UCDAVIS

DEPARTMENT of NUTRITION

INJURY AND ILLNESS PREVENTION PROGRAM

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INJURY AND ILLNESS PREVENTION PROGRAM

This Injury and Illness Prevention Program has been prepared by the University of California, Nutrition 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). The goal of the program is to provide and maintain a safe and healthful work environment for all of our students and employees. Each member within the department is required to follow and adhere to the items set forth in this program.

The purpose of this Injury & Illness Prevention Program is to:

a) Establish a management framework for reducing the risks associated with workplace injuries and illnesses,

b) Identify what is required to promote the safety and health,

c) Create an outline of policies and procedures to achieve safety and health goals.

It is understood that the effectiveness and success of the Injury and Illness Prevention Program depends upon the active support and commitment at all levels within the department and its units. All employees and students agree to support and assist in the implementation of the department's Safety and Health Injury and Illness Prevention Program (IIPP) and thereby agree to:

- Follow Standard Operating Procedures and use maximum care to prevent injuries.
- Use required safety equipment (such as personal protective equipment) provided.
- Report unsafe or hazardous situations, equipment or practices to their supervisor, instructor or safety coordinator immediately. In the event of any work-related accident or injury, all employees and/or students must notify their supervisor immediately.
- Read and understand all training instructions (and not hesitate to ask questions about work safety) and verify documentation of such in training records.

▶ This document is also available online via the Nutrition department website under "*Safety Resources*" (http://nutrition.ucdavis.edu/about/admin/safety.html) .

UC DAVIS

Nutrition

INJURY AND ILLNESS PREVENTION PROGRAM

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APPENDICES

Department Information

Department Name: **Nutrition**

Department Director: Dr. Francene Steinberg (Dept. Chair)

Address: 3135 B Meyer Hall

Telephone Number: (530) 752-0160

Buildings Occupied by Department

1. Building**: Meyer Hall**

Unit(s)**:** Main Department office and individual offices (Meyer Hall - South wing); Research Laboratories (Meyer Hall - North wing); Animal Facility (Meyer Hall basement)

(Rooms: 1339, 1426, 3109, 3111, 3113, 3115, 3135A-E, 3138, 3139, 3143, 3145, 3147, 3148, 3149, 3150A-I, 3202A-C, 3205, 3207, 3209, 3211, 3215, 3217A-C, 3241, 3243, 3245, 3247, 3249, 3251, 3252, 3252A, 3253A-C, 3323, 3325, 3326, 3328, 3329, 3329A, 3401, 3401A, 3403, 3405, 3407, 3407A, 3408, 3412, 3415, 3415A, 3416, 3418, 3420, 3420A, 3422, 3422A, 3423, 3424, 3425, 3425A, 3427, 3428, 3429, 3430, 4303, 4303A, 4305, 4305A, 4306, 4306A, 4307, 4309)

Dept. Contact**:** Dr. Mike Satre, DSC

Phone**:** (530) 220-6277

Unit**: Animal Facility** (Meyer Hall basement - Rooms: Basement rooms 0107 through 0210)

Site Contact**:** Sue Bennett

Phone**:** 752-7264

Dept. Contact**:** Dr. Mike Satre, DSC

Phone**:** (530) 220-6277

2. Building**: Academic Surge**

Unit(s)**:** Ragle Facility (Rooms: 1283 A-1283 S, except 1283 M and 1283 P)

Site Contact**:** Jody Randolph

Phone**:** 752-7620

Dept. Contact**:** Dr. Mike Satre, DSC

Phone**:** (530) 220-6277

3. Building**: Willow Cottage (TB33)**

Unit(s)**:** Rooms: 001, 002, 003, 101, 104, 106, 107, 109, 110, 111, 112

Contact**:** Dr. Carolyn Slupsky

Phone**:** (530) 219-5757

Dept. Contact**:** Dr. Mike Satre, DSC

Phone**:** (530) 220-6277

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: **Dr. Francene Steinberg** (Dept. Chair)

   Title: **Department Chair**

   Authority: Authority and responsibility for ensuring implementation of this IIPP

   Signature: _____ Date: 8-12-19

2. Name: **Dr. Mike Satre**

   Title: **Department Safety Coordinator**

   Authority: Department designated authority for implementation of this IIPP

   Signature: _____ Date: 8/9/2019

Additionally, all **Principal Investigators** (PI's) 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 - http://manuals.ucdavis.edu/PPM/290/290-15.pdf).

PI's and supervisors are also responsible for assuring employees and students are properly trained and that such training is documented in training records; that work hazards are evaluated and identified; Standard Operating Procedures are reviewed annually and updated as required.

II. System of Communications

1. Effective communications with **Nutrition Department** employees have been established using the following methods:

   - Standard Operating Procedures Manual
   - Safety Data Sheets (available on-line at ucsds.com)
   - Departmental and Lab-Group meetings
   - Internal media (department intranet website – under "Administration"; "Safety Resources")
   - EH&S / UCD Safety Services Safety Nets
   - Handouts
   - Building Evacuation Plan (Departmental EAP)
   - E-mail
   - Posters and warning labels
   - Job Safety Analysis – Initial Hire
   - Job Safety Analysis – Annual Review
   - Other - Occasional updates and informational items

2. Employees are encouraged to report any potential health and safety hazard that may exist in the workplace. **Hazard Alert/Correction Forms** **(Appendix A)** 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 (UC Davis Personnel Policies for Staff Members-Section 62, 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 (PPE). Conformance will be reinforced by discipline for non-compliance in accordance with University policy (UC Davis Personnel Policies for Staff Members- Section 62, 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 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 employee work functions, potential health or injury hazards, and specifies appropriate safe practices, personal protective equipment, and tools/equipment. JSA's can be completed for worksites, an individual employee's job description, or a class of employees' job description. JSA's are located in **Appendix B**.

The following resources are available for assistance in completing JSA's:

- Laboratory personnel, (please refer to the Laboratory Hazard Assessment Tool "LHAT")
- Non-Laboratory personnel, (please refer to the JSA/PPE Certification Forms)

▶ Job Safety Analysis TEMPLATE forms are located in **Appendix B**.

▶ *Consult the EH&S/Safety Services website (http://safetyservices.ucdavis.edu/article/injury-illness-prevention-program-iipp) and sub-links for updates to these forms.*

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: **Meyer Hall (North** and **South Wings** and **the** basement **Animal Facility)**
Frequency: **Annually** (or more frequently as required)
Responsible Person: **Lab Managers/Supervisors** and **Dr. Mike Satre (DSC)**
Records Location: **3205 Meyer Hall**

2) Location: **Academic Surge ('Ragle' Facility)**
Frequency: **Annually** (or more frequently as required)
Responsible Person: **Lab Managers/Supervisors** and **Dr. Mike Satre (DSC)**
Records Location: **3205 Meyer Hall**

3) Location: **TB 33 (Willow Cottage)**
Frequency: **Annually** (or more frequently as required)
Responsible Person: **Lab Managers/Supervisors** and **Dr. Mike Satre (DSC)**
Records Location: **3205 Meyer Hall**

▶ Worksite Inspection Forms are located in **Appendix C**.

▶ *Consult the EH&S/Safety Services web site (http://safetyservices.ucdavis.edu/article/injury-illness-prevention-program-iipp) and sub-links within for updates to these forms.*

Filled-in example forms are available for guidance in completing your worksite-specific or personnel (job)-specific forms.

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.

Nutrition department personnel 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. Proper injury reporting procedures can be found at http://safetyservices.ucdavis.edu/article/injury-reporting-procedure.

2. The **Injury and Illness Investigation Form** **(Appendix D)** shall be completed to record pertinent information and a copy retained to serve as documentation. It can be completed by either the supervisor or the Department Safety Coordinator.

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/or safely disconnecting unsafe electrical equipment from the power source) and providing a list of alternatives for employees to use until the equipment is repaired.

- Immediately stopping unsafe work practices and providing retraining on proper procedures before work resumes.

- Reinforcing and explaining the need for proper personal protective equipment (PPE) 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/Correction Report** (Appendix A) to document corrective actions, including projected and actual completion dates.

▶ If an imminent hazard exists, all work in the area must cease, and the appropriate supervisor must be contacted immediately. If the hazard cannot be immediately corrected without endangering personnel 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 Principal Investigator and immediate Supervisor(s) / Manager(s) as applicable to the following criteria:

1. PI's/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 personnel receive training ***prior to*** engaging in responsibilities that pose potential hazard(s). ▶ *see **Initial Training** template in **Appendix E***

Additional and/or refresher Training is conducted annually (at a minimum) or more frequently when / if:

3. Any employee given a new job assignment receives 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. The employer is made aware of a new or previously unrecognized hazard, training is provided.

▶ *see **Refresher Training** template in **Appendix E***

6. Individual employee / personnel training records are located in that individual's primary work place.

A **Safety Training Record** forms are located in **Appendix E**.

▶ *PI's / Supervisors may use these forms 'as is' or modify these to create a form, suitable for local conditions.*

VIII. Recordkeeping and Documentation

Documents related to the IIPP are maintained in **3205 Meyer Hall**.

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

1. Hazard Alert/Correction Forms **(Appendix A)**.
   Retain for three (3) years.

2. Employee Job Safety Analysis forms **(Appendix B).**
   Retain for the duration of each individual's employment.

3. Worksite Inspection Forms **(Appendix C)**.
   Retain for three (3) years.

4. Injury and Illness Investigation Forms **(Appendix D)**.
   Retain for three (3) years.

The following documents will be maintained within the employee's/worker's primary work location.

5. Employee Safety Training Attendance Records **(Appendix E).**
   Retain for length of employment ***plus*** three (3) years.

