

HEAT ILLNESS



Workers who are exposed to extreme heat or work in hot environments may be at risk of heat stress. Exposure to extreme heat can result in occupational illnesses and injuries.

While heat illness is largely preventable, and commonly under-reported, thousands of workers are sickened each year by workplace heat exposure. Despite widespread under-reporting, 43 workers died from heat illness in 2019, and at least 2,410 others suffered serious injuries and illnesses.

Stay **Cool**



Stay **Hydrated**



Stay **Informed**



Tips for Preventing Heat-Related Illness

- ◇ Wear Appropriate Clothing: Choose lightweight, light-colored, loose-fitting clothing.
- ◇ Stay Cool Indoors, where possible
- ◇ Wear Sunscreen: Sunburn affects your body's ability to cool down and can make you dehydrated. If you must go outdoors, protect yourself from the sun
- ◇ Drink Plenty of Fluids: Drink more fluids, regardless of how active you are. Don't wait until you're thirsty to drink.
- ◇ Know the Signs: Learn the signs and symptoms of heat-related illnesses and how to treat them.

Resources for Heat Illness:

<https://www.cdc.gov/disasters/extremeheat/heattips.html>

<https://www.cdc.gov/disasters/extremeheat/warning.html>

8 STEPS TO HELP PREVENT HEAT ILLNESS ON THE JOB

1. HEAT HYGIENE



Educate and inform your team about measures to prevent and recognize heat illness including day-to-day or even hour-to-hour communications and monitoring.

2. HYDRATION



Provide icy-cold water and/or electrolyte replacing beverages in close proximity to every worker.

3. HEAT ACCLIMATIZATION



Ease new workers or workers returning from an extended absence into hot conditions gradually, increasing exposure slowly over a 5-to-7-day period.

4. ENVIRONMENTAL MONITORING



Use a Wet Bulb Globe Temperature (WBGT) monitor to measure the humidity, temperature, wind, and sun on your jobsite to find which areas need extra heat safety measures.

5. PHYSIOLOGICAL MONITORING



Consider wearable monitors that can alert workers of risk factors like elevated skin temperature or heart rate that may indicate a risk of heat illness.

6. BODY COOLING STATIONS



Provide cool areas for resting at break and mealtimes. These should include icy-cold drinks and coolers full of ice and towels for hydration and body cooling inside and out.

7. EMERGENCY PREPARATIONS



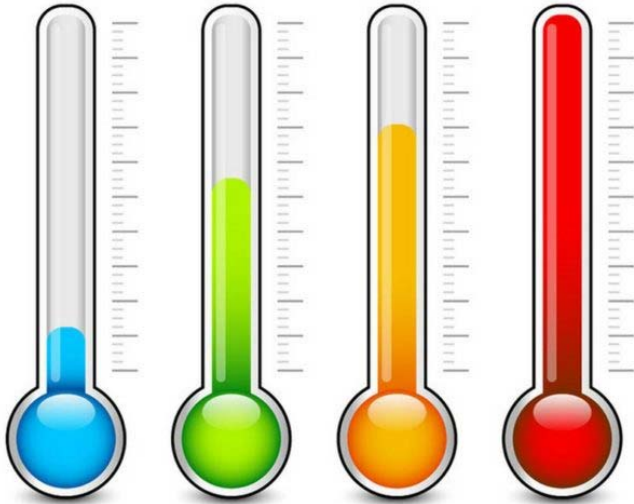
Teach the principle of Cool First, Transport Second in a heat illness emergency including cold water immersion or application of ice and cold towels to cool the victim to a safe temperature before transportation to the hospital by EMTs.

8. COOLING PPE



Provide body cooling PPE like Magid® Cool Powered by Mission® for workers to bring onto the jobsite that cool with any temperature of water and can be reactivated again and again for anytime relief.

