Eye Injury Prevention: Knowing the Basics

The laboratories at Case Western Reserve University present many potential hazards to the eye. Proper eye protection, however, should not be limited to workplace. According to the American Academy of Ophthalmology, there are more than 1 million eye injuries each year in the United States when work and residential injury statistics are combined. An astonishing ninety percent of these injuries could have been prevented if the individual had been wearing the appropriate eye-protection. In order to ensure your eye safety, it is important to know how and when to use the appropriate eyewear. Below is a quick summary of some important points to remember regarding eye protection:

- Understand your eye protection choices and what they mean. There are four basic types of eye protection available:
  
  1) Safety Glasses—Safety glasses are designed to protect your eyes from particulate matter. For example, from flying debris in a machine shop. They are not designed for normal lab use and cannot protect your eyes from liquids.
  
  2) Safety Goggles—Safety goggles form a seal that protects eyes from liquids, gases, and mists. They are recommended for lab use, but they do not protect the whole face.
  
  3) Face Shields—Safety (Face) shields protect the face but may not protect the eyes. They are recommended for lab use.
  
  4) Combination (Safety Goggles and Safety [Face] Shield)—This combination provides for the ultimate eye protection in the lab. It shields the eyes and the face from solids, liquids, and gases.

- In case of chemical burn to the eye, flush the eye with clean water for 15-20 minutes and seek emergency medical treatment immediately.

(continued on page 7)
Fall Preparations—Is Your Lab Ready for the Fall Semester?

The summer is almost over and classes are about to begin—but how prepared are you? If you run a lab, then chances are you will have new students, new teaching assistants, and maybe even new full-time employees. Or maybe you are new to CWRU. If so, welcome!

To get ready for the new school year, the first thing to do is to make sure that your entire staff is properly trained. All new employees must be trained by DOES. If you are a new employee or find yourself in a new workplace environment, don't wait for someone to tell you to get trained—take responsibility and make sure you are properly trained to handle the possible safety hazards you might face. DOES offers training sessions in a variety of areas including: radiation, chemical, laser, and bloodborne pathogens (BBP). Radiation and BBP Training sessions are subdivided into "New" and "Retraining" sections, so sign-up for the appropriate session based on your training status.

DOES also provides X-ray Training for specialty radiation workers. Remember, if you are not trained in these areas and you are performing duties which involve these materials, you are out of compliance with both federal and state requirements for safe work practices. Call us immediately (x2906) to sign up for a training session to avoid this problem. Times are frequent and sessions are designed to provide you with practical means of applying safety techniques to better deal with hazardous materials and procedures. Visit our website for a complete schedule of training session dates and times or call our department (x2906). For your convenience, training sessions are also listed in this newsletter on page 9.

Another way to prepare your lab for both workers and students is to “stranger proof” it. You probably spend most of your days there, so you know where and what everything is—but do not assume that other people will also. Go through your lab and make sure everything is (properly) labeled and correctly shelved, sealed, and signed. When there are hazardous materials and items which might be misused, unidentified, or shelved inappropriately, this extra step of preparedness is a must. Also, familiarize your lab with our newsletter. If you keep the old copies in a file or binder (which is a good idea) leave some time for your staff to leaf through them, or, direct them to our website at http://does.case.edu where an archive exists of our (continued on page 3)
Fall Preparations—Is Your Lab Ready for the Fall Semester?

(continued from page 2) ...past issues. Of particular interest might be our November/December 2007 issue that addressed CWRU’s Shut the Sash! Program—a program of safety awareness and energy savings.

Along these lines, take some time in these beginning weeks to go over simple procedures for dealing with topics such as small spills, waste reduction, and fire safety. Consult the appropriate DOES Safety Manual(s) for details. All of our manuals can be found at http://case.edu/finadmin/does/web/Forms/Forms.html. Finally, make sure your new employees (and you) know who we are—when you spot a DOES staff member making his or her way around your lab or building, meticulously working to help insure your personal safety, don't be afraid to stop them and introduce yourself.

We are happy to meet you and answer any questions you might have. Have a safe Fall semester by training, practicing, and leading by example. Together, we can make CWRU a safe learning environment for all.

