



Safety Instruction

Food & Drink in Laboratories

Introduction

Eating, drinking, gum chewing, or similar activities within laboratories where teaching or research involving toxic substances take place, can result in the accidental ingestion of hazardous materials (chemical, biological, and/or radiological). Good laboratory practices, which is supported by the Occupational Safety and Health Administration (OSHA), the Centers for Disease Control and Prevention (CDC), Prudent Practices in the Laboratory (PPL), and the Nuclear Regulatory Commission (NRC), seeks to eliminate this potential route of exposure and these agencies have guidelines which prohibit these activities in areas where hazardous materials are present.

Policy

Eating, drinking, smoking, gum chewing, the application of cosmetics or contact lenses, the storage of food and beverages or similar activities are not permitted in laboratories or other facilities where hazardous materials (as listed below) are used, handled or stored.

Under no circumstance shall food or drink be stored or consumed in a laboratory, space or room containing:

- **Moderate, High or Extreme Hazard Carcinogenic materials** (<http://ehs.oregonstate.edu/carcinogen-safety-manual>)
- **Radioactive materials**
- **Unbound engineered nanomaterials**
- **Highly toxic chemicals** (a substance with an oral LD50 of less than 50 mg/kg or skin toxicity of less than 200 mg/kg)
- **Research animals, or**
- **Microorganisms designated as Biosafety Level (BSL) 1 or higher**

NOTE: Other harmful substances not included above may also apply and should be taken into consideration when determining food/drink prohibition. Contact EH&S for a consultation if further assistance is needed.

Exceptions

Where consistent with building, departmental, or other local rules, Principal Investigators may allow food or beverages in certain rooms in the following situations:

- a) A room in which the above conditions do not apply. These rooms must have clearly designated "Clean Areas" separated from the work space and only on the condition that no hazardous materials are allowed within the designated clean area at any time. OR
- b) A connecting room that is separated from the lab with floor to ceiling walls and a closing door. If the designated clean area can only be accessed by going through the laboratory, then all food and beverage items must be covered while being carried through the laboratory.

Each clean area should be clearly demarcated and have at least one sign that reads as follows:



Copies of the sign above can be found on the EH&S website at:

<http://ehs.dev.acquia.cws.oregonstate.edu/sites/ehs.oregonstate.edu/files/pdf/forms/fooddrinkcleanareanotice.pdf>

If a person has questions or concerns regarding whether the laboratory may be permitted a "Clean Area" they should contact EH&S at 541-737-2273 for further consultation.

Regulations

OSHA Bloodborne Pathogens Standard:

- I. 29 CFR 1910.1030 (d)(2)(ix) - Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of occupational exposure.
- II. 29 CFR 1910.1030(d)(2)(x) - Food and drink shall not be kept in refrigerators, freezers, shelves, cabinets or on countertops or benchtops where blood or other potentially infectious materials are present.

OSHA Sanitation Standard:

- I. 29 CFR 1910.141 (g)(2) - No employee shall be allowed to consume food or beverages in a toilet room nor in any area exposed to a toxic material.

OSHA Laboratory Standard:

- I. 29 C.F.R. 1910.1450 Appendix A (d) - Avoid eating, drinking, smoking, gum chewing, or application of cosmetics in areas where laboratory chemicals are present (22, 24, 32, 40); wash hands before conducting these activities (23, 24). Avoid storage, handling, or consumption of food or beverages in storage areas, refrigerators, glassware or utensils which are also used for laboratory operations (23, 24, 226).

OSU Chemical Hygiene Plan:

5.3 Personal Habits in the Laboratory

1. Eating, drinking, and cosmetic application are not permitted in laboratories.
2. Food may not be stored in a refrigerator that has been used or is being used to store chemicals.
3. Ice produced by ice machines for laboratory use shall not be used for beverages, food, or food storage.

OSU Radiation Safety Manual

6. Regulations Concerning Radioisotopes

- 6.6.6. Eating, drinking, smoking, or applying cosmetics is not permitted in any area where unsealed radioactive materials are stored or used.

Guidelines

Prudent Practices in the Laboratory (published by National Academic Press, 2011):

- I. 5.C.2.2 Avoiding Ingestion of Hazardous Chemicals - Eating, drinking, smoking, gum chewing, applying cosmetics, and taking medicine in laboratories where hazardous chemicals are used should be strictly prohibited. Food, beverages, cups, and other drinking and eating utensils should not be stored in areas where hazardous chemicals are handled or stored. Glassware used for laboratory operations should never be used to prepare or consume food or beverages. Laboratory refrigerators, ice chests, cold rooms, ovens, and so forth should not be used for food storage or preparation. Laboratory water sources and deionized laboratory water should not be used for drinking water.
- II. 5E-1 Biohazardous Materials - Never eat, drink, smoke, handle contact lenses, apply cosmetics, or take or apply medicine in the laboratory.
- III. 5E-2 Radioactive Materials - Never eat, drink, smoke, handle contact lenses, apply cosmetics, or take or apply medicine in the laboratory, and keep food, drinks, cosmetics, and tobacco products out of the laboratory entirely so that they cannot become contaminated.

