

# Bench Top Radioactive Work Protocol

by Mazen Ferzly, 06/22/2000

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## Log in radioactive material received and deduct amount of radioactive material used in each experiment in Radioisotope Log Book.

1. Clear your bench top work area and make sure it is clean.
2. Put on your lab coat and protective gloves.  
(Note that you are not allowed to wear open toed shoes while doing lab work)
3. Put your radiation badge on your lab coat at the height of your work surface area.  
(If are working with mCi amounts of  $^{32}\text{P}$ , you should wear a finger ring, with the film side facing the inside of your hand)
4. Survey the area where you are going to do the work. Make sure it is not already HOT. (If HOT, decontaminate, and repeat step 4.)
5. Place a fresh layer of bench paper over the area where the radioactive work is to be done.
6. Put a small plastic bag, with absorbent in the bottom, in a glass beaker, and place it on the bench top, for radioactive waste disposal.
7. Place all radioactive material and perform all the work behind Lucite shielding.
8. The Geiger counter must be placed next to you on the bench top within easy reach. It must be turned ON. Any time you are to walk away from your bench or handle non-radioactive material, survey yourself to make sure that you are not contaminated.
9. Take all precautions when working with the radioactive material to avoid spillage.  
(It is advisable to plan your experiment {do a cold run} so that you know exactly what needs to be done and where things should be placed when you start the actual experiment.)
10. Make sure all equipment used for the radioactive work is labeled with radioactive tape. (Use only equipment designated for radioactive work {e.g. only centrifuges, water baths, fume hoods, sinks, etc... designated for radioactive work})
11. When you are done with the radioactive experiment, make sure all your waste is disposed of in the absorbent filled bag. Tie the bag and dispose of it in the appropriate radioisotope container.  
Document the date and amount of radioactivity you disposed of, on the log sheets on or above the radioactive waste container.
12. All waste must be thoroughly defaced or radioactive labels removed, before being thrown in the appropriate radioactive waste containers
13. Survey your work area and make sure it is not contaminated. Return Geiger counter to designated area. (Bench top next to HOT room)
14. Store all radioactive material in appropriate container (Lucite box {if not stored in HOT room}) and make sure it is clearly labeled with your name, lab name, radioisotope used, and date placed in fridge.
15. Dispose of the bench top paper and gloves in the appropriate radioactive waste container.

## **DECONTAMINATION**

1. Notify Lab Radiation officer or Lab Manager of contamination.  
(They will ascertain type of procedure needed to handle the spill. If it is a minor contamination then follow the steps 2 to 4)
2. Dilute decontamination solution according to instructions on bottle.
3. Clean area with decontamination solution and then check radiation level with Geiger counter.
4. Repeat step 4 until level is at background.

**IMPORTANT NOTE: If you are even slightly unsure of how something should be done then ASK someone for help.**

**WARNING: Any person caught violating radioactive work procedures may be subject to suspension from radioactive work.**