



National Adult and Influenza Immunization Summit

Adult & Influenza Immunization Update

2013–2014 Influenza Season

Issue #15 — December 12, 2013

Reminder: Summit calls are scheduled every Thursday at 3:00 p.m. ET, unless cancelled. The next call is scheduled for December 19, 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 - December 5, 2013

Announcements – L.J Tan, IAC

L.J. announced that the [“2013 IDSA Clinical Practice Guideline for Vaccination of the Immunocompromised Host”](#) was just published in *Clinical Infectious Diseases*. This information also may be accessed on the IDSA [website](#).

Influenza Surveillance Update – Scott Epperson, CDC

Scott provided an influenza update through Week 47, ending November 23, 2013. Reported influenza activity remains low for most of the country, with only the Southern (Region 4) and Southeastern (Region 6) Regions reporting increased levels of ILI. The vast majority of the 83 specimens tested to date have been antigenically characterized as 2009 H1N1, with 20 influenza type A (H3N2) and 1 influenza type B virus also having been identified. All tests to date indicate virus strains that are included in this year's vaccines. No new pediatric deaths were reported this week, leaving the total for this season at two.

Cochrane Re-Arranged – Arnold Monto, Univ of MI and Janet McElhaney, Univ of CT

By way of background, Drs. Monto and McElhaney reminded call participants of the 2010 Cochrane [review](#) on the efficacy, effectiveness, and safety of influenza vaccination in the elderly. This review, which covered dozens of clinical studies over a period of four decades, confirmed vaccine safety, but found no convincing evidence for vaccine effectiveness (VE) against disease, thus challenging the ongoing efforts to vaccinate the elderly.

A group of physicians/scientists, including Drs. Monto and McElhaney, recently reviewed the conclusions presented by the Cochrane group. The result of this effort, [“Cochrane re-arranged: Support for policies to vaccinate elderly people against influenza”](#), was published in *Vaccine* on December 5, 2013.

As noted in the abstract, the group determined that “the Cochrane review analyzed and presented the data in a way that may have hampered the desired separation of real vaccine benefits from inevitable background noise.” The compilation of forty years of studies incorporated multiple different ways of looking at the data, which confused many of the outcomes. In addition, studies were included from years in which there was low circulation of the virus, hampering the ability to show any effect of the vaccine.

The authors re-arranged the same data used by the Cochrane group into a framework based on the sequence of events throughout the “patient journey”, i.e., exposure, infection, clinical outcome and observation, and used broad outcome definitions and simple frequency distributions of VE values. In this way, they hoped to divide the data into areas where power could be demonstrated. Of particular significance, the group tried to consolidate the information based on what it represented in terms of illness severity. Key in this respect was an effort to look at “vaccine-preventable disability,” i.e., reducing the risk of an individual having to move into a nursing home or go into rehabilitation, or coming out of the infection with reduced physical function.

Using these methods, the group determined VE was more in line with what had been reported previously in the literature, i.e., VE of ~30% against influenza-related fatal and non-fatal complications, ~40% against typical influenza-like illness (ILI), and ~50% against disease with confirmed virus infection, as well as ~60% biological VE against infection under conditions of virus circulation. As summarized by L.J, “If you increase the sample size and use studies with similar outcomes, you get numbers more like what we have seen in the past.”

Drs. Monto and McElhaney commented that interpretation of a meta-analysis is extremely complicated, requiring a review of all available data with subsequent weighting based on set criteria. L.J stated that the concept of appropriate study design might be an issue for future consideration by the Summit. Dr. Monto also suggested that we should pay more attention to data from current studies that include PCR testing results, providing clear virus outcomes for consideration in any subsequent analysis.

Although not included within the Cochrane Re-Arranged article, Dr. Monto discussed similar issues related to determining the effectiveness of antiviral medications. For example, should non-influenza cases be included when examining the effectiveness of antivirals? A consortium was developed to reanalyze the clinical trial and observational data on antivirals, but the Cochrane group did not participate in this effort.

Summit members also briefly discussed Peter Doshi’s [commentary](#) published in the *British Medical Journal* earlier this year. Dr. Doshi, a postdoctoral fellow at Johns Hopkins, suggests that the impact of influenza illness has been disproportionately reported. He also suggests that influenza vaccines are unsafe and that there is virtually no evidence that they reduce elderly deaths. In a footnote, Dr. Doshi notes that his commentary was not peer-reviewed, meaning this is essentially an op-ed piece. L.J reported that the December 2 issue of the Washington Post contains an [article](#), “Flu vaccine is not universally praised citing Dr. Doshi’s work. John Billington reported that IDSA and The Society for Healthcare Epidemiology in America (SHEA) have written a response to Dr. Doshi’s article which is scheduled for February publication in JAMA Internal Medicine. John will be sure to share this with Summit members as soon as possible after its publication.

Call participants noted that Dr. Doshi’s comments go to the heart of our efforts to improve influenza vaccines. We know that they could be improved. But if we’re going to develop better vaccines, it is imperative that we recognize influenza for the killer that it is.

