

# Laboratory Safety Inspection Checklist

PRINCIPAL INVESTIGATOR:  
LAB CONTACT (if diff than PI):  
LOCATION: \_\_\_\_\_ DATE: \_\_\_\_\_

Y or N	ITEM	Y or N	ITEM
	<b>1. LAB REGISTRATION</b>		<b>6. GENERAL HAZARDS AND CONTAINMENT</b>
_____	a. Lab registration is on file with Safety	_____	a. Walkways & doors unobstructed (36" in passageways)
_____	b. Listed space/personnel/ hazards are current	_____	b. Adequate lighting and switches
	<b>2. POLICIES, PROCEDURES, MANUALS - ACCESS</b>	_____	c. Excess trash, boxes, & paper removed promptly
_____	a. All COH Policies	_____	d. No eating, drinking, smoking or food storage in lab
_____	b. Chemical Hygiene Plan/OSHA Lab Guidance	_____	e. No personal medication/applying lip balm or cosmetics
_____	c. Infection Control - BBP Exposure Control Plan	_____	f. No fabric upholstered/covered furniture or chairs.
_____	d. Infection Control - TB Exposure Plan/ATD Standard	_____	g. Lab door is working (self-closing, preferred)
_____	e. Safety Manuals (Biological, Chemical, Radiological, etc)	_____	h. Ceiling is intact - no holes, no missing tiles
_____	f. Research Regulatory Committee protocols (if applicable, IACUC, IBC, OSBC, SCRO, RSC, etc)	_____	i. Wall is intact - no major holes/cracks
_____	g. Lab-specific SOPs (high hazards agents/procedures)	_____	j. Floor is coved and intact - no major holes/cracks
	<b>3. HAZARD COMMUNICATION</b>	_____	k. Work area is organized and accessible for cleaning
_____	a. Primary & second contacts up-to-date on lab placard	_____	1. Non-porous casework/shelves
_____	b. Warning/restriction labels (rad, carcinogen, biohaz)	_____	2. Benchtops impervious to water and chemical resistant
_____	c. Emergency phone numbers posted in lab	_____	3. No rugs/raw wood (BSL2 - no cardboard/paper)
_____	d. Emergency action plan/procedures - available & up-to-date	_____	l. No plants or animals not associated with work are present
_____	e. COH Emergency Guide is posted.	_____	m. No windows open to the exterior
_____	f. Staff have access to emergency policy/procedures.	_____	n. No minors in the lab
	<b>4. LIFE &amp; SAFETY EQUIPMENT</b>	_____	1. No persons under 16 yrs of age (BSL2+)
_____	a. Fire extinguisher available (50 to 75 ft)	_____	2. Consent form completed to work with hazardous material
_____	1. Unobstructed & mounted at designated location (40" top)		<b>7. PROTECTIVE CLOTHING (PPE)</b>
_____	2. Monthly visual & annually inspected, sealed, and charged	_____	a. Minimum PPE
_____	3. Appropriate extinguisher for hazard (Class A, B, C, or D)	_____	1. No shorts/skirts/sandals or open toed shoes
_____	4. Fire extinguisher sign is visible/correctly placed	_____	b. PPE (eyewear, gloves, lab coat) <b>readily</b> available in lab
_____	5. Staff can locate nearest fire extinguisher	_____	c. Proper body protection
_____	b. Fire Detection/Alarm Station in or near the lab	_____	1. Lab coat worn as appropriate to the hazard
_____	1. Unobstructed	_____	2. Disposable gown
_____	2. Alarm system is visible (strobe light) and audible	_____	3. Rubber apron available (if concentrated acid/base)
_____	3. Staff can locate nearest fire alarm station	_____	d. Proper eye protection use
_____	4. Staff familiar with fire prevention policy/procedure	_____	1. Safety glasses/goggles/face shield
_____	c. All fire sprinklers have 18 inches of clearance	_____	2. Hazard specific eye protection - UV-protected glasses
_____	d. Safety shower present (within 50 ft or 10 sec travel)	_____	e. Visitor glasses <b>readily</b> available
_____	1. Unobstructed	_____	f. Proper hand protection
_____	2. Checked/tested within past month (record)	_____	1. Powder-free latex
_____	e. Eyewash present (within 50 ft or 10 sec travel)	_____	2. Nitrile gloves/Chemo resistant gloves
_____	1. ANSI Stnd Type: Portable, Plumbed, Other	_____	3. Thermal Resistant Gloves: Cryogenic/Autoclave
_____	2. Unobstructed	_____	4. Other: Heavy Duty, Cut Resistant, Puncture Resistant
_____	3. Checked/tested within past month (record tag)	_____	g. Respiratory Protection available as appropriate
_____	4. Staff can locate the nearest eyewash	_____	1. N95, P100, Half Face, or Full Face with fit testing up to date
_____	f. First Aid kit available & marked	_____	2. PAPR
_____	1. Stocked, up to date	_____	h. Hearing protection is available as appropriate
_____	2. Staff can locate the nearest first aid kit	_____	i. Other PPE (disposable hair cover, foot cover, sleeve cover)
_____	g. Exit signs & emergency lighting operating (if needed)		<b>8. REFRIGERATOR/FREEZER/ICE MACHINE</b>
_____	1. Unobstructed	_____	a. "No Food or Drink" sign
_____	2. Staff knows evacuation policy/procedure	_____	b. "No Flammables or Combustible Storage" sign
_____	3. Staff knows disaster preparedness plan	_____	c. Flammables stored in approved flammables refrigerator
_____	4. Staff knows location of flash light/radio	_____	d. "Not for Human Consumption" label on ice machine
_____	h. Hand hygiene is practiced.	_____	e. Approp hazard sign is posted (if applicable)
_____	1. Sink is available with paper towels and soap.		<b>8. CENTRIFUGE/INCUBATORS/WATER BATH</b>
_____	2. Hand sanitizer is available (if applicable)	_____	a. Appropriate hazard sign is posted
	<b>5. EMERGENCY RESPONSE</b>	_____	b. Proper maintenance and decontamination procedure
_____	a. Spill kit available - proper size & type	_____	c. Centrifuge safety buckets avail. for high speed & high hazard
_____	b. Spill procedures established - written & available	_____	d. No mercury thermometers are used
_____	c. Lab knows spill response procedure/reporting		<b>9. NON-IONIZING EQUIPMENT</b>
_____	d. Staff is trained on emergency procedure/reporting.	_____	a. "For Lab Use Only" sign on microwave
		_____	b. Warning sign to protect eyes/skin against UV light
		_____	c. Warning sign to protect against laser

