“C-SAR” Wants You!
~ Classes begin April 20, 2004 ~
Linda Bogue and Joe Rizkallah

What is C-SAR? C-SAR is the new UC Irvine Campus Search and Rescue Program. It’s a voluntary program open to all faculty and staff.

Why has the program been developed? It’s the right thing to do. Large scale emergencies and disasters, such as fires, chemical spills, earthquakes, floods, etc. can happen anytime, anywhere. This program will provide you with tools and information to improve your ability to ‘ride it out’ and assist family members, neighbors and colleagues.

Where does the training come from? The C-SAR program is modeled after the Federal Emergency Management Agency’s Community Emergency Response Team program (FEMA CERT). CERT-trained individuals may be able to become C-SAR team members by demonstrating proficiency in selected topics, and learning new material which is campus specific.

What’s in it for me? By the end of the training, C-SAR team members will be able to improve their emergency preparedness at home, in their communities and here on campus. Most of us want to be prepared. This program gives you information on what to plan for, how to make your home and work space safer and what you should have on hand. After an earthquake or other community-wide disaster or emergency, many people want to respond and help. This program trains you in some simple actions that you and other team members can take to assist the professional responders who may be overwhelmed and need your help.

What does the training include? The training is approximately 12 hours spread over multiple sessions. Topics include disaster preparedness, emergency utility shut-offs, hazardous materials handling (especially around the house), fire safety, disaster first aid and triage, light search and rescue, structural building design overview and campus emergency management plans. The final training session is a full-scale drill to practice what’s been learned in class.

How much does the training cost? Training is provided by EH&S at no cost to all participants. In other words, FREE.

What is expected of C-SAR Team Members? Following a large campus emergency or disaster, the need to activate C-SAR teams will be assessed. If activated, C-SAR team members will apply their training to search lightly damaged buildings, triage injured people, provide limited first aid, and perform other duties as necessary. C-SAR team members will be the vital ‘extra hands’ to emergency responders such as the fire department, paramedics and other agencies.

Where do I get more information? Keep checking the EH&S Emergency Management page for program developments. Look for the Caesar Anteater, the program mascot. http://www.ehs.uci.edu/emerg.html. Class size will be limited to 25-30 participants per session. Sessions will be offered regularly beginning in April.

For question(s) on this article, contact our Emergency Management Coordinator, Linda Bogue via email at lbogue@uci.edu or via phone at 949-824-7147.
Managing Your Hazardous Chemical Waste – Part I

Kirk Matin

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 949-824-4578 or visit www.ehs.uci.edu/programs/enviro.

**Labeling**

- Labels must be complete, legible and permanent.
- Labels must be placed on the hazardous waste container upon start of the accumulation.
- Chemical waste containers must be identified with the label shown here. These labels are available online at http://www.ehs.uci.edu/programs/enviro/

**Segregation**

- Hazardous waste must be segregated into categories to prevent incompatible mixtures. Visit http://www.ehs.uci.edu/programs/enviro/ for a comprehensive table to use when separating incompatible chemicals.

**Storage**

- Hazardous waste must be transferred to EH&S for disposal within 9 months of being generated.
- Hazardous waste that meets the quantity threshold of 55 gallons of hazardous waste, 1 quart of acutely hazardous waste, and/or 1 quart of extremely hazardous waste must be transferred to EH&S for disposal within 3 days of reaching these set volumes.
- Containers must be closed when not in use.
- Report damaged containers to EH&S. EH&S can provide assistance to transfer the contents of the damaged container to an appropriate container.
- Containers must be inspected weekly for signs of leaks, corrosion or deterioration.
- Containers must be placed in secondary containment which can adequately hold the entire volume of the materials contained.

Stay tuned for Part II of Managing Your Hazardous Chemical Waste…
Focus on back health...... New workshops available at EH&S!

Belinda Manalac

Back injury rates in the workplace have been continuously increasing over the years. Thousands of occupational injuries related to manual material handling tasks could have been prevented by simply using proper lifting, carrying and lowering techniques.

