

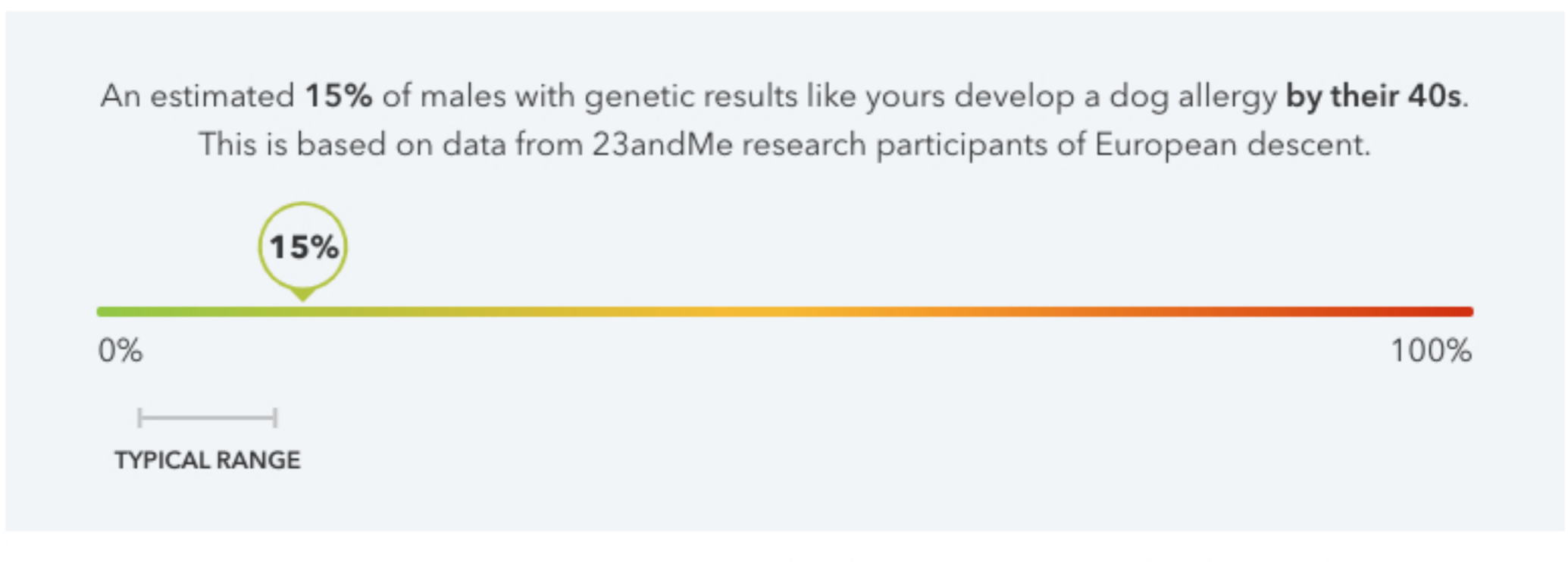
Dog Allergy

POWERED BY 23ANDME RESEARCH

Dog allergy is a condition where the immune system overreacts to certain proteins that dogs produce. For people with dog allergies, contact with dogs may trigger sneezing, runny nose, watery eyes, and itchy skin. Some people may experience signs of asthma, such as difficulty breathing or wheezing.



Jamie, your genetic result is associated with an **increased likelihood** of developing a dog allergy.



This estimate is based on currently available data and may be updated over time.

Ways to take action

For people with a dog allergy, avoiding contact with dogs is the best way to prevent allergic reactions. But if contact is unavoidable, here are some ways to reduce exposure to allergens and lower the chances of experiencing symptoms.



- Keep dogs off of furniture and away from sleeping areas.
- Frequently clean places where allergens can collect, like carpets and furniture. Using a vacuum with a HEPA filter may help.
- Wash hands and change clothes after coming into contact with a dog.
- Use an air purifier with a HEPA filter.

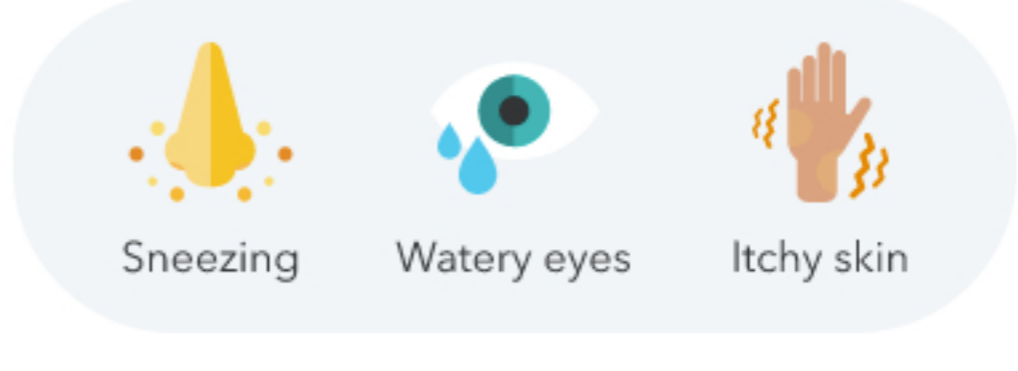
[Learn more from the National Institutes of Health](#)

About dog allergy

What is dog allergy?

