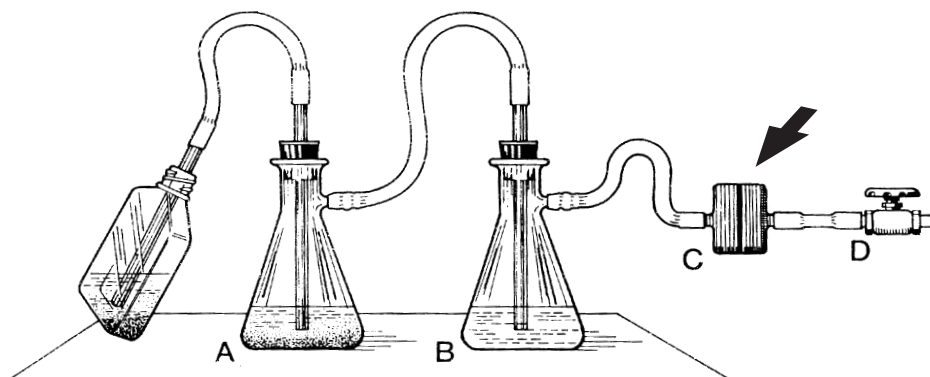


HOOD VACUUM LINE PROTECTION POLICY

At its meeting on November 11, 1998, the Biosafety Committee (BSC) approved the following policy statement:

In a biosafety cabinet, a HEPA filter must be placed in-line immediately before the vacuum valve to prevent contamination of the vacuum system with infectious agents in use in the cabinet. The filter should be replaced no less often than annually.

This policy was established to protect laboratory and Facilities Maintenance staff in the event it became necessary to service, replace or otherwise handle the vacuum valve or vacuum line supplying the cabinet following contamination of the valve or line with a Risk Group 2 or 3 agent being handled in the cabinet.



The HEPA filter must be placed in the vacuum line immediately before the valve. In most biosafety cabinets, this will be between the last aspirator flask and the valve. It should be replaced at least annually. The cost of these filters is minimal. Department Safety Advisors (DSAs) can provide an information sheet showing proper installation of the filter and suggesting two specific products designed for this purpose.

This information is also in the Biological Safety Update flyer (#bsu6) posted on the EH&S web site <http://www.ehs.ucsf.edu>.

When you have finished reading this newsletter, please pass it along to others in your lab or office.

ARE YOU PREPARED FOR A DISASTER?

What would your first reaction be if we had an earthquake of magnitude 7.0? Would you worry about your family? Your home? Your coworkers? The possibility of fire or chemical damage to your laboratory? What about all your research records and vital specimens; what would happen to them?

Where is this leading? Well, it may be time to update your department or group Emergency Action Plan! If your group has moved to a new location, or the people assigned to specific emergency roles have moved on, the plan should be modified to reflect these changes.

Beyond the obvious concern over injuries and fatalities, disasters can cause a disruption in your research program, or even a loss of data or experiment specimens. Thoughtfully addressing these possibilities before disaster strikes is what the Emergency Action Plan is all about!

Your Emergency Action Plan should identify emergency evacuation routes from your laboratories and offices. It's a good idea to have multiple routes identified, should your primary route be blocked. An Emergency Assembly Area should be identified for

your group. This site should be within reasonable walking distance, but sufficiently far from your building that it can be used in event of a fire or building collapse.

The Emergency Action Plan should also include lists of emergency supplies, including food, water, first aid materials, and tools, that your group would need in an emergency. Your planning should not stop at just making a list, but should include collecting everything on the list, storing it in a reasonably accessible location, and assigning someone responsibility for overseeing these supplies. Batteries will need to be replaced periodically, as will drinking water, and perhaps some food supplies.

It is wise to use the Emergency Action Plan to assign various department personnel specific duties, should a disaster occur. These duties might include turning off all electrical equipment, retrieving certain records, accounting for all personnel, or checking for hazardous materials spills.

There are two sections of the Emergency Action Plan that are very critical to continuing or resuming normal department operations. First, it is critical that you identify functions and services that must be in place for your operations to continue during the disaster period or to resume reasonably soon after the disaster. When developing this list, consider personnel and equipment required, whether backups are available, and alternate ways of doing the job.

Second, what department records, if lost, would make it difficult or impossible to continue normal operations? These will surely include research data. Does this data exist in more than one location? Does it exist both electronically and as hard copy? If it became necessary to rescue only a part of these records, which ones would be most important? Who would be responsible for rescuing or recovering these records?

Once you've developed your Emergency Action Plan, it's a good idea to run disaster drills. These can help train all your staff for their assigned tasks, and can also be used to identify any shortcomings in your plan.

