



Safety For New Lab Instructors

A Handbook for
Laboratory Lecturers &
Teaching Assistants

COLLEGE OF SCIENCE & ENGINEERING

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ABOUT THIS HANDBOOK

Prior to beginning work in the College of Science & Engineering (COSE), it is important to become familiar with safety, health, and hazardous waste policies and established work practices.

To this end, all part-time lecturers, teaching associates (TAs), and graduate teaching assistants (GTA's) will be given a safety orientation either through reading this handbook or by attending an orientation seminar. The intent of an orientation is to provide enough information so new people can work knowledgeably and safely. A safety orientation certificate must be turned into the stockroom or department office within **30 days** of starting work.

Instructions

Read this handbook to familiarize yourself with existing policies and procedures concerning safety, hazardous materials management, and emergencies.

- ◆ Fill out the "Certificate of Safety Orientation".
- ◆ Sign the "Acknowledgement of Safety Orientation".
- ◆ Complete the "Orientation Recall Exercise" on the back side.
- ◆ Return the completed forms to your department office or stockroom.
- ◆ Ask your supervisor or lab coordinator to clarify anything you are unsure about.

The safety orientation forms should be on one double-sided sheet on the back of this handbook.

Simply remove the last sheet(s) and submit the completed forms to your supervisor, dept office, or stockroom.

1. THE INJURY & ILLNESS PREVENTION PROGRAM

Cal-OSHA requires that all employers inform their employees of the provisions of the written IIPP. If you are interested in learning more, you can review the University IIPP (in a burgundy binder) and the full text of the regulation. The following section summarizes the COSE's written IIPP.

At a minimum, you should know that:

- ◆ the Injury and Illness Prevention Program exists;
- ◆ a copy is in both the department office and stockroom;
- ◆ it is an employer's written safety program, required by Cal-OSHA, that describes *training, inspections, assessing hazards, reporting hazards, investigating incidents, and recordkeeping practices.*

Authority and Responsibility for Safety

A key element of the Injury Illness Prevention Program is the clear assignment of authority and responsibility to an individual who must implement the safety program.



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The University president is ultimately accountable for implementing and maintaining an effective safety program on the SFSU campus. Within the College of Science and Engineering (COSE), the dean of the college has the responsibility and authority to make sure the IIPP is implemented. He has delegated the authority, but not the responsibility, to enforce the safety program to the Director of Operations and the COSE Health & Safety Specialist.

Academic departments, being semi-autonomous, are responsible for maintaining the established safety program as follows:

The person with both the authority and responsibility for implementing and enforcing the provisions of the IIPP within the department is the Chair/Director.

The person designated to facilitate IIPP compliance, maintain the master department chemical inventory and oversee hazardous waste compliance is the Stockroom Manager (Dept. Office for departments without stockrooms).

COSE Contacts

COSE Health & Safety Specialist	Linda Vadura	x8-6892	lvadura@sfsu.edu
COSE Dean's Office	-----	x8-1571	-----
Radiation Safety Officer	Linda Vadura	x8-6892	lvadura@sfsu.edu
Chemistry Stockroom	Chris Johansson	x8-2259	cjohanss@sfsu.edu
Biology Stockroom	Michael Fong	x8-1091	mfong@sfsu.edu
Physics & Astronomy Stockroom	Anthony Kelley	x8-1673	akelly@stars.sfsu.edu
Engineering Stockroom	Alex Barszap	X5-0956	barszap@sfsu.edu

Finding Written Safety and Health Documents

You can find copies of the written Injury & Illness Prevention Program (*October 2007*), Hazard Communication Program (*January 2008*) and other written health and safety programs in your department office or stockroom. Ask your lab coordinator or supervisor where to find written **Codes of Safe Work Practices** (Standard Operating Procedures) & **Hazard Assessments** that involve equipment, processes, and chemicals in YOUR laboratory.

Reporting Hazards and Malfunctions

Monday through Friday from 8 AM to 5 PM, contact the stockroom or department office to report utility outages such as power, distilled water, heat and ventilation.

After hours, if the power goes out or vital equipment stops working report the problem to the campus dispatcher at x8-7200.



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Report spills and safety hazards to the stockroom or EHOS at x8-1449. To report **large spills and serious hazards on evenings and weekends**, call Campus Police at 911.

Security Measures

The general policy is to work alone *only when it is absolutely necessary to do so*. It is always safer to have a work partner. Ask your lab coordinator or supervisor about your department's policy.

At night and on weekends, you may contact campus police at x8-7200 to let them know where you are working and how long you plan to be there. Report suspicious persons or activities promptly.

