HARVARD
Assessment & Inspection Management System (AIMS)

| Description |
|---|
| **Inspection Type: General Lab Inspection** |
| **Lab:** |
| **Inspector(s):** |
| **Lab Rep:** |

| Yes | No | N/A | Corrected | Questions |
|---|---|---|---|---|
| | | | | **1. Bio-Documentation** |
| | | | | 1.1 Does this laboratory work with biological materials (plants, animals, arthropods, bacteria, viruses, parasites, biological toxins, recombinant DNA, etc.)? |
| | | | | 1.2 All materials and work covered under the Committee on Microbiological Safety (COMS) is registered with the committee? |
| | | | | 1.3 All persons using human materials, Hepatitis B virus, or other potentially infectious materials have reviewed and completed the HBV vaccine declination statement, as required, and forms are stored in a designated location? |
| | | | | 1.4 If using bloodborne pathogens or other potentially infectious materials (e.g. human materials, including human cell lines) as defined by the OSHA Bloodborne Pathogens Standard, the laboratory has a completed the Exposure Control Plan (ECP), which is kept readily accessible to personnel? |
| | | | | 1.5 The COMS approval letter is available and accessible to all working in the laboratory (required for BL2 and above, recommended for BL1)? |
| | | | | 1.6 If the laboratory is a core facility, it has an intake process for properly identifying biohazards, determining safety requirements, and ensuring appropriate COMS registration? |
| | | | | 1.7 The lab is compliant with all permitting requirements for receipt and use of biological agents? |
| | | | | 1.8 Other Bio-Documentation requirements are met? |
| | | | | 1.9 Laboratories possessing materials that are known to or may contain poliovirus (e.g., cultures, viral nucleic acids, sputum, fecal, water, or sewage samples from times/countries where polio was endemic) have completed the CDC's Poliovirus Containment Survey? |
| | | | | **2. BL1 Requirements** |
| | | | | 2.1 Does this laboratory work with biological materials under BL1 containment per COMS requirement or as a non-COMS regulated laboratory? |
| | | | | 2.2 Laboratory access is restricted to designated personnel at the discretion of the Principal Investigator (PI)? |

| Yes | No | N/A | Corrected | Questions |
|---|---|---|---|---|
| | | | | 2.3 Use of sharps such as needles, scalpels, glass pipettes, and broken glassware are minimized to the best extent possible? |
| | | | | 2.4 Work surfaces are decontaminated with appropriate disinfectant after completion of work and after any spill or splash of biological material? |
| | | | | 2.5 When used, 10% bleach dilutions are made fresh daily or weekly at minimum? |
| | | | | 2.6 Materials for biological spill response are available? |
| | | | | 2.7 Aspiration setup is appropriate (e.g., flasks are in good condition, appropriately labeled for contents, have vacuum lines protected with hydrophobic HEPA filters, etc.)? |
| | | | | 2.8 A sink with soap and paper towels is available for handwashing after handling research materials and before leaving the laboratory? |
| | | | | 2.9 Chairs and other laboratory furniture are covered in non-porous material that is easily cleaned and decontaminated? |
| | | | | 2.10 Researchers wear proper street clothing into the laboratory before donning PPE? Proper street clothing includes long pants or other garments that cover one's legs and shoes that cover the entire foot. |
| | | | | 2.11 Protective eyewear is worn when conducting procedures with the potential to create splashes of microorganisms or other biohazardous materials? |
| | | | | 2.12 Appropriate disposable gloves are worn? |
| | | | | 2.13 “Clean surfaces” (e.g. door handles, keyboards, etc.) are not touched by persons wearing gloves or are appropriately labeled to indicate gloves must be used? |
| | | | | 2.14 Plants are not present in the laboratory, if prohibited by applicable regulations? |
| | | | | 2.15 Materials are properly transported within and between Harvard campus buildings and locally within the Boston area? |
| | | | | 2.16 Other BL1 requirements are met? |
| | | | | **3. BL2 Requirements** |
| | | | | 3.1 Does this laboratory work under BL2 or BL2+ containment per COMS requirement? |
| | | | | 3.2 A sign incorporating the universal biohazard symbol is posted at all entrances to the laboratory? |
| | | | | 3.3 All persons entering the laboratory are advised of the potential hazards and meet established entry/exit requirements? |
| | | | | 3.4 Laboratory equipment is labeled with the universal biohazard symbol when used with materials requiring BL2 containment? |
| | | | | 3.5 Laboratory equipment is routinely decontaminated with an appropriate disinfectant? |
| | | | | 3.6 Infectious materials used in procedures with a potential for creating aerosols or splashes, or used in high concentrations or large volumes (e.g. centrifugation, homogenizer, nebulizer, probe sonicator, blender) are appropriately contained by engineering controls (e.g. aerosol-tight rotors, swinging bucket safety caps, biosafety cabinet)? |

