



# Pneumococcal Vaccines

**Katherine A. Poehling, MD, MPH**

Pneumococcal Vaccines Work Group Chair

Advisory Committee on Immunization Practices

February 25, 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)
- Thomas Weiser (IHS)
- Kristina Lu (NIH)

- **CDC Lead**

- Miwako Kobayashi (NCRID)

- **Liaison Representatives and Consultants**

- Lynn Fisher (AAFP)
- Mark Sawyer (AAP/COID)
- Jason Goldman (ACP)
- David Nace (AGS/AMDA)
- Emily Messerli (AIM)
- Oliver Baclic (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**

- Tamara Pilishvili, Ryan Gierke, Jennifer Farrar (Respiratory Diseases Branch)
- Penina Haber, Pedro Moro (Immunization Safety Office)
- Sarah Schillie (Immunization Services Division)
- Jessica MacNeil

- **GRADE/EtR consultants**

- Doug Campos-Outcalt, Rebecca Morgan

# Pneumococcal Work Group Terms of Reference

- Review current data including efficacy, effectiveness, immunogenicity, epidemiology, and cost-effectiveness of pneumococcal conjugate and polysaccharide vaccines and assess the strength of the evidence
- Review current recommendations considering up-to-date evidence
- Revise or update recommendations for pneumococcal vaccine use as needed

# History of ACIP Pneumococcal Vaccine Recommendations

**PPSV23:** adults aged  
≥65 years and  
individuals with  
underlying conditions



1984

2000

2010

2012

2014

2019

**PCV7:** Children

**PCV13:** Children  
(replaced PCV7)

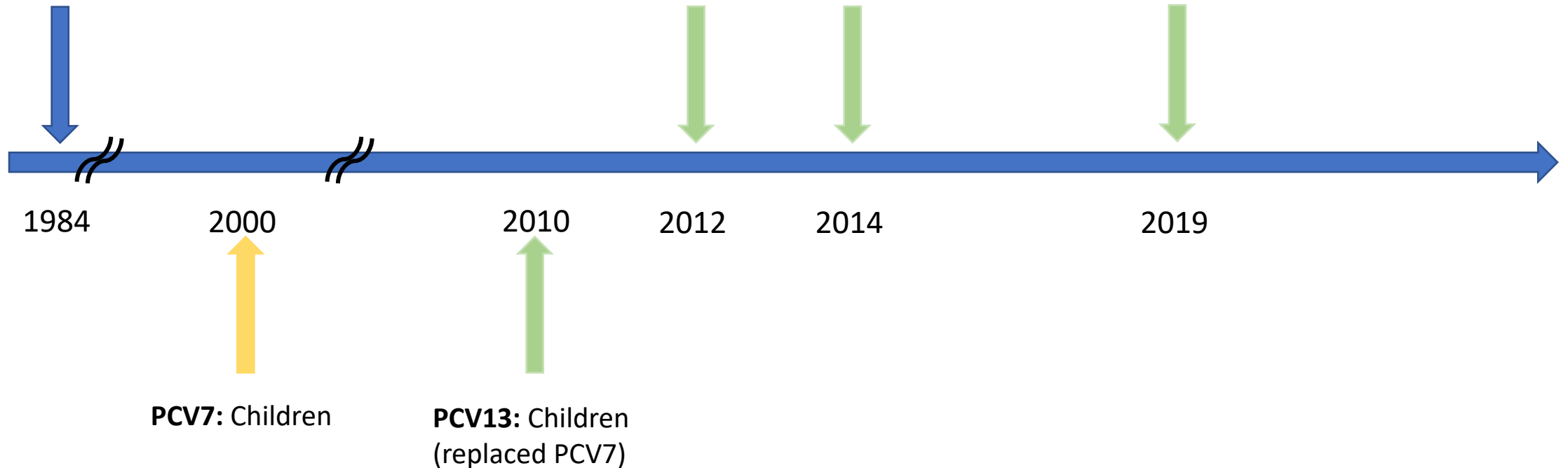
# History of ACIP Pneumococcal Vaccine Recommendations

**PPSV23:** adults aged  $\geq 65$  years and individuals with underlying conditions

**PCV13:** Adults with immunocompromising conditions in addition to PPSV23

**PCV13:** All adults aged  $\geq 65$  years in addition to PPSV23

**PCV13 based on SCDM** for all adults aged  $\geq 65$  years, routine PPSV23 recommendation



SCDM: shared clinical decision-making

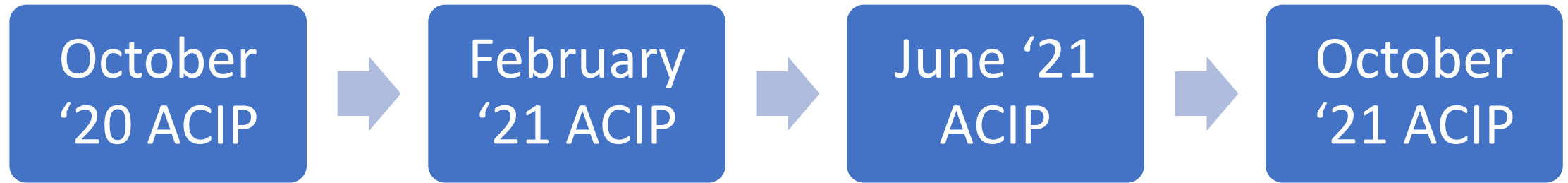
# Changes in ACIP Adult Pneumococcal Vaccine Recommendations

Target population	2012	2014	2019
Adults aged 19–64 years with chronic medical conditions	PPSV23	PPSV23	PPSV23
Adults aged ≥65 years*	PPSV23	<b>PCV13</b> +PPSV23	<b>PCV13 based on SCDM, PPSV23</b>
Adults aged ≥19 years with immunocompromising conditions, functional or anatomic asplenia, CSF leaks, or cochlear implants	<b>PCV13</b> +PPSV23	<b>PCV13</b> +PPSV23	<b>PCV13</b> +PPSV23

SCDM: shared clinical decision-making

\*without immunocompromising conditions, functional or anatomic asplenia, CSF leaks, or cochlear implants

# Anticipated Timeline for Licensure of Higher-Valent Pneumococcal Conjugate Vaccines



Pfizer (PCV20)	Filed to FDA (Oct '20)	Licensure anticipated (June '21*)
Merck (PCV15)	Filed to FDA (Nov '20)	Licensure anticipated (July 2021**)

Licensure for children anticipated in Q2–Q3 2022 (PCV15) or mid-2023 (PCV20)

\*<https://www.pfizer.com/news/press-release/press-release-detail/data-pfizers-adult-and-pediatric-clinical-trial-programs-20>

\*\*<https://www.merck.com/news/u-s-fda-accepts-for-priority-review-the-biologics-license-application-for-v114-mercks-investigational-15-valent-pneumococcal-conjugate-vaccine-for-use-in-adults-18-years-of-age-and-older/>



# Today's Pneumococcal Vaccines Session Outline

Introduction

Dr. Katherine Poehling (ACIP, WG Chair)

Current epidemiology of pneumococcal disease and pneumococcal vaccine coverage in US adults

Mr. Ryan Gierke (CDC/NCIRD)

PCV20 Phase 2/3 study results in adults

Dr. Wendy Watson (Pfizer)

PCV15 Phase 2/3 study results in adults, including adults with underlying conditions

Dr. Ulrike Buchwald (Merck)

Considerations for PCV15 and PCV 20 use in adults

Dr. Miwako Kobayashi (CDC/NCIRD)

# Proposed Timeline of ACIP Presentations

