

LAB

NOTES

Safety Newsletter for Lab Workers

UCSD Environment, Health & Safety Office

April is California Earthquake Preparedness Month

Glance around your research facility and imagine what it would look like if a large earthquake shook UCSD right now—and it could. Geologists consider several of San Diego county's faults capable of producing at least a 6.5 earthquake.



There's a lot you can do now to prevent and minimize injury and damage when an earthquake occurs. UCLA, UCSB, UCSC, and UCI all have experience with earthquake damage. We know from their experience, and now from the University of Washington (magnitude 6.8 on February 28, 2001), **what worked** to minimize damage and **what didn't work**.

- **Shelf lips and cabinet door locking systems do work.** Where shelf lips were in place, containers of chemicals and lightweight equipment were prevented from rattling off shelves and landing on the floor. They vibrated right up to the edge, but stopped at the shelf lip. Bungie cords used as restraints across shelves did not work quite as well; in some cases, smaller items slipped under them. Equipment sitting unrestrained on shelves or in unlatched/unlocked cabinets by and large ended up on the floor (one slide that's been circulated shows a pile of microscopes that fell to the floor in a teaching lab).

- **Seismic anchoring of tall furniture does work.** Tall storage cabinets and bookcases that were not bolted to secure mounts generally tumbled over, their contents breaking, spilling, and mixing into chemical soup (what do you know about reactivities and incompatibles—imagine the possibilities, especially with flooding from broken water lines). The fallen cabinets frequently blocked exit paths.

- **Compressed gas cylinders which had been double-chained and bolted to a secure surface stayed in place.** Single chain restraints were not as

successful. **C-clamps did not work at all.** Following the 1994 Northridge quake (magnitude 6.9), UCLA responders reported that several doorways were blocked by fallen cylinders, especially those that had been stored behind doors. At the CSU-Northridge campus where three out of the four science buildings suffered major fires, over 50 cylinders exploded.

- **Fire walls and closed fire doors worked.** Rooms next door to areas that were completely consumed by flames did not burn where fire doors were shut and fire walls had not been compromised. An example of a "compromised fire wall" was seen where a display case had been installed in a wall extending through to the hall on the other side. Flames easily consumed the display case and escaped out into the hall through the hole in the fire wall where the display case had been.

continued on back...see Earthquake

Don't Trash That Battery!

<http://blink.ucsd.edu/go/battery>



All batteries are hazardous waste. Keep used batteries out of UCSD's trash by following proper disposal methods.

How you dispose of batteries at UCSD depends on:

- Where your facility is located
- Whether you have a Waste Generator Number (WGN) or not
- Size and type of battery

"How To" procedures appropriate for you and your location are available on Blink at <http://blink.ucsd.edu/go/battery>.

ChemCycle
UCSD's Chemical Reuse
& Recycling Program
<http://chem-tech.ucsd.edu/Reuse/>
It's free!





Basic Radiation Safety

<http://www-ehs.ucsd.edu/rad/radtrain.htm>

No registration required for Basic Radiation Seminars

Wed, April 24 ---- 9 - 11 a.m. ----- SIO Admin Bldg, 114

Wed, May 1 ----- 10 a.m. - 12 p.m. --- Price Ctr, Gallery B

Thurs, June 6 ---- 10 a.m. - 12 p.m. --- Price Ctr, Gallery B

At the Hillcrest Medical Center:

Thurs, June 13 --- 9 - 11 a.m. ----- CTF-A, Room 101

Topic Specific Radiation Seminars

<http://www-ehs.ucsd.edu/rad/radtrain.htm>

Register by e-mailing bleeks@ucsd.edu

P-32 Safety Seminar

Thurs, May 16 ---- 10 - 11 a.m. ----- Price Ctr, Gallery A

Liquid Scintillation Counting Methods

Thurs, June 20 ---- 10 - 11 a.m. ----- Price Ctr, Gallery A



Bloodborne Pathogens Training

<http://www-ehs.ucsd.edu/bio/bbptrain.htm>

Register by e-mailing ehsbio@ucsd.edu

Principles of Biosafety

Thurs, June 20 --- 12:30 - 1:30 p.m. --- Price Ctr, Gallery A

Viral Vectors

Thurs, May 16 --- 2 - 3 p.m. ----- Price Ctr, Gallery A

Thurs, June 20 --- 1:30 - 2:30 p.m. ---- Price Ctr, Gallery A

At the Hillcrest Medical Center:

Wed, June 19 ---- 1 - 2 p.m. ----- MTF, Room 450

Bloodborne Pathogens

Thurs, May 16 --- 3 - 4 p.m. ----- Price Ctr, Gallery A

Thurs, June 20 --- 2:30 - 3:30 p.m. ---- Price Ctr, Gallery A

At the Hillcrest Medical Center:

Wed, June 19 ---- 2 - 3 p.m. ----- MTF, Room 450

Earthquake...continued

So where do you begin? Much of earthquake preparedness is common sense and can be accomplished at little or no expense often by you and your coworkers.

- Store heavy items on lower shelves—less damage will be done should they fall. Devise some sort of restraining system to hold equipment in place when not in use. When placing items on an upper shelf, picture them falling off during a tremor. That image may help you decide where to store the heavy stuff.

- Are tall cabinets and shelves bolted to the wall? The taller and narrower they are, the more likely they are to tumble over. Wide-based storage (deeper shelves) is more stable.

- Check the area around your exits; any tall bookcases, storage cabinets, stacked items or equipment that could fall over and block your way out are high priority—have them bolted securely to the wall or moved.



Please Post or Circulate



Safety Training Programs

EH&S Safety Training Days
1st & 3rd week of every month.

See the schedule at

http://www-ehs.ucsd.edu/training/train_sched.htm

An extensive array of safety training classes are offered:

- ♦ **Injury & Illness Prevention Program (IIPP)**
- ♦ **Radiation, Biosafety, Chemical Safety**
- ♦ **Hazardous Waste Management**
- ♦ **Risk Management/Workers' Compensation**
- ♦ **How to Maintain a Healthy Back**
- ♦ **Office and Laboratory Ergonomics**
- ♦ **Skin Protection/Sun Sense**



Laboratory & Chemical Safety Seminars

<http://www-ehs.ucsd.edu/lab/labtrain.htm>

Register by e-mailing ehschem@ucsd.edu

Lab Safety for Professionals

Wed, May 1 ----- 2:30 - 4:30 p.m. ---- Price Ctr, Gallery B

Thurs, June 6 ---- 1 - 3 p.m. ----- Price Ctr, Gallery B

Assessing Chemical Hazards

Wed, May 1 ----- 1 - 2:30 p.m. ----- Price Ctr, Gallery B

Hazardous Waste Training

Thurs, May 16 ---- 1 - 2 p.m. ----- Price Ctr, Gallery A



The Unseen Costs of Risk Management

<http://enrollmentcentral.ucsd.edu/>

May 30, 1 - 4 p.m. Torrey Pines Ctr South, suite 265A

Learn how to manage costs related to work-related injuries, employment/general liability, auto accidents, thefts, flood, and fire damage. Register online via Enrollment Central at <http://enrollmentcentral.ucsd.edu/>.



Cell Culture Classes

<http://enrollmentcentral.ucsd.edu/>

Basic Cell Culture Workshop and **Primary Cell Growth & Differentiation Workshop** are taught in the CORE Cell Culture Facility, BSB. Browse the Staff Education & Development's Course Catalog under the "Laboratory" entry for current schedules. Register online via Enrollment Central at <http://enrollmentcentral.ucsd.edu/>.