Reminder: Summit calls are scheduled every Thursday at 3:00 p.m. ET, unless cancelled. 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. The National Adult and Influenza Immunization Summit Call scheduled for November 14, 2013, cancelled.

   The next call is scheduled for Thursday, November 21 at 3:00 p.m. ET. The planned agenda includes a presentation by Dr. Arnold Monto on vaccine effectiveness in the elderly. (See Cochrane Re-Arranged and last week’s Update for more information.) Also on the agenda is an update by Nichole Bobo on vaccine projects and activities from the National Association of School Nurses. Bobo. The full agenda for this meeting will be sent prior to the call.

   Please let us know if you have other agenda items to share with the Summit, and we will add these items to an upcoming agenda.

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

   The CDC weekly influenza surveillance report for week 45 (ending November 9, 2013) is available here, and region specific date may be found here. During week 45, 6.1% of all deaths reported through the 122 Cities Mortality Reporting System were due to P&I. This percentage was below the epidemic threshold of 6.4% for week 45. Two influenza-associated pediatric deaths were reported to CDC during week 45. One was associated with an influenza A and B virus coinfection and occurred during week 43 (week ending October 26, 2013), while the other was associated with an influenza A virus for which no subtyping was performed and occurred during week 42 (week ending October 19, 2013). A total of two influenza-associated pediatric deaths for the 2013–2014 season have been reported.

   Nationwide during week 45, 1.6% 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 45, two states (Alabama and Mississippi) experienced moderate ILI activity, and four states (Kentucky, Louisiana, Texas, and Vermont) experienced low ILI activity. Forty-four states (Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, 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, 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.

Archives of previous FluViews are available here and seasonal influenza key points for November 15, 2013 are available here.

3. More Information from CDC
   
   - 2013–2014 Season Key Points
     The 2013–2014 Season Key Points are now available in Spanish.
   
   - National Influenza Vaccination Week
     CDC will hold National Influenza Vaccination Week (NIVW) during the week of December 8-14, 2013. Be sure to visit the NIVW homepage for recently updated print materials and to submit your NIVW activities. Additional resources will be added over coming weeks, so please check again soon for the NIVW media toolkit, select matte articles, and more details on CDC’s NIVW plans.

ANNOUNCEMENTS

4. Update Frequency of CMS Influenza Data
   
   On the November 7 Summit call, a question was asked about how frequently the CMS data for influenza coverage rates in Medicare beneficiaries is updated. We have been informed that the data is updated weekly – with about a 10 day lag. It is generally updated every Monday.

5. International Version of Immunization Logo Now Also Available!
   
   As detailed in last week’s Update, immunization advocates have developed a universal symbol for immunization. An international version (with “immunize” spelled as “immunise”) is now also available. The symbol, in several formats, is housed on Google Docs, and it is available to all immunization advocates as a free download. There is also a Style Guide and Read Me guide on how to download and use the symbol.

   ![Immunize Symbol](image)

6. 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.

7. **Calling All School Nurses Leading Immunization Efforts!**

The National Association of School Nurses (NASN) wants to recognize your efforts – in the current school year or past years - to promote immunizations. Three individuals will be announced on School Nurse Day (May 2014), and recognized on the NASN website and in NASN publications (print and electronic). Applications are now being accepted through March 2014.

8. **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**

9. **Massachusetts is top state in Influenza Vaccination Rates**

The Massachusetts Department of Public Health recently announced that Massachusetts was the top state in terms of influenza vaccination rates during the 2012–2013 season. According to the U.S. Centers for Disease Control and Prevention’s 2012–2013 Behavioral Risk Factor and Surveillance System survey and National Immunization Survey, Massachusetts was number one in vaccination rates with 58 percent of state residents receiving influenza vaccines. The national immunization rate for that season was 45 percent.

“Vaccination rates are increasing thanks to our success in implementing health care reform, our partnerships with providers, and our progress in removing barriers to wellness and preventive services,” John Polanowicz, the Massachusetts secretary of health and human services, said.

10. **Protein Sciences Announces Availability of Flublok Influenza Vaccine**

Protein Sciences Corporation, the Meriden, Connecticut-based manufacturer of Flublok, announced on Wednesday that doses of the influenza vaccine for the 2013–2014 season are now available. Protein Sciences Corporation said that quantities of Flublok are limited and will be exclusively distributed by FFF Enterprises on a first-come, first-served basis.

