

Audit ID & Type	731	Lab Safety
Audit Time & Facility type	Thu, 8/25/22 2:00 PM	Lab Safety
Room	Test	University Hall
Location notes		
Initial audit ended	Thu, 8/25/22 2:03 PM	
Status	Open/Items need correction	
General Laboratory Safety		
Question # (Question ID):	1 (1)	Household-type refrigerators are not used for flammable chemical storage?
Status/Due date	Passed	08/25/22
Priority/Recommendation:	Intermediate	General Lab Safety Corrective Actions: Flammable Refrigerator - All flammable chemicals must be stored in a refrigerator designed for flammable chemicals and must be marked as such.
Notes:		
Question # (Question ID):	2 (2)	The laboratory is free of food and food items?
Status/Due date	N/A	08/25/22
Priority/Recommendation:	Intermediate	General Lab Safety Corrective Actions: Food - No food or food stuff shall be present in the lab.
Notes:		
Question # (Question ID):	3 (3)	Laboratory sinks have paper towels, soap, and hot water, and vacuum breakers or antisiphon devices available at each sink?
Status/Due date	N/A	08/25/22
Priority/Recommendation:	Intermediate	General Lab Safety Corrective Actions: Sinks - Each sink shall contain soap, hot water, and paper towels.
Notes:		
Question # (Question ID):	4 (4)	A chemical inventory has been prepared?
Status/Due date	N/A	08/25/22
Priority/Recommendation:	Intermediate	General Lab Safety Corrective Actions: Chemical Inventory - A new chemical inventory system is available on-line called. The program is called ChemWatch. A link to this site can be found on the Safety and Health web page under the Chemical Hazard Information field.
Notes:		
Question # (Question ID):	5 (5)	MSDS's are accessible and personnel know where they are kept?
Status/Due date	N/A	08/25/22
Priority/Recommendation:	Intermediate	General Lab Safety Corrective Actions: MSDS - MSDS's must be made available and readily accessible to all lab employees and students. A new chemical inventory system that allows users to develop an on-line inventory and MSDS database is now located on the Safety and Health web page under the Chemical Hazard Information field.
Notes:		
Question # (Question ID):	6 (6)	Institutional and lab specific chemical hygiene plan is located within the laboratory? The Institutional Chemical Hygiene Plan and Lab Specific Chemical Hygiene Plan can be found on the Safety and Health web page under Laboratory Safety.
Status/Due date	N/A	08/25/22

Priority/Recommendation: Intermediate

Institutional and lab specific chemical hygiene plan is located within the laboratory? The Institutional Chemical Hygiene Plan and Lab Specific Chemical Hygiene Plan can be found on the Safety and Health web page under Laboratory Safety.

Notes:

Question # (Question ID):	7 (7)	Personnel have been instructed to pipette only by mechanical means, never by mouth?
Status/Due date	N/A	08/25/22

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID):	8 (8)	Aisles and emergency exits are free from obstacles?
Status/Due date	N/A	08/25/22

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID):	9 (9)	Signs are posted on doors to warn of hazards and give information (i.e. Radiation, Biohazard)?
Status/Due date	N/A	08/25/22

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID):	10 (10)	Personnel have attended the lab safety training (Check Safety Test Bank Records)?
Status/Due date	N/A	08/25/22

Priority/Recommendation: Intermediate

General Lab Safety Corrective Actions: Training - Everyone in this lab must attend lab safety training through the Department of Safety and Health. Sessions are be offered monthly, alternating location between campuses.

Notes:

Question # (Question ID):	11 (11)	A good housekeeping program is set up and enforced and work benches and tables are kept free of chemicals, scraps of paper, dirty glassware, etc.?
Status/Due date	N/A	08/25/22

Priority/Recommendation: Intermediate

General Lab Safety Corrective Actions: Housekeeping - Ensure all materials and equipment not being used are stored away properly.

Notes:

Question # (Question ID):	12 (12)	Emergency telephone numbers are posted in the lab (PI and campus Police)?
Status/Due date	N/A	08/25/22

Priority/Recommendation: Intermediate

General Lab Safety Corrective Actions: Emergency Phone Numbers - Safety and Health has updated the REACT poster. It must be posted in the lab and updated with the current PI and associated contact information.