OFFICE TEMPERATURE



Summer is here and we all know what that means in Riverside County, **HOT** days! Consequently, the interior of our buildings warms up. During this time, questions arise as to what “acceptable” indoor temperatures are. Employees who work in traditional office environments have a lower risk of heat illness, and currently there are no Cal/OSHA standards for this environment and the County of Riverside Board of Supervisors sets no upper temperature limit. So when questions arise regarding office temps, we at HR-Safety often refer to the American Society of Heating,

Refrigeration and Air Conditioning Engineers (ASHRAE) guidelines to what is recommended as a “comfortable” indoor office temperature.

The Environmental Conditions for Human Occupancy specifies the combinations of indoor environmental and personal factors that produce acceptable thermal conditions to the majority (80%) of occupants within a space [ANSI/ASHRAE 2013b]. Assuming slow air movement (less than 40 feet per minute) and 50% indoor relative humidity, the operative temperatures recommended by ASHRAE range from 68.5°F to 75°F in the winter, and from 75°F to 80.5°F in the summer.

TIPS FOR MAINTAINING INDOOR COMFORT ON HOT DAYS

- Reduce consuming warm beverages:** Coffee, tea and hot chocolate are beverages many of us like to start the day with. Keep in mind these products elevate the body’s interior temperatures. This coupled with a warm morning can make the body feel warmer than normal.



- Local fans:** Using desk fans can increase air movement and make one feel cooler. Desk fans work well for air movement; however, fans blowing directly in the face increases the susceptibility to dry eyes. Dry eyes not only cause one to blink more, but can also lead to eye fatigue, excessive tearing, blurred vision, etc.
- Pull down those blinds:** If your office or work area has windows, close the blinds to block out the sun. Radiant heat (heat deriving from

sun rays) can warm up an office quickly; this forces the air conditioner to work harder.

- Clothing:** Wear light colored loosely fit clothing. What you wear indoors can affect body temperature just as much as what you wear outdoors.



SILICA AND EXPOSURE RISKS

Have you ever driven by a construction area and observed employees using a saw, hammer, drill, or other tool creating a massive cloud of dust?

Chances are there's Silica in the cloud dust.

What is Silica?

Silica is a naturally occurring mineral in the earth's crust.

Silica is the second most abundant mineral found primarily in sand, rock, and soil. Silica-

containing materials such as: concrete, brick, rock, stone, and mortar are heavily used in the construction industry.



How is Silica dangerous?

When left intact, Silica is relatively harmless. However, when sanding, milling, crushing, cutting, grinding, or other impactful construction activities occur, Silica dust which contains crystalline Silica becomes airborne. Once airborne, Silica can be inhaled and enter deep into the workers' lungs. Once inside the lungs, the silica particles can't be expelled. This can cause respiratory diseases such as silicosis, tuberculosis, lung cancer, etc.

Are there laws protecting working from Silica exposure?

According to the Center for Disease Control and Prevention, nearly 2 million construction workers are exposed to silica dust each year. Cal-OSHA (Title 8) has set the permissible exposure limit (PEL) for an 8-hour work-shift for Silica as:

50ug/m³ PEL, 25ug/m³ AL 25ug/m³ TLV (ACGIH)
*

How can I reduce my exposure to Silica dust?

There are several methods to reduce or eliminate silica dust exposure. The following are a few examples:

⇒ **Elimination/Substitution:** Stop using materials that contain Silica or use another material or product that does not generate respirable dust.

⇒ **Engineering:** Wetting down Silica dust, enclosing the area where silica dust is generated, and utilizing vacuum methods at the generation source are examples of engineering controls.

⇒ **Personal Protective Equipment (PPE):** Providing the appropriate respirator can filter out airborne Silica dust and prevent its inhalation. This requires the employment of a respirator program. **Training: Knowing the dangers of Silica exposure enables one to protect himself. An industrial hygienist or safety engineer is an excellent resource for obtaining information on how to protect workers from the hazards of silica dust.**

Safe-work Practices: If you use a product containing Silica, implement safe work practices. Never dry-sweep using a standard broom. Don't eat or smoke in areas where Silica dust is generated. Work upwind to prevent dust from blowing in your breathing zone. Always wash down at the end of a work shift and avoid wearing work attire home.

