

## *The updated prevalence of peanut allergy among children in the United States*

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### **Introduction**

Previous research indicates that peanut allergy is the most prevalent food allergy in the United States and that peanut allergy comprises a high proportion of fatal food-allergic reactions. Studies also suggest that peanut allergies are rarely outgrown, resulting in chronic food allergy management and decreased quality of life. This study aims to further elucidate the current state of childhood peanut allergy in the United States via a population-based survey of US households.

### **Methods**

Food allergy surveys were completed via parent-proxy for 38,408 US children between 2015-2016. Surveys assessed demographics, allergens, history of allergic reactions, food allergy diagnosis, reaction management, food allergy severity, and chronic comorbidities. Children with suspected oral allergy syndrome and/or food intolerances were excluded. Complex survey weighted proportions were calculated with cluster robust standard errors at the household level for valid population-level inference.

### **Results**

An estimated 2.2% (95% CI:2.0-2.5) of US children have a peanut allergy, with 80.9% (77.0-84.4) of the allergies having been physician diagnosed. Of children with peanut allergy, 59.2% (53.6-64.6) have experienced a severe reaction. Furthermore, 54.8% (49.1-60.3) of children with peanut allergy have multiple food allergies and 73.0% (68.0-77.5) also have a current epinephrine prescription. 50.4% (44.9-55.0) of those with peanut allergy have had at least one lifetime ED visit, with 22.9% (19.1-27.2) having had an ED visit in the past year.

### **Conclusions**

Childhood peanut allergy remains the most common food allergy amongst children in the United States equating to 1.6 million children. Further, these data suggest that acute allergic reactions to peanut are often severe and require emergency department utilization. Rates of physician-diagnosis of peanut allergies are becoming increasingly common.