Injury and Illness Prevention Program (IIPP) Training

Including:
Regulatory Oversight

- Broad perspective
- For example: Regulatory oversight increases from office to laboratory areas
- In general:
  - Higher risk job tasks = More regulatory oversight
Regulatory Agencies

- Federal, State, and Local Agencies
- State agencies must have standards at least as stringent as Federal agencies
  - For example in California we have Cal/OSHA in addition to Federal OSHA
IIPP Requirement Overview

- IIPP is required by the California Code of Regulations Title 8, Section 3203 of the General Industry Safety Orders
  - Written document is required and available on the EH&S web site

http://bfa.sdsu.edu/ehs/IIPP/iippindex.htm
IIPP Required Components Summary

All of this information is available on EH&S web site

- Responsibilities
- Compliance
- Communication
- Evaluation of workplace hazards
- Injury investigation/corrective actions
- Training
- Recordkeeping
Communication

- **General safety training, for example:**
  - Fire Safety, California Fire Code
  - Emergency Preparedness
- **Job specific training at department level**
  - Departmental meetings
- **New Employee Orientation**
- University Police email
Training Requirement

- Employee training must be provided and documented:
  - Before employees handle hazardous substances, equipment, or conduct new procedures
  - When new hazards are identified
  - When new tasks present a hazard
  - As needed
  - When required annually
Training

- Safety Coordinators informed of training opportunities
- Safety Coordinators are asked to share information with their department with a focus and emphasis on department specific topics
  - Everyone should be aware of emergency procedures
- Faculty communicate with students
- IIPP training offered for all Faculty and Staff
Hazard Identification and Correction

- **Scheduled workplace inspections by Safety Coordinators or designees, technicians, EHS Compliance Specialists**
  - Workplace surveys using a Safety Survey Checklist
    - Office, Lab, Shop
  - Frequency based on hazards
    - Office areas every 1-2 years

- **Unscheduled workplace inspections**
  - Whenever new hazards are introduced into the department
  - As part of injury and illness investigation
  - Reports by faculty, staff, and students investigated by EH&S
  - State Fire Marshal inspections
Hazard Identification and Correction

- **Corrective actions**
  - Inspection findings are sent to Department Chairs and EH&S
  - Work orders and account numbers must be submitted by the department in a timely manner for corrective action

- **Ergonomics**
  - Goal is to adjust workstation before a repetitive motion injury occurs
Injury Reporting

- **All injuries must be reported to the supervisor immediately**
  - Supervisor must receive specific details about the occurrence
  - Injured employees will be referred by Workers’ Compensation Department to a facility for treatment
    - Supervisor completes a Supervisor’s Report of Work Related Injury/Illness Form and provides employee with a Workers’ Compensation Claim Form if treatment is required
    - Both forms must be sent by the supervisor to the Workers’ Compensation Manager
  - Please see:
    - http://hr.sdsu.edu/pdf/Work%20Comp/WCFlowChart.pdf

These procedures apply to all campus employees
Hazard Communication

- **HAZARDOUS SUBSTANCE**
  - Includes any substance which presents a physical or health hazard

- **HAZARD COMMUNICATION**
  - Labeling
  - Safety Data Sheets (SDS) and Inventories
  - Training
  - All employees have the Right To Know about the hazardous substances used in their work area or those they may be potentially exposed to
Hazard Communication

**SAFETY DATA SHEET**

An SDS is provided by the manufacturer of a material and is like an instruction book for the product. A copy that came with the material should be available on site.

- 3E Corporation provides Safety Data Sheets via FAX on Demand System in the event of an emergency

- Call 1-800-451-8346 or (760) 602-8703 with the product name, manufacturer's name, and your fax number

- Report emergencies to University Police by dialing “911” or (619) 594-1991
Hazardous Waste

- Containers must be labeled with a completed hazardous waste label
- Hazardous waste must be picked up and disposed of by a licensed waste hauler
- Do not mix hazardous waste
- Do not store over 9 months
Universal Waste
Batteries

- Alkaline
- NiCad
- Lithium
- Button Cell
- Sealed Lead Acid
Aerosol Cans

All Types of Aerosols- Full, Partially Full and Empty
Mercury Switches/Devices

- Tilt Sensors
  - Doors
  - Lids
- Temperature Switches
- Thermometers
- Thermostat Probes
Collection of Mercury Devices