### 11. VENTILATION - HOODS - BSCs

- a. Exhaust hood & alarm (if approp.) working
  - 1. Current certification sticker within year
  - 2. Sash at or below certified sash height mark
  - 3. Airflow is not blocked, no excess storage
  - 4. Housekeeping - properly maintained, decontaminated
- b. BSCs airflow & alarm working
  - 1. Current certification sticker at least within year
  - 2. Sash at or below certified sash height mark
  - 3. Airflow is not blocked and BSC is not used as storage
  - 4. Housekeeping - properly maintained, decontaminated
  - 5. Use of UV is limited to 30mins at the end of the day
  - 6. No absorbable postings/cardboard on/around BSC area
  - 7. No open flame in the BSC
    - If used is justified, must use a safer open flame device
- c. Other ventilated hoods are working & alarm
  - 1. Assesed by Safety for hazards and procedures
    - a. Laminar clean bench (horizontal/vertical)
    - b. Ductless fumehood
- d. Glove box
  - 1. Current certification sticker (if applicable)
  - 3. Airflow is not blocked and is not used as storage
  - 4. Housekeeping - properly maintained, decontaminated
- d. Hoods on stands are seismically anchored

### 12. ELECTRICAL

- a. Proper power cord use (good housekeeping, no trip hazard)
  - 1. Extension cords- temp. use, single only (no daisy chains)
  - 2. Power strips (w/surge protection)- computer equip. only
  - 3. No cording through walls, floors or ceiling
- b. Electrical cords not frayed & good insulation
- c. GFCI near sinks / rubber mats on floors in wet areas
- d. Electrical panels and disconnects unobstructed
- e. Electrical outlets are tested, properly labeled, & covered