Notes:

Question # (Question ID):	13 (13)	Other safety and health hazards are not present in the lab?
Status/Due date	N/A	08/25/22

Priority/Recommendation: Intermediate

Notes:

Chemical Handling and Storage

Question # (Question ID):	14 (14)	Volitile liquids are kept away from heat sources, sunlight, and electrical switches?
Status/Due date	N/A	08/25/22

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID): 15 (15) **Chemicals which might react together to produce dangerous reactions are stored away from each other? This includes compressed gases (i.e. oxygen must be stored 20 feet from Hydrogen)?**

Status/Due date **N/A** **08/25/22**

Priority/Recommendation: Intermediate

General Lab Safety Corrective Actions: Chemical Segregation - Segregate chemicals by chemical grouping. Store flammable chemicals in one area and acids in another area. Organic acids should be stored with flammables instead of acids.

Notes:

Question # (Question ID): 16 (16) **Items are not stored within 18 inches of a sprinkler head?**

Status/Due date **N/A** **08/25/22**

Priority/Recommendation: Intermediate

General Lab Safety Corrective Actions: Ceiling Clearance - Keep all items at least 18 inches away from sprinkler heads allowing them to operate properly.

Notes:

Question # (Question ID): 17 (17) **Fume hoods are effective enough to eliminate all strong odors and have been checked for adequate flow (80-120 fpm) at a sash height of 18 inches?**

Status/Due date **N/A** **08/25/22**

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID): 18 (18) **Fume hoods have safety glass windows or safety shields?**

Status/Due date **N/A** **08/25/22**

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID): 19 (19) **Laboratory fume hoods are not used for the storage of materials?**

Status/Due date **N/A** **08/25/22**

Priority/Recommendation: Intermediate

General Lab Safety Corrective Actions: Lab Hoods - Laboratory hoods must not be used for storage.

Notes:

Question # (Question ID): 20 (20) **The lab has chemicals classified as toxic and standard operating procedures are available in the lab? Standard Operating Procedures are available for commonly used chemicals and are located on the Safety and Health website under laboratory Safety.**

Status/Due date **N/A** **08/25/22**

Priority/Recommendation: Intermediate

General Lab Safety Corrective Actions: SOP'S - Your lab has chemicals that are classified as acutely toxic, carcinogenic, or reproductive hazard. Safety and Health has posted standard operating procedures for "commonly found chemicals" on the Safety and Health web page. If an SOP is needed for a chemical that is not included in the "commonly found toxic chemical" list, one must be developed.

Notes:

Question # (Question ID): 21 (21) **Apparatus and glass tubing does not project beyond the front shelf limits?**

Status/Due date **N/A** **08/25/22**

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID): 22 (22) All acid bottles are kept tightly stoppered when not in use?
Status/Due date N/A 08/25/22

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID): 23 (23) Ether and other peroxide forming materials are labeled with date received and opened?
Status/Due date N/A 08/25/22

Priority/Recommendation: Intermediate

General Lab Safety Corrective Actions: Peroxide Forming Chemicals - Peroxide forming materials such as (THF, ether, etc.) were found in the lab. They must be labeled when received and opened. They must be disposed of through Safety and Health after 18 months of the received date and one year after opening.

Notes:

Question # (Question ID): 24 (24) All chemical containers are labeled?
Status/Due date N/A 08/25/22

Priority/Recommendation: Intermediate

General Lab Safety Corrective Actions: Labels - All liquids should be contained and labeled. All chemical containers must be labeled to be in compliance with OSHA's Hazard Communication standard 29 CFR 1910.1200.

Notes:

Question # (Question ID): 25 (25) Flammable solvents are kept to a minimum and are stored in accordance with NFPA regulations? The lab is currently rated for a maximum storage of __ gallons of total flammable liquids (half of which must be stored in a flammable storage cabinet). Of this __ gallons, a maximum storage of __ gallons can be class 1 flammable liquids (ethyl acetate, hexane, toluene, etc). Only __ gallons of class 1 flammable liquids can be stored outside of a flammable storage cabinet.
Status/Due date N/A 08/25/22

Priority/Recommendation: Intermediate

General Lab Safety Corrective Actions: Flammable Storage - Reduce flammable solvents to the minimum needed.

Notes:

Heavy Metals

Question # (Question ID): 26 (26) Are heavy metals used in the lab? If not, the Heavy Metals question group can be set as N/A.
Status/Due date N/A 08/25/22

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID): 27 (27) Are heavy metals used in a designated area and surfaces decontaminated at the end of each day?
Status/Due date N/A 08/25/22

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID): 28 (28) Are heavy metals used under local exhaust?

