Prevalence and triggers of anaphylactic events in schools

Anaphylaxis is a serious allergic condition that often involves swelling, hives, lowered blood pressure, and, in severe cases, shock. If not treated immediately, it can be fatal. Not only have rates of anaphylaxis been on the rise in the general population but also in childhood populations in which prevention and management of the condition in schools has become an area of great importance. School administrators have noted increases in students’ self-reporting severe allergies (particularly elementary-school–age children) and more frequent anaphylactic events that occur in the school setting. Epinephrine is now known to be the best treatment for anaphylaxis, and, because it works best if given within the first few minutes of a severe allergic reaction, hand-held devices, referred to as epinephrine autoinjectors (EAIs), have been developed and allow the medication to be self-administered. Despite these observations, there remains a lack of adequate information regarding the epidemiology of, triggers for, and treatment of anaphylactic events in school settings. In a recent report, White et al. from the Institute for Asthma and Allergy, Wheaton, Maryland, performed a study to elucidate the epidemiology of and management strategies for anaphylaxis in the school setting.

Who or What Was Proposed to Be Studied?

A questionnaire-based survey was administered to schools that participated in a nation-wide EPIPEN4SCHOOLS program, an initiative that provides stock EAIs to qualifying U.S. schools.

How Was the Study Done?

Of a total of 12,275 of the 45,819 invited schools that responded to the survey, the occurrence of one or more anaphylactic events was reported by 1358 schools. High school students accounted for the largest proportion of anaphylactic reactions, and food was the most commonly identified anaphylaxis trigger across grade levels, seasons, and geographic regions.

What Are the Limitations of the Proposed Study?

The interpretation of study findings was subject to the limitations inherent to a survey instrument. Moreover, the data available for each event were limited by the level of detail recorded by the school or district at the time of occurrence.

What Are the Implications of the Study?

Anaphylaxis occurred across grade levels and in individuals with or without known risk factors, which reinforced the need for school preparedness in both management of anaphylaxis and stocking of EAIs.