



TEACHER TOOLKIT

A Facilitator Guide for the Be PINK DVD

CURRICULUM CONNECTIONS:

- Physical Education/Health Education
 - Biology

Grade 9 to Grade 12

WELCOME TO THE TEACHER TOOLKIT!

What is Be PINK?

- An evidence-based educational resource for adolescent students that addresses breast health and risk reduction for breast cancer.

What does the Be PINK DVD and Teacher Toolkit involve?

- The viewing of the Be PINK DVD (17 minutes viewing time).
- Follow-up activities for each of the 3 chapters of the DVD.
- Total delivery time is 60-90 minutes.

What is the goal of the Be PINK DVD and Toolkit?

- To empower high school teens by providing tools to make appropriate decisions throughout their lifetime to reduce their risk of breast cancer in the future.

What are the Curriculum Connections?

- Aligns with the current **Manitoba Physical Education/Health Education Curriculum for Grades 9-12.**
- Supports learning outcomes outlined in the **Science Curriculum for Grade 11 and 12 Biology.**

The Be PINK DVD and Teacher Toolkit are based on the material within the Be PINK Adolescent Breast Health Resource. Please visit:

www.cancercare.mb.ca/bepink to view the complete resource which includes:

- Lesson plans
- Learning outcomes
- Additional activities
- Evaluation tools

CancerCare Manitoba identifies breast health as potentially sensitive content and recommends that teachers, schools and school divisions refer to Manitoba Education's "[School Division Planning Process for Treatment of Potentially Sensitive Content](#)." An optional sample parent permission letter is available at www.cancercare.mb.ca/bepink under Lesson 1, Appendices.

TOOLKIT OVERVIEW

Option A: To achieve program objectives, it is recommended that the DVD be viewed in Chapters followed by the Toolkit activities.

Option B: The DVD may be played all at once. Please complete the Warm-Up Exercise prior to showing the DVD and conclude with the activities which follow each Chapter viewing.

- **Warm-Up Exercise:** prior to viewing DVD
- **Chapter 1: It's Your Body**
(8 minutes viewing time, 12 minutes follow-up activities)
- **Chapter 2: Facts and Myths**
(2 minutes viewing time, 13 minutes follow-up activities)
- **Chapter 3: Healthy Living**
(7 minutes viewing time, 13 minutes follow-up activities)

GETTING STARTED

1. Identify your audience.

- The Be PINK video and the activities within this Teacher Toolkit can be presented to **both girls and boys**.
- If your audience is only girls, please consider using additional **girl specific activities** as suggested in Chapter 1: It's Your Body.

2. Review all materials.

- **Consider length of time** you have for the presentation and prepare accordingly. Completing the Toolkit viewing and activities will take between 60-90 minutes.
- **Preview the video** before showing it in class.
- **Review each Chapter** in the Toolkit and the accompanying activities.
- **Resource Masters (RM)** are for teacher use only. These will help you become more informed about breast cancer; what it is, risk factors, signs and symptoms as well as common treatments.
- **Blackline Masters (BLM)** are for student use.

3. Be prepared for questions.

- **Review the Resource Masters (RM)'s** listed for each Chapter to become more informed and assist you in answering questions and preparing for class discussions.
- **Encourage questions and discussion** during the activities. Some students may not feel comfortable asking questions in class. Allowing students the option to submit questions anonymously would allow for the opportunity to address these questions at the end of the session or at a later date.
- **Clarify any concepts** you may be unsure about. If you have any questions about the content of the video or Toolkit, please contact the Be PINK Project Manager at: bepink@cancercare.mb.ca

Teacher tips:

Guest speaker

Invite a breast cancer survivor to speak with students about her experience of having breast cancer.

Breast Self Awareness

Based on research evidence, there has been a shift away from a "practice breast self examination (BSE)" message to a "know how your breasts look and feel" message. For the most recent information on this read "Important Message about Breast Self Examination" (RM-9) in Lesson 3 available at : www.cancercare.mb.ca/bepink.

Warm-Up Exercise (10 minutes)

Objective

This activity will allow students to:

- determine who gets breast cancer
- define hereditary risk factors
- identify risk factors for breast cancer

Teacher Materials

- Breast Cancer Teacher Reference (RM-1)
- Breast Cancer Quiz Answer Key (RM-4)

Student Materials

- Be P.I.N.K Poster (BLM-1)
- Student Breast Cancer Quiz (BLM-2)

Activity

1. Handout copies of the Student Breast Cancer Quiz (BLM-2) to students prior to the viewing of the DVD.
2. Ask students to complete the quiz.
3. Using the Breast Cancer Quiz Answer Key (RM-4), review their answers as a means of initiating dialogue about breast cancer and to assess their prior knowledge about breast cancer.
4. Display a copy of the Be P.I.N.K. Poster (BLM-1).
5. Discuss the meaning of the acronym P.I.N.K.

BREAST CANCER TEACHER REFERENCE

WHAT IS BREAST CANCER?

Cancer is a disease that is characterized by uncontrolled cell growth. Breast cancer begins in the breast tissue and may start in the duct or lobe of the breast. These tissues are made up of microscopic cells which regularly divide to replace older cells, damaged cells or cells that have died. These cells have built in controls which tell them when to grow or when to stop growing. When the controls in breast cells are not working properly, they divide continually and a lump or tumor is formed.

Most women will have some lumpiness in their breasts. It is important to know that most breast lumps are benign, meaning not cancer. Many resources indicate 8 of 10 lumps are benign. Even though most lumps will not be cancer, if you find a lump in your breast, make an appointment with your doctor or nurse practitioner to have it checked.

WHO GETS BREAST CANCER?

Breast cancer is not common in young women. Canadian Cancer Statistics, 2010 indicates 85 new cases of breast cancer will be found in women 20-29 years of age across Canada in 2010.

