

Employee Name: \_\_\_\_\_ Lab PI: \_\_\_\_\_

## DEPARTMENTS OF PLANT PATHOLOGY, ENTOMOLOGY & NEMATOLOGY LAB REFRESHER SAFETY TRAINING FOR EMPLOYEES

The Departments of Plant Pathology & Nematology, pursuant to State Law, has instituted an **Injury and Illness Prevention Program [ IIPP ]**. This program is designed to help mitigate health related problems associated with the work place. In general, it is the Department's responsibility to provide information and resources so that you, the employee, can perform your job in a safe manner. (see E. H. & S. SafetyNet #33 and others listed below)

Your responsibility is to:

1. Participate in safety training sessions (see your "right-to-know" SafetyNet #40).
2. Study, learn, and understand the hazards associated with your job and the appropriate health and safety precautions, protective equipment, and emergency measures for your workplace.
3. Follow all rules, safety guidelines and established safe work practices.
4. Report unsafe work practices or conditions to your supervisor or Department Safety Coordinator.
5. Offer suggestions and/or comments to improve and maintain a safe work environment.

This check list must be completed with your supervisor as you take a "walk through" of your work area. Make certain that you have identified the following safety features and that you have been introduced to following general safe lab practices. Lab orientation will be followed by training on safety procedures that you will need for your specific job.

### I. EMERGENCY PROCEDURES

- Access & Egress – Evacuation Procedures.** Location of exits noted.
  - Importance in maintaining clear exits, doors and aisle ways.
  - Train to lab specific **Emergency Action Plan**.
  - Primary and secondary assembly areas noted
  - Evacuation of disabled explained (if applicable)
  - Train location and activation of fire alarm pull station
- Fire extinguishers.** Location(s) noted.
- Emergency Eye Wash and Showers.** Location(s) and operation. (SafetyNet #66)
- General Earthquake Safety, Bomb Threat, Active Shooter, and Disaster Procedures**
  - Earthquake: Shelter in place, watch for falling objects
  - UC Davis Police Department [Warn Me](#),
    - o Cell phone registration recommended
- Chemical spill kits.** Location(s) noted. SafetyNet #13 posted in the lab. SafetyNet #127 (if applicable).
  - Procedures regarding response to an accidental spill should be described.
  - Neutralization of strong acid or strong base
  - Mercury (SafetyNet #16)
- First aid kit.** Location noted, components described and use explained.
- Emergency Response**
  - Obtain medical care – **Call 911**
  - Phone location noted and dialing instructions covered
  - Emergency Response Guide use explained and location noted
  - Report injury or symptoms of illness to supervisor within 24 hours.
  - Report all serious work related injuries or illnesses to EH&S within 8 hours
    - o Explain serious injury or illness (loss of body part, surgery, hospitalization > 24 hours, death)

### ☐ Safety Documents

- ☐ Safety Data Sheets (formerly material safety data sheets, MSDS) , importance and sections explained. Employees must read and understand all sections of Safety Data Sheets (MSDS) before working with any chemicals
- ☐ Location within the lab or website - <http://www.ucmsds.com/?X>
- ☐ Location and training of the [Chemical Hygiene Plan](#), including Training Materials and Safety Forms.
  - Employee must read and understand Chemical Lab Safety Manual
- ☐ Explain the importance and confirm deadlines for completing UC Laboratory Safety Fundamentals course, Initial Laboratory Safety training, Refresher Laboratory Safety training, Greenhouse and Field Safety training, Heat Illness Prevention training, any Specialized Safety training necessary (biosafety cabinet, safe driver, radioactive materials, cryogenic liquids, etc.)
  - Consult [UCD safety training matrix](#) to determine appropriate coursework
- ☐ Employee must read, understand, and sign Injury and Illness Prevention Plan & Emergency Action Plan
- ☐ Standard Operating Procedures (protocols) for all hazardous procedures performed in lab, Chemical Standard Operating Procedures for all hazardous chemicals in lab
  - Location noted, importance, applicable signatures, and procedures explained

