

## Breast Cancer: Are You at Risk?

The risk of cancer increases for everyone as they age. Depending on the specific treatment you received for childhood cancer, you may be at increased risk for developing breast cancer. It is important to understand that risk, so that you can take steps to protect your health.

### What are the risk factors?

Several studies have shown that **women treated with radiation to the chest for cancer during childhood, adolescence, or young adulthood** have an increased risk of developing breast cancer as they get older, compared to women their same age in the general population. The risk of secondary breast cancer is **related to the location and dose of radiation**. People treated with higher doses of radiation have the highest risk. Researchers are studying this problem to better understand the risk factors and find ways to prevent secondary breast cancer.

### When is breast cancer likely to occur?

The risk of secondary breast cancer begins to increase at about ten years following radiation therapy and continues to rise thereafter. This means that if a woman develops breast cancer following chest radiation for childhood/adolescent cancer, it usually happens at a much younger age (usually 30 to 40 years old) than in women who develop primary breast cancer (usually age 50 or older).

### What can I do to protect my health?

Most women who received radiation therapy to the chest during childhood, adolescence, or young adulthood will **not** develop breast cancer. However, if you received radiation to the chest, it is important to understand that the risk is higher for you than it is for women your age who never received radiation. So, the best way for you to protect your health is by taking steps to closely monitor your breasts. That way, if a cancer develops, it will be detected in its earliest stages, when treatment is most effective. It is also important to tell your healthcare provider about your cancer treatment history, including the dose of chest radiation that you received. You should ask your treating oncologist or cancer center for a written summary of your cancer treatment (see related Health Link: [Introduction to Long-Term Follow-Up](#)).

### What monitoring is recommended?

If you received radiation therapy to the chest, underarm (axilla), or total body irradiation (TBI) during childhood, adolescence, or young adulthood, you should:

1. Have a clinical breast exam performed by your healthcare provider—at least once a year until you reach age 25—then every 6 months thereafter.
2. Have a yearly mammogram and breast MRI (magnetic resonance imaging test) starting at age 25, or 8 years after you received radiation (whichever comes last).

*If your healthcare provider is not familiar with these monitoring recommendations for women who have received chest radiation during childhood, adolescence, or young adulthood, we encourage you to share this Health Link with them, and tell them that additional information is also available at [www.survivorshipguidelines.org](http://www.survivorshipguidelines.org).*

### Is there anything else I can do to minimize the risk?

The following lifestyle changes may help reduce the risk of developing breast cancer, and will also help you to stay as healthy as possible:

- Eat more fruits and vegetables (at least 5 servings a day are recommended).

- Exercise at least 30 minutes per day on most days of the week.
- Maintain a healthy body weight.
- Limit your intake of alcohol to no more than one drink per day.
- Avoid smoking or vaping.
- If you have a baby, try to breastfeed for at least four months.
- If you need hormone replacement therapy or birth control pills, discuss the risks and benefits with your healthcare professional.

If you have questions regarding your risk of developing breast cancer, and how you can best protect your health, be sure to discuss this with your healthcare provider.

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**Additional health information for childhood cancer survivors is available at [www.survivorshipguidelines.org](http://www.survivorshipguidelines.org)**

**Note:** Throughout this *Health Links* series, the term "childhood cancer" is used to designate pediatric cancers that may occur during childhood, adolescence, or young adulthood. Health Links are designed to provide health information for survivors of pediatric cancer, regardless of whether the cancer occurred during childhood, adolescence, or young adulthood.

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