| Yes | No | N/A | Corrected | Questions |
|---|---|---|---|---|
| | | | | 3.7 Biosafety cabinets are certified within the past year and in good working order (e.g. operable sash)? |
| | | | | 3.8 Operation of the biosafety cabinet maintains the protection of the operator and experiment? |
| | | | | 3.9 Sources of open flames (e.g. Bunsen burners) are not used within the biosafety cabinet? |
| | | | | 3.10 Animals not associated with the work being performed are not permitted in the laboratory? |
| | | | | 3.11 Laboratory coats or gowns are worn while working in the laboratory? |
| | | | | 3.12 If the laboratory has been assigned BL2+ work in addition to BL2, COMS BL2+ requirements are followed? |
| | | | | 3.13 Other BL2/BL2+ requirements are met? |
| | | | | **4. Biowaste Procedures** |
| | | | | 4.1 Does this laboratory generate biological waste, including biological sharps waste? |
| | | | | 4.2 All liquid cultures, stocks, and other biological materials are decontaminated using an effective method (e.g. 10% household bleach for at least 20 minutes) before disposal into the sink? |
| | | | | 4.3 Used biologically contaminated sharps are collected in approved red sharps containers and disposed of immediately after use? Or if sharps are reused, they are handled using mechanical techniques, safely decontaminated, and stored appropriately? |
| | | | | 4.4 Solid biological waste is properly disposed, and other hazardous waste is not present in the solid biowaste containers? |
| | | | | 4.5 Biological waste and sharps containers are not more than 3/4 full? |
| | | | | 4.6 Filled disposable single-use red biohazard sharps containers are closed and placed in biowaste box/bin? |
| | | | | 4.7 Biowaste boxes/bins are lined with red bag(s)? |
| | | | | 4.8 If materials are classified as Category A materials under DOT/IATA or are USDA-regulated materials for shipping, they are properly decontaminated prior to placement in the biological waste stream? |
| | | | | 4.9 Other biowaste requirements are met? |
| | | | | **5. Biological Toxins Use** |
| | | | | 5.1 Does this laboratory use biological toxins (e.g., diphtheria, pertussis, Select Agent toxins—botulinum, tetrodotoxin, conotoxins, etc.)? |
| | | | | 5.2 If using Select Agent Toxins in ”non-regulated” amounts, the laboratory adheres to proper documentation, storage, and destruction procedures? |
| | | | | 5.3 If using non-Select Agent Toxins (e.g., diphtheria, pertussis, etc.), the laboratory adheres to BL2 containment procedures? |
| | | | | 5.4 Other requirements for biological toxins are met? |

