UC DAVIS

Animal Science department

INJURY AND ILLNESS PREVENTION PROGRAM

This Injury and Illness Prevention Program has been prepared by the University of California, Animal Science department in accordance with University Policy (UCD Policy & Procedure Manual Section 290-15: Safety Management Program) and California Code of Regulations Title 8, Section 3203 (8 CCR, Section 3203).

Buildings Occupied by Department

1. Building: Meyer Hall
   Contact: Front Office
   Phone: 752-1250

2. Building: Swine Center
   Contact: Aaron Prinz
   Phone: 760-532-5667

3. Building: Goat Barn
   Contact: Rachel Irene Conway
   Phone: 707-845-8291

4. Building: Sheep Barn
   Contact: Kyle Wood
   Phone: 752-0744

5. Building: Meyer Hall Avian Facility/Hatchery
   Contact: Kristy Smith
   Phone: 752-3537/752-3560

   Contact: Kristy Smith
   Phone: 752-3537/752-3560
7. Building: Beef Barn/Feedlot  
   Contact: Donald Harper  
   Phone: 752-1200

8. Building: Dairy Barn  
   Contact: Doug Gisi  
   Phone: 752-1686

9. Building: Horse Barn  
   Contact: Kelly Davis  
   Phone: 754-4156

    Contact: Sandra Weisker  
    Phone: 752-3642

    Contact: Caleb Sehnert  
    Phone: 752-7410

    Contact: Lisa Nash Holmes  
    Phone: 752-6022

13. Building: ABES, CABA Shelters 1 – 4, Putah Creek Facility  
    Contact: Linda Deanovic  
    Phone: 752-8160

13. Off Campus: Sierra Foothill Research and Extension Center  
    Contact: Donald Harper  
    Phone: 530-752-1200

14. Off Campus: Desert Research and Extension Center  
    Contact: Richard Zinn  
    Phone: 760-356-3068, 356-3060

16. Off Campus: Bodega Marine Laboratory  
    Contact: Dr. Gary N. Cherr  
    Phone: 707-875-2009/2051/2050

17. Off Campus: Hopland Research and Extension Center  
    Contact: Dr. Robert M. Timm  
    Phone: 707-744-1424
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I. Authorities and Responsible Parties

The authority and responsibility for the implementation and maintenance of the Injury and Illness Prevention Program (IIPP) is in accordance with University Policy (UCD Policy & Procedure Manual Section 290-15: Safety Management Program) and California Code of Regulations (8 CCR, Section 3203) and is held by the following individuals:

1. Name: James Murray
   Title: Chair
   Authority: Authority and responsibility for ensuring implementation of this IIPP

   Signature: ____________________________ Date: __________________

   Safety Coordinator: Leslie Oberholtzer

   Signature: ____________________________ Date: __________________

   Alternate Safety Coordinator: Janelle Belanger

   Signature: ____________________________ Date: __________________

Additionally, all Principal Investigators and supervisors are responsible for the implementation and enforcement of this IIPP in their areas of responsibility in accordance with University Policy (UCD Policy & Procedure Manual Section 290-15: Safety Management Program).

   The Departments System for Identifying, Evaluating, and Preventing Occupational Safety and Health Hazards Includes the Following:

   Review of general information, including Safety Data Sheets (SDSs), chemical hygiene plans, facility safety plans, and office safety plans for potential occupational safety and health hazards. Annual inspections of work areas, laboratories and facilities. Evaluation of information provided by employees regarding safety and health hazards.
II. System of Communications

1. Effective communications with Animal Science employees have been established using the following methods:

- Standard Operating Procedures Manual
- Safety Data Sheets
- Monthly departmental operations meetings
- Internal media (department intranet)
- EH&S Safety Nets
- Safety Training
- Safety Newsletter
- Handouts
- Building Evacuation Plan
- E-mail
- Posters and warning labels
- Job Safety Analysis – Initial Hire
- Job Safety Analysis – Annual Review
- Other (list): Hazard Evaluation, Identification and Inspection

2. Employees are encouraged to report any potential health and safety hazard that may exist in the workplace. Hazard Alert Forms (Appendix 2) are available to employees for this purpose. Forms are to be placed in the Safety Coordinator’s departmental mail box. Employees have the option to remain anonymous when making a report.

3. Employees have been advised of adherence to safe work practices and the proper use of required personal protective equipment. Conformance will be reinforced by discipline for non-compliance in accordance with University policy (UCD Procedure 62 - Personnel Policies for Staff Members, Corrective Action).
III. **System for Assuring Employee Compliance with Safe Work Practices**

Employees have been advised of adherence to safe work practices and the proper use of required personal protective equipment. Conformance will be reinforced by discipline for non-compliance in accordance with University policy ([UCD Procedure 62 - Personnel Policies for Staff Members, Corrective Action](#)).

The following methods are used to reinforce conformance with this program:

1. Distribution of Policies
2. Training Programs
3. Safety Performance Evaluations

   Performance evaluations at all levels must include an assessment of the individual's commitment to and performance of the accident prevention requirements of his/her position. The following are examples of factors considered when evaluating an employee's safety performance.

   - Adherence to defined safety practices.
   - Use of provided safety equipment.
   - Reporting unsafe acts, conditions, and equipment.
   - Offering suggestions for solutions to safety problems.
   - Planning work to include checking safety of equipment and procedures before starting.
   - Early reporting of illness or injury that may arise as a result of the job.
   - Providing support to safety programs.

4. Statement of non-compliance will be placed in performance evaluations if employee neglects to follow proper safety procedures, and documented records are on file that clearly indicate training was provided for the specific topic, and that the employee understood the training and potential hazards.

5. Corrective action for non-compliance will take place when documentation exists that proper training was provided, the employee understood the training, and the employee knowingly neglected to follow proper safety procedures. Corrective action includes, but is not limited to, the following: Letter of Warning, Suspension, or Dismissal.
IV. Hazard Identification, Evaluation, and Inspection

Job Hazard Analyses (Job Safety Analysis) and worksite inspections have been established to identify and evaluate occupational safety and health hazards.

1. Job Safety Analysis:

Job Safety Analysis (JSA) identifies and evaluates individual employee work functions, potential health or injury hazards, and specifies appropriate safe practices, personal protective equipment, and tools/equipment. JSAs have been completed for the following job categories:

A. Animal Science Laboratories
   - Staff Research Associate, Lab Assistant, Post-Graduate Researcher, Post-Graduate Scholar, Faculty, Cooperative Extension Specialist
   - Graduate Student, Undergraduate Student, Visiting Personnel, and various summer programs

B. Animal Science Facilities
   - Agricultural Technician, Animal Technician, Animal Resources Supervisor
   - Superintendent of Agriculture, Staff Research Associate and students

C. Animal Science Office Staff
   - Chief Administrative Officer, Administrative Assistant, Advising Associate
   - Programmer/Analyst, Faculty, Cooperative Extension Specialist, students, Post-Doctoral Scholars and visiting scholars

Example Job Safety Analyses (JSAs) are located in Appendix 1, pages 17-20. Completed Job Safety Analyses should be kept on file in a departmental IIPP Addendum Binder.

2. Worksite Inspections

Worksite inspections are conducted to identify and evaluate potential hazards. Types of worksite inspections include both periodic scheduled worksite inspections as well as those required for accident investigations, injury and illness cases, and unusual occurrences. Inspections are conducted at the following worksites:

1) Location: Animal Science Laboratories
   Frequency: Annual
   Responsible Person: Leslie Oberholtzer
   Records Location: Safety Coordinators Office

2) Location: Animal Science Facilities
   Frequency: Annual
   Responsible Person: Leslie Oberholtzer
   Records Location: Safety Coordinators Office
3) Location | Animal Science Office  
Frequency | Annual  
Responsible Person | Leslie Oberholtzer  
Records Location | Safety Coordinators Office

Template **Worksite Inspection Forms** are located in **Appendix 2** (general office page 57, Laboratory page 58-59, and Facilities page 60). **Completed Worksite Inspection Forms** are to be kept on file in the departmental **IIPP Addendum Binder**.

V. **Accident Investigation**

University Policy requires that work-related injuries and illnesses be reported to Workers’ Compensation **within 24 hours of occurrence** and state regulation requires all accidents be investigated.

**Animal Science employees** will immediately notify their supervisor when occupationally-related injuries and illnesses occur, or when employees first become aware of such problems.

1. **Supervisors** will investigate all accidents, injuries, occupational illnesses, and near-miss incidents to identify the causal factors or attendant hazards. Appropriate repairs or procedural changes will be implemented promptly to mitigate the hazards implicated in these events. The **Electronic First Report (EFR)** is used to report work-related injuries and illnesses (https://ehs.ucop.edu/efr)

3. **Note:** Serious occupational injuries, illnesses, or exposures must be reported to Cal/OSHA by an EH&S representative **within eight hours** after they have become known to the supervisor. These include injuries/illnesses/exposures that cause permanent disfigurement or require hospitalization for a period in excess of 24 hours. Please refer to **EH&S SafetyNet #121** for OSHA notification instructions.
VI. Hazard Correction

Hazards discovered either as a result of a scheduled periodic inspection or during normal operations must be corrected by the supervisor in control of the work area, or by cooperation between the department in control of the work area and the supervisor of the employees working in that area. Supervisors of affected employees are expected to correct unsafe conditions as quickly as possible after discovery of a hazard, based on the severity of the hazard.

Specific procedures that can be used to correct hazards include, but are not limited to, the following:

- Tagging unsafe equipment “Do Not Use Until Repaired,” and providing a list of alternatives for employees to use until the equipment is repaired.
- Stopping unsafe work practices and providing retraining on proper procedures before work resumes.
- Reinforcing and explaining the need for proper personal protective equipment and ensuring its availability.
- Barricading areas that have chemical spills or other hazards and reporting the hazardous conditions to appropriate parties.

Supervisors should use the Hazard Alert Form (Appendix 2), page 44 and the Hazard Correction Report (Appendix 2), page 62 to document corrective actions, including projected and actual completion dates.

If an imminent hazard exists, work in the area must cease, and the appropriate supervisor must be contacted immediately. If the hazard cannot be immediately corrected without endangering employees or property, all personnel need to leave the area except those qualified and necessary to correct the condition. These qualified individuals will be equipped with necessary safeguards before addressing the situation.
VII. Health and Safety Training

Health and safety training, covering both general work practices and job-specific hazard training is the responsibility of the Department Safety Coordinator and immediate Supervisor(s) as applicable to the following criteria:

1. Supervisors are provided with training to become familiar with the safety and health hazards to which employees under their immediate direction and control may be exposed.

2. All new employees receive training prior to engaging in responsibilities that pose potential hazard(s).

3. All employees given new job assignments receive training on the hazards of their new responsibilities prior to actually assuming those responsibilities.

4. Training is provided whenever new substances, processes, procedures or equipment (which represent a new hazard) are introduced to the workplace.

5. Whenever the employer is made aware of a new or previously unrecognized hazard, training is provided.

The Safety Training Attendance Record form is located in Appendix 2, page 63.
VIII. Recordkeeping and Documentation

Original documents related to the IIPP are maintained in the Animal Science Department main office at 2223 Meyer Hall. Electronic versions are maintained at each lab/facility and the Safety Coordinator’s office.

The following documents will be maintained within the department’s IIPP Addendum Binder for at least the length of time indicated below:

1. Hazard Alert Forms (Appendix A form). Must be used in conjunction with the Hazard Correction report Appendix E form (filed when hazard is corrected.) Retain for three (3) years.

2. Hazard Correction Reports (Appendix E form). Retain for three (3) years.

3. Employee Job Safety Analysis forms (Appendix B form) An electronic copy to be maintained at the employee’s workplace and the original at the Animal Science office. Retain for the duration of each individual’s employment.

4. Worksite Inspection Forms (Appendix C1 (office), C2 (laboratory), C3(facilities) forms. Retain for three (3) years.

5. Accident Investigation Forms (Appendix D form). Retain for three (3) years.

The following documents will be maintained within the department’s IIPP Training Records Binder and at each lab/facility (documents may be scanned and electronic versions kept at lab/facility, original kept in the department’s main office) for at least the length of time indicated below:

1. Employee Annual Safety Training Attendance Records (Appendix F form). Retain for three (3) years.
IX. Resources

1. Office of the President: University Policy on Environmental Health and Safety, 10/22/86

2. UC Davis Policy and Procedure Manual, Section 290-15, Safety Management Program

3. California Code of Regulations Title 8, Section 3203, (8CCR §3203), Injury and Illness Prevention Program

4. Personnel Policies for Staff Members, Corrective Action, UCD Procedure 62


6. UC Davis Environmental Health & Safety
   - EH&S Website
   - EH&S SafetyNets and FireNets
   - Safety Data Sheets

7. Department website http://animalscience.ucdavis.edu

Appendix 1

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Safety Forms

A) Hazard Alert Form (Appendix A form) .............................................................. 28
   To be followed by the “Hazard Correction Form, (Appendix E)” when hazard is
   corrected
   Retain for three (3) years.

B) Employee Job Safety Analysis forms (Appendix B form) .................. 29-40
   Retain for the duration of each individual’s employment.

