

CWRU DEPARTMENT OF OCCUPATIONAL AND ENVIRONMENTAL SAFETY

NEWSLETTER



October-November 2003 *"Safety Comes First"*

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Welcome to D.O.E.S.



It is once again the start of a new school year. Whether you have been here for years or this is your first semester, the Dept. of Occupational and Environmental Safety welcomes you! Part of our operations involve the training and re-training of personnel. We cannot stress enough the importance of making sure that all lab personnel are properly trained. All employees must be trained by D.O.E.S. annually.

The Safety Office offers mandatory training sessions in Radiation, Chemical, Bloodborne Pathogens (BP) Safety, X-ray, and a variety of Physical Safety areas. Radiation and BP Training sessions are subdivided into "New" and "Retraining" sections, so sign up for the appropriate session based on your training status (which can be checked by entering Social Security # as a secure code on the D.O.E.S. webpage at <http://does.cwru.edu>).

Lab Volunteers Must Register With HR

Do you know that the university is not only liable for paid lab employees, but also for volunteers in the labs? Because of this liability, lab volunteers are now required to register with Human Resources and receive training if they will be working within any facility where employees must undergo safety training or health screening. Volunteers are defined as any indi-

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Workplace Violence: Are YOU Safe?

The tragedy last spring at the Peter B. Lewis Building illustrates the importance of workplace safety issues in a university environment. According to the National Institute for Occupational Safety and Health, over two million physical assaults and 7,000 homicides occur in the workplace each year. Homicide is now the leading cause of death for women in the workplace and the second-leading for men.

Here are some of the early warning signs for workplace violence:

- Direct or veiled verbal threats of harm or intimidation.
- Hypersensitivity or extreme suspiciousness.
- Extreme moral righteousness ("I know I am right").
- Unable to take criticism of job performance.
- Person holds a grudge, especially against a supervisor.
- Expression of extreme desperation over recent problems.
- History of violent behavior.

No one signal alone should cause concern but a combination of these items should be a cause for action. The University's policy states that "Employees who either experience, observe, or become aware of acts of violence must report such conduct to either the Department of Protective Services (368-4630; x3333 for emergencies) or the Department of Human Resources (368-4500). Confidentiality will be maintained to the extent that circumstances permit."

Other suggested behavioral guidelines are:

- To project calmness: move and speak slowly, quietly and confidently.
- Focus your attention on the other person to let them know you are interested in what they have to say.
- Maintain a relaxed yet attentive posture

and position yourself at a right angle rather than directly in front of the other person.

- Accept criticism in a positive way. When a complaint might be true, use statements like "You are probably right" or "It was my fault." If the criticism seems unwarranted, ask clarifying questions.
- Acknowledge the feelings of the other person. Indicate that you can see he or she is upset.
- DO NOT use styles of communication which generate hostility such as apathy, brush off, coldness, going strictly by the rules or giving the run-around.
- DO NOT challenge, threaten, or dare the person. Never belittle the person or make him or her feel foolish.
- DO NOT try to make the situation seem less serious than it is.

Women especially have to deal with several types of workplace violence. According to a study by the Center for Women in Government, workplace violence - including physical assaults, threats, rape, rob-

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TRAINING SCHEDULE

Radiation (x2906)

- New Training: (check website)
- X-ray Training: (call for times)

Chemical and Biological Safety (x2907)

- OSHA Lab Standard and Regulated Chemicals: Mondays 1-3:00
- Bloodborne Pathogens: Mondays 3-5:00

- All online training is available at <http://does.cwru.edu>

Please Note: ALL training (except X-ray) is **REQUIRED ANNUALLY** and all re-training (except regulated chemicals) is available online. Please continue to check our website for updates. We hope to make retraining for Regulated Chemicals available online soon.

Violence, cont.

bery and murder - is a significant risk for so-called "hidden" violence, as it is often committed behind closed doors by unarmed patients, clients or students whom the women know.

