



## Question & Answer

# What is hyponatremia and when is it a risk in the workplace?



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It has a fancy-sounding scientific name, but hyponatremia is means something really simple: low levels of sodium in the blood.

According to the [Mayo Clinic](#), hyponatremia generally results from drinking too much water, which dilutes the sodium in the body to less than 135 mEq/L (milliequivalents per liter). This causes the body's water levels to rise and cells begin to swell, resulting in a variety of health concerns that range from mild to life threatening.

While the condition most often affects high-performance athletes, it can also be a risk for those working in hot and humid conditions – particularly workers with poor diets, low physical fitness levels, or underlying health conditions (learn more in [It's Not All About Fluids: 5 Factors That Can Lead to Dehydration](#)).

It's important to remember that workers don't have to be outdoors to be at risk. A [study published in the Industrial Psychiatry Journal](#) outlines the case of a 34-year-old male who was working in a large, very hot aluminum plant. He was taken to the emergency room after experiencing intense perspiration, weakness, and lethargy, and was found to have a sodium level of just 111 mEq/L – well below the normal range.

Workers consuming fairly large amounts of water should be mindful to watch for symptoms of hyponatremia, which include:

- **Headache**
- **Confusion**
- **Fatigue and energy loss**
- **Muscle weakness, spasms, or cramps**
- **Nausea and vomiting**

In severe cases, seizures and coma can occur. Left untreated, hyponatremia can result in death.

The key to avoiding this condition is **drinking water in moderation**. Experts recommend that workers consume only about the amount of fluid they lose. For those doing moderately strenuous work, that means about 5-7 ounces every 15-20 minutes (read about [Electrolytes: What They Are and Why They Matter for On-The-Job Hydration](#)).

Most people know about dehydration but aren't familiar with issues associated with the overconsumption of water, so it's a good idea to include this topic in training sessions and [toolbox talks](#). Educating workers about the risks of hyponatremia is a good way to proactively prevent medical emergencies on the job site.