C) Worksite Inspection Forms
   Appendix 2-C1 (office) ................................................................. 41
   Appendix 2-C2 (laboratory) .............................................................. 42-43
   Appendix 2-C3 (facilities) ................................................................. 44-45
   Retain for three (3) years.

D) Accident Investigation Forms (Appendix D form) .......................... 46
   Retain for three (3) years.

E) Hazard Correction Reports (Appendix E form) ............................ 47
   Retain for three (3) years.

F) Employee Safety Training Attendance Records (Appendix F form) .. 48
   Retain for three (3) years.

G) Safety Plan Postings
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EMERGENCY ACTION PLAN POSTING
ANIMAL SCIENCE DEPARTMENT - MEYER HALL

When calling 911: give building name, wing, floor, room number, your name, phone number, explain the problem including: number of people involved & injuries if relevant.

<table>
<thead>
<tr>
<th>THE EMERGENCY:</th>
<th>CONTACT:</th>
</tr>
</thead>
<tbody>
<tr>
<td>smoke, fire</td>
<td>Pull nearest fire alarm, Call 911</td>
</tr>
<tr>
<td>Use fire extinguisher only if safe</td>
<td></td>
</tr>
<tr>
<td>injury, accident, illness</td>
<td>Call 911 (Ambulance)</td>
</tr>
<tr>
<td>hazardous spills (chemical, radioactive, biological/infectious agents, fumes)</td>
<td>Call 911(Haz Mat) and EH&amp;S (752-1493)</td>
</tr>
<tr>
<td>disruptive or illegal behavior, harassment, bomb threats, suspicious packages, robbery or other crime</td>
<td>Call 911 (Police)</td>
</tr>
<tr>
<td>building problems: electrical, plumbing, elevators, broken door lock/latch/closure, broken window, gas leak, sewer problems, fumes, strange smells or noises</td>
<td>Call Facilities if an emergency (752-1655)</td>
</tr>
<tr>
<td>Non-emergency; submit on-line work order</td>
<td></td>
</tr>
<tr>
<td>If chemical/strange smells, call EH&amp;S (2-1493) first.</td>
<td></td>
</tr>
</tbody>
</table>

WHEN TO EVACUATE? When the fire alarm bell sounds, if you know there is a fire or hazardous material spill, or in an earthquake AFTER the shaking has stopped. Remember, stay calm and urge others to do the same.

Evacuation Procedure: Close doors as you leave, evacuate via the nearest safe stairway or exit door. Check your area to see if everyone has been able to leave. DO NOT USE THE ELEVATORS. Proceed to the Departmental meeting location: the asphalt path north of the laboratory (north) building. Do not group in the courtyard between the two buildings.

Reporting: Staff and students should report to their laboratory or office supervisor. These supervisors will take roll call and report to the department Safety Coordinator or Alternate Safety Coordinator. Faculty should report directly to one of the departmental coordinators. Reports should include information on persons who definitely are or may be left in the building. Evacuees should stay with the group until told to leave or return to work. Anyone leaving before that time MUST report his/her leaving to his/her supervisor.

IF YOU CANNOT LEAVE the building because of obstruction or physical handicap, close doors between yourself and any fire, call 9-1-1 and give information on your location and situation, and stand by a window so rescuers can see you.
These guidelines contain the most common potential hazards for the work area, but are not inclusive of all the potential hazards in the work area. The inspection and hazard evaluation of the work area should not be limited to only these hazards. These guidelines are intended to be used in conjunction with site-specific job safety analysis.

<table>
<thead>
<tr>
<th>Potential Safety/Health Hazard</th>
<th>Preventive Safe Work Conditions, Safe Work Practices, or Personal Protective Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animals</td>
<td>Provide proper training.</td>
</tr>
<tr>
<td></td>
<td>Provide adequate fencing/containment.</td>
</tr>
<tr>
<td></td>
<td>Post warning signs on enclosures/areas holding dangerous animals.</td>
</tr>
<tr>
<td></td>
<td>Wear closed toed shoes or boots.</td>
</tr>
<tr>
<td>Machine/Equipment Operation</td>
<td>Provide proper training.</td>
</tr>
<tr>
<td></td>
<td>Follow manufacturers' operating and safety instructions.</td>
</tr>
<tr>
<td></td>
<td>Ensure guards and safety shields are in place during operations.</td>
</tr>
<tr>
<td></td>
<td>Provide and use face, hearing, dust protection.</td>
</tr>
<tr>
<td></td>
<td>Maintain adequate illumination.</td>
</tr>
<tr>
<td></td>
<td>Keep aisles and floor areas free of debris, spilled oil or feeds, manure, chemicals, and water to prevent tripping and slipping hazards.</td>
</tr>
<tr>
<td></td>
<td>Do not allow food/drink in machine/equipment areas.</td>
</tr>
<tr>
<td>Cleaning/Servicing Machinery/Equipment</td>
<td>Ensure machines/equipment turned off and disconnected from power source before cleaning/servicing.</td>
</tr>
<tr>
<td>Hazardous Chemicals</td>
<td>Inventory hazardous materials and ensure that SDSs are available in work area.</td>
</tr>
<tr>
<td></td>
<td>Provide proper training.</td>
</tr>
<tr>
<td></td>
<td>No chemicals in clean areas.</td>
</tr>
<tr>
<td></td>
<td>No food/drink in chemical storage areas.</td>
</tr>
<tr>
<td></td>
<td>Establish and maintain necessary health checks.</td>
</tr>
<tr>
<td>Dust</td>
<td>Dust/particle masks will be made available.</td>
</tr>
<tr>
<td></td>
<td>Eye wash stations or portable saline bottles should be available.</td>
</tr>
<tr>
<td>Hay Stacks and Bales</td>
<td>Stay off hay stacks unless performing a specified duty.</td>
</tr>
<tr>
<td></td>
<td>Bales used for feeding must be removed from the stacks prior to removing binding twine.</td>
</tr>
<tr>
<td></td>
<td>Bales will be removed from the stack in a manner which creates a step effect up the face.</td>
</tr>
<tr>
<td></td>
<td>Bales should be removed in a manner that does not cause the stack to become unstable.</td>
</tr>
<tr>
<td></td>
<td>Hay hooks will not be left on hay bales, but hooked on trash barrels.</td>
</tr>
<tr>
<td></td>
<td>Knives used for cutting binding twine will not be left in the barns.</td>
</tr>
<tr>
<td></td>
<td>All bale twine and other trash will be placed completely in trash barrels</td>
</tr>
<tr>
<td>Wet and Slippery Surfaces, Animal Pens and Lanes</td>
<td>No running or sudden motions/twisting. These actions in such areas pose risk of slipping, tripping, or falling.</td>
</tr>
<tr>
<td></td>
<td>Running or sudden motion around animals can cause them to react violently, with the possibility of injuring humans and animals.</td>
</tr>
</tbody>
</table>
DEPARTMENT OF ANIMAL SCIENCE  
HAZARD EVALUATION GUIDELINES FOR LABORATORIES

These guidelines contain the most common potential hazards for the work area, but are not inclusive of all the potential hazards in the work area. The inspection and hazard evaluation of the work area should not be limited to only these hazards. These guidelines are intended to be used in conjunction with site-specific job safety analysis.

<table>
<thead>
<tr>
<th>Potential Safety/Health Hazard</th>
<th>Preventive Safe Work Conditions, Safe Work Practices, or Personal Protective Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxic (highly toxic, carcinogenic, reproductive hazards, neurotoxins, etc.)</td>
<td>Use gloves to avoid skin absorption. Use in fume hood and/or wear mask/respirator to avoid inhalation. Segregate in storage from incompatible chemicals. Wear eye protection. Use mechanical pipetting devices. Wash lab bench/scale thoroughly after use; rinse glassware thoroughly after use; wash hands thoroughly after use. Post appropriate signs/labels. Use in smallest quantities practicable.</td>
</tr>
<tr>
<td>Adverse Chemical Reactions</td>
<td>Maintain labeling of containers. Segregate incompatibles by distance and/or barrier.</td>
</tr>
<tr>
<td>Corrosive Chemicals: Skin or Eye Damage</td>
<td>Wear eye and face protection. Ensure that eye wash/shower is available and functioning. Wear rubber gloves and apron. Wear closed toed shoes.</td>
</tr>
<tr>
<td>Radioactive Materials</td>
<td>Be up-to-date on training. Post appropriate signs/labels. Use absorbent bench paper. Use proper disposal techniques.</td>
</tr>
<tr>
<td>Biohazards</td>
<td>Be up-to-date on training. Post appropriate signs/labels. Use proper disposal techniques.</td>
</tr>
</tbody>
</table>
Seismic Hazards
Ensure there are shelf lips or restraints to prevent chemical spillage.

Secure equipment, instruments, shelf units, and cabinets.
Secure cylinders properly.
Leave protective caps on during storage or transport.

Compressed Gasses: Physical or Health Injury, Fire
Use cylinder hand truck to move cylinders.
Use proper regulator for type of gas.
Visually inspect for dents, leaks, corrosion, pitting, bulges, and physical distortions.

Electrical Shock, Electrocution
Do not overload outlet circuits.
Replace worn or frayed cords.
Use three pronged (grounded) plugs.
Do not use extension cords.
Do not force a plug into a non-matching receptacle.
Use GFI's with appliances in wet or potentially wet locations.
Keep area in front of circuit panels clear.

Equipment/Instrument Use
Follow manufacturer's operating and safety instructions.
Inspect equipment regularly for broken parts and/or frayed electrical cords.
Train new employees/students in safe and proper use.

Fume Hoods, Biosafety Hoods
Have fume hood/biosafety hood inspections and evaluations performed.
Do not use any hood tagged as being inoperative or substandard.
Ensure that visual indicator is present to show hood is operating.
Maintain sashes in place.

High Noise: Hearing Damage
Post equipment requiring use of ear protectors.
Provide and use ear protectors.

Obstructed Egress
Keep all exit ways and exits clear.
Maintain exit signs.

Skin/Eye Injury due to Cryogenic Liquids
Ensure that eye and skin protection is provided and used.

Clean Areas
Currently, post food storage refrigerators/freezers with "Food only" or other appropriate designation. And store and consume food/drink in Clean Areas only (but this needs to change to No Food In The Lab, as per UCD policy and CalOSHA).
But Clean Areas Still Critical for Non-Chemical Work:
Do not use ANY laboratory chemicals in Clean Areas.
Wash hands, remove gloves before entering Clean Area.
Do not answer telephone when wearing gloves.
Acquaint all lab personnel with P&PM 290-65 (4/5/00).

Emergency Evacuation
Post evacuation routes and departmental meeting place.

Other
DEPARTMENT OF ANIMAL SCIENCE  
HAZARD EVALUATION GUIDELINES FOR THE OFFICE

The inspection and hazard evaluation of the work area should not be limited to only these hazards. These guidelines are intended to be used in conjunction with site-specific job safety analysis.

<table>
<thead>
<tr>
<th>Potential Safety/Health Hazard</th>
<th>Preventive Safe Work Conditions, Safe Work Practices, or Personal Protective Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Shock, Electrocuton</td>
<td>Do not overload outlet circuits. Replace worn or frayed cords. Do not use extension cords. Use 3-pronged/grounded plugs. Do not force a plug into a non-matching receptacle. Ensure that electrical cords are not damaged by being wedged against furniture or pinched by doors.</td>
</tr>
<tr>
<td>Tripping Hazards</td>
<td>Keep aisles and floor areas free of debris and liquid spills. Do not string unprotected electrical cords across aisles. Do not stand on chairs. Use approved foot stools. Provide general office safety training.</td>
</tr>
<tr>
<td>Lifting Hazards</td>
<td>Provide proper training. Provide hand trucks and carts to transport heavy objects.</td>
</tr>
<tr>
<td>Injury Due to Falling Objects</td>
<td>Do not store heavy objects overhead. Do not open more than one file drawer at a time. Do not top load file cabinets, fill them bottom to top. Brace tall bookcases and cabinets to walls. Provide shelf restraints as necessary.</td>
</tr>
<tr>
<td>Repetitive Motion Injury</td>
<td>Ensure workstations are ergonomically correct. Provide proper training.</td>
</tr>
<tr>
<td>Equipment</td>
<td>Provide proper training. Follow manufacturers’ operating and safety instructions.</td>
</tr>
<tr>
<td>Hazardous Chemicals</td>
<td>Inventory chemicals and maintain SDS file. Arrange for proper disposal if needed. Follow labeling precautions for safe use.</td>
</tr>
<tr>
<td>Fire or Other Disaster</td>
<td>Provide Emergency Action Plan</td>
</tr>
<tr>
<td>Suspicious Packages</td>
<td>Provide training via posting in the receiving room listing things to look for, and to call UC Police Department</td>
</tr>
</tbody>
</table>
UNIVERISTY OF CALIFORNIA, DAVIS - DEPARTMENT OF ANIMAL SCIENCE:
HEAT ILLNESS PREVENTION PROGRAM

This program is intended to comply with California Code of Regulations Title 8, Section 3395, Heat Illness Prevention. The heat illness prevention standard is applicable to any outdoor workplace, whenever environmental risk factors for heat illness are present.

