

Preventing Laboratory Fires











Electrical outlets are not appropriately used to prevent overload.

To prevent overloading an outlet, outlet adaptors must be equipped with surge protection.









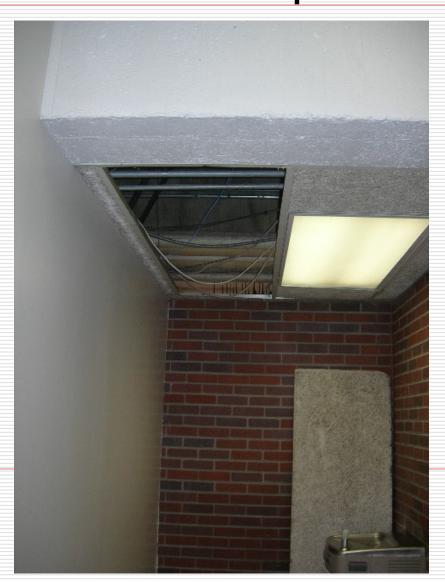


Flammable liquids requiring refrigeration are not stored in a flammable liquids refrigerator or freezer.

- □ Flammable liquids requiring cooling must be stored in flammable liquids refrigerators or freezers that meet specific design requirements.
- Such devices must be prominently labeled by the manufacturer to indicate that the unit is suitable for storing flammable liquids.











Ceiling tiles are missing.

Ceiling tiles must be in place to limit the spread of smoke and to assure proper operation of detectors and sprinklers in case of fire.









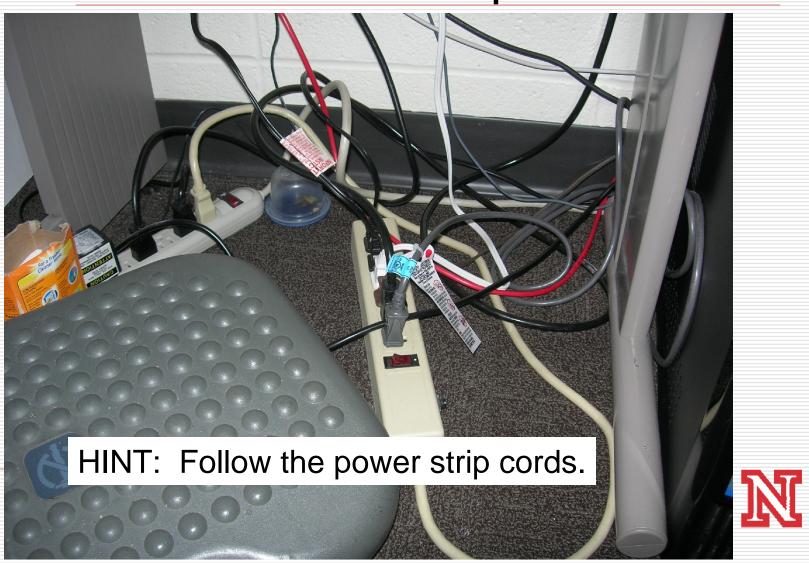


Electrical cords and wiring systems are not in good repair.

Covers for wiring system components must be in place with all associated hardware and with no unprotected openings. Electrical wiring must be in good condition to prevent shock or electrocution.









Power strips are not plugged directly into wall outlets and/or are plugged into other power strips or extension cords.

The relocatable power (e.g. power strips, multi-plug adapters) must be directly connected to a permanently installed receptacle









A door normally required to be kept closed is secured in the open position.

A door normally required to be kept closed must not be secured in the open position at any time and must be self-closing or automatic-closing unless otherwise permitted.







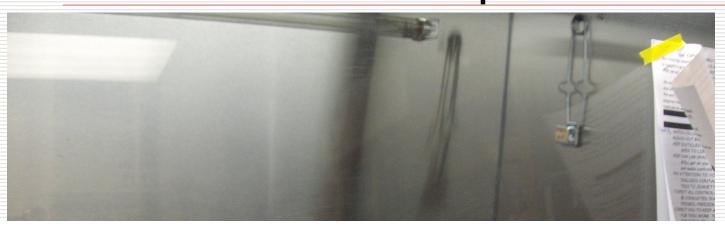




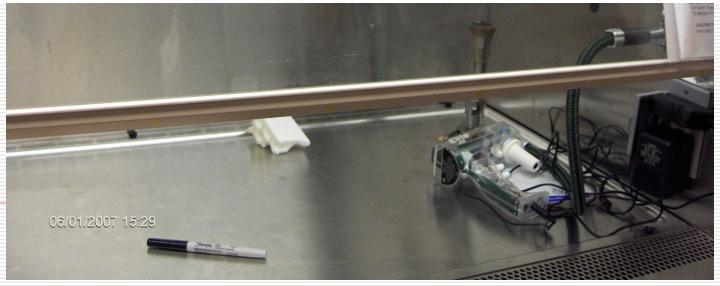
Flexible cords and cables, such as extension cords, are used on a permanent basis.

