

Instructions for use of the Chemical Hygiene Plan Part III template and examples

Specific Safety Procedures are necessary if you use any particularly hazardous substances such as carcinogens, reproductive toxins (mutagens and teratogens), biotoxins and substances with a high degree of acute toxicity (more information available in Appendix II-A of Part II of the Chemical Hygiene Plan (CHP) at www.uos.harvard.edu/ehs/ih/CHP_Part_II.pdf). See Harvard's CHP 2005 at www.uos.harvard.edu/ehs/ih/labsafety.shtml, which notes in Part II Section 5 that: "Laboratories that use **high hazard chemicals** should document specific standard operating procedures for these materials and include them in Part III of this Chemical Hygiene Plan."

Use one of the following approaches in documenting specific safety procedures for each high hazard chemical:

- (1) Use the questions/categories in the CHP Part III template to ensure that the safe work practices are incorporated into your standard lab protocols, including work practices to minimize exposure to specific hazards (e.g., working in chemical fume hoods) and specific personal protective equipment (PPE) to use (during normal operations and emergency procedures).
- (2) Create separate chemical-specific procedures using the template format.
Note: Examples of such chemical-specific procedures are provided in the following files. For instance, there is an example of a Part III Specific Safety Procedure for phenol chloroform that notes that PVA (polyvinyl alcohol) gloves should be used (since chloroform would easily degrade standard latex or nitrile gloves). Such information can be obtained from reference materials such as <http://www.cdc.gov/niosh/ncpc/ncpc1.html> (which applies to protective coveralls and gloves) or <http://www.osha.gov/SLTC/healthguidelines/chloroform/recognition.html>. MSDSs are helpful but as standalone documents sometimes do not provide enough specifics or are not as frequently reviewed as the lab protocols. Some MSDSs merely provide a general statement like "Use appropriate gloves."
- (3) Group similar chemicals (e.g., aldehydes, halogenated hydrocarbons, biotoxins) into one safety procedure using the Part III template.