



GREAT PLAINS

Center for Agricultural Health

PREVENTION OF HEAT ILLNESS

DID YOU KNOW...

Exposure to heat can cause illness and death as a result of increased internal body temperature. More worker compensation claims for heat illness come from workers in agricultural than from any other occupation.

The most serious heat illness is *heat stroke*, which can be fatal. Other heat illnesses, such as *heat exhaustion*, *heat cramps* and *heat rash*, are important indications of excess exposure to heat.



CDC photo

Heat-related illness: Know the signs

It's important to know the signs of heat illness—acting quickly can prevent more serious medical conditions and save lives.

Heat Stroke is the most serious heat-related illness and requires immediate medical attention. Symptoms include confusion, fainting, seizures, very high body temperature and hot, red, dry skin or profuse sweating. **CALL 911** if anyone shows signs of heat stroke.

Heat Exhaustion is also a serious illness. Symptoms include headache, nausea, dizziness, weakness, thirst, muscle cramps, and heavy sweating.

Heat Fatigue and **Heat Rash** are less serious conditions, but they are still signs of too much exposure to heat.

If you or a coworker has symptoms of heat-related illness, you must act immediately. Move the affected person to a shaded area, loosen his/her clothing, give him/her water (if he/she is able to drink), and cool him/her down with cool water.

What circumstances lead to heat illness?

- High temperature and humidity with limited air movement
- Direct sun exposure
- Low fluid intake
- Heavy physical labor
- Wearing chemical protective clothing
- No recent exposure to hot workplaces

Great Plans Center for Agricultural Health

Promoting and Protecting the Safety and Health of Farm Workers and Their Families

The University of Iowa College of Public Health, Iowa City, Iowa

www.public-health.uiowa.edu/gpcah/

319.335.4405

Pr.HI Revised 1/2014

BEAT THE HEAT: FOUR SIMPLE STEPS

WATER: Water helps prevent heat illness — drink a quart of water every hour. Don't wait until you feel thirsty. "Sport drinks" are useful. Caffeinated and sweetened beverages (cola, coffee, tea) are less helpful. Do not drink alcoholic beverages when working in the heat — alcohol dehydrates the body.

REST: Rest breaks help you recover from heat and let your body temperature cool down. Take frequent breaks when working in hot conditions.

SHADE: Resting in the shade or in air-conditioning helps you cool down. Be sure to have a shaded or cool place to rest.

TOLERANCE: Workers who are not used to hot conditions should gradually increase daily time spent in hot conditions.



Useful links

<http://www.osha.gov/Publications/osha3154.pdf>

An OSHA "Quick Card" entitled "Protecting Workers from Heat Stress." Generic heat stress information intended for use by workers at risk of heat illness. It is not directed specifically at agricultural workers.

http://nasdonline.org/static_content/documents/137/d001702.pdf

A two page "Training Module" prepared by the Ohio State University Extension Office. The intended audience includes occupational safety specialists, safety managers, and supervisors. Has useful information with some direct applicability to agricultural works, especially pesticide handlers and "early entry" workers. Has five True-False questions at end to assess heat stress knowledge.

http://depts.washington.edu/pnash/files/heat_illness/31.ht_illness.pdf

A one page chart describing the symptoms, health consequences, and first aid for heat cramps, heat syncope (fainting), heat exhaustion, and heat stroke. Somewhat text intensive.

<http://www.99calor.org/educational-resources/>

Extensive web page prepared by CAL/OSHA. Especially useful for links to education and training materials in English, Spanish, Hmong, Punjab, and Mixteco. Includes low literacy fact sheets in multiple translations. Some legal issues unique to CAL OSHA regulations.

<http://www.cdc.gov/niosh/docs/wp-solutions/2013-143/pdfs/2013-143.pdf>

NIOSH document of use to high literacy employees, health and safety managers, and public health officials.

<http://www.hpc.ncep.noaa.gov/html/heatindex.shtml>

Easy to use heat index calculator from the National Weather Service.



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This publication was supported by Cooperative Agreement Number U54 OH007548 from CDC-NIOSH through an award to the Great Plains Center for Agricultural Health. Its contents are solely the responsibility of the authors and do not necessarily represent the views of the CDC-NIOSH.