Approximately 23,200 women will be diagnosed with breast cancer in 2010 across Canada. Canadian Breast Cancer Foundation National Statistics, 2010 indicates incidence by age group:

- 20% will occur in women under age 50
- 51% will occur in women ages 50-69 years
- 29% will occur in women age 70 and over

As you can see, breast cancer is most common in women over 50 years of age. Because of this, routine breast screening begins at age 50. Routine screening includes a mammogram every 2 years or as recommended. A clinical breast exam should be performed by a woman's doctor every year starting at age 20.

BREAST CANCER RISK FACTORS

Research has not identified the cause of breast cancer. Studies, however, have identified some common risk factors.

A risk factor does not mean you will get the disease but is something that may raise your chances of getting a disease. There are some risk factors you cannot change but others like lifestyle choices you may be able to change.

The two highest or most common risk factors are things you cannot change:

- **gender** (1 of every 100 breast cancers occur in men, 99 % occur in women)
- **age** (most common after age 50)



Other factors are:

- a family history of breast cancer
- reproductive factors
 - starting your menstrual cycles early (before 12 years old)
 - never having a child
 - having late menopause (after 55 years of age)
- high doses of radiation as a child (for example: treatment for Hodgkin's disease)
- a previous breast biopsy which showed atypical cells or lobular carcinoma-in-situ
- ethnic origin (for example: Ashkenazi-Jewish ancestry)

Lifestyle choices:

- lack of exercise
- alcohol intake of more than 1 drink a day
- cigarette smoking
- excessive weight gain

BREAST CANCER SIGNS AND SYMPTOMS

Changes in the breast tissue may be the first indication of a problem in the breast. Your doctor will examine your breasts at your regular check up and women over 50 years of age are recommended to have a mammogram (breast x-ray) every two years. Mammograms are not routine in women under this age but may be recommended for evaluating a lump in the breast. For very young women the preferred test may be an ultrasound because their breasts are more dense and therefore more difficult to assess.

Changes to look for:

- a lump in the breast
- a change in the size, shape or color of your breast (most women have one breast larger than the other)
- a change in the way your nipple looks (it may be normal for your nipple to be flat or pulled in/inverted)
- an eczema type rash on the nipple (this may be normal if you have eczema on other areas of your body)
- any discharge from the nipple that is spontaneous, new or bloody (a milky or creamy discharge is normal for many women)
- puckering or dimpling of the skin
- skin that looks like "orange peel" or feels very thick

BREAST CANCER TREATMENT

Treatment for breast cancer is often a combination of treatments. They may include surgery, chemotherapy, radiation and hormone therapy.

Surgery

- lumpectomy removes the area of concern and some normal tissue around it
- removing the complete breast is called a mastectomy (most women with breast cancer will not need the breast removed)
- lymph nodes from under the arm may be removed with either a lumpectomy or mastectomy

Chemotherapy

- referred to as systemic treatment because it affects the whole body
- is the use of a combination of intravenous drugs which affect breast cancer cells

Radiation

- referred to as local treatment because it affects only the area being treated with radiation
- is standard treatment after a lumpectomy to reduce the chance of the breast cancer coming back in the same breast
- is sometimes needed after a mastectomy

Hormone Treatment

- treatment is in the form of a pill which is taken for a minimum of 5 years
- may be recommended for women who have a breast cancer that is sensitive to hormones
- growth of many breast cancers can be blocked by taking hormone therapy

HEREDITARY BREAST CANCER

Breast cancer is the most common cancer diagnosed in Canadian women. Daughters and sisters of these women often ask if they are at high risk of the same disease. They wonder if their family has a genetic or inherited form of breast cancer that may be passed down from one generation to another.

Hereditary breast cancer may be suspected when:

- several close family members (mother, daughter, sister, aunt, grandmother) have been diagnosed with breast or ovarian cancer
- a number of generations are involved
- family members have been diagnosed at a young age (pre-menopause)
- both breasts have been involved
- a male relative has been diagnosed

Breast cancer that is passed down through a gene from one family member to another is not common. It happens in 5-10% of all new breast cancers. This number surprises women. Most women believe it is much higher than this.

Two genes have been identified that increase the risk of breast cancer. They are the BRCA1 and BRCA2 genes. Having one of these genes does not mean you will develop breast cancer. However, it does increase your risk of developing it at some point in your life. Not having one of these genes on the other hand does not mean you would never be diagnosed with breast cancer. It means that your risk is the same risk as the general population.

Some families have more cancer than others, just like some families have a higher incidence of heart problems or osteoporosis. Talk to your family and learn about your medical history. Then talk to your doctor and share information around your family's medical history. Women who do have a family with a high risk for breast cancer should discuss with their doctors what their routine breast health care should involve.

BREAST CANCER QUIZ ANSWER KEY

1. Only women get breast cancer.

False. 1 out of 100 (1%) breast cancers occur in men.

2. A family history of breast cancer is the main risk factor for getting breast cancer.

False. Breast cancer in the family does not mean you will get breast cancer but it may put you in a higher risk category. Only 5-10% of all new breast cancers are passed down through a gene from one family member to another. Hereditary breast cancer may be suspected when: several close family members have been diagnosed with breast or ovarian cancer, a number of generations are involved, when it is diagnosed in younger women (under 50), and when it is in both breasts or in a male relative. The main risk factor for breast cancer is being a woman.

3. Learning about the breast and normal changes that can occur is one way you can take some control of your breast health care.

True. Knowing what the anatomy and normal changes of the breast are is helpful in understanding the makeup of the breast. Because many breast lumps are found by a woman or her partner, awareness of the signs and symptoms of breast cancer will alert you to changes that your doctor should be aware of.

