



Albert Einstein College of Medicine

## Reproductive Hazards in the Laboratory

Basic laboratory chemical hygiene practices (such as wearing protective gloves and washing hands frequently) are always important when working with hazardous materials. These practices are even more important for women who work in laboratories while they are pregnant or attempting to become pregnant. Campus laboratories typically contain a number of dangerous chemicals, some of which may harm the reproductive system or pose a hazard to a developing fetus if exposure is not adequately controlled.

### Standard Precautions

Women who are pregnant or attempting to become pregnant should strictly apply the following standard exposure-control practices whenever they are working in a campus laboratory. These same precautions will help protect men from chemical exposures that might affect the male reproductive system and will help prevent contaminants being brought home to spouses on clothing.

1. Prevent accidental chemical ingestion or contamination by practicing basic hygiene in the laboratory. Never eat, drink, apply cosmetics, or make other hand-to-mouth contact in the laboratory. Always wash your hands with soap and water after handling chemicals and when leaving the laboratory.
2. Always handle volatile chemicals at least six inches inside a properly operating chemical fume hood with the sash placed between you and the material.
3. Wear appropriate personal protective equipment including a laboratory coat, closed-toe shoes, impermeable disposable gloves, and safety glasses (or goggles when using liquids). The specific protective equipment worn should be tailored to the task that is being performed. For example, face shields, rubber aprons, and heavy-duty gloves should be used for strong corrosives. For assistance in selecting the proper personal protective equipment, refer to the appropriate Safety Data Sheet, or contact EH&S at [Einstein-Safety@einsteinmed.edu](mailto:Einstein-Safety@einsteinmed.edu).
4. Take a fresh look at the safety precautions spelled out in your laboratory's Chemical Hygiene Plan.
5. Discuss any concerns you may have about potentially hazardous laboratory operations or conditions with your Principal Investigator (PI). If your concerns are not adequately addressed, contact EH&S.

### Special Precautions

Pregnant laboratory workers should discuss the work they perform and the hazardous materials they handle with their personal physicians to determine what, if any, work restrictions are needed. In some cases, certain chemicals may need to be substituted for other reagents-or- certain activities curtailed -for the duration of the pregnancy. Any restrictions placed by the physician should be discussed with the laboratory's PI and Chemical Hygiene Officer immediately.

Specific federal and state regulations apply to pregnant workers' exposure to radiation. If you work with radioactive materials, contact EH&S and schedule an appointment with the Radiation Safety Officer for more information.

Remember, it is **always** important to adhere to proper laboratory safety practices to prevent unsafe chemical exposures. For women of childbearing age, it is particularly important because fetal damage from chemical exposure may occur prior to a woman realizing she is pregnant.