Heat Stress Policy

Purpose

The purpose of this Heat Stress Policy is to protect employees from the adverse effects of heat while they are performing their job. This not only applies to employees who work outside in the sun but also to employees who work inside buildings where there is no air-conditioning and little air movement.

Guidelines for the Wet Bulb Globe Temperature Index

Heat stress levels will be assessed by measuring the Wet Bulb Globe Temperature Index (WBGT) which takes into account environmental factors such as humidity, wind speed, temperature, and radiant heat. This environmental index correlates with deep body temperatures and other physiological responses to heat.

The heat stress level determined by measuring the WBGT and corresponding recommended break schedule are listed in the following table. This break schedule is based on the 1999 American Conference of Governmental Industrial Hygienists threshold limit values.

Recommended Break Schedule for Measured WBGT and Work Load

<table>
<thead>
<tr>
<th>Heat Stress Level</th>
<th>Break Schedule</th>
<th>WBGT (° F)</th>
<th>Light Workload</th>
<th>Moderate Workload</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Continuous Work</td>
<td>86</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Level I</td>
<td>15 Minute Break Every Hour</td>
<td>87</td>
<td>82.5</td>
<td></td>
</tr>
<tr>
<td>Level II</td>
<td>30 Minute Break Every Hour</td>
<td>88.5</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>Level III</td>
<td>45 Minute Break Every Hour</td>
<td>90</td>
<td>88</td>
<td></td>
</tr>
</tbody>
</table>

1. A light workload would be performing light hand or arm work.

2. A moderate workload would be walking about with moderate lifting and pushing.

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Guidelines when WBGT is not measured

Supervisors of evening or weekend work crews when measured WBGT is not available can use the following guidelines to judge heat stress levels and break schedule. As always, the workload of the employee and an individual’s susceptibility to heat-related illnesses must be considered. Common sense should prevail.

These guidelines are designed on the temperature of the ambient air as measured on a traditional thermometer and for moderate activities. They have been calculated from an average of the ambient temperatures measured on heat stress days.

Recommended Break Schedule for Nights and Weekends When WGBT Is Not Measured

<table>
<thead>
<tr>
<th>Heat Stress Level</th>
<th>Break Schedule</th>
<th>Indoors</th>
<th>Outdoors &amp; Sunny</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level I</td>
<td>15 Minute Break</td>
<td>90°F</td>
<td>88°F</td>
</tr>
<tr>
<td></td>
<td>Every Hour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level II</td>
<td>30 Minute Break</td>
<td>93°F</td>
<td>90°F</td>
</tr>
<tr>
<td></td>
<td>Every Hour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level III</td>
<td>45 Minute Break</td>
<td>98°F</td>
<td>96°F</td>
</tr>
<tr>
<td></td>
<td>Every Hour</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Responsibilities

Environmental Health and Safety Responsibilities

- Monitor heat stress levels indoors and outdoors on days likely to cause heat stress.
- Alert Facilities Management, Public Safety, Auxiliary Enterprises, Division of Student Affairs and the Athletic Equipment Room prior to 12:00 p.m. to the level of heat stress following those measurements.
- Send out a Twitter message through the WMU EHS account.

Departmental Responsibilities
• Inform supervisors who in turn inform each of their employees of the occurrence of heat stress conditions and the recommended break schedule. If a heat stress level is reported it will continue at that level until dusk.
• On days likely to cause heat stress, schedule activities which cause a high metabolic workload or require working in an enclosed area in the early part of the day.
• On heat stress days (WBGT reaches 82.5° F) an employee should not be working at a high metabolic rate such as occurs with pick and shovel work.
• Provide readily available fresh water in the work vicinity in order that the employees can frequently drink small quantities.
• It has been demonstrated that areas such as stairwells and hallways under certain conditions can be at a higher heat stress level than outdoor areas. Air movement provided by fans can significantly lower the level of heat stress.
• Ensure rapid treatment or medical evaluation for employees reporting heat related illnesses and complete an accident injury report form.

Employee Responsibilities

• Dress properly for the heat. Natural-fiber clothing which is lightweight and loose fitting is recommended for hot days. If the work will take place outside in the sun, the clothing should be light-colored.
• On heat stress days (WBGT reaches 82.5° F), adjust work rate to a moderate level. Walking about with moderate lifting and pushing is an example of a moderate level of activity.
• Drink water frequently on heat stress days. Approximately eight (8) oz. of fresh water every twenty (20) minutes is recommended.
• Eat regular meals and snacks to provide salt and electrolytes to replace those lost through sweating.
• Recognize and report symptoms of heat related illnesses.

WMU EHS Twitter Advisories

Follow WMU Environmental Health and Safety (@EHSWMU) on Twitter. If you don’t have a Twitter account, you can receive text messages by using Twitter’s "Fast Follow" feature.
Types of messages posted by WMU Environmental Health and Safety via Twitter
Heat stress level alerts.
General environmental, health, and safety comments.
Receive text messages with Twitter’s “Fast Follow” feature from WMU EHS
Opt-in by texting "follow ehswmu" to 40404.
Opt-out by texting "unfollow ehswmu" to 40404.
Stop all Twitter Fast Follow messages by texting "off" to 40404.
**Restart all Twitter Fast Follow messages by texting "on" to 40404.**
If you need help, you may visit Twitter’s Fast Follow help page or contact us.

**Additional information on signing up for Twitter's "Fast Follow" feature**
If your mobile number is affiliated with a Twitter account, you may need to turn on SMS notifications.
When you initially sign up to follow us you will also receive our last tweet as a text message (and it may be old).
Twitter’s phone number is 40404. That's the number you are sending the message to.
Some phones will insert a dash in the phone number and it may display as "404-04". This is ok.
The actual text you send is "follow ehswmu" (without the quotes).
Some phones will capitalize some letters. It will still work. Additional spaces are a problem. Capitalization is not