IX. Resources

1. UC Office of the President: Management of Health, Safety and the Environment, 10/28/05
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 & Illness Prevention Prog.
4. Personnel Policies for Staff Members, Corrective Action, UC PPSM 62
5. UC Davis Environmental Health & Safety / Safety Services
   - Safety Services Website
   - EH&S SafetyNets
   - Safety Data Sheets
6. Nutrition departments Safety website under "*Safety Resources*" http://nutrition.ucdavis.edu/about/admin/safety.html

Appendices

*Please **DOWNLOAD** and **fill-in** the TEMPLATES provided in this section.*

In many cases, PI's/supervisors may use these as is, or amend them to create a form to suit your site-specific or work-specific environment or local conditions.

▸ *Once down-loaded and filled in appropriately, please insert these **INTO YOUR LAB HARD-COPY IIPP** (and/or other relevant hard-copy file) which is kept for easy access in your lab.*

Please consult EH&S/Safety Services (http://safetyservices.ucdavis.edu/article/injury-illness-prevention-program-iipp) for sub-links within as well as updates to these forms.

A) Hazard Alert and Correction Forms

While these are available within this IIPP, these can also be accessed here **(Appendix A)** at the Safety Services IIPP page (above - and sub-links within).

B) Job Safety Analyses (JSA)

Training 'matrix' for Lab personnel *(UCDavis Training Matrix for Laboratory Personnel)*

B-1. example JSA – Office [excel xlsx. doc]

B-2. example JSA 2 – Laboratory [excel xlsx. doc]

B-2 AF – Animal Facility JSA [Word docx.]

JSA/PPE Certification Instructions (for non-laboratory personnel) [pdf]

JSA Form (Job Safety Analysis – part I) TEMPLATE

JSA Example (filled-in example of JSA Form - part I above) [pdf]

Working Alone SOP (Standard Operating Procedure – Animal Facility)

PPE Hazard Assessment & Certification – part II

PPE Hazard Assessment & Certification – part II (Example)
- (This is a filled-in example of the PPE Cert. form - part II) [pdf]

C) Worksite Inspection Forms

C-1. Worksite Inspection Form - Office

C-2. "Self-Inspection checklist" Worksite Inspection Form – Laboratory

Laboratory Safety Review Checklist
(http://safetyservices.ucdavis.edu/sites/default/files/documents/LaboratorySafetyReviewChecklist.pdf)

D) Injury and Illness Investigation Form

E) Safety Training Records

Located in this section are guide/example TEMPLATE FORMS which may be used for the indicated topics. PI's/Supervisors may use these 'as is', or amend them to create a form to suit training for a site-specific environment or local conditions.

Initial Individual Site-Specific Lab Safety Training

Initial Individual Office Safety Training

Refresher Training

Appendix **A**

HAZARD ALERT FORM

Department: **Nutrition** Alert Identification No. _____

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
January 2016

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.

Appendix **A**

HAZARD CORRECTION REPORT

Alert Identification No. _____

Department: **Nutrition**

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: _____

Description and Location of Unsafe Condition	Date Discovered	Required Action and Responsible Party	Completion Date	
			Projected	Actual

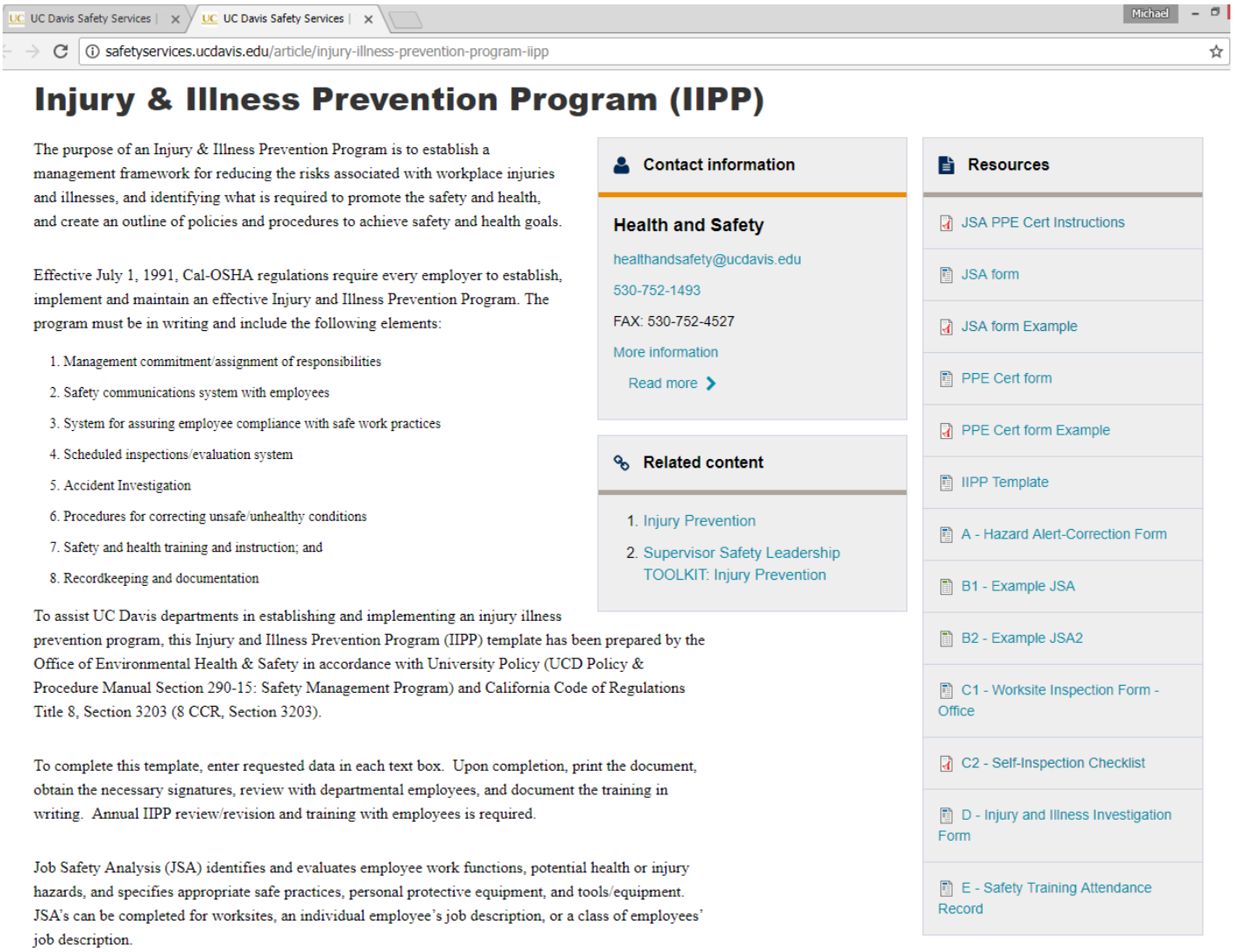
IIPP Appendix A
January 2016

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

Appendix **B** Job Safety Analyses

In addition to the TEMPLATE forms supplied in this section, the following link to EH&S/Safety Services [*http://safetyservices.ucdavis.edu/article/injury-illness-prevention-program-iipp*] (*screen shot below*) provides multiple resources and should be consulted for updates and when completing or amending the supplied template forms below.

▶ Note the Resources with links for forms



▶ PI's/Lab Supervisors should also consult the **Training Matrix for Lab Personnel** *(UCDavis Training Matrix for Laboratory Personnel)* to aid in determining hazard-specific safety risks and appropriate training.

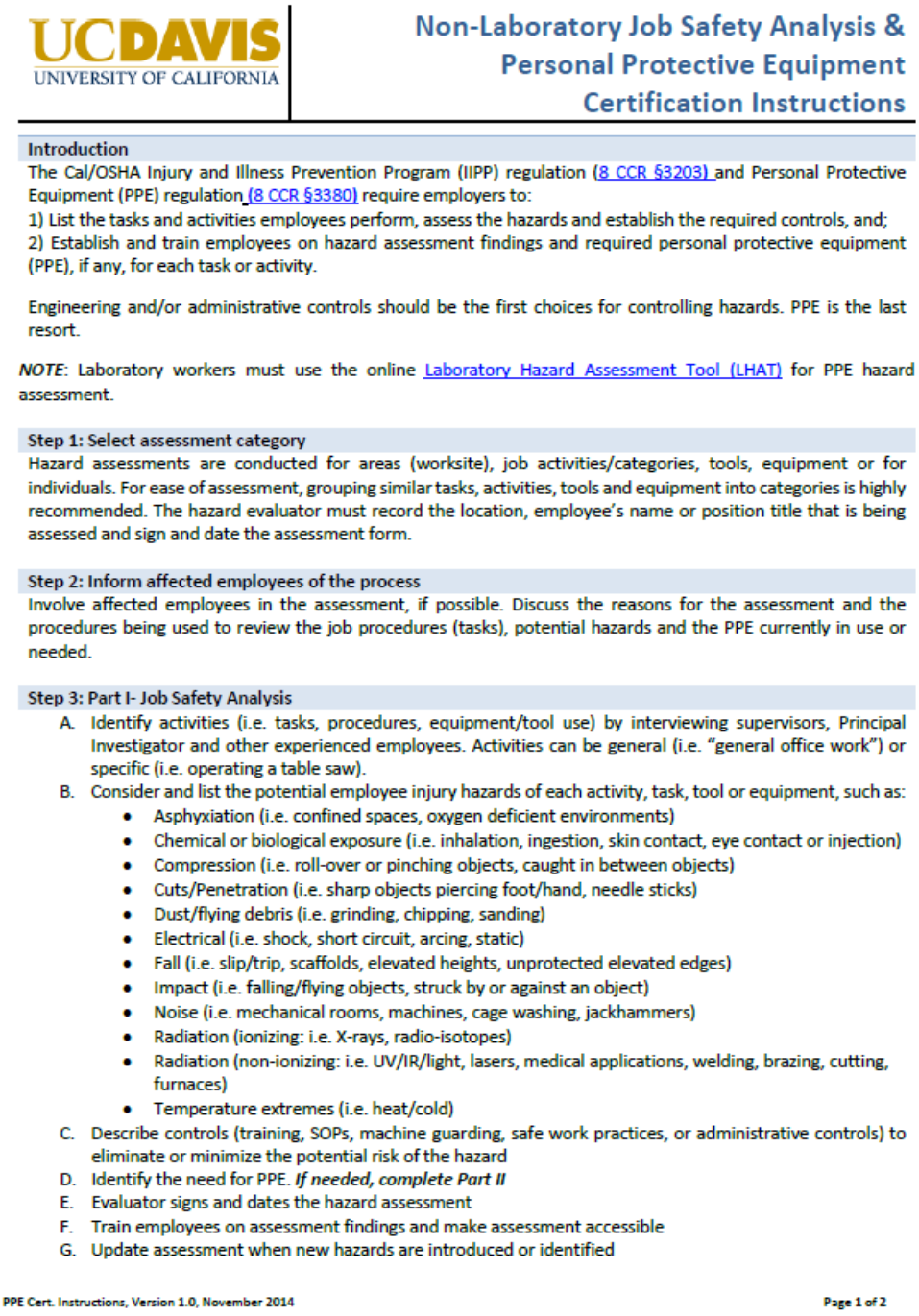
The Training Matrix for Lab Personnel is also available on the Nutrition department website ("*Safety Resources*" - http://nutrition.ucdavis.edu/about/admin/safety.html).

