News

- Particularly in older adults, annual influenza vaccinations provide more protection than residual antibodies from prior years’ vaccines, a study of repeated annual immunizations shows (Clin Infect Dis. 2019[Sept 15];69:970–979). The Canadian study, conducted over the 2011–12 through 2014–15 seasons, looked at prior influenza vaccines and subsequent influenza vaccine effectiveness to address recent findings that repeated annual vaccinations might be detrimental. Researchers found “mainly nonsignificant associations”; the only statistical trends in the data showed a nonsignificant decrease in vaccine effectiveness in those vaccinated in both of two A/H3N2-dominant seasons (2012–13 and 2014–15). “Even in circumstances where we observed a trend of negative impact, being repeatedly vaccinated was still more effective than not receiving the current season’s vaccine,” the authors concluded.

- The route of administration of influenza vaccine made no difference in a difficult-to-immunize group: people living with HIV infections. Amoah et al. analyzed immunologic responses in men with or without HIV infections following intradermal or intramuscular administration of standard-dose influenza vaccines. The idea was that intradermal administration might increase immunologic responses by taking advantage of antigen-processing cells and other immune components of the skin. “The route of vaccination had no effect on antibody responses, antibody avidity, T-cell responses, or B-cell responses in HIV-infected or HIV-uninfected subjects,” the investigators concluded. “With the serological and cellular immune responses to influenza vaccination being impaired in HIV-infected individuals with a CD4+T-cell count of <200 cells/μL, passive immunization strategies need to be explored to protect this population.” (J Infect Dis. 2019[Sept 1];220:743–751)

Resources

- Visit the Flu and Chronic Health Conditions toolkit on the National Foundation for Infectious Diseases website to download infographics for consumers and health professionals, fact sheets for people with specific chronic health conditions, and additional resources.
The recent release of a draft National Vaccine Plan (see next article) offered an opportunity for providers and consumers to identify evidence, gaps in research, and tools and resources needed to improve recommendations and trust in the vaccine delivery system. Although priorities have been identified, input into objectives was requested by October 24 in an open call for input by nonfederal stakeholders. Working with members of the National Adult Vaccination Program workgroup, GSA identified ways the objectives could be enhanced for the adult population.

Engagement in calls for comments from federal stakeholders is a great opportunity to highlight on-the-ground needs to improve provider use of a strong recommendation and patient acceptance of vaccination. Providing a strong recommendation for vaccination is the primary indicator of whether a patient receives a vaccine, yet few patients indicate that they have received a strong recommendation.

2020: SHIFTING TO A LIFESPAN APPROACH FOR THE NATION’S VACCINE PLAN

The calendar will soon turn to 2020, and with the new decade comes a decennial update of the National Vaccine Plan for the United States. That process is now under way, starting with five recommendations approved in September by the National Vaccine Advisory Committee (NVAC) and a recent call for additional input by nonfederal stakeholders with an October 24 deadline. In addition, a recently issued White House executive order brings new attention to the risks of continued reliance on egg-culture-derived vaccines against influenza virus in pandemics or other crisis situations.

SOCIAL RESEARCH/POLICY/PRACTICE

The National Vaccine Program has been developing strategic plans for the nation since Congress created it in 1986. The last plan was developed in 2010, with midcourse review in 2016. In the proposed update for 2020, NVAC’s first recommendation is to adopt overarching goals that are similar to those of past plans: fostering innovation, leveraging the vaccine safety system, enhancing knowledge of and confidence in the immunization system, optimizing access to and use of recommended vaccines, and promoting global immunization (see Figure 1).

One major difference important for readers of this adult-immunizations newsletter is a planned emphasis on immunization priorities across the lifespan. Specifically, a goal from the 2016 National Adult Immunization Plan—to strengthen the adult immunization infrastructure—is not included in the recommended 2020 goals. Instead, according to NVAC, the needed infrastructure would be covered as a priority objective: “The NVAC adult, adolescent, and pediatric vaccination standards should be adapted to improve vaccination uptake across the lifespan.”
The National Vaccine Plan recommendations recognize and call for elimination of geographic, racial-ethnic, and socioeconomic barriers that limit vaccine access across the lifespan. Recognizing the challenges of vaccine advocacy in patient encounters, the priority objectives include advancing quality improvement initiatives through enhanced use of electronic health records and immunization information systems to collect and track data on vaccines, support of clinical decision-making, assistance with vaccine forecasting, and identification of areas of need.

“Noteworthy disparities and gaps in immunization coverage remain, which place many individuals at unnecessary risk from vaccine-preventable diseases,” NVAC said in describing its fourth goal (see Figure 1).

Developing and applying new ways of countering vaccine hesitancy is also necessary, NVAC said. To support its third goal of enhancing knowledge of and confidence in routine vaccines and immunization system, NVAC supports these priorities:

- Research effective communication strategies to reach under-immunized populations, including messaging, outreach strategies, and cultural and linguistic approaches.
- Unify and promote vaccination standards across the lifespan.
- Enhance the delivery of vaccine safety and effectiveness messages to providers and the public.

As “trusted sources of information,” providers need these tools to “explain vaccine safety and address a range of questions, values, and information related to improving vaccine confidence,” the group added.

FIGURE 1. The National Vaccine Plan Stakeholder Engagement Diagram

Source: National Vaccine Advisory Committee.
Seeking to leverage advances in influenza vaccine research and technology over the past decade, the White House executive order issued on September 19 calls for action in addressing the potential devastation that could be wrought by a pandemic with the “potential to spread rapidly around the globe.” Citing the 70-year-old process of manufacturing influenza vaccine in chicken eggs, the executive order states, “It is the policy of the United States to modernize the domestic influenza vaccine enterprise to be highly responsive, flexible, scalable, and more effective at preventing the spread of influenza viruses.”

The National Influenza Vaccine Task Force, chaired by the Secretaries of Health and Human Services (HHS) and Defense (or their designees), is charged with delivering a report within 120 days that outlines a plan for reducing reliance on egg-manufactured influenza vaccine, expands domestic capacity using alternative methods to facilitate “more agile and rapid responses to emerging influenza viruses,” advances development of these new vaccines, and supports promotion of influenza vaccination in recommended populations.

Responding to the order, HHS Secretary Alex Azar said in a statement, “Faster methods of producing influenza vaccines will help keep Americans safer both from seasonal influenza, which kills tens of thousands of Americans each year, and from the potential of pandemic influenza, which is the single greatest biodefense threat our country faces. Under this executive order, HHS will lead on coordinating and advancing work to modernize influenza vaccine production, as part of the important work we do to protect Americans from all infectious threats, whether naturally occurring, accidental, or manmade.”

How much difference this order will make is not clear at this point, but it could direct federal planners to focus less on egg-manufactured vaccines and more on faster ways of producing products. In the long run, that could drive innovation in the private sector and associated changes in recommendations and availability of products in the marketplace.