Assessing Work Hazards

Effective safety programs must have a means by which workplace hazards are reported and assessed. Cal-OSHA requires written Codes of Safe Work Practices, also known as standard operating procedures, for specific tasks as part of the written IIPP. Some general Codes have been written and are part of the IIPP in the department and safety coordinator's offices.

However, faculty and staff supervisors are responsible for performing hazard assessments and for writing work practices that address the hazards in their work areas. Review your written practices and the safe operation of all hazardous equipment and processes specific to your lab. You should have a general idea of what chemicals you will have and what equipment you will use.

Inspections

Inspections are an excellent way of making sure work areas are in compliance and safe. Your department conducts scheduled safety inspections periodically according to the following schedule so that by the end of each semester, all rooms are evaluated at least once. The dept safety coordinator and chair receive inspection reports each semester from the COSE Health & Safety Specialist.

Department	Frequency*	Department	Frequency*
Biology	Once per semester	Geoscience	Once per semester
Chemistry & Biochemistry	Once each semester	Mathematics	Once each semester
Computer Science	Once each semester	Physics & Astronomy	Once each semester
Engineering	Once each semester	EHOS	Once each year
Quarterly self-inspections of hazardous materials storage areas are conducted by faculty and staff.			

You should inspect your lab or work area periodically to make sure waste is being managed appropriately, safety goggles and other personal protective equipment (PPE) are being worn as required, established procedures are being followed, and work is being performed as instructed.

Dogs and other pets are not allowed in campus buildings.

The Campus Environment, Health, and Occupational Safety Office (EHOS) performs an annual safety audit of the safety program and all the COSE buildings.



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Communicating Safety Issues

TRAINING

New employees in the COSE must get a safety orientation within 30 days of starting work. Required topics covered in an orientation include a review of the IIPP, Hazard Communication overview, finding MSDSs, emergency procedures, and general safety.

Laboratory and shop employees get additional training in handling compressed gases, storing chemicals, chemical hygiene, and hazardous waste management. All safety orientations must be documented for each new person.

SAFETY MEETINGS

Safety meetings are a good way of communicating new safety-related and regulatory information. Each department conducts a safety meeting at least twice each academic year. Safety meetings may be held as an addendum to other staff or faculty meetings.

The following safety and health committees meet at least once each semester:

- ◆ Non-Ionizing Radiation Committee
- ◆ Radiation Safety Committee
- ◆ SFSU Campus Safety Committee

SIGNS AND POSTINGS

Other information such as how to find MSDSs, emergency procedures and contact numbers, warnings, chemical hazards, and instructions are often communicated with signs and postings. Check your lab to familiarize yourself with them and point them out to your students.



Safety for New Lab Instructors

2. EMERGENCY INFORMATION

If there is an emergency, who should you call?

Campus Police (DPS)	911 or x8-7200
Campus EHOS Office	x8-1449
COSE Health & Safety Specialist	x8-6892

Dept. Safety Coordinator _____

Evacuation Procedures

When the evacuation alarm sounds...

- ◆ Stay calm and leave the building through the nearest safe exit and wait there for instructions.
- ◆ Take the stairs, not the elevators.
- ◆ Assist persons with disabilities.
- ◆ Instruct wheelchair users on upper floors to wait by one of the outside stairwells.
- ◆ Have them wait until people return or rescue personnel evacuate them.
- ◆ Inform people monitoring doors of the existence and location of the wheelchair user so they can notify campus police.

Night and Weekend Campus Emergencies

Emergencies can include lengthy power outages, flooding, security and injuries.

Call campus police by dialing 911 from any campus phone.

- ◆ Plant Operations has personnel on-call to deal with operational emergencies. The campus police dispatcher will contact them.
- ◆ Campus police have emergency medical technicians (EMTs) on staff.
- ◆ The campus police dispatcher will contact paramedics and the fire department.
- ◆ Campus police will contact EHOS, Mike Blagoyevich, *Director of Operations* or Linda Vadura, *Health and Safety Specialist*, as necessary.

If you are in charge of your area and have the department's notification list,

- ◆ Call people on the department's notification list until you reach someone.
- ◆ Follow up with calls to people responsible for specific areas.
- ◆ Evaluate hazards prudently without risk to your own safety.



3. HAZARD EVALUATION

To be effective, a health and safety program must have processes in place to assess work-related hazards. Performing a hazard assessment is a commonly used method for evaluating the potential for injuries or illness of work tasks. A “Code of Safe Work Practice” also known as a standard operating procedure can then be written based on this assessment.

