

Health and Safety **BULLETIN** *Science Safety Reminders*

A recent inspection of SSRSB schools by the School Insurance Program (SIP) has brought forward a need for some Science Safety Reminders.

A major challenge for science educators is balancing exciting and meaningful curriculum while maintaining a safe learning environment. While there is always an inherent level of risk in science learning investigations, common sense prevails in reducing risk to as low as reasonable possible. This can be done through the combined efforts of maintaining a safe environment, the support and promotion of safety from teachers and administrators, knowledge of chemicals and equipment, and supervision of students in the labs as they learn about responsibilities.

While not all hazardous materials can be, nor should be, eliminated from science curriculum, some schools are not able to provide the conditions necessary for safe use. The decision to use certain chemicals should be based on the chemical's hazards, and the ability to properly store, handle and deal with emergencies. When risk outweighs the benefits, and no substitute is possible, then the learning investigation should be excluded.



To assist, the NS Department of Education has published the "**Science Safety Guidelines Grades Primary-12**": <http://www.ednet.ns.ca/files/curriculum/sciencesafety.pdf>

One important area on Pages 15-16 is "Prohibited Chemical Samples" (chemicals not to be used), and "Restricted Chemical Samples" (chemicals that may be used only if adequate safety equipment and storage facilities exist). For restricted chemicals to be used, the teacher must understand the hazards and take the required precautions. This can be done by reviewing the chemical's Material Safety Data Sheet (MSDS), contacting the chemical manufacturer or supplier, or consulting with the SSRSB Program Coordinator, SSRSB Health and Safety Manager, or the Department of EECD Science Consultant. As an example, Calcium Carbide is a restricted chemical, requiring special attention to strict storage and fire-fighting measures.

Another component of a safe learning environment is an well managed chemical storage area. Regular inspection, organization and disposal of chemicals should take place. All chemicals should have a designated location and be stored appropriately. Assistance in this area can also be found in Appendix B of the guidelines. While some chemicals may be disposed through normal means, some require special handling. Periodically, at least every 2nd year, SSRSB offers disposal services to schools for hazardous waste. Whenever in doubt, teachers should either refer to the guidelines, chemical MSDS, or request assistance.

For further assistance:

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