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Do DTP and Tetanus Vaccinations Cause Asthma?

New Study Shows Vaccinated Children Twice as Likely to Get Asthma and Other Allergy-Related Symptoms

By Michael Devitt

A new study in the *Journal of Manipulative and Physiological Therapeutics*¹ supports the findings of three previous studies that children who receive diphtheria-tetanus-pertussis (DTP) or tetanus vaccines are more likely to have a "history of asthma" or other "allergy-related respiratory symptoms." The study reviewed data from the Third National Health and Nutrition Examination Survey, which was conducted by the National Center for Health Statistics from 1988 to 1994. The survey data included interviews (by proxy with parents) of 13,944 infants, children and adolescents (2 months through 16 years old).

The *JMPT* study addresses an issue that has much supporting evidence:

- The prevalence of allergic disorders has doubled over the last 20 years.²⁻⁵
- In the U.S., there are currently 30-50 million asthma and allergy sufferers,^{6,7} with an estimated cost of \$6.21 billion in 1990.⁸
- The Institute of Medicine, which convened two committees (the Committee to Review the Adverse Consequences of Pertussis and Rubella Vaccines and the Vaccine Safety Committee) concluded that there is a causal relation between the DTP vaccine and anaphylaxis,⁹ and tetanus toxoid and anaphylaxis.¹⁰

The results of the *JMPT* study demonstrated that those children who had been given DTP and tetanus vaccination had significantly greater odds of asthma and allergy-related symptoms than those who had remained unvaccinated. The specific odds ratios (for vaccinated children vs. unvaccinated) are as follows:

Condition	Odds Ratio
Asthma	2.00
Severe allergic reaction	1.50
Any allergy or allergic reaction	1.66
Sinusitis or sinus problems	1.81
Wheezing or whistling	1.23
Nose and eye symptoms	2.22
Any allergy-related respiratory symptom (past 12 months)	1.68
Any lifetime allergy history or 12-month symptoms	1.69

According to these odds ratios, a child who had the DTP and tetanus vaccination is 50% more likely to experience severe allergic reactions, over 80% more likely to experience sinusitis, and twice as likely (100% more likely) to experience asthma.

In addition to these findings, the authors commented:

"Evidence was also presented showing that vaccination may be associated with different types of allergies at different ages. The vaccination may be associated with severe allergic reactions and sinusitis or sinus problems among younger children, and with asthma, wheezing and whistling, and nose and eye symptoms among adolescents.

"Six studies have recently addressed the association between pertussis or DTP immunizations and allergy-related disease. Our results are similar to findings reported from three retrospective cohort studies.

"Asthma and other allergic hypersensitivity reactions and related symptoms may be caused, in part, by the delayed effects of DTP or tetanus vaccination. One or more vaccine components may be responsible for a portion of the increased prevalence of asthma and allergies in U.S. children.

"Because the proportion of U.S. children who have received at least 1 dose of DTP vaccine approaches 100%, the number of allergies and allergy-related conditions attributable to DTP or tetanus vaccination in the United States may be very high. For example, assuming that the estimated vaccination effect is

unbiased, 50% of diagnosed asthma cases (2.93 million) in U.S. children and adolescents would be prevented if the DTP or tetanus vaccination was not administered. Similarly, 45% of sinusitis cases (4.94 million) and 54% of allergy-related episodes of nose and eye symptoms (10.54 million) in a 12-month period would be prevented after discontinuation of the vaccine. The well-documented public health benefits of the DTP and tetanus vaccines must be considered in light of these potential long-term risks, which should be addressed in future studies."

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