Influenza Activity Spotlights
Monday, March 19, 2012
Issue #18

Professional Medical Organizations
Please disseminate widely to all of your members.

Note: Because the NIVS calls have now moved to an every other week schedule, there will be no call on March 22, 2012. The next call will take place on Thursday, March 29, 2012.

1. Summary of the March 15, 2012 National Influenza Vaccine Summit Call

   Opening Announcements – L.J Tan welcomed Summit partners and provided a short update about the upcoming National Adult Immunization Summit (NAIS) and National Influenza Vaccine Summit (NIVS), scheduled for May 15–17 in Atlanta. He reminded call participants to make their hotel reservations before April 20, the expiration date on the block of rooms. Registration information for the hotel and both meetings is available through the NIVS webpage or directly on the AMA website.

   Influenza Surveillance Update – Scott Epperson from CDC reported little change in influenza activity from previous weeks. Routine surveillance indicators, such as ILI visits and P&I deaths from the 122-city surveillance system, remain low. To date, 612 isolates have been submitted for testing. Of those testing positive for H1N1, 98% are similar to the vaccine strain. Only 78% of the H3N2 isolates are similar to the vaccine, a slight drop from the levels reported in previous weeks. (In response to questions, Scott said that he had not yet seen sufficient data to determine whether the B strain was drifting toward the strain identified for the 2012-2013 vaccine.) Approximately one-half (46%) of the type B isolates are similar to the strains included in this season’s vaccine.

   Scott fielded several questions related to a recently reported cluster of influenza deaths in one Maryland family. An elderly mother and her three adult children were infected, and the mother and two of the children died from influenza complications. Scott noted that the Maryland Department of Health is leading the investigation into these cases. Although had been some speculation about whether the family members might have been infected with the H3N2-variant strain last identified in November in West Virginia, at this point it appears only routine seasonal influenza virus was involved. Apparently the mother had been vaccinated, but the vaccination status of the adult children is unclear at this time. At least one of the three had a MRSA co-infection. As discussed by call participants, we are aware that H3N2 disease can be lethal, particularly in the elderly and in persons with underlying medical conditions. Final results of the investigation will be forthcoming from the Maryland Department of Health.

   Finally, call participants discussed the idea that this season’s low morbidity may present communications difficulties next year, in that people may feel there is a reduced need for immunization. Carolyn Bridges replied that we can only continue to point out that influenza is unpredictable, and variability from year to year is to be expected. Being vaccinated is similar to
obtaining an insurance policy; you hope it won’t be needed, but, if your house burns down, you’ll be glad you have it! This communications dilemma will be a topic of discussion at the upcoming NIVS.

**Update on FluMist Quadrivalent** – Kathleen Coelingh with MedImmune provided an update on the FDA’s recent approval of the company's quadrivalent influenza vaccine, which contains 2 type A strains and 2 type B strains. Ms. Coelingh pointed out that B strains from two lineages (B/Yamagata and B/Victoria) have been circulating for years, but currently available trivalent vaccine provides coverage for only one strain each season. A CDC analysis has suggested that use of quadrivalent vaccines in the U.S. during the 2001-2008 seasons would have been beneficial in each season, cumulatively resulting in approximately 2.1 million fewer cases.

*FluMist Quadrivalent* will be recommended for individuals 2–49 years of age. The quadrivalent vaccine will not be available until the 2013-2014 season, at which time it will completely replace MedImmune’s trivalent vaccine. The quadrivalent vaccine has a similar safety and immunogenicity profile to currently available trivalent *FluMist*. A new website has been established which includes information on the quadrivalent vaccine’s indications for use, as well as other relevant information for health care providers and consumers.

Call participants discussed whether injectable quadrivalent influenza vaccines can be expected in the future. LJ noted that sanofi and GSK apparently have these in the pipeline, but there is no anticipated date when they might be available.

2. **The CDC/Influenza Division Weekly Influenza Surveillance Report** for week 10, 2012 (ending March 10, 2012) is available [here](#). This site also includes maps of the ILINet State Activity level 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. Although the rate of influenza-like illness remains relatively low nationally, influenza activity remained elevated in some areas. Fifteen states (California, Colorado, Illinois, Iowa, Kentucky, Maryland, Michigan, Minnesota, Missouri, Nebraska, Nevada, New York, Oklahoma, Pennsylvania, Virginia) reported widespread geographic activity. CDC’s seasonal influenza [key points](#) for March 16 and [archives](#) of previous *FluViews* are available.

3. **CDC Confirms Typical Human Influenza A H3N2 Virus in Maryland Cluster**

   CDC has confirmed that the influenza viruses isolated from the cluster of severe respiratory illness in one family in Maryland are seasonal influenza A H3N2 viruses. Information about this cluster is available through CDC’s *Flu Spotlight* and additional stories found [here](#) and [here](#).

4. **American Academy of Family Physicians (AAFP) Story on Quadrivalent LAIV**

   The story “First Quadrivalent Influenza Vaccine Gains FDA Approval” was posted in the *AAFP News Now* on March 14, 2012.

5. **Recent Study on Healthcare Workers and Acceptance of Influenza Vaccination**

   A meta-analysis has found that healthcare workers were twice as likely to get vaccinated against seasonal influenza if they believe that influenza prevention is important, the vaccine is effective, and the infection is highly contagious. Other predictors for vaccination include having a family that is usually vaccinated and being willing to prevent influenza transmission. Additional stories about this analysis may be found [here](#) and [here](#).
6. Fascinating Scientific Article in *Nature* on How Influenza Suppresses Host Antiviral Response

A team of researchers led by scientists at The Rockefeller University has identified a novel mechanism by which influenza interferes with antiviral host response. The finding, reported in this week’s issue of the journal *Nature*, shows that the immunosuppressive NS1 protein of the influenza A virus hijacks key regulators of antiviral gene function by mimicking a core component of gene regulating machinery. A news story on this finding is available [here](#).

7. Microneedle-Based Influenza Immunization in the Skin

Recent research found that microneedle vaccine patches are more effective at delivering protection against influenza virus in mice than subcutaneous or intramuscular inoculation. A new, detailed analysis of the early immune responses by the Emory and Georgia Tech research team helps explain why the skin is such fertile ground for vaccination with these tiny, virtually painless microneedles. Additional information may be found in this news [story](#).

8. ONLINE REGISTRATION for the National Influenza Vaccine Summit (NIVS) and the National Adult Immunization Summit (NAIS) IS NOW AVAILABLE!

**Meeting registration** - [Online registration](#) for the NIVS and NAIS is now available. Participants are asked to register before Friday, April 27, 2012. On-site registration will be available after that date.

**Hotel Registration** - The meeting will be held at the J.W. Marriott Atlanta Buckhead located at 3300 Lenox Road, Atlanta, GA 30326. Participants may reserve a hotel room by visiting the J.W. Marriott Atlanta Buckhead [website](#) or by contacting the hotel directly at (800) 228-9290. The negotiated rate is $149/night (single/double) and is valid until April 20, 2012. The Group Code for this rate is fluflua. The room rate is $133/night for persons traveling on a government *per diem*. Federal employees will need to call the hotel to make reservations.

A [Draft Agenda](#) for both meetings and additional information is available [here](#).

9. Summit Web site Offers Wonderful Resources on Influenza Vaccination!

Remember to visit the Summit [website](#) for the latest on influenza immunization resources, as well as archived copies of the weekly newsletters!