

Appendix

Table 1.
RESOURCES

Science Supply Houses	Professional Associations / Organizations
AirClean® Systems Ductless Hoods www.aircleansystems.com 919-255-3220 800-849-0472	AAPCC American Association of Poison Control Centers 800-222-1222 www.aapcc.org
Carolina Biological Supply Co. 2700 York Rd. Burlington, NC 27215-3398 800-334-5551 www.carolina.com	ACS American Chemical Society www.acs.org
Fisher Science Education 800-955-1177 www.thermofisher.com	CSSS Council of State Science Supervisors www.csss-science.org
Frey Scientific 100 Paragon Parkway Mansfield, OH 419-589-1900 www.freyscientific.com	ICASE International Council of Associations for Science Education www.icaseonline.net
Flinn Scientific, Inc. Batavia, IL 60510 www.flinnsci.com 800-452-1261	MIT MIT Green Chemicals Purchasing System http://ehs.mit.edu/site/content/green-chemical-alternatives-purchasing-wizard
Lab Safety Supply® Janesville, WI 53547-1368 800-356-0783 www.labsafety.com	NCSLA North Carolina Science Leadership Association www.ncsla.net
	NCSTA North Carolina Science Teachers Association www.ncsta.org
	NFPA National Fire Protection Association www.nfpa.org
	NRC National Research Council www.nationalacademies.org
	NSC National Safety Council www.nsc.org
	NSELA National Science Education Leadership Association www.nsela.org
	NSTA National Science Teachers Association www.nsta.org
	Safety & Health Council of North Carolina www.safetync.com

Table 1. (cont'd)
RESOURCES

Government Agencies	Publications
CDC Centers for Disease Control and Prevention www.cdc.gov	American Chemical Society www.acs.org <ul style="list-style-type: none"> • <i>Handbook of Chemical Health and Safety</i>, Robert J. Alaimo, Editor • <i>Regulation of Laboratory Waste</i> www.acs.org/content/dam/acsorg/policy/publicpolicies/promote/laboratorywaste/laboratory-waste.pdf • <i>Safety in the Elementary (K-6) Science Classroom, Second Edition</i>, Committee on Chemical Safety • www.acs.org/content/acs/en/about/governance/committees/chemicalsafety/chemical-safety-in-the-classroom.html • <i>Reducing Risk to Students and Educators from Hazardous Chemicals in a Secondary School Chemical Inventory</i> www.acs.org/content/dam/acsorg/about/governance/committees/chemicalsafety/publications/reducing-risks-to-students-and-educators-from-hazardous-chemicals.pdf • <i>Safety Audit / Inspection Manual</i> • <i>Chemical Safety for Teachers and Their Supervisors Grades 7-12</i> • Alternative solvent purification techniques • Cut-resistant gloves • Goggle cleaning recommendations • Handbook of Chemical Health and Safety • Latex allergy information • Security Vulnerability Checklist for Academic and Small Chemical Laboratory Facilities • Safe Transportation Recommendations for Chemicals Used in Demonstrations and Educational Activities www.acs.org/content/acs/en/about/governance/committees/chemicalsafety/safetypractices.html • <i>Safety in Academic Chemistry Laboratories, 7th Edition, Volume 1: Accident Prevention for College and University Students</i> • <i>Safety in the Academic Laboratory: Eye Protection (video)</i> www.acs.org/content/acs/en/about/governance/committees/chemicalsafety/chemical-safety-in-the-classroom.html • <i>Student Laboratory Code of Conduct for a Secondary Science Program</i> www.acs.org/content/dam/acsorg/about/governance/committees/chemicalsafety/publications/student-laboratory-code-of-conduct-pdf.pdf
Connecticut High School Science Safety: Prudent Practices and Regulations by Dr. Ken Roy www.sde.ct.gov/sde/lib/sde/pdf/curriculum/science/safety/science_safety.pdf	
Connecticut Middle School Science Safety: Prudent Practices and Regulations by Dr. Ken Roy www.sde.ct.gov/sde/lib/sde/pdf/curriculum/science/safety/middleschool_sciencesafety.pdf	
CPSC Consumer Product Safety Commission www.cpsc.gov	
EPA Environmental Protection Agency www.epa.gov	
NIH National Institutes of Health www.nih.gov	
NIEHS The National Institute of Environmental Health Sciences www.niehs.nih.gov	
NIOSH The National Institute for Occupational Safety and Health www.cdc.gov/niosh	
NTP National Toxicology Program http://ntp-server.niehs.nih.gov	
NCDOL North Carolina Department of Labor, OSH Division www.nclabor.com	
NOAA National Oceanic & Atmospheric Administration http://response.restoration.noaa.gov http://cameochemicals.noaa.gov (chemical database and reactivity tool)	
OSHA Occupational Safety and Health Administration www.osha.gov	
USDOT US Department of Transportation www.dot.gov	

