



**“Your Connection for Workplace Safety”**  
**Phone: 920-208-7520**

*We're about service, commitment, results, and accountability!*

## *Weekly Safety Tip*

*Life Is All About Choices!®*

May 30, 2016

### SCI Safety Tips Heat illness prevention: NIOSH updates guidance document with new research

Source: <http://www.blr.com>

Date: 5/26/2016



When it comes to heat stress, you know what you need to do to protect workers, right? Eight ounces of cool water an hour, frequent breaks in the shade, planning heavy work for cooler times of day ... You've got this.

That's what researchers at the National Institute for Occupational Safety and Health (NIOSH) thought, too—until the Deepwater Horizon disaster led to thousands of workers cleaning up the mess in the heat of a Gulf shore summer.

NIOSH learned some important lessons about heat illness from that experience. As a result, the agency has updated its *Criteria for a Recommended Standard: Occupational Exposure to Heat and Hot Environments* for the first time since 1986.

Keep reading to find out what's new in our understanding of heat illness.

#### **Two types of heatstroke**

The most significant change to the NIOSH document is a change in the definition of “heatstroke.” At one time, the accepted definition of “heatstroke” included confusion, unconsciousness, and/or convulsions, accompanied by a lack of sweating. In fact, workers

***SCI Safety Slogan***

**BE ALERT!!**  
**EXPECT THE**  
**UNEXPECTED**

***James Lehrke-SCI***

were warned that if they stopped sweating, heatstroke was imminent. Unfortunately, this type of heatstroke, now called “classic heatstroke,” isn’t the type that most commonly strikes workers.

NIOSH has recognized that another type of heatstroke, known as “exertional heatstroke,” is more common in workers—and profuse sweating is one of its symptoms. So workers who have been taught that sweating is a positive sign are actually at increased risk. Exertional heatstroke is caused by the combination of heat exposure and heavy physical exertion. It can lead to a condition called rhabdomyolysis, in which muscle tissue breaks down, releasing large amounts of potassium into the blood. High levels of potassium in the blood can lead to cardiac arrhythmias and seizures. High levels of proteins released by muscle breakdown can cause temporary or permanent kidney damage.

Symptoms of rhabdomyolysis include muscle pain and cramping, swelling, weakness, and decreased range of motion. Fatigue, abdominal pain, back pain, nausea or vomiting, and confusion may also occur. However, many cases occur with very mild symptoms that are mistaken for heat stress. This creates a potentially dangerous situation because these workers don’t receive the intensive medical intervention they require. Another potential complication of rhabdomyolysis is compartment syndrome, or swelling in a specific type of muscle, usually in the lower extremities, that blocks blood flow. Compartment syndrome is often delayed—it may take several hours to develop—and can lead to permanent loss of function in the affected limb.

Symptoms of compartment syndrome include the “5 Ps”: pain, pallor, pulselessness, paresthesias (sensation of tingling, numbness, or burning, usually felt in the hands, feet, arms, or legs), and paralysis. Pain is the most common and tends to be extremely severe. Workers who experience these symptoms must go to a hospital immediately. Quick surgical intervention is required to treat compartment syndrome.

Both types of heatstroke are accompanied by extremely high body temperature, and both types are a medical emergency that require immediate medical attention. First aid includes cooling the worker as quickly as possible by any means available, including an ice bath, circulating air around the worker, and placing cold packs on the head, neck, armpits, and groin. For exertional heatstroke, oral hydration is vital—the more the victim drinks, the more potassium and proteins will be flushed from the body. However, in serious cases, it’s impossible for the victim to drink enough fluids to flush out the proteins and potassium; the victim will need intravenous fluids. Emergency medical services should be summoned immediately for all cases of heatstroke, and victims should be transported to a hospital as soon as possible.

#### Identifying susceptible workers

In addition to the revised definition and symptom description for heatstroke, NIOSH has tweaked the information about factors that make workers susceptible to heat illness, including:

- *Age.* Older workers are at increased risk of heat illness, and acclimatization is less effective in older workers. NIOSH suggests that working for shorter periods between breaks can help protect these workers.
- *Pregnancy.* Pregnant women have a higher-than-normal body temperature throughout pregnancy, meaning that it takes more fluids and more effort to cool a pregnant woman once she has overheated. In addition, heat tolerance decreases as pregnancy progresses.
- *Obesity.* Obese individuals are 3.5 times more likely to suffer heat illness than other workers. Obese workers may require increased supervision and more careful management to prevent heat illness.
- *Medication.* Both illegal and prescription drugs can affect the body’s fluid balance and thermoregulation. Workers should ask their doctor or pharmacist about the effects of their medication on heat tolerance.
- *Alcohol and caffeine.* Alcohol significantly reduces heat tolerance and should be avoided. However, recent studies have found that caffeinated fluids have an effect on fluid balance similar to that of water, so that morning cup of coffee shouldn’t increase workers’ risk.

