Ontario Curriculum

Health and Physical Education Grade 11 Healthy Active Living Education (PPL30)

Breast/Testicular Cancer Awareness

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Lesson: Breast/Testicular Cancer Awareness

Description

This lesson provides students with an awareness of breast cancer in young women and testicular cancer in young men. Students will gain knowledge of the disease and factors to enhance their personal health choices, identify risk factors, symptoms and create a personal plan that will reduce chances of developing breast and/or testicular cancer.

Strand: Healthy Living

Overall Curriculum Expectations

• demonstrate in a variety of settings, the knowledge and skills that reduce risk to personal safety

Specific Learning Expectations

• describe factors (e.g., environmental, hormonal, nutritional) affecting reproductive health in males and females

Strand: Living Skills Overall Curriculum Expectations Decision Making

• use decision-making and goal-setting skills to promote healthy active living

Specific Learning Expectations

- describe their understanding of what constitutes healthy active living (e.g., a lifestyle that stresses the importance of exercise and healthy eating)
- explain the advantages, disadvantages and possible consequences of risktaking behaviour

Materials and Preparation

The information on the chart is necessary for the lesson. Other possible sources of information are also included below.

Material	Number Required
Team Shan brochures for breast cancer awareness	1 brochure per student (or group) – can also be printed off from the Team Shan website www.teamshan.ca
Testicular Cancer Canada (TCC) brochures for testicular cancer awareness	1 brochure per student (or group) – can also be printed off from TCC website www.tctca.org
Team Shan public service announcements (PSA) compact disc (CD) Testicular Cancer Canada PSA CD CD player	1 per class - can also be downloaded from www.teamshan.ca 1 per class - can also be downloaded from www.tctca.org
KWL Chart Jigsaw Organizer Student copy of Personal Plan for Healthy Living	-class set -class set -class set
Rubric for Personal Plan	-class set

*View notes for teacher for background information Other Possible Materials

- posters, commercials, advertisements etc.: Team Shan (breast cancer awareness for young women) resources, and Testicular Cancer Canada *"Check Em"* resources
- personal stories (breast/testicular cancer survivors/family members who have lost someone to breast/testicular cancer) as a guest speaker e.g., Team Shan member
- Team Shan website (www.teamshan.ca) and links and Testicular Cancer Canada website (www.testicularcancer.ngo) and links. Use "contact us" feature for possible guest speaker
- Public Health Nurse resource

Assessment Opportunities

- students will participate in partner, group and class discussions
- students will use their oral communication skills to present their topic to the class
- students will assess self and peer group work contribution
- students will prepare a personal breast/testicular health plan

Suggestions for Assessing Expectations

- observation during class discussion and work periods
- group presentation
- evaluation of Personal Plan for Healthy Living (journal to be submitted for teacher assessment)
- group work evaluation

Teaching/Learning Strategies

Lesson 1

Introduction

- Ask students how many people in the class know someone who has had cancer
- Ask students how many people in the class know someone who has had breast or testicular cancer
- 1. Using the Think, Pair, Share strategy, students list as many different types of cancer as they can.
- 2. As a class, discuss the types of cancer the pairs came up with. Record them on the board. Add any forms of cancer that have not been mentioned to the class-created list on the board. Discuss what the students know about these types of cancer. The class might be surprised at how many types of cancers they have heard of and yet how little they actually know about these diseases that can affect anyone.
- 3. Students will complete a KWL (What I KNOW, What I WANT to KNOW, and What I LEARNED) chart about breast/testicular cancer.

- 4. Place students in coed or gender based groups.
- 5. Have group members share each section of their KWL charts (at this point you could have students create a group KWL chart).
- 6. Post the KWL charts and have groups rotate for viewing.

Lesson 2

- 1. Place students into groups of 4 and tell the students they will be using the Jigsaw strategy to gather information. Students will label themselves A, B, C, D and will become an expert on ONE of the topics below. Once they have become an expert, they will return to their original group to share their information with their original group members. Assign one topic: Facts, Symptoms, Self Help or Risk Factors to each group for breast and/or testicular cancer.
- 2. Students view/listen to the Team Shan Public Service Announcements (PSAs) and the Team Shan and testicular cancer brochures.
- 3. Experts record information from the brochures/PSAs for their topic on the sheet provided.
- 4. Experts return to their original group and present their topic to the rest of the members. The group members fill in the rest of the organizer based on the information given by each expert.
- 5. Students will discuss in their groups how they would reduce the risk factors for breast/and or testicular cancer by giving specific steps to do so. For example, for physical activity students should identify specific things that would reduce the risk factor e.g., walk to school, go to the gym, go for a walk daily, join a team.
- 6. Students will use their jigsaw organizer to complete a journal which will be their Personal Plan for reducing their chances of developing breast/testicular cancer.