Similarly, campus crime rates are at all-time highs: one in three students will be the victim of some kind of campus crime, from theft to rape to homicide.

Though workplace violence is not often an avoidable situation, being aware of growing interpersonal tensions can possibly be of help; it is however, sadly, no guarantee. For further information call Human Resources or Ease Employee Assistance at (216) 241-EASE.

Volunteers, cont.

vidual; including prospective faculty, staff or students; who works or assists in University facilities prior to formal employment or matriculation, including students, workers, and international workers. Each volunteer must register with Human Resources in Crawford 304 and complete a "Lab Volunteer Information Form" providing his or her full name, phone number, department, and the name of his or her supervisor or volunteer host. Volunteers under the age of 18 should note that they must obtain parental consent to work in Case labs. Volunteers are not required to provide their date of birth or social security information, because they will not be paid by the university. Additionally, volunteers must receive training including but not limited to: lab safety, bloodborne pathogen training, radiation training, and respirator training before volunteering in a lab. If necessary, the university will administer a hepatitis B shot at the volunteers expense. Questions can be directed to Lorraine Tobias-Watson in Human Resources (368-4503) or to Richard Dell, the Assistant Director of Safety Services (368-2907).



RADIATION NEWS

UV RADIATION: PROTECTION

When one thinks of radiation hazards, dangerous atomic isotopes are usually the first to spring to mind. But there are other kinds of radiation dangers to be aware of; specifically, dangerous exposure to UV radiation. Consider the following incidents:

- While attempting to visualize the results of a DNA digestion on a UV transilluminator, a new technician removed his face shield to get a closer look (the bands were indistinct), exposing his unprotected eyes for about a minute.
- A researcher turns on a light box he has repaired to ascertain that it works properly. His eyes were exposed to UV light for about 30 seconds.
- A student works for fifteen minutes at a clean air bench while the UV is on. She was not wearing any eye protection while being exposed to the UV radiation from the hood's reflective surface.

Several hours after each of these incidents, these people experienced extreme discomfort as the result of "sunburned" corneas; the delay in the appearance of symptoms is common with this type of injury. Fortunately there were no immediate long term effects from any of these incidents. Even the briefest exposure to UV light should be avoided and requires eye protection; a face shield is preferable to goggles for avoiding a sunburned face.

Not all shields protect against UV. When ordering, be sure that the item is specified by the manufacturer as providing protection at **THE WAVE LENGTH(S) USED.**

Power Failures

Like any other part of the University infrastructure, electrical power to the campus can fail, either as an isolated incident (a blown fuse or a tripped circuit breaker) or as part of a larger event (regional power outages due to spring storms or other natural or man-made disasters). Should the campus experience a wide-area electrical outage, secondary emergency generators will work in some buildings, but be prepared in case they do not. There are several things you can know beforehand that will help in the event of this sort of emergency.

Emergency Lighting

Emergency lighting provides enough light for a safe, quick exit. Batteries in these lights should last a couple of hours, but may fail sooner. It is important that lighting in hallways and stairwells is monitored during a power outage to ensure occupants can exit safely. If natural or emergency lighting in hallways and stairwells begins to diminish to one foot candle (about the light provided by a full moon), building occupants should evacuate the building. Outlet-mounted and handheld emergency flashlights are useful in rooms without windows or areas where work is conducted at night.

Freezers and Incubators

For outages of up to several hours, freezers will hold their temperature and should not be opened. In general, chest freezers will hold temperature longer than upright freezers. Incubators are more of a problem and may lose the CO₂ balance necessary to maintain pH. If power outages are anticipated to last for longer than a few hours, dry ice and wet ice chests may be used to maintain cold temperature.