| Yes | No | N/A | Corrected | Questions |
|---|---|---|---|---|
| | | | | **6. Chem-Documentation** |
| | | | | 6.1 Lab personnel know how to access the Chemical Hygiene Plan? |
| | | | | 6.2 Lab personnel know how to access chemical safety information, including lab-specific SOPs? |
| | | | | 6.3 Other Chem-Documentation requirements are met? |
| | | | | **7. Chem-Equipment** |
| | | | | 7.1 Fume hoods are registered and certified, and appears adequate with qualitative test? |
| | | | | 7.2 Fume hood or other Local Exhaust Ventilation flow indicators and alarms appear to be operating? |
| | | | | 7.3 Fume hood sashes are positioned appropriately? |
| | | | | 7.4 Equipment or containers inside a fume hood are positioned to allow adequate air flow? |
| | | | | 7.5 Housekeeping and organization in fume hood allows user to work safely in hood? |
| | | | | 7.6 Gas cylinders are properly secured? |
| | | | | 7.7 Compressed gas cylinders and liquid cylinders are properly labeled? |
| | | | | 7.8 Compressed gas cylinders without a regulator attached have valve cap in place? |
| | | | | 7.9 Flammable gas cylinders segregated from oxidizing gas cylinders? |
| | | | | 7.10 Other Chem-Equipment requirements are met? |
| | | | | **8. Chem-Practices** |
| | | | | 8.1 Chemical containers are in good condition? |
| | | | | 8.2 Hazardous chemical containers are properly labeled? |
| | | | | 8.3 Chemical storage cabinets are clearly labeled? |
| | | | | 8.4 All glass containers with liquid chemicals on floor are placed within secondary containment? |
| | | | | 8.5 Flammable liquids are returned to appropriate storage when not in use? |
| | | | | 8.6 Stored quantities of flammable and combustible liquids do not exceed fire department limits? |
| | | | | 8.7 Strong acids and bases are stored separately? |
| | | | | 8.8 Strong oxidizers are stored separately from flammable/organic materials? |
| | | | | 8.9 Other incompatible chemicals are appropriately separated? |
| | | | | 8.10 Containers of peroxidizable materials are being managed properly? |
| | | | | 8.11 Unexpired calcium gluconate is available for work with hydrofluoric acid? |
| | | | | 8.12 Heated perchloric acid work is performed in perchloric acid hood, hood with acid scrubber or in standard hood with appropriate vapor capture? |
| | | | | 8.13 Chemical bottles are stored upright on flat, stable surfaces and are not stacked? |
| | | | | 8.14 Other Chem-Practices requirements are met? |

| Yes | No | N/A | Corrected | Questions |
|---|---|---|---|---|
| | | | | **9. Chem-Waste** |
| | | | | 9.1 Non-biological/chemically-contaminated sharps are disposed in appropriate puncture/shatterproof containers? |
| | | | | 9.2 Green hazardous chemical waste SAA (Satellite Accumulation Area) signs (8.5 x11) posted? |
| | | | | 9.3 Chemical waste is stored only in posted SAAs? |
| | | | | 9.4 Does each waste container have a Hazardous Waste label attached that is completely filled out, including appropriate hazard boxes checked and full chemical names listed? |
| | | | | 9.5 Chemical waste containers are properly closed? |
| | | | | 9.6 Chemical waste containers are in secondary containment? |
| | | | | 9.7 At each SAA, is only one container of type of waste being filled at one time? (No duplicate waste streams?) |
| | | | | 9.8 Chemical waste containers are separated from virgin chemicals? |
| | | | | 9.9 Non-hazardous waste streams are managed appropriately? (e.g. lab glass, textiles, metal scraps, batteries/universal waste, PPE, etc.) |
| | | | | 9.10 Other Chem-Waste requirements are met? |
| | | | | **10. Electrical Safety** |
| | | | | 10.1 Electrical cords, plugs, outlets, equipment and wiring are in good condition? |
| | | | | 10.2 Only commercial grade extension cords are used? |
| | | | | 10.3 Extension cords and power strips are not connected in series? |
| | | | | 10.4 Electrical connections in potentially wet areas are GFCI protected? |
| | | | | 10.5 Facility live conductors and wiring are covered or guarded? |
| | | | | 10.6 Other Electrical Safety requirements are met? |
| | | | | **11. Emergency Preparedness** |
| | | | | 11.1 Emergency Response Guide is posted and up to date? |
| | | | | 11.2 Proper clearance is maintained below sprinkler heads? |
| | | | | 11.3 Emergency eye washes and showers have clearly visible signs? |
| | | | | 11.4 Emergency eye washes and showers have a current test tag attached? |
| | | | | 11.5 Eyewashes, drench hoses, showers, and fire extinguishers are unobstructed? |
| | | | | 11.6 Electrical panels are unobstructed? |
| | | | | 11.7 Exit access corridors/hallways and emergency exits are unobstructed? |
| | | | | 11.8 Doors to hallway are closed or held open by magnetic holders? |
| | | | | 11.9 Fire alarm pull stations are unobstructed? |
| | | | | 11.10 Fire extinguishers are adequately charged and have inspection tag attached and dated within the past 12 months? |
| | | | | 11.11 Appropriate chemical spill supplies are readily available? |
| | | | | 11.12 Exit signs are illuminated and pointing in the right direction |
| | | | | 11.13 Other Emergency Preparedness requirements are met? |