Below is an example of a hazard assessment of an administrative environment. The third column outlines the work practices to put in place to minimize the risk of injury or illness. These work practices are the basis for established standard operating procedures.

Task	Potential Hazards	Safe Work Practices <i>(that one could implement to minimize risks)</i>
Working at a computer or microscope station	Eye strain	<ul style="list-style-type: none"> ▪ Adjust lighting and position of monitor (or microscope). ▪ Attach a glare-reducing screen to the monitor. Consider special eye wear ▪ Change work practices to look away periodically or change tasks.
Working at a computer or microscope station	Repetitive motion injury	<ul style="list-style-type: none"> ▪ Break up repetitive tasks to allow recovery time. Stretch frequently. ▪ Adjust mouse, keyboard, and other equipment to allow neutral body position.
(1) Working at a computer or microscope station (2) Restocking, lifting, filing	Back & neck strain	<ul style="list-style-type: none"> ▪ Evaluate work stations and modify equipment to ensure that a neutral body posture is achieved & maintained. ▪ Rearrange work space to place frequently needed items close by so excessive stretching and bending is avoided. ▪ Get up and stretch frequently to increase blood flow and ease tight muscles. ▪ Bend at the knees before picking anything up, avoid bending at the waist or reaching forward while lifting
Walking to and from office, lab, or work station	Slips, trips, falls	<ul style="list-style-type: none"> ▪ Keep floors and doorways free from clutter and stretched out electric cords. ▪ Avoid standing on chairs, esp. ones with wheels. Use a step stool or ladder. ▪ Close file drawers promptly and don't open more than one drawer at a time.
Working in an area with storage	Being struck by falling objects Seismic hazards	<ul style="list-style-type: none"> ▪ Avoid storing heavy items overhead ▪ Provide bracing devices on shelves ▪ Secure tall bookcases and other heavy & tall furniture to walls
Opening mail packages	Cuts from sharp items	<ul style="list-style-type: none"> ▪ Cut in a direction away from the body ▪ Don't place items to be cut on the thigh or other body part ▪ Keep fingers away from blade on paper cutters



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Electrical Hazards

- ◆ Arrange to have permanent installations properly wired with a legal outlet. *Extension cords are only a temporary solution to powering new equipment.*
- ◆ Ensure high wattage appliances don't overload circuits
- ◆ Avoid multiple outlets (like splitters) that don't have ground fault circuit interrupters (GFCIs)
- ◆ Replace frayed or damaged cords and plugs
- ◆ Protect electric cords from damage by not wedging them against furniture, pinching them in doorways, or unprotected in walkways
- ◆ Use only heavy-duty extension cords for computers, analytical instruments, and other high wattage equipment
- ◆ Don't modify or "jury rig" electrical equipment

Slip, Trip, and Fall Hazards

- ◆ Don't stretch extension cords across aisles or doorways. If it is temporarily necessary to do so, make sure the cord is securely taped down or under a rubber or plastic protector.
- ◆ Clean up spilled liquids promptly.
- ◆ Barricade openings or damaged areas in the floor.
- ◆ Pick up or move food or other clutter on stairs and in hallways so no one will slip or fall

Know the four types of fires:

Type A- Wood, paper, cloth

Type B -Flammable as/liquids

Type C -Electrical Fires

Type D -Combustible metals

Fire Hazards

- ◆ For a fire to burn, it must have three things: oxygen, fuel, and heat. Remove any one of these components, and the fire will burn itself out.
- ◆ Small (incipient) fires can be contained and extinguished before they can cause damage to persons or property if the right extinguisher is used. Fire extinguishers have picture codes showing the types of fires they can be used on.
- ◆ To put out a fire, point the fire extinguisher nozzle at the base of the fire to smother the fuel (remove the oxygen or heat component)
- ◆ Most of the fire extinguishers are of the ABC dry chemical type. Although dry chemical extinguishers are effective on electrical fires, some rooms, such as computer rooms, have halon or CO₂-type extinguishers to minimize damage to electrical equipment.
- ◆ Fire extinguishers are usually mounted by exits. If one is missing or damaged, contact the stockroom or department office right away.
- ◆ Take fire extinguishers with broken seals out of service.
- ◆ If a fire is too big or out of control, pull the lever on the fire pull-station and evacuate.



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Inform your students about special hazards they could encounter, such as high voltages, radioactive materials, extremely toxic or carcinogenic chemicals, and highly flammable or oxidizing materials.

BIOLOGICAL HAZARDS

Review **biohazard and/or medical waste** use, storage & disposal policies that affect your lab so such materials are properly handled. All biohazardous waste must be autoclaved in a sealed bag with indicator prior to disposal. Animal waste is kept frozen until ready for disposal. Sharps and some medical waste must be taken to the Biology Stockroom for processing and disposal.

