SEC-010

Radiation Worker Protection during Pregnancy

Effective Date Monday, August 1, 2005

Status Final

Last Revised Wednesday, September 16, 2026

Policy Type University

Contact Office Radiation Safety (EHS)

Oversight Executive
Vice President for Research

Applies To Academic Division, the Medical Center, and the College at Wise.

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Reason for Policy

The University is committed to providing a safe workplace and complying with State regulations regarding exposure to radiation during pregnancy.

Definition of Terms

Declared Pregnant Worker

Description

An individual who has voluntarily informed the licensee or registrant, in writing, of their pregnancy and the estimated date of conception. The declaration remains in effect until the declared pregnant worker withdraws the declaration in writing or is no longer pregnant.

Radiation Worker

Description

An individual engaged in work under a license or registration issued by the Virginia Department of Health (VDH).

rem (Sv)

Description Units used to quantify radiation dose equivalent.

Policy Statement

Radiation workers who require radiation protection training should be provided with information concerning the risks of radiation exposure during pregnancy.

1. **Regulatory Position:**
   The Virginia Radiation Protection Regulations (Code of Virginia, Section 12VAC5-481-710) require that the dose equivalent to the embryo/fetus during the entire pregnancy due to occupational exposure of a declared pregnant worker does not exceed 500 mrem (mrem is 1/1000 of a rem).

2. **Background:**
   Exposure to any level of radiation is assumed to carry with it a certain amount of risk. In the absence of scientific certainty regarding the relationship between low dose exposure and health effects, and as a conservative assumption for radiation protection purposes, the scientific community generally assumes that any exposure to ionizing radiation may cause undesirable biological effects and that the likelihood of these effects increases as the dose increases. At the occupational dose limit for the whole body of 5 rem (50 mSv) per year, the risk is believed to be very low.

   The magnitude of risk of childhood cancer following in utero exposure is uncertain in that both negative and positive studies have been reported. The data from these studies “are consistent with a lifetime cancer risk resulting from exposure during gestation which is two to three times that for the adult” (NCRP Report No. 116, Ref. 2). The Nuclear Regulatory Commission (NRC) has reviewed the available scientific literature and has concluded that the 0.5 rem (5 mSv) limit specified in 10 CFR 20.1208 provides an adequate margin of protection for the embryo/fetus. This dose limit reflects the desire to limit the total lifetime risk of leukemia and other cancers associated with radiation exposure during pregnancy.

3. **Declaration of Pregnancy:**
   For a pregnant radiation worker to take advantage of the lower exposure limit and dose monitoring provisions specified in 12VAC5-481-710, the worker must declare the pregnancy in writing to the radiation safety officer in the Office of Environmental Health and Safety (EHS).

4. **Compliance with Policy:**
   Radiation workers retain the right to determine whether to voluntarily disclose a pregnancy. The requirements of this policy and the associated Virginia Radiation Protection Regulations apply to declared pregnant workers.

   Direct questions about this policy to Radiation Safety (EHS).

Procedures

Pregnancy Declaration:
Declaration may occur at any time during the pregnancy. If you choose to declare your pregnancy, the Voluntary Declaration Form must be completed, signed, and returned to the radiation safety officer (EHS). By signing this form, you state that you have been advised of the potential health risks to the embryo/fetus associated with radiation exposure and have been advised of the State regulatory requirements to limit the dose to the

embryo/fetus to 500 mrem for the entire gestation period. Before signing and returning the form, contact the radiation safety officer (EHS) should you have any questions concerning this form.

After a written declaration is filed, instruction will be provided and may include limitation of normal job functions if they could cause you to receive more than 500 mrem during the pregnancy. This may mean that, if you declare your pregnancy the University may not permit you to do some of your normal job functions if those functions will cause you to receive more than 500 mrem and you may not be able to have some emergency response responsibilities. In most cases, however, you can continue in your present job with no change and still meet the dose limit for the embryo/fetus. Any necessary modification of your duties will be discussed with you and the departmental supervisor.

A declaration of pregnancy may be withdrawn at any time. If it is withdrawn, the lower dose limit will no longer apply.

You may ask your supervisor for a job that does not involve any exposure to occupational radiation dose, but the University is not obligated to provide you with a job involving no radiation exposure. The decision on what level of risk to accept is yours.

Related Information

Voluntary Declaration of Pregnancy/Declaration Withdrawal Forms
NRC Regulatory Guide 8.13 - Instructions Concerning Prenatal Radiation Exposure
SEC-009: Radiation Safety Program
UVA Radiation Safety Program Manual and Pregnancy & Radiation Exposure Webpage

Major Category Safety, Security and Environmental Quality

Next Scheduled Review Sunday, September 16, 2029

Revision History

Confirmed 9/16/26; Updated Contact Office, Procedures, minor word edits 10/31/23; Updated 2/5/20; 9/27/11, 8/25/2008.

Approved By Executive Vice President and Chief Operating Officer

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