Carolyn Bridges stated that one of the major criticisms of the influenza vaccine program is a lack of randomized trial information for older adults. However, Dr. McElhaney pointed out that we have sufficient data now, particularly for prevention of serious outcomes. In addition, she noted that it would be unethical to conduct a placebo-controlled trial of vaccine effectiveness. Rather, our efforts should go into making it feasible for all countries to have viable vaccine programs. Dr. Monto seconded Dr. McElhaney’s statements, noting that VE studies are useful for proceeding with the programs we have now and that we should concentrate on ensuring vaccines are used globally.

The group mentioned several questions about VE that remain unanswered. For example, could lowered VE be partly attributable to H3N2 trials in effect during seasons in which that strain dominated? Other questions involve an observed decrease in VE for doses received following receipt of vaccine during the previous season.

Finally, Carolyn Bridges raised the critical point that, although it would be better to have an improved vaccine for older adults, even a modest VE results in a relatively great impact. Even a 30% VE translates to a large number of hospitalizations prevented. Summit members agreed that our

message should be consistent and clear about the benefits of vaccine, rather than about items that might affect VE.

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

The CDC weekly influenza surveillance report for week 48 (ending November 30, 2013) is available [here](#), and region specific data may be found [here](#). During week 48, 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 6.7% for week 48.

One influenza-associated pediatric death was reported to CDC during week 48. This death was associated with a 2009 H1N1 virus and occurred during week 47 (week ending November 23, 2013). A total of three influenza-associated pediatric deaths for the 2013–2014 season have been reported. Additional data can be found [here](#).

Nationwide during week 48, 1.9% 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 48, two states (Mississippi and Texas) experienced high ILI activity, two states (Alabama and Louisiana) experienced moderate ILI activity, and two states (Arkansas and Delaware) and New York City experienced low ILI activity. Forty-four states (Alaska, Arizona, California, Colorado, Connecticut, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, 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) experienced minimal ILI activity. Data were insufficient to calculate an ILI activity level from the District of Columbia.

Archives of previous *FluViews* are available [here](#), and CDC's seasonal influenza key points for December 6, 2013 may be found [here](#).

3. More Information from CDC

- **New CDC study on Effectiveness of Influenza Vaccine in Pregnant Women**

A new [study](#) recently published in the journal *Clinical Infectious Diseases* examines the effectiveness of seasonal trivalent influenza vaccine (TIV) in pregnant women over two influenza seasons, 2010–2011 and 2011–2012. Key points related to this article may be found [here](#).

- **CDC Media Briefing on Influenza Activity - December 12, 2013**

On December 12, 2013, CDC hosted a media [briefing](#) to discuss influenza activity and early-season influenza vaccination coverage estimates. The agency also shared information from a new *MMWR* [report](#) estimating the number of illnesses and hospitalizations prevented by influenza vaccination last season. CDC has released [key points](#) in conjunction with this information. An additional [article](#), "Seasonal Influenza Vaccination Coverage Among Women Who Delivered a Live-Born Infant", is available in the same issue of the *MMWR*.

ANNOUNCEMENTS

4. Follow up from December 12, 2013 Summit Call

(Note: The December 12 call summary and slide decks will be shared in the next Summit eUpdate on December 16, 2013.)

Thanks to Kathy for catching the error in the bar graph in the figure in the IIV4 study. We received this response from Dr. Ferreira: She has confirmed with her clinical team that the number on the bar graph for B/Yamagata, end of study should read: 157.0 (instead of 361.5), which is on par with the longevity of immune response of the other virus types included in the vaccine. Just to recap, the histogram is correct, just the number above the bar would need to be corrected. She has now informed the corresponding author of the paper, and they will be taking the appropriate steps to correct it both online and in the print format release. Thanks again for catching the error in the number.

Scott Epperson also sent this [link](#) to the CDC's surveillance methods page for those interested in greater detail.

5. IDSA, SHEA, and PIDS Call for Obligatory Immunization for Health Care Personnel

On December 10, 2013, the Infectious Diseases Society of America (IDSA), the Society for Healthcare Epidemiology of America (SHEA) and the Pediatric Infectious Diseases Society (PIDS) released a policy [statement](#) calling for obligatory immunization for health care personnel. The Societies recommend all health care employers require the immunizations recommended by CDC's Advisory Committee on Immunization Practices (ACIP), including influenza, MMR, pertussis, and hepatitis B. A [press release](#) announcing this policy statement has been published, and these documents also are available on the IDSA [website](#). Persons with questions about this policy statement may contact [John Billington](#) at IDSA.

6. SAVE THE DATE! 2014 Summit Face-to-Face Meeting Information

The 2014 face-to-face annual meeting of the National Adult and Influenza Immunization Summit will be held in Atlanta, Georgia, at the Hyatt Regency hotel on May 13-15, 2014. As details are finalized, we will continue to inform the Summit partners on the agenda, rooming block, etc. Thank you for your continued support and participation!

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.

8. Asia-Pacific Alliance for the Control on Influenza (APACI) Newsletter

As you are aware, the Summit enjoys a wonderful collaborative relationship with the [Asia-Pacific Alliance for the Control of Influenza \(APACI\)](#). From time to time, we highlight the work of our partners internationally. Follow this [link](#) to see APACI's latest media bulletin.

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*.