Have you heard the news? Breast cancer rates are dropping—a lot. After more than 20 years of rising incidence, rates plateaued in 1999 and then abruptly plummeted 6.7 percent between mid-2002 and mid-2003 before leveling off again in 2004. The bulk of the sudden decline occurred in women 50 to 69 and in tumors that depend on estrogen for their growth.

The reasons for the decline? There are probably two: The number of women getting mammograms peaked around 1999, meaning rates might have continued increasing if more women were getting mammograms; and the results of the Women’s Health Initiative (WHI), a major clinical trial that linked higher rates of breast cancer to postmenopausal estrogen/progestin therapy, led millions of women to quit taking hormone therapy. Because estrogen fuels most breast cancers, researchers suspect this sudden withdrawal may be slowing the growth of miniscule tumors too small to be seen on mammogram, at least in the short term.

Will the decline continue? Only time will tell.

What is certain is this: that 98 percent of women diagnosed with early-stage breast cancer, mainly through mammogram, are still alive five years later; that even if the cancer returns, you’re nearly twice as likely to be alive three years later as women were a decade ago; and that if you have a strong family history of breast cancer, taking medication prescribed by your doctor once a day could prevent the cancer.

This Women’s Health Update will help you understand the world of breast cancer as it is today so you can take the steps you need to reduce your risk and protect your health.

Fact 1. Age is the most important risk factor for breast cancer, not family history, your weight or your diet.
The simple fact is that a woman in the United States has a 12.7 percent lifetime risk of developing breast cancer. That translates into one in eight women. But too many women panic when they see that number. Check out the word “lifetime” again. It means that just one in 233 women in their 30s will be diagnosed with breast cancer; one in 69 in their 40s; one in 36 in their 50s; and one in 27 in their 60s. The “one-in-eight” applies to women in their 80s and 90s. Overall, by the time you reach age 85, your risk is 15 times higher than that of a 30-year-old woman.

Keep in mind that just five to 10 percent of breast cancers are directly related to mutations in the so-called “breast cancer genes,” BRCA-1 or BRCA-2. And only about one in five breast cancers have any genetic basis at all.

Fact 2. Mammograms are still the best way to find breast cancer early.
And finding breast cancer early is still the best way to survive it. You probably know the recommendation, but it’s worth repeating: According to the American Cancer Society, women 40 and older should have a mammogram once a year. If you are at high risk for developing breast cancer, talk with your health care professional about adding an MRI, which can find miniscule tumors that won’t show up on mammogram. Once you reach age 70, discuss how often you need a mammogram with your health care provider.

Here’s something you might not know: Mammograms not only find breast cancers, they can also help identify certain factors that could increase your risk of breast cancer.
such as dense breasts or benign (noncancerous) breast disease. That, in turn, can alert you and your health care professional to be even more vigilant about screenings than a woman with an average risk.

A word about mammograms and African-American women: While studies show that African-American women are less likely to develop breast cancer than Caucasian women, they are more likely to die of it than Caucasian women. One reason may be that they are less likely to get regular mammograms than Caucasian women, so they're more likely to be diagnosed with more advanced breast cancers, which are more difficult to treat.12,13

Fact 3. A simple, six-question quiz can provide a good indication of your risk of breast cancer in five years and throughout your lifetime.14

It’s called the “Gail Risk Assessment,” and it takes about two minutes to complete. Ideally, your health care professional should administer it so the two of you can talk about the results. But you can also take it online at www.cancer.gov/bcrisktool. If the test shows you have a higher-than-average risk, or if you have a significant family history of breast cancer, talk to your health care professional about a referral to an oncologist and/or genetic counselor to discuss your options. You can find a genetic counselor through the National Society of Genetic Counselors (www.nsgc.org).

Fact 4. You’re more likely to find a tumor by chance than by conducting monthly breast self-exams.

We’re not suggesting you throw away the shower card and stop those exams. They are a good way to become familiar with what is “normal” for your breasts so it’s easier for you to tell if something changes. But if you don’t like doing it, or keep forgetting, don’t sweat it. However, you should make sure you receive a clinical breast exam (CBE) from your health care practitioner at least once every three years until age 40, then annually. Studies find CBE combined with mammogram works best to find early breast cancers.15,16

Fact 5. Breast cancer can be prevented in high-risk women.

If your risk is much higher than average, talk to your doctor about options. Two medications are now approved for preventing breast cancer in high-risk women: tamoxifen, which can be used by pre- and postmenopausal women; and raloxifene, which is approved for use in post-menopausal women. Both can slash the risk of breast cancer by half in high-risk women and reduce the risk of estrogen-positive cancer even more.17,18 Side effects vary but include a slightly higher risk of uterine cancer and cataracts (higher with tamoxifen than raloxifene), stroke, pulmonary embolism and blood clots.

