

## Heat Stress Daily Assessment Procedure – Humidex

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 Humidex.

### 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:

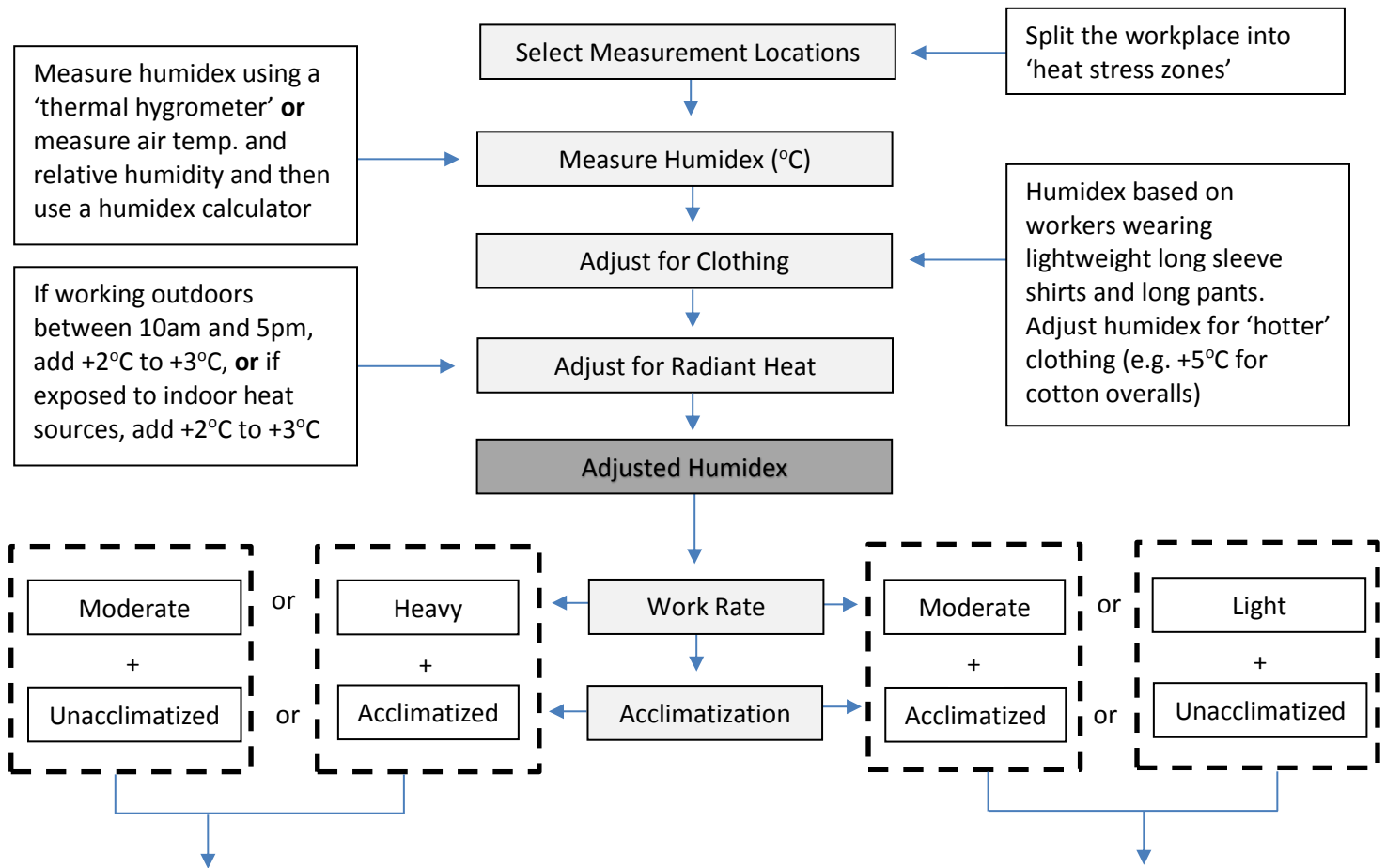
1. Refer to the *Heat Stress Risk Assessment for Outdoor Workers: Daily Monitoring Plan* for the pre-determined plan for undertaking heat stress monitoring on a daily basis. This includes:
  - a. ‘Trigger’ values
  - b. Time of day when initial measurement will be undertaken
  - c. Criteria and frequency 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 Humidex* each time a measurement is undertaken.
4. Initiate appropriate response actions (refer to attached Flow Chart). These include:
  - a. Posting Heat Stress Alert’s and Heat Stress Warning’s
  - b. Initiating increasing rest in a work/rest cycle regimen
  - 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 Humidex
- Heat Stress Alert (poster)
- Heat Stress Warning (poster)

Visit [sunsafetyatwork.ca](https://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 – Humidex



Humidex 1 (°C)	Response Actions	Humidex 2 (°C)
25 – 29	Supply water to workers on an 'as needed' basis	32 – 35
30 – 33	Post 'Heat Stress Alert' notice Encourage workers to drink extra water Start recording hourly temperature and relative humidity	36 – 39
34 – 37	Post 'Heat Stress Warning' notice Notify workers that they need to drink extra water Ensure workers are trained to recognize symptoms	40 – 42
38 – 39	Work with 15 minutes of relief per hour can continue Provide adequate quantities of cool (10 – 15°C) water At least one cup of water every 20 minutes per worker Workers with symptoms should seek medical attention	43 – 44
40 – 41	Work with 30 minutes of relief per hour can continue, in addition to previously listed actions	45 – 46*
42 – 44	If feasible, work with 45 minutes of relief per hour can continue, in addition to previously listed actions	47 – 49*
> 45*	Only medically supervised work can continue	> 50*

Notes: Humidex 1 is considered to be the default scenario; \*at humidex >45°C, heat stress should be managed according to ACGIH TLV requirements