

Pneumococcal Vaccination in People with HIV

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Disclosures

No conflicts of interest to disclose

Disclaimer

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Why does pneumococcal vaccination in people with HIV have to be so darn confusing?!

Why the change?

- Cost-saving in cost-effectiveness analyses
- New recommendations provide opportunity for higher PCV coverage – to prevent more disease and address equity concerns
- Simplify recommendations*

* Not sure if this is the case though

Differences between coverage of serotypes

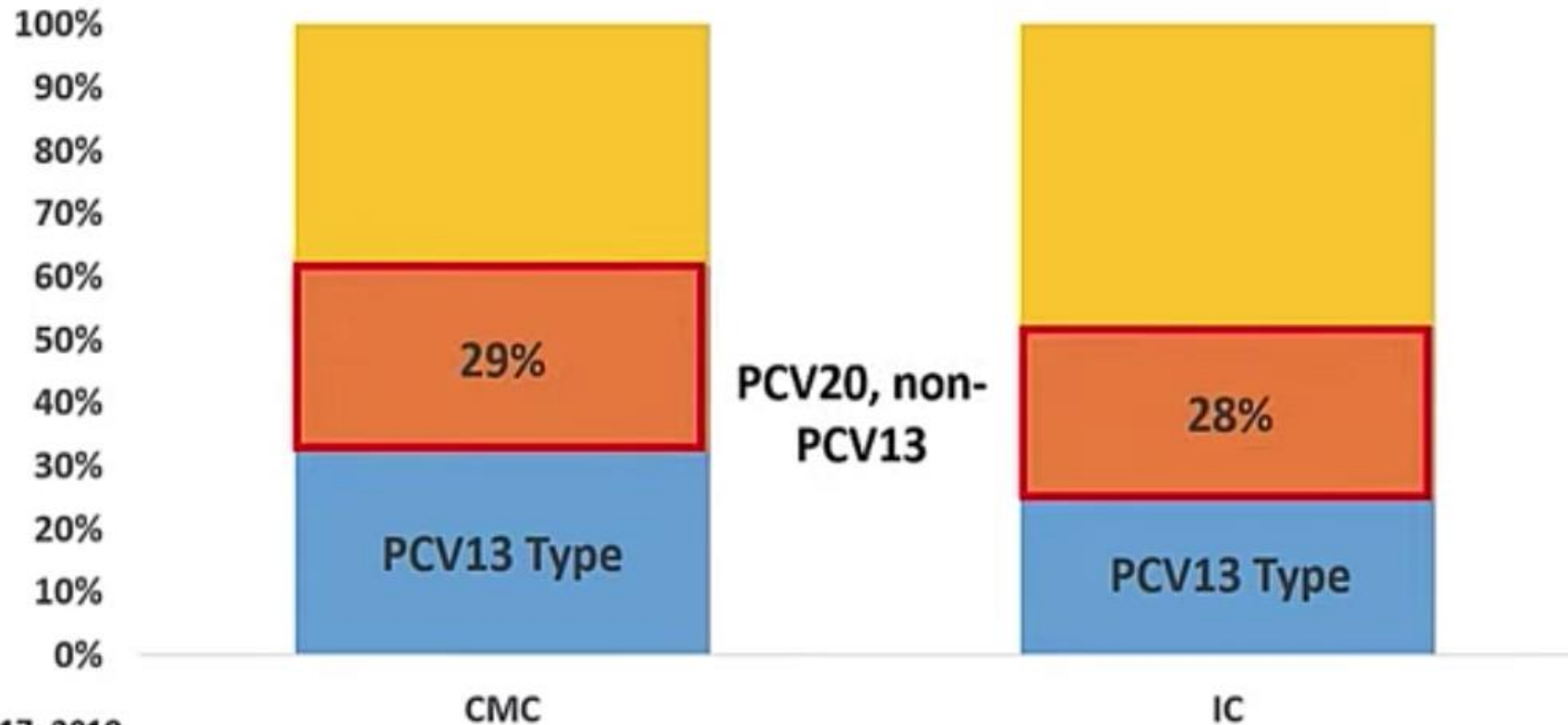
Serotypes Contained in Current and New Pneumococcal Vaccines

