SKILLS DRIVEN LEARNING OPPORTUNITIES FOR SUN SAFETY AND EARLY DETECTION OF SKIN CANCER

Lesson Plan

NEW YORK HEALTH EDUCATION GUIDANCE DOCUMENT
SKIN CANCER

OVERVIEW

This teacher's guide accompanies the DVD, "Dark Side of the Sun: Mollie Biggane's Story," produced by the Mollie Biggane Melanoma Foundation. The mission of the Foundation is to increase awareness for melanoma prevention, provide information and services on skin cancer detection, and support melanoma patients through education of the latest treatments. Additional information and materials may be obtained by logging on to the website, MolliesFund.org.

The materials are aligned with the 2006 Revision of the National Health Education Standards, PreK-12 (http://www.aahperd.org/aahe/pdf_files/standards.pdf), and the New York State Health Education Guidance Document, (http://www.emsc.nysed.gov/sss/Health_Ed/GuidanceDocument11-05.pdf), which are used when designing skills-based curriculum for the Health Education classroom. Development of skills such as self management and planning and goal setting, as well as functional knowledge related to sun safety, skin cancer detection, and self exams, are critical components of these materials. The New York State Association for Health, Physical Education, Recreation, and Dance (NYS AHPERD) has collaborated with the Foundation to produce this teacher's guide. Special thanks to Veronica Dwyer, District Health Education Coordinator, Yorktown High School, member of the NYS Health Education Leadership Institute and NYS Curriculum and Assessment Design Institute, Pat Loncto, member of the NYS Health Education Leadership Institute and NYS Curriculum and Assessment Design Institute, Carol Nochajski, Health Teacher, Alden Middle School, member of the NYS Health Education Curriculum and Design Institute, and Dom Splendorio, NYS AHPERD Health Section President, for their input in creating this guide.

This unique lesson plan and DVD has the full endorsement of Dr. James Goydos, M.D., Co-director of the Melanoma and Soft Tissue Program at The Cancer Institute of New Jersey and Assistant Professor of Surgery at UMDNJ-Robert Wood Johnson Medical School.
ESSENTIAL QUESTION:
How can the bright side of the sun be safer?

GRADE LEVEL:
Grades 6-12

TIME NEEDED:
Three 40 minute periods for lessons (not including extension activities.)
Extended time for monitoring progress in achieving a personal health goal would be required.

ASSESSMENT:
*An assessment scoring tool is not provided. Each teacher must develop this scoring tool based on the extension activity/activities chosen.

OBJECTIVES:
Students will:
• Analyze the role of individual responsibility for preventing skin cancer by taking a personal Risk Assessment Questionnaire and comparing the results to healthy sun exposure behaviors
• Define key vocabulary terms related to skin cancer and sun safety
• Develop and commit to a sun safety plan, identify barriers and develop strategies to overcome, identify resources and support for achieving their plan, implement, assess, reflect, and adjust as needed
• Develop the skills involved in early detection of skin cancer by regularly and correctly performing self exams, recognizing skin cancer symptoms, and getting regular checkups

PERSONAL SKILL FOCUS:
• Self Management
• Planning and Goal Setting
• Extension - Advocacy

MATERIALS:
• DVD - “The Dark Side of the Sun: Mollie Biggane’s Story”
• CD - "Skills-Driven Learning Opportunities for Sun Safety and Early Detection of Skin Cancer”
• Pamphlet - “Have you checked your skin lately?”

