#### ENVIRONMENTAL HEALTH & SAFETY UNIVERSITY of WASHINGTON

# Personal Dosimetry

Radiation dosimeters monitor external radiation exposure and provide a permanent record of your occupational dose. Regulations require the University of Washington to monitor occupational exposure to radiation for any individual that is likely to receive 10% of the annual occupational dose of 5,000 millirem. The Radiation Safety section of Environmental Health & Safety (EH&S) manages radiation dosimeters for all UW employees.

## **Requesting Dosimetry**

Dosimeters are ordered through Radiation Safety by submitting a <u>Dosimetry Request Form</u>. You may return it to your Series Coordinator, send it via email to Radiation Safety at <u>radsaf@uw.edu</u>.

## **Dosimeter Exchange**

There is a Series Coordinator for each group to distribute and collect badges and coordinate with Radiation Safety. The Series Coordinator will also receive dose reports and distribute them to individuals.

Dosimeters are distributed monthly or quarterly; the frequency is noted on the front of your badge.

To ensure timely notification of high exposures and compliance with regulations, please return your dosimeter(s) to your Series Coordinator promptly.

Badges that are returned with the "remove" tab still intact are considered unused. Please remove the tab from your dosimeter before using.



## How to Wear Your Dosimeter

#### **Collar Badges**

These dosimeters should be worn on the front portion of the trunk of the body between the waist and shoulders and in approximately the same location every time. As an example, if you wear the dosimeter clipped to your belt,



it should be worn there each time. If a lead apron is worn for x-ray work, the dosimeter should be worn *outside* the apron.



#### **Fetal Monitors**

The fetal monitor should be worn in the center of your body, near the fetus, and under your lead apron (if used). Contact your Series Coordinator to request a fetal monitoring form, or find it on the <u>EH&S Website</u>. For more information, and confidential fetal monitoring, <u>contact Radiation Safety</u>.

#### **Three Types of Personnel Dosimeters**

- > Collar/Whole Body
- > Fetal
- Extremity/Ring

#### Extremity/Ring

Ring dosimeters should be worn on your dominant hand with the wide part facing the radiation source. If you are assigned two rings, they should be worn on the correct hand for accurate exposure readings. To the



right of the QR code are two alpha digits: "R" indicates Right hand, "L" indicates Left hand, "M" indicates monthly, "N" indicates quarterly. If wearing gloves, the ring should be worn under the gloves.

## Lost/Damaged/Contaminated badges

There should be no gaps in your exposure records. If a dosimeter is lost or damaged, immediately fill out a <u>Missing/Damaged Dosimeter Report</u>; give it to your Series Coordinator or <u>contact Radiation Safety</u> so that a replacement badge can be issued. Should your dosimeter become contaminated, please <u>contact</u> <u>Radiation Safety</u> for proper handling instructions.

#### **Top Dosimeter Do's and Don'ts**

- ✓ DO wear your dosimeter when working around radiation sources.
- ✓ DO turn in your dosimeter to your dosimetry coordinator promptly after the wear period has ended.
- ✓ DO turn in your dosimeter to your Series Coordinator if you terminate your employment.
- ✓ DO wear your dosimeter on the outside of lead aprons (excluding fetal dosimeters).

## **Change of Jobs**

When transferring to another location within the University where you will be exposed to radiation, take your dosimeter(s) with you, and <u>contact Radiation</u> <u>Safety</u> to inform them of your new location.

## **Dose Reports**

Dose reports are emailed to your Series Coordinator monthly or quarterly depending on your series frequency. Ask your coordinator to share your dose information with you. Individual dose information is also available from the Landauer website, the instructions are on the <u>EH&S website</u>, or <u>contact</u> <u>Radiation Safety</u>.

### **ALARA Program**

ALARA stands for As Low as Reasonably Achievable. In practice, it means UW Radiation Safety monitors dosimetry results and investigates anyone that that exceeds ALARA 2 doses, and evaluates doses above ALARA 1 levels.

Dose Type	ALARA Level 1 (mrem)	ALARA Level 2 (mrem)
DDE	125	375
LDE	375	1125
SDE	1875	5625
SDEM	1250	3750

- DON'T wear your dosimeter when you are receiving x-rays for your own personal health care.
- DON'T wear your dosimeter when you are away from the workplace.
- O DON'T share your dosimeter with someone else.
- DON'T tamper with any dosimeter. This will make the readings invalid.