- Do not try to dismantle
  - Store and Label as Universal Waste

- Broken Switches/Devices
  - Collect any spilled Mercury and Store in a plastic container
Fluorescent Light Tubes

- Fluorescent tubes
  - All (California)
- High intensity discharge (HID)
  - Sodium vapor
  - Metal halide
  - Some automobile
  - Floodlights
Lamp Collection

- Must be in a rigid container to protect from breaking
- Containers must be “Closed” while in storage
- Containers need to be properly labeled
Bulbs Were Not Protected!
Broken Lamps

- Treat as Universal Waste not trash
- Put in a sealed, rigid container
  - Label container “broken lamps” with date when container is first used
General Requirements for Managing Universal Waste

- Storage
- Labeling
- Time Limits
Storage of Universal Waste

- Storage containers for universal waste need to:
  - Prevent leakage
  - Prevent damage
  - Be able to close
Labeling

All universal waste must include the following:

- A description of the waste: Waste (or Used) Batteries, Waste (or Used) Lamps…
- For E-Waste: Universal Waste: Electronic Devices
- The “Accumulation Start Date” with the complete date to include the month, the day and the year
Sample Label

UNIVERSAL WASTE

Used Lamps

Accumulation start date: July 10, 2007
Time limits

- “Universal Waste” can not be accumulated in any area or department for longer than 1 year.
- “Universal Waste” needs to be removed from an area or department once its storage container is full.
Ergonomics

• The study of the relationship between people, the work they perform, and their physical work environment
Lifting and Carrying Ergonomics

- **Lifting Techniques**
  - Evaluate a load before attempting to lift it
  - Stand directly facing the object, get as close to the object as possible, bend your knees, keep back straight, and lift with legs
  - Always ask for assistance with heavy or awkward loads
  - Make sure your path is clear and you can see around the object
  - Use a dolly or cart whenever possible
Computer Ergonomics

- Basic recommendations
- Top 1/3 of monitor screen should be at eye level
- Monitor should be 18-24 inches in front of employee
- Elbows and knees should be at approximately 90 degree or slightly greater angles
- Wrists should be maintained in a neutral position
- Keyboard and mouse should be next to each other on the same level surface
- All frequently accessed items should be in the neutral reach zone and accessible to minimize reaching and stretching
- Taking micro breaks every 30 minutes is recommended
Computer Ergonomics

- Written Ergonomic Program on EHS website
  http://bfa.sdsu.edu/ehs/ergonomics.htm
- Computer Workstation Ergonomic Self Evaluation Survey
  http://bfa.sdsu.edu/ehs/pdf/ergocompselseval.pdf
- Goal is to make workstation adjustments before injury occurs
EQUIPMENT SAFETY

General Safety Guidelines

• Do not leave equipment out, secure equipment when not in use to protect employees and the equipment
• Wind and store cords
• Don’t stretch cords around corners, across stairs, or across doorways as this presents a trip and fall hazard for employees
• Do not use equipment with damaged cords or plugs
• Unplug cords by the plug, not by pulling on the cord
• Never use equipment that is malfunctioning
• Use equipment according to manufacturer’s recommendations
• All manufacturer installed guards are required to be in place
Equipment Safety

- **Ladder Safety Guidelines**
- Do not stand on the top three rungs of a ladder
- Face the ladder while climbing or descending
- Remove damaged ladders from use
- Place ladder on a solid base
- Use both hands to climb and always keep three points of contact with the ladder
- Don’t use chairs or tables instead of ladders
- Ensure stepladder is locked before use
- Do not use stepladder as a lean to ladder
FIRE AND LIFE SAFETY

- Items cannot be stored in main egress corridors or in stairwells, main egress corridors must be kept clear for easy evacuation
- Items cannot be stored so they are blocking doors, exits, fire and life safety equipment such as fire extinguishers, or electrical panels
- Fire rated doors must be kept closed to control the spread of smoke and fire
- Door stoppers cannot be used to prop fire doors open and prevent them from closing properly
- Consider seismic safety when storing items overhead
- Store items in a stable manner
- Any items that could potentially fall into an egress path must be secured
- Secure shelves and cabinets
- Ensure no items can fall into exit path
- Extension cords are for temporary use only
- Power strips must be plugged directly into electrical outlets
- All electrical cords must be in good condition
Fire Extinguishers

