



Public Health  
Agency of Canada

Agence de la santé  
publique du Canada

# BREAST CANCER & YOUR RISK

Canada 





# BREAST CANCER & YOUR RISK

This brochure identifies biological as well as lifestyle factors associated with breast cancer. It offers information and advice to help you better understand and address them. It also identifies common misconceptions about breast cancer and includes helpful tips and useful website addresses to help you stay informed.

This pamphlet is intended for women who:

- are 18 years of age or over; and
- do not have breast cancer or any breast problems. You should report any changes in your breasts or concern you might have about your breasts to your doctor.

## WHAT IS BREAST CANCER?

Breast cancer occurs when a normal cell in the breast becomes abnormal and begins to grow out of control. The cancer can grow into a lump in the breast and can eventually spread to other places in the body such as the bones, lungs, liver, or brain. Breast cancer most often affects women, yet can also be diagnosed in men.

## HOW COMMON IS BREAST CANCER IN CANADA?

Breast cancer is one of the most common forms of cancer in women. Each year, more than 22,000 women develop breast cancer in Canada and more than 5,000 women die of the disease. Based on current rates, one in nine women in Canada is expected to develop breast cancer during her lifetime.

The risk of getting breast cancer goes up as women get older. The risk of developing breast cancer in the next 10 years is as follows:

- 13 out of 1,000 women in their 40s
- 23 out of 1,000 women in their 50s
- 29 out of 1,000 women in their 60s
- 31 out of 1,000 women in their 70s

Since 1999, the rate of new cases of breast cancer has stabilized, and death rates have steadily declined.





# WHAT ARE THE RISK FACTORS?

Risk factors are conditions that may increase the chance of developing breast cancer. It is important to understand that most women will have some of these risk factors. Having one or more risk factors does NOT mean you will be diagnosed with breast cancer. In addition, many women who develop breast cancer have no obvious risk factors. Why some women develop breast cancer while others do not is not fully understood.

Generally recognized risk factors for breast cancer are listed on the following pages.

# BIOLOGICAL RISK FACTORS

Biological risk factors are those that are related to your body. While you can not change biological risk factors, knowing about them allows you to better understand your risk level and will help you to discuss appropriate action with your health care provider.

## 1. GETTING OLDER

Breast cancer can occur at any age; however the risk of breast cancer increases with age. Most breast cancer is detected in women over 50 years.

## 2. FAMILY HISTORY

You have a greater chance of developing breast cancer if someone in your family has had breast cancer, particularly at a young age. Studies show that about 5-10% of breast cancer cases are hereditary. Women who have inherited a mutated gene related to breast cancer have greatly increased lifetime risks of developing breast cancer. If you have questions about your risk, talk to your health care provider.

## 3. HORMONES AND MENSTRUAL HISTORY

Certain reproductive factors increase the risk of breast cancer:

- beginning to menstruate (have periods) before age 12;
- having a first baby after age 30, or never having a baby; and
- completing menopause after age 55.

Some evidence suggests that the use of birth control pills may be associated with a small increased risk of developing breast cancer. However, research also indicates that birth control pills reduce a woman's risk of developing endometrial and ovarian cancers.

Although associated with a decreased risk of developing osteoporosis (thinning bones), studies suggest certain types of hormone replacement therapy (HRT) may increase breast cancer risk and that risk increases with increasing duration of use. HRT is used to relieve symptoms of menopause such as hot flashes. Discuss the risks and benefits of using birth control pills/HRT with your health care provider and make the decision that is best for you.





Some reproductive factors are related to decreased breast cancer risk:

- having a greater number of children; and
- breastfeeding, with decreasing risk the longer you breastfeed.

The Government of Canada recommends exclusive breastfeeding for the first six months of life for healthy term infants. (*Exclusive Breastfeeding Duration - 2004 Health Canada Recommendation*: [www.hc-sc.gc.ca/fn-an/nutrition/child-enfant/infant-nourisson/excl\\_bf\\_dur-dur\\_am\\_excl-eng.php](http://www.hc-sc.gc.ca/fn-an/nutrition/child-enfant/infant-nourisson/excl_bf_dur-dur_am_excl-eng.php)).

#### 4. HIGH BREAST DENSITY

Increased density of the breast is associated with a higher risk of breast cancer. Breast density is related to the amount of fat in your breast tissue. Density usually decreases with age and after menopause and can only be identified by a mammogram (breast x-ray).

#### 5. PREVIOUS BREAST CONDITION

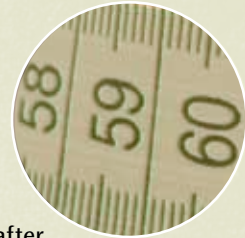
Having had a previous breast biopsy (a sample of tissue) showing non-cancerous, but abnormal cells.

## LIFESTYLE RISK FACTORS

Lifestyle risk factors are those that are modifiable, or can be changed. Therefore, taking action on lifestyle risk factors can significantly lower your risk of breast cancer. It may also increase your overall wellness and reduce your risk of diabetes and heart disease.

### 1. BODY WEIGHT

Weight gain during adult life increases breast cancer risk. It has been found that women who gained 25 kg (55 pounds) or more after the age of 18 years were at a 45% increased risk of breast cancer compared to women who maintained their weight. An increase of 5 kilograms (12 pounds) after menopause has been associated with up to a 12% increased risk of breast cancer.



