

Annual Safety Seminar

Alphabet Soup

EH&S, IIPP, EAP, SOP, LMS, JSA, HazCom, PI, UCOP

University of California, Davis

Safety Seminar Topics

- Injury and Illness Prevention Plan (IIPP) Department
- Training UCOP
- Hazard Communication (HazCom) PI/Supervisor with EH&S
- · Emergency Action Plan (EAP) Department
- Ergonomics PI/Supervisor and Safety Services
- Safety Services Resources http://safetyservices.ucdavis.edu/



Elements of the IIPP



Injury and Illness Prevention Plan (IIPP)

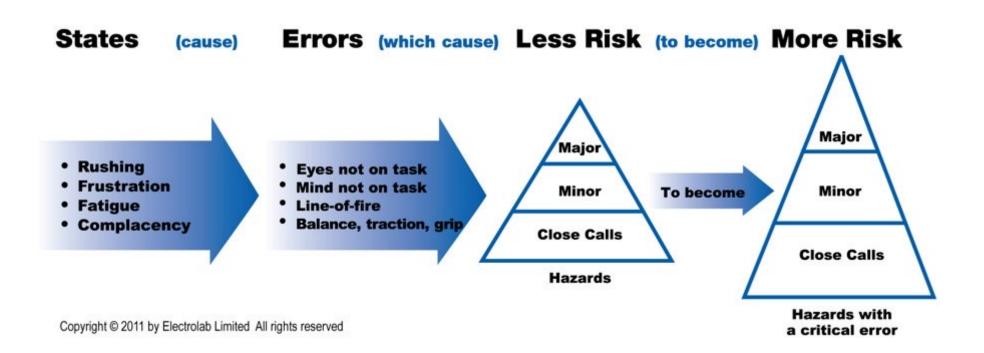
- Management commitment/assignment of responsibilities
- Safety communications system with employees
- System for assuring employee compliance with safe work practices
- Scheduled inspections/evaluation system
- Procedures for correcting unsafe/unhealthy conditions
- Safety and health training and instruction
- Recordkeeping and documentation
- Accident Investigation



Most Likely Injuries - Training

- 1. Transportation injuries LMS Safe Driver Series
- Slips, trips, and falls LMS Fall Protection, Ladder Safety, and Sprains and Strains
- 3. Violence by people and animals LMS Violence Prevention
- 4. Hazardous equipment JSA and HazCom
- 5. Hazardous environment JSA and HazCom
- 6. Fires and explosions LMS Emergency Response

Contributors to Accidents





What are some of the hazards we encounter in offices?



- Ergonomic issues;
- Fire & evacuation;
- Electrical cords & equipment;
- Heat-generating sources;
- Hand & powered tools
 & equipment;

- Office machines
 (copiers, paper cutters, shredders, jammed machines);
- Office chemicals;
- Slips, trips, falls;
- Housekeeping;
- Furniture/layout;
- Motor vehicle accidents.

Job Safety Analysis

• Job Safety Analysis (JSA) identifies and evaluates employee work functions, potential health or injury hazards, and specifies appropriate safe practices, personal protective equipment, and tools/equipment. JSA's can be completed for worksites, an individual employee's job description, or a class of employees' job description.



