



As summer approaches with hot weather, it is important to remember that working outdoors in conditions of extreme heat can lead to dangerous health effects or can jeopardize your safety. Excessive exposure to a hot work environment can bring about a variety of heat-induced disorders. However, if the risks are understood and precautions are taken, activities in hot environments can be performed in relative comfort and security.

Quick Safety Tips in Recognizing and Treating Heat Emergencies...

HEAT CRAMPS (severe muscle cramps, usually leg or abdominal; exhaustion; occasional dizziness/fainting): Get the person to a cooler place and have him or her rest in a comfortable position. Lightly stretch the affected muscle and replenish fluids. Give a half glass of cool water every 15 minutes. Do not give liquids that contain alcohol or caffeine, as they can make conditions worse.

HEAT EXHAUSTION (cool, moist, pale or flushed skin; heavy sweating; headache; nausea or vomiting; dizziness; exhaustion; normal body temperature): Get the person out of the heat and into a cooler place. Remove or loosen tight clothing and apply cool, wet cloths, such as towels or sheets. If the person is conscious, give cool water to drink. Make sure the person drinks slowly. Give a half glass of cool water every 15 minutes. Do not give liquids that contain alcohol or caffeine. Let the victim rest in a comfortable position, and watch carefully for changes in his or her condition.

HEAT STROKE (hot, red skin; change in consciousness; rapid, weak pulse; rapid, shallow breathing; high body temperature): Heat stroke is a life-threatening situation. Help is needed fast. Call 9-1-1 or your local emergency number. Move the person to a cooler place. Quickly cool the body. Immerse victim in a cool bath, or wrap wet sheets around the body and fan it. Watch for signs of breathing problems. Keep the person lying down and continue to cool the body any way you can. If the victim refuses water or is vomiting or there are changes in the level of consciousness, do not give anything to eat or drink.

For more information on working safely in hot weather, heat stroke or heat exhaustion, the following OSHA publications are available online.

Protecting Yourself in the Sun

<http://www.osha.gov/Publications/osha3166.pdf>

Working Outdoors

http://www.osha.gov/OshDoc/data_General_Facts/working-outdoors-factsheet.pdf

OSHA's Heat Stress Card

<http://www.osha.gov/Publications/osha3154.pdf> - English

<http://www.osha.gov/Publications/osha3155.pdf> - Spanish

Managing Your Hazardous Chemical Waste – Part II

Many University operations involve the use of chemicals and the generation of wastes that must be stored, managed and disposed of in strict compliance with federal, state and local environmental regulations. UC Irvine supports these regulations since they help ensure a safer, healthier environment for everyone. Complying with the following simple guidelines will help all of us live in a cleaner environment.

For more information, contact *Kirk Matin* at x4-4578 or visit www.ehs.uci.edu/programs/enviro.

~Disposal~

- Do not dispose of chemicals via sinks or trashcans.
- Do not use hoods to intentionally evaporate chemicals.
- At no time should full or partially full containers be placed in the regular trash.
- All containers that held materials considered extremely hazardous waste or acutely hazardous waste are considered hazardous waste and must be picked up by EH&S.
- If the hazardous materials container is greater than five gallons, it must be picked up by EH&S.

Request Hazardous Waste Pickup Service via the Internet:

- Visit <http://www.ehs.uci.edu/programs/enviro/>
- Fill out the “Chemical Waste Collection” form.
- We will pick-up your waste within 1-3 days.

~Waste Minimization~

- Review each experimental protocol to assure that hazardous chemicals are used efficiently and that excess purchases are minimized.
- Conduct microscale research when possible.
- Use less hazardous substitutes when feasible.
- If possible, use substances that can be neutralized or stabilized either physically or chemically.

DO NOT PROP FIRE DOORS OPEN

Dale Saunders

Keep Fire Door Closed!



To Identify a Fire Door, look for ...

1. A mechanical device that automatically shuts the door.
2. A fire-rating door label (by Underwriters Laboratory or Warnock Hersey), located on the door next to the hinges, and
3. A fire-rating doorframe label (usually UL) or, located on the doorframe next to the hinges.

Do Not 'PROP' Fire Doors Open!



As you may know, many building fires start in one room and quickly spread throughout the building. We ask ourselves how this could have happened, how could the fire spread so fast, especially with today's technology. It happens because fire doors get propped open.

On July 23, 2001, UC Irvine's Frederick Reines Hall sustained a laboratory fire. The fire started in one laboratory and spread to an adjacent laboratory. However, it did not spread into the corridor because both laboratory doors leading to the corridor were closed and latched. If these lab doors were propped open, the fire would have spread to other parts of the building!

Fire will spread if it has fuel to keep burning, has not been extinguished and has a path to spread. The first defense against the spread of fire is to contain the fire by keeping fire-rated doors closed at all times. These are doors that are closed automatically by a mechanical closure, usually mounted at the top of the door. Fire-rated doors are part of the overall fire safety system design in buildings.

