

SAFETY NOTES

*These notes apply to all classrooms, office areas, workrooms, storerooms, shops, and all areas on campus
Please call or email RESIG's Environmental Health and Safety Department if you have any questions*

Will Davis, CIEC, REPA, REP, EP
Director of Env. Risk Services
(707) 836-0779 Ext. 107
wdavis@resig.org

Kelly L. Cook, CSMS, CPDM, CEAS
EHS Program Supervisor
(707) 836-0779 Ext. 108
kcook@resig.org

Christine Dektor, CPSI, CSRM, CEMS
EHS Specialist II
(707) 836-0779 Ext. 110
cdektor@resig.org

EARTHQUAKE SAFETY

High Storage: All areas should be reviewed for hazardous conditions due to excessive, high storage of heavy items, especially when near an exit or near students or staff. Check spaces on top of cabinets, add lips or wires along the tops of all cabinets and across the front of all shelves to prevent items from flying off in the event of an earthquake. Limit high storage of heavy items.

Securing Cabinet Doors: All cabinet doors should be equipped with some type of device (other than magnets) to prevent them from opening in an earthquake. Evidence from past earthquakes indicates that cabinet doors open and dump their contents, many times directly in front of main exits. It is also recommended that students' desks not be located directly in front of cabinets.

Unsecured Furniture and Other Items:

- Cubbies, four drawer files, metal cabinets, bookshelves, as well as aquariums, should be located away from main exits if possible. Four and five drawer files, cabinets and other shelves should not be located directly behind a teacher's or student's desk. These routinely fall over in an earthquake and may block classroom exits. It is best to locate files and other cabinets in corners where they are least likely to cause an injury or block an exit. Ensure all items are securely fastened to a wall or other sturdy structure.
- "L" brackets or other method should be used for **bookshelves**. **Free-standing shelves** may be bolted back-to-back or in a "T" shape to create a more stable base. **Multiple drawer file cabinets** can also be bolted together. Make sure drawers latch securely when closed.
- Strap to the wall or attach a lip of molding to the counter at the base of an **aquarium**. Do not position students' desks close to aquariums.
- Science **specimens** should be secured from falling off shelves during an earthquake and should not have Formaldehyde.
- Do not store **trophies** in high locations if possible. If no other option is available, secure with Plexiglas rails or museum putty. Do not store trophies above students' desks.
- **TVs** on carts should always be secured with a sturdy strap or other appropriate method.
- Use the [CalOES Guide and Checklist for Nonstructural Earthquake Hazards in CA Schools](#) as a guide. Contact RESIG for mitigation supplies.

FIRE SAFETY

Clear Hallways and Exits: Hallways, breezeways and other evacuation routes should not be used to store excess furniture and other items. All doors that exit to the outside of the building **MUST** always be kept clear (per fire code). All exits to the outside must always be clear and available as an evacuation route. Throw bolts on any classroom doors (which are not recommended) must **ALWAYS** be open during school hours. Keep exits and routes clear at all times. [Access to Exits](#)

Fire Extinguishers: Fire extinguishers should be securely hung near the exit at approximately waist height. Fire extinguisher locations should be clearly marked. Fire extinguishers must be recharged and serviced every year. Extinguishers must be visually inspected monthly by staff and the inspection documented. All staff must be trained annually in the proper use of a fire extinguisher. Make sure that all fire extinguishers are properly mounted, do not have items hanging from them and are not blocked. [Portable Fire Extinguishers](#)

Clear Room Numbers: All exterior doors (classrooms, offices, custodial rooms, etc.) should be labeled both inside and outside, above the door or to the side to enable rooms to be located quickly.

Combustible Fuel Load in Classrooms: The amount of paper coverage, such as decorations and student work, in classrooms should be limited **to no more than 20%** of the total wall space in classrooms that do not have approved automatic sprinkler systems. Paper coverage **should not exceed 50%** of the total wall space in classrooms that are equipped with approved automatic sprinkler systems. Adding layers of paper, as in bulletin boards displaying artwork, increases the fire risk. Use fire resistant materials whenever possible. Keep classrooms clear of unnecessary clutter and debris as much as possible. Christmas trees must be treated with fire retardant. [State Fire Marshal: Fuel Load on Classroom Walls](#)

Household Electrical Appliances: Due to the potential fire hazard, coffee makers, microwave ovens, refrigerators, etc. are not recommended for use in classrooms.

