

North Dakota State University

Working in the Warm Weather

I. Introduction

This NDSU procedure provides guidelines for those individuals performing their job duties while working in a warm weather environment at all properties of the University. The intent is to establish proper safety procedures and practices, as well as to promote and provide for a safer environment for students, faculty and staff.

II. Purpose

To provide guidelines to employees to know and understand the safe operating procedures involved with working in warm conditions.

III. Goals

To reduce the risk of a work related injury by maximizing personal safety while working in warm conditions.

IV. Procedures

Guidelines to understand and follow when overexposed to warm conditions

- A. UV Rays – Ultraviolet Radiation is one form of energy coming from the sun. There are 3 types of UV rays.
 1. UVA – causes the skin to age and results in wrinkles, colors the skin, and gives a false sense of protection from the sun
 2. UVB – causes sunburns, cataracts, and skin cancer.
 3. UVC – most dangerous. Fortunately, these rays are blocked by the ozone layer and don't reach the earth.
- B. Heat stress is when excessive heat can place an abnormal stress on your body. The body temperature rises above normal and you can experience: Muscle cramps; weakness and disorientation; feeling dangerously ill; tiredness, irritability, and inattention. The following are some measures you can take to prevent heat stress:
 1. Drink a lot of fluids – it is very important to stay hydrated.
 2. Take frequent breaks.
- C. Heat Rash is when you are exposed to hot and humid air, a rash develops, and there is a reduction in the ability to sweat. First aid for heat rash:
 1. Cleanse affected area thoroughly and dry completely.
 2. Use soothing lotion to relieve discomfort.
- D. Heat Cramps or exhaustion may occur after prolonged exposure to heat - usually at the end of the day. What do you do?
 1. Rest in the shade or cool place.
 2. Drink plenty of water.
 3. Loosen clothing to allow body to cool.
 4. Use cool, wet rags to aid in cooling.
- E. Heat Stroke may have the following symptoms and should be treated immediately
 1. Absent of sweating.
 2. The skin is hot and dry.

3. The body temperature is high.
4. Mental confusion, dizziness, chills, convulsions.
5. Hot, dry skin.

If an individual is experiencing the above: **CALL 911 and contact the University Police and Safety Office.** Try to cool the body by applying cool water, but be careful not to cool the body down too quickly or the body may go into shock.

VI. Guidelines for Protection

A. Eye Protection

1. Make sure the lenses are designed to block out 95% of UV.
2. Polarizing lenses and mirror finishes reduce glare, but have little effect in blocking the absorption of UV rays.

B. Skin Protection

1. Sunscreen SPF 30+ sunscreen blocks 96% of UV and SPF15+ blocks out 93%. Only products with both “Broad Spectrum” and SPF 15 or higher have been shown to provide all these benefits.
2. Apply sunscreen 20 minutes before going outside. Don’t rub it in – a light film should stay visible.
3. Reapply sunscreen every 2 hours if you are sweating a lot.
4. Wear clothes that cover your arms, legs, and neck to ensure proper protection.
5. Wear comfortable, lightweight fabrics like cotton, hemp and linen.
6. Wear a hat, sunglasses, and seek shade.

C. Sun is at its peak from 10 am to 2 pm

1. Be aware of its effects on you.
2. Consume a lot of water to stay hydrated.
3. Cool down in air-conditioned rooms or near fans.
4. Wear light colored, natural fiber clothing to help your body repel heat absorption and cool easier.
5. Pace yourself during strenuous activities.

VII. The Sting of summer

When temperatures increase, insects become very active. Insects can cause health related problems. Mosquitoes and ticks carry diseases and allergic reaction can occur with bee or wasp stings.

If stung by a bee, remove the stinger by scraping it with a card, etc. DO NOT pinch, it will inject more venom into your system. Yellow jacket hornets and wasps will sting repeatedly.

A. Before working outside

1. Use insect repellents that contain DEET.
2. Wear long pants and long sleeve shirts in lightweight material.
3. Avoid garbage areas that contain food, open soda and empty cans.
4. Avoid wearing colognes, perfumes, hairspray, etc.

- B. Symptoms of stings
 - 1. Develop hives, itching or swelling
 - 2. Tightness in chest, unconsciousness or cardiac arrest
 - 3. Difficulty breathing, dizziness
- C. Summer insect dangers
 - 1. Lyme disease is caused from bites of infected ticks. Symptoms are as follows:
 - a. Bull's-eye rash
 - b. Flu-like symptoms such as fever
 - c. Lymph node swelling
 - d. Stiff neck
 - e. Fatigue
 - f. Headaches
 - g. Migrating joint aches and muscle aches
- D. West Nile Virus is caused by mosquito bites.
 - 1. Mild symptoms
 - a. Fever
 - b. Headache and body aches
 - c. Skin rash on the trunk of the body
 - d. Swollen lymph glands
 - 2. Severe symptoms
 - a. High fever
 - b. Neck stiffness
 - c. Stupor, disorientation
 - d. Coma, tremors, convulsions
 - e. Muscle weakness, and paralysis
- E. Precautions and prevention to take to eliminate stings and bites:
 - 1. Wear light-colored clothes to see ticks more easily.
 - 2. Wear long sleeves; tuck pant legs into socks or boots in tick-infested areas.
 - 3. Wear high boots or closed shoes that cover your feet completely.
 - 4. Wear a hat and use tick repellants, but not on your face.
 - 5. Shower after being outdoors. Wash and dry your clothes at high temperature.
 - 6. Examine your body for ticks after working or playing outside.
 - 7. Remove any attached ticks promptly with fine-tipped tweezers.
 - 8. Apply insect repellent with DEET to exposed skin.
 - 9. Spray clothing with repellents containing DEET or permethrin.
 - 10. Be extra careful at dusk and dawn when mosquitoes are most active.
 - 11. Remove standing water and ponds when able to.