



*Environmental Health
Safety*

Guardian

Florida State University

Spring 2008

A Newsletter of the
FSU

EH&S

Department

EH&S: 850-644-6895 Fax 850-644-8842
www.safety.fsu.edu email:ehs@admin.fsu.edu

GUARDIAN, is published periodically by The Florida State University Department of Environmental Health and Safety

1200 Carothers Hall
Tallahassee, FL 32306-4481

Director
Tom Jacobson
tjacobson@admin.fsu.edu

Editor
Amanda Boor
a boor@admin.fsu.edu

Contributors:
Dave Bujak
Bob Durham
LeAnne Hotchkiss
Jason Johnson
Mark Klawinski
Richard Le

The *GUARDIAN* is available in alternative format upon request and on the web at
www.safety.fsu.edu/guardian.html

Please recycle this
newsletter when finished.



Why Wear Eye and Face Protection?

Thousands of people are blinded each year from work-related eye injuries that could have been prevented with the proper selection and use of eye and face protection. Eye injuries alone cost more than \$300 million per year in lost production time and medical expenses. Each day about 2,000 U.S. workers have a job-related eye injury that requires medical treatment with one third requiring hospital emergency treatment. No dollar figure can adequately reflect the personal toll these accidents take on the injured workers.

What causes eye injuries?

- Flying particles. 70% of eye injuries are from flying or falling objects or sparks striking the eye. 60% of the objects were smaller than a pin head.
- Contact with chemicals caused 20% of the injuries.
- Other accidents were caused by objects swinging from a fixed or attached position, like tree limbs, ropes, chains, or tools which were pulled into the eye while the worker was using them.
- Not wearing eye protection. 60% of workers injured were not wearing eye protection at the time of the accident.
- Wearing the wrong kind of eye protection for the job. About 40% of injured workers are wearing some form of eye protection when the accident occurs. These workers are most likely wearing typical protective eyeglasses instead of protective eyeglasses with side shields or goggles.
- In addition to common eye injuries, laboratory staff, janitorial workers, animal handlers, and other workers may be at risk of acquiring infectious diseases via ocular exposure.

Eye protection is designed to prevent or lessen the severity of injuries to workers. Eyewear should be comfortable and allow for sufficient peripheral vision. Supervisors must assess the workplace and determine if hazards that necessitate the use of eye and face protection are present or are likely to be present before assigning Personal Protective Equipment (PPE) to workers. Do not rely on PPE alone to provide protection against any hazard. Use PPE in conjunction with

Continued on page 4

Workers' Compensation: Why Is All that Paperwork Necessary?

Often times, EH&S receives a question such as "Why do I have to fill out these forms? I didn't go to the doctor and I feel okay". The purpose of the paperwork is to protect your future rights should medical treatment be needed at a later date.

All workers' compensation claims are governed by statutory law. This law is very strict when it comes to reporting accidents. An employee only has thirty days to report a claim to the employer in order for the claim to be considered. If the employee files the report more than 30 days after the accident, the claim is automatically denied due to an untimely report filing. This dilemma often occurs with back injuries.

In order to protect university employees, EH&S requires all claims to be reported at the time they occur. The forms, *First Report of Injury* and *Accident Investigation Report*, are to be completed by the supervisor or the designated department representative if medical treatment is not necessary and forwarded

Continued on page 3

Get Up and Get Out!

Okay you're sitting there, at your desk, minding your own business, and finally getting around to that "thing" you've been putting off when... this really, really annoying sound blasts your ears, an equally annoying light keeps flashing and sometimes, just sometimes, this utterly annoying obviously computer-generated voice tells you to "Leave the building". Is it real? Is it a mistake? What to do? What to do? Ah....leave the building by the nearest exit, and no, you can't use the elevator. Because it's the FIRE ALARM!!!!!!!!!!!!!!

You see, most campus buildings are equipped with fire alarm systems. These systems are designed to let you know if there is a problem in your building and then, quite frankly, they are being just as annoying as they can to make you leave.