Status/Due date	N/A	08/25/22
Priority/Recommendation:	Intermediate	
Notes:		
Question # (Question ID):	29 (29)	Are gloves worn when handling heavy metals?
Status/Due date	N/A	08/25/22
Priority/Recommendation:	Intermediate	
Notes:		
Waste Disposal		
Question # (Question ID):	30 (30)	Waste material is not allowed to accumulate on the floors, in corners, or under shelves and tables?
Status/Due date	N/A	08/25/22
Priority/Recommendation:	Intermediate	
Notes:		
Question # (Question ID):	31 (31)	Sharps containers are secured with a dog dish on a counter top, are of sufficient width or affixed to a wall?
Status/Due date	N/A	08/25/22
Priority/Recommendation:	Intermediate	
Notes:		
Question # (Question ID):	32 (32)	Acids are disposed of by pouring down an acid sewer, using much flushing water?
Status/Due date	N/A	08/25/22
Priority/Recommendation:	Intermediate	
Notes:		
Question # (Question ID):	33 (33)	Waste materials are labeled as such and promptly identified to Safety and Health?
Status/Due date	N/A	08/25/22
Priority/Recommendation:	Intermediate	
Notes:		
Question # (Question ID):	34 (34)	Contents of unlabeled containers are always disposed of through Safety and Health?
Status/Due date	N/A	08/25/22
Priority/Recommendation:	Intermediate	
Notes:		
Question # (Question ID):	35 (35)	Chemical spill kits are available in the lab?
Status/Due date	N/A	08/25/22
Priority/Recommendation:	Intermediate	
Notes:		
Question # (Question ID):	36 (36)	Broken glass is disposed of broken glass containers? Broken glass containers can be ordered through Central Distribution on the Health Science Campus and through Building Services on the Main Campus.
Status/Due date	N/A	08/25/22
Priority/Recommendation:	Intermediate	
Notes:		
Question # (Question ID):	37 (37)	Biological waste is disposed of in a leak proof container and labeled with a biohazard symbol.

Status/Due date **N/A** **08/25/22**

Priority/Recommendation: Intermediate

Notes:

Personal Protection

Question # (Question ID): **38 (38)** **Closed toed shoes and long pants are worn in lab?**

Status/Due date **N/A** **08/25/22**

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID): **39 (39)** **Protective gloves are always worn when transferring hazardous chemicals?**

Status/Due date **N/A** **08/25/22**

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID): **40 (40)** **Respirators are being used in the lab in accordance with UT's respiratory protection program?**

Status/Due date **N/A** **08/25/22**

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID): **41 (41)** **Face shields or goggles are worn where there is a potential of splashing chemicals or flying particles?**

Status/Due date **N/A** **08/25/22**

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID): **42 (42)** **Safety shields are used in front of glassware assemblies that are fragile, subject to heat, shock, or contain flammable or explosive chemicals?**

Status/Due date **N/A** **08/25/22**

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID): **43 (43)** **Eyewash units for flushing the eyes in case of chemical contamination are available and being checked weekly?**

Status/Due date **N/A** **08/25/22**

Priority/Recommendation: Intermediate

General Lab Safety Corrective Actions: Eyewash Stations - Safety and Health will place a work order to have a sink mounted eye wash installed. Please check the eyewash units weekly and document inspections.

Notes:

Question # (Question ID): **44 (44)** **Safety shower is available within easy access to all personnel and is tested on a regular basis?**

Status/Due date **N/A** **08/25/22**

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID): **45 (45)** **Safety shower and eyewash units are plainly labeled and the shower will remain open until manually closed?**

Status/Due date **N/A** **08/25/22**

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID): 46 (46) Proper types of fire extinguishers are available (check charge status)?
Status/Due date N/A 08/25/22

Priority/Recommendation: Intermediate

Notes:

Animal Care
Question # (Question ID): 47 (47) Is anyone in the lab listed on a protocol that uses animals? If not, the Animal Care question group can be set as N/A.
Status/Due date N/A 08/25/22

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID): 48 (48) Does the lab euthinize animals with CO2? If yes it must be completed using compressed gas, not dry ice.
Status/Due date N/A 08/25/22

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID): 49 (49) Do researchers have access to, read, and follow all approved IACUC protocols?
Status/Due date N/A 08/25/22

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID): 50 (50) Lab personnel having contact with research animals are enrolled in the Medical Surveillance program and have required immunizations?
Status/Due date N/A 08/25/22

