



Lynn Marshall, R.N., patient navigator at the Tammy Walker Cancer Center (left), discusses information on genetic testing with Sherry Wiesen, Bennington.

**Don't Wait to Get Screened**  
Call Lynn Marshall, R.N., at the Tammy Walker Cancer Center at **785-452-7335** for more information about genetic testing for breast and colorectal cancers.

# THE GENETICS OF CANCER

Heredity may hold the key to cancer survival BY JOHN BERGGREN

The old saying that “you can’t outrun genetics” may one day become obsolete. Already, valuable genetic tests exist that recognize mutations likely to cause breast, ovarian and colorectal cancers and other forms of the disease. But research geared toward using genetic markers as a tool to guide preventive care is only in its infancy.

At 50, Sherry Wiesen has become well-versed in the power of genetics. The Bennington High School teacher has been fighting breast cancer for more than 20 years. While in college at Emporia State University, with two sons ages 3 and 6, she detected a lump that was found to be cancerous. She underwent a lumpectomy, radiation and chemotherapy and felt some relief to be cancer-free. But a lingering uneasiness soon reappeared. Her mother and an aunt also were diagnosed with breast cancer and the fact that her grandmother had died of ovarian cancer at age 39 began to paint a vivid picture: Breast and ovarian cancers were running through her family. Breast cancer eventually claimed her mother’s life at age 52.

In 2010, Wiesen’s breast cancer reappeared. This time, genetic testing was available and she and her aunt tested positive as genetic carriers of a known mutation that causes breast and ovarian cancer. With this knowledge she elected to take a more radical approach to prevent cancer recurrence by having a bilateral mastectomy and a hysterectomy, including the removal of her ovaries.

“The hardest part through all of this was losing my mom when she was only 52,” Wiesen says. “She felt like there wasn’t enough information available when she was battling the disease and really became an advocate for the family to become vigilant.”

Several members of Wiesen’s family have also undergone testing and more are considering it.

“A cousin of mine has also tested positive for the gene,” Wiesen says. “We’ve been told that females carrying the gene have an 80 percent chance of getting breast or ovarian cancer. That means as women in our family, we need to start becoming more aware of our bodies at a much younger age than most women.”

### A STANDARD OF CARE

Today, women younger than 50 who are diagnosed with breast cancer often undergo genetic testing as a standard of care. The information can be critical to forming a treatment plan and how aggressive the approach should be.

“For a woman with Hereditary Breast and Ovarian Cancer Syndrome a simple lumpectomy, even when the cancer is caught early and localized, may not be the most prudent option when chances for recurrence are so high,” says Lynn Marshall, R.N., patient navigator at the Tammy Walker Cancer Center. “This testing has only been commonly available within the last five years, so we know there are other cancer survivors out there who could benefit from the results.”

### WHO SHOULD BE TESTED?

Generally women younger than 50 who have a breast cancer diagnosis, women who have ovarian cancer at any age, men who have breast cancer at any age, and women who have had multiple breast cancers or multiple breast cancers on the same side of the family should consider genetic testing. If a person is found to be a carrier of a genetic mutation known to cause breast or ovarian cancer, preventive surgeries such as mastectomy and removal of the ovaries might be warranted along with the use of some medications shown to reduce the risk for breast cancer. At a minimum, increased surveillance for cancer through breast examinations, mammography and more advanced imaging studies should be used to find the disease in its earliest, most-treatable stages.

Many insurance providers provide coverage for genetic testing and even Medicaid and Medicare offer support for those with an active

cancer diagnosis. Other resources may be accessible for the uninsured.

Many primary care physicians and specialty physicians can facilitate genetic testing. Resources are also available at the Tammy Walker Cancer Center to provide education and counseling on genetic testing, and additional consultations can be achieved through the Cancer Center’s affiliation with the University of Kansas Cancer Center and the Midwest Cancer Alliance.

### EMPOWERING INFORMATION

Last year, Wiesen went to her doctor after experiencing symptoms that proved to be urethral cancer. While urethral cancer is unrelated to breast and ovarian cancers, doctors also detected another small cancerous lump on tissue near her breast. Once again she underwent treatment.

“This time urethral cancer probably saved me from breast cancer,” Wiesen says. “I think it helped that I’ve become so in tune with my body that I knew when something wasn’t right and sought care right away. My experience and my family’s history may be an extreme example, but it’s wonderful these genetic resources are available today.”

Many who have undergone genetic testing feel the same way.

“No matter the outcome, everyone we’ve encountered has been thankful for the results of genetic testing,” Marshall says. “Those who have tested positive as carriers of the genetic mutations have gone on to share the information with their family members so that they can seek testing for themselves or begin aggressive screening for the disease.”



### COULD YOU BE AT RISK?

Visit [srhc.com](http://srhc.com) and click the link to the Tammy Walker Cancer Center to find a questionnaire to see whether you might benefit from genetic testing for breast cancer.

