



Integrated Chemical Management (ICM)

A PROVEN MODEL FOR THE SYSTEMATIC MANAGEMENT OF CHEMICALS IN SCHOOLS

WHAT IS THE PHARMACY APPROACH?

Integrated Chemical Management, which applies the “Pharmacy Approach”, involves a PLACE, a METHOD, and a COMMITMENT. This process is the backbone for proper chemical management. The “pharmacy” is a centralized location where **ALL** laboratory chemicals at the school are properly inventoried, stored, secured, and controlled. It requires a location(s) where teachers may prepare solutions and mixtures as needed for classroom laboratory applications. The “pharmacy” itself must be adequately designed and equipped for chemical storage, safety, security, ventilation, lighting, and emergency communication.

WHY IMPLEMENT THE PHARMACY APPROACH?

- Reduce risk of accidents
- Decrease chemical exposure
- Ensure chemical security
- Provide accurate inventory
- Reduce solid & hazardous waste
- Control chemical purchasing
- Minimize liability
- Save money & Prevent pollution

WHAT DOES ICM INVOLVE?

This approach requires that all chemicals in the pharmacy be clearly labeled, adequately contained, segregated by compatibility and stored in accordance with proper chemical management practices. All chemicals must have a complete and a current safety data sheet (SDS, formerly MSDS) library (binder or digital database) covering all substances plus a “real time” chemical inventory database.

The centralized chemical storage area (pharmacy) is under the control of the science department. The department (ICM Gatekeeper) is responsible for maintaining and updating the chemical inventory, ensuring adequate physical condition of the storage area, screening and ordering any chemical supplies.

HOW TO GET STARTED?

The US EPA’s New England office offers free assistance to a limited number of communities based on need and location. EPA has partnered with 100+ public schools, including the Boston Public School System, and their science departments to help identify and correct improper chemical management and implement a pharmacy-type chemical management system. EPA also provides training for science teachers on chemical safety, hazardous waste management, pollution prevention, laboratory safety planning, and safer & healthier chemistry.

If your school needs help, please contact:

Dwight Peavey, Senior Scientist, US EPA, Region 1
At 617-918-1829 or peavey.dwight@epa.gov