



DEPARTMENT OF HEALTH
DIRECTORATE: RADIATION CONTROL



GUIDELINES

PERSONAL MONITORING WHEN A LEAD RUBBER APRON IS WORN
MEDICAL AND VETERINARY USE OF DIAGNOSTIC X-RAY EQUIPMENT

Introduction

Monitoring of persons occupationally exposed to ionizing radiation is an essential component of any safety programme. The purpose of a dosimetry programme is to provide occupational workers with an estimation of their radiation dose and to highlight unsafe practices.

A Personal Radiation Monitoring Device (PRMD) is a radiation sensor designed to measure the radiation dose received by a person, who is occupationally exposed to radiation, over a specified period of time.

Note: The licence holder is responsible to ensure that radiation workers on his/her premises wear a PRMD.

In order to ensure that the exposure record is accurate, the following guidelines must be followed.

WEARING POSITION OF PRMD

If ONLY a lead rubber apron is worn:

- *Wear the PRMD in front of the body, **OUTSIDE** the apron, between the neck and waist, preferably at the collar.*
- *The PRMD must be facing outwards towards the source of exposure*

If a lead rubber apron with eye and thyroid protection is worn:

- *Wear the PRMD at the waist **UNDER** the protective apron.*

Precautions

- The PRMD must be worn only during periods of occupational exposure.
- Do not wear the PRMD when receiving dental, radiography or nuclear medicine examinations.
- Wear only the assigned PRMD. Do not wear any other individual's PRMD.
- The PRMD must not be kept inside a pocket where coins, keys, or other objects can attenuate incident x-rays before it reaches the PRMD.
- Do not tamper with or unnecessarily expose a PRMD to radiation, heat or moisture.
- Do not store the PRMD near a radiation source (e.g. do not leave it attached to a lead apron that will be stored in the X-ray examination room).
- Remove the PRMD from clothes before it is washed.

- Return the PRMD at the end of wearing period.
- PRMD is considered late if not returned by the due date to the Radiation Monitoring Service provider. A lost (non-returned) PRMD causes a permanent gap in the individual's exposure history record. Lost PRMD's must be reported.

Pregnant radiation workers

Refer to document on "*Management of Pregnant Radiographers and other staff members*" with special reference to pregnant radiographers, available from the Directorate: Radiation Control or at:

<https://sites.google.com/site/radiationcontroldoh/>

Notifications of over-exposures

- The Service Provider will notify the user and Radiation Control of an exposure which exceeds the prescribed limits.
- In the event of an over-exposure the user must complete and immediately return form RC010 to the Department of Health: Directorate: Radiation Control.
- This form is available from the Directorate: Radiation Control or at:
<https://sites.google.com/site/radiationcontroldoh/>

Service Provider of PRMD's

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