Introduction

Skin cancer is the most common and most preventable form of cancer in the United States yet the incidence of the deadliest skin cancer, malignant melanoma, is rising faster than any other form of cancer. Melanoma is now the most prevalent cancer in the 25 to 29 year age group and second only to breast cancer in women aged 30 to 35. Although more than 95% of melanomas and other skin cancers can be cured by early detection and treatment, a large majority of adolescents and young adults remains unaware of melanoma and its associated warning signs and risks. High school is an effective setting in which to teach individuals about melanoma at a time when their vulnerability is about to escalate rapidly.

Most students are not taught about melanoma effectively, or at all, in high school - often reflecting limited knowledge of the subject by their teachers. Lack of knowledge by parents, and even by primary care physicians, contributes to the problem.

Goals and Objectives

Since young adults are at most risk for developing melanoma the goal of this lesson is for students to develop a greater awareness of melanoma, the detrimental effects of natural as well as artificial sunlight on the skin and to learn how to perform a skin self-examination.
Objectives

1. After completion of the program, students will be able to define malignant melanoma and identify at least five associated risk factors.

2. After completion of the program, students will be able to list and describe the components of the "ABCD" rule for early melanoma detection.

3. Students will understand the harmful effects of exposure to sun and tanning lamps and will be able to differentiate between at least two facts and myths associated with indoor tanning practices.

4. Using the handout provided and information obtained from the demonstration, students will be able to perform a skin self-examination.

Structure of the Program

This guide for health educators provides a one session classroom plan for educating high school students about skin cancer and melanoma. It is based on the Melanoma Education Foundation web-site at www.skincheck.org and requires students to pre-read the three main "pages" of the site and two hand-out pages that may be printed and photocopied from this guide prior to the classroom presentation. The hand-out pages contain supplemental information about the three common types of skin cancer and instructions for performing a self-examination of the skin.

To effectively present the subject it is essential for you, as health educator, to visit the web site and update your own knowledge of melanoma, especially warning signs, risk factors, and the importance of early detection.

The classroom presentation is in the form of an interactive game show based on the popular TV show, “Jeopardy.” Information covered includes the common forms of skin cancer (with focus on melanoma), the dangers of overexposure to natural and artificial UV light, and early detection of skin cancer by self-examination. Grouping students in teams keeps the entire group involved and interested in the activity. There are three categories and six questions in each category.

When the game portion of the program is concluded, the health educator or a student volunteer will demonstrate how to perform a skin self-examination through visual demonstration (clothed) with the class following along.

Initiation of Presentation (10 minutes, starting at end of last class preceding the presentation)
Introduce the subject of skin cancer/melanoma by asking students:

- How many use suncreen routinely to protect their skin from the sun?
- How many use tanning salons?
- What do they know about "skin cancer"?

Tell students that, during the next class, they will play a trivia game to test their knowledge of skin cancer and tanning and, to prepare, they need to:

- visit a web site to learn about the skin cancer, melanoma
- read some information you will distribute, and
- follow some written instructions to check their skin at home.

Print and photocopy the pre-homework assignment on page 9 of this guide, the skin cancer information on page 10, and the skin examination instructions on page 11 and distribute them to students.

Make enough extra photocopies of the skin examination instructions to hand out again during the next class session.

**Needed Materials for Presentation/Demonstration**

1. A hand mirror with long handle.
2. A hair brush.
3. (Optional) Prizes for all members of the winning team.

**Presentation Introduction  (10 minutes)**

Start by asking students how they feel about skin cancer and tanning after visiting the Melanoma Education Foundation web site.

After their responses emphasize these points:

- Melanoma is the type of skin cancer most likely to strike teens and young adults.
- An individual living in a northern state is just as likely to develop melanoma as
someone in a sunbelt state.

- Melanoma is incurable unless it is found early.
- There’s no such thing as a “healthy tan.”

Explanation of “Save Your Skin” Game Rules (5 minutes)

Divide the students into even groups, sitting in vertical rows starting at the front of the class. Teams consist of all students in each horizontal row. The instructor reads the first question in Category 1 and, after the entire question has been read the first student to raise their hand is chosen to answer the question. The first person with the correct answer then chooses the category for the next question. If three persons in sequence fail to answer a question correctly the instructor answers it and chooses the next category.

