General

- A standardized lab hazard sign has been established at OSU; its purpose is to warn employees and visitors entering laboratories and other hazardous areas.
- **A sign is required** (sample depicted below) **at each main entrance to**:
  - Laboratory rooms or complexes, teaching labs, workshops, and workrooms with materials not commonly found in an office environment.
- **A sign is not required** in:
  - Offices, break rooms, general purpose classrooms, rest rooms, or food prep areas.
- Signs are generated by EH&S. However, personnel responsible for the hazardous area (i.e. PI's, Lab and Shop Managers) are responsible for providing EH&S with current and accurate information via the ONID accessed [Lab Hazard Sign Request](mailto:labhazardrequest@oregonstate.edu).

### Sign Components

**Hazard Warning Icons**

- A **hazard warning icon** is required for each piece of equipment or material stored or used at or above the amounts listed in the following [Hazard Warning Icon Definitions](#) section.
Emergency Contact Information

- This information assists EH&S in the event of an emergency and may help to save your research and/or equipment.
- Include the names of the individual(s) responsible for the space.

Hazard Warning Icon Definitions

Flammable Solvents
- Room contains 10 gallons or more of flammable liquids in one or more containers.
- A flammable liquid is defined as any liquid that has a flash point below 100 degrees Fahrenheit (°F) or 37.8 degrees Centigrade (°C).

Flammable Gas
- The room contains 200 cubic feet or more of a flammable gas in one or more containers.
- A flammable gas is defined as any gas that has a flash point below 100 °F (37.8 °C) with a container pressure of 40 psig at 100 °F.
  - Example: a single large compressed gas cylinder of hydrogen.

Highly Toxic Chemicals
- The room contains a total of 1 pound or more of highly toxic chemicals.
- A highly toxic chemical is a substance with an oral LD50 of less than 50 mg/kg or skin toxicity of less than 200 mg/kg.
- Liquid chemicals should be converted to pounds for this computation.

Toxic Gas
- The room contains any amount of a highly toxic gas (inhalation LC50 < 200 ppm).
- The room contains 80 cubic feet or more of toxic gases (inhalation 200 < LC50 < 2000 ppm).

Oxidizers
- More than 1 pound of a Class 3 oxidizer.
  - Class 3 oxidizer is defined as a substance that will cause a severe increase in the burning rate of combustible material.
  - Examples: Ammonium dichromate, Bromine trifluoride, concentrated Perchloric acid, Potassium bromate, and Potassium chlorate.
- More than 25 pounds of a Class 2 oxidizer.
  - Class 2 oxidizer is defined as a substance that will moderately increase the burning rate.
  - Examples: Calcium hypochlorite, Chromic acid, Nitric acid, Potassium perchlorate, Potassium permanganate, and Sodium permanganate.
- More than 150 cubic feet of an oxidizing compressed gas.
  - Examples: Oxygen, Oxides of Nitrogen.

Restricted Area
- Access to the room is restricted for students and visitors.
- The restriction does not apply to custodians or Facilities Services personnel who are performing required maintenance activities.
Corrosive Materials

- The room contains more than 50 gallons (liquid) or 500 pounds (solid) of corrosive materials in one or more containers.
- A corrosive material is defined as a solid caustic substance or a liquid which has a $2 < \text{pH} < 12$.
- Typical examples of corrosive materials would be acids such as Chromic, Hydrochloric, Hydrofluoric, and Sulfuric; bases such as Ammonium hydroxide, Calcium hydroxide, Potassium hydroxide, Potassium carbonate, and Sodium hydroxide.

Biohazard

- The room contains a biological agent, capable of self-replication, which presents or may present a hazard to the health or well-being of humans.
- The agent is a human blood borne pathogen or work with the agent has been assigned to be handled in a Biosafety Level (BSL) 2, BSL-3, or BSL-4 laboratory based on the guidelines established in the CDC / NIH book "Biosafety in Microbiological and Biomedical Laboratories".
- The name of the agent(s) must be entered on the hazard sticker.

Radioactive Material

- The room contains any amount of radioactive material.

Radiation Area

- The room contains a radiation source that poses a significant external radiation hazard.
- Sign issued by Radiation Safety group.

X-Ray Equipment

- This room contains a machine which produces X-Ray radiation.

Laser Light

- The room contains a Class 2 or Class 3a laser as defined by ANSI Standard Z136.1.
- Under this classification, a Class 2 continuous wave laser in the visible range (400nm to 700nm) which can emit a power exceeding 0.4 micro Watts.
- Class 4 laser installations emit power exceeding 0.5 W and require a special sign issued by EH&S.

Cancer Suspect Agent

- The room contains any amount of High or Extreme hazard chemical carcinogens as described by the University’s Chemical Carcinogen Safety Program.