	1	3	4	5	6A	6B	7 F	9V	14	18 C	19 A	19 F	23 F	22 F	33 F	8	10 A	11 A	12 F	15 B	2	9N	17 F	20	
PCV13	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow												
PCV15	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Green										
PCV20	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Green	Blue	Blue	Blue	Blue	Blue	Blue				
PPSV23	Yellow	Yellow	Yellow	Yellow	White	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Green	Blue	Blue	Blue	Blue	Blue	Blue	Orange	Orange	Orange	Orange

- PCV15 non-PCV13: includes serotypes 22F and 33F
- PCV20 non-PCV13: includes serotypes 22F, 33F, 8, 10A, 11A, 12F, and 15B
- PPSV23 non-PCV20: includes serotypes 2, 9N, 17F, and 20

Invasive Pneumococcal Disease in IC Hosts

Proportion of IPD by Serotype Groups in Adults aged 19–64 Years with Risk-based Indications



ABCs 2017–2018

PCV15 non-PCV13 serotypes: 22F, 33F
PCV20 non-PCV15 serotypes: 8, 10A, 11A, 12F, 15B/C
PPSV23 non-PCV20 serotype: 2, 9N, 17F, 20

CMC

CMC: chronic medical conditions
IC: immunocompromising conditions

Question:

43-year-old woman who presents for f/u after recent diagnosis of HIV. She is now on ART. She received all her childhood vaccinations. She is a non-smoker and has no other medical problems.

Which of the following is most appropriate regarding pneumococcal vaccination?

- A. She does not need additional pneumococcal vaccination today
- B. Give PCV20 today
- C. Give PPSV23 today
- D. Give PCV20 today, followed by PPSV23 in 1 year

ACIP Recommendations

Give 1 dose of PCV20 or PCV15

- If PCV15 is used, this should be followed by a dose of PPSV23 at 8 weeks later.
- If PCV20 is used, a dose of PPSV23 is NOT indicated.

Question:

43-year-old woman who presents for f/u after recent diagnosis of HIV. She is now on ART. She received all her childhood vaccinations. She is a non-smoker and has no other medical problems.

Which of the following is most appropriate regarding pneumococcal vaccination?

- A. She does not need additional pneumococcal vaccination today
- B. Give PCV20 today**
- C. Give PPSV23 today
- D. Give PCV20 today, followed by PPSV23 in 1 year

Question:

63-year-old individual presents for routine follow-up for HIV. They are on ART and VL has been suppressed. They ask about “pneumonia vaccine” as they are pro-vaccine and heard that there is a new vaccine available. You note they have received PCV13 in 2013 and PPSV23 in 2014 and again in 2019.

Which of the following is most appropriate regarding pneumococcal vaccination?

- A. No further vaccination is needed as they received the complete series
- B. Offer PCV20 at age 65 through shared decision making
- C. Offer PCV20 at age 65
- D. Give PPSV23 at age 65 to complete vaccination series

ACIP Recommendations for Individuals Age 65 and older

- If no prior vaccine - give PCV20 (or PCV15 + PPSV23 8 weeks later)
- If received PPSV23 only – give PCV20 or PCV15 at least 1 year later (no PPSV23 needed)
- If received PCV13 only – give PCV20 at least 1 year later (or give PPSV23 at least 8 weeks later)
- If received PCV13 at any age and PPSV23 before age 65 – give dose of PCV20 at least 5 years after last pneumococcal vaccine dose
- If received PCV13 at any age and PPSV23 at or after age 65 – shared decision making regarding given PCV20 (should be given 5 years after last pneumococcal vaccine dose)

Question:

63-year-old individual presents for routine follow-up for HIV. They are on ART and VL has been suppressed. They ask about “pneumonia vaccine” as they are pro-vaccine and heard that there is a new vaccine available. You note they have received PCV13 in 2013 and PPSV23 in 2014 and again in 2019.

Which of the following is most appropriate regarding pneumococcal vaccination?

