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On Drugs and Therapeutics

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IN BRIEF

Tdap, DTaP Mix-Ups

Medical Letter consultants have brought to our attention some confusion that has accompanied the release of *Adacel*, a combination of tetanus toxoid, diphtheria toxoid and acellular pertussis antigens (Tdap) recently approved for use as a booster in adolescents and adults 11-64 years old ([Med Lett Drugs Ther 2006; 48:5](#)). Another Tdap vaccine, *Boostrix*, is approved for use in adolescents 10-18 years old. Some adults have inadvertently been immunized with *Daptacel* or *Infanrix* (DTaP), which are intended for active immunization of infants and children 6 weeks to 6 years old. Such mix-ups were reported by the Institute for Safe Medication Practices ([www.ismp.org](#)) in the August 24 and December 2006 issues of its newsletter.

The problem with giving these pediatric vaccines to adults is that they contain *more* diphtheria and pertussis antigens than the adult vaccine, and adults may have untoward reactions to these higher antigen levels. One consultant who inadvertently gave the pediatric vaccine to 80 adults reports that a few developed fever to 102°F, and several developed

severe erythema and swelling at the injection site. In the absence of a comparative trial, whether these reactions were due to the higher antigen load can only be a matter of speculation.

The reasons for the mix-ups, according to the Institute, include the similarities in the brand names and packaging of *Adacel* and *Daptacel* in addition to the similar component antigens in the 2 products (the components of *Adacel* are listed in a different order and are labeled as "reduced" diphtheria toxoid and acellular pertussis). The manufacturer of *Adacel* and *Daptacel* intends to make changes in the packaging and labeling to clarify the differences between the products. The inadvertent administration of *Infanrix* to adults was caused by an electronic order entry program's failure to differentiate between the adult and pediatric vaccines.

Tdap vs. DTaP

COMPONENT	SANOFI/PASTEUR		GLAXOSMITHKLINE	
	<i>Adacel</i> (Tdap) 11-64 yrs	<i>Daptacel</i> (DTaP) 6 wks-6 yrs	<i>Boostrix</i> (Tdap) 10-18 yrs	<i>Infanrix</i> (DTaP) 6 wks-6 yrs
Tetanus toxoid	5.0 Lf	5.0 Lf	5.0 Lf	10.0 Lf
Diphtheria toxoid	2.0 Lf	15.0 Lf	2.5 Lf	25.0 Lf
Detoxified pertussis toxin	2.5 mcg	10.0 mcg	8.0 mcg	25.0 mcg
Other pertussis antigens				
Filamentous hemagglutinin	5 mcg	5 mcg	8 mcg	25 mcg
Pertactin	3 mcg	3 mcg	2.5 mcg	8 mcg
Fimbriae types 2 and 3	5 mcg	5 mcg	none	none

Lf: Limit of flocculation unit

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