

Pneumococcal Vaccines Work Group Considerations and Next Steps

Miwako Kobayashi, MD, MPH

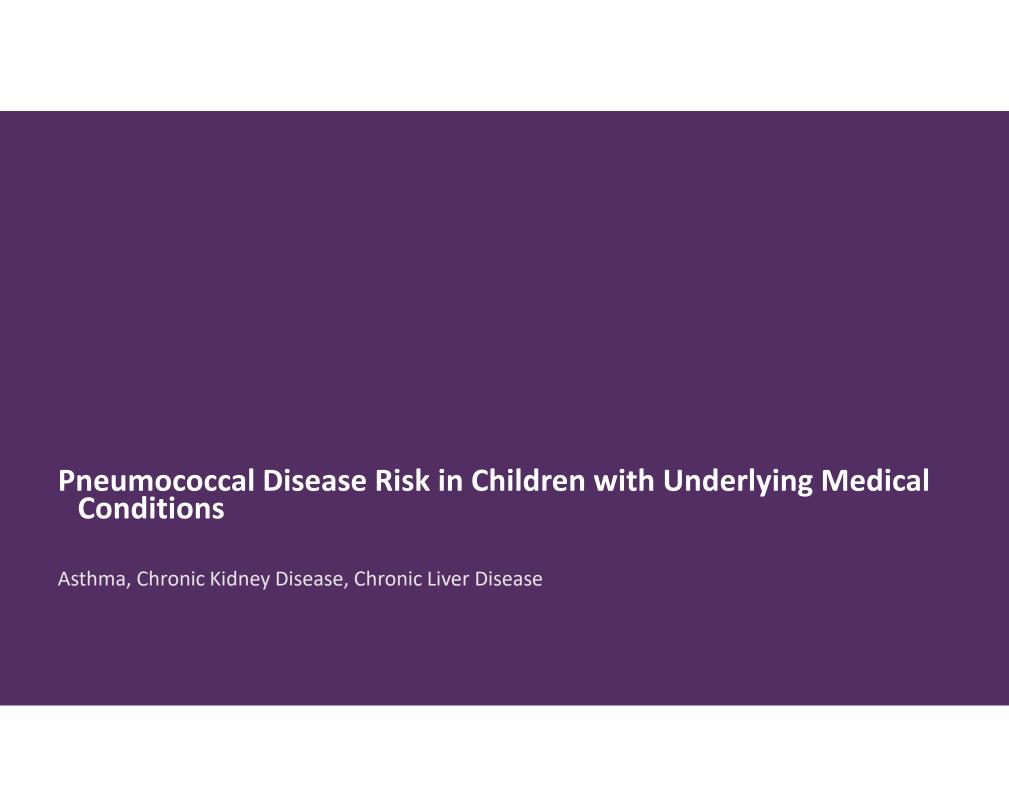
Pneumococcal Vaccines Work Group Advisory Committee on Immunization Practices February 22, 2023

Proposed Policy Questions

- Should PCV20 be recommended as an option for pneumococcal conjugate vaccination according to currently recommended dosing and schedules, for U.S. children aged <2 years?</p>
- Should PCV20 without PPSV23 be recommended as an option for pneumococcal vaccination for U.S. children aged 2–18 years with underlying medical conditions that increase the risk of pneumococcal disease?

Additional Considerations

- Cost-effectiveness analysis will be performed to assess:
 - Incremental benefit of PPSV23 use in addition to PCV20 in children aged 2–18 years with underlying medical conditions.
 - **Incremental benefit of PCV20 use** in children who completed the recommended PCV series with either PCV13 or PCV15.



Specific Questions Being Considered by the Work Group

- Are children with asthma at increased risk of pneumococcal disease regardless of high-dose oral corticosteroid use?
- Are children with chronic liver disease at increased risk of pneumococcal disease?
- Are children with chronic kidney disease of any stage at increased risk of pneumococcal disease?

Differences in the Indications for Children vs Adults with Asthma

- Pediatric recommendation^{1,2}:
 - Including asthma if treated with high-dose oral corticosteroid therapy
- Adult recommendation^{3,4}:
 - Includes chronic obstructive pulmonary disease, emphysema, and asthma

- 1. Nuorti et al. MMWR RR 2010
- 2. Kobayashi et al. MMWR 2022. 71(37); 1174–1181
- 3. Matanock et al. MMWR 2019
- 4. Kobayashi et al. MMWR 2022. 71(4); 109–117

Risk-Based Pneumococcal Vaccine Recommendations

	Children	Adults
Alcoholism		
Chronic heart disease		
Chronic lung disease		
Chronic liver disease		
Cigarette smoking		
Diabetes mellitus		
Cerebrospinal fluid leak		
Cochlear implant		
Chronic renal failure or nephrotic syndrome		
Congenital or acquired asplenia, or splenic dysfunction		
Congenital or acquired immunodeficiency		
Diseases and conditions treated with immunosuppressive drugs or radiation therapy		
HIV infection		
Sickle cell disease or other hemoglobinopathies	Should we add "chronic liver disease" as part of pediatric	
Solid organ transplant	risk-based recommendation?	

Risk-Based Pneumococcal Vaccine Recommendations

	Children	Adults
Alcoholism		
Chronic heart disease		
Chronic lung disease		
Chronic liver disease		
Cigarette smoking		
Diabetes mellitus		-
Cerebrospinal fluid leak		
Cochlear implant		
Chronic renal failure or nephrotic syndrome Congenital or acquired asplenia, or splenic dysfunction	The intent has been to provide additional protection for those on dialysis or about to be on dialysis → Should the risk-based recommendations be expanded to all CKD stages?	
Congenital or acquired immunodeficiency Diseases and conditions treated with immunosuppressive drugs or radiation therapy	→ Should the risk-based reco	•

Work Group Next Steps

Work Group Next Steps

- Review of evidence and Work Group interpretation of remaining EtR domains (Values, Acceptability, Resource Use, Feasibility)
- Review findings from cost-effectiveness analyses (CDC and other groups)
- Draft policy options on PCV20 use in U.S. children for consideration by the committee

Questions for the Committee

- Does the Committee agree with the policy questions being considered by the Work Group?
- Are there additional data the Committee would like to see before deciding on policy options for a vote?

For more information, contact CDC 1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

