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New Vaccine Recommendation for Prevention of
Haemophilus influenzae type b Disease in Alaska

Background

Since the development of effective vaccines to prevent *Haemophilus influenzae* type b (Hib), the incidence of Hib meningitis has been greatly reduced in Alaska. From 1986 to 1990, an average of 29 cases of Hib meningitis were reported in Alaska each year. From 1991 through 1995, after statewide Hib vaccine became available, an average of 5 cases were reported each year.

In January 1996, Alaska switched from an all *PedVaxHIB*[®] schedule to the use of *Tetramune*[®], a combination of DTP and *HibTITER*[®]. In May 1996, four cases of Hib meningitis were reported in infants less than 7 months of age. Subsequent investigation indicated the increase was not significant when compared to the previous five years. Additionally, 3 of the 4 cases were not adequately vaccinated. (*Epidemiology Bulletin* No. 23, July 9, 1996.)

Because additional cases of Hib disease have continued to occur in Alaska Natives, we reviewed our vaccine selection. Studies indicate *PedVaxHIB*[®] achieves a higher antibody titer after the initial dose, while *HibTITER*[®] appears to provide more sustained protection.

In May, 1997, epidemiologists with the Centers for Disease Control and Prevention (CDC) collaborated with the State of Alaska, the Arctic Investigation Program, and the Indian Health Service to carry out a study of Hib carriage in Alaska Native children. Carriage levels (8.4%) were similar to those found in the pre-vaccine era and were much higher than expected based on carriage studies performed in other countries.

Because of this evidence of continued Hib carriage and the epidemiology of the Hib cases in Alaska during 1996-97, CDC recommended the use of *PedVaxHIB*[®] for the first dose in the vaccine series in Alaska Natives, followed by 3 doses of *HibTITER*[®].

New Recommendations

The Alaska Section of Epidemiology now recommends the following immunization schedule for protection against Hib disease:

**Recommended Vaccine Schedule for Prevention
of *Haemophilus influenzae* type b, Alaska, 1997**

<i>Dose #</i>	<i>Recommended Age</i>	<i>Type of Vaccine</i>
1*	2 mos	<i>PedVaxHIB</i> [®]
2	4 mos	<i>HibTITER</i> [®]
3	6 mos	<i>HibTITER</i> [®]
4	12-15 mos	<i>HibTITER</i> [®]
<p>* Special situations related to first dose only:</p> <ul style="list-style-type: none"> • Age at time of first dose: <ul style="list-style-type: none"> ◦ <15 months of age, use <i>PedVaxHIB</i>[®] ◦ ≥15 months of age - use <i>HibTITER</i>[®] • If <i>PedVaxHIB</i>[®] is unavailable for the first dose, do NOT postpone the immunization. Use <i>HibTITER</i>[®] for the first dose as well as all subsequent doses. 		

Although adherence to the above recommendations is particularly important in the Alaska Native population, private health care providers serving non-Native populations may choose to follow the above schedule or use an all *HibTITER*[®] regimen. State public health clinics will use *PedVaxHIB*[®] for the first dose for all clients <15 months of age.

Sufficient quantities of both types of Hib vaccine will be available through the Alaska Immunization Program. Providers are reminded, however, that *PedVaxHIB*[®] is available only for dose #1. Sufficient *PedVaxHIB*[®] vaccine will not be available for use in the entire Hib series. The current Vaccine Information Statement (VIS) may be used for either type of Hib vaccine.

For questions or to obtain additional information on this new vaccine recommendation, call the **Alaska Immunization Program** at 269-8000.