### **National Center for Immunization & Respiratory Diseases**



## **Pneumococcal Vaccines**

### Katherine A. Poehling, MD, MPH

Pneumococcal Vaccines Work Group Chair Advisory Committee on Immunization Practices October 20, 2021

# **Pneumococcal Vaccines Work Group**

### ACIP Members

- Katherine Poehling (Chair)
- Keipp Talbot
- Sarah Long

#### Ex Officio Members

- Jeffrey Kelman (CMS)
- Lucia Lee (FDA)
- Tina Mongeau (FDA)
- Uzo Chukwuma (IHS)
- Mamodikoe Makhene (NIH)

#### CDC Lead

- Miwako Kobayashi (NCIRD)

### Liaison Representatives and Consultants

- Lynn Fisher (AAFP)

- Mark Sawyer (AAP/COID)

- Jason Goldman (ACP)

- David Nace (AGS/AMDA)

- Emily Messerli (AIM)

- Elissa Abrams (NACI)

- Carol Baker (IDSA)

- William Schaffner (NFID)

- Virginia Caine (NMA)

Monica Farley (VAMC/Emory)

- Keith Klugman (BMGF)

- Arthur Reingold (UC Berkley)

- Lorry Rubin (CCMC)

- Cynthia Whitney (Emory)

- Richard Zimmerman (U. of Pittsburgh)

# **Pneumococcal Vaccines Work Group**

#### CDC Contributors

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- Ryan Gierke (Respiratory Diseases Branch)

- Jennifer Farrar (Respiratory Diseases Branch)

- Penina Haber (Immunization Safety Office)

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### • GRADE/EtR consultants

- Doug Campos-Outcalt
- Rebecca Morgan

# Policy Questions Presented at the September ACIP Meeting

#### PCV15 Age-based:

Should PCV15 be routinely recommended to US adults ≥65 years in series with PPSV23?

#### **PCV15** Risk-based:

Should PCV15 in series with PPSV23 be recommended for U.S. adults aged 19–64 years with chronic medical conditions\* or immunocompromising conditions\*\*?

#### If age-based PCV20 recommendation at age ≥50 years:

- Should PCV20 be routinely recommended to US adults aged ≥50 years?
- Should PCV20 be recommended for U.S. adults aged 19–49 years with chronic medical conditions\* or immunocompromising conditions\*\*?

#### If age-based PCV20 recommendation at age ≥65 years:

- Should PCV20 be routinely recommended to US adults aged ≥65 years?
- Should PCV20 be recommended for U.S. adults aged 19–64 years with chronic medical conditions\* or immunocompromising conditions\*\*?

<sup>\*</sup>Alcoholism, chronic heart/liver/lung disease, diabetes, cigarette smoking

<sup>\*\*</sup>Chronic renal failure, nephrotic syndrome, immunodeficiency, iatrogenic immunosuppression, generalized malignancy, human immunodeficiency virus infection, Hodgkin disease, leukemia, lymphoma, multiple myeloma, solid organ transplants, congenital or acquired asplenia, sickle cell disease, or other hemoglobinopathies, CSF leak, or cochlear implant

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Confusing to have different age-based recommendations by vaccine. Request to simplify the policy options for consideration for a vote.



## **Guiding Principles Proposed by the Work Group**

- Decisions on policy options should be supported by best-available evidence
- Simplifying existing pneumococcal vaccine recommendations could help improve vaccine coverage among adults
- Disparities in pneumococcal disease burden and vaccine coverage should be reduced
- Timely recommendations for each new vaccine should be made after FDA licensure

# Rationale for Harmonizing at Age ≥65 years

- Due to potential waning of immunity, vaccination later in life may be favorable when risk of disease may be higher
- Consistently cost-saving (lower cost and better health outcome compared to current recommendations) in cost-effectiveness analyses
- Proposed risk-based and age-based options still provide an opportunity for higher PCV coverage, which may prevent more disease compared with current recommendations and may address some health equity concerns

# **Updated Policy Questions for Consideration**

Should PCV20 alone OR PCV15 in series with PPSV23 be routinely recommended to US adults aged ≥65 years?

Should PCV20 alone OR PCV15 in series with PPSV23 be recommended for U.S. adults aged 19–64 years with certain underlying medical conditions or other risk factors\*?

<sup>\*</sup>alcoholism, chronic heart/liver/lung disease, cigarette smoking, diabetes mellitus, chronic renal failure, nephrotic syndrome, immunodeficiency, iatrogenic immunosuppression, generalized malignancy, human immunodeficiency virus, Hodgkin disease, leukemia, lymphoma, multiple myeloma, solid organ transplants, congenital or acquired asplenia, sickle cell disease or other hemoglobinopathies, CSF leak, or cochlear implant.

## One risk-based and one age-based recommendation are being considered.

	19-64 years	≥65 years
None of the conditions listed below	No recommendation	
Chronic medical conditions† (CMC)		Age-Based Recommendation
Cochlear implant, CSF leak	Risk-Based Recommendation	
Immunocompromising conditions*		

https://www.cdc.gov/vaccines/vpd/pneumo/downloads/pneumo-vaccine-timing.pdf

<sup>†</sup>Examples include alcoholism, chronic heart/liver/lung disease, diabetes, cigarette smoking

<sup>\*</sup>Chronic renal failure, nephrotic syndrome, immunodeficiency, iatrogenic immunosuppression, generalized malignancy, human immunodeficiency virus, Hodgkin disease, leukemia, lymphoma, multiple myeloma, solid organ transplants, congenital or acquired asplenia, sickle cell disease or other hemoglobinopathies

## **Today's Pneumococcal Vaccines Session Outline**

Introduction

Dr. Katherine Poehling

(ACIP, WG Chair)

Considerations for age-based and risk-based use of

PCV15/PCV20 among adults and proposed policy options

Dr. Miwako Kobayashi

(CDC/NCIRD)

Discussion

Dr. Miwako Kobayashi

(CDC/NCIRD)