This handout answers common questions about having surgery to lower your risk of breast cancer.

**What is risk-reducing mastectomy?**

*Risk-reducing mastectomy* is surgery to remove the breasts to lower your risk of breast cancer. It is also called a *prophylactic* mastectomy.

**Who should have this surgery?**

For every 8 women in the U.S., 1 will be diagnosed with breast cancer during their lifetime. This means that 7 out of 8 women in the U.S. who live to age 90 will not get breast cancer.

Most women do not have a high enough risk of breast cancer to justify risk-reducing mastectomy. Even women with a very high risk of the disease may not choose to have this surgery.

You may want to think about having a risk-reducing mastectomy:

- If several close female relatives had breast cancer before age 50, or ovarian cancer at any age. These relatives may be your mother, sisters, grandmothers, or aunts.

- If tests show that you have a harmful change (*mutation*) in one of your genes that is linked to cancer. Two of these genes are BRCA1 and BRCA2.

**Lobular Carcinoma in Situ**

Talk with your doctor if you have been diagnosed with *lobular carcinoma in situ* (LCIS). Most times, care of LCIS involves getting *mammograms* (a low-dose X-ray of the breast) and breast exams more often. LCIS is sometimes treated with *chemoprevention* or risk-reducing mastectomy.

*Be sure to talk with your provider if you have any concerns about your breast health.*
What are other ways to prevent breast cancer?

Other ways to prevent breast cancer or to find it early, when it is more curable, are:

- Lifestyle changes
- Regular screening mammograms
- Chemoprevention

To learn more, read our handouts “Reducing Your Risk of Breast and Ovarian Cancer,” “Breast and Ovarian Cancer: Screening and Detection,” and “Breast Cancer Chemoprevention.”

About Risk-Reducing Mastectomy

Most breast cancer starts in the milk duct tissue of the breast. In risk-reducing mastectomy, we want to remove as much of the milk duct tissue as we can.

Types of Surgery

- A simple (complete) mastectomy is the most common type of risk-reducing mastectomy. In this surgery, the entire breast, including the nipple, is removed.

- In a subcutaneous (nipple sparing) mastectomy, the nipple is not removed. But, leaving the nipple means we do not remove all of the milk duct tissue. This surgery might not be as successful at preventing breast cancer.

Does having a risk-reducing mastectomy mean I will not get breast cancer?

We cannot guarantee that having a risk-reducing mastectomy will mean you will never get breast cancer. This is because milk ducts attach to the skin in many tiny places. We cannot remove all the milk duct tissue unless we also remove all the skin. Even if you have a complete mastectomy, cancer may still occur where the milk ducts connect to the skin.

But, studies show that risk-reducing mastectomy lowers breast cancer risk:

- By at least 95% in women who have a harmful mutation in the BRCA1 or BRCA2 gene
- By up to 90% in women who have a strong family history of breast cancer
Common Questions About Risk-Reducing Mastectomy

What is my actual risk of developing breast cancer?
Studies show that most women believe their risk of breast cancer is much higher than it actually is. But, certain factors may increase your risk. Specialists at the Cancer Genetics Clinic at UW Medical Center, or at the Breast and Ovarian Cancer Prevention Program at Seattle Cancer Care Alliance, can help you understand your actual risk.

What are other ways I can prevent breast cancer or find it early?
Other ways to help prevent breast cancer include lifestyle changes, regular screenings, and chemoprevention. You can read more about these topics in our handouts “Reducing Your Risk of Breast and Ovarian Cancer,” “Breast and Ovarian Cancer: Screening and Detection,” and “Breast Cancer Chemoprevention.”

Some of these other options may not be right for you. Talk with your doctor about how easily your breasts can be checked with screening mammograms and physical exams. It can be harder to detect cancer in its early stages if you have dense breasts, breasts with several calcifications (calcium deposits), or certain other conditions.

