

# Long-Term Care Updates

February 2020

ACIP Immunization Updates  
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## Introduction

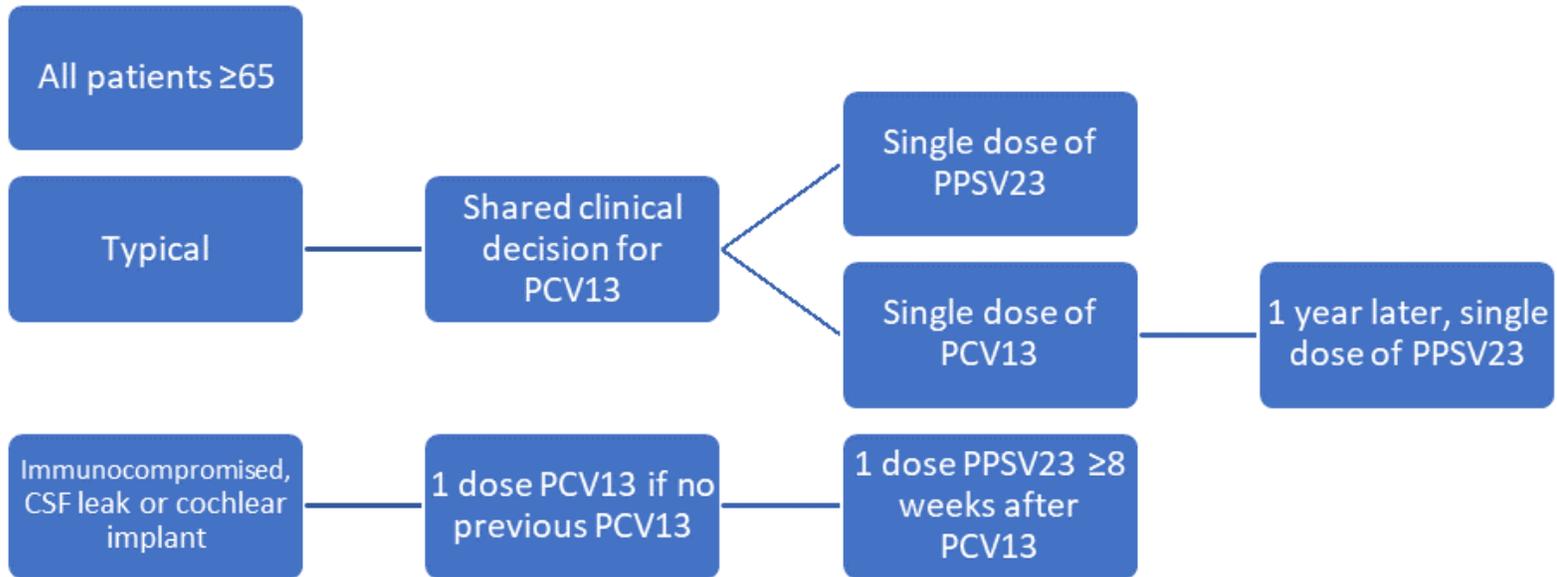
Volunteer public health experts serve on the Advisory Committee on Immunization Practices (ACIP) to develop recommendations for appropriate immunizations. These recommendations are usually adopted by the Centers for Disease Control and Prevention (CDC), and they become official when published in the CDC's *Morbidity and Mortality Weekly Report* (MMWR). In the past year, ACIP and CDC updated recommendations for immunizations for pneumococcal disease and human papillomavirus infections. ACIP also voted to update recommendations for tetanus, diphtheria, and pertussis, which will become official when published in *MMWR*.<sup>1</sup> This article will summarize relevant updates to the recommendations from the past year.

## Pneumococcal Vaccines

In 2014, ACIP recommended that adults  $\geq 65$  receive in series the 13-valent pneumococcal conjugate vaccine (PCV13) and the 23-valent polysaccharide vaccine (PPSV23) to prevent pneumococcal disease. In November 2019, the Committee published updated recommendations. Now, ACIP recommends routine immunization with PPSV23 for adults 65 years of age and older and - for those who do not have an immunocompromising condition, cerebrospinal fluid (CSF) leak, or cochlear implant - shared clinical decision-making for whether those adults also receive PCV13 (See Figure 1 on the next page ).<sup>2</sup>