Appendix **B** Job Safety Analyses

For Non-Laboratory (Office) personnel:

JSA/PPE Certification Instructions (for non-laboratory personnel) [pdf] - *see screen shot below*

▶ The complete document is available at:
http://safetyservices.ucdavis.edu/sites/default/files/documents/JSA_PPE_Cert_Instructions.pdf



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Non-Laboratory Job Safety Analysis & Personal Protective Equipment Certification Instructions

Introduction

The Cal/OSHA Injury and Illness Prevention Program (IIPP) regulation (8 CCR §3203) and Personal Protective Equipment (PPE) regulation (8 CCR §3380) require employers to:
1) List the tasks and activities employees perform, assess the hazards and establish the required controls, and;
2) Establish and train employees on hazard assessment findings and required personal protective equipment (PPE), if any, for each task or activity.

Engineering and/or administrative controls should be the first choices for controlling hazards. PPE is the last resort.

NOTE: Laboratory workers must use the online Laboratory Hazard Assessment Tool (LHAT) for PPE hazard assessment.

Step 1: Select assessment category

Hazard assessments are conducted for areas (worksite), job activities/categories, tools, equipment or for individuals. For ease of assessment, grouping similar tasks, activities, tools and equipment into categories is highly recommended. The hazard evaluator must record the location, employee's name or position title that is being assessed and sign and date the assessment form.

Step 2: Inform affected employees of the process

Involve affected employees in the assessment, if possible. Discuss the reasons for the assessment and the procedures being used to review the job procedures (tasks), potential hazards and the PPE currently in use or needed.

Step 3: Part I- Job Safety Analysis

A. Identify activities (i.e. tasks, procedures, equipment/tool use) by interviewing supervisors, Principal Investigator and other experienced employees. Activities can be general (i.e. "general office work") or specific (i.e. operating a table saw).
B. Consider and list the potential employee injury hazards of each activity, task, tool or equipment, such as:
   - Asphyxiation (i.e. confined spaces, oxygen deficient environments)
   - Chemical or biological exposure (i.e. inhalation, ingestion, skin contact, eye contact or injection)
   - Compression (i.e. roll-over or pinching objects, caught in between objects)
   - Cuts/Penetration (i.e. sharp objects piercing foot/hand, needle sticks)
   - Dust/flying debris (i.e. grinding, chipping, sanding)
   - Electrical (i.e. shock, short circuit, arcing, static)
   - Fall (i.e. slip/trip, scaffolds, elevated heights, unprotected elevated edges)
   - Impact (i.e. falling/flying objects, struck by or against an object)
   - Noise (i.e. mechanical rooms, machines, cage washing, jackhammers)
   - Radiation (ionizing: i.e. X-rays, radio-isotopes)
   - Radiation (non-ionizing: i.e. UV/IR/light, lasers, medical applications, welding, brazing, cutting, furnaces)
   - Temperature extremes (i.e. heat/cold)
C. Describe controls (training, SOPs, machine guarding, safe work practices, or administrative controls) to eliminate or minimize the potential risk of the hazard
D. Identify the need for PPE. ***If needed, complete Part II***
E. Evaluator signs and dates the hazard assessment
F. Train employees on assessment findings and make assessment accessible
G. Update assessment when new hazards are introduced or identified

PPE Cert. Instructions, Version 1.0, November 2014 Page 1 of 2

▶ Additional resources:

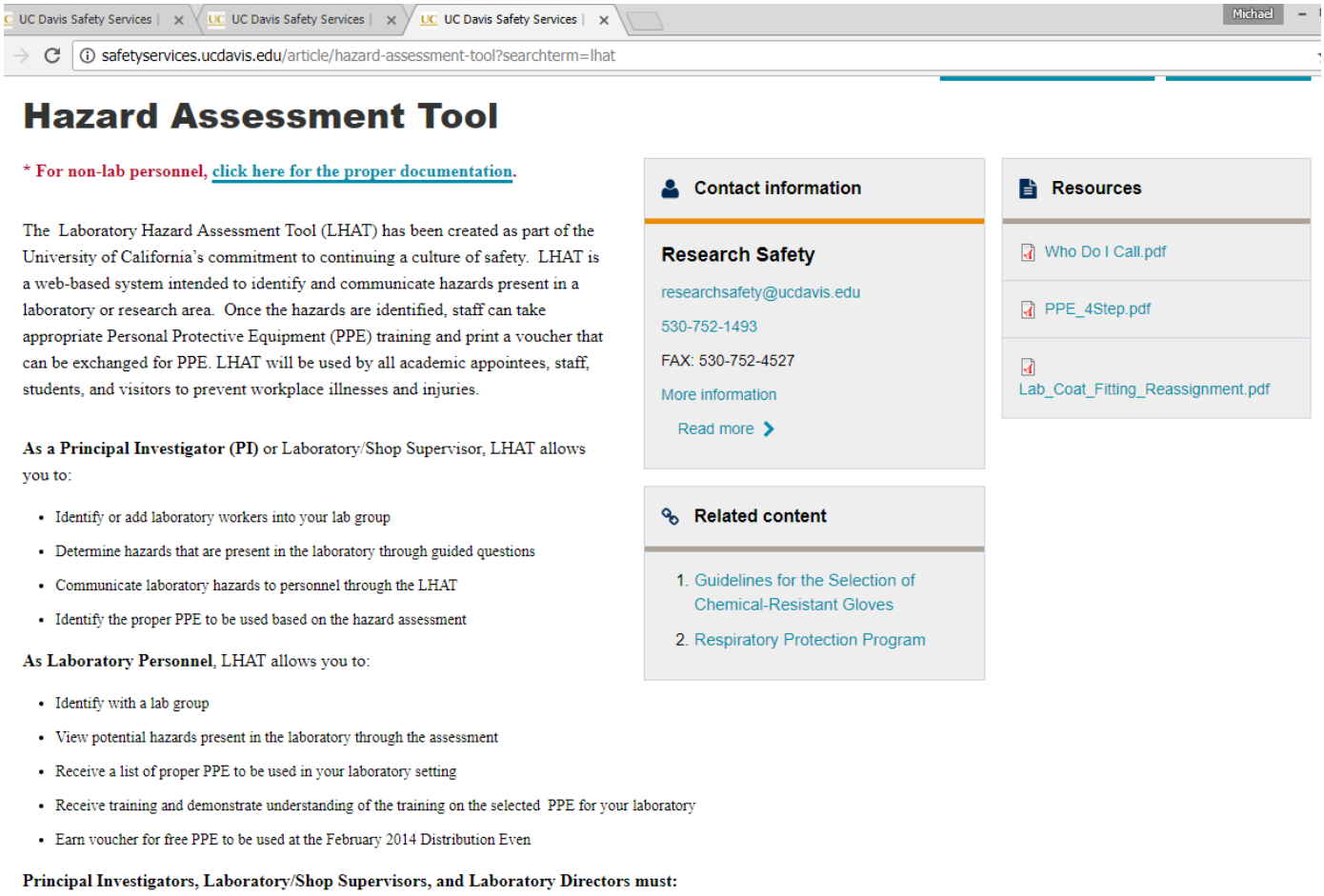
JSA (part 2) – PPE Hazard Assessment & Certification - Example of filled-in Form [pdf] Appendix B2

B2 - Example JSA2 – Business Office Job Safety Analysis [excel xlsx. doc] Appendix B2

Appendix **B** Job Safety Analyses

In addition to the TEMPLATE forms supplied here, additional resources for assistance in completing JSA's are available [*http://safetyservices.ucdavis.edu/article/injury-illness-prevention-program-iipp - screen shot above*] and that shown below:

- for **Laboratory personnel** - Laboratory Hazard Assessment Tool ("LHAT") *screen shot below*



UC Davis Safety Services | UC Davis Safety Services | UC Davis Safety Services | Michael

safetyservices.ucdavis.edu/article/hazard-assessment-tool?searchterm=lhat

Hazard Assessment Tool

*** For non-lab personnel, click here for the proper documentation.**

The Laboratory Hazard Assessment Tool (LHAT) has been created as part of the University of California's commitment to continuing a culture of safety. LHAT is a web-based system intended to identify and communicate hazards present in a laboratory or research area. Once the hazards are identified, staff can take appropriate Personal Protective Equipment (PPE) training and print a voucher that can be exchanged for PPE. LHAT will be used by all academic appointees, staff, students, and visitors to prevent workplace illnesses and injuries.