Talk to your health care provider or a registered dietician about how you can achieve and maintain a healthy body weight. For more information, consult the *Canadian Guidelines for Body Weight Classification in Adults* ([www.hc-sc.gc.ca/fn-an/nutrition/weights-poids/guide-ld-adult/qa-qr-pub\\_e.html](http://www.hc-sc.gc.ca/fn-an/nutrition/weights-poids/guide-ld-adult/qa-qr-pub_e.html)).

## 2. EXERCISE

Even if you've been inactive most of your life, you may reduce your risk of developing breast cancer by becoming active now.

Increased physical activity is associated with a 25-30% decrease in breast cancer risk and helps to achieve and maintain a healthy weight. Consider participating in at least thirty minutes of moderate to vigorous physical activity most days of the week.

Talk to your health care provider about a program that is right for you. Consult *Canada's Physical Activity Guide* for tips on getting fit and staying active ([www.paguide.com](http://www.paguide.com)).

## 3. DIET

There is a limited but growing body of scientific evidence that a poor diet may be linked to an increased risk in breast cancer.

Eating a balanced diet and choosing lower-fat dairy products and leaner meats may help contribute to maintaining a healthy body weight and a lower cancer risk. For more information on wise food choices, consult *Canada's Food Guide to Healthy Eating* ([www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php](http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php)) or the Dietitians of Canada website at [www.dietitians.ca](http://www.dietitians.ca).

## 4. ALCOHOL CONSUMPTION

Evidence suggests that drinking alcohol may increase the risk of developing breast cancer. In a review of almost 100 research studies, it was concluded that women who drink alcohol are at over a 20% higher risk for breast cancer than those who do not drink.

If you consume alcohol, limit your alcohol intake to one alcoholic drink a day:

- 12 ounces (340 mL) of beer;
- 5 ounces (140 mL) of wine; or
- 1.5 ounces (42 mL) of spirits.





## 5. SMOKING

Nearly 17% of all deaths in Canada can be attributed to smoking. Some recent studies have found a link between breast cancer and tobacco smoking and breathing second-hand smoke. However, the effects are not fully understood and more research is needed.

Quit smoking! Ask your health care provider for advice on how to quit or visit [www.gosmokefree.gc.ca](http://www.gosmokefree.gc.ca). If you do not smoke, avoid breathing second-hand smoke.

## 6. ENVIRONMENT

Some researchers suspect that chemicals in our environment are increasing the risks of breast cancer for women. Although there is no evidence of a direct link between chemicals and breast cancer, we do not have all the answers about how chemicals affect our bodies.

At home, follow proper use and storage instructions for cleaning, painting and motor engine products and take proper safety precautions if you use pesticides in the garden. At work, talk to your employer about ensuring good air quality and proper handling of chemicals. Read the material safety data sheets (MSDS) for chemicals and follow the directions, warnings and safe handling procedures.



## COMMON MISCONCEPTIONS

Many common items such as under-arm deodorants/antiperspirants, under wire bras, and silicone breast implants are often mistakenly associated with increased risk of breast cancer. There is currently no scientific evidence indicating these items pose additional risk for women.

If you have concerns regarding your breast health, always speak to your health care provider.

More information on risk factors can be found at the:

- Public Health Agency of Canada website at [www.phac-aspc.gc.ca/publicat/updates/breast-99-eng.php](http://www.phac-aspc.gc.ca/publicat/updates/breast-99-eng.php).
- Canadian Cancer Society website at [www.cancer.ca](http://www.cancer.ca) or the Cancer Information Service at 1-888-939-3333.

To get a more accurate estimate of your risk of breast cancer, you can:

- ask your health care provider or speak to them about the Breast Cancer Risk Calculator on the U.S. National Cancer Institute's website at [www.cancer.gov/bcrisktool](http://www.cancer.gov/bcrisktool).





# BREAST CANCER SCREENING

## WHAT ABOUT SCREENING FOR BREAST CANCER?

Evidence clearly indicates that women between the ages of 50 and 69 should have a mammogram (an x-ray of the breast that can find very small cancers before they can be felt) every two years. Talk to your health care provider about the organized breast screening program in your province or territory. If you are 40-49 years of age or aged 70 or older, you are encouraged to discuss the benefits and limitations of mammography with your health care provider.

The booklet “Information on Mammography for Women Aged 40 and Older: A Decision Aid for Breast Cancer Screening in Canada” is available at [www.publichealth.gc.ca/decisionaids](http://www.publichealth.gc.ca/decisionaids).

## WHAT CAN I DO?

Be proactive. Increasing your awareness and knowledge may help reduce your risk of developing breast cancer. Take action on your lifestyle risk factors. Know your body, watch for changes, and contact your health care provider with any questions or concerns about breast health and breast cancer prevention, early detection and screening.





## ACKNOWLEDGMENTS

The Public Health Agency of Canada would like to thank the Canadian Breast Cancer Initiative for its assistance in developing this brochure.

---

To promote and protect the health of Canadians through leadership, partnership, innovation and action in public health.

— Public Health Agency of Canada

Breast Cancer and Your Risk  
is available on the Internet at the following address:  
<http://www.phac-aspc.gc.ca>

Également disponible en français sous le titre :  
Quels sont vos risques de cancer du sein?

© Her Majesty the Queen in Right of Canada, 2009  
Cat.: HP35-14/1-2009E-PDF  
ISBN: 978-1-100-13859-6