



Food Allergy Facts and Figures

What Is a Food Allergy?

- A <u>food allergy</u> occurs when the body's immune system sees a certain food as harmful and reacts by causing specific clinical symptoms. This is an allergic reaction.
- Foods that cause allergic reactions are called <u>allergens</u>. People are usually allergic to proteins found in a food allergen.
- Allergic reactions can involve the skin, mouth, throat, eyes, lungs, heart, gut, and brain.
- Severe symptoms can lead to a serious allergic reaction called <u>anaphylaxis</u> [annafih-LACK-sis]. This reaction usually involves more than one part of the body and can worsen quickly and can be life-threatening. In some cases, it can lead to death.
- Anaphylaxis must be recognized and treated right away with epinephrine to provide the best chance for improvement and to prevent serious, potentially life-threatening complications.

How Common Are Food Allergies?

- As of 2021, about 20 million people have food allergies in the U.S.^{1,2}
 - About 16 million (6.2%) U.S. adults have food allergies.¹
 - o About 4 million (5.8%) U.S. children have food allergies.²
- In 2021, 7.6% of non-Hispanic Black children had food allergies, compared to 5.3% of non-Hispanic White children.²
 - Food allergy has increased among U.S. children over the past 20 years, with the greatest increase in Black children.³

What Are the Most Frequent Food Allergens?

- Nine foods cause most food allergy reactions in the United States:⁴
 - Milk
 - Egg
 - Peanut
 - Tree nut (for example, almonds, walnut, pecans, cashews, pistachios)
 - Fish (for example, bass, flounder, cod)
 - Shellfish (for example, crab, shrimp, scallop, clams)
 - Wheat
 - Soy
 - Sesame





 Sesame is a rising food allergy. It impacts an estimated 1 million people in the United States.⁶ It was declared a major allergen in the United States in 2021.

What Is Anaphylaxis?

- Anaphylaxis is a severe, potentially life-threatening allergic reaction that comes on quickly and in rare cases can cause death. Not all allergic reactions are anaphylaxis.⁵
- Symptoms of anaphylaxis can involve more than one part of the body such as the skin, mouth, throat, eyes, lungs, heart, gut, and brain.
- Symptoms of anaphylaxis can include:
 - Skin: hives (often very itchy), flushed skin, or rash
 - Mouth: swelling of the lips, tongue, and throat; tingling or itchy feeling in the mouth
 - o Lungs: shortness of breath, trouble breathing, coughing, or wheezing
 - o Eyes: swelling around the eyes, itchiness
 - o Brain: feeling a sense of doom
 - Heart: dizziness, lightheadedness, loss of consciousness, low blood pressure, shock
 - o Stomach and gut: cramps, vomiting, diarrhea⁵
- Each year in the U.S., it is estimated that anaphylaxis to food results in 90,000 emergency room visits.⁶
 - From 2006-2015, emergency room visits from food-induced anaphylaxis in infants and toddlers more than doubled.⁷

How Are Food Allergies Managed and Treated?

- Although new treatments are being developed, there is currently no cure for food allergies.⁴
- Strictly avoiding a food allergen and not eating it is the primary way to prevent a reaction.⁴
- People with food allergies should carefully read food ingredient labels and always ask about ingredients before eating food prepared by other people.⁴
- Epinephrine is the first line of treatment for anaphylaxis.⁸
- It is critical to recognize and treat anaphylaxis early and without delay.
- People with diagnosed food allergies should always have epinephrine with them. If anaphylaxis is suspected, epinephrine should be given right away and without delay to prevent severe complications (another health issue). 9,10
- If a person is having anaphylaxis, they should:





- Follow their <u>Anaphylaxis Action Plan</u>, a written plan created with a health care provider
- Use their epinephrine right away and without delay
- Get emergency medical care as needed to ensure symptoms are treated appropriately and resolve^{9,10}

Are Food Allergies Outgrown?

