



Department of Health and Social Services  
Joel Gilbertson, Commissioner

Division of Public Health  
Doug Bruce, Director

Section of Epidemiology  
John Middaugh, MD, Editor

3601 C Street, Suite 540, PO Box 240249, Anchorage, Alaska 99524-0249 (907) 269-8000  
24-Hour Emergency Number 1-800-478-0084

Bulletin No. 6 March 9, 2004

<http://www.epi.alaska.gov>

## Shortage of Pneumococcal Conjugate Vaccine (PCV7) Worsens - Temporary Suspension of 3<sup>rd</sup> and 4<sup>th</sup> Doses in Healthy Children

On February 18, 2004 the Section of Epidemiology announced recommendations for a temporary suspension of the fourth dose of pneumococcal conjugate vaccine (PCV7 or *Prevnar*<sup>TM</sup>).<sup>1</sup> Because Wyeth, the vaccine's sole manufacturer, has continued to experience problems with its vial-filling production line, CDC now recommends that all health care providers temporarily suspend routine administration of both the third and fourth doses to healthy children. Children at increased risk of severe disease should continue to receive the routine, 4-dose series.<sup>2</sup> Limiting healthy children to two doses of PCV7 will conserve vaccine and should permit most children to obtain at least two doses.

### HOW WILL THIS RECOMMENDATION BE IMPLEMENTED IN ALASKA?

Effective immediately, the Section of Epidemiology recommends:

- Alaska healthcare providers should temporarily suspend routine administration of the third and fourth doses of PCV7 for healthy children  $\leq 12$  months of age. Unvaccinated healthy children aged 12-23 months should receive a single dose of PCV7.
- Providers should continue to administer all recommended doses to children at increased risk for severe disease and/or in the Bristol Bay and Yukon-Kuskokwim Regions of Alaska.

#### Recommendations for PCV7 Use Among Healthy Children in Alaska Regions Other Than Bristol Bay and Yukon-Kuskokwim

Age at 1 <sup>st</sup> vaccination	Recommendation
$\leq 6$ mos	2 doses at 2-month interval in 1 <sup>st</sup> 6 mos of life (defer 3 <sup>rd</sup> and 4 <sup>th</sup> doses)
7-11 mos	2 doses at 2-month interval (defer 3 <sup>rd</sup> dose)
12-23 mos	1 dose (defer 2 <sup>nd</sup> dose)
$\geq 24$ mos	No vaccination with PCV7

### WHICH CHILDREN SHOULD CONTINUE TO RECEIVE FOUR DOSES?

#### (A) Children $\leq 59$ Months of Age with High Risk Medical Conditions

Pneumococcal vaccine should be administered to all *high risk* children  $\leq 59$  months of age as recommended in the standard schedule (i.e., at 2, 4, 6 and 12-15 months of age or age appropriate) issued by the ACIP.<sup>3</sup> High risk children are those who are at increased risk for developing pneumococcal infection due to an underlying medical condition:

- Children with sickle cell disease and other sickle cell hemoglobinopathies, including hemoglobin SS, hemoglobin S-C, or hemoglobin S- $\beta$ -thalassemia, or children who are functionally or anatomically asplenic;
- Children with HIV infection;
- Children who have chronic disease, including chronic cardiac and pulmonary disease (excluding asthma), diabetes mellitus, or CSF leak;
- Children with immunocompromising conditions, including (a) malignancies (e.g., leukemia, lymphoma, Hodgkin's disease); (b) chronic renal failure or nephrotic syndrome; (c) those children receiving immunosuppressive chemotherapy, including long-term systemic corticosteroids; and (d) those children who have received a solid organ transplant; and
- Children who have received cochlear implants.

#### (B) Healthy Children <24 Months of Age in Bristol Bay and Yukon-Kuskokwim Regions

Studies in Alaska have shown that Alaska Native children <24 months of age living in southwest Alaska (i.e., YK Delta and Bristol Bay) have a considerably higher incidence of pneumococcal disease. Because of their higher risk of disease, all children <24 months of age residing in southwest Alaska should be vaccinated according to the routine schedule.

#### IS PPV23 A POSSIBLE OPTION FOR HEALTHY CHILDREN 24-59 MONTHS OF AGE IN ALL ALASKA REGIONS?

Pneumococcal polysaccharide vaccine (PPV23 or *Pneumovax*<sup>®</sup> 23) is licensed for use in persons 2 years of age and older. PPV23 is effective for prevention of invasive pneumococcal infection in children aged 2-5 years.<sup>4</sup> Providers may consider administering PPV23 to healthy children aged 2-5 years until PCV7 supplies have returned to normal.

#### HOW SHOULD ALASKA HEALTHCARE PROVIDERS FOLLOW-UP CHILDREN WHOSE DOSES ARE DEFERRED?

Children whose third and/or fourth doses are delayed should receive the missed doses on their first visit to a healthcare provider after supplies return to normal. Providers are encouraged to flag patient charts and/or keep lists of patients who have had doses deferred. This practice will aid in identifying those children who should receive follow-up after routine recommendations are reinstated.

#### HOW LONG SHOULD THIS VACCINE SHORTAGE LAST?

The anticipated duration of this shortage is unknown at this time. CDC has stated that widespread shortages may continue beyond this summer. Utilizing the recommendations outlined in this *Bulletin*, the Alaska Immunization Program currently has a 2-3 month supply of PCV7. Depending upon the vaccine's availability when this supply is depleted, additional recommendations/restrictions may need to be implemented. Vaccine supply updates will be provided through future issues of the *Bulletin*.

#### WHERE CAN PROVIDERS GET MORE INFORMATION?

CDC updates on the PCV7 situation are posted at:

<http://www.cdc.gov/nip/news/shortages/default.htm>.

CDC also has published a helpful education tool, *Facts for Parents*, that may be downloaded to assist in answering parent's questions about the PCV7 recommendations:

[http://www.cdc.gov/nip/news/shortages/pcv7\\_parent\\_3-1-04.pdf](http://www.cdc.gov/nip/news/shortages/pcv7_parent_3-1-04.pdf).

#### References:

- Shortage of Pneumococcal Conjugate Vaccine (PCV7) – Temporary Suspension of 4<sup>th</sup> Dose in Healthy Children. *Bulletin* No. 5, February 18, 2004.
- Notice to Readers: Updated Recommendations on the Use of Pneumococcal Conjugate Vaccine: Suspension of Recommendation for Third and Fourth Dose. Centers for Disease Control and Prevention. *MMWR*. 2004; 53(08): 177-178.
- Preventing Pneumococcal Disease Among Infants and Young Children; Recommendations of the Advisory Committee on Immunization Practices. Centers for Disease Control and Prevention *MMWR*. October 6, 2000, Vol. 49, No. RR-9.
- Fiore, AE, Levine OS, Elliott JA, Facklam RR, Butler JC. Pneumococcal Polysaccharide Vaccine Effectiveness among Preschool-age Children with Chronic Disease. *Emerg Infect Dis* 1999; 5; 828-831.