Reproductive Options for Genetic Risk

If you are at risk to have a child with a genetic condition, it can help to know your options. You'll have the most options before a pregnancy starts.

Accept the Genetic Risk

No Intervention Before Pregnancy

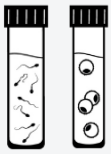
Each baby would be at risk of inheriting the genetic condition. The chance of that happening depends on the condition (see "Inheritance Patterns").

Once pregnant, you can decide on genetic testing. Testing is usually covered by medical insurance.

Testing during pregnancy: You can test a baby for the condition during pregnancy. CVS and amniocentesis are the tests offered for prenatal diagnosis. Prenatal testing allows the option of ending the pregnancy for medical reasons.

Testing after delivery: You can arrange testing after the baby is born. The timing would depend on when symptoms might appear. Newborn screening may identify some conditions, but not all.

Sperm Donor or Egg Donor



Using a sperm or egg donor to conceive lowers the chance of the genetic condition. The type of donor needed to reduce the risk depends on the inheritance pattern. The donor may need to be tested. The cost for a donor is not usually covered by medical insurance.

Recessive: Either a sperm or egg donor would lower the risk. Donor testing is recommended.

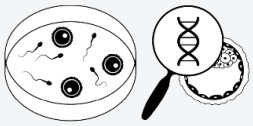
Dominant: Use a donor instead of the egg or sperm from the person with the genetic variant. Testing may not be needed if the condition is rare or the donor does not have the condition.

X-Linked: Using a donor would lower the risk. The type of donor needed depends on which parent has the X-linked variant. Donor testing may be recommended.

Adoption

You can choose to adopt a child that is not biologically related. Adoption costs are not covered by insurance.

In Vitro Fertilization and Embryo Testing



The egg and sperm are collected and combined at a fertility clinic to form embryos. Each embryo is tested for the condition by preimplantation genetic testing (PGT). Embryos without the condition would be placed in the uterus (womb). PGT for inherited conditions is often covered by medical insurance. However, other IVF services are not usually fully covered.

Inheritance Patterns

Recessive: Both parents carry the same genetic trait. There is a 1 in 4 (25%) chance for any biological child to have the genetic condition.

Dominant: One person has a genetic variant (mutation) that causes a genetic condition or health risk. There is a 1 in 2 (50%) chance for any biological child of that person to inherit the variant.

X-linked: One person has a genetic variant (mutation) on the X chromosome that can cause a genetic condition.

- If the variant is in an egg, there is a 1 in 2 (50%) chance for a male (XY) child to have the condition. There is also a 1 in 2 (50%) chance for a female (XX) child to be a carrier (may be unaffected).
- If the variant is in the sperm, there is a 100% chance for a female (XX) child to be a carrier (may be unaffected). There is a 0% chance for a male (XY) child to have the condition.

Other: Risk varies with other types of inheritance (e.g., mitochondrial).

Talk with your doctor or a genetic counselor to learn more about your reproductive options.

KAISER PERMANENTE®