About 240 Americans succumb to the taxing demands of heat every year. Our bodies dissipate heat by varying the rate and depth of blood circulation, by losing water through the skin and sweat glands, and as a last resort, by panting, when blood is heated above 98.6°F. Sweating cools the body through evaporation. However, high relative humidity retards evaporation, robbing the body of its ability to cool itself. When heat gain exceeds the level the body can remove, body temperature begins to rise, and heat related illnesses and disorders may develop.

In the course of their work duties, employees at our on-campus outdoor animal facilities (Goat Barn, Horse Barn, Sheep Barn, Beef Barn, Feedlot, Feedmill, Dairy, Swine Facility and Hopkins /Avian Science Research Facility) may be exposed to environmental risk factors for heat illness, in addition the employees of our Farm Crew/Shop who are also at risk due to their primarily outdoor work duties, and the employees at our field stations (Sierra Foothill, Browns Valley and Desert Research, El Centro). The supervisor/manager at each facility is the designated individual to oversee the training and implementation of this program.

Recognizing Heat Illness Risk Factors

Environmental risk factors for heat illness are defined in the regulation as working conditions that affect the possibility that heat illness could occur, including air temperature, relative humidity, radiant heat from the sun and other sources, conductive heat sources such as the ground, air movement, workload severity and duration, and protective clothing and personal protective equipment worn by employees.

Personal risk factors for heat illness include age, degree of acclimatization, general health, water consumption, and use of medications, caffeine, or alcohol which can affect the body’s water retention or other physical response to heat.

Supervisors must evaluate work conditions before sending employees to perform outdoor work in hot conditions. Typically, temperatures above 80°F, especially with heavy physical work activities, would represent conditions where there is a risk of heat illness. Other factors, such as high humidity, or work activities that restrict the body’s ability to cool itself, such as wearing protective clothing, could result in a risk of heat illness even at lower temperatures.

The Heat Index (HI) guideline (attached at the end of this document) may be used to assess the environmental risk of heat illness, based on temperature and relative humidity. The Heat Index table categorizes the risk or degree of heat illness with increasing heat index values. Provision of water and shade as described below should be implemented whenever the Heat Index exceeds 80°F.

Provision of Water

Clean, fresh, and cool potable water will be readily available to employees. Whenever environmental risk factors for heat illness exist, drinking water will be available in sufficient quantities to provide one quart per employee per hour for the entire shift (at least 2 gallons per employee for an 8-hour shift). Supervisors are responsible to ensure that employees have an adequate supply of drinking water, by pointing out the location of drinking fountain(s) available at each of our facilities. Employees working outside will be encouraged to drink water frequently; at least one quart per hour. The farm and field station crews when working away from a
particular facility will have a 5 gallon water cooler on their truck filled and maintained by the crew supervisor or his designee.

**Access to Shade**

A shaded or air-conditioned area will be provided that employees may use during breaks, or when they are suffering from heat illness, or believe they need a recovery period to prevent heat illness. All our facilities have an air conditioned office that can be used for this purpose. If an outdoor project is occurring away from the office proximity, then a shaded area such as a canopy, umbrella or other temporary structure that blocks direct sunlight may be used to provide shade. Supervisors are responsible to ensure that employees have access to a shaded area.

**Procedures for Monitoring the Weather**

At the beginning of each day, the Facility Manager will be responsible for monitoring the weather (using [http://www.weather.gov](http://www.weather.gov) or another local weather web site, or by calling California Dial-A-Forecast (916) 979-3051 or by using an outdoor thermometer) at the worksite. This information will be taken into consideration, to determine when it will be necessary to make modifications to the work schedule (such as stopping outdoor work early, rescheduling the job, or working during the cooler morning hours of the day, and increasing the number of water and rest breaks).

The Facility Manager can use the Heat Index Chart (at the end of this document) to evaluate the risk level for heat illness on any particular day. It is important to keep in mind that the temperature/humidity at which these “warnings” occur must be lowered as much as 15 degrees, if the workers are in direct sunlight.

**Handling a Heat Wave**

During a heat wave or heat spike (e.g., a sudden increase in daytime temperature of 9 degrees or more) outdoor work will be rescheduled if possible. If schedule modifications are not possible and workers have to work during a heat wave, the Facility Manager will reinforce heat illness prevention with emergency response procedures. In addition, the manager will institute alternative preventive measures such as increasing the number of water and rest breaks, and observe closely all workers for signs and symptoms of heat illness.

**High Heat Procedures** (additional preventive measures that the Animal Science Department will use when the temperatures equals or exceeds 95 degrees Fahrenheit).

The Facility Manager will ensure that communication by voice, observation, or electronic means is maintained so that employees at the worksite can contact a supervisor when necessary. When possible the manager will observe employees for alertness and signs of heat illness, and will remind employees to drink water and take breaks.

**Procedures for Acclimatization**

Acclimatization is the gradual exposure to work in hot conditions to allow a person’s body to adjust to working in heat. Acclimatization is particularly important for employees who are returning to work after a prolonged absence, recent illness, or recently moving from a cool to hot climate. For heavy work under very hot conditions, a period of 4-10 days of progressively increasing work time is recommended, starting with about 2 hours of work per day. For less severe conditions, 2-3 days of increasing work activity and duration are recommended. Inadequate acclimatization can imperil anyone exposed to conditions of heat and physical stress significantly more intense than what they are used to. Employers are responsible for the working conditions of their employees, and they must act effectively when conditions result in sudden exposure to heat their employees are not used to. The Facility Manager will be extra-vigilant with new employees and stay alert to the presence of heat related illness symptoms.

**Attachment A: Acclimatization Guidance**

When ambient temperatures rise to levels higher than employees are accustomed, supervisors must act effectively by taking the following measures:

- Monitor the weather and be aware of sudden heat wave(s) or increases in temperatures to which employees haven’t been exposed to for several weeks or longer.
• “Heat Wave” is defined as any day in which the predicted high temperature for the day will be at least 80 degrees Fahrenheit and at least 10 degrees Fahrenheit higher than the average high daily temperature in the preceding five days.

• Cut short or re-schedule the work day during a heat wave or heat spike (e.g., a sudden increase in daytime temperature of 9°F or more). During the hot summer months, the work shift may start earlier in the day or later in the evening.

• Lessen the intensity of work for new employees during a two-week break-in period (i.e. scheduling slower paced, less physically demanding work during the hot parts of the day and the heaviest work activities during the cooler parts of the day). New employees may be assigned to a “buddy” or experienced coworker to watch each other closely for discomfort or symptoms of heat illness.

• Closely observe all employees during a heat wave and monitor for possible symptoms of heat illness. For employees working in remote locations, maintain frequent communication by phone or radio.

• Train employees and supervisors on the importance of acclimatization.

**Handling a Sick Employee & Procedures for Emergency Response**

When you identify the signs of heat illness (see below) in yourself or in a co-worker, immediately move to a shaded or air-conditioned area, loosen or remove any heavy clothing, provide drinking water or an electrolyte beverage, and fan and mist the person with water, for a recovery period of at least five minutes, if the condition initially appears to be severe (loss of consciousness, incoherent speech, convulsions, red and hot face) or the employee does not recover from early symptoms (dizziness, muscle cramps, weakness), then emergency medical care is needed. Emergency medical care shall be provided by the following method: Call 911 and be ready to provide emergency response personnel with directions to the specific work location.

**Identifying Heat Illness**

Heat illness is a group of serious and escalating medical conditions that can result from the body's inability to cope with a particular heat load, and includes heat fatigue, heat cramps, heat exhaustion, and heat stroke. The National Institute of Occupational Safety and Health (NIOSH) publication *Working in Hot Environments* describes the symptoms and response measures for several types of heat illness, as follows:

**Transient Heat Fatigue:** Transient heat fatigue refers to the temporary state of discomfort and mental or psychological strain arising from prolonged heat exposure. Workers unaccustomed to the heat are particularly susceptible and can suffer, to varying degrees, (e.g. a decline in task performance, coordination, alertness, and vigilance). The severity of transient heat fatigue will be lessened by a period of gradual adjustment to the hot environment (heat acclimatization).

**Heat Rash:** Heat rash, also known as prickly heat, is likely to occur in hot, humid environments where sweat is not easily removed from the surface of the skin by evaporation and the skin remains wet most of the time. The sweat ducts become plugged and a skin rash soon appears. When the rash is extensive or when it is complicated by infection, prickly heat can be very uncomfortable and may reduce a worker's performance. The worker can prevent this condition by resting in a cool place part of each day and by regularly bathing and drying the skin.

**Fainting:** A worker who is not accustomed to hot environments and who stands erect and immobile in the heat may faint. With enlarged blood vessels in the skin and in the lower part of the body due to the body's attempts to control internal temperature, blood may pool there rather than return to the heart to be pumped to the brain. Upon lying down, the worker should soon recover. By moving around, and thereby preventing blood from pooling, the patient can prevent further fainting.

**Heat Cramps:** Heat cramps are painful spasms of the muscles that occur among those who sweat profusely in heat, drink large quantities of water, but do not adequately replace the body's salt loss. The drinking of large quantities of water tends to dilute the body's fluids, while the body continues to lose salt. Shortly thereafter, the low salt level in the muscles causes painful cramps. The affected muscles may be part of the arms, legs, or
abdomen, but tired muscles (those used in performing the work) are usually the ones most susceptible to cramps. Cramps may occur during or after work hours and may be relieved by taking salted liquids by mouth. **CAUTION:** Persons with heart problems or those on a low sodium diet who work in hot environments should consult a physician about what to do under these conditions.

**Heat Exhaustion:** Heat exhaustion includes several clinical disorders having symptoms which may resemble the early symptoms of heat stroke. Heat exhaustion is caused by the loss of large amounts of fluid by sweating, sometimes with excessive loss of salt. A worker suffering from heat exhaustion still sweats but experiences extreme weakness or fatigue, giddiness, nausea, or headache. In more serious cases, the victim may vomit or lose consciousness. The skin is clammy and moist, the complexion is pale or flushed, and the body temperature is normal or only slightly elevated. In most cases, treatment involves having the victim rest in a cool place and drink plenty of liquids. Victims with mild cases of heat exhaustion usually recover spontaneously with this treatment. Those with severe cases may require extended care for several days. There are no known permanent effects. **CAUTION:** Persons with heart problems or those on a low sodium diet who work in hot environments should consult a physician about what to do under these conditions.

**Heat Stroke:** Heat stroke is the most serious of health problems associated with working in hot environments. It occurs when the body's temperature regulatory system fails and sweating becomes inadequate. The body's only effective means of removing excess heat is compromised with little warning to the victim that a crisis stage has been reached.

A heat stroke victim's skin is hot, usually dry, red or spotted. Body temperature is usually 105°F or higher, and the victim is mentally confused, delirious, perhaps in convulsions, or unconscious. Unless the victim receives quick and appropriate treatment, death can occur.

Any person with signs or symptoms of heat stroke requires immediate hospitalization. However, first aid should be immediately administered. This includes removing the victim to a cool area, thoroughly soaking the clothing with water, and vigorously fanning the body to increase cooling. Further treatment at a medical facility should be directed to the continuation of the cooling process and the monitoring of complications which often accompany the heat stroke. Early recognition and treatment of heat stroke are the only means of preventing permanent brain damage or death.

Any employee who recognizes symptoms or signs of heat illness in themselves or in co-workers should immediately report this condition to their supervisor.

**Procedures for Employee and Supervisory Training**

All Department of Animal Science employees who may work outdoors in conditions where there are environmental risk factors for heat illness shall be provided training on this program. The Department of Animal Science Safety Coordinator will ensure that all Facility Managers are trained prior to supervising other workers, and this training will be conducted on an annual basis. The Facility managers, in turn, will provide training to all employees working at their Facility. Training will include the review of this Department’s written “HEAT ILLNESS PREVENTION PROGRAM” and the signing of the “Training Documentation Form”.

**Heat Index**

The Heat Index (HI) is the temperature the body feels when heat and humidity are combined. As relative humidity increases, the air seems warmer than it actually is because the body is less able to cool itself via evaporation of perspiration. The chart below shows the HI that corresponds to the actual air temperature and relative humidity. This chart is based upon shady, light wind conditions. Exposure to direct sunlight can increase the HI by up to 15°F. The average monthly relative humidity for the Sacramento area in the summer is approximately 50%.

As the heat index rises, so do health risks. When the HI is 80-90°F, fatigue is possible with prolonged exposure and activity. When the HI is 90-105°F, sunstroke, heat cramps, and heat exhaustion is possible. When
the HI is 105-130°F, sunstroke, heat cramps and heat exhaustion is likely and heat stroke possible. When HI is 130°F or more, heat stroke is very likely. Physical activity and prolonged exposure to the heat increase the risks at all indices.

