

Pregnancy in the Lab

By using prudent work practices, most laboratory workers who are pregnant or who plan to become pregnant can safely work in research laboratories without exposing their unborn child to potentially harmful chemicals.

It is important for those who are pregnant to identify the specific chemical hazards and the quantities of those chemicals that are used. The most concerning hazard for pregnant women would be reproductive toxins, which can affect the reproductive system. These include teratogens (can harm the fetus), embryotoxins (can harm the fetus) and mutagens (can cause chromosomal damage). OSHA requires that all chemical containers have a GHS-compliant chemical label on it, which lists information such as a hazard statement(s), a precautionary statement and pictograms (graphic symbols describing the hazards of a chemical). Additionally, each chemical has a Safety Data Sheet (SDS), which provides more detailed information. The following health hazards are examples of possible warnings that you would want to specifically look for:

"May cause harm to breast-fed children"

"Suspected of damaging fertility or the unborn child"

Personal Protective Equipment (PPE) are items, such as disposable nitrile gloves, lab coats and safety glasses/goggles that help protect the wearer from specific hazards and hazardous substances. The proper handling of chemicals and the use of PPE is especially important in reducing fetal exposure to chemicals. No PPE is a perfect barrier. Therefore, it is important to consider permeation and breakthrough times specific to the chemical, biological and/or radiation hazards that you work with.

Engineering and administrative controls are an effective way to reduce one's risks. Engineering controls can include fume hoods, biological safety cabinets and glove boxes. The fume hood should be used when working with hazardous chemicals, as the hood will help draw chemical vapors away from the user's face and prevent dangerous vapors from drifting into the rest of the lab. Administrative controls pertain to Standard Operating Procedures (SOP) and lab-specific training.

Laboratory workers who are contemplating pregnancy or who are pregnant should review the toxicity of the chemicals in their laboratory and contact CEHS to determine whether any of the chemicals used in the laboratory pose an additional risk during pregnancy.

For more information, please contact CEHS at (618) 453-7180.