Plastic Gasoline Cans: Only approved containers shall be used for storage and handling of flammable and combustible liquids such as gasoline. An *Approved Container* is a safety can of not more than 5-gallons capacity, approved by a nationally recognized testing laboratory such as Underwriter's Laboratories (UL) or Factory Mutual (FM), having a flash-arresting screen, spring-closing lid and spout cover and so designed that it will safely relieve internal pressure when subjected to fire exposure. If the safety cans are used to transport flammable or combustible liquids over the road, they must also be approved by the Department of Transportation. [Approved Containers for Flammable and Combustible Liquids](#)

ELECTRICAL SAFETY

Electrical Outlets: All electrical outlets within 6 ft. of a water source, such as a sink, must be a ground-fault circuit interrupter (GFCI) outlet to protect people from electrocution.

Extension Cords, Multiplug Adaptors, Power Strips: [Extension cords](#) are to be used ONLY as a temporary power source and are not to be used to permanently hook up a computer, radio, or other appliance. Multiplug adapters are approved for use only if they are equipped with a breaker (light). Long cords to equipment should be unplugged and rolled up when not in immediate use. Cords should be routed away from traffic paths. If it is not possible to re-route a cord out of the traffic path, a tread guard may be used to prevent a tripping hazard, however it is not ideal. Do not run cords under carpets as this will damage the cord if it is walked on.

Hanging Artwork in the Classroom: Artwork and other decorative materials should not be hung from light fixtures. There are hazards associated with fire as well as electrical shock. Artwork and other types of decorative materials may be hung from suspended wires. Ensure wires are well above head level.

Blocked Electrical Panels: Sufficient access to electrical panels must be always maintained. A minimum of 36" clearance is required. [Work Space About Electrical Equipment](#)

Storing Flammable Materials: Flammable and combustible liquids must be stored in an approved container or flammable materials cabinet.

CHEMICAL SAFETY

Cleaning Products in Classrooms: During inspections, a variety of hazardous materials are found in classrooms, often in easily accessible locations, such as under sinks. Any products with the warning “Keep Out of Reach of Children” should be kept out of classrooms or be locked in a cabinet that is not accessible to students. NOTE: Bleach and ammonia (including powdered cleansers like Comet and liquid glass cleaners like Windex) should never be stored or used together. When mixed, bleach and ammonia create chlorine gas which may cause permanent lung damage or death. [Healthy Cleaning & Asthma-Safer Schools](#)

Staying Safe With Chemicals: [Cal/OSHA Hazard Communication](#), [Chemical Management for School Admin](#)

- School sites must have copies of **Safety Data Sheets (SDS)** for all hazardous materials used on site. These should be kept in a central location. Copies should also be kept in areas where chemicals are stored, such as custodial closets and science prep rooms. All affected employees should receive training in how to read an SDS and proper disposal techniques.
- EEs should not bring chemicals or cleaning products from home and may only use approved products.
- All **science prep rooms** should have an up-to-date inventory and the chemicals should be properly stored according to reactivity. All chemicals and by-products should be disposed of properly; employees should be instructed in proper disposal techniques. Spill kits should be readily available.
- Appropriate **personal protective equipment** such as splash-proof goggles, face shields, chemical-resistant aprons, etc. should be used when handling corrosive chemicals.
- [Emergency eyewash and shower equipment](#) must be readily available where corrosive chemicals are present and in all work areas where, during routine work or foreseeable emergencies, the eyes or body of an employee may come into contact with a substance that causes corrosion, severe irritation, or permanent tissue damage. Water hoses, sink faucets, or regular showers are not acceptable substitutes.

Proper Equipment for Custodians and Maintenance Personnel: Custodian and maintenance personnel should be appropriately attired for the job tasks they are performing, e.g., protective footwear, long pants, personal protective equipment, etc. Cal/OSHA Title 8, GISO, CCR Sections [3382](#), [3383](#), and [3385](#).

Compressed Air Safety: Compressed air can be dangerous if used improperly. Never direct a stream of compressed air towards your body or the body of another person. Do not use compressed air to blow dust from clothing or hair. Compressed air forced into the body can cause an *air embolism* (air bubbles in the bloodstream) resulting in organ damage, heart attack, or stroke. [Use of Compressed Air](#)

PLANNING FOR EMPLOYEE SAFETY

Healthy Schools Act: The Healthy Schools Act (HSA) established right-to-know procedures for pesticide use in CA public schools and requires using the least-toxic pest management methods. The HSA requires that schools:

- Identify an Integrated Pest Management (IPM) coordinator
- Develop an IPM plan
- Provide annual written notification of pesticide applications to parents, guardians, and staff
- Establish an individual notification registry
- Send individual notices of planned pesticide applications 72 hours prior to application
- Post warning signs 24 hours before pesticide application and leave for 72 hours post application
- Not use prohibited pesticides
- Keep records of pesticide use (4 years)
- Report pesticide use to the California Department of Pesticide Regulation annually

- Provide annual training to personnel working in a school or daycare center that apply pesticides, including the use of disinfecting sprays and Clorox wipes. [Disinfectants and Sanitizers in Schools](#)

