Water Shade Rest

Implementation Guideline on 3 Basic Rules for Prevention of Heatstroke from Heatwaye

- **⊘** For Heatwave Warnings, the Korea Meteorological Administration (KMA) issues a heatwave watch/warning depending on the daily highest apparent temperature.
 - Indicated as "Apparent (00°C)" next to the temperature on the first screen page of the ""Website of KMA (kma. go.kr/eng/index.jsp) and Weather Notification App" by the KMA
 - * Apparent ("Feel-like") Temperature (or Heat Index): It is the temperature quantitatively expressing the human sensation where the current temperature is perceived lower under low humidity or higher under high humidity by adding the impacts from the humidity and winds.

Heatwave Watch

- When it is expected for the daily highest apparent temperature of 33°C or higher to maintain for 2 days or longer;
- When serious damages are expected to occur due to rapid increase of apparent temperature or prolonged heatwaves;

Heatwave Warning

- When it is expected for **the daily highest apparent temperature of 35°C or higher** to maintain **for 2 days or longer**;
- When serious damages are expected to occur in a wide range of regions due to rapid increase of apparent temperature or prolonged heatwaves;



Water



Cool and clean water needs to be provided. / Be sure to drink water on a regular basis.

Shade





- Shade canopies or awning screens should be made of materials which can block direct sunlight and the worksite must be ventilated with cool air.
- Installations need to be placed at safe locations free of risks of noise, falling objects or vehicle traffic.
- The rest area must be able to sufficiently accommodate the workers seeking rests where proper supplies, such as chairs, mats and beverage stands, are furnished.

Rest



- Upon heatwave watch, take a break for 10 minutes every hour.



- ➤ Avoid outdoor works during the hours of high temperature (14:00-17:00) by rescheduling working hours.
 - Lessen the workload, slow down your pace, and focus on less-demanding tasks.
- ▼ Take immediate actions when a worker requests for suspension of operations due to imminent concerns for heat-related illness.
 - ▲ Taking a rest doesn't only mean taking a break by suspending operations.
 - ▲ You can also spend time productively by taking indoor training programs on safety and health or engaging in less-demanding works.
- During the Heatwave Warning, take the following measures for the indoor workplaces where there is no temperature difference between indoor and outdoor due to outdoor temperature or where indoor temperature is higher than outdoor temperature.

(Example) Worksites where it is difficult to conduct space-wide air-conditioning due to their characteristics, including those located inside temporary facilities, i.e. tented warhouses, or those with immense floor areas.

- Install cooling device* within the workplace in order to maintain the room temperature at a proper level.
 - * Major cooling device: Air circulation device (ventilator), fan, cool-air fan, mobile air conditioner, etc.
- If cooling device cannot be installed, try to ventilate the workspace and prevent the accumulation of hot air by periodically opening windows and doors, and be sure to hand out and wear the cold-reserving gear, i.e. cooling vest and cold pack, if possible.
- When indoor temperature easily rises despite the ventilation and installation of cooling device, identify the causes, and develop and implement additional measures*.
 - * Additional installation of cooling device and improvement of ventilation methods at workplaces \Rightarrow If unavoidable, adjust the workloads, and grant rest hours. For the works not urgent, change the work schedule.
 - ** Despite the actions taken as stated above, when it is deemed necessary to implement additional measures in order to prevent health problems from the heatwave, please refer to the responsive measures by heatwave levels for outdoor works.



Please take necessary actions according to the responsive measures by each level of heatwave.

※ For levels of heatwave by regions, please refer to 「The Website (kma.go.kr/eng/index.jsp) of the KMA.」



- Check the weather conditions through the website of KMA (or Weather Notification App), and provide the heatwave information for the workers.
- Prepare cool and clean water as well as shades (rest area) to rest for the workers.
- Verify and classify the group susceptible to heat-related illness, i.e. heatstroke, and the group with physically demanding duties in advance.
- What is the group susceptible to heat-related illness?
 - ▲ Patients with obesity, diabetes, high/low blood pressure, etc. ▲ Persons with history of heat-related illness
 - ▲ Persons of advanced age ▲ Persons newly assigned to the duties exposed to the heatwave
- . What is the labor with high intensity? It means the labor demanding extensive physical intensity and easily exposed to heat stress. (Examples) Duties using shovel/hammer/saw/pickax/axe, duties requiring physical labor with the entire body, such as rack/steel bar/ concrete-pouring works, or duties repeatedly lifting, unloading or handling heavy objects at construction sites



Prepare cool and clean water as well as shades (rest area) to rest for the workers.

- Take a break at the shade (rest area) for 10 minutes every hour.
- Arrange additional recess hours for the group susceptible to heat-related illness and the workers engaging in the labor of high intensity.
- Reduce outdoor labors or adjust the working hours during the hours of high temperature.
- Put on the cold-reserving gear, i.e. cooling vest and cold pack, if possible, during the outdoor works. (14:00-17:00)



at or 35°C higher

Prepare cool and clean water as well as shades (rest area) to rest for the workers.

- Take a break at the shade (rest area) for 15 minutes every hour.
 - Arrange additional recess hours for the group susceptible to heat-related illness and the workers engaging in the labor of high intensity.
- Suspend outdoor labors during the hours of high temperature (14:00-17:00) unless unavoidable.
 - Grant sufficient recess hours for unavoidable outdoor labors.
- Put on the cold-reserving gear, i.e. cooling vest and cold pack, if possible, during the outdoor works.
- Restrict outdoor labors for the group susceptible to heat-related illness, i.e. heatstroke.



Serious **Apparent** Temperature at or 38°C higher

- Prepare cool and clean water as well as shades (rest area) to rest for the workers.
- Take a break at the shade (rest area) for 15 minute or longer every hour.
- Arrange additional recess hours for the group susceptible to heat-related illness and the workers engaging in the labor of high intensity
- Suspend outdoor labors during the hours of high temperature (14:00-17:00) except for emergency measures required for disaster and safety management.
 - Grant sufficient recess hours when emergency works are executed.
- Put on the cold-reserving gear, i.e. cooling vest and cold pack, if possible, during the outdoor works.
- Restrict outdoor labors for the group susceptible to heat-related illness, i.e. heatstroke.

Responses to Emergency Situations (Upon onset of major symptoms)

Extensive exposure to heatwaves may lead to heat-related illness, such as heatstroke and heat exhaustion, and it may even cause fatalities without prompt countermeasures.

** The group susceptible to heat-related illness and the workers engaging in the labor of high intensity are required to verify their health conditions before and after engaging in their duties.

Onset of major symptoms

- Hyperthermia
- Tachypnea (frequent pulse)
- Headache and discomfort
- Convulsion
- Slow or no response
- Collapsing, etc.

Check for signs of mental deteriorationsymptoms

- Call out his/her name or
- tap him/her. - Pinch in the ribs

(Unconsciousness)

Responsive measures and observation of progress

- Move to a cool location Keep the body cool.
- Keep hydrating and take some rest
 - (Unconsciousness or no improvement)

Call 119 for help.

Completion

- Check physical conditions frequently.
- Send him/her home, if possible.

(Check for improvement of symptoms)



Beware of Safety Accidents during Heatwaves!!

- Be sure to wear personal protective gears, i.e. safety helmets and harnesses, which are prone to be neglected.
- Be cautious of safety accidents, including fall-off and fall-down, due to deteriorating concentration.







