It is estimated that heart disease, cancer and diabetes account for 7 of every 10 deaths in the United States. Like rare genetic disorders, these "common" diseases run in families and can therefore be considered genetic diseases. Because of this, a family history can provide important information about your family's risk of disease. But, is it possible to predict who will or will not develop disease? If so, how is this done?

Common diseases result from the combined effects of multiple genes and environmental factors. This makes it very difficult to predict whether or not an individual will inherit disease.

One reason for this is that the number of genes contributing to so-called "polygenic" diseases is usually not known. The number of genes carried by parents or children that can increase risk is also not known. And, environmental factors can greatly vary an individual's risk of developing disease.

Because more than one gene is involved in most common diseases, resulting inheritance patterns are varied and complex. If a parent has a disease, it does not necessarily mean a child will develop the same disease. So, risk can be estimated but not calculated.

Information in a family medical history must be used to assign an individual to a low, medium, or high risk group. This is done by comparing an individual’s family history to data collected from large families affected by these diseases. Persons in each risk group share characteristics that correlate with a certain probability of developing a disease.

Sometimes it's not possible to have access to medical information from your biological family. But it's still useful to complete a history using your guardian family. This is because family histories capture more than just genetic risk factors. They also capture cultural, social, and environmental risk factors shared by a family that can contribute to a disease.
contribute to these complex diseases, and understand how these genes are influenced by a person’s environment and lifestyle choices.

Family Health History Toolkit
Utah Department of Health
An interactive online family health history tool that provides a printable report of your family tree and risk assessment for many chronic diseases.

Website coming soon
University of Utah, Utah Department of Health

Your Family History - Your Future
National Society of Genetic Counselors
Guidelines on how to collect a family health history.

Does It Run in the Family? A Guide to Family Health History
American Folklife Center, American Society of Human Genetics, Genetic Alliance, Health Resources and Services Administration, Institute for Cultural Partnerships
Downloadable booklet that describes the importance of family health history and guidelines for collecting and recording family health history.

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