Renovation, Repair and Painting Rule: U.S. EPA's Renovation, Repair, and Painting Rule (RRP) requires anyone who does renovation, repair work, or painting preparation work in a school built prior to 1978, where children under the age of six are present, be a Certified Renovator. [EPA Renovation, Repair, and Painting Program](#)

Asbestos Hazard Emergency Response Act: U.S. EPA's Asbestos Hazard Emergency Response Act (AHERA; [EPA Asbestos and School Buildings](#)) requires public school districts to:

- Identify an AHERA designated person
- Regularly inspect their schools for asbestos-containing materials and develop a management plan
- Provide 2 hours of annual training to all custodial and maintenance personnel, and 16 hours of training to staff that disturb small amounts of asbestos-containing materials (e.g., asbestos-containing floor tiles)

COVID-19 Prevention Plan: Districts must maintain a COVID-19 Prevention Plan. The plan can be included as a workplace hazard in the District's written [Injury and Illness Prevention Program](#) or in a separate document. [COVID-19 Prevention Non-Emergency Regulations](#)

Emergency Action Plan: Cal/OSHA requires that every employer must develop and implement a written [Emergency Action Plan](#) (EAP). The EAP Standard requires employers to develop a plan to respond to emergencies, including evacuating and accounting for EEs, providing emergency medical assistance, and reporting emergencies to community agencies. The EAP must be available for EEs to review.

Hazardous Materials Business Plan: The [Hazardous Materials Business Plan](#) (HMBP) is intended to prevent or minimize damage to public health and the environment by a release of hazardous materials. Districts must implement an HMBP if hazardous materials are handled or stored onsite in quantities equal or greater than the following: 550 pounds of a hazardous solid; 55 gallons of a hazardous liquid; 200 cubic feet of a hazardous gas at standard temperature and pressure.

Workplace Violence Prevention Plan: California Labor Code Section 6401.9 requires employers to have a written [Workplace Violence Prevention Plan](#) (WVPP) and provide initial and annual training to employees in the WVPP. The training must include reporting workplace violence incidents or concerns to the employer or law enforcement, workplace violence hazards specific to an employee's job, corrective measures, and strategies to avoid physical harm. Under 6401.9, workplace violence is defined broadly as the threat, or actual use, of physical force against an employee that results in, or presents a high likelihood, of injury, psychological trauma, or stress, regardless of whether an employee sustains a physical injury. Cal/OSHA has developed a fillable [template](#) applicable to schools.

Mandatory Staff Training: School employees are required to abide by training requirements for Injury and Illness Prevention, Safe Work Practices, and other trainings set by State and Federal agencies. Please refer to RESIG's [Training Matrix](#) for required training topics.

STUDENT SAFETY

Playground structures and surfacing: RESIG provides playground safety **inspections** for member districts. RESIG can also evaluate plans for new structures for age appropriateness and ADA compliance prior to installation. All playground equipment should comply with the CPSC Guidelines and the ASTM Standards OR a plan should be in place to correct deficiencies within a reasonable timeline. Equipment should be checked daily for broken or missing parts. Regular maintenance schedules should be developed for each playground and all maintenance activities should be documented. Loose fill **surfacing** material should be maintained at a minimum of 12". Surfacing should be raked often and all foreign materials (rocks, glass, feces, etc.) removed. Proper **supervision** should be provided during regular school hours. Contact RESIG for additional information.

Soccer Goals: Heavy metal soccer goals should be secured in place during use. During off-season, they should be chained to a fence to prevent being moved. Unsecured soccer goals may tip and cause serious injuries or death.

Hazardous Arts and Crafts Material: Rubber cement, solvent based “White Out”, spray adhesives and other products have been identified by the California OEHHA as not being appropriate for use at the TK-6 level. The [Art Hazards List](#) is available at on the [OEHHA](#) website. The list should be reviewed annually by anyone purchasing school supplies, and any listed items found in classrooms should be removed. While intended for use at the TK-6 level, the list may also be applied to the upper grades to protect the health and safety of all students and staff. Products labeled as AP Non-toxic, conforming to ASTM D4236 are a preferred choice.

Lead and “Lead Safe” Glazes: All ceramic glazes and underglazes that are labeled as containing lead or fritted lead should be removed from schools and disposed of as hazardous waste. Products labeled “lead safe” should not be used by students, either. Only products labeled “NON-TOXIC” are considered safe for use in schools.

In-Wall Lunch Tables: In-wall lunch tables should be raised and lowered carefully to prevent injury to staff. When returning the tables or benches to their in-wall positions, ensure that the pins are engaged, and security toggles activated. Improper storage of these units has resulted in failure of the securing hardware causing the table or bench to fall out of position and severely injuring and even killing students.