



# National Adult and Influenza Immunization Summit

## ***Adult & Influenza Immunization Update***

**2013–2014 Influenza Season**

**Issue #14 — December 2, 2013**

**Reminder:** Summit calls are scheduled every Thursday at 3:00 p.m. ET, unless cancelled. The next call is scheduled for December 5, 2013. Thank you for your continued participation. Please email [L.J Tan](#) or [LaDora Woods](#) if you have any updates on activities to provide to the Summit.

### **HEADLINES**

#### **1. Summary of Summit Call - November 21, 2013.**

##### **Announcements**

Carolyn Bridges announced the revised NVAC Standards for Adult Immunization Practice are now available [online](#).

L.J Tan reported that, due to an unexpected scheduling conflict, today's scheduled presentation by Dr. Arnold Monto on Cochrane Re-arranged has been postponed until the December 5, 2013 call. In addition to Dr. Mont, Dr. Janet McElhaney will be on the call to discuss the work.

##### **Epidemiology Update – Scott Epperson**

Influenza activity remains low but is increasing slightly across the nation.

So far, the 2009 H1N1 strain is predominant, with lower levels of H3N2 and type B. The Southeast Region is seeing more activity than the rest of the country at this time. To date, about 88% of typed strains have been type A, and 81% of those are 2009 H1N1. As of November 14, 2 pediatric deaths have been reported for this season. These deaths occurred in middle and late October. One was type A, but was not further subtyped; the other child had type A (not sub-typed) and type B co-infection. Additional information concerning the pediatric deaths and their epidemiology will be provided on a future call, when we have a sufficient sample size to ensure no connection to the children is possible. No locations of these two deaths can be provided due to anonymity.

So far 47 viruses have been tested, which is a still small sample. Thirty-five strains were 2009 H1N1, all of which were similar to the vaccine virus. Of the 11 strains that were H3N2, all were from the vaccine strain. There was one type B strain of Yamagata lineage, and this was similar to the B strain in the IIV3 and IIV4 vaccines. As influenza activity picks up, there will be more specimens and we will have a better idea of the strain distribution.

There were 3 oseltamivir-resistant 2009 H1N1 strains, and 2.8% of overall influenza strains tested were oseltamivir-resistant. These patients were not connected, and sporadic cases of resistance continue to appear across the country. Influenza-like-illness (ILI) remains below the national baseline except for Region 6 (which includes TX, LA, OK NM) which is above the region specific baseline for week 45. This reflects what has been seen with the concentration of cases in the Southeastern US for ILI and influenza.

One call participant asked whether private distribution of influenza vaccine (particularly the formulations for young children) was slower than expected. According to the CDC, 122.6 million doses of vaccine have been distributed thus far, and there is no information regarding slow distribution.

There was a comment about a potential issue related to IIV4 for the upcoming 2014 influenza season. Due to the small quantity of doses produced and the greater demand due to publicity this season, IIV4 doses have been scarce. This is making wholesale vaccine harder to locate and causing increases in wholesale prices. There is concern that if there is an insufficient supply of IIV4 to meet demand next season, pricing will increase. In addition, adequate reimbursement will become an issue if ACIP does not list QIV as a preferentially recommended vaccine, since payers would simply reimburse at the price of IIV3. L.J. said that this was a topic worthy of discussion at the Summit and with partners such as AHIP.

### **Partner Updates**

The National Association of School Nurses (NASN) announced that they have launched a program to recognize school nursing initiatives. Nomination criteria may be found [here](#). All projects examining the impact of school nursing on the school community are acceptable. These can range from educational initiatives to actual immunizations being given to school students. NASN currently has 8 applicants. The winner will be recognized on May 1, 2014, which is School Nursing Day. Additional information on this project may be found in item #7 in the November 18 [Update](#).

## **2. CDC/Influenza Division Weekly Influenza Surveillance Report and CDC Key Points**

The CDC weekly influenza surveillance report for week 47 (ending November 23, 2013) is available [here](#), and region specific data may be found [here](#). During week 47, 5.8% of all deaths reported through the 122 Cities Mortality Reporting System were due to P&I. This percentage was below the epidemic threshold of 6.6% for week 47.

No influenza-associated pediatric deaths were reported to CDC during week 47. A total of two influenza-associated pediatric deaths for the 2013-2014 season have been reported.

