



# Case Department of Occupational and Environmental Safety

*“Safety Comes First”*

*Service Building, 1st Floor*

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**Website: <http://does.case.edu>**

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With the road construction along Euclid Avenue, the reconstruction of the Adelbert Road overpass, there are many things to keep in mind in order to stay safe.

**When walking:**

- Follow signs and stay on designated paths. Do not venture into a construction area for any reason without proper PPE (hardhat, glasses, etc.) and authorization from the foreman in charge.

- Watch for vehicles where you are not normally used to seeing them. While this has presented a parking problem for several areas, this also can mean vehicles backing in and out of the construction site – often, these drivers have a limited range of vision, so give them as wide a berth as possible.

- Be aware of construction actions in motion. This can include overhead\ cranes as well as overland transport and pulling.

**When driving:**

- Be careful of construction vehicles on the road and give them ample distance, even more so than when walking. This goes for all driving locations – each year, hundreds of workers die due to construction-related highway accidents.

- Never attempt to circumvent a posted detour. While this may seem like common sense advice, numerous accidents are caused each year by impatient drivers looking for shortcuts. Construction workers and barricades are there for a clear reason. Follow all posted detours.

- Plan ahead. If you know construction is ongoing in a particular area, allow extra time to get to and from your destination. Be reasonable—expect delays.

With so many large-scale projects in process around the Case community, construction can often be frustrating, but as our University is improved and expanded, keep safety concerns in mind for both yourself and the workers who are doing their jobs.

*“If you have any questions regarding your ergonomic needs and work area assessments, please contact Shirley Mele at [smm5@case.edu](mailto:smm5@case.edu)”*

## *Ergonomic Safety Program at DOES*

In order to meet the needs of the Case Community, The Department of Occupational and Environmental Safety (DOES) has ergonomic and work area assessment programs in place. We currently have one Safety Ergonomics Specialist (Shirley Mele) on staff. If you wish to schedule a time for Shirley to meet with you, please contact her at ext. 2906 or at her personal number, ext. 3149, and she will fax or campus mail you a copy of the DOES Office Ergonomics Questionnaire to fill out and return to the office. Upon the return of the questionnaire, Shirley will schedule a time to meet with you and to evaluate your work area. If you have any questions regarding your ergonomic needs and work area assessments, please contact Shirley Mele at [smm5@case.edu](mailto:smm5@case.edu). Her hours are Monday through Friday from 8:30 am to 5 pm.

## *Security of Radioactive Materials*



*“All radioactive materials, including stock solutions as well as stock vials, must be secured against unauthorized access.”*

As with all hazardous materials, care must be taken when storing radioactive materials. All radioactive materials, including stock solutions as well as stock vials, must be secured against unauthorized access. While it is not necessary for radioactive waste to be secured, it must be kept in a designated waste area of the laboratory and its activity sensibly minimized. Even if you are in another part of the laboratory, the radioactive material must be in your line of sight. If it is not, it is not considered secured. For instance, if you have a stock vial on the bench and you leave your laboratory unstaffed for even a few minutes, the laboratory must be locked or the radioactive material must be placed in a lockable refrigerator or in a lockbox that is secured inside the refrigerator. If you have a refrigerator labeled for radioactive material that is currently not being used for radioactive material storage, the refrigerator must either be locked or decommissioned.

During recent routine security checks by our staff, it was also noted that empty lead pigs labeled radioactive are being placed on lab benches. These pigs are still considered to be unsecured radioactive material unless the label has been defaced. The Radiation Safety Office will pick up empty lead pigs; however, the lab must survey the lead pigs and deface the labels prior to pickup by the Radiation Safety Office. Please contact the Radiation Safety Office at ext. 2906 if you want to dispose of your lead pigs.

## *A Few Building Safety Coordinator Training Reminders*

DOES would like to extend our gratitude and sincere appreciation to all the Building Safety Coordinators who have completed their training and welcome those who will be completing their training in the coming weeks. As a Building Safety Coordinator, you have elected to accept the following duties:

- *Assist with building evacuation or lock down during an emergency.*
- *Provide additional assistance and coordination with emergency responders as needed during campus emergencies.*
- *Act as a liaison with Security and/or DOES to report unsafe conditions in your department on an ongoing basis.*
- *Participate as a point of contact for the distribution of notices and informational materials.*
- *Participate in fire safety, evacuation and emergency procedure training with Security and DOES as needed.*

For those of you who have completed training, please remember to periodically review your assigned areas so that you are prepared for evacuation procedures in the event of an emergency. If you have questions, comments, or concerns contact DOES 368-6951 or Protective Services 368-2908. Please make sure you add these numbers to your contact list. Help keep our campus the “safest and securest” learning environment in the world!

