Implementing Board Policy 2.30.05 Contact: Environmental Health & Safety, 533-8686

1.0 Purpose

Community Colleges of Spokane (CCS) is committed to the health and safety of its faculty and staff and in maintaining a safe and efficient workplace that complies with all local, state, and federal safety and health regulations, programmatic standards, and with any special safety concerns identified at the unit level. CCS complies with <u>WAC 296-62-095</u> requirements regarding outdoor heat exposure to prevent employee heat-related illnesses.

The purpose of this plan is to protect CCS employees from heat-related exposures and illnesses. Per WAC 296-62-095, this plan applies to outdoor work environments and is **in effect year round** when employees are exposed to outdoor heat.

2.0 Scope

- 2.1 The Outdoor Heat Exposure Control Plan applies to employees working outdoors for more than <u>15</u> minutes in any 60-minute period in temperatures:
 - 2.1.1 As low as 52 degrees Fahrenheit when wearing clothing that is non-breathable or provides a vapor barrier such as rain gear or chemical resistant suits.
 - 2.1.2 At 80 degrees Fahrenheit when wearing any other type of clothing such as typical shirts and pants.
- 2.2 Individuals who are not acclimatized or who come to work dehydrated, which makes them more susceptible to heat stress than others.

3.0 Definitions

- 3.1 <u>Acclimatization:</u> The body's temporary adaptation to work in heat that occurs as a person is exposed to it over a period of seven to 14 days depending on the amount of recent work in the heat and the individual factors. Acclimatization can be lost after seven consecutive days away from working in the heat.
- 3.2 <u>Buddy System</u>: A system where individuals are paired or teamed up into work groups so each employee can be observed by at least one other member of the group to monitor and report signs and symptoms of heat-related illness.
- 3.3 <u>Drinking Water</u>: Potable water that is suitable to drink and suitably cool in temperature. Other acceptable beverages include drinking water packaged as a consumer product, and electrolyte-replenishing beverages (i.e., sports drinks) that do not contain high amounts of sugar, caffeine, or both such as energy drinks.<u>Engineering Controls</u>: The use of devices to reduce exposure and aid cooling, not including wearable items. Examples of engineering controls include fans, misting stations, air-conditioning, etc.
- 3.4 <u>Heat-related Illness:</u> A medical condition resulting from the body's inability to cope with a particular heat load with symptoms that include, but are not limited to, heat cramps, heat rash, heat exhaustion, fainting and heat stroke.
- 3.5 <u>Heat Wave:</u> Any day in which the predicted high temperature for the day will be at least the temperatures listed in Table 1 of <u>WAC 296-62-09530</u> and as outlined in section 2.1, and at least 10 degrees Fahrenheit higher than the average high daily temperature in the preceding five days.
- 3.6 <u>Outdoor Environment:</u> An environment where work activities are conducted outside. Work environments such as inside vehicle cabs, sheds, and tents or other structures may be

considered an outdoor environment if the environmental factors affecting temperature are not managed by engineering controls.

- 3.7 <u>Risk Factors for Heat-related Illness:</u> Conditions that increase susceptibility for heatrelated illness including:
 - 3.7.1 Environmental factors such as air temperature, relative humidity, air movement, radiant heat from the sun and other sources, conductive heat sources such as the ground;
 - 3.7.2 Workload (light, moderate, or heavy) and work duration;
 - 3.7.3 Personal protective equipment and clothing worn by employees; and
 - 3.7.4 Personal factors such as age, medications, physical fitness, and pregnancy.
- 3.8 <u>Shade</u>: A blockage of direct sunlight. Shade may be provided by any natural or artificial means that does not expose employees to unsafe or unhealthy conditions and that does not deter or discourage access or use. One indicator that blockage is sufficient is when objects do not cast a shadow in the area of blocked sunlight. Shade is not adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool. For example, a car sitting in the sun does not provide acceptable shade to a person sitting in it, unless the car is running with air-conditioning.
- 3.9 <u>Vapor Barrier Clothing:</u> Clothing that significantly inhibits or completely prevents sweat produced by the body from evaporating into the outside air. Such clothing includes encapsulating suits, various forms of chemical resistant suits used for PPE and other forms of non-breathable clothing.

4.0 Responsibilities

- 4.1 Environmental Health & Safety will do the following.
 - 4.1.1 Assist departments with their heat exposure concerns.
 - 4.1.2 Provide heat exposure training to departments as needed and upon request.
 - 4.1.3 Update the CCS Outdoor Heat Exposure Control Plan to comply with any changes to the requirements.
- 4.2 Supervisors will do the following.
 - 4.2.1 Be aware of and look for the symptoms of heat-related illnesses in employees and stop work immediately if any symptoms are observed.
 - 4.2.2 Ensure employees have access to an adequate supply of drinking water that is suitably cool.
 - 4.2.3 Ensure employees are provided with frequent breaks to allow for hydration and cooling down.
 - 4.2.4 Encourage employees to frequently consume water or other acceptable beverages to stay hydrated.
 - 4.2.5 Attend heat exposure training provided by their department.
 - 4.2.6 Ensure their employees also attend heat exposure training.
- 4.3 Employees will do the following.