WEB LINKS FOR ACCESSING INFORMATION:
http://molliesfund.org
http://www.skincancer.org
http://www.epa.gov/sunwise
http://www.skincheck.org
http://www.cancersociety.com/skin
http://www.nih.gov/medlineplus/skincancer.html
http://www.cdc.gov.cancer
NATIONAL HEALTH EDUCATION STANDARDS AND PERFORMANCE INDICATORS (2006):

- NHE 1.1 Analyze the relationship between healthy behaviors and personal health (6-8)
  1.1 Predict how healthy behaviors can impact health status. (9-12)
- NHE 1.3 Analyze how environment impacts personal health. (6-8)
  1.3 Analyze how environment and personal health are interrelated (9-12)
- NHE 1.4 Describe how family history can impact personal health. (6-8)
  1.4 Analyze how genetics and family history can impact personal health. (9-12)
- NHE 6.2 Develop a goal to adopt, maintain, or improve a personal health practice. (6-8)
  6.2 Develop a plan to attain a personal health goal that addresses strengths, needs, and risks. (9-12)
- NHE 6.3 Apply strategies and skills needed to attain a personal health goal. (6-8)
  6.3 Implement strategies and monitor progress in achieving a personal health goal. (9-12)
- NHE 7.1 Explain the importance of assuming responsibility for personal health behaviors. (6-8)
  7.1 Analyze the role of individual responsibility for enhancing health. (9-12)
- NHE 7.2 Demonstrate healthy practices and behaviors that will maintain or improve the health of self and others. (6-8)
- NHE 7.2 Demonstrate a variety of healthy practices and behaviors that will maintain or improve the health of self and others. (9-12)

NEW YORK STATE HEALTH EDUCATION STANDARDS AND PERFORMANCE INDICATORS:

- NYSHE 1.B Apply prevention and risk reduction strategies to adolescent health problems (Intermediate)
- NYSHE 1.C Apply prevention and risk reduction strategies which can delay the onset or reduce the risk of potential health problems into adulthood (Commencement)

NEW YORK STATE HEALTH EDUCATION FUNCTIONAL KNOWLEDGE:
(Specific research-based information and ideas essential to health promotion, safety, and disease prevention)

- ORH.I.6 Individuals protect their skin from the sun's UV rays with clothing and sunscreen containing a sun protection factor of 15 or higher. (Intermediate)
- ORH.C.5 Individuals prevent skin cancer by limiting or minimizing exposure to the sun by using UV-B protection, and avoiding sunlamps and tanning beds. (Commencement)
- ORH.C.6 Individuals detect breast cancer, testicular cancer and other types of cancer by regularly and correctly performing self-examinations, recognizing cancer symptoms and getting regular check-ups. (Commencement)
LEARNING OPPORTUNITIES:

The Learning Opportunities in the following chart lists the experiences that will allow learners to assess, explore, discover, question, personalize, apply, adapt, evaluate, and monitor their own learning and progress. The Assessment column lists the tool that will show what each student knows and can do as a result of the experience.

These lessons use a skills driven approach to take students through a series of sub skills that develop self management and planning and goal setting abilities. Research has shown that when skills are practiced successfully, numerous times, with positive reinforcement and social support, and in a sequential order, the person develops the competence and confidence to effectively apply that skill to a variety of situations. Therefore, to be effective, the students should experience the learning opportunities in the order listed in the chart.

