

Food Allergy Disease Burden and Patient Journey

In the United States, food allergies affect **32 million people** including:

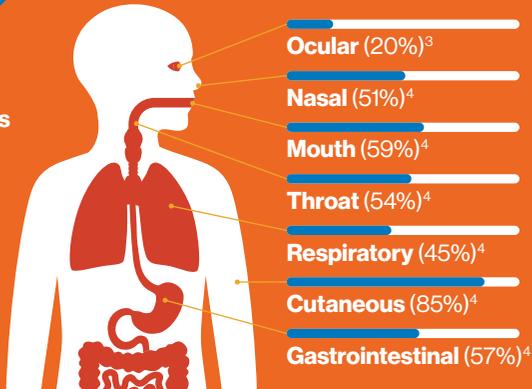
1 in 10 adults

1 in 13 children



20 minutes to 2 hours

Symptoms typically develop within **20 minutes to 2 hours** after exposure and are broad and **often severe** (eg, anaphylaxis)²⁻⁴



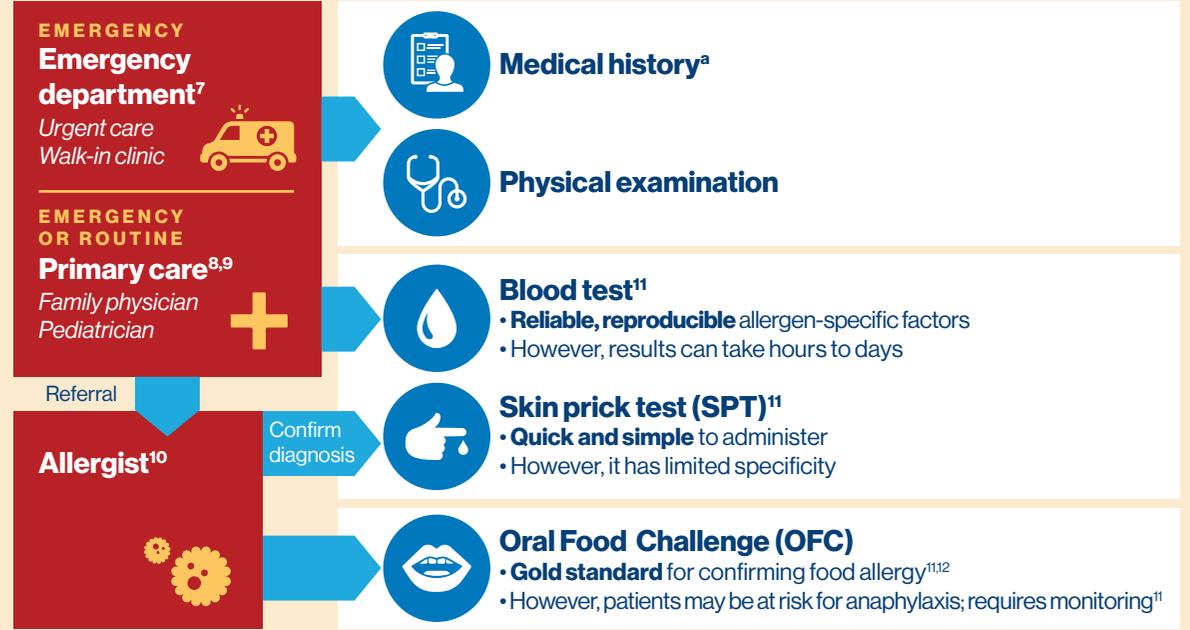
ANAPHYLAXIS

is a **severe, potentially fatal, multisystem allergic reaction** characterized by the **sudden onset** and rapid progression of symptoms, with **respiratory and cardiovascular involvement**⁵



Accurate diagnosis is often difficult; symptoms can be misinterpreted as the result of a potential allergy, with some patients diagnosed only after experiencing a severe allergic reaction⁶

PRESENTATION DIAGNOSIS



^aThe basophil activation test is proposed as a second step in diagnosis where history and other testing could not lead to a definite diagnosis, potentially limiting the need for OFC.¹³ However, utility is currently limited to research institutions.¹⁴

