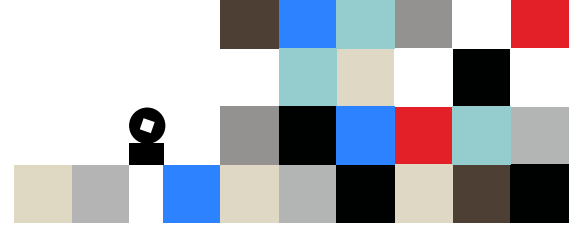


# ImageTrend Short Report



## July 2026: Prehospital Response to Allergic Reactions

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### Background

Multiple studies have noted increasing rates of emergency department visits for acute allergic reactions, including anaphylaxis, over recent decades in the United States.<sup>1-3</sup> While fatal anaphylaxis events remain rare, approximately 1%-5% of the population is estimated to experience a non-fatal anaphylaxis event during their lifetime.<sup>4</sup> Prehospital clinicians play a critical role in prompt identification and lifesaving management severe allergic reactions. However, recent studies have found substantial gaps in state-level EMS protocols for anaphylaxis recognition and management<sup>5</sup> as well as administration of epinephrine in less than 50% pediatric anaphylaxis responses by EMS.<sup>6</sup>

### National Scope of 911 Responses for Allergic Reactions:

Out of 12,277,536 911 responses with patient contact in the 2025 ImageTrend Collaborate Dataset, there were **70,398** 911 responses with allergic reaction as a primary or secondary impression, with **11% (n=7,572)** specifically documented as anaphylaxis.



**58%** of allergic reaction responses were female



Over **1 in 4** allergic reaction responses were for patients **<20 years old**

### When & Where are 911 Responses for Allergic Reactions Taking Place?:



The rate of responses for allergic reactions rose throughout the spring & summer, peaking in **August**