What are the risks of having this surgery?
A risk-reducing mastectomy is a low-risk surgery. But there are some risks involved. These include:

- An infection in the surgical wounds
- Heavy bleeding (only rarely leading to a transfusion)
- Problems with anesthesia
- Fluid collecting beneath the wounds
- Scar formation

You may also have areas of soreness or numbness on your chest and inner arm after surgery. These problems usually fade over a few months.

Talk with a breast surgeon if you have questions about the risks involved in this surgery.

Is a risk-reducing mastectomy the same as a mastectomy to treat cancer?
In a risk-reducing mastectomy:

- Chest muscles are not removed. You will not have a loss of strength as you would with a mastectomy to treat cancer.
Lymph nodes are not removed. Your arms will not swell as they would with a mastectomy to treat cancer.

How will it affect my self-esteem and my sexuality?
You may go through emotional changes after this surgery. Having a mastectomy is a loss, and women mourn their loss in different ways. Women with extra weight across their shoulder blades may not be happy with how they look and feel afterward the surgery.

What about breast reconstruction?
There are many options for reconstruction. Before having the mastectomy, you can decide:

- To do nothing
- To wear breast prostheses (worn inside a special bra or attached to the chest wall)
- To have a surgical breast reconstruction

When is the best time for a risk-reducing mastectomy?
It is very important to wait to have risk-reducing surgery until you are very sure that it is the right choice for you.

If you are at high risk for cancer, but you want to breastfeed your children:

- You may want to delay having this surgery until your family is complete.
- Or, you may decide your risk of developing breast cancer in the near future is too high, and that you do not want to wait.

Talk with your healthcare providers about the benefits of breastfeeding, as compared to your short-term risk of getting breast cancer.

About Breast Reconstruction
The goal of breast reconstruction is to create breast forms with a shape and texture that you want. Your new breasts will not work like your natural breasts.

Some women find that breast reconstruction improves their body image and self-esteem. They also feel more comfortable wearing low-neck tops. But, another surgery means more pain, recovery time, missed work, costs, and possible problems. And, some ways of doing reconstructive surgery lead to weak abdominal muscles. If you smoke, are obese, or have high blood pressure face, you also face other risks from breast reconstruction.

If you decide to have a surgical breast reconstruction, you will have more choices to make. You will need to decide whether to use an implant made of artificial material or use your own tissue from another part of your body.
You will also need to choose whether to have a reconstruction right after the mastectomy, or to wait.

If you have questions, talk with a plastic surgeon who specializes in breast reconstruction. You may find it helpful to see “before” and “after” pictures.

**Making the Decision**

Risk-reducing surgery is permanent. Having this surgery is a very personal choice. Take your time to think carefully about your decision. Talk with your healthcare providers about your risks and options.

Try to talk openly with your spouse or partner, too. Find out how they feel about your having this surgery, so that you know what to expect.

**To Learn More**

**Breast and Ovarian Cancer Prevention Program**
Seattle Cancer Care Alliance: 206.606.5241

**Cancer Genetics Clinic**
University of Washington Medical Center: 206.606.2135

**Breast Health Center**
University of Washington Medical Center-Roosevelt: 206.598.5500
Seattle Cancer Care Alliance: 206.606.1024, www.seattlecca.org

**ABCD: After Breast Cancer Diagnosis**
414.977.1780 (office) or 800.977.4121 (Breast Cancer Support Center), www.abcdbreastcancersupport.org

**National Breast Cancer Coalition**
414.77.1780 (office) or 800.622.2868 (Breast Cancer Support Center), www.natbcc.org

**The Susan G. Komen Breast Cancer Foundation**
877.GO.KOMEN (877.465.6636), www.komen.org

**FORCE (Facing Our Risk of Cancer Empowered)**
866.288.RISK (7475), www.facingourrisk.org

**Young Survival Coalition**
877.972.1011, www.youngsurvival.org

---

**Questions?**

Women’s Health Care Center,
Roosevelt Clinic:
4245 Roosevelt Way
206.598.5500

Seattle Cancer Care Alliance (SCCA): 206.606.7300