**Introduction:** Dehydration occurs when the body’s output of water is greater than the body’s intake. Excessive heat, sweating, and decreased water intake can lead to dehydration. Following are guidelines for the prevention of dehydration.

**Mild Dehydration:** Drinking plain water may be all that is needed. However, when both water and electrolyte losses have occurred, salt (especially sodium and potassium), must also be replaced. Flavored commercial drinks, with electrolytes, have been formulated to replace the salts lost during vigorous work.

- **To maintain** water balance within the body, workers who are not excessively sweating, should drink at least 1 quart of water.
- **To protect** against dehydration, drink 1 ½ to 2 quarts of water while working on the job site.
- **Profuse sweating** can dramatically increase the amount of water lost during the day.
- **Always have** plenty of cool, potable water available at each job site.
- **Make sure** a “Drinking Water” label is stamped on the cooler complying with OSHA regulations.
- **Use** plastic water coolers that have pressure fit lids to prevent mold and mildew.
- **Use** galvanized steel water coolers when working in harsh and inclement conditions.
- **Attach** cup dispensers to the side of the coolers to allow workers safe drinking vessels.
- **Make sure** water is available when working on elevated platforms or roofs.
- **When operating** heavy machinery, keep a thermos of water readily available.
- **Change** the water supply frequently when it is kept in portable coolers.
- **Take** cool-down breaks when working in extreme heat.
- **Encourage** fellow workers to drink water while working together.
- **Always** do the heaviest work during the coolest part of the day.
- **Damage** to the kidneys, liver, and brain can occur from dehydration.
- **Consult** a doctor about safely replacing fluids if you have heart or kidney problems.
- **Know** the signs and symptoms of dehydration.

**Heat Exhaustion**

<table>
<thead>
<tr>
<th>Symptoms: Weakness</th>
<th>Signs: High Pulse Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatigue</td>
<td>Extreme Sweating</td>
</tr>
<tr>
<td>Blurry Vision</td>
<td>Pale Face</td>
</tr>
<tr>
<td>Dizziness</td>
<td>Insecure Walking</td>
</tr>
</tbody>
</table>

**Heatstroke**

<table>
<thead>
<tr>
<th>Symptoms: Chills</th>
<th>Signs: Red Face</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restlessness</td>
<td>Disorientation</td>
</tr>
<tr>
<td>Irritability</td>
<td>Erratic Behavior</td>
</tr>
<tr>
<td>Shivering</td>
<td>Collapse</td>
</tr>
</tbody>
</table>

**Over-hydration:** Over-hydration occurs when the body’s intake of water is greater than its output. Excess water in the body causes the sodium in the bloodstream to become overdrilled.

- **Limit** intake of water when suffering from heart, kidney, or liver problems.
- **Do not** drink more than two gallons of water in a single work day.
- **Symptoms** from over-hydration can be mental confusion, seizures, and coma.
- **Contact** a doctor to prescribe a diuretic to increase excretion of excess water.

**Heat Stress:** In heat stress environments, the body cools itself by perspiring. When this occurs, much more is lost than water. Magnesium, potassium, sodium, and calcium are depleted. These electrolytes are crucial to maintaining healthy muscles and a productive energy level. Specific (electrolyte) drinks need to be available for workers when heat stress indicators are present.

- **Beware** of heat exhaustion, heat cramps, or heat stroke when involved in strenuous work when it is 90°F or above.
- **Take time** to allow the body to adjust to high-heat and high-humidity environments, before beginning operations on the job.
- **Do not depend** on thirst, or sweat as an indicator of escalating body heat. Drink fluids with electrolytes at regular intervals.

**Conclusion:** Hydration is essential and must be consciously maintained during the hot season. Use these guidelines to stay healthy.

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**Work Site Review**

Work-Site Hazards and Safety Suggestions:

Personnel Safety Violations:

**Employee Signatures:**

(My signature attests and verifies my understanding of and agreement to comply with, all company safety policies and regulations, and that I have not suffered, experienced, or sustained any recent job-related injury or illness.)

__________________________
__________________________
__________________________
__________________________
__________________________
__________________________

Foreman/Supervisor’s Signature:

These guidelines do not supercede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.

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