

## Pedigrees – Reference Summary

A pedigree is a visual diagram used to map out the inheritance of genetic traits within a family. Pedigrees are often useful for determining the mode of inheritance, or inheritance pattern, of a particular trait.

Genetic traits can display various modes of inheritance. They can be either dominant or recessive, and they can be either autosomal or X-linked. This course focuses on the following modes of inheritance:

- **Autosomal recessive:** a recessive trait that is inherited on any chromosome that is not X or Y
  - Pedigrees of autosomal recessive traits exhibit affected offspring from **two unaffected parents** (both sexes should be affected equally)
- **Autosomal dominant:** a dominant trait that is inherited on any chromosome that is not X or Y
  - For pedigrees of autosomal dominant traits, every affected offspring has one affected parent (both sexes should be affected equally)
- **X-linked recessive:** a recessive trait that is inherited on the X chromosome (this means that females will each have two alleles and males will only have one)
  - Pedigrees of X-linked recessive traits will (often) have **only males affected**

Pedigree nomenclature