- A. No further vaccination is needed as they received the complete series
- B. Offer PCV20 at age 65 through shared decision making
- C. Offer PCV20 at age 65**
- D. Give PPSV23 at age 65 to complete vaccination series

Question:

50-year-old man presents for routine HIV care. Has well controlled HIV on ART. You note that he has received PPSV23 x 1 in 2019 but has not received any pneumococcal conjugate vaccine

- A. Give PCV20 followed by an additional PPSV23 in at least 8 weeks (and at least 5 years from last PPSV23)
- B. Give PCV20 and no additional pneumococcal vaccines needed

ACIP Recommendations

- Give 1 dose PCV20 (or PCV15) at least 1 year after most recent PPSV23
 - No further doses of PPSV23 needed

Question:

50-year-old man presents for routine HIV care. Has well controlled HIV on ART. You note that he has received PPSV23 x 1 in 2019 but has not received any pneumococcal conjugate vaccine

- A. Give PCV20 followed by an additional PPSV23 in at least 8 weeks (and at least 5 years from last PPSV23)
- B. Give PCV20 and no additional pneumococcal vaccines needed**

Question:

50-year-old man presents for routine HIV care. Has well controlled HIV on ART. You note that he has received PCV13 x 1 in 2019 but has not received any other pneumococcal vaccine.

- A. Give PCV20 followed by PPSV23 in at least 8 weeks
- B. Give PCV20 and no additional pneumococcal vaccines needed
- C. Give 1 dose of PPSV23 and another dose 5 years later

ACIP Recommendations

- Give 1 dose of PCV20 at least 1 year after PCV13

OR

- Give 1 dose of PPSV23 at least 8 weeks after PCV13. These patients could receive up to two additional doses of PPSV23 in their lifetime. The second dose of PPSV23 should be administered at least 5 years after the first dose of PPSV23.

Question:

50-year-old man presents for routine HIV care. Has well controlled HIV on ART. You note that he has received PCV13 x 1 in 2019 but has not received any other pneumococcal vaccine.

- A. Give PCV20 followed by PPSV23 in at least 8 weeks
- B. Give PCV20 and no additional pneumococcal vaccines needed**
- C. Give 1 dose of PPSV23 and another dose 5 years later

Pneumococcal Vaccination in PWH

Adults 19–64 years old with specified immunocompromising conditions Complete pneumococcal vaccine schedules

Prior vaccines	Option A	Option B
None*	PCV20	PCV15 → ≥ 8 weeks → PPSV23
PPSV23 only	≥ 1 year → PCV20	≥ 1 year → PCV15
PCV13 only	≥ 1 year → PCV20	≥ 8 weeks → PPSV23 → ≥ 5 years → PPSV23 Review pneumococcal vaccine recommendations again when your patient turns 65 years old.
PCV13 and 1 dose of PPSV23	≥ 5 years → PCV20	≥ 5 years [†] → PPSV23 Review pneumococcal vaccine recommendations again when your patient turns 65 years old.
PCV13 and 2 doses of PPSV23	≥ 5 years → PCV20	No vaccines recommended at this time. Review pneumococcal vaccine recommendations again when your patient turns 65 years old.

Summary Recommendations

Adults ≥65 years old Complete pneumococcal vaccine schedules

Prior vaccines	Option A	Option B
None*	PCV20	PCV15 → ≥1 year† → PPSV23
PPSV23 only at any age	→ ≥1 year → PCV20	→ ≥1 year → PCV15
PCV13 only at any age	→ ≥1 year → PCV20	→ ≥1 year† → PPSV23
PCV13 at any age & PPSV23 at <65 yrs	→ ≥5 years → PCV20	→ ≥5 years§ → PPSV23

Resources

<https://www.cdc.gov/vaccines/vpd/pneumo/hcp/who-when-to-vaccinate.html#adults-over-65>



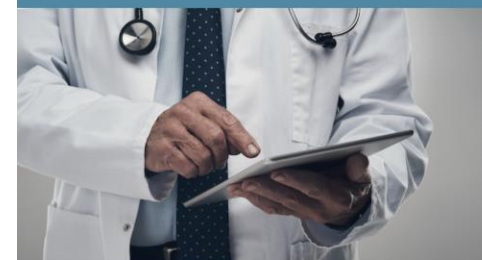
PneumoRecs VaxAdvi...

Medical

★★★★☆ 45

PneumoRecs VaxAdvisor

Tool to help determine which pneumococcal vaccines children and adults need.



Enter a patient's age, pneumococcal vaccination history, and underlying medical conditions. Move through this tool to create customized pneumococcal vaccination recommendations.

<19 years

19 through 64 years

≥65 years

Home

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