- Fire extinguishers are rated as A, B, C, or combination
- Types
  - Class A - Wood and Paper
  - Class B - Grease or Combustible Liquids
  - Class C - Electrical
- Hands on fire extinguisher training
Fire Response Basic Procedures

- **Fire Response**
  - Rescue
  - Alarm
  - Confine
  - Extinguish

- **Fire Extinguisher Use**
  - Pull the pin
  - Aim at the base of the fire
  - Squeeze the handle gently
  - Sweep side to side
Emergency Preparedness

- Emergency preparedness information is available on the main SDSU home page [www.sdsu.edu/prepare](http://www.sdsu.edu/prepare)
- Employees should be aware of and prepare for potential incidents that could occur
- Plan and discuss how incidents will be handled prior to them occurring
- Be familiar with campus procedures and know where to locate the information
  - Emergency Procedures Poster
Emergency Preparedness

- In the event of an evacuation the Safety Coordinator will wear yellow vest and have yellow flag
- Building evacuees must stand clear of the buildings while at the assembly point and not block fire access lanes
- Do not re-enter building until given the All Clear
- All employees must be accountable
- Departments should have contingency plans for persons with special needs
Emergency Preparedness

- It is recommended that everyone know
  - Who the Safety Coordinator is
  - The primary and back up assembly area for their building
  - A primary and back up evacuation route

- When the fire alarm is activated or an announcement is made everyone in the affected area is required to evacuate

- Faculty and staff must inform students of this

- Participation in drills is required
Emergency Evacuation Procedures

1. The activation of the fire alarm signals the evacuation.
2. Everyone is required to evacuate the building immediately.
3. Safety Coordinators wear yellow vests and have yellow flags for easy identification by employees reporting to them.
4. Employees should know the location of:
   - Telephones
   - Building exits
   - Fire safety equipment and devices
   - Evacuation routes (primary & backup)
   - Assembly points (primary & backup)
5. Employees should consider other potential evacuation routes and assembly points before an incident.
Emergency Evacuation Procedures

6. Assist disabled persons out of the building or into the nearest stairwell.
7. Have contingency plans for persons with special needs.
8. Consider and address security issues during a drill.
9. Do not use the elevators.
10. Assemble in a pre-specified area of the assembly point.
12. Do not block fire lanes.
14. Do not re-enter the building until given the All Clear.
SDSU Mass Notification System

Campus Mass Notification System

- **Exterior public address system.**

  Allows for public announcements for people outside of buildings.

  Messages generated through University Police.

  Pre recorded or specific messages.

  Can work in connection with interior PA systems in applicable campus buildings.
SDSU Mass Notification System

- SDSU has a Mass Notification System that is capable of alerting the campus community in the event of a campus emergency or health and safety concern.

- The Mass Notification System has been installed atop buildings throughout campus:
  - Geology Mathematics and Computer Sciences
  - Education and Business Administration
  - Love Library (southwest corner)
  - Love Library (northeast corner)
  - Gateway
  - Fowler Athletics Center
  - Aztec Recreation Center
  - Arts and Letters
  - Life Sciences North
The Mass Notification System is also available within additional buildings and residence halls:

- Zura
- Tenochca
- Cuicacalli
- Maya
- Olmeca
- Chapultepec
- Love Library
- Viejas Arena
SDSU Mass Notification System

- When activated by University Police, the system is capable of alerting the campus community using a combination of tones, sirens and voice. The Mass Notification System will only be used by SDSU for emergency notification purposes and periodic testing of the system.

- Caution: Please keep in mind SDSU’s Mass Notification System is one of the many forms of communication which may be utilized in an emergency. While we believe this system is effective and efficient, you should not wait for, or rely exclusively on a mass notification system to contact you for appropriate action in response to an emergency. Be aware of your surroundings, and take appropriate action.
Safety Coordinator Emergency Evacuation Duties

1. Assist with evacuation of personnel from your area as you evacuate.
2. Close any propped open doors along corridors as you evacuate.
3. Direct evacuees to the designated assembly point.
4. Direct evacuees to stand clear of buildings while at the assembly point.
5. Direct evacuees not to block fire access lanes.
Safety Coordinator Emergency Evacuation Duties

6. Report to Police Officer or designee at assembly point.
7. Convey the following information:
   • Clearance / occupancy status of your area
   • Location of disabled or injured persons
   • Unaccounted for personnel

Be familiar with the SDSU Emergency Preparedness website www.sdsu.edu/prepare, which includes designated evacuation assembly points for campus buildings (available in map and list formats)
Shelter In Place Information

During certain emergency situations, it may be best to “Shelter in Place.” Directions to shelter in place may or may not be given, depending on the type of emergency situation.

