



GENETIC SCREENING *Info Sheet*



Only about **5-10%** of cancers are linked to inherited genetic mutations.

Our board-certified genetic counselors are formally trained providers in both genetics and counseling.

These experts can interpret the complex data revealed by various genetic tests, explain the pros and cons of testing for your situation, and counsel you regarding your options.



Roswell Park is the only National Cancer Institute-designated Comprehensive Cancer Center in New York State outside of New York City.

IS CANCER HEREDITARY?







Some people are born with gene mutations (alterations in specific genes) that can greatly increase their risk of developing cancer. These gene mutations may be passed along from parents to their biological children, from one generation to the next. If you inherit a change in a gene that's associated with cancer, you have a higher-than-average chance of developing cancer.

SHOULD YOU BE TESTED?

While genetic screening can reveal whether or not you have genetic changes related to cancer risk, testing is not recommended for everyone. Roswell Park's genetic counselors can review your personal and family medical history to determine whether you should consider testing.

RED FLAGS FOR CANCER RISK

You may benefit from genetic screening if your family tree shows one or more of the following:

-  **Multiple blood relatives who have had cancer.** Most important are first degree relatives – parents, siblings, children – but consider cancers among your grandparents, aunts and uncles, too.
-  **Multiple cases of the same cancer** (or related cancers like breast and ovarian) on the same side of the family.
-  **A rare cancer type** such as pancreatic, ovarian, male breast cancer, metastatic breast cancer and metastatic prostate cancer.
-  **Cancer at a young age.** Cancer is not uncommon among people in their 60s or 70s, but a diagnosis in someone younger than age 50 may indicate an inherited risk.
-  **More than one primary cancer** diagnosed in the same person.
-  **The ancestry of your family.** Certain ethnic groups – for example, people of Ashkenazi Jewish ancestry – may be at higher risk.



HIGH RISK? WE CAN HELP

If genetic testing reveals an increased cancer risk, Roswell Park's experts can provide appropriate screening, surveillance and preventive options through our **High Risk Clinics** dedicated to helping people manage their risk for these cancers:

- ✓ Breast
- ✓ Gynecologic
- ✓ Pancreatic

If you have an inherited gene mutation, each of your biological children has a **50%** chance of inheriting it, too.



DID YOU KNOW?

Women can inherit changes in genes linked to breast and ovarian cancer, such as BRCA1 and BRCA2, from their mother and/or their father.



RoswellPark.org/CareNetwork

WHY ROSWELL PARK GENETIC TESTING?

Genetic screening should be performed by formally trained genetics providers to ensure that appropriate tests are ordered, results are interpreted correctly, and the right screening recommendations are made. Roswell Park's providers can:

- ✓ **Educate you and your family** about the biology and genetics of cancer and discuss the social, ethical, and legal issues related to genetic testing.
- ✓ **Create your genetic pedigree** (family tree) to record cases of cancer among your relatives and look for patterns that may show increased cancer risk.
- ✓ **Arrange for genetic testing** via a blood test.
- ✓ **Explain the results** of your genetic tests.
- ✓ **Discuss what you can do** if testing reveals an inherited cancer risk. Options may include starting cancer screening at an earlier age and more frequent screenings; taking medication designed to lower the risk of certain cancers; or undergoing risk-reducing surgery – for example, having breasts, ovaries, or the thyroid gland removed to prevent cancer from developing in those organs.

FOLLOW-UP IS ESSENTIAL

If you decide to undergo genetic testing, or if you were tested in the past, the answers you get today may be different from the answers you'll get later on. We're just beginning to identify inherited gene mutations that raise cancer risk. Your risk profile will change as research reveals more information, so your personal and family history should be reviewed periodically.

WHAT'S THE NEXT STEP?

If you have questions about your personal cancer risk and want to learn whether you should consider genetic screening call **1-800-ROSWELL** (1-800-767-9355). An information specialist will complete a brief questionnaire with you over the phone, and you will be contacted later about an appointment.

MEET THE TEAM



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Learn more at RoswellPark.org/genetic-screening