

Dementia and Genetics Fact Sheet

What is Dementia?

Dementia is the term used to describe the symptoms of a large group of illnesses which cause a progressive decline in a person's functioning. It is a broad term to describe a loss of memory, intellect, rationality, social skills and what would be considered normal emotional reactions. There is no genetic test for the umbrella term "dementia."

What Causes Dementia?

There are many different causes for dementia. These include, but are not limited to:

- Alzheimer's disease
- Parkinson's disease
- Frontotemporal dementia
- Lewy Body dementia
- Huntington's disease
- Amyotrophic lateral sclerosis

Each of these diseases have different explanations for if they are considered "genetic." The overwhelming amount of all dementia cases are multifactorial, meaning there is a combination of genetic risk factors and environmental risk factors that interact to cause disease. We can see clustering in families of multifactorial disease because we share genetic factors and often share environmental factors as well. However, in multifactorial diseases there isn't one single gene that can be inherited and cause disease.

In some cases, there are single-gene causes for dementia-related disease. The best people to have genetic testing in cases like this are individuals who have a diagnosis of a particular disease. If someone in your family who is affected tests positive for a single-gene cause of dementia, we can talk about the implications of having predictive genetic testing done for you. At this point in time, without a positive test result for someone in your family, we do not offer predictive genetic testing for any neurodegenerative disease to unaffected individuals.

Additional Resources

For additional resources, please visit our website: <https://www.TriHealth.com/Institutes-And-Services/Precision-Medicine>