A Summer Safety Reminder—Proper Attire in the Labs

Warmer weather makes this the ideal time to review what is considered proper lab attire. In short, when working in the lab, all skin should be protected from exposure. Most lab workers are aware of the benefits of proper PPE in the form of lab coats, gloves, and safety glasses, but your personal clothing is actually your last line of defense against chemical or biological exposure. Long pants and closed toed shoes cover areas of the body that lab coats do not protect. Shoes should be of leather or other impermeable substance instead of cloth. Skirts also should not be worn in the lab unless long enough that the legs are completely covered (tights and panty hose are not considered adequate leg covering). While it may be tempting to shed some clothing to stay cool in summer, protecting your body from preventable injuries is far more important. For more on this important issue, please read, “Revisiting UCLA: What We Can Learn from Their Mistakes” which appeared in the DOES June/July Safety Newsletter.
Signs, Labels, and Markings: A Few Basic Reminders

Ideally, the workplace would be hazard-free and safe from potential injuries and accidents. However, many operations by their nature involve a certain amount of risk that cannot be controlled through engineering measures. In these situations, safety signs, tags, barricades, signals, and other markings have been developed as one way of preventing work accidents.

OSHA has established rules throughout 29 CFR 1910 and 1926 regarding the design, application, and use of safety markings in the workplace to indicate hazardous conditions and prevent accidents. At the heart of these regulations, you will find...

- 29 CFR 1910.145, Specifications for Accident Prevention Signs and Tags; and
- 29 CFR 1926.200 to .203, Signs, Signals, and Barricades.

In recent years, the top OSHA marking violations for general industry have included hazard communication labels, electrical labels and signs, load markings, exit signs, lockout/tagout application, permit-required confined space signs, OSHA 301 Form (annual summary) postings, forklift markings, and aisle markings. Other agencies, like EPA and DOT, also call for various markings. State and local agencies may require further marking. Plus, you may also find the following consensus standards helpful:

- ANSI Z535.2, Environmental and Facility Safety Signs;
- ANSI Z535.3, Criteria for Safety Symbols;
- ANSI Z535.4, American National Standard for Product Safety Signs and Labels;
- ANSI Z535.5, Safety Tags and Barricade Tapes (for Temporary Hazards);
- ANSI A13.1, Scheme for the Identification of Piping Systems; and

Be aware that some consensus standards are required because they are adopted by reference in federal and state regulations. Look around your facility. While government agencies require specific markings, in many cases common sense will tell you where to use markings to protect workers and visitors.

As always, please feel free to call DOES @ ext. 2907 with specific question regarding signage, labels and markings. We are here to help.
A Reminder on Radioactive Material Ordering

For liability reasons, the RSOF requires that the old CASE requisition with the signature of the AU or the AU’s approved designee be faxed to the RSOF (fax 368-2236) and must have the PeopleSoft requisition number referenced in the body of the requisition. Only the AU’s or formally approved designee’s signature will be accepted. Also, you must print the name below the signature. This information can be written on the main body of the requisition. The RSOF maintains a list of individuals authorized to sign isotope orders. If you want to add or delete anyone’s name, fax an updated personnel form to the RSOF.

As of July 1, 2004, in addition to the paper requisition, the orders (including all replacement orders and no-charge samples) must now be submitted through the PeopleSoft system. The following items must appear on the PeopleSoft requisition:

- The vendor’s name and address under “Suggested Vendor.” (Be sure to choose the “radioactive category” and not glassware or chemicals)
- The number of stock vials to order should be placed under “Quantity.”
- The activity to order should be placed under the “Unit.” Activity should be expressed in units of millicuries (mCi) or microcuries (µCi), not Becquerels (Bq).
- The catalog number should be under the “Catalog Number.”
- The isotope and chemical form should be written under “Description.”

Once all of the above steps are followed correctly, the requisition will automatically appear in the RSOF approval Worklist via the computer for final approval. There is a 2:00 p.m. cut-off time in the RSOF for processing radioactive material requisitions due the following business day. Requisitions received after 2:00 p.m. are not guaranteed for next day delivery.

IMPORTANT: Radioactive materials cannot be purchased with a University P-Card.