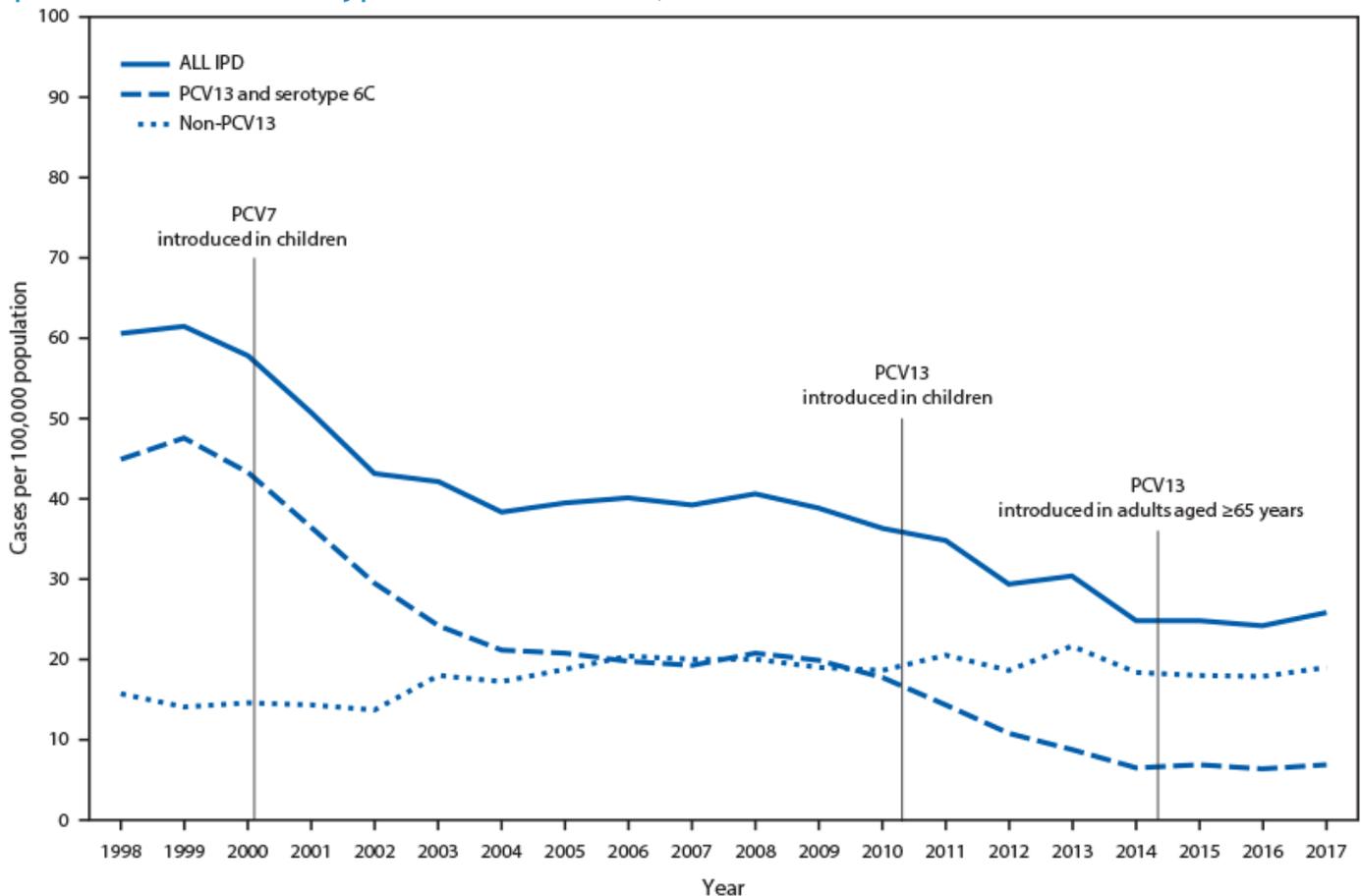
This recommendation was based on a systematic review of the evidence published from January of 2014 to July of 2018. The systematic review evaluated PCV13 in series with PPSV23 compared with PPSV23 alone in patients 65 and older. Researchers excluded patients who had an immunocompromising condition, cerebrospinal fluid leak, or cochlear implant. The outcomes were invasive pneumococcal disease, pneumonia, mortality, and PCV13 safety.<sup>2</sup>

Figure 1. Pneumococcal Immunization recommendations for older adults<sup>2</sup>



The review found that PCV13 effectively prevents invasive and non-invasive PCV13-type disease among adults that it is administered to, and there are no serious safety concerns. However, the recommendation in 2014 to immunize adults  $\geq 65$  with PCV13 did not seem to decrease rates of PCV13-type invasive pneumococcal disease rates in that population. The rates are now at an all-time low, but this is most likely due to the indirect effects from pediatric immunizations, not from adult vaccinations (See Figure 2 below).<sup>2</sup>

Figure 2. Invasive pneumococcal disease (IPD) incidence among adults aged  $\geq 65$  years, by pneumococcal serotype - United States, 1998-2017



