

# Chemical Demonstration Guidelines

The American Chemical Society's Division of Chemical Education has published safety guidelines for *National Chemistry Week*, applicable to all demonstrations. The complete text of the Guidelines can be found on the Internet at the ACS website: <http://www.chemistry.org>

Type "Chemistry Demonstrations" in the Search window to access the document.

## Minimum Safety Guidelines for Chemical Demonstrations ACS Division of Chemical Education

### Chemical Demonstrators Must:

1. Know the properties of the chemicals and the chemical reactions involved in all demonstrations presented.
2. Comply with local rules and regulations.
3. Wear appropriate eye protection for all chemical demonstrations.
4. Warn members of the audience to cover their ears whenever a loud noise is anticipated.
5. Plan the demonstration so that harmful quantities of noxious gases (e.g., NO<sub>2</sub>, SO<sub>2</sub>, H<sub>2</sub>S) do not enter the local air supply.
6. Provide safety shield protection wherever there is the slightest possibility that a container, its fragments or its contents could be propelled with sufficient force to cause personal injury.
7. Arrange to have a fire extinguisher at hand whenever the slightest possibility of fire exists.
8. Not taste or encourage spectators to taste any nonfood substance.
9. Not use demonstrations in which parts of the human body are placed in danger (such as placing dry ice in the mouth or dipping hands in liquid nitrogen).
10. Not use open containers of volatile, toxic substances (e.g., benzene, CCl<sub>4</sub>, CS<sub>2</sub>, formaldehyde) without adequate ventilation as provided by fume hoods.
11. Provide written procedure, hazard, and disposal information for each demonstration whenever the audience is encouraged to repeat the demonstration.
12. Arrange for appropriate waste containers for and subsequent disposal of materials harmful to the environment.

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