**Prevention Procedures**

**General Prevention**

- Rest in shaded areas
- Stay hydrated
- Avoid vigorous physical activities in hot and humid weather
- At work, if you must perform physical activities in hot weather:
  - Drink plenty of fluids
  - Avoid alcohol, coffee, and tea - may lead to dehydration
  - Take frequent mini-breaks to hydrate yourself
  - As practical; wear hats, light colored, and light/loose clothes
I have reviewed the Department’s Heat Illness Prevention Program, and understand the risk factors leading to heat illness, on how to reduce the risk of heat related illness, how to recognize the symptoms of heat illness, and what to do if heat related illness occurs.

Name (print): ________________________________

Facility: ___________________________________

Signature: _________________________________

Date: __________________

Trainer Name (Print): __________________________

Trainer Signature: ____________________________
SOP’s for Chemicals

SOP template and example SOP’s can be found on the Safety Services website at:

http://safetyservices.ucdavis.edu

This link for Standard Operating Procedure Templates can be found on the safety link of the Animal Science webpage.
HAZARD ALERT FORM

Department: ____________________________________________

I. Unsafe Condition or Hazard

Name: (optional) ________________________________________  Job: __________________________

Title: (optional) __________________________________________

Location of Hazard: _______________________________________

Building: __________________ Floor: __________ Room: __________

Date and time the condition or hazard was observed:

________________________________________________________

Description of unsafe condition or hazard:

________________________________________________________

________________________________________________________

What changes would you recommend to correct the condition or hazard?

________________________________________________________

Employee Signature: (optional) ____________________________

Date: __________________________________________

II. Management/Safety Committee Investigation

Name of person investigating unsafe condition or hazard:

________________________________________________________

Results of investigation (What was found? Was condition unsafe or a hazard?): (Attach additional sheets if necessary.)

________________________________________________________

________________________________________________________

________________________________________________________

Proposed action to be taken to correct hazard or unsafe condition: (Complete and attach a Hazard Correction Report, IIPP Appendix E)

________________________________________________________

________________________________________________________

________________________________________________________

Signature of Investigating Party: ____________________________

Date: __________________________________________

IIPP-Appendix A
March 2006  Completed copies of this form should be routed to the appropriate supervisor and department
Safety Coordinator, and must be maintained in department files for at least three years.
What is a Job Safety Analysis?

What are the benefits of doing a Job Safety Analysis?

What are the four basic steps?

What is important to know when "selecting the job"?

How do I break the job into "basic steps"?

How do I "identify potential hazards"?

How do I "determine preventive measures"?

How should I make the information available to everyone else?

Appendix B: Sample form for Job Safety Analysis Worksheet

Appendix B: Sample forms for Tasks and Job Inventory

What is a Job Safety Analysis?

A job safety analysis (JSA) is a procedure which helps integrate accepted safety and health principles and practices into a particular task or job operation. In a JSA, each basic step of the job is to identify potential hazards and to recommend the safest way to do the job. Other terms used to describe this procedure are job hazard analysis (JHA) and job hazard breakdown.
Some individuals prefer to expand the analysis into all aspects of the job, not just safety. This approach is known as total job analysis. Methodology is based on the idea that safety is an integral part of every job and not a separate entity. In this document, only health and safety aspects will be considered.

The terms "job" and "task" are commonly used interchangeably to mean a specific work assignment, such as "operating a grinder," "using a pressurized water extinguisher," or "changing a flat tire." JSAs are not suitable for jobs defined too broadly, for example, "overhauling an engine"; or too narrowly, for example, "positioning car jack."

**What are the benefits of doing a Job Safety Analysis?**

One of the methods used in this example is to observe a worker actually perform the job. The major advantages of this method include that it does not rely on individual memory and that the process prompts recognition of hazards. For infrequently performed or new jobs, observation may not be practical.

One approach is to have a group of experienced workers and supervisors complete the analysis through discussion. An advantage of this method is that more people are involved in a wider base of experience and promoting a more ready acceptance of the resulting work procedure. Members of the joint occupational safety and health committee must participate in this process.

Initial benefits from developing a JSA will become clear in the preparation stage. The analysis process may identify previously undetected hazards and increase the job knowledge of those participating. Safety and health awareness is raised, communication between workers and supervisors is improved, and acceptance of safe work procedures is promoted.

A JSA, or better still, a written work procedure based on it, can form the basis for regular contact between supervisors and workers. It can serve as a teaching aid for initial job training and as a briefing guide for infrequent jobs. It may be used as a standard for health and safety inspections or observations. In particular, a JSA will assist in completing comprehensive accident investigations.
What are the four basic steps?

Four basic stages in conducting a JSA are:

- selecting the job to be analyzed
- breaking the job down into a sequence of steps
- identifying potential hazards
- determining preventive measures to overcome these hazards

What is important to know when "selecting the job"?

Ideally, all jobs should be subjected to a JSA. In some cases there are practical constraints posed by the amount of time and effort required to do a JSA. Another consideration is that each JSA will require revision whenever equipment, raw materials, processes, or the environment change. For these reasons, it is usually necessary to identify which jobs are to be analyzed. Even if analysis of all jobs is planned, this step ensures that the most critical jobs are examined first.

Factors to be considered in setting a priority for analysis of jobs include:

- Accident frequency and severity: jobs where accidents occur frequently or where they occur infrequently but result in disabling injuries.
- Potential for severe injuries or illnesses: the consequences of an accident, hazardous condition, or exposure to harmful substance are potentially severe.
- Newly established jobs: due to lack of experience in these jobs, hazards may not be evident or anticipated.
- Modified jobs: new hazards may be associated with changes in job procedures.
- Infrequently performed jobs: workers may be at greater risk when undertaking non-routine jobs, and a JSA provides a means of reviewing hazards.

How do I break the job into "basic steps"?
After a job has been chosen for analysis, the next stage is to break the job into steps. A job step is defined as a segment of the operation necessary to advance the work. See examples below.

Care must be taken not to make the steps too general. Missing specific steps and their associated hazards will not help. On the other hand, if they are too detailed, there will be too many steps. A rule of thumb is that most jobs can be described in less than ten steps. If more steps are required, you might want to divide the job into two segments, each with its separate JSA, or combine steps where appropriate. As an example, the job of changing a flat tire will be used in this document.

An important point to remember is to keep the steps in their correct sequence. Any step which is out of order may miss serious potential hazards or introduce hazards which do not actually exist.

Each step is recorded in sequence. Make notes about what is done rather than how it is done. Each item is started with an action verb. Appendix A illustrates a format which can be used as a worksheet in preparing a JSA. Job steps are recorded in the left hand column, as shown below:

<table>
<thead>
<tr>
<th>Sequence of Events</th>
<th>Potential Accidents or Hazards</th>
<th>Preventive Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park vehicle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remove spare and tool kit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pry off hub cap and loosen lug bolts (nuts)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>And so on.....</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This part of the analysis is usually prepared by knowing or watching a worker do the job. The observer is normally the immediate supervisor. For a more thorough analysis often happens by having
another person, preferably a member of the joint occupational health and safety committee, participate in the observation. Key points are less likely to be missed in this way.

The job observer should have experienced and be capable in all parts of the job. To strengthen full co-operation and participation, the reason for the exercise must be clearly explained. The JSA is neither a time and motion study in disguise, nor an attempt to uncover individual unsafe acts. The job, not the individual, is being studied in an effort to make it safer by identifying hazards and making modifications to eliminate or reduce them. The worker's experience contributes in making job and safety improvements.

The job should be observed during normal times and situations. For example, if a job is routinely done only at night, the JSA review should also be done at night. Similarly, only regular tools and equipment should be used. The only difference from normal operations is the fact that the worker is being observed.

When completed, the breakdown of steps should be discussed by all the participants (always including the worker) to make that all basic steps have been noted and are in the correct order.

**How do I "identify potential hazards"?**

Once the basic steps have been recorded, potential hazards must be identified at each step. Based on observations of the job, knowledge of accident and injury causes, and personal experience, list the things that could go wrong at each step.

A second observation of the job being performed may be needed. Since the basic steps have already been recorded, more attention can now be focused on each potential hazards. At this stage, no attempt is made to solve any problems which may have been detected.

To help identify potential hazards, the job analyst may use questions such as these (this is not a complete list):

- Can any body part get caught in or between objects?
- Do tools, machines, or equipment present any hazards?
- Can the worker make harmful contact with moving objects?
Can the worker slip, trip, or fall?
Can the worker suffer strain from lifting, pushing, or pulling?
Is the worker exposed to extreme heat or cold?
Is excessive noise or vibration a problem?
Is there a danger from falling objects?
Is lighting a problem?
Can weather conditions affect safety?
Is harmful radiation a possibility?
Can contact be made with hot, toxic, or caustic substances?
Are there dusts, fumes, mists, or vapours in the air?

Potential hazards are listed in the middle column of the worksheet, numbered to match the corresponding job step. For example:

<table>
<thead>
<tr>
<th>Sequence of Events</th>
<th>Potential Accidents or Hazards</th>
<th>Preventive Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park vehicle</td>
<td>a) Vehicle too close to passing traffic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Vehicle on uneven, soft ground</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) Vehicle may roll.</td>
<td></td>
</tr>
<tr>
<td>Remove spare and tool kit</td>
<td>a) Strain from lifting spare.</td>
<td></td>
</tr>
<tr>
<td>Pry off hub cap and loosen lug bolts (nuts).</td>
<td>a) Hub cap may pop off and hit you</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Lug wrench may slip</td>
<td></td>
</tr>
<tr>
<td>And so on.....</td>
<td>a)...</td>
<td></td>
</tr>
</tbody>
</table>

Again, all participants should jointly review this part of the analysis.

**How do I "determine preventive measures?"**

The final stage in a JSA is to determine ways to eliminate or control the hazards identified. The generally accepted measures, in order of preference, are:
1. **Eliminate the hazard: use a machine guard**

This is the most effective measure. These techniques should be used to eliminate the hazards:

- Choose a different process
- Modify an existing process
- Substitute with less hazardous substance
- Improve environment (ventilation)
- Modify or change equipment or tools

2. **Contain the hazard**

If the hazard cannot be eliminated, contact might be prevented by using enclosures, machine guards, worker booths or similar devices.

3. **Revise work procedures**

Consideration might be given to modifying steps which are hazardous, changing the sequence of steps, or adding additional steps (such as locking out energy sources).

4. **Reduce the exposure**

These measures are the least effective and should only be used if no other solutions are possible. One way of minimizing exposure is to reduce the number of times the hazard is encountered. An example would be modifying machinery so that less maintenance is necessary. The use of appropriate personal protective equipment may be required. To reduce the severity of an accident, emergency facilities, such as eyewash stations, may need to be provided.

In listing the preventive measures, do not use general statements such as "be careful" or "use caution". Specific statements which describe both what action is to be taken and how it is to be performed are preferable. The recommended measures are listed in the right hand column of the worksheet, numbered to match the hazard in question. For example:
<table>
<thead>
<tr>
<th>Sequence of Events</th>
<th>Potential Accidents or Hazards</th>
<th>Preventive Measures</th>
</tr>
</thead>
</table>
| Park vehicle       | a) Vehicle too close to passing traffic  
b) Vehicle on uneven, soft ground  
c) Vehicle may roll. | a) Drive to area well clear of traffic. Turn on emergency flashers  
b) Choose a firm, level parking area  
c) Apply the parking brake; leave transmission in PARK; place blocks in front and back of the wheel diagonally opposite to the flat |
| Remove spare and tool kit | a) Strain from lifting spare. | a) Turn spare into upright position in the wheel well. Using your legs and standing as close as possible, lift spare out of truck and roll to flat tire. |
| Pry off hub cap and loosen lug bolts (nuts). | a) Hub cap may pop off and hit you  
b) Lug wrench may slip | a) Pry off hub cap using steady pressure  
b) Use proper lug wrench; apply steady pressure slowly. |
| And so on.... | a)... | a)... |

**How should I make the information available to everyone else?**

JSA is a useful technique for identifying hazards so that workers can take measures to eliminate or control hazards. Once the analysis is completed, the results must be communicated to all workers who are, or will be, performing that job. The side-by-side format used in JSA worksheets is not an ideal one for instructional purposes. Better results can be achieved by using a narrative-style communication format. For example, the work procedure based on the partial JSA developed as an example in this document might start out like this:
1. Park vehicle.

a) Drive vehicle off the road to an area well clear of traffic, even if it requires rolling on a flat tire. Turn on the emergency flashers to alert passing drivers so that they will not hit you.

b) Choose a firm and level area for parking. You can jack up the vehicle to prevent rolling.

c) Apply the parking brake, leave the transmission in PARK, place blocks in front and back of the wheel diagonally opposite the flat. These actions will also help prevent the vehicle from rolling.

2. Remove spare and tool kit.

a) To avoid back strain, turn the spare up into an upright position in its well. Stand as close to the trunk as possible and slide the spare close to your body. Lift out and roll to flat tire.

3. Pry off hub cap, loosen lug bolts (nuts).

a) Pry off hub cap slowly with steady pressure to prevent it from popping off and striking you.

b) Using the proper lug wrench, apply steady pressure slowly to loosen the lug bolts (nuts) so that the wrench will not slip, get lost or and hurt your knuckles.

