

# WASHINGTON STATE LOGGER SAFETY INITIATIVE

Keeping Washington loggers safe.

May 2, 2014

## Outdoor Heat Exposure Reminder

This is a reminder that the Outdoor Heat Exposure rule is in effect from May 1 through Sept. 30 every year, when exposures are at or above a specific temperature. As an employer with workers in the outdoors during hot weather, you must complete the Outdoor Heat Exposure Training Program. A copy from the model LSI Accident Prevention program is attached.

We also want to tell you about a phone app that makes it easier to determine the risk level for heat-related illness. The app was produced by the federal OSHA, and it is available for iPhone, Android and also in Spanish at [www.osha.gov/SLTC/heatillness/heat\\_index/heat\\_app.html](http://www.osha.gov/SLTC/heatillness/heat_index/heat_app.html)

The App allows you and your workers to calculate the **heat index**, and, based on the heat index, displays a **risk level** to outdoor workers. Then, with a simple "click," you can get reminders about the **protective measures** that should be taken at that risk level to protect workers from heat-related illness-reminders, such as:

- Drink enough fluids
- Schedule rest breaks
- Know what to do in an emergency
- Monitor each other and recognize symptoms
- Gradually build up workload if new to the job
- Avoid alcohol, caffeine and heavy meals.

For more information and training resources, visit [A-Z Safety & Health Topics](#) and click on "Heat Stress" under "H."

## Outdoor Heat Exposure Safety Program

As your employer, we are responsible to determine whether we have employees who may work under conditions that increase the risk of developing heat related illness. The main environmental factors include: air temperature, relative humidity, radiant heat from the sun, conductive heat sources such as the ground, air movement and workload severity and duration. Generally, any employee who works in moderate to high temperature and/or humidity conditions, and performs physical activities that elevate the heart rate and/or causes increased perspiration, needs to be prepared for potential heat related illness. This could include jobs such as the rigging crew, cutters, chasers, pre-commercial thinners, etc. As an employee, you are responsible for monitoring your personal factors for heat-related illness including consumption of water or other beverages to ensure hydration.

The information in this program will be used for training supervisors and employees. L & I regulations require that affected employees receive annual training and it must be completed by May 1<sup>st</sup>. Affected employees hired between May 1 and Sept. 30 must receive training prior

to any work assignments. Your supervisor will monitor on-site temperature and clothing requirements to determine if Table 1 applies. The following might be used for temperature readings: thermometer, psychrometer, or hygrometer.

<b>Table 1 Outdoor Temperature Action Levels</b>	
All other clothing	89 degrees
Double-layer woven clothes including coveralls, jackets and sweatshirts	77 degrees
Non-breathing clothes including vapor barrier clothing or PPE such as chemical resistant suits	52 degrees

We will adhere to requirements for first aid supplies, first aid training and heat related illness training, Logging operations will have a written emergency medical plan per WAC 296-54 – 513-9 to ensure prompt medical attention, and a stretcher to carry an ill worker to a place accessible to EMS. All work sites will have reliable communication, such as a cell phone, so EMS services (911) can be reached.

We will ensure that a sufficient quantity of drinking water is readily accessible (as much as 2 gallons per person when exposed to temperature at or exceeding the temperature in Table 1) to employees at all times; and that all employees have the opportunity to drink at least one quart of drinking water per hour. If necessary, we will make arrangements to replenish water supply during the day. Your supervisor may send someone to purchase/obtain more drinking water or contact a returning log truck driver and have the driver purchase water. Your supervisor will tell you where the water is located.

Staying hydrated is extremely important. The body naturally sweats to cool itself. Sweating can use up a significant amount of fluid, which must be replaced continuously throughout the workday. If fluid is not regularly replaced, a worker will become dehydrated, increasing the risk for heat illness.

It is very important that you protect yourself and other workers by learning the signs and symptoms of heat illness and how to treat it.

**How do you protect yourself from heat illness?**

- Learn the signs and symptoms of heat illness and take them seriously.
- Drink plenty of water or sports drinks, even when not thirsty. Up to 4 cups per hour during the workday.
- Try to do the heaviest work during the cooler parts of the day.
- Adapt the pace of work to the heat – take more breaks, go slower when possible.
- Build up a tolerance to the heat and your work slowly. The more you work in heat, the more your body gets used to it. This is called becoming acclimatized to heat, and can take 4-10 days depending on the person and working conditions.
- Wear light-weight, loose-fitting, light-colored, breathable (e.g. cotton) clothing.
- Take regular breaks in the shade. Generally there will be sufficient rest/break time between turns or when “gasing up” your saw or during lunch. However additional breaks will be provided as necessary. For example you may be instructed to sit out

several turns to get additional rest/cooling. PPE, like leg protection, should be removed during rest breaks.

- Avoid alcohol, caffeinated drinks (coffee/pop) and heavy meals before or during work.
- Keep an eye on co-workers for symptoms of heat stress and notify a supervisor immediately.
- If you start feeling ill, stop what you are doing immediately and take steps to cool down. Immediately tell your supervisor.

**The three major forms of heat stress are heat cramps, heat exhaustion and heat stroke. Heat exhaustion is a serious problem, and heat stroke can kill you.**

<i>Heat-related illness</i>	<i>Signs and Symptoms</i>	<i>First Aid</i>
<b>Heat Cramps</b>	<ul style="list-style-type: none"> <li>- Muscle cramps or spasms</li> <li>- Grasping the affected area</li> <li>- Abnormal body posture</li> </ul>	<ul style="list-style-type: none"> <li>- Drink water or sport drinks</li> <li>- Rest, cool down</li> <li>- Massage affected muscle</li> <li>- Get medical evaluation if cramps persist</li> </ul>
<b>Heat Exhaustion</b>	<ul style="list-style-type: none"> <li>- Heavy sweating</li> <li>- Pale, cool skin</li> <li>- Headache</li> <li>- Weakness</li> <li>- Dizziness</li> </ul>	<ul style="list-style-type: none"> <li>- Move to shade or air conditioned vehicle and loosen clothing; <b>do not leave him or her alone</b></li> <li>- Spray water or apply cool, wet cloths to head and torso</li> <li>- Lay on back and elevate legs</li> <li>- Encourage person to drink cool liquids, preferably a sports drink</li> </ul>
		<ul style="list-style-type: none"> <li>- If no improvement, call 911</li> </ul>
<b>Heat Stroke</b>	<ul style="list-style-type: none"> <li>- Any of the above but more severe</li> <li>- Hot, dry skin (25-50% of cases)</li> <li>- Altered mental status with confusion or agitation</li> <li>- Can progress to loss of consciousness and seizures.</li> <li>- Can be fatal</li> </ul>	<ul style="list-style-type: none"> <li>- <b>Call 911</b></li> <li>- Move the victim to a cool shaded area; <b>do not leave him or her alone</b></li> <li>- If a shaded area is not available; the blanket with our first aid supplies can be used to block the sunlight.</li> <li>- Cool the person rapidly using whatever means you can. Fan the person, spray with cool water, or wipe with a wet cloth or cover with a wet sheet, immerse in a tub of cool water.</li> <li>- Apply icepacks to the person's neck, armpits and in the groin.</li> <li>- If responsive, lay on back. If unresponsive, place in recovery position (on side).</li> <li>- If responsive and not nauseous, give <b>sips</b> of water</li> <li>- Monitor airway and breathing – administer CPR if needed</li> </ul>

Safety Meeting/Training Date: \_\_\_\_\_

Employees trained: \_\_\_\_\_

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