

LESSON OVERVIEW

This lesson is designed to provide participants with basic information on cancer of the skin including risk factors, symptoms and early detection. A variety of educational materials and activities are included to encourage active learning.



Objectives: By the end of the lesson, the participants will be able to:

1. Describe the structures and functions of the skin.
2. Define skin cancer.
3. Identify the risk factors for skin cancer.
4. Identify the symptoms of skin cancer.
5. Describe how to reduce the chance of developing skin cancer.



Outline:

1. Introduction to the Topic
2. Anatomy Review of the Skin
3. Skin Cancer
 - a. Risk Factors
 - b. Signs and Symptoms
 - c. Early Detection
 - d. Sun Protection
4. Where to Get Help



Time: 1 hour



Materials:

- Markers
- Flipchart Paper
- Overhead Projector
- Overhead Transparencies
- Hand held Mirror
- Sunscreen with an SPF of 15
- Long sleeve shirt, hat, pants, and sunglasses

DETAILED LESSON

Display and Review OHT: 1, Lesson 12 Objectives

1. Introduction to the Topic



Read the following:

The topic for this lesson is skin cancer. We will be learning about the structures and functions of the skin; define skin cancer; identify risk factors and symptoms of skin cancer; and describe how to reduce the chance of developing skin cancer.

Did you know the skin is the largest organ of the body? If we were to remove our skin it would weigh approximately 6 pounds. It is the outer covering of our body and it holds our body organs in place. It also helps to regulate body temperature, store water and vitamin D, and can sense painful and pleasant stimulation.

Display and Review OHT: 2, and Distribute Handout 1: Illustration of the Skin

2. Anatomy Review of the Skin



Read the following:

Let us assess our knowledge of the parts of the skin and its function.

We will identify the parts of the skin and identify the function of each part. Please follow along on your handout.

The skin has two layers, like an onion has layers. (Refer to an onion as example)

- The outside layer of the skin is called the **epidermis** and is made up primarily of cells that “die” every day. These “old” cells are removed when we bathe. You can see there are no blood vessels in the epidermis. This is why the cells die; cells need blood to live.
- Under the epidermis is the **dermis**, the inner or true skin layer. This layer of the skin can reproduce/grow new cells because of the blood vessels in this layer. As the “new” cells grow, they push the “old” cells off the outer skin layer. You can see there are different structures in the dermal layer.

Look at the illustration and identify the following structures:

1. **Sweat glands** produce sweat which helps regulate/keep the body temperature normal.
2. **Oil glands** produce an oily liquid that helps keep the skin from drying out.
3. **Follicles** produce the hair we see on the skin.
4. **Nerves** give us a sense of touch and temperature.
5. **Fatty tissue** makes our skin feel soft. It also provides nutritional storage and cushions our body. Some parts of our body have more fatty tissue than other parts!

Sweat and oil glands reach the outside of the skin through tiny openings called pores.

Notes to the Trainer

- Ask the participants to look and feel the skin on their eyelid, arm, and heel of the foot.
- Ask them to compare the texture and the thickness of the skin.

Ask the following questions:

- ❖ What part has the **thickest** skin? Why?
The heel because our feet have to support our body weight and the wear and tear of everyday activity such as walking and standing. Its thickness prevents the skin from breaking open from cuts/ scrapes on the bottom of our feet.
- ❖ Which part has the most hair follicles?
The head.

Display and Review OHT: 3, and Distribute Handout 2: Important Points



Read the following:

Let's review these important points:

- The skin is the body's outer cover and is the body's largest organ. It weighs about 6 pounds.
- The skin protects the body against heat, light, injury, infection and regulates the temperature of the body.
- The skin has two skin layers, the outer (epidermis) and inner (dermis) skin layer.
- The outside skin layer does not reproduce because there are no blood vessels in it. It sheds old cells every day.
- The inside layer does reproduce and pushes the old skin cells off the outside layer and replaces it with new cells. It contains blood and lymph vessels, hair follicles and sweat and oil glands.

Notes to the Trainer

- At this point, you may want to add some local skin cancer statistics.

