



Influenza Activity Spotlight

2012–2013 Season

Issue #17 — March 11, 2013

Reminder: Summit calls are scheduled weekly every Thursday at 3 p.m. ET, unless cancelled. The call scheduled for March 14 is cancelled. The next Summit call is scheduled for March 21, 2013. **Please email [L.J Tan](#) or [LaDora Woods](#) if you have any updates on activities to provide to the Summit.**

SAVE THE DATE! The National Influenza Vaccine Summit (NIVS) will be meeting in conjunction with the National Adult Immunization Summit on May 14–16, 2013 in Atlanta, Georgia. For details and information on how to register for the meeting, contact [LaDora Woods](#) or [L.J Tan](#). More details and a draft agenda will be provided as soon as available.

NOTICE – 2013 Immunization Excellence Awards! The National Influenza Vaccine Summit is accepting [nominations](#) for its *2013 Immunization Excellence Awards* through **March 25, 2013**. The 2013 awards recognize individuals and organizations that have made extraordinary contributions towards improved adult, and/or childhood influenza vaccination rates within their communities during the 2012–2013 influenza season. This year NIVS added an award recognizing immunization activities focused on the adult population, beyond influenza.

A national winner and honorable mention recipient will be selected for each award category. The winners will be presented with their awards and invited to present their programs at the National Adult and Influenza Immunization Summit to be held May 14–16, in Atlanta. The five categories of recognition are:

- **Overall Season Activities**
- **Healthcare Personnel Campaign**
- **Immunization Coalitions/Public Health/Community Campaign**
- **Corporate Campaign**
- **Overall Adult Immunization Activities - Beyond Flu**

1. Summary of the March 7th, 2013 National Influenza Vaccine Summit Call

Influenza Surveillance Update – Scott Epperson (CDC)

Scott reported that influenza levels are declining throughout the country. Although the number of positive specimens has declined, the proportion of these that are type B continues to increase. Six (6) new pediatric deaths have been reported, bringing this season's total to 87. At least 64% of these children had at least one ACIP-recognized medical condition for high risk complications. Of those children who were eligible for vaccination and whose status was known, 14% were immunized. There have been 10,721 influenza-related hospitalizations reported this season, the majority of which were in persons ≥ 65 years of age.

The WHO and FDA's VRBPAC have recommended the vaccine viruses for the 2013–2014 influenza vaccine in the United States. Both agencies recommend that trivalent vaccines contain an A/California/7/2009-like (2009 H1N1) virus, an A(H3N2) virus antigenically like the cell-propagated, or cell-grown, virus A/Victoria/361/2011 (A/Texas/50/2012), and a B/Massachusetts/2/2012-like (B/Yamagata lineage) virus. It is recommended that quadrivalent vaccines containing an additional

influenza B virus contain a B/Brisbane/60/2008-like (B/Victoria lineage) virus in addition to the viruses recommended for the trivalent vaccines.

Influenza Vaccine Effectiveness and Prevention of Hospitalizations – Marie Griffin (Vanderbilt)

Dr. Griffin provided a [review](#) of two papers (in [Clinical Infectious Diseases](#) and the [Journal of Infectious Diseases](#)) examining influenza vaccine effectiveness (VE) against hospitalization. While recently released information on VE looked at outpatient illness, this study involved the more severe outcomes resulting in hospitalization. Dr. Griffin reminded persons on the call that the original intent behind the development of influenza vaccine was to prevent these more severe complications and deaths.

Limited data on VE in seniors (age 65+) has been available in previous years. Only five randomized clinical trials have been conducted, and none of these used hospitalization outcomes. Other attempts at observational studies often have used respiratory illness as an outcome, rather than influenza specifically. Questions about the validity of these studies also have been raised based on potential differences in vaccinated and unvaccinated patients, such as frailty and functional status.

The recent research being reported by Dr. Griffin was gathered from 4 hospitals in the Nashville area. The project used a hospital-based case control study design, with RT-PCR+ patients being cases and RT-PCR- patients as controls. This design allowed controls to be similar to cases in disease severity and propensity to seek/need this level of care.

