
ENVIRONMENTAL HEALTH AND SAFETY



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Improving Services and Reducing Costs

Our on-going efforts to improve EH&S services, increase efficiency, and hold down costs have resulted in two changes that will modernize UofM fire prevention services.

EH&S is obtaining a license from the Department of Commerce and Insurance for a fire extinguisher shop. That process will allow EH&S to handle some tasks that were performed by contractors, saving approximately \$8,000 annually.



Tom Eadie (I) demonstrates the finer points of scanning a fire extinguisher barcode with the iPad Mini

We are also implementing a new digital system to guide and document inventory, inspection, and maintenance of fire extinguishers. With the Brady InspectNTrack™ system, we will replace pen and paper with databases and iPads, helping ensure that all fire extinguishers are inspected and maintained in accordance with fire code.

Do You Know How and When to Use a Fire Extinguisher?

If you answered the above question with “no” or “maybe,” please consider signing up for Tom Eadie’s fire extinguisher training class. The class includes a short lecture followed by hands-on experience with a fire extinguisher. [Send Tom an e-mail](#) or call him at 901-678-4671 to schedule a class.

Reporting Unsafe Conditions or Practices

If you would like to report an unsafe condition or practice on campus, you have a new option: The [EH&S web site](#) allows you to file an anonymous report in situations where you might not otherwise report. Just look on the left side of our web page, and click on “Report an Incident.” That link will take you to forms for reporting “near misses,” occupational illnesses and injuries, and anonymous reporting.

University Policy [UM1293](#) has more information on reporting unsafe conditions and practices.

New Accident Report Form

If you are using the old accident report form that asks for your Social Security Number, please stop. The latest version of the form eliminates that question and has other changes, including instructions to send the completed form to EH&S.

The [First Report of Injury or Illness form](#) is available on the [EH&S Web page](#).

Inside this Issue

Occupational Injuries and Illnesses	Page 2
EPA Enforcement Results	Page 2
Infected Lab Supervisor	Page 3
Hoverboards Hot Items	Page 3
Scary Incidents at Other Institutions	Page 4
3-D Printer Emissions	Page 4

Occupational Injuries and Illnesses for 2015

The numbers are in for occupational injuries and illnesses reported by UofM employees during calendar year 2015. Employees experienced 23 injuries serious enough to be considered “reportable” by OSHA. ([Click here](#) to see the report.)

As a consequence of these injuries, employees lost 326 days of work and accumulated 492 days of modified duties in 2015. These injuries were due to the following causes:

- Slips, trips, and falls – 6 injuries
- Overexertion (muscles or effort) – 5 injuries
- “Stuck-by” injuries – 4 injuries
- Cuts and punctures – 3 injuries
- Dust and fume injuries – 2 injuries
- All others – 3 injuries

Let’s all stay vigilant and try to avoid these common injuries.



Kevin Watts keeps the volume below 85 dB to avoid hearing loss

What’s that in Your Ear, Bud?

A study by Irish charity [DeafHear](#) indicated that young people using earbuds can be up to 4 times more likely to have long-term hearing damage as those using headphones.

Much of the problem appears to be associated with the loudness of the music played through earbuds. DeafHear recommends protecting your hearing by either switching to over-the-ear headphones or, if you must use earbuds, keeping the volume below 85 decibels.

EPA Enforcement Results for 2015

The U.S. Environmental Protection Agency just announced results of its enforcement efforts in 2015, and those results are impressive. The numbers should be a little frightening to anyone who might consider ignoring or willfully violating environmental regulations.

Here are the numbers:

- \$7 billion in investments by companies in actions and equipment to control pollution and clean up contaminated sites;
- \$404 million in combined federal administrative, civil judicial penalties, and criminal fines;
- \$4 billion in court-ordered environmental projects resulting from criminal prosecutions;
- 129 combined years of incarceration for sentenced defendants;
- \$1.975 billion in commitments from responsible parties to clean up Superfund sites; and
- \$39 million for environmental mitigation projects that provide direct benefits to local communities across the country.

Are you complying with the EPA regulations applicable to your work area?

Need a Label for a Chemical Container?

If you need a label for a chemical container and don’t know where to get one, there is an easy solution: Avery’s web site will allow you to design and print chemical labels right at your desk. Just click on the hyperlink to access the free [Avery Design & Print Online](#).

Please note that OSHA regulations require chemical hazard pictograms to have a red border, so print the labels with a color printer.

Radiation Safety Class begins February 5

If you expect to use, or be in the presence of, ionizing radiation at UofM during the next few months and have not already passed the Radiation Worker Course, plan to attend the course that begins on February 5. Contact [Al Simpson](#) at 678-4672 to register.

Ashley Koehler is here to Assist You

Ashley Koehler has joined EH&S as Coordinator, Occupational Safety. Ashley has a master's degree in Occupational Safety and Health from Murray State University. She was most recently employed in EH&S at Western Kentucky University.