COMPRESSED GAS CYLINDERS

Review safe methods for using, storing & transporting **compressed gas cylinders**. Safe practices focus on protecting the valve. Leaks can cause toxic, flammable, oxidizing, or asphyxiating gases to fill small work spaces. Valves that snap off will cause a sudden release of pressure causing the cylinder to become a missile, easily going through walls. Cylinders must be secured with *two* straps or chains.

RADIATION-IONIZING & NON-IONIZING

Initial **laser and radiation safety training** are conducted by the Laser Safety Officer, x8-6892 and Radiation Safety Officer x8-6892.

LASER POINTERS (FROM LBNL LASER TRAINING MANUAL)

Background

Originally used as tools by educators in the classroom and by business people at meetings, laser pointers are now cheap and widely available to the general public. Currently, there are no federal restrictions to purchasing laser pointers but FDA has issued a warning urging such pointers to be used only as intended by adults.

A laser pointer contains a small diode laser that emits an intense beam of light. Most laser pointers contain low to moderate powered lasers that do not pose a serious risk of eye injury unless intentionally misused. However, some of the newer imported laser pointers, especially those with green beams, present a significantly increased risk of eye injury.

Hazards

Direct viewing of the laser beam may cause temporary flash blindness (*temporary vision impairment after viewing a bright light*), headaches, afterimages (*perception of spots in field of vision*) or glare (*reduction or loss of visibility in field of vision*). Besides the risk of injury from the beam, loss of concentration or retaliation by angry people may promote other hazards.

Laser Pointer Safety Tips

- Never look directly into the laser beam
- Never point a laser beam at a person
- Don't aim the laser at a highly reflective surface
- Don't allow children to use laser point unless under adult supervision
- Only use laser pointers meeting the following criteria
 - Classified as Class 2 or 3a, no higher
 - Power output less than 5 mW
 - Wavelength between 630 nm and 680 nm



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4. FIELD TRIP POLICY

1. Only the faculty member(s) in charge and individuals enrolled in a course may participate in the field trips for that course. However, the faculty member in charge of the field trip may make an exception (with prior approval) for the following individuals:
 - Visiting faculty
 - Student assistants, teaching assistants, or lab technicians
 - Guests invited by participants
(The university is not responsible for these invitees and they join in at their own risk.)
2. All participants must complete a Field Trip Registration form with medical and emergency information and give it to the trip leader prior to leaving for the field trip.
3. All participants must conduct themselves in a professional and civil manner. Field trip participants are expected to follow instructions, not disrupt the activities of the field trip, not to harass others or engage in disorderly conduct and avoid putting themselves or others in danger by their behavior.
4. Alcoholic beverages or other intoxicating drugs may not be consumed at any time while a field trip is convened. This policy applies to time in transit to and from field trip locations.
5. All accidents and injuries must be reported to the trip leader as soon as possible.
6. The University is not responsible for field trip participants who choose to drive their personal vehicles or who make their own personal travel arrangements to and from the field trip site and/or activity.
7. Students who violate these rules may be expelled from the field trip. Upon review of the circumstances, the University reserves the right to take additional disciplinary action.
8. For additional information, contact your department office.



5. THE HAZARD COMMUNICATION STANDARD

If you are not already familiar with it, it would be a good idea to obtain a copy of the COSE Hazard Communication Program from your department safety coordinator. Also known as the “Employee Right-To-Know” act, OSHA requires all employers to provide chemical information to employees as follows:

- ◆ Establish a written program
- ◆ Compile an inventory of all hazardous chemicals used in the workplace
- ◆ Provide a Material Safety Data Sheet (MSDS) for every chemical on the inventory
- ◆ Label all containers with chemical name and significant health or physical hazards
- ◆ Train employees in the safe use of the chemical they work with and in the required protective measures
- ◆ Establish a procedure for communicating hazards during non-routine tasks and when contractors work on-site

What is NOT covered by Hazard Communication Standard.

The standard doesn't cover foods, beverages, cosmetics, or “articles”. An article is a solid object like a steel rod.

However if the steel rod will be machined or welded – thus generating fumes – then it would be covered under the standard and an MSDS would be required.

Material Safety Data Sheets (MSDS)

The manufacturer, importer or distributor is responsible for evaluating the hazards and writing an MSDS. The University relies on the initial hazard evaluation performed by the manufacturer, importer, or distributor of the product.

