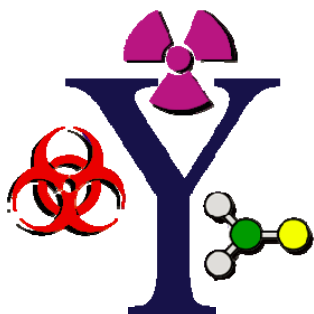


Spring Issue

April 2008



YALE UNIVERSITY OFFICE OF ENVIRONMENTAL HEALTH & SAFETY

Safety Bulletin

DHS Chemical Security Update

Thanks to overwhelming assistance from Yale's research, research support, and facilities departments, we received a 100% response to our chemical inventory initiative and met our institution's deadline well in advance. This effort was required by newly issued U.S. Department of Homeland Security (DHS) security rules designed to help prevent the intentional misuse of certain harmful chemicals. The new rules obliged organizations that manufacture, store, or use chemical materials to register with DHS and complete an initial inventory screening.



For this effort, OEHS developed and launched a web-based data entry tool for users to record the results of their standing inventory of specific compounds of security concern. OEHS then summed this information across the entire campus, re-interviewed certain departments with special inventory profiles, and subsequently entered the data in the DHS application known as "Top Screen." Based upon the data provided to the Top Screen survey, Yale may be required to perform, develop or enhance existing security plans for certain areas.

As part of the roll-out of this project, OEHS offered a "bonus prize" to help raise awareness of requirement: an Apple iPod! The winners were randomly selected from the entire pool of individuals, Principal Investigators, and support departments who fully completed their surveys and returned them in advance of our deadline. Based upon these criteria, OEHS is pleased to announce that **Anna Marie Pyle** and **Michael Roitzisch** from the **Department of Molecular Biophysics and Biochemistry**, were our winners! Special thanks also to OEHS staff who helped make this effort possible – John Dahlstrom and Cathy King in particular, and also all of our Safety Advisors and their managers for the leg work that got us to the finish line!

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135 College Street

Building Renovations

Due to building renovations, the OEHS 135 College lower level training room will not be available for training classes for the upcoming months. Training classes will continue to be held, but the location(s) vary. Please check with OEHS prior to your classroom session for the current training location. Call OEHS at 785-3550 or email safetytraining@yale.edu for more information.

“EMPLOYEE OF THE YEAR”

In recognition of her valuable contributions to the department as the Environmental Operations Manager and as acting Environmental Services Section Manager, Brenda handles the many crises and issues she faces with perseverance and dedication, and in a calm, consistent and professional manner.



Starting with her initial hire in 1994 as an Environmental Services Section Technician, along with her earning both her masters in Environmental Science/Environmental Health Management and her professional certification as a Hazardous Materials Manager in 2001, Brenda has demonstrated her great skill and ability to evaluate and prioritize her duties, which shows in her steady growth to the management position she holds today.

She exemplifies the best of Yale's Office of Environmental Health and Safety with her professionalism, thoroughness and knowledge. She is committed to the development and growth of her staff and consistently promotes a diplomatic and professional atmosphere, is committed to her personal and professional goals and is an excellent choice as the first recipient of the Employee of the Year award.

What's in a Name?

If a picture is worth a thousand words then a word can also help draw a picture. The Environmental Services Section of the Office Environmental Health & Safety has officially changed its name to the **Environmental Affairs Section**. Environmental Affairs is a more encompassing name in hopes to describe all the activities for which this section is responsible. The Environmental Affairs Section manages all hazardous and regulated waste programs including chemical, radioactive, biomedical and universal waste within the University. In addition to regulated waste management, this section also is responsible for programs in air and water discharge quality, obtaining necessary permits, and conducting testing, record-keeping and calculations to maintain compliance. Other responsibilities include managing the University's Underground Storage Tank and PCB-containing equipment program, maintaining a hazardous material inventory for community and regulatory notifications, and assisting in site evaluations and remediation efforts. We are located at 268 Whitney Ave. Please contact us at 785-3551 if we can assist you in any of these areas.

Shipping Containers Available in Stockrooms

If you are shipping human specimens, animal specimens or most infectious agents you can now buy shipping containers in the Yale Stockrooms in the medical school as well as KBT. There are containers for both ambient temperature shipments as well as shipments on dry or wet ice.

Before you ship any hazardous material, including exempt human and animal specimens, you must complete a "HAZMAT Shipment Request" form and return it to OEHS. The form is available on the OEHS web site at <http://www.yale.edu/oehs/hazmatship.htm>.