Publications (cont'd)	Laboratory Safety Institute 192 Worcester Road Natick, MA 01760 1 800 647 1977 www.labsafety.org <i>Safer Science: Be Protected! Volume 1, 2nd edition, Dr. Ken Roy</i> <i>Safer Science: Be Protected! Volume 2, 1st edition, Dr. Ken Roy</i> Numerous publications
American Chemical Society (cont'd) <ul style="list-style-type: none"> • <i>Creating Safety Cultures in Academic Institutions</i> • <i>Employer's Safety Awareness Expectations for New Hires</i> • <i>Identifying and Evaluating Hazards in Research Laboratories</i> • <i>Less Is Better</i> • <i>Living with the Laboratory Standard</i> • <i>Guide for Chemical Spill Response Planning in Laboratories</i> www.acs.org/content/acs/en/about/governance/committees/chemicalsafety/safetypractices.html	Lab Safety Supply www.labsafety.com <ul style="list-style-type: none"> • <i>E-Z Facts®</i> • <i>Saf-T-News</i>
CRC Press www.crcpress.com <ul style="list-style-type: none"> • <i>CRC Handbook of Laboratory Safety, Fifth Edition</i>, Furr, A. Keith • <i>Chemical Safety in the Laboratory</i>, Hall, Stephen K. 	National Research Council www.nap.edu/catalog/12654/prudent-practices-in-the-laboratory-handling-and-management-of-chemical <i>Prudent Practices in the Laboratory: Handling and Disposal of Chemicals</i>
Council of State Science Supervisors www.csss-science.org <i>Science and Safety, Making the Connection – A Secondary Safety Guide</i>	National Science Education Leadership Association www.NSELA.org Various science and safety position statements
EPA www.epa.gov <ul style="list-style-type: none"> • <i>Chemical Management Resource Guide for School Administrators</i>. EPA December 2006 EPA 747-R-06-002 Office of Pollution Prevention and Toxics. Washington, DC 20460 • EPA Guide: Little Known But Allowable Ways to Deal with Hazardous Waste www.epa.gov/sbo/pdfs/hazwaste_500.pdf 	National Science Teachers Association (NSTA) www.nsta.org <ul style="list-style-type: none"> • NSTA Safety Portal: Safety in the Science Classroom: www.nsta.org/safety • NSTA Safety Advisory Board White Papers (http://www.nsta.org/safety) • Field Trip Safety (PDF) [added 2015.03.17] • Globally Harmonized System of Classification and . . . • Labeling of Chemicals (PDF) [added 2014.05.20] • Duty or Standard of Care (PDF) [added 2014.05.02] • Overcrowding in the Instructional Space (PDF) [added 2014.05.02] • Safety in the Science Classroom, Laboratory, or Field Sites (PDF) [added 2013.05.23] • Tips for the Safer Handling of Microorganisms in the School Science Laboratory (PDF) [added 2012.05.09] • Safety Acknowledgment Form for Working with Microorganisms (PDF) [added 2012.05.09] • YouTube and Other Public Posting of Science Demonstration Videos (PDF) [added 2012.05.09] • Safe Handling of Alcohol in the Laboratory • Exploring Safely A Guide for Elementary Teachers, Kwan, Terry & Juliana Texley • <i>Inquiring Safely A Guide for Middle School Teachers</i>, Kwan, Terry & Juliana Texley
Fisher Scientific www.thermofisher.com <i>Safety in High School and College Laboratories</i>	
Flinn Scientific www.flinnsci.com <ul style="list-style-type: none"> • <i>Flinn Chemical & Biological Catalog Reference Manual</i> • <i>Flinn Catalog / Reference Manual for Middle School Science Teachers</i> • <i>Chemical Hygiene Plan</i> • <i>Student Safety Contracts</i> (Teachers can request one copy free) • <i>Science Classroom Safety and the Law</i>. Ryan, Kelly • <i>Lab Safety Courses</i> http://labsafety.flinnsci.com/Home.aspx 	

