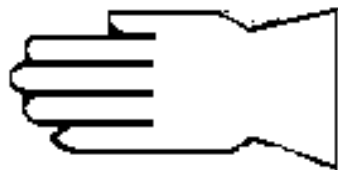


Department of Occupational and Environmental Safety NEWSLETTER

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CASE WESTERN RESERVE UNIVERSITY

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Gloves and Chemical Compatibility

Gloves are the single most common form of personal protective equipment in the lab. But if you are using gloves that are incompatible with certain chemicals, you may not be protecting yourself as well as you think. Several types of gloves are available and one kind may be more appropriate than another, depending on the job at hand.

Most gloves come in both single-use (or disposable) and reusable forms. Disposable latex gloves offer little protection against most hazardous liquid materials and should only be used for non-toxic or non-hazardous materials. Reusable gloves offer more protection than disposables, so use the thicker gauge glove with more dangerous chemicals.

The most common types of gloves are made from:

- Latex (or natural rubber)— Latex gloves are most common in disposable form, offering excellent conformity and dexterity. Therefore, they are good for quick jobs (when you only need gloves for a few minutes) and are resistant to most acids and alkalis.

- Neoprene— Neoprene provides protection against a wide range of corrosive chemicals; it resists oils, greases, alcohols, resins, alkalis, and many solvents. It is poor for chlorinated aromatic solvents, phenols, and ketones.

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Dimethylmercury Causes a Death

An article appeared recently about the death of a researcher at Dartmouth College who was using dimethylmercury in her work. Since this compound is used

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Mercury Wastes

Since mercury is such a highly toxic chemical, few landfills continue to accept waste containing this dangerous material. Below are two suggestions for reducing the mercury in your lab.

Cutting Down on Mercury Salts

Try to find a suitable non-hazardous substitute for mercury salts. If your research requires the use of mercury salts or organic-metallic salts containing mercury, make sure you purchase only the exact quantity of these items needed. There are practically no disposal sites that continue to accept items with mercury in them. These same disposal difficulties apply to mercury salts and compounds containing mercury—mercuric chloride, mercuric oxide, mercuric acetate, or mercurochrome.

If you have questions concerning a mercury substitute, call DOES at x2907.

Use Non-Mercury Thermometers

Various companies have created a non-mercury “environment friendly” thermometer. Though they are slightly less accurate than mercury thermometers, they are also much cheaper—about one fourth the cost. Because the thermometers contain no mercury, clean-up is easy if an accident occurs and no hazardous waste is created.

Equipment used in conjunction with thermometers—heat blocks, ovens, incubators—becomes contaminated if a mercury thermometer should break during the experiment. The equipment must often be thrown out since mercury may bond with metal. Mercury is also more volatile in hotter temperatures, and it evaporates quickly, so be extremely careful in this type of situation.

In order to reduce hazards associated with mercury, please consider purchasing an alcohol thermometer for your laboratory.

Mercury Storage Tips

- Keep containers covered and stored in secondary container in a well-ventilated area.
- Check tubing and glassware periodically for leaks and cracks.
- Consider using a drip pan to contain possible spills where mercury is stored.
- Mark all mercury containers correctly with hazardous chemical labels.

Ra

Bloodborne Pathogen (x2907)

• **New Training:** Mondays 3-4:30 (Service Building Conference Room)

• **Retraining:** July 10 (10-11:30), 23(2-3:30) (Service Building Conference Room)

Please call to reserve a space for BBP Retraining sessions; space is limited.

Dimethylmercury Causes a Death

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ing trouble speaking and hearing in January, though she spilled the mercury five months

HOT TIPS



Internal Transfers of Radioactive Material

It has come to our attention that internal transfer of radioactive materials prior to approval from the Radiation Safety Office (RSOF) sometimes occurs. This procedure violates terms of our licensed programs. Therefore, do not transfer radioactive material, either internally or externally, until the proper forms have been completed and approved.

A copy of the "Authorization for Internal Transfer of Radioactive Materials" form is found in the Radiation Safety Manual (form 8). Both the sending and receiving Authorized Users (AUs) should sign the form. Send the form on to the RSOF for approval; a copy of it signed by the RSOF will be returned to both parties. Only then can the transfer of materials occur.

Please do not transfer materials without waiting for approval from the RSOF. Call DOES (x2906) with any questions.

Radioisotope Inventory Report

Fume Hood Testing

Chemical fume hood testing is now occurring on campus. Millis, the BRB, Morely, and the Biology building are completed, with the rest of the campus scheduled as follows:

| <u>Building</u> | <u>Test Date</u> |
|-----------------|------------------|
| Smith | early July |
| HG Wood | mid-July |
| Bingham | late July |
| Rockefeller | late July |
| Med School—East | early August |
| UCRC | mid August |
| Glennan | mid August |
| White | mid August |
| Olin | mid August |
| Wickenden | mid August |
| Dental School | late August |
| Pathology | late August |
| Wearn | early September |
| RB&C | |

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beside each name gives the last training session attended by that worker. All lab personnel who work with radiation must be retrained yearly, so inform workers needing re-training of upcoming dates for radiation re-training sessions. This information can be found on page 2 of the DOES newsletter.

- Radio

