

September 18, 2012

When Is The Best Time To Start Giving Flu Vaccines?

There is no “one-size fits all” answer to this question. In fact we are getting mixed messages from the Centers for Disease Control (CDC), Advisory Committee on Immunization Practices (ACIP) and other national specialty groups. Here are the current recommendations:

CDC: CDC recommends that people get vaccinated against influenza as soon as flu season vaccine becomes available.

<http://www.cdc.gov/flu/professionals/vaccination/vax-summary.htm>

ACIP: ACIP in its 8/17/2012 statement recommends that vaccination providers should offer vaccination as soon as vaccine is available. Vaccination should be offered throughout the influenza season (i.e., as long as influenza viruses are circulating in the community).

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6132a3.htm>

American Academy of Pediatrics: As soon as the trivalent seasonal influenza vaccine is available locally, health care personnel (HCP) should be immunized, publicize vaccine availability to parents and caregivers, and begin immunization of all children 6 months of age and older, especially children at high risk of complications from influenza.

<http://pediatrics.aappublications.org/content/128/4/813.full>

Epidemiology and Prevention of Vaccine Preventable Disease (CDC Pinkbook) 12th edition, May 2012:

Influenza activity peaks in temperate areas between late December and early March. TIV should be offered as soon as it becomes available. Organized vaccination campaigns generally should be scheduled no earlier than mid-October. <http://www.cdc.gov/vaccines/pubs/pinkbook/index.html>

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I have done a literature search on the duration of immunity for flu vaccines and the results are mixed. Some common themes are: adults aged >65 typically have a diminished immune response compared to young healthy adults; serum anti-influenza antibodies and nasal IgA remain detectable in children vaccinated with LAIV for more than 1 year; and the proportion of persons who retained seroprotective levels of anti-influenza antibody declined in all age groups within 1 year of vaccination.

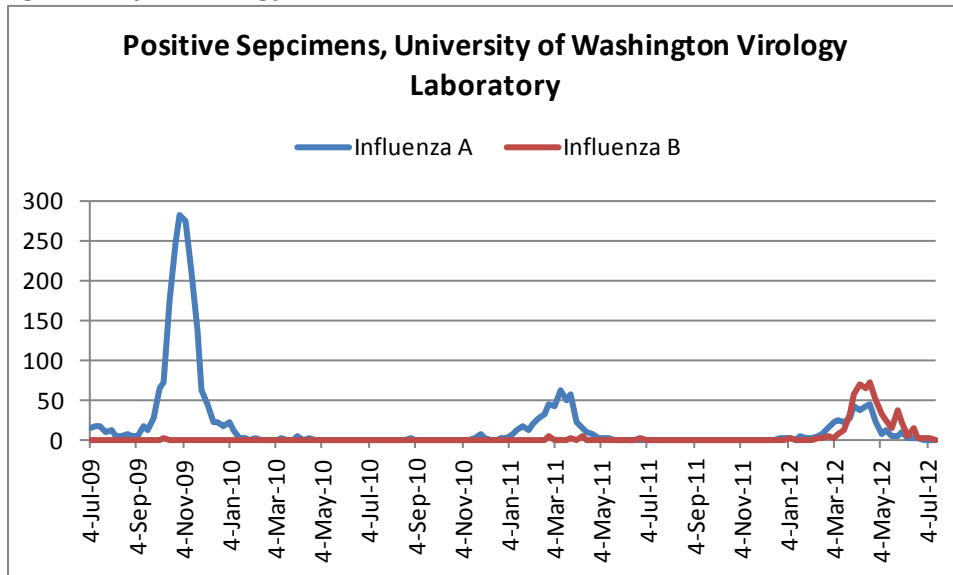
While older studies have suggested that vaccination efficacy could wane as early as 2-4 months post vaccination, newer studies and newer technologies appear to offer longer duration of immunity. Both computer modeling and clinical record reviews (retrospective case studies) both conclude that vaccination is optimal in October and less effective later than mid-November.

So, what do I recommend?

Looking at our epidemiology (see Figure 1), our influenza season generally starts later than the rest of the United States. It is not uncommon to begin our flu season in February or March. We do have sporadic flu isolates in the county and one year we had flu activity peaking in early November. Given all the above studies and recommendation, **I think starting flu vaccinations in mid October will allow enough time to develop antibodies (within 2 weeks) if it is an early November flu season as well as optimize the peak of antibodies (3-4 months) if the typical season occurs in January or February.**

I certainly would not turn anyone away who presents before mid-October for a flu vaccination. In fact, many local pharmacies have been offering flu vaccines for several weeks in our county. While early in my opinion, they are consistent with CDC recommendations and will ultimately increase the number of persons that receive vaccine in our communities.

Figure 1. Epidemiology of Influenza Isolates 2009-12



Feel free to contact me directly if you have any questions or comments.

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