



Best Practices for Safety in the Classroom

1. Scope
 - a. This Best Practices is for general classrooms.
 - b. Best practices for Science laboratories, science classrooms, and chemical storerooms are found in the *Science Safety Handbook for California Public Schools* published by the California Department of Education.
 - c. Best practices for Art classrooms are found in *Safety Guide for Art Studios* published by United Educators.
 - 1) See also “Best Practices for Use of Kilns.”

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3. Regulations and Codes
 - a. CCR 8: California Code of Regulations, Title 8, Department of Industrial Relations.
 - 1) References are from the Division of Occupational Safety and Health (Cal/OSHA)
 - b. CBC: Uniform Building Code
 - c. EC: California Education Code

- d. IFC: International Fire Code
 - e. NFPA: National Fire Protection Agency
4. Animals
- a. Refer to “Best Practices for Animals in the Classroom,”
 - 1) “Animals in the Classroom Safety Information Sheet.”
 - b. Refer to “Best Practices for Service and Therapy Animals.”
5. Electrical Safety
- a. Maintain a three (3) foot clearance around all electrical panels. (CCR 8, section 2340.16)
 - b. Keep cables, cords, and plugs clean and in good repair.
 - c. Extension cords are for temporary use only, and are not substitutes for permanent wiring. (IFC 605.5)
 - 1) Extension cords are to put away at the end of use or the end of the day.
 - d. Extension cords (IFC 605.5) are not to be:
 - 1) Affixed to structures;
 - 2) Extend through walls, ceilings, and/or floors;
 - 3) Placed under doors or floor coverings;
 - 4) Subjected to physical or environmental damage.
 - e. Extension cords are to be grounded (IFC 605.5.4) and 18 gauge or larger.
 - 1) Extension cords for home use are not to be used.
 - f. Multi-outlet strips are to be of the polarized or grounded type, have overcurrent protection, and are to be listed.
 - g. Use multi-outlet strips instead of extension cords and do not place them across the floors or working areas that are open to use. Multi-outlet plugs are to be plugged directly into a permanently installed wall outlet (IFC 605.5.1);
 - 1) Never plug a multi-outlet strip into another multi-outlet strip.
 - h. Extension cords and multi-outlet strips that are temporarily placed across aisles and walkways are to be secured in cord protectors.
 - i. Each plug is to be plugged directly into a wall socket or multi-outlet strip. Multi-plug adapters are not to be used in wall sockets.
6. Fire Safety
- a. No open flames in general classrooms

- 1) Exceptions: gas stoves in special education classrooms and home economics classrooms
 - b. Fire extinguishers are to be maintained in a fully charged and operable condition, and kept in their designated places at all times when they are not being used. (NFPA 10, 1-6.2)
 - c. Fire extinguishers are to be conspicuously located where they will be readily accessible and immediately available in the event of a fire. (NFPA 10, 1-6.3)
 - d. Fire extinguishers are to be mounted along the evacuation path normal paths of travel, including exits from areas. (NFPA 10, 1-6.3)
 - e. Fire extinguishers are to be mounted no less than four (4) inches from the floor and no higher than five (5) feet to the top of the extinguisher.
 - f. Cabinets housing fire extinguishers are to remain unlocked, unless the fire extinguisher would be subject to malicious use. (NFPA 10, 1-6.5)
 - g. Fire extinguishers are not to be blocked or obstructed from view (NFPA 10, 1-6.6)
 - h. Flammable liquids are to be stored in approved flammable liquid storage cabinets. Non-combustible liquids should be stored in secondary containment to minimize spills.
 - 1) This includes cans of spray paint,
 - 2) Exception: small amounts (one (1) gallon or less) may be stored in a vented custodial room or custodial closet.
7. Wall and Window coverings
- a. All wall and window coverings are to comply with codes and regulations adopted by the local fire protection jurisdiction. Questions regarding the codes and regulations are to be referred to the local fire protection jurisdiction.
 - b. Artwork and teaching materials used for decorations must not cover more than ~~25%~~ 50% of available wall space. (CFC 807.5.2.3) Combustible materials should be distributed in a manner that will not create a continuous fuel source for a fire.
 - c. Exit doors are to be readily distinguishable from the adjacent construction and are to be easily recognizable as exit doors. (CBC 1008.1)
 - 1) Exit doors are not to be concealed by curtains, drapes, decorations, and similar materials.
 - 2) Mirrors or similar reflecting materials are not to be used on exit doors.
 - 3) Windows in doors are to remain uncovered.
 - d. When arranging artwork and teaching materials over shoulder level, proper ladder safety should be observed.
 - e. Ceilings should be kept free of decorations at all times. No decorations are to be attached directly to the ceiling.