Allergies occur when the immune system mistakes a normally harmless substance, called an allergen, for a harmful one. When the immune system detects an allergen, it triggers an immune reaction in an attempt to protect the body. In the case of dog allergy, the immune system reacts to certain proteins found in dogs' saliva, skin cells (also called "dander"), or urine. Those with dog allergies often experience sneezing, runny nose, watery eyes, and itchy skin. Some may experience signs of asthma, such as difficulty breathing or wheezing. For people with dog allergies, lifestyle modifications and other treatments, including medications, can help ease symptoms.

Common symptoms



What about hypoallergenic dog breeds?

Certain dog breeds have been described as "hypoallergenic," meaning they are unlikely to cause allergic reactions. Some propose that low-shedding breeds, like labradoodles, poodles, or cairn terriers, may release less allergens into the surroundings and cause fewer reactions. However, studies have shown that there is no significant difference between allergen levels inside homes of hypoallergenic dogs and non-hypoallergenic dogs. While it appears there is no correlation between dog breed and the amount of allergens released, some evidence suggests that regardless of breed, bathing dogs twice a week or more may help reduce allergic reactions. But keep in mind that over-washing may irritate the skin so this may not be suitable for all dogs.



Keep in mind

This report **does not diagnose** dog allergy. **Consult with a healthcare professional** if you are concerned about your likelihood of developing a dog allergy, have a personal or family history of a dog allergy, or before making any major lifestyle changes.

If you have already been diagnosed with a dog allergy by a healthcare professional, it is important to **continue any treatment plans** that they prescribe, including medications and lifestyle modifications.

The likelihood of developing a dog allergy also depends on **other factors**, including lifestyle and family history.

This report **does not account for every possible genetic variant** that could affect your likelihood of developing a dog allergy.

This report is based on a genetic model **created using data from 23andMe research participants**. It has not been clinically validated and should not be used to make medical decisions.

[How we got your result](#)

Methods

This report is based on a statistical model that takes into account your genetic results at 8,166 genetic markers, along with the ethnicity and sex you reported in your account settings, to estimate the likelihood of developing a dog allergy. We used data from 23andMe research participants to calculate this estimate. Results and estimates may be updated over time as the model or scientific understanding about this condition improves.

About the result

People whose result is associated with odds of developing a dog allergy that are at least 1.5 times higher than average are considered to have an increased likelihood. Between 7% and 24% of individuals receive an "increased likelihood" result, depending on ethnicity. These results are based on many genetic markers, and random test error at one or more of these markers can lead to a small margin of error in your estimated likelihood of developing a dog allergy. For people whose estimates are near the boundary between typical and increased likelihood, this margin of error may introduce some uncertainty about whether their estimated likelihood is considered "typical" or "increased". Your genetic result is associated with an increased likelihood. Based on the available genetic markers used to calculate your result, there is a less than 1% chance your genetic likelihood estimate could fall on the other side of the boundary and be in the range that is considered typical.

Scientific validity across ethnicities

We verified that the model meets our scientific standards for individuals of European, Hispanic/Latino, East/Southeast Asian, South Asian, Sub-Saharan African/African American, and Northern African/Central & Western Asian descent.

How we may use ethnicity and sex to customize this result

- If you indicated in your account settings that you are of European, Hispanic/Latino, East/Southeast Asian, South Asian, Sub-Saharan African/African American, or Northern African/Central & Western Asian (Middle Eastern) descent, your result is tailored based on data from individuals of that ancestry.
- If you indicated in your account settings that you are predominantly of both Hispanic/Latino and another ancestry, your result will be based on data from individuals of Hispanic/Latino descent.
- If you indicated in your account settings that you are predominantly of both Sub-Saharan African/African American and European descent, your result will be based on data from individuals of Sub-Saharan African/African American descent.
- If there is not enough data from individuals of your ethnicity or combination of ethnicities at this time, your result may be based on data from individuals of European descent because the most data is available for this population.
- Your Dog Allergy result also takes into account the sex you indicated in your account settings.

See our [white paper](#) to learn more about the science behind this report.

Read More:

Chan SK et al. (2018). "Dog and Cat Allergies: Current State of Diagnostic Approaches and Challenges." *Allergy Asthma Immunol Res.* 10(2):97-105. *

Mayo Clinic. "Pet allergy." Retrieved February 22, 2020, from <https://www.mayoclinic.org/diseases-conditions/pet-allergy/symptoms-causes/syc-20352192>. *

National Institute of Environmental Health Sciences. (2019). "Pet Allergens." Retrieved February 22, 2020, from <https://www.niehs.nih.gov/health/topics/agents/allergens/pets/index.cfm>. *

Nicholas CE et al. (2011). "Dog allergen levels in homes with hypoallergenic compared with nonhypoallergenic dogs." *Am J Rhinol Allergy.* 25(4):252-6. *

Salo PM et al. (2014). "Prevalence of allergic sensitization in the United States: results from the National Health and Nutrition Examination Survey (NHANES) 2005-2006." *J Allergy Clin Immunol.* 134(2):350-9. *