SAFETY & HEALTH AWARENESS SHEET

Indoor Heat Illness Prevention: California

This document addresses safety considerations when employees in California may be exposed to indoor heat levels that rise above the temperature thresholds defined below. Safeguards should be taken to prevent heat illness.

In California, productions must comply with Title 8, Section 3396 of the California Code of Regulations, "Heat Illness Prevention in Indoor Places of Employment," whenever the indoor temperature equals or exceeds 82°F when employees are present. This regulation applies to most indoor workplaces which are spaces that are under a ceiling or overhead covering that restricts airflow and that are enclosed along the entire perimeter by walls, doors, windows, dividers, or other physical barriers that restrict airflow, whether open or closed.

Scope and Application
Different requirements apply, depending upon two main temperature thresholds under the California regulation: 82°F and 87°F.

Indoor Workplaces That Are Between 82°F and 87°F
In all cases in which the workplace's indoor temperature equals or exceeds 82°F, Production Management must comply with the following:

- Provide access to potable drinking water;
- Maintain one or more cool-down areas as needed;
- Implement effective emergency response procedures;
- Provide acclimatization processes;
- Provide employee-level and supervisory-level training; and
- Implement their written Indoor Heat Illness Prevention Plan (IHIPP).

Indoor Workplaces That Are 87°F or Higher and Certain Workplaces That Are 82°F or Higher
In addition to the above, when: a) the indoor temperature or heat index equals or exceeds 87°F, or b) where the temperature or heat index is 82°F and employees are either wearing clothing that restricts heat removal or working in high radiant heat areas, then Production Management also must enact various assessment and control measures that are described below.

The **heat index** is a measure indicating the level of discomfort the average person is thought to experience as a result of the combined effects of the temperature and humidity of the air.

The California standard defines "**clothing that restricts heat removal**" as full-body clothing covering the arms, legs, and torso that is any of the following:

- Waterproof; or
- Designed to protect the wearer from a chemical, biological, physical, radiological, or fire hazard; or
- Designed to protect the wearer or the work process from contamination.

Radiant heat is heat transmitted by electromagnetic waves and not transmitted by conduction or convection. Sources of radiant heat include the sun, hot objects, hot liquids, hot surfaces, set lights, and fire. A "high radiant heat area" means a work area where the temperature is at least five degrees greater than the ambient temperature.

Provision of Water
Production Management must give employees free access to clean, cool drinking water as close as practicable to their work area and in the employees' cool-down area. If a continuous or plumbed water supply

is not possible, Production Management must provide enough water (i.e., one quart of drinking water per hour) for each employee for the entire shift. Employees should be encouraged to frequently drink water.

Access to Cool-Down Areas
Production Management should maintain a cool-down area whenever employees are present. A cool-down area is an area that could be indoors or outdoors, is blocked from direct sunlight and shielded from other high-radiant-heat sources to the extent feasible and is either open to the air or provided with ventilation or cooling.

The cool-down area shall be located as close as possible to the areas where workers are working and should be large enough to allow employees to sit normally without having to touch one another. The cool-down area should be maintained at less than 82°F, unless it is not feasible to do so.

Production Management should allow and encourage employees to take preventative, cool-down rest periods in the cool-down area if the employee feels the need to do so to avoid overheating. When an employee takes such a preventative cool-down rest, Production Management should monitor the employee, ask the employee if they are experiencing symptoms of heat illness, encourage the employee to remain in the cool-down area until they are no longer overheated, and should not order the employee back to work until the signs and symptoms of possible heat illness have abated (and never earlier than 5 minutes after the employee entered the cool-down area).

Appropriate first aid or emergency response should be provided to any employee who exhibits signs or reports symptoms of heat illness while taking a preventative cool-down rest period.

Emergency Response Procedures
Production Management must ensure an effective communication system is in place so workers can alert a supervisor or emergency medical services if needed.

Whenever an employee exhibits or reports signs and symptoms of heat illness, Production Management shall take immediate action commensurate with the severity of the employee's illness, which could include notifying the set medic, monitoring the employee, and/or implementing emergency response procedures.

The emergency response procedures must include a process to contact emergency medical services, transport the employee to where the employee can be reached by an emergency responder, and provide clear and precise directions to the worksite to any emergency responder.

Acclimatization
For the first 14 days of employment, a supervisor should monitor an employee who has been newly assigned to work in an indoor area in which: a) the temperature or heat index equals or exceeds 87°F; b) the temperature equals or exceeds 82°F and the employee wears clothing that restricts heat removal; and/or c) the employee is working in a **high radiant heat area** in which the temperature equals or exceeds 82°F.

During a heat wave, all employees must be closely monitored by a supervisor for possible signs and symptoms of heat illness. A "heat wave" means any day when the predicted outdoor temperature will be at or above 80°F and at least ten degrees Fahrenheit greater than the average daily outdoor temperature over the previous 5 days.

