Sun Sense



In hot, humid weather, be alert to the threat of too much sun. Good judgment and some simple precautions will help avoid possible dangers related to the heat. The heat of the sun can cause illnesses that range from unpleasant feelings to life-threatening heat stroke.

The risk of heat illness is present when the heat index is 100°F or more, which happens when the temperature is above 90°F and the humidity is above 60 percent. When the heat index is this high, several illnesses such as heat stroke, heat cramps, or heat exhaustion are possible with physical activity or prolonged exposure. The heat may overcome the body's ability to regulate internal body temperature at a safe level.

Some of the signs of heat illness include nausea, weakness, fainting, and pale, clammy skin. A warning signal before heat illness occurs may be red, dry skin. Prompt action can prevent the most serious heat illness heat stroke—which is fatal 50 percent of the time.

First Aid for Heat Illness

To provide first aid for heat illness:

- stop activity,
- improve air circulation with a fan or air conditioner, and
- sponge the body with cool water.

A conscious person should be given sips of cold, diluted fruit juice, sports drink, or water. Heat illness is an emergency situation and requires medical care!

How to Prevent Heat Illness

During hot weather, the following tips can prevent heat illness:

- Avoid heavy physical exertion in the middle of the day, from 10 a.m. until 4 p.m.
- Exercise less intensely.
- Wear light-colored, freshly laundered cotton clothing to reflect heat and allow air to circulate around the body.
- Drink at least 8 ounces of water or diluted fruit juice each hour, or every 15 minutes if exercising and depending on the heat and humidity. Alcohol and beverages with caffeine don't count.

- Wear a broad-brimmed hat in the sun.
- When in a closed space such as a car or house without air conditioning, open windows for ventilation.

For at least 20 years, scientists and organizations devoted to protection of human health have encouraged people to avoid intense exposure to the hot sun. The price for exposure to the sun's ultraviolet light may include these:

- skin cancer
- cataracts
- premature aging
- burns
- less immunity to illness
- macular degeneration, a leading cause of blindness in adults

Is There a Safe Type of Ultraviolet Light?

The spectrum of light includes several types of ultraviolet rays that are a form of radiation. The amount of radiation exposure over a lifetime is a risk for those exposed to the sun through outdoor recreation, occupation, or cosmetic tanning. Full-spectrum sunlight, the way most of us "catch a few rays," includes both ultraviolet A and B light (UVA and UVB), which cause tanning and burning of the skin.

Tanning beds and lamps used in salons primarily deliver ultraviolet A light (UVA) and are less likely to produce obvious burning of the skin. UVA light is not safer than sunlight or safer than UVB, and it carries the same risks as other types of ultraviolet sunlight. However, since UVA radiation goes deeper into and beneath the skin, its effects may not be as apparent until damage is done.

How Much Exposure Is Too Much?

Some people are at higher risk for serious effects of ultraviolet exposure. People who have a family member with cataracts or skin cancer are considered to be at risk for those conditions. A fairer complexion increases the risk, but excessive ultraviolet light can cause problems in all skin types depending on the degree of exposure. Generally, if sun causes any redness or discomfort, it is too much exposure. Certain medications and medicated soaps and creams may combine with the effects of sunlight to cause intense itching, skin burns, rashes, and swelling. These medications include, but are not limited to, some birth control pills, many antibiotics, high blood pressure medicines, antihistamines, tranquilizers, diabetes medications, the psoralen class of drugs used to treat some skin disorders such as psoriasis, and nonsteroidal anti-inflammatory drugs like ibuprofen. Discuss the risks of any medications you are taking with your doctor and pharmacist.

Protection from Ultraviolet Light

UV radiation reaches the earth even on cloudy days, so apply sunscreen anytime you are going outside. Follow these guidelines to avoid excessive exposure to ultraviolet light:

- Sunscreen lotions and creams with skin protection factors (SPF) of 30 provide good protection against UVA and UVB rays. Always apply as directed for the highest level of protection from damaging sun rays. Reapply more often to noses, feet, earlobes, and bald spots. The sports formulas are more enduring and last through heavy perspiration.
- Stay out of the sun between 10 a.m. and 4 p.m. as much as possible.
- Keep babies younger than 6 months out of direct sunlight.
- Hats and tightly woven clothing protect the shielded body areas from exposure. A broad-brimmed hat (3- to 4-inch brim) provides protection of the face and neck.
- Check labels for sunglasses and look for those that block most UVA and UVB light.
- Sunscreen is only effective for 1 to 2 years. Purchase new sunscreen every year, and write the date of purchase on the container.

The ill effects of the sun are almost totally preventable. Precautions may seem unnecessary and inconvenient, but they are well worth the effort in the long run.

Early Detection of Skin Cancers

Although the long-term effect of too much sun exposure is not completely predictable, the damage may show up as one of three types of skin cancer: basal cell, squamous cell, or malignant melanoma. The risk of developing one of these cancers increases with each episode of sunburn throughout life.

Knowing how to spot these cancers early can lead to timely, effective treatment. Check the skin all over your body once a month. When checking your skin for cancer, look for fleshy bumps that bleed, scab over, and heal in cycles; scaly patches of skin; and moles that appear suddenly or begin to grow and change color.

Melanoma is the most severe form of skin cancer, and it is the one most likely to spread to other parts of the body. The American Academy of Dermatology has developed warning signs of melanoma.

The ABCDEs of Melanoma



Asymmetrical shape: One half of your mole does not look like the other half.



Border: The border of your mole is scalloped or poorly defined.



Color: The colors within your mole vary. There may be shades of tan and brown, black, and sometimes red, white, or blue.



Diameter: Your mole is larger than the diameter of a pencil eraser (6 millimeters).

Evolution: The most important factor to consider when it comes to diagnosing a melanoma is the evolution of your moles. Knowing what is normal for YOU could save your life. If a mole has recently changed color and/or size, notify your dermatologist immediately.

Information Sheet 1524 (POD-05-18)

Revised by David Buys, PhD, MSPH, Extension State Health Specialist, Food Science, Nutrition, and Health Promotion.



Copyright 2018 by Mississippi State University. All rights reserved. This publication may be copied and distributed without alteration for nonprofit educational purposes provided that credit is given to the Mississippi State University Extension Service.

Produced by Agricultural Communications.

Mississippi State University is an equal opportunity institution. Discrimination in university employment, programs, or activities based on race, color, ethnicity, sex, pregnancy, religion, national origin, disability, age, sexual orientation, genetic information, status as a U.S. veteran, or any other status protected by applicable law is prohibited. Questions about equal opportunity programs or compliance should be directed to the Office of Compliance and Integrity, 56 Morgan Avenue, P.O. 6044, Mississippi State, MS 39762, (662) 325-5839.

Extension Service of Mississippi State University, cooperating with U.S. Department of Agriculture. Published in furtherance of Acts of Congress, May 8 and June 30, 1914. GARY B. JACKSON, Director