4. It is extremely rare for a young woman in her teens or early twenties to develop breast cancer.

True. All women are at risk for breast cancer but a young woman's risk is very small. Across Canada, 75 women between 20-29 years will be diagnosed this year.

5. Being physically active early in life may reduce the risk of developing breast cancer.

True. There is clear evidence that women who do regular exercise have a reduced risk of breast cancer. The evidence that physical activity during adolescence affects the risk of breast cancer is not consistent. Further study around this age group is needed.

6. Breast cancer is most common in women 50 years and older.

True. In 2010, 51% of all new breast cancers occurred in women between the ages of 50 and 69.

7. All breast lumps are breast cancer.

False. In fact, 80 % of all breast lumps are not breast cancer. Breasts generally feel lumpy because they are made of ducts, lobes and fatty tissue. Individual lumps are often fluid filled cysts or sacs. These may come and go or a doctor may sometimes use a needle to remove the fluid. All lumps should be assessed by a doctor.

8. A mammogram is not 100% accurate in detection of breast cancer.

True. It is a useful diagnostic tool but it is not 100% accurate. Certain types of breast cancers do not show up well on a mammogram.

9. Having a risk factor for breast cancer means you will get breast cancer.

False. A risk factor is something that may increase your risk of getting a disease but is not a direct cause. For example, being a woman is a risk factor but not all women develop breast cancer.

10. Breast cancer is the most common cancer diagnosed in Canadian women.

True. It accounts for more than 30% of all new cancers diagnosed in women.

BREAST CANCER

be "P.I.N.K." to reduce your risk

P ractice what you know

- eat healthy ·
- be active ·
- don't smoke ·
- one drink/day or less ·

I nvestigate the information

- know fact from fiction ·

N know what's **normal**

- for your body and breasts ·

K nowledge is power



Name: _____

STUDENT BREAST CANCER QUIZ

1. Only women get breast cancer.

True or False

2. A family history of breast cancer is the main risk factor for getting breast cancer.

True or False

3. Learning about the breast and normal changes that can occur is one way you can take some control of your breast health care.

True or False

4. It is extremely rare for a young woman in her teens or early twenties to develop breast cancer.

True or False

5. Being physically active early in life may reduce the risk of developing breast cancer.

True or False

6. Breast cancer is most common in women 50 years and older.

True or False

7. All breast lumps are breast cancer.

True or False

8. A mammogram is not 100% accurate in detection of breast cancer.

True or False

9. Having a risk factor for breast cancer means you will get breast cancer.

True or False

10. Breast cancer is the most common cancer diagnosed in Canadian women.

True or False

Chapter 1

It's Your Body

(20 minutes)

Teacher tips:

Popular topics of interest

Students will often ask questions about oral contraceptives, abortion, breast feeding, pesticide exposure and their relationship to breast cancer risk.

In order to answer these questions with evidence based information, please read "Breast Cancer Risk Factors" (RM-5) in Lesson 2 available at:
www.cancercare.mb.ca/bepink

Objective

This activity will allow students to:

- identify risk factors for breast cancer
- identify the difference between risk factors you can change and risk factors you cannot control
- identify healthy lifestyle behaviors that can help reduce their risk of breast cancer

Teacher Materials

- Class Brainstorm Teaching Guide (RM-7)

* Note: If you are teaching girls only, Lesson 3 of the Be PINK Adolescent Breast Health Resource offers **girl specific activities** that complement Chapter 1 of this DVD. These are available at www.cancercare.mb.ca/bepink in Lesson 3.

Lesson 3: Power Point Presentation	
Breast Anatomy Diagram	BLM-11, BLM-12
Breast Anatomy Worksheet	RM-14, BLM-18
Breast Familiarity Worksheet	RM-15, BLM-19
Bra Basics (bra fitting activity)	BLM-16
Breast Changes Tic Tac Toe Activity	RM-13, BLM-17

Activity

1. Show the first chapter of the DVD: It's Your Body. (8 minutes)
2. Using the Class Brainstorm Teaching Guide, initiate a class discussion about the complexity of breast cancer. Your discussion should emphasize the "act on what you already know": eat well, be active, avoid smoking and alcohol.
3. Address these questions:
 - a) What are risk factors?
 - b) What are risk factors we cannot control?
 - c) What are some lifestyle factors that might prevent breast cancer?

CLASS BRAINSTORM TEACHING GUIDE

When delivering the class brainstorm to students, be sure to mention the complex nature of cancer and breast cancer. Convey to students that there are a lot of things we do know about factors that might increase one's risk for breast cancer. As well, that there are also a lot of things we do not know about breast cancer and what may cause it. It is important to suggest to adolescents that although we may live a healthy lifestyle and do everything "right," there is no guarantee we won't ever get breast cancer. We do, however, know of some things that adolescents can do now and throughout their lifetime that will help reduce their chances of developing breast cancer. This discussion should emphasize to "*act on what you already know*"; **eat well, be physically active, avoid exposure to tobacco smoke and if they consume alcohol, to drink less than one alcoholic beverage per day.**

a) What are risk factors?

A risk factor is anything that *increases your chance* of getting a disease; it is not the same as the cause.

b) What are some risk factors we cannot control?

The two main risk factors for breast cancer are *being a woman* and *growing older*.

Other factors are:

- a family history of breast cancer (refer to genetic information)
- reproductive factors
 - starting your menstrual cycles early (before 12 years old)
 - never having a child
 - having late menopause (after 55 years of age)
- high doses of radiation as a child (for example: treatment for Hodgkin's disease)
- a previous breast biopsy which showed atypical cells or lobular carcinoma-in-situ
- ethnic origin (for example: Ashkenazi-Jewish ancestry)

c) What are some lifestyle factors that might prevent breast cancer/cancer?

