#### **Pneumococcal Vaccines**

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Advisory Committee on Immunization Practices
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#### **Pneumococcal Vaccines Work Group**

- ACIP members
  - Grace Lee (Chair)
  - Nancy Bennett
  - Paul Hunter
- Ex officio members
  - Tina Mongeau (FDA)
  - Lucia Lee (FDA)
- CDC lead
  - Tamara Pilishvili (NCIRD)

- Liaison representatives and consultants
  - Lorry Rubin (AAP)
  - Mark Sawyer (AAP/CIOD)
  - Rick Zimmerman (AAFP)
  - Chris Lupold (AAFP)
  - Sandra Fryhofer (ACP)
  - Jane Zucker (AIM)
  - William Schaffner (NFID)
  - Monica Farley (DVA)
  - Jeffrey Duchin (U. of Washington)
  - Keith Klugman (Gates Foundation)
  - Kathy Neuzil (IDSA)
  - Arthur Reingold (U of California, Berkeley)

### Pneumococcal Vaccines Work Group: Terms of Reference

- Review current data on efficacy, effectiveness, immunogenicity, and cost-effectiveness of pneumococcal vaccines
- Review current recommendations considering up-to-date evidence, including epidemiological studies conducted post-licensure, and assess strength of the evidence
- Revise or update recommendations for pneumococcal vaccine use, as needed

# ACIP August 2014: PCV13 recommended for adults 65 years and older

- Work Group and ACIP Conclusions
  - Short term: recommendation for universal PCV13 use is warranted
  - Long term: continued herd effects may limit the utility of a universal recommendation
    - Magnitude of indirect effects unknown
    - Uncertainty around the burden of vaccine preventable non-bacteremic pneumonia
  - Recommendation for re-evaluation and revision as needed of routine PCV13 use among adults 65 years and older

## Re-evaluation of PCV13 for adults 65 years and older recommendation

- Monitor pneumococcal disease and vaccine impact among adults 65 years and older
- Monitor indirect vaccine effects on pneumococcal disease trends among PCV13-naïve adults (19-64 years old without PCV13 indications)
- Update ACIP on direct and indirect effects and pneumococcal disease trends among adults
- Use the Evidence to Recommendation (EtR) framework to re-evaluate the use of PCV13 among adults 65 year and older

#### **October 2017 ACIP Meeting**

- Updated on changes in carriage and invasive pneumococcal disease (IPD)
- Among adults ≥65 years old:
  - Carriage rates are very low (1.8% overall and 0.2% for PCV13 serotypes)
  - IPD caused by PCV13 serotypes declined by 40% after PCV13 was introduced in children and annual incidence rates plateaued in 2014–2016
- Presented outline of research agenda to inform potential policy change

### Today's Pneumococcal Vaccines Session Outline

- PCV13 effectiveness against IPD among adults ≥65 years old (Tamara Pilishvili, NCIRD)
- PCV13 direct and indirect effects among adults ≥65 years old (Tamara Pilishvili, NCIRD)
- PCV13 effectiveness against pneumococcal pneumonia among U.S. adults and coverage estimates (John McLaughlin, Pfizer Vaccines)
- Estimating burden of pneumococcal pneumonia among U.S. adults and progress of the research agenda to inform potential policy change (Almea Matanock, NCIRD)

### Discussion Questions for Today's Pneumococcal Vaccines Session

- Is the proposed research agenda appropriate to help determine if potential policy change is needed?
- What additional information will the committee need to help determine whether continued PCV13 use in adults 65 years and older is warranted?