And when they go off, and they will, you, the occupant, are obligated to leave. Why? Well for a start, we don't want you hurt, or dead. This is something we really feel strongly about. Secondly, you don't know if this is a drill, a mistake, or the real thing. So always treat it as the real thing and you never have to wonder what it is, all you have to do is leave.

How to leave? Rapidly, but orderly. Go to the nearest exit, leave the building, and move away at least 100 feet. 100 feet? Yes 100 feet. Think 1/3 of a football field, or 2.2 times the length of the Loch Ness monster. Nearest exit? Yes, pretty much all of the buildings have multiple exits so if any one exit is blocked there are other ways out. So be sure to learn all the exits from your area. Some are quite scenic and it gives them a sense of purpose.

Be sure to establish an office rally point to meet when you ALL go outside. That way you can make sure all folks are accounted for. Finally, please don't come back into the building until given the "All Clear" by the Police, Fire Department or other Campus Fire Safety personnel. Remember: Being Safe means Get Up and Get Out!



Self-Luminous EXIT Signs Prohibited On Campus

Self-luminous EXIT signs are illuminated by an internally contained radioactive gas. They require no external power supply or battery to operate. These signs have a useable lifespan of about 10 years.

While these devices are in compliance with fire safety requirements for buildings on campus, they have been prohibited for use by the Radiation Control and Policy Committee for the last twenty years. These signs are considered safe, however, to reduce the potential for accidental or intentional damage to an exit sign, in 1988 a moratorium was placed on the installation of these signs. The rationale influencing the moratorium is to reduce the liabilities for improper disposal and to reduce the cost of radioactive contamination cleanup and disposal.

The Department of Environmental Health and Safety occasionally finds these devices around campus. The self-luminous EXIT signs are recognized by the lack of an external energy source and a telltale 'Caution-Radioactive Material' notice on the backside or top of the sign. If anyone suspects that an EXIT sign is self-luminous, he or she should contact EH&S and we will remove it and work with Facilities to find and install an alternative.



Planning to Have Food at Your Event?

In the United States, millions of people become ill due to food related diseases each year¹. Spread of these diseases is primarily due to poor hygiene and improper food handling procedures. Therefore, it is important to consider food safety protocols when hosting an event at Florida State University.

Any organization at FSU wishing to serve food during an event open to the public and student body, is required to obtain prior approval from the EH&S Biological Safety Office. A permit can be obtained on the EH&S website under "Forms", form number EHS 1-2, Request for Approval of a Temporary Food Event.

Examples of open events at FSU include (but are not limited to) bake sales, conferences, celebrations, social functions, and recruitment socials held by any organization, fraternity, or sorority in which anyone from the general public and student body can attend. Departmental birthday parties, general organizational meetings, Christmas parties, and luncheon parties are considered closed events and in most cases do not require prior food approval. If you have any additional questions contact the Biological Safety Office at 644-5374 or by email at biosafety@admin.fsu.edu

¹Centers for Disease Control and Prevention. CDC Surveillance Summaries, March 17, 2000. MMWR 2000;49(No. SS-1).

Are You Prepared?

Although hurricane season does not start until June 1, the time to prepare is now. Most of us in the Big Bend area of Florida have grown complacent to hurricanes because one has not hit Tallahassee directly since Kate in 1985. It is not a matter of IF another hurricane will hit the Capital Area region, but WHEN. Statistically, we are well overdue.

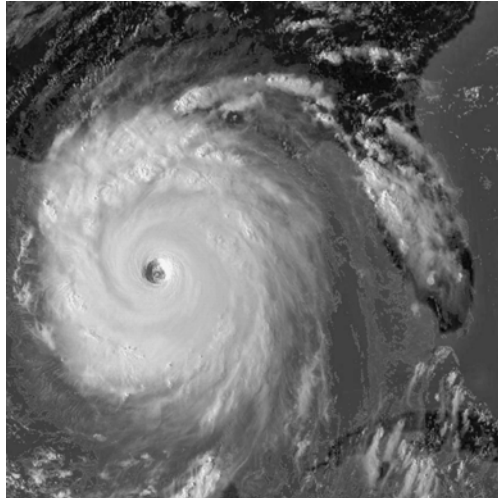
There are numerous recent examples of a hurricane's impact on higher education. The most obvious, of course, is Hurricane Katrina's impact on Tulane, University of New Orleans, and University of Southern Mississippi. In 2001, a mere tropical storm, Allison flooded the University of Texas, Baylor College and Texas A&M. Closer to home, Hurricane Ivan was very disruptive to the University of West Florida. That and other 2004 and 2005 hurricanes resulted in \$47.2 million in losses to the State of Florida University School System. Of that, \$28.2 million was not covered by insurance or FEMA reimbursement.

