Guideline

Radiation Exposure During Pregnancy

The purpose of this document is to provide health care workers and their supervisors and managers with information on radiation exposure to pregnant workers. This document supplements the *Safe Use and Installation of Medical X-ray Equipment* and Radiation Safety Manual: Safe Use of Radioisotopes in Nuclear Medicine.

The Lower Mainland Health Authorities and their employees understand the value of good health. If you're planning to become pregnant, or have recently conceived, your baby's health is a priority. When you work in an area with or near radiation sources, you'll have some extra questions. This is particularly true if you work in:

- Medical Imaging
- Nuclear Medicine
- Cardiology
- Operating Room
- Areas where radiological procedures are performed



What You Need to Know

According to the International Commission on Radiological Protection, if you follow proper safe work procedures, the potential hazards from radiation are extremely low. Historical fetal monitoring in the Health Authorities supports this and indicates that where staff utilize PPE, and follow safe work procedures, fetal exposures are far below the regulatory limits.

If you regularly have your radiation doses monitored using a dosimeter, you could be offered a fetal dosimeter. The monthly dose reports will be closely monitored by you and your Site Radiation Safety Officer. It's important that the reading be kept below 4mSv throughout the remaining gestation period. This is why monitoring is so important, so you can be sure you are below these recommended limits

What Should You Do?

You are encouraged to discus with your supervisor/manager as soon as possible that you are pregnant. If you are not comfortable discussing this with your supervisor or co-workers, notify a Workplace Health representative so that confidential monitoring can begin without delay.

Begin using your fetal dosimeter as soon as it is received. Ensure it is worn at the abdomen under your PPE. Exchange your dosimeters monthly to ensure that dose monitoring is as accurate as possible. When not using the dosimeter, store it with the control badge either on the department badge board or in another location away from any sources of radiation. Do not leave it attached to your PPE.

Follow all safe work procedures for your department. If your work involves higher exposure tasks (such as close proximity or long duration near a radiation source) talk to your supervisor/manager about the possibility of additional control measures or performing other duties during your pregnancy. Wearing two lead aprons (one on top of another) is not recommended. A lead apron with modified fit for pregnancy may be made available.

Review your fetal dosimetry reports monthly. If you have any questions or concerns, speak to your department/site Radiation Safety Officer, or Workplace Health.

Where to Look for Additional Information

The Lower Mainland Health Authorities maintain information on Radiation Safety on their intranet sites. You can find the links below:

- Fraser Health Pulse Radiation Safety Page
- Vancouver Coastal and Providence Health Care Radiation Safety Page
- Provincial Health Services Authority Radiation Safety Page

You may also want to consult other reputable sources for radiation safety information such as the International Commission on Radiological Protection and the WorkSafeBC Occupational Health and Safety Regulation (Part7 Noise, Vibration, Radiation and Temperature).

Who to Contact for Additional Information

In addition to your site or department Radiation Safety Officers, the following Workplace Health representatives can assist you with any additional questions you may have.

Fraser Health	Dennis He, Client Partner, Radiation Safety: dennis.shaofenghe@fraserhealth.ca or 604.360.6475;
Vancouver Coastal	Cindy Wu, Occupational Hygienist: cindy.wu@vch.ca or 604.314.1683.
Providence Health Care	Alina Tepes, Safety and Hygiene Officer: Atepes1@providencehealth.bc.ca or 236.858.7428 Haoyang Zhen, Safety & Hygiene Officer: hzhen@providencehealth.bc.ca or 647.936.3884
Provincial Health Services	Nena Benic, Exposure Prevention Advisor: nena.benic@phsa.ca or 604.875.7227.