

Laboratory Door Placards REFERENCE GUIDE

February 2024

Hazardous chemicals, equipment, and processes are frequently found in laboratories, endangering first responders, visitors, and laboratory workers. This reference guide has been developed to ensure that laboratory door placards are adequately designed and updated to communicate significant potential hazards to emergency responders with posted signage outside of laboratory doors.

This guideline applies to all laboratories on campus that contain hazardous chemicals and materials, equipment, and processes. Door placards should be posted on all lab doors that contain physical and health hazards.

What is required to be included on a Lab Door Placard:

Minimum requirements that need to be included on every lab door sign:

The laboratory door placard must be printed in color and include the contents listed below.

1 General Information:

- Building name
- Room number
- Principal Investigator (PI) name / lab name; contact information (office and alternative phone numbers)
- Laboratory manager's name / Safety Representative's (SR) name; contact information (office and alternative phone numbers)
- Last certified date of chemical inventory

2 Emergency Contacts:

• Emergency Police/Fire/Medical Contact: dial **911 from any phone.**

3 Globally Harmonized System (GHS) Pictograms:

Pictograms indicate physical and health hazards related to chemicals, biohazards, radiation hazards, magnetic hazards, and any other physical and health hazards not related to chemicals.

GHS Pictogram



Oxidizers



Flammables, Self Reactives, Pyrophorics, Self-Heating, Emits Flammable Gas, Organic Peroxides



Explosives, Self Reactives, Organic Peroxides



Acutely Toxic (severe)



Burns Skin, Damages Eyes, Corrosive to Metals



Gases Under Pressure



Carcinogen, Respiratory Sensitizer, Reproductive Toxicity, Target Organ Toxicity, Mutagenicity Aspiration Toxicity



Toxic to aquatic environment



Acutely toxic(harmful), Irritant to skin, eyes or respiratory tract, Skin sensitizer, Hazardous to the Ozone layer.

For Biological hazards:

- Universal biohazard symbol the symbol must be displayed in black ink on an orange background with the word BIOHAZARD
- Name of the agent in use
- Designated Biosafety containment level of the lab (required for BSL-2 and higher)
- Personal protective equipment (PPE)
- Name and phone number of the PI or another responsible person
- Procedures required for entry
- Procedures required for exit
- Date placard generated / printed

• For Radiation hazards:

- Radiation material hazards symbol in red on a yellow background
- PI information or another responsible person
- Other physical hazards, such as high voltage or high pressure

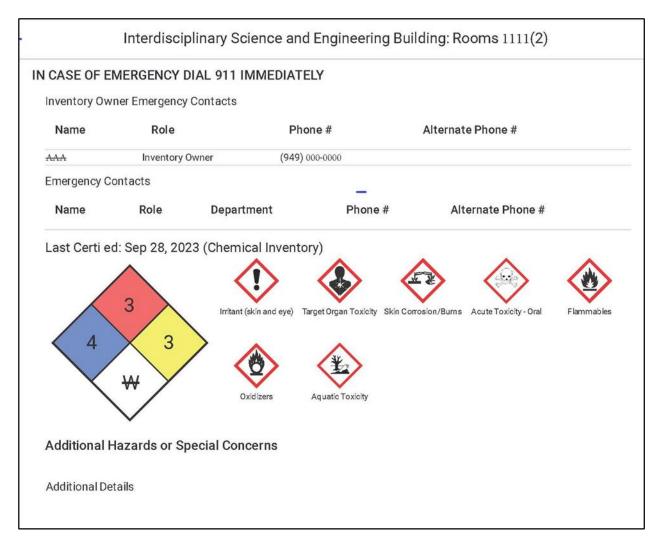
4 NFPA 704 Diamond:

The National Fire Protection Association (NFPA) diamond should be displayed with numbered ratings based on the hazard classification as identified in the following link: https://www.nfpa.org/news-blogs-and-articles/blogs/2021/11/05/hazardous-materials-identification