EH&S is asking that wedges (or any other objects) not be used to keep these doors open. If you would like to keep your office, dorm or laboratory's fire rated door open, please contact your building's Facility Manager. Your Facility Manager may be able to provide a different type of closure that allows the door to be open during normal use, but will close if smoke is detected.

For more information on Fire Safety, visit <http://www.ehs.uci.edu/firesafe.html>

TRACKING HAZARDOUS CHEMICALS USING WEB-BASED DATABASE

Rama Singh

The UCI EH&S department has worked diligently for the last year and a half in creating a web-based database for tracking hazardous chemicals in our research laboratories. This project is moving forward nicely and the database is in the process of being populated by the individual labs with help from EH&S students. Once the inventories have been entered into the database and released to the campus, EH&S will request that all researchers update (at least annually) their individual chemical inventories. This will enable EH&S to generate the required regulatory reports. By updating the chemical inventory on a regular basis, Principal Investigators will be able to track their chemicals in real time with password protection, which will result in a win-win situation for all concerned.

The School of Physical Sciences undertook special initiative to satisfy the needs of the Chemistry department by acquiring an entirely different database, which not only tracks reagent compounds with its amounts and locations, but many other functions as well (i.e. track synthesized chemicals with analytical data, search by both name and structure, two and three dimensional structure search, bar code capability, track biological assays, integration with Physical Sciences Store, etc.). Information from the Physical Sciences' database will be routinely exported to the EH&S database to generate campus wide reports. We are pleased to report that over 95% of the chemicals in the Chemistry department, in addition to the Physical Sciences Store, are already in the database with bar code entries and the system is working nicely.

Initially, all data from the individual labs was entered into the system by graduate students from those labs. They made a conscious effort to sort out unwanted chemicals that were then disposed of through EH&S. We very much appreciate the help provided by these Chemistry graduate students in completing this project.

This is a great example of working together to create a partnership between EH&S and one of UCI's largest academic schools where many of the hazardous chemicals are kept and used. This is attributed mostly to the leadership and vision of the Dean's Office and the Chemistry Faculty. We

especially thank Karl Wolonsky, Assistant Dean of the School of Physical Sciences, and Dr. Richard Chamberlin, Professor of Chemistry, for supporting this project from inception until completion during a very difficult financial environment. The School of Physical Sciences has spent over \$50,000 so far to acquire and maintain this database.



Dr. Darren Holmes



Tory Graziano

We would also like to recognize the goodwill and efforts of two Physical Sciences employees without whose dedicated help this project would not have been possible: Dr. Darren Holmes, Director of Synthesis Facility, Chemistry Department, and Tory Graziano, Programmer, Computing Services, School of Physical Sciences. EH&S very much appreciates the support provided by both Darren and Tory in undertaking this project and bringing it to completion.

The success of any health and safety program is very much dependent upon the creation and maintenance of an accurate inventory of hazardous materials in the campus buildings. We look forward to creating similar partnerships in the future for the success of common health and safety goals.

To receive future notices of **EH&Safety Matters Newsletter**, have your UCINetID Login information ready and subscribe at https://www.ddm.uci.edu/zotmail/zm_subscribe/sublist.asp. Just click on **Update** under **My ZotMail** OR visit our website quarterly at <http://www.ehs.uci.edu/>, click on **EH&Safety Matters Newsletter** and download a copy!

EH&S Directory...

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Join the C-SAR Team (Campus Search & Rescue)



Accepting registrations for Series #2
 July 12, 13, 19, 20, 26, 27
 August 2, 3, 9, 10, 16, 17, 24

All sessions will be held at
 Natural Sciences #1, Room 1114
 Building 517 on the Campus Map
 from Noon to 1:00

To register, e-mail Lbogue@uci.edu by July 8

Free C-SAR t-shirt to all participants who complete the training!

If this series doesn't fit your schedule,
 bookmark the C-SAR webpage
 (<http://www.ehs.uci.edu/em/csar/index.htm>)
 and check for future dates.

EH&S FACTS AND FIGURES

.....Did you know that in one quarter.....

Division	Statistics
Environmental Management	<ul style="list-style-type: none"> Disposed of 1,540 gallons of flammable solvent waste Disposed of 9,719 pounds of lab pack/containerized bulk waste Completed 594 hazardous waste pick-up requests
Fire Safety	<ul style="list-style-type: none"> Averaged a turnaround time of 5.29 days for construction plan reviews
Radiation Safety	<ul style="list-style-type: none"> Performed 123 radiation protection lab surveys
General Safety	<ul style="list-style-type: none"> Averaged a turnaround time of 9.92 days for written reports for ergonomic assessments
Industrial Hygiene	<ul style="list-style-type: none"> Performed 58 lead surveys and 57 asbestos surveys