## **University of Pennsylvania Pregnant Radiation Workers**

## **EHRS Contact**:

Dennise Magill magilld@upenn.edu 267-650-3843

1. The dose limit to the embryo/fetus of a declared pregnant woman due to occupational exposure is 500 mrem during the entire gestation period (Title 25 of the Pennsylvania Code). In addition, efforts will be made to avoid substantial variation above a uniform monthly exposure rate.

A declared pregnant worker is a woman who has voluntarily informed her employer, in writing of her pregnancy and the estimated date of conception.

It is entirely her choice whether or not to declare her pregnancy. She may also choose to rescind her written pregnancy declaration at any time.

If she chooses not to declare her pregnancy, the lower dose limit does not apply.

- 2. If a worker is pregnant or believes she may be pregnant, she can contact EHRS either directly or through her supervisor. All inquiries will be kept in confidence if requested.
- 3. A counseling session will be held, with a follow-up visit to the work area if the hazard is unusual or needs further investigation. A Health Physicist will:
  - Provide information concerning regulatory dose limits.
  - Provide instruction and opportunity to declare a pregnancy in writing.
  - Evaluate personal dose history and exposure potential based on her specific job, type of radiation exposure, recent inspections of the area or equipment, and previous exposures.
  - Provide her with information concerning risk associated with exposure to the fetus.
  - Recommend ways to reduce exposure.
- 4. Pregnant workers will be provided a copy of U.S. NRC Regulatory Guide 8.13, Instructions Concerning Prenatal Radiation Exposure.
- 5. When necessary a dosimeter (badge) that will monitor radiation exposure will be provided to the worker. Monitoring results will be maintained by EHRS and are available for review.

6. The activation of the rights afforded under the declared pregnant radiation worker policy will remain in effect until withdrawn in writing or pregnancy is no longer active. If the declaration is not withdrawn in writing, it will expire one month after the due date specified on the declaration form. If the pregnancy does not go to term, EHRS should be promptly informed in writing.

Declared pregnant workers may elect to continue working as prior to pregnancy. Restriction of specific Job functions will be recommended to supervisors if those functions would result in exposure to the embryo/fetus in excess of 0.05 rem per month or 0.35 rem total. Workers exceeding 0.05 rem per month will be reported in the ALARA investigations to the University Radiation Safety Committee using their badge participant number in lieu of their name.

The following precautions may be recommended for declared pregnant radiation workers when applicable:

- 1. Minimize participation in procedures requiring presence in the examination room during procedures involving fluoroscopy and mobile radiography. If work requires that you are present in the room, use appropriate shielding such as lead aprons or standing shields.
- 2. Minimize participation in procedures involving therapeutic amounts of radioisotopes such as Cesium 137 or Iridium 192, handling of radioactive sealed sources, or brachytherapy patients.
- 3. Minimize participation in radiopharmaceutical dose preparation and therapeutic procedures, particularly ones involving Iodine 131.
- 4. Maintain as large a distance as possible from sources of radiation, patients containing radioactive sources, radiopharmaceuticals, or being x-rayed while still being able to monitor the patient.
- 5. Declared pregnant nurses may be restricted from caring for patients who have received therapeutic doses of radiopharmaceuticals.
- 6. Use of volatile radioactive material may be restricted.