Nationwide during week 47, 1.7% of patient visits reported through the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) were due to influenza-like illness (ILI). This percentage is below the national baseline of 2.0%. ILI is defined as fever (temperature of 100°F [37.8°C] or greater, and cough and/or sore throat. An Influenza Summary [Update](#) of the influenza activity reported by state and territorial epidemiologists indicates the geographic spread of influenza viruses but does not measure the intensity of influenza activity.

During week 47, two states (Mississippi and Texas) experienced high ILI activity, one state (Alabama) experienced moderate ILI activity (Alabama), and one state (Louisiana) experienced low ILI activity. Forty-five states (Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming) and New York City experienced minimal ILI activity. Data were insufficient to calculate an ILI activity level from the District of Columbia and one state (Montana).

Archives of previous *FluViews* are [here](#) and seasonal influenza key points for December 2, 2013 are available [here](#).

### 3. More information from CDC

- *CDC Sample Tweets for Promoting NIVW*
  - CDC has released sample [tweets](#) that partners can use on Twitter to promote National Influenza Vaccination Week and influenza vaccination. Some messages are intended to be tweeted this week and others during NIVW (Dec. 8-14).
- *National Influenza Vaccination Week (NIVW) is coming soon, December 8–14!*

Check [here](#) for new resources and updates to help you prepare:

  - Enter your NIVW vaccination activities and see what others are doing.
  - 2013–2014 NIVW [Update](#)
    - Highlights key activities planned for NIVW, December 8-14. Provides information to participate and learn more.
  - 2013 NIVW Key Points are now available on the NIVW web page in English and [Spanish](#).
  - NIVW posters, flyers, and matte [articles](#) are available in English and Spanish
  - Get informed on CDC’s NIVW activities, and learn how to participate.
    - Twitter Chat, December 9, 1–2pm EST. All tweets will use the hashtag #NIVW2013. CDC will share NIVW tweets with partners the week prior to NIVW.
    - Press Conference, December 12. More information to be shared next week.
    - Early next week, CDC will post a document highlighting CDC’s key NIVW activities.
- Today a CDC-authored [study](#), “Efficacy of oseltamivir treatment started within 5 days of symptom onset to reduce influenza illness duration and virus shedding in an urban setting in Bangladesh: a randomised placebo-controlled trial,” was published in the journal *The Lancet Infectious Diseases*. This research confirms the benefits of the influenza antiviral medication oseltamivir in treating children with uncomplicated flu illness and shows that treatment can be beneficial even beyond the two-day window recommended as a cut-off for treatment in the drug’s package insert. A CDC Flu Spotlight article related to this study is available on the CDC flu [website](#).
- Final influenza vaccine effectiveness (VE) estimates for the 2011–2012 were recently released in the journal [Clinical Infectious Diseases](#): Influenza vaccine effectiveness in the 2011-2012 season: protection against each circulating virus and the effect of prior vaccination on estimates. Key points related to this article are available [here](#).
- Princeton University has been experiencing an outbreak of meningococcal disease since spring 2013. All eight of the cases were caused by meningococcal bacteria known as serogroup B ("strain" B). Working with CDC and the New Jersey Department of Health, the University has decided to make arrangements to provide their students access to a serogroup B meningococcal vaccine as soon as possible. FDA will allow the use of the vaccine at Princeton University under an Investigational New Drug application. The outbreak and plans for a vaccination effort have received media attention and CDC understands that partners may have and/or be receiving questions. Please be aware that you can get information from the [University](#), the [New Jersey Department of Health](#), and [CDC](#). CDC will continue to update and add to the questions and answers on the CDC webpage as needed.

## ANNOUNCEMENTS

### 4. Hill Briefing on December 4, organized by Alliance for Aging Research

In coordination with the launch of the *Silver Book: Infectious Diseases and Prevention through Vaccination*, the Alliance for Aging Research is holding a lunch educational session at 121 Cannon House Office Building between 12:00 and 1:30PM EST, on December 4, 2013.

Please join the Alliance for Aging Research, in partnership with the National Foundation for Infectious Diseases, the Infectious Diseases Society of America, and the Society for Healthcare Epidemiology of America, as they discuss the latest volume of the Alliance's *Silver Book®: Chronic Disease and Medical Innovation in an Aging Nation*, which shines the spotlight on the human and economic burden of infectious diseases, and explores the value of vaccines in reducing these burdens.

