# Safety Newsletter

A quarterly publication for injury and illness prevention

### THE IMPORTANCE OF HEAT ACCLIMATIZATION

One factor that increases risk to heat related illness is the inability to acclimatize to the heat. Heat acclimatization is the improvement in



heat tolerance that comes from gradually increasing the intensity or duration of work performed in a hot setting. According to the National Institute of Occupational Safety & Health (NIOSH), the best way to acclimatize yourself to the heat is to increase the workload performed in a hot setting gradually over a period of 1–2 weeks. You begin to lose your acclimatization after about 1 week of working away from the heat. Employees and students returning back to outdoor school activities after a long summer break may be more susceptible to heat related illness because they are not acclimatized. In addition to being deconditioned to the heat due to physically being away from work, employees must be attentive to the weather pattern and temperatures as well.

There are positive health benefits when the body has time to acclimate to the heat. Gradual heat exposure causes less strain to the heart and other organs. As the body acclimates and adjusts to the heat it also improves the individual's ability to sweat, which is the body's natural way to cool off. The body will adjust by producing earlier onset and higher volumes of sweat to promote the cooling effect. Things to remember while attempting to acclimatize to heat in work settings:

• Best results will come from gradually increasing work time in hot conditions over a period of 7 to 14 days, and cooling off and fully rehydrating between shifts.

• Pushing to the point of heat exhaustion will hurt, not help, your heat tolerance.

• Typically, acclimatization requires at least two hours of heat exposure per day (which can be broken into two, 1-hour periods).

• The body will acclimatize to the level of work demanded of it. Simply being in a hot place 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.

• Stay hydrated! Dehydration reduces the benefits of heat acclimatization.

• Eating regular meals aids acclimatization. Food replaces electrolytes lost in sweat, especially during the first few days of acclimatization, when you lose the most salt in sweat.



Physical fitness aids acclimatization

According to the Central for Disease Control (CDC) heat casualties often occur with new or less experienced employees and deaths from heat stress often occur during the first few days on the job. Planning ahead and providing awareness to all will help reduce injuries and unwarranted fatalities.

**Central Region** 

**CRSIG** School Insurance Group

### Temperature-Humidity Index

A useful guide to stay comfortable in the heat is the Temperature-Humidity Index (THI). You can access a calculator to determine the Heat Index (HI) at http://www.weatherimages.org/data/heatindex.html

Drink plenty of fluids and be on the lookout for signs of heat stress. Download the **OSHA NIOSH Heat Safety Tool** at your local app store.

# **OFFICE ERGONOMICS**

If your work involves sitting at a desk you may experience some discomfort from time-totime, but it doesn't have to be a permanent part of the job. You may be able to avoid some of the discomforts associated with seated work, such sore wrists and as shoulders. by using



proper office ergonomics. Chair height, equipment spacing and desk posture all make a difference. Here is a general guide to help ease stress on your body and help you stay comfortable as you work.

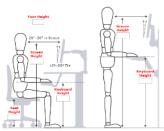
**Chair.** Choose a fully adjustable chair that cannot only support your spine back but be fitted specifically to your body proportions. Ideally the chair should be able to adjust to a proper height so that your feet rest flat on the floor – or, a footrest. This will support your feet so your thighs are parallel to the floor. It is recommended that the chair has armrests. Position them so your arms sit gently on the armrests with your elbows close to your body and your shoulders relaxed.

**Desk.** Under the desk, make sure there's enough room for your legs and feet. **Don't store items under your desk, as that can minimize the amount of available leg room and make it hard to sit correctly.** If the desk is too high and can't be changed, raise your chair. Use a footrest to support your feet if necessary. The rotation of different positions eases stress and fatigue that can build on the body from being in stagnant positions for too long.



