School Safety Regulations and Guidelines – Quick Tips

Keeping our schools safe is a high priority for everyone. We must keep in mind that school safety isn’t just about violence control. Schools share many of the same hazards commonly seen in industries, and they have a few unique hazards as well. With laboratories, food-processing areas and other specialized facilities, schools are like small communities and are loaded with potential safety and health hazards.

What Are the Requirements for School Safety?

Schools are like all other industries in that they have safety and health regulations and guidelines they must follow. However, most are decided at the state and local levels. For the most part, states have adopted Occupational Safety and Health Administration (OSHA) regulations, while modifying certain requirements to make them more applicable to schools. Typically, the agency responsible for public-sector employee safety in your state is also responsible for school safety. For information on exactly what regulating agency is responsible for school safety in your state or school district, contact the U.S. Department of Education.

School Safety and Security

Security incidents are usually unpredictable, evolve quickly and all too often turn tragic. The Department of Homeland Security (DHS), along with many other groups, has redoubled its efforts and is poised to continue enhancing school safety and security. Visit their School Safety and Security page for DHS documents, resources and tools related to school safety and security.

First Aid Concerns

All schools need basic first aid equipment. Bandages, antiseptic wipes, cold packs and hot packs are frequently needed items. Items such as tweezers, scissors and disposable gloves also come in handy.

Many schools usually have one large first aid kit in the school’s office or nurse’s office. However, some classes such as chemistry, art, industrial technology and family and consumer sciences should have their own kits readily available. The kits in these classrooms should contain the items needed to deal

with specific hazards in the particular classroom. Industrial technology classes, for example, have additional hazards such as flying debris and welding spatter. Therefore, these kits should also contain burn relief products, eye pads and eye-irrigating solutions. See Quick Tips #219, First Aid Kit: Components, Use, Inspection and Placement, for more guidance on what should be in a first aid kit and where the kit should be placed.

Emergency Preparedness Concerns

Depending on your state or school district's regulations and guidelines, the details might differ, but the basic elements of an emergency preparedness plan are the same. These elements include:

- A written emergency program to ensure student, faculty, staff and visitor safety during and after an emergency
- An alarm system
- Evacuation plans
- Emergency drills

To develop a successful emergency preparedness plan, follow these basic steps:

- Identify the types of emergencies you might encounter – weather related, non-weather related, fires and medical emergencies.
- Determine how to respond to the emergency. All potential emergencies have different safety and health concerns, and a response must be customized. For each emergency, the following actions must be considered:
    - How will you become aware of the emergency?
    - How will you provide warning?
    - How will you evacuate if necessary?
    - What steps are necessary to implement emergency response procedures?
    - What steps are necessary to return to normal activities?
- Assign responsibility. Normally, faculty are responsible for ensuring that their classes respond safely and properly to an emergency. However, there also are other responsibilities, including maintaining documentation on your emergency preparedness plan. The emergency program should be evaluated and updated on a regular basis. Also, a designated person should be charged with training all faculty and supporting staff when the program is developed, when there is a change, and at least once a year as a refresher course.
- Finally, drills – scheduled and unscheduled – can help determine preparedness. Drills also help to calm fear in case of a real emergency. When conducting drills, it's a good idea to have a person or a group of people monitoring the situation to see how well everything operates. For monitoring evacuations, a simple stopwatch is a good way to determine how quickly and efficiently people can evacuate a building. But before conducting drills, notify the fire department, police and neighbors so you don't cause alarm.

Developing an emergency preparedness plan takes a lot of planning. Many times, the plan for the school must also work with the plan already set up with the city. There are programs available that can assist you in developing an emergency preparedness plan. See Quick Tips #108 Employee Emergency and Fire Prevention Plans for more information on this topic.

Pedestrian Traffic Concerns

School hallways are extremely busy places. Between classes and even during them, these areas are filled with students, faculty and staff. In order to comply with applicable school safety regulations, a few issues need to be addressed – means of egress, signage and emergency lighting.

According to 29 Code of Federal Regulations (CFR) 1910.35, a means of egress is a path from any point in a building to a public way. The means of egress must be an unobstructed path. Exit doors cannot be locked, and obstructions (backpacks, gym bags, etc.) must not sit in hallways. There must be a sufficient number of exits. The discharge from those exits must lead to a safe, public area that is large enough to handle the anticipated load. The OSHA standard details what is required for exits based on occupant load and building design. However, checking your local regulations and guidelines for any additional requirements is suggested.

To help ensure students, faculty, and staff are familiar with the closest exit and the appropriate path to the exit, posting evacuation plan maps showing the nearest exits and paths to them is suggested. Exit signs direct the flow of people in case of an emergency. Doors that look like they could be exits but are not exits need to be marked with their stated purpose, i.e., “Closet” or “Not an Exit,” so they are not mistaken as exits. Exit signs must also be illuminated by a reliable light source, giving off no less than five foot-candles; the word EXIT must be written in letters at least six inches high with brush strokes at least one inch wide; and the exit sign must not blend into its background. It should be a color and a shape that makes it readily visible. Always check with the Authority Having Jurisdiction (AHJ) to determine specific exit sign requirements that may apply.