In this lab/office/shop, I can obtain an MSDS in the following fashion:

Department Stockroom

On-line using the computer(s) in room _____

Practice finding an MSDS for

- ◆ Ethyl alcohol
- ◆ Windex
- ◆ Acetic acid

www.hazard.com

www.ilpi.com/msds/index.html

Biology Stockroom Web Page

(go to www.sfsu.edu, click on departments, biology and follow prompts)

If you don't know, contact your lab coordinator or stockroom manager for assistance.



6. MANAGING HAZARDOUS WASTE

1. Choose a hazardous waste collection area in or near the laboratory or shop.
2. **Post a sign designating this area as the “Satellite Accumulation Area” (SAA) for your hazardous waste.**
3. Know that an SSA is a discrete portion of the laboratory where special EPA regulations apply that differ from those governing regular chemical storage. Government inspectors look at these areas very closely for infractions.
4. Review the following procedure with everyone working in your lab/shop.
 - ◆ Obtain a waste disposal bottle from the stockroom
 - ◆ Affix a COMPLETED hazardous waste ID tag to the bottle
 - ◆ **Separate wastes** according to chemical compatibility and waste type. *Biohazardous waste, radioactive waste, broken glass, solid waste, and chemical hazardous waste must be stored in separate secondary containers or areas.*
 - ◆ Keep waste containers closed when not adding waste. *Do not leave funnel in the container when finished.*
 - ◆ Wipe off spilled materials on the outside of containers to minimize inadvertent exposure to the material.
 - ◆ When the waste container is full OR it has been **60 days** since the **first drop** of waste was added, take it to the stockroom for disposal.
5. Do not mix wastes unless directed to do so by your supervisor and do not pour hazardous wastes in the sink.
6. Make it clear who is responsible for labeling and tagging waste bottles.
7. The generator of the waste is responsible for identifying the waste, completing the waste ID tag, and for making sure waste is stored properly at all times.
8. The stockroom is NOT responsible for identifying wastes or filling out the waste ID tag. **Important Note:** *Lab costs for identifying unknowns can cost thousands of dollars!*

This is a designated hazardous waste satellite accumulation area



7. CHEMICAL HYGIENE PLAN

This section outlines the requirements of a Chemical Hygiene Plan (CHP) mandated by OSHA’s Laboratory Standard. This section is not CHP itself.

The Chemical Hygiene Officer for SFSU is Dr. Robert Shearer, *Director of Environmental, Health, and Occupational Safety*. For detailed information please contact your teaching lab coordinator.

Health Hazards

A CHP must have a description of the methods(s) used to detect the presence or release of a hazardous chemical. In other words, how would someone know if there is an unplanned release into the air or ground?

Below is an example of how health hazards of chemicals used in the work area can be communicated.

Route of Exposure	Target Organs	Chemical(s) Used
Skin, mucous membranes	Corrosive to skin and eyes	hydrochloric acid
Inhalation, ingestion	Defatting of skin Toxic to liver and CNS	toluene

See Figure 1 entitled *Chemical Storage Guidelines*

Personal Protective Equipment (PPE) Assessment

All employers must perform a hazard evaluation that specifies appropriate PPE, according to the OSHA Personal Protective Equipment Standard.

Task	Glove Type	Eyewear ^(specify)	Clothing
Mixing reagents (SAMPLE ENTRY)	Nitrile <i>(depends on the chemical being used)</i>	Splash goggles	Lab coat and apron

Respirators

Before allowing anyone to wear a respirator (including dust masks), contact the COSE Health and Safety Specialist at x8-6892 for an initial hazard evaluation. There is an OSHA Respirator Standard with stringent requirements to follow. All respirator use must have prior approval from EHOS, x8-1449.

Engineering Controls

The CHP must include the types of engineering controls available for protecting the health of employees and how they are used. For example, you could describe how engineering controls are used by listing the tasks that must be performed in a fume hood.

Look for your laboratory-specific CHP in a blue 3-ring binder or ask your lab coordinator.



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Tasks Requiring Prior Approval

The laboratory manager must specify the tasks, if any, requiring prior approval due to the toxicity, volatility, carcinogenicity, radioactivity, biological hazard, or other significant hazard of the chemical(s) used.

Medical Surveillance

If you work regularly with one of the regulated materials, such as lasers or formaldehyde, talk with your supervisor about participating in the in the medical surveillance program.

A **carcinogen** causes development of cancerous growths in living tissue.

A **mutagen** induces mutations in DNA and living cells.

A **teratogen** causes growth abnormalities in embryos and genetic modifications in cells.