Patients were enrolled only during the influenza season when they met certain criteria, including being admitted for acute respiratory illness. After obtaining informed consent, researchers interviewed the patient and obtained a nasal swab. Vaccination status was self-reported, though attempts were made to verify this status by contacting the provider named by the patient. Persons were eliminated from the study if the vaccination had occurred less than 14 days prior to hospitalization. Information was obtained on the patient's age, gender, race, high risk medical conditions, current smoking, and timing of admission.

Two separate publications have been developed from this information. A report in JID in 2011 combined information from 3 influenza seasons (2006–2009) for adults age 50+, while a brief report in CID in 2013 used information from the 2011-2012 season for persons over age 18. Because of the variability in influenza severity over these seasons, varying numbers of persons were included in the study. In all years, 100–400 persons were eligible, and an average of 48% were enrolled.

The demographic characteristics of persons in the 3-year study were similar, with small differences noted between vaccinated and unvaccinated persons. However, vaccinated persons tended to have more lung and heart disease, and they were more likely to be immunosuppressed. Data from the 2012 study was similar, with no statistically significant differences in persons who were positive or negative.

A variety of tools were used to analyze the data collected over the years and determine VE. Ultimately, study coordinators determined that influenza caused 6–20% of acute respiratory hospitalizations in adults age 50+ during 4 influenza seasons in the context of a relatively highly vaccinated population. It was determined that vaccine could prevent 60–70% of these hospitalizations.

Summit partners asked questions about comparing this inpatient data with the previously released outpatient data, and Carolyn Bridges agreed to compile a table of this information. Partners also expressed frustration about the best methods for communicating this nuanced information to the public. The challenge for the Summit will be to do a better job of balancing the need to get data out quickly and in a transparent manner with the need to present the full picture in a non-confusing way.

- 2. The CDC/Influenza Division Weekly Influenza Surveillance Report** ending week 9, 2013 (ending March 7, 2013) is available [here](#). Of 6,259 specimens tested and reported by the U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories in week 9, 1,074 (17.2%) were positive for influenza. The proportion of

outpatient visits for influenza-like illness (ILI) was 2.3%; still above the national baseline of 2.2%. Seven of 10 regions reported ILI at or above region-specific baseline levels. Four (4) states experienced moderate activity, 13 states and New York City experienced low activity, 33 states experienced minimal activity, and the District of Columbia had insufficient data. This site also includes maps of ILINet State Activity Levels and the [geographic spread](#) of influenza illness as reported by state and territorial epidemiologists. This map indicates geographic spread of influenza viruses but does not measure the intensity of influenza activity. CDC's Seasonal Influenza Key Points for [March 8, 2013](#) and for [March 1, 2013](#) have been released. Archives of previous *FluViews* may be found [here](#).

3. Information from CDC

Data from a new study released online in the journal *Clinical Infectious Diseases* (see Griffin presentation under item #1 above) shows that influenza vaccination during the 2011–2012 season offered significant protection against hospitalization for older adults. The study also was the topic of a CDC Flu Spotlight, "[Study Shows Flu Vaccination Prevents Hospitalizations in Older Adults.](#)" The article also was discussed during the March 7 Summit conference call, as shown above. A recently distributed Summit eUpdate Supplement also included [CDC Key Points](#) regarding narcolepsy following receipt of Pandemrix influenza vaccine in Europe.

4. Update from the College Health Surveillance Network (CHSN)

The CHSN monitors the incidence of ILI among students seen at student health services, both as an absolute number and as a percent of total primary care visits. The CHSN includes 21 schools representing 671,000 students. Currently 15/21 schools participating in the network submit de-identified ILI data into a central database each week.

Weekly data (the most recent is from March 2) is available [here](#). A presentation of the influenza and pertussis data through February 23 is available [here](#). Dr. Turner noted that the influenza outbreak appears to be almost over, unless there is a resurgence post spring break.