Hazardous Equipment

Identify hazardous equipment that should be turned off after power fails because it might cause injury when restarted after power returns. Unless there has been an order to evacuate the building, assign an employee to shut off the power to all hazardous equipment in the work area after a power failure. To facilitate this, make a list of equipment that must be reset or restarted once power returns. Keep instructions for doing so in a nearby place. Equipment that operates unattended should be programmed to shut down safely during a power failure and not restart automatically when power returns. Make sure that all fume hoods have a physical, non-electrical indicator to show if they are running. This could be as simple as a strip of hanging tissue paper that will flutter when the fume hood is running.

What's in YOUR Kit?

According to the Department of Homeland Security, U.S. residents should assemble a disaster supplies kit in case of emergency. The contents of this kit however have been a topic of debate. The DHS recommends using an easy-to-carry container such as a duffel bag or small plastic trash can. Include "special needs" items for any member of your household (infant formula, insulin, etc.), first aid supplies (including prescription medications), a change of clothing for each household member, a sleeping bag for each, a battery powered radio or television and extra batteries, food, bottled water, and tools. Also include some cash and copies of important family documents (birth certificates, passports and licenses) in your kit. Copies of other documents -- powers of attorney, insurance policies, life insurance beneficiary designations and a copy of your will -- should also be kept in a safe location outside your home. For more instructions, see the government's site at www.ready.gov.

Ask Dr. Goggles



Dear Doctor Goggles:

When I first came here to CWRU, I went through the required Radiation Safety training. I was never active as a RAD worker, but now (3 years later) I am in a lab that uses radioactivity. Can I do my re-training online?

Yours,
The Irradiator

Dear Inquisitive Irradiator:

No. Since it's been over 2 years, you must sign up for **new RAD worker training**, which must be done **in-person**. Please visit the DOES Safety website (regularly updated) at <http://does.cwr.edu> for dates and times. **Note: Rad Retraining is now required ANNUALLY.**

Dear Doc Goggles:

I know that all sharps cannot be reused but what about blood tube holders? Can I remove a needle to re-use a blood tube holder? Must each blood tube collection device be disposed of with the needle attached each time they are used?

-Thrifty Pete

Dear Thrifty Pete:

OSHA's Bloodborne Pathogens Standard (29 CFR1910.1030, paragraph (d)(2)(vii)(A)) states: "Contaminated needles and other contaminated sharps shall not be bent, recapped, or removed" unless required by an actual medical procedure. CPL 2-2.69 at XIII.D.5 goes on to say that "removing the needle from a used blood-drawing/phlebotomy device is rarely, if ever, required by a medical procedure." So the answer is "no."

Tales from the LAB . . .



At 4pm on a Friday afternoon, a laboratory worker trying to finish her work in order to leave for a long Memorial Day weekend in the Catskills, picked up a container of trifluoroacetic acid to move it. In her hurry, she did not notice that there was a small amount of residue on the glass. Several hours later, driving through upstate New York (and looking forward to an idyllic weekend of rest, relaxation, and the joys of the outdoors) she experienced pain in the palm of her hand and the inside part of her thumb. She assumed it was just from the long drive, but when she stopped to get gas, she noticed a serious burn on her palm where she had picked up the container of trifluoroacetic acid. Unfortunately, it got worse and her weekend was cut short and she required skin grafting to treat this serious burn. She returned to work the next week without any rest and only minor periods of relaxation.

The lesson? Trifluoroacetic acid can form hydrofluoric acid upon contact with moisture. Hydrofluoric acid can cause deep burns that may not be painful for hours.

Safety Shorts

Recently, we've been made aware that some of you have noticed lines that read "Acid Waste" running across your ceilings. According to Specialist Bob Latsch however, there are NO ACTIVE ACID WASTE LINES at CWRU, just the standard laboratory waste lines. This is apparently a case of mislabeling from way back. These labels will be replaced over time; for now though, don't be unsettled by that pipe over your head.



"WELL, I GUESS THIS IS IT, SON... WE'LL SEE YOU ABOUT \$18,000 FROM NOW."

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