Q: Is there a risk if a patient receives one dose of a pneumococcal vaccine too close to another?

A: The risk is for diminished immune response if the interval is too short. There may also be a risk for increased frequency and severity of local reactions after vaccination. See <https://www.cdc.gov/mmwr/pdf/wk/mm6434.pdf#page=16> for more information.

Q: Does all this data about invasive pneumococcal disease only apply to bacteremia and meningitis, correct?

A: Pneumonia (that accompanies bacteremia), bacteremia, or sepsis, and meningitis are the most common types of invasive pneumococcal disease. Much less common invasive forms are empyema, (abscess in the pleural space), septic arthritis, pericarditis (infection of the sac around the heart), and endocarditis (infection of a heart valve).

Q: Can an adult receive pneumococcal conjugate vaccine (PCV13) while taking antibiotics?

A: Yes, antibiotic use will not affect the immune response to this vaccine. Please be sure the patient receiving antibiotics is no longer moderately to severely ill, which is a precaution for all vaccinations. This precaution is in place to avoid a vaccine adverse event complicating the ongoing illness.

Q: Should the six yr. old in the first example [in the presentation] receive PPSV23 at five-year intervals? If so, would the child would get more than three in a lifetime?

A: The question in the presentation is:

A 6-year-old patient has sickle cell disease. Her immunization history includes a complete PCV13 series and PPSV23 at 4 years of age. Should PPSV23 be administered today?

CDC and ACIP do not recommend more than three doses of PPSV23 in a lifetime, nor more than two doses before age 65 years. These recommendations were developed because data are insufficient concerning the safety and benefit of pneumococcal vaccine when administered three or more times. Therefore, revaccination more than twice (for three doses in a lifetime) is not recommended. See <https://www.cdc.gov/mmwr/pdf/wk/mm6225.pdf> and <https://www.cdc.gov/mmwr/pdf/wk/mm6140.pdf> for more information.

Q: Is hepatitis C [infection] a risk factor or just cirrhosis for administering pneumococcal polysaccharide vaccine (PPSV23) to persons less than 65 years of age?

A: The CDC and ACIP recommendations for pneumococcal polysaccharide vaccination before age 65 include chronic liver disease and cirrhosis (see <https://www.cdc.gov/mmwr/pdf/wk/mm6140.pdf>). The decision to vaccinate is up to the clinician as to the severity of the chronic liver disease, and risk for pneumococcal infection.

Q: Have the 2019 ACIP recommendations been published in MMWR yet? If not, when will this happen?

A: The ACIP recommendation describing the rationale for altering the 2014 recommendation for routine vaccination of all persons 65 years and older with PCV 13 to a recommendation for provider and patient shared clinical decision making about vaccination is not yet published. Publication is expected before the end of the year.

Q: Please restate why no PPSV23 should be given to the 70 year old?

The question in the presentation is:

A 70-year-old patient is immunosuppressed. Her immunization history includes PCV13 and PPSV23 administered on the same day at 65 years of age. Should PPSV23 be administered today?

A: The patient had already received both pneumococcal vaccines recommended for her at 65 years of age. Although these vaccines should not be administered at the same time or medical visit, CDC does not recommend repeating either dose if they are administered together. Although the patient is immunocompromised, those who receive PPSV23 at or after age 65 years should receive only a single dose (<https://www.cdc.gov/vaccines/vpd/pneumo/downloads/pneumo-vaccine-timing.pdf>).

Q: You mentioned that on military installations pneumococcal carriage rates are 50-60%. Can you provide additional information about that?

A: Most studies of military populations describing pneumococcal disease outbreaks cite carriage rates in healthy personnel as between 10% and 30% (see <https://www.ncbi.nlm.nih.gov/pubmed/?term=pneumococcal+carriage+in+soldiers>). One study (see <https://www.ncbi.nlm.nih.gov/pubmed/15727144>) cited colonization as high as 69%.

Q: What if a patient has received more than three doses of PPSV23 before the age of 65-would they still receive one after age 65?

A: Yes. There are limited data demonstrating persons have safely received more than three doses of pneumococcal polysaccharide vaccine, particularly if at least five years have passed between doses. The dose of pneumococcal polysaccharide vaccine recommended at 65 years of age and older provides protection in the age group with the highest rate of invasive pneumococcal disease. This final dose should be given at least five years after the previous PPSV23 dose.

Q: Is the one-year separation a strict calendar year? Therefore, if PCV13 is given Sept. 18, 2019, then the PPSV should not be given before Sept. 18, 2020.

A: The one-year separation does not need to be a strict calendar year. When ACIP made the recommendation in 2014, the recommended interval was 6 to 12 months, but was later changed to “at least one year” to simplify recommendations (see <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6434a4.htm>). Therefore, if a dose of PPSV23 is inadvertently given earlier than the recommended interval, the dose need not be repeated.

Q: Is there a maximum number of doses for PCV13?

A: There is no specified maximum number of doses for PCV 13. Per current recommendations, the maximum number recommended would be four doses the routine childhood schedule. ACIP currently recommends PCV13-naïve adults with indications to receive PCV13.

Q: If invasive pneumococcal disease does not include pneumonia, what about the data on pneumonia? Isn't it the largest problem?

CDC estimates that as many as 400,000 hospitalizations from pneumococcal pneumonia occur annually in the United States. Invasive pneumococcal disease can include pneumonia, if it is accompanied by bacteremia and/or meningitis. Bacteremia occurs in up to 25–30% of patients with pneumococcal pneumonia. Bacteremia and meningitis without pneumonia account for approximately 5,000 and 2,000 cases of invasive pneumococcal disease annually. See <https://www.cdc.gov/pneumococcal/clinicians/clinical-features.html> for more information.