Table 1. (cont'd)
RESOURCES

<p>Publications (cont'd)</p> <p>National Science Teachers Association (NSTA (cont'd)</p> <ul style="list-style-type: none"> • <i>Investigating Safely A Guide for High School Teachers</i>, Kwan, Terry; Juliana Texley & John Summers • <i>Science Safety in the Community College</i> Summers, John & Texley, Juliana & Kwan, Terry • <i>The NSTA Ready-Reference Guide To Safer Science: Volumes 1, 2, & 3</i>, Roy, Kenneth Russell 	<p>Science & Safety Consulting Services www.sciencesafetyconsulting.com</p> <ul style="list-style-type: none"> • <i>Chemical Management System CD, Second Edition</i>. Stroud, Linda M. and Fred L. Beyer, Jr. • <i>Eye Protection Options Poster</i> • <i>Implementation of a Science Laboratory Safety Program in North Carolina Schools. J. Chem. Health & Safety (2007)</i>, Vol. 14, No. 3. May/June 2007, 20-30. Stroud, Linda M., Clara Stallings, and Todd J. Korbusieski • <i>MSDS (SDS) Activity for Chemicals Poster</i>, Linda M. Stroud, Ph.D.
<p>NC Department of Labor www.nclabor.com</p> <ul style="list-style-type: none"> • OSH Presentations, www.nclabor.com/osh/etta/presentations/presentations.htm • <i>A Guide to School Safety and Health</i>, Davis, Bobby R. • <i>North Carolina Occupational Safety and Health Standards for General Industry</i> 	<p>US Department of Transportation www.dot.gov</p> <p>2012 Emergency Response Guidebook, http://phmsa.dot.gov/pv_obj_cache/pv_obj_id_7410989F4294AE44A2EBF6A80ADB640BCA8E4200/filename/ERG2012.pdf</p> <p>Research and Special Programs Administration</p>
<p>NIOSH www.cdc.gov/niosh</p> <ul style="list-style-type: none"> • <i>NIOSH Safety Checklist Program for Schools (CD)</i> • <i>School Chemistry Laboratory Safety Guide</i>, November 2006. Publication No. 2007-117. 	
<p>OSHA www.osha.gov</p> <ul style="list-style-type: none"> • Chemical Hazards and Toxic Substances, www.osha.gov/SLTC/hazardoustoxicsubstances/index.html • Chemical Reactivity Hazards, www.osha.gov/SLTC/reactivechemicals/index.html • Permissible Exposure Limits: Annotated Table, www.osha.gov/dsg/annotated-pels/index.html • OSHA Occupational Chemical Database, www.osha.gov/chemicaldata • Chemical Sampling Information, www.osha.gov/dts/chemicalsampling/toc/toc_chemsamp.html • 29 CFR 1910.132 Personal Protective Equipment • 29 CFR 1910.1030 Bloodborne Pathogens • 29 CFR 1910.1200 Hazard Communication Standard • 29 CFR 1926.25 Housekeeping Standard • A Guide to The Globally Harmonized System of Classification and Labelling of Chemicals (GHS), www.osha.gov/dsg/hazcom/ghs.html • OSHA Quick Cards, www.osha.gov/pls/publications/publication.athruz?pType=Types&pID=6 	<p>Web Resources—Safety Data Sheets (SDSs) for Chemicals</p> <p>Chemical Safety Board, After the Rainbow, www.csb.gov/videos/after-the-rainbow</p> <p>Use search function at these sites:</p> <p>www.aldonchem.com www.carolina.com www.cdc.gov/niosh www.cornell.edu www.fishersci.com www.flinnsci.com www.flinnsci.com/resources www.thermofisher.com www.hazard.com www.osha.gov www.siri.uvm.edu (kitchen chemicals)</p> <p>Google the name of the chemical plus SDS (e.g., sodium chloride SDS)</p>

Web Resources—Chemical Substitutions
Science & Safety Consulting Services www.sciencesafetyconsulting.com Substitution of a More Hazardous Chemical by a Less Hazardous Chemical List
Cole-Parmer www.coleparmer.com/techinfo/chemcomp.asp Interactive Chemical Compatibility
Green Chemicals Purchasing Wizard http://ehs.mit.edu/site/content/green-chemistry
OSHA Basics of Informed Substitution & Alternatives Assessment www.osha.gov/dsg/safer_chemicals/basics.html

