

LABORATORY & RADIATION SAFETY

Cornell University Department of Environmental Health & Safety

125 Humphreys Service Building, Ithaca, NY (Phone: 255-8200)

201 Palm Road, Ithaca, NY (Phone: 255-8200)

Web site <http://www.ehs.cornell.edu>

NEWS

Fall 2005



RESPIRATORY PROTECTION FOR LAB WORKERS

Respiratory protection includes disposable respirators (such as N95 filtering facepieces, commonly referred to as "dust masks"), air purifying, and atmosphere supplying respirators. Respirators are generally not recommended for laboratory workers. Engineering controls, such as the use of dilution ventilation, fume hoods, and other devices, which capture and remove vapors, fumes, and gases from the breathing zone of the user, are preferred over the use of respirators in most laboratory environments. There are certain exceptions to this general rule, such as the changing out of cylinders of toxic gases and emergency response to chemical spills.

The use of respirators is regulated by OSHA. A laboratory worker at Cornell may not purchase a respirator and bring it to their lab for their personal use. The use of all types of respiratory protection at Cornell is governed by the Cornell EH&S Respiratory Protection Program.

The following are some situations where respiratory protection would be appropriate for laboratory workers:

- The use of disposable respirators (e.g. N95 filtering facepieces/dust masks) for weighing powdery or dusty materials. Note: Most disposable respirators do not offer protection for chemical vapors and fumes; they are for use for nuisance dust only, and the use of disposable respirators may or may not be regulated by OSHA depending upon the circumstances of use. In order to determine which OSHA regulations apply, please contact EH&S at 255-8200 to schedule a hazard assessment prior to using a disposable respirator.
- The use of large volumes of certain hazardous chemicals, such as formaldehyde, in a room where dilution ventilation or capture devices will not be able to offer adequate protection.
- Changing out cylinders of hazardous gases. (Additional training is required.)
- Cleaning up hazardous chemical spills. (Additional training is required.)
- To reduce exposure to some chemicals to which certain individuals may be or become sensitive.
- When mixing chemicals that may result in more hazardous vapors from the combination of the chemicals versus the exposure to each chemical alone or when the potential for an unknown

exposure exists. However, laboratory staff should try to conduct such experiments using a fume hood. EH&S has an established program for the use of respirators on campus. The program is designed for those University personnel who, during their normal duties are, or could be, exposed to hazardous substances or atmospheres that may affect their health and safety.

The Cornell University Respiratory Protection Program includes the following areas:

- You will receive a medical evaluation by Gannett Health Center to ensure that you are physically fit to wear a respirator. Wearing any type of respirator puts a large amount of stress on the body.
- You will be given a fit test to determine which size respirator fits you best. Due to the differences in the sizes and shapes of faces, there is no one respirator that fits all sizes and shapes of faces.
- You will be shown how to properly put on and take off the respirator, and how to check to make sure it is functioning properly.
- You will be shown how to properly clean and care for your respirator, including proper maintenance.
- You will be shown how to choose the right respirator or respirator cartridge for the specific processes and types of chemicals you will be using. Note: As with chemical protective gloves, there is no one universal respirator cartridge that can be used with every chemical.

If you are approved for the use of a respirator after meeting the requirements of the OSHA Standards and the Cornell EH&S Respiratory Protection Program, then you may purchase a respirator from the PDC Warehouse on Palm Road. If the use of a respirator is required to perform your job duties, your department will pay for the respirator. For more information concerning the use of respirators at Cornell, call EH&S at 255-8200.



SUPER EAGLE AWARD



The Laboratory and Radiation Safety section is pleased to announce that **D. Stern, Boyce Thompson Institute**, has been awarded the new Super Eagle Award. To achieve this award the lab group must maintain a spotless record for eight consecutive radioactive materials permit inspections. That translates to four years with no violations or recommended improvements to the lab group's internal management of their regulatory and permitted obligations. Living up to this high standard for such an extended period of time is truly a remarkable accomplishment and requires the participation of everyone within the lab group. Congratulations!

*****Please share with your graduate students*****

CHEMICAL SAFETY TRAINING

The next regularly scheduled **new employee** laboratory worker OSHA Laboratory Standard training program, "Chemical Safety for Laboratory Workers", will be held in 118 Humphreys Service Building on:

Wednesday, November 9, 9 – 11 a.m., followed by the EPA-Chemical Waste Disposal Program from 11:15 a.m. to 12:15 p.m.