3. Skin Cancer

Display and Review OHT: 4, Distribute Handout 3: Skin Cancer



Read the following:

Do you know someone who has had skin cancer? What did it look like? How/why do you think the person got it?

Skin cancer is an abnormal growth of the cells on the skin that can spread to and destroy healthy tissue. Skin cancer is the most common type of cancer.

Every day we are exposed to the sun's radiation. The sun's radiation is the major cause of skin cancer. The sun's rays have long term effects on our skin. Farmworkers are at risk for developing skin cancer because they spend a lot of time in the sun. We need to be aware that we are at risk whether we are working or just having fun outdoors. Everyday exposure to the sun results in damage that has accumulated over the years from ultra violet rays, which can lead to skin cancer.

Damage to the skin begins early. Nearly 75% of a person's lifetime sun exposure typically occurs between childhood and adolescence.

Between 65-90% of melanomas are caused by repeated exposure to UV rays.

There are two types of skin cancers we will be discussing: Melanoma and Non-Melanoma Skin Cancers.

Display and Review OHT: 5, and Distribute Handout 4: Melanoma and Non-Melanoma Skin Cancer



Read the following:

Melanoma Skin Cancer

There are about a million cases of skin cancer diagnosed each year. Most of these skin cancers are easily treated and cured. However, a certain type of skin cancer called malignant melanoma is less common but one of the most dangerous types of cancers. Melanoma is responsible for about 4% of skin cancer cases, and leads to 79% of all skin cancer deaths. In fact, according to the American Cancer Society, it is estimated in the US that in the year 2003 there will be 54,200 new cases and about 7,600 of those will result in death.

Melanoma begins in the cells that produce skin coloring, called the melanocytes. It can occur anywhere on the skin. In men, it is often found on the area from the shoulders to the hips or the head and neck. In women, it often develops on the lower legs. Melanoma is rare in African American people and others with dark skin. When it does develop in dark-skinned people, it usually occurs under the fingernails or toenails or on the palms or soles. The chance of developing melanoma increases with age, but this disease affects people of all age groups.

It is one of the most common cancers in adolescents. If it is found early and treated, it is almost 100 percent curable.

Anyone can get skin cancer but people whose work or play activities involve time outdoors are at higher risk.



Read the following:

Non-Melanoma Skin Cancer

Non-Melanoma skin cancers, usually basal cell and squamous cell cancers, are the most common types of skin cancer. They are called non-melanoma because this group of cancers includes all skin cancers except for melanoma skin cancer.

Non-melanoma skin cancer is the most common form of cancer. This type of cancer makes up 40% of all cancers and accounts for approximately 1.3 million cases of skin cancer each year. The American Cancer Society predicts that in the US in the year 2003, 2,200 people will die from non-melanoma skin cancer. The good news is that we can protect ourselves from skin cancer by learning about the risk factors.

Display and Review OHT: 6, and Distribute Handout 5: Risk Factors for Skin Cancer

a. Risk Factors



Read the following:

- Constant exposure to strong sunlight
- Certain types of large moles, or large number of moles
- Light natural skin color
- Family History
- Personal history of skin cancer
- Blue or green eyes
- Blonde or red hair
- History of sunburns early in life
- Skin that burns, freckles, gets red easily, or gets painful in the sun
- Men are twice as likely as women to have basal cell cancers and three times as likely to have squamous cell cancers of the skin
- Exposure to arsenic, a heavy metal used in insecticides, increases the risk

Display and Review OHT: 7, and Distribute Handout 6: Possible Signs of Skin Cancer

b. Signs and Symptoms



Read the following:

- Changes in the size or color of a mole or dark spot
- Moles that change in color to red or blue or white
- A lump that is pink or red
- Sores or lumps that don't heal
- Spots on the skin that are scale like
- Changes in the appearance of a bruise
- Changes to the touch of a mole (how it feels now as compared to how it used to feel)
- Itching or pain of a mole

Display and Review OHT: 8, and Distribute Handout 7: What to Look For

c. Early Detection



Read the following:

Early detection (finding the cancer early) is the key to preventing skin cancer. A skin exam is often part of a routine checkup by a doctor or nurse practitioner. People can check their own skin for new growths or other changes by doing a skin self-exam.