Priority/Recommendation: Intermediate

Notes:

Biosafety
Question # (Question ID): 51 (51) Are biological agents used in the lab (bacteria, fungi, rickettsia, prions, vectors, plasmids, other)? If they are not, the Biosafety question group can be set to N/A.
Status/Due date N/A 08/25/22

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID): 52 (52) Does the lab contain any BSL2 agents (List ATTC#)?
Status/Due date N/A 08/25/22

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID): 53 (53) Do research personnel ship infectious substances and/or diagnostic specimens?
Status/Due date N/A 08/25/22

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID): 54 (54) Are biohazard spill kits available?
Status/Due date N/A 08/25/22

Priority/Recommendation: Intermediate

General Lab Safety Corrective Actions: Spill Kits - Biohazard spill kits are required for BSL2 labs. Safety and Health will provide spill kit.

Notes:

BBP

Question # (Question ID):	55 (55)	Is human or primate blood or other potentially infectious materials used in the lab? If not, the BBP question group can be set to N/A.
----------------------------------	----------------	---

Status/Due date	N/A	08/25/22
------------------------	------------	-----------------

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID):	56 (56)	Have lab personel completed annual bloodborne pathogen training?
----------------------------------	----------------	---

Status/Due date	N/A	08/25/22
------------------------	------------	-----------------

Priority/Recommendation: Intermediate

General Lab Safety Corrective Actions: BBP Training - All personel working with human or primate blood must complete annual bloodborne pathogen training annually vis the Safety and Health on-line test bank. The following people need to comple the training:

Notes:

Question # (Question ID):	57 (57)	Have lab personel completed or declined the HEP B vaccination series?
----------------------------------	----------------	--

Status/Due date	N/A	08/25/22
------------------------	------------	-----------------

Priority/Recommendation: Intermediate

General Lab Safety Corrective Actions: HEP B Series - Lab personel working with human or primate blood must obtain, show proof, or decline the HEP B vaccination series. The following people must obtain or show proof of vaccination to University Health (HSC) or Main Campus Medical Center (MCMC):

Notes:

Physical Hazards

Question # (Question ID):	58 (58)	Proper goggles and face shields for protection from infrared and ultraviolet light are worn when working with these rays?
----------------------------------	----------------	--

Status/Due date	N/A	08/25/22
------------------------	------------	-----------------

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID):	59 (59)	All electrical connections are secured, and worn connections are replaced promptly when there is any sign of thinning insulation?
----------------------------------	----------------	--

Status/Due date	N/A	08/25/22
------------------------	------------	-----------------

Priority/Recommendation: Intermediate

General Lab Safety Corrective Actions: Electrical Connections - DO NOT modify electrical equipment without oversight from a qualified electrician. Safety and Health will ask Plant Operations to take a look at the arrangements.

Notes:

Question # (Question ID):	60 (60)	Equipment is grounded and the ground prong is in tact. Do not use cheater plugs!!!!
----------------------------------	----------------	--

Status/Due date	N/A	08/25/22
------------------------	------------	-----------------

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID):	61 (61)	Extension cords are not used in the lab?
----------------------------------	----------------	---

Status/Due date	N/A	08/25/22
------------------------	------------	-----------------

Priority/Recommendation: Intermediate

General Lab Safety Corrective Actions: Extension Cords - DO NOT use extension cords without surge protectors in the lab. DO NOT plug surge protectors into each other.

Notes:

Question # (Question ID):	62 (62)	The lab has a LASER and is in compliance with the UT LASER Safety manual (refer to Laser Safety Officer)?
----------------------------------	----------------	--

Status/Due date	N/A	08/25/22
------------------------	------------	-----------------

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID):	63 (63)	The lab does not have a potential exposure to noise greater than 85dBA (i.e. Do you have to shout to be heard at a distance of 3 feet?)?
----------------------------------	----------------	---

Status/Due date	N/A	08/25/22
------------------------	------------	-----------------

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID):	64 (64)	Are gas cylinders secured and stored away from heat sources?
----------------------------------	----------------	---

Status/Due date	N/A	08/25/22
------------------------	------------	-----------------

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID):	65 (65)	Does the lab use radioactive materials or radiation generating equipment (refer to Radiation Safety Officer)?
----------------------------------	----------------	--

Status/Due date	N/A	08/25/22
------------------------	------------	-----------------