## SCI OSHA Tip: Is Zika Coming to a Workplace Near You?

Source: <http://www.blr.com>

By: Clare Condon

Date: May 27, 2016

---

It’s time for environment, health, and safety (EHS) managers to add another task to a seemingly endless list of everyday duties. The Zika virus has been identified as a workplace hazard, and it is incumbent upon employers to protect their workers from contracting the virus. Today we offer some steps you can take to keep the Zika virus from infecting your workplace.

#### Where in the United States?

The Zika virus is creeping north from South America. According to the Centers for Disease Control and Prevention (CDC), although there



Aurora Health Care®

Quick Tips for Healthy Living

Stop with Excuses and Make it Happen

Today, for many American adults, the word “exercise” usually brings up negative thoughts. “I can’t.” “It’s too hard.” “I am too busy”. Physical fitness used to be essential to live. Hunting and gathering at first, then farming. In fact, only about one in five American adults get the recommended amount of aerobic and strength training exercise each week. We spend more time each day watching TV, going on online, eating and drinking or playing games on the computer or our phones.

There are endless benefits of physical activity. Research indicates that exercise can help reduce the risk of heart disease, stroke, type 2 diabetes, some cancers, and metabolic syndrome. Exercise allows us the ability to concentrate more, improve our mental health and help us live longer, healthier lives.

It only takes 150 minutes a week of moderate aerobic intensity like brisk walking, to get the benefits. That is 30 mins, 5 days a week! If you do not have 30 mins, you can break it up into three 10 minutes session each day. There are more 1,440 per day use 30 of those to improve your health and well-being!

Make sure to always consult your physician before starting any fitness activity.

are, as of yet, no locally acquired cases of the Zika virus in the United States, there have been a total of 426 travel-associated Zika virus cases. On the other hand, there have been 596 locally acquired Zika virus cases in U.S. territories, with 570 of those in Puerto Rico.

The CDC points out that imported cases could result in local spread of the virus in some areas of the United States. In addition, the mosquitoes that carry the Zika virus could migrate to the United States.

**Is your workplace affected?**

Workplaces in industries that could be affected by the Zika virus include healthcare providers and first responders, who are exposed to blood and bodily fluids, and outdoor workers, who could be exposed to mosquito bites.

**Steps you can take to protect workers**

The Occupational Safety and Health Administration (OSHA) and the National Institute for Occupational Safety and Health (NIOSH) recently released a guidance for protecting workers from contracting the Zika virus. The guidance outlines steps you can take to protect your workers from Zika.

It all starts with *training*. Employers should train workers about their risks of exposure to the Zika virus through mosquito bites and direct contact with infectious blood and other bodily fluids, as well as how to protect themselves. Employers should also provide information about Zika virus infection, including modes of transmission and possible links to birth defects of the children of workers who are pregnant or may become pregnant or whose sexual partners are or may become pregnant.

Additional steps to protect outdoor workers include:

- Step 1:** Provide insect repellents, and encourage their proper use.
- Step 2:** Provide workers with, and encourage them to wear, clothing that covers their hands, arms, legs, and other exposed skin. Consider providing workers with hats with mosquito netting to protect the face and neck.
- Step 3:** In warm weather, encourage workers to wear lightweight, loose-fitting clothing. This type of clothing protects workers against the sun’s harmful rays and provides a barrier to mosquitoes.
- Step 4:** Provide workers with adequate water, rest, and shade, and monitor workers for signs and symptoms of heat illness.
- Step 5:** Get rid of sources of standing water (e.g., tires, buckets, cans, bottles, barrels) whenever possible to reduce or eliminate mosquito breeding areas. Train workers about the importance of eliminating areas where mosquitos can breed at the worksite.
- Step 6:** If requested, consider reassigning workers who indicate they are or may become pregnant or who have a sexual partner who is or may become pregnant to indoor tasks to reduce their risk of mosquito bites.

What do you think?  
Send us an email at:  
[jlconnections@aol.com](mailto:jlconnections@aol.com)  
See our bold new look  
In Loving Memory

In Loving Memory...  
Jessica, Kristin and Nick