Teams will receive 100 “points” for each correct response. After the last question is answered each team will add up their points to determine the winning team.

“Save Your Skin” Game (25 minutes)

Write the three categories on the board:

Skin Cancer

Melanoma

Sun & Tanning

Inform students that the format of the game is similar to the TV game show, "Jeopardy," so each correct response must be in the form of a question. Explain the other rules of the game and that, unlike “Jeopardy,” each correct response is worth 100 points.

CATEGORY 1: SKIN CANCER

A1 The three most common types of skin cancer.

Q1 What are basal cell carcinoma, squamous cell carcinoma, and melanoma?

A2 The skin cancer most likely to strike teens and young adults.
Q2 What is melanoma?
A3 Melanoma often spreads and causes this unless it is detected early.

Q3 What is death?
A4 Of the three common skin cancers, the two that occur on parts of the skin that have received the most lifetime sun exposure.

Q4 What are basal cell carcinoma and squamous cell carcinoma?
A5 This skin cancer often starts as a dry scaly patch on the face or neck.

Q5 What is squamous cell carcinoma?
A6 Residents of northern states are as likely to get this type of skin cancer as Florida residents.

Q6 What is melanoma?

CATEGORY 2: MELANOMA

A1 Melanoma often involves one of these four skin features.

Q1 What are moles, freckles, blemishes, and birthmarks?
A2 When a mole does this you should see a dermatologist immediately.

Q2 What is change?
A3 Five characteristics that put individuals at a higher risk for melanoma.

Q3 What are (any five): fair skin, light hair color, 50 or more normal moles, any atypical moles, family history of any skin cancer, blistering sunburn under age 20, indoor tanning, sun-sensitive skin, sporadic exposure of normally covered skin?
A4 Of these, the recommended interval to perform skin self-examinations: daily weekly monthly annually.

Q4 What is monthly?
A5 The most common sites of melanomas in men and women, respectively.
Q5 What is the back and legs?

A6 One or more of these four features are often seen in early melanomas.

Q6 What is asymmetry, uneven or fuzzy borders, multiple colors, and diameter greater than 1/4”?

(If the response is “what is ABCD” ask for a more specific answer).

CATEGORY 3: SUN AND TANNING

A1 The hours of the day during which sun exposure is most harmful to your skin.

Q1 What is 10 A.M. to 3 (or 4) pm?

A2 The abbreviated name of the system that sunscreen lotions are rated by.

Q2 What is the SPF system?

A3 The UVA exposure from a visit to this is equal to a day at the beach.

Q3 What is a tanning salon?

A4 The only safe way of tanning.

Q4 What is artificial tanning (or bronzing) lotion?

A5 The minimum SPF number sunscreen an adult with any skin cancer risk factors should wear.

Q5 What is 30?

A6 The amount of sunscreen an average person should apply.

Q6 What is one ounce (or the amount in a shot glass)?

Game Conclusion

Add points to determine the winning team.

Optional: Award sun protection prizes such as sunscreen lotion packets, sunscreen lip balms, or other items to all members of the winning team.
Skin Self-Examination Demonstration (10 minutes)

Volunteer Selection: Males have a higher mortality rate from melanoma than females because they tend to check their skin less often. You may want to consider choosing a macho male if no one volunteers. If no one volunteers conduct the demonstration yourself. Students may feel uneasy about volunteering so don’t force the issue.

1. While distributing the "Skin Self-Exam" handout to each participant, remind students that they should perform this exam on a monthly basis and also have a physician or dermatologist examine their skin once a year if they have any risk factors.

2. Explain to students that, for the purposes of this program, they will be simulating this exam. Tell students that they would be unclothed when performing a real skin self-exam and would need a large wall mirror, preferably full-length, and a hand mirror with long handle in a well-lighted room. The best time to perform the exam at home is after showering and drying.

3. As depicted in the handout provided, tell students to mimic each step which you or a volunteer will now demonstrate to the entire group.

Skin Self Exam Demonstration

1. Tell students to stand up and examine their bodies front and as much of their backs as they can see in an imaginary full-length mirror, then check their right and left sides in the mirror with arms raised.