Ashley will be handling occupational health and safety issues, accident investigations, training, and related tasks. [Contact her](#) at 901-678-2740.



Ashley Koehler

Laboratory Pressure Vessel Webinar

EH&S will host a webinar entitled "Safe Use of Laboratory Scale Pressure Reactors" on February 18 from 12:00 p.m. until 1:30 p.m. If you have pressure vessels in your lab, or plan to have one in the near future, please contact [Eric Swauncy](#) to register for the webinar.

Infected Canadian Lab Supervisor Lacked Safety Training

An investigation by the Public Health Agency of Canada revealed lack of appropriate training as a factor in a supervisor at the National Microbiology Laboratory in Winnipeg being infected by one of the BSL-2 diseases that was being studied. Thankfully, the supervisor recovered after medical treatment.

Prior to the incident, the supervisor was reported to have never received training on biosafety, general safety, or spill response. The real kicker is that this person worked at Canada's primary infectious disease laboratory focused on public health. Even our own CDC has had significant biosafety problems associated with its labs. Let's continue to do a better job at lab safety than PHAC and CDC.

Are you ensuring that everyone under your supervision is appropriately trained for the hazards to which they are exposed?

Suit Seeks Information on Biosafety Problems at U of Hawaii - Manoa

In 2104 the Centers for Disease Control and Prevention (CDC) noted serious regulatory deficiencies at a Biosafety Level 3 laboratory (i.e., they work with bad stuff) operated by the University of Hawaii at Manoa. CDC never publicly released details of the deficiencies, so a watchdog group has filed a Freedom of Information Act suit seeking the information.

The suit appears to be associated with concerns that biosafety lapses at the university-affiliated lab may represent a threat to public health.

Hoverboards Hot Items

In addition to the significant potential for fall injuries associated with hoverboard use, it has been well documented that some of the more affordable models have been involved in fires. An article in *Wired.com* notes that the risk of fire is associated with the quality [lack thereof] of the lithium-ion batteries, not the mechanics of the hoverboard. If you absolutely must have one, choose a top quality hoverboard bearing the seal of a reputable independent testing laboratory.

[Click on this link](#) to get hoverboard safety tips and learn more about the hazards.

Useful Contacts

Director, EH&S	678-4672
Radiation Safety Officer	678-4672
Hazardous Materials Specialist	678-2044
Laboratory Safety Specialist	678-1625
Occupational Safety Coordinator ...	678-2740
Fire Protection Specialist	678-4671
Fax	678-4673
Emergency (Fire, Police, Ambulance, after hours Chemical/Radiological)	678-4357
EH&S Web Page ...	http://ehs.memphis.edu

Scary Incidents at Other Institutions

Michigan Tech University

Two MTU students suffered injuries in an October 2015 lab explosion. *Upper Michigan's Source* reported that the students were disposing of outdated nitric acid that they had transferred to a waste container in a fume hood. Although the students were following procedure, the waste container still exploded. We suspect that the waste bottle was either contaminated or contained a non-compatible chemical (e.g., flammable).

Even when you follow protocol, things can still go wrong. Wear your personal protective equipment at all times when working in the lab.



Tsinghua University

Chemistry World reported a December 2015 lab blast that killed a postdoc researcher at Tsinghua University in Beijing. An exploding hydrogen tank caused severe injuries to the researcher, leading to his death.

If a cylinder is due for hydrostatic testing or has a leak, take appropriate action immediately.

University of Georgia

In September 2015, *Online Athens* reported an explosion that occurred in a lab at UGA. One man was injured when a hazardous waste bottle exploded.

Please take time to ensure that new waste bottles are clean before adding waste, and check the label to make sure that existing contents are compatible with waste that you are about to add.

Managing a Biological Spill

Esco, a manufacturer of biological safety cabinets, just released a video showing proper protocol for managing spills in BSCs. [Click here](#) for the video.

3-D Printer Emissions May be Harmful

Researchers at the Illinois Institute of Technology just published a study of air contaminants emitted from 3-D printing. "[Emissions of Ultrafine Particles and Volatile Organic Compounds from Commercially Available Desktop Three-Dimensional Printers with Multiple Filaments](#)," published in the journal *Environmental Science and Technology*, states, "...potential exposure to these [air contaminants] ... in a typical small office environment suggest caution should be used when operating many of the printer and filament combinations in poorly ventilated spaces or without the aid of combined gas and particle filtration systems."

Check the adequacy of ventilation before purchasing a 3-D printer.

Stairwells not for Storage

Stairwells are designed to safely get you out of a building in an emergency; they also serve as a place of refuge for those who are physically unable to exit. Because of their importance as a safe passage and refuge, they must not be used for storage.

Keep stairwells and hallways free of storage!

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