## *Using Your “Blue Bins” Properly*

While our bins may no longer be “blue” in the strictest sense of the word (they are now white with gray lids), the rules regarding these bins have not changed and *are mandated by federal law*. All of these hazardous waste material storage bins are clearly labeled as a specific type of hazardous waste and the numbering system allows DOES to track them wherever they go on the Case campus. ***When using these bins, there are two key points to remember: 1) At no time should incompatible materials be combined in the bins. For example, never mix bases and acids, oxidizers and acids, oxidizers and reducers, etc., and 2) FLAMMABLE LIQUIDS ARE NOT TO BE PLACED IN BINS AT ANY TIME. Waste flammable liquids must be placed in the yellow flammable liquid storage cabinets (FLSC).*** Following these simple guidelines will ensure your safety and the expedient removal of hazardous waste materials.

*“For those Building Safety Coordinators who have completed training, please remember to periodically review your assigned areas so that you are prepared for evacuation.”*





*“Scintillation fluid and any item containing scintillation fluid must be disposed of separately from dry waste. Only biodegradable scintillation fluid is to be used.”*

## *Radioactive Waste Segregation*

It is vital for the safe disposal of radioactive waste that it be properly segregated and labeled. Below is a listing of each type of radioactive waste and how it must be disposed of.

### 1) **Dry solids.** *Separate dry waste by isotope and waste characteristics.*

- Any contaminated needles or hypodermic syringes must be disposed of in a red SHARPS container, keeping these separate from sharps that are not contaminated. Any other “sharps” can be placed in a securely sealed cardboard box.
- Any biohazardous materials must be rendered non-biohazardous before pick-up.
- Scintillation vials and betaplate mats must be separated from each other and must be kept out of dry waste (see below).
- Place dry radioactive waste (other than sharps) in the large dry solid bags, being careful not to overfill them.

### 2) **Scintillation vials.** *Scintillation fluid and any item containing scintillation fluid must be disposed of separately from dry waste. Only biodegradable scintillation fluid is to be used.* Put all vials in the bags specifically provided for that purpose—the bags we give out for dry solid waste are inappropriate for disposing vials. Also, do not use the small desktop bags which look similar to vial bags; they are very thin and break easily. Vial bags are available on request.

- Vials should be bagged to control leakage. Radiation safety provides 1 cubic foot yellow bags specifically for this purpose. They are extra thick to control ripping and leakage. They should not be topped off; a number of small bags is preferred over one overfilled bag. **They should not contain anything but vials—no gloves, pipette tips, tissue trays, etc.**
- Scintillation fluid does not need to be separated from the vial itself before disposal; the entire vial (cocktail included) can simply be thrown away.
- Do not mix these in with solid waste.

### 3) **Liquid waste.** Liquid waste should also be separated by isotope and chemical class (regulated, non-regulated) to facilitate disposal. *No solids should be present.*

- Every container of liquid waste must be accompanied by a separate completed Disposal Listing for Liquid Radioactive Materials form. Be sure to list all the chemical constituents of the waste so we may determine specific disposal (continued on page 5).

## *Radioactive Waste Segregation (continued from Page 4)*

(continued from page 4) procedures after it decays. "Aqueous waste" is NOT a sufficient description. (If the waste is 100% water, say so.) Liquid waste must also be noted on the Radioactive Waste Disposal form.

- Aqueous radioactive liquids ready for disposal should have a pH between 5 and 10.
- Put liquid waste in containers no larger than 4L. It is too difficult to carry and pour if the container is larger than 4L; larger sizes will be accepted only for decay in storage and for non-sewer disposable regulated chemicals and will not be returned to the researcher until the waste is disposed of. Be careful that the plastic container used is not soluble in organic materials. Those with high chemical resistance include unmodified polypropylene, polytetrafluoroethylene (Teflon) and polytri-fluorochloroethylene. Glass containers will NOT be picked up.
- All radioactive liquid waste must be double-contained to serve as a precaution against leaking. The outer container must be leak-proof and able to hold all the liquid should a breach of the inner container occur. A Lucite shielded container or even a five-gallon bucket is suitable for this job.
- Use recyclable containers whenever possible rather than single-use containers such as milk jugs or tissue culture flasks, which must be disposed of after the liquid waste is poured out. This creates large amounts of unnecessary radioactive waste. Instead, use reusable containers (sold by Fisher Scientific and other companies) to hold waste. Each lab should have two such containers; when one is ready for disposal, the other can be used. We will return the first as quickly as possible.
- When ordering, pick sizes that are easy to handle and that are appropriate to the amount of waste your lab produces. We recommend one-gallon containers unless your lab produces a large amount of short-term waste; then we can supply five-gallon containers.