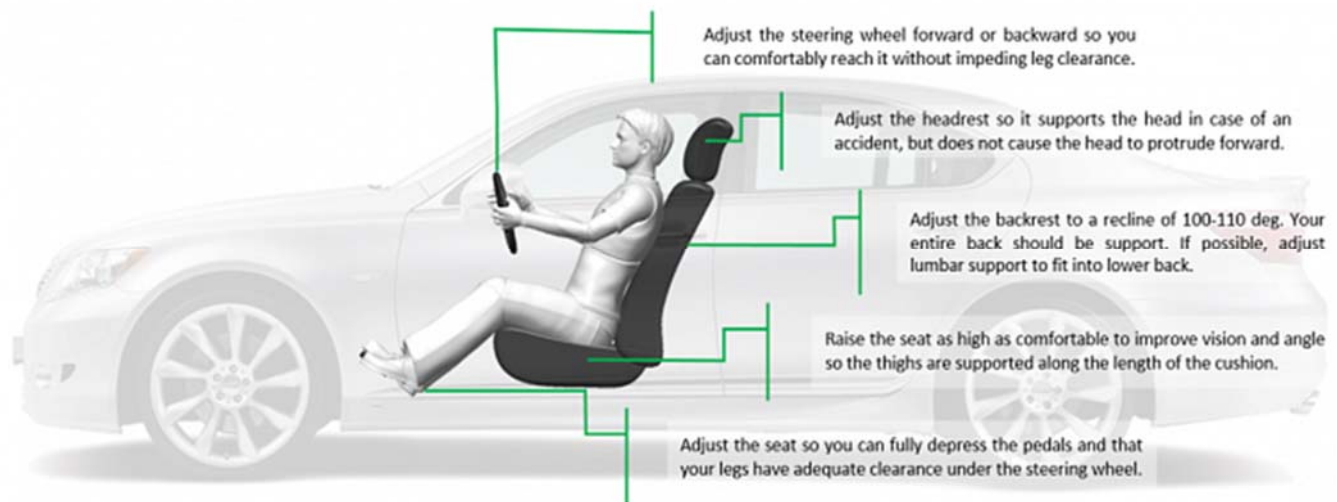
Safety Data Sheets (SDS): Any product with more than 0.1% Crystalline Silica must be provided an SDS. Reviewing a products' SDS BEFORE using it will educate the user on the dangers of the product and the proper methods of reducing any hazards.



DRIVING ERGONOMICS

MAY 2022

While Ergonomics is important in desk based jobs, it is also important when driving—whether it be your personal vehicle or a County issued vehicle. Surprisingly, many ergonomic risk factors (e.g., awkward postures, excessive force, and vibration) exist in relation to driving. Such risk factors become increasingly apparent during distance driving. Driving ergonomics has an overall goal of fitting the driver to their car so they can drive in a way that maximizes the natural ability of their body to move and respond to physical stress.



To be comfortable while driving the driver should be able to adjust to reach the pedals and controls, have sufficient headroom, sit high enough to see out the front and side windows and mirrors, and reach the steering wheel without stretching the arms. The driver should have sufficient room (25 - 30 cm or 10 - 12 in) between the steering wheel and his or her chest for the seat belt and air bag to provide the maximum safety protection in case of a crash. Some common adjustments include:

- **Seat height** - seat height should allow driver to see at least 3in over top of steering wheel and allow clearance from vehicle ceiling.
- **Seat forward/back position** - move the seat forward until you can easily push the pedals through their full range with your whole foot, not just your toes.
- **Seat back rest** - adjust the back rest until it supports the full length of your back when you are sitting upright. If you are leaning too far back, you may end up bending your head and neck forward, which may cause muscle fatigue, neck, or shoulder pain, tingling in the fingers, etc.
- **Lumbar support** - adjust the lumbar support up-and-down and in-and-out until you feel an even pressure along your back from the hips to shoulder height.
- **Head rest** - raise the head restraint until the top of it is level with top of your head. If the head restraint can be tilted, adjust the angle of the head restraint until is practically touching the back of your head when you are in your sitting posture.