Employee and Supervisor Training
Production Management must provide comprehensive training on the Indoor Heat Illness Prevention Plan ("IHIPP") and heat illness risk factors to supervisory and non-supervisory employees before the employee engages in work that should reasonably be anticipated to result in exposure to the risk of heat illness. The specific requirements for these training sessions can be found in Production Management's IHIPP.

The Production should document all indoor heat illness training using a sign-in sheet and/or notes on the production report or other suitable means.

Signs and Symptoms of Heat Illness
Early heat illness signs and symptoms may not always follow a progressive pattern from a mild condition such as heat rash up to the life-threatening condition of heatstroke. Thirst alone is a poor indicator of how the body is reacting to heat. Here are the symptoms of heat illness to watch for:

- Discomfort
- Headache
- Fatigue
- Loss of coordination
- Vomiting
- Seizures
- Fainting
- Blurry vision
- Confusion
- Dizziness
- Irritability
- Poor concentration
- Muscle pain/cramps
- Lack of sweating or excessive sweating
- Altered behavior

Heat Illness Risk Factors
There are many environmental and personal risk factors that increase susceptibility to heat illness. Environmental risk factors for heat illness mean working in conditions that create the possibility that heat illness could occur, including the following:

- Air temperature
- Relative humidity
- Radiant heat from the sun, lights, and other sources
- Conductive heat sources such as the ground
- Air movement
- Workload severity and duration
- Protective clothing and personal protective equipment worn by employees

Personal risk factors for heat illness mean factors such as:

- An individual's age
- Degree of acclimatization
- Health
- Water consumption
- Alcohol and/or caffeine consumption
- Use of prescription medications that affect the body's water retention or other physiological responses to heat

Employees should consult with a doctor if they are known to have risk factors for heat illness.

Written Indoor Heat Illness Prevention Plan Requirement
When working in California on a production covered by the Indoor Heat Illness Standard, Production Management shall establish, implement, and maintain an effective IHIPP with specific, required elements and procedures, including all of the above-described heat-illness requirements. This written plan can be combined with the employer's Outdoor Heat Illness Prevention Plan and/or can be incorporated into the employer's Injury and Illness Prevention Plan ("IIPP"). The IHIPP shall be in English and, if needed, in another language understood by the majority of employees. The IHIPP also shall be available at the worksite to employees and to representatives of Cal/OSHA upon request.

Indoor Workplaces That Are 87°F or Higher and Certain Workplaces That Are 82°F or Higher
When these special conditions are in effect, Production Management also must provide various assessment and control measures, as described below.

Assessment
Production Management must measure the temperature and heat index, and record the greater, whenever it is reasonably suspected that either might reach 87°F (for all workers) and/or 82°F for workers wearing restrictive clothing or working in high radiant heat areas. Measurements again must be taken if a 10°F increase over the previous measurement is expected. Temperature can be measured with a thermometer that is freely exposed to the air but shielded from high radiant heat sources such as the sun, hot objects, hot surfaces, hot liquids, and fire.

Control Measures
When indoor workspaces temperatures rise to or above 82°F, Production Management must use control measures to minimize the risk of heat illness. Control measures start with **engineering controls**, such as air conditioning, swamp coolers, and ventilation, to reduce the air temperature and heat index below 87°F when employees are present, or below 82°F when employees are wearing heat-restrictive clothing or working in radiant heat areas.

Production Management must also apply **administrative controls** to minimize the risk of heat illness where engineering controls are not feasible or cannot sufficiently reduce the temperature or heat index. Administrative controls can include rest breaks, rotating workers, adjustments to worker clothing, a "buddy system" (working in pairs or groups), or changing worker schedules to minimize exposure to heat.

Finally, if feasible engineering controls do not decrease the temperature enough and if administrative controls do not minimize the risk of heat illness, then **Personal Heat-Protective Equipment (PHPE)** (e.g., water-cooled garments, air-cooled garments, cooling vests, wetted over-garments, heat-reflective clothing, and supplied-air personal cooling systems) shall be used to minimize the risk of heat illness.

Additional Considerations for Productions
Additional considerations should be provided to employees who may be required to wear heavy, custom wardrobe, special effects make-up, heavy protective gear for welding, or work in elevated areas without good ventilation or HVAC systems etc., to ensure that they are protected from heat illness.

Additional Information and Resources
Guidance for employers and employees on preventing heat illness while working indoors is available on the following websites:

- Cal/OSHA Heat Illness Prevention Guidance and Resources (https://www.dir.ca.gov/dosh/heatillnessinfo.html)
- Cal/OSHA Frequently Asked Questions Related to Indoor Heat Illness Prevention (https://www.dir.ca.gov/dosh/heat-illness/indoor-faq.html)
- Cal/OSHA Indoor Heat Illness Prevention Educational Materials and Other Resources (https://www.dir.ca.gov/dosh/heat-illness/Indoor-HIP-Resources.html)

Further Assistance

If you have further questions, please contact your supervisor, the Studio Safety Representative or Production Management.