

## Nut anaphylaxis risk increases among kids at Halloween and Easter

**HAMILTON, ON (21 September 2020)**

There is a significant increase in the incidence of peanut and unknown nut anaphylaxis among children during Halloween and Easter, according to [a new Canadian study](#) published today in the *Canadian Medical Association Journal (CMAJ)*.

“Identifying those times of the year associated with an increased risk of anaphylaxis can help to intensify vigilance around food allergies and inform the timing of public awareness campaigns to prevent allergic reactions,” says lead researcher Dr. Moshe Ben-Shoshan. Dr. Ben-Shoshan is a pediatric allergist and immunologist at the Research Institute of the McGill University Health Centre (RI-MUHC) and at the Montreal Children’s Hospital, and an assistant professor of Pediatrics at McGill University.

The study evaluated the average daily cases of anaphylaxis in children during six holidays (Halloween, Easter, Christmas, Diwali, Chinese New Year, and Eid al-Adha) compared to all the other days of the year.

For anaphylaxis triggered by peanuts, the study found an 85% increase in average daily cases at Halloween and a 60% increase at Easter compared with the rest of the year.

For anaphylaxis triggered by unknown nuts, there was a 70% increase in average daily cases at both Halloween and Easter compared with the rest of the year. No holiday-related increase was observed for anaphylaxis triggered by tree nuts.

“We didn’t see an increase in anaphylaxis at Christmas, Diwali, Chinese New Year, or Eid al-Adha,” comments Dr. Ben-Shoshan. “This may be due to the fact that on Halloween and Easter, children often receive candies from people who may be unaware of those children’s allergies. Christmas and other holidays may involve more intimate celebrations with family members and close friends who are more vigilant regarding allergen exposure.”

Canadian labelling regulations may also partially explain the findings, according to Dr. Ben-Shoshan. When sold individually, prepackaged “one bite” snacks and candies are exempt from legislation requiring common allergens be listed on the label. “At Halloween, one-bite treats are often packaged together in a larger bag, and although the outer bag must label ingredients and allergens, most people empty the candies into a bowl and hand them out individually, so there’s no allergen information there,” he notes.

For the study, the researchers analyzed data from 1,390 patients visiting pediatric emergency departments in four Canadian provinces between 2011 and 2020, as part of AllerGen’s nationwide Cross-Canada Anaphylaxis REgistry (C-CARE) project. C-CARE is led by Dr. Ben-Shoshan and is the first prospective study on anaphylaxis to assess the rate, triggers and management of anaphylaxis in different provinces and settings.

For the purposes of the study, anaphylaxis was defined as a reaction affecting at least two organ systems and/or involving a sudden drop in blood pressure.

The researchers also found that the holiday period particularly affected older children. “The incidence of anaphylaxis was higher during Halloween and Easter for children six years of age and older, compared to younger children,” comments first-author Mélanie Leung, a medical student at McGill University. “We suspect this is likely due to decreased parental supervision of older children.”

“Additionally, we found that the majority of anaphylactic reactions to tree nuts, in contrast to peanuts, occurred in children not known to have a tree nut allergy, highlighting the need for vigilance regarding first exposures to tree nuts at any time of the year.”

“The big takeaway from this study is that educational tools are needed to increase vigilance toward children who have food allergies and that new strategies and awareness campaigns are needed to highlight the risk of anaphylaxis during holiday periods.”

**About AllerGen Inc. (Allergy, Genes and Environment Network)**

AllerGen Inc. is a former Networks of Centres of Excellence (NCE) national research network dedicated to improving the quality of life of people suffering from allergic and related immune diseases. Funded by the Government of Canada from 2005 to 2019, AllerGen is hosted at McMaster University in Hamilton, ON.

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