

Allegheny County Immunization Coalition

General Meeting

August 9, 2018

**Minutes**

**I: Welcome and introductions:**

Steve Forest provided opening remarks and introductions of guest speakers. Minutes from previous meeting approved.

**II: Dr. Karin Byers – Flu Overview and CDC’s ACIP Vaccine Recommendations**

* Dr. Byer’s is the Clinical Director of the Division of Infectious Diseases at UPMC
* Seasonal influenza differs every season in terms of start date, duration, numbers of peaks, strains, etc.
* High risk populations include > 65 and < 2 years old
* Vaccines are designed to protect individuals against Influenza A & B strains
* Weekly U.S. Influenza Surveillance Report - [CDC FluView](https://www.cdc.gov/flu/weekly/index.htm)
* Spring/Summer 2009 Pandemic- antigenic shift occurred, new variant of H1N1 virus with a new combination of genes emerged
	+ *Antigenic drift* = small changes in the genes of influenza viruses that happen continually over time as the virus replicates, viruses produced are similar
	+ *Antigenic shift* = abrupt, major change in the influenza A viruses, resulting in new hemagglutinin and/or new hemagglutinin and neuraminidase proteins; new influenza A subtype or a virus emerged from animal population.
		- When shift happens, most people have little or no protection against the new virus
			* Takes at least 6 months to produce large quantities of flu vaccines
* Northern Hemisphere 2018-19 flu season
	+ In February, the WHO recommended the following strains for the Northern Hemisphere's quadrivalent (four-strain) vaccines:
		- *For H1N1, an A/Michigan/45/2015-like virus*
		- *For H3N2, an A/Singapore/INFIMH-16-0019/2016-like virus*
		- *For B Victoria, a B/Colorado/06/2017-like virus*
		- *For B Yamagata, a B/Phuket/3073/2013-like virus*
* 4 types of flu vaccinations:
	+ *Inactivated Influenza Vaccine (IIV):* “regular” vaccine; intramuscular injection
	+ *High Dose IIV-* Fluzone High Dose- designed specifically for individuals 65 years and older, contains 4 times the antigen contained in regular flu shots (see studies below)
	+ *Cell Culture-based Inactivated Influenza Vaccine (ccIIV3)-* Flucelvax- indicated for individuals 18 years and older; injection; contains much smaller amount of egg protein
	+ *Recombinant Influenza Vaccine (RIV)-* FluBLok – trivalent; injection; indicated for individuals 18 years and older; does not contain any egg protein
	+ *Live, Attenuated Influenza Vaccine (LAIV)-* FluMist – quadrivalent; intranasal; indicated for non-pregnant, non-immunosuppressed individuals 2 years to 49 years old; should not be given to children under 5 years with asthma (precaution in children older than 5 years with asthma)
* Vaccine Recommendations:
	+ The CDC recommends that everyone 6 months and older receive the annual flu vaccination (with rare exception).
	+ All age groups benefit from vaccination but target populations (such as adults > 50 years old, pregnant women, children 6 months – 4 years, chronic medical illness, immunosuppressed, healthcare workers, etc.) should prioritize flu vaccination.
	+ CDC's ACIP approved restoring the live attenuated influenza virus (LAIV) by a 12-to-2 margin for the 2018-2019 flu season. ACIP will continue to review efficacy data.
		- AstraZeneca (company that makes FluMist) switched H1N1 strain for the 2017-2018 formulation. The company presented findings to ACIP from a “US study in children ages 2 to 4 on shedding and antibody responses of the H1N1 strain in the latest version of the quadrivalent vaccine. It said the results showed that the new 2017-18 post-pandemic 2009 H1N1 LAIV strain (A/Slovenia) performed significantly better than the 2015-16 post-pandemic LAIV strain (A/Bolivia). AstaZeneca officials said the new H1N1 strain prompted an antibody response similar to the highly effective H1N1 LAIV strain that was a component of the vaccine before the 2009 H1N1 pandemic.”
* Contraindications to flu vaccination:
	+ Less than 6 months of age, previous severe allergic reaction to any component of the vaccine or after previous dose of any influenza vaccine
* Precautions to flu vaccination:
	+ Guillain-Barre Syndrome within 6 weeks of a previous dose of influenza vaccine
	+ Presence of a moderate or severe acute illness with or without a fever
* *Egg Allergy:* “People with egg allergies can receive any licensed, recommended age-appropriate influenza vaccine and no longer have to be monitored for 30 minutes after receiving the vaccine. People who have severe egg allergies should be vaccinated in a medical setting and be supervised by a health care provider who is able to recognize and manage severe allergic conditions.”
	+ Individuals with egg allergy may receive RIV. Hives-only reaction to egg may receive IIV. Individuals with egg allergy should not receive LAIV.
* Thiomersal: Flu vaccines in multi-dose vials contain thimerosal to safeguard against contamination of the vial. Most single-dose vials, pre-filled syringes, and the nasal spray flu vaccine do not contain a preservative.
* Efficacy of Flu Vaccine: During 2010-2011 flu season, vaccine efficacy was at it’s highest of 60%. May not be effective at preventing illness completely but will likely lessen symptoms. Continue to advocate for herd immunity.
* Antivirals: Oseltamivir (Tamiflu) - oral, 5 doses; Zanamivir (Relenza) - inhaled, 5 doses; must start within 2 days of symptoms; lessens/shortens symptoms