**4) Animals or animal waste.** *All radioactive animals must be logged in.* However, due to new construction, contact the Animal Research Center (ARC) directly before disposing of any animal or animal waste. ARC can provide you with detailed information at x3490.

Laboratories in University Hospital buildings may make arrangements for disposal during regular waste pick-ups. All containers prepared for disposal must be properly sealed and labeled; also make sure the accompanying forms are completely filled out before you call for a waste pick-up. We encourage all labs to arrange for frequent pick-ups in order to reduce the potential hazard that exists when large amounts of waste are present in the lab. This also reduces the amount that must be picked up at one time. As you can see, there are many segregation and disposal issues to consider when dealing with radioactive waste. Make sure everyone in your lab is aware of the procedures involved and knows how to properly prepare waste for disposal. Call the Radiation Safety Office (x2906) if you have any questions.

## *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

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

DOES conference room - Service Building 1st Floor

PREREGISTRATION IS *REQUIRED* ! - Please call 368-4601

or email [jxb153@case.edu](mailto:jxb153@case.edu)

### **Laser Safety Training**

DOES conference room - Service Building 1st Floor

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

or email [hwj@case.edu](mailto:hwj@case.edu)

Laser Safety training schedule is now available online at the DOES website <[does.case.edu](http://does.case.edu)> under Laser Training. Listed below are the training dates through June 2006:

Thursday, March 6, 1:00 PM

Monday, April 3, 1:00 PM

Wednesday, May 3, 1:00 PM

Friday, June 2, 10:00 AM

### **New Bloodborne Pathogen Training**

DOES conference room - Service Building 1st Floor

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

*There is an online version of this class. You do not have to attend the class if you take the online version.*

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

Additional training classes schedule:

### **Formaldehyde, Benzene, Methylene Chloride, and Vinyl Chloride Retraining**

Please call 368-2907 to preregister for this class.

There are online versions of Formaldehyde and Benzene retraining. If you take the online versions of Benzene or Formaldehyde you do not have to take the class.

Class Objective: Chemical specific training

(continued on page 8)

## *Case Laser Safety Updates*

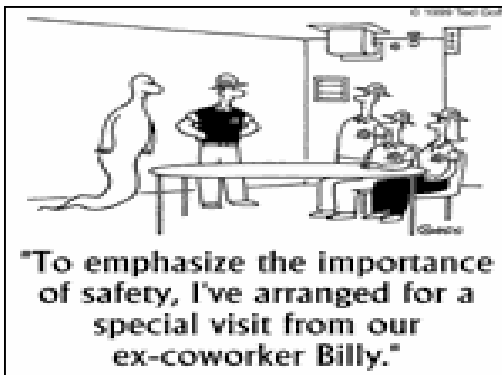
The Case Laser Safety Program Audits and Hazard Assessments are now underway. The Laser Safety Program will focus on training requirements, inventory, hazard assessments, and appropriate signs. Everyone using a Class 3b or Class 4 laser must attend the initial Laser Safety Class. Contact **H. Wayne Justice, DOES** at x.4600, ext. 1.

DOES would like to remind all laser users that the appropriate class laser signs are available. Specific instructions should be posted on the signs below the starburst. Several new Laser Guidance Sheets are available to assist you in providing a more thorough understanding of the ANSI Z136.1-2000 requirements:

- Posting of Signs and Labeling Requirements
- Writing of a Laser Site SOP
- Pamphlet of Sample Laser Calculations
- Class 4 Controlled Entry Requirements for Curtains and Interlocks
- An overview of ANSI Standard Safety Controls may be found on the Internet under "OSHA Technical Manual, Section III, Chapter 6"

Please be sure to check our website <does.case.edu> for the new laser training schedule and contact Mr. Justice for specifics at x.4600, ext.1

### *Humor Corner*



*According to the International Labor Organization (ILO), deaths due to work-related accidents and illnesses represent 3.9 per cent of all deaths and 15 per cent of the world's population suffers a minor or major occupational accident or work-related disease in any one year.*

***PLEASE THINK SAFETY FIRST!***



**OSHA Laboratory Safety and Regulated Chemical Training**

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

Held every Tuesday afternoon from 1:00 to 3:00 pm

**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):

**Radiation Safety Retraining**

Please retrain on the Internet @: <http://does.case.edu>

**Annual Respirator Training**

DOES conference room—Service Building 1st Floor.

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

*There is an online version of this class. If you take the online version you do not have to take the class. But you still need to come in for a fit test.*

**DOES STAFF**

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