

Department of Occupational and Environmental Safety NEWSLETTER

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CASE WESTERN RESERVE UNIVERSITY

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New Assistant Director of Radiation Safety

The department is glad to welcome the new Assistant Director of Radiation Safety, Bill Stephany, who holds a doctorate in nuclear science from the University of Michigan. He migrated back north after spending nine years in the Southeast working as a consultant at the Department of Energy's Savannah River Site, then as the Assistant Radiation Safety Officer at the Medical College of Georgia. His extensive experience in the nuclear field makes him an outstanding addition to the Department of Occupational and Environmental Safety staff.

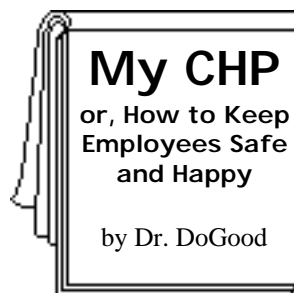
After completing a DOE-funded research project and work for his PhD degree at the University of Michigan, he worked as an Assistant Professor at the University of Massachusetts. Concomitantly, he held a Visiting Scientist appointment at MIT's National Magnet Laboratory, contributing to fusion reactor design.

Bill brings to the position many years of operational, management, and supervisory experience as well as an appreciation of the pressures to which researchers are subject. While recognizing the need for compliance with regulations, he sees the need to support research and succinctly expresses this balance as "low impact compliance."

The Laboratory's Chemical Hygiene Plan

Early this year, when 1999 laboratory inspections begin, our safety technicians will be looking expressly for each laboratory's specific Chemical Hygiene Plan (CHP), the set of written procedures detailing safety protocols for procedures done in the lab.

The Safety Office is currently handing out the updated Chemical Safety Manual to PIs, along with an Exposure Control Plan if necessary (those laboratories working with bloodborne pathogens). All laboratory personnel should know where this



document is located and what it contains, and PIs must make sure that all laboratory personnel know how to comply with the safety protocols contained in their CHP.

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What WASTE!

Recycling Materials for the Still

Though the amount of materials our department has received for distillation and recycling has gone up over the past few months, we are still actively trying to increase participation in this highly desirable program. Is your laboratory a good candidate for recycling?

One of the issues that has caused problems in the past has been discoloration of the newly recycled acetone wash, caused by the disintegration of the storage can's liner. We now have storage receptacles that will not cause discoloration.

We also have instituted a lab "pick up" which will allow for quicker turn-around time for materials. When you have several gallons of acetone wash that is ready for recycling, we will pick up the material from your lab and return it when the procedure is completed.

The department's spinning band still is currently set up to recycle acetone wash. Xylene from histological procedures, as long as it has only traces of wax or alcohol, is also readily recyclable, and we have also recycled ethylene. However, these are not the only options—if your lab produces many gallons of a specific type of waste over a short period of time and you think some of it could be distilled, contact us with the suggestion.

Recycling is an effective approach to waste minimization and helps us meet government-mandated programs required of all producers of large amounts of potentially hazardous waste. Please look into your lab practices to see how you can contribute to our waste recycling and reclamation program. Call us at x2907 with any questions about the procedure.

The Laboratory's Chemical Hygiene Plan

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The Chemical Hygiene Plan, as defined by OSHA, is a written program developed and implemented in the laboratory which sets forth four main items specific to each laboratory: procedures, equipment, PPE, and work practice controls which protect employees from chemical hazards, including chemical exposures. To be in compliance with this very important regulation, PIs need to create a CHP for their laboratories, which provides information to all employees of their labs.

How To Create A CHP

The first step in creating a CHP should be to review your procedures and to get an up-to-date chemical inventory of your laboratory and become familiar with stockroom conditions. This is a good time to dispose of old chemicals that you may have "inherited" from a former PI, or those containers with missing or torn labels.

Once you have a comprehensive picture of your procedures involving hazardous and toxic materials and their amounts, you can concentrate

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Upcoming Training Sessions

Radiation (x2906)

•**New Training:** March 3(9-12), 16 (1-4); April 7 (9-12), 23(1-4)

•**Retraining:** March 2(10-11), 17(2-3), 29(10-11); April 8(10-11), 30(2-3)

•**X-ray Training:** call office to set up training

Chemical (x2907)

•**OSHA Lab Standard:** Mondays 1-3 (Service Building Conference Room)

Bloodborne Pathogen (x2907)

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

• **Retraining:** March 4(10-11), 23(2-3); April 9 (2-3), 21(1-2) (Service Building Conference Room)

The Laboratory's Chemical Hygiene Plan

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on creating a CHP and safety procedures. At this point, you should go through CWRU's Chemical Safety Manual for general information.