### 5. Are You in Illinois? Consider Joining These American College of Physicians Events!

Two events in adult immunization are occurring in Illinois during the month of December. Both are organized by the American College of Physicians, with other co-sponsors such as IAC, the Chicago Department of Health, and Advocate Health Care.

[Doing the Best for Our Patients: Patient Engagement in Adult Immunization and Diabetes](#), will be held at the Hilton in Springfield, IL on December 6–7, 2013. This program is a two day symposium on patient engagement in adult immunizations and diabetes. The Friday session goes from 6 – 8:30 p.m., and the Saturday session goes from 8 a.m. – 12 p.m. Discounted rooms are being held for participants of this ACP event until November 21, 2013. Room reservations are available [online](#) or by calling 1-800-HILTONS. Register [online](#) or by emailing [Selam Wubu](#), Associate, Center for Quality.

Then on December 11, as a part of *Vaccinate Illinois Week 2013*, [Closing the Gap in Adult Immunizations: Practical Tips to Enhance Quality](#) will be held at the Radisson Blu Aqua, 221 N Columbus Dr, Chicago, IL 60601. There are two parts to this event; an afternoon *Presentation Skills Workshop* will be held from 2:30 – 5:45 p.m., followed by a free dinner program with national adult immunization experts from 5:45 – 9:15 p.m. Register [online](#) or by emailing [Selam Wubu](#), Associate, ACP Center for Quality.

Please promote this to your network, particularly to practices engaging, or seeking to start engaging, in adult immunizations!

### 6. Illinois Chapter of the AAP Hosting an Influenza Webinar

In celebration of *Vaccinate Illinois Week* and *National Influenza Vaccination Week*, join the Illinois Chapter, American Academy of Pediatrics (ICAAP) and *Vaccinate Illinois Week* partners on December 10, 2013 from 12–1 p.m. Central Time for a webinar featuring Dr. Lyn Finelli, Surveillance and Outbreak Response Team Lead, Influenza Division, Centers for Disease Control and Prevention and Shelle Allen, Families Fighting Flu. Details about the webinar are available [here](#). Click [here](#) to register for the event.

### 7. National Conference on Immunization and Health Coalitions – Seattle, WA, May 21–23, 2014

*Partnering for Prevention from Sea to Summit* is the theme of the 11th National Conference on Immunization and Health Coalitions (NCIHC) which will take place in Seattle, WA from May 21–23, 2014. NCIHC is the only conference solely dedicated to collaboration and partnership as a way to improve the health status of communities. Keynote speakers will include Dr. David Williams, Dr. William Foege, Dr. Wendy Sue Swanson (Seattle Mama Doc), and Sara Rosenbaum, JD.

Participants are invited to submit abstracts for presentation at the conference. Abstracts are welcome from all disciplines, including coalition staff and members, community-based providers, healthcare providers, social workers, researchers, government agencies, health communication specialists, and

others. Abstracts are due December 13, 2013. Go to the *Call for Abstracts* [page](#) to learn more. Registration information will be posted soon. Additional details about the event are available [here](#).

## 8. CDC Media Advisory: December 5 Telebriefing on Measles

On December 5 at 12:30 p.m. (ET), CDC will hold a live media briefing at CDC to discuss the renewed spike of measles in the U.S. and its continued threat to health security.

Persons scheduled to speak at the briefing are:

**Tom Frieden, M.D., M.P.H.**, Director, Centers for Disease Control and Prevention

**Peter Strebel, M.B.Ch.B., M.P.H.**, Accelerated Disease Coordinator, Immunizations, Vaccines and Biologicals Department, WHO

**Alan Hinman, M.D., M.P.H.**, Director for Programs, Center for Vaccine Equity, Task Force for Global Health

**Samuel Katz, M.D.**, Wilburt Cornell Davison Professor and Chair Emeritus of Pediatrics, Duke University Medical School

Reporters who wish to attend the media briefing must send a RSVP to [Laura Bellinger](#), Public Affairs Specialist, CDC's Division of Public Affairs or contact CDC's main press office at 404-639-3286 by noon on Tuesday, December 3, 2013. Reporters who RSVP will be guaranteed access.

A transcript of this media availability will be available following the briefing at CDC's [website](#).

