

Hi all,

Ages and ages ago I made a comment about how many children would be exempt if they continued to use a personal or family history of seizures as a contraindication. Someone (Lisa??) asked where I got my number from. Well, I'm not sure if this is my original source (not even sure at this point if I had the right statistic), but finally, here it is.

It's 5-7% of the kids.

Laura

J Pediatr 1989 Oct;115(4):527-31

Family history of convulsions and use of pertussis vaccine. Livengood JR, Mullen JR, White JW, Brink EW, Orenstein WA. Division of Immunization, Centers for Disease Control, Atlanta, GA 30333. To evaluate the risk of neurologic events after vaccination with diphtheria-tetanus-pertussis (DTP) vaccine, we used data from the Centers for Disease Control Monitoring System for Adverse Events Following Immunization to compare the family history of convulsions in persons reporting neurologic events with that in persons reporting nonneurologic events; these events have an onset within 3 days of immunization with DTP vaccine, given either alone or with oral poliovirus vaccine. Persons reporting neurologic events were 6.4 times more likely to report a prior personal history of convulsions than those reporting nonneurologic events (95% confidence interval 4.7 to 8.8), and were 2.4 times more likely to report a history of convulsions in first-degree family members, that is, siblings or parents (95% confidence interval 1.7 to 3.4). Similar risks were noted for subgroup analyses controlling for type of event (febrile vs nonfebrile convulsion), age at immunization, source of report, number of previous doses of DTP vaccine, and day of onset. Because the Centers for Disease Control monitoring system receives reports on a nonrandom sample of all adverse events after immunization, selection bias could not be ruled out. On the basis of these data, we conclude that children with a family history of seizures are at increased risk of neurologic events, primarily febrile convulsions, after DTP vaccination. However, this increase in risk may reflect a nonspecific familial tendency for convulsions rather than a specific vaccine effect. Considering the rare occurrence of neurologic events after DTP vaccination, the generally benign outcome of febrile convulsions (which make up the majority of these neurologic events), and the possible increased risk of pertussis in the general population if the estimated 5% to 7% of persons with a first-degree family history of convulsions were exempted from pertussis vaccination, we

further conclude that a history of convulsions in siblings or parents should not be a contraindication to pertussis vaccination. Special care in the prevention of postvaccination fever may be warranted in children with a family history of seizures. PMID: 2552066, UI: 90011561