

Use of PCV7 in children aged 24-59 months who are incompletely vaccinated

Pneumococcal Vaccines Work Group
Advisory Committee on Immunization
Practices (ACIP)
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Objectives

- Clarify the current 7-valent pneumococcal conjugate vaccine (PCV7) “catch-up” immunization recommendation for children aged 24-59 months who are incompletely vaccinated
- Expand the “catch-up” recommendation to include all children aged 24-59 months

Current ACIP language for use of PCV7 in older children*

- PCV7 is **recommended** for children aged 24-59 months who have certain underlying diseases or immunocompromising conditions
- PCV7 **should be considered** for all other children aged 24-59 months with priority given to children who are of Alaska Native, American Indian, or African American descent and for children who attend group day care centers

* MMWR 2000;49(RR-9) - Table 8

Current ACIP schedule for use of PCV7 in children aged 24-59 months*

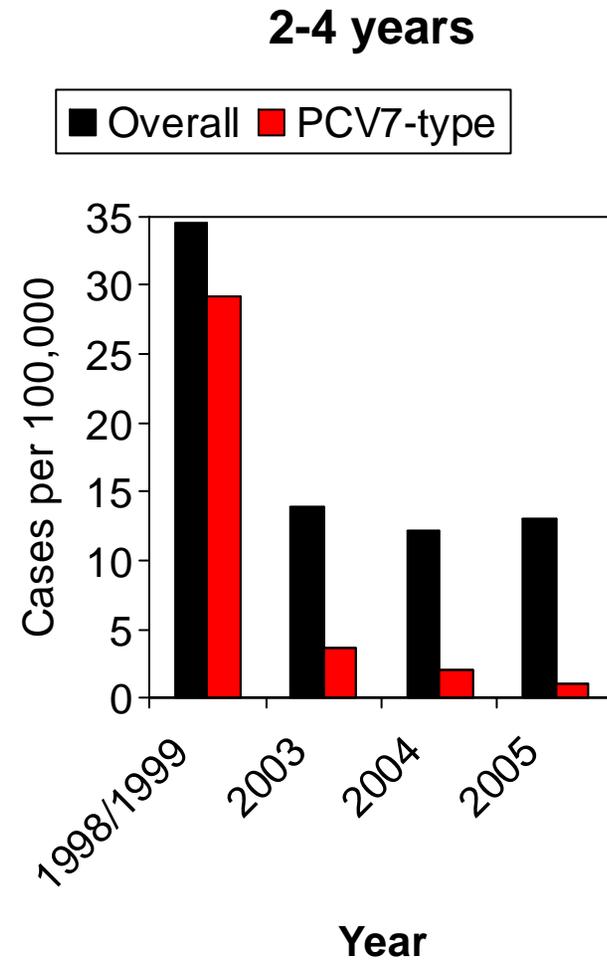
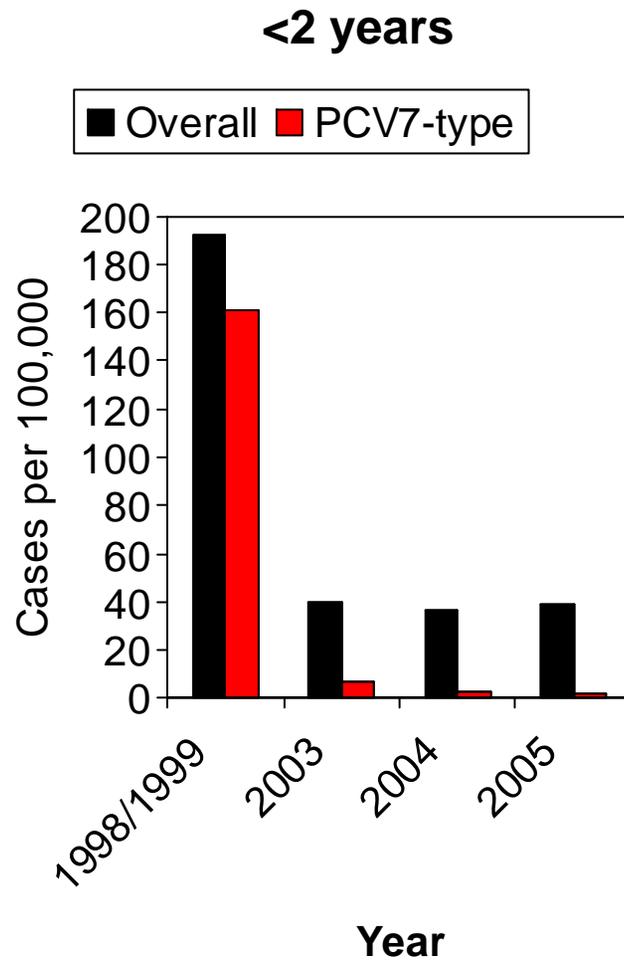
- Schedules for administering PCV7 to previously unvaccinated or incompletely vaccinated children aged 24-59 months:
 - Healthy children: 1 dose
 - Children with certain chronic diseases or immunocompromising conditions: 2 doses (≥ 2 months apart)
 - In addition: 1 dose of PPV23 administered ≥ 2 months after last dose of PCV7

* MMWR 2000;49(RR-9) – Tables 10,11 and 12

Reasons for proposing a change in the recommendation

- Some providers find the current recommendation confusing
- Historically, routine catch-up recommendation was limited to those with underlying medical conditions partly because of concerns about limited vaccine supply and cost
- Simplifying and expanding the catch-up recommendation may improve PCV7 coverage among healthy, unvaccinated or incompletely vaccinated children aged 24-59 months, including immigrants and adoptees

Rates of overall & PCV7-type invasive pneumococcal disease among children aged <2 & 2-4 years, ABCs, 1998/99-2005



Proportion of cases of invasive pneumococcal disease with ACIP indications for PCV7 among children aged 24-59 months, 2006 (N=150)*

ACIP indication†	Percent
Sickle cell disease or asplenia	2.7
HIV infection	0
Other immunocompromising conditions	6.0
Chronic illness	0.7
Any ACIP indication	9.3

* Preliminary data, Active Bacterial Core surveillance, CDC

† MMWR 2000; 49(RR-9), Table 8.

Summary of relevant epidemiologic data

- Rates of PCV7-type invasive pneumococcal disease very low in children aged 24-59 months
 - 7+ years of routine PCV7 immunization and herd effects
 - Additional benefit from individual protection and induction of immunologic memory
- PCV7 generally is safe and immunogenic in children aged 24-59 months¹
 - Local reactions more common in older children aged 7 months to 9 years than among children aged <1 year
- Post-licensure vaccine effectiveness good
 - Even for 1 PCV7 dose \geq 24 months: 94% (95%CI, 49-99)²
- In 2006, 4 dose vaccine coverage among 19-35 month olds: 68.4%³
 - Expanded catch-up recommendation would potentially apply to up to 1/3 of children aged 24-59 months

1) MMWR 2000;49(RR-9)

2) Whitney et al., Lancet 2006;368:1495-1502

3) National Immunization Survey, 2006

Vote

- Work group's proposal for a revised recommendation for **healthy children**:

“At ages 24-59 months, administer one dose of PCV7 to healthy children with any incomplete schedule”

Vote contd.

- Work group's proposal for a revised recommendation for children with **underlying medical conditions***:

“At ages 24-59 months, administer two doses of PCV7 at least 2 months apart to incompletely vaccinated children with underlying medical conditions. *Those who have previously received three PCV7 doses need only one dose.*”

* List of underlying medical conditions: MMWR 2000;49(RR-9) – Table 8