## 9. 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*.

## INFLUENZA IMMUNIZATION HIGHLIGHTS

### 10. Hong Kong Confirms First Human H7N9 Avian Influenza Case in Indonesian Domestic Worker

The Hong Kong government [confirmed](#) its first human case of avian influenza A(H7N9) in a Indonesian domestic worker who traveled to Shenzhen last month. Secretary for Food & Health, Dr Ko Wing-man, told the media that the woman was in contact with poultry while in Shenzhen. Her close contacts have minor symptoms and are being isolated in Princess Margaret Hospital.

Dr Ko said the Government has raised the response level from 'alert' to 'serious' under its preparedness plan for influenza pandemic, and the Centre for Health Protection is looking for the patient's friend who traveled with her to Shenzhen.

### 11. Adjuvanted Bird Flu Vaccine Approved by FDA

The U.S. Food and Drug Administration has recently [approved](#) the first adjuvanted vaccine for H5N1 influenza, or what's already known as the avian or bird flu. The vaccine, manufactured by GSK Vaccines, is known as pandemic Influenza A H5N1 Virus Vaccine, also referred to as Q-Pan H5N1 influenza vaccine, and is for the immunization of adults 18 and older. The Q-Pan H5N1 influenza vaccine is composed of monovalent, inactivated, split A/H5N1 influenza virus antigen and GSK's AS03 adjuvant. However, this vaccine won't be available for commercial use and does not currently have a trade name in the United States.

## 12. Influenza Infects Cells in a Newly Discovered Way

Scientists at Fred Hutchinson Cancer Research Center have uncovered a new mechanism by which influenza can infect cells, a finding that ultimately may have implications for immunity against the flu. The [paper](#) is published in the *Journal of Virology* and written by Jesse Bloom, Ph.D. An additional story is available [here](#).

These researchers discovered that a mutation in the influenza virus neuraminidase gene can allow influenza to continue to infect host cells despite a mutation in the hemagglutinin that would be expected to render the virus incapable of infecting its host cell.

## 13. Gold Dust in Fight Against Pandemics

UK scientists have devised a rapid new flu test using [gold particles](#) that could help prevent pandemics erupting across the globe.

The new test will literally be gold dust for medics worldwide. It can distinguish between human and avian flu – and it could be used to fight superbugs in hospitals and even to detect toxins like ricin used in bioterrorism. Results published in *Organic & Biomolecular Chemistry* show that gold nanoparticles can be used to detect the human influenza virus X31 (H3N2) within 30 minutes and to distinguish between human and avian influenza.

## 14. Q&A: Are Flu Vaccines Really Needed and Answers to Other Questions

The risks of the flu vaccine are very small, but the benefits are tremendous, as discussed in this [story](#) from *The Seattle Times*.

## 15. China Reports Third H7N9 Case in November

A new human H7N9 bird flu case was [reported](#) in East China's Zhejiang province, the fifth in China this autumn, according to local health authorities on Thursday, 28 November. This is the third case reported in November, following the one confirmed on November 4 in Zhejiang and one on November 5 in southern Guangdong Province

In October, two new human H7N9 avian flu cases were reported. No new cases were reported in September. China had reported 134 cases by the end of August, with 45 fatalities, according to the National Health and Family Planning Commission.

## 16. Flu Shot or Mask? B.C. Hospitals Will Make You Choose One

Monday marks the official start of flu season in B.C., and health officials [say](#) that if you're planning on visiting a hospital or clinic, you'll have to either have had a flu shot already, or you'll need to wear a mask.

Dr. Bonnie Henry, director of public health emergency management with the British Columbia Centre for Disease Control, says that between 2,000 and 8,000 Canadians, mostly seniors, die each year because of complications from the flu.

"Every year we have outbreaks, particularly in long-term care homes," she said. "Influenza can be really devastating for people in hospitals — people who are suffering from other illnesses and trying to recover, when their immune systems aren't working that well."

Because officials believe that being vaccinated or wearing a mask helps limit the transmission of influenza, B.C. is now making those preventative measures mandatory for health centre visitors.

Henry says they'll make it easy for the public to comply. "We'll have masks available at the entrance to facilities and to the wards," she said. "It's on the honor system. We're not going to be policing it, but we think people will do the right thing."