5. FDA Announces New Strains for the 2013–2014 Influenza Vaccine

After a [meeting](#) held February 27, the Vaccines and Related Biological Products Advisory Committee (VRBPAC) to the US Food and Drug Administration (FDA) recommended that trivalent vaccines for the 2013–2014 season retain current vaccine strain A/California/7/2009pdm09-like (2009 H1N1) virus. The committee also recommended replacing current vaccine strain A/Victoria/361/2011 (H3N2)-like virus with an A(H3N2) virus antigenically similar to the cell-propagated prototype virus A/Victoria/361/2011 (A/Texas/50/2012) and replacing current vaccine strain B/Wisconsin/1/2010-like virus with a B/Massachusetts/2/2012-like (B/Yamagata lineage) virus.

The committee also recommended that quadrivalent vaccines, which are expected to be available for the upcoming season, contain a B/Brisbane/60/2008-like (B/Victoria lineage) virus in addition to the viruses recommended for the trivalent vaccines.

6. NIH Study Sheds Light on Role of Climate in Influenza Transmission

Two types of environmental conditions — cold-dry and humid-rainy — are associated with seasonal influenza epidemics, according to an epidemiological study led by researchers at the National Institutes of Health's Fogarty International Center. The [paper](#) published in PLoS Pathogens, presents a simple climate-based model that maps influenza activity globally and accounts for the diverse range of seasonal patterns observed across temperate, subtropical and tropical regions. NIH also has published a [press release](#) describing the study.

7. Article in New England Journal of Medicine on Developing New Vaccines

This NEJM [article](#) discusses both the need for new vaccine development and the associated challenges with such an effort.

8. Recent Media Coverage on Influenza

[New Wave Shows Flu Season Not Over Yet](#) (6abc.com)

"It sounds like it could have been - the way I usually describe flu is it is a total body illness," says Dr. Wiener. But I was fortunate, that the fever and body aches only lasted three days. I did get the flu shot this year. So even if I still got the ...

[Flu Still Hanging Around Erie County](#) (GoErie.com)

Flu patients are still seeing their doctor and going to the emergency room, though not as often as during the peak of flu season in January. See Tuesday's Erie Times-News and GoErie.com for more coverage...

[Flu Season on the Decline in Southwest Georgia](#) (WFXL FOX 31)

Jackie Jenkins, the epidemiologist for public health, says although there are a small number of cases throughout the area, for the most part the most active part of flu season is over. Jenkins states that numbers are down across the nation for flu...

[Tracking Flu Outbreaks Nationwide](#) (Washington Post)

You may be seeing less sniffing and sneezing in your neighborhood these days, but flu season is never really over for Lynnette Brammer, who has been described as the "architect of influenza surveillance in the United States." Each week, Brammer...

[Dos and Don'ts of a Flu Vaccine Policy](#) (Law 360 – subscription)

As health experts describe this flu season as one reaching epidemic proportions, many employers are questioning the legality of requiring their employees to receive a flu vaccine shot when they...

[Narcolepsy Link Raises Doubts about Next-Gen Adjuvants](#) (Fierce Vaccines)

The FDA is facing calls to reform an advisory panel to review a GlaxoSmithKline (GSK) vaccine in light of data linking an adjuvant to narcolepsy. And the outcome could have implications for other next-generation adjuvants pharma hopes will supercharge...

[Influenza Drug: An Interview with Dr. Jenny McKimm-Breschkin, CSIRO](#) (News-Medical.net)

Influenza or flu for short is caused by a family of viruses, which can be called influenza A or influenza B. Influenza A viruses are found in humans, animals – like swine and horses- and mostly aquatic birds. Influenza B is only found in humans.

[Non-Inferiority Observed in Phase III Clinical Trial of Seasonal Flu Vaccine](#) (PharmiWeb.com)

The recombinant seasonal influenza HA vaccine ASP7374 containing three different strains of antigens has been produced by a cell-culture manufacturing method employing the Baculovirus Expression Vector System, a next-generation technology platform...

[Astellas Reports Positive Flu Vaccine Trial Data](#) (Zenopa)

Summary results from the study showed that the new drug delivered a non-inferior performance to an approved egg-derived trivalent inactivated vaccine, thus meeting the primary efficacy endpoint of the trial, while no major safety issues were observed.