The "Chemical Safety for Laboratory Workers" program (two hours in length) is also scheduled for:

- Thursday, October 20, 1:30 pm, 118 Humphreys Service Building
- Tuesday, October 25, 9:30 am, Veterinary Lecture Hall 2
- Thursday, Nov. 3, 2:00 pm, 118 Humphreys Service Building
- Tuesday, Nov. 15, 1:30 pm, A106 Corson Hall

Using your Cornell NetID, you can register on-line at <http://www.ehs.cornell.edu/>. Select Training, then **Register Now in SafetyBase**. To use Safetybase, you will need to sign into Kerberos, Side Car, or CUWebLogin to access Cornell University restricted electronic services. If you do not have a Cornell NetID, you can register from the EH&S home page at <http://www.ehs.cornell.edu/>; select Training; select the desired class; then fill out the On-Line Class Registration form, and submit. For help please contact Czora Pagsolingan by e-mail at cpp5@cornell.edu or by phone at 254-4693.



RADIATION SAFETY TRAINING

Individuals must receive radiation safety training **prior** to starting work with radioactive materials. This training is required by law. The course is given in two separate presentations; both sessions must be attended. There is a short exam, which can be taken either at the end of the second day, or later at our office during normal business hours. *Prior registration for this course is necessary, as seating is assigned on a first come first served basis.* The next Radiation Safety training programs are scheduled for:

November 15 & 17 from 9:00 a.m. to 12:00 noon
December 5 & 7 from 1:00 p.m. to 4:00 p.m.

To register please use the online form available on our EH&S Web site, or call the EH&S main desk, at 5-8200. For the online form go to <http://www.ehs.cornell.edu>, select "Training", then select the course under "Class Times & Registration". Please fill in all fields before you submit your registration.



Radiation Safety Eagle Awards



We are pleased to recognize the following laboratories for receiving radiation safety awards:

July

- D. Antczak, VM Administration, Baker Institute
- T. Begley, Chemistry & Chemical Biology, S.T. Olin
- T. Brutnell, Boyce Thompson Institute
- R. Cerione, Molecular Medicine, VMC
- J. Guan, Molecular Medicine, VMC
- J. Jacob, Vet. Clinical Sciences, VMC
- D. Klessig, Boyce Thompson Institute
- * G. Martin, Boyce Thompson Institute
- K. Schat, Microbiology & Immunology, VMC
- G. Sharp, Vet. Molecular Medicine, VMC
- D. Stern, Boyce Thompson Institute
- M. Wang, Physics, Clark Hall
- G. Whittaker, Vet. Microbiology & Immunology, VMC
- G. Weiland, Molecular Medicine, VMC

August

- A. Bass, Neurobiology & Behavior, Mudd Hall
- A. Bensadoun, Nutritional Sciences, Kinzelberg Hall
- R. Harrison, Ecology & Evol. Biology, Corson Hall
- J. Helmann, Microbiology, Wing Hall
- L. Lion, Civil & Env. Engineering, Hollister Hall
- D. Manor, Nutritional Sciences, Kinzelberg Hall
- * A. Nixon, Vet. Clinical Sciences, VMC
- N. Noy, Nutritional Sciences, Kinzelberg Hall
- J. Scott, Entomology, Comstock Hall
- P. Soloway, Nutritional Sciences, Kinzelberg Hall
- P. Stover, Nutritional Sciences, Kinzelberg Hall

September

- Y. Boisclair, Animal Science, Morrison Hall
- W.R. Butler, Animal Science, Morrison Hall
- * W. De Jong, Plant Breeding & Genetics, Bradfield Hall
- W. Fry, Plant Pathology, Bradfield Hall
- G. Hrazdina, Food Science & Technology, Geneva
- M. Van Amburgh, Animal Science, Morrison Hall

* Winner of Meal Deal from Pizza Hut

ADVANCED RECORD KEEPER TRAINING

This special radiation safety training is held monthly, on the last Friday of every month. It is geared just for those who perform inventory record-keeping tasks. The survey class, taught by Wayne Westmiller, is from 1:00 to 2:00 p.m., and the inventory class, taught by Marlene Larson, is from 2:15 to 3:15 p.m. The next classes are scheduled for Friday, October 28 (register by October 21). **Use our website to register or call Agnes Morris at 5-5600.**

Please share with your graduate students