4. And so on.
Appendix B: Sample form for Job Safety Analysis Worksheet

<table>
<thead>
<tr>
<th>Job Safety Analysis Worksheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job:</td>
</tr>
<tr>
<td>Analysis By:</td>
</tr>
<tr>
<td>Reviewed By:</td>
</tr>
<tr>
<td>Approved By:</td>
</tr>
<tr>
<td>Date:</td>
</tr>
<tr>
<td>Date:</td>
</tr>
<tr>
<td>Date:</td>
</tr>
<tr>
<td>Sequence of Steps</td>
</tr>
<tr>
<td>Potential Accidents or Hazards</td>
</tr>
<tr>
<td>Preventative Measures</td>
</tr>
</tbody>
</table>
Appendix B: Sample forms for Tasks and Job Inventory

<table>
<thead>
<tr>
<th>Tasks with Potential Exposure to Hazardous Materials or Physical Agents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis By:</td>
</tr>
<tr>
<td>Date:</td>
</tr>
<tr>
<td>Tasks</td>
</tr>
<tr>
<td>Job Inventory of Hazardous Chemicals</td>
</tr>
<tr>
<td>------------------------------------</td>
</tr>
<tr>
<td>Analysis By:</td>
</tr>
<tr>
<td>Date:</td>
</tr>
<tr>
<td>Name of Chemical</td>
</tr>
</tbody>
</table>
**WORKSITE INSPECTION FORM**
Animal Science Office

<table>
<thead>
<tr>
<th>Location:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspector:</td>
<td>Phone:</td>
</tr>
<tr>
<td>Department:</td>
<td></td>
</tr>
</tbody>
</table>

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### Administration and Training

<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Are all safety records maintained in a centralized file for easy access? Are they current?</td>
<td>Yes/No/NA</td>
</tr>
<tr>
<td>2.</td>
<td>Have all employees attended Injury &amp; Illness Prevention Program training? If not, what percentage has attended?</td>
<td>Yes/No/NA</td>
</tr>
<tr>
<td>3.</td>
<td>Does the department have a completed Emergency Action Plan? Are employees being trained on its contents?</td>
<td>Yes/No/NA</td>
</tr>
<tr>
<td>4.</td>
<td>Are chemical products used in the office being purchased in small quantities? Are Material Safety Data Sheets needed?</td>
<td>Yes/No/NA</td>
</tr>
<tr>
<td>5.</td>
<td>Are the Cal/OSHA information poster, Workers’ Compensation bulletin, annual accident summary posted?</td>
<td>Yes/No/NA</td>
</tr>
<tr>
<td>6.</td>
<td>Are annual workplace inspections performed and documented?</td>
<td>Yes/No/NA</td>
</tr>
</tbody>
</table>

### General Safety

<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7.</td>
<td>Are exits, fire alarms, pull boxes clearly marked and unobstructed?</td>
<td>Yes/No/NA</td>
</tr>
<tr>
<td>8.</td>
<td>Are aisles and corridors unobstructed to allow unimpeded evacuations?</td>
<td>Yes/No/NA</td>
</tr>
<tr>
<td>9.</td>
<td>Is a clearly identified, unobstructed, charged, currently inspected and tagged, wall-mounted fire extinguisher available as required by the Fire Department?</td>
<td>Yes/No/NA</td>
</tr>
<tr>
<td>10.</td>
<td>Are ergonomic issues being addressed for employees using computers or at risk of repetitive motion injuries?</td>
<td>Yes/No/NA</td>
</tr>
<tr>
<td>11.</td>
<td>Is a fully stocked first-aid kit available? Is the location known to all employees in the area?</td>
<td>Yes/No/NA</td>
</tr>
<tr>
<td>12.</td>
<td>Are cabinets, shelves, and furniture over five feet tall secured to prevent toppling during earthquakes?</td>
<td>Yes/No/NA</td>
</tr>
<tr>
<td>13.</td>
<td>Are books and heavy items and equipment stored on low shelves and secured to prevent them from falling on people during earthquakes?</td>
<td>Yes/No/NA</td>
</tr>
<tr>
<td>14.</td>
<td>Is the office kept clean of trash and recyclables promptly removed?</td>
<td>Yes/No/NA</td>
</tr>
</tbody>
</table>

### Electrical Safety

<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15.</td>
<td>Are plugs, cords, electrical panels, and receptacles in good condition? No exposed conductors or broken insulation?</td>
<td>Yes/No/NA</td>
</tr>
<tr>
<td>16.</td>
<td>Are circuit breaker panels accessible and labeled?</td>
<td>Yes/No/NA</td>
</tr>
<tr>
<td>17.</td>
<td>Are surge protectors being used? If so, they must be equipped with an automatic circuit breaker, have cords no longer than 6 feet in length, and be plugged directly into a wall outlet.</td>
<td>Yes/No/NA</td>
</tr>
<tr>
<td>18.</td>
<td>Is lighting adequate throughout the work environment?</td>
<td>Yes/No/NA</td>
</tr>
<tr>
<td>19.</td>
<td>Are extension cords being used correctly? They must not run through walls, doors, ceiling, or present a trip hazard.</td>
<td>Yes/No/NA</td>
</tr>
<tr>
<td>20.</td>
<td>Are portable electric heaters being used? If so, they must be UL listed, plugged directly into a wall outlet, and located away from combustible materials.</td>
<td>Yes/No/NA</td>
</tr>
</tbody>
</table>

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**HPP-Appendix C-Office**

**March 2006**

Completed copies of this form should be routed to the department Safety Coordinator and must be maintained in department files for at least three years.
# WORKSITE INSPECTION FORM

**Animal Science Laboratory**

<table>
<thead>
<tr>
<th>Location:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspector:</td>
<td>Phone:</td>
</tr>
<tr>
<td>Department:</td>
<td></td>
</tr>
</tbody>
</table>

## General Hazards

<table>
<thead>
<tr>
<th>Yes ☐</th>
<th>No ☐</th>
<th>NA ☐</th>
<th>1.</th>
<th>Are aisles, exits, and adjoining hallways maintained free of obstructions that would hinder emergency access or exiting?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes ☐</td>
<td>No ☐</td>
<td>NA ☐</td>
<td>2.</td>
<td>Are there at least 18 inches (47 cm) of vertical clearance between all stored items and the ceiling-mounted fire sprinklers? (If there are no sprinklers, measure to the ceiling itself.)</td>
</tr>
<tr>
<td>Yes ☐</td>
<td>No ☐</td>
<td>NA ☐</td>
<td>3.</td>
<td>Are approved sharps waste containers available for disposal of needles, blades, and other sharps? (Reminder: There should be a proper procedure for disposal of broken glass.)</td>
</tr>
<tr>
<td>Yes ☐</td>
<td>No ☐</td>
<td>NA ☐</td>
<td>4.</td>
<td>Has furniture and equipment over five feet tall been bolted to the wall or otherwise secured?</td>
</tr>
</tbody>
</table>

## Emergency Equipment

<table>
<thead>
<tr>
<th>Yes ☐</th>
<th>No ☐</th>
<th>NA ☐</th>
<th>5.</th>
<th>Are all emergency eyewash and shower stations free of obstructions that would prevent quick access by someone temporarily blinded by a chemical splash? Are they within 100 feet of the laboratory (or approximately 10 seconds)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes ☐</td>
<td>No ☐</td>
<td>NA ☐</td>
<td>6.</td>
<td>Are the emergency eyewashes for the laboratory tested (flushed) monthly and are the tests documented?</td>
</tr>
</tbody>
</table>

## Laboratory Equipment

<table>
<thead>
<tr>
<th>Yes ☐</th>
<th>No ☐</th>
<th>NA ☐</th>
<th>7.</th>
<th>Look inside each refrigerator and freezer in your lab to ensure flammables are stored in units that are suitable for storage of flammables. Is each refrigerator and freezer in the laboratory labeled as either “safe” or “unsafe” for storage of flammables?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes ☐</td>
<td>No ☐</td>
<td>NA ☐</td>
<td>8.</td>
<td>Look inside each refrigerator and freezer in your lab to ensure food is stored only in units designated “food only.” Are all refrigerators, freezers, and microwave ovens properly labeled either “Food Only” or “No Food or Drink Allowed?”</td>
</tr>
<tr>
<td>Yes ☐</td>
<td>No ☐</td>
<td>NA ☐</td>
<td>9.</td>
<td>Are all compressed gas cylinders adequately secured with non-combustible restraints to keep the cylinders from falling? (Bench clamps are not adequate to secure large cylinders. Gas cylinders should be capped when not in use.)</td>
</tr>
</tbody>
</table>

## Chemicals

<table>
<thead>
<tr>
<th>Yes ☐</th>
<th>No ☐</th>
<th>NA ☐</th>
<th>10.</th>
<th>Does the lab have a Chemical Hygiene Plan (CHP)? If yes, is it up to date and has it been reviewed and signed within the past year? If no, all labs that contain chemicals are required to maintain a CHP. Complete a lab specific CHP using the EH&amp;S template (<a href="http://ehs.ucdavis.edu/chem/chem_mnl/clsm_apps.cfm">http://ehs.ucdavis.edu/chem/chem_mnl/clsm_apps.cfm</a>).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes ☐</td>
<td>No ☐</td>
<td>NA ☐</td>
<td>11.</td>
<td>Has the laboratory’s chemical inventory been completed or updated within the last year (or within 30 days of a significant change such as a move to a new location or addition of new chemicals) and entered into the EH&amp;S Chemical Inventory System (CIS)?</td>
</tr>
<tr>
<td>Yes ☐</td>
<td>No ☐</td>
<td>NA ☐</td>
<td>12.</td>
<td>Are chemical fume hoods kept uncluttered so that air flows properly (e.g., is storage minimized and are adequate work areas provided)? Can ALL chemical work be done more than six inches into hood? (Note: Chemical fume hood</td>
</tr>
</tbody>
</table>
sashes must be in good condition and be used at the proper setting, typically 18 inches from the work surface.)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th>13.</th>
<th>Are all chemical containers and hazardous waste containers kept closed when not in use?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>NA</td>
<td></td>
<td></td>
<td>Are all chemical containers (including squirt bottles and unwanted hazardous materials containers) clearly labeled with their contents and primary hazard(s) and are they in good condition (not corroded or leaking)?</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>NA</td>
<td></td>
<td></td>
<td>Are corrosives stored below eye level and are incompatible chemicals stored appropriately (e.g., acids separate from bases, oxidizers separate from flammables)?</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>NA</td>
<td></td>
<td></td>
<td>Is a spill kit available? Is the location known to all employees in the laboratory? Has there been training in the past 12 months?</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>NA</td>
<td></td>
<td></td>
<td>Are peroxide formers (such as isopropyl ether and diethyl ether) stored away from light and heat and labeled with the date they were opened and the expiration date?</td>
</tr>
</tbody>
</table>

**Electrical**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th>18.</th>
<th>Are extension cords used only as temporary wiring (&lt;30 days) and not connected in a series (daisy-chained) with other extension cords or power strips? (Cords must be in good condition with no breaks or exposed wiring.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>NA</td>
<td></td>
<td></td>
<td>Is high voltage equipment clearly labeled, properly guarded, and is its use restricted to trained personnel only?</td>
</tr>
</tbody>
</table>

**Ergonomics**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th>20.</th>
<th>Are ergonomic issues being addressed for employees using computers or at risk of repetitive motion injuries?</th>
</tr>
</thead>
</table>

**Other Hazards**

1.  
2.  
3.  
4.  
5.  

