If a person inherits a mutation in one of their BRCA genes, they have an increased risk for the associated cancers. It is important to understand that having a *BRCA1* or *BRCA2* mutation does not mean that a person will develop cancer; it only means that they have an increased risk.

Women who have a *BRCA1* or *BRCA2* genetic mutation are at an increased risk of breast, ovarian, and pancreatic cancers.

Men who have a *BRCA1* or *BRCA2* genetic mutation are at an increased risk of prostate, pancreatic, and breast cancers.

The age at diagnosis and type of cancer can vary among people who have a *BRCA1* or *BRCA2* genetic mutation, even within the same family.

What can a person do to manage their *BRCA1*- or *BRCA2*-associated cancer risk?

For women who have a *BRCA1* or *BRCA2* mutation:

To reduce the risk of breast cancer, we recommend frequent and specialized breast exams. Women may also consider risk-reducing bilateral mastectomy to address their risk.

To reduce the risk of ovarian cancer, we recommend that women remove their ovaries and fallopian tubes after family planning. This procedure is known as bilateral salpingo-oophorectomy.

For men who have a *BRCA1* or *BRCA2* mutation:

We recommend prostate cancer screening and breast cancer screening

Depending on the family history of cancer, a genetic counselor may also discuss screening for pancreatic cancer done on a research basis.

Recommendations on the best way for you to manage your individual cancer risk should be discussed with a genetic counselor or doctor who is experienced in the care of people with *BRCA1* or *BRCA2* genetic mutations.

How are *BRCA1* and *BRCA2* genetic mutations passed down through a family?

BRCA1 and *BRCA2* genetic mutations can be passed from a mother or father to a son or daughter.

People with a first-degree relative (a parent, sibling, or child) with a *BRCA1* or *BRCA2* mutation have a 50% chance of having inherited the mutation.

Mutations in the *BRCA1* and *BRCA2* genes have been found in people all over the world. However, some genetic mutations may be more common in certain ancestral groups. For example, three *BRCA1* and *BRCA2* genetic mutations are particularly common among Ashkenazi Jewish families. Ashkenazi Jewish families typically have origins in Eastern Europe. One in 40 Ashkenazi Jewish individuals carry one of these common BRCA mutations.

Through MSK's RISE Program and CATCH Program, our experts help people who have an increased risk of cancer shape personalized long-term surveillance plans.

PREVIOUS
ATM and PALB2 Associated Cancers

NEXT
Hereditary Breast Cancer Testing