

1. Huntington Disease only affects adults. True or False?

False. HD can affect individuals at any age, and those with HD are classified into two different groups based on the age of onset. Those who develop HD symptoms before the age of 20 are classified as having juvenile HD (JHD), while those who develop symptoms after 20 have HD.

2. Clinical trials and observational studies for Huntington Disease have more volunteers than they need. True or False?

False. Trials and studies are always seeking participants at every stage of disease to volunteer and help contribute to HD research

3. Children of people with HD have a 50% chance of inheriting the mutated HD gene. True or False?

True. Because HD is an autosomal dominant inherited disorder, only one HD gene from one parent is needed to pass on the disease. Because an affected parent has one expanded huntingtin allele and one normal allele, there is a 50/50 chance that the child will inherit the expanded huntingtin gene and Huntington Disease.

4. There is a cure for HD. True or False?

False. Right now we are able to treat symptoms of HD (i.e. anxiety, depression, involuntary movements), but at this time there is no cure.

5. The symptoms of HD include involuntary movement (chorea), impairment in cognitive function, especially thinking and reasoning skills, as well as anxiety and depression. True or False?

True. HD is a neurodegenerative disorder that affects neurons, or brain cells. Neurons in the basal ganglia, a region of the brain which controls voluntary motor movements and cognition, are affected by the disorder. Loss of function in these neurons is responsible for the symptoms of the disease.

6. There are ongoing clinical trials around the world that are seeking ways to slow the progression of HD and treat the symptoms of HD, and others that are searching for a treatment. True or False?

True. Researchers and physicians around the world and at HSG credentialed research sites are conducting clinical trials that seek to help HD patients and families and contribute to the growing body of knowledge of HD. For more information or to find active clinical trials, see the Find HG Trials link.

7. Huntington Disease (HD) is a male disease. True or False?

False. Both men and women can be born with the HD gene.

8. The gene responsible for Huntington Disease was discovered in 1993. True or False?

True. While the description and classification of symptoms of HD were completed much earlier, by George Huntington in 1872, the gene was not discovered until much later. Early research continued and in 1983 the approximate location

of the gene was discovered by the Venezuela Huntington's Disease Collaborative Research Project. This same group reported the exact location of the gene in 1993. The gene is located on chromosome 4.

9. A gene is the same as a protein. True or False?

False A gene is a small strand of DNA that makes up a part of a chromosome. Humans have 23 chromosomes, and each has hundreds or thousands of genes each made up of DNA. Genes provide the instructions to the body to make a certain protein. A protein, then, is the product that results when the body makes a series of polypeptides based on the DNA instructions of a gene. The Huntington gene makes the Huntington protein. In individuals with HD, the gene has an excessive number of CAG nucleotide repeats in the DNA and this produces a protein that is different in structure from the normal protein. This different protein eventually damages cells in the brain, but the mechanisms by which it does so are not fully understood.

10. HD research might also contribute to research, knowledge, and discoveries that would help to treat and improve other movement and cognitive disorders such as Parkinson's disease and Alzheimer's. True or False?

True. Because movement and neurological disorders share common factors, it is possible that research on one disease may contribute to increased knowledge of another related disease. For example, sometimes drugs designed to improve a symptom of one disease can show similar affects in another.

11. All clinical trials are designed to test new drugs. True or False?

False. Research can be either interventional or observational. Interventional trials are those that test the efficacy or safety of new treatments or other interventions such as a specific exercise program. Observational studies seek to gather information about HD, including its progression, age of onset, physical symptoms, and other data and may include taking surveys, giving blood or other biosamples, or monitoring movement.

12. If you have the gene you will start showing symptoms at the same age as your parents. True or False?

False. If your mother is affected with HD it is more likely you will have a similar age of onset. If your father is affected with HD you have the potential of developing the disease at an earlier age than he did.

13. Huntington Disease (HD) can skip generations. True or False?

False. HD is an autosomal dominant inherited disorder, and because of this the disease does not skip generations. In an autosomal dominant disorder, only one abnormal allele is necessary to cause disease. If this allele is inherited from a parent, the child will have the disease as well.