**Comments**

Completed copies of this form should be routed to the department Safety Coordinator and must be maintained in department files for at least three years.
**ANIMAL SCIENCE DEPARTMENT** Worksite Inspection Form

**FACILITY (name):**

**Date:**

### SAFETY CHECK

<table>
<thead>
<tr>
<th>Postings:</th>
<th>OK</th>
<th>Not OK</th>
<th>N/A</th>
<th>Comments:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Safety Plan &amp; Emergencies</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>Work Injury Notice &amp; Hazard Warnings</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>Clean Area &amp; Prior Authorization Needed</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>Hazard Signs</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
</tbody>
</table>

**Facility Safety Plan Elements:**

<table>
<thead>
<tr>
<th>Postings:</th>
<th>OK</th>
<th>Not OK</th>
<th>N/A</th>
<th>Comments:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Specific Training &amp; SOP's</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>SDS’s &amp; Safety Nets &amp; First Aid Kit</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>Chemical Inventory (CIS)</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>Emergency Action Plan</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
</tbody>
</table>

### Additional Training Requirements:

**Heat Illness Prevention Program**

**Confined Space**

**Forklift**

**Scissors Lift**

**Other Heavy Equipment: e.g. Tractors**

**Site Specific Hazards (circle/list others):**

- Slippery Surfaces
- High Speed Machinery
- Knives
- Saws
- Loft
- High Speed Machinery
- Knives
- Saws
- Slicers, Hay Elevator, Stun Gun, Hog Stunner

**Protective clothing/equipment (PPE) (circle/list others):**

- Coveralls
- Lab Coats
- Gloves
- Eye Protectors
- Footwear
- Dust Masks
- Hearing Protectors

**Chemicals and Hazardous Wastes:**

- Compressed Gas Cylinders
- Chemical Storage
- Flammable Storage
- Chemical Waste: stored & labeled, and Disposal within 9 mo.
- Chemical Spill Control
- Metal Shavings

**Misc. Issues:**

- Machine Guards in Place
- Extension Cords
- Worn/Damaged Cords/Plugs
- Cluttered/Messy/Obstacles
- Clean Areas & Food Storage

**Animal Use and Care:**

- Protocols posted & Up-to-Date
- ACU 101 every 3 years
- Occupational Health Forms submitted
- Reviewed Potential Zoonotic Diseases
- No Food and Drink in Animal Areas

**Other:**

- ( )
- ( )
- ( )

Inspector(s) Comments:

______________________________
Inspected

By:_____

________________________________________ Facility Supervisor's

Comments:___________________________

Facility Supervisor Signature:_________________ Correction date______

Inspectors Signature(s):_____________________
Accident Investigation Form

Name of Injured Person: ___________________________ Date of Injury: ____________

Name of Supervisor: ___________________________ Telephone #: ________________

Department: ___________________________ Location of Injury: ___________________________

Brief Description of Accident:

Nature of Injury (describe all body parts affected):

<table>
<thead>
<tr>
<th>Was Training Provided?</th>
<th>Yes</th>
<th>No</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were established procedures followed?</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
</tr>
<tr>
<td>Were tools or equipment adequate for task?</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
</tr>
<tr>
<td>Were environmental conditions a factor in the incident?</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
</tr>
</tbody>
</table>

Elaborate on Responses:

Proposed Corrective Action:

Supervisor: ___________________________ Date of Report: ________________

Signature: ___________________________

IIPP-Appendix D
March 2006

Completed copies of this form should be routed to the department Safety Coordinator and kept in department files for at least three years.
HAZARD CORRECTION REPORT

Department: ________________________________

This form should be used in conjunction with the “Hazard Alert Form” (IIPP Appendix A), as appropriate, to track the correction of identified hazards.

All hazards should be corrected as soon as possible, based on the severity of the hazard. If a serious imminent hazard cannot be immediately corrected, evacuate personnel from the area and restrict access until the hazard can be addressed.

Supervisor/Safety Coordinator Name: ___________ Telephone: __

Supervisor/Safety Coordinator Signature: ___________ Date: __

<table>
<thead>
<tr>
<th>Description and Location of Unsafe Condition</th>
<th>Date Discovered</th>
<th>Required Action and Responsible Party</th>
<th>Completion Date Projected</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

IIPP–Appendix E
March 2006

Completed copies of this form should be routed to the department Safety Coordinator and kept in department files for at least three years.
SAFETY TRAINING ATTENDANCE RECORD

Training Topic: ___________________________ Date: __________
(attach a copy of the training session curriculum)

Instructor: ___________________________ Training Aids: ___________________________

Location: ___________________________ Time: ___________________________

Attendees – Please print and sign your name legibly. Use additional sheets if necessary.

<table>
<thead>
<tr>
<th>No.</th>
<th>Print Name</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
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<tr>
<td>2.</td>
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<td>3.</td>
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<td>10.</td>
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<td>12.</td>
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<td>24.</td>
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<td>26.</td>
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<td>28.</td>
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<td>29.</td>
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<tr>
<td>30.</td>
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</tr>
</tbody>
</table>

HIPP-Appendix F March 2006

Completed copies of this form should be routed to the department Safety Coordinator and must be maintained in department files for at least three years.
CHEMICAL HYGIENE PLAN (CHP): Department of Animal Science, Meyer Hall [part of the Safety Management Program (PPM 290-15)]

Rooms covered by this plan:
Principal Investigator (PI):
Person responsible for CHP, if different from PI:
Location in the laboratory of the CHP elements listed below:

1. Injury Illness Prevention Program (IIPP) & Generic Rules For Laboratory Safety (including wearing of personal protective equipment (PPE)):

2. Standard Operating Procedures (SOP’s) and Lab Specific Hazards:

3. Safety Nets:

4. Chemical Inventory and Material Safety Data Sheets (MSDS’s):

5. Emergency Evacuation Plan:

6. Training Documentation Records:

7. First-Aid Kit:

8. Spill Containment Materials:

<table>
<thead>
<tr>
<th>Annual Review Date</th>
<th>Print Name</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

Safety questions, concerns, suggestions?
Contact your supervisor or the Department Safety Coordinator (DSC) or any member of the Department Safety Committee (current list of members available from the main office staff). Identified safety & health hazards may be submitted anonymously to the DSC mailbox and a standardized form is available in your lab’s copy of the Department IIPP.
OFFICE SAFETY PLAN

Department of Animal Science

Office Manager/Supervisor ________________________________________________

Building/Room Number(s) _______________________________________________

Location in the office of:

1). Generic Rules for Office Safety and the Department IIPP:

_____________________________________________________________________

2). Standard Operating Procedures, manuals, and lists of chemicals, procedures, equipment, and substances not to be used without prior authorization:

_____________________________________________________________________

3). Safety Nets

_____________________________________________________________________

4). Chemical and Hazardous Materials Inventory

_____________________________________________________________________

5). Material Safety Data Sheets (MSDSs)

_____________________________________________________________________

6). Safety and Other Training Records

_____________________________________________________________________

7). First-Aid Kit

_____________________________________________________________________

8). Fire Extinguisher

_____________________________________________________________________


Site Specific Animal Facility Safety Plan

Facility covered by this plan: ___________________________________________________________________
Facility Supervisor: ______________________________________________________________________
Phone & Email: __________________________________________________________________________

Location in the Facility of:

1). Department IIPP, Livestock & Farm Safety Standard Operating Procedures, and Safety Nets:
                                                                                           
2). Site-Specific Standard Operating Procedures, manuals, and lists of chemicals, procedures, and equipment not to be used without prior authorization:
                                                                                           
3). Animal Use and Care Records, Protocols:
                                                                                           
4). Documentation of Training Records:
                                                                                           
5). Chemical Inventory and Material Safety Data Sheets (MSDS’s):
                                                                                           
6). Personal Protection Equipment (PPE):
                                                                                           
7). First-Aid Kit:
                                                                                           
8). Fire Extinguisher and/or Fire Hose:
                                                                                           
9).
                                                                                           
____________________________________________________________________________________

Annual Review Date          Print Name          Signature
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

51
DEPARTMENT OF ANIMAL SCIENCE
INDIVIDUAL TRAINING DOCUMENTATION
OFFICE PERSONNEL

Type of Training (check “X”): Initial: _______ Refresher: _______

Name of Trainee: ____________________________________________

Staff___ Faculty___ Other Employee___ Student___ (U___: G___)

Name of Trainer: ____________________________________________

Training Subject(s): __________________________________________

Training Materials Used: ______________________________________

I, __________________________ hereby certify I have received training as described above in the following areas:

➢ The potential occupational hazards in general in the work area and associated with my job assignment.
➢ The Codes of Safe Practices (Generic Rules for Office Safety) which indicate the safe work conditions and safe work practices required for my job.
➢ The hazards of any chemicals to which I may be exposed and my right to information contained on Material Safety Data Sheets for those chemicals, and how to understand this information.
➢ My right to ask questions, or provide any information to the employer on safety either directly or anonymously without any fear of reprisal.
➢ Disciplinary procedures the employer will use to enforce compliance with Code of Safe Practices.
➢ Emergency evacuation routes and departmental meeting place

Other: ______________________________________________________

I understand this training and agree to comply with the Code of Safe Practices for my work area.

Employee Signature ___________________________ Date __________

Trainer Signature ____________________________________________

Directions: Return the signed original of this form to the departmental Safety Officer. Retain a copy in your safety file.
Name of Trainee:__________________________________________________________

Name of Trainer:_________________________________________________________

Name of Facility or Lab/Office Room Number(s):______________________________

Training Subject(s):______________________________________________________

Training Materials Used:___________________________________________________

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I hereby certify I have received training in the following areas:

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I understand this training and agree to comply with the Code of Safe Practices for my work area.

Trainee signature_________________________________________________________ Date_________________

Trainer signature__________________________________________________________
OFF-CAMPUS FIELD RESEARCH SAFETY TRAINING INFORMATION AND DOCUMENTATION FORM

This information is for those who travel to off campus sites, non-University property or remote areas. There are responsibilities for both the person going to do field research and the supervisor of the person doing the field research. With each trip the following information must be supplied:

1. Date of leaving and returning.
2. Trip itinerary (as accurate as possible, given the nature of the field work).
3. Emergency contact information must be available to the person going to the field by their supervisor. The following three numbers must be provided: (1) the nearest hospital or medical facility, (2) the nearest sheriff or police station, and (3) the county health department. See below, the CCR Title 8, Section 3400. “Shall” and “must” items are requirements of the law.
4. SOP for work being done in the field and include all potential work-related hazards beyond what is listed below.
5. Supply of clean water for drinking and, if necessary, for portable eye wash/shower (or you can purchase small eye wash kits for the field from most catalogs with a “safety” section).
6. First aid kit.
7. Person(s) going to the field as an employee and/or student of the University must carry an ID (preferably a driver’s license and their University ID card).

CCR Title 8, Section 3400:

a. The employer shall ensure the ready availability of medical personnel for advice and consultation for matters of industrial health or injury.

b. In the absence of an infirmary, clinic, or hospital in near proximity to the workplace, which is used for treatment of all injured employees, a person or persons shall be adequately trained to render first aid. Training shall be equal to that of the American Red Cross or the Mining Enforcement and Safety Administration. (Note: Proximity could mean within 4-5 minutes.)

c. There shall be adequate first aid materials, approved by the consulting physician, readily available for workmen on every job. Such materials shall be kept in a sanitary and usable condition. A frequent inspection shall be made of all first-aid materials, which shall be replenished as necessary.

d. Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.

e. Stretchers and blankets, or other adequate warm covering may be required by the Division, unless ambulance service is available within 30 minutes under normal conditions.

f. At isolated locations, provisions must be made in advance for prompt medical attention in case of serious injuries. This may be accomplished by on-the-site facilities or proper equipment for prompt transportation of the injured person to a physician or a telephone communication system for contacting a doctor or combinations of these that will avoid unnecessary delay in treatment.

General Safety Instructions and Potential Hazards When Working in California Field Conditions (site-specific hazards should be added to this list)

1. 8-Hour Injury Reporting □ The following injuries must be reported to EH&S (530) 752-1493 as soon as practically possible but no longer than 8 hours after the employer knows or with diligent inquiry would have known of the death or serious injury or illness. Any injury or illness occurring in the place of employment or in connection
with any employment requiring inpatient hospitalization in excess of 24 hours for other than medical observation. Or when an employee suffers any loss of any member of the body or suffers any serious degree of permanent disfigurement, eye injury or death. This reporting to EH&S is in addition to reporting to the Department’s Workers Compensation representative.

2. **Heat Stress, Cramps, Exhaustion and First Aid** – The following symptoms of heat stress and exhaustion are fatigue, headache, nausea, chills, dizziness, fainting and loss of coordination. Heat cramps are muscle spasms in the legs, arms or stomach caused by loss of salts from sweating. To avoid these wear cool clothing, drink plenty of water, have a “sports” drink that contains salts available, rest more often in the shade as the temperature rises. For first aid, move to a shaded area, give cool water to person if conscious, use “sports” drink for heat cramps to replenish salts and also give cool water. Seek medical help if necessary or if the person is unconscious.

3. **Hanta Virus** – Hanta virus disease comes from breathing the aerosolized virus from contaminated droppings, dried urine and saliva of the deer mouse (new research has shown that other strains of the virus are carried by other rodent species). The CDC web site is a source for more information. Infections may also occur through broken skin contamination with the above mouse items. The symptoms appear 2-3 weeks after contact and are flu-like. Hanta virus disease may result in death. The disease exposure can be controlled by controlling deer mice populations. Mouse dropping should be cleaned up using a bleach water solution and wetting the area thoroughly before wiping or cleaning. Inhalation protection and other personal safety equipment must be worn when cleaning up mouse contamination. Call EH&S for specific information.

4. **Lyme Disease** – Lyme disease is spread through the bite of deer ticks (nymph stages are the size of a pin head). Symptoms include headache, fever, chills, fatigue, joint pain, and a characteristic skin rash at the site of the bite which looks like a red “bulls-eye” patch. May-July is the time of high tick activity. Protection against Lyme disease includes avoiding tick infested areas, contact with overgrown grass and shrubs, wearing light colored clothing (helps spot ticks), wearing long pants, long sleeve shirt, tucking pant legs into socks, or taping pant legs around ankles; use of insect repellent containing 25-30% DEET on exposed skin (except the face) and on pant legs, shoes, and socks. Check yourself for ticks at the end of the work day. Remove embedded ticks with a fine tip tweezers and cleanse the area with an antiseptic. The disease takes about 36 hours to be transmitted after a bite, so prompt removal a tick is important.

5. **Valley Fever** – Valley fever is caused by inhaling spores from *Coccidioides immitis*, a fungus found in the soil in warm and dry areas of low rain fall, high summer temperatures and low altitude. High risk groups are African-Americans, Asians, pregnant women during the third trimester, and immuno-compromised persons. The symptoms are generally flu like. Some patients fail to recover and develop chronic pulmonary infection or widespread infection affecting meninges, soft tissues, joints and bones. Severe pulmonary disease may develop in HIV-infected persons. Use inhalation protection (dust mask) in dusty and windy areas.