2. Tell students to bend their elbows and look closely at their forearms, upper underarms, and palms.

3. Tell students to stand up again and examine the back of their neck and scalp with the wall mirror and imaginary hand mirror. Suggest that they part their hair with a brush or blow dryer when they do a real exam, or ask a family member to check their scalp.

4. Tell students to check their back and buttocks with the hand mirror or using a combination of the wall mirror and hand mirror.

5. Tell students to sit down and then look at the backs of their legs and feet, including the soles and spaces between toes using the imaginary hand mirror.
Conclusion

Ask students how much time they spend each month brushing their teeth (typical responses: 30 to 60 minutes). Remind them that checking their skin only takes 10 minutes a month, then ask what the consequences of not brushing their teeth are compared to the possible consequence of not checking their skin.

Emphasize that melanoma is, by far, the easiest of all serious cancers to detect early by self-examination and, when caught early, it is 100% curable by simple, painless removal in a doctor’s office without any need for radiation or chemotherapy.

Evaluation and Suggestions

Your comments and suggestions for improving this lesson plan, sent via e-mail to MEF@skincheck.org, would be greatly appreciated.
Pre-Homework Assignment: Skin Cancer/Melanoma

Visit the internet site, www.skincheck.org, and read the three main "pages" to learn about melanoma, a serious skin cancer that has become common and can strike anyone starting at age 12.

- Focus especially on warning signs, risk factors, and prevention.

- Read "Dan's Story" to learn how the disease tragically claimed the life of a young man.

- Read the printed information distributed in class about the three most common types of skin cancer.

- Read the information in the web site or in the printed hand-out on how to check your skin then self-examine your skin according to the instructions.

- There will be an opportunity for a volunteer to earn extra credit in the next class session by demonstrating (fully clothed) how to self-examine the skin using an imaginary full-length mirror and a real hand mirror with a long handle.
Comparison of Common Types of Skin Cancer

This information is intended to supplement the information found in the www.skincheck.org web site.

Basal Cell Carcinoma

This skin cancer occurs in heavily sun-exposed areas of the skin such as the face and neck and typically appears starting at about age 40. Although it is common in all areas of the country it is especially prevalent in southern states.

Basal cell carcinomas typically occur as light pink or flesh colored “bumps” with pearly or waxy appearances. They grow slowly and are hardly ever fatal but, if neglected, they can grow to the point where disfiguring surgery is necessary to remove them.

Squamous Cell Carcinoma

This skin cancer also tends to occur in the most heavily sun-exposed areas of the skin and, like basal cell carcinoma, typically appears starting at about age 40. It occurs in all areas of the country but is more prevalent in southern states than in the North.

Squamous cell carcinomas often start as flat red or brown splotches that become rough, dry and scaly. If not treated, they may eventually grow large enough to spread to nearby internal organs and be fatal.

Melanoma

The deadliest of skin cancers, melanoma may occur anywhere on the body, including places that have not been exposed to sun. It often occurs in areas of the skin that have been subjected to sporadic heavy sun exposure such as the back in males and the legs in females. Vulnerability to melanoma begins at age 12, much earlier than other skin cancers. It is equally likely to occur in all areas of the country. If not removed early, while thin, melanoma often grows rapidly, spreads to distant internal organs and is fatal.
HOW TO CHECK YOUR SKIN

Facing the wall mirror, examine your face including lips, ears, and eyes. Use a flashlight to check inside mouth, nostrils, and ears. Check neck, shoulders, and upper chest. Women should also check under breasts.

Using both mirrors, check behind ears, neck, and upper back. While parting your hair with a dryer or brush, use both mirrors to check your scalp, front - back - sides. Or have a family member help.

Check your abdomen, front and sides. Use the hand mirror to check mid- and lower back carefully. The back is the most common site of melanomas in males. Use the hand mirror or both mirrors to check all areas of buttocks and genitals, including hidden parts.

Raise both arms and check all sides of arms and hands, including between fingers and under nails. Then check underarms and sides of upper body. Sitting on a small chair, prop each leg in turn on another chair. Check all sides of legs from ankles to thighs. Check feet, including tops, heels, soles, between toes, and under toenails. Legs are the most common sites of melanomas in females.