FSU was not left totally unscathed either. During Allison in 2001, flash flooding claimed the life of an FSU student and flooded portions of the campus. In 2004 and 2005, we suffered approximately \$500,000 in damage from Hurricanes Charley and Dennis at the Ringling Museum of Art in Sarasota and at the Marine Lab in Franklin County, respectively.

So, what is FSU doing as a university to prepare for a direct hit? The 150-member strong Emergency Management Team has been participating in numerous training and planning sessions throughout the last year. Critical infrastructure items such as emergency power generators are tested regularly. New emergency response contracts are in place to get the necessary resources we need to prepare for and respond to any emergency. A major hurricane exercise is scheduled for late May/early June to test the team's level of preparedness.

However, much of the University's ability to respond and recover from a major disaster rests in the ability of its individual employees to recover at home. Are YOU and your family ready to respond to a hurricane in the Capital Region?

For more information about how you can be personally prepared and how FSU is planning for a hurricane and any other emergency, visit the Emergency Management section of our website, <http://safety.fsu.edu>.



Workers Compensation from page 1 to EH&S for reporting purposes. The forms are located on the EH&S website, form numbers EHS11-1 and EHS11-2.

If you later need to seek medical care for the accident that occurred, there is a record of the report and you do not risk having your claim denied because of late reporting.

There is also a statute of limitations for medical treatment being administered on a workers' compensation claim. You can receive authorized medical treatment on a continual basis as long as it is related to your accident. Remember, though, you must have medical care within a year of the initial two year period following the claim. After the initial two year period, if one year lapses between medical visits, your accident will be determined not to be the reason you need medical treatment and you will be responsible for future medical care.

It is best to be cautious and avoid jeopardizing your right to benefits under workers' compensation. Always report an accident no matter how insignificant you may think it is because sometimes it may be more serious than you think!

Tidbits

Remember that eye washes must be tested and inspected annually.

One out of every three people will have a fire related emergency in their lifetime.

Ten people a day die in fires.

A fire doubles in size every 30 seconds.

Did you know that if you are involved in a work related accident and failed to use appropriate Personal Protective Equipment, your workers' compensation benefits can be reduced by 25%?

If you are using a University vehicle outside the scope of employment and have an accident, you will be financially responsible.

Every 12 minutes, one person dies because of a car accident. Every 14 seconds, a car accident results in an injured victim.

Of the estimated 3.8 million disabling injuries each year in the work force, 15% are due to slips, trips, or falls, which account for 12% to 15% of all Workers' compensation costs.

Request for Approval of a Temporary Food Service Event forms are required to be submitted to EH&S at least three business days prior to the event date.

Americans generate 1.6 million tons of household hazardous waste annually.

Over time, the average home can accumulate as much as 100 pounds of household hazardous waste in the basement, garage, storage closets and under the kitchen sink.

In 370 BC, Hippocrates dealt with the health of citizens, not workers, but did identify lead poisoning in miners and metallurgists.

In 50 AD, Plinius Secundus suggested the use of animal bladders intended to prevent inhalation of dust and lead fume.

In 1775, Percival Pott described occupational cancer among English chimney sweeps, identifying soot and the lack of hygiene measures as a cause of scrotal cancer. The result was the Chimney-Sweeps Act of 1788.

Deadly hurricanes in Bangladesh: 300,000 killed in November 1970 and 70,000 killed in April 1991.

Eye and Face from page 1

guards, engineering controls and sound work practices.