## 17. What's it Like: To Get the Flu

As reported in this [article](#) from *The Oklahoman*, Oklahoma's flu season generally runs from mid-November to May, with the number of people catching the flu peaking in January or February.

## ADULT AND ADOLESCENT IMMUNIZATION HIGHLIGHTS

### 18. How Vaccines Have Changed Disease Rates

Sometimes it's easy to forget how common many diseases were before vaccines for them were introduced. When the disease is not around, people may not notice as much. A recent study attempted to make these "missing" diseases more "visible" by calculating how many were prevented since the introduction of vaccines.

The researchers found that more than 100 million cases of just seven diseases had been prevented since the vaccines were introduced. This conclusion was based on calculations using data that reached back into the previous century.

This [study](#) was published November 28 in the *New England Journal of Medicine*. The research was funded by awards from the Bill and Melinda Gates Foundation and the U.S. National Institute of General Medical Sciences.

Additional stories on this study are available from the [Daily Rx](#) and [Medscape](#). (login required)

### 19. The Quest for an HIV-1 Vaccine — Moving Forward

The November 23, 2013 issue of the *New England Journal of Medicine* contains an interesting [editorial](#) about the pursuit of the elusive HIV-1 vaccine. Dan H. Barouch, M.D., Ph.D details the four different ways in which research has pursued a vaccine for HIV-1. While all four methodologies have not yielded a successful clinical trial, the author of this editorial maintains that there are data that future research can build on. Thus, he remains hopeful that the future will someday see a vaccine against HIV-1.

### 20. 'Nanosponge vaccine' Fights MRSA Toxins

Nanosponges that soak up a dangerous pore-forming toxin produced by MRSA (methicillin-resistant *Staphylococcus aureus*) could serve as a safe and effective vaccine against this toxin. This "nanosponge vaccine" enabled the immune systems of mice to block the adverse effects of the alpha-haemolysin toxin from MRSA—both within the bloodstream and on the skin. Nanoengineers from the University of California, San Diego described the safety and efficacy of this nanosponge vaccine in the December 1 [issue](#) of *Nature Nanotechnology*. An additional story is available [here](#).

### 21. MERS Virus Strikes Jordan Couple in UAE

Two new cases of the potentially deadly MERS respiratory virus, including a heavily pregnant woman, have been reported in the United Arab Emirates, [media](#) Friday cited health authorities as saying.

A 38-year-old Jordanian resident was hospitalised with breathing problems and diagnosed to be a carrier of MERS, the Middle East Respiratory Syndrome Coronavirus. His wife, who is eight months pregnant, was also hospitalised after being diagnosed as suffering from the disease, health authorities in Abu Dhabi said.

In July, the authorities reported that there had been seven MERS cases in the oil-rich Gulf federation in which foreign residents comprise 80 percent of the population.

The World Health Organisation says it has been informed of 160 laboratory-confirmed cases of infection worldwide since September last year, including 68 deaths.

## **22. Cough Shot Lacks Protection: Vaccine May Not Stop Spread of Illness**

A government [study](#) published in the *Proceedings of the National Academy of Sciences* offers a new theory on why the whooping cough vaccine doesn't seem to be working as well as expected.

The research suggests that while the vaccine may keep people from getting sick, it doesn't prevent them from spreading whooping cough — also known as pertussis — to others.

Merkel and his colleagues used baboons, considered the most human-like model for studying whooping cough. Baboons at ages 2, 4 and 6 months were vaccinated with DTaP and then exposed to whooping cough at 7 months — when vaccine protection would be new and strong.

The baboons didn't get sick, but they had high levels of bacteria in their respiratory system for five weeks — which suggest they were contagious for about that long. Some baboons given the old DPT vaccine had low levels after only two weeks.

That's a big deal finding because it was thought that people only spread the disease when they had coughs and other symptoms, said Dr. Erik Hewlett, a University of Virginia whooping cough researcher who was not involved in the FDA study but has collaborated with Merkel.

A news story about this study may be viewed [here](#).

## **23. Rise in Measles and Other Infectious Diseases Has U.S. Public Health Experts on Alert**

In this interesting [article](#) by Steven Johnson, the author discusses how the increase in measles cases in the United States, which were due to importation and a lowly vaccinated community, and the increase in pertussis as a result of potentially waning vaccine, has led to concern among public health authorities with regards to infectious disease outbreaks.