Keyboard and mouse. Put your computer keyboard in front of you so your wrists and forearms are in line and your shoulders are relaxed. If you use a mouse or another type of pointer connected to a computer, place it within easy reach, on the same surface as your keyboard. While you are typing, using a computer

touchpad, or using a mouse or pointer, keep your wrists straight, your upper arms and elbows tucked close to your body, and your hands at or slightly below the level vour elbows. lf of

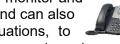


possible, set the sensitivity of the mouse or pointer so you can use a light touch on it.

**Monitor.** Place the computer monitor straight in front of you, directly behind your keyboard, about an arm's length away from your face. The monitor should be no closer to you than 20 inches and no further away than 40 inches. The top of the screen should be at or slightly below eye level. If you wear bifocals, lower the monitor an additional 1 to 2 inches for more comfortable viewing. Be conscious of lighting. Is there a window directly behind you that may create a glare on the monitor screen making it difficult to see? If so, consider moving the position of the monitor or using an anti-glare screen protector to block direct sunlight reflections.

Using a laptop computer may lead to Laptop. discomfort because of the low screen height and cramped keyboard and touchpad. If you use a laptop at your desk, consider getting an external keyboard and

mouse, along with an external monitor and a docking station. A laptop stand can also be considered in certain situations, to more closely mimic a desktop computer setup.



Frequently used objects. Keep objects you use often - such as the phone, stapler or printed materials close to your body to minimize reaching. Stand up to get anything that you can't comfortably reach while sitting.

Telephone. If you spend a lot of time on the phone, or if you often type or write while you're using the phone, put the phone on speaker or use a headset. Don't cradle the phone between your head and neck.

# Incorporate stretch breaks throughout the day

Remember, no matter how well your workspace is set up for proper ergonomics, sitting in the same position for hours at a time isn't good for your body. Get up and

walk around as often as you can throughout the workday. If possible, do some work standing up. While you're seated, stretch your hands, fingers and arms from time to time. Shifting your position, standing up and moving will ease strain on your body and help you stay healthier.



Neck- Tilt head from side-to-side. Start by sitting tall with the shoulders down and back, away from the ears.

Slowly tilt the head so that the right ear is leaning toward the right shoulder. Feel the stretch on the left side of the neck. Try to roll the left shoulder down away from the ear to deepen the stretch.



Bring the head back to center and repeat on the other side.

Shoulder- Doing shoulder shrugs helps focuses on pulling the shoulders down the back. Shrugging will help improve posture and prevent neck and shoulder pain. While taking a breath in, roll the shoulders up to the ears. On the exhale, roll the shoulders back and lift the chest.



**Back**- A good upper back stretch will help stretch all the muscles between the shoulder blades. Start in a seated position. Hold the arms straight out and rotate the hands so that the palms face away from each other. Cross the arms so that the palms are pressed together and claps

fingers together. If twisting the arms doesn't feel good, simply lace the fingers together. Contract the abs and round the back, reaching away with your arms as you relax the head down. Imagine you're curving up and over an imaginary ball. Hold the stretch for 10-30 seconds.

Forearms- You may not even realize how tight your forearms can get from typing until you stretch them out. Start in a seated or standing position. Stretch the right arm out and turn the hand down so that the fingers point towards the floor. Use the left



hand to gently pull the fingers towards you, feeling a stretch in the forearm. Hold for 10 to 30 seconds and repeat on the other hand.

## SUMMER CAR MAINTENANCE - TIRE CARE

Tire care is especially critical in warm weather because long trips, heavy loads, high speeds and higher temperatures all put additional stress on tires.

- Check your tires regularly for signs of wear.
- Check your tire pressure often with a gauge. Serious injury can result from tire failure because of under inflation.
- Never overload your vehicle.
- Make sure there is enough tread on the tire. All grooves should be visible and deep enough to at least touch the top of Lincoln's head on a penny inserted head first in the tread.
- Make sure tires are aligned and balanced properly.
- Obey posted speed limits lower speed also means better gas mileage.



