## Precautions for Pregnant Women Working with Laboratory Rodents

If you are pregnant or planning to become pregnant, you should confer with your family physician and Occupational Health Services prior to continued exposure to laboratory animals, inhalation anesthetics, radiation or potentially toxic chemicals.

### I. Laboratory Animal Use

Rodent bites are among the most common accidents of personnel handling animals. Any bite should be reported and treated, because the wound may become infected with organisms from the animal's mouth.

Lymphocytic Choriomeningitis Virus (LCMV) is a rodent-borne arenavirus endemic in the house mouse (*Mus musculus*) population. Pet rodents (including hamsters and guinea pigs) can become infected with LCMV after contact with wild rodents at a breeding facility, pet store, or home; however the prevalence of LCMV in pet rodents is unknown. Although the risk for LCMV infection from laboratory rodents is low, pregnant women or women who think they might become pregnant should be aware of the risks associated with LCMV infection during pregnancy. The following precautions can be taken to reduce the risk for acquiring LCMV infection during pregnancy:

- Avoid contact with wild rodents. Pregnant women who reside in a household with a wild rodent infestation should have the infestation addressed promptly by a professional pest control company or another member of the household.
- Keep pet rodents in a separate part of the home. Pregnant women should ask another family member or friend to clean the cage and care for the pet or arrange for temporary adoption of the pet by a responsible person. Pregnant women should avoid prolonged stays in any room where a rodent resides.

Toxoplasmosis is a relatively widespread parasitic infection caused by a one-celled organism called *Toxoplasma gondii*, and it its shed primarily in cat feces. It can infect the unborn babies of women exposed during pregnancy who do not have immunity to the agent. Asymptomatic toxoplasma infection is common before child-bearing years, and many women have elevated antibody levels indicative of immunity. To help assess the level of immunity against this agent, serum samples can be tested. The mouse can serve as an intermediate host;

however, the prevalence of natural infection is negligible because laboratory mice do not have access to sporulated cysts shed by infected cats. The following precautions can be taken to reduce the risk for acquiring toxoplasmosis infection during pregnancy:

- Cat feces should be avoided and gloves should be worn when working in areas potentially contaminated with cat feces.
- Thorough hand washing after handling any potential source of infection is also necessary.

## II. Handling Hazardous Agents and Toxic Chemicals

Working with hazardous agents and toxic chemicals may pose additional risks to the developing fetus. On request, Environmental Health and Safety will conduct reproductive risk assessments to provide information on the biological, chemical, and radioactive research materials used in an animal or laboratory experiment Ultimately, informed decisions must be made by staff members, in consultation with their personal physicians and Occupational Health, about the use of hazardous materials during a pregnancy.