



Pneumococcal Vaccines Work Group Considerations and Next Steps

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Pneumococcal Vaccines Work Group
Advisory Committee on Immunization Practices
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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?
- 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.



Pneumococcal Disease Risk in Children with Underlying Medical Conditions

Asthma, Chronic Kidney Disease, Chronic Liver Disease

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 | | |
| Solid organ transplant | | |
| | Should we add “chronic liver disease” as part of pediatric risk-based recommendation? | |

Risk-Based Pneumococcal Vaccine Recommendations

Chronic heart disease

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

Solid organ transplant

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?

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
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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.

