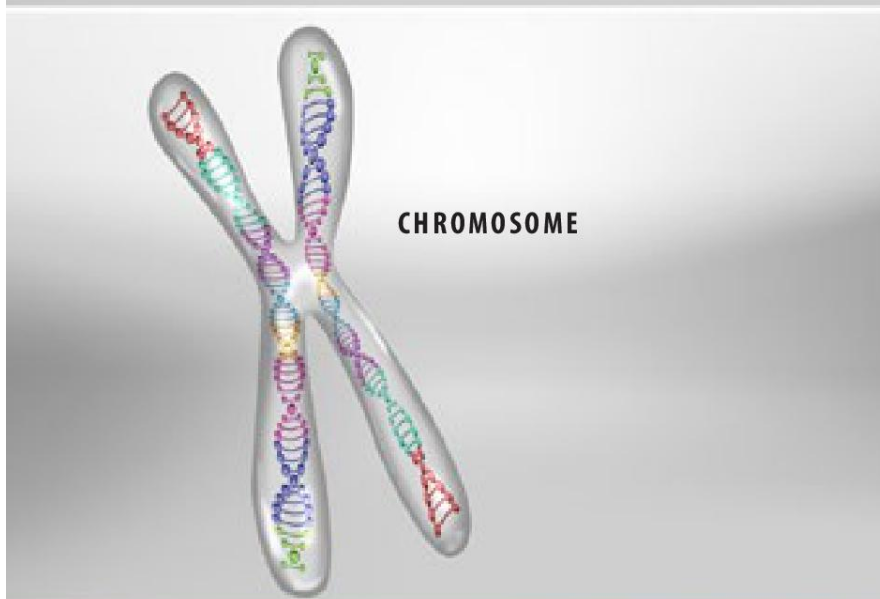
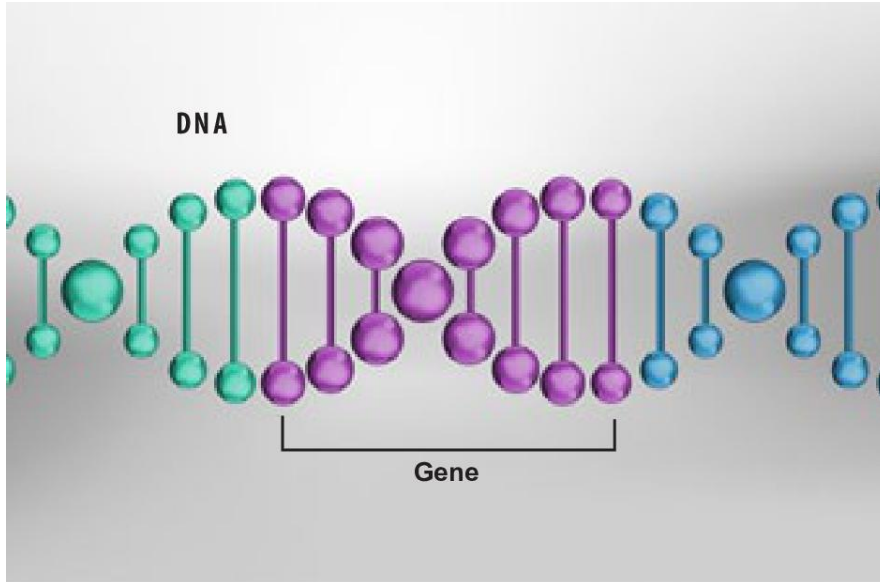




## Genetic Disorders



### Overview

These are disorders that are caused by a problem with our genetic code, which we call "DNA." You can be born with a genetic disorder. Or, you can develop one later in life. Let's take a few minutes to learn more.

### DNA

First, what is DNA? It's genetic material you inherit. Half comes from your mother, and half from your father. It's found in the nucleus of every cell in your body. Think of DNA like a blueprint that tells your cells how to grow and what to do.

### Genes and chromosomes

If we look at short segments of DNA, we see genes. These are instructions for a specific trait. Genes control everything about you, like the color of your eyes and your height. And if we pull back a bit, we see that all of this genetic information is packed tightly into tiny bundles of DNA called "chromosomes."

### Mutations and chromosomal problems

Genetic disorders happen in a few different ways. Some are caused by a change in one or more genes. We call this change a "mutation." Mutations can happen randomly. They can be passed down to you through your mother's or father's DNA. Or, a mutation can happen after you are born because of something in the environment. Other genetic disorders are caused by a problem with your chromosomes. These problems happen before you are born, when your cells begin dividing.

### Conclusion

There are many types of genetic disorders, and they affect people in very different ways. Ask your doctor for more information about specific genetic disorders.