Job Safety Analysis

EMPLOYEE: ENTER EMPLOYEE NAME	JOB SAFETY ANALYSIS	DEPT: EH&S	LOCATION All	JOB TYPE DSA	
JOB FUNCTION	POTENTIAL HEALTH OR INJURY HAZARDS	SAFE PRACTICE, APPAREL, OR EQUIPMENT			
Handling and moving heavy items and equipment.	Ergonomic hazards including heavy lifting, repetitive motions, awkward motions, crushing or pinching injuries etc.	motions, awkward motions, crushing or person. Use mechanical means to lift and move heavy			
Operation of Motor vehicles	Motor vehicle accidents involving personal injury, or property damage	All drivers of UCD vehicles (greater than 10% of your job) should take the online Safe Driver Awareness Course offered by the UC Learning Center and possess a valid California drivers license. Hazardous materials may not be transported in personally owned vehicles.			
General office work. Backstrain, eyestrain, repetitive motion injury. Physical injuries due to slips, trips and falls, and falling obje Electrical hazards. Physical injuries due to fires, earthquakes, bomb threats an workplace violence.		Keep floors clear from blocking dochairs of any kind heavy objects over top. Do not open bookcases and fild Do not use extens high wattage appreceptacles in pot electrical cords. I wedged against fattend emergence	stations are ergonomically co of debris and liquid spills. Korways, halls and walking sp I, use proper foot stools or lacthead. Do not topload filing more than one file drawer at e cabinets to walls. Provide of sion cords in lieu of permane liances do not overload circu tentially wet areas. Replace f Ensure that electrical cords a urniture or pinched in doors, y action and fire prevention p e drills. Attend Workplace V e Department.	eep furniture, boxes, etc. ace. Do not stand on dders. Do not store cabinets, fill bottom to a time. Brace tall one-inch lip on shelves. nt wiring. Ensure that its. Use GFIs in rayed or damaged re not damaged by being	

Job Safety Analysis

1	An Injury or Illness Investigation	Train employees on reporting injuries or illnesses as soon as possible, employees & supervisors on how to access and complete the online injury reporting form, supervisors to interview employees and document injury details plus establish effective corrective actions (i.e. Review SOPs, retraining, new tools or equipment, ergonomics reviews, etc.)	3203(a)(7)(E)	Y	Initial	Supervisors/Accident Investigators	Employers First Report of Injury or Illness	
2	Accident Prevention Signs and Tags	Post signs and tags for Danger, Caution or Warning or obtain any labels you need made from EH&S to increase safety awareness around equipment	3341(d)(5)	Y	Initial	Impacted Employees	Signs and tags	
23	Emergency Action Plan	A written EAP program on file plus evacuation routes. Assembly areas established, posted and employees trained	3220(e)	Y	Initial and with Annual Plan Update	Impacted Employees	Emergency Action Plan	
28	Fire Extinguisher & Fire Fighting Equipment	An educational program or instructor led training to familiarize employees with the general principles of fire extinguisher use and the hazards involved with incipient stage fire fighting when first employed and annually thereafter.	<u>\$151(g)(1)-(2)</u>	Y	Initial Annual	Assigned Employees	Requesting a fire extinguisher or training	
37	Hazard Communication	Maintain an inventory of hazardous chemicals, insure all containers are labeled including secondary containers, keep an inventory of SDS up-to-date and employee training on how to read an SDS, the hazards and PPE required when working around	5194(b)(1)	Y	Initial New chemicals or processes	Exposed Employees	Hazard Communication	See Hazardous Chemical Communication Program Policy & Procedure 290-27
43	Injury & Illness Prevention	Initially for new employees, an annual update and reminder for all	3203(a)(7)	Y	Initial and Annual	All Employees	IIPP template.	See Policy & Procedure 290-15 Safety Management
44	Job Hazard(s) JSA or JHA	Conduct a review of equipment used and tasks performed and list	3203(a)(7)	Y	Before Job Assignment	All Employees	Job Safety Analysis Training	
45	Ladder Safety	Employee Training, Before an employee uses a ladder, the employee shall be provided training in the safe use of ladders. Supervisors of employees who routinely use ladders must also have ladder safety training. The training may be provided as part of the employer's Injury and Illness Prevention Program required by Section 3203and must address the Cal/OSHA 7 specific topics (see link).	3276 (I)	Υ	Before ladder use	All employees using portable ladders	Portable Ladder Safety	
49	Material Handling and Storage	Purchasing, using and training employees how to use the correct material handling equipment for your department's needs. Hand truck, lighthweight collapsible (folding) hand carls, cylinder trucks, trucks with brakes, platform carls, table carls, stair climbing hand trucks, using ratchets straps to fasten loads, pallet jack safety and forklift (plus attachments) safety plus training requirements before use. Lightening the load, getting assistance, proper body mechanics moving a load and checking the trasport path before moving materials (asile clear, doors open, no slippery surfaces, blind corners, high traffic areas).	Injury prevention and best manageemnt. practices	Υ	Initial and Annual	Employees handling hevaier loads (loading docks, materials receiving and transport	Material Handling	
50	Medical & Exposure Records - Access	Employees can request access to medical exposure records and a response is required <15 days after the request. New employees when hired and at least annually must be informed of the existence, location, and availability these records and who is responsible and maintaining plus providing record access, each employee's rights of access to these records, and copies of this section/appendices on file and available to employees.	3204(g)(1)	Y	Initial and Annual	Affected Employees	Access to Medical and Esposure Records	
	Office Safety	Office hazard awareness and prevention, housekeeping, slips, trips and falls prevention, safe us file drawers and stroage cabinets, basic electrical safety and panel access, back & lifting safety, step stools & ladders, material storage, Repetitive Motion Injuries an proper PC and laptop set-up, transporting material	3273	Y	Initial and Annual	Offfice workers		