<table>
<thead>
<tr>
<th>LEARNING OPPORTUNITY (What the students do)</th>
<th>ASSESSMENT (Evidence of student's learning)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduct a personal assessment about their skin cancer risk factors.</td>
<td>Sun Safety Personal Assessment Reflection Journal question 1</td>
</tr>
<tr>
<td>Analyze the behavior of a safe and healthy person with regard to sun. Show DVD: <em>Dark Side of the Sun</em></td>
<td>Fact Sheet on Skin Cancer Reflection Journal question 2</td>
</tr>
<tr>
<td>Compare and analyze their personal assessment to healthy behaviors, and identify strengths and needs.</td>
<td>Reflection Journal questions 3,4</td>
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<tr>
<td>Predict short and long term benefits and harmful consequences of behavior when exposed to the sun.</td>
<td>Reflection Journal question 5</td>
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<tr>
<td>Analyze the benefits of planning for exposure to the sun.</td>
<td>Reflection Journal question 6</td>
</tr>
<tr>
<td>Make a personal commitment to achieve your plan. Develop a personal health plan for exposure to the sun.</td>
<td>SMART Steps My Sun Safety Plan Part I</td>
</tr>
<tr>
<td>Identifies personal barriers to achieving goal and develops strategies to overcome those barriers.</td>
<td>My Sun Safety Plan Part II</td>
</tr>
<tr>
<td>Implement their plan and adjust as needed.</td>
<td>My Sun Safety Plan Part III</td>
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<tr>
<td>Analyze the impact of their decisions about sun exposure on their personal health goal.</td>
<td>Reflection Journal question 6</td>
</tr>
<tr>
<td>Identify support systems; access, manage and evaluate related health resources; and explain the importance of these resources in achieving their personal health plan.</td>
<td>Reflection Journal question 8 My Sun Safety Plan, Part IV</td>
</tr>
<tr>
<td>Continue to assess, reflect and adjust their plan as needed.</td>
<td>Goal Plan reflection journaling Sun Exposure Incident Report</td>
</tr>
<tr>
<td>Celebrates personal health accomplishments with wearing sun-day hats and sun classes. Show and tell with sunscreens and other sun protective gear.</td>
<td>Verbal feedback and conversation during celebration</td>
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</table>
SUN SAFETY PERSONAL ASSESSMENT

Directions: For each question below, check “Yes” or “No” in the column to the right.

1. Do I frequently work or play in the sun between the hours of 10:00 AM and 4:00 PM without wearing a hat? __ __
2. Do I frequently work or play in the sun between the hours of 10:00 AM and 4:00 PM without wearing protective clothing? __ __
3. Do I frequently work or play in the sun between the hours of 10:00 AM and 4:00 PM without wearing sunglasses? __ __
4. Do I frequently work or play in the sun between the hours of 10:00 AM and 4:00 PM without using sunscreen with an SPF of 30 or more? __ __
5. Do I use, or have I used in the past, sun lamps or tanning booths? __ __
6. Do I have red, blonde, or light brown hair and a fair complexion that burns easily? __ __
7. When I am exposed to one hour of summer sun, do I burn, and sometimes blister? __ __
8. Do I have blue, green, or hazel eyes? __ __
9. Have I experienced severe, blistering sunburns before the age of 18? __ __
10. Do I have any family members who have had skin cancer or a history of melanoma? __ __
11. Has it been more than six months since I performed a skin self-exam by thoroughly checking my skin for changes in warts or moles? __ __

Total number of “YES” Answers = __

EVALUATING YOUR RISK (WHAT DOES YOUR SCORE MEAN?)

Your total number of “YES” answers corresponds directly with your potential risk for developing skin cancer in the future. The higher your number, the higher your risk. Above average risk does not mean you will definitely get skin cancer. It is just an estimate, based on your risk factors, some of which you can change.

Because cancer is not that common in people under 40, most young people have a relatively small risk of getting cancer, and no matter how many risk factors they have, it makes it more difficult to say that one person is at a higher or lower risk than another. It is important to remember though that regardless of your age or the color of your hair, eyes, or skin, ANYONE can develop skin cancer. Making healthy choices now can reduce your risk of developing skin cancer in the future.
PERSONAL REFLECTION SKIN CANCER

Name: _______________________________________________________

1. What current positive attitudes, positive behaviors, and resources already help you practice sun safety?

2. After viewing the DVD, *The Dark Side of the Sun*:
   
   I know...
   
   I think...
   
   I feel...

3. Some of the risks for skin cancer deal with factors that we may not have much control over, like heredity or family history. Which of your risk factors on the Sun Safety Personal Assessment might fall under this category? How can you improve your health by reducing the impact of these risk factors?

<table>
<thead>
<tr>
<th>MY UNCONTROLLABLE RISK FACTORS</th>
<th>POSITIVE ACTIONS I ALREADY TAKE</th>
<th>POSITIVE ACTIONS I NEED TO TAKE TO BE SAFER</th>
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6
4 Some of the risks for skin cancer can be controlled by personal healthy behaviors. Which of your risk factors on the Sun Safety Personal Assessment might fall under this category? How can you improve your health by reducing the impact of these risk factors?