Lifestyle factors related to breast cancer such as physical activity, healthy eating, tobacco and alcohol use are also known as "modifiable" risk factors that you can do something about.

Adolescents who are *physically active, maintain healthy eating habits* and who *avoid alcohol and tobacco smoke* may be able to influence some of their long-term individual risks for breast cancer.

Healthy Eating: Good nutrition practices at an early age lead to choosing healthy foods throughout our lifetime. Eating healthily along with being physically active will reduce the risk of breast cancer by leading to better weight management. (*Note: Because of the prevalence of eating disorders among adolescent females, weight should not be discussed directly*). In addition, a healthy diet provides the body with many cancer fighting nutrients and substances which are primarily found in plant foods. Toxins that may lead to cancer are found and removed from the body before they can cause cell damage. Some of these same cancer fighting nutrients and substances also promote cell repair and stop cancer cells from replicating. The AICR believes that how we eat and how we live has the ability to stop the cancer process even if it has started. Choosing a variety of foods as outlined in Canada's Food Guide forms the basis of a healthy way of eating. Within this framework, adolescents should be encouraged to eat a varied diet high in a variety of vegetables, fruits, whole grains, dried peas, beans and lentils (e.g. hummus, chili, refried beans, dahl, curried chickpeas).

Physical Activity: Being physically active may reduce the risk of developing breast cancer. This is thought to occur because physical activity reduces body fat, affects hormone metabolism, possibly strengthens immune system and may reduce estrogen and androgen levels. It is not yet clear whether being physically active as an adolescent directly influences this but it does indirectly. This is because if a person is physically active earlier in their life it will lead to a more active lifestyle as an adult. In turn, this may lead to better life long weight management which will help reduce the risk of developing breast cancer. Students should be encouraged to get 60 minutes or more (cumulative) of moderate to vigorous physical activity daily. These activities should be varied, enjoyable and fit easily into the student's lifestyle.

Alcohol: Alcohol has been consistently linked with an increased risk of breast cancer at any age. Any amount of any kind of alcohol increases the risk of developing breast cancer. It is recommended that adolescents abstain from consuming alcohol. If a person chooses to drink, females should consume no more than one alcoholic beverage per day, and males should consume no more than two alcoholic beverages per day. Alcohol increases the level of estrogen and high levels of estrogen are strongly associated with the development of breast cancer.

Tobacco Use: The relationship between cigarette smoke and breast cancer risk has been the topic of many studies over the years. Studies on breast development have shown that the immature breast cells before a first pregnancy may be especially vulnerable to the carcinogenic effects of cigarette smoke. In April 2009 an international panel organized by the Ontario Tobacco Research Unit (University of Toronto) announced there was sufficient scientific evidence to link both active smoking and second-hand smoke to breast cancer. All available research was reviewed and the panel concluded that young women are at increased risk of breast cancer through passive exposure to cigarette smoke and that active smoking increases the risk of both pre and post-menopausal breast cancer. They concluded more study was required to determine the relationship between exposure to second-hand smoke and post-menopausal breast cancer. Since this report more studies have supported their findings. Based on our current knowledge it is reasonable to encourage adolescents to avoid smoking cigarettes and their exposure to second hand smoke as a means to reduce their risk of developing breast cancer.

Chapter 2 (15 minutes)

Facts and Myths

Objective

This activity will allow students to:

- understand that health research is always evolving
- identify breast cancer resources in the community
- understand strategies to keep oneself informed and up-to-date with new information

Teacher Materials

- Fact, Myth or Gray Area Answer Key (RM-3)

** Review the background information provided in the Breast Cancer Teacher Reference (RM-1) in Chapter 1.

Student Materials

- Fact, Myth or Gray Area Worksheet (BLM-3)
- Student Website Resource List (BLM-5)

Activity

1. Show the second chapter of the DVD: Facts and Myths. (2 minutes)
2. Ask students to explain the differences between a fact, myth and gray area using the introductory paragraph in the Fact, Myth or Gray Area Teacher Reference (RM-3) as a guide.
3. Handout copies of the Fact, Myth or Gray Area Worksheet (BLM-3).
4. Ask the students to complete the worksheet in groups or individually.
5. Once complete, discuss student answers by sharing why they chose the category (fact, myth or gray area) for each statement.
6. Handout copies of the Student Website Resource List (BLM-5).

Teacher tips:

Optional Activity:

Initiate a short discussion about how to investigate website information. Use the Investigate the Information Teacher Reference (RM-6) to facilitate this discussion. You will find (RM-6) in Lesson 2 available at: www.cancercare.mb.ca/bepink

FACT, MYTH OR GRAY AREA ANSWER KEY

FACT Examples: Information Established in Science and Research

MYTH Examples: Information or a Belief that is Not Based on Evidence

GRAY AREA Examples: Suspected Factors for Further Research

	Fact	Myth	Gray Area
1. Giving birth after age 30, or not giving birth, are risk factors associated with breast cancer. (This is due to an increase in lifetime exposure to a woman's own estrogen.)	✓		
2. Stress can cause breast cancer. (Stress may attribute to how and when cancer occurs and how people recover. People have an interest in this area; researchers are studying how stress may relate to cancer.)			✓
3. Sleeping with a bra or wearing an under-wire bra can increase risk for breast cancer. (Some people think the problem is the under-wire bra restricts circulation, or the exposure to the metal in the under wire.)		✓	
4. Breast cancer does not occur in young women. (It can affect women ages 20-30 years but it is much less common.)		✓	
5. Some types of breast changes (abnormal growths in breast tissue) can be pre-cancerous.	✓		
6. Bumping or bruising of the breasts (i.e. accidents, sports injuries) can lead to breast cancer.		✓	
7. Breast implants increase breast cancer risk. (It may be harder to detect with implants.)		✓	
8. Abortion or terminating a pregnancy can increase the risk for breast cancer. (Some internet sites carry this message, this topic has been studied and no evidence has been found to link the two.)		✓	
9. Breastfeeding protects the mother against breast cancer at all ages.	✓		
10. Underarm deodorant (antiperspirant) causes breast cancer. (The concern is with antiperspirant chemicals being absorbed near the breast area. There is not enough evidence to support this.)		✓	
11. It's not possible for men to develop breast cancer. (It is extremely rare but nearly 1% of all breast cancer cases do affect men.)		✓	
12. There are other factors related to breast cancer risk that we can control. (Exercise, alcohol use, eating habits, exposure to inhaled or second hand smoke are risk factors we can control).	✓		
13. Exposures in the environment can trigger genetic changes in cells that may progress to cancer.	✓		