**III: Treasurer’s report: Dr. Coppula**

GRANT SUBCONTRACT ACCOUNT, #27480157

Balance on Hand as of June 2018: ~$3,200

CASH SUBACCOUNT, #27480079

Balance on Hand as of June 2018: ~ $41,400

Expenses- Meetings only; Conference expenses be occurring this Fall

**IV: Conference update: Dr. Donna Nativio**

* 13th Annual Immunization Update Conference will be on November 1, 2018 at the Doubletree Monroeville
* Save the Date was sent out
* Registration/Breakfast- 7:30a; Program- 8:30a – 12:30p
* Registration will open on *August 27th*!
* Registration fee: Physicians ($75), PA/NP/RNs ($40), and Students ($20)
* Continuing education will be provided for Nurse Practitioners, Physicians, Physicians Assistants, Registered Nurses, & Nurses
* Speakers: Dr. Zimmerman (Flu overview); Dr. Mark Roberts (Herd Immunity), and Dr. Jonathan Weinkle (Immigrant Immunization)
* Exhibitors will be contacted by Mary Shubert soon but feel free to reach out to her at mschuber@pitt.edu

**V: ACIC Updates: Steve Forest**

* Reminder- One more meeting (12/6/18) at the Hilton Garden Inn
* Per survey monkey feedback, general membership meetings (starting in 2019) will be moved to the AIU Headquarters in the Waterfront (free parking and meeting space; possible option for conference call?), time and day of the week for the meetings will not change
* The executive committee is in the process of *updating the bylaws*. The board is looking to add a “leadership pipeline”, so there is always a past, present and future executive committee member for every position. The updated bylaws will be sent out to general membership for review and comment soon.
* The executive committee also wants to create a *Community Outreach committee* and is currently looking for volunteers! Please reach out to Morgan Gilbert (Secretary) at morgangilbert17@gmail.com or Steve Forest (Chair) at Stephen.Forest@alleghenycounty.us if you are interested in joining!
* The executive committee is in the process of developing a “strategic plan” for 1, 3 and/or 5 years. More to come!

**VI: Round Robin**:

* *Steve Forest-* School Immunization Report to be published on ACHD website soon. The immunization rates for all required vaccinations will be published by school. There have been some recent Hepatitis A outbreaks across the country. Alleghany County has only had 1 case in the past year and is working to vaccinate high risk populations.
* *Melissa Merante*- works for Pfizer; helping with a non-product campaign “Partner to Help Protect” where they are partnering with the Urban League to do community outreach. One of the goals is to increase healthy kids visits and infant immunizations. Melissa offered to provide dates for upcoming community events to the Community Outreach committee.
* *Theresa Joseph*—Pfizer has vaccine resources available in numerous languages
* *Lisa McKnight*: Works for American Healthcare. Currently working as a Community Nurse and focusing mostly on a Senior Lifestyle Series, which includes vaccine education. Expressed interest in joining the Community Outreach committee.
* *Jessica Duell:* Just finished 1st year of Pitt Medical School. Worked on research this summer at Pitt doing flu vaccine efficacy studies with FluVE project.