As a Principal Investigator (PI) or Laboratory/Shop Supervisor, LHAT allows you to:

- Identify or add laboratory workers into your lab group
- Determine hazards that are present in the laboratory through guided questions
- Communicate laboratory hazards to personnel through the LHAT
- Identify the proper PPE to be used based on the hazard assessment

As Laboratory Personnel, LHAT allows you to:

- Identify with a lab group
- View potential hazards present in the laboratory through the assessment
- Receive a list of proper PPE to be used in your laboratory setting
- Receive training and demonstrate understanding of the training on the selected PPE for your laboratory
- Earn voucher for free PPE to be used at the February 2014 Distribution Even

Principal Investigators, Laboratory/Shop Supervisors, and Laboratory Directors must:

Contact information

Research Safety

researchsafety@ucdavis.edu

530-752-1493

FAX: 530-752-4527

More information

Read more

Related content

1. Guidelines for the Selection of Chemical-Resistant Gloves
2. Respiratory Protection Program

Resources

Who Do I Call.pdf

PPE_4Step.pdf

Lab_Coat_Fitting_Reassignment.pdf

TEMPLATE Forms provided below:

Job Safety Analysis (JSA) - "JSA form - part I" (ver. 2014) [Appendix B1]

PPE Hazard Assessment & Certification form - part II (ver. 2014) [Appendix B2]

- These forms should be filled and a copy kept in the Laboratory Safety file.

Additional for **Laboratory personnel**:

JSA (part 1) - Example of filled-in Form part 1 [pdf] - consult the Safety Services website here: Appendix B1

B1 - Example JSA – Lab Safety Analysis [excel xlsx. doc] - consult the Safety Services website: Appendix B1

Additional, amendable TEMPLATE forms are provided on the Nutrition department website (under "*Safety Resources*" - http://nutrition.ucdavis.edu/about/admin/safety.html).

For additional information please go to the Nutrition department website under "*Safety Resources*".

Appendix **B**

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Job Safety Analysis (Part I)

Instructions:

1. Select assessment category.

2. List tasks/activities: Develop a list of activities, tasks, equipment/tools (group similar tasks/activities).

3. Identify and list potential hazards: for each task, activity or equipment/tools, list and describe the potential hazards.

4. Identify and list controls: for each task, activity, equipment/tools, document controls (*i.e*. training, equipment, written procedures, Personal Protective Equipment (PPE), etc.).

5. ***If PPE is required, complete Part II- PPE Hazard Assessment and Certification.***

6. Train affected employees on the final assessment and document the training.

- ***Repeat assessment when new hazards are identified or introduced into the workplace or at least every three (3) years.***
- ***Laboratory workers must use the online Laboratory Hazard Assessment Tool (LHAT) for PPE hazard assessment.***

I am reviewing *(check the appropriate box)*	☐ A worksite	Specify location:
	☐ A single employee's job description	Name of employee:
		Position title:
	☐ A job description for a class of employees	Position titles:
		Location:
	Hazard Evaluator	Signature / Date:

TASK/ACTIVITY	POTENTIAL HAZARD	CONTROL	PPE Required? Y/N

Please consult the "JSA form Example" at *http://safetyservices.ucdavis.edu/article/injury-illness-prevention-program-iipp* to aid in filling out this form.

Appendix **B** Job Safety Analyses – Meyer Hall **Animal Facility**

The following Job Safety Analysis section pertains directly to ALL individuals working in the Meyer Hall basement Animal Facility.

▶ **NOTE:** The Job Safety Analysis in this section are also applicable to personnel working with **laboratory animals** (*eg*. mice, rats, etc.) OUTSIDE of the Animal Facility (in Meyer Hall, Willow Cottage/TB33 laboratories or other designated research areas). Read and include these and the **associated risks** (*eg*., allergies, bites) within your JSA (part I) and part II (PPE Hazard Assessment & Certification), in addition to laboratory animal specific S.O.Ps.

Appendix **B** Working Alone SOP – Meyer Hall **Animal Facility**

Purpose: This SOP is to promote employee awareness and facilitate employee safety when working alone.

Scope/ Responsibility: This policy applies to all Animal Facility staff, student assistants and interns. It is everyone's responsibility to evaluate their work space, communicate risks and report all accidents to their supervisor. Everyone is responsible for maintaining a safe work environment by working in the safest manner at all times and adhering to all safety measures and safety training instructions. It is also important to be familiar with basic emergency procedures and report suspicious activity to your supervisor.

In this facility, you will be expected to work independently beyond visual or audible range of co-workers and supervisors. You may also work alone on weekends or holidays after being trained.

Notify us if you have an issue or concern that will affect or prevent you from working alone.

Definitions:

- **Working alone:** Individuals are considered to be working alone when they are working by themselves in areas beyond visible or audible range of another individual for more than a few minutes.
- **Incidents**: Unexpected occurrence.
- **High risk activities**: activities where the potential for the occurrence of accidents or injuries is deemed to be highly likely and where the severity of the injury or accident will bring serious consequences. For example: working from heights, working in confined spaces, working with electricity, working with hazardous substances or materials, working with material under high pressure.
- **Low Risk activities**: activities where the potential for the occurrence of accidents and injuries is deemed to be highly unlikely and where the severity of an accident or injury is generally thought not to have serious consequences.
- **Emergency assistance**: a means of communication to gain assistance in the event of an emergency involving an accident or serious injury, illness, or threat of violence.
- **After hours**: The period of time when "normal¨ weekday or shift operations cease. For example: After 5 pm, Holidays and Weekends.
- **Risk assessment**: Process to identify potential hazards and identify what could happen if a hazardous situation occurs and measures taken to reduce identified risks to acceptable levels. A critical part of the risk assessment is the determination of emergency assistance procedures.

General Housekeeping Guidelines:

- Do not obstruct access to exits and emergency equipment such as fire extinguishers and safety showers.
- Store coats, bags, and other personal items in the proper area, in the change room.
- All equipment temporarily placed in the hallways must be on carts with wheels that are easily moveable. All carts should be lined up along one side of the hall so movement through the hallway is not obstructed and they do not become hazards in the event of an emergency.
- Keep drawers and cabinets closed when not in use, to avoid accidents.
- Use caution: wet surfaces may pose a slip hazard and electrical hazards.
- Avoid carrying items that obscure your view.
- Keep chemical containers closed when not in use.
- Secure all water, gas, air, and electrical connections in a safe manner.
- Use proper lifting techniques when lifting diet bags to fill chow barrels. Slide bag close to an empty barrel, grasp bag by opposite corners and lift onto barrel. Use your knees and do not carry bag. Roll an open empty barrel next to bag and open one end of bag so diet falls freely into the new clean barrel.
- Return all equipment, ladders, hoses, brushes etc. to their designated storage location when finished.

- Dispose of broken glass in broken glass container located in the surgery room.
- Dispose of sharps (e.g., needles and razor blades) in sharps container located in the surgery room.

Emergency Procedures: ***Read and follow procedures below which are also posted on change room door***.

I. In all Emergencies: Notify facility staff if present. Emergency contact #'s by facility exits and phones

II. Animal Emergency: If you find a sick or injured animal that you believe is in severe pain or dying, it is your responsibility to provide immediate care to the animal. Follow steps for getting animal care posted by each facility phone.

III. Injury: Serious or life threatening injuries: Call 911

Non-life threatening injuries:

During regular business hours: Call Occupational health services (530) 752-6051

After-hours/weekend: Davis Urgent Care: (530) 759-9110
4515 Fermi Place, Suite 105, Davis CA 95618
Hours: 9am - 9pm; 365 days a year

After 9pm, Any day: Go to Sutter Davis Hospital Emergency Room (530) 757-5111

IV. Equipment or Building Emergency: If there is an emergency with the building or animal rooms

- Call Operations and Maintenance: 752-1655. Explain the type of emergency clearly.
- Emergencies that threaten human or animal life are top priority. Wait for them to arrive.

V. Campus Emergency Services:

- UCD Police: Non-emergency and cell phone (530) 752-1230
- UCD Fire: Non-emergency and cell phone (530) 752-1234

Safety Guidelines for Before, During and After Working Alone:

Before**:** notify supervisor, sign in on white board, get prepared by changing into scrubs, getting keys and check sheet, wash hands and read all notes.

During: maintain tidy environment, do not block exit, keep keys with you as you move through the facility, use situational awareness and read and follow all posted signs. At all times, know location of emergency exits, emergency eye washes, fire extinguishers, phones and first aid kits.

After: leave area safe and tidy, return keys, secure facility, communicate problems, get out safe, notify supervisor.

Hazard Restrictions: *When working alone in the facility with no one else present.*

Equipment Restrictions: Do not operate or clean tunnel washer, autoclave or rack washer unless specifically assigned to do so. Do not flip emergency off switch to the on position without first confirming with supervisor.

Chemical Restrictions: Do not use mixing stations to disinfect rooms or hallways unless specifically assigned to do so.

Ergonomic Restrictions: Physical hazards include climbing on ladders, using power tools and pushing and pulling heavy objects. Do not use ladders. Do not change light bulbs or open light diffusers unless specifically assigned to do so. Do not change or repair rack wheels, if you find a rack with a broken wheel, label rack "Do Not Use" and notify supervisor. Do not move gas cylinders or soap barrels.

