

Food Allergy Facts and Figures

What Is a Food Allergy?

- A food allergy 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 **allergens**.
- 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 **anaphylaxis** [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?

- About 32 million people have food allergies in the U.S.^{1,2}
 - About 26 million (10.8%) U.S. adults have food allergies.¹
 - About 5.6 million (7.6%) U.S. children have food allergies.²
- In 2018, 4.8 million (6.5%) children under 18 years of age had food allergies over the previous 12 months.³
- In 2018, 6% of Black and Hispanic children had food allergies over the previous 12 months, compared to 6.6% of white children.³
 - Food allergy has increased among U.S. children over the past 20 years, with the greatest increase in Black children.⁴
- Children with food allergies are two to four times more likely to have asthma or other allergic diseases.⁵

What Are the Most Frequent Food Allergens?

- Nine foods cause most food allergy reactions in the United States:⁶
 - Milk
 - Egg
 - Peanut
 - 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.⁷ 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.⁸
- 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
- Lungs: shortness of breath, trouble breathing, coughing, or wheezing
- Heart: dizziness, lightheadedness, loss of consciousness, low blood pressure, shock⁶
- Stomach: cramps, vomiting, diarrhea⁶
- Each year in the U.S., it is estimated that anaphylaxis to food results in 90,000 emergency room visits.⁸

How Are Food Allergies Managed and Treated?

- Although new treatments are being developed, there is currently no cure for food allergies.⁶
- Not eating the food allergen is the primary way to prevent a reaction.⁶
- People with food allergies should carefully read food ingredient labels and always ask about ingredients before eating food prepared by other people.⁶
- 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:
 - Follow their [Anaphylaxis Action Plan](#)
 - 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

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References

1. Gupta, R. S., Warren, C. M., Smith, B. M., Jiang, J., Blumenstock, J. A., Davis, M. M., Schleimer, R. P., & Nadeau, K. C. (2019). Prevalence and Severity of Food Allergies Among US Adults. *JAMA Network Open*, 2(1), e185630. <https://doi.org/10.1001/jamanetworkopen.2018.5630>
2. Gupta, R. S., Warren, C. M., Smith, B. M., Blumenstock, J. A., Jiang, J., Davis, M. M., & Nadeau, K. C. (2018). The Public Health Impact of Parent-Reported Childhood Food Allergies in the United States. *Pediatrics*, 142(6). <https://doi.org/10.1542/peds.2018-1235>
3. Centers for Disease Control and Prevention. (2019). *FastStats: Allergies and Hay Fever*. U.S. Department of Health and Human Services. Retrieved from <https://www.cdc.gov/nchs/faststats/allergies.htm>
4. 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>
5. 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>
6. U.S. Food & Drug Administration. (2021). *Food Allergies: What You Need to Know*. U.S. Department of Health and Human Services. <https://www.fda.gov/media/79019/download>
7. 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>

8. 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>
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>