Site-Specific Safety Orientation & Training for New Laboratory Personnel

Revised - 10/2013

Prior to completing this site safety orientation and training, all laboratory personnel must have successfully completed the <u>UC Laboratory Safety Fundamentals</u> course. Completion of this training is required prior to personnel being granted unescorted access to the laboratory. This serves to satisfy components of the <u>University of California Policy - Laboratory Safety Training</u> and UC Davis policy <u>PPM290-56</u>.

1 <u> </u>		confirm receipt of training on the listed topics on				
	(print name, trainee)					
I	I from	All of my questions regarding				
(da	ate) (print	name, trainer)				
this mat	· ·	have been initialed, or marked with an "X" where not				
	(signature, trainee)	(signature, trainer)				
Initial	Topic	Action				
	EMER	RGENCY PROCEDURES				
	Fire Alarm Pull Station:	Show location(s) and proper activation.				
	Eye Wash / Safety Showers:	Show location(s) and proper operation.				
	Chemical Spill Procedure	Show location of spill kit(s), SafetyNets $\frac{\#13}{}$ and $\frac{\#127}{}$ (if applicable), and describe procedures.				
	First Aid Kits:	Location(s) and description of contents.				
	Phone:	Location(s), detail dialing instructions, '911' dialing instructions, bomb threat card.				
	Emergency Response Guide:	Location(s) of flipchart guide, discuss scenario actions				
	Emergency Action Plan:	Review Emergency Action Plan. Demonstrate both paths to Emergency Assembly Area. Review evacuation procedures for disabled employees if applicable.				
	Warn Me:	Enroll in UC Davis <u>Warn Me</u> emergency alert system, recommend registering cellular phone number.				
	ENG	INEERING CONTROLS				
	Chemical Fume Hood(s):	Demonstration of proper use, instruction on adjustable controls, flow sensor function, and training requirements.				
	Biological Safety Cabinet(s):	Demonstration of proper use, instruction on adjustable controls and training requirements.				

Site Specific Training

LMS Safety Training Classes (Online and Instructor Led)

- Injury Prevention
- Emergency Preparedness
- General and Equipment Safety
- Ergonomics
- Lab Safety for Support Personnel
- Campus COVID-19 Prevention Plan







Personal Safety

Lab Safety for Support Personnel

NO PANTS, NO SHOES NO SCIENCE





FOR MORE INFORMATION CONTACT **ENVIRONMENTAL HEALTH AND SAFETY AT (806) 742-3876**www.ehs.ttu.edu | www.safety.ttu.edu



Managing LMS Safety Training

- Supervisors, administrators, and department safety coordinators can assign training
- You can follow up on training
- You can see what training is past due
- Safety inspectors can see what training individuals have completed and when

EH&S Safety Nets

- Personal and Workplace Safety (65)
- Fire Prevention (53)
- Occupational Health (46)
- Emergency Preparedness (16)
- Campus Environment (15)
- Risk Management Services (2)
- Food Safety (1)





Hazard Communication

- California Occupational Safety and Health Administration (Cal/OSHA) requires employers to inform employees about hazards associated with hazardous chemicals that are present in the workplace
- Industrial (Non-Laboratories) and manufacturing or commercial laboratories are subject to requirements of Title 8, CCR section <u>5194</u>, "Hazard Communication" and are covered under the Hazard Communication Program requirements.

