Workers
Introduction

• The Ministry of Labour (MOL) in UAE issues a Decree every year concerning the mid-day break during the summer months for those working under the sun:

15 June-15 September
between 12.30 pm – 3.00 pm

• Abu Dhabi Occupational Health and Safety Center (OSHAD) supports MOL by raising awareness on heat illnesses and injuries through the Safety in Heat Program.
OSHAD Video

- OSHAD Video
What is Heat Stress

- Exposure to extreme heat can result in occupational illnesses and injuries.
- When the body is exposed to heat and unable to cool itself by sweating, heat stress can occur.
Who is at Risk

• Anyone who works in high temperatures may be at risk of heat stress or heat related illnesses.
Symptoms of exposure to Heat

• Heat stress can result in:
  - Heat Rash
  - Heat Cramps
  - Heat Syncope
  - Heat Exhaustion
  - Heat Stroke

• Heat can also increase the risk of injuries in workers as it may result in sweaty palms, fogged-up safety glasses, and dizziness.
Common Symptoms - Heat Rash

Heat rash is a skin irritation caused by excessive sweating during hot, humid weather.

Symptoms
• Red cluster of pimples or small blisters
• Occurs on the neck and upper chest, in the groin, under the breasts, and in elbow creases

First Aid
• Work in a cooler place
• Keep the affected area dry
• Use dusting powder to increase comfort
Common Symptoms - Heat Cramps

Heat cramps affect workers who sweat a lot during strenuous activity. This sweating depletes the body’s salt and moisture levels. Low salt levels in muscles causes painful cramps. Heat cramps may also be a symptom of heat exhaustion.

Symptoms
• Muscle pain or spasms usually in the abdomen, arms, or legs

First Aid
• Stop all activity, and sit in a cool place
• Drink clear juice or a sports beverage
• Do not return to strenuous work for a few hours after the cramps subside because further exertion may lead to heat exhaustion or heat stroke
• Seek medical attention if any of the following apply:
  - The employee has heart problems
  - The employee is on a low-sodium diet
  - The cramps do not subside within one hour
Common Symptoms - Heat Syncope

Heat syncope is a fainting episode or dizziness that usually occurs with prolonged standing or sudden rising from a sitting or lying position. Factors that may contribute to heat syncope include dehydration and lack of acclimatization.

Symptoms
• Light-headedness
• Dizziness
• Fainting

First Aid
• Sit or lie down in a cool place when they begin to feel symptoms
• Slowly drink water, clear juice, or a sports beverage
Common Symptoms - Heat Exhaustion

Heat exhaustion is the body’s response to an excessive loss of the water and salt, usually through excessive sweating. Workers most prone to heat exhaustion are those that are elderly, have high blood pressure, and those working in a hot environment.

Symptoms
- Heavy sweating
- Extreme weakness or fatigue
- Dizziness, confusion
- Nausea
- Clammy, moist skin
- Pale or flushed complexion
- Muscle cramps
- Slightly elevated body temperature
- Fast and shallow breathing

First Aid
- Rest in a cool, shaded or air-conditioned area
- Drink plenty of water or other cool, non-alcoholic beverages
- Take a cool shower, bath, or sponge bath
Common Symptoms - Heat Stroke

Heat stroke is the most serious heat-related disorder. It occurs when the body becomes unable to control its temperature: the body’s temperature rises rapidly, the sweating mechanism fails, and the body is unable to cool down. When heat stroke occurs, the body temperature can rise to 106 degrees Fahrenheit or higher within 10 to 15 minutes. Heat stroke can cause death or permanent disability if emergency treatment is not given.

Symptoms
- Hot, dry skin or profuse sweating
- Hallucinations
- Chills
- Throbbing headache
- High body temperature
- Confusion/dizziness
- Slurred speech

First Aid
- Call emergency contact number and notify supervisor
- Move the sick worker to a cool shaded area
- Cool the worker using methods such as:
  - Soaking their clothes with water
  - Spraying, sponging, or showering them with water
  - Fanning their body
How to avoid Heat Stress

• Come to work well hydrated and drink at least 1 Liter of water before work each day

• Drink regularly during the day at least 2 Liters of water every 2-3 hours

• Carry a large water container with at least 2 Liters to drink within 2-3 hours

• Add a little more salt to your food to replace salt lost in sweat
Self-assess

- Self-assess using the urine charts

<table>
<thead>
<tr>
<th>SG Level</th>
<th>Specific Gravity</th>
<th>Meaning</th>
<th>Action</th>
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<tbody>
<tr>
<td>Normal</td>
<td>1.000 to 1.015</td>
<td>Hydration adequate</td>
<td>• Fluid intake is adequate to maintain desired hydration status</td>
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<td>• Maintain fluid intake</td>
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<tr>
<td>Alert</td>
<td>1.016 to 1.020</td>
<td>Slightly dehydrated</td>
<td>• Extra fluids required</td>
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<td></td>
<td>• Rehydrate before starting the work</td>
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<tr>
<td></td>
<td>1.021 to 1.029</td>
<td>Moderately dehydrated</td>
<td>• Extra fluids required</td>
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<td>• Rehydrate before starting the work and every 15-20 minutes during the shift</td>
</tr>
<tr>
<td>Action</td>
<td>1.030+</td>
<td>Significantly dehydrated</td>
<td>• Extra fluids required</td>
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<td>• Rehydrate before starting the work and every 15-20 minutes during the shift</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Investigate cause of dehydration</td>
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<td>• Remove worker from hot workplace</td>
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<td></td>
<td>• Worker not to be allowed to perform this work until hydration levels improved</td>
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<td>• Recheck SG in 4 hours</td>
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