



Lessons Learned

The Lawsuit

An ASCIP member was sued by a student who was injured during a class science experiment. While performing an experiment on the Rock Cycle by melting Starburst candy, another student accidentally knocked the tray off the hotplate, spilling the molten candy onto the student's hands. The lawsuit alleged that the District was negligent in supervising the student during the experiment and failed to provide appropriate personal protective equipment (PPE).

The Demand: \$250,000

The potential liability in this claim could have been reduced had the District provided closer supervision and mandated safety gloves for the experiment. The tray holding the molten candy was made of foil and not attached to the hot plate. This type of accident would be foreseeable and avoidable by having the teacher demonstrate the experiment.

Similar Lawsuits

A: While conducting an experiment with chemical (Biurets), the chemical splashed on student's forehead, dripped on to his right eyelid, and in his eye. Student was wearing safety glasses, not goggles.

B: While performing an experiment making smoke bombs, the student ignited the substances, and it blew upwards towards her face and hair. Students were not using safety goggles or gloves. The student sustained burns to hand, right side of face.

Science Laboratory Safety

To further protect the safety of staff and students as well as safeguard the District from potential lawsuits, ASCIP recommends the following:

1. Implement safe practices

- Safe practices are essential in any laboratory activity. Each experiment and exercise should be reviewed beforehand to identify any particular safety concerns, needed PPE and safe practices to minimize risk. These safe practices should be reviewed through instructor explanation and behavior modeling for a given activity. Responses that reflect students' understanding of safe practices should be solicited before the instructor proceeds with a lab activity. Effective strategies for fostering a responsible attitude regarding safety include the use of a student agreement to be signed by both student and parents and the display of student-generated posters on various aspects of safety in the science classroom.

2. Provide demonstrations for each experiment

- Instructors should be prepared to demonstrate safe laboratory techniques *each time* a new exercise begins. The demonstration should outline the specific safety requirements for each experiment, including the type of gloves, goggles or other PPE that should be used and any special precautions. Although this may take more time, deliberately demonstrating the safe way to conduct an experiment will go a long way to instill confidence and safe work practices in students. Regular safety orientations should be considered an integral part of the instruction planning process. Safety in the laboratory should be taught and reinforced throughout the year.

3. Provide and require utilization of appropriate PPE for each experiment

- All students must wear laboratory appropriate clothing and experiment specific PPE (e.g. goggles, face shield, gloves, protective aprons, etc.). The use of approved eye-protective devices is *required* of all persons performing science activities that involve potential hazards to the eyes. This includes chemical and water-propelled rockets. All persons in dangerous proximity to laboratory activities, (that is, all persons within the laboratory) must also wear approved eye-protective devices.

For more information, see the *California Department of Education's Science Safety Handbook* or reach out to your Risk Services Consultant.

Learn all you can from the mistakes of others. You won't have time to make them all yourself. ~ Alfred Sheinwold