

## Laboratory Fire Safety Compliance Checklist

**Building:** \_\_\_\_\_

**Room Number:** \_\_\_\_\_

	<b>GENERAL FIRE SAFETY</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>
1	Exit signs are lit and emergency lights operational. <i>Emergency signs help direct individual out of a building and emergency lighting provides minimal lighting levels in case of a power failure. Report any fixture that is not working to your Building Manager.</i>			
2	Staff knows where multi-purpose, CO <sub>2</sub> or pressurized water fire extinguisher present and fully charged (within 50 feet of any point). <i>Labs that use substantial quantities of flammable hazardous chemicals will have a multi-purpose (ABC) fire extinguisher mounted inside the laboratory. Additional fire extinguishers will also be found in the hallways. If the fire extinguisher is used or found to be not fully charged, immediately contact EH&amp;S for replacement.</i>			
3	New or surplus equipment, trash, and empty containers not discarded in the corridor. <i>Corridors are intended to provide a safe and efficient means of exiting a building in emergencies and during normal daily activities. They should not be used as a storage area at any time.</i>			
4	Laboratory doors remain closed at all time. <i>Building ventilation systems and fume hood designs depend on laboratory doors to remain closed at all time. Doors left open can render a fume hood useless, exposing building occupants to hazardous chemicals.</i>			
5	Warning signs are listed on the door of the lab (ex. Flammable solvents, biohazard, etc.). <i>Warning about any unusual chemical, biological, or physical hazard are required to be prominently posted at or near all laboratory entrance doors. Contact EH&amp;S for template.</i>			
6	Emergency evacuation routes and outside meeting point are posted. <i>Evacuation routes from each laboratory to the two closest exits and the area where everyone is to meet for a "head-count" must be posted. Contact EH&amp;S for template.</i>			
7	Emergency procedures are written and available. <i>Alarm activation, evacuation and building re-entry procedures, clothing fires, and equipment shutdown procedures or applicable emergency operation must be written and readily available to all laboratory occupants. Contact EH&amp;S for template.</i>			
8	Equipment maintenance plans are written. <i>Maintenance plans for all equipment used in a laboratory must be written and available.</i>			
9	Aisles free of clutter (no tripping hazards) and exit doors not blocked. <i>Generally, all aisles leading to fire exits must be at least 36 inches wide in laboratories. Equipment and furniture must be placed to prevent any obstruction to the fire exits. Any space over 1,000 square feet must have two fire exits.</i>			
10	A current inventory and MSDSs of all chemicals used is available. <i>All hazardous materials must be listed on an inventory associated with the MSDS collection. The chemical supplier, manufacturer, or distributor should accompany the chemical name. DOT hazard class and NFPA ratings for all hazardous chemicals should also be included in the inventory.</i>			
11	Laboratory fume hoods have current inspection labels. <i>All fume hoods must be inspected annually by EH&amp;S and have a current inspection sticker posted on the facing of the hood.</i>			
12	Quantity of flammable/combustible liquids does not exceed storage limits. <i>No more than 25 gal. of flammable liquids can be stored in a lab outside of a flammable storage cabinet. Maximum allowable containers for flammable/combustible liquids: 4 L (1.1 gal) glass or 20 L (5 gal) metal.</i>			
13	Refrigerators for flammable are explosion proof type and are properly marked. <i>Residential type refrigerators can not be used to store flammable liquids. The refrigerator must be rated "laboratory safe".</i>			

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<b>GAS CYLINDERS</b>		<b>YES</b>	<b>NO</b>	<b>N/A</b>
14	Number of compressed gas cylinders does not exceed the maximum number allowed. <i>Maximum number of compressed gas cylinders per lab: No more than 6 flammable or oxidizing gases; No more than 3 flammable gases and no more than 3 gases with an NFPA Health Hazard Rating of 3.</i>			
15	All cylinders not in use are stored in an appropriate location. <i>Cylinders, empty or full, may not be stored in a corridor.</i>			
16	All cylinders are properly secured. <i>Gas cylinders must be anchored by chains, clamps, or stands.</i>			
17	All cylinders without regulators are capped. <i>Cylinders not in current use must have the regulator removed and the cap secured.</i>			
<b>CHEMICAL STORAGE</b>		<b>YES</b>	<b>NO</b>	<b>N/A</b>
18	Chemicals are stored properly (ex. according to compatibility, not stored in fume hood). <i>In general, flammable chemicals should be stored away from oxidizing chemicals. Acids must be separated from caustic chemicals. Either distance or a barrier can be used for separation. Poisonous materials usually must be kept separate from acids. All chemicals must be stored and used away from any area used for eating or drinking. Chemicals with unusual properties should be stored separately from other chemicals. Storage areas should be labeled with DOT and NFPA labels.</i>			
19	Flammable liquids are stored away from ignition sources (burners, hotplates, electrical units, etc.). <i>If a container of flammable liquid failed, would the leaking liquid or vapor contact any item that could cause ignition?</i>			
<b>ELECTRICAL SAFETY</b>		<b>YES</b>	<b>NO</b>	<b>N/A</b>
20	All electrical wiring is free of fraying and cuts. <i>Electrical cords should not show signs of wear or breakage.</i>			
21	All electrical devices are grounded. <i>Three prong plugs should be used for all electrical items, except double insulated tools.</i>			
22	Extension cords are not used for permanent wiring. <i>Any fixed or permanent equipment should be hard wired into the power system. If the unit must be unpluggable, the outlet should be within reach without an extension cord. Computer systems may use a surge suppressing power strip to provide surge protection.</i>			
23	Controls that turn equipment on and off are labeled. <i>Both On and Off positions are identified. The equipment that is controlled by the switch is obvious, or the label includes the identification of the controlled equipment.</i>			
24	Electrical receptacles, switches, and controls are located so as not to be subject to liquid spills. <i>A Ground Fault Circuit Interrupter (GFCI) should be used on outlets within 6 feet of a water source.</i>			
25	Circuit breaker panels and electrical transformers are free of storage within 30 inches of the panel in laboratories and mechanical spaces. <i>Circuit breakers and other electrical disconnecting devices must have at least 30 inches of clearance to ensure immediate access if needed and to ensure electrician safety during maintenance.</i>			

**Signed:** \_\_\_\_\_ **Date:** \_\_\_\_\_