References: *Emergency Call List, What to do if there's an Emergency in the Animal Facility*, *How to Call in a Building Problem to Operations and Maintenance and What to do if you find a sick animal.*

	JOB SAFETY ANALYSIS	DEPARTMENT: Nutrition JOB TYPE: Animal caretaker, technician, researcher
	POTENTIAL HEALTH or INJURY HAZARDS	SAFE PRACTICE, OR EQUIPMENT, PPE REQUIRED
Animal Handling and Restraint	<u>Zoonotic Exposures</u>: Zoonotic diseases are infections or infestations shared by humans and animals. Be aware that these diseases may also be transmitted via animal fluids or tissues (blood, neural tissue, urine, feces, etc.). Allergies to rodents Mechanical/Physical Injuries from Animals, including bites and scratches	Before beginning work, review the documents: *Staying Healthy in the Vivarium* and *Allergy to Animals* on the Safety Services website. Use the "Hazard Analysis Tool" to obtain current information on zoonotic diseases for the species with which you will be working. Everyone who has exposure to animals must be enrolled in the Occupational Health Surveillance System (OHSS): Complete the Risk assessment with their supervisor and a confidential Health Questionnaire. Health care professionals at Occupational Health Services will review the form and make individual recommendations as appropriate. Training for handling animals can be obtained from the Laboratory Animal Skills Class or from your supervisor. Do not perform a procedure for which you have not been trained or feel uncomfortable, ask your supervisor for assistance. Always keep in mind that animals may bite and/or scratch. Notify your supervisor if you get bit by an animal or needle stick. Follow any Standard Operating Procedures (SOP) that your supervisor provides. The minimum protective clothing (PPE) requirement is a lab coat, gloves, long pants and closed-toed shoes. The PI, facility or experimental conditions dictate any other requirements. No food or drink allowed when handling animals. Practice good personal hygiene at all times. Wash hands before and after handling animals.

	JOB SAFETY ANALYSIS	DEPARTMENT: Nutrition JOB TYPE: Animal caretaker, technician, researcher
	POTENTIAL HEALTH or INJURY HAZARDS	SAFE PRACTICE, OR EQUIPMENT, PPE REQUIRED
Physical Hazard: Handling sharps, proper use and disposal	Physical injury due to lacerations, cuts, punctures and needle stick	Situation awareness, use appropriate PPE. Only use an approved, properly labelled sharps container for the particular type of sharp. Keep needles capped until ready to use, discard in appropriate container after use. Do not recap needles. Secure all scalpels and razor blades after use. Report all needle sticks and unsafe conditions to your supervisor. Report any accident or injury to your supervisor.
Exposure Hazard: Handling of animals exposed to chemical or biological agents	Exposure to chemical agents via inhalation, contact, ingestion, bite or injection. Chemical exposure in the vivarium can be a result of chemicals leaving the animal via urine and feces. Chemicals can be spilled or splashed during animal dosing.	Avoid unnecessary exposures, read and follow all safety signs. Practice good personal hygiene (handwashing before and after working with biological hazard). Know the location of the nearest emergency eyewash station and shower. Wear the minimum protective clothing (PPE) requirement plus any additional protective equipment as outlined in the Vivarium Health Safety Sheet. Be familiar with the Safety Data Sheets (SDS's) for the chemicals being used. Reduce risk by notifying the Department Safety Coordinator and EH&S of potential or new hazards. Use a fume hood when required by the SDS, SOP or by campus policy. Chemical solutions must be prepared in the laboratory and may not be stored in the animal facility. Do not dispose of chemical solutions in the vivarium trash, take the solutions back to the laboratory for proper disposal. Use secondary container when transporting chemical solutions to the vivarium. If there is a chemical spill in the animal area, notify your supervisor.

	JOB SAFETY ANALYSIS	DEPARTMENT: Nutrition JOB TYPE: Animal caretaker, technician, researcher
	POTENTIAL HEALTH or INJURY HAZARDS	SAFE PRACTICE, OR EQUIPMENT, PPE REQUIRED
Exposure Hazard: Antimicrobial disinfection. Scrubbing floors and equipment	Exposure to chemical disinfectants and bleach via mucous membrane, inhalation and skin.	Be familiar with the SDS for the chemical being used. Know the location of the nearest emergency eyewash station and shower. Wear protective clothing and eyewear as per the SDS, SOP or campus policy. Do not mix cleaning chemicals. Avoid splashing chemical disinfectants. Always add the cleaner to the container of water when making a solution. Make sure the lid is secure when transporting bottles of bleach and disinfectants. Aim nozzle away from you before turning on mixing station. When finished nozzle should be pointing to the wall or floor, never facing out. Clean up excess and spills after use. Wash hands and arms thoroughly after use.
Physical Hazard: Rack and Tunnel washers	Steam and hot water Tangled Parts Bodily Injury Eye Injury Back Strain Hearing damage from audible noise > 90dB	Read all safety signs. Understand how the machine operates and procedures before commencing work. Know the location of emergency stops and main power switches. Keep access clear: You must be able to reach emergency stop button at all times. Do not open access doors while machine is running. Make sure sprayers and belt have stopped before carefully opening access doors. Do not wear loose clothing or jewelry. Secure long hair. Do not overreach. Stand back when opening and closing doors. Keep feet shoulder length apart. Be aware of tripping and falling into machine. Use the guarding systems and shields. Always keep clear pathway to an exit, do not block yourself in. If operating machines for over 8 hours wear hearing protection. Wear non-slip, close toed shoes and gloves. Machine floor grates are uneven be careful when loading items or stepping into machine. Be aware, interior surfaces of the rack washer can be hot and slippery when wet.

	JOB SAFETY ANALYSIS	DEPARTMENT: Nutrition JOB TYPE: Animal caretaker, technician, researcher
	POTENTIAL HEALTH or INJURY HAZARDS	SAFE PRACTICE, OR EQUIPMENT, PPE REQUIRED
Physical Hazard: Exposure to cryogenic liquids, dry ice and gas cylinders	Burns, asphyxiation and bodily injury	Avoid unnecessary exposures use in well ventilated area. Proper adherence to cryogenic procedures. Proper selection and use of protective clothing such as thermal gloves and tongs. Safe transport of cryogenics and dry ice in an insulated container. Transport cylinders using a cylinder cart. Detach regulator and replace valve cover before transport. Cylinders should be affixed to a solid wall using 2 brackets. Read label and select appropriate regulator for gas use. Keep cylinders upright. Inspect valve for damage, contents under pressure.
Physical Hazard: Handling and/or moving heavy items and equipment	Ergonomic hazards including heavy lifting, repetitive motions, awkward motions, crushing or pinching injuries, etc.	Get help with all loads that cannot be safely lifted by one person. Use mechanical means to lift and move heavy items, push carts and dolly rather than pull, employ proper lifting techniques at all times. Wear proper hand and foot protection to protect against crushing or pinching injuries Take frequent breaks, stretch and readjust position to avoid muscle strain. Do not stack heavy objects above your head. Avoid pinching and crush hazards by keeping hands and feet away from walls and door jambs while moving heavy equipment. Slide equipment from one surface to another instead of dead lifting. Always keep clear pathway to an exit available, do not block yourself in.

	JOB SAFETY ANALYSIS	DEPARTMENT: Nutrition JOB TYPE: Animal caretaker, technician, researcher
	POTENTIAL HEALTH or INJURY HAZARDS	SAFE PRACTICE, OR EQUIPMENT, PPE REQUIRED
Physical Hazard: Electrical	Electrical hazards	Do not use extension cords in lieu of permanent wiring. Ensure that high wattage appliances do not overload circuits. Replace frayed or damaged electrical cords. Ensure that electrical cords are not wedged against furniture or pinched by doors. Do not "daisy chain" surge protectors with extension cords. Affix cords to walls or tape to floor to avoid trip hazard. Do not spray water near cords. Do not use electrical equipment on wet surfaces. Do not submerge, drench or douse electrical equipment. Do not unplug equipment by pulling the cord; always pull from the plug.
Physical hazard: Wet surfaces	Wet surfaces and hosing of equipment and floors. Slip and trip hazard. Electrical hazard	Use proper PPE such as slip resistant footwear. Use situational awareness; avoid hosing near cords, outlets and switches. Do not tangle hose around body parts and equipment. Control stream at all times, avoid splashing onto clean dry equipment. Be careful, there is a burn risk at the hottest setting.
Physical Hazard: Use of hand tools	Cuts, abrasions, contusions from contact with point of operation	Use the proper tool for the job. Keep work area clean and free from clutter. Work on a solid level surface if possible and make sure the area is well lit. Inspect tools and repair or replace if broken or damaged. Wear safety glasses or face shield if there is a risk of flying debris. Consult equipment user guides for any other PPE recommendations.

