GECKO
Genetics Education Canada: Knowledge Organization
Centre d'éducation en génétique canadien: Connaissances organisées
POINT OF CARE TOOL

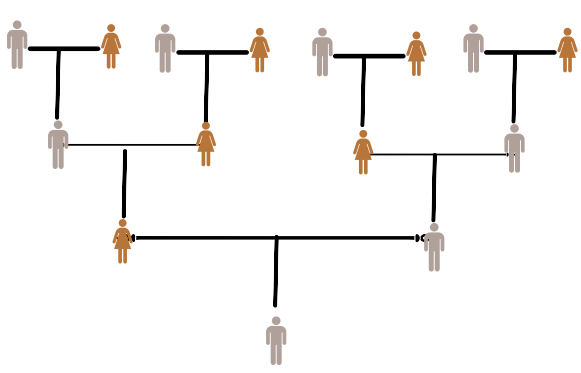
Family history

Red flags that suggest that an individual (or his/her/their family) may be at increased risk for a genetic condition.

The best way to identify red flags is by taking a family history (in addition to a personal health history).

1 Multiple affected family members (with the same or related disorder)

breast and ovarian cancer
iron overload and diabetes
very high cholesterol



2 Earlier age of onset of disease (symptom) than typically expected

- May demonstrate genetic predisposition in an individual who is more susceptible to environmental risk factors
  - e.g. pre-menopausal breast cancer; premature ovarian failure before age 40 (fragile X syndrome carrier)

3 Disease occurring in an individual of the less commonly affected sex

e.g. breast cancer in a person assigned male at birth

4 Presence of disease in the absence of other precipitating factors

sudden unexplained death in an athletic 20-year-old; diabetes mellitus (hereditary hemochromatosis or myotonic dystrophy)

5 Ethnicity

Some genetic conditions are more common in those of certain ethnicities.
e.g. Tay-Sachs disease in Ashkenazi Jewish individuals; hemoglobinopathies (thalassemia, sickle cell anemia) in individuals of Mediterranean, African, Middle Eastern and South East Asian ethnicity

6 Consanguinity

Generally defined as a union between two individuals related as second cousins or closer

- Higher than average chance for both members of a couple to be carriers of the same autosomal recessive condition

7 History of congenital anomalies (e.g. heart defect, imperforate anus), still birth, childhood death, infertility, more than three unexplained miscarriages

May be suggestive of underlying genetic etiology