

# Emergency room anaphylaxis observation times could be reduced

April 28 2023

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According to a new national study, most children visiting hospital emergency departments with anaphylaxis, a severe and potentially life-threatening allergic reaction, could be discharged after two hours or

less—which is half the time of current minimum guidelines. This research will be presented at the [2023 Pediatric Academic Societies \(PAS\) Meeting](#), held April 27-May 1 in Washington, D.C.

Researchers conducted a study of 4,735 children aged 6 months to 18 years who had [anaphylaxis](#) and received at least one dose of epinephrine in the pre-emergency department or emergency department setting between 2015 and 2019.

The study suggests current national guidelines could be updated to require only two hours of observation for [patients](#) without cardiovascular symptoms. The existing guidance recommends a four- to six-hour observation period after anaphylaxis. Among the [study group](#), researchers found patients with no respiratory or cardiovascular symptoms may be able to be discharged after only 5 minutes; patients with respiratory symptoms could be discharged after 1 hour; and patients with cardiovascular symptoms could be discharged after two hours.

"Data to back up current guidelines for anaphylaxis observation times is severely lacking, leading to inefficient care, emergency department overcrowding, and inconvenience for patients and families," said Tim Dribin, M.D., associate professor of emergency medicine at Cincinnati Children's Hospital Medical Center and presenting author. "Our analysis shows there is a way to safely streamline care and give crucial time and resources back to patients, families, and providers."

Table. Patient and reaction characteristics	
Patient and reaction characteristics	Summary <sup>a</sup> n = 4729
Age, years (IQR)	7.62 [3.07, 12.91]
Male sex	2653 (56.1%)
Race	
White	1920 (40.6%)
Black or African American	1181 (25.0%)
American Indian	11 (0.2%)
Asian or Native Hawaiian or Other Pacific Islander	364 (7.7%)
Ethnicity	
Hispanic	983 (20.8%)
Insurance	
Private	2330 (49.3%)
Public	1983 (41.9%)
Past medical history	
Prior anaphylaxis	1220 (25.8%)
How many prior episodes	
1	337 (7.1%)
2 or more	213 (4.5%)
Prior anaphylactic reaction to the current allergen	523 (11.1%)
Asthma	1575 (33.3%)
Trigger	
Food	3390 (71.7%)
Medications	218 (4.6%)
Insect stings	105 (2.2%)
Unknown	890 (18.8%)
Total epinephrine doses	
1	4375 (92.5%)
2	291 (6.2%)
3 or more	63 (1.3%)
ED disposition	
ED discharge	3926 (83.0%)
Inpatient hospitalization	803 (17.0%)
<sup>a</sup> All % were calculated based on the total sample size who had non-missing date/time of 1st and last dose of epinephrine as the denominator.	

The study authors note additional research is needed before the findings can be implemented in a clinical setting.

Provided by American Pediatric Society

Citation: Emergency room anaphylaxis observation times could be reduced (2023, April 28)  
retrieved 4 May 2024 from

<https://medicalxpress.com/news/2023-04-emergency-room-anaphylaxis.html>

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