CDC Influenza E-brief



Influenza (the flu) is a contagious respiratory illness caused by influenza viruses. It can cause mild to severe illness, and at times can lead to death. Some people, such as older people, young children, and people with certain health conditions, are at greater risk for serious complications if they get the flu. The best way to prevent the flu is by getting vaccinated each year.

In 2009-2010, a new and different flu virus (called 2009 H1N1) spread worldwide. During the 2010-2011 flu season, CDC expects the 2009 H1N1 virus to cause illness again along with other influenza viruses. Outbreaks of the seasonal flu usually occur during the late fall through early spring. In a typical year, approximately 5 to 20 percent of the population gets the seasonal flu. CDC recommends a three step approach to fighting flu: Vaccination, everyday good hygiene, and the correct use of antiviral drugs if recommended by a patient's doctor.

For more information about the flu, click on www.cdc.gov/flu

Key Facts about Seasonal Flu Vaccine

The 2010-2011 flu vaccine is designed to protect against an influenza A H3N2 virus, an influenza B virus and the 2009 H1N1 virus that caused so much illness last season The same virus strain that was included in last year's monovalent 2009 H1N1 flu vaccine is included in this year's seasonal vaccine; a separate 2009 H1N1 monovalent vaccination is no longer needed this flu season.

The first and most important step in protecting against the flu is to get a flu vaccine each year. In February, 2010, CDC's Advisory Committee on Immunization Practices (ACIP) voted to expand vaccination recommendations to include all people six months of age and older, beginning with this 2010-11 influenza season. Because children younger than 6 months are at high risk of serious flu illness but are too young to be vaccinated, it is important that people who care for them are vaccinated.

The effectiveness of flu vaccines can vary and depends in part on the match between the viruses in the vaccine and the flu viruses that are circulating in the community, as well as the age and health of the person being vaccinated. Over 100 million Americans receive flu vaccines each year; the vaccine has a strong safety record. Every year, CDC works closely with FDA, health care providers, state and local health departments, and other partners to ensure the highest safety standards for flu vaccines. CDC also works closely with FDA to ensure systems are in place to promptly detect unexpected health problems following vaccination.

How to Locate Seasonal Flu Vaccine

Flu.gov recently posted Google's Flu Vaccine Finder on its home page to help the public find locations for influenza vaccination. The vaccine finder is based on the popular Google Maps feature. Google worked with the American Lung Association, CDC, and the Department of Health and Human Services.

To locate providers with a supply of influenza vaccine, by zip code (or city and state), go to: http://www.flu.gov/individualfamily/vaccination/locator.html

For more information about distribution of this year's seasonal flu vaccine supply, go to: http://www.cdc.gov/flu/professionals/vaccination/vaccinesupply.htm

Facilitating Influenza Vaccine Development

The flu viruses selected for inclusion in the seasonal flu vaccines are updated yearly based on which influenza virus strains are identified and where they are circulating. Currently, 130 national influenza centers in 101 countries conduct year-round surveillance for influenza and study influenza disease trends. These laboratories then send influenza viruses to CDC and to the other three World Health Organization (WHO) Collaborating Centers for Reference and Research on Influenza for additional analyses. CDC provides comprehensive virus characterization and epidemiological information to the WHO vaccine strain selection and also provides numerous vaccine candidate viruses on a regular basis.

CDC is actively engaged with other federal agencies in developing ways to make influenza vaccines more rapidly, specifically by developing better growing influenza virus vaccine candidates, increasing the number of high-growth reassortants with pandemic potential, and developing improved methods for testing the potency of vaccines produced by commercial manufacturers.

Payment for the Seasonal Flu Vaccine

For the 2010-11 influenza season, the majority of flu vaccine will be purchased and distributed through the private sector. CDC will continue to encourage influenza vaccine manufacturers and distributors to use a distribution strategy that provides vaccine to all provider types in a comparable timeframe. Last year, during the pandemic, the federal government had authority and control over the purchase, distribution and management of the 2009 H1N1 vaccine and ancillary supplies. This change occurred because the United States government officially declared the pandemic a public health emergency. However, these same authorities and control over vaccine and ancillary supplies do not apply to the annual influenza season.

