



Guidelines for Protecting Workers in Factories and Construction Sites from the Prevailing Excessive Temperature (Heat)

1. Core Safety Measures

- Drink 1L of water every hour; don't wait for thirst. Keep an adequate supply of drinking water in locations easily accessible to employees.
- Take scheduled breaks in cool, shaded areas.
- Avoid working outdoors as much as possible during periods of intense sunlight (from approximately 10:00 AM to 3:00 PM).
- Wear light-colored, loose, and cotton clothing.
- Closely monitor those around you. If any of the following conditions caused by excessive heat occur, seek medical treatment immediately (**emergency contact: 1990**).
 - **Heat Exhaustion: Spotting Symptoms-** Feeling faint, Excessive sweating, Headache.
 - **Heat Stroke): Spotting Symptoms-** faint, Cessation of sweating. (life-threatening)

Guidelines for Employers

1. Heat Stress Risk Assessment Process

Employers should follow these 4 steps.

1. **Identification:** Measure and record the heat felt by the worker (WBGT value) at the workplace every hour.
2. **Analysis:** Consider the nature of the task (heavy/ Moderate/ light) and the employee's health condition (e.g., diabetes, blood pressure).
3. **Control:** Implement work-rest schedules based on the heat felt by the worker (WBGT value) and provide shade and water.
4. **Review:** Check the effectiveness of control measures daily and change work shifts if necessary.

2. Acclimatization Plan - 7 Days

For acclimatizing new employees to the heat:

- **Day 1:** Only 20% of the maximum work time.
- **Days 2-4:** Increase the work time by 20% each day.
- **Days 5-7:** Full work shift under close supervision.



3. Employer Responsibilities

- Arrange to provide cool water and shaded, cool areas at locations easily accessible to employees (within 100-200 meters of the work environment).



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- Regularly educate all employees on how to protect themselves from the heat and the potential complications that may arise.

Table 1: Actions to be taken according to the heat felt by the worker (WBGT value) and Risk Levels (WBGT Risk Levels)

Felt heat (WBGT value)	Risk	Required Action
< 28.0°C	Low	- Normal work; drink adequate water. - Implementation of work-rest schedule (Moderate/ Heavy work): 45 minutes work / 15 minutes rest (Table 2/3).
28.0 - 30.9°C	Moderate	1 liter of water is mandatory; close supervision
31.0 - 32.9°C	High	Implementation of work-rest schedule (Light work/ Moderate): 45 minutes work / 15 minutes rest (Table 2/3).
≥ 33.0°C	Extreme	Stopping work is the most appropriate course of action.

4. It is most appropriate to follow the work-rest schedule below, according to the perceived heat (WBGT value).

Table 2: For Non-Acclimatized Workers

For new employees or those returning after more than 7 days of leave.

Felt heat (WBGT (°C))	Light Work	Moderate Work	Heavy Work
28.0 – 30.9	100% (Continued)	75%(45 minutes work / 15 minutes rest)	50%(30 minutes work / 30 minutes rest)
31.0 – 32.9	75%(45 minutes work / 15 minutes rest)	50%(30 minutes work / 30 minutes rest)	25%(15 minutes work / 45 minutes rest)
≥ 33.0	50% (30 minutes work / 30 minutes rest)	Stopping work is the most appropriate course of action.	Stopping work is the most appropriate course of action.

Table 3: For Acclimatized Workers

For employees who have completed the 7-day acclimatization period.

Felt heat (WBGT (°C))	Light Work	Moderate Work	Heavy Work
28.0 – 30.9	100%(Continued)	100% (Continued)	75% (minutes work / 15 minutes rest)
31.0 – 32.9	100% (Continued)	75% (45 minutes work / 15 minutes rest)	50% (30 minutes work / 30 minutes rest)
≥ 33.0	75% (45 minutes work / 15 minutes rest)	50% (30 minutes work / 30 minutes rest)	25% (15 minutes work / 45 minutes rest)



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Important Note:

Rest periods must be taken in a designated, shaded, and cool area.



Workload Classification

Workload Category	Examples of Work
Light	Sitting with light manual work, light hand work, standing, operating machinery, typing, driving.
Moderate	Walking, pushing/pulling light carts, moderate lifting/shoveling, continuous arm/hand work.
Heavy	Heavy lifting, pushing/pulling heavy loads, shoveling heavy materials, intense manual labor.



