



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 symptoms. This is an allergic reaction.
- Foods that cause allergic reactions are called <u>allergens</u>.
- Allergic reactions can involve the skin, mouth, eyes, lungs, heart, gut, and brain.
- Mild and severe symptoms can lead to a serious allergic reaction called <u>anaphylaxis</u> [anna-fih-LACK-sis]. This reaction usually involves more than one part of the body and can worsen quickly.
- Anaphylaxis must be treated right away with epinephrine to provide the best chance for improvement and 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 5.5% 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
- Children with food allergies are two to four times more likely to have asthma or other allergic diseases.⁴

What Are the Most Frequent Food Allergens?

- Nine foods cause most food allergy reactions in the United States:5
 - Milk
 - Egg
 - Peanut
 - o Tree nut (for example, almonds, walnut, pecans, cashews, pistachios)
 - Wheat
 - Sesame
 - Soy
 - Fish (for example, bass, flounder, cod)
 - Shellfish (for example, crab, shrimp, scallop, clams)
- 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. Not all allergic reactions are anaphylaxis.⁷
- Symptoms of anaphylaxis usually involve more than one part of the body such as the skin, mouth, 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
 - Heart: dizziness, lightheadedness, loss of consciousness, low blood pressure, shock
 - Stomach: cramps, vomiting, diarrhea⁵
- Each year in the U.S., it is estimated that anaphylaxis to food results in 90,000 emergency room visits.⁷
 - From 2006-2015, emergency room visits from food-induced anaphylaxis in infants and toddlers more than doubled⁸

How Are Food Allergies Managed and Treated?

- Although new treatments are being developed, there is currently no cure for food allergies.⁵
- Not eating the food allergen is the primary way to prevent a reaction.⁵
- People with food allergies should carefully read food ingredient labels and always ask about ingredients before eating food prepared by other people.⁵
- Epinephrine is the first line of treatment for anaphylaxis.⁹
- People with food allergies should always have epinephrine with them.⁹
- If a person is having anaphylaxis, they should:
 - o Follow their Anaphylaxis Action Plan
 - o Use their epinephrine
 - Get emergency medical care to ensure symptoms resolve¹⁰

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

Medical Review: April 2022 by Gurjit K. Khurana Hershey, MD, updated March 2023



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. Branum, A., & Lukacs, S. (2019). Food Allergy Among U.S. Children: Trends in Prevalence and Hospitalizations. Centers for Disease Control and Prevention; National Center for Health Statistics. https://www.cdc.gov/nchs/products/databriefs/db10.htm
- 5. 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
- 6. 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
- 7. 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
- 8. 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
- 9. American College of Allergy, Asthma, and Immunology. (2018). *Epinephrine Auto-injector*. https://acaai.org/allergies/management-treatment/epinephrine-auto-injector
- 10. 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
- 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