11. **Interesting Approach for Increasing Influenza Awareness: Theater!**

As part of the production of "Unity (1918)," a lecture series will be held at the Cape Breton University Boardmore Theatre. Kevin Kerr’s Governor General award winning play, "Unity (1918)," deals with the Spanish flu coming to a small town in Saskatchewan, not unlike Sydney and neighboring communities. The lecture series will include five talks all inspired by the play, including a lecture titled "Scotch Whiskey, Wine and Influenza," and "Why We Should Care About the Flu...or Not."
12. Hashtag Health: Using Twitter to Track the Spread of Influenza and Pertussis

A social media-monitoring program led by San Diego State University geography professor Ming-Hsiang Tsou could help physicians and health officials learn when and where severe outbreaks are occurring in real time.

In results published last month in the Journal of Medical Internet Research, Tsou demonstrated that his technique might allow officials to more quickly and efficiently direct resources to outbreak zones and better contain the spread of the disease. In general, correlation coefficients were stronger in the flu analysis compared to the pertussis analysis. Within each analysis, flu tweets were more strongly correlated with ILI rates than influenza tweets, and whooping cough tweets correlated more strongly with pertussis incidence than pertussis tweets.

Tsou and his colleagues, funded by a $1.3 million grant from the National Science Foundation, selected 11 U.S. cities and monitored tweets originating from within a 17-mile radius of those cities. Whenever people tweeted the keywords "flu" or "influenza," the program would record characteristics about those tweets, including username, location, whether they were original tweets or retweets, and whether they linked to a Web site.

Tsou compared his team's findings to regional data based on the CDC's definition of influenza-like illnesses (ILI). Nine of the 11 cities showed a statistically significant correlation between an increase in the number of tweets mentioning those keywords and regionally reported outbreaks. In five of those cities, Tsou's algorithm picked up on the outbreaks earlier than the regional reports. The cities with the strongest correlations were San Diego, Denver, Jacksonville, Seattle and Fort Worth.

A news article on this research is available here.

13. Biota Initiates Additional Clinical Trials of Laninamivir Octanoate

Biota Pharmaceuticals Inc. announced today that it has commenced dosing in two Phase 1 clinical trials of laninamivir octanoate, its long-acting neuraminidase inhibitor being developed for the treatment of influenza.

14. Using Registries to Remind Parents More Likely to Get Kids Vaccinated During Pandemic

A new University of Michigan study found that the state immunization registry – the public health database that tracks vaccinations – can be an effective tool to encourage influenza vaccinations during a pandemic.

U-M researchers collaborated with the Michigan Department of Community Health (MDCH) to evaluate a statewide influenza vaccination reminder campaign conducted using the Michigan Care Improvement Registry (MCIR) during the H1N1 pandemic during 2009-10. The study results were published Nov. 14 in the American Journal of Public Health.

Reminder letters were mailed to parents of children with chronic health conditions such as asthma or diabetes, who had not yet received the vaccine that was recommended during the 2009-10 H1N1 pandemic. Vaccination rates were higher for children whose parents were sent a reminder letter compared to children without chronic conditions who were not sent reminders.

15. New Findings on Flu Shot Offer Some Relief

If you get the flu shot, a vaccination against this year's strains of the influenza virus, you're 62 percent less likely to get the bug, according to the U.S. Centers for Disease Control and Prevention. Getting the shot is the first step, but a new study has found that exercising shortly after can also boost your immunity.

The new study conducted by researchers at Iowa State University looked at healthy young adults in two groups - one group went on a 90-minute jog or bike ride after receiving a flu shot, the other group
sat quietly for that period of time. Afterward, researchers looked at the flu antibody levels in each participant's blood. They found that those who exercised had nearly double the response of those who did not. They also had higher levels of the cells that ward off infection.

Stories about the study are available here and here.

16. Check out Patsy Stinchfield’s influenza video!

As many of you are aware, Patsy Stinchfield is an active partner in the Summit and a pediatric nurse practitioner and the director of infection prevention and The Children’s Immunization Project at Children’s Hospitals and Clinics of Minnesota. She has recently published a blog emphasizing that influenza is a complex, tricky virus that is nearly impossible to predict. She pointed out that the previous influenza season ended up being the widest season on record (earliest start and latest end). Patsy’s video is available here.

17. Novartis Bird Flu Jab Shows Early Promise

Novartis' novel H7N9 avian influenza vaccine has hit targets in a Phase I trial, demonstrating strong efficacy in protecting against the disease.

Data from the 400-patient trial showed that 85% achieved a protective immune response after two doses of the powerful MF59-boosted vaccine; without this adjuvant just 6% achieved the same level of response.

