

27.0 MIA Safety Services - July 2013

Executive Summary

HEAT ILLNESS CAN BE DEADLY. We revisit this issue because every year thousands of workers become sick and even die from exposure to heat. These illnesses and deaths are preventable.

The purpose of this Toolbox Talk is to raise awareness among workers and employers about the hazards of working in hot weather. Other training tools and posters to display can be found on OSHA's website: <http://www.osha.gov/SLTC/heatillness/edresources.html>.

Two toolbox talks are enclosed: one reviewing an investigation from OSHA files and another reviewing General Safety Practices and Procedures. Also provided are a relevant safety checklist, standard employee meeting sign-in sheet, and a safety related "Product of the Month" feature.

Enclosed in this issue of MIA Safety Talks are the following resources:

- 27.1 TOOLBOX TALK - OSHA ACCIDENT SUMMARY
 - Overview
 - Description of Accident
 - Inspection Results
 - Prevention Recommendations
 - Recap & Review

- 27.2 SAFETY TOOLBOX TALK - Heat Illness
 - Overview
 - Heat Stroke
 - Heat Exhaustion
 - Heat Cramps
 - Prevention
 - Recap & Review

- 27.3 SAFETY CHECKLIST

- 27.4 SIGN-IN SHEET

- 27.5 SAFETY PRODUCT OF THE MONTH

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27.1 MIA Safety Services - OSHA Accident Summary

Refer to sign-in sheet for attendees (note: a separate meeting should be held with all absent employees).

Agenda

Accident Type:	Heat Stress
Type of Operation:	Masonry, stone setting and other stone work
Size of Work Crew:	9
Safety Monitor on Site:	No
Safety & Health Program:	No
Training Provided:	Yes



Brief Description of Accident

A 34 year old male laborer collapsed while working on a 24-foot scaffold. When EMS arrived, they recorded the laborer's body temperature as 107°F (41.7°C). The laborer was transported to a local hospital where he died the next day with an internal body temperature of 108°F (42.4°C). Death was listed by the coroner as due to heat stroke (hyperthermia). The worker had been exposed to excessive ambient heat during the performance of his duties which included moving stone and scaffold boards, and maintaining a supply of mortar on mortar boards. Temperatures exceeding 91 degrees Fahrenheit (32.8°C) were recorded on the date in question.

Inspection Results

OSHA issued citations and assessed fines of several thousand dollars for serious violations including:

- The employer did not furnish employment and a place of employment which were free from recognized hazards that were causing or likely to cause death or serious physical harm to workers, in that the workers were exposed to the recognized hazard of heat stress while performing masonry work [Section 5(a)(1) of the Occupational Safety and Health Act of 1970].
- The employer failed to report the death of the laborer within eight (8) hours [1904.39(a)].

Accident Prevention Recommendations

- Develop and implement a Heat Stress Management Program.
- Instruct all personnel about the potential problems and the prevention of heat-related illnesses, including recognizing symptoms.
- Provide a cool, climate-controlled area where heat-affected employees can take their breaks and/or recover when signs and symptoms of heat-related illnesses are recognized.

Recap & Review

- Has anyone seen or experienced a similar accident? What happened?
- What other steps or procedures should have been taken to prevent this accident?

Reminder: Safety is the responsibility of both management and employees!

The next safety meeting is scheduled for _____ and the topic will be _____.

NOTE: The case here described was selected as being representative of injuries caused by improper work practices. No special emphasis or priority is implied nor is the case necessarily a recent occurrence. The legal aspects of the incident have been resolved, and the case is now closed.

27.2 MIA Safety Services - Heat Illness

(Adapted from NIOSH Fast Facts: Protecting Yourself from Heat Stress)

Refer to sign-in sheet for attendees (note: a separate meeting should be held with all absent employees).

Agenda

1. **Overview.** Heat stress from exertion or hot environments place workers at risk for heat stroke, heat exhaustion, or heat cramps.
2. **Heat Stroke:** A condition that occurs when the body becomes unable to control its temperature, and can cause death or permanent disability.
 - *Symptoms*
 - High body temperature
 - Confusion
 - Loss of coordination
 - Hot, dry skin or profuse sweating
 - Throbbing headache
 - Seizures, coma
 - *First Aid*
 - Request immediate medical assistance.
 - Move the worker to a cool, shaded area.
 - Remove excess clothing and apply cool water to their body.