[**SFU and UBC Researchers Test New Anti-Influenza Drug**](#) (Canadian University Press Newswire)
SFU virologist Masahiro Niikura and PhD student Nicole Bance have collaborated with researchers from Australia, the United Kingdom and UBC to test the flu-controlling capacity of a new anti-influenza drug.

[**Universal Flu Vaccine May Be Closer: Study**](#) (Ninemsn)

A universal flu vaccine may be closer than ever, with Melbourne researchers saying they've found a way to predict and protect against new strains of the virus. Spectacular moments...

[**Universal Flu Vaccine Comes Closer to Reality**](#) (Zee News)

Researchers from Melbourne have claimed that they have found a new way to protect people against new strains of the flu virus.

[**Flu Season Update – It Ain't Over Yet**](#) (About – News & Issues)

In other flu news, the World Health Organization and the FDA have made recommendations for the composition of next year's flu vaccines. The trivalent flu vaccine will contain an A/California/7/2009-like (2009 H1N1) virus, an A/Victoria/361/2011...

[**Flu Infections Continue to Decline**](#) (Medical Xpress)

The predominant strain of circulating flu this season continues to be influenza A H3N2, which typically poses bigger problems for young children and the elderly, according to the CDC. But predominant strains can vary across states and regions of the...

[**CDC Report: Flu Vaccine Not as Effective**](#) (KVOA Tucson News)

Aaron Pacheco, a program coordinator at the Pima County Health Department, said he recognizes how the report can raise concern, "well, we know that the flu vaccine isn't going to stop all flu and that's it's not perfect, not 100 percent but it's still ...

[**Masks Dramatically Reduce Spread of Flu, Study Finds**](#) (WTOP)

"Our study provides new evidence that there is nearly nine times more influenza virus present in the smallest airborne droplets in the breath exhaled from those infected with **flu** than in the larger droplets that would be expected to carry more virus...

[**The Role of Climate in Influenza Transmission**](#) (Kansas City infoZine)

The paper, published in PLoS Pathogens, presents a simple climate-based model that maps influenza activity globally and accounts for the diverse range of seasonal patterns observed across temperate, subtropical and...

[**How Flu Spreads More Easily Than We Thought**](#) (The Inquisitr)

As if the flu isn't miserable enough, a new study from the University of Maryland School of Public Health has discovered that the virus spreads much more easily through the air in smaller droplets than science had previously proven. It turns out that...

[**Swine Flu Jab Narcolepsy Risk Very Small**](#) (Littlehampton Gazette)

Children are not routinely vaccinated against flu, although vaccination was extended to children during the swine flu pandemic. Being vaccinated against flu is very important for over-65s and others at high risk of developing complications from the...

[**New Study Finds Flu Is Mostly Spread by Airborne Droplets of the Virus**](#) (CBS Local)

As doctors across the nation reported epidemic level flu cases back in December and January, a new study released on Thursday found that many people are more likely to get the illness through tiny, airborne droplets of the virus. But how is it that the...

[**Myths About the Flu Vaccine**](#) (New York Times – blog)

Although annual flu vaccination is now recommended for nearly everyone over the age of 6 months, for one reason or another only a minority of Americans — and fewer than half of those most at risk of serious complications and death from the flu — take...

[**Could Fatty Acids Be the Answer to the Flu?**](#) (Ivanhoe)

We have identified a novel therapeutic target for the treatment of severe influenza that is effective under conditions where known antiviral drugs fail to protect from death," senior study author Yumiko Imai of Akita University, was quoted as saying...

[**Four More Minnesota Deaths Linked to Flu Outbreak**](#) (Minneapolis Star Tribune)

As the flu season continues to fade, an additional 36 people were hospitalized last week, down from a high of more than 600 a week in January. As of March 2, more than 2,900 Minnesotans had been hospitalized with complications of the flu since October...

[**22 Died from Bird Flu in Georgia This Year**](#) (APA)

3 more persons died from bird flu in Georgia and death toll reached 22 this year, APA reports quoting Novosti Gruzia. According to Georgia's National Center for Disease Control and Public Health, 262 cases of A/H1N1 virus and 22 cases of B/H1N1 were...