6. **West Nile Virus** – West Nile virus is spread by mosquitoes that feed on infected birds and then infect humans or animals like horses. Only certain species of mosquitoes carry the virus. The virus is most prevalent when mosquitoes are most abundant from May to October. The majority of people and animals infected with the virus do not experience any symptoms. Others may experience a mild to moderate illness which include fever, headache, tiredness, and body aches. Occasionally a skin rash on the trunk of the body may occur and swollen lymph glands. In rare cases, the virus can cause more serious conditions of encephalitis (inflammation of the brain) or West Nile poliomyelitis. These symptoms include headache, high fever, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness and paralysis. Wear long sleeves, socks and pants to prevent exposure to mosquito bites. Use insect repellent containing 25-30% DEET when working in mosquito areas. If possible, avoid dawn and dusk times when mosquitoes are most active.
7. **Poison Oak** – “Poison oak (*Toxicodendron diversilobum*) is common along the west coast and in the south and southeastern portions of the country.” The plants are found in fencerows, forests, pastures, shady areas and stream banks as woody shrubs from 1 to 6 feet tall or as climbing vines wrapped around trees or shrubs. All parts of the plant including the roots contain the poisonous oily substance *urushiol* which can produce the painful irritation and blistering of the skin. The poisonous substance is active all year around. Touching any of the plant parts or objects (including pets) that have contacted the plant can transfer the toxin to people. Burning of the plant is extremely dangerous sending the oily toxin into the air as droplets that may be inhaled. “Poison oak can usually be identified by its leaves. In the spring, the leaves of young plants are shiny red, turning to shiny green as they mature. In the fall, poison oak foliage changes from green to orange and red. Poison oak is a deciduous, woody plant that loses its leaves in the winter. The leaves of these plants usually grow in groups of three on a shared stalk. Poison oak leaflets are rounded at the tips and alternate on the stem. The leaf surface can be glossy or a bit hairy, usually 1 to 4 inches in length with lobed or toothed edges. In the spring, poison oak yields small clusters of greenish-white flowers. The fruits are formed in the summer, and are white and green resembling berries. Poison oak oils cause allergic skin reactions in nearly 85% of people exposed to the plant. Symptoms can begin within a few hours after contact and can arise between 2-5 days later. The rash of poison oak typically occurs between 24 to 48 hours after contact. The most frequent symptoms of poison oak are rash in the form of blisters (sometimes in a line), blisters can eventually break open, ooze, and then dry or crust over, swelling in the area of contact, red blotches that can be raised or flat and intense itching. More intense symptoms include fever, stomach cramps, nausea and overall body swelling. These intense symptoms should be reported to a physician immediately.” Prevention- Learn to identify and stay away from poison oak. Wear long sleeve shirt, long pants and boots. Wash all clothing and tools after exposure. Wash pets after exposure. “Barrier skin lotions containing bentonquat offer some protection before contact with poison oak. Washing the skin immediately after contact with the plant using an outdoor skin cleanser is also helpful.” (This information taken from IvyStat!)

8. **Plague** – Plague is caused by the bacterium *Yersinia pestis* from the bite of infected fleas of rodents (especially rock squirrels, ground squirrels, chipmunks, prairie dogs, wood rats and other burrowing rodents.) Deer mice and voles are also thought to maintain the disease in the wild, but are less important sources of infection to humans. Symptoms of plague are a “very painful, usually swollen, and often hot-to-touch lymph node, called a bubo. This finding, accompanied with fever, extreme exhaustion, and a history of possible exposure to rodents, rodent fleas, wild rabbits, or sick or dead carnivores should lead to a suspicion of plague. Onset of symptoms is usually 2 to 6 days after a person is exposed.” Local county health department should be notified. Without antibiotic treatment the disease spreads rapidly in the body going into septicemic plague and pneumonic plague. Wear socks, shoes and long pants to prevent bites. Stay away from rodents holes as much as possible and avoid handling dead rodents. If disease symptoms appear, get medical attention immediately. (This information taken from CDC.)

9. **Animal bite Procedures and First Aid** – Employee Health Services has a hand out on animal bites and this material is also located in the Departmental IIPP. Report all non-rodent mammal bites to the County Health Dept. where the bite occurred. Bites from certain animals require the animal be quarantined. First aid-stop bleeding and cleanse the wound. Seek medical attention if necessary.

10. **Tularemia** – “Tularemia, also known as ‘rabbit fever,’ is a disease caused by the bacterium *Francisella tularensis*. Tularemia is typically found in animals, especially rodents, rabbits, and hares.” People may be infected with the bacteria though the bite of ticks or deerflies or by handling infected or dead animals, by eating or drinking contaminated food or water, or by inhaling airborne bacteria. Symptoms may appear 3 to 5 days after exposure but can range 1 to 14 days. “The signs and symptoms people develop depend on how they are exposed to tularemia. Possible symptoms include skin ulcers, swollen and painful lymph glands, inflamed eyes, sore throat, mouth sores, diarrhea or pneumonia. If the bacteria are inhaled, symptoms can include abrupt onset of fever, chills, headache,
muscle aches, joint pain, dry cough, and progressive weakness. Tularemia can be fatal if the person is not treated with appropriate antibiotics.” Protection is offered against insect bites by wearing long sleeve shirt and pants with socks and shoes, avoid handling dead animals, using insect repellant and not drinking from contaminated water sources. (This information taken from CDC.)

11. Rocky Mountain Spotted Fever – Rocky Mountain spotted fever is caused by a species of bacteria called *Rickettsia ricettsii*. The disease is spread by the bite of ixodid (hard) ticks or exposure to crushed tick tissues, fluids or tick feces. “Rickettsiae are transmitted to a vertebrate host through saliva while a tick is feeding. It usually takes several hours of attachment and feeding before the rickettsiae are transmitted to the host.” The two major vector sources of the disease are the American dog tick and the Rocky Mountain wood tick. Rocky Mountain spotted fever is very difficult to diagnose in its early stages and initial symptoms may include fever, nausea, vomiting, severe headache, muscle pain and lack of appetite. Later symptoms are rash (not all people develop this), abdominal pain, joint pain, and diarrhea. The rash may appear 2-5 days after the onset of fever. The disease may be more severe in those of “advanced age, male sex, African-American race, chronic alcohol abuse, and glucose-6-phosphate dehydrogenase (G6PD) deficiency” leading to death within 5 days of illness onset. Prevent tick bites by wearing light colored clothes to see ticks, tuck pants legs into your socks to prevent ticks from crawling up legs, apply repellants and check yourself and your clothing. Remove ticks from your body. (This information taken from CDC)

11A. Tick Removal – To remove attached ticks, use the following procedures:
   a. “Use fine-tipped tweezers or shield your fingers with a tissue, paper towel, or rubber gloves. When possible, person should avoid removing ticks with bare hands.
   b. Grasp the tick as close to the skin surface as possible and pull upward with steady, even pressure. Do not twist or jerk the tick; this may cause the mouthparts to break off and remain in the skin. (If this happens, remove mouthparts with tweezers.)
   c. Do not squeeze, crush, or puncture the body of the tick because its fluids (saliva, body fluids, gut contents) may contain infectious organisms.
   d. After removing the tick, thoroughly disinfect the bite site and wash your hands with soap and water.
   e. Save the tick for identification in case you become ill. This may help your doctor make an accurate diagnosis. Place the tick in a plastic bag and put it in your freezer. Write the date of the bite on a piece of paper with a pencil and place it in the bag.” (This information taken from the CDC.)

12. Rattlesnakes – Many species of rattlesnakes occur in the West. Rattlesnakes are diurnal. The snakes feed at night. Rattlesnakes occur from sea level to 11,000 feet. The snakes make a rattling sound to warn off invaders. The snakes are normally solitary except in the colder climates where the snakes over winter in dens together. The snakes travel from the den when warmer weather comes. The snakes are good swimmers. The snakes have scales that vary in color from yellow to brown to black and have dark V or diamond shaped markings on their backs. Rattlesnakes usually, but not always, warn the invader of their space by rattling their tail. (Santa Catalina Island rattlesnake does not have a rattle as a warning). Wear boots or other high top shoes and long pants when in an area known to have rattlesnakes. Be on the lookout and watch where you sit on rocks or walk through grassy areas. The rattle is a warning to get out of the way. If you spot a snake give it at least 6 feet of clearance. “First aid for snake bites, wash the bite with soap and water, immobilize the bitten area and keep it lower than the heart, and get medical help within 30 minutes.” **DO NOT use ice or any other type of cooling on the bite area. No tourniquets, electric shock or incisions in the wound should be made.** “Basic signs like pain, swelling and bleeding, along with more complicated reactions such as ecchymosis (purple discoloration), necrosis (tissue dies and turns black), low blood pressure, and tingling of lips and tongue give medical professionals clues to the seriousness of bites and what treatment route they should take.” (Quotes are from the FDA Consumer revised in Nov. 2002)
13. Bears – Bears will attack if they are surprised, feel they are in danger, wish to protect their territory or if they have cubs. “The best way to avoid danger is to avoid the bear. But if you cannot avoid them, make sure they see you first. As you walk or travel through bear territory, and if you cannot see more than 50 to 100 feet in front of you, call out every few minutes until you enter a clear area. Some people call out, others sing, some wear bear-bells”.

The point is to make a lot of noise. “In most cases the bear will move off the trail and watch you pass. They rarely look for a confrontation. If you see a bear, talk to the bear.” Make sure it sees you. Hold your arms high above your head. This will make you look like a much bigger animal to the bear. “Continue to talk and slowly back away.” A female bear with cubs is very dangerous and very protective. She may attack even though you are a distance away from her. “If you are in a camp, before anything else, put your food, trash, cooking gear, fuel, soaps and toiletries up a bear pole or tree. They must be at least 12 feet (4 meters) to be secure. Then place your camp a safe distance away.” (Quotes are from arcticwebsite.com)

14. Mountain Lion – Although encounters with mountain lions are slim, it is still a possibility. “Mountain lions are plentiful in areas where there is a large deer population. As long as the food source is there, the lions do not bother humans generally but in leaner times, the lions have been known to stalk and also attack humans on the trail.” Try to avoid being alone in mountain lion territory. Make noise as you walk. “The noise you make will generally scare the lion away and halt any confrontation.” Always give plenty of space between you and the lion so that the lion can escape and get away. “Mountain lions usually do not like confrontation, so always, if you do happen to have contact, leave a wide berth between you and the lion for its escape.” “Never run away from a mountain lion. Running stimulates a mountain lion’s natural instinct to chase.” Be sure if you make contact with the lion to stand up as tall as possible. “By making yourself look larger it intimidates the lion and often makes them turn and run.” If you have a jacket on, open it and flap it about, yell, throw stones “but make sure you react so that the cat knows that you are the one in control, not him.” Never turn your back on a lion, squat down or bend over. “Research has shown that when a human bends over that person looks like a four legged prey to a large cat of any type. Avoid stooping, leaning over, squatting, or bending at the waist…” “If you are attacked, fight back. Never succumb or roll into a ball. Hit as hard as possible especially to the head area. If you can retrieve a stick or large rock, use it as a weapon. If face to face with the cat, go for the eyes by clawing or throwing sand in the face of the cat. Mountain lions will usually strike the back of the head and especially the neck so be vigilant to protect these areas and if at all possible remain standing or face to face with the animal once it is attacking. If attacked from behind, try to reposition yourself to meet the cat face to face. The cat may weigh between 100-150 lbs. Report mountain lion attacks to Fish and Game or a Ranger as soon as possible. Get medical attention. (Quotes taken from PageWise)

It is the PI’s responsibility to add additional items for training such as use of chain saws, boating, bee stings, lightning strikes, scorpions or other animal or hazardous conditions that are specific to their field research area as part of safety training.

This safety training must have written documentation.

PI’s must provide required personal safety protection equipment if necessary. The CDC web site is a source for updated information on diseases at http://www.cdc.gov

Name of Trainee: ___________________________ Date: ______________

Trainee Signature: ___________________________

Supervisor or Trainer Name: ___________________________ Date: ______________

Trainer Signature: ___________________________
Off-Campus Field Research Safety Form
(Maintain these records in the appropriate safety notebook and submit a copy of this form to the Department Safety Coordinator before leaving.)

Date Leaving UCD: __________________________   Date Returning to UCD: __________________________

Trip Itinerary (use extra page if necessary or an attachment):

SOP (use extra page if necessary or an attachment):

PI or Leader’s name: ___________________ Contact phone # __________________________

If it is a group field trip then list the
Group member(s) name(s): ___________________ Contact phone # __________________________

Emergency Information Supplied by Supervisor:
Nearest Sheriff Station or Police phone number: __________
County Health Dept. phone number: ______
Nearest medical facility or hospital phone number: __________

To contact in case of an accident or emergency: EH&S phone number (530) 752-1493;
Department Front Office (530) 752-1250, Department Safety Coordinator, Leslie Oberholtzer (530) 752-1816.

