Don’t be a Mad Scientist in the Lab



What’s at Stake?

The laboratory environment can be a hazardous place to work. Some settings, such as hospitals, chemical production and pharmaceuticals may contain many specific hazards which lab workers must be aware of. Labs present just about every type of workplace hazard you can think of – all in one location.

What’s the Danger?

Laboratory workers have the potential to be exposed to chemical hazards, compressed gas hazards, contaminated blood and body fluids, fires and electrical hazards. Other hazards include exposure to lasers, radiation, and cryogenic materials such as liquid nitrogen. Lab employees often do a lot of repetitive motion work, stand for long hours and work in awkward postures, which can lead to a high risk of musculoskeletal injuries such as carpal tunnel, neck and back injuries. Finally, there is the potential for sharps injuries, burns, and slips and falls.

How to Protect Yourself

Follow the signs. Pay attention to and follow all warning signs. Don’t go in restricted areas unless you are trained and authorized.

Put on PPE. Wear all required PPE (personal protective equipment), avoid wearing loose-fitting clothing or jewelry and keep long hair tied back.

Avoid ingestion risks. Never eat, drink, chew gum or smoke in a lab. Never put food in lab refrigerators. Wash your hands after removing gloves, before leaving the lab, before eating, applying cosmetics or using the restroom.

Be ready! Learn to locate and use fire extinguishers, emergency numbers, at least two emergency escape routes, safety showers and eyewash stations.

Cut the risk of sharps injuries. Never use damaged glassware or pick up broken glass with your bare hands – always use tongs or a broom and dust pan. Dispose of broken glass safely by keeping it separate from other trash. Learn proper techniques to avoid needle-stick injuries and always put sharps in appropriate sharps containers.

Give falls the slip. Pick up and throw away clutter and debris and clean up spills immediately to reduce the chance of slips, trips and falls.

Get a handle on it. Practice safe handling, labeling and storage of chemicals and compressed gases. Safety data sheets should be available in case of chemical exposure and should always be reviewed before working with chemicals. Return chemicals and equipment to the proper storage areas. Make sure lids are securely on chemical bottles and compressed gas cylinders are stored upright and secured properly. Only move cylinders in secured carts – never roll them – and replace protective caps when cylinders are not in use.

Avoid the ache. Learn proper lifting techniques and manual material handling to avoid back injuries. Take breaks, practice good technique and use equipment correctly to avoid repetitive motion injuries.

Final Word

Don’t be Dr. Jekyll in the lab. Use caution, plan your work, and follow safety procedures to keep yourself and others safe while working in the lab.