October 8, 2014

Memorandum: Radiation Safety Committee

Subject: Radiation Safety Policy for Pregnant Radiation Workers

It is the responsibility of the Tufts Radiation Safety Committee (RSC) to formulate, implement, and review radiation protection policies to ensure regulatory compliance with federal and state regulations. To be consistent with the applicable regulatory agencies, and in the interest of providing a safe and healthy environment for pregnant radiation workers, the RSC revised document is provided.

Policy

1. Regulations promulgated by the Massachusetts Department of Public Health Radiation Control Program governing occupational exposure to ionizing radiation requires that the radiation dose to the fetus of occupationally exposed pregnant worker be held to 500 mrem or less during the pregnancy. This policy is intended to achieve As Low as Reasonably Achievable (ALARA) conditions. ALARA is also a Massachusetts Department of Public Health regulatory requirement, and to comply with the ALARA requirement, no person should conduct an operation that generates unnecessary radiation. The National Council of Radiation Protection (NCRP) has recommended that this dose be controlled such that no more than 50 mrem be delivered to the fetus in any one month.

2. Tufts University radiation workers, especially women of childbearing age, are required to adhere to the above regulation / guidance and following procedure.

Procedure

1. When an employee informs the Radiation Safety Officer (RSO), in writing, that she believes she is pregnant:
   a. The employee is instructed to complete form RSP-011, Radiation Worker Declaration of Pregnancy and schedule a consultation with the RSO to receive training, and review the employee rights and pertinent regulations.
   b. The employee will be assigned a fetal dosimeter to be worn during the gestation period at waist level (under apron, if applicable) to serve as a measure of fetal radiation dose. The supervisor will take all reasonable steps to maintain the radiation exposure for this employee (as recorded by the waist level badge) to less than 50 mrem/month.

2. Pregnant radiation workers should be particularly diligent in avoiding unnecessary exposure during their regular work assignment.
   a. Employees should minimize their time of exposure, maximize their distance from the radiation source, and take advantage of available protective equipment such as lead aprons, shield barriers, and protective booths whenever practical.

3. If the pregnant employee is currently assigned to duties whereby the potential for exposure is significantly increased (e.g. fluoroscopy or Nuclear Medicine), she may be reassigned to duties involving lower potential for exposure for the duration of her pregnancy.
4. After reassignment, if practical, the pregnant employee will be expected to perform all duties as assigned. The preceding procedures should be implemented in the new work area as well, in order to minimize potential radiation exposure to the fetus.

5. A declared pregnant worker who is exposed to workplace radiation may be eligible to utilize leave time consistent with applicable Human Resources policies. The HR policy is provided whenever a pregnant radiation worker declares her pregnancy to their respective supervisor or the RSO. Pregnant employees are encouraged, although not required, to declare their pregnancies.

6. The pregnant radiation worker is encouraged to discuss the potential radiation exposure to the fetus, risk associated with radiation dose, and methods of controlling radiation exposure with a physician, supervisor, and/or the RSO.

7. The RSO will notify the appropriate supervisor when a declared pregnant employee provides written notice of her pregnancy.

Additional information

Managers and staff should continually seek methods for minimizing unnecessary radiation exposure. Investigation levels have been established by the RSC for the purpose of controlling occupational exposure to radiation. Occupational radiation dose to workers continues to be well below regulatory limits as reported by a private NAVLAP (http://www.nist.gov/nvlap/about-nvlap.cfm) accredited dosimetry vendor. Please contact the Radiation Safety Officer (617-636-3450) for further information or guidance regarding this memorandum.

Sincerely,

Mauricio Solano MV, DACVR
Chairman, Tufts University Radiation Safety Committee

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