PATIENT BARRIERS

Self-diagnosis

- Self-reporting food allergies without proper medical diagnosis¹⁵
- Food sensitivity is often confused with food allergy¹¹

Diagnosis

- Accurate diagnosis is difficult⁶
- Physicians may need more education on OFC tests¹⁷
- Fear and anxiety to participate in OFC¹⁸

Referral to allergist

- Low rates of guideline implementation and adherence among pediatricians¹⁶
- Potential misdiagnosis (over and under diagnosis)¹⁷

Treatment discussion

- Caregivers have concerns with needle injections for pediatric patients⁴
- Patients and caregivers may have preferences for particular treatment attributes, goals of treatment, and risk tradeoffs¹⁹

IMPACT

Food allergies can have a profoundly negative impact on the quality of life of patients and their caregivers^{4,20,21}

<p>"It is...stressful to worry about when an exposure might happen."⁴</p> 	<p>"Most people just never understand... It is hard to hang out with my friends who love the foods I can't be around."⁴</p> 	<p>"...I sold a lot of my belongings along with receiving food stamps... just to afford food, as you can't use food banks when you have allergies."²⁰</p> 	<p>"We weren't given any information or told: '...if he is allergic, these are...the precautions or this is what you need to do from here.'"²¹</p> 
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APPROACH

However, a multidisciplinary approach can enable the effective management of food allergies



OFC, Oral Food Challenge.

1. American Academy of Allergy Asthma & Immunology. Accessed December 14, 2021. <https://www.foodallergy.org/resources/what-food-allergy>; 2. Bird JA. *Immunol Allergy Clin North Am*. 2018;38(2):e1-e8. 3. Fauquet JL. *Acta Ophthalmologica*. 2014;92:S253. 4. Asthma and Allergy Foundation of America. Accessed December 14, 2021. <https://www.aafa.org/media/2451/aafa-my-life-with-food-allergy-parent-survey-report.pdf>; 5. Campbell RL et al. *Ann Allergy Asthma Immunol*. 2014;113(6):599-608. 6. American Academy of Allergy Asthma & Immunology. Accessed December 14, 2021. <https://www.foodallergy.org/research-innovation/accelerating-innovation/food-allergy-diagnosis-and-testing>; 7. Krajewski GS, Krajewski T. *Emerg Med Clin North Am*. 2022;40(1):57-67. 8. Kurowski K, Boxer RW. *Am Fam Physician*. 2008;77(12):1678-1686. 9. Pistiner M, Devore CD. *Pediatr Ann*. 2013;42(8):334-340. 10. Food Allergy Resource and Education. Accessed December 14, 2021. <https://www.foodallergy.org/resources/oral-food-challenge>; 11. Burks AW et al. *J Allergy Clin Immunol*. 2012;129(4):906-920. 12. Scurlock AM, Jones SM. *J Allergy Clin Immunol*. 2018;141(6):2002-2014. 13. Santos AF et al. *J Allergy Clin Immunol Pract*. 2021;9(5):2016-2027.e6. 14. Noriega DB et al. *J Asthma Allergy*. 2021;14:1335-1348. 15. Verrill L et al. *Allergy Asthma Proc*. 2015;36(6):458-467. 16. Gupta RS et al. *JAMA Netw Open*. 2020;3(7):e2010511. 17. Sicherer SH et al. *Pediatrics*. 2017;140(2):e20170194. 18. Marsac ML, Wurth MA. *Ann Allergy Asthma Immunol*. 2021;126(6):728-729. 19. Greenhawt M. *Ann Allergy Asthma Immunol*. 2020;125(3):262-267. 20. Food Allergy Research & Education. Accessed December 14, 2021. <https://www.foodallergy.org/accessing-safe-and-ordable-foods>; 21. Abdurrahman ZB et al. *Allergy Asthma Clin Immunol*. 2013;9(1):18. 22. Wang J et al. *J Allergy Clin Immunol Pract*. 2018;6(2):427-435. 23. Foong RX et al. *Paediatrics and Child Health*. 2016;26:445-450. 24. Australian Society of Clinical Immunology and Allergy. Accessed December 14, 2021. <https://www.allergy.org.au/patients/food-allergy/ascia-dietary-avoidance-for-food-allergy-faq>