Hazard Communication

- The UC Davis Hazard Communication Program (HazCom) applies to industrial workplaces, manufacturing or commercial laboratories and activities such as animal husbandry areas, shops, custodial, craft centers, theaters and studios. The program requires employees to:
- Maintain a hazardous chemical inventory in the UC Davis <u>Chemical</u> <u>Inventory System</u>
- Maintain and have access to safety data sheets (formerly called material safety data sheets)
- Understand hazards associated with chemicals they work with through labeling and other forms of warning
- Receive <u>safety training</u> and other information to minimize the risks associated with the hazardous chemicals used in the work area
- Develop, implement and maintain a written HazCom program (follow <u>General HazCom Program</u> and complete <u>Department-Specific</u> <u>HazCom Program Summary</u>).

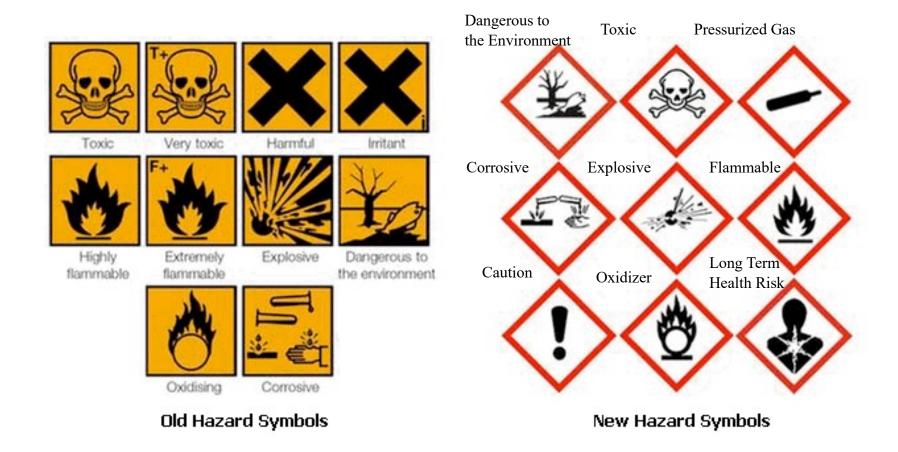
SDS Information

- Identity of the chemical
- Hazardous nature of chemical
- Physical characteristic (e.g., boiling point)
- Fire and explosion information
- Reactivity data
- Health hazard data (e.g., health effects, symptoms)
- Personal protective equipment needed
- How to handle leaks, spills and disposal
- Special precautions

