

APPENDIX L

SCIENCE LABORATORY SAFETY/LIABILITY CHECKLIST

The safety program in the school and school district should be dedicated to preventing and minimizing injury to personnel, limiting the liability of schools and school districts and their personnel, and protecting and preserving the facilities and the environment.

The following checklist represents some of the main considerations that schools, school districts, and individuals should address in planning and implementing their science laboratory safety program.

1. The school or the school district must have a written plan (if the plan is for the school district, it should be written to include the schools involved) for, or exemption from, each of the following:
 - Chemical hygiene plan (CHP), *California Code of Regulations, Title 8, Section 5191* (required of all employers in workplaces in which there is laboratory use of hazardous chemicals; the CHP is to include safe operating procedures, use of protective equipment, employee information and training, provisions for medical consultations and examinations, and designation of a chemical hygiene officer)
 - Bloodborne pathogens exposure control plan, *California Code of Regulations, Title 8, Section 5193* (required of all employers with employees reasonably anticipated to have exposure to blood or other potentially infectious materials in the performance of their duties)
 - Hazard communication; material safety data sheet (MSDS), *California Code of Regulations, Title 8, Section 5194* (may be included in chemical hygiene plan noted above [see also Chapter 5, section E]; required of all employers in workplaces in which hazardous chemicals are used unless all exposed employees are under the direct supervision and regular observation of an individual with knowledge of physical and health hazards and emergency procedures and who conveys this knowledge to employees in terms of safe work practices. Labels and MSDSs received must be maintained and available to employees)
2. The school or school district has implemented a plan for the safe storage, use, and disposal of hazardous chemicals (*Education Code* Section 49411).
3. The implementation of the overall safety plan makes provisions at all levels for instruction and training, responsible supervision, and adequate and well-maintained facilities and equipment.
4. Safety equipment includes each of the following, as appropriate:
 - Fire extinguisher for classes A, B, and C fires
 - Dry sand or other provision for class D fires
 - Fire blanket
 - Splash-proof goggles and sterilizer
 - Eyewash or eyewash and facewash fountain; drench hose
 - Deluge shower
 - Chemical-spill kit
 - Fume hood
 - First-aid kit
5. Teachers are prepared to safely handle, use, and store science supplies and equipment as well as safety equipment. Documentation of staff training should be maintained on both school and school district sites.
6. A safety assessment is regularly made of the science classrooms/laboratories and auxiliary rooms (e.g., by using the "Safety Checklist for Science Instruction, Preparation, and Storage Areas," found in Appendix H)
7. Each science teacher consciously includes safety as a component in planning and conducting each lesson, demonstration, and activity.
8. Classrooms are inspected daily for irregularities or dangerous conditions, including, but not limited to, faulty equipment, improper ventilation, and missing or nonfunctional safety supplies.
9. Potential dangers (safety hazards, defective equipment, or unsafe conditions) that cannot be readily corrected within the department are reported immediately to the site administrator for necessary action.

10. Each class is provided with proper initial instruction in safety procedures, specific to the subject, which are reviewed regularly. The review includes the following:
- Use of safety equipment, devices, and materials
 - Proper laboratory preparation, attire, and attitude
 - Proper use of material and equipment
 - Disposal and clean-up procedures
11. Documentation files are maintained on the types of instruction given and the dates on which safety-related topics were demonstrated, conducted, or tested.
12. Student safety consent/contract forms, which attest to initial safety instruction and a knowledge of laboratory regulations and potential dangers, are signed by the student and a parent or guardian and retained by the teacher.
13. The school and school district fire and earthquake drills and emergency procedures include special provisions relating to science equipment, facilities, and materials. Procedures are included for contacting community resources (fire department, ambulance, paramedics, hospital, doctor).
14. A report is made of any injury, illness, or incident, including appropriate procedures for remediation.
15. Safety guidelines adopted by the school and school district are reviewed and updated on a regular basis.

By following the suggestions noted above, instructors, schools, school districts, and students can improve their ability to conduct laboratory activities safely and effectively. Failure to implement the procedures increases the relative degree of liability of school districts and individuals.