

# 2010-2011 Flu Season FAQ's

## **What sort of flu season is expected this year?**

Flu seasons are unpredictable in a number of ways. Although epidemics of flu happen every year, the timing, severity, and length of the epidemic depends on many factors, including what influenza viruses are spreading and whether they match the viruses in the vaccine. Last flu season (2009-2010) saw the emergence of the 2009 H1N1 influenza virus (previously called "novel H1N1" or "swine flu"). This virus caused the first influenza pandemic (global outbreak of disease caused by a new flu virus) in more than 40 years. While not certain, it is likely that 2009 H1N1 viruses will continue to spread along with seasonal viruses in the U.S. during the 2010-2011 flu season.

## **Will new strains of flu circulate this season?**

Flu viruses are constantly changing so it's not unusual for new flu virus strains to appear each year. For more information about how flu viruses change, visit "How the Flu Virus Can Change." While not certain, it is likely that 2009 H1N1 viruses and seasonal viruses will cause illness in the U.S. during the 2010-2011 flu season.

## **When will flu activity begin and when will it peak?**

The timing of flu is very unpredictable and can vary from season to season. Flu activity most commonly peaks in the U.S. in January or February. However, seasonal flu activity can occur as late as May.

## **What should I do to prepare for this flu season?**

CDC recommends a yearly flu vaccine for everyone as the first and most important step in protecting against this serious disease. While there are many different flu viruses, the flu vaccine is designed to protect against the three main flu strains that research indicates will cause the most illness during the flu season. The 2010-2011 flu vaccine will protect against three different flu viruses: an H3N2 virus, an influenza B virus and the H1N1 virus that caused so much illness last season. Getting the flu vaccine soon after it becomes available each year is always a good idea, and the protection you get from vaccination will last throughout the flu season.

## **How effective is the flu vaccine?**

The effectiveness of the vaccine can vary and depends in part on the match between the viruses in the vaccine and flu viruses that are circulating in the community. If these are closely matched, vaccine effectiveness (VE) is higher. If they are not closely matched, VE can be reduced. During well-matched years, clinical trials have shown VE between 70% and 90% among healthy adults. For more information about vaccine effectiveness, visit "How Well Does the Seasonal Flu Vaccine Work?"

## **Will this season's vaccine be a good match for circulating viruses?**

It's not possible to predict with certainty which flu viruses will predominate during a given season. Flu viruses are constantly changing (called drift) – they can change from one season to the next or they can even change within the course of one flu season. Experts must pick which viruses to include in the vaccine many months in advance in order for vaccine to be produced and delivered on time. (For more information about the vaccine virus selection process visit "Selecting the Viruses in the Influenza (Flu) Vaccine.") Because of these factors, there is always the possibility of a less than optimal match between circulating viruses and the viruses in the vaccine.

## **How do we know if there is a good match between the vaccine viruses and those causing illness?**

Over the course of a flu season CDC studies samples of flu viruses circulating during that season to evaluate how close a match there is between viruses in the vaccine and circulating viruses. In addition, CDC conducts vaccine effectiveness studies to determine how well the vaccine protects against illness. However, it's important to remember that even during seasons when the vaccine is not optimally matched to predominant circulating viruses, CDC and other experts continue to recommend flu vaccine as the best way to protect against the flu.

## **Can the vaccine provide protection even if the vaccine is not a "good" match?**

Yes, antibodies made in response to vaccination with one strain of flu viruses can provide protection against different, but related strains. A less than ideal match may result in reduced vaccine effectiveness against the variant viruses, but it can still provide some protection against influenza illness. In addition, it's important to remember that the flu vaccine contains three virus strains so that even when there is a less than ideal match or lower effectiveness against one strain, the vaccine may protect against the other two viruses. For these reasons, even during seasons when there is a less than ideal match, CDC continues to recommend flu vaccination. This is particularly important for people at high risk for serious flu complications, and their close contacts.



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## **In what years was there a good match between the vaccine and the circulating viruses?**

In recent years the match between the vaccine viruses and those identified during the flu season has usually been good. In 16 of the last 20 U.S. influenza seasons the viruses in the influenza vaccine have been well matched to the predominant circulating viruses. Since 1990, there has only been one season (1997-98) when there was very low cross-reaction between the viruses in the vaccine and the predominant circulating virus, and three seasons (1992-93, 2003-04, and 2007-08) when there was low cross-reaction. In response to the emergence of the 2009 H1N1 virus last season (2009-2010), a new flu vaccine was developed which was a good match to the new virus.

## **What is CDC doing to monitor vaccine effectiveness for the 2010-2011 season?**

CDC carries out and collaborates with other partners within and outside CDC to assess the effectiveness of flu vaccines. During the 2010-2011 season, CDC is planning multiple studies on the effectiveness of influenza vaccine. These studies will measure vaccine effectiveness in preventing laboratory confirmed influenza in older people and in children.

## **What actions can I take to protect myself and my family against the flu this season?**

CDC recommends a yearly flu vaccine as the first and most important step in protecting against this serious disease. While there are many different flu viruses, the flu vaccine protects against the three main flu strains that research indicates will cause the most illness during the flu season. For information about vaccine supply this season, please visit <http://www.cdc.gov/flu/about/qa/vaxsupply.htm>. In addition, you can take everyday preventive steps like staying away from sick people and washing your hands to reduce the spread of germs. If you are sick with flu, stay home from work or school to prevent spreading influenza to others.

## **Is there treatment for the flu?**

Yes. If you get sick, there are drugs that can treat flu illness. They are called antiviral drugs and they can make your illness milder and make you feel better faster. For more information about antiviral drugs, visit <http://www.cdc.gov/flu/antivirals/index.htm>.

## **What is antiviral resistance?**

Antiviral resistance means that a virus has changed in such a way that the antiviral drug is less effective in treating or preventing illness. Samples of viruses collected from around the United States and worldwide are studied to determine if they are resistant to any of the four FDA-approved influenza antiviral drugs.

## **What is CDC doing to monitor antiviral resistance in the United States during the 2010-11 season?**

CDC routinely collects viruses through a domestic and global surveillance system to monitor for changes in influenza viruses. CDC will continue ongoing surveillance and testing of influenza viruses. Additionally, CDC is working with the state public health departments and the World Health Organization to collect additional information on antiviral resistance in the United States and worldwide. The information collected will assist in making informed public health policy recommendations

*Source: CDC*



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