Preventing Breast Cancer

Every woman wants to know what she can do to prevent breast cancer. The fact is, beyond chemoprevention with tamoxifen or raloxifene or surgery to remove your breasts, we know of very few things that can actually prevent breast cancer. Having said that, we do know of certain things that could increase your risk of developing breast cancer. Some, like your genetic background, you can’t change; others, like the amount of alcohol you drink, you can. Here’s what we know:

Periods, childbirth and breastfeeding. If you’re planning to have children, or more children, consider breastfeeding as long as possible. A major risk factor for breast cancer is how many times you ovulate in your life. That’s because ovulating means you’re not pregnant or breastfeeding (or menopausal), which means there is more estrogen circulating in your body. Estrogen triggers breast cell division; the more times breast cells divide, the more likely it is that something will go wrong, possibly leading to a cancerous growth. The younger you are when you have your first child, the lower your breast cancer risk. That may be due to a link between the type of breast stem cells that develop during a woman’s first full-term pregnancy and breastfeeding. These cells appear less likely to become cancerous. Specifically, a first pregnancy before age 20 significantly reduces the risk of breast cancer, while never getting pregnant or having your first child at 30 or older nearly doubles the risk.19

Benign breast disease. Benign breast disease includes breast pain, breast cysts, mastitis, fibrocystic disease and related lesions. If you required a biopsy for any of these conditions, your risk of breast cancer is higher. Not because of the biopsy, but because the need for one signifies greater concern about the possibility of changes in breast cells that could,
eventually, lead to breast cancer.\textsuperscript{14} 

**Atypical ductal hyperplasia.** This condition, also called atypia, is overactive growth of the cells lining breast ducts. If a biopsy shows you have this condition, your risk of breast cancer is higher than a woman your age with your family history who doesn’t have it. Don’t panic! It just means you and your doctor need to be aware of your risk and pay special attention to screening.\textsuperscript{20}

**Breast density.** If your breasts are dense, your risk of breast cancer is between three and five times higher than a woman without dense breasts, particularly if you have a family history of breast cancer. If you’re using hormone therapy, consider stopping; hormone therapy may increase breast density in some postmenopausal women.\textsuperscript{21,22} You may also want to talk to your health care professional about the possibility of an MRI along with your mammogram.

**Use of postmenopausal hormone therapy.** As noted earlier, the WHI found an increased risk (24 percent) of invasive breast cancer in women using the hormone therapy Prempro. This might sound like a lot, but if your overall risk is 12 percent, it only increases your risk by 2.9 percent. That’s still really small! Plus, the increased risk in the WHI was only seen in women who had been using hormone therapy prior to enrolling in the study.\textsuperscript{23} And women who were using estrogen only (Premarin) had no increased relative risk.\textsuperscript{23,24}

**Radiation exposure.** Multiple chest x-rays, radiotherapy for Hodgkin’s disease or exposure during atomic bomb explosions increase the risk of breast cancer by varying degrees.\textsuperscript{25}

**Obesity.** Every 2.2-pound weight gain increases a woman’s risk of breast cancer by 1.08 percent, likely because of the effect of fat on estrogen production.\textsuperscript{26} The risk appears related more to the percentage of body fat than to the actual weight. So, ask your health care professional about sensible approaches to long-term weight management.\textsuperscript{27}

**Alcohol intake.** An estimated four percent of breast cancers are linked to alcohol consumption. One major study found that one drink a day from age 18 onward increased a woman’s relative risk of developing breast cancer by seven percent compared to women who never drank.\textsuperscript{28-30} Other studies, however, suggest this risk may be erased if you get high levels of the B vitamin folate in your diet.\textsuperscript{31,32} Good sources include whole grains, beans and legumes and dark green, leafy vegetables like collards and spinach.

**Birth control pills.** Birth control use does not appear to increase breast cancer risk. The Cancer and Steroid Hormone Study (CASH) from the U.S. Centers for Disease Control and Prevention compared 4,711 women with breast cancer with 4,676 women without. About half the women in each cohort used oral contraceptives. There was no increase in relative risk in those using oral contraceptives, even after 15 years of use.\textsuperscript{33} A later sub-analysis showed a slightly increased risk for women aged 20 to 34, but a slightly decreased risk for women 45 to 54.\textsuperscript{34}

**Confronting the Fear**

Study after study shows that women’s greatest health-related fear is breast cancer. Yet women are far more likely to die from heart disease than breast cancer; and breast cancer isn’t even the cancer most likely to kill women. That’s lung cancer. So, why the fear?

Maybe it’s because our sense of ourselves is so tied up in our breasts. Maybe it’s because of the pink ribbons and headlines and articles about the disease we see everywhere, particularly during “Breast Cancer Awareness Month” in October. The fact is, women don’t need a special month to be aware of breast cancer; we have only to look around us at our mothers, sisters and friends to be aware of it.

The fear, however, is a waste of energy and time. Instead of fearing breast cancer, decide to confront it head-on. That means sticking to the recommended screening schedule, scheduling a time to talk with your health care professional about your individual risk and making the kind of lifestyle changes that might, just might, reduce your own risk. And, find time to talk to girlfriends, daughters, mothers and grandmothers about their fears and successes with breast health and breast cancer. Fight the fear together. Make your plan today.

**Resources**

**American Cancer Society**
800-227-2345
[www.cancer.org](http://www.cancer.org)

**Breastcancer.org**
[www.breastcancer.org](http://www.breastcancer.org)

**National Women’s Health Resource Center**
866-986-9472
[www.healthywomen.org](http://www.healthywomen.org)

**Y-ME National Breast Cancer Organization**
800-221-2141
800-986-9505 Spanish
[www.yme.org](http://www.yme.org)
Questions to Ask Your Health Care Professional

1. What is my risk for developing breast cancer?
2. My mother had breast cancer. Will I develop it, too?
3. What are the symptoms of breast cancer?
4. How is breast cancer diagnosed?
5. What is a clinical breast exam? How often do I need to have one?
6. What is a screening mammogram? Should I have one? Does it hurt?
7. I'm not sure I can afford a mammogram. Are low-cost or free mammograms available?
8. Can breast cancer be treated? What treatments are available?
9. Does postmenopausal hormone therapy cause breast cancer?

References