

# **Ontario Curriculum**

## **Health and Physical Education Grade 11 Health for Life (PPZ30)**

### **Breast/Testicular Cancer Awareness**

**June 2008**

**Updated November 2017**

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## **Breast/Testicular Cancer Awareness**

### **Description**

This lesson provides students with an awareness of breast/testicular cancer in teenagers/young adults. Students will gain knowledge of the disease(s) and factors to enhance their personal health choices. This lesson also helps students to understand current knowledge of cancer and environmental factors and risk reduction for breast and testicular cancer.

### **Strand: Determinants of Health**

#### **Overall Curriculum Expectations**

- analyze the role of individual responsibility in enhancing personal health
- analyze the social factors that influence personal health

#### **Specific Learning Expectations**

##### **Personal Factors**

- describe the heredity factors that influence personal health (e.g., a family history of an illness such as breast cancer)
- analyze how various lifestyle choices (e.g., decisions pertaining to nutrition, physical activity, and smoking) affect health
- implement a personal plan for healthy living

### **Strand: Community Health**

#### **Overall Curriculum Expectations**

- analyze the value of health information and health promoting products and services
- analyze how the environment influences the health of the community
- demonstrate an understanding of the concepts and approaches related to health promotion and disease prevention

#### **Specific Learning Expectations**

##### **Health and Environmental Factors**

- describe the specific health problems (e.g., cancer) on personal health and the health of others

##### **Health Promotion**

- describe how to reduce the risks and/or delay the onset of chronic diseases (e.g., cancer)

### **Materials and Preparation**

- access or copy samples of informative print materials and awareness advertisements etc. (e.g., Team Shan (breast cancer awareness for young women) resources [www.teamshan.ca](http://www.teamshan.ca), and Testicular Cancer Canada (TCC) *Check 'em* resources [www.testicularcancer.ngo](http://www.testicularcancer.ngo) )
- arrange for possible guest speaker to provide personal stories (e.g., survivors/family members who have lost someone to breast/testicular cancer)
- invite and arrange possible guest speaker to present facts, symptoms, risk factors and self help messages (e.g., Team Shan member, public health nurse)
- arrange library time and book computer access for research
- book A/V equipment for CDs and possible needs for guest speaker

- view Notes for Teacher (background information)

## **Resources**

### *Breast Cancer*

- Team Shan awareness materials (e.g., brochure, shower card, poster, bookmark, radio ads etc. available in English and French) and information on breast cancer in young women ([www.teamshan.ca](http://www.teamshan.ca)). Links available for breast cancer, cancer in teenagers and young adults and breast awareness/self checks. Use “contact us” feature for possible guest speaker

### *Testicular Cancer*

- Testicular Cancer Canada materials (e.g., brochure, poster, shower card available in English and French) and testicular cancer website ([www.testicularcancer.ngo](http://www.testicularcancer.ngo)). Use “contact us” feature for possible guest speaker

### *Both*

- High School Resources (attached)
- sample Personal Plan Rubric (attached)
- sample Presentation Rubric (attached)
- sample Peer Assessment (attached)

## **Assessment Opportunities**

- students create a breast/testicular cancer text based on their research
- students create drafts of their work to be teacher edited
- students use their oral communication skills to present their text to the class
- students engage in peer assessment
- students prepare a personal breast/testicular health plan

## **Suggestions for Assessing Expectations**

- observation during class discussion and work periods
- teacher evaluation of student draft work
- evaluation of final text product/oral presentation
- evaluation of Personal Plan
- peer and/or group assessments

