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Our Vision

To promote and maintain a safe and healthful environment by ensuring the highest level of environmental health and safety services for faculty, staff, students, and visitors at the University of Connecticut.



Welcome to another edition of the Environmental Health & Safety's Newsletter.

With the start of the new academic year, the Environmental Health & Safety Department wishes to bring informative news to faculty, staff and students on campus. In each issue we have various news items regarding chemical, biological, radiation and occupational safety. I welcome ideas from all readers as to what you would like to see addressed in future newsletters. Please e-mail me at diane.bolduc@uconn.edu Thank you.

~ Radiation Safety ~

Man-Made Radiation Sources

(Source: Health Physics Society)



The Nuclear Regulatory Commission and other federal and state agencies regulate exposure from man-made radiation sources. Different regulations apply to two distinct groups:

- Members of the Public
- Occupational Workers

Sources of Exposure

Examples of man-made sources of radiation to members of the public (annual average dose in mrem/yr):

1. Natural gas (2)
2. Lantern mantles (0.2)
3. Medical diagnosis (60)
4. Building materials (7)
5. Nuclear power plants (0.4)
6. Coal power plants (0.15)
7. Tobacco (25 mrem/week)
8. Phosphate fertilizers (4)

Notice which sources contribute the most to man-made radiation exposure.

How Radiation is Used

- **Science**
 - carbon dating to determine age
 - instruments to measure density
 - power satellites
 - research
- **Medicine** (radiation used in medicine is the largest source of man-made radiation)
 - x-rays and nuclear medicine (most of our exposure is from diagnostic x-rays)

Our Mission

To provide comprehensive environmental health and safety services for the University community by developing and administering effective policies and procedures that prevent personal injuries and maintain regulatory compliance in the areas of biological, chemical, occupational, and radiation safety, thereby supporting the University's mission of teaching, research, and public service.

- diagnose and treat illness

- **Industry**

- smoke detectors
- kill bacteria and preserve food

~ Biological Health & Safety (Biosafety and Public Health) ~

Biosafety

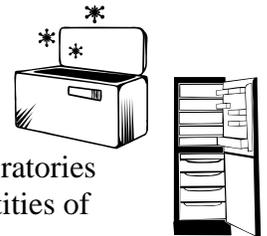
UConn's Occupational Health & Safety Program for Animal Handlers

The program is now 5 years old. Those of you who have been in the program since the beginning should begin receiving Form A update requests in their inter-office mail. To be in compliance with the Animal Handlers Program, yearly updates are done electronically, but every 5 years a hard copy of the Animal Handlers Personal Profile (Form A) needs to be updated and resubmitted to our office. We are in the process of sending out 5 year update requests for you to review, make any necessary changes, sign, date and return to the EH&S office at U-4097. Personnel who do not return the updated forms will be removed from our database and the Animal Handlers Program. Any questions can be directed to bill.field@uconn.edu

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WHAT'S IN YOUR LAB FREEZER?

Biosafety would like to remind everyone that all ultra-low temperature storage units, -80/-70 freezers and liquid nitrogen systems must have an up to date inventory. The inventory should list the biological agents and their locations in the unit. Inventories of shared units should also list the names of the laboratories using the unit. Select agent labs are required to record the quantities of each of the agents stored.



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Public Health

Serving food or beverages at an event that is **open to the public?**

Not using **Dining Services Catering?**

You need to **register** your **Temporary Food Service Event**. **It's easy!!**

Two weeks before your event, fill out and submit the [application](#) on-line.

Questions?

See our Guide to Food Safety at Temporary Events [here](#).

~ Occupational Safety ~

Asbestos – A Concern of the Past?

Here's a quiz for you:



[EH&S Services](#)

<http://www.ehs.uconn.edu/serv.html>

for a list of all
EH&S Services
including;

* **Training**
schedules which
are updated on a
regular basis.

* **Waste Pickup**
and Delivery
Request Forms

* [Temporary](#)
[Food Service](#)
[Application](#)

* [UConn Waste](#)
[Streams Guide](#)