The updated Chemical Safety Manual has a checklist corresponding with the Table of Contents. PIs, after reading through the manual, can check those sections which apply to their laboratories. However, it is important to realize that while the Chemical Safety Manual is quite comprehensive, it is intended primarily as a reference document from which PIs should cull relevant information. It is not intended to replace a specific laboratory's document.

Most laboratories use chemicals or perform operations that are fairly unique and which are not addressed in the general Chemical Safety Manual. In these cases—when the safety protocols for a procedure common to your lab are not detailed in the Chemical Safety Manual—you will need to write up the safety protocols for that procedure and submit it to DOES for approval, along with the manual's checklist.

Think of the CHP as a guide for new laboratory workers: could new employees in your lab, after reading the lab's CHP, begin a procedure and know what PPE and work practices they should employ to protect herself from any hazardous chemicals she will be asked to use? The document itself does not need to be particularly lengthy or detailed, but it should list procedures with safety precautions to be observed.

PIs are encouraged to attend a Laboratory Standard Training session here at the Safety Office, where they can also pick up the new manual if they have not already received one. The training session is offered every Monday from 1:00 - 3:00 in the DOES conference room, located on the first floor of the Service Building.

Please call x2907 with any questions about how to go about constructing a Chemical Hygiene Plan, or to sign up for a training session.

Ordering Replacement Radioactive Isotopes

Occasionally there may be a problem with a radioactive material shipment that requires a vendor to replace your order. Regardless of the problem, the replacement shipment must be placed through Purchasing and the Radiation Safety Office. **Do not call the vendor or company directly.**

If there is a problem with any radioactive isotopes received and a replacement order is needed, two procedures need to be followed:

1) Call Purchasing (x2677) and they will process the order—our office does not deal with vendors themselves and can only re-route your call to Purchasing.

2) Send the Radiation Safety Office a requisition form for that replacement material, just like you would for a regular order. When filling out the requisition form, write on it "Replacement" and the original PO number of the material it is replacing. If there is no charge for the material, write "No Charge."

Again, do not call the vendor to replace your material. **ALL shipments of radioactive**

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❄️ WATCH ❄️ ❄️ YOUR ❄️ ❄️ STEP! ❄️

Along with winter weather comes increased potential for injuries caused by slips and falls on icy outside walkways and wet floors, especially near doorways.

The key to reducing the risk of injury from any hazard is to be aware of it and act accordingly. This includes eliminating or reducing hazards when possible, and protecting yourself against unavoidable ones. Here are some ways to reduce the risk of seasonal injury:

- Be sure to wear proper footwear and use handrails when possible;
- Be more observant and deliberate while walking;
- Clear up danger spots by removing ice and snow from walkways, mopping wet areas, removing or replacing ineffective floor mats, repairing leaks that result in ice formation, and displaying signs or barricades to warn others of slippery areas.

While Plant Services does an admirable job of keeping areas of the university clear of ice and snow, the rapidly changing winter weather makes it impossible for them to keep conditions safe at all times. We can help by notifying them (368-2580) of any hazardous spots.

How to Report an Employee Injury or Illness

Needlestick Injuries Are Especially Under-reported

As a reminder, supervisors must file a report for all injuries to personnel working for them, both for worker's compensation reasons and under OSHA Rule 200 reporting requirements. Injuries must be reported even if medical attention is refused.

Workers hurt on the job should first inform their supervisor and then, depending on the extent of the injury, go to Health Services or the emergency room. Often for minor injuries, workers choose not to seek medical attention. In these situations, supervisors still should fill out a report that records this information—that the employee refused medical attention beyond basic first aid. We are especially concerned that needlestick injuries are under-reported by supervisors, because workers often refuse medical attention for this type of injury.