	Fact	Myth	Gray Area
14. Healthy habits can make a difference to reduce or “modify” an individual’s cancer risk, and support good health overall.	✓		
15. If you had breast cancer as a young adult woman, you won’t be able to have children later. (Chemotherapy may affect fertility but there are medical options. Every person’s cancer is unique.)			✓
16. If your mother or sister had breast cancer, your risk is higher than the average woman. (Know your family history, get check-ups, review family history with your doctor or nurse. Breast cancer that is passed down through a gene from one family member to another is not common. It happens in only 5-10% of all new breast cancers.)	✓		
17. Certain chemicals may interfere with the body’s natural hormones that, in turn, can play a role in how breast cancer develops. (Some chemicals may disrupt hormone functions in cells. It is important to stay informed about chemical agents and breast cancer, minimize use or exposure when possible. Visit the websites listed on the Student Website Resource List BLM-5 for more information.)			✓
18. Breast cancer risk increases as women get older, especially after age 50. (Most breast cancer incidences are related to aging and hormones present in a woman’s body.)	✓		
19. Genetic (inherited) traits account for a small percentage of breast cancers (5 – 10%). (Genetic factors elevate risk. There are medical interventions to reduce this risk.)	✓		
20. Some of the suspected cancer causing chemicals are present in pesticides, solvents, flame-retardants, and plastics. (Scientists are studying how these chemicals affect genes to decide which pose the greatest threat.)			✓
21. Early detection helps to catch breast cancer early, this helps to improve survival rates. (Most women start to get regular clinical breast exams at age 20 and mammograms at age 50.)	✓		
22. Ionizing radiation (high doses to the chest area, earlier in life) is a known cause for breast cancer. (Exposures at this level are rare. It is not the same as the sun’s ultraviolet radiation.)	✓		
23. Some teen girls may be more susceptible to exposures that may cause changes in breast cells during puberty. (Puberty is a stage when girls may be more susceptible to factors in their environment because the breast cells are growing rapidly and specializing for future reproduction and breastfeeding.)			✓
24. Early age of first menstrual period, and later age for menopause increases lifetime exposure to a woman’s own estrogen which can lead to breast cancer. (These are breast cancer risk factors that we cannot control.)	✓		
25. Cell phones can increase risk of breast cancer. (There is not enough evidence to support this.)		✓	
Body piercing causes cancer. (There is not enough evidence to support this.)		✓	

FACT, MYTH OR GRAY AREA WORKSHEET

FACT Examples: Information Established in Science and Research

MYTH Examples: Information or a Belief that is Not Based on Evidence

GRAY AREA Examples: Suspected Factors for Further Research

	Fact	Myth	Gray Area
1. Giving birth after age 30, or not giving birth, are risk factors associated with breast cancer.			
2. Stress can cause breast cancer.			
3. Sleeping with a bra or wearing an under-wire bra can increase risk for breast cancer.			
4. Breast cancer does not occur in young women.			
5. Some types of breast changes (abnormal growths in breast tissue) can be pre-cancerous.			
6. Bumping or bruising of the breasts (i.e. accidents, sports injuries) can lead to breast cancer.			
7. Breast implants increase breast cancer risk.			
8. Abortion, or terminating a pregnancy can increase the risk for breast cancer.			
9. Breastfeeding protects the mother against breast cancer at all ages.			
10. Underarm deodorant (antiperspirant) causes breast cancer.			
11. It's not possible for men to develop breast cancer.			
12. There are other factors related to breast cancer risk that we can control.			
13. Exposures in the environment can trigger genetic changes in cells that may progress to cancer.			
14. Healthy habits can make a difference to reduce or "modify" an individual's cancer risk, and support good health overall.			
15. If you had breast cancer as a young adult woman, you won't be able to have children later.			
16. If your mother or sister had breast cancer, your risk is higher than the average woman.			
17. Certain chemicals may interfere with the body's natural hormones that, in turn, can play a role in how breast cancer develops.			

	Fact	Myth	Gray Area
18. Breast cancer risk increases as women get older, especially after age 50.			
19. Genetic (inherited) traits account for a small percentage of breast cancers (5 – 10%).			
20. Some of the suspected chemicals are present in pesticides, solvents, flame-retardants, and plastics. Scientists are studying how these chemicals affect genes to decide which pose the greatest threat.			
21. Early detection helps to catch breast cancer early - this helps to improve survival rates (most women start to get regular clinical breast exams at age 20 and mammograms at age 50).			
22. Ionizing radiation (high doses to the chest area, earlier in life) is a known cause for breast cancer.			
23. Some teen girls may be more susceptible to exposures that may cause changes in breast cells during puberty.			
24. Early age of first menstrual period, and later age for menopause increases lifetime exposure to a woman's own estrogen which can lead to breast cancer.			