Can you find asbestos in new brakes today?**Yes!**

Is the U.S. still manufacturing products with asbestos today?**Yes!**

Has the U.S. banned the use of asbestos?**No!**

Is the U.S. importing products containing asbestos?**Yes!**

Does the U.S. regulate asbestos in consumer products, such as toys?**No!**

Do you see a disturbing trend here? Many people are under the belief that the use of asbestos was banned in the United States. Actually, only a few types of materials have been banned (thermal system insulation, spray-on fireproofing, and some plasters). EPA attempted to ban all asbestos in the late 1980s, with much fanfare, but the ban was remanded by the court system in 1991, with little fanfare. Thus, it can still be found today in many building materials and friction products. Over Christmas last year, it was even found in a popular toy (the CSI Fingerprint Examination Kit), manufactured in China. Products containing vermiculite and talc are also raising concerns because asbestos may be present in the locations where these minerals are mined. And while there is no restriction on the manufacture of most asbestos products in the U.S., the removal or disturbance of these same asbestos-containing products (floor tiles, glues/mastics, gaskets, roofing materials, etc), is highly regulated by many government agencies. Removal can only be conducted by licensed, trained personnel, in a specific, controlled fashion.

Here at the University, and as required by Federal and State regulations, prior to any renovation or demolition, an asbestos survey must first be conducted by a state-licensed inspector. If asbestos-containing materials will be impacted, licensed asbestos contractors must properly remove the material. See the "[Impact of Federal and State Asbestos Regulations](#)" document on our website.

Further information on asbestos can be found at the Connecticut Department of Public Health's [Asbestos Program](#) website, as well as [EPA's Asbestos Program](#) and [OSHA's Asbestos Topics](#) websites.

~ *Chemical Safety* ~

Time Sensitive Chemicals



Peroxide forming chemicals, also known as time sensitive, present special problems in the lab because they can be violently reactive and explosive. These chemicals demand careful storage, use, and management. A peroxide is a chemical substance that contains a peroxy unit, O_2^{2-} ; hydroperoxides contain the O-O-H unit. Both peroxides and hydroperoxides are highly reactive materials and may be extremely shock sensitive explosives.

Peroxides can form in almost any organic chemical; however the most commonly found peroxide forming chemicals on campus are ethyl ether and tetrahydrofuran. Caution should be exercised when working with any chemical, especially organic peroxide formers, always refer to the MSDS. Peroxide formers react with oxygen even at low concentrations and ordinary temperatures to form peroxy compounds which are usually hydroperoxides. In addition to any other hazards that they have, they pose a "peroxide threat" especially if the oxygenated product crystallizes out or becomes concentrated by evaporation or distillation of the unoxidized part.

Precautions for storing and handling peroxide formers are summarized here:

- a. When you receive a bottle of the material, write "Received on:" and the date on the label. Be sure to enter the bottle into your [chemical](#) inventory records at that time. It is good practice to do this for ALL chemicals, not just peroxide-forming ones.
- b. When you open the bottle for the first time, write "**Opened:**" and the date on the label. It helps to enter this in your chemical inventory record as well. This also is prudent practice for ALL chemicals, not just peroxide-forming ones.
- c. Do not purchase more of the [chemical](#) than you can reasonably use in three month's time. Peroxides can build up over time as solvent evaporates and/or [air](#) seeps into the bottle.
- d. Do not store peroxide-forming materials in clear glass bottles (light can accelerate the chemical reactions that form peroxides). Preferably use an amber, but transparent bottle. Although ether is sold in metal containers, it is not advisable to store the ether indefinitely in a metal container, as that prevents you from examining the contents. This is especially important if the storage area is susceptible to a corrosive atmosphere due to acids nearby. The metal container may become pitted. Do not store peroxide-forming [chemicals](#) near heat, sunlight or ignition sources. Avoid places that undergo temperature variations which can cause the bottle to "breathe in" oxygen.
- e. **NEVER UNDER ANY CIRCUMSTANCES** touch or attempt to open a container of a peroxide-forming liquid if there are whitish crystals around the cap and/or in the bottle. The friction of screwing the cap could detonate the bottle with disastrous results.

FYI – Pest Control --- Facilities Work Order Control coordinates requests for **Pest Control**.

<http://www.fo.uconn.edu/wopolicy.html> you will need your NET ID and follow the prompts, if you have any questions or for emergency requests, please call **486-3114**.

Do you work in a lab and are not sure what you should be trained in?
Have you started a new job?
Do you need to be trained?
Do you need refresher training?

--- **Register on-line** for **Biological, Chemical, Radiation** and **Occupational** training classes.



- ☞ Go to <http://www.ehs.uconn.edu/> and **click** on **Training**.
- ☞ Click Training Schedule for the appropriate section and to see which dates are scheduled
- ☞ Click [HERE](#) to register

You will need your **NET ID** to register. If you are not sure what your NET ID is, go to <https://netid.uconn.edu> and follow the prompts.

Thank you for registering for our training classes **on-line**. Please call 486-3613 for assistance.