This is how to do it:

- Check your skin using a mirror.
- Start with the head and work down the shoulders, arms, back, chest, buttocks, and legs.
- Look for moles or spots on the skin, especially those with an unusual size, shape or color.

Look for the following: A change in size, color, shape and/or feel of an existing mole.

It is important to be able to spot the signs of skin cancer. Remember them by using the **ABCD** acronym:

A=Asymmetry

B=Border

C=Color

D=Diameter

Asymmetry: the shape of one half of the mole does not match the other.

Border: edges that are irregular, blurred, or notched; pigment spreads into the surrounding skin.

Color: color which is uneven; shades of black, brown and tan with areas of white, gray, red, pink or blue may also be seen.

Diameter: changes in size, usually an increase. Melanomas are usually larger than a pencil eraser.

Other signs include:

- Red patches on the face and neck
- Skin sores that won't go away

Display and Review OHT: 9, and Distribute Handout 8: How to Spot Skin Cancer

Activity 2

Skin Assessment

Purpose: To provide an opportunity for the participants to perform a skin assessment.

Materials:

Hand mirror for each participant
Two stools or chairs
Bright light source
Full-length mirror
Hair dryer

Procedure:

1. Ask the participants to pair with a partner. One partner will observe while the other inspects his/her skin.
2. Ask them to use Handout 8 as a guide for the skin exam.
3. Using a mirror, look for moles or spots on the skin, especially with an unusual size, shape or color. Examine the exposed skin. Start with the head, the neck, arms, and legs.

***The private areas are not included in this exercise; however, remind the participants that a thorough skin assessment would include shoulders, back, chest and buttocks.**

4. Ask the observer and the inspector to switch roles.
5. Once they are finished ask the following questions:
 - How many of you had done a skin cancer assessment before?
 - How did you feel doing it?
 - How would you encourage others to do the assessment?

d. Sun Protection

Notes to the Trainer

Show samples of clothing and sunscreen.

Display and Review OHT: 10, and Distribute Handout 9: Sun Protection



Read the following:

The best protection against skin cancer is by reducing your exposure to the sun. It is impossible for the farmworker to stay out of the sun, but everyone including farmworkers must learn ways to protect him or herself. Remember, put a barrier between the skin and the sun. Here are things you can do to protect yourself.

- Seek shade. Especially during midday when the sun's rays are the strongest (usually between 10am-4pm).
- Wear a wide-brimmed hat.
- Wear a long sleeved shirt. Best if loose fitting and tightly woven.
- Wear long pants.
- Wear sunglasses while outside.
- Use a sunscreen with a sun protection factor (SPF) of at least 15. Apply it at least 30 minutes before going outside and reapply often especially after sweating. Sunscreen is not meant to allow you to spend more time in the sun than you would otherwise.
- Don't use tanning beds.
- Remember to protect children.

Ask the following question:

- ❖ What are three ways to help protect against skin cancer?



Read the following:

These are important things to remember to help protect against skin cancer:

- Protect yourself from the sun
- Check your skin regularly
- See the doctor for any skin changes

Display and Review OHT: 11, and Distribute Handout 10: Where to Get Help

4. Where to Get Help



Read the following:

You can receive more information on skin cancer by contacting one of the following resources:

- National Center for Farmworker Health, Call for Health toll free line is a line operated by trained professionals to assist farmworkers and migrant health staff connect with service providers. They can be reached by calling: 1-800-377-9968 (bilingual).
- American Cancer Society is an organization that provides information on a variety of cancers. They can be reached by calling 1-800-ACS-2345.
- National Cancer Institute also contains information on cancer and clinical trials, they can be reached by calling: 1-800-4-CANCER
- American Academy of Dermatology-www.aad.org/SkinCancerNews/WhatIsSkinCancer

- Centers for Disease Control (CDC)-www.cdc.gov/cancer/nsc/pep/skin.htm
- Melanoma.com-is an informative website that contains additional skin cancer information.
- Skin Cancer Foundation-skincancer.org-This organization dedicates itself to the prevention of skin cancer.