



SQWINCHER

365
HYDRATION
HEALTH & SAFETY

Question & Answer

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



BUBBA WOLFORD received his MS in Exercise Physiology from Mississippi State University 1991. He joined Sqwincher in 2009, serving now as Director of Corporate Development and Training, where he spearheads promoting the importance of proper hydration within the Industrial Workplace to key corporate accounts

It has a fancy-sounding scientific name, but hyponatremia 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](#)).



www.pryme.com.au | sales@pryme.net.au | 07 3374 4544

SQWINCHER

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.