5 Predict your short and long term benefits and harmful consequences of behaviors based on the results of your “Sun Safety Personal Assessment.”

6 Why is it important for you to think about and plan for what you will do the next time you are in the sun? Be specific.

7 How are the decisions you are making helping you or hurting you in reaching your goal?
Identify your support systems and health resources and explain the importance of these resources in achieving your personal health plan.

<table>
<thead>
<tr>
<th>SUPPORT PERSONS OR RELATED HEALTH RESOURCES THAT HELP ME ACHIEVE MY GOAL AND FOLLOW MY PLAN</th>
<th>HOW EACH RESOURCE CAN HELP ME ACHIEVE MY GOAL AND FOLLOW MY PLAN</th>
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WHAT IS SKIN CANCER?
Skin cancer is the most common of all cancers. More than one million cases of skin cancer occur in the United States each year. There are three types of skin cancer.

• **Basal Cell Carcinoma** is the most common, usually appearing on the face and ears. It is the easiest to detect and treat, and does not usually metastasize (spread).

• **Squamous Cell Carcinoma** is the second most common type of skin cancer. It usually appears on sun-exposed parts of the body and is potentially dangerous because it is more likely to spread to areas beneath the skin.

• **Melanoma** is the least common, but most lethal form of skin cancer. Doctors and scientists believe that UV radiation from the sun or tanning beds can increase the risk of melanoma. It is important to diagnose melanoma in its early stages, since it is most likely to spread quickly to other parts of the body. If detected early, melanoma can be treated and cured. Approximately 70 percent of melanomas begin in or near a mole or other dark spot on the skin. People at highest risk for developing melanoma have fair skin that burns and freckles easily, light blue/green eyes and either red or blonde hair. Although people with these physical characteristics are most at risk, anyone can develop skin cancer.

HOW TO DO A SELF-EXAM*:
The best time to do this is after a bath or shower. Use a full-length mirror and hand mirror so you can check any moles, blemishes, or birthmarks from the top of your head to your toes, noticing any changes in size, shape, or color or sore that does not heal.

• Examine your body, front and back in the mirror
• Bend elbows and look carefully at forearms and upper underarms and palms
• Sit, if that is more comfortable, and look at the backs of the legs and feet and the genital area.
• Don’t forget to look at the back of the neck and scalp, pulling back long hair if necessary.

REMEMBER THE ABCDE WARNING SIGNS OF MOLES*:
A - asymmetry - irregular in shape
B - border - uneven or irregular
C - color - different colors or changing shades
D - diameter - anything larger than a pencil eraser
E - evolving - if a mole is growing or changing in size, shape, or elevation

USE:
Sun Protection Factor (SPF) of 30 or higher to reduce the harmful effects of ultraviolet (UVA and UVB) rays.

*Supplemental pdf document available on this cd.
MY GOAL & PLAN FOR THE SUN

SPECIFIC  What will I do?

MEASURABLE  How can I measure my progress or success?

ACHIEVABLE  Is this something I can really do?

RELEVANT  Does it relate to sun exposure?

TIMELY  When? For how long?

MY GOAL:

____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

Signature: _____________________________________________ Date: __________
PART 1
Steps I will follow to reach my goal: (Be specific)

<table>
<thead>
<tr>
<th>WHAT WILL I DO FIRST, SECOND, THIRD...?</th>
<th>HOW OFTEN WILL I NEED TO DO IT?</th>
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PART 2
Barriers -Predict 3 barriers to achieving my goal and develop a strategy to overcome each.

<table>
<thead>
<tr>
<th>BARRIER</th>
<th>STRATEGY TO OVERCOME</th>
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<tbody>
<tr>
<td>1.</td>
<td>1.</td>
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<td>2.</td>
<td>1.</td>
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<tr>
<td>3.</td>
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PART 3
Implement, evaluate, and adjust Action Plan.

