

Sept. 11, 2024, Vaccine Update Webinar Q&A

General questions

If you had chickenpox vaccine as a child, do you need a shingles vaccine later in life?

Yes. Like the natural virus, the chickenpox vaccine virus can remain dormant in the nervous system. While the vaccine virus is much less likely to reawaken and cause shingles compared with natural varicella virus, it can still occur. The shingles vaccine is recommended for adults 50 years of age and older.

Where can I obtain the slides for this presentation?

The slides are available in the "event resources" section of the console when you watch the event or on the webinar archive page of our site, <u>vaccine.chop.edu/webinars</u>.

Nirsevimab-related questions

Do you have guidance on giving nirsevimab during active RSV infection?

Nirsevimab administration should typically begin in October in most areas of the United States. Local epidemiology in the southeast may require beginning administration in September. The monoclonal antibody provides at least five months of protection, so if it is administered in October or later, the baby will be protected for the season. Keep in mind nirsevimab is only used for prevention; it cannot be used to treat an RSV infection.

What is the time interval between maternal RSV vaccination and birth at which the infant would be considered protected by passive immunity from maternal vaccination? Are there any instances where the infant would require nirsevimab even if mother was vaccinated?

The interval is two weeks between maternal receipt of the RSV vaccine and delivery. If delivery occurs earlier than two weeks after vaccination, the infant should receive nirsevimab. In rare circumstances nirsevimab may be recommended after maternal vaccination, including:

- Infants born to pregnant people who may not mount an adequate immune response to RSV vaccination (e.g., people with immunocompromising conditions)
- Infants born to pregnant people who have medical conditions associated with reduced transplacental antibody transfer (e.g., people living with HIV infection)
- Infants who have undergone cardiopulmonary bypass or extracorporeal membrane oxygenation (ECMO), leading to loss of maternal antibodies
- Infants at substantial increased risk for severe RSV disease (e.g., hemodynamically significant congenital heart disease, intensive care admission with a requirement of oxygen at discharge)

RSV maternal-related questions

Can you please clarify/repeat the guidance on pregnancy doses of RSV vaccine and if it should be given with subsequent pregnancies? Or should just one dose be given?

From September through January, pregnant people should receive RSV vaccine from weeks 32 through 36 weeks of pregnancy. It is not recommended for people to receive additional doses of vaccine during subsequent pregnancies. If a pregnant person had vaccine during a prior pregnancy, their more recently born infant should receive nirsevimab.

If a baby is born before 2 weeks post RSV vaccination, will breastfeeding (exclusively) provide protection to the baby?

Breastfeeding provides excellent protection against RSV infection regardless of vaccine status. It is currently unknown if breastfeeding by a recently vaccinated mother offers equal protection against disease compared with nirsevimab. Infants born before two weeks post-maternal RSV vaccination should receive nirsevimab.

Influenza-related questions

What is the recommended time frame for flu vaccine in the over 65 population?

For most people, September and October are generally good times to be vaccinated against influenza with the aim to be vaccinated by end of October. Adults 65 and older should avoid getting vaccinated too early, such as in August, as protection may wane during the influenza season.

Pneumococcal-related questions

An adult patient got the "old" and "new" pneumococcal vaccines and had redness, discomfort and baseball-sized arm swelling at the site. They are now hesitant to get other vaccines. How would you counsel this patient?

First, review vaccine administration records and try to identify the specific vaccine that was administered. Report this event to VAERS. While redness, pain and tenderness are all known side effects, the benefits of the vaccine usually still outweigh the risk of the local reaction. If the swelling is severe, the patient should be counseled to receive a vaccine made by a different manufacturer recognizing that antigens and adjuvants in each product are different. Likewise, a reaction to the pneumococcal vaccine would not be anticipated to carry over to other vaccines, such as shingles or influenza, because all vaccines are made differently.

For pneumococcal vaccines is the assumption that "coverage" of a serotype is 100% (i.e., the vaccine efficacy for that serotype is 100%), so that more serotypes are always a better vaccine (not really asking about PCV 21)?

The effectiveness of pneumococcal conjugate vaccines varies based on what is being studied. For example, when looking at PCV13, it was 45% effective against vaccine-type pneumococcal pneumonia and 75% effective against vaccine-type invasive pneumococcal disease. Current pneumococcal vaccines are not anticipated to provide 100% effectiveness against disease from all serotypes contained in the vaccine, but we will need to see real-world effectiveness studies for more information. The amount of disease caused by each serotype in the vaccine is just as important as considering the number of serotypes contained in the vaccine, so the number alone (i.e., PCV20 versus PCV21) should not be used to determine which product is best.

For adults who received the PCV13 and PPSV23 vaccines as previously recommended, is it recommended for them to receive the newer vaccination?

Adults who have received PCV13 and PPSV23 are considered up to date, but they can receive a dose of either PCV20 or PCV21 through shared decision making with their clinician.

So, it looks like PCV21 should be recommended over PCV20 because it has more coverage. Is that correct?

PCV21 and PCV20 provide significantly different coverage, with 10 serotypes in common. PCV20 provides coverage for serotype 4, which is an important cause of invasive pneumococcal disease. PCV21 does not contain serotype 4 but does contain many serotypes that are responsible for disease in older adults. Licensure of both PCV20 and PCV21 was based on immunogenicity trials which compared the products to previously licensed products to ensure the immune response is not inferior. Following licensure, real world effectiveness studies will need to be conducted to compare the two products' effectiveness in reducing disease at the populational level. At that time, it may be possible to determine if there should be a preferential recommendation for one over the other.