

### III.

## Human Genetics

### Family Health History

An affective tool for indicating whether a condition is inherited is by obtaining a family health history or family tree. In genetics, a family tree is referred to as a pedigree. There are symbols that indicate the organization of a family. The exercises below illustrate the techniques used when drawing a pedigree. Here are some key questions that should be asked when talking with a family member:

- Current ages of each of the individuals
- Ethnic origin of each side of the family
- Major health problems
- Age in which a person has been diagnosed with a medical condition
- Birth defects in the family
- Learning disabilities
- Hearing or vision problems

Resources: To learn more about family history, the following website offers the ability to create a pedigree.

[U.S. Surgeon General's Family History Initiative.](#)

## **Genetic Conditions**

The previous lessons have explained how we inherit traits. Although many of these traits do not have an impact on our health, there are traits that can. These traits include cystic fibrosis, Down syndrome, Achondroplasia, Duchenne muscular dystrophy, and many more. The link below offers educational resources on many more conditions.

[Genetics Education Center](#)

## **Exercise**

Read the case studies in the following exercise and answer the questions posed about Cystic Fibrosis.

[University of Colorado Biological Science Initiative – Cystic Fibrosis](#)

[Positive Exposure](#)