Heat stroke is fatal without emergency medical help.

3. **Heat Exhaustion:** The body's response to an excessive loss of water and salt, usually through sweating.
 - *Symptoms*
 - Rapid heart beat
 - Heavy sweating
 - Extreme weakness or fatigue
 - Dizziness
 - Nausea, vomiting
 - Irritability
 - Fast, shallow breathing
 - Slightly elevated body temperature
 - *First Aid*
 - Rest in a cool area.
 - Drink plenty of water or other cool beverages.
 - Take a cool shower, bath, or sponge bath.

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27.2 MIA Safety Services - Heat Illness

(Adapted from NIOSH Fast Facts: Protecting Yourself from Heat Stress)

Refer to sign-in sheet for attendees (note: a separate meeting should be held with all absent employees).

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4. **Heat Cramps:** Affects workers who sweat a lot during strenuous activity. Sweating depletes the body's salt and moisture levels.
 - *Symptoms*
 - Muscle cramps, pain, or spasms in the abdomen, arms or legs
 - *First Aid*
 - Stop all activity, and sit in a cool place.
 - Drink clear juice or a sports beverage, or drink water with food.
 - Avoid salt tablets.
 - Do not return to strenuous work for a few hours after the cramps subside.
 - Seek medical attention if you have the following: heart problems, are on a low-sodium diet, or if the cramps do not subside within one hour.
5. **How can heat illness be prevented?** Remember three simple words: water, rest, shade. Drinking water often, taking breaks, and limiting time in the heat can help prevent heat illness. Gradually build up to heavy work in hot conditions. This helps you build tolerance to the heat - or become acclimated. Allow time to become acclimated, especially if new to working outdoors in the heat or have been away from work for a week or more. Also, it's important to know and look out for the symptoms of heat illness in yourself and others during hot weather. Plan for an emergency and know what to do – acting quickly can save lives!
6. **Discussion**
 - Where does the heat come from that causes our bodies to overheat?
 - What are some of the signs you may notice if your body is getting too hot?
7. **Recap & Review:** Heat illness can affect us all, but some people are at greater risk. What do you think would put a person at greater risk?
8. **Reminder:** Safety is the responsibility of management and employees!
9. **Next Safety Meeting** is scheduled for _____ and the topic will be _____.

27.3 MIA Safety Services - Checklist for Working in Heat and Humidity

(Source - OSHA's Heat Illness Prevention Training Guide)

Water

- Is there plenty of fresh, cool drinking water located as close as possible?
- Are water coolers refilled throughout the day?



Shade

- Is there shade available for breaks and if workers need to re-cover?

Training

Does everyone know the:

- Common signs and symptoms of heat illness?
- Proper precautions to prevent heat illness?
- Importance of acclimatization?
- Importance of drinking water frequently (even when they are not thirsty)?
- Steps to take if someone is having symptoms?

Emergencies

- Does everyone know who to notify if there is an emergency?
- Can workers explain their location if they need to call an ambulance?
- Does everyone know who will provide first aid?

Worker Reminders

- Drink water often
- Rest in shade
- Report heat symptoms early
- Know what to do in an emergency

27.5 MIA Safety Product of the Month - July 2013

MARBLE
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STONE INDUSTRY SAFETY SERVICES

Safe Stone Slab Handling II

Focused on Facilities with Overhead Cranes

(DVD - English or Spanish versions)

Created by a team of stone industry safety experts, this video showcases best practices for safe stone slab handling. It includes those practices recommended by the Occupational Safety & Health Administration (OSHA), and the hazards of not following proper procedures. This video includes eight sections designed so that each section can be utilized as a stand-alone safety training session for your employees.



The sections include:

- Overview of stone-related accidents that have claimed more than 50 lives in the decade beginning in 2000
- Slab handling
- Handling slabs with overhead cranes
- Handling slabs with forklifts
- Slings and clamps
- Material handling and containers
- Material handling and flatbed trucks
- Employee & consumer training

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