**VII: Meeting adjourned**

Next General Membership meeting is December 6th.

Respectfully Submitted

Morgan Gilbert

HIGH DOSE FLU VACCINE STUDIES (per member request):

***Randomized, Double-Blind Controlled Phase 3 Trial Comparing the Immunogenicity of High-Dose and Standard-Dose Influenza Vaccine in Adults 65 Years of Age and Older***

<https://academic.oup.com/jid/article/200/2/172/955522>

**Abstract**

**Background**

Influenza-associated morbidity and mortality has not decreased in the last decade, despite increased receipt of vaccine. To improve the immunogenicity of influenza vaccine, a high-dose (HD) trivalent, inactivated influenza vaccine was developed

**Methods**

A multicenter, randomized, double-blind controlled study was conducted to compare HD vaccine (which contains 60 μg of hemagglutinin per strain) with the licensed standard-dose (SD) vaccine (which contains 15 μg of hemagglutinin per strain) in adults ⩾65 years of age

**Results**

HD vaccine was administered to 2575 subjects, and SD vaccine was administered to 1262 subjects. There was a statistically significant increase in the rates of seroconversion and mean hemagglutination inhibition titers at day 28 after vaccination among those who received HD vaccine, compared with those who received SD vaccine. Mean postvaccination titers for individuals who received HD vaccine were 116 for H1N1, 609 for H3N2, and 69 for B strain; for those who received SD vaccine, mean postvaccination titers were as 67 for H1N1, 333 for H3N2, and 52 for B strain. The HD vaccine met superiority criteria for both A strains, and the responses for B strain met noninferiority criteria. Seroprotection rates were also higher for those who received HD vaccine than for those who received SD vaccine vaccine, for all strains. Local reactions were more frequent in individuals who received HD vaccine, but the reactions were mild to moderate.

**Conclusions**

There was a statistically significant increase in the level of antibody response induced by HD influenza vaccine, compared with that induced by SD vaccine, without an attendant increase in the rate or severity of clinically relevant adverse reactions. These results suggest that the high-dose vaccine may provide improved protective benefits for older adults

***Efficacy of High-Dose versus Standard-Dose Influenza Vaccine in Older Adults***

<https://www.nejm.org/doi/full/10.1056/NEJMoa1315727>

**Abstract**

**Background**

As compared with a standard-dose vaccine, a high-dose, trivalent, inactivated influenza vaccine (IIV3-HD) improves antibody responses to influenza among adults 65 years of age or older. This study evaluated whether IIV3-HD also improves protection against laboratory-confirmed influenza illness.

**Methods**

We conducted a phase IIIb–IV, multicenter, randomized, double-blind, active-controlled trial to compare IIV3-HD (60 μg of hemagglutinin per strain) with standard-dose trivalent, inactivated influenza vaccine (IIV3-SD [15 μg of hemagglutinin per strain]) in adults 65 years of age or older. Assessments of relative efficacy, effectiveness, safety (serious adverse events), and immunogenicity (hemagglutination-inhibition [HAI] titers) were performed during the 2011–2012 (year 1) and the 2012–2013 (year 2) northern-hemisphere influenza seasons.

**Results**

A total of 31,989 participants were enrolled from 126 research centers in the United States and Canada (15,991 were randomly assigned to receive IIV3-HD, and 15,998 to receive IIV3-SD). In the intention-to-treat analysis, 228 participants in the IIV3-HD group (1.4%) and 301 participants in the IIV3-SD group (1.9%) had laboratory-confirmed influenza caused by any viral type or subtype associated with a protocol-defined influenza-like illness (relative efficacy, 24.2%; 95% confidence interval [CI], 9.7 to 36.5). At least one serious adverse event during the safety surveillance period was reported by 1323 (8.3%) of the participants in the IIV3-HD group, as compared with 1442 (9.0%) of the participants in the IIV3-SD group (relative risk, 0.92; 95% CI, 0.85 to 0.99). After vaccination, HAI titers and seroprotection rates (the percentage of participants with HAI titers ≥1:40) were significantly higher in the IIV3-HD group.

**Conclusions**

Among persons 65 years of age or older, IIV3-HD induced significantly higher antibody responses and provided better protection against laboratory-confirmed influenza illness than did IIV3-SD.