PART 4
List 3 resources/people that can support me in achieving my goal and explain how they will assist you.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
### MY SUN EXPOSURE INCIDENT REPORT:

1. **Date:** ________________

2. **What did I decide to do and was it healthy?**
   
   ___________________________________________________________
   ___________________________________________________________

3. **Why did I make that choice? What influenced me?**
   
   ___________________________________________________________

4. **What do I plan to do next time?**
   
   ___________________________________________________________
EXTENSION OPPORTUNITIES:
Below are possible additional extension activities that could be incorporated into the lessons on skin cancer or adapted during a more comprehensive unit on healthy lifestyles.

1 HEALTHY LIFESTYLES:
The lesson structure and worksheets may be adapted for a more comprehensive approach on healthy lifestyles which would allow for addressing and assessing additional functional knowledge areas (nutrition, exercise, testicular and breast cancer exams, etc.) Students could take an overall health assessment to discover current healthy behaviors and family health history. Students need to make the connection between their present health behaviors and the potential risk that those behaviors have in contributing to the development of a disease for which they have an authentic risk. By researching and presenting the controllable risk factors for each disease being covered, the benefits become clear to the students. They then become more willing to buy into changing their behavior through the creation of a plan to achieve an authentic goal that would reduce their risk.

2 ADVOCACY:
Publicity project to raise skin cancer awareness, especially during "spring break" and "prom time," when many teens will be trying to get a tan from sunbathing or tanning beds to alternative methods such as sunless tanning. (posters, brochures, public service announcements) An advocacy piece might involve demonstration of sunless tanning products rather than other forms of tanning that may be harmful.

3 DEBATE OR DISCUSSION:
In Australia, school children are required to wear sunscreen when they go outdoors for recess or physical education. The program is called "Slip, Slop, Slap," meaning that they slip on a shirt, slop on some sun screen, and slap on a hat. Do you feel that schools in the United States should require these same types of rules?

4 RESEARCH:
Use jig-saw group strategy for students to investigate and share information from websites about skin cancer (see web links list).

5 EXTENDED RESPONSE QUESTION:
Part A
Identify 5 (five) healthy behaviors identified in the DVD that you should practice for sun safety and develop three strategies to implement these behaviors into your lifestyle.
Part B
Explain how to do a skin self exam, including when to look, where to look, and what to look for (ABCDE)
POSSIBLE ANSWERS:
PART A - FUNCTIONAL KNOWLEDGE

- Avoid prolonged exposure to sun, especially between the hours of 10 AM - 4 PM
- Use sunscreen with a SPF of at least 30 and preferably 45
- Reapply sunscreen after swimming
- Avoid tanning booths or sun lamps, since they can also increase risk
- Wear protective clothing, especially hats and sunglasses while outdoors for extended periods
- Wear lip balm or zinc oxide on lips, nose
- Avoid blistering sunburns, since these episodes increase the likelihood of developing skin cancer in the future
- Visit a dermatologist for regular checkups, especially if you are high risk (light skin, blonde or red hair, freckle, burn easily)

POSSIBLE ANSWERS:
PART B - ADVOCATE FOR PERSONAL, FAMILY, COMMUNITY HEALTH

- Student essay takes a clear, health-enhancing position on the importance of self exams
  - Examine the body front and back from head to toe in the mirror.
  - Use small mirror to examine backs of legs, feet, and genital area
  - Check back of neck and scalp, pulling hair back if necessary
- Supports the position with relevant information and encourages other teens to make healthful choices. Specifically, moles should be checked for ABCDE's:
  - **Asymmetry**
  - **Border** uneven
  - **Color** changes
  - **Diameter** larger than a pencil eraser
  - **Evolving** (mole is growing or changing in size, shape, or elevation)
- Essay demonstrates passion/conviction in expressing views