Help in preparing your Emergency Action Plan can be obtained by calling Lynda Purves of the University of California Police Department (UCPD) @ 476-5507. Lynda's e-mail address is lpurves@police.ucsf.edu. The UCPD website (<http://www.police.ucsf.edu>) includes a section on emergency preparedness. From this sight, the standard template for the Emergency Action Plan can be downloaded. It can also be obtained by calling Lynda Purves.



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SPACE HEATER CONSIDERATIONS

The cold weather season is here once again. Along with the decrease in temperature comes the increase in number of space heaters and related fires in the work environment. Before bringing a space heater to work, the following needs to be considered:

- The only space heaters authorized by the Office of the State Fire Marshal for use at UCSF and UCSF Stanford Health Care facilities must meet the following criteria:
 1. Energy source must be electrical.
 2. Appliance labeled or accompanying documentation stating “authorized for use in commercial occupancies”.
- Heaters must be installed in an approved manner.
- Heaters must have no live parts exposed to contact.
- The branch-circuits in the building are capable of carrying the appliance current without overheating or drawing current from other appliances.
- All heaters, cords and plugs are UL rated.
- Heater is placed in a location which provides ample protection between the appliance and adjacent combustible material.
- Heaters are to be plugged directly into receptacle outlets (no adapters or extension cords).
- Cords are not frayed.
- Cords are grounded.
- All broken coverplates are replaced.
- Electrical cord trip hazards secured.

To ensure the building can supply adequate power for the appliance, Medical Center personnel should contact the Clinical Engineering Department; Campus Employees should contact Facilities Management Building Management. The Campus Fire Marshal or Department Safety Advisor should be contacted for placement location.

To provide a safe environment for staff, patients and visitors all other space heaters are to be removed. If you have any questions, you can contact Katie Shypertt, Campus Fire Marshal, at 476-0570.

MERCURY THERMOMETERS STILL BAD NEWS

Most mercury thermometers in the Medical Center have been replaced by thermistor or thermocouple devices. However, mercury thermometers are still used by many UCSF research laboratories. They can be found in water baths, incubators, ovens, reaction vessels, workbench drawers, even hiding behind shelf lips. Sometimes they're used intentionally with the mistaken notion that there is no substitute as suitable or accurate. At other times, their presence is so taken for granted that they're not even recognized as a laboratory hazard.

Mercury is a noncombustible liquid metal that freezes at minus 38° F, boils at 674° F and is highly toxic. The most common exposure route in the laboratory is absorption through the skin. However, mercury spilled in a hot location can lead to respiratory exposure because the vapor pressure of mercury rises rapidly with heating; its 225 times higher at 212° F than at 68° F. OSHA has set the permissible ceiling exposure level (which must not be exceeded during any part of the workday) at 10mg/cubic meter for mercury vapor. The exposure risk, while not especially high, cannot be ignored.

When a mercury thermometer breaks, the laboratory is suddenly and unexpectedly dealing with a hazardous material spill. Unless the lab staff is trained and equipped to clean up a mercury
(Continued on page 4, see Mercury)

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Protection policy*

*Are You Prepared
For A Disaster?*

*Space Heater
Considerations*

*Mercury
Thermometers
Still Bad News*

*A Few New Faces
At EH&S*

PLEASE HAVE ALL PERSONNEL IN YOUR LAB INITIAL HERE AS EVIDENCE OF CONTINUING EDUCATION AND KEEP THIS NEWSLETTER IN YOUR LOGBOOK.

(Mercury, continued)

spill, the proper course of action is to call 9-911 to summon the EH&S Emergency Responder.

And respond we do - an average of three times per month during 1998! We responded to twice as many calls from research labs as clinical units. Each call takes an hour or more to complete and exposes the Responder to the mercury hazard as well. We also pay a fee to recycle mercury. These costs are paid from the EH&S operating budget.

However, this is one laboratory hazard that can be eliminated. All you have to do is get rid of all your mercury thermometers. There are plenty of alternative thermometers ranging from simple alcohol-filled

to fast-responding bimetal to remote infrared-sensing to super-accurate thermocouple thermometers. Since virtually all high quality scientific thermometers meet NIST, ASTM or ANSI/SAMA specifications, instruments that meet or exceed the accuracy of mercury thermometers can be easily obtained.

So help EH&S and do yourself a favor at the same time. Round up all your old mercury thermometers and get rid of them. Simply dispose of them through EH&S as a hazardous chemical. Then replace them with modern, non-mercury models. You won't be sorry.



A FEW NEW FACES AT EH&S

The staff at EH&S is proud to introduce four new members to our team:

The Hazardous Materials Management Program welcomes three new Technicians in the Radiation Safety Group:

- Tarran Richardson
- Joel Barbosa
- Mike Tudisco

The Campus Program welcomes Department Safety Advisor James Wilborn.

Please be sure to offer a warm welcome as you encounter them throughout the day.