Once the form is returned to OEHS, a member of the HAZMAT shipping team will contact you about the shipment. If you have any questions, please contact us at 785-3550.



OEHS is looking for employees who contribute positively to Yale's safety culture to feature in our newsletter. If you know someone you would like to see spotlighted, please submit their name, along with a short description of their safety-related contribution to the Yale community, to: tamara.hall@yale.edu.

Heat and Flame Protective Clothing

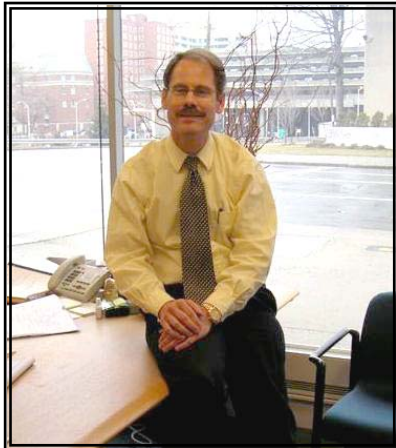


Many laboratory research activities require the use of and open flame and high heat devices for scientific purposes. Depending upon the fuel source used, the process of flame ignition

can be dangerous if premixed fuel and an oxidizing gas build-up. For example, this can occur if the flame is enclosed within a chamber or if a high volumetric flow of fuel is needed. In these cases, the action of igniting the flame can create a flash with the potential to burn skin or clothing. While engineered devices are most preferable, some applications still require manual ignition and fine tuning operations of the scientific device. In these circumstances, it is essential that flame retardant clothing be worn. Gloves and long sleeve or aluminized spun fiberglass provide good protection against brief exposures to flames and heat. While not suitable for continued longer duration exposures, they temporarily insulate the skin from heat and are made from non-combustible materials. Long hair and loose clothing should be pulled back away from the work area, and safety glasses and a face shield also worn. If your work involves potential exposures similar to these, please contact your Safety Advisor to review additional protective measures.

**Contributed by:
Bruno Coriton, Mechanical Engineering,
Gomez Laboratory**

Be Safe in Hot Weather



As summer approaches we look forward to warmer weather and, eventually, summer's heat. The year's first periods of hot weather can be stressful because our bodies aren't used to it. Please take the following precautions to avoid heat-related illness when working or exercising outdoors in unusually hot weather. Some employees need to follow these precautions year-round when they work in unconditioned indoor environments.

People suffer heat-related illness when their bodies are unable to regulate internal body temperature. In hot weather, the body normally cools itself by sweating. Under some conditions, however, sweating isn't enough. These conditions include high humidity, where air movement is limited, working in the direct sun, heavy physical exertion and poor physical condition. Some medical conditions and medications can also reduce the body's ability to tolerate heat.

Heat-related illness is preventable by following these guidelines when working outdoors in hot weather:

- Drink small amounts of cool water frequently, regardless of your activity level. Drink throughout the day. Don't wait until you're thirsty.
- Replace salt and minerals. A sports beverage can replace the salt and minerals you lose in sweat.
- Wear appropriate clothing. Choose lightweight, light-colored, loose-fitting clothing.
- Protect yourself from the sun by wearing a wide-brimmed hat. (Sunglasses and sunscreen—SPF 15 or higher—are also recommended.)
- Schedule outdoor work carefully. If outdoor work must be done in hot weather, try to limit it to morning hours. Limit sun exposure during mid-day hours. Consider rotating outdoor work schedules among your co-workers.
- Pace yourself. Start slowly and pick up the pace gradually.
- Monitor yourself for the signs and symptoms of heat-related illness, listed below.
- Take time to cool down. Rest often in shady areas. A few hours in air conditioning can help you stay cooler later in the heat.
- Use a buddy system. When working in the heat, monitor the condition of your co-workers and have someone do the same for you.
- Monitor those at high risk. Some people are at greater risk than others, including people who are overweight, people who overexert themselves, and people with heart disease or high blood pressure, or who take certain medications.
- Take time to acclimate to heat and humidity. A heat wave is stressful to your body. You will have a greater tolerance for heat if you limit physical activity until you become accustomed to it.

Signs and symptoms of heat-related illness include headache, dizziness, lightheadedness, fainting, weakness, mood change, mental confusion, upset stomach or vomiting. An employee experiencing these symptoms should be taken to a hospital emergency room as soon as possible by calling 111 from any Yale phone, or by calling 911 from any other phone. If you want more information about heat related illness, please contact either your primary health care provider or the employee health department at 203-432-7978.