NOTE: Purchase requisitions for radioactive material to be ordered or delivered to MetroHealth Medical Center or the VA Medical Center do not require the approval of the CASE RSOF. Contact the RSOF at those locations for instruction.
September is Safety Month at CWRU

September is National Campus Safety Month, Campus Fire Safety Month and Disaster Preparedness Month. Case Western Reserve University will mark all three campaigns by observing its second annual Safety Awareness Month. In conjunction with this observation, CWRU will be hosting its second annual "Safe@Case" fair on September 7, 2010 on the Case Quad. Safe@Case is an opportunity for employees to hear about important safety topics related to campus such as emergency procedures, warning and notification, crime prevention, fire prevention and personal safety planning. Attendees will have opportunities to interact with campus police and safety officials while learning tips for putting safety first at work. The Department of Occupational and Environmental Safety (DOES) will host a display table at the fair. DOES will also be presenting short talks on subjects such as chemical safety in the home and the proper use of chemical fume hoods. In addition to our DOES Newsletter as a regular source for safety information on campus, the Case Daily will also be featuring safety related articles throughout the month of September. Please keep a look out for these updates and feel free to contact DOES with questions about safety or ideas on how we might improve communication on safety related issues.

Where is DOES?

If you're new to Case (or simply haven't been to visit us yet), we are located in the Service Building on the 1st floor just off Circle Drive between the Health Sciences Library to the east and the Powerhouse Building to the west. For clarity, call x2906/2907 or check our website (http://does.case.edu.) for an interactive map before your visit. Keep in mind that much of the information and services (e.g., Safety Services manuals and forms, upcoming training sessions, online training sessions, past newsletters, etc.) that DOES provides can be found conveniently online at http://does.case.edu at any time.

Hood Repair Status Reminder

If you have a chemical fume hood being repaired, you can see its status on our Laboratory Safety page. You can find this information right on our main page under “News and Safety Tips.” Just go to <https://www.case.edu/finadmin/does/>.
Wearing proper eye protection is important outside of the workplace as well. The American Academy of Ophthalmology (AAO) notes that safety goggles should be worn when working in a home workshop, yard, or when jump-starting or working on your car.

The AAO notes that safety goggles should also be worn when working with household chemicals.

Injuries such as cuts, chemical burns or foreign bodies stuck in the eye are emergencies. Don’t try to treat these injuries yourself—contact your Eye M.D. or emergency room for help immediately.

The leading causes of eye injuries include sports accidents, consumer fireworks, household chemicals, battery acid, and yard debris (particularly projectile objects from lawn mowers and weed “wackers”).

Always wear protective eye wear during sports and recreational activities.

Even a seemingly light blow can cause a serious eye injury. If a black eye, pain, or visual problem occurs after a blow, contact your Eye M.D. or emergency room immediately.

Remember, in the lab, safety goggles should always be worn for eye protection. They provide protection for the eyes from hazardous solids, liquids, and gases. For full face protection, a safety shield should be used in tandem with safety goggles. Professors are responsible for the use of their labs and any potential fines imposed for failure to wear proper eye protection or for injuries associated with the failure to use proper eye protection.

For more information on eye safety in the lab, please contact DOES at (216) 368-2907. You may also find more information online at the American Academy of Ophthalmology’s website (www.aao.org).

Sources: MedicineNet.com (www.medicinenet.com)
American Academy of Ophthalmology (www.aao.org)
DOES STAFF
W. David Sedwick, PhD, (wds), Director and RSO
Marc Rubin (mdr6), Director of Chemical and Biological Safety
Felice Thornton-Porter (fst2), Asst. Director, Asst. RSO, and Q.A. Specialist
Shirley Mele (smm5), Office Manager/Ergonomic Coordinator
Gwendolyn Cox-Johnson (gxc13), Dept. Assistant II
  Jason May (jason.may), Dept. Assistant I
Ronald Tulley, PhD (rxt33), Technical Writer

CHEMICAL SAFETY
Robert Latsch (rml2), Specialist II
Bill DePetro (wjd11), Specialist II
Tom Merk (tml8), Operations Supervisor, Specialist II
  Jon Birkes (jon.birkes), Specialist II
Edwin Filppi (edwin.filppi), Specialist II
Mary Ellen Scott, PhD (mas35), Specialist II
Anna Dubnisheva (anna.dubnisheva), Specialist I

RADIATION SAFETY
Yelena Neyman (yxt13), Specialist I
Charles Greathouse (cxg118), Analyst Programmer I
Joe Nikstenas (jen), Operations Supervisor, Specialist II
  Victoria Cook (vcook), Specialist I
Sylvia Kertesy (sylvia.kertesy), Specialist I

Remember, all back issues of the DOES Newsletter can be found online at http://does.case.edu. Simply click on the “Newsletter” link in the left-hand column!