	JOB SAFETY ANALYSIS	DEPARTMENT: Nutrition JOB TYPE: Animal caretaker, technician, researcher
	POTENTIAL HEALTH or INJURY HAZARDS	SAFE PRACTICE, OR EQUIPMENT, PPE REQUIRED
Physical Hazard: Autoclave use	Lifting heavy items Burn hazard Items falling Pushing/pulling heavy racks	Do not enter autoclave for any reason. Understand how the machine operates before starting work. Stand back when opening and closing doors. Keep front of autoclave doors clear. Always use insulated gloves and pull pole for removing items. Be aware, interior surfaces are very hot keep hands and arms in to avoid burn. Be aware, interior is under high pressure when in use. In the event of water leaking from door, do not open chamber. Racks very hot when unloaded, keep thermal gloves on top of load to indicate hot racks. Do not overload autoclave racks; racks should move easily when loading. Use secondary container for items that may spill. Place indicator in load to ensure proper sterilization of items. Alert facility staff when autoclave indicates a *caution* code or *warning* code. Do not tightly seal containers or bags.
Physical Hazard: Hobart mixers	Moving parts pinching or crushing Heavy mixing bowls Inhalation of dust particles Heavy lifting	Know the location of emergency stops and main power switches. Do not reach into bowl while machine is running. Do not wear loose clothing or jewelry. Secure long hair. Wear closed toed shoes. Do not lower or lift bowl when mixer is on. Avoid excessive dust by using bowl shroud and closing chamber door when in use. Use bowl caddy when moving bowls, do not lift. Add ingredients slowly to avoid spillage and overflow. Turn mixer on using lowest setting first. Gradually increase speed as needed.

	JOB SAFETY ANALYSIS	DEPARTMENT: Nutrition JOB TYPE: Animal caretaker, technician, researcher
	POTENTIAL HEALTH or INJURY HAZARDS	SAFE PRACTICE, OR EQUIPMENT, PPE REQUIRED
Physical Hazard: Ladders and step stools	Falls, trips Electrical hazard	Use a ladder or step-stool (do not use a chair, cart, rack, bucket or box). Avoid using ladders that have damaged cleats, rungs or steps. Center your body between the ladder rails; do not over-reach. Check that all cleats, rungs, and steps are firmly in place before use. Choose correct ladder height for the job required. Place ladder on level surface and insure it is stable before use. Open step stool completely before stepping on it. Do not remove electrical plugs or light bulbs using ladder if the floor is wet.
Hazard: Trash Disposal	Exposure and physical hazard. Inhalation and contact. Ergonomic hazards Heavy lifting	Use proper PPE including gloves and slip resistant footwear. Test the weight before attempting to lift bag out of can. Before handling, look into trash can to see if there are hazards present such as sharps, chemicals or blood. If hazards are seen, notify facility staff before removing. Do not squeeze air out of bag into your face and do not "hug" the bag of trash. Lift bag out of barrel using safe lifting practices. When transporting trash, do not swing bag, do not bang bag against your body, do not swing bag over shoulder and do not drag bag on floor. If the bag leaks, stop and place bag into secondary bag. Notify facility staff for direction on spill cleanup.

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Job Safety Analysis (Part I)

Training Record

Designated Trainer: (signature required) _____

I have read and acknowledge the contents, requirements, and responsibilities outlined in this document:

Name	Signature	Date

Appendix **B**

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PPE Hazard Assessment & Certification (Part II)

Instructions :

1. Select assessment category.
2. List ***tasks/activities***: List tasks identified in Part I (or any other JSA document) that require PPE and list the activity on the form.
3. Identify ***body parts*** that may be injured.
4. Identify and list specific ***required PPE***.
5. Provide necessary PPE to employee.
6. Train affected employees on the final assessment, PPE specific training and document the training.

- ***Repeat assessment when new hazards are identified or introduced into the workplace or at least every three (3) years.***
- ***Laboratory workers must use the online Laboratory Hazard Assessment Tool (LHAT) for PPE hazard assessment.***

I am reviewing *(check the appropriate box)*	☐ A worksite	Specify location:
	☐ A single employee's job description	Name of employee:
		Position title:
	☐ A job description for a class of employees	Position titles:
		Location:

Task/Activity	Head	Ears*	Eyes	Face	Lung*	Trunk	Whole Body	Arms	Hands	Knees	Feet	Required PPE

I certify the above hazard assessment was performed to the best of my knowledge and ability, based on the hazards present on this date. Compliance reference-8 CCR §3380.

Evaluator Name:		Department:
Evaluator Signature:		Date:

Please consult the "PPE Cert form Example" at *http://safetyservices.ucdavis.edu/article/injury-illness-prevention-program-iipp* to aid in filling out this form.

Appendix **B**

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PPE Hazard Assessment & Certification (Part II)

Training Record

Designated Trainer: (signature required) _____

I have read and acknowledge the contents, requirements, and responsibilities outlined in this document.
I have been provided the necessary PPE and received training on the proper selection, use and maintenance of PPE:

Name	Signature	Date

Appendix **C** Worksite Inspection Forms

In addition to the TEMPLATE forms supplied here, please consult the Safety Services links (*C1 - General Office* and *Appendix C2 - Laboratory*) for updates and when completing or amending the forms below.

TEMPLATE Forms provided below**:**

- **C-1** **Worksite Inspection form** – General Office Environment (TEMPLATE)
- **C-2** **Self-Inspection checklist** - Laboratory (TEMPLATE)

▶ Alternate, amendable TEMPLATE forms are provided on the Nutrition department website ("*Safety Resources*" - http://nutrition.ucdavis.edu/about/admin/safety.html).

Appendix **C-1**

WORKSITE INSPECTION FORM
General Office Environment

Department: _____ **Date:** _____

Inspector: _____ **Principal Investigator:** _____

Location Building/Room(s): _____

		YES	NO	N/A
	Administration and Training			
1	Are all safety records maintained in a centralized file for easy access? Are they current?			
2	Have all employees attended Injury & Illness Prevention Program (IIPP) training? If not, what percentage has attended? _____			
3	Does the department have a completed Emergency Action Plan (EAP)? Are employees being trained on its contents?			
4	Are chemical products used in the office being purchased in small quantities? Are Safety Data Sheets needed or available?			
5	Are the Cal/OSHA information poster, Workers' Compensation bulletin, annual accident summary posted?			
6	Are annual workplace inspections performed and documented?			
	General Safety			
7	Are exits, fire alarms, pull-boxes clearly marked and unobstructed?			
8	Are aisles and corridors unobstructed to allow unimpeded evacuations?			
9	Is a clearly identified, unobstructed, charged, currently inspected and tagged, wall-mounted fire extinguisher available as required by the Fire Department?			
10	Are ergonomic issues being addressed for employees using computers or at risk of repetitive motion injuries?			
11	Is a fully stocked first-aid kit available? Is the location known to all employees in the area?			
12	Are cabinets, shelves, and furniture over five feet tall secured to prevent toppling during earthquakes?			
13	Are books and heavy items and equipment stored on low shelves and secured to prevent them from falling on people during earthquakes?			
14	Is the office area kept clean of trash and recyclables promptly removed?			
	Electrical Safety			
15	Are plugs, cords, electrical panels, and receptacles in good condition? No exposed conductors or broken insulation?			
16	Are circuit breaker panels accessible and labeled?			
17	Are surge protectors being used? If so, they must be equipped with an automatic circuit breaker, have cords no longer than 15 feet in length, and be plugged directly into a wall outlet.			
18	Is lighting adequate throughout the work environment?			
19	Are extension cords being used correctly? (They must not run through walls, doors, ceiling, or present a trip hazard).			
20	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.			

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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.

LABORATORY SELF-INSPECTION CHECKLIST

Principal Investigator / Lab Supervisor: _____

Location Building/Room(s)**:** _____ **Date:** _____

Inspector / Reviewer: _____

I SAFETY PROGRAM ADMINISTRATION		YES	NO	N/A
A.	**Chemical Hygiene Plan (CHP)**			
1	Does the laboratory have access to the campus-wide Chemical Hygiene Plan and all of the required elements?			
2	Are there any operations that require prior approval before beginning (*eg*. Radiation Safety, Bio-safety committee)?			
3	Is training current with the Chemical Hygiene Plan?			
B.	**Injury and Illness Prevention Plan (IIPP)**			
1	Does laboratory have access to Department IIPP (on-line and/or hard copy) and has it been reviewed in past year?			
2	Is there documentation that all laboratory personnel have trained on the IIPP?			
C.	**Standard Operating Procedures (SOP's)**			
1	Are there written SOP's covering the laboratory processes and hazardous chemicals referenced in Title 8 (*i.e*., acutely toxic substances, reproductive toxins, and regulated carcinogens)?			
2	Are there exemptions to the written SOPs and are these documented?			
3	Is there documented training of lab personnel on specific SOP's?			
4	Is any required specialized training complete and documented?			
5	Is training is complete on Hazardous waste management?			
6	Is training complete on Blood-borne Pathogen requirements?			

NOTES:

Continued on next page

	II HAZARDOUS MATERIALS	YES	NO	N/A
1	Laboratory doors are labeled with emergency contact notification names & numbers, hazards present & necessary precautions.			
2	Labels are clean and intact on all chemical containers.			
3	Chemical containers are clearly identified with contents and hazards.			
4	Containers with non-hazardous substances (i.e., water) clearly labeled to avoid confusion.			
A.	**Chemical Controls**			
1	Chemicals are not stored on laboratory benches in excessive quantities.			
2	Expired or chemicals not used (> one year) are disposed of as hazardous waste.			
3	Secondary containment is provided for strong acids and strong bases.			
4	Incompatible chemicals are segregated and stored with compatible hazard classes.			
5	All chemical containers are closed, except when actively adding or removing materials from them (*i.e*, no open funnels left in container).			
6	Containers of peroxide-forming chemicals are dated upon receipt and disposed of as hazardous waste within one year of receipt.			
7	Safety Data Sheets (SDS) and laboratory chemical inventory are up-to-date and readily available.			
8	Chemicals (liquids) are stored below eye level and not directly on the floor, unless in secondary containment.			
9	Dedicated chemical storage (cabinets, refrigerators, freezers) clearly labeled with contents and hazard warnings.			
B.	**Flammable and Combustible Liquids**			
1	Flammable liquids stored in 1-gallon (or smaller containers) or kept in 2-gallon (or smaller) safety cans.			
2	Flammable liquids (including flammable liquid waste) stored outside of a storage cabinet does not exceed 10 gallons.			
3	If more than 10 gallons of flammable liquids are present, does the laboratory have an approved flammable storage cabinet?			
4	Flammable liquids, stored in flammable storage cabinets limited to 60 gallons per fire rated area.			
5	Flammable liquids requiring reduced temperature stored in flammable-rated refrigerator/freezer.			
C.	**Particularly Hazardous Substances**			
1	Have all particularly hazardous substances been identified?			
2	Designated area(s) for acutely toxic materials, reproductive toxins and/or carcinogens clearly marked.			
3	Are all users adequately trained? Specific training documentation available?			
4	All necessary PPE (personal protective equipment) available and used as needed.			
D.	**Radioactive Materials**			
1	Stock materials of radioactive materials are secured against unauthorized removal?			
2	Do personnel wear lab coats and gloves when handling radioactive materials? If assigned dosimeters, are they wearing them?			
3	Are all radioactive materials registered with the EH&S Health Physics Program?			
4	Radioactive Waste – Properly labeled, segregated, and shielded?			

