

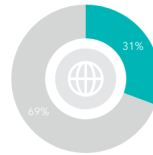
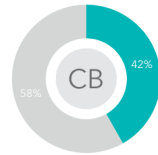
Photic Sneeze

Do you sneeze after going from a dark room out into bright sunlight? Even if you don't, chances are you have a friend who does. This unusual "photic sneeze reflex" is at least partly genetic.

[Photic Sneeze Reflex](#) [What You Can Do](#)

Cordell, you are not likely to sneeze when suddenly exposed to bright sunlight.

58% of customers who are genetically similar to you don't sneeze when exposed to bright sunlight.



Your genetic likelihood		European ancestry customers	
● Photic sneeze reflex	42%	● 31% Photic sneeze reflex	
● No photic sneeze reflex	58%	● 69% No photic sneeze reflex	

This prediction best applies to customers of European descent. We analyzed over 110,000 customers who consented to research to identify genetic markers associated with the photic sneeze reflex. Our prediction is based on your results at 54 genetic markers, as well as your age and sex.

About The Photic Sneeze Reflex

The reflex to sneeze after exposure to bright sunlight is called the "photic sneeze."

ACHOO

Also known as the Autosomal Cholinergic HeliO-Ophthalmologic Outburts (ACHOO) syndrome, the few studies on this reflex suggest that around a quarter of the population might have it, and that it is present even in babies.



Biology

When exposed to bright lights, photic sneezers show increased neural activity in areas of the brain involved in processing light signals and sensations. Overstimulation of the visual system may lead to triggering of a sneeze.

Photic sneeze neural activity



Other factors

More about why you or your friends are always sneezing.

[Genetics](#) >

[History](#) >

[Headshaking](#) >

Do more with your Traits results.



Help us develop more trait reports by contributing to research.

[Contribute](#)



Compare your results to your family and friends.

[Compare](#)



Join the discussion with other 23andMe customers interested in Traits.

[Discuss](#)

Ⓟ Patent Pending



Your Physical Responses

Scientific Details

[Methodology](#)[About Your Result](#)[References](#)

We use two different methods to calculate your trait results.

Statistical Model

Most traits are influenced by many different factors, including genetics, lifestyle, and environment. Usually, a statistical model using many factors provides better predictions than looking at single factors by themselves. To develop our models, we first identify genetic markers associated with a trait using data from tens of thousands of 23andMe customers who have consented to research. Then, we use statistical methods to generate a "score" for that trait using your genotype at the relevant genetic markers as well as your age and sex. We predict your likelihood of having different versions of the trait based on the survey responses of 23andMe customers with similar scores. These predictions apply best to customers who are of the same ethnicity as the people whose data contributed to the model. The accuracy of these predictions varies from trait to trait.

[Read more about our statistical methodology](#)

Curated Model

For some traits, just a few genetic markers can strongly predict whether a person will have a particular version of the trait. For curated models, we first evaluate published scientific studies to identify genetic markers with well-established associations with the trait. Then, we look at genetic and survey data from tens of thousands of 23andMe customers who have consented to research. We estimate your likelihood of having different versions of the trait based on survey responses from customers who are genetically similar to you at those markers. These results apply best to customers who are of the same ethnicity as the people whose data contributed to the predictions.

About your Photic Sneeze result

Your result for this trait was calculated using a **statistical model**.

About the Photic Sneeze model

Created based on customers of ethnicity: European
Number of customers used to create: 110,000
Number of markers: 54
Area Under Curve (AUC): 0.64
Non-genetic factors: Age, Sex

Bin #	Photic sneeze reflex	No photic sneeze reflex
1	12.50%	87.50%
2	15.85%	84.15%
3	18.95%	81.05%
4	20.10%	79.90%
5	20.43%	79.57%
6	23.25%	76.75%
7	24.77%	75.23%
8	25.56%	74.44%
9	26.98%	73.02%
10	29.53%	70.47%
11	29.45%	70.55%
12	31.58%	68.42%
13	33.38%	66.62%
14	35.51%	64.49%
15	37.36%	62.64%
16	39.47%	60.53%
17	41.81%	58.19%
18	45.04%	54.96%
19	47.90%	52.10%
20	57.47%	42.53%
Overall European	30.84%	69.16%

References

- Aristotle et al. (1936). "Problems." Harvard University Press. [↗](#)
- Langer N et al. (2010). "When the sun prickles your nose: an EEG study identifying neural bases of photic sneezing." PLoS One. 5(2):e9208. [↗](#)
- Madigan JE et al. (1995). "Photic headshaking in the horse: 7 cases." Equine Vet J. 27(4):306-11. [↗](#)

Patent Pending