## **Teaching/Learning Strategies**

### ***Lesson 1***

1. List as many of the different types of cancer as a class, writing them down on the board. Add any forms of cancer that have not been mentioned by the class. Have a brief discussion on what the class knows about some of these forms of cancer. The class might be surprised at just how many types of cancers they have heard of and yet how little they actually know about these diseases that can affect people.
2. Ask the class how various organizations like the Canadian Cancer Society, Team Shan and the Canadian Testicular Cancer Association try to provide us with information. What are the different resources/strategies that they might use?
3. An invited guest may present information on breast/testicular cancer facts, risk factors, symptoms and self help. Awareness materials may also be shared with the class.
4. View/play the class some of the sample resources (CD of radio spots, brochures, posters, bookmarks, model and other awareness materials) collected on breast/testicular cancer. Explain that, in addition to the guest speaker (if arranged), these samples are some of the most common methods of providing information to the public on cancer. Remind class of interactive media including websites for breast/testicular cancer.
5. Explain to the class that there will be two assignments evaluated. One will be a written Personal Plan as an individual assignment. The second will be a group assignment. Student groups will create a breast/testicular cancer product, much like the samples they have seen, to raise awareness. They will complete this project in groups of 3-4. The teacher may either have pre-selected the groups or will allow the students a few moments to select their own group members. The teacher may also choose to let the students assign themselves to a breast/testicular cancer topic or to perform a lottery where the groups will select one that has been written on a piece of paper from a hat/bowl. Record the group selections.
6. Create a thought cluster on the board of some of the types of information they might want to research. They should include five of the following: definition, statistics, risk factors, hereditary indicators, environmental causes, detection, symptoms, treatments, self help activities, resources such as websites and support groups, etc.
7. Model the thought process that may go in to the creation of a few different types of media texts, discussing the conventions for each media type. For example, if creating a radio or television commercial, the teacher might want to think aloud or ask the class about some of the different factors that would go into creating an effective commercial. What kind of images or sounds would I want to include? How long should it be? What kind of information would be most effective when using this medium? The teacher may want to use this opportunity to show a pre-existing sample and break it down as a class, analyzing each of the components.

### ***Lessons 2-4***

1. Review the assignment with the class, explaining that in their groups they must research their topic and create a project that will raise awareness amongst their peers. Inform the class that they may choose how they want to present their information. They may choose to create a pamphlet, a poster, a newspaper or magazine ad, a radio or television commercial, etc. Encourage the students to be creative in their presentations, reminding them that the purpose behind the assignment is to get people thinking about their topic in order to help them be able to prevent or detect such diseases at an early stage.

2. Allow research time for the assignment, providing access to the library or computer labs. By the end of class 4 the students should hand in a draft of their project (e.g., a script for a radio or television ad or an outline of a brochure, poster, magazine or newspaper ad), in addition to their research notes and sources. Make sure to take note of what equipment will need to be reserved. Teacher may want to spend the first part of class 2 reviewing how to properly document sources and tips on how to take research notes. Refer to “*On Your Own*” document.

### ***Lessons 5-6***

1. Return student drafts and provide students with some in-class time to make necessary corrections and put together their assignment.

### ***Lesson 7***

1. Student presentations, with time for peer reflection. Distribute peer evaluation form.
2. After the class presentations, engage students in a discussion about what they found most interesting about this assignment.
3. Review final class assignment. Students will be asked to write their Personal Plan, i.e., journal entry on self help measures for maintaining a healthy lifestyle. The Personal Plan should include activities to increase their opportunity for early detection of breast/testicular cancer.

Guideline questions: What can I do today to reduce my risk of breast/testicular cancer? What lifestyle changes should I make today or in the future? What can I continue to do?

### ***Closure***

Coordinate one week of cancer awareness in the school, where students may set up a display of their informational texts/projects. Make copies of brochures or advertisements, have a television displaying any recorded commercials and an area for people to listen to any radio ads. Encourage students to become involved in community activities that help raise cancer awareness.

***Additional Assignment/Options***

1. Make a breast/testicular cancer awareness display or oral/video announcement script.
2. Make a shower card as a breast/testicular awareness reminder.
3. Chart the path and growth of a cancerous cell for breast /testicular cancer in a creative manner. Ideas include a sketch, comic strip, slide show, model etc.
4. Create an informational chart of breast/testicular cancer. Include facts, risk factors, symptoms and self help. Chart could also include environmental issues related to cancer.
5. Write a monologue, poem, or other creative writing activity about a time when you or someone you know has turned a potentially negative event into something positive.
6. Write a journal response about someone you know who has been impacted by cancer or another life threatening illness. How did it make you feel? How did it affect those around you or the person him/herself?
7. Write about a time when you had to make an important choice. Describe the event. Do you think you made the right choice, why or why not? What do you think would have happened if you had taken the other option?

## Notes for Teacher (Background Information)

### Facts

#### ***Breast Cancer***

- every year over 1,100 young women (15-39 years) are diagnosed with breast cancer (*Canadian Cancer Society*)
- every year over 100 young women (15-39 years) in Canada will die (*Canadian Cancer Society*)
- a woman in Canada has a 1 in 8 chance of developing breast cancer at some point in her lifetime
- breast cancer in young women is often very aggressive (*Cancer in 15-29 Year Olds*)
- breast cancer does not always start as a lump – over 80% of young women are symptomatic with breast lumps (*Breast Cancer in Young Women*)
- most breast lumps are not cancer
- inflammatory breast cancer (IBC) - 4-5% percent of women diagnosed (*Canadian Cancer Society*)
- breast cancer can spread (metastasize) primarily to the bones, liver, lungs and brain
- early detection through mammography screening is available routinely in Ontario to women at the age of 50 (*Ontario Breast Screening Program*)
- when breast cancer is found at an early stage there is usually a better chance of successful treatment (*Canadian Breast Cancer Foundation*)
- finding breast cancer early may allow for more treatment options (*Canadian Breast Cancer Foundation*)

