

Department of Animal Science Annual Lab Safety Quiz

All lab members including the PI should be able to answer these questions after your lab training (whether initial or refresher training). Circle the correct answer. Review answers with lab members and keep the quizzes with your annual safety documentation.

- (1) What does IIPP stand for?
(Available here <https://animalscience.ucdavis.edu/about/resources/safety-department>)
- A. **It Is** just a **P**ile of **P**aper
 - B. **I**njury/**I**llness **P**revention **P**rogram
 - C. **I**ndividual **I**njury **P**revention **P**rocedures
- (2) Where is the IIPP in your lab and what is its purpose?
- (3) What does SDS stand for? (Formerly called MSDS)
(They must be available for all chemicals in your lab, and **on-line access is acceptable, but be sure to place a shortcut icon to an SDS database on your lab computer desktop.**
<http://safetyservices.ucdavis.edu/ps/cls/msds> It is also still recommended that you retain hard copies for commonly used acutely hazardous materials in your work area.)
- A. **S**afety **D**ata **S**heet
 - B. **S**afety **D**ata **S**creen
 - C. **S**afety **D**ocument **S**heet
- (4) Which of the following can be useful information from an SDS?
- A. reactivity information
 - B. lethal dosage
 - C. post exposure emergency first aid
 - D. all of the above
- (5) When should you look up a chemical's SDS? (*circle all that apply*)
- A. never
 - B. when you use a chemical for the first time
 - C. while you're bored and eating lunch at your computer
 - D. when your PI or lab safety person tells you
 - E. when you are unsure of the hazards of a chemical you will be using
- (6) What is the **required minimum PPE** for being in a chemical laboratory, whether working with chemicals or not?
- A. fire retardant lab coat
 - B. closed-toe and closed-heel shoes
 - C. long pants or floor-length skirt
 - D. B & C above

(7) Which of the following is considered appropriate laboratory attire when working with chemicals?

- A. lab coat
- B. safety glasses
- C. nitrile gloves
- D. A & B & C above
- E. it depends on the activity and chemical (may also need splash goggles or face shield or different gloves).

(8) Before using gloves for protection, one should check for:

- A. proper fit
- B. compatibility with the chemical that is to be used
- C. cracks or holes
- D. all of the above

(9) Nitrile gloves are good to wear while working with a flame:

- A. True
- B. False

(10) Select which of the following are common ways for hazardous chemicals to enter the body.

- A. injection
- B. ingestion
- C. inhalation
- D. absorption (e.g. through skin or eyes)
- E. all of the above

(11) When a chemical spill occurs which covers a small amount of skin you should (*circle all the apply*):

- A. always follow the instructions in the SDS for the chemical
- B. quickly soak up the material with paper towels or kimwipes
- C. flush with water for 15 minutes and notify your PI, and seek medical attention if there is any question regarding its seriousness, complete the Employers First Report, and document how to prevent the incident from happening again
- D. use the safety shower for 1 minute

(12) Eye wash stations, safety showers, fire extinguishers and fire alarms are:

- A. important safety devices required by law
- B. located in chemical storage areas only
- C. safety devices that you should be aware of (their location and how to use them)
- D. A & C above

(13) When *and* how often does anyone working in a lab need **lab-specific safety training** that is documented? (Remember the PI needs documented training regardless of working in the lab or not, because they must be aware of all the issues their employees or students are exposed to while working in the lab. Remember everyone in the lab needs to know where these and other important safety documents are kept.).

- A. sometime during their first quarter at UCD *and* every 2 years
- B. sometime during your first week at UCD *and* every 2 years
- C. before working in a lab *and* annually

(14) In terms of training...in addition to the above #13) there is an on-line lab safety course required for everyone before working in a chemical laboratory setting. What is it called and how often is it required?

- A. Lab Safety Training, every year
- B. Chemical Laboratory Training, every two years
- C. UC Laboratory Safety Fundamentals, every 3 years... ***and MUST be completed before doing anything in the lab***

(15) What do you do if you drop and break a full one gallon bottle of nitric acid on the floor of your lab?

- A. get your spill kit and clean it up while holding your breath
- B. evacuate everyone from your lab and make sure all doors are closed and call 911
- C. run into the hall and pull the fire alarm

(16) The following are all safety issues in the lab but what are the main issues CUPA inspectors will check when inspecting your lab?

- A. Are folks wearing open-toed shoes or eating in the lab?
- B. Are there propped open fire doors or blocked exits?
- C. Is there lab specific safety training documentation for everyone in the lab (including the PI) that is not over one year old AND are there properly labeled waste labels on all chemical waste containers?
- D. all of the above

(17) During a fire alarm or other evacuation, where is the Animal Science evacuation site/meeting place? (Make sure no one is still in the lab and close all doors behind you)

- A. the nearest Peets Coffee
- B. loitering in the breezeway area
- C. the NW area of the asphalt bike path, located just north of the Meyer Hall loading dock entrance driveway

(18) You have several empty glass one gallon containers of acids and solvents...how do you properly dispose of them?

- A. Place the containers in the solid waste (dumpster), deface the labels or not, and keep them capped or not... it's up to you, none of these practices violates any regulations.
- B. If the container is empty, you can recycle with WRR (deface label and keep capped to control odors). Do not rinse them as the rinse is considered waste.
- C. Consult Safety Net #124 and follow the guidelines (unless the bottle could be used as a waste container...ask your PI if you should keep it).
- D. Triple rinse them, put the rinse down the sink and then toss them in the dumpster.

