National Center for Immunization & Respiratory Diseases



Pneumococcal Vaccines

Katherine A. Poehling, MD, MPH

Pneumococcal Vaccines Work Group Chair Advisory Committee on Immunization Practices February 24, 2022

Pneumococcal Vaccines Work Group

ACIP Members

- Katherine Poehling (Chair)
- Sarah Long

Ex Officio Members

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

CDC Lead

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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)

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- Keith Klugman (BMGF)

- Arthur Reingold (UC Berkley)

- Lorry Rubin (CCMC)

- Cynthia Whitney (Emory)

- Richard Zimmerman (U. of Pittsburgh)

Pneumococcal Vaccines Work Group

CDC Contributors

Adam Cohen (Respiratory Diseases Branch)

- Ryan Gierke (Respiratory Diseases Branch)

Jennifer Farrar (Respiratory Diseases Branch)

Pedro Moro (Immunization Safety Office)

Sarah Schillie (Immunization Services Division)

- Marc Fischer (Arctic Investigations Program)

Jessica MacNeil (ACIP Secretariat)

GRADE/EtR consultants

- Doug Campos-Outcalt
- Rebecca Morgan

1) PCV13 Routine recommendation

2) PCV13 Catch-up options

3) PCV13 and PPSV23, children 24–71 months old with underlying medical conditions

4) PCV13 and/or PPSV23, children 6–18 years old with underlying medical conditions

1) PCV13 Routine recommendation

• 4-dose PCV13 series at **2**, **4**, **6** and **12–15** months (3+1 schedule)

2) PCV13 Catch-up options

- Healthy children through age 59 months
- Children with underlying medical conditions through age 71 months

- 3) PCV13 and PPSV23, children 24–71 months old with underlying medical conditions
 - Complete recommended dose of PCV13 followed by PPSV23 ≥8 weeks after last PCV13
 - Children who are immunocompromised or with sickle cell disease or asplenia
 - → 2nd dose of **PPSV23** recommended 5 years after the 1st dose

3) Children aged 24–71 months with underlying medical conditions

Risk group	Underlying conditions	Complete PCV13 dose	PPSV23	
		Recommended	Recommended	Revaccination 5 years after 1 st dose
Immunocompetent	Chronic heart disease	Х	Х	
	Chronic lung disease	Х	Х	
	Diabetes mellitus	Х	Х	
	Cerebrospinal fluid leaks	X	Х	
	Cochlear implants	Х	Х	
Functional or anatomic asplenia	Sickle cell disease/other hemoglobinopathies	X	X	X
	Congenital or acquired asplenia	Х	Х	Х
Immunocompromised	Congenital or acquired immunodeficiencies	X	X	X
	Chronic renal failure/nephrotic syndrome	X	X	X
	Hematologic malignancy	X	Х	X
	Generalized malignancy	X	Х	Х
	Solid organ transplant	X	Х	Х

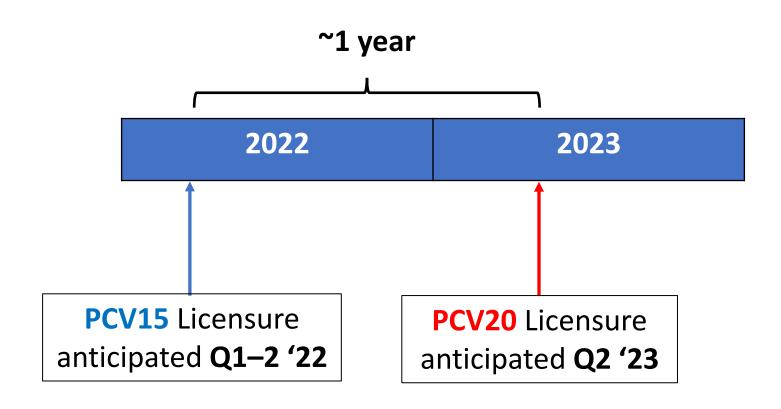
4) PCV13 and/or PPSV23, children 6–18 years old with underlying medical conditions

- One dose of PPSV23 recommended for children with chronic heart/lung disease, or diabetes
- One dose of PCV13 (if never received) followed by PPSV23 ≥8 weeks for children with immunocompromising conditions, CSF leak, or cochlear implants
 - For children with immunocompromising condition, give a 2nd dose of PPSV23 ≥5 years after the first PPSV23 dose

4) Children aged 6–18 years with underlying medical conditions

Risk group	Underlying conditions	Complete PCV13 dose	PPSV23	
		Recommended	Recommended	Revaccination 5 years after 1st dose
Immunocompetent	Chronic heart disease		Х	
	Chronic lung disease		Х	
	Diabetes mellitus		Х	
	Cerebrospinal fluid leaks	X	X	
	Cochlear implants	X	Х	
Functional or anatomic asplenia	Sickle cell disease/other hemoglobinopathies	X	Х	X
	Congenital or acquired asplenia	X	Х	Х
Immunocompromised	Congenital or acquired immunodeficiencies	X	X	X
	Chronic renal failure/nephrotic syndrome	X	X	X
	Hematologic malignancy	X	Х	X
	Generalized malignancy	X	Х	X
	Solid organ transplant	X	X	Х

Anticipated timeline of PCV15 and PCV20 licensure in children



Policy Questions Proposed by the Work Group

- Should PCV15 be routinely recommended for U.S. children ≤2 years of age as an option for pneumococcal conjugate vaccination according to currently recommended dosing and schedules?
- Should PCV15 be recommended for U.S. children with underlying medical conditions 2–18 years of age as an option for pneumococcal conjugate vaccination according to currently recommended dosing and schedules?

The Work Group is currently not considering any change in recommended pneumococcal vaccination dosing or schedule.

Today's Pneumococcal Vaccines Session Outline

Introduction

Dr. Katherine Poehling

(ACIP, WG Chair)

Epidemiology of pneumococcal disease and pneumococcal

Mr. Ryan Gierke

vaccine coverage in U.S. children

(CDC/NCIRD)

PCV15 Phase 2/3 study results in children

Dr. Natalie Banniettis (Merck)

GRADE and EtR or PCV15 use in U.S. children

Ms. Jennifer Farrar

(CDC/NCIRD)

Summary and next steps

Dr. Miwako Kobayashi

(CDC/NCIRD)