

School districts are required to follow all applicable compliance standards to keep their science rooms as safe as possible. However, Chemical Hygiene Plans are often overlooked. The Washington State Department of Labor and Industries requires employers to carry out the provisions of a chemical hygiene plan when hazardous chemicals are used in the workplace per [WAC 296-828-20005](#).

A Chemical Hygiene Plan (CHP) is a written program developed and implemented by the employer that establishes procedures, equipment, personal protective equipment, and work practices to protect employees and students from the health hazards of the chemicals used in the laboratory. The plan also requires the assignment of a chemical hygiene officer (CHO) and, if appropriate, the establishment of a chemical hygiene committee. The CHO is defined as an employee designated by the employer who is qualified by training or experience to provide technical guidance in developing and implementing the chemical hygiene plan.

The CHO is responsible for meeting the [requirements](#) for a Chemical Hygiene Plan. The following are primary recommendations to meet the state requirements of the CHP:

- Ensure science laboratories have a written chemical hygiene plan (CHP) available for all students and staff. Review annually and update when necessary. (New science teachers are to review the CHP as part of their employee safety orientation.)
- Develop standard safety and health operating procedures for laboratory work involving hazardous chemicals.
- Establish criteria to select and use control measures to reduce staff and student exposures to hazardous chemicals, especially chemicals known to be extremely hazardous. Replace hazardous chemicals with less toxic substances.
- Restrict access to chemical storage rooms to staff only. Keep door(s) and storage cabinets locked.
- Establish a schedule for collecting surplus and hazardous reagents to be correctly removed.
- Designate a chemical hygiene liaison for each building site that communicates chemical hygiene information between the CHO and science staff on-site if there is no CHO at each building site.
- Address the circumstances under which a particular laboratory operation, procedure, or activity should require prior approval from the CHO or the district safety officer.
- Train science teachers, paraprofessionals, and staff handling chemicals on the CHP's applicable details. Document the training provided. Document all CHO visits and safety audits for each building site. Document all in-building meetings on science safety.
- Each site should conduct a safety audit at least annually.
- Maintain testing records for eyewash stations, showers, and fume hoods. Make sure that their performance meets the required standards.

- Establish procedures to ensure that labels on incoming containers are not removed or defaced and that the Safety Data Sheets (SDS) with incoming shipments of hazardous chemicals are maintained and available for employees and students. Make certain SDS are up to date in a binder that is visibly marked and kept in the lab.
- Provide a written and documented lab safety orientation to students that includes components of the Chemical Hygiene Plan, including personal protective equipment, hand washing, first aid kit, fire blanket, fire extinguishers, eye wash, shower, and spill kits. Document the orientation and have the proof of training dated and signed by all attendees.
- Require parents to sign an informed consent form describing inherent science lab risk before the student participates.

Having a relevant Chemical Hygiene Plan and a competent Chemical Hygiene Officer is fundamental. If the district-wide CHO only holds the title, does not visit each location, and does not conduct employee training at each location, the law's letter and intent have not been met. WSRMP recommends that school districts include in their science teaching positions a requirement for maintaining, updating, and following the district's CHP and working with CHO as part of the job description.

WSRMP recommends that districts have a CHO for every school with chemical exposure in science laboratories. If it is not feasible to assign a CHO for each location, appoint a district-wide CHO who is given the responsibility and the authority to implement the CHP for all locations in the district with chemical exposure in science labs. Then appoint a teacher at each building familiar with chemicals to act as a liaison between the district CHO and school staff.

For questions about recommendations or issues addressed in this article, please contact our Risk Services Department at 206-394-9737 or riskservices@wsrmp.com.