- If you are SHELTERING IN PLACE,* stay inside the building or proceed to a safe place.
- If you are in a room with a door, make sure the door is closed.
- Due to the varying age of campus buildings, doors may lock manually, remotely, or not at all.
- If applicable and time permits, lock doors and silence cell phones.
- If you are in a room with a window, make sure the window is closed.
- Remain where you are until further direction.

*Evacuation and Shelter in Place procedures are different in the event of an active shooter or violent intruder. Review active shooter response protocol at www.police.sdsu.edu/dps/ or call University Police, 594-1991 to schedule a presentation.
Specific Information for location

In a classroom

- “Drop, Cover, and Hold On”
  Individuals drop to the floor and take cover under a desk to protect heads and necks and hold on to it firmly

  If there is no desk available, drop to the floor against an interior wall

- “Hold” for 2 minutes
EARTHQUAKE PREPAREDNESS

In a lecture hall or theater

- Individuals stay in their seats and protect their heads and necks with their arms
- “Hold” for 2 minutes
EARTHQUAKE PREPAREDNESS

In a lab or training room

- “Drop, Cover, and Hold On”
  Individuals take cover to protect heads and necks

- Instructors in science labs and workshops should be familiar with and assist students with extinguishing any flames and isolating any hazardous materials in use
In the library

- “Drop, Cover, and Hold On”
  Individuals take cover under a desk or table to protect their heads and necks with their arms
  If no desks or tables available, drop to the floor against an interior wall

- “Hold” for 2 minutes
In an office or conference room

- “Drop, Cover, and Hold On”
  Individuals take cover under desks or tables to protect their heads and necks using their arms
- “Hold” for 2 minutes
- Suggest that while down on the floor, employees look around at what would be falling on them in a real earthquake
- Secure or move items after the drill to prevent injury and damage
EARTHQUAKE PREPAREDNESS

In a residence hall

- “Drop, Cover, and Hold On”
  Individuals take cover under desks or tables to protect their heads and necks using their arms or remain where they are

- If in bed, hold on and stay there protecting head with a pillow

- Broken glass on the floor has caused injury to those who have rolled to the floor or tried to get to doorways

- “Hold” for 2 minutes
EARTHQUAKE PREPAREDNESS

In outdoor areas

- Move to a clear area if safe to do so
- Avoid power lines, trees, signs, buildings, vehicles and other hazards
EARTHQUAKE PREPAREDNESS

Individuals with disabilities or access and functional needs

- Try not to move and immediately protect oneself as best possible right where you are
- Use arms to protect head and neck
Earthquake Preparedness

Available resources and preparedness

Review The Great California Shake Out information at www.shakeout.org/.

Print Seven Steps to Earthquake Safety and Drop, Cover, and Hold On summary sheets at www.shakeout.org/california/resources/ to review with students and staff (also available in multiple languages at http://www.shakeout.org/california/otherlanguages/).

Remove or secure items in offices or classrooms that might fall and injure students, faculty, and staff.
Earthquake Preparedness

Develop or review your department Emergency Plan and Business Continuity Plan (templates are available at www.sdsu.edu/prepare).

Check department and individual emergency supplies to make sure they are accessible and functional.

Register for SDSU Alert at www.sdsu.edu/prepare. This is one of the many forms of campus communication.
The Seven Steps to Earthquake Safety

www.earthquakecountry.info/roots/seven_steps.html

Prepare
Step 1: Secure it now!
Reducing and/or eliminating hazards throughout your home, neighborhood, workplace and school can greatly reduce your risk of injury or death following the next earthquake or other disaster.

Conduct a "hazard hunt" to help identify and fix things such as unsecured televisions, computers, bookcases, other furniture items, unstrapped water heaters, etc.

Securing these items now will help to protect you tomorrow.
The Seven Steps to Earthquake Safety

Step 2: Make a plan
Planning for an earthquake, terrorist attack, or other emergency is not much different from planning for a party or vacation.