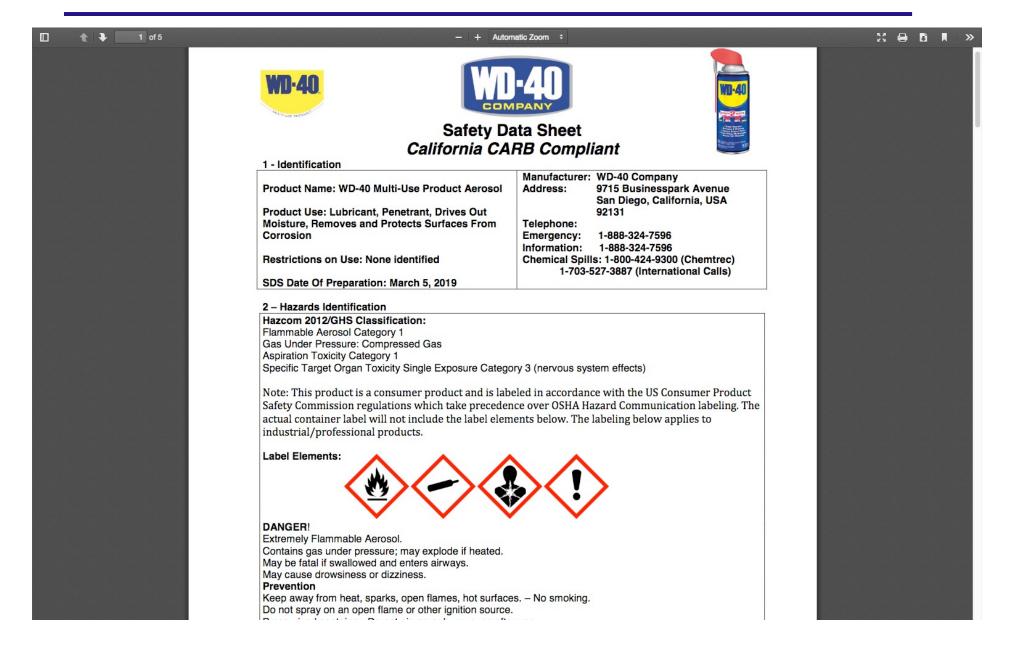
The Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

- Signal word either DANGER or WARNING
- Precautionary statement indicating product handling to minimize risks to the user
- H200 Physical Hazard
- H300 Health Hazard
- H400 Environmental Hazard
- The lower the number within the category the higher the hazard i.e. H300 is more hazardous than H301 or H304

Hazard Symbols



SDS Information — H223, H280, H304, H336

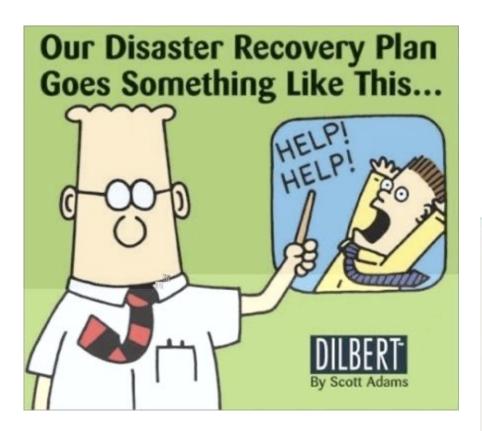


Standard Operating Procedure

Cal/OSHA requires standard operating procedures (SOPs) be established for work with hazardous chemicals.

SOPs document the specific procedures for the safe handling, storage and disposal of hazardous chemicals.

Emergency Preparedness





Emergency Action Plan (EAP)

The program must be in writing and include the following elements:

- Emergency escape procedures and emergency escape route assignments
- Procedures to account for all employees after an emergency evacuation
- The preferred means of reporting fires and other emergencies
- Names or regular job titles of persons or departments who can be contacted for further information or explanation of duties under the plan
- A system to notify employees of an emergency
- Procedures for employees who remain to complete critical operations before they evacuate
- Rescue and medical duties for those employees who are to perform them
- Training for all employees on the EAP
- The written plan must be kept in the workplace and made available for employee review



Emergency Action Plan Know the locations of:

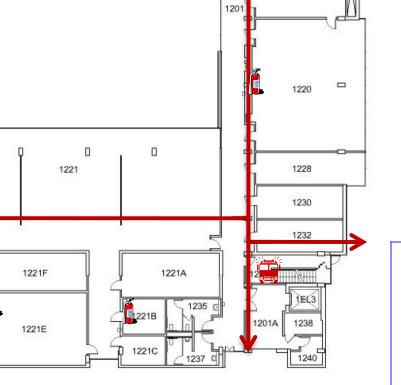
- All exits for your workplace and the building
- Alarm pull boxes and fire extinguishers
- Nearest phone
- First-aid kits

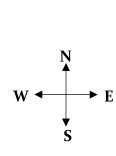
If you will need assistance during evacuation, please contact me in advance!