Hazardous Materials

Store chemicals from incompatible hazard classes separately using space, different cabinets or separate secondary containment. General rules for storing chemicals safely are as follows:

- ◆ Avoid storing chemicals on the floor – even temporarily.
- ◆ Don't store chemicals above eye level.
- ◆ Store acids separately from bases and organic solvents.
- ◆ Store nitric acid with the other acids but keep it in a separate secondary container. Keep it away from acetic acid.
- ◆ Keep strong oxidizers and open flames away from flammable solvents.
- ◆ Make sure compressed gas cylinders are securely attached to a countertop or wall bracket with a chain.

Fume Hoods

- ◆ Work as far under the hood as is practical but be at least 6 inches inside the hood.
- ◆ Use the fume hood sash as a faceshield. Avoid working with the hood sash wide open.
- ◆ Close the sash when you are not using the hood.
- ◆ Avoid using an active fume hood as a storage area for chemicals and other materials because it causes dead air space and impedes the flow of air away from the user.
- ◆ In case of a runaway reaction or fire in a hood, close the sash and allow the hood to continue operating until the event is under control.
- ◆ Report malfunctioning fume hoods to your stockroom manager right away and place a sign indicating it is out of service to prevent others from using it.

Eye Washes and Emergency Showers

- ◆ Keep the area in front of the eye wash and emergency shower clear. Don't allow items to be stored underneath or in front of them.
- ◆ Make sure you flush the affected area thoroughly for at least 15 minutes BEFORE taking the student to the Student Health Center.
- ◆ Flush the eye wash frequently so you know it is ready to be used. If there is no built-in drain, place a tray at the end of the pipe to collect the water.



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8. INCIDENTS AND INJURIES

Employees injured on the job will have their (authorized) associated medical expenses covered. Injured students must have their own insurance cover their medical expenses.

Potential Life-Threatening Situations

If someone has fainted or seriously injured themselves, or you are not sure if it is an emergency or not, follow this procedure:

- ◆ Evaluate the circumstances and isolate the area, if necessary.
- ◆ Stabilize the person and ask someone to call 911 right away.
- ◆ **Avoid skin or eye contact with blood or vomit.** Report such contact to EHOS.
- ◆ Notify EHOS (x8-1449) and Linda Vadura (x8-6892) of the incident.
- ◆ Assist campus police in completing the incident report.

Off-Site Medical Services

St. Francis Memorial Hospital
Franciscan Treatment Room
1150 Bush Street
415-353-6305

Injuries Requiring Medical Attention

- ◆ Take the injured person to the *Student Health Center* for a medical evaluation and/or treatment. *After hours, medical attention must be found off-site.*
- ◆ Complete an **Initial Incident Report** (from stockroom or department office) describing the accident or other incident in detail.
- ◆ Take the completed report to your department office so they can forward it to campus *EHOS*. For more information, contact their office at x8-1449.
- ◆ Evaluate the room arrangement, equipment, supervision and training and make the necessary changes to prevent similar injuries.

ADDITIONAL INFORMATION

- ◆ Dialing 911 or 9-911 from campus telephones connects you with the campus police dispatcher who will then contact off-campus paramedics.
- ◆ Campus police have emergency medical technicians (EMTs) on their staff to assist people in distress until the paramedics arrive.
- ◆ The **Student Health Center** is open Mon-Thu 8:30 AM to 5:45 PM and Friday from 8:45 AM to 4:45 PM. *No weekend or evening hours.* The advice nurse can be reached at x8-2754
- ◆ Off-site medical services are provided by **St. Francis Memorial Hospital**. Go to the **Franciscan Treatment Room** on 1150 Bush Street in San Francisco. **Telephone: 415-353-6305.**



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1600 HOLLOWAY AVENUE • SAN FRANCISCO, CALIFORNIA 94132-4163 • 415-338-1571

INITIAL INCIDENT REPORT

PURPOSE: This report can be used to notify the University of an incident and should provide the University with the information required to eliminate or improve the conditions and practices that resulted in the injury, damage, near miss, fire or spill.

INSTRUCTIONS: Complete this form as soon as possible after an incident or near miss and forward to Linda Vadura, Health & Safety Specialist in the COSE Dean's office by FAX at (415)338-6136 or in person at TH323 & call x8-6892 or EHOS at 8-1449.

- Injury
- Fainting
- Near Miss
- Fire
- Chemical Spill
- Other _____

INCIDENT DESCRIPTION (PLEASE PRINT)

Location: Building: _____ Room/Area: _____

Date: ____ / ____ / _____ Time: _____ AM or PM

Was anything spilled or damaged? NO Yes Was the Supervisor/PI notified? NO Yes
(If so, what was it and how much or to what extent?)