Reproduced from *MMWR Morb Mortal Wkly Rep*<sup>2</sup>

As PCV13 vaccination is safe and effective for an individual but does not result in a meaningful population-level benefit, ACIP recommended it be an option for adults  $\geq 65$ , rather than a routine recommendation. There are several factors to consider for shared clinical decision-making (see Box), notably residence in nursing homes or other long-term care facilities. While the overall elderly population may not benefit from PCV13 immunization, those who are at higher risk for exposure and who may be more likely to develop pneumococcal disease if exposure occurs should consider receiving PCV13 immunization for their personal added protection.<sup>2</sup>

### Box. Factors increasing likely benefit from PCV13 vaccination<sup>2</sup>

Residence in long-term care facilities

Chronic heart, lung, or liver disease or diabetes

More than one chronic medical condition

Alcoholism

Smoking

### Human Papillomavirus Vaccine

ACIP updated their recommendations for human papillomavirus (HPV) in adults in August 2019. While previously this vaccine was only routinely recommended in pediatric patients and catch-up for females up to 26 years of age, ACIP now suggests catch-up vaccination in all adults up to 26 and recommends shared clinical decision-making for persons aged 27-45.<sup>3</sup>

ACIP performed a review of clinical trial evidence from 2006-2018. They found that HPV vaccination is effective to prevent HPV-related outcomes (persistent vaccine-type HPV infections, anogenital warts, and cervical intraepithelial neoplasia lesions) compared with no vaccination in adults 27-45 years of age, with similar adverse events compared with placebo. As exposure to HPV decreases with age, they believe there would be minimal population benefit.<sup>3</sup>

The HPV vaccine is effective to prevent new infections, but would not be effective in persons who have already been infected with those HPV types. The likelihood of already being exposed-such that the vaccine would no longer be necessary or effective-increases with age, so most persons from 27-45 do not need the vaccine. People who may have a new sex partner at any age who have not previously had the HPV vaccine may benefit.<sup>3</sup>

### Tetanus Vaccines

In October 2019, the ACIP voted to approve new recommendations for tetanus immunizations. In most recommendations where Td was indicated, now either Td or Tdap are recommended (see Table on the next page). These recommendations will become official when published in *MMWR*.<sup>1</sup> These recommendations aim to improve flexibility for providers and add potential benefit for pertussis control, with no additional safety concerns.<sup>4</sup>

Table. ACIP-approved tetanus recommendations for adults  $\geq 19$  years<sup>1,4</sup>

Indication	Recommendation
<b>Decennial booster dose</b>	Either Td or Tdap should be administered every 10 years
<b>Tetanus prophylaxis for wound management</b>	For nonpregnant persons with previous Tdap vaccination, either Td or Tdap should be used
<b>Catch-up immunization for never vaccinated</b>	Persons should receive at least three immunizations, including at least 1 dose of Tdap: 1 dose Tdap, followed by Td or Tdap 4 weeks after, and either Td or Tdap 6-12 months later
<b>Catch-up immunization for partial immunization</b>	At least 1 dose of Tdap should be given, preferably the first in the series; if additional doses are needed, either Td or Tdap can be used
<b>Catch-up immunization during pregnancy</b>	One of the doses administered during pregnancy should be Tdap; if more than one dose of a tetanus-toxoid containing vaccine is needed, either Td or Tdap vaccine can be used

## Conclusion

ACIP provides vaccine schedule recommendations which are published by CDC. Current recommendations allow clinical decision-making for PCV13 in adults 65 and older, changing from the previous recommendation for PCV13 immunization in series with PPV23 in all older adults. PCV13 is appropriate for individual protection in higher risk patients, including long-term care residents. HPV is now considered appropriate in adults 27-45 years of age, but is not routinely recommended. This immunization is more valuable in patients who will have new sex partners. In October 2019, ACIP recommended that Tdap is an appropriate alternative for Td in situations where previously only Td was recommended, allowing more flexibility for providers and potentially more protection from pertussis.

## References

1. Advisory Committee on Immunization Practices. Recommendations. Centers for Disease Control and Prevention website. <https://www.cdc.gov/vaccines/acip/recommendations.html>. Reviewed December 4, 2019. Accessed January 17, 2020.
2. Matanock A, Lee G, Gierke R, Kobayashi M, Leidner A, Pilishvili T. Use of 13-valent pneumococcal conjugate vaccine and 23-valent pneumococcal polysaccharide vaccine among adults aged  $\geq 65$  years: updated recommendations of the advisory committee on immunization practices. *MMWR Morb Mortal Wkly Rep*. 2019;68:1069–1075. <http://dx.doi.org/10.15585/mmwr.mm6846a5> Accessed January 15, 2020.
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