

# Genetic Disorder Brochure Project

(modified from a project found on the Robbinsdale School District website)

## Overview

Create a tri-fold brochure for a doctor's office waiting room. The brochure should provide patients with information about one of the genetic disorders listed below. Assume that most of the patients of your audience are adults with a typical high school science background.

The brochure should be creative as well as informative. You want people to pick it up and read through it. Be sure to include accurate, up-to-date information and graphics that illustrate important ideas. *You should reference at least four sources of information on a separate "works cited" page to hand in along with your brochure. (Google DOES NOT count)*

## Procedure

You will research the genetic disorder of your choice and use the following questions. *as a guide*, to the type of information you will need for your brochure.

- \* \* What other names are there for this disorder? (Any common names?)
- \* \* What causes the disorder? (mutation, nondisjunction)
- \* \* What gene or chromosome is affected by this disorder? (X, Y, #21)
- \* \* Are there prenatal tests for this disorder?
- \* \* What are the symptoms?
- \* \* What population is affected? Can anyone be a candidate for the disorder?
- \* \* How is it inherited? (Is it sex-linked, recessive, and/or dominant?)
- \* \* What kind of medical assistance will the affected child need? Will further assistance be needed, as the child grows older? What is the long-term outlook for the child?
- \* \* Are there any treatments or cures?
- \* \* Could this disorder have been prevented?
- \* \* Can this individual have children in the future? Will those children be affected?
- \* \* What is the current status of research on this disorder? Is there a cure coming soon?

## Brochure

After researching the disorder, make an informational pamphlet that could be given to patients. The pamphlet **must be no larger** than 8.5 x 11 unfolded. This brochure should be of **professional quality**. It must **fully inform** the reader of all issues pertaining to the genetic disorder. Again, use the questions provided to guide your research. Your brochure will be graded based on accuracy, completeness, and creativity. Visual representations (pictures, graphs, etc.) should be incorporated into the brochure. *Give credit for graphics you did not make.*

## Works Cited Page

You will need to prepare, on a separate sheet, a works cited page that identifies **all** sources used to make the brochure. **At least four sources are required** for this project. **More than four is acceptable, and encouraged!** (Be sure to use proper format; **do not just list websites**, list author, title, date, etc.)

Here is an example of how you record your reference:

- \* Huntington's Disease Society of America website, Living with Huntington's, article by Pat Pillis.

## Possible Internet Resources (use google.com to find other sites)

- \*\* [Online Mendelian Inheritance in Man](#)
- \*\* [Center for Disease Control Genetic Information](#)
- \*\* [International Birth Defects Information Systems](#)
- \*\* [National Center for Biotechnology Information](#)
- \*\* [Genetic Alliance](#)
- \*\* [Howard Hughes Medical Institute](#)
- \*\* [National Institute of Health Office of Rare Diseases](#)
- \*\* [Genetics Education Center](#)

# List of Genetic Diseases

(Circle the one you have chosen)

Adrenoleukodystrophy  
Albinism, oculocutaneous, Alzheimer Disease, familial, type 5  
Angelman Syndrome  
Burkitt's Lymphoma  
Cat Eye Syndrome  
Cri-du-chat (Cat's Cry Syndrome)  
Cystic Fibrosis  
DiGeorge Syndrome  
Down Syndrome (Trisomy 21)  
Duchenne Muscular Dystrophy  
Edwards Syndrome  
Fabry Disease  
Hemophilia A  
Hemophilia B  
Huntington's Disease  
Jacobson Syndrome  
Marfan Syndrome  
Monsomy 9p or Alfi's Syndrome  
Mytonic Dystrophy (Steinert Disease)  
Neurofibromatosis  
Patau Syndrome or Trisomy 13  
PKU  
Prader-Willi Syndrome  
Rentinitis pigementosa  
Rett Syndrome  
Sickle Cell Anemia  
Smith-Magenis Syndrome  
Von Hippel-Lindau Syndrome  
Wolrf Hirschhorn Syndrome

# Genetic Disease Notes

What other names are there for this disorder? (Any common names?)

What causes the disorder? (mutation, nondisjunction)

What gene or chromosome is affected by this disorder? (X, Y, #21)

Are there prenatal tests for this disorder?

What are the symptoms?

What population is affected? Can anyone be a candidate for the disorder?

How is it inherited? (Is it sex-linked, recessive, and/or dominant?)

What kind of medical assistance will the affected child need? Will further assistance be needed, as the child grows older? What is the long-term outlook for the child?

Are there any treatments or cures?

Could this disorder have been prevented?

Can this individual have children in the future? Will those children be affected?

What is the current status of research on this disorder? Is there a cure coming soon?

Sources:

# Genetic Disease Brochure Rubric

Category	4	3	2	1
Content - Accuracy	All facts in the brochure are accurate.	99-90% of the facts in the brochure are accurate.	89-80% of the facts in the brochure are accurate.	Fewer than 80% of the facts in the brochure are accurate.
Knowledge Gained	Student has demonstrated the ability to answer accurately all questions related to about the selected disease.	Student has demonstrated the ability to accurately answer most questions about the selected disease	Student has demonstrated the ability to accurately answer less than half of the questions about the selected disease	Student appears to have little knowledge about the selected disease.
Writing - Organization	Each section in the brochure has a clear beginning, middle, and end.	Almost all sections of the brochure have a clear beginning, middle and end.	Most sections of the brochure have a clear beginning, middle and end.	Less than half of the sections of the brochure have a clear beginning, middle and end.
Writing - Vocabulary	The student correctly uses required vocabulary and defines words and terms unfamiliar to the reader.	The student correctly uses most of the required vocabulary and defines most words and terms unfamiliar to the reader.	The student attempts to use required vocabulary but uses 1-2 words incorrectly and defines few words and terms unfamiliar to the reader.	The student does not incorporate new vocabulary and fails to define words and terms unfamiliar to the reader.