Was anyone injured? NO Yes Was anyone sick or dizzy? NO Yes
If so, who? Name(s) _____

LAST FIRST

Male Female SFSU Student SFSU Faculty SFSU Staff Visitor

Class/Dept/Local Address: _____

Were others involved? _____

Briefly describe what happened:

Answer questions such as "What was the person or equipment doing when it occurred?" "What spilled or injured victim?"

Who was there?(witnesses) _____

If there was an injury... (Please be specific)

What directly injured the person? (*book, chemical, stairs, glassware, steam, animal*) _____

What kind of injury? (*burn, cut, chemical contact*) What part of the body? _____

Where did the person go for treatment? OR Was it first aid (*band aid*) only? _____

Was an eye wash, shower, fire extinguisher, or spill kit used? _____

ASSESSMENT

How do you think this incident could be prevented? (Please do not write "by being more careful" or "the place was unsafe" or "I don't know".) Please, write on the back of this sheet if you run out of room.

Print Name of Person filling out this form: _____ Signature _____



9. CALIFORNIA'S WORKERS' COMPENSATION INSURANCE BENEFITS

(Excerpted from the following documents:

"If you are hurt on the job" brochure from office of risk management and "notice to employees" poster)

MEDICAL CARE

When a job injury occurs, first aid and medical treatment are provided immediately, as required by the nature of the injury, at no cost to you. During the first 30 days following the injury, you will be seen by a doctor designated by the Office of Risk Management.

If you still need care 30 days after reporting the injury, you may be treated by a physician of your own choice. If you prefer, you may pre-designate your personal medical provider in writing to Human Resources.

DEATH BENEFITS

Should a work injury cause death, a benefit will be paid to your dependents.

DISABILITY INCOME

If hospitalized, or unable to work for more than three days, you will receive income equal to two-thirds of your average weekly pay, up to a legal maximum per week. If the injury results in permanent disability, decreasing your ability to work, additional payments will be provided.

VOCATIONAL REHABILITATION

If the injury or illness prevents you from returning to your same job, you may be eligible for vocational rehabilitation and retraining.

- ◆ When seeing a medical provider following a work injury
- ◆ Tell the doctor or healthcare provider that you are a SFSU employee and that you were hurt on the job
- ◆ Get a Workers' Compensation Claim form (SCIF 3301) from your supervisor, Office of Risk Management or Student Health Services.
- ◆ Complete and return the Workers' Compensation Claim form to your supervisor or send the claim form directly to the Office of Risk Management.

Carrier: Ward North America P.O. Box 271808 Concord, CA 94527 **800-292-1808**

OFF-DUTY RECREATIONAL, SOCIAL, OR ATHLETIC ACTIVITY

Your employer or its insurance carrier may not be liable for the payment of workers' compensation benefits for an injury arising out of voluntary participation in off-duty recreational, social, or athletic activity not a part of the employee's work-related duties.

Warning: Worker's compensation fraud laws make it a felony for anyone to file a false or fraudulent statement or to submit a false report or any other document for the purpose of obtaining workers' compensation benefits. Anyone caught performing these illegal acts will be prosecuted. If convicted, the penalty is up to 5 years in prison and/or up to a \$50,000 fine.



10. EARTHQUAKES

San Francisco is in a seismically active area and it is important to avoid panic when an earthquake occurs.

Before an earthquake hits

- ◆ Become familiar with exit routes and location of emergency equipment.
- ◆ Reorganize storage so heavy items are not stored overhead.
- ◆ Secure shelving units greater than 5 feet – especially if they are next to an exit or behind a desk. If they fall over, injury or blocked exits could hinder your ability to evacuate.
- ◆ Chemicals should be secured behind closed cabinet doors or by shelf lips or guard wire or rails.

During an earthquake

- ◆ Keep calm and look for cover. Stay away from windows and glass doors because they may shatter.
- ◆ Do not use the elevators
- ◆ Do not exit the building until the shaking stops
- ◆ After the shaking stops, think of a way out and check for potential hazards.
- ◆ When safe, evacuate to an open area and take your personal belongings with you. You may not be able to re-enter later.
- ◆ Use the telephone only in an emergency to call 911 or 8-7200.
- ◆ Expect aftershocks

source: SFSU DPS Earthquake Emergency Information Bulletin)

After the shaking stops

- ◆ Do not return to an evacuated building unless it is cleared by police.
- ◆ Do not enter the parking structure until cleared by officials.
- ◆ Do not use the telephone unless it a real emergency.
- ◆ Avoid beaches and waterfront areas where seismic waves (tsunamis) could strike.
- ◆ Listen to the radio, if possible, for updates.