Continued on next page

III CHEMICAL WASTE		YES	NO	N/A
A.	**Storage**			
1	Are chemical waste containers properly segregated, sealed with tight-fitting caps and stored with EH&S Hazardous Waste Labels attached?			
2	All hazardous chemical waste is arranged to be picked up by EH&S — not drain disposed or evaporated.			
3	Hazardous chemical waste has been accumulating for less than 270 days. Extremely hazardous waste has been accumulating less than 90 days.			
4	All hazardous chemical waste is secondary contained.			
5	Training for personnel handling hazardous waste is documented?			
6	EH&S is called for waste pick up when containers are full (90% capacity or full line) or have reached their accumulation date threshold.			
7	Is the WASTe system being used?			
8	Waste containers sturdy, compatible with the waste, routinely checked for leaks and kept closed when not actively being filled.			
B.	**Labeling**			
1	All hazardous waste containers have proper labels with contents and accumulation start date.			
2	The hazardous waste accumulation area is clean with waste containers clearly marked.			
IV BIOHAZARDOUS WASTE		YES	NO	N/A
A.	**Storage**			
1	Solid bio hazardous waste is bagged in red polyethylene bags as per the Medical Waste Management Plan.			
2	Biohazardous liquid waste is managed per the Medical Waste Management Plan.			
3	Sharps stored in puncture-proof containers; labeled appropriately, and not past fill line.			
B.	**Labeling**			
1	Secondary containers for laboratory medical waste storage or transport labeled with the international biohazard symbol and the word “Biohazard.”			
V PERSONAL HEALTH and SAFETY				
A.	**Food and Drink**			
1	Sinks labeled “Industrial Water – Do Not Drink”.			
2	Food and drink is not permitted in laboratories.			
3	Food and drink is stored only in refrigerators/freezers dedicated and labeled “for food only”.			
B.	**Standard Practices**			
1	Employees wash areas of exposed skin prior to leaving the laboratory.			
2	Sink is available and hands washed after removing gloves and before leaving lab.			
3	Cosmetic applications, taking medication, touching eyes, nose or mouth is avoided when in the laboratory.			

NOTES:

VI HEALTH and SAFETY EQUIPMENT		YES	NO	N/A
A.	**Safety Showers and Eye Washes**			
1	Approved safety showers and eye washes provided within 10 seconds travel time from the work area for immediate use, with no barriers (*ie*. doors).			
2	All eyewashes and showers have unobstructed access.			
3	Sign indicating location of safety shower and eye wash unobstructed.			
4	Units inspected and activated monthly. Annually certification by Facilities Management for proper functioning.			
B.	**Personal Protective Equipment (PPE)**			
1	Has the correct PPE been selected based on a hazard assessment (LHAT) and/or SDS recommendation?			
2	PPE required for laboratory work present: [ ] Lab Coats, [ ] Gloves [ ] Safety glasses with side shields/goggles [ ] Face Shield [ ] Hearing protection [ ] Proper foot-wear [ ] Aprons			
3	All necessary equipment is available, in good condition, and properly used.			
C.	**Biological Safety Cabinets**			
1	Certified within the last year *(TSS Certificate)*			
2	Hood type is proper for work being conducted?			
3	Equipment is properly labeled for the hazard present (radiation, UV,), Manufacturer approved for all indicated hazards.			
4	Hood ducted per manufacturer and ASHRAE requirements and meets the biosafety specifications.			
D.	**Laboratory Fume Hoods**			
1	Storage inside of hood is kept to a minimum.			
2	Equipment in use does not interfere with proper functioning of the hood.			
3	All work is done at least 6 inches inside hood.			
4	Front sash is lowered when hood is not in use.			
5	Certified annually by Facilities Management, semi-annually for Title 8 §5209 "listed" Carcinogens.			
6	Hood has continuous flow monitor.			
7	The back ventilation slot is not obstructed.			
8	Drains are protected from hazardous materials entering.			
E.	**Compressed Gas Cylinders**			
1	Cylinders stored in well protected, well vented and dry locations away from combustible materials.			
2	Flammable gases stored away from oxidizers.			
3	Cylinders are secured to a rigid structural component of the building with non-flammable restraints located 1/3 and 2/3 (preferred) or ½ the height of the cylinder.			
4	Protective caps in place while cylinders are in storage and full/empty tags attached.			
5	Proper regulators are being used and closed when cylinders are not in use.			

NOTES:

F. Housekeeping & Miscellaneous Laboratory Safety		YES	NO	N/A
1	Bench tops clean, organized and environs maintained to eliminate harmful exposures or unsafe conditions.			
2	Supplies stored at minimum of 24 inches from ceiling and off the floor.			
3	Vacuum lines equipped with traps designed specifically to accumulate/filter the hazardous materials being evacuated.			
4	All moving machinery (i.*e*, vacuum pumps) belts adequately protected by a rigid belt guard or housing.			
5	All sharps disposed properly.			
6	The condition of the broken glass box is adequate and placed out of the way.			
7	Ceiling tiles present and in good condition.			
8	Refrigerators/freezers labeled according to use.			
G. Electrical Safety				
1	High voltage equipment (>600V) labeled, grounded and insulated.			
2	No electrical equipment has damaged or frayed cords.			
3	Extension cords are not connected together (no "daisy chains").			
4	Power strips used only if they are equipped with circuit breakers.			
5	All equipment is grounded via 3-prong plugs.			
6	Damaged equipment tagged out (and unplugged) to prevent use.			
H. General Safety				
1	Cabinets and bookshelves are secured.			
2	Overhead storage is minimized and restrained from falling (*i.e*, shelf lips, rails).			
3	Heavy equipment is secured or braced from falling.			
I. Respiratory Protection				
1	Use of respiratory protection conforms to UC Davis Policy.			
2	Respirators are inspected monthly and before use.			
3	The user has been fit tested by the Occupational Health Services.			
4	Cartridges are changed on designated schedule and are the appropriate cartridge for the hazard.			
J. Laser Safety				
1	Does the laboratory use any Class 3b or 4 lasers?			
2	Are the lasers registered with EH&S Health Physics Program?			
3	Are the Standard Precautions for lasers prominently posted for each laser?			
4	Are appropriate warning signs and labels posted?			
5	Does the laboratory entrance have a warning light or lighted sign showing when the laser is in use?			
6	Have all workers attended the EH&S Laser Safety course?			
7	Does the laboratory have appropriate laser eyewear?			

NOTES:

K. Non-Ionizing Radiation (NIR) Source		YES	NO	N/A
1	Have proper warning signs been posted?			
L. Emergency Planning & Procedures				
1	Emergency Response Guide and evacuation map visibly posted and current.			
2	Chemical spill kit/cleanup materials available.			
3	Training in spill clean-up procedures provided and documented.			
4	First aid materials kept in adequate supply (in a sanitary and usable condition); contains no expired materials, and is made readily available.			
M. Fire Prevention				
1	Appropriate fire extinguisher mounted, unobstructed, available within 75 feet, is in working order and inspected within the last year.			
2	A fire extinguisher should be available in a room containing flammable and/or combustible liquids.			
3	Fire extinguisher sign is clearly visible.			
4	18-inch vertical clearance maintained from sprinkler head (*i.e*, over shelving and wall/floor cabinets).			
5	Are all laboratory doors kept closed? Closure devices in place?			
6	Storage of combustible material is minimized.			
N. Exits				
1	Exits and aisles are clear and free of obstructions in case of emergency.			
2	Exit signs clearly visible.			

NOTES:

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Keep a copy of this completed form in the Laboratory Safety binder.
A completed copy of this form should be routed to the Department Safety Coordinator and must be maintained in department files for at least three years.

Injury Reporting

- Be sure to consult and be prepared to do the following in the event of an injury:

  1) Access the **Injury Reporting Procedure** page on the Safety Services website http://safetyservices.ucdavis.edu/article/injury-reporting-procedure

  2) Complete the electronic **Employer's First Report** (*screen shot below – NOT the actual form for use*) as soon as practical.

UCD Employer's Report of Occupational Injury or Illness

UNIVERSITY POLICY REQUIRES THAT INDUSTRIAL INJURY/ILLNESS BE REPORTED TO WORKERS' COMPENSATION WITHIN 24 HOURS OF OCCURRENCE AND STATE REGULATIONS REQUIRE THAT ALL ACCIDENTS BE INVESTIGATED.
In the event of a serious injury or hospitalization, call Workers' Compensation immediately at (530) 752-7243. This form must be completed in its entirety and mailed or faxed (530) 752-3439 to Workers' Compensation. Omission of information could result in a delay of benefits.