Manual material handling (MMH) is defined as the unaided lifting, carrying, and lowering of objects by hand, often combined with twisting and awkward postures contributing to musculoskeletal disorders. Due to the presence of ergonomic risk factors in manual material handling, it has become important to focus on applying ergonomic principles that particularly address back injury prevention.

Effects of MMH on health can be immediate or long term. Immediate effects are fatigue and accidental injuries. Accumulation of immediate effects results in long-term musculoskeletal injuries and disorders. Therefore, in preventing future injuries and disorders, it is important to examine an employee’s work for hazards and take into consideration the following risk factors before executing a MMH task.

Risk Factors:

**Load** – Be sure to size up your load before you lift to determine if you can handle it. Lifting/lowering over 40 pounds causes more frequent and more severe injuries. Asking someone to lend a hand can reduce the ergonomic risks.

**Range of lift** – The safest range is between knee and waist height.

**Load-to-body** – A load held far from the body is harder on the back than one held close to the body.

**Size/shape load** – A bulky object is harder to handle than a compact one, and can cause poor balance.

**Number and frequency of lifts** – Frequent, long-lasting tasks tire and strain the back and mind.

Bending and Twisting – Poor layout in the work area can force the worker to bend and twist too much while lifting/lowering.

Carrying distance or height – Mechanical aids such as dollies, carts, hoists and powered equipment (forklifts) should be used to help with handling a heavy workload.

**Other factors** –
Temperature extremes and humidity affect the back muscles and fatigue level and can worsen back injury.

Additional ergonomic information is available from EH&S. You may register for an Ergonomics Manual Material Handling training workshop at [http://www.ehs.uci.edu/train.html](http://www.ehs.uci.edu/train.html) Please send requests for ergonomic evaluations of your work area to safety@uci.edu.

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THE GREEN CORNER...

Recycle your used batteries!

EH&S has placed battery recycling bins in various locations throughout campus. To find the location nearest you, please visit the Universal Waste section on our website at [http://www.ehs.uci.edu/programs/enviro/](http://www.ehs.uci.edu/programs/enviro/)
No matter where you work at UC Irvine, reading a chemical product's label and Material Safety Data Sheet (MSDS) and then understanding and practicing what the information says is the simplest way to work safely with hazardous chemicals.

Container labels are content rich today. (Click here to see the manufacturer's label of a commonly found hazardous material.) It is very important to follow directions for properly using the chemical to receive the full benefits of the product, as well as avoid unsafe situations that can result from misusing a chemical product. With regard to specific safety information appearing on the container label, the most prominent and likely hazard associated with the chemical product will appear first.

**REMEMBER:** If you transfer a chemical out of its original container, you must affix a label identifying the chemical on the new container. This label informs others and reminds yourself about the products hazards. Visit our website at [http://www.ehs.uci.edu/programs/enviro/](http://www.ehs.uci.edu/programs/enviro/) and scroll down to Blank Labels to print out your own Hazardous Materials label.

Users of hazardous chemical products should also become familiar with the safety information found in the Material Safety Data Sheet. MSDS' provide specific safety information for chemicals and chemical products in the areas of health hazards, physical hazards, handling, storage, protective clothing, first aid measures and spill response. For those who enjoy even more scientific detail, MSDS' provide physical properties and toxicological data. Here at UC Irvine, we are very lucky in that our campus makes it possible for us to access MSDS' through the WWW at [www.ucmsds.com](http://www.ucmsds.com). Ten years ago, access to MSDS’ was a labor intensive activity so this is a true example of one of the ways the WWW has made it easier to work better and safer.

Whether you work in an art studio, facilities management, an office or a research laboratory, by taking the time to read chemical product labels and MSDS' and then following what you have read, you will avoid injury from chemicals. This is the simple rule of chemical safety.

For additional resources on chemical safety, contact Chris Younghans-Haug at 949-824-5730.