

## Heat Stress and Poison Ivy

## SUMMER HEAT

Hot weather may trigger a variety of medical emergencies. Even healthy adults can be affected. Employers are required to provide a workplace free of recognized hazards. Working outdoors in high heat conditions can pose a number of hazards to workers. Heat-related injuries range from uncomfortable to life-threatening:

**Sunburn** should be avoided because it damages the skin. Although the discomfort is usually minor and healing often occurs in about a week, a more severe sunburn may require medical attention. Symptoms of sunburn are well known: the skin becomes red, painful, and abnormally warm after sun exposure. When treating sunburn:

- Avoid repeated sun exposure.
- Apply cold compresses or immerse the sunburned area in cool water.
- Apply moisturizing lotion to affected areas after cooling. Do not use butter or ointment.
- Do not break blisters.

**Heat cramps** are muscular pains and spasms that occur when the body loses electrolytes during profuse sweating or when inadequate electrolytes are taken into the body. They usually begin in the arms, legs or abdomen and may precede heat exhaustion. Treatment for heat cramps is to rest in a cool place, drink water, and stretch / gently rub the cramp.

**Heat exhaustion** is a medical emergency. When a person is suffering from heat exhaustion, they will perspire profusely and most likely will be pale. It is best treated by taking the patient to a cool place, applying cool compresses, elevating the feet and giving the patient fluids. Victims should recover after 10-15 minutes of treatment. Consider calling 9-1-1 if conditions persist.

**Heat stroke** is serious medical emergency, call 9-1-1. The brain has lost its ability to regulate body temperature. The patient will be hot, reddish and hot to the touch. Their temperature will be markedly high and there will be no perspiration. The emergency care of heat stroke is to cool the body as quickly as possible. One of the best methods for cooling the body during a heat emergency is to wrap the patient in cool, wet sheets.

## The best way to avoid sun stress emergencies are to:

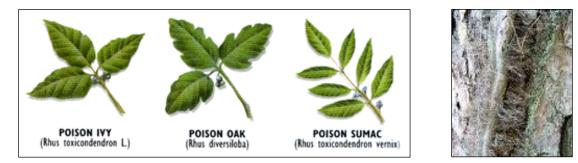
- Drink before you're thirsty and drink often. Hydrate before getting to work.
- Eat a healthy diet. Avoid large meals, drinking caffeinated and alcoholic beverages.
- Wear a hat or cap, keep the neck covered and wear loose fitting clothing. The greatest amount of heat loss from the body occurs at the head.
- If you can, work in the cool hours of the day or evening.
- Supervisor should have a plan for hot days. Consider heat indexes, water, rest periods, cool towels, and other compensatory factors.

The use of table salt or salt tablets to replace body electrolytes is not recommended. Many electrolyte replacement drinks are available on the market. Electrolytes are crucial for the proper functioning of the body. If going to drink for longer periods, a common practice is to mix drinks 50/50 with water. A physician or health care practitioner should be consulted before using these electrolytic fluids.

This bulletin is intended for general information purposes only. It should not be construed as legal advice or legal opinion regarding any specific or factual situation. Always follow your organization's policies and procedures as presented by your manager or supervisor. For further information regarding this bulletin, contact your Safety Director at 877.398.3046.

## **POISON IVY**

Poison ivy is extremely common and grows as a vine on trees, rock walls, or buildings. If there is no such support nearby, poison ivy will grow as a small bush or shrub. Poison ivy has a number of relatives, which can cause an identical rash on sensitive persons. This group includes poison oak, poison sumac, and the cashew tree.



NOTE: vines display typical 'hairy' appearance

A typical poison ivy leaf is made up of three leaflets, joined at a common stalk. The leaflets are often colored slightly reddish (but not always) at the stem. The leaflets may have toothed edges (as in poison oak) or may be smooth. Grape-like clumps of greenish, then white berries appear in mid-summer, and in fall the leaves turn an orange-yellow or red.

**How does poison ivy cause a rash?** The rash occurs after a person who is allergic to poison ivy gets Urushiol (oo-ròo-she-all) oil found in the sap from the plant on the skin. The plant must be damaged (bruised or cut) before the sap can escape, so touching an undamaged plant will usually not cause a rash. Damaging any part of the plant, such as brush cutting (including the vine and roots), any time of year will release enough sap to cause problems. Smoke from burning the plant can also cause a rash, or worse reactions if it is inhaled. Pets, tools, and clothing can carry the sap to the skin, even for weeks. Dead plants and dry roots will hold the oil for up to five years.

Knowledge and avoidance of the plant is critical. Appropriate clothing *is* the best prevention if you must work around poison ivy. Some "barrier creams" can be effective in preventing or slowing the absorption of the poison ivy sap into the skin, but washing with soap and water is still required as soon as practical after exposure. Clothing that has been in contact should be carefully handled and washed before wearing again.

Once the sap gets on the skin it soaks in quickly. Washing with soap and cool water within 10 or 20 minutes of exposure may prevent the rash. But washing within an hour of exposure can reduce the seriousness of the rash. The rash may start as early as six hours or as much as two weeks after exposure.

The rash cannot be spread by scratching or by the blister fluid. It usually heals within two or three weeks. Broken blisters can become infected like any other open wound and should be well cared for. The rash will itch and swell more with a hot shower, whirlpool, or sauna so cool baths or showers will be more comfortable. Minor itching, pain, oozing, and swelling can be relieved with over-the-counter anti-itch treatments that contain zinc acetate, diphenhydramine HCI, menthol zinc oxide, or hydrocortisone. In sever cases a physician can prescribe antihistamine creams, tablets, or shots.

NJDEP prohibits using products such as Round-Up® unless done by a Licensed Pesticide Applicator.