Novartis said it would submit full data from the trial to a peer-reviewed journal for publication "in the near future."

18. *New England Journal of Medicine* Publishes Positive Data From Clinical Trial of Novavax’ Vaccine Against H7N9 Avian Flu

Novavax, Inc. announced that positive clinical data for the company's virus-like particle (VLP) vaccine candidate against A(H7N9) influenza were published online in the Correspondence section of *The New England Journal of Medicine*. The correspondence also will appear in the December 26, 2013 print edition.

19. Researchers Suggest China Consider National Flu Vaccination Plan with Staggered Timing

China should tailor its influenza vaccination strategies to account for its three distinct flu regions, according to the first comprehensive study of the country's flu patterns conducted by a research team of Chinese and American scientists.

Flu season in northern China occurs during the same period as in the world's other northern temperate zones, but in the south the disease peaks in the spring, while patterns in a third, intermediate zone are complex and require more research, according to the study, led by researchers from the Fogarty International Center, part of the National Institutes of Health.

"This research suggests the need for staggered timing of vaccination in three broad epidemiological regions," said Dr. Cecile Viboud, who co-authored the study with Fogarty colleagues and Chinese collaborators.

20. Evaluating the Safety of Influenza Vaccine Using a Claims-Based Health System

Researchers from the CDC led by Natalie McCarthy looked at influenza vaccine safety utilizing claims-based data in 2009–2010 and 2010–2011 seasons. They found no increased risk after H1N1 in 2009–2010 season, no increased risk after TIV in 2010–2011 season, and, after claims review, no increased risk for pre-specified outcomes in either season was found.
21. First Human Case Of New Bird Flu Found
A new strain of the bird flu, which is being called H6N1 has been found in an individual in Taiwan. This is the first known occurrence of this particular strain being found in an human.

22. MedImmune Partners with Author Pantley to Give Parents Guide to Flu Season
AstraZeneca’s MedImmune Specialty Care division, a Gaithersburg, Maryland-based biopharmaceutical business unit, announced a partnership on Wednesday with author Elizabeth Pantley on a flu season guide for parents.

A Parent’s Guide to Flu Season means to educate parents on the necessity of flu prevention and to help them navigate flu misconceptions and myths. Pantley, the author of the No-Cry Solution parenting book series, said she welcomed the opportunity to help families protect themselves against the disease.

ADULT AND ADOLESCENT IMMUNIZATION HIGHLIGHTS

23. Princeton to Use New Meningitis Vaccine To Stem Campus Outbreak
Princeton University is trying to stop an outbreak of meningococcal B meningitis, which has already struck seven students. Princeton's trustees decided November 18, 2013, to start offering students a vaccine that the federal government has approved specifically to help protect students.

The university said once it receives final approval from the Centers for Disease Control and Prevention (CDC), it would recommend all its “undergraduate students (those who live in dormitories or off campus) and graduate students who live in dormitories receive a vaccine that helps protect against meningococcal disease caused by serogroup B. There have been no fatalities thus far.

CDC Q and As are available here.

24. Alberta Health Service (AHS) Combats Spread of Measles After Outbreak Declared
Alberta Health Services is taking action against an outbreak of measles in the province that was declared on Oct. 18.

As of last week, the disease was still contained to the southern part of the province, with 28 cases of the disease confirmed with AHS. The outbreak was determined to have originated from the Netherlands, having been brought back to Alberta when a resident of the south zone returned from a trip. One of the precautions implemented in the central zone is to put on extra measles immunization clinics, and raise awareness about measles and its symptoms.

25. East Africa: Polio Drive to Target Millions in Horn
Efforts to stop the spread of polio in the Horn of Africa region are being ramped up with major immunization campaigns underway, targeting millions of vulnerable children.

There have been outbreaks in Kenya and Ethiopia, and more seriously neighbouring Somalia, with 183 cases confirmed this year up to October, according to a snapshot by the UN Office for the Coordination of Humanitarian Affairs (OCHA).

If the polio outbreak in Somalia is not controlled quickly, global efforts to wipe out the disease once and for all could be jeopardized, warned the UN Children's Fund.
So far this year (up to 13 November), some 334 polio cases have been recorded globally, compared to 187 over the same period in 2012, according to the Global Polio Eradication Initiative (GPEI). In 2012, a total of 223 cases were recorded worldwide.