(19) What are the guidelines for rinsing chemicals down the laboratory sink drain?

- A. Any chemical can go down the drain in quantities less than a pound or gallon.
- B. Whatever will not react violently when mixed with water
- C. Pretty much nothing can go down the drain, except some weak saline solutions, culture media mixed with 10% bleach (final volume is 10% bleach), ethanol (EtOH) <24%, and a few other similar items. Check with Safety Services or your safety coordinator if you are not absolutely sure and read Safety Net #6

(20) *{If you do not work with animal blood you may skip this question if you like}*
You have collected some blood from some healthy animals (not treated with chemicals, radioisotopes or biohazards), centrifuged down the RBC's, collected the plasma or serum, and now what do you do with the vacutainers of RBC's?

- A. Just toss them in the lab trash buckets.
- B. Hide them in black plastic bags and throw them in the dumpster.
- C. Treat them as hazardous waste and contact EH&S for pick-up.
- D. Treat the RBC's with bleach for 30 min (10% bleach final volume) and then flush the mixture down the lab sink. The rinsed clean glass vacutainers can be disposed of in the dumpster *after* autoclaving and proper packaging (see Safety Net #3).

(21) **ALL** bottles, flasks, and beakers of media, dry chemicals, buffers, saline, 1N or 1M acids, or any other liquid (including distilled water) must be clearly labeled with which of the following? (This includes items within your own lab and within common space...e.g. walk-in cold rooms).

- A. a secret code so no one else can use your "stuff"
- B. a drawing of the chemical structure
- C. the full chemical name in English, or names and percentages (if it is a mixture), PI name or name of creator, and date made, any hazards

(22) What is the latest website for all safety services? (EH&S falls under this)

- A. <http://ehs.ucdavis.edu>
- B. <http://safetyservices.ucdavis.edu>

(23) You are in the Meyer Hall breezeway and hear a small “bang” and see smoke coming out onto one of the catwalks between the north and south buildings... using your cell phone, what number do you call?

- A. 411
- B. 911
- C. 752-1234 (UCD fire)
- D. B or C (911 does work from cell phones...**for almost all coverage plans**)

(24) Does your lab have a Carcinogen Use Authorization (CUA)? The chemicals falling under this category show up on your chemical inventory with a red check mark. If your lab does have one or more, what are some important aspects to be aware of:

- A. read the SDS of the carcinogen before using
- B. be trained on its procedural use and safety protocol
- C. know how and when to clean-up any spills
- D. all of the above.

(25) The person ultimately responsible for your safety in the laboratory is:

- A. you
- B. others in the lab
- C. EH&S/Safety Services
- D. the Department Safety person

(26) Samples placed for storage in the department -20 or -80 freezers should be:

- A. labeled so you know what experiment it is
- B. identified with your lab room number
- C. left in the freezer forever, who knows when someone might need it?
- D. labeled with the date, contents, room #, your name, PI name, any hazards, and a disposal date.

(27) Which are true about our department cold rooms and freezers?

- A. they are Animal Science only, so we do not have to label our stuff
- B. walk-in cold rooms are for temporary storage only
- C. you can put your stuff wherever you can find a space
- D. the floor in front of a shelf is a good place for your stuff
- E. if an item is not properly labeled and stored, it is subject to being disposed of by the Department Safety Committee
- F. space is assigned in the -20s and -80s and you must store your items on your PIs assigned space
- G. B, E & F above

(28) The EAP (Emergency Action Plan) is required by Cal-Osha and contains the following:

- A. emergency escape procedures
- B. procedures to maintain critical operations during an emergency
- C. a departmental emergency contact list
- D. a system to notify lab members of an emergency
- E. procedures to account for all lab members after an evacuation
- F. all of the above

(29) You need to carry a chemical in the hallway, you could do one of the following things:
(circle all that apply)

- A. wear gloves on both hands and touch door handles as usual
- B. ask another lab member to open doors for me
- C. use a cart to transport the chemical
- D. if appropriate, have one hand gloved and the other ungloved to open doors

(30) You are in the middle of a lab experiment and need to use the restroom:

- A. just go to the restroom wearing your gloves and lab coat (because it's a pain to take them off)
- B. it's ok to wear my gloves, I can just throw them in the restroom trash
- C. remove ALL PPE before proceeding to the restroom

Some friendly reminders...

- "Wet" lab work must always be performed in a lab, on the lab side, even if the work is non-toxic. "Dry" lab work (computational) can be done on the office side or on the lab side.
- When outside the lab you should have at least one hand un-gloved. This is so you can have a hand free to touch doorknobs, elevator buttons, etc, with no worry of contamination from substances used in the lab. Even if the glove is clean, common etiquette demands that you only use glove-free hands for common surfaces.
- Lab coats and gloves should not be worn in the lunchroom or the restroom. You should remove these items when you leave the lab, and put them back on when you re-enter the lab. The only exception is if you are moving from one lab space to another on the lab side, you can wear your coat in the hallway.
- Cell phones and computer keyboards are glove-free zones - take off your gloves to use these (and other) devices, especially in common spaces!

Name (Print): _____

Signature: _____

Date: _____

PI/Lab: _____