

GUIDANCE ON RADIATION DOSE LIMITS FOR DECLARED PREGNANT WOMEN

It is recognized that the human embryo and fetus are much more sensitive to radiation than the adult. In view of this, the dose limit to the embryo/fetus is set at 0.5 Rem for the entire pregnancy.

Definition: "Declared pregnant women" means a woman who has voluntarily informed her employer, in writing, of her pregnancy and the estimated date of conception.

Regulations that regulate this are:

Sections 4.13 through 4.13.4 of the Regulations outline "Dose to an Embryo/Fetus".

Section 4.18 of the Regulations outlines "Conditions Requiring Individual Monitoring of External and Internal Occupational Dose".

Section 4.46.3 of the Regulations outlines "Record keeping Format" for the declared pregnant woman.

Section 4.53.2.2 of the Regulations outlines "Reports of Exposures" which requires the Division to be notified, if the exposure limit to the embryo/fetus is exceeded.

Section 4.56 of the Regulations outlines "Reports of Individual Monitoring" which requires specific types of licensees or registrants listed in section 4.56.1 submit an annual report to the Division, for the individuals for whom monitoring was required by section 4.18.

To stay below the 0.5 Rem limit, pregnant females should be given assignments and provided protection, which will insure that their occupational dose will not cause the embryo/fetus dose to exceed the 0.5 Rem.

Maintaining occupational dose below this level will require a management commitment, a clear statement of operating philosophy in policy documents and operating procedures, and continuing management follow-up. A member of senior management should be given responsibility for assuring this policy is implemented and should conduct periodic review of related procedures and practices.

Effective control cannot be limited to management commitment and support. It necessarily includes careful design of facilities and equipment and good radiation protection practices by persons who have been determined to be well qualified, responsible and conscientious in performing their duties safely.

Helpful Guides are:

U.S. Nuclear Regulatory Commission, Regulatory Guide 8.7, "Instructions for Recording and Reporting Occupational Radiation Exposure Data" dated June/1992.

U.S. Nuclear Regulatory Commission, Regulatory Guide 8.36, "Radiation Dose to the Embryo/Fetus" dated July/1992.

U.S. Nuclear Regulatory Commission, Regulatory Guide 8.13, "Instruction Concerning Prenatal Radiation Exposure" dated February/1987.

Personnel monitoring (TLD, film badges and LUXEL) companies supply fetal monitoring services.

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