



May 2006

## Radiation Safety Training Update

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Volume 2, Issue 5

May 2006

**Quick Procurement Reminder:** Any problems (wrong shipment amount "uCi", degraded batch, wrong tag, replacement orders, etc) with your RAM order are to be communicated directly to Procurement by calling Janet Rienzo Stack at 632-6092.

### Lab Surveys

Lab surveys must be performed weekly if you handle more than 200 uCi of radioactive material/per week. (Surveys can be performed monthly if you handle less than 200 uCi / week).

Lab surveys consist of meter surveys and wipe tests.

#### To perform a GM meter survey:

1. Check the calibration date of the meter.
2. Check the batteries.
3. Check and record the background in mrem/hr.
4. Move the meter about 10cm/sec about 2 cm from the surface to be checked.
5. Record the results in mrem/hr.

#### To perform wipe tests:

1. Use filter paper, kim wipes or similar material to perform wipes.
2. Wipe an area approximately 100 cm<sup>2</sup> in one direction.
3. Count results in liquid scintillation counter and record results in DPM (disintegrations per minute).  $DPM = CPM / \text{counter efficiency \%}$ .

#### Dose Limits

5,000 mrem/ year – whole body exposure  
50,000 mrem/year – skin dose equivalent  
15,000 mrem/year – eye dose equivalent  
50,000 mrem/year – extremity dose  
500 mrem/gestation – whole body (for voluntarily declared pregnant workers - DPW)

**FOR OFF-HOURS EMERGENCIES (nights, weekends, holidays)**

**CALL U. Police AT 911**

### Personal Exposure Monitoring

#### *FastFactsFastFactsFastFacts*

- Exposure monitoring is required for any person who is likely to receive more than 500 mrem per year.
- All individuals who are exposed to radiation on a regular basis will be issued a badge.
- Badges are issued to specific individuals.
- If you lose your badge, call the Radiation Safety Office (ext 2-9674) immediately for a replacement.
- Don't borrow anyone else's badge
- Store your badge AWAY from radioactive materials or radiation sources
- Don't leave your badge in a hot vehicle.
- Our New Luxel Badges are very sensitive and can read down to 1 mrem doses.
- Analysis of badges can tell the dose, type of radiation, energy range, direction of exposure, and whether the film was exposed in its holder.
- Finger rings (extremity dosimetry) use a lithium fluoride chip to measure and store radiation dose information.
- Individuals who use P-32 in large quantities (> 1 mCi) will be issued finger rings
- **Return monthly / bimonthly badges PROMPTLY to the Radiation Safety Office for processing**
- Dose reports are reviewed promptly and any unusually high or low exposures are promptly investigated.
- Additional badges are issued to "declared pregnant personnel to monitor fetal exposure