

Heat Stress Daily Assessment Procedure – WBGT

Based on your *Risk Assessment - Operational Review*, you should have a good understanding of when the local climate increases the risk of heat stress in your workers. During the times and seasons identified (generally between May and September in Canada), workplaces should be prepared to undertake daily assessments of the Wet Bulb Globe Temperature (WBGT).

Initiating the Daily Assessment:

Daily Assessments should be undertaken when predetermined 'trigger' values are reached for a particular day. A workplace needs to determine what their 'trigger' will be. Examples include:

- Humidex above 30°C or the air temperature is above 26°C
- Humidex reaching or exceeding 35°C
- Environment Canada humidex advisory (air temperature exceeding 30°C and humidex exceeding 40°C)
- Environment Canada weather reports
- Heat waves (3 or more days of 32°C or higher)
- Smog Alerts

Undertaking the Daily Assessment:

- 1. Refer to the *Heat Stress Risk Assessment for Outdoor Workers: Daily Monitoring Plan* for the pre-determined plan for undertaking heat stress monitoring on a daily basis. This includes:
 - a. 'Trigger' values
 - b. Time of day when initial measurement will be undertaken
 - c. Criteria and frequency of repeated measurements
 - d. Measurement location details
 - e. Measurement equipment to be used
 - f. Who is responsible for undertaking measurements
 - g. Procedure to follow when undertaking measurements
- 2. Refer to attached Flowchart for assessment steps.
- 3. Complete the *Heat Stress Risk Assessment for Outdoor Workers: Daily Assessment Record for the Wet Bulb Globe Temperature (WBGT)* each time a measurement is undertaken.
- 4. Initiate appropriate response actions (refer to attached Flow Chart). These may include:
 - a. Posting Heat Stress Alert's and Heat Stress Warning's
 - b. Initiating increased rest in a work/rest cycle regimen, and increased 'self-pacing'
 - c. Provision of cool water
 - d. Ensuring all workers are aware of heat stress procedures and are vigilant for the signs and symptoms of heat stress



Relevant Resources:

- Heat Stress Risk Assessment for Outdoor Workers: Technical Guide
- Heat Stress Risk Assessment for Outdoor Workers: Daily Monitoring Plan
- Heat Stress Risk Assessment for Outdoor Workers: Daily Assessment Record for WBGT
- Heat Stress Alert (poster)
- Heat Stress Warning (poster)

Visit sunsafetyatwork.ca for more information. This resource was prepared by Dr. Thomas Tenkate. Production of this resource has been made possible through financial support from Health Canada through the Canadian Partnership Against Cancer.



Flow Chart for Heat Stress Daily Assessment Procedure - WBGT



If °C is <Action Limit: Little risk, no further action, but monitor trigger values

If °C > Action Limit < TLV: Implement general control measures

If °C > TLV: Undertake further detailed analysis and implement additional control measures

* Note: Values listed for Screening Criteria are for 'unacclimatized' workers