

UNIVERSITY OF MINNESOTA
RADIATION PROTECTION DIVISION
POLICY ON DECLARED PREGNANT RADIATION WORKERS

General Information

To assure compliance with the revised Nuclear Regulatory Commission (NRC) regulations pertaining to declared pregnant radiation workers, the following policy has been adopted by the All University Radiation Protection Advisory Committee:

At the time of employment and on an annual basis thereafter, **all personnel** who work with sources of ionizing radiation will be informed of the recommendations of the NRC relative to the control of radiation exposure received by declared pregnant women. The supervisor (permit holder, registrant or designate) will be responsible for conducting this training which should include an explanation of the new category of "declared" pregnant radiation worker. In the event that a worker declares pregnancy (in writing to her supervisor), the supervisor or his/her designate shall contact the Radiation Protection Division (RPD) to arrange for the completion of specific training. Contact the RPD at 612-626-6002 with questions.

Responsibilities of Supervisor (Permit Holder or designate)

- New employee training and annual refresher training shall provide information on the new "declared" pregnant category of radiation worker and the reason why the NRC and State of Minnesota radiation protection rules recommend that a pregnant woman declare pregnancy. NRC Regulatory Guide 8.13 (Appendix S of the University Radiation Protection Manual), will be used in this training. During these training sessions the supervisor needs to inform all staff members that Appendix S contains information concerning prenatal radiation exposure and that specific steps must be followed once a worker declares her pregnancy.
- Following declaration of pregnancy (contact the RPD for official form), the supervisor shall contact the RPD to arrange a training session for the pregnant worker and themselves.

NOTE: Prior to the training session, the supervisor and the pregnant worker must read the NRC guide reprinted in Appendix S of the Radiation Protection Manual.

The training session will include a review of this guide and of the precautions and procedures to be followed to assure that the worker's radiation dose is maintained within 500 mrem (total effective dose equivalent = summation of external and internal dose) for the entire 9 month gestation period. Also, the work assignment during pregnancy should be such that the pregnant woman does not exceed 50 mrem/month for each month following the declaration of pregnancy.

NOTE: If the pregnant women agrees, the supervisor may wish to assign her to duties that do not involve occupational radiation exposure. This is especially true if she has been involved in protocols that may present a potential for internal uptake of radioactive material (some chemical forms of I-125, S-35, C-14, and H-3).

- A signed record of the above training shall be kept on file by the supervisor and a copy retained by the RPD.
- A film badge dosimeter will be issued to the worker at the training session. The supervisor will assure that dosimetry film is returned to the RPD for processing on a monthly basis.
- If required, assure that bioassay samples and counts (urine analysis and/or thyroid count) are completed on the required monthly schedule. Notify the RPD in the event of any radioactive materials spill, and arrange for appropriate bioassay monitoring for the pregnant person.

Responsibilities of the "Declared Pregnant Worker"

- Complete and sign the "Declaration of Pregnancy" form, and give it to your supervisor.
- Read NRC Guide 8.13 "Instructions Concerning Prenatal Radiation Exposure" (Appendix S pages 1-9, University Radiation Protection Manual). Attend training provided by the RPD on precautions to be followed or changes in work assignment to assure that radiation exposure is maintained below 500 mrem for the entire gestation period, and 50 mrem/month during pregnancy.
- Complete and sign the film badge request card (available from the RPD). Be sure to change the film on the monthly change schedule, and return the used film to the RPD. After completion of the pregnancy term be sure to return the film badge holder along with the last month's film.
- If potentially volatile radioactive materials will be handled by you, submit a monthly urine sample and/or report to the RPD for a thyroid count on a monthly basis. The RPD staff can assist you in determining if a radioactive material presents a volatility concern.