To report an injury, supervisors should call Laura Corrigan, in charge of Workman's Compensation, at 368-4394. A "Supervisor's Report of Occupational Injury/Illness" form will be sent to you. The front part should be filled out by the injured person's immediate supervisor; the back of the form contains a place where the department, division, or administrative head is asked for additional information about the occurrence. Keep a copy for your records, and send the original back to Laura Corrigan.

Supervisors are not called upon to make any sort of judgment call as to the appropriateness of a Worker's Compensation claim—they should simply report the injury or illness. Again, this includes needlestick injuries, even if the victim refuses medical attention.

Regardless of where an injured person chooses to receive medical help—University Health Services, the emergency room, or one's own physician—we strongly recommend that everyone receive treatment without delay. If you have any

questions about injury reporting, call Laura Corrigan at the above number or Richard Harley of Safety Services (x5865).

See related article on page 5: "Needlestick Injuries and Their Prevention"

Certification of Laminar Flow Hoods & Biological Safety Cabinets: Form Now on DOES' Homepage

Each year, CWRU contracts with an outside company to inspect and certify the laminar flow hoods and biological safety cabinets on campus. In the past, we have had PIs e-mail or call our department with the necessary information. Now, you can provide us with the information by filling out the form found on DOES' homepage.

At our homepage, <http://does.cwru.edu>, click on Micro-Clean Online Ordering from the sidebar. The form asks you for an account number, the depart-

ment, the building and room of the hood(s) and/or cabinets, a contact person and a phone number and e-mail address. There is also a "comments" line, where you can place any special scheduling requests such as a certain day or time. Then hit the "New Record" button. The form is sent to our office, and we can schedule an appointment for you.

Hood certification is a requirement of the OSHA Laboratory Standard and CDC/NIH protocols for containment of biohaz-

ards. The cost for the inspection and certification of biological safety cabinets is \$135.00 and for laminar flow hoods \$95.00.

If your lab has equipment of this type and you work with biohazardous materials, you must get yearly certification.

We prefer that you sign up for certification electronically by completing the form on the homepage, but if you would rather call our office to set up the appointment, or if you have any questions, please contact Safety Services at x2907.

Needlestick Injuries and their Prevention

According to OSHA's latest figures, an estimated 800,000 needlesticks occur annually, counting for over 80% of accidental exposures to blood. Nurses in hospitals are most frequently injured, but anyone performing operations involving needles has the potential to receive a needlestick injury. These procedures include drawing blood, collecting materials used during patient care procedures, administering injections, disposing of needles, or handling trash.

The most serious possible effect arising from a needlestick injury is contraction of diseases such as Hepatitis C (HCV), Hepatitis B (HBV) or HIV. The

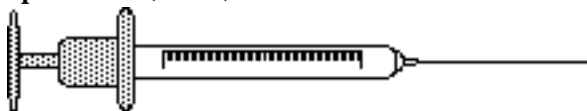
risk of transmitting HCV or HBV is much higher than HIV, because of the higher prevalence of these two diseases in the general population. However, about 2%, or 16,000, of needlestick injuries are likely to be contaminated with HIV.

To help reduce needlestick injuries it is vital that employees who work with blood or blood products follow the principles set forth in the Bloodborne Pathogen Exposure Control Plan. This includes complying with universal precautions, using personal protective equipment, and using engineering and work practice controls.

Most needlestick injuries do not stem from worker carelessness

but from unsafe needle devices. "Safer needle devices" have been developed over the past few years to reduce the potential of needlestick injuries. These devices are designed to provide a barrier between the workers' hands and the needle after use and allow the workers' hands to be behind the needle at all times. The safety features should stay in effect before disassembly and remain in effect after disposal to protect downstream workers like housekeeping personnel.

If you would like additional information about safer needle devices, or if you have questions about the Exposure Control Plan, call Safety Services at x2907.



Ordering Replacement Radioactive Isotopes

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materials must be inspected and approved by our department before Shipping and Receiving can deliver it to each lab. The order will not arrive at a lab any sooner by calling the vendor rather than calling Purchasing and sending a requisition form. Conversely, it ends up taking much longer, since the package will be held until the order can be verified and approved.

The above procedures must be followed for replacement orders ONLY. With a regular order, simply fax or mail requisition forms to the Radiation Safety Office. We will fax them on to Purchasing as soon as possible after they have been approved, usually the same day.

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