RMI South First Floor









Fire Extinguisher



Fire Alarm Box

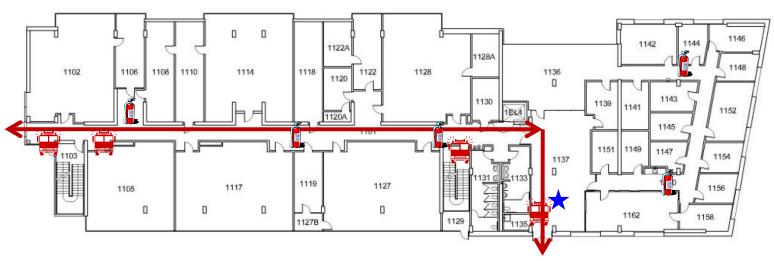


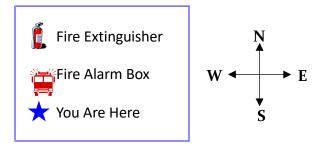
You Are Here

RMI North First Floor

Emergency Contacts:

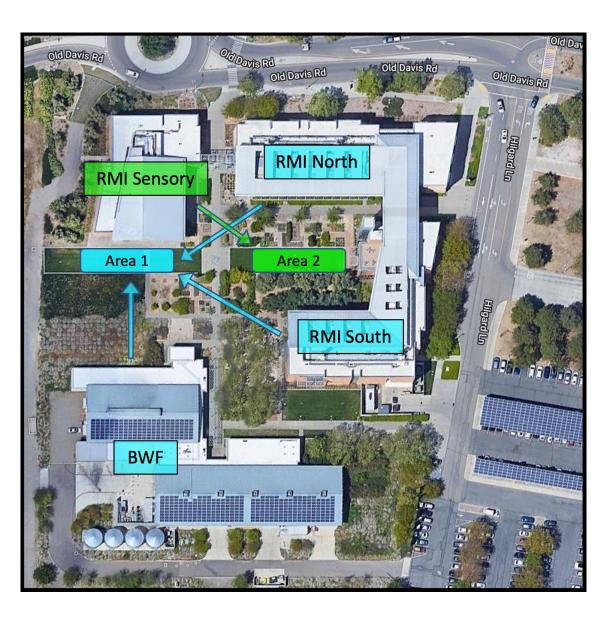
Vanessa Lieberman 752-2826 Jennifer Radke 752-1947 Linda Harris David Block







EMERGENCY EVACUATION MAP MEETING PLACES



Procedures in Case of Fire

- If fire is small you may attempt to neutralize the threat without endangering yourself
- If you are unsure Leave the area, being sure others are out
- CLOSE THE DOOR!
- ACTIVATE THE NEAREST BUILDING FIRE ALARM
 - Once manual pull alarm is activated, alarm will emit audible and visual (strobing lights) signals to warn occupants of evacuation
- DIAL 911 (or 530-752-1234)
- STAY AWAY FROM AREA AND CLOSE ALL DOORS!
 - Doors in RMI complex are fire rated and will help prevent the spread of fire to surrounding areas
- Go to agreed meeting place
- Stand by to advise the emergency personnel when they arrive









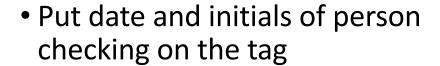
Fire extinguishers: Types and how to use

- 5 types
 - Class A: ordinary combustibles wood, paper, trash etc
 - Class B: flammable/combustible liquids
 - Class C: Electrical fires
 - Class D: special metals
 - Class K: Kitchen fires (oil, grease, etc.)
- All buildings in RMI equipped with combo extinguishers (A+B+C)
- Emit a powder that suffocates the fire
- Need to be checked monthly



How to check fire extinguishers

- Need to be checked monthly
- Make sure needle is within the green range
 - Look at the needle as if you were looking at a meniscus of a liquid



