Availability of TETRAMUNE and DTaP (Diphtheria/Tetanus/acellular Pertussis) Vaccines for Statewide Use

Background: As immunization schedules have increased in both scope and complexity, vaccines have been developed which combine multiple antigens in one injection (DTP and MMR). Recently, vaccines have been licensed which combine DTP with Haemophilus influenzae type B (Hib) vaccine. Beginning January 1, 1996, the Alaska Immunization Program will supply TETRAMUNE, a DTP-Hib combination vaccine, to all providers participating in the program's universal vaccine distribution system.

VACCINE: TETRAMUNE is indicated for routine vaccination of infants, beginning at age 2 months, to prevent diphtheria, tetanus, pertussis, and invasive Hib disease. The vaccine is a combination of DTP and HibTITER (Lederle). TETRAMUNE is available in combination form; no dilution or reconstitution is required prior to use. The vaccine is stored in the refrigerator at 2° to 8° C (36° to 46°).

DOSAGE/SCHEDULE: TETRAMUNE is given as a primary series of 3 immunizations at 2, 4, and 6 months of age, with a booster given at 12-15 months of age. The initial 3 doses should be administered at least 1 month apart, with the 4th given after at least a 6 month interval following the 3rd dose. As with all vaccines, a longer than recommended interval between doses is acceptable; however, the minimum spacing between doses must be maintained.

When a child has completed his/her series of 4 doses of TETRAMUNE, a 5th dose of DTP is still recommended between 4-6 years of age. The State of Alaska will begin supplying DTaP (diphtheria/tetanus/acellular pertussis) for the 5th dose. (More on DTaP follows.)

INTERCHANGABILITY OF HIB VACCINES: For several years, the State of Alaska has been supplying PedVaxHib, which follows a schedule of 3 doses at 2, 4, and 12-15 months. HibTITER, the Hib component of TETRAMUNE, follows a 4 dose schedule at 2, 4, 6, and 12-15 months. However, TETRAMUNE MAY BE USED TO COMPLETE AND INFANT IMMUNIZATION SERIES STARTED WITH ANY HIB VACCINE AND WITH ANY DTP VACCINE IF BOTH VACCINES ARE TO BE ADMINISTERED SIMULTANEOUSLY.

In other words, if a child has already begun the series with PedVaxHib, regardless of the number of doses received, the series can simply be completed with TETRAMUNE. Those children who had received two doses of PedVaxHib will therefore receive one more dose of Hib vaccine than is actually required (i.e., the 3rd dose of Hib and 6 months would not have been needed if PedVaxHib alone had been used). However, this will not be harmful to the child.

SIMULTANEOUS IMMUNIZATION: Large pre-and post-licensure studies have demonstrated the safety, immunogenicity, and efficacy of administering Hib conjugate vaccines concurrently with any other infant vaccine. The vaccine should be administered intramuscularly using a separate syringe and at a separate site from any other concurrent vaccination.

ADVERSE EVENTS: The risks for local and systemic events following TETRAMUNE administration are similar to those following concurrent administration of its individual component vaccines, and may be due largely to the pertussis component of the DTP vaccine. Similarly, contraindications and precautions for the use of TETRAMUNE are the same as those for its individual components.

ACELLULAR PERTUSSIS VACCINE; Tripedia, a Connaught vaccine, is a combination of diphtheria and tetanus toxoids and acellular pertussis vaccine. Acellular pertussis vaccine contains purified, inactivated components of B. Pertussis cells. Significantly fewer local adverse events (redness, swelling, pain) and fever are reported following the use of DTaP vaccine than following whole cell DTP vaccine. DTaP had been found to be at least as effective as the whole cell DTP.

DTaP is licensed for use as the 4th dose of the primary DTP series and the booster (5th) dose. In addition, the vaccine is licensed for use only in children 15 months to 7 years of age. Currently, DTaP vaccine is not licensed for the initial three dose DTP vaccination series, regardless of the child's age.

The State of Alaska routinely will supply DTaP only for use as the 5th dose of DTP; TETRAMUNE will remain in use for dose #4, when the Hib component is still needed. The only exception to this will be that those children who have received the full PedVaxHib series (3 doses at 2, 4, and 12-15 months) need no additional Hib vaccine and may be given DTaP for the fourth dose. A SMALL supply of separate Hib vaccine will be available for use with those children who have medical contraindications to pertussis vaccine.

QUESTIONS? Call 907-561-4406