### 13. STORAGE

- a. Heavy overhead storage is kept to a minimum.
- b. Tall refrigerators, double stack incubators, and other heavy equipment are seismically secured.
- c. Bookcases, shelves, and/or cabinets meet COH earthquake requirements.
- d. Glass bottles on the ground are placed in secondary containment.
- e. Cardboard boxes are minimized - use clear plastic bins

### 14. LABWARES

- a. Ergonomic labwares are used whenever possible
- b. Disposable labwares are used whenever possible
- c. Glassware use is minimized
  - 1. Plasticwares are substituted for biohazard work
- d. Mechanical pipetting devices are available and in use
- e. Hot plates are use in safe area, auto off available
- f. Sonicator is in safe area (sound proof enclosure preferred)
- g. Bunsen burner is in safe area with limited use
  - (If appropriate, use alternative safer device)

### 15. GAS CYLINDERS

- a. Properly secured (double chain or cable)
- b. Stored away from flammables/ignatable sources
- c. Cylinder labeled as to contents
- d. Caps on cylinders not in use

### 16. BIOLOGICAL HAZARDS

- a. Designated area for work with biological hazards
- b. Benchtop work using universal precaution,
  - a splash guard is available and in use.
- c. Signs and Symptoms awareness esp inc. risk personnel
- d. Proficiency on microbiological practices prior to start of work

### 17. CHEMICAL HAZARDS

- a. Annual inventory up-to-date and complete online
- b. Personnel know where to find SDSs
- c. Chemicals stored by reactive class (flamm, acids, bases, etc.)
- d. Incompatible chemicals physically separated
- e. Chemicals properly labeled (original or secondary label in place)
  - 1. Secondary containers w/ HMIS labels (filled in correctly)
  - 2. Storage areas labeled with hazard &/or HMIS placard
  - 3. Working chemical solutions are clearly labeled
  - 4. Lab use food products labeled
    - "Lab use only. Not for human consumption"
- f. Special labels & storage (i.e. carcinogens, acute toxics, etc.)
- g. Acids/corrosives/solvents stored in compatible trays
- h. No excess chems on bench tops/under sinks/floor
- i. Flammable &/or corrosive cabinets available (if needed)
- j. Suspected or known carcinogens/repro toxins are labeled

### 18. UNSTABLES/REACTIVES

- a. Marked with receipt & open dates
- b. Peroxide formers have required disposal date

### 19. TRANSPORT

- a. Secondary container is available and in use
  - 1. Non-absorbent, Leak-proof & puncture proof
  - 2. Appropriate hazard label - no shipping labels
  - 3. Transport outside bldg has contact info for emergency
- b. Pneumatic Tube (if applicable) is maintained & properly used
- c. Shipping is consistent with DOT regulations (if applicable)

### 20. DECONTAMINATION

- a. Disinfectant is in used and hazard specific
  - 1. Stock & working bottles are labeled & stored properly
  - 2. Preparation and use is according to manufacture
  - 3. Concentration, contact time, frequency are known
- b. Absorbent pads are available and changed regularly
- c. Autoclave is maintained according to mfr (if applicable)
  - 1. Autoclave is not used for medical waste
  - 2. Biological indicator including controls is used
  - 3. Autoclave log is current and accurate
- d. Area (floor, benchtop, equipment) is decontaminated

### 21. WASTE

- a. Chemical Waste containers are appropriate & labeled
  - 1. Labeled with Hazardous Waste labels
  - 2. Containers are closed (2nd container is used if applicable)
- b. Biohazardous waste containers are rigid, leak resistant, have a tight fitting lid, and labeled on the lid and all facing sides
- c. Vacuum lines and portable vacuum pumps are protected with liquid disinfectant traps and HEPA filters (2ndary container)
- d. Sharps are disposed of in an approved, rigid puncture-resistant, leak proof sharps container with appropriate hazard label
- e. Only **clean** glass is disposed of in the broken glass disposal
- f. Waste containers are less than 3/4 full, sharps containers are not filled above manufacture's fill line.
- g. Containers are designed to hold hazardous waste, correct bag, inspected daily