| Yes | No | N/A | Corrected | Questions |
|---|---|---|---|---|
| | | | | **12. Gen-Equipment** |
| | | | | 12.1 Lab microwave ovens, ice machines, refrigerators/freezers, and other appliances have 'Not for Food/Drink' or 'For Lab Use Only' label attached? |
| | | | | 12.2 Vacuum lines/pumps are protected by hydrophobic filters? |
| | | | | 12.3 Bunsen burner hoses are made of appropriate materials and in good condition? |
| | | | | 12.4 Work with hazardous or odiferous volatile chemicals is adequately controlled using local exhaust ventilation? |
| | | | | 12.5 Laser and imaging area curtains have fire-retardant tags? |
| | | | | 12.6 Lab-safe refrigerator/freezer is used for cold storage of flammable liquids? |
| | | | | 12.7 Are safe conditions maintained in Environmental (cold/warm) Rooms? |
| | | | | 12.8 Only non-mercury-containing thermometers used? |
| | | | | 12.9 Are materials handling equipment (cranes, lifts, hoists) in working condition and inspected? Are users appropriately licensed? |
| | | | | 12.10 Is soldering equipment present in lab? |
| | | | | 12.11 Is lead solder waste being managed properly through SAA? |
| | | | | 12.12 Are cleaning wipes or other suitable means of decontamination available to clean work area? |
| | | | | 12.13 Is fume scavenging equipment in place? |
| | | | | 12.14 Does the lab have an updated SOP for soldering work? |
| | | | | 12.15 Cords are not run through walls, ceiling (including false ceilings), doors, floors, windows, or secured to walls, baseboards, etc. using nails, staples, pushpins or other methods that would require a tool to remove? |
| | | | | 12.16 Is work with Li-ion batteries in accordance with EHS guidance? (storage, charging, emergency supplies, etc.) |
| | | | | 12.17 Is a laser cutter present in the lab? |
| | | | | 12.18 Has the laser cutter been inspected within 2 years, and does it have Radiation Protection Office (RPO) warning signs affixed? |
| | | | | 12.19 Laser cutter interlocks have not been disabled or altered? |
| | | | | **13. Gen-Practices** |
| | | | | 13.1 Laboratory door placards are updated and posted? |
| | | | | 13.2 No indications of eating, drinking or application of personal care products in labs? |
| | | | | 13.3 Food used for research is labeled 'For Lab Use Only'? |
| | | | | 13.4 Loose razor blades or similar sharps are protected or isolated when not in use? |
| | | | | 13.5 Lab is free of slip, trip and fall hazards? |
| | | | | 13.6 Contaminated glassware is disinfected/decontaminated before being washed or given to glasswash facility? |
| | | | | 13.7 The space does not have excessive clutter or other signs of poor housekeeping. |
| | | | | 13.8 Lab materials, lab equipment, and used PPE are kept separate from personal spaces (e.g. desk spaces, offices, breakrooms)? |

| Yes | No | N/A | Corrected | Questions |
|---|---|---|---|---|
| | | | | 13.9 Other Gen-Practices requirements are met? |
| | | | | **14. PPE** |
| | | | | 14.1 A signed PPE assessment completed within the last year is available in the lab? |
| | | | | 14.2 Required PPE is available, in good condition and appropriately stored? |
| | | | | 14.3 Closed-toed shoes that cover entire foot are worn in lab? |
| | | | | 14.4 Lab personnel use PPE required by PPE assessment or lab SOP? |
| | | | | 14.5 Other PPE requirements are met? |
| | | | | **15. Rad-Equipment** |
| | | | | 15.1 Are x-ray generating devices affixed with a Harvard X-ray Survey Record label? |
| | | | | 15.2 Other Rad-Equipment requirements are met? |
| | | | | **16. Training** |
| | | | | 16.1 There are completed personnel roster and assigned training requirements in Peoplesoft and HTP? Lab members have completed the trainings assigned to them? |
| | | | | 16.2 Lab-specific safety orientation training is completed and documented? |
| | | | | 16.3 Individuals who transport or ship chemicals, biologicals, dry ice, or other hazardous materials to other institutions, field research sites, or within and between campuses have completed the appropriate training? |
| | | | | 16.4 Other Training requirements are met? |