Everyone inherits two copies of HFE the gene that causes the classic form of hemochromatosis. People with mutated (changed from normal) copies of HFE will absorb more than normal amounts of iron from the diet. Over time, the extra iron builds up in vital organs. The body has no natural way to rid itself of this excess iron except through blood removal or iron chelation therapy with prescribed medicines.

People most at risk are those with two mutated copies of HFE. Presently the primary mutations known are C282Y and H63D. This worksheet can help you understand the inheritance patterns of HFE mutations in your family.

**NORMAL HFE**  
**CY=C282Y mutation HD=H63D mutation**

Children

One parent is a carrier. Children: 50% normal HFE; 50% chance: carrier

One parent is a homozygote. Children: 100% chance: carrier

![Diagram showing inheritance patterns](image)

**FOUR copies create different POSSIBILITIES**

- **#1 Possibility**
  - CY
  - HD

- **#2 Possibility**
  - HD
  - CY

- **#3 Possibility**
  - CY
  - CY

- **#4 Possibility**
  - HD
  - HD

**Your Parents**  
Children

- CY
- CY

**You & Your Spouse**  
Children

- CY
- CY
- CY
- CY

**Your Children**  
Children

- HD
- CY
- HD

LEARN MORE ABOUT HEMOCHROMATOSIS AT: [www.hemochromatosis.org](http://www.hemochromatosis.org)  
[www.irondisorders.org](http://www.irondisorders.org)