Evacuation Plans: Know and Practice

With the terrible events of September still looming over us all, it is important to know about building evacuation – which is important for ALL types of disaster including fire, chemical or radiation spills, and unfortunately, even terrorist attack. The basic steps to a quick and safe evacuation include:

- Know your escape plan. Make sure all exits are posted. Think about the way that others who are NOT familiar with your environs will see the signs and post them accordingly so even visitors can find them easily. Make sure that ALL NEW PERSONNEL know and learn your room's plan.

- PRACTICE your escape plan – don't wait for routine, University-scheduled drills – feel free to conduct your own evacuation drills! Time them!

- Be aware of others, especially who are handicapped, injured, or otherwise-impaired. If others panic or are unfamiliar with the plan, TAKE THE LEAD. Think about others, but DON'T FORGET ABOUT YOURSELF!

- Leave material things behind. You might be tempted to grab your last ten years of research in the event of a fire, but DON'T. Your life is far more important than a series of numbers on paper. Back up your work at home so that this contingency doesn't need to be addressed.

Welcome to D.O.E.S.

Once a year, the Newsletter takes time to (re)acquaint you with the Department of Occupational and Environmental Safety (D.O.E.S.). Whether you have been here for years or this is your first semester, it is important to know how D.O.E.S. operates to help keep you at your safest.

We cannot stress the importance of making sure that all lab personnel are properly trained. All new employees must be trained by D.O.E.S.

If you are a new employee or find yourself in a new workplace environment, don't wait for someone to tell you to get trained -- take responsibility and make sure you are properly trained to handle the possible safety hazards you might face.

The Safety Office offers training sessions in Radiation, Chemical, Bloodborne Pathogens (BP) Safety and a variety of Physical Safety areas. Radiation and BP Training sessions are subdivided into "New" and "Retraining" sections, so (continued on pg. 4)
What a WASTE!

Glass in the Trash
Employees can receive severe injuries when the glass recycling bins they handle contain bottles with hazardous liquids in them. To prevent this from happening, please make sure that the bottles you place into the glass recycling bins are empty and clean. Empty means the bottle does not contain any liquids or solids. For empty solvent bottles, allow any residual vapors to vent in a fume hood and then rinse the bottle with water. For acid or base bottles, rinse out any remaining drops of material. After the bottles have thoroughly dried, deface any labels and then place them into the recycling bin. Contact Safety Services (x2907) for recycling procedures for glass bottles containing other materials. Please be considerate of those who have to handle the trash!

Minimize Radioactive Waste!
Isotope users are encouraged to reduce the volume of waste generated in the laboratory by minimizing the use of extraneous paper products and by insuring that non-radioactive waste is NOT included with radioactive waste.

Polyacrylamide Gels
Polyacrylamide gels containing radioactive material are to be disposed of as dry (solid) radioactive waste for pickup as waste by the Radiation Safety Office. They no longer need to be kept separate from the solid waste.

Questions? Call Radiation Safety at x2906.

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- Once evacuated to a designated safe area, do a head count and make sure all staff are accounted for. **IF SOMEONE IS MISSING, DO NOT GO BACK INTO THE EVACUATED AREA** – do a quick check of the surroundings and notify local fire or hazard personnel IMMEDIATELY.

The general procedure to follow is to 1) use stairways; **NEVER USE ELEVATORS**. 2) do **NOT** re-enter the building. 3) If an exit is blocked, find another one. 4) if a fire, feel the doorknob. If hot, do not open it. And 5) keep low to the ground to avoid smoke.

If you cannot evacuate, find a room with a door and seal the door with towels or clothing if possible. Notify emergency personnel via phone of signal from a window.

Upcoming Training Sessions

**Radiation (x2906)**
- **New Training:** Nov.28, Dec.13 (call for times)
- **Retraining:** Dec.14 (call for times)*
- **X-ray Training:** Nov.29, Dec.12 (call office to set up training)

**Chemical (x2907)**
- **OSHA Lab Standard:** Tuesdays 1-3 (Service Building Conference Room)

**Bloodborne Pathogen (x2907)**
- **New Training:** Tuesdays 3-5 (Service Building Conference Room)
- **Retraining:** Nov.18, Dec.13 (call for times; Service Building Conference Room)

*Don't forget: rad re-training is now also ONLINE on our website: [http://does.cwru.edu](http://does.cwru.edu) – please check this out as it is an easy, interactive way to accomplish your radiation retraining.
EPA Changes
In the wake of 9/11, the EPA has taken all of its risk-management assessment (RMA) programs off the Internet -- in a controversial move to avoid giving any sensitive information to would-be terrorists. What do you think? Should all facilities dealing with dangerous chemicals/radioactive materials -- including CWRU -- do this? Write us and share your opinion.

For those of you working with security-risk agents (toxins, biological agents, etc.) you already know the HIGH importance of keeping your labs and workstations secure. DO NOT DISMISS THIS AS OVERPREPAREDNESS. FOLLOW EXISTING GUIDELINES FOR SIGN-IN AND ACCESS TO THESE SUBSTANCES. NOTIFY US IMMEDIATELY OF LOSS OR THEFT.

QUIZ: Know Your Role
Here are questions EVERY lab worker should be able to answer:

- Who is your P.I.?
- Where is your CHP?
- To what chemicals/radiation are you exposed to?
- Where can MSDS be obtained for these chemicals?
- What are the hazards associated with these chemicals/radiation?
- How do you protect yourself from these hazards?

