



## The Eyes Have it!

The human eye is often taken for granted. While people are accustomed to eating healthy foods and receiving the proper amount of exercise, many rarely consider their vision health. When it comes to our eyes, it is most important to protect the eyesight we have been given. During Workplace Wellness Month, Friends for Sight reminds everyone that workplace eye safety actions are easy to incorporate and invaluable to maintain long-term vision health.

Almost 2,000 people in the U.S. injure their eyes while working everyday. Of these 2,000, one third of the injuries are severe enough to be treated in the hospital emergency room. The majority of injuries that happen within the workplace are due to small particle abrasion in the eye or chemical splashing. Examples of this could be: metal, wood, UV radiation burns, or cleaning products. However, our eyesight can be damaged without a tragic accident or spill. A recent survey found that computer work alone resulted in 14% of patients' reported eye problems. This number is expected to increase as our jobs and daily activities become more computer screen driven. Because eyesight can be at risk in numerous ways, it is extremely important to be aware of and practice eye safety in the workplace. The consequences of not doing so could lead to a loss of precious vision.

According to [preventblindness.org](http://preventblindness.org), 10-20% of the total amount of work related injuries will cause permanent vision loss. They also state that the right

eye protection could lessen the severity or even prevent 90% of eye injuries in accidents.

The Bureau of Labor Statistics reports that almost three out of five workplace eye injuries are due to not wearing appropriate eye protection. Whether it is goggles, helmets, face shields, or just safety glasses, simply wearing them will protect and in many cases save eyesight. Health care workers especially require proper eye protection. Infectious diseases can be transferred through the mucous membrane of the eye. When there is any type of eye hazard, proper eye protection should be worn at all times.

In the workplace, technology, specifically computers, poses a significant risk to our vision. Over exposure to computer screens, a common problem during the 8-hour work day, can cause our eyes to lose their ability to function properly.

Today more than ever we find ourselves staring at an assortment of artificial light sources. While research has not yet proven any long-term effects of technology on vision, there are a multitude of reasons you should practice safety when looking at a computer screen for extended periods of time.

Collectively known as "Computer Vision Syndrome", these symptoms can leave you feeling like you are seeing double or with a debilitating headache that prevents you from doing anything at all. There is

Continued on page 2

hope, however: by following a few basic safety tips you can virtually eliminate the problems so many people struggle with today.

The primary problem associated with looking at a computer screen is the fact that our eyes are not designed to stare at something so close for an extended period of time. It is hard to imagine, but computers have only existed for the last half-century or so which means throughout our evolution, human eyes have not evolved to this significant change.

### **Tips for Relief**

The easiest home remedy for many of these is something that almost everyone admits to not doing and that is taking a break every now and then. Staring at a computer for extended periods of time is not only mentally exhausting, but also very taxing for eye muscles. To lessen the effects of Computer Vision Syndrome, look away from the computer screen for at least 20 seconds every 20 minutes and scan the room with the eyes. This allows the eyes to relax and refocus. Blinking is another simple task that is often overlooked. Blinking moistens the eyes and reduces severe eye strain that comes with constant staring at the computer screen.

### **Recommendations**

While these simple problems may be cured by some simple modifications to your work habits, there are times when users may need to go a step further and consult their doctor about the underlying cause. For many computer users who experience headaches, special glasses or contacts for computer use are often the best solution. This is why it is so critical for everyone to have his or her eyes examined every 2 years.

Another possible concern with the amount of time that we are looking at LED screens is the effect it has on our sleep. New research is being conducted that

indicates using your tablet before bedtime can have dramatic effects on your body. According to a research study conducted at Lighting Research Center at Rensselaer Polytechnic Institute in Troy, NY evidence suggests that using electronics before bedtime will actually trick your body into not producing melatonin. This means that once you finally decide to power off your electronics you are going to be counting more sheep than you would have otherwise. So what is the solution you might be wondering? Well perhaps leaving the tablet on the nightstand a little earlier each night will help to ensure you get your full eight.

To remedy vision strain while still being productive, follow these suggestions:

1. Keep the computer roughly 30 inches away from your eyes.
2. Rest your eyes every 15 minutes.
3. Remember to blink frequently. This simple action reduces dry eye and maintains eye health.

### **Conclusion**

While technology's effects on vision are still a relatively new issue, the harmful effects can be drastically reduced as long as you take an active role in the preventative measures. Taking breaks and having regular eye exams are among the most important of these. Just like the rest of your health, your vision needs to receive regular attention to ensure you are able to use it to its maximum potential. Taking an active role in your vision can lead to increased productivity, a better night's sleep, and a better overall well-being. Take care of your vision around those electronic devices and it will take care of you.

# HEAT ILLNESS: Do you know what to look for



Workers who are exposed to extreme heat or work in hot environments may be at risk of heat stress. Exposure to extreme heat can result in occupational illnesses and injuries. Heat stress can result in heat stroke, heat exhaustion, heat cramps, or heat rashes. Heat can also increase the risk of injuries in workers as it may result in sweaty palms, fogged-up safety glasses, and dizziness. Burns may also occur as a result of accidental contact with hot surfaces or steam.

Workers at risk of heat stress include outdoor workers and workers in hot environments such as fire-

fighters, bakery workers, farmers, construction workers, miners, boiler room workers, factory workers, and others. Workers at greater risk of heat stress include those who are 65 years of age or older, are overweight, have heart disease or high blood pressure, or take medications that may be affected by extreme heat.

