

The RAMP Process and Associated Information Tools

Recognize

- GHS information from the label and [Safety Data Sheets](#) (SDS)
- Reactivity data from [PubChem LCSS](#)

Assess

- Write a detailed description of the work to be done
- Review [GHS signal words](#) of reactants and products
- Use hazard assessment methods from [ACS web site](#)

Manage

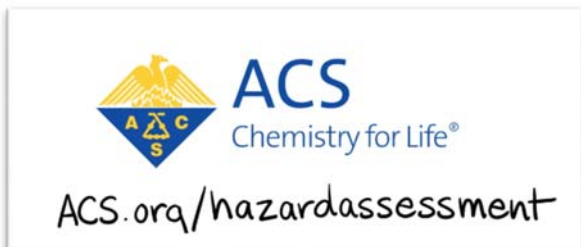
- Understand [laboratory ventilation equipment](#) and rates
- Use Personal Protective Equipment (gloves, eye protection, etc.) based on a risk assessment of likely scenarios and [manufacturer's compatibility guides](#)

Prepare for Emergencies

- Identify the most likely scenarios
- Locate and understand how to use emergency equipment
- Review institutional emergency plans

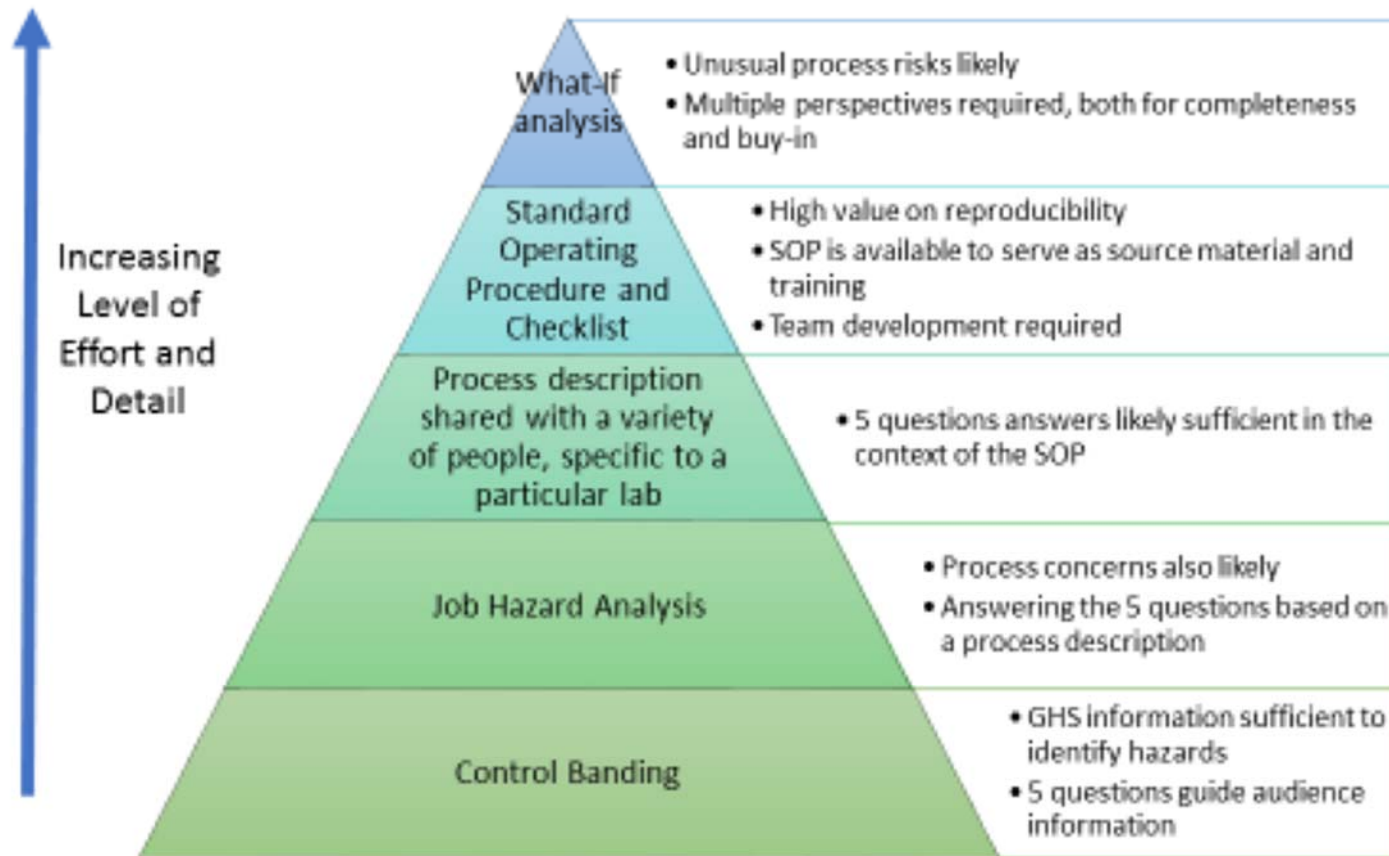
Protect Your Neighbors and the Environment

- Manage lab wastes using institutional waste disposal services
- Consider Greener Chemistry opportunities



Forms and ideas to help you organize risk assessments for your laboratory work are available at the ACS hazard assessment web site:
<http://www.acs.org/hazardassessment>

Assess: Identifying and Evaluating Hazards in Research Laboratories



Information on lab incidents in the training:

More details on the University of Minnesota explosion and response: <http://cenblog.org/the-safety-zone/2014/07/more-details-on-the-university-of-minnesota-explosion-and-response/>

How a student unintentionally made an explosive at U Bristol: <http://cenblog.org/the-safety-zone/2017/02/how-a-student-unintentionally-made-an-explosive-at-u-bristol/>

Learning from UCLA: Details of the experiment that led to a researcher's death prompt evaluations of academic safety practices: <https://cen.acs.org/articles/87/i31/Learning-UCLA.html>

Texas Tech University Chemistry Lab Explosion: <https://www.csb.gov/texas-tech-university-chemistry-lab-explosion/>

Oversight In Transcription Of Written Procedures Causes Explosion: <http://www.depts.ttu.edu/vpr/integrity/lessons-learned/march-2016.php>

Contact information:

- John Baxter, EH&S Program Manager
 - 402-546-6269
 - jtbaxter@creighton.edu
- Mary Duda, Chemical Coordinator
 - 402-546-6404
 - mjduda@creighton.edu
- General phone number: 402-564-6400
- Public Safety
 - Emergency: 402-280-2911
 - Non-emergency: 402-280-2104
- <http://www.creighton.edu/ehs>
- Research Compliance Office: <https://www.creighton.edu/researchservices/rco/>

