Food Allergy and Anaphylaxis in School during COVID-19

Considerations for school nurses.

In the current COVID-19 pandemic, specific processes for students with food allergy need to be reinforced to ensure safe attendance at school.

CONSIDERATIONS:

Variations in Locations Where Students Eat:

- Due to social distancing recommendations, students may be eating in more places within the school community this year. This may include not only the cafeteria, but also classrooms and outdoor spaces.
 - Teacher and staff training on food allergy and anaphylaxis should be renewed and reinforced, including the understanding that first time reactions can occur in students without a previous diagnosis of food allergy.
 - For students with known food allergies, the student's autoinjector must be immediately available and with the student at all times, including for activities outside of the building.

Vigilance for Safe Practices:

- Cleaning of table surfaces should be performed before and after lunch in the same manner as previously recommended for cafeteria settings.
- Handwashing is recommended as part of infection control precautions, but should be specifically enforced before and after lunch and other snack/meal times.
- Handwashing with soap and water or use of commercial wipes are the only methods proven to remove food proteins from surfaces. Hand sanitizers are not an effective replacement.
- "No sharing food" policy should be enforced.

Asthma and Allergy Considerations:

• If students also have asthma, they should continue their asthma medications as prescribed by their asthma health provider as comorbid asthma is also an important risk factor associated with poor anaphylaxis outcomes.

- If students with pollen allergies eat lunch/snack outside, it will be challenging to distinguish between allergic rhinitis symptoms and food allergic reactions. Distinguishing features of food allergy reactions include rapid onset after ingestion of allergen and additional symptoms such as hives, facial swelling, coughing, nausea, etc.
- Symptoms of anaphylaxis triggered by a food allergen are no different from those triggered by an insect sting. Staff should be trained to act quickly whenever an allergic reaction is suspected.
- The priority remains prompt administration of epinephrine in the event of anaphylaxis.
- Every effort should be made to ensure that all students with food allergy have an updated Allergy and Anaphylaxis Action Plan or Individualized Healthcare Plan (IHP).

REFERENCES:

- CDC: https://www.cdc.gov/coronavirus/2019-ncov/community/ schools-childcare/schools-faq.html#Administrators
- Greenhawt M, Shaker M, Stukus D, Fleischer D, Hourihane J, Tang M, Abrams EM, Wang J, et al. Managing Food Allergy in Schools During the COVID-19 Pandemic. *J Allergy Clin Immunol Pract.* 2020 Jul 22:S2213-2198(20)30724-8. [e-pub]
- Sampson HA, Muñoz-Furlong A, Campbell RL, Adkinson NF Jr, Bock SA, Branum A, Brown SG, Camargo CA Jr, Cydulka R, Galli SJ, Gidudu J, Gruchalla RS, Harlor AD Jr, Hepner DL, Lewis LM, Lieberman PL, Metcalfe DD, O'Connor R, Muraro A, Rudman A, Schmitt C, Scherrer D, Simons FE, Thomas S, Wood JP, Decker WW. Second symposium on the definition and management of anaphylaxis: summary report--Second National Institute of Allergy and Infectious Disease/Food Allergy and Anaphylaxis Network symposium. J Allergy Clin Immunol. 2006 Feb;117(2):391-7.
- Simons FE, Ardusso LR, Bilò MB, El-Gamal YM, Ledford DK, Ring J, Sanchez-Borges M, Senna GE, Sheikh A, Thong BY; World Allergy Organization. World allergy organization guidelines for the assessment and management of anaphylaxis. *World Allergy Organ J*. 2011 Feb;4(2):13-37.
- Wang J, Bingemann T, Russell AF, Young MC, Sicherer SH. The Allergist's Role in Anaphylaxis and Food Allergy Management in the School and Childcare Setting. *J Allergy Clin Immunol Pract*. 2018 Mar-Apr;6(2):427-435.
- WHO: https://www.who.int/news-room/commentaries/detail/transmission-of-sars-cov-2-implications-for-infection-prevention-precautions





Food Allergy and Anaphylaxis in School during COVID-19

Considerations for school nurses.

CASE SCENARIO:

Student with peanut allergy is noted to have hives and complains of abdominal discomfort during lunch. The following is advised:

- Prompt administration of epinephrine autoinjector is the first priority.
- Have another person contact the school nurse and activate EMS.
- Coughing is a common response and can occur at any time during anaphylaxis. The highest level of personal protective equipment (PPE) is recommended for staff responding to the student.
- The student should be put in a comfortable sitting position, if in respiratory distress. Obtain a trash can or other container as vomiting is a common symptom with food allergy reactions. The student should not be walked to another room as sudden standing has led to fatalities. Instead, other students should be moved to a different location to increase social distancing, reduce potential exposure to respiratory secretions, and provide privacy to the student.
- Be prepared to administer a second dose of epinephrine in 5-10 minutes if student has symptoms that are not improved or are worsening. In many rural or remote location, EMS may have extended response times.

DISCLAIMER: This document provides a summary of currently available resources that school nurses can consult as they formulate independent nursing judgement for their practice or when participating in policy discussions in their districts. This document is not intended to provide clinical standards or guide-lines. The school nurse is responsible for complying with applicable federal, state, and local laws, regulations, ordinances, executive orders, policies, and any other applicable sources of authority, including any applicable standards of practice.



