Mantle radiation (also known as mantle field radiotherapy) is a radiation technique that involves radiation to the neck, chest and armpit area (also known as the ‘mantle’ area). Mantle radiation was primarily used as a treatment technique for Hodgkin lymphoma from the 1970s until the late 1990s, when it was replaced by newer treatments, although it is still used today in rare situations.

BC Cancer recommends additional breast cancer screening for all women who have received mantle radiation treatment for Hodgkin lymphoma. Evidence indicates that women who have received mantle radiotherapy treatment for Hodgkin lymphoma have a significant increased risk of breast cancer compared to other women of the same age. This increased risk begins about 10 years after treatment and increases over time.

Recent research recommends that the optimal screening for women who received mantle radiation for Hodgkin Lymphoma is an annual digital mammogram and a breast MRI (magnetic resonance imaging). Therefore, BC Cancer recommends that women who have received mantle radiation for Hodgkin lymphoma follow this screening routine:

- A breast magnetic resonance imaging (MRI) exam every year starting at age 30 or 10 years after radiation treatment until the age of 65.
- A screening mammogram (breast x-ray) every year starting at age 30 or 10 years after radiation treatment until the age of 74.

These two tests can help find breast cancer early – when there is a better chance of treating the cancer successfully.

How can I book a screening mammogram?
You can book a screening mammogram appointment directly, without a doctor’s referral, with the Breast Screening Program by calling 1-800-663-9203. Please have your BC Services Card/CareCard and the name of your doctor available when you’re booking your appointment.

How can I book a breast MRI?
Your breast MRI must be booked by your doctor. Please contact your doctor and ask him/her to refer you for this test.

I don’t have a family doctor, what can I do?
We encourage you to find a family doctor or a walk in clinic that can discuss these screening recommendations with you and refer you for the tests. If you are having difficulty finding a doctor you can call the BC Cancer information line for some help at: 604-877-6292 or Toll Free 1-800-663-3333, extension 676292.

Why did ‘mantle radiation’ increase my risk of getting breast cancer?
Radiation used to treat cancer can also affect normal cells that are exposed to the radiation. This can cause a new, different cancer (like breast cancer) to develop decades later. This risk has been noted in many research studies.

What exactly does increased risk mean?
Current evidence suggests that women who received mantle radiotherapy may face as high as a 40 per cent increased risk of developing breast cancer much later in life when compared to other women of the same age. This type of breast cancer typically develops 20 to 30 years after treatment.
Why was I not told about these risks before I was treated with mantle radiation?
At the time of your treatment, your doctor would have spoken with you about the potential side effects and risks of treatment. Given the success of that particular treatment in curing Hodgkin lymphoma – and the lack of alternatives available– the benefits significantly outweighed the harms. The higher risk of breast cancer for women who received mantle radiation has only become clear with subsequent research, leading to the recommendation for additional screening.

Why am I being contacted now?
We are reaching out to you because in additional to an annual mammogram, breast magnetic resonance imaging (MRI) exam is also recommended every year. The family doctor that we have on file for you is also being sent information about this.

What if my doctor is not aware of my increased risk of developing breast cancer?
If your doctor does not know about your increased risk and/or did not receive our information package, please refer him/her to www.bccancer.bc.ca/screening/health-professionals/breast or to our information hotline at 604-877-6292 or Toll Free 1-800-663-3333, extension 676292. We will make sure that your doctor gets the appropriate package, including information about booking the breast MRI.

What is an MRI?
An MRI uses a magnetic field and pulses of high frequency sound waves to make pictures of the breast. For breast MRI an injection of intravenous dye is required so that abnormalities can be seen more clearly from normal breast tissue. MRI is a safe and effective test, but it does have a high rate of false-positive results which is why it is only recommended as a screening tool for women at high risk of developing breast cancer. Following an MRI, you could be recalled for additional tests such as breast ultrasound and/or a needle biopsy.

What is a screening mammogram?
Mammograms are x-rays of the breasts that are done by a specially-trained technologist. A screening mammogram consists of four images (two of each breast) that look for hidden cancer in women who are healthy (no symptoms) and have never had breast cancer. BC Cancer’s Breast Screening Program offers screening mammograms to eligible women in BC.

My doctor is already sending me for regular diagnostic mammograms; do I need to book through the Breast Screening Program instead?
The important thing is to go for an annual mammogram, either screening or diagnostic. Discuss with your doctor what is appropriate and convenient for you. The Breast Screening Program sends the results of the test as well as recall notices to women and their physicians.

For more information or to discuss your treatment history with a health care professional from BC Cancer, please call us at: 604-877-6292 or Toll Free 1-800-663-3333, extension 676292 or visit www.bccancer.bc.ca/screening/health-professionals/breast.