Take 5-10 minutes this week to do this exercise in your lab so that EVERYONE knows the answers to these very important questions.

Pregnancy Precautions
Any pregnant radiation worker who plans to continue working with radioisotopes during her pregnancy may inform the Radiation Safety Office and her supervisor in writing of her pregnancy and the estimated date of conception as soon as the pregnancy is known. This declaration lowers the permissible dose limits from 5000 mRem per year to 500 mRem for the entire gestation period.

If she chooses to declare her pregnancy, the worker will receive a fetal badge to be worn at the waist in addition to her quarterly badge. The embryo/fetus dose limit after declaring pregnancy is approximately 50 mRem per month. Fetal badges are exchanged monthly by the Radiation Safety Office.

Declaring one's pregnancy is voluntary; however, it is strongly encouraged. Receiving a fetal badge in addition to your whole body badge is also voluntary, but it more accurately reflects the fetal dose. Otherwise, your highest badge reading is automatically assigned to the fetus. Even if you choose not to wear a fetal badge in addition to your body badge, notify us of your pregnancy so we can monitor your quarterly badge in accordance with fetal/embryo exposure limits.

Contact the Radiation Safety Office (x2906) if you have any questions or would like a current copy of the NRC Regulatory Guide 8.13, "Instructions Concerning Prenatal Radiation Exposure."
sign-up for the appropriate session based on your training status (which can now be checked by entering your social security # as a secure code on the D.O.E.S. webpage found at http://does.cwru.edu). D.O.E.S. also provides X-ray Training for radiation specialty workers. See the box on page 2 for further details or calls us to sign up for a session.

Remember, if you are not trained in these areas and you are performing duties which involve regulated radiation, biological, or chemical materials, you are out-of-compliance with both Federal and State requirements. Call us IMMEDIATELY to sign up for a slot. Times and opportunities for training are frequent and sessions are designed to train you in practical safety procedures to better allow you to deal with hazardous materials and procedures. See you soon!

Where is D.O.E.S.?

If you're new to CWRU (or simply haven't been to visit us yet), this map should help you in finding the Department of Occupational and Environmental Chemical: x2907
Radiation: x2906
To sign up for training: x2907

Newsletter Suggestions: hjr8@po.cwru.edu
Website: http://does.cwru.edu

Closed Door Policy

The University requires laboratory doors be kept closed in many areas. There are two good reasons for this. First, fire codes may require it. Second, the ventilation balance in laboratory buildings is sensitive to disruption by breaches of the separation between zones. The University's heating system is not always reliable (or is sometimes too reliable), making it tempting to open your door sometimes to get a breeze. Current practice, however, is to keep the laboratory door closed and call maintenance to correct the ventilation problem. Keeping an air of collegiality is very important, but these practices should not diminish the safety and security provided by keeping doors closed. So keep your office doors open as much as you wish, but keep the lab doors closed.
**Leftover Lessons**

Late one night in November, a tired lab worker helped himself to some Thanksgiving leftovers. After taking them from the storage refrigerator he was using, he forgot to lock it back up. A few nights later, he opened it up and searched through the chemicals for something he needed. Suddenly, an ampoule stored within the refrigerator door exploded, sprays its unknown contents in all directions! Can you guess what happened? Can you identify the culprit? Since the refrigerator was not locked, the researcher had inadvertently left it slightly open — by just the tiniest crack — the last time he used it. Having been initially sealed at a relatively low temperature, the ampoule warmed up in the open door, causing pressure to build up inside it — until it violently exploded. But that's not all, he should have never put food in this refrigerator in the first place! The lesson: lock your refrigerators; eat your leftovers at home.

**Electrical Shorts**

A major component of the laboratory is electrical equipment. Such equipment should be checked periodically to insure that it is safe and does not present a potential for electrical shock or an ignition source.

**Danger Signs:**
- If you get a tingle, even one that does not seem to be "that bad," it is a sign of an electrical short. It presents a very serious danger to anyone who comes into contact with the equipment. Take the equipment out of service immediately and repaired.
- A cord that is frayed, dried out, cracked, or has bare wires showing should be replaced.
- A grounded plug that has the third prong broken off should be replaced with one that does have all three prongs.
- Any piece of equipment that is overheating, or causes the cord to get excessively hot.
- Smoke, sparks from switches or controls, liquids spilled in equipment, or erratic operation.

**Cutting Utensils**

After carving your turkey, it might be a good time to evaluate the cutting tools and utensils used in your laboratory. Replace or modify bare unprotected razor blades to reduce the potential for cuts and lacerations. Cuts and lacerations were the most prevalent type of injuries observed following a review of accident/injury data for U.S. laboratories. Utilize sharps containers for proper disposal, and do not leave sharp utensils or tools lying around your workplace. If you have a procedure or process that requires the use of bare unprotected razor blades, be sure to have specific places to store the blades and guidelines for their use.

**Change Your Clock, Change Your Battery**

Daylight Savings Time began last month in October (we hope you know this). This is also a good time to change the batteries in your smoke detectors. So if you forgot, get to it this weekend. Buy batteries and change them in all of your detectors. And if you don't have any smoke detectors? Get some. Smoke detectors are the easiest, most important preventive measure against fires in the home.