



Safety Guidelines for Pregnant Women in Florida Tech's Laboratories

Introduction

Florida Institute of Technology (Florida Tech) seeks to minimize the risks of working in its laboratories for all employees and students. Minimizing risks for pregnant women is especially important due to the sensitivity of the fetus to specific chemicals, biological agents and ionizing radiation. All lab workers should know the hazards of the materials with which they work, and it is important to recognize that an individual's susceptibility to those hazards may change due to factors such as pregnancy.

Information about specific hazardous materials may be found in the Safety Data Sheets (SDSs), labels, literature, or from the instructor for the class. All employees, including pregnant women, are encouraged to make use of these sources of information. Safe laboratory procedures minimize exposure for all laboratory employees and, if followed faithfully, they also protect the developing fetus.

The Pregnancy Discrimination Act (PDA) prevents Florida Tech from compelling a woman to disclose that she is pregnant, and it prevents her from being assigned to different tasks simply because she is pregnant. If a woman willingly informs Florida Tech that she is pregnant then additional assessments, precautions or other accommodations can be implemented. Colleges, departments and faculty will determine the extent to which a pregnant lab worker or lab student can be excused from lab requirements or what accommodations can be made.

In all cases, a pregnant woman should discuss her laboratory environment with her medical care professional and provide specific information about potential exposures.

Additionally, pregnant lab workers can:

- Request a hazard assessment with Environmental Health & Safety to understand those potential exposures and protective measures that should be utilized;
- Request from the Department, an altered assignment within the lab either through a change in lab duties, a reduced time-frame within the lab or a change in location*;
- Request a delay in entry into the academic program requiring the laboratory work*; or
- Continue to work in a laboratory by utilizing the regular safety precautions that have been developed for the laboratory.

**Please note that requests for altered schedules might not be able to be honored.*

Chemicals

Safety Data Sheets (SDS), container labels and literature provide information about the hazards of specific chemicals as well as allowable exposures to those chemicals. Be aware that most occupational safety and chemical hazard information considers allowable



exposures to adults with healthy immune status. Teratogens and fetotoxic chemicals are of especial concern for pregnant workers, though all other hazards should still be considered.

Hundreds of chemicals have been identified as having teratogenic effects, a few examples: lead, ethanol, thalidomide, ethisterone, testosterone, retinoic acid, tetracycline, chemotherapeutic agents and certain ethylene glycol ethers. Please review the following links for National Institute for Occupational Safety and Health (NIOSH) information about chemical hazards: <https://www.fit.edu/office-of-environmental-health-and-safety/chemical-safety/>.

Biological Agents

Some viruses and infectious agents have harmful reproductive effects in pregnant women. Examples include, but are not limited to Cytomegalovirus, Hepatitis B virus, Varicella-zoster virus, *Toxoplasma gondii*, and Rubella virus. Information about the toxic health effects can be found in the **Agency for Toxic Substances and Disease Registry**: <https://www.atsdr.cdc.gov/>.

Ionizing Radiation

The first trimester is known to be the most radiosensitive time for a fetus, thus, it is beneficial, but not required, to meet with the Radiation Safety Officer (RSO) as soon as possible to review safety practices and monitoring options. If a pregnant radiation worker decides to declare her pregnancy, she will meet with the RSO to review radiation safety procedures, the risk to the fetus, and **NRC Regulatory Guide 8.13**.

A pregnant woman who does not declare that she is pregnant is protected under the regulations for adult radiation workers.

Additional Information

NIOSH The Effects of Workplace Hazards on Female Reproductive Health
<https://www.cdc.gov/niosh/docs/99-104/default.html>

NIOSH The Effects of Workplace Hazards on Male Reproductive Health
<https://www.cdc.gov/niosh/docs/96-132/default.html>