Make sure that your emergency plan includes evacuation and reunion plans; your out-of-state contact person's name and number; the location of your emergency supplies and other pertinent information.

By planning now, you will be ready for the next emergency.
The Seven Steps to Earthquake Safety

Step 3: Make disaster kits
Everyone should have disaster supplies kits stored in accessible locations at home, at work and in your vehicle.

Having emergency supplies readily available can reduce the impact of an earthquake, a terrorist incident or other emergency on you and your family.

Your disaster supplies kits should include food, water, flashlights, portable radios, batteries, a first aid kit, cash, extra medications, a whistle, fire extinguisher, etc.
Step 4: Is your place safe?

Most houses are not as safe as they could be. Whether you are a homeowner or a renter, there are things that you can do to improve the structural integrity of your home.

Some of the things that you might consider checking include inadequate foundations, unbraced cripple walls, soft first stories, unreinforced masonry and vulnerable pipes.

Consult a contractor or engineer to help you identify your building's weaknesses and begin to fix them now.
Protect
Step 5: DROP, COVER, and HOLD ON!
Learn what to do during an earthquake, whether you're at home, at work, at school or just out and about.

Taking the proper actions, such as "Drop, Cover, and Hold On", can save lives and reduce your risk of death or injury.

During earthquakes, drop to the floor, take cover under a sturdy desk or table, and hold on to it firmly.

Be prepared to move with it until the shaking stops.
The Seven Steps to Earthquake Safety

Recover

Step 6: Check it out!
One of the first things you should do following a major disaster is to check for injuries and damages that need immediate attention.

Make sure you are trained in first aid and in damage assessment techniques. Get assistance as needed.

You should be able to administer first aid and to identify hazards such as damaged gas, water, sewage and electrical lines. Get assistance as needed.

Be prepared to report damage to city or county government.
The Seven Steps to Earthquake Safety

Step 7: Communicate and recover!
Following a major disaster, communication will be an important step in your recovery efforts.

Turn on your portable radio for information and safety advisories.

If your home is damaged, contact your insurance agent right away to begin your claims process.

For most Presidentially declared disasters, resources will also be available from federal, state, and local government agencies.
Basics Before An Emergency

- Please note that all emergency situations are unique and although general guidelines apply, specific details and directives will be given based on the situation.
- Become familiar with the Emergency Procedures Poster.
- Know your building’s floor plan and become familiar with building exits and doors.
- Be aware of the building Evacuation Assembly Point.
- Faculty can share this information with students at the beginning of each semester.
- Know who is the Department Safety Coordinator.
- Maintain department phone trees.
- Gather individual preparedness supplies.
- Cooperate during drills.
Basics During An Emergency

- Try to remain calm.
- Alert emergency responders.
- When evacuating go to assembly point using a safe route.
- Assist individuals with disabilities.
- Walk, do not run.
- Use stairs, do not use elevators.
- Wait for and follow instructions from University Police or designee.
- When Sheltering in Place stay inside or find a safe place.
Basics After An Emergency

- Wait for and follow instructions from University Police or a designee.
- Updated emergency information and information concerning the status of the campus will be communicated through a variety of sources, as available.
- Plans are in place for essential university functions to continue on a temporary basis.
- Personnel and facilities are designated to carry on operations on a limited basis if it is safe to do so.
- Alternate facilities will be established if necessary.
- Normal campus operations will resume as soon as possible following an emergency.
Exercise Evaluation Criteria

Feedback

Feedback or questions from students, faculty, and staff related to an Emergency Exercise or campus emergency preparedness should be directed to Department Safety Coordinators, Environmental Health and Safety, or to the Office of the Vice President, Business and Financial Affairs X45937.
Post Evacuation Drill Evaluation

Criteria

- Did the fire alarm devices, including sirens, strobes, public address system, and mass notification system where applicable operate properly?
- Was the drill exercise conducted in a safe and orderly manner?
- Approximately how much time before group was evacuated?
- Did anyone refuse to leave?
  - Where?
- Were there disabled/injured persons and were they assisted appropriately during evacuation?
- Were security or special procedures needed in your area?
  - How were they implemented?
- Were emergency evacuation personnel available at the assembly point?
- Did evacuees report to the designated assembly point?
  - If not, where did they report?
- Did occupants leave buildings and keep fire lanes clear?
- Recommendations/Comments