

**MILLE LACS BAND OF OJIBWE
HEALTH AND HUMAN SERVICES POLICY & PROCEDURE**

Department: Health Services-Radiology

Policy Number: HHS-HS-RAD 1419

Policy Title: Fetal Protection

Attachments: Declaration of Pregnancy

Revision History: 09, 02/15, 3/18, 1/21

Revised by/Date: Lance Roeschlein, Dr. Ravi Gupta 1/2022

Approved by:

Jenna Kuduk, Health Services Director

Date:

01/31/22

Approved by:

Nicole Anderson, Commissioner of HHS

Date:

2-3-22

POLICY STATEMENT: It is the policy of Mille Lacs Band Health Services Radiology department that occupational exposure levels for female employees of child-bearing age are within NCRP (National Council on Radiation Protection and Measurements), Minnesota Administrative Rules and Indian Health Service Guidelines.

PURPOSE: The purpose of this policy is to establish a fetal protection policy that limits fetal exposure to ionizing radiation.

PROCEDURE:

- A. Any pregnant employee is not allowed to be in the radiology room or dental operatory during x-ray exposure.
- B. The Fetal Protection policy and procedure will be reviewed by the Radiation Safety Officer (RSO) and staff annually.
- C. New employees will read policy and sign prior to working with radiographic equipment.
- D. Declared pregnant women will receive a personal dosimeter during the entire pregnancy and must be worn at the abdomen and under any lead/lead free aprons (if apron is worn) to ensure that they receive less than 0.5 rem annually.
- E. Barrier protection to be used whenever possible when the pregnant employee operates radiographic equipment.
- F. If shielding is not possible, the pregnant employee must stand at least two meters from the tube head and out of the path of the primary beam
- G. Employee may voluntarily declare her pregnancy by signing the attached "Declaration of Pregnancy" form indicating she wishes to declare her pregnancy and follow the institution's radiation exposure limits to fetus of 0.5 rem maximum for the period of gestation, not to exceed a rate of 0.05 rem for any single month. The declaration of pregnancy form is available in the radiology manual.
- H. The employee will be given two dosimeters that shall be worn when conducting either radiographic or fluoroscopic procedures. One dosimeter shall be worn at the waist level under the lead/lead free apron during the gestation period and the other dosimeter shall be worn at the collar level (Note: The fetal radiation dosimeter shall be turned in monthly in order to determine monthly dose). The Regulatory Guide 8.36 for the revised regulations which recommend assigning the dose most representative of the fetal

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- exposure, i.e. in the mother's lower torso. In addition to providing deep dose, the report provides a column for the RSO to write in any internal dose in case of radionuclide intake.
- I. For the period from conception until the declaration of pregnancy is made and a dosimeter is issued, the Radiation Safety Officer (RSO) will make a determination of the dose to the fetus from the calculations of associated exposure to radiation for work performed by the employee during that period. During the period of pregnancy, HHS management will make efforts to work with the employee to maintain fetal doses to less than the limits specified above.
 - J. The dose from conception to declaration is recorded separately, thus allowing easy tracking of the 0.05 rem cap for the remainder of the pregnancy.
 - K. In either case, the pregnant employee of Health and Human Services (HHS) must acknowledge by their signature that they have read the attached material regarding effects on the embryo/fetus of exposure to Radiation and other Environmental Hazards.
 - L. If, the pregnant employee chooses to terminate the declaration of pregnancy and receive a higher dose of radiation to the fetus, they may sign the attached form as indicated, BUT, the institution is not held liable for doses received by the employee as a result of terminating the declaration of the pregnancy and accepting a higher dose to the fetus.

Internal and/or External References	Indian Health Manual, Part 3, Chapter 21 – Diagnostic Imaging Program
	Minnesota Administrative Rules 4732.0440 Minnesota Administrative Rules 4732.0415 National Council on Radiation Protection and Measurements, Report 116 – Limitation of Exposure to Ionizing Radiation
Compliance - Posting Date	
Replaces – Policy Number	2/3/2023 <i>CH</i>
Next Review - Due Date	01/2023 2/3/2023 <i>CH</i>



DECLARATION OF PREGNANCY

To: _____

In accordance with the NRC's regulations at 10 CFR 20.1208, "Dose to an Embryo/Fetus," I am declaring that I am pregnant. I believe I became pregnant in _____ (only the month and year need be provided).

I understand the radiation dose to my embryo/fetus during my entire pregnancy will not be allowed to exceed 0.5 rem (500 mRem) (unless that dose has already been exceeded between the time of conception and submitting this letter). I also understand that meeting the lower dose limit may require a change in job or job responsibilities during my pregnancy.

(Your Signature) _____ (Date)

(Your Name Printed)

REVOCAION DECLARATION OF PREGNANCY

I wish to formally notify the Radiation Safety Officer that, as of this date, I am revoking the Declaration of Pregnancy I filled above. Included with this are any unreturned monitors that were still in my possession. Please arrange to end the issuance of any additional pregnancy monitor dosimeters.

I have read and understand the written materials regarding the potential health effects from exposure to ionizing radiation published in Regulatory Guide 8.13 by the Nuclear Regulatory Commission. The decision to revoke my prior declaration of pregnancy to the Radiation Safety Officer is a personal choice which I have made freely. I release my employer on a liability based on my decision.

(Your Signature) _____ (Date)

(Your Name Printed)