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID):	66 (66)	Does the lab currently use cryogenic materials (liquid nitrogen, dry ice, liquid oxygen)? If yes, employees are not allowed to wear jewelry, must wear cryogenetic gloves, eye and face protection, closed toed shoes and protective clothing?
----------------------------------	----------------	---

Status/Due date	N/A	08/25/22
------------------------	------------	-----------------

Priority/Recommendation: Intermediate

Notes:

Controlled Substances

Question # (Question ID):	67 (67)	Are controlled substances (barbital, phenobarbital, ketamine) used in the lab? If not, the Controlled Substances question group can be set to N/A.
----------------------------------	----------------	---

Status/Due date	N/A	08/25/22
------------------------	------------	-----------------

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID):	68 (68)	Is a biannual inventory present in the lab?
----------------------------------	----------------	--

Status/Due date	N/A	08/25/22
------------------------	------------	-----------------

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID):	69 (69)	Are they contained in a locked storage area?
----------------------------------	----------------	---

Status/Due date	N/A	08/25/22
------------------------	------------	-----------------

Priority/Recommendation: Intermediate

Notes:

Question # (Question ID):	70 (70)	Do you have a dispensing log?
Status/Due date	N/A	08/25/22
Priority/Recommendation:	Intermediate	
Notes:		
Question # (Question ID):	71 (71)	Do you have a DEA liscense? If No who orders controlled substances for your lab?
Status/Due date	N/A	08/25/22
Priority/Recommendation:	Intermediate	
Notes:		
Question # (Question ID):	72 (72)	Are background checks performed on individuals working around controlled substances?
Status/Due date	N/A	08/25/22
Priority/Recommendation:	Intermediate	
Notes:		
Hazardous Drugs		
Question # (Question ID):	73 (73)	Are hazardous drugs (i.e. chemo drugs, research grade pharmecuticals, anti-neoplatic drugs) used or stored in the lab? If they are not, the Hazardouos Drugs question group can be set to N/A.
Status/Due date	N/A	08/25/22
Priority/Recommendation:	Intermediate	
Notes:		
Question # (Question ID):	74 (74)	Are hazardous drugs manipulated under local exhaust?
Status/Due date	N/A	08/25/22
Priority/Recommendation:	Intermediate	
Notes:		
Question # (Question ID):	75 (75)	Are work surfaced decontaminated after use?
Status/Due date	N/A	08/25/22
Priority/Recommendation:	Intermediate	
Notes:		
Question # (Question ID):	76 (76)	Are hazardous drugs used in a designated area?
Status/Due date	N/A	08/25/22
Priority/Recommendation:	Intermediate	
Notes:		
Question # (Question ID):	77 (77)	Are non-powdered latex gloves worn during drug prep.? A double layer of gloves should be worn if it this does not interfere with technique.
Status/Due date	N/A	08/25/22
Priority/Recommendation:	Intermediate	
Notes:		
Question # (Question ID):	78 (78)	Are all hazardous drugs labeled as a carcinogen or suspect carcinogen?
Status/Due date	N/A	08/25/22
Priority/Recommendation:	Intermediate	
Notes:		

List I and List II

Question # (Question ID): 79 (79) **Are List I or II chemicals used in the lab (Acetone, iodine, etc.)? If not, the List I and List II question group can be set to N/A.**

Status/Due date N/A
08/25/22
 Priority/Recommendation: Intermediate
 Notes:

Question # (Question ID): 80 (80) **Are accurate records kept of the intake (amount received), use and purpose of the List I and II chemicals?**

Status/Due date N/A
08/25/22
 Priority/Recommendation: Intermediate
 General Lab Safety Corrective Actions: List I and II Inventory - Maintain accurate records of the intake, use and purpose of these chemicals. For example, iodine used to disinfect, each use be difficult to measure, recording the amount recieved, purpose and the number os estimated users in a daily basis would be sufficient documentation.

Notes:

Nanotechnology

Question # (Question ID): 81 (81) **Are nanomaterials used in the lab? If not, the Nanotechnology question group can be set to N/A.**

Status/Due date N/A
08/25/22
 Priority/Recommendation: Intermediate
 Notes:

Question # (Question ID): 82 (82) **Has the lab completed the UT nanotechnology survey?**

Status/Due date N/A
08/25/22
 Priority/Recommendation: Intermediate
 General Lab Safety Corrective Actions: Nano Survey - Complete the UT Engineered Nanomaterial survey found at http://www.enrollmentservices.utoledo.edu/events/register.asp?event_id=1204

Notes: