

## Heat Illness Prevention Plan - Appendix F: Acclimatization Practices

Managers should consider the following facts when developing and implementing effective acclimatization practices for their employees working in environments in which the apparent temperature is 91°F or more:

The National Institute of Occupational Safety and Health (NIOSH) recommends the following acclimatization schedule for new employees:

- 1<sup>st</sup> day: 20% of usual work duration
- 2<sup>nd</sup> day: 40% of usual work duration
- 3<sup>rd</sup> day: 60% of usual work duration
- 4<sup>th</sup> day: 80% of usual work duration
- 5<sup>th</sup> day: 100% of usual work duration

NIOSH recommends the following acclimatization schedule for workers with previous experience with the same job:

- 1<sup>st</sup> day: 50% of usual work duration
- 2<sup>nd</sup> day: 60% of usual work duration
- 3<sup>rd</sup> day: 80% of usual work duration
- 4<sup>th</sup> day: 100% of usual work duration

Managers should consider the following when implementing acclimatization practices:

- Acclimatization can be maintained for a few days of non-heat exposure.
- Loss of acclimatization begins after about 1 week of not working in the heat.
- After 1 month away from work in the heat, most people's heat tolerance will have returned to baseline.
- Working 1-2 days in cooler conditions or taking breaks in air conditioning will not hurt acclimatization.
- Sudden shifts in work intensity or sudden increases in work environmental temperature can increase the risk for heat illness even for acclimatized workers.
- The body will acclimate to the level of work demanded of it. Simply being in a hot environment is not sufficient. Doing light or brief physical work in the heat will acclimatize you only to light, brief work. More strenuous or longer tasks require more acclimatization (see the examples of work level below).

<b><u>Work Level</u></b>	<b><u>Example Motions</u></b>	<b><u>Example Tasks</u></b>
Light	-Sitting with light manual work with hands & arms -Driving -Standing with some light arm work and occasional walking -Casual walking (2 mph) -Lifting 10 lbs fewer than 8x/min or 25 lbs less than 4x/min	-Using small bench tools or small power tools -Inspecting & sorting produce -Sorting light materials -Assembling small parts -Driving vehicle on roads -Nailing

<b><u>Work Level</u></b>	<b><u>Example Motions</u></b>	<b><u>Example Tasks</u></b>
Moderate	<ul style="list-style-type: none"> <li>-Sustained moderate hand and arm work</li> <li>-Moderate arm &amp; leg work</li> <li>-Moderate arm &amp; trunk work</li> <li>-Moderate pushing &amp; pulling</li> <li>-Walking at a moderate speed</li> <li>-Lifting 10 lbs 10x/min, or 25 lbs 6x/min</li> </ul>	<ul style="list-style-type: none"> <li>-Picking fruits and vegetables (bending, squatting)</li> <li>-Painting with a brush</li> <li>-Pushing or pulling lightweight carts or wheelbarrows</li> <li>-Off road operation of trucks, tractors, or construction equipment</li> <li>-Operating an air hammer</li> <li>-Weeding or hoeing</li> </ul>
Heavy	<ul style="list-style-type: none"> <li>-Intense arm and trunk work</li> <li>-Carrying, shoveling, manual sawing</li> <li>-Pushing or pulling heavy loads</li> <li>-Walking at a fast pace (4 mph)</li> <li>- Lifting 10 lbs 14x/min, or 25 lbs 10x/min</li> </ul>	<ul style="list-style-type: none"> <li>-Transferring heavy materials, shoveling</li> <li>-Sledgehammer work</li> <li>-Hand mowing, digging</li> <li>-Concrete block laying</li> <li>-Pushing or pulling loaded hand carts or wheelbarrows</li> </ul>
Very Heavy	<ul style="list-style-type: none"> <li>-Very intense activity at fast to maximum pace</li> <li>-Jogging, running or walking faster than 4 mph</li> <li>-Lifting 10 lbs more than 18x/min, or 25 lbs more than 13x/min</li> </ul>	<ul style="list-style-type: none"> <li>-Heavy shoveling or digging</li> <li>-Ax work</li> <li>-Climbing stairs, ramps or ladders</li> </ul>