

# Case Department of Occupational and Environmental Safety

### October/ November 2005

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### "Safety Comes First"

Service Building, 1st Floor Phone: (216) 368-2906/2907 FAX: (216) 368-2236

Website: http://does.case.edu

## Safety Questions? Login to does.case.edu

One of the ways in which the Department of Occupational and Environmental Safety accomplishes its mission to promote the health and safety of the Case Western Reserve Community and its environment is by maintaining its website as a resource for faculty, students, lab volunteers, and university employees. The website is a collaborative effort undertaken by the entire staff at DOES through which the department endeavors to give you everything from basic safety instructions to the most up-to-date radiation, biological, and chemical safety information—all at your fingertips.

For example, the DOES website presents Material Safety Data Sheets on current construction projects as well as announcements about new emergency evacuation plans and opportunities for training online. Did you know, for instance, that if you have questions about biohood testing, service, or need to send results, you should call DOES or email us at does@case.edu?

Additionally, the DOES website is a convenient location for accessing safety manuals, including biological safety, chemical safety, radiation safety and physical safety manuals. We also have an online Helix database for radiation safety. Each Authorized User can access information regarding their inventory, worker training dates, and meter information. Each Authorized User has a password to access this information. Since this information is read only and cannot be changed, any updates regarding workers and RAM inventory must be made by fax or e-mail to the Radiation Safety Office. You can also access order forms and inventory forms from our website. You can even complete most of your required retraining online at the DOES website. Login and explore the possibilities at does.case.edu.

## Eating Food in the Lab--A Dangerous and Illegal Habit

"Federal and
Ohio State Laws
prohibit food and
drink in all Case
Laboratory
areas...

Violation of this
law and Case
policy is a serious
offense and can
result in
suspension of
laboratory
activities and
privileges."

While a little snack or drink may seem harmless enough, in the lab these items can be deadly. Ingestion is the primary means by which chemical, radiological, and biohazardous materials enter the human body. Federal and Ohio laws prohibit food and drinks in ALL Case laboratory areas. OSHA Reg.29 CFR 1910.1450, page 494, E.1.d. specifically states, "Avoid eating, drinking, smoking, gum chewing, or application of cosmetics in areas where laboratory chemicals are present." This includes standard laboratory, warm rooms, equipment rooms, common use and other laboratory-related areas.

The reasoning behind this regulation is simple: accidental **fatal** ingestion or contamination of food can occur **easily** without realizing it, no matter how careful you are.

In order to ensure your compliance with these rules, make sure these guidelines are followed:

- Establish well-defined areas for storage and consumption of food and beverages. This must be in a FOOD-ONLY area. There can be no chemicals in this area whatsoever.
- All food or drink used for research purposes (dried milk, iodized salt, etc.) must be clearly labeled as follows:

#### "NOT FOR HUMAN CONSUMPTION"

- **Prominently mark any area** where food is permitted and post a warning sign (e.g. **EATING AREA--NO CHEMICALS!**). No chemicals or lab equipment should be allowed in this area.
- Never use glassware or utensils to prepare or consume food or drink that
  have been used for laboratory operations. Similarly, laboratory refrigerators,
  ice chests, and cold rooms should never be used for food storage unless
  clearly designated for this purpose and kept off-limits for the storage of
  chemicals, blood or blood by-products, and radioactive materials.

Food, drinks and their corresponding containers found in laboratory areas will be confiscated and disposed of as biohazardous waste. Moreover, anyone found in violation of this law will by reported to the Chairman and Primary Investigator in charge of the area where the policy violation occurred. Violation of this law and Case policy is a serious offense and can result in suspension of laboratory activities and privileges.

Safety should be the first priority of all members of the Case research community. If you note violations of this policy, please respond promptly by contacting DOES at 368-2907.

### Compliance Issues: Reminders

General Training: The Department of Occupational and Environmental Safety offers many classes that are not only mandated by the University but also by the Occupational Safety and Health Administration (OSHA). You must make sure that your training is up-to-date and that it is renewed annually. General training classes include Lab Safety, Standard and Regulated Chemicals, Bloodborne Pathogens, Respirator Training, and Shipping, Department of Transportation (DOT) regulations.

**<u>DOT Training:</u>** The Department of Transportation (DOT) requires specific training for those that ship or receive materials defined by DOT as "hazardous." This training must be renewed every three years. DOES offers in-house DOT training.

<u>Outside Contractors</u>: Contractors must be made aware of all hazards when working in unfamiliar environments. Contact DOES if there is a need to have equipment removed or discarded. Also, make sure to ask if there is a need to have any area monitored for hazards, e.g., chemical, radiation, or safety.

## Safety Plans: Does Your Lab Need a Chemical Hygiene or Exposure Control Plan?

If you think that your safety plan may need to be updated, your first course of action should be to contact DOES. By visiting our website at does.case.edu, you may access a link for "Forms/Manuals." Here you will find all the important Chemical Safety and Radiation Safety materials you will need.