Review and “X” the following Checklist:
☐ Clean water
☐ First aid kit (check supplies)
☐ Do employee and/or student have their University ID?
☐ Personal safety protection equipment required? ☐ Yes ☐ NO
☐ Portable eye wash/shower for work involving corrosives ☐ Yes ☐ NO
☐ Isolated location medical provision needed ☐ YES ☐ NO
☐ First Aid training required before taking this trip? ☐ YES ☐ NO

(If yes, employee must have a written record of first aid training from the American Red Cross on file with supervisor.)
**ANIMAL BITE INJURIES**

The following appendices cover the training and documentation that is required of all students and employees that handle animals and thus are exposed to potential animal bites. Available at the following website:

(http://ehs.ucdavis.edu/ps/a/TRACS/animalBites?searchterm=ANIMAL+BITE+INJURIES)

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**Medical Care of Bites and Helpful Information**

All animal bites should be immediately cleaned with soap and running water for a minimum of 5 minutes, and 10 minutes if extensive or very dirty. Primate bites have additional cleansing requirements, see Primate Center procedures.

**DOG AND CAT BITES:**
Animal quarantine is required. (Must be reported to Public Health Depart.) High frequency of wound infection with Pasteurella and other oral pathogens. Medical care is needed. Antibiotics may be required.

**REPTILE AND BIRD BITES:**
Possible exposure to bacterial pathogens that sometimes require medical care and antibiotic treatment for deep wounds.

**LABORATORY RODENT BITES:**
Do not usually cause infection unless very deep bite or unusual pathogen present.

**LARGE ANIMAL BITES (COWS, HORSES, ETC.):**
Animal quarantine is required. (Must be reported to County Health Dept.). Medical care is needed.

**PRIMATE CENTER BITES & EXPOSURES:**
Animal quarantine is required. Bites or scratches require evaluation, because of possible exposure to simian herpes (B virus) or to special pathogens, depending on experimental protocol. See Primate Center bite procedures.

**BITES FROM ANIMALS WITH UNEXPLAINED NEUROLOGICAL SYMPTOMS:**
Animal quarantine is required. (Must be reported to County Health Dept.) Animal quarantine is required. Bites or scratches require evaluation, because of possible exposure to simian herpes (B virus) or to special pathogens, depending on experimental protocol. See Primate Center bite procedures.
FOR MEDICAL EMERGENCY, CALL 911 IMMEDIATELY

1. **CONTROL BLEEDING:** If bleeding, apply continuous pressure for 5-10 minutes. If bleeding is not controlled, seek medical assistance immediately (see #4 below).

2. **CLEANSE WOUND:** Wash all wounds immediately with soap or detergent solution and a high volume of water for at least 5 minutes, 10 minutes if extensive or extremely dirty. Primate bites require special care. Scrub with a solution such as chlorhexidine for 15 minutes under high volume of running water.

3. **REPORT BITE:** Report bite to your supervisor or department personnel office.

4. **SEEK MEDICAL FOLLOW-UP:**
   - Employees (including student employees): Go to Occupational Health Services in Cowell Hall, corner of California Ave and Beckett Hall Circle (across from intramural athletic field; 757-3200 Hours: 8am-5:30pm (M,T,Th,F); 9am-5:30pm (W), closed at 5 during summer session and school breaks
   
   - Students (non-UCD employees): Go to Student Health and Wellness Center, 930 Orchard Rd (corner of Orchard and LaRue); 752-2300 Hours when school in session: 8am-5pm (M,T,Th,F); 9am-5:30pm (W); closed 21-1 daily Hours Summer: 8am-5pm (M,T,Th,F); 9am-5pm (W)
   
   - For After Hours Care: Sutter Davis Hospital, Urgent Care & Emergency Medical Services, 756-6440

5. **NOTIFY COUNTY:** All bites must be reported to the supervisors. All bites must be reported to the County Health Department except for the small rodent bites from rodents purchased from approved animal vendors. Required forms are completed at the treating Medical Facility.
Post Test for First Aid Procedures and Medical Care for Animal Bites

Instructions: Review the training document on First Aid Procedures and Medical Care for Animal Bites, then answer the following questions. Check your answers and review training material for any questions that you missed. Sign and date the test. Return your completed test to your supervisor or departmental safety officer. Direct your questions about this material to your supervisor or departmental safety officer.

1. If you are bitten by an animal other than a primate, and you have minimal bleeding you should
   a. apply continuous pressure to the area
   b. do nothing and continue working
   c. rinse the area for 30 seconds
   d. wash the area immediately with soap and water for at least 5 minutes

2. Medical follow-up is recommended for
   a. bites that result in bleeding
   b. bites that have no bleeding
   c. dog and cat bites
   d. all of the above

3. For medical follow-up for a bite that occurs between 9-5pm on a weekday, employees and student employees should go to
   a. their own doctor
   b. Employee Health Services
   c. Cowell Student Health Center
   d. Sutter Davis Hospital

4. If a bite results in moderate bleeding and bleeding is not controlled within 5-10 minutes of continuous pressure, you should
   a. Try another 5-10 minutes of continuous pressure
   b. Proceed to wash the wound with soap and water
   c. Immediately seek medical assistance
   d. Wrap the area and continue working

5. The following animal bites may require antibiotic treatment
   a. Dog
   b. Cat
   c. Bird
   d. All or the above

Name (print)____________________________Signature____________________________Date________

Answers: 1=d; 2=d; 3=b; 4=c; 5=d
**ANIMAL BITE or SCRATCH REPORTING FORM**  
(Must be completed for ALL animals bites or scratches)  
Complete and Fax to: County of Yolo, Health Department, Fax: 530-666-8664

<table>
<thead>
<tr>
<th>I. Person Bitten (completed by the person bitten/scratched by animal):</th>
<th>PRINT</th>
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</thead>
<tbody>
<tr>
<td>Last Name:</td>
<td></td>
</tr>
<tr>
<td>First Name:</td>
<td></td>
</tr>
<tr>
<td>DOB:</td>
<td></td>
</tr>
<tr>
<td>University ID#:</td>
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<thead>
<tr>
<th>UC Dept and Supervisor’s Name:</th>
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<table>
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<tr>
<th>Home Address:</th>
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<table>
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<tr>
<th>City:</th>
<th>State:</th>
<th>Zip:</th>
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<tr>
<th>Phone:</th>
<th>Fax:</th>
<th>Date bitten:</th>
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<tr>
<th>UC Status: (Circle once)</th>
<th>UC Employee</th>
<th>UC Student</th>
<th>Vet Student</th>
<th>No Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>UC Employee</td>
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<tr>
<td>UC Student</td>
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<tr>
<th>Did the animal appear ill? Describe:</th>
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Describe the Bite/Scratch, include location on body:

<table>
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<tr>
<th>Date reported to Supervisor:</th>
</tr>
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</table>

In the space below, explain the circumstances under which the bite/scratch occurred (include physical location):

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<thead>
<tr>
<th>City:</th>
<th>State:</th>
<th>Zip:</th>
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<table>
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<tr>
<th>II. The Animal (completed by the person bitten/scratched):</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Species:</th>
<th>Breed/Type:</th>
<th>Name or ID# of Animal:</th>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Sex:</th>
<th>Color:</th>
<th>Age:</th>
</tr>
</thead>
</table>

Vaccinated for Rabies?  
- Yes  
- No  

Date vaccinated:

License #:

License jurisdiction:

- Pet?  
- Research?  
- Wild?  
- Feral?

Health Status:  
Current Location:

<table>
<thead>
<tr>
<th>III. Reported By (completed by medical personnel helping patient):</th>
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<table>
<thead>
<tr>
<th>Last name: (MD)</th>
<th>First name:</th>
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</thead>
<tbody>
<tr>
<td>Last name: (RN/Medical)</td>
<td>First name:</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Address: Employee Health Services, 501 Oak Avenue</th>
<th>First date of care:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>City: Davis</th>
<th>State: California</th>
<th>Zip: 95616</th>
</tr>
</thead>
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<table>
<thead>
<tr>
<th>Phone: (530) 757-3200</th>
<th>Fax: (530) 752-5277</th>
</tr>
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</table>

<table>
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<tr>
<th>Date:</th>
<th>Signature:</th>
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<th>Date:</th>
<th>Signature:</th>
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Instructions: Supervisors must assure that employees receive care and complete this report within **24 hours** of the bite/scratch. Bitten individuals who are UCD employees must report to Employee Health Services (530-752-2330) for treatment and evaluation. Bitten UCD students should report to Cowell Student Health Center (530-752-2300).

Completed form must be faxed to **EH&S (530-752-4994) and Yolo County Health Department (530-666-8664). Do not kill the animal. If the animal is dead, do not discard the body.** For further information contact EH&S at 530-752-1493.
Procedures for Reporting Animal Bites and Scratches

Effective Date: April 1, 2004

I. Purpose

Yolo County is located in a rabies endemic area. Rabies is a viral infection of the central nervous system that causes a fatal inflammation of the brain and in some cases the spinal cord. All mammals could become infected with rabies. Bite wounds are the primary method of entry into both human and animals, however, the virus can enter through an animal scratch. Animal bites and scratches to humans are investigated by the Yolo County Health Department because of the serious implications of the disease.

II. General Policy

This procedure is to assure that all animal bites and scratches are reported to the Yolo County Health Department. Mice and rats obtained from qualified laboratories are exempt from this policy.

III. Procedures for completing the Reporting Form:

A. Supervisors must assure that employees receive care and complete this form with 24 hours of the bite/scratch.

B. The employee must complete section I and II of the Animal Bite or Scratch Reporting Form.

C. The provider of medical attention must complete Section III of the form and immediately fax a copy of the report to the Yolo County Health Department.

D. The animal must be retained, alive if possible, until it has been determined by the Yolo County Health Department that it is no longer needed for their investigation.
Useful Abbreviations Defined

ACU  Animal Care and Use
AV   Audio-Visual
BUA  Biological Use Authorization
CalOSHA  Occupational Safety and Health Administration, California
CCR  California Code of Regulations
CDC  Center for Disease Control
CFATS Chemical Facility Anti-Terrorism Standards
CHP  Chemical Hygiene Plan
CIS  Chemical Inventory System
CUA  Carcinogen Use Authorization
CUPA  Certified Unified Protection Agency (for regulating hazardous waste)
DSC  Department Safety Coordinator
EH&S Office of Environmental Health and Safety
GUA  Genetic Materials Use Authorization
IIPP  Injury-Illness Prevention Program
MSDS  Material Safety Data Sheet, now SDS
P&PM  Policy and Procedure Manual
PPE  Personal Protective Equipment
RUA  Radioactive Use Authorization
SDS  Safety Data Sheet
SOP  Standard Operating Procedure
UCPPM  UC Policy and Procedure Manual
# Animal Facility Street Addresses

Davis, Ca

<table>
<thead>
<tr>
<th>Facility Name</th>
<th>Street Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Science Teaching Facility</td>
<td>191 &amp; 197 Dairy Road</td>
</tr>
<tr>
<td>Beef Barn</td>
<td>1680 Brooks Road</td>
</tr>
<tr>
<td>Cole A (Large Animal Metab.)</td>
<td>510 Putah Creek Road</td>
</tr>
<tr>
<td>Cole B (Small Animal Colony)</td>
<td>600 Putah Creek Road</td>
</tr>
<tr>
<td>Cole C (Meat Lab)</td>
<td>534 Putah Creek Road</td>
</tr>
<tr>
<td>Dairy</td>
<td>201 Dairy Road</td>
</tr>
<tr>
<td>Farm Shop</td>
<td>400 Hopkins Road</td>
</tr>
<tr>
<td>Feedlot</td>
<td>2950 Straloch Road</td>
</tr>
<tr>
<td>Feedmill</td>
<td>2950 Straloch Road</td>
</tr>
<tr>
<td>Goat Facility</td>
<td>1300 Equine lane</td>
</tr>
<tr>
<td>Hopkins Avian Facility</td>
<td>701 Hopkins Road</td>
</tr>
<tr>
<td>Horse Barn</td>
<td>530 South La Rue Road</td>
</tr>
<tr>
<td>Meyer Hall Animal Facility</td>
<td>Basement of Lab Building, 450 Bioletti Way</td>
</tr>
<tr>
<td>Sheep Barn</td>
<td>2250 Brooks Road</td>
</tr>
<tr>
<td>Swine Center</td>
<td>2953 Straloch Road</td>
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</tbody>
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## Remote Facilities

<table>
<thead>
<tr>
<th>Facility Name</th>
<th>Street Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bodega Marine Laboratory</td>
<td>2099 Westside Rd, Bodega Bay, 94923</td>
</tr>
<tr>
<td>Desert Research and Extension Center</td>
<td>1004 East Holton Rd, Holton, 92250</td>
</tr>
<tr>
<td>Hopland Research and Extension Center</td>
<td>4070 University Rd, Hopland, 95449</td>
</tr>
<tr>
<td>Sierra Foothill Research and Extension Center</td>
<td>8279 Scott Forbes Rd, Browns Valley, 95918</td>
</tr>
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