- f. Hanging artwork and teaching materials
 - 1) Hanging artwork and teaching materials are to be arranged to maintain visibility in the classroom and to maintain clear evacuation aisles.
 - 2) Hanging artwork and teaching materials are to be at least 24 inches apart;
 - 3) Hanging artwork and teaching materials are to be at least 80 inches above the floor over aisles and walkways, but when hung over desks and tables, may be lowered to 30 inches above the desks and tables;
 - 4) Hanging artwork and teaching materials may be hung from cables or wires suspended wall-to-wall;
 - 5) Hanging artwork and teaching materials may be hung from suspended ceiling grids;
 - a. Consult with the maintenance department to ensure the grid is able to support the hanging artwork and teaching materials,
 - 6) Items are not to be hung from light fixtures.
 - g. Combustible decorations, including curtains, should not be hung on windows.
 - 1) Window coverings are to be certified flame retardant by the manufacturer.
 - h. Window coverings are to remain open when students are in the classroom:
 - 1) Exception: School lockdown because of a dangerous intruder.
8. Non-structural Earthquake safety
- a. See also “Guide and Checklist for Non-Structural Earthquake Hazards in California Schools”
 - b. Wall-mounted cabinets
 - 1) Secure single units to wall studs or blocking with screws.
 - 2) Secure multiple units with an angle clip. Use sheet metal screws to clip each unit to the angle clip. Fasten the angle clip to wall studs or blocking with screws.
 - c. Wall-mounted TV or video monitors and speakers
 - 1) Secure each TV or monitor to a mounting bracket with adjustable strap, wrapping it around the TV or monitor,
 - 2) Locate TV or monitor mounting brackets away from desks, doors, walkways, or exit ways,
 - 3) Follow the recommendations provided by the manufacturer for the mounting bracket for TVs, monitors, or speakers.
 - 4) Periodically inspect the mounting plate for the mounting bracket to ensure it is properly secured to the wall.
 - d. File cabinets

- 1) When the cabinet depth or width is less than one-quarter the height, the cabinet should be secured to an adjacent wall, or fastened to adjacent cabinets
- 2) Heavier contents should always be stored in lower drawers of a file cabinet
- 3) Locate cabinets away from exits and hallways
- e. Book cases
 - 1) When the book case depth or width is less than one-quarter the height, the bookcase should be secured to the floor, an adjacent wall, or fastened back to back to adjacent bookcases
 - 2) Heavier contents should always be stored in lower shelves of a bookcase
 - 3) Locate bookcases away from exits and hallways
- f. Display cases
 - 1) Secure the display case to the floor or a wall
 - a. Use angle brackets if needed
 - 2) Secure contents to shelves using hook-and-loop material, putty, or similar devices
- g. Equipment carts
 - 1) When the cart depth or width is less than one-quarter the height, the cart should be secured to an adjacent wall, using a cable or chain.
 - 2) Secure equipment to the cart with adjustable straps.
 - 3) Carts should have locking wheels or casters
 - 4) Locate carts away from exits and hallways
- h. Aquariums and terrariums
 - 1) Fasten angle clips to the tabletop against each side of the aquarium or terrarium,
 - 2) Locate aquariums and terrariums away from exits and hallways.
9. Overhead storage
 - a. Use a ladder when reaching over shoulder level. Never stand on a chair and/or table to reach high items.
 - 1) Refer to Best Practices for Ladders
 - b. Only store light items high. Heavier items are to be stored in lower locations.
 - c. Stored items are to be at least 24 inches below the ceiling in rooms without fire sprinklers.
 - d. Stored items are to be at least 18 inches below the ceiling in rooms with fire sprinklers.
 - e. Maintain at least 18 inches around light fixtures.

10. Housekeeping

- a. Tables and desks should be wiped, and floors swept or vacuumed immediately after an activity involving food in a classroom.
- b. Dispose of all unused items. Removal of unnecessary items will reduce the need for storage.
- c. Always keep aisles and walkways clear. Keep storage off of floors, out of hallways, aisles, and sidewalks.