Of particular importance are the documents which allow you to detail the safety procedures in use in your specific laboratory: The Chemical Hygiene Plan and the Exposure Control Plan for Bloodborne Pathogens. The goal of these documents is to provide the necessary guidance to the employees required to maintain a safe work environment through the avoidance of physical and health hazards related to working with chemicals and bloodborne pathogens. Both Chemical Hygiene and Exposure Control Plans must be updated on a yearly basis. Plans also need to be updated whenever there is a major change in the process and/or new hazards are introduced.

Updated plans which include all changes should be submitted to the Safety Department at DOES. These forms and other required information should be completed by the lab PI and returned to the DOES office, as well as provided to the laboratory staff.

"The Chemical Hygiene Plan and the Exposure Control Plan for Bloodborne Pathogens—The goal of these documents is to provide the necessary guidance to the employees required to maintain a safe work environment through the avoidance of physical and health hazards related to working with chemicals and bloodborne pathogens."

## Reporting Accidents, Near-Misses and Incidents to DOES Immediately

Most people are familiar with the necessity of a quick response to a crime scene. Popular shows such as *CSI* and *NYPD Blue* have made us all aware that the longer a crime goes unreported, the less chance there is to resolve a crime. What you may not know is that **timely reporting to DOES** is key to the proper documentation of all accidents, near-misses and incidents. Timely reporting ensures that the scene is left fresh and untampered, nearly identical to when the accident, near-miss, or incident occurred. If reporting is delayed, persons involved in the accident often forget important information and the sequence of events.

DOES currently handles all documentation requirements for risk management and we must report to OSHA, to BWC (so a claim can be registered and reimbursed), and to Health Services (as a matter of internal protocol). If a report is not filled out properly and in a timely fashion, it may lead to fines from OSHA or unpaid insurance claims. In some cases, failure to report in an expedient manner can be construed as insurance fraud.

Typically, when DOES arrives on the scene of an accident, near-miss, or incident, we interview all parties involved, take pictures of the scene, and take immediate actions according to strict procedures. After an accident, etc. is properly reported and documented, DOES takes corrective actions to reduce the risk of recurrence of the event. We assess personal habits and department protocols to determine if retraining is necessary and to take proactive measures to ensure the future safety of all parties involved and all parties affected.

Quite simply, it is essential to report all accidents, near-misses, and incidents to DOES (x2907) immediately after they occur.

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"Timely

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## Proper Disposal of Your Empty Chemical Bottles

All empty chemical bottles are considered hazardous chemical waste, except in cases where there is no chemical residue. It is important to follow all of the following steps before disposing of empty chemical bottles:

- Remove tops
- Remove or cross out the label on the bottle
- Rinse the bottle three times with water. Be sure to follow all safety guidelines when rinsing acid or base bottles (NOTE: Water may not be used for water reactive substances)
- Mark the bottle "MT" or "EMPTY"
- If the bottle is made of glass, place in a sealed cardboard box and mark as exterior "Glass Sharps" (these will be removed by custodial services)
- If the bottle is made of plastic or metal, dispose of it in regular trash

## Laboratory Surveys: When Do They Need to Be Performed?

Any laboratory containing radioactive material is required to perform and document a contamination survey monthly. However, when more than 200  $\mu$ Ci are used regularly, then documented full laboratory surveys are required weekly. If more than 200  $\mu$ Ci are used only occasionally, a documented post-use survey of the work areas will suffice in lieu of a weekly full-laboratory survey.

Also, if your lab uses only P-32, Cl-36, Na-22, and Rb-86, a survey meter can be used to run your wipes instead of a liquid scintillation counter. However, if you use P-32, Cl-36, Na-22, and Rb-86 in addition to other isotopes, you must use the liquid scintillation counter. When using portable survey meters, record the make, model, serial number, and its calibration date on the survey sheet. Record the count rates in cpm for all locations on the survey data sheet. **Convert cpm to dpm.** The cpm-to-dpm calculation, as well as the isotope efficiencies, can be found on the tag that is attached to your meter. Identify those areas which show count rates >220 dpm after background subtraction.

### Where is DOES?

If you're new to Case (or simply haven't been to visit us yet), we are located in the Service Building on the 1st floor just off Circle Drive between the Health Sciences Library to the east and the Powerhouse Building to the west. For clarity, call x2906/2907 or check our website (http://does.case.edu.) for an interactive map before your visit.

Volunteer/Minors/International Dependent Policy: Reminders

All individuals working/volunteering in a lab MUST complete the Volunteer Waiver Form and all appropriate Safety Training. Volunteering minors (under the age of 18 and not matriculating) MUST present a Volunteer Waiver Form signed by a parent/guardian. Laboratories employing international dependents without obtaining a signed Volunteer Waiver Form and facilitating completion of safety training are non-compliant with Safety Programs at Case.