EMPLOYEE MUST COMPLETE THESE SECTIONS:

EMPLOYEE DATA

Employee Name:		Employee's UCDavis ID #:
Address:		Home Phone: ( )
City/State/Zip:	Sex: ☐Female ☐Male	Date of Birth:
Department/Location:		Employee's Work Phone: ( )
Payroll Title/TC:	Date of Hire:	Annual Gross Salary: $
Supervisor's Name:		Supervisor's Work Phone: ( )
Employee ( ) Volunteer ( ) Student-Employee ( )	( )hours per day	( ) days per week ( ) total weekly hours

EMPLOYEE STATEMENT

Specific Injury/Illness/Exposure:	Body Part(s) affected:	Date of injury/illness:
Location where injury or illness occurred:		Others Injured? ☐Yes ☐No
What equipment, materials or chemicals caused the injury/illness? :		Who witnessed this injury?

Explain in detail how the injury occurred. Include specific activities/tasks performed at the time.

Medical Treatment provided by:
___Employee Health Services ___Sutter Davis Hospital ER Other: (Provide Name &Phone #) _____
___Private Physician ___UC Davis Medical Center _____
___First Aid, no medical care needed.

Employee Signature:	Today's Date:

EMPLOYER'S INVESTIGATION AND STATEMENT (EMPLOYER COMPLETES):

EMPLOYER

After the investigation, explain in detail how the injury/illness occurred and the specific activity being performed:

What was the injury, illness or exposure?

INITIAL CAUSE	CONTRIBUTING FACTORS AND ACTIVITIES		PREVENTIVE ACTIONS
☐ Struck by or against object (indicate) _____	**Equipment**	☐ Ventilation issues	**SUPERVISOR WILL:**
☐ Caught in/under/ between	☐ Equipment failure	☐ Ergonomic factors	☐ Develop/revise safety procedures and update IIPP or Chem. Hyg. Plan
☐ Fall / Slip / Trip	☐ Equipment unavailable	**Employee**	☐ Request ergonomic evaluation
☐ Material handling or lifting	☐ Improper equipment or material used for job	☐ Physically not able to do work	☐ Order new equipment
☐ Repetitive motion	**Personal protective equipment**	☐ Employee fatigue	☐ Order new personal protective equipment
☐ Chemical exposure	☐ Not worn	☐ Unbalanced or poor position or motion	☐ Remove equipment from use and repair/replace
☐ Body fluid exposure:	☐ Not readily available	☐ Incorrect procedures used for task	☐ Schedule preventive maintenance
__Needle stick	☐ Not adequate for the task	☐ Other unsafe practice	☐ Will retrain employee before task is re-assigned.
__Sharps	☐ Personal protective equipment failure	**Assistance**	☐ Perform on-site review of work activity, update job safety analysis.
☐ Animal bite	**Training/Experience**	☐ Difficult to perform task without help	☐ Reconfigure work area
☐ Other, Explain _____	☐ Lack of training	☐ Safety features or devices not readily available	☐ Communicate corrective actions to others in job category.
_____	☐ Safety training provided, not followed	☐ Assistive devices not used	☐ Other_____
_____	☐ New task for employee or lack of experience	☐ **Lack of policy/procedure**	_____
_____	**Work Area**	☐ **Animal** (explain below)	**Preventive actions will be completed by:**
_____	☐ Work area set up improperly	☐ **Other** (explain) _____	Name_____
	☐ Inadequate lighting or noise issues	_____	Expected date of completion_____
	☐ Housekeeping issues	_____	
	☐ Environmental factors (rain, wind, temp. etc)	_____	
		Use additional pages as needed	

SUPERVISOR'S OR MANAGER'S SIGNATURE:	**Date of Investigation:**
DEPARTMENT HEAD'S SIGNATURE:	**Date:**

PLEASE NOTE: COMPLETING THIS FORM IS NOT AN ADMISSION OF UNIVERSITY LIABILITY 7/2011 ER: WC/H/MJB

IIPP-Appendix D
January 2016

Appendix **E** Safety Training Records

1) INITIAL Training form [TEMPLATE] for personnel new to Lab or work area.

2) REFRESHER Training form [TEMPLATE] for personnel having had Initial Training *no more than 1 year prior*.

*Please **DOWNLOAD** and **FILL-IN** the TEMPLATE FORMS provided in this section.*

In many cases, PI's/supervisors may use these as is, or amend them to create a form to suit your site-specific or work-specific environment or local conditions.

▶ *Once down-loaded and filled in appropriately, please insert these **INTO YOUR LAB HARD-COPY RECORDS** file for easy access in your lab.*

Consult EH&S/Safety Services (http://safetyservices.ucdavis.edu/article/injury-illness-prevention-program-iipp) for further information.

Appendix **E**

INITIAL SITE-SPECIFIC ORIENTATION AND LABORATORY SAFETY TRAINING

FOR NEW LAB PERSONNEL

Trainee Name (print): _____ Date: _____

Faculty / PI: _____ Room #'s: _____

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

☐ Has successfully completed the ***UC Laboratory Safety Fundamentals*** course. Date: _____

☐ Certificate in file

▶ Please initial only topics covered. For others not covered/not applicable, mark with an "X".

EMERGENCY PROCEDURES		
INITIALS	**TOPIC**	**ACTION**
	Fire Alarm Pull Station	Show location(s) and proper activation.
	Eye Wash / Safety Showers	Show location(s) and proper operation.
	Spill Procedures	Show location of spill kit(s), has read SafetyNets *#13* and *#127* (if applicable), and describe procedures.
	First Aid Kits	Location(s) and description of contents.
	Phone	Location(s), detail dialing instructions, '**911**' dialing instructions, bomb threat card.
	Emergency Response Guide	Show location(s) of flipchart guide, discuss various scenario actions
	Emergency Action Plan (EAP)	Review Emergency Action Plan. Demonstrate both paths to Emergency Assembly Area. [If applicable - Review evacuation procedures for disabled personnel].
	Warn Me	Enroll in UCDavis *Warn Me* emergency alert system, recommend registering cellular phone number.

ENGINEERING CONTROLS		
INITIALS	**TOPIC**	**ACTION**
	Chemical Fume Hood(s)	Demonstration of proper use, instruction on adjustable controls, air-flow sensor function, applicable training requirements
	Biological Safety Cabinet(s)	Demonstration of proper use, instruction on adjustable controls, appropriate training applicable requirements
	Chemical Storage Location(s)	Location(s) and incompatible chemical segregation rules, volume limits (>10 gallons **REQUIRES** storage in flammable storage cabinet).
	Other Controls (*e.g.* Laminar Flow Benches)	Demonstration of proper use, instruction on adjustable controls
	Describe Details**:**	

ADMINISTRATIVE CONTROLS		
INITIALS	**TOPIC**	**ACTION**
	Laboratory Safety Manual **[** includes **Chemical Hygiene Plan]**	Location (web-Link) and content description. Laboratory Safety Plan(s) – if applicable.
	Department IIPP [Injury and Illness Prevention Plan]	Location (web-Link), content description and review.
	Safety Data Sheets (SDSs)	Demonstration of electronic/computer access; describe laboratory repository of hard-copy SDSs (if applicable).
	Standard Operating Procedures	Location(s) of lab's SOPs; describe required approvals. Identification of chemical processes / areas requiring specific SOP use, and related laboratory safety rules.
	Describe Details**:**	

PERSONAL PROTECTIVE EQUIPMENT [PPE]		
INITIALS	**TOPIC**	**ACTION**
	Determine Hazard-specific Safety Risks and Training	Consult *UCDavis Training Matrix for Laboratory Personnel*; enroll in appropriate courses.
	Lab Coat	Provide at no cost fitted laboratory coats. Some labs/hazards require flame resistant coats – determine type(s) needed.
	Eye Protection	Provide at no cost pair(s) of safety eyewear. Glasses must fit appropriately, be comfortable to wear, and stay securely in place. For labs where goggles must be worn, provide pair(s) of fitted chemical splash goggles. When a face shield is required, demonstrate proper use, care and storage.
	Gloves	Location(s) and description. Provide knowledge and resources to select correct type as related to use. Instruct proper procedures for putting on / taking off.

OTHER		
INITIALS	**TOPIC**	**ACTION**
	Hazardous Waste	Overview of laboratory hazardous waste procedures. Location(s) of accumulation area(s); demonstrate proper labeling; describe proper storage requirements and detail pickup/removal procedures.
	Specialized Equipment	Review of safety procedures for proper operation. (*eg.* UV light, high voltage equipment, cryogen handling, high/low vacuum, etc…
	Describe Details**:**	

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

Trainee Signature _____

Directions: Retain a copy in your Lab safety file along with any certificates for completion of Safety Training courses

Appendix **E**

REFRESHER LABORATORY SAFETY TRAINING

PI / Faculty in-charge: _____ Date: _____

Trainer name (print): _____

Check BOX of Topics / Subjects covered

	REQUIRED TOPICS
	Injury and Illness Prevention Plan (IIPP)
	Emergency Action Plan (EAP)
	Chemical Hygiene Plan (CHP – as part of Laboratory Safety Manual)
	Chemical Spill Control – SafetyNet 13
	Standard Operating Procedures (SOPs)

	OTHER TOPICS
	Fill-in with the individual specific topics relevant to your lab/group.
	If multiple topics are listed, be sure to check the box(es) of only those that are
	covered in that particular Refresher training session
	***NOTE** – for your Lab- / site-specific SOPs, these may be in addition to any new or*
	revised SOPs (new versions) which would have triggered earlier, documented
	personnel training.

In signing below, I certify that I have received training as described above

	Name (print)	Signature	Employee or student ID # / Title
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Directions: Retain a copy in your Lab safety file along with any certificates for completion of Safety Training courses