#### ***Testicular Cancer***

- testicular cancer is the most common cancer in young men (15-34 years)
- a man has a 1 in 300 chance of developing testicular cancer at some point in his life. That is 2-3 young men in an average high school
- in the last three decades the rates in Ontario have increased by 60%. This increase was largest among teens and young men (15-29 years)
- testicular cancer does not always show up as a noticeable lump
- testicular cancer can spread (metastasize)
- when caught early, testicular cancer is often easily treatable
- knowing/checking your testicles may help detect testicular cancer early

#### ***Both***

- every year about 7,600 young adults (15-39 years) in Canada are diagnosed with cancer (*Canadian Partnership Against Cancer*)
- for all cancers combined, the incidence rate rose in young adults (15-29 years) from 1992-2005 (*Canadian Cancer Society*)
- overall, cancer mortality rates for young adults (15-29 years) declined between 1992-2004 (*Canadian Cancer Society*)
- awareness of cancer in adolescents and young adults is less than older adults (*Canadian Cancer Society*)
- delays in diagnosis are attributed to either young adult or physician inaction (*Young Adults Experience with Cancer*)
- early detection saves lives

### ***Environmental Factors***

- currently there is relatively scant data to support an environmental causation to cancer in 15-29 year olds (*Cancer in 15-29 Year Olds*)
- there are a few exceptions including melanoma (skin cancer) with exposure to ultraviolet radiation (*Cancer in 15-29 Year Olds*)
- cancer occurring before age 30 appears to be spontaneous and unrelated to carcinogens in the environment (*Cancer in 15-29 Year Olds*)
- ultimately, a larger proportion of cancer may be attributable to specific factors, but at present, most cancer in this age group appears to be sporadic and random (*Cancer in 15-29 Year Olds*)
- concern over increased exposure to man-made chemicals such as plastics (e.g., bisphenol A) and pesticides

### **Risk Factors**

#### ***Breast Cancer***

- young women born in North America and Northern Europe are at a higher risk of developing breast cancer (*Breast Cancer in Young Women*)
- the risk of developing breast cancer increases with a woman's age (*Cancer in 15-29 Year Olds*)
- a strong family history of breast cancer is the primary risk factor for the development of breast cancer in women of all ages (*Cancer in 15-29 Year Olds*)
- age younger than 35 years at diagnosis is a risk factor for the development of aggressive disease
- young women with genetic mutations in BRCA1, BRCA2, p53 (LiFraumeni syndrome), Muir syndrome, or PTEN (Cowden's syndrome) are at an increased risk for breast cancer (*Cancer in 15-29 Year Olds*)
- lifestyle risk factors include alcohol misuse, physical inactivity, smoking tobacco use and an unhealthy weight (*Breast Cancer in Young Women*)
- other risk factors include early onset of menstruation (before 12 years), use of oral contraceptives and never breastfeeding (*Breast Cancer in Young Women*)
- general risk factors for the development of breast cancer include reproductive history, personal or family history of breast cancer and possible environmental exposure to carcinogens (*Cancer in 15-29 Year Olds*)
- personal medical history of benign breast disease, Hodgkin's disease and high levels of radiation exposure to the chest increases the risk for developing breast cancer

#### ***Testicular Cancer***

- 15-35 years of age (*Canadian Cancer Society*)
- delayed descent of testicles into the scrotum (cryptorchidism) (*Canadian Cancer Society*)
- family history of testicular cancer (*Canadian Cancer Society*)
- abnormal development of a testicle due to a condition such as Klinefelter's syndrome (*Canadian Cancer Society*)
- certain rare genetic conditions (*Canadian Cancer Society*)
- one testicle smaller than the other (*Canadian Cancer Society*)



### ***Both***

- having a risk factor, or even several, does not mean you will definitely get the disease
- some teenagers/young adults get cancer without any of the risk factors

### **Symptoms**

#### ***Breast Cancer***

- breast lumps
- breast thickening
- dimpling/puckering of the breast
- breast changes (e.g., size, shape, changes in the skin)
- breast swelling, redness, warmth
- breast pain
- nipple changes or discharge/leaking
- symptoms that may appear from the spread of the disease (e.g., bone pain)