Surveillance

In the U.S., CDC epidemiologists work with state and local health officials to collect, compile and analyze surveillance data year-round and produce a weekly report on U.S. influenza activity called FluView A description of surveillance methods is available at: http://www.cdc.gov/flu/weekly/overview.htm CDC is improving surveillance of influenza by evaluating the use of electronic health data sources and by enhancing the display of data. The most current flu activity and surveillance information can be found at http://www.cdc.gov/flu/weekly/

http://gis.cdc.gov/grasp/fluview/main.html

Use of Respirators and Surgical Masks

In community and home settings, the use of facemasks and respirators generally are not recommended. However, in the occupational health care setting, respiratory protection is recommended but the type of protection varies. For example, face masks should be provided to patients with signs and symptoms of respiratory infection when the patients enter or visit a health care setting. Health care personnel should put on a facemask when entering the room of a patient with suspected or confirmed influenza. They should remove the facemask when leaving the patient's room, dispose of the facemask in a waste container, and perform hand hygiene. If the health care personnel are performing an aerosol-generating procedure, then they should wear respiratory protection equivalent to a fitted N95 filtering facepiece respirator or equivalent N95 respirator. For more information: http://www.cdc.gov/features/masksrespirators/ or http://www.cdc.gov/features/masks.htm

Research in the Influenza Field

CDC carries out and supports Influenza research in an effort to reduce the health burden flu places on society and to promote improvements in human health. CDC supports collaborative research projects with the World Health Organization (WHO), state, local, and federal government partners, academic institutions, and other international partners.

CDC is working to identify and resolve knowledge gaps about influenza and to develop evidence-based prevention and control strategies. For more information about CDC's influenza research agenda and activities, please contact the CDC Washington office at 202-245-0600.

Antivirals and Antiviral Resistance

CDC monitors circulating influenza strains for antiviral resistance year-round to determine whether certain antivirals continue to be effective prevention and treatment measures, especially for high risk persons. Antiviral resistance can develop very quickly, and when resistance develops, CDC will promptly update public health recommendations. There are two antiviral drugs currently recommended by CDC for the 2010-2011 influenza season: oseltamivir (Tamiflu) and zanamivir (Relenza). When used for treatment, these drugs can shorten the time a person is sick by 1 or 2 days and can also prevent serious flu complications. For more information: http://www.cdc.gov/flu/protect/antiviral/keyfacts.htm





Global Activities

CDC's Influenza Division's international program focuses on increasing global preparedness for pandemic and novel influenza emergence, and on reducing global seasonal influenza morbidity and mortality. A core strategy to achieve these goals is to foster greater use of influenza vaccines worldwide. Towards this objective, CDC has developed a global program to help countries and regions develop estimates of disease burden and need for influenza prevention through leveraging new surveillance and laboratory capacity. Substantial improvements in country capacity were evident between 2008 and 2009-10. In addition, CDC provides technical advice to global partners to increase vaccine development by emerging suppliers.

CDC helps coordinate the development of enhanced capacities for diagnostic testing, antiviral drug resistance surveillance and genetic analysis with other countries' national influenza centers. During the last year, CDC supported and assessed global capacity efforts through the development and implementation of a laboratory capacity review in 34 countries in collaboration with Association of Public Health Laboratories (APHL), launched a surveillance assessment protocol, and conducted a second round of monitoring and evaluation assessments in 36 countries. For more information: http://www.cdc.gov/flu/international/activity.htm

The 2009-2010 H1N1 Pandemic

The 2009 H1N1 virus that emerged last year caused the first pandemic in more than 40 years and resulted in substantial illness, hospitalizations and deaths. CDC estimates that the 2009 H1N1 pandemic resulted in more than 12,000 flu-related deaths in the U.S. In contrast to seasonal flu, nearly 90 percent of the deaths occurred among people younger than 65 years of age. Furthermore, CDC estimates that from April 2009 through April 10, 2010, about 61 million people were sickened with 2009 H1N1 flu, and approximately 274,000 2009 H1N1-related hospitalizations occurred (for detailed estimates visit http://www.cdc.gov/h1n1flu/estimates_2009_h1n1.htm)

Years of pandemic influenza preparedness, funded in large part through major investments allocated by Congress allowed CDC and other parts of the federal government--in coordination with state and local partners, international organizations, and private agencies—to provide an effective response to the 2009 H1N1 pandemic. CDC learned a tremendous amount during the pandemic. We are now working to apply this new knowledge to other public health efforts, including several key areas where gaps were identified and improvements are needed. The recent 2009 H1N1 pandemic does not lessen the likelihood of future pandemics, which can occur at any time. CDC stresses the importance of remaining vigilant for the next pandemic and continues to prepare. For example, in the past several months CDC has led two tabletop pandemic preparedness exercises with other U.S. Government agency partners, and is planning a three-day functional pandemic exercise in the spring. (http://www.cdc.gov/h1n1flu/cdcresponse.htm)

Other Sites for Information on the 2010-2011 Flu Season:

HHS "Know What to Do About the Flu" Webcasts: http://www.flu.gov/live

http://www.cdc.gov/about/grand-rounds/archives/2010/09-September.htm

http://www.flu.gov/video/webcasts/2010_look_ahead.html

http://www.cdc.gov/flu/

Remind your friends and relatives to get vaccinated by sending an 'e-card' from the CDC website

MacIntyre CR, et al. EID 2009;15:233-41. 2. Cowling BJ, et al. Non-pharmaceutical interventions to prevent household transmission of influenza. The 8th Asia Pacific Congress of Medical Virology, Hong Kong, 26-28 February 2009.