**NOTE: new employees cannot work in lab, greenhouse, or field until all applicable safety training is complete**

## II. STANDARD OPERATING PROCEDURES FOR LABORATORIES

### ☐ Introduction to the work area, safety features and safe working practices.

- ☐ Personal protective equipment (PPE) location or assignment of appropriate equipment. (see general chemical lab safety manual or SafetyNet #19)
  - Lab coat, safety glasses, and gloves must be worn when working with or within 3 meters of someone working with any hazardous chemicals
  - Lab Coat types and uses explained (flame resistant, barrier, standard)
  - Safety eyewear types and uses explained (face shield, eye goggles, safety glasses)
  - Gloves how to do on and off, types and uses explained, online glove selection guide (safety net #50)
  - Other PPE's location noted and uses explained (autoclave gloves, leather gloves, knee pads, aprons, etc.)
- ☐ Fume hoods, location noted controls and equipment explained (SafetyNet #35, UC Laboratory Safety Fundamentals, Fume Hood Safety training)
- ☐ Laminar Flow Hoods
  - Clean/Sterile Benches, locations noted instructions for use provided
  - Biosafety Cabinets, specialized training certification required

## II. STANDARD OPERATING PROCEDURES FOR LABORATORIES

### ☐ Introduction to the work area, safety features and safe working practices.

- ☐ Chemical storage & handling [including transport]. (SafetyNet#33, #42)
  - ☐ Flammables
  - ☐ Corrosives and contact hazardous chemicals (Phenol, SafetyNet #22)
  - ☐ Reactive and incompatible chemicals (SafetyNet #4)
  - ☐ Campus-regulated **Chemical Carcinogen Plan** – chemical & SOP specific.
  - ☐ Reproductive toxins, highly toxic chemicals and chemicals of unknown toxicity
  - ☐ Explain proper containment, handling and labeling of chemicals; emphasize the need to label solutions properly (full chemical name, manufacturer, known hazards, date prepared)
- ☐ Hazardous waste. Procedures outlined and explained. Autoclaving and double containment explained. Labeling procedures explained (school, department, lab PI, room #, contact phone #)

- **NOTE: Plant Pathology and Nematology do not use the red biohazard waste bags, only clear or orange autoclave bags are allowed for disposal of hazardous waste from plant material**
- ❑ Chemical Waste, Sharps and Broken Glass containers (SafetyNets #3, 43, 110).
  - ❑ Location(s) of receptacles noted.
- ❑ Other laboratory hazards. Location(s) noted.
  - ❑ Syringes & Needles (SafetyNet #62)
  - ❑ Potential electrical hazards
  - ❑ Cryogenic liquids, dry ice, ultra-low freezers (SafetyNet #58)
  - ❑ Autoclaves (SafetyNet #26), Hot Plates
  - ❑ Compressed Gas Cylinders (SafetyNet #60)
  - ❑ Ultraviolet Radiation (SafetyNet #106)
- ❑ **Introduction to personal hygiene practices and behavior.**
  - ❑ Smoking is prohibited on all UC campuses across California
  - ❑ Wash hands before leaving laboratory.
  - ❑ Note where food and drink consumption and storage is allowed and prohibited.
  - ❑ Appropriate dress for the work place – **closed toe & closed heel shoes, long pants, no sandals, no bare midriiffs, and no bare shoulders**
  - ❑ The removal of one glove to open doors, operate elevators, etc. is recommended in all common areas
  - ❑ Emphasize safety aspects of keeping neat, clean and organized work stations.
  - ❑ Back safety (lifting hazards)
  - ❑ Falling, tripping, slipping hazards. Never stand/climb on chairs
  - ❑ Other laboratory hazards. Location(s) noted.

### III. HEAT ILLNESS PREVENTION, GREENHOUSE, AND FIELD SAFETY TRAINING

- ❑ **Employees who are exposed to temperatures of 85°F and higher must be given Heat illness prevention training.** This is likely to include greenhouses, agricultural fields and the Armstrong field station. A separate training module is required. <http://safetyservices.ucdavis.edu/tr/lmsL/hip>
- ❑ Greenhouse and field safety training. Offered periodically from Ron Lane at Environmental Horticulture, watch for email notifications of when and where

I have completed the annual refresher Safety Training and have been informed of the above safety considerations.

\_\_\_\_\_  
Signature of Employee

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Lab Safety Contact / PI

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date

✓ Place a copy in your Laboratory Safety & Training Manual to document training