#### ***Testicular Cancer***

- hard, painless lump on either testicle
- change in the size, shape, tenderness or feel of the testicles
- swelling or change in consistency of testicles or scrotum
- feeling of heaviness/dragging in the lower abdomen or scrotum
- unusual backache that doesn't go away
- unexplained weight loss
- breast tenderness or enlargement around the pectoral muscle

### ***Both***

- lump not always present

### **Self Care**

#### ***Breast Cancer***

- self detection through self awareness/checks is recommended for young women (*Breast Cancer in Young Women*)
- young women need to understand the importance of body/breast awareness, knowing their breasts and checking for changes regularly (*Breast Cancer in Young Women*) e.g., once a month
- young women must also be aware of the signs and symptoms of breast cancer to self detect the disease (*Breast Cancer in Young Women*)
- personal health plan should include both breast and body awareness
- detected breast changes or symptoms of breast cancer should be brought to the attention of a medical professional
- routine clinical breast exams should be discussed with a woman's health care provider

#### ***Testicular Cancer***

- self detection through awareness/checks is recommended for young men
- young men need to understand the importance of body/testicle awareness, knowing their testicles and checking for changes regularly e.g., once a month
- personal health plan should include both testicle and body awareness
- detected changes in the testicles or symptoms of testicular cancer should be brought to the attention of a medical professional

### ***Both***

- living a healthy lifestyle can help reduce the risk of serious health problems e.g., cancer
- lifestyle choices include:
  - limit alcohol to one drink or less per day
  - live smoke free and avoid exposure to second-hand smoke
  - get active and aim for at least 30 minutes of physical activity each day
  - eat well and enjoy a balanced diet that is high in fruits, vegetables and whole grains, and low in fat and sugar
- health care professional should be advised of any risk factors i.e., family history
- delays in diagnosis and treatment can be reduced by seeking prompt and regular medical care, especially if AYAs (adolescents and young adults) are aware of unusual changes in their skin, breasts and testes
- many breast/testicle changes are not cancer, but prompt medical attention should be obtained for unusual changes
- when symptoms persist the question “**Could this be cancer?**” should be asked

### ***Healthy Lifestyle Resources***

- Eat Right Ontario ([www.eatrightontario.ca](http://www.eatrightontario.ca)) or call a Registered Dietician toll free at 1-877-510-5102
- Low Risk Drinking Guidelines (<http://www.ccsa.ca>) or call toll free at 1-613-235-4048
- Smokers Helpline ([www.smokershelpline.ca](http://www.smokershelpline.ca)) or call toll free at 1-877-513-5333

## **Definitions**

**Breast Self Awareness:** regular self awareness/checking a woman's breasts to learn the normal look and feel of her breasts and to check for any changes.

**Cancer:** uncontrolled, abnormal growth of cells that can invade and destroy healthy tissues.

**Clinical Breast/Testicular Exam:** breast/testicular exam performed by a health care professional as part of a regular medical check-up.

**Healthy Lifestyle:** way of life in which health enhancement and disease prevention are integrated into daily life.

**Inflammatory Breast Cancer (IBC):** uncommon type of breast cancer that can grow and spread quickly even at a relatively early stage of the disease.

**Mammogram:** x-ray picture of the breast which can find some cancers before they can be felt.

**Metastasis:** transfer of cancer from one part of the body to another.

**Testicular Awareness:** regular self awareness/checking of a man's testicles to learn the normal look and feel of his testicles and to check for any changes.