[**2nd Flu Death Confirmed in Northern KY**](#) (WHAS11.com – subscription)

A Campbell County man died in January from flu complications. The agency said the number of flu cases increased so much this season that a new record was set with a total of 2,712 cases reported by March 2. Last year, only 284 people in Boone, Campbell...

[**Influenza Cases Hit Record Level**](#) (YourErie)

...saw a spike of 53 reported cases. The first spike occurred early in the season around December, with type A influenza, which is more severe. Now, we're dealing with the second spike of influenza B, which isn't as powerful, but still should be taken...

[**Flu Epidemic Is Over in Maryland**](#) (WBAL Radio)

One pediatric death was reported in the state. The state does not track adult deaths possibly connected with the flu. There were over 3,000 positive tests out of 5,000 possible flu cases for the season, Najera said. There were about 2,000...

[**New Clues to How Flu Virus Spreads**](#) (Science Daily)

People may more likely be exposed to the flu through airborne virus than previously thought, according to new research from the University of Maryland School of Public Health. The study also found that when flu patients wear a surgical...

[**UMD Study Provides New Clues to How Flu Virus Spreads**](#) (Science Codex)

"Our study provides new evidence that there is nearly nine times more influenza virus present the smallest airborne droplets in the breath exhaled from those infected with flu than in the larger droplets that would be expected to carry more virus..."

[**CDC Sponsors New Study on Links Between Pandemic Flu Vaccine & Narcolepsy**](#)

(Examiner.com)

Yahoo News, in an article by Reuters, is reporting this evening on data that links GlaxoSmithKline's Pandemrix, a pandemic flu vaccine, to an increase in the cases of narcolepsy in European children. A similar vaccine is awaiting approval in the United...

[**Narcolepsy Link to Glaxo Vaccine Poses Challenge for FDA**](#) (Reuters)

Growing evidence of a link between GlaxoSmithKline Plc's pandemic flu vaccine and an increase in narcolepsy cases among children who received it in Europe, is giving pause to health regulators weighing approval of a similar vaccine in the...

[Study Shows Fatty Acids Could Lead to Flu Drug](#) (Xinhua)

A compound derived from fats found in fish oils prevents death in influenza-virus-infected mice, even at advanced stages of disease, according to a study published Thursday in the journal Cell. Flu viruses are a major...

[Nosocomial Outbreak of the Pandemic Influenza A \(H1N1\) 2009 in Critical Hematologic Patients During Seasonal Influenza 2010–2010](#) (7thSpace Interactive)

The pandemic influenza A (H1N1) 2009 (H1N1pdm09) virus infection caused illness and death among people worldwide, particularly in hematologic/oncologic patients because influenza infected individuals can shed virus for prolonged periods, thus...

9. Don't Forget to Update and Submit to the New Adult Vaccine Locator!

The new Adult Vaccine Finder is now available! Please forward the following information to immunization providers with whom you work!

Attention Immunization Providers: If interested in letting the public know about vaccines offered at your practice or clinic, go to <http://vaccine.healthmap.org>. This site already includes more than 54,000 locations that provide flu shots and has provided this information to 500,000 users from the general public. On January 28, 2013, the site expanded to include 10 additional adult vaccines. If you want to register your location on this website, click on the "about" button on the top right hand side and follow the prompts to register, or go to <https://flushot.healthmap.org/admin/signup>.

10. 2012–2013 Influenza Vaccine Information Statements Are Now Available

The [influenza vaccine information statements](#) have recently been updated. Both the TIV and LAIV VISs, as well as the TIV Large Print edition, have been updated, and RTF files also are available. All are dated 7/2/2012. These editions have been converted to the updated VIS format, but the text in both VISs is identical to that in last year's influenza VISs. Note that there will be minor updates in the ACIP influenza recommendations, but these do not affect the VIS language.

11. Summit Website Offers Wonderful Resources on Influenza Vaccination

Remember to visit the Summit [website](#) for the latest on influenza immunization resources and to view archived copies of the weekly updates.