Web Resources—General
California State University, Northridge www.csun.edu/science/ref/laboratory/safety/safety.html
CAMEO Chemicals www.cameochemicals.noaa.gov <ul style="list-style-type: none"> • <i>Chemical Database</i> with response recommendations for over 6,000 chemicals • <i>Critical Response Information</i> • <i>Chemical Reactivity</i> predicts what hazards could arise if chemicals were to mix.
Carolina Biological Supply Co. www.carolina.com
Cole-Palmer www.coleparmer.com/techinfo/chemcomp.asp Chemical Resistance Database
Connecticut State Department of Education www.sde.ct.gov/sde/lib/sde/pdf/curriculum/science/safety/science-safety.pdf High School Science Safety, Prudent Practices and Regulations
Council of State Science Supervisors www.csss-science.org Click on “Resources” and then click on “Science Safety” to download pdfs on Science and Safety

Flinn Scientific www.flinnsci.com <ul style="list-style-type: none"> • Safety: Safe Science Series and MSDSs • Student Safety Contracts for Middle and Secondary students • Science Laboratory Safety Course • Science Safety Tests for Middle and Secondary students
JaKel, Inc http://showcase.netins.net/web/jakel/research.html
National Science Education Leadership Association www.nsela.org Click on “Publications,” “Safe Science Series,” “Position Papers”
National Science Teachers Association www.nsta.org <ul style="list-style-type: none"> • Numerous NSTA position statements on safety, field trips, class size, etc. www.nsta.org/about/positions • Animals: Responsible Use of Live Animals and Dissection in the Science Classroom www.nsta.org/about/positions/animals.aspx • Students with Disabilities www.nsta.org/about/positions/disabilities.aspx • Elementary School Science www.nsta.org/about/positions/elementary.aspx • Environmental Education www.nsta.org/about/positions/environmental.aspx • Gender Equity in Science Education www.nsta.org/about/positions/genderequity.aspx • Learning Conditions for High School Science www.nsta.org/about/positions/highschool.aspx • Informal Science Education www.nsta.org/about/positions/informal.aspx • Inquiry, Scientific www.nsta.org/about/positions/inquiry.aspx • The Integral Role of Laboratory Investigations in Science Instruction www.nsta.org/about/positions/laboratory.aspx • Liability of Science Educators for Laboratory Safety www.nsta.org/about/positions/liability.aspx • Science Education for Middle Level Students www.nsta.org/about/positions/middlelevel.aspx • Science Safety Portal: Safety in the Science Classroom www.nsta.org/safety • Multicultural Science Education www.nsta.org/about/positions/multicultural.aspx • The National Science Education Standards www.nsta.org/about/positions/standards.aspx

Table 1. (cont'd)
RESOURCES

<p>Web Resources—General (cont'd)</p>	<p>NIOSH 2005-149 NIOSH Pocket Guide to Chemical Hazards, www.cdc.gov/niosh/email-pubs.html 2007-107C School Chemistry Laboratory Safety Guide CD, www.cdc.gov/niosh/pubs/all_title_desc.html 1 copy per order at: cdcinfo@cdc.gov or call 1800 232 4636 or order online. This CD contains much more than the School Chemistry Laboratory Safety Guide and additional safety resources that NIOSH published earlier. Histoplasmosis www.cdc.gov/fungal/diseases/histoplasmosis/index.html</p>
<p>National Science Teachers Association (cont'd)</p> <ul style="list-style-type: none"> • Parent Involvement in Science Education www.nsta.org/about/positions/parents.aspx • Safety and School Science Instruction www.nsta.org/about/positions/safety.aspx • Safety in the Science Classroom www.nsta.org/safety • Science Teacher Preparation www.nsta.org/about/positions/preparation.aspx • NSTA Safety Portal for NSTA Safety Advisory Board safety white papers, resources and more www.nsta.org/safety 	<p>NOAA www.response.restoration.noaa.gov National Oceanic & Atmospheric Administration</p>
<p>NIEHS www.niehs.nih.gov/kids National Institute of Environmental Health Sciences National Institute of Health (NIH), Department of Health & Human Services (DHHS)</p>	<p>Oklahoma State University Online Safety Library http://ehs.okstate.edu/links/Index.htm</p>
	<p>Science & Safety Consulting Services www.sciencesafetyconsulting.com Check “Links” and “Products” for downloads</p>
	<p>State of Connecticut Department of Labor www.ctdol.state.ct.us</p>