Notes for Teacher (Background Information) Facts

Breast Cancer

- every year over 1,100 young women in Canada are diagnosed with breast cancer (*Canadian Cancer Society*)
- every year over 100 in Canada will die (*Canadian Cancer Society*)
- a women has a 1 in 8 chance of developing breast cancer at some point in her life
- breast cancer in young women is often very aggressive (*Canadian Cancer Society*)
- 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 usually 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) (*Canadian Cancer Society*)
- 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 catch testicular cancer early

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- 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 (i.e. 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, 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 (cryptochidism) (*Canadian Cancer Society*)
- family history of testicular cancer (Canadian Cancer Society)
- abnormal development of a testicle due to a condition such as Klinfelter'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 of enlargement around the pectoral muscle

Both

• lump is 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 breast/body awareness, examining 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 self awareness/checks is recommended for young men
- young men need to understand the importance of body/testicle awareness, examining their testicles and checking for changes regularly i.e., 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

- living a healthy lifestyle can help reduce the risk of serious health problems e.g., cancer
- lifestyle choices include:
 - o limit alcohol to one drink or less per day
 - o live smoke free and avoid exposure to second-hand smoke
 - o get active and aim for at least 30 minutes of physical activity each day
 - o eat well and enjoy a balanced diet that is high in fruits, vegetables and whole grains, and low in fat and sugar
- health care provider should be advised of any known risk factors e.g., 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

Both

Definitions

- **Breast Self Awareness**: regular self awareness/checks of 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 Self Awareness**: regular self awareness/checks 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).

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Name_____

Breast/Testicular Health KWL

What I know about breast/testicular cancers:

What do I want to know about breast/testicular cancers:

What I learned about breast/testicular cancers:

Name_____

Breast/Testicular Cancer Organizer

Use the chart below to record information for your topic.

Facts	Symptoms
Self Care	Risk Factors

Breast Cancer Organizer

Facts	Symptoms	
every year over 1,100 young women in Canada are diagnosed with	breast lumps	
breast cancer	reast thickening	
every year over 100 young women (15-39 years) with breast cancer	dimpling/puckering of the breast	
in Canada will die	breast changes (e.g., size, shape, changes in the skin)	
breast cancer in young women is often very aggressive	breast swelling, redness, warmth	
breast cancer does not always start as a lump	breast pain	
breast cancer can spread (metastasize) primarily to the bones, liver,	nipple changes or discharge/leaking	
lungs and brain	symptoms that may appear from the spread of the disease (e.g., bone	
early detection saves lives	pain)	
Self Care	Risk Factors	
choose a healthy lifestyle	born in North America or Northern Europe	
become familiar with breasts/body	early onset of menstruation (before 12 years)	
learn breast self awareness and check regularly	use of oral contraceptives	
ask a trained professional about routine clinical breast exams	alcohol misuse	
advise medical professional of known risk factors	physical inactivity	
seek medical attention for any breast cancer symptom	tobacco use	
seek medical attention for any persistent symptom that might	unhealthy weight	
indicate the spread of breast cancer	strong family history (e.g., mother, sister)	
ask the doctor "Could this be breast cancer?"	high levels of radiation exposure to the chest	
	history of benign breast disease	
	never breastfeeding	
	genetic mutations (e.g., BRCA1, BRDC2)	

Testicular Cancer Organizer

Facts	Symptoms
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. in the last three decades the rates in Ontario have increased by 60 percent. 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 and curable regular testicular self exams may help catch testicular cancer early	hard, painless lump on either testicle change in the size, shape, tenderness of feel of your testicles or sac swelling of change in consistency of your testicles or sac pain in your testicles or sac dull ache or feeling of heaviness in lower stomach
Self Care choose a healthy lifestyle learn testicular self awareness and check regularly ask a trained professional about routine clinical testicular exams detected changes in the testicles or symptoms of testicular cancer should be brought to the attention of a medical professional ask the doctor, "Could this be testicular cancer?"	Risk Factors between the ages of 15-49 years of age had a delays descent of testicles into the scrotum (cryptochidism) family history of testicular cancer abnormal development of a testicle certain rare genetic conditions

Breast/Testicular Health Rubric

Student				
	Level 1	Level 2	Level 3	Level 4
Demonstrate an understanding that heredity factors influence personal health (e.g. a family history of an illness such as breast cancer)	understanding of heredity	Demonstrates some understanding of heredity factors that influence personal health		Demonstrates thorough understanding of heredity factors that influence personal health
Analyze how various lifestyle choices affect health	choices that affect personal health (prevention of	choices that affect personal health (prevention of	number of lifestyle choices	Identifies all lifestyle choices that affect personal health (prevention of breast/testicular cancer)
Demonstrate an understanding of what constitutes healthy active living (e.g., a lifestyle that stresses the importance of exercise and healthy eating)	understanding of what constitutes healthy active	constitutes healthy active living	Demonstrates a considerable understanding of what constitutes healthy active living	Demonstrates a thorough understanding of what constitutes healthy active living

Personal Plan for Healthy Living

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
Personal plan	Personal plan	Personal plan	Personal plan demonstrates
demonstrates a limited	demonstrates a fair	demonstrates considerable	an excellent understanding
understanding of self help	understanding of self help	understanding of self help	of self help and recognition
and recognition of	and recognition of	and recognition of	of symptoms of
symptoms of	symptoms of	symptoms of	breast/testicular cancer
breast/testicular cancer	breast/testicular cancer	breast/testicular cancer	
Identifies a few simple	Identifies some lifestyle	Identifies many complex	Consistently identifies
lifestyle changes	changes	lifestyle changes	many complex lifestyle
			changes
Identifies 1 risk factor with	Identifies 2 risk factors	Identifies 3-4 risk factors	Identifies 5 or more risk
a limited understanding of	with some understanding	with considerable	factors with a consistent
how to counteract it	of how to counteract them	understanding of how to	understanding of how to
		counteract them	counteract them