STUDENT WEBSITE RESOURCE LIST

CancerCare Manitoba (CCMB) : www.cancercare.mb.ca
Canadian Cancer Society : www.cancer.ca
National Cancer Institute of Canada : www.ncic.cancer.ca
Canadian Breast Cancer Foundation – Prairies/Northwest Chapter : www.cbcf.org
Health Canada/Santé Canada : www.hc-sc.gc.ca

BREAST HEALTH LINKS:

Manitoba Breast Health Services Pamphlet

♀♂ • http://www.cancercare.mb.ca/MBSP/pdfs/FS_breast_health_svces_e_0905.pdf

The Society of Obstetricians and Gynaecologists of Canada - Breast Pain Fact Sheet

♀ • http://www.sogc.org/health/pdf/breast-pain3_e.pdf

Rethink Breast Cancer -Touch. Look. Check.

♀ • <http://rethinkbreastcancer.com/breast-cancer/early-detection/touch-look-check/>

Teens Health - Finding the Right Bra ♀ • http://teenshealth.org/teen/your_body/take_care/bra.html

GENERAL HEALTH:

Pause to Play - Has information geared for teens about getting active, eating right, and getting and staying healthy. ♀♂ • <http://notgonnakillyou.ca>

Healthy Measures - Provides key messages for females on how to improve their health. Structured around healthy eating, physical activity and self-esteem. ♀ • http://www.healthymeasures.ca/HM_Eng_Home.html

NUTRITION:

Dietitians of Canada - Provides reliable information about eating healthy. ♀♂ • <http://dietitians.ca/>

Vegetarian Eating for teens and adults – A handout that will help you to plan a balanced vegetarian diet.

♀♂ • <http://www.hamiltonhealthsciences.ca/documents/Patient%20Education/VegetarianEating-trh.pdf>

Pulse Canada - Provides information and recipes about legumes. ♀♂ • www.pulsecanada.com

PHYSICAL ACTIVITY:

Manitoba In Motion - ♀♂ • <http://www.manitobainmotion.ca>

Canadian Association for the Advancement of Women and Sport and Physical Activity

♀ • <http://caaws.ca/>

TOBACCO:

Quit For Life – A Health Canada site designed for teens that provides an interactive and personalized four week web program to help you quit smoking for life. ♀♂ • www.quit4life.ca

Kick Butts Day - Provides anti-smoking activities to plan. ♀♂ • www.kickbuttsday.org

Manitoba Tobacco Reduction Alliance - Facts on smoking. ♀♂ • <http://www.mantrains.ca/>



Manitoba Healthy Living - Tobacco Reduction - Facts on smoking and lists websites for youth.
 ♀♂ • <http://gov.mb.ca/healthyliving/smoking.html>

ENVIRONMENT:

David Suzuki Foundation - Dirty Dozen cosmetic chemicals to avoid.
 ♀♂ • <http://www.davidsuzuki.org/issues/health/science/toxics/dirty-dozen-cosmetic-chemicals/>

What's Inside – A shoppers guide which lists harmful ingredients to avoid.
 ♀♂ • <http://www.davidsuzuki.org/publications/downloads/2010/whats-inside-shoppers-guide.pdf>

Environmental Health Association of Nova Scotia – A guide to less toxic products.
 ♀♂ • <http://www.lesstoxic.guide.ca>

ABORIGINAL HEALTH LINKS:

National Aboriginal Health Organization - ♀♂ • <http://www.naho.ca>
Northern Links - ♀♂ • <http://www.northernlinks.org/>
Quesnel Tillicum Society - ♀♂ • <http://www.quesnel-friendship.org/html/diabetes/healthy.htm>

MYTHBUSTING:

Canadian Cancer Society - Cancer Myths
 ♀♂ • http://www.cancer.ca/ccs/internet/standard/0,3182,3172_369401_langId-en,00.html

American Cancer Society - Breast Cancer Facts & Figures
 ♀♂ • <http://www.cancer.org/acs/groups/content/@nho/documents/document/f861009final90809pdf.pdf>

Quackwatch - Your Guide to Quackery, Health Fraud, and Intelligent Decisions
 ♀♂ • <http://www.quackwatch.org/>

Stats at George Mason University - Checking out the facts and figures behind the news
 ♀♂ • <http://stats.org/>

ANALYZING AND INTERPRETING INFORMATION ON THE INTERNET:

Canadian Health Network - Search tips for trustworthy Canadian health information on the Internet:
 ♀♂ • <http://www.phac-aspc.gc.ca/searchtips-aiderecherche-eng.php>

University of California Berkeley Library - Finding Information on the Internet: A Tutorial
 ♀♂ • <http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/Evaluate.html>

Media Awareness Network - Deconstructing Web Pages
 ♀♂ • http://www.media-awareness.ca/english/resources/special_initiatives/wa_resources/wa_shared/tipsheets/deconstructing_webpages.cfm

Authenticating Online Information
 ♀♂ • http://www.media-awareness.ca/english/teachers/wa_teachers/fact_or_folly_teachers/index.cfm

ANALYZING AND INTERPRETING NUTRITION INFORMATION:

International Food Information Council - Beyond The Headlines: What Consumers Need to Know About Nutrition News ♀♂ • <http://ific.org/foodinsight/2001/nd/nutrnewsfi601.cfm>

Nutriwatch - Your Guide to Sensible Nutrition ♀♂ • <http://www.nutriwatch.org/>

Chapter 3

Healthy Living

(20 minutes)

Teacher tips:

Who gets breast cancer?

It is important to suggest to adolescents that although we may live a healthy lifestyle and do everything “right” there is no guarantee we won’t ever get breast cancer. We do, however, know of some things that teens can do now and throughout their lifetime that will help reduce their chances of developing breast cancer.

