

ACS Office of Safety Programs: Highlighted Resources Prepared October 2025

Thank you for attending *Understanding, Developing, and Implementing Laboratory Safety and Safety Culture in Two-Year Colleges*! Below are some chemical safety resources for your reference. For a full compilation, we invite you to browse our <u>catalog</u>. Please contact the ACS Office of Safety Programs at <u>safety@acs.org</u> with any questions.

Teaching Safety

<u>Laboratory Safety for Chemistry Students (3rd Edition)</u>
 Free e-Textbook for students and instructors worldwide. Requires ACS ID and short registration. Covers safety topics for undergraduate chemistry majors, with content structured into Introductory, Intermediate, and Advanced topics. Versatile for integrating safety into an undergraduate curriculum.

Foundations of Chemical Safety and Risk Management

Free online course with 17 one-hour units. Equivalent to a one-semester-hour lecture course. Instructor materials available for:

- Integration into lab courses
- Stand-alone safety course
- Prerequisite for research experience

Foundations for Storing, Organizing and Disposing of Chemicals Explores chemical management using the RAMP framework. Six lessons total, with each taking approximately 60–90 minutes to complete. Total course time is approximately 10 hours.

Safety in Academic Chemistry Laboratories (SACL-8) Targeted at first- and second-year undergraduate students. Available as a free, downloadable PDF or for purchase from the ACS Store.

ACS Chemical Safety YouTube Channel Multiple videos covering essential safety practices in academic labs. Portfolio includes the ACS College Lab Safety Video Series.

Other Resources

- Creating Safety Cultures in Academic Institutions: A Report of the Safety Culture Task Force of the ACS Committee on Chemical Safety Suggestions and recommendations that help academic institutions strengthen safety cultures.
- Safe Science: Promoting a Culture of Safety in Academic Chemical Research (Study sponsored by the U.S. National Academies)

 Examines the culture of safety in research institutions and makes
 recommendations for university leadership, laboratory researchers, and
 environmental health and safety professionals to support safety as a core
 value of their institutions.
- <u>Hazards in Research Laboratories</u>
 A collection of methods and tools for assessing hazards in research laboratories. Based on the publication <u>Identifying and Evaluating</u>
 Hazards in Research Laboratories (IEHRL).
- <u>Publications and Resources from the ACS Committee on Chemical</u> Safety

The ACS Committee on Chemical Safety (CCS) offers a wide range of curated resources to support chemical safety in laboratories, classrooms, and workplaces. Below are key categories of materials available:

o Curated Resources

A collection of websites, documents, and organizations identified by CCS as authoritative and frequently referenced. These resources are handy for addressing questions and challenges related to chemical safety.

o CCS Project Portfolio

Variety of materials developed by the CCS, including informative documents, web-based guides, and educational videos.

Safety Tipsheets and Best Practices

Short, topical guides created by CCS to help laboratory personnel understand essential aspects of chemical and laboratory safety. These tipsheets are designed to be practical, accessible, and easy to implement. Also included here are Laboratory Reaction Safety Summaries (LRSSs).

Communities

• ACS Division on Chemical Health and Safety (CHAS)

A close-knit, passionate community where chemical safety professionals, researchers, and educators collaborate to advance safety knowledge, education, and culture. Impactful projects—including programming initiatives, workshops, and resources—are amplified by the reputation, reach, and expertise of the ACS. Join CHAS to drive meaningful change and grow professionally!

• ACS Chemical Health & Safety Journal

Peer-reviewed journal dedicated to advancing chemical safety through innovative research, practical insights, and interdisciplinary collaboration. Read and contribute to a journal where chemical safety research spans foundational datasets, risk management, and safety education across laboratories, industry, and public spaces. Your contribution can help guide safer science, whether you're a chemist, engineer, public health professional, or safety policymaker.