 If there are issues, contact fireprevention@ucdavis.edu





How to use a fire extinguisher

PASS

- P: pull the pin (note take care not to squeeze handle)
- A: aim at the base of the fire and stand back 5-6 ft
- **S**: squeeze the handle and move carefully closer as powder is being discharged
- **S**: sweep back and forth to cover the range of the fire
- This should only be done when fire is at the beginning stage. If flames are large, evacuate. 911 should already have been alerted
- Fire extinguisher will only last 20-30 seconds



Fire Extinguisher Training Video-OSHA

Procedures in Case of Earthquake

- · Get under a desk, table, archway, etc. during the shaking
- Leave the building after the shaking is over
- If outside during shaking, stay clear of buildings, trees, etc.
- DIAL 911 (or 530-752-1230) to report any fires, ruptured pipes or downed electric lines
- Assist injured persons in securing medical attention
- Go to agreed meeting place
- Stand by to advise emergency personnel when they arrive

<u>Active Shooter</u>

- Immediate actions
 - Run
 - Hide
 - Fight
- Seek Help
 - Call 911 and provide as much information as possible:
 - Location, what is happening, description of suspect, your name and number
- Silence your phone:
 - If you cannot speak, turn the sound off with line open so police can hear what is going on
- https://safetyservices.ucdavis.edu/units/emergency-preparedness/procedures/active-shooter
- LMS: <u>Shots Fired</u>

Campus Safety Tips

Safety tips from UCD Police Department:

- Always be alert to your surroundings. This includes persons and vehicles.
- Report suspicious activity to UC Davis Police at (530) 754-2677.
- Do not allow strangers to enter behind you at secured facilities, residences halls and do not lend your entry keys.
- Report criminal activity (such as break-in, intruder, robbery, assault) immediately to 9-1-1
- Always lock your doors. Secure your property by locking doors to offices, laboratories, and buildings.
- At campus office facilities, report malfunctioning or broken doors and windows to Facilities call (530) 752-1655

Department Safety Tips:

- Do not leave personal items or items of value in your vehicles and always lock your vehicle,
- Set up a communication system with other co-workers. If working late or alone, this can be used to alert of your safe arrival and departure from the building and in case of emergencies.
- Make sure all entry doors are closed and not propped open to prevent building break-ins and theft.
- Report any building malfunctions to bftvfacilities@ucdavis.edu

Campus Resources for Personal or Property Safety

UC Davis Campus Emergency Line: (530) 752-1230

- For Police, Fire, or Medical emergencies
- If on a cell phone on campus, use this number, for landline, dial 911

UC Davis Police Department 24 hour Non-Emergency: (530) 752-1727

- Can be contacted to report suspicious behavior or for non-emergency situations
- Can be contacted if you are on Campus and feel unsafe

Safe Rides/UCD Police Department: (530) 754-2677

- https://police.ucdavis.edu/safe-rides
- Hours of Operation:
 - 7 days a week, 5:00 p.m. to 10:00 p.m., on-campus to another on-campus location
 - 7 Days a week 10:00 p.m. to 6:00 a.m., on-campus location pick-up to any location in the city of Davis
 - VIP wheelchair transportation
 - 24/7 on campus to another on campus location
 - 7 Days a week, 10:00 p.m. to 6:00 a.m., on-campus location pick-up to any location in the city of Davis

Emergency notification

Campus emergency notification



UCD WarnMe alerts







Requesting a SafeRide just got even easier! We've officially launched a **new app** called TransLoc!