Objective

This activity will allow students to:

- apply their new knowledge about breast cancer risk factors
- identify strategies to adopt healthy lifestyle behaviors

Teacher Materials

- Breast Cancer Risk Factor Case Studies Answer Key (RM-8)

Student Materials

- Breast Cancer Risk Factor Case Studies Worksheet (BLM-6)

Activity

1. Show the third chapter of the DVD: Healthy Living. (7 minutes)
2. Discuss examples of characteristics that can reduce or increase their risk of breast cancer with the students. List these for student use.
3. Handout copies of the Breast Cancer Risk Factor Case Studies Worksheet (BLM-6). ****Note: you will need 3 copies per group.**
4. As an example, complete the Breast Cancer Risk Chart for Abby’s profile as a class.
5. Working in groups, assign students the remaining three profiles.
6. When completed, each group will share their findings. Using the Breast Cancer Risk Factor Case Studies Answer Key (RM-8), begin by discussing each case study and end with a class discussion using the discussion questions in the answer key as your guide.
7. Ask students to complete the Wrap-Up Survey. Please take some time to complete the Teacher Evaluation form. Submit all forms to:

Be PINK
Breast Cancer Centre of Hope,
Rm 125, 691 Wolseley Ave.
Winnipeg, MB, R2G 1C3.



BREAST CANCER RISK FACTORS CASE STUDIES ANSWER KEY

Explain to the class that each case study represents a risk profile. The case studies include characteristics that may increase an individual's risk for breast cancer and characteristics that may reduce their risk for breast cancer. Working in groups, students are given the Breast Cancer Risk Chart (BLM-6):

- a) In the characteristics column, identify all the characteristics in each case study that may reduce or increase their risk for breast cancer.
- b) In the second and third columns, using a check mark, identify if each characteristic may increase or reduce their risk for breast cancer.
- c) In the risk reduction action column, recommend potential risk reduction behaviors.

Note: It is not necessary for the group to come to a consensus, simply encourage students to list a variety of risk reduction activities.

Each group should appoint a recorder (to record characteristics and risk reduction actions) and a presenter (to report back to the class) for their group. Allow time for each group to complete the exercise and then have each presenter report back to class about their profile. At the end, initiate a discussion about all four profiles.

Discussion questions:

1. Which profile showed an individual with a family history of breast cancer?

Answer: Erin and Abby

a) Which risk factors in their profile are controllable?

Erin:

- Lifestyle factors (eating habits, exercise, second-hand smoke exposure),
- talking to her doctor about her family history
- being informed about breast cancer
- getting regular (every 1-2 years) mammograms (one instance of breast cancer does not increase her risk by a large amount, therefore every two years may still be appropriate)
- being familiar with what is normal for her breasts

Abby:

- lifestyle factors (eating habits, exercise, not smoking or drinking alcohol),
- informing doctor about their family medical history
- becoming familiar with what is normal for her breasts

2. Which profile showed an individual who had a *lifestyle* that suggested a potential increased risk for breast cancer?

Answer: Jenny and Brent

a) What are the *lifestyle* risks?

Jenny: eating habits, alcohol intake, cigarette smoking.

Brent: sedentary/inactive, eating habits.

b) What factors are controllable?

Jenny: eating habits, alcohol intake, cigarette smoking.

Brent: inactivity, eating habits.

c) What barriers might Jenny and Brent encounter as a result of trying to change their lifestyle to reduce their risk?

Jenny: Lack of interest, lack of motivation, lack of support from her friends, sense of loss, withdrawal symptoms, lack of knowledge and resources.

Brent: Time, fatigue, lack of motivation, lack of knowledge and resources, perceived lack of options.

d) How could Jenny and Brent overcome these barriers?

Jenny:

Smoking: nicotine substitutes, obtain more knowledge about the many dangers of smoking, find reward substitute for not smoking, write a note to self about why you want and should quit smoking, write herself a contract, seek professional help (i.e. smoking cessation program, counseling) etc.

Alcohol Intake: Explore sober alternatives for socializing with friends, explore potential consequences of drinking heavily to increase motivation to reduce alcohol intake, find healthy rewarding substitute for drinking, etc.

Diet: Explore healthy food alternatives that she enjoys, etc.

Brent:

Find opportunities throughout the day he can be physically active (i.e. several 10 minute bouts of activity instead of having to find a whole hour), explore lifestyle activities (such as getting off the bus a couple of stops early or parking a couple of streets away) that he could partake in instead of

Teacher Reference: Abby

Characteristic	May Increase Risk	May Reduce Risk	Risk Reduction Action
Gender: woman	√		
Good diet		√	
Two close family members diagnosed with breast cancer	√		Abby should become familiar now with what is normal for her breasts and let her doctor know about her family's medical history of breast cancer.
Very physically active		√	

Teacher Reference: Erin

Characteristic	May Increase Risk	May Reduce Risk	Risk Reduction Action
Gender: woman	√		
Age: 56	√		
Has no children	√		
Follows Canada's food guide and eats lot of fruits and vegetables		√	
Physically Active		√	
Sibling diagnosed with breast cancer	√		Erin should ensure her doctor is aware of her sister's diagnosis and discuss routine (every 1-2 years) breast exam and mammograms.
Exposure to second hand smoke	√		Erin could ask her brother-in-law to smoke outside permanently or at least when she is visiting.

Teacher Reference: Jenny

Characteristic	May Increase Risk	May Reduce Risk	Risk Reduction Action
Gender: woman	√		
Diet (hamburgers and fries)	√		Jenny should choose healthier options on the menu or she could bring a healthy lunch/dinner to work.
Alcohol intake	√		Jenny should limit her alcohol intake to no more than 1 drink a day. She could also try to find activities she and her friends may enjoy other than going to the bar.
Cigarette smoking	√		Jenny should quit smoking.