Extension cords (flexible cords) are permitted for temporary use only. Each flexible cord must be equipped with an attachment plug and be energized from a receptacle outlet and, except for approved multi-plug extension cords, serve only one portable appliance.





HINT: Biosafety Cabinet. Note: Bunsen Burner on right.







An open flame device, such as a standard Bunsen burner, is used in a manner that may potentially result in fire and/or decrease the capture efficiency of a recirculation biosafety cabinet.

□ A standard Bunsen burner or similarly operating device is not appropriate for use inside of a biosfety cabinet. An electric furnace such as a Bacti-cinerator, or a device such as the Touch-O-Matic Bunsen Burner is recommended.











Flammable and combustible liquids are not stored in closed containers.

Flammable and combustible liquids being stored (not in use) must be kept in closed containers.











Incompatible gases (propane and oxygen) in cylinders are not STORED at least 20 feet apart.

- Incompatible gases STORED in cylinders must be separated by a minimum distance of 20 ft.
- □ Liquified Petroleum Gas (LPG) cylinders such as propane, butane and butylenes are not stored appropriately or the amount of cylinders exceeds the allowable storage limit.











Compressed gas cylinders are not stored or used in areas protected from external heating sources such as flame impingement, intense radiant heat, electric arcs, or sources of ignition.

Compressed gas cylinders are not stored in areas protected from external heating sources such as flame impingement, intense radiant heat, electric arcs, or sources of ignition.





Look closely inside red circle. Flame can be seen against the gray background.





Bunsen burner flame (red circle) in unattended room. Flammable chemicals on shelf above burner.

Open flame left unattended and/or used near flammable chemicals is likely to result in fire and cause physical injury.









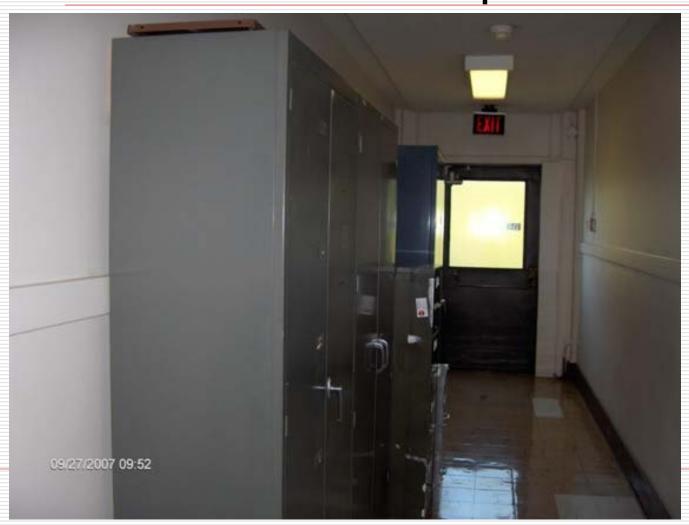


Peroxide-forming chemicals (ether, tetrahydrofuran) are not dated and stabilized with an inhibitor.

Laboratories must keep a record for all peroxidizable compounds to indicate the date of receipt, the date the container was first opened, and disposal date.











Exits are not maintained free of all obstructions and impediments.

No items are permitted to be stored in exit stairwells or exit corridors. Exits must be continuously maintained free of all obstructions or impediments to full instant use in the case of fire or other emergency.











Three-feet of clearance is not maintained in front of electrical panels and breaker boxes.

Three feet of working space must be maintained in front of electrical panels or other equipment likely to require examination, adjustment, servicing, or maintenance while alive and may not be less than 30 inches wide in front of the electrical equipment.









Portable fire extinguishers are not properly installed or secured.

Portable fire extinguishers must be installed using any of the following means:

- Securely on a hanger intended for the extinguisher.
- 2. In the bracket supplied by the extinguisher manufacturer.
- 3. In a listed bracket approved for such purpose.
- In cabinets or wall recesses.











Violation #1

Gas cylinders are not properly secured using restraints of adequate strength and braced against non-mobile structures.

All compressed gas cylinders in use or storage must have regulators removed, be capped and placed in an approved stand or secured above the midpoint but below the shoulder of the cylinder using restraints of adequate strength and braced against immovable structures.



Violation #2

Fire extinguishers are not accessible and/or are obscured from view.

☐ Fire extinguishers must be conspicuously located where they are readily accessible and immediately available in the event of fire; be located along normal paths of travel, including exits from areas; and must not be obstructed or obscured from view.





Violation #3

A door normally required to be kept closed is secured in the open position.

A door normally required to be kept closed must not be secured in the open position at any time and must be self-closing or automatic-closing unless otherwise permitted.



For assistance or more information:

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