11. Evacuation

- a. Evacuation maps should be posted with assembly and head count areas clearly marked.
- b. Aisle width
 - 1) Perimeter aisles are to be at least 36 inches wide,
 - 2) All other aisles should be at least 24 inches wide,
- c. Aisles are to end at a cross aisle or door. Aisles are not to dead end in the direction of the exit.
- d. Exit doors are to be openable from the inside without the use of a key or any special knowledge or effort. (IFC 1010.1.9)
 - 1) Door handles, latches, locks, and other operating devices on doors shall not require tight grasping, tight pinching or twisting of the wrist to operate. . (IFC 1010.1.9.1)
 - 2) The force for pushing or pulling open interior swinging exit doors shall not exceed 5 pounds. The door shall swing to a full-open position when subjected to a 15-pound force. (CBC 1008.1.3)

12. Indoor Air Quality

- a. See also “Indoor Air Quality, A Guide for Educators” by California Department of Education
- b. The heating, ventilation, and air conditioning (HVAC) system is to be operated continuously during working hours (Title 8, section 5142) except:
 - 1) During scheduled maintenance and emergency repairs,
 - 2) During periods not exceeding a total of 90 hours per calendar year when a serving electric utility requests, by contractual agreement, its customers to decrease electrical power demand,
 - 3) During periods for which the district can demonstrate that the quantity of outdoor air supplied by non-mechanical means meets the outdoor air supply rate required by the State Building Standards Code, Title 24, Part 2.
- c. Use of space heaters can be eliminated by a properly functioning HVAC system

- d. When exterior water intrusion, leakage from interior water sources, or other uncontrolled accumulation of water occurs, the intrusion, leakage, or accumulation is to be corrected. (Title 8, section 3362 (g))
 - e. Once water intrusion, leakage, or accumulation is corrected, stained or otherwise damaged building materials are to be replaced.
 - f. Housekeeping procedures
 - 1) Schedule the use of polluting products early on weekends or vacation periods to allow fumes to dissipate before the building is reoccupied. Use fans during application.
 - 2) Use low-emission cleaning products when available,
 - 3) Avoid aerosols, including air-fresheners,
 - 4) Avoid any product with a strong odor, including plug-in air fresheners
 - 5) Use plain water or soap and water as cleaning agents, to minimize odors
 - 6) Remove dust with vacuum cleaners and/or damp cloths. Do not use feather dusters or spray dust collectors
 - 7) Avoid moisture problems with prompt cleanup of spills and additional ventilation
 - g. Classroom pets are not recommended. Animal and bird dander, animal waste products, contaminated bedding, water, or habitat, food debris, and animal odors have been associated with classroom indoor air quality concerns and are suspected of being potential asthma triggers among sensitive students and staff.
 - h. School employees should be encouraged to minimize the use of perfume, cologne, scented aftershave, perfumed soaps, or hairspray. Students in the higher grade levels should receive similar guidance
 - i. Rugs and furniture may be sources of dust, VOCs, and allergens. Teachers should not bring items that may present indoor air quality problems into classrooms or offices. Stuffed furniture and toys have contributed to the spread of head lice in schools.
13. Integrated Pest Management
- a. Refer to the District IPM policy for pesticide use.
 - b. Pest infestations are to be reported to the school custodian or district maintenance department.
 - 1) No chemicals or other pest management products should be brought from home;
 - 2) The school district is required to annually notify all staff and parents or guardians of students regarding pesticide applications. (EC, section 48980.3);
 - 3) The school district is to post a warning sign at each area of the school site where pesticides are applied 24 hours prior to the application. (EC, section 17612 (d));
 - 4) The school district is to keep records of all pesticide use. (EC, section 17611).

- c. Control pest infestations through good housekeeping and repair. Good housekeeping is essential for effective pest management.
- d. Food in classrooms attracts pests.
 - 1) Food should be limited to specifically designated areas whenever possible;
 - 2) No open food storage or preparation in areas not intended and/or designated for that use;
 - 3) Careful consideration should be given before introducing food that is not part of the educational program into the classroom.
 - a. Exemption: special education classrooms and home economics classrooms;
 - b. Classroom treats should be eaten outdoors whenever possible;
 - c. Tables and desks should be wiped, and floors swept or vacuumed immediately after an activity involving food in a classroom.
 - d. No overnight storage of food in classrooms;