Reporting Unsafe Conditions

- There is a form in the IIPP for reporting unsafe conditions
- You can also turn in work orders to Facilities for building issues that are unsafe. For example; loose tiles, poor lighting, leaks, etc.
- You can also report things you consider unsafe to your supervisor or department safety coordinator
- You can report unsafe conditions or a near miss to Safety Services
- You can also report unsafe conditions to Cal-OSHA

What is a "Near Miss"



Report a "Near Miss" to Safety Services

Report an Incident or Concern

- All faculty members, staff, students and visitors at UC Davis can participate in making the campus a safe place to work, study, and live by identifying health and/or safety hazards or unsafe conditions by informing those responsible for the problem area.
- Employees are advised that use of this form or other reports of unsafe conditions or practices are protected by law. It would be illegal for the employer to take any action against an employee in reprisal for exercising rights to participate in communications involving safety.

Ergonomics

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"We could try a larger monitor with an ergonomic glare filter...but you're still going to get headaches if you keep banging your head against the screen."

Ergonomics

- Ergonomics –(er-ge-na-miks)–n. Greek term for "the laws of work."
- The science of adapting workstations, tools,
 equipment and job techniques to be compatible with
 human anatomy and physiology to reduce the risk of

 <u>Musculoskeletal Disorder</u> injuries due to <u>Ergonomic</u>

 <u>Stressors</u>.
- In other words, "fit the job to the person" rather than the "person to the job."

Ergonomic Equipment

- Workstation
- Chair
- Pointing Device
- Keyboard





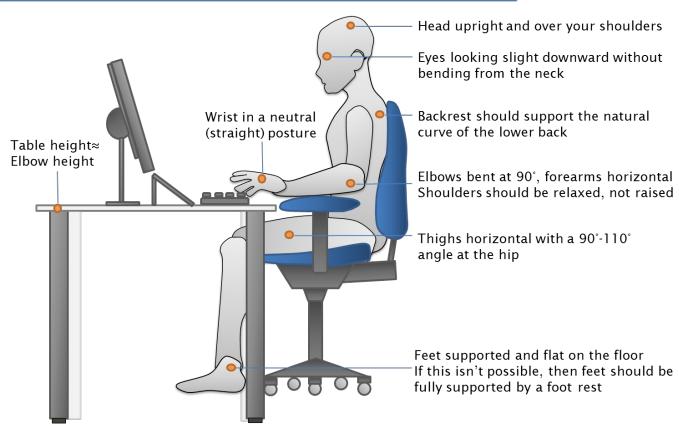




Ergonomics - sitting

WHAT IS GOOD POSTURE?







Below are some useful Ergonomic tips to maintain healthy working conditions for using your computer while telecommuting.

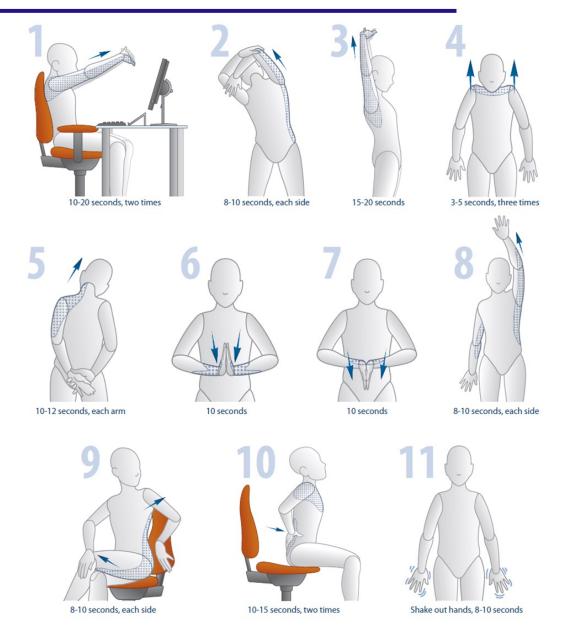
- Safety Services has some tips for setting up <u>ergonomic work stations</u> while at home
- LMS training course for <u>Ergonomic Self-Evaluation For Remote Work</u>
- https://safetyservices.ucdavis.edu/units/occupationalhealth/ergonomics



New Computer Ergonomics Training in UC Learning Center

https://safetyservices.ucdavis.edu/news/computer-ergonomics-training-lms

Ergonomic – stretches





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