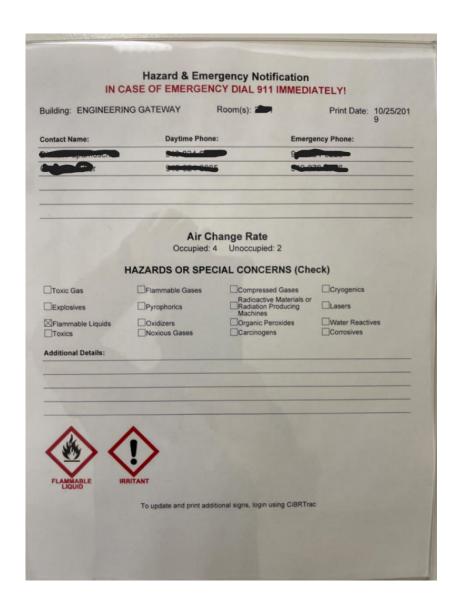
Below is an approved UCI lab door placard produced by the Chemicals application:

Approved lab door signs must be posted on all lab room doors that contain physical and health hazards.



Below is a <u>non-approved</u> lab door placard because it is missing the following requirements:

- The example below is an old version of a lab door sign (generated from CiBRTrac that is no longer in use at UCI)
- Sign does not indicate the NFPA 704 Diamond with hazard ratings
- Sign does not indicate the chemical inventory owner's emergency contact information
- Sign does not indicate the last certified date of chemical inventory



When to Update the Lab Door Placard:

Laboratory door placards must be updated whenever the following conditions exist:

- a. Chemical use changes When research changes in the lab where different chemicals and different hazards are introduced, door placards should be updated to reflect the change in process and materials.
- b. People/staff/PI changes When staff changes (individuals have left lab, new researchers present), including Principal Investigators, graduate student researchers, postdoctoral researchers, etc., door placards should be updated with the current responsible persons inside the laboratory space.
- c. When EHS changes requirements for door placards When EHS provides updated regulatory information on when door placards must be updated, every lab door must be updated to meet requirements.

Lab Suites:

Lab suites are comprised of several benches, hallways, and rooms that are assigned to several PIs. PIs will have their own chemical inventory, so a lab suite can have several chemical inventories with a variety of hazards to be included on the door placard. In order to post an accurate lab door placard, all PIs/researchers' chemical inventories must be integrated, and all hazards identified on one lab suite door placards. In the Chemicals application, generate a lab door placard by following the steps below and select sublocations or rooms within the main suite number. Contact your EHS School Coordinator for questions or assistance, if necessary.

Roles and Responsibilities:

1. Principal Investigators (PI) / Safety Representatives (SR):

- Ensure that all information is accurate based on the conditions and requirements stated above.
- Ensure all laboratory door placards are posted and updated with new placards based on when any of the following changes occur:
 - Chemical use changes,
 - Equipment use changes,
 - o Process changes, or
 - Contact or emergency information changes.
- Work with your EHS School Coordinator when updating door placards for suites to ensure the door placard includes all rooms and the hazards associated with them.

2. EHS Lab Safety Inspectors

 Communicate requirements of laboratory door placard content to all laboratories under their assigned schools. • Inspect laboratory door placards during laboratory safety inspections to ensure lab door placards are compliant with criteria stated in this reference guide.

3. EHS School Coordinators:

- Communicate requirements of laboratory door placard content to all laboratories under their assigned schools.
- Coordinate with schools to ensure all laboratories, rooms, and storages that contain potential hazards have door-posted signages, especially when a space has no assigned PI.
- Coordinate to resolve all laboratory safety inspection findings associated with door placards in their assigned schools.
- Ensure all laboratory door placards are posted and updated with new placards based on when any of the following changes occur:
 - Chemical use changes,
 - Equipment use changes,
 - o Process changes, or
 - o Contact or emergency information changes.
- Work with labs to ensure all rooms within a suite are set up in Chemicals to generate a
 door placard showing all the hazards associated with them.

