

Guidelines

For Radioactive Contamination Survey Of Laboratory

1. Surveys are required each day that radioisotopes are used.
2. At least two locations shall be surveyed.
3. Conduct survey at locations most likely to be contaminated such as the immediate workbench surface, the floor near the isotope usage area, and pieces of equipment such as a pipette, refrigerator handles, faucet handles and related objects.
4. Document on the Laboratory Contamination Survey Form, and keep forms on file.
5. On days when isotopes are not used, a survey need not be conducted. When re-initiating isotope use after an interruption, the next Survey Form should include a comment that "isotopes not used since _____(date of the last survey form)".
6. For gamma emitter (I- 125), strong beta emitter (P-32), or (P-33) the survey may be done with a GeigerMueller survey meter. The survey procedure should be to pass the detector over the survey area to find any "hot spots", rather than to observe and record the exposure rate at pre-designated points.
7. For weak beta emitters (C-14, S-35, H-3) the survey procedure should be to conduct a filter paper "smear" (wipe) of the surface, and then count the smear in a Liquid Scintillation Counter. The area to be smeared shall be 100 cm² (10 cm x 10 cm) or one smear of two feet in length.
8. Care needs to be taken to wear disposable gloves during the survey, and to remove them and place them into radioactive waste receptacle prior to the counting step.
9. A survey result of 2x background level is considered contaminated. A contaminated location must be decontaminated and re-surveyed until the level drops below 2x background.
10. Lab personnel using (I- 125, P-32, or P-33) should survey shoes and hands with survey meter prior to leaving lab.