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PERTUSSIS NONCONTROVERSY

A recent national television program and a syndicated newspaper article may have created a false public impression that a controversy is emerging concerning routine pertussis immunization. In fact, the media reports merely reiterated the benefits and risks of pertussis vaccine which have been known for many years.

The issue of pertussis vaccine's safety received particular attention in the media reports. Relative to other childhood vaccines, there is a higher frequency of systemic reactions following the administration of DTP vaccine (pertussis vaccine is only available in combination with diphtheria and tetanus toxoids). However, the exact frequency of reactions is unknown. The reported frequency ranges for severe events following DTP vaccination are:

1. Collapse or shock-like state: 60-300 million doses
2. Persistent screaming episodes: 70-2,000 per million doses
3. Isolated convulsions, with or without fever: 40-700 per million doses
4. Encephalopathy, with or without permanent neurologic deficit: 1.3-30 per million doses.

Because serious systemic symptoms are less common following administration of diphtheria-tetanus preparations which do not contain pertussis vaccine, further vaccination with DTP is contraindicated if any of the events listed above should occur. Lesser reactions than these do not, in themselves, preclude further use of DTP. A pediatric combination of diphtheria and tetanus toxoids (DT) is available for children under seven years of age who need additional doses of these antigens and for whom pertussis vaccine is contraindicated.

In the United States, the U.S. Public Health Service and the American Academy of Pediatrics are recognized as the pre-eminent authorities on immunization practices. These two organizations develop their immunization recommendations independently, and there is no controversy between them on the use of pertussis vaccine. Recognizing that there are reactions associated with pertussis vaccine, both bodies have concluded that the benefits of pertussis vaccination far outweigh any risks associated with the vaccine. Both organizations strongly recommend that the vaccine be routinely administered to children under seven years of age. These recommendations are supported by experiences in England and Japan where decreased use of pertussis vaccine was followed by large outbreaks of pertussis disease and significant increases in deaths from pertussis.

It is also important to note that in addition to recommending routine administration of pertussis vaccine, both the USPHS and the AAP strongly support mandatory pertussis immunization, unless medically contraindicated, for children under seven years of age as a condition of school and day care attendance. The Division of Public Health fully concurs with these recommendations, as well as the recommendation that parents of vaccine recipients be appropriately informed of the vaccine's benefits and risks.

(Reported by Craig Leutzinger Program Coordinator, Section of Communicable Disease Control, 561-4233)