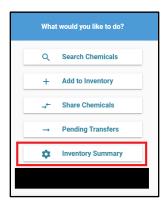
How to update the information on the door placards

Please use these instructions to update the contact information on the door placard for your laboratory:

- 1. Log onto Chemicals (riskandsafety.com) (https://app.riskandsafety.com/chemcials/)
 - a. Enter UCI email
 - b. You may be required to submit DUO authentication

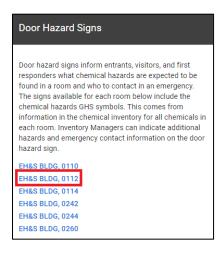


2. After logging into Chemicals, click on "Inventory Summary".



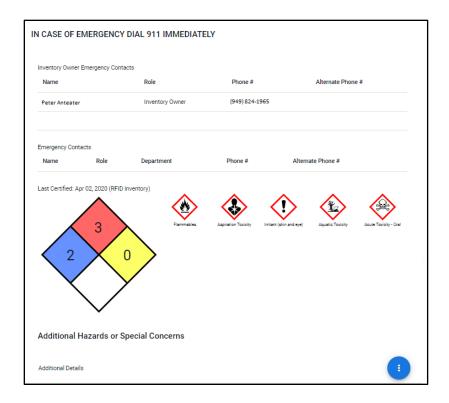
Note: Your screen may vary depending on your level of access.

3. Scroll down to "Door Hazard Signs" and click on the room location of the door placard you want to edit.

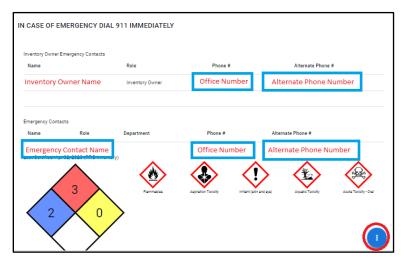


Note: You will need to click each location and edit that location individually, then print the placard for that door location.

4. Below is the page you will see after clicking on a building/room location. The following is a preview of the resulting door placard:



5. To edit any information on the door placard:



- a. Click on the Options button
- b. Click on the Edit button





- c. Click on the necessary field that needs to be updated.
 - i. Fields that should be filled out:
 - 1. Inventory Owner Emergency Contacts This is the PI
 - a. Inventory Owner Name (This cannot be edited)
 - b. Inventory Owner Phone generally, this is the office phone number
 - c. Inventory Owner Alternate Phone generally, this is the cell phone number
 - d. After editing the necessary fields, click Save



- 2. **Emergency Contacts** –Generally, this is the Safety Representative
 - a. Emergency Contact Name (First and Last)
 - b. Emergency Contact Phone Number generally, this is the office phone number
 - c. Emergency Contact Alternate Number generally, this is the cell phone number
 - d. Emergency Contact Role Optional
 - e. After editing the necessary fields click "Save"



6. Click on "Additional Hazards or Special Concerns" section and select any additional concerns there may be, or select None



- a. After all selections have been completed, click on the Options button (ellipses/3 vertical dots) again
- b. Click View



- c. This will take you back to the original door placard preview page
- 7. Print the Door Placard
 - a. Click the Options (ellipses/3 vertical dots) button

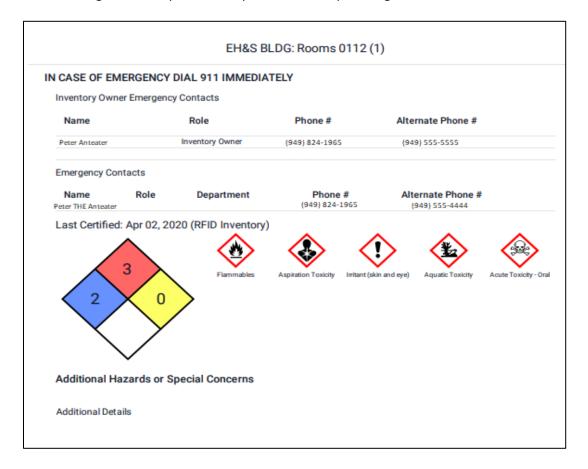


b. Click the "Save PDF" button and then the Printer Icon to print the door placard.



8. Affix the printed door placard to every door of the lab space.

The following is an example of a completed lab door placard generated in Chemicals:



References

Cal OSHA Laboratory Safety standard:

<u>California Code of Regulations, Title 8, Section 5191. Occupational Exposure to Hazardous Chemicals in Laboratories.</u>

Cal OSHA Hazard Communication standard:

California Code of Regulations, Title 8, Section 5194. Hazard Communication.

National Fire Protection Association (NFPA) 704: Standard System for the Identification of the Hazards of Materials for Emergency Response: https://www.nfpa.org/

Contact EH&S at (949) 824-6200 or safety@uci.edu for questions.