Ask any woman what disease she most fears, and she’s likely to say it’s breast cancer. Ask her what the number-one killer of women is, and her answer will probably be the same. She’d be wrong.

Among the most lethal diseases of women in the United States, breast cancer ranks sixth, after heart disease, other cancers, stroke, chronic obstructive pulmonary (lung) diseases, and pneumonia/influenza. Women are eight times more likely to die of heart disease than breast cancer. Even as cancers go, breast cancer’s not the deadliest form. Lung cancer kills twice as many women every year as cancer of the breast.

But breast cancer does kill more women age 35 to 54 than any other disease, and therein lies one big reason why it’s a woman’s worst nightmare.

"The really compelling reason that people put breast cancer on a different scale is that everybody knows somebody with breast cancer. Many of us know someone with it in her 40s, and we don’t know someone with heart disease in her 40s," says Barbara Brenner, executive director of Breast Cancer Action, an information and advocacy group based in San Francisco. "Since it is the leading killer of women in the 30-to-55 range, everybody has a tragic story, and the tragic story translates into a lot of fear.... We do know that women tend to overestimate their risk."

Breast cancer is also a disease rife with mythology. Although it gets a huge amount of media attention, a lot of what’s widely circulated is wrong. Here are a few choice myths and misconceptions worth correcting:

**Myth No. 1: If I get it, I’m going to die.**
The number of women diagnosed with breast cancer has been rising substantially each year, but the death rate has been steadily declining. Eighty-three percent of women diagnosed with breast cancer are alive after five years. That’s compared to 64 percent in the 1960s. Better treatments and early diagnosis through mammograms and regular breast exams – including monthly breast self-exams – are responsible for these improved outcomes.

**Myth No. 2: All women have a one in eight chance of developing breast cancer today.**
The widely quoted "one in eight" figure applies to a woman closer to the end of her lifetime. A 20-year-old, for example, has a one in 2,500 chance of developing breast cancer in the next decade, and a 30-year-old’s probability is one in 250 in the next decade. At age 40, it’s one in 67; from 50-60, it’s one in 30, and from 60-70 it’s one in 29. The one-in-eight risk is a cumulative lifetime risk of developing breast cancer if you live at least to age 85.
Myth No. 3: If my mother had breast cancer, I'll get it too.
If your mother or sister was diagnosed with breast cancer, your chances of getting the disease are doubled – that is to say if, with no family history, you would have had a 1.5 percent chance of developing the disease in the next five years, with your history, your chance rises to 3 percent.

Myth No. 4: I'm at astronomical risk if I test positive for gene mutations.
Only 5 to 10 percent of breast cancers are the result of BRCA1 and BRCA2 mutations in the genes. How a particular mutation influences your risk for getting breast cancer depends on what other risk factors you may already have. For example, if 10 or more people in various generations of your family have had breast cancer, a particularly dangerous BRCA1 mutation could give you as much as an 85 percent chance of developing the disease by the age of 70.

But if you've had only a few relatives with breast cancer, such a mutation probably gives you at most a 56 percent chance of a breast cancer diagnosis before you turn 70. A genetic counselor can help you sort out whether you should be tested, and your doctor can help you determine whether you have enough of a genetic predisposition to warrant taking medication as a preventative.

Myth No. 5: If I have no family history and I exercise, eat right, and don't smoke, I probably won't get breast cancer.
Unfortunately, this is not the case. About 70 percent of women who are diagnosed with breast cancer have no identifiable risk factors. Go ahead and exercise, eat a low-fat diet, avoid tobacco, and drink alcohol only in moderation, because all those things will certainly help guard against heart disease, diabetes, and other life-threatening conditions – and research has shown a relationship between breast cancer and drinking more than one alcoholic beverage a day. But since we really don't know the cause of breast cancer, there's very little you can do to prevent it.

Myth No. 6: In general, only white women get breast cancer.
The truth is that although more white women are diagnosed with breast cancer, a greater percentage of African-American women who have the disease will die of it. The rate of diagnosis is 13 percent higher among white women. But after five years, only 71 percent of African American women diagnosed with breast cancer are alive, compared to 86 percent of white women, according to the American Cancer Society. Most experts attribute the difference to black women's poorer access to health care.
As a group, white, Hawaiian, and black women have the highest rates of the disease, according to the National Cancer Institute. The lowest rates occur among American Indian, Vietnamese, and Korean women. (The rate of breast cancer among white women is four times as high as it is for Korean women, who have the lowest incidence.) No one knows what accounts for this, although there are unproven theories that the groups with less breast cancer consume less fat. Some researchers and advocates for women with the disease say there’s a correlation between breast cancer incidence and industrial pollutants.

**Myth No. 7: Women get it from wearing underwire bras.**
Underwire bras are reputed in some circles to obstruct lymph flow. Interesting theory, but there’s no evidence.

**Myth No. 8: Breast cancer is a women’s disease.**
Breast cancer in men is rare – only about 1,600 men are diagnosed each year, and the disease in men accounts for less than one percent of all breast cancers. But breast cancer kills 25 percent of the men who develop it, largely because men – and often their doctors – don’t know they can get it, so the cancer goes untreated until it has reached a late stage.

**Myth No. 9: If a lump hurts, it’s not breast cancer.**
Tenderness associated with a lump, particularly if it’s cyclical in nature, is often a good sign. But many breast tumors that are malignant can be tender as well. It’s best to have your doctor check out anything suspicious.

**Myth No. 10: Mammograms catch all breast cancers.**
At the moment, mammograms are the single most important tool for finding breast tumors. They catch 85 percent of breast tumors, but that still leaves 15 percent that escape detection. It’s harder to spot tumors in dense glandular tissue than in fatty tissue, and some women – particularly those who are thin, young, premenopausal or on hormone-replacement therapy -- have dense breasts (more gland tissue, less fat). For women with dense breasts, breast ultrasound or MRI may be useful along with mammography.

For more information on breast cancer, visit anthem.com.

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