Teacher Reference: Brent

Characteristic	May Increase Risk	May Reduce Risk	Risk Reduction Action
Gender: male		√	
Sedentary	√		Brent should explore ways to be active during his breaks at work. Explore active ways of commuting to work. Explore ways he can make physical activity a priority in his life. Explore activities that he enjoys and that fit into his busy lifestyle.
Diet	√		Brent should explore ways he could pack his own healthy meals for work and explore where he could find the time to prioritize his diet.



Name(s): _____

BREAST CANCER RISK FACTORS CASE STUDIES WORKSHEET

Breast Cancer Risk Chart

Characteristic	May Increase Risk	May Reduce Risk	Risk Reduction Action



Abby

Abby is a 19 year old triathlete who trains four to five times a week for two hours. She considers herself to be the “picture of health”; she eats very well, gets lots of exercise, doesn’t smoke cigarettes and rarely drinks alcohol. Five years ago, after her aunt was diagnosed with breast cancer, her mother was also diagnosed with breast cancer at age 51. Both survived and are thriving, currently cancer free.

Erin

Erin is a 56 year old woman with no children. She has worked as a zookeeper for over two decades and loves what she does for a living. Because of the nature of her job, she is quite active throughout the day and tries to get at least three or four brisk walks in throughout the week. Erin is also very concerned with what she eats. She tries to follow Canada’s Food Guide as much as possible, and is very conscious about eating at least 5 servings of fruits and vegetables a day. Both of her parents are still alive, with no major health conditions. She has five siblings; 3 sisters and 2 brothers. Recently one of her sisters (59 years of age) was diagnosed with breast cancer. As a result, Erin has been helping her sister out around the house while she is getting treatment. One thing that bothers Erin is that her brother-in-law smokes cigarettes in the house, therefore exposing her and her sister to second hand smoke on a daily basis.

Jenny

Jenny is a very social 28 year old waitress at a burger joint. She eats most of her meals (often hamburgers and fries) at work since she gets a discount. Jenny’s favorite thing to do is hang out with her friends. Jenny goes out to the bar with her friends most nights of the week. She tries to limit her alcohol intake to a couple of drinks a night most nights of the week, but she usually ends up having at least three drinks or more. Jenny has been smoking cigarettes for about 10 years now. One day she hopes to quit but for now she’s not worrying about it.

Brent

Brent is a 45 year old manager at a bank. His job requires him to sit at a desk for close to nine hours a day. Brent always thinks about exercising but finds himself exhausted at the end of the day. He tries to eat healthy, but finds himself so busy that often he ends up eating whatever is the most convenient.



STUDENT WRAP-UP SURVEY

Complete the following questions to identify how you can make a change in your life now and in the future to try and reduce the risk of breast cancer.

Name of school: _____ Grade: _____

1. The Be PINK DVD increased my knowledge about breast health.

Strongly Agree Agree Neutral Disagree Strongly Disagree

2. The three most important things I learned about risks and breast cancer are:

- _____
- _____
- _____

3. The video increased my awareness of lifestyle choices I can make to reduce my risk of developing breast cancer.

Strongly Agree Agree Neutral Disagree Strongly Disagree

4. I intend to make lifestyle changes now: Yes No

If "yes", what lifestyle change(s) will you make?

If "no", please explain why not:

5. I would recommend this DVD and lesson to my friends. Yes No

If "no", please explain why not:

6. One piece of information I will take from Be PINK would be:

and I will share it with (ie. mother, sister, friend, aunt) :



Date: _____

School: _____

TEACHER EVALUATION

1. Please describe your role:

Teacher Guidance Counselor Nurse Other: _____

2. Which grade level(s) was Be PINK delivered to?

Grade 9 Grade 10 Grade 11 Grade 12

3. Within which school subject was Be PINK used?

Physical Education Health Biology Other: _____

4. Was Be PINK presented to a co-ed group or all girls? co-ed all girls

5. Please specify the total number of teens reached: _____

6. Did you use the Be PINK DVD? yes no
 If yes, did you show the DVD: all at once by chapter

7. Did you use the Be PINK Teacher Toolkit? yes no
 If yes, please specify which activities were used:

8. Did you use the Be PINK lesson plans? yes no
 If yes, please specify which activities were used:

9. Please circle the number that corresponds best with your response to each statement.

	strongly agree	agree	neutral	disagree	strongly disagree
The instructions for delivery were easy to understand.	5	4	3	2	1
The background information and references provided were easy to understand.	5	4	3	2	1
The suggested allotted time required to deliver the lessons was about right.	5	4	3	2	1
I was comfortable delivering the lessons.	5	4	3	2	1



10. Now we would like to know your opinion regarding your student’s reaction to Be PINK.

	strongly agree	agree	neutral	disagree	strongly disagree
The learning activities were appropriate for the age(s) of the students.	5	4	3	2	1
Students appeared to be interested in the subject matter.	5	4	3	2	1
Students appeared to be engaged with the learning activities.	5	4	3	2	1

10. Please comment on any student reaction to the DVD and/or specific learning activities.

9. Please include any additional recommendations or comments regarding the use and delivery of any aspects of Be PINK:

CancerCare Manitoba thanks you for your cooperation in delivering Be PINK.

Thank you for choosing **Be PINK !**

We want to hear from you!

If you have any questions or a few moments to tell us what you think of this Toolkit, please contact:

Be PINK Project Manager
(204) 788-8421
1-888-660-4866
bepink@cancercare.mb.ca

CancerCare Manitoba, Breast Cancer Action Nova Scotia and The Pink Tulip Foundation collaborated on the development of the Be PINK DVD which is based on the materials found in the Be PINK Adolescent Breast Health Resource. This evidence based resource was created by CancerCare Manitoba in collaboration with the Winnipeg Regional Health Authority Breast Health Centre and supported by funds from the Canadian Breast Cancer Foundation, Prairies/NWT Chapter.