In a widespread emergency, the University Disaster Plan will take effect
Cox Stadium is the designated emergency information and supply center. Go there
in case you can't leave campus and need food, information or medical attention.

CERTIFICATE OF SAFETY ORIENTATION



FOR NEW LECTURERS AND TEACHING ASSISTANTS WORKING WITH HAZARDOUS MATERIALS

Your official starting date:

How did you receive your initial safety orientation?

- Reading the handbook:
Safety for New Lab Instructors: *A handbook for lecturers and teaching assistants*
- Attending a training seminar (you may check off both if both apply)

Please print

Trainer's name: _____

Your First name:

Last Name

Department

What is your position at SFSU?

- Lecturer
 Teaching Associate
 Graduate Teaching Assistant
 Volunteer Employee

What is the name of the person you report to? His or her position?

- Teaching Lab Coordinator
 Staff Supervisor
 Faculty Supervisor

Safety Orientation Topics

- Health and safety contacts and safety program organization
- Injury & Illness Prevention Program at COSE
- Emergencies, Power Outages and Evacuation Procedures
- General Safety Principles: *includes electrical, slip/trip/fall, & seismic hazards*
- General Office Safety
- Fire Extinguisher Use & Types of fires
- Hazard Communication Program and Material Safety Data Sheets
- Chemical Storage and Hazard Classes
- Hazardous Waste Storage and Disposal Practices
- Eye Washes, Emergency Showers and Fume Hoods
- Location and overview of Chemical Hygiene Plan *[For laboratory workers only]*

Additional topics (if any): _____

ACKNOWLEDGMENT OF SAFETY ORIENTATION

I have read the handbook entitled: **Safety for New Lab Instructors, *A handbook for lecturers and teaching assistants*** and/or I attended a safety orientation with my supervisor or designated trainer. I understand the information presented including who to contact in an emergency, where to find material safety data sheets and other safety information, what to do during a building evacuation and when to use fire extinguishers. I have had an opportunity to ask my supervisor questions concerning health and safety topics affecting my work area.

Your signature here  _____ Date: _____

Orientation Recall Exercise

Print Name: _____

Please circle your answers to the questions below.

1. **TRUE FALSE** In an emergency, I should call 911 from a campus phone or 415.338.7200 from my cell phone.
2. **TRUE FALSE** I can find copies of written documents such as the Injury & Illness Prevention Program and Hazard Communication Program in the stockroom or department office.
3. **TRUE FALSE** To prevent eye strain, it is good practice to look away periodically from your computer monitor or microscope so your eyes can rest.
4. **TRUE FALSE** When extension cords must temporarily be used, you should tape or otherwise secure them across doorways or walkways to both protect them and prevent a tripping hazard.
5. **TRUE FALSE** An **IIPP** is
 - (a) an Irksome Intelligence Prevention Policy
 - (b) an employer's written health and safety program that specifies the person(s) with the responsibility and authority to implement the safety program
 - (c) a program describing safety training, assessing work hazards, investigating accidents, & recordkeeping
 - (d) (b) and (c) only
6. **TRUE FALSE** When a room has a fire extinguisher, it is usually mounted near the exit door.
7. **TRUE FALSE** For type C electrical fires, an extinguisher containing dry chemical, halon or CO2 must NEVER be used to put them out. Water is a much better extinguishing agent.
8. **TRUE FALSE** When the fire alarm sounds, evacuate immediately and stay outside until told to return – even if the alarm stops.
9. **TRUE FALSE** Which of the following pose seismic hazards? (in the event of an earthquake)
 - (a) unsecured bookshelves > 5 ft
 - (b) overhead storage of heavy items
 - (c) chemicals stored in shelves with no lip or other restraint
 - (d) all of the above
10. **TRUE FALSE** All containers must have a legible label identifying what is inside, even distilled water and soap.
11. **TRUE FALSE** Material Safety Data Sheets (MSDS) convey information about the hazards and physical characteristics of chemicals and products like toner, detergents and solvents.
12. **TRUE FALSE** My department safety coordinator is the department stockroom manager (except Math/CompSci).
13. **TRUE FALSE** Compressed gas cylinders may be stored on a transport cart or left standing in a quiet corner of the room as long as the cylinder cap is left off.
14. **TRUE FALSE** Hazardous waste may be stored in a satellite accumulation area (SAA) for up to 60 days.
15. **TRUE FALSE** When using a fume hood, the sash should be as high as possible both to allow enough air to flow into the hood and to see the work being done more clearly.

Return this completed safety orientation form to your department office or stockroom no later than 30 days after starting work.