Eye injuries are caused by hazards associated with impact, dust, chemicals, heat, and optical radiation.

Impact

While working in an area where you are exposed to flying objects, fragments, and particles, primary protective devices such as safety glasses with side shields or goggles must be worn. Common related tasks include chipping, grinding, machining, masonry work, wood working, sawing, drilling, chiseling, and sanding. Safety glasses without side shields are not acceptable eye protection for impact hazards.

Secondary protective devices such as face shields are required in conjunction with primary devices during severe exposure impact hazards. When worn alone, face shields do not protect employees from impact hazards. Face shield windows are made with different transparent materials and in varying degrees or levels of thickness. These levels should correspond with specific tasks.

Dust

Dust is present in the workplace during operations such as woodworking, grinding, buffing, and grounds keeping. Working in a dusty environment can cause eye injuries and presents additional hazards to contact lens wearers.

Either eyecup or cover-type safety goggles should be worn when dust is present. Safety goggles are the only effective type of eye protection from nuisance dust because they create a protective seal around the eyes. In one study, nearly one-fifth of the injured workers with eye protection wore face shields or welding helmets. However, only six percent of the workers injured while wearing eye protection wore goggles, which generally offer better protection for the eyes. Best protection is afforded when goggles are worn with face shields.

Chemical

Contact with chemicals causes 20% of eye injuries. These injuries often result from an inappropriate choice of eyewear that allows chemical substances to enter from around or under protective eyewear. Serious and irreversible damage can oc-

cur when chemical substances enter the eyes in the form of splash, mists, or fumes. When working with or around chemicals, it is important to know the location of emergency eyewash stations and how to access them with restricted vision. A face shield may be required in areas where workers are exposed to severe chemical hazards.

Heat

Heat injuries may occur to the eye and face when workers are exposed to high temperatures, splashes of molten metal, or hot sparks. Burns to eye and face tissue are the main concern when working with heat hazards.

Working with heat hazards requires eye protection such as goggles or safety glasses with special-purpose lenses and side shields. However, many heat hazard exposures require the use of a face shield in addition to safety glasses or goggles. When selecting PPE, consider the source and intensity of the heat and the type of exposure that may occur.

Optical Radiation

Common tasks with optical radiation hazards include welding, torch-cutting, brazing, soldering, and laser work.

Welding: Among welders and nearby workers, UV radiation burns (welder's flash) routinely damage workers' eyes and surrounding tissue. Thermal burns to the eye occur as well.

Only filter lenses with the appropriate shade number will provide protection against optical radiation. Filter lenses must coincide to specific radiant energy exposure. These devices protect the eyes and face from flying sparks, metal spatter, and slag chips produced during welding,

brazing, soldering, and cutting.

Welding helmets are secondary protectors intended to shield the eyes and face from optical radiation, heat, and impact. Contact EH&S for additional information on filter lens.

Lasers: Laser work and similar operations create intense concentrations of heat, ultraviolet, infrared, and reflected light radiation. Unprotected laser exposure may result in eye injuries including retinal burns, cataracts, and permanent blindness. Select protective eyeglass lenses that protect against the maximum intensity. The selection of laser protection should depend upon the lasers in use and the operating conditions. Contact EH&S for specific lens requirements.

Conclusion

To be effective, the eye and face protection must be appropriate for the hazard encountered and properly fitted. Remember, almost all injuries to workers wearing eye protection resulted from objects or chemicals going around or under the protector. Eye protective devices should allow air to circulate between the eye and the lens.

Many workers injured while not wearing protective eyewear believe it is not required by the situation, so training is important. Eye protection devices must be properly maintained. Scratched and dirty devices reduce vision, can cause glare and may contribute to accidents.

References:

- Occupational Safety and Health Administration
- National Institute for Occupational Safety and Health
- Department of Labor, Bureau of Labor Statistics



FLORIDA STATE
UNIVERSITY

Environmental Health and Safety
Tallahassee, FL 32306-4481

First Class
U.S. Postage
PAID
Tallahassee, FL
Permit 55