OSHA®
Occupational Safety and Health Administration

Heat Illness Prevention

Keeping Workers Well-Hydrated

Why Hydration is Important

Your body heats up as you work and cools itself through sweating. Sweating can lead to dehydration. Proper hydration is essential in preventing heat illness.

How Different Products Play into Hydration

Alcohol
Alcohol can increase your risk of heat illness because it is a diuretic. Diuretics lead to dehydration.

Water
Drinking water frequently and eating regular meals is usually sufficient for hydration.

Medications
Certain medications, like diuretics, can lead to an increase in urination. If a worker is not keeping up with their water intake, they are at risk of dehydration.

Electrolytes
For sweating that lasts several hours, sports drinks can help replace electrolytes that workers lose when working in hot environments. Salt tablets are not recommended unless a worker is instructed by their doctor. Most people can restore electrolytes through regular meals. Additionally, consuming too much salt may lead to nausea and vomiting which can worsen dehydration.

Caffeine
In general, a normal amount of caffeine will not influence your overall hydration. When your heart is strained from hot temperatures and workload, high caffeine levels can add additional strain on your heart. Workers should keep this in mind: some energy drinks contain more caffeine than coffee.

Tips for Employers

To prevent heat illness among indoor and outdoor workers, it is important for employers to ensure workers are hydrated, have easy access to water, and can rest.

Employers can encourage proper hydration by:

Educating workers on the importance of hydration and what should be avoided.

Equipping all work areas with accessible and visible cool water (i.e., temperature less than 60° F).

Encouraging workers to drink at least one cup (8 ounces) of water every 15-20 minutes while working in the heat, not just when they are thirsty. Do not drink more than 48 oz (1½ quarts) per hour! Drinking too much water or other fluids (sports drinks, energy drinks, etc.) can cause a medical emergency because the concentration of salt in the blood becomes too low.

Maintaining a cool or shaded rest break location:

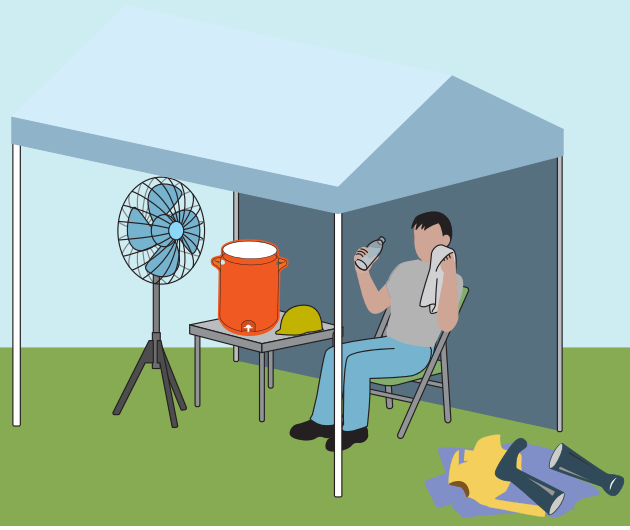
Outdoors: This might mean a shady area, an air-conditioned vehicle, a nearby building or tent, or an area with fans and misting devices.

Indoors: Workers should be allowed to rest in a cool or air-conditioned area away from heat sources (e.g., ovens, furnaces).

Designating a relief person so that workers can take a water break or having water brought directly to workers that cannot leave their work area.

Motivating workers to keep a **sealable bottle of cool water** in their work area so that they can continuously hydrate.

Consider providing **electrolyte products** when workers perform strenuous, sweat-producing job tasks for extended periods of time.

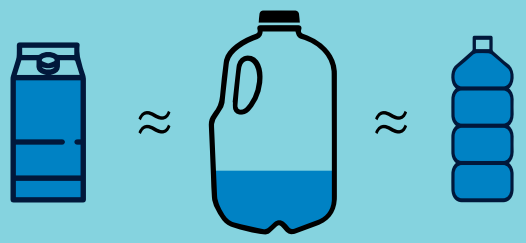


Tips for Indoor and Outdoor Workers

When working in the heat, drink 1 cup (8 ounces) of water every 15–20 minutes. This is about 32 ounces of water every hour, however, this should not exceed the 48 oz.

Along with continuous drinking, take your scheduled meal breaks as food will help in replacing the electrolytes lost from sweat.

How much is 32 ounces?



Hydrate *Before* Work

Being hydrated before you begin work makes it easier for you to stay hydrated throughout your shift.

Hydrate *During* Work

Dehydration can happen fast, so make sure to drink cool water throughout your shift even when you do not feel thirsty.

Hydrate *After* Work

Be sure to replace the fluids you lost while working. Hydrating after work reduces the strain on your body from dehydration. Hydrating after work is even more important if you work in a hot environment on a regular basis. Chronic dehydration increases the risk for medical conditions, such as kidney stones.

Pro tip: There are misconceptions around the safety of cold water. Consuming water—whether it is cold, cool, or room temperature—when you're dehydrated is important for preventing heat illness. Source: Sustainable solutions to mitigate occupational heat strain | NCBI

Sources:
Heat Stress: Hydration | CDC | Keeping Workers Hydrated and Cool Despite the Heat | Blogs | CDC

Federal law entitles workers to a safe workplace. Workers have the right to speak up about hazards without fear of retaliation. See www.osha.gov/workers for information about how to file a confidential complaint with OSHA and ask for an inspection.

1-800-321-OSHA (6742) | TTY 1-877-889-5627 | www.osha.gov/heat

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