Moreover, the prevalence of food allergy may be increasing among school-aged children. Approximately 20% of events (172/847) had an unknown trigger (Figure 4). A total of 32,387 schools had available contact information (Figure 1).

Study duration: May 21, 2014, to July 9, 2014

Missing responses were excluded.

22% of these events (187/852) occurred in individuals who had no known allergies. Fewer events triggered by insect stings or bites occurred in the winter compared with spring or fall (Table).

Answered by an individual at each school with knowledge of occurrences of anaphylactic reactions and anaphylaxis that could be encountered in this setting. Most anaphylactic events (89%) were experienced by students; of these, many (20%) reported 1 to 2 anaphylactic events. Most anaphylactic events occurred in students: 62% (n=529) were listed as food, 10% (n=81) were listed as environmental/malicious or medication/health-related causes, and 1% (6) were listed as unknown. Approximately 30% (n=723) of these had an unknown trigger. Although food allergies triggering anaphylaxis have been identified as a priority condition for health care providers, the number of reactions to foods is not well documented.

Anaphylaxis is a serious, acute, and potentially life-threatening allergic reaction. Anaphylaxis is defined as a reaction usually characterized by some combination of respiratory distress, skin or mucosal manifestations, or cardiovascular symptoms that is severe enough to warrant medical intervention. Anaphylactic events were defined as those events in which a subject experienced respiratory or skin/ocular symptoms consistent with anaphylaxis and were subject to respondent recollection of the events. Responses were limited by the level of detailed information retained at the schools related to anaphylaxis and were subject to respondent misreporting of the events.

Surveys were distributed to all schools participating in the EPIPen4Schools survey. A total of 6019 surveys were completed (Figure 1); most questions included a count of missing data, as respondents did not report exactly the same quantity.

So, data were available for 919 anaphylactic events experiences throughout the school year, with the majority of events occurring during the fall and winter months. These results highlight the unpredictability of anaphylaxis and the need for continued anaphylaxis training for all staff members, as well as the need for continued research on anaphylaxis.

A) Data analysis

Anaphylactic triggers

- 9% (n=71) were reported as latex (Figure 4).
- 20% (n=56) were environmental or medication factors.
- 1% (n=4) were reported as unknown.

B) Data analysis

Anaphylactic triggers

- 9% (n=61) were reported as vaccines.
- 30% (n=187) were reported as foods.
- 10% (n=61) were reported as environmental factors.
- 1% (n=4) were reported as unknown.

C) Data analysis

Anaphylactic triggers

- 9% (n=61) were reported as vaccines.
- 30% (n=187) were reported as foods.
- 10% (n=61) were reported as environmental factors.
- 1% (n=4) were reported as unknown.

D) Data analysis

Anaphylactic triggers

- 9% (n=61) were reported as vaccines.
- 30% (n=187) were reported as foods.
- 10% (n=61) were reported as environmental factors.
- 1% (n=4) were reported as unknown.

E) Data analysis

Anaphylactic triggers

- 9% (n=61) were reported as vaccines.
- 30% (n=187) were reported as foods.
- 10% (n=61) were reported as environmental factors.
- 1% (n=4) were reported as unknown.

F) Data analysis

Anaphylactic triggers

- 9% (n=61) were reported as vaccines.
- 30% (n=187) were reported as foods.
- 10% (n=61) were reported as environmental factors.
- 1% (n=4) were reported as unknown.

G) Data analysis

Anaphylactic triggers

- 9% (n=61) were reported as vaccines.
- 30% (n=187) were reported as foods.
- 10% (n=61) were reported as environmental factors.
- 1% (n=4) were reported as unknown.

H) Data analysis

Anaphylactic triggers

- 9% (n=61) were reported as vaccines.
- 30% (n=187) were reported as foods.
- 10% (n=61) were reported as environmental factors.
- 1% (n=4) were reported as unknown.