• Milk, egg, wheat, and soy allergies are often outgrown. Most people do not outgrow peanut, tree nut, fish, and shellfish allergies.¹¹

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References

- 1. Ng, A.E. & Boersma, P. (2023). NCHS Data Brief, no 460: Diagnosed allergic conditions in adults: United States, 2021. National Center for Health Statistics. https://dx.doi.org/10.15620/cdc:122809
- 2. Zablotsky, B., Black, L.I., & Akinbami, L.J.(2023). *NCHS Data Brief, no 459: Diagnosed allergic conditions in children aged 0-17 years: United States, 2021.* National Center for Health Statistics. https://dx.doi.org/10.15620/cdc:123250
- 3. Keet, C. A., Savage, J. H., Seopaul, S., Peng, R. D., Wood, R. A., & Matsui, E. C. (2014). Temporal Trends and Racial/Ethnic Disparity in Self-Reported Pediatric Food Allergy in the United States. *Annals of Allergy, Asthma & Immunology*, 112(3), 222-229.e3. https://doi.org/10.1016/j.anai.2013.12.007
- 4. U.S. Food & Drug Administration. (2023). *Food Allergies*. U.S. Department of Health and Human Services. https://www.fda.gov/food/food-labeling-nutrition/food-allergies
- 5. Warren, C. M., Chadha, A. S., Sicherer, S. H., Jiang, J., & Gupta, R. S. (2019). Prevalence and Severity of Sesame Allergy in the United States. *JAMA Network Open*, 2(8), e199144. https://doi.org/10.1001/jamanetworkopen.2019.9144
- 6. Clark, S., Espinola, J., Rudders, S. A., Banerji, A., & Camargo, C. A. (2011). Frequency of US Emergency Department Visits for Food-Related Acute Allergic Reactions. *Journal of Allergy and Clinical Immunology*, 127(3), 682–683. https://doi.org/10.1016/j.jaci.2010.10.040
- 7. Robinson, L. B., Arroyo, A. C., Faridi, M. K., Rudders, S., & Camargo, C. A., Jr (2021). Trends in US Emergency Department Visits for Anaphylaxis Among Infants and Toddlers: 2006–2015. *Journal of Allergy and Clinical Immunology: In Practice*, 9(5), 1931–1938.e2. https://doi.org/10.1016/j.jaip.2021.01.010
- 8. David B.K. Golden, Wang, J., Waserman, S., Akin, C., Campbell, R. L., Ellis, A. K., Greenhawt, M., Lang, D. M., Ledford, D. K., Lieberman, J., Oppenheimer, J., Shaker, M., Wallace, D., Abrams, E. M., Bernstein, J. A., Chu, D. K., Horner, C. C., Rank, M. A., Stukus, D. R., & Burrows, A. G. (2023). Anaphylaxis: A 2023 practice parameter update. *Annals of Allergy Asthma & Immunology*. https://doi.org/10.1016/j.anai.2023.09.015





9. Cardona, V., Ansotegui, I. J., Ebisawa, M., El-Gamal, Y., Fernandez Rivas, M., Fineman, S., Geller, M., Gonzalez-Estrada, A., Greenberger, P. A., Sanchez Borges, M., Senna, G., Sheikh, A., Tanno, L. K., Thong, B. Y., Turner, P. J., & Worm, M. (2020). World Allergy Organization Anaphylaxis Guidance 2020. World Allergy Organization Journal, 13(10), 100472. https://doi.org/10.1016/j.waojou.2020.100472

10. Whyte, A. F., Soar, J., Dodd, A., Hughes, A., Sargant, N., & Turner, P. J. (2022). Emergency treatment of anaphylaxis: concise clinical guidance. *Clinical Medicine*, 22(4), 332–339. https://doi.org/10.7861/clinmed.2022-0073

11. Sicherer, S. H., & Sampson, H. A. (2014). Food Allergy: Epidemiology, Pathogenesis, Diagnosis, and Treatment. Journal of Allergy and Clinical Immunology, 133(2), 291-307.e5. https://doi.org/10.1016/j.jaci.2013.11.020