- 4.3.1 Be aware of and look out for symptoms of heat-related illnesses in themselves and their coworkers and stop work immediately if any symptoms are experienced or observed.
- 4.3.2 Drink enough water to remain hydrated while working outside in hot temperatures.
- 4.3.3 At least one quart of water per hour should be consumed while working outside in the heat.
- 4.3.4 Attend heat exposure training provided by their department.

5.0 Access to Shade

- 5.1 The departments with employees exposed to temperatures at or above those listed in Section 2 of this plan must utilize shade in work and/or break areas to reduce heat exposure. This includes, but is not limited to, shade from trees, walls, and/or shade structures such as a portable canopy.
 - 5.1.1 The shade must be located as close as practicable to the areas where employees are working.
 - 5.1.2 The departments must ensure that the amount of shade present is large enough to accommodate the number of employees on a meal or rest period, so they can sit in a normal posture fully in the shade.
- 5.2 In lieu of shade, the departments may use other means to reduce body temperature if they can demonstrate such means are equally or more effective than shade. Some alternatives to shade may include the provision of misting stations, cooling vests, or airconditioned areas.

6.0 High Heat Procedure

- 6.1 The departments must implement the following high heat procedures when outdoor temperatures are at or above 90 degrees Fahrenheit, unless engineering or administrative controls are utilized to reduce exposure to below 90 degrees Fahrenheit.
- 6.2 Mandatory rest periods must be provided in the shade or an equally or more effective method must be implemented to reduce body temperature.
 - 6.2.1 At or above 90 degrees Fahrenheit, a mandatory rest period of 10 minutes every two hours is required.
 - 6.2.2 At or above 100 degrees Fahrenheit, a mandatory rest period of 15 minutes every hour is required.
 - 6.2.3 The mandatory cool-down rest period may be provided concurrently with any meal or rest period.
- 6.3 The departments or their designee must closely observe their employees for signs and symptoms of heat-related illness by implementing one or more of the following:
 - 6.3.1 Regular communication with employees working alone, such as by radio or cellular phone;
 - 6.3.2 A mandatory buddy system; or
 - 6.3.3 Other effective means of observation.
- 6.4 Observations described in Section 8.1 of this plan must also be implemented.

7.0 Provision of Water

- 7.1 Employees must have access to potable water.
 - 7.1.1 Water that is suitably cool for drinking must be provided in sufficient quantity at the beginning of the work shift to allow one quart per employee, per hour for a total of two gallons per employee, per eight-hour shift.
 - 7.1.2 Employees may begin the shift with smaller quantities of water if effective procedures for replenishment of water during the shift have been implemented to allow employees one quart or more per hour.

8.0 Adjusting to Heat (Acclimatization)

- 8.1 Acclimatization is especially critical for heavy work in hot temperatures. The departments or their designee must closely observe employees for signs and symptoms of <u>heat-related illness</u> for 14 days when employees:
 - 8.1.1 Are newly assigned to working at or above the applicable temperatures listed in Section 2.1 of this plan.
 - 8.1.2 Return to work at the applicable temperatures listed in Section 2.1 of this plan after an absence of seven days or more;
 - 8.1.3 Are working during a heat wave.
- 8.2 It takes about two weeks to fully adjust to hot working conditions. This adjustment will be lost if the employee is away from the hot conditions for a week or more.

9.0 Responding to Heat-Related Illness

- 9.1 The departments or their designee must closely observe their employees for signs and symptoms of <u>heat-related illness</u>.
- 9.2 Employees showing signs or demonstrating symptoms of heat-related illness must be relieved from duty and provided with sufficient means to reduce body temperature.
- 9.3 Employees showing signs or demonstrating symptoms of heat-related illness must be monitored to determine whether medical attention is necessary.

10.0 Training

- 10.1 All employees and supervisors must be trained as required by this section prior to outdoor work where occupational exposure to heat might occur and at least annually after the initial training.
- 10.2 Both employees and supervisors will be trained on the signs of heat-related illnesses and the importance of stopping work immediately if any symptoms are observed.
- 10.3 For training purposes, departments can access the online Outdoor Heat Exposure training provided by the Washington State Department of Labor and Industries (L&I) at http://wisha-training.lni.wa.gov/training/articulate/HeatIllness/story.html.
- 10.4 Departments interested in having in-person training or access to other training options should contact the EH&S Office at 509-533-8686.

11.0 Related Information

- 9.1 CCS Heat Exposure Website
- 9.2 <u>L&I Heat Exposure Safety Educational Pocket Guide</u>

- 9.3 L&I Be Heat Smart
- 9.4 <u>Heat Exposure Safety Educational Posters</u>
- 9.5 WAC 296-62-095 Outdoor Heat Exposure

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