**53%** occurred at private residences

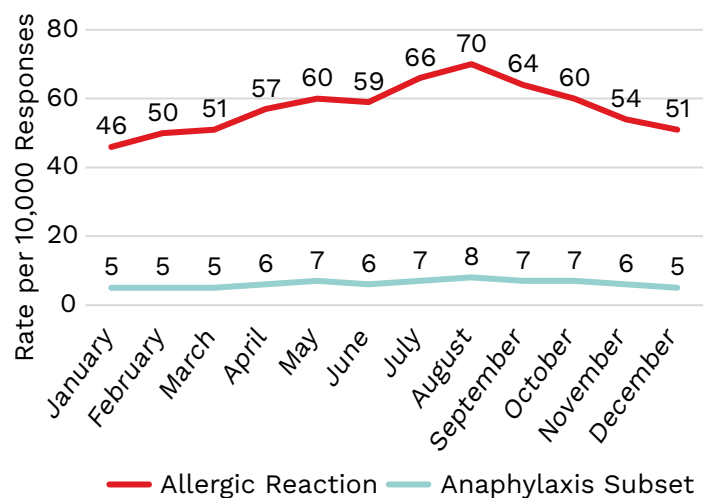


**15%** occurred at healthcare facilities (predominately outpatient settings like offices and urgent care centers)



**19%** of pediatric responses occurred at schools

### Allergic Reaction Impressions by Month Rate per 10,000 EMS 911 Responses



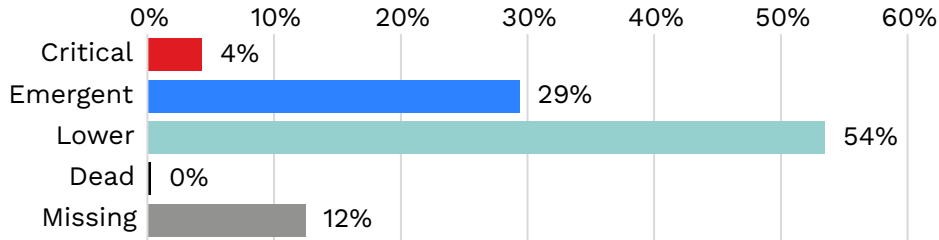


**71%** were identified as allergic reactions by dispatch



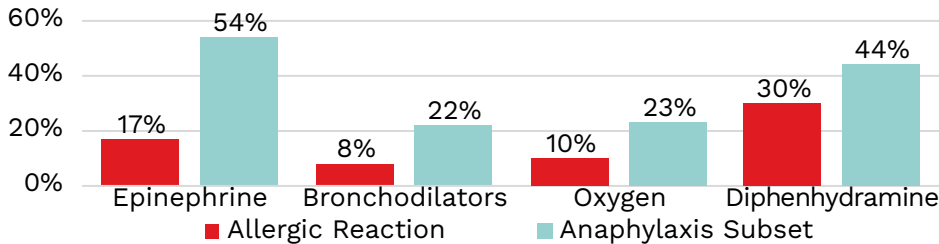
While only **33%** of overall 911 responses for allergic reactions had critical or emergent initial acuity, **60%** of responses with anaphylaxis-specific impressions did

### % of Allergic Reaction 911 Responses



Cutaneous symptoms were the most common (**44%**), followed by airway or breathing symptoms (**25%**)

### Proportion of Allergic Reaction Administered Medications



Approximately **1 in 2** anaphylaxis 911 responses were administered epinephrine by the responding unit



**79%** of allergic reactions and **93%** of anaphylaxis 911 responses resulted in EMS transport

- **13%** of allergic reactions resulted in patient refusals, while only **4%** of anaphylaxis did

#### About the data:

This analysis was conducted using the 2025 **ImageTrend Collaborate™** dataset, a representative national EMS research resource consisting of de-identified data from agencies that opt into data-sharing. 9-1-1 responses for allergic reactions or anaphylaxis were identified using relevant ICD-10 codes in provider primary and secondary impressions (eSituation11 and eSituation12).

#### Citations:

1. Arroyo A, Robinson L, Cash R, et al. (2021). Trends in Emergency Department Visits and Hospitalizations for Acute Allergic Reactions and Anaphylaxis Among US Older Adults: 2006-2014. *The Journal of Allergy and Clinical Immunology: In Practice*. 9, 2831-2843.e8
2. Carrillo-Martin I, Gonzalez-Estrada A, Funni S, et al. (2020). Increasing Allergy-Related Emergency Department Visits in the United States, 2007 to 2015. *The Journal of Allergy and Clinical Immunology: In Practice*. 8, 2983-2988
3. Dribin T, Neuman M, Schnadower D, et al. (2023). Trends and Variation in Pediatric Anaphylaxis Care From 2016 to 2022. *The Journal of Allergy and Clinical Immunology: In Practice*. 11, 1184-1189
4. Golden, D. B. K., Wang, J., Waserman, S., et al. (2024). Anaphylaxis: A 2023 practice parameter update. *Annals of allergy, asthma & immunology : official publication of the American College of Allergy, Asthma, & Immunology*, 132(2), 124-176.
5. Carly A. Gunderson, Sandra M. Lopez, et al. (2025). Discrepancies in anaphylaxis protocols across emergency medical services in the United States: Opportunities for improvement. *Annals of Allergy, Asthma & Immunology*. Volume 135, Issue 1, Pages 91-96.

## Call to Action



Anaphylaxis can progress rapidly and may not always present with classic symptoms. Reinforce clinician education on early recognition and empower providers to administer epinephrine promptly when anaphylaxis is suspected.



Severe allergic reactions can occur in any age group; however, they are most common in children. Support clinicians' confidence in pediatric dosing strategies.



A substantial portion of allergic reaction responses occur in schools, urgent care centers, medical offices, and other healthcare facilities. Work with community partners to promote rapid recognition, timely epinephrine use, and effective EMS handoffs.

#### Work With Us:

ImageTrend's Clinical & Research Services team partners with EMS and healthcare organizations to uncover actionable insights and drive data-informed public health initiatives.

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[> Learn more about participating in or conducting research with the ImageTrend Collaborate Dataset here:](#)