In case of a power outage, automatic illumination (emergency lighting) for a minimum of 90-minutes may be required. The National Fire Protection Association (NFPA) 101, Life Safety Code, describes exactly what is required for emergency lighting. When required, a minimum of one foot-candle is required at the light, and a minimum of one-tenth of a foot-candle is required along the path of egress at floor level. Not all buildings and areas require emergency lighting. Refer to NFPA 101 and your AHJ to determine whether your school needs emergency lighting.

See Quick Tips #265: Emergency Lighting and Exit Sign Requirements for more information.

Indoor Air Quality (IAQ)

Indoor air quality (IAQ) is a growing concern for newer airtight buildings and buildings that have poor or inadequate ventilation. There are two basic illnesses associated with IAQ problems – sick building syndrome (SBS) and building-related illness.

Sick building syndrome is a physical reaction to multiple low-level contaminants. The contaminants might be chemical, biological or physical in nature. The symptoms generally include nausea, headache, fatigue or eye irritation. SBS symptoms usually disappear when the person leaves the building for a prolonged period of time, such as over the weekend, but return when the person returns.

Building-related illnesses differ from SBS in that they are caused by one contaminant. An example of building-related illness is legionnaires’ disease – a

severe form of pneumonia caused by the legionella bacteria primarily spread through aerosolized water droplets found in HVAC systems of buildings.

Poor building ventilation or new building materials are usually the cause of IAQ problems. To avoid IAQ problems, properly maintaining ventilation systems is key. Take a closer look at potential problem areas and identify potential contaminants and stressors to help diagnose IAQ problems. Once identified, they can be eliminated one by one. Often, the activities in a laboratory or new carpeting or furniture can be the culprit.

See Quick Tips #230: Indoor Air Quality Standards for more information.

Janitorial Concerns

Janitorial closets and supply cabinets accumulate various chemicals and cleaning supplies. The two main safety concerns with janitorial chemicals are proper storage and maintaining compliance with the Hazard Communication standard.

To determine what type of storage container you may need, you must first understand the OSHA definition of flammable liquids. A flammable liquid is any liquid with a flashpoint lower than 199.4º F. Flammable liquids are further divided into four different categories dependent upon their exact flashpoint and boiling point. This helps determine the amount of liquid you can have before requiring a flammable safety cabinet. The OSHA standard that specifically deals with this topic is 29 CFR 1910.106. However, always check with your AHJ or insurance carrier for rules that may be more stringent. See Quick Tips #179: Flammable Liquids Storage and Handling for more information on this topic.

The purpose of the Hazard Communication standard (29 CFR 1910.1200) is to ensure that chemical hazards in the workplace are identified and evaluated. In schools, as in industries, the main areas of concern are ensuring proper chemical labeling, maintaining and making available current safety data sheets (SDS) and conducting employee training when needed.

For more information on hazard communication, see Quick Tips #374 Globally Harmonized System (GHS).

Subject-Specific Requirements

Each classroom and subject may have its own safety and health requirements and guidelines. Each classroom needs a hazard assessment based on its activities. Although the following suggestions mirror OSHA requirements, checking with your AHJ to determine whether more stringent requirements apply is suggested.

Art and Science

Art and science classrooms require proper eye protection due to the potential for exposure to both non-splash and splash hazards. Proper ventilation (fume hoods) may also be required due to the potential exposure to toxic fumes and vapors. If the fumes cannot be controlled through ventilation, respirators may be required. Spill cleanup kits are also suggested. Proper personal protective equipment (PPE)— gloves and protective clothing — may also be in order. Due to the possibility of chemical exposure, emergency eye wash stations and safety showers should be considered.

Industrial Technology

PPE is needed for many processes in industrial technology classrooms. Eye protection is needed to guard against projectiles created through drilling, lathing, sanding or other mechanical processes. Cut-resistant gloves should be worn to protect hands from sharp, manually propelled blades. Machine guards are necessary when working with moving machinery due to point-of-operation hazards, in-going nip points, rotating parts, flying chips and sparks. Welders should wear proper welding goggles, welding shields, welding gloves, welding aprons and spats.

Orchestra and Band

The main concern with band practices is hearing protection because decibel (dB) levels can exceed OSHA-recommended limits. The most concern is for students who have instruments directed near their heads, such as the students sitting in front of trumpets or trombones. Earplugs can reduce sound levels without distortion so that the true sounds around them will not be affected.

Family and Consumer Sciences / Education

Family and consumer sciences/education classrooms mirror many of the hazards found at home in the kitchen. Burns and cuts are even more likely because of distractions from other students. Crowding also becomes an issue when students work with others because someone might push or bump another classmate, leading to a serious accident.

Commonly Asked Questions

Q: What type of eye protection is appropriate in a classroom laboratory?

A: The best choice is indirect-vent, non-padded goggles. Indirect-vented goggles protect students’ eyes from chemical splash. They must be non-padded because the padding, if saturated with chemicals, can cause serious facial burns.

Q: How do I set up an emergency preparedness plan?

A: First, define what emergencies you might encounter. Then, detail a plan and what will need to be done during each specific emergency.

Q: Whom do I contact to find out who my regulating agency is?

A: Contact the U.S. Department of Education.

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