Prevention of heat stress in workers is important. Employers should provide training to workers so they understand what heat stress is, how it affects their health and safety, and how it can be prevented.

[Title 8 Section §3395. Heat Illness Prevention](#)

## HEAT STROKE

Heat stroke is the most serious heat-related disorder. It occurs when the body becomes unable to control its temperature: the body's temperature rises rapidly, the sweating mechanism fails, and the body is unable to cool down. When heat stroke occurs, the body temperature can rise to 106 degrees Fahrenheit or higher within 10 to 15 minutes. Heat stroke can cause death or permanent disability if emergency treatment is not given.

### Symptoms

Symptoms of heat stroke include:

- Hot, dry skin or profuse sweating
- Hallucinations
- Chills
- Throbbing head-ache
- High body temperature
- Confusion/dizziness
- Slurred speech

### First Aid

Take the following steps to treat a worker with heat stroke:

- Call 911 and notify their supervisor.
- Move the sick worker to a cool shaded area.
- rapidly** cool the worker using methods such as:
  - Fanning their body.
  - Spraying, sponging, or showering them with water.
  - Soaking their clothes with water.
  - Immersing up to the neck in cold water

## HEAT EXHAUSTION

Heat exhaustion is the body's response to an excessive loss of the water and salt, usually through excessive sweating. Workers most prone to heat exhaustion are those that are elderly, have high blood pressure, and those working in a hot environment.

### Symptoms

Symptoms of heat exhaustion include:

- Heavy sweating
- Extreme weakness or fatigue
- Dizziness, confusion
- Nausea
- Clammy, moist skin
- Pale or flushed complexion
- Muscle cramps
- Slightly elevated body temperature

### First Aid

Treat a worker suffering from heat exhaustion with the following:

- Have them rest in a cool, shaded or air-conditioned area.
- Drink fluids gradually (4oz. Every 15min.) Water best choice.
- Have them take a cool shower, bath, or sponge bath.

## HEAT SYNCOPE

Heat syncope is a fainting (syncope) episode or dizziness that usually occurs with prolonged standing or sudden rising from a sitting or lying position. Factors that may contribute to heat syncope include dehydration and lack of acclimatization.

### Symptoms

Symptoms of heat syncope include:

- Light-headedness
- Dizziness
- Fainting

### First Aid

Workers with heat syncope should:

- Sit or lie down in a cool place when they begin to feel symptoms.
- Slowly drink water, clear juice, or a sports beverage.

## HEAT CRAMPS

Heat cramps usually affect workers who sweat a lot during strenuous activity. This sweating depletes the body's salt and moisture levels. Low salt levels in muscles causes painful cramps. Heat cramps may also be a symptom of heat exhaustion.



### Symptoms

Muscle pain or spasms usually in the abdomen, arms, or legs.

### First Aid

Workers with heat cramps should:

- Stop all activity, and sit in a cool place.
  - Drink clear juice or a sports beverage.
  - Do not return to strenuous work for a few hours after the cramps subside
- because further exertion may lead to heat exhaustion or heat stroke.
- Seek medical attention if any of the following apply:
    - The worker has heart problems.
    - The worker is on a low-sodium diet.
    - The cramps do not subside within one hour.

# County of Riverside

## Standard Safety Operation Manual



DOCUMENT NUMBER: 1001

REVISED DATE: 2/4/04

SUBJECT: General Safety Rules

General Work Procedures

### GENERAL REQUIREMENTS

The General Safety Rules contained in this section are not considered to be a replacement for specific safety training of employees or the development of job specific safety procedures and guidelines by departments and agencies.

A. Supervisors at all levels are responsible for the enforcement of safety rules among employees under their supervision. As such, supervisory personnel should review and discuss with their employees all rules which apply to the department or agency's specific

B. As a condition of employment, employees must obey all established safety rules and regulations.

### Electricity

1. Only authorized and qualified electricians shall make repairs or work on electrical equipment except for minor work, or low voltage fixtures.
2. Steam, water or oil leaks near electrical equipment shall be reported immediately to the supervisor in charge.
3. Electrical equipment which is heating excessively or sparking shall be shut off and an electrician called to correct the situation.
4. Working surfaces shall be kept dry when working with, or near, electrical apparatus.
5. All portable and fixed electrical equipment must be securely grounded before using.
6. No untrained employee shall operate equipment or machinery within ten (10) feet of any high-tension power line.
7. All electrical wires must be considered live until proven otherwise.
8. A switch shall not be closed without full knowledge as to why the circuit is open. The tag on a switch shall be removed only by the person who tagged the switch open or an authorized relief person.
9. Do not use any electrical equipment with frayed or otherwise deteriorated insulation.
10. The use of make-shift or over-capacity fuses and circuit breakers is prohibited.
11. No employee, except authorized electricians, shall work on live circuits.
12. Employees should stand on insulating mats when operating electrical switch gear.
13. No metal ladders shall be used within six feet (6) of live circuits.
14. A clear space of at least three (3) feet shall be maintained in front of all electrical panels and switch gear.
15. The green or ground wire on all portable tools and extension cords shall be securely fastened at both ends of the cord. The grounding prong on the cord plug shall not be removed nor bent aside to allow insertion in a two-prong receptacle.
16. Do not attempt to use or start any electrical equipment if your hands are wet or if you are standing on a wet surface.
17. All electrical cords must be protected from oil, chemicals, and rough surfaces.
18. Overloading of electrical outlets is prohibited. Overloading of electrical outlets is prohibited.