



LABORATORY SAFETY GUIDELINES


40 SUGGESTIONS FOR A SAFER LAB




1. Have a written health, safety and environmental affairs (HS&E) policy statement.




3. Develop an HS&E orientation for all new employees and students.




5. Involve every employee and student in some aspect of the safety program and give each a specific responsibility.




2. Organize a departmental HS&E committee of employees, management, faculty, staff and students that will meet regularly.




4. Encourage employees and students to care about their health and safety and that of others.



6. Provide incentives to employees and students for safety performance.



7. Require all employees to read the appropriate safety manual and sign a statement that they agree to follow it.



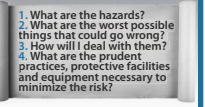
8. Conduct periodic, unannounced laboratory inspections to identify and correct hazardous conditions and unsafe practices.



9. Make learning how to be safe an integral and important part of science education, your work, and your life.



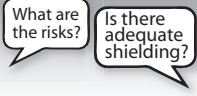
10. Schedule regular departmental safety meetings for all students and employees to discuss the results of inspections and safety issues.




11. Before doing anything, ask the four big questions.




12. Require that all accidents be reported, evaluated by the departmental safety committee, and discussed at departmental safety meetings.



13. Require every pre-lab/pre-experiment discussion to include consideration of the health and safety aspects.




14. Don't allow experiments to run unattended unless they are failsafe.




15. Forbid working alone in any laboratory and working without prior knowledge of a staff member.




16. Extend the safety program beyond the laboratory to the automobile and the home.




17. Allow only minimum amounts of flammable liquids in each laboratory.



18. Forbid smoking, eating and drinking in the laboratory.

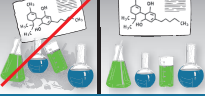


19. Do not allow food to be stored in chemical refrigerators.




(Drill cards available at LabSafety.org)


20. Develop plans and conduct drills for dealing with emergencies.




21. Require good housekeeping practices in all work areas.



22. Display a list of emergency phone numbers either on or immediately next to every phone.




23. Store acids and bases separately. Store fuels and oxidizers separately.




24. Maintain a chemical inventory to avoid purchasing unnecessary quantities of chemicals.




25. Use warning signs to designate particular hazards.




26. Develop specific work practices for individual experiments, such as those that should be conducted only in a ventilated hood.



27. Allocate a portion of the departmental budget to safety.




28. Require the use of appropriate eye protection at all times in laboratories and areas where chemicals are transported.




29. Provide adequate supplies of PPE: safety glasses, goggles, face shields, gloves, lab coats, and benchtop shields.



30. Provide fire extinguishers, safety showers, eye wash fountains, first aid kits, fire blankets and fume hoods in each lab and test monthly.




31. Provide guards on all vacuum pumps and secure all compressed gas cylinders.




32. Provide an appropriate supply of first aid equipment and instruction on its proper use.



33. Provide fireproof cabinets for storage of flammable chemicals.




34. Maintain a centrally located departmental safety library.



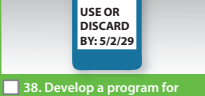
35. Remove all electrical connections from inside chemical refrigerators and require magnetic closures.




36. Require grounded plugs on all electrical equipment and install ground fault interrupters where appropriate.



37. Label all chemicals with the name of the material, the nature & degree of hazard, appropriate precautions, and the person responsible for it.



38. Develop a program for dating stored chemicals and for recertifying or discarding them after predetermined maximum periods of storage.



39. Develop a system for the legal, safe and ecologically acceptable disposal of chemical wastes.



40. Provide secure, adequately spaced, well-ventilated storage of chemicals.

Blue boxes: steps requiring minimal expense

Green boxes: steps requiring moderate expense



The Laboratory Safety Institute
LabSafety.org