Departments with employees who normally work outdoors or in unconditioned indoor environments need to include heat stress precautions in their written job procedures, as appropriate to their work. Supervisors should make employees aware of heat stress risks, signs, symptoms and precautions. For assistance, please contact the Office of Environmental Health and Safety (OEHS) at 785-3550 or by sending an email via <http://www.yale.edu/oehs/contact.htm>. OEHS can also suggest appropriate controls to reduce your risk of heat-related illness. The U.S. Centers for Disease Control and Prevention has more information at http://www.bt.cdc.gov/disasters/extremeheat/heat_guide.asp.

EHS Web Links

- www.yale.edu/oehs
- info.med.yale.edu/bbp
- info.med.yale.edu/bbpclinical
- info.med.yale.edu/chemhaz
- info.med.yale.edu/chemsafe
- www.yale.edu/oehs/TB/index.htm

Office of Environmental Health & Safety
135 College Street, New Haven, CT 06510
Telephone: 203-785-3550
Fax: 203-785-7588
<http://www.yale.edu/oehs>

Director: Peter Reinhardt

10 TIPS FOR FIRE SAFETY AT YALE



YALE UNIVERSITY

OFFICE OF THE
FIRE MARSHAL
314 Prospect Street
New Haven, CT
06511

Voice: 203-432-9923
Fax: 203-432-8937

- Call 111 from any campus phone or use the emergency button on any BLUE PHONE to report any emergency.
- Evacuate the building when the fire alarm sounds. Take your keys with you. Stay out of the building until you are instructed to go back into the building by the Yale Police or Fire Department.
- Candles, burned or unburned are not allowed in any dormitory.
- Check your smoke detector weekly. To report a missing, beeping, or inoperative smoke detector, please call Customer Service at 2-6888.
- Do not hang anything from sprinkler equipment.
- Fire extinguishers are provided for emergency use only.
- Cooking and heating appliances are not allowed in student rooms and suites with the exception of the Swing Dorm.
- Know where your exits are at all times. Make sure that both exits are free from obstructions including clothes, bikes, cords, and furniture.
- Do not overload electrical outlets and do not use excessive extension cords.
- Furniture, trash, recycling, shoes, bikes, etc. must be stored in student rooms, not in hallways or stairwells.

If you have any questions or concerns regarding fire safety, call the Yale University Office of the Fire Marshal at 2-9923

Safety Bulletin Committee:

Whyndam Abrams
George Andrews
Brenda Armstrong
Tamara D. Hall-Walcott
Cathleen King
Robert Klein
Tammy Stemen



A small sampling of incidents OEHS provided responses to during the past few months...

January 2008—Cut to Hand

Description

Student working with large natural history specimens cut her hand with a scalpel. There was concern that the specimen she was working with may have had rabies.

Resolution

It was believed that the risk of rabies was extremely low, but as a precaution the student was seen in Urgent Visit and given rabies immunoglobulin, as well as began a vaccine series. OEHS provided cut resistant gloves to the laboratory.

Lessons Learned

When alternatives or safe sharps are not feasible, cut resistant gloves should be worn when doing work where cuts to the hand can occur. Training on specific work procedures must be given to all students before hazardous work can begin.

March 2008—Hydraulic Oil Spill

Description

Hydraulic oil was found to be leaking from the compactor dumpster at the Peabody Museum loading dock. The oil was found to have entered a nearby storm drain and interior building sump.

Resolution

Fortunately, the oil had not been pumped out to the city sewer system. OEHS called in the services of an Environmental Contractor for spill clean-up and pump out of the drain and sump.

Lessons Learned

Please ensure OEHS is immediately contacted upon discovery of oil or chemical releases.

March 2008—Chemical Spill and Personal Contamination

Description

A researcher working with ethidium bromide solution spilled it on her upper thigh and on the floor. The researcher and other lab workers in the area cleaned up the spill and the researcher drove home to take a shower, with some lab bench paper placed between the wet jean and her leg to protect her from further contamination.

Resolution

After the researcher had left to drive home, others in the lab called OEHS to get advice on disposing of spill cleanup material and to report the personal contamination. OEHS notified the lab that the contaminated researcher needed to return after showering and be seen at Urgent Visit. Pants were bagged and disposed. Lab staff were re-trained on proper emergency procedures.

Lessons Learned

Emergency showers should be used immediately in the event of chemical contamination to the body. All laboratory workers need to be reminded about emergency contamination procedures.