26. High Immunization Rates among HCPs Needed to Protect Patients from Disease

Adequate immunization of health care providers is needed to best protect patients, according to a presenter here at the 26th Annual Infectious Diseases in Children Symposium. There are a plethora of reasons for keeping employee immunizations records and maintaining high vaccination rates among health care providers (HCPs), according to Ed Septimus, MD, FACP, FIDSA, FSHEA. The most important rationale for vaccination of HCPs, he said, is that vaccination of transmissible infectious diseases protects both patients and HCPs from illness and death.

Vaccinating HCPs also prevents missed work days during outbreaks, which would further negatively impact patient care. Despite this potential impact, immunization rates for ACIP-recommended vaccines remain low among HCPs. “Mandatory programs are necessary where voluntary programs fail to significantly increase HCP vaccination rates,” Septimus said. “ACIP-recommended vaccines are proven to be safe, effective and cost-saving.”

27. WHO: Summary of the SAGE November 2013 Meeting

A summary of the November 2013 meeting of the Strategic Advisory Group of Experts (SAGE) on immunization, who advise the WHO, is now available. Meeting documents are available here. The meeting report will be published in the WHO Weekly Epidemiological Record on January 3, 2014.

28. Could Vaccines Someday Improve Heart Health?

Two animal studies suggest that vaccines might someday be used to reduce high cholesterol levels and lower blood pressure, according to findings presented Monday at the American Heart Association (AHA) annual meeting in Dallas.

In both cases, the vaccines interrupt processes in the body that, if left alone, can lead to high cholesterol and elevated blood pressure.

The first study, out of Vienna, found that mice and rats had lower cholesterol levels for a year following treatment with a vaccine that protects a cell's ability to remove "bad" LDL cholesterol from the bloodstream.

The second study, from Japan, used a different vaccine to lower high blood pressure in laboratory rats for up to six months.

This vaccine interferes with a hormone called angiotensin II, which increases blood pressure by causing blood vessels to constrict. Medications already are widely used to block angiotensin II and control blood pressure, but they have to be taken daily to be effective.

29. WHO is Informed of Four More Cases of MERS-CoV

The World Health Organization (WHO) has been informed of an additional four laboratory-confirmed cases of infection with Middle East respiratory syndrome coronavirus (MERS-CoV). These include one laboratory-confirmed case from the United Arab Emirates, one laboratory-confirmed case in Qatar, and an additional two laboratory-confirmed cases from Kuwait.

Globally, from September 2012 to date, WHO has been informed of a total of 157 laboratory-confirmed cases of infection with MERS-CoV, including 66 deaths.
Based on the current situation and available information, WHO encourages all of its member states to continue their surveillance for severe acute respiratory infections (SARI) and to carefully review any unusual patterns.

30. Pertussis Vaccinations Encouraged in Ohio

The Ohio Department of Health said on Nov. 8 that Ohioans should renew their pertussis vaccinations in response to multiple outbreaks across the state.

“If your family is going to be welcoming a new baby or if you are a caregiver to young children, it is especially important to get a pertussis booster shot,” Dr. Ted Wymslo, the director of the Ohio Department of Health, said. “Not only will it lessen your illness if you get whooping cough, but it can help protect infants who haven’t had a chance to get the full series of vaccinations yet.”

31. ECDC Clarifies Recommendations for Poliovirus

The European Centre for Disease Prevention and Control said on November 14, it examined the risk of wild-type poliovirus re-emerging within the European Union following confirmed cases of asymptomatic WPV1 and poliomyelitis in the Middle East.

Recommendations made by the ECDC to the European Union and Member States include assessing the increase in polio vaccination at national, subnational and local levels, as well as identifying vulnerable and under-vaccinated communities.

Countries with less than 90 percent vaccination rates should increase their vaccination program to communities and travelers. Countries accepting refugees from Syria should check their vaccination status and provide the necessary vaccines.

The ECDC also recommended countries develop contingency plans to distribute polio vaccines in case of an outbreak.

32. Two UCSB Students Diagnosed with Meningococcal Disease

The Santa Barbara County Public Health Department says two UC Santa Barbara students have been diagnosed with meningococcal disease and are receiving medical treatment.

First-year students living in residence halls are recommended to receive a meningococcal vaccine; however, the Public Health Department says the first recent case of the disease was caused by a strain of the bacteria that the available vaccines do not prevent.

33. 14 Durham Students Get Preventative Antibiotics for Meningitis

The Durham County Department of Public Health has given 14 preventative antibiotics to students at Mount Zion Christian Academy, the department said November 18th. Eric Nickens with the Department of Public Health said those numbers were through Friday the 15th, 5 p.m. Durham health officials are investigating a "probable case" of bacterial meningitis after a 5-year-old student at the school died last week.