**Tumour:** abnormal swelling (lump) in the body. A tumour can be benign (not cancerous) or malignant (cancerous).

## References

- Canadian Cancer Society. *Canadian Cancer Statistics 2009*. [www.cancer.ca](http://www.cancer.ca)
- Cancer Care Ontario (2006). *Cancer in Young Adults in Canada*. [www.cancercare.on.ca](http://www.cancercare.on.ca)
- Canadian Partnership Against Cancer (2017). *Adolescents & Young Adults with Cancer*. [www.partnershipagainstcancer.ca](http://www.partnershipagainstcancer.ca)
- Centre for Addiction and Mental Health (March 2007). *Alcohol and Cancer: Best Advise*.
- Chadder, J., and Coleman, B. (2011). *Review of the Literature: Risk factors in Younger Women & Health Promotion Campaigns*. [www.teamshan.ca](http://www.teamshan.ca)
- Johnson KC. *Accumulating evidence on passive and active smoking and breast cancer risk*. *International Journal of Cancer* 2005; 117: 619-628.
- Kahlenborn C., MD; Modugno, F, PhD; Potter, D. M., PhD; Severs, W. b., PhD. (October 2006). *Oral Contraceptive Use as a Risk Factor for Premenopausal Breast Cancer: A Meta-analysis*. *Mayo Clin Proc.* 81(10):1290-1302.
- Miedema, B (Bo), PHD; Easley, J.; Hamilton, R., MSES. (November 2006). *Young Adult's Experiences with Cancer*. *Canadian Family Physician* 52:1446-1447.
- National Cancer Institute (2007). *Cancer in 15-29 Year Olds, US SEER, 1975-2000*.
- Public Health Agency of Canada (2006). [www.hc-sc.gc.ca/iyh-vsv/diseases-maladies/breast-sein\\_e.html](http://www.hc-sc.gc.ca/iyh-vsv/diseases-maladies/breast-sein_e.html)
- Suffel, S., and Coleman, B. (2006). *Literature Review: Breast Cancer in Young Women*. [www.teamshan.ca](http://www.teamshan.ca)
- Suffel, S., and Coleman, B. (2007). *Updated Literature Review: Breast Cancer in Young Women*. [www.teamshan.ca](http://www.teamshan.ca)
- Symonds. K., Tiseo. L., and Coleman. B. (2015). *Review of the Literature of Risk Factors for Breast Cancer in Adolescent and Young Adult Women (15-39 years) & Health Promotion Campaigns*. [www.teamshan.ca](http://www.teamshan.ca)

## Breast Cancer Awareness Peer Assessment Form

Your Name: \_\_\_\_\_

Group: \_\_\_\_\_

Please rate your peers on the creation of their informative product. Your ratings will not be disclosed to other students so please be honest in this evaluation.

In rating your peers use a one to five point scale where:

- 5 = Superior
- 4 = Above Average
- 3 = Average
- 2 = Below Average
- 1 = Weak

Creativity	
Information Provided	
Appealing	
Overall Quality of Work	
<b>Total</b>	

Key message from the presentation: \_\_\_\_\_

\_\_\_\_\_

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Creativity	
Information Provided	
Appealing	
Overall Quality of Work	
<b>Total</b>	

Key message from the presentation: \_\_\_\_\_

\_\_\_\_\_

### Breast/Testicular Cancer Presentation Rubric

	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>
<b>Group presentation raises awareness of breast/testicular cancer by engaging their peers</b>	presentation raises little awareness of breast/testicular cancer amongst their peers	presentation raises some awareness of breast/testicular cancer amongst their peers	presentation raises considerable awareness of breast/testicular cancer amongst their peers	presentation does an excellent job of raising awareness of breast/testicular cancer amongst their peers
<b>Group research includes: definitions, statistics, risk factors, environmental causes, detection, symptoms, treatments, self help activities, resources and support groups</b>	presentation does not include any of the outlined criteria	presentation includes 1-2 requirements of the outlined criteria	presentation includes 3-4 requirements of the outlined criteria	presentation includes 5 or more requirements of the outlined criteria
<b>Group presentation reflects planning and flows in a logical sequence</b>	presentation reflects little evidence of planning and organization	presentation reflects some evidence of planning and organization	presentation reflects evidence of effective planning and organization	presentation reflects evidence of complex planning and organization

## Personal Plan Rubric

Use the following questions to guide your personal plan.

1. What can you do today to reduce your risk of breast/testicular cancer?
2. What specific lifestyle changes can you make to reduce your risk of breast/testicular cancer today or in the future?
3. What are the symptoms of breast/testicular cancer and what should you do if you see any changes in your body?

Select and include in your plan, a minimum of 3 risk factors that you can counteract.

	Level 1	Level 2	Level 3	Level 4
<b>Create and implement a plan for healthy living</b>	Personal plan demonstrates a limited understanding of self help and recognition of symptoms of breast/testicular cancer	Personal plan demonstrates a fair understanding of self help and recognition of symptoms of breast/testicular cancer	Personal plan demonstrates considerable understanding of self help and recognition of symptoms of breast/testicular cancer	Personal plan demonstrates an excellent understanding of self help and recognition of symptoms of breast/testicular cancer
<b>Identifies specific lifestyle changes</b>	Identifies a few simple lifestyle changes	Identifies some lifestyle changes	Identifies many complex lifestyle changes	Consistently identifies many complex lifestyle changes
<b>Identifies risk factors that can be counteracted</b>	Identifies 1 risk factor with a limited understanding of how to counteract it	Identifies 2 risk factors with some understanding of how to counteract them	Identifies 3-4 risk factors with considerable understanding of how to counteract them	Identifies 5 or more risk factors with a consistent understanding of how to counteract them