#### Halloween is

October 31—Remember to keep your "treats" out of the lab.



"Any laboratory containing radioactive material is required to perform and document a contamination survey monthly."

## Upcoming Training Sessions\*

#### \*As always, consult our website (http://does.case.edu) for a full schedule of training sessions

#### **New Radiation Safety Training**

DOES conference room - Service Building 1st Floor

PREREGISTRATION IS REQUIRED! - Please call 368-2906

Wednesday, October 12, 2005, 2:00 p.m.

Thursday, October 27, 2005, 9:00 a.m.

Wednesday, November 9, 2005, 9:00 a.m.

Wednesday, December 7, 2005, 9:00 a.m.

#### **X-Ray Safety Training**

DOES conference room - Service Building 1st Floor

PREREGISTRATION IS REQUIRED! - Please call 368-4601

or email jxb153@case.edu

#### **Laser Safety Training**

DOES conference room - Service Building 1st Floor

PREREGISTRATION IS *REQUIRED*! - Please call 368-4600

or email hwi@case.edu

Classes will be held on the first Thursday of each month at 1:00 PM in the DOES conference room, Service Building.

Thursday, October 6, 2005 1:00 p.m.

Thursday, November 3, 2005 1:00 p.m.

Thursday, December 1, 2005 1:00 p.m.

#### New Bloodborne Pathogen Training

DOES conference room - Service Building 1st Floor

PREREGISTRATION IS *REQUIRED*! - Please call 368-2907

Held every Tuesday afternoon from 3:00 to 4:30 p.m.

Additional training classes schedule:

Thursday, November 10, 2005 9:00 am

(continued on page 8)

## Separation of Background Scintillation Vials from Radioactive Scintillation Vials

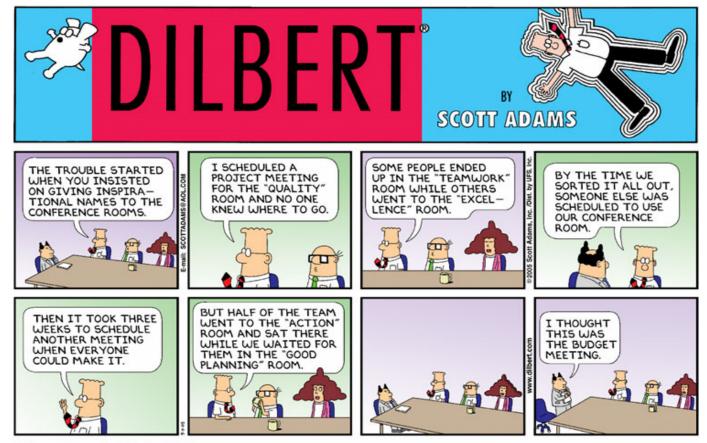
The separation of background scintillation vials from radioactive scintillation vials is a very important step in reducing costs. When laboratories contact the Radiation Safety Office at DOES regarding scintillation vials, we ask them to separate background vials from vials that are "radioactive." The reason for this is if background vials are placed along with scintillation vials containing isotopes other than H-3 or C-14, it adds to the volume of the regulated waste that we have to ship, and therefore increases our waste costs. Please make sure that you take this important measure to help us reduce expenses.

### DOES Staff News

Please join us in congratulating and saying good luck to DOES staff members Richard "Dick" Harley (Loss Prevention Specialist II) and Richard "Dick" Dell (Associate Director, Safety Services) who leave us to retire after 18 years apiece of service to DOES and the Case community. They will be sorely missed!

For more on their service to DOES and the greater Case Community, please read Dr. Sedwick's articles in our next edition of the newsletter.

Congratulations are also in order for Cheng Zhou (Radiation Safety Specialist I), who is now a Cisco Certified Network Associate.



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#### OSHA Laboratory Safety and Regulated Chemical Training

DOES conference room—Service Building 1st Floor PREREGISTRATION IS *REQUIRED*! - Please call 368-2907

Held <u>every</u> Tuesday afternoon from 1:00 to 3:00 pm Additional training class schedule:

Thursday, October 13, 2005, 9:00 am

#### Hazard Communication Training (Right-to-Know)

Crawford, Room 209

Held every Tuesday afternoon from 1:00 to 2:30 pm

Additional training classes schedule (Note: additional classes will be held in the DOES conference room located in the Safety Service Building):

Thursday, December 8, 2005 9:00 am

#### **Radiation Safety Retraining**

PREREGISTRATION IS *REQUIRED*! - Please call 368-2906

DOES conference room—Service Building 1st Floor You can also retrain on the Internet @: http://does.case.edu

#### DOES STAFF

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