9 situations closely and coordinating with domestic and international partners. The U.S. Government has provided funding to support international surveillance for avian influenza viruses with pandemic potential. CDC takes routine preparedness actions whenever a new virus with pandemic potential is identified, including developing a candidate vaccine virus (CVV). That CVV has been used to produce limited amounts of an H7N9 vaccine currently undergoing clinical trials to assess its suitability for use in the event this virus were to emerge as pandemic. H5N1 vaccine components are available in the SNS stockpile.

SPOTLIGHT

In November 2013, CDC launched a Twitter campaign to encourage discussion of flu vaccination efforts occurring across the United States. The #VaxWithMe campaign, which reached 284,000 people in early November, resulted in an increase in social media conversations around the issue of flu vaccination and provided a platform for different organizations to share the great work they do to increase vaccine uptake. To share your organization's flu prevention activity or to learn more about this effort SIGN UP and stay current with CDC Flu!



Organizations may also submit success stories on flu vaccine events to fluinbox@cdc.gov. Stories will be featured on the CDC flu prevention partner website and highlighted on the @CDCFlu Twitter handle.

More info is available at: http://www.cdc.gov/flu/partners/success_stories.htm#success

ACCESS TO FREE RESOURCES

CDC provides a variety of free materials for all audiences, including print, audio/video, social media tools, and web tools. CDC has recently added new flu promotional materials for grassroots outreach to health-disparate populations. Order these resources and more at the [free resources web page](#)

the **benefits** of **flu vaccination**

The estimated number of influenza-associated illnesses prevented by flu vaccination during the 2012-2013 season:

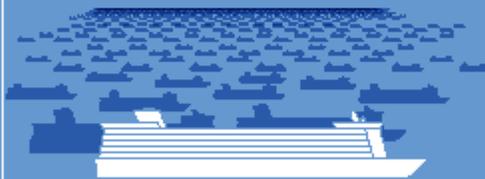
6.6 million



or the population of the state of **Arizona**

The estimated number of flu-associated medical visits prevented by vaccination during the 2012-2013 season:

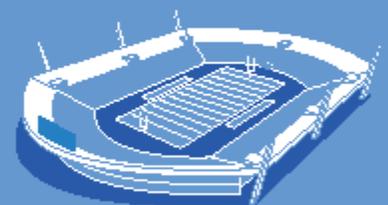
3.2 million



or the passengers of **1,067** mega cruise ships

The estimated number of flu hospitalizations prevented during the 2012-2013 season:

79,000



or all the fans in a **FULL** NFL stadium

get **vaccinated**