

## Science Teaching & Liability!

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### SAFE SCI: Be Protected!

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 My note: Previous story: *Science Teaching & Liability!-Safety Matters*, CSTA Newsletter  
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**Safety in the Science Classroom**



- Science teachers have a unique, added classroom management responsibility.
- We encourage students to purposely use and manipulate scientific equipment, living specimens, and chemicals in order to learn science.

#### I. The Charge!

Research and general educational practice clearly indicates that students learn science best by doing it – not just reading about it. Hands-on, process and inquiry based science is the key to understanding science – not just memorizing a list of facts or theories. Unfortunately, this is a double edged sword for science teachers in that doing science has its potential risks. Science laboratories and field work sites can be unsafe places to work and learn. If a student gets hurt while doing an activity in the lab, in the field or even at home if it was an assignment by the teacher, the teacher and school have potential liability— should there be legal initiatives undertaken by the parents or guardians. Some educators believe they can be held harmless when it comes to these types of law suits. Unfortunately, in most instances, teachers will be exempt from held

harmless laws or statutes when it comes to “duty of care.”

#### II. Preventions to Reduce the Risk!

When a student get hurt doing a science laboratory activity, there obviously are risks for the science teacher and school as previously noted. So, how can the science teacher better protect themselves from such actions. One great resource is the National Science Teachers Association’s position paper titled *Liability of Science Educators for Laboratory Safety*. In the Introduction of the paper, it notes the following about “duty of care:”

*“The breach of a particular duty owed to a student or others may lead to liability for both the teacher and the school district that employs that teacher” (Ryan 2001). As such, science educators must act as a reasonably prudent person would in providing and maintaining safe learning environment for their students.”*

Bottomline is science teachers must maintain a safer working environment at all times for students. So what can teachers do to stay out of legal trouble. The position paper contains a section titled **Declarations**. The following are a few areas noted and summarized that teachers should consider in earnest to help keep students, the teacher and the school out of harm’s way when doing science activities:

1. Develop and implement comprehensive safety policies with clear procedures for engaging in lab activities. These safety policies should comply with all applicable government health and safety codes, regulations, ordinances, and other rules established by the applicable oversight organization.
2. Ensure that all safety policies, including those related to safety training, are reviewed and updated annually in
3. Support and encourage the use of laboratory investigations in science instruction, and share the responsibility with teachers to develop and fully integrate these activities into the science curriculum.
4. Become knowledgeable of and enforce all legal codes and regulations to ensure a safer learning environment for students and educators. Particular attention should be given to means of hazard prevention, including reasonable class sizes to prevent overcrowding in violation of occupancy load codes or contrary to safety research; replacement or repair of inadequate or defective equipment; adequate number or size of labs, or proper facility design; and the proper use, storage, disposal, or recycling of chemicals.
5. Understand that the number of occupants allowed in the laboratory must be set at a safe level based on available legal standards, size and design of the laboratory teaching facility, chemical/physical/biological hazards, and students’ needs. Require teachers to develop, maintain, and implement chemical safety plans.
6. Support teachers of science by obtaining materials and resources from government sources and professional organizations that will inform and educate teachers about safe laboratory activities, safety procedures, and best practices in the teaching of laboratory-based science instruction.
7. Review existing insurance policies to ensure adequate liability insurance coverage for laboratory-based science instruction.
8. Provide teachers with sustained, comprehensive training in lab logistics— including setup, safety, management of materials and equipment, and assessment



of student practices—at the time of initial assignment and before being assigned to a new exposure situation. This includes storage, use, and disposal of materials and chemicals; use of personal protective equipment; engineering controls; and proper administrative procedures. To ensure ongoing safety, annual training should be provided to keep teachers well informed about changes in safety procedures.

9. Support the decisions of teachers to modify or alter activities in a safe manner or select safe alternative activities to perform in the science classroom/laboratory.



10. Maintain adequately supplied, properly equipped, and safe facilities for performing lab instruction by conducting annual facilities audits.

In addition, the position paper lists other means of providing for a safer learning site relative initiatives on the part of the school administration and governing body.

### In The End!

Remember as a science teacher, you not only have the duty to instruct students to learn science, but also duty of care to make sure it is safer for students to do the science activities. Prepare for a safer experience and continuously monitor/adjust for safety to keep all out of harm's way and the court room!

### Internet Reference:

*Liability of Science Educators for Laboratory Safety; Position Paper*, National Science Teachers Association, Arlington, Virginia, United States of America: <http://www.nsta.org/about/positions/liability.aspx>

