

# Safe Operating Procedure

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Division: All, Building: All, Lab:

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Title: Radioactive Spill Clean Up

## Procedure

1. Don lab coat, double gloves, safety glasses and overshoes.
2. Don personal monitors.
3. Check that you have the appropriate monitoring equipment and that your radioactive spill kit is to hand.
4. If required use bench-coat, shiny side up, to create a safe walkway and shield any hot spots to minimise your exposure.
5. Monitor to identify boundaries of the spill. Demarcate, if necessary. (Do not use permanent marker pen!) Remember to check for splashes outwith the main area.
6. Absorb spill onto paper towels/tissues, holding them in forceps or tongs if a medium/high energy emitter is involved to minimise dose to fingers. Start at perimeter and work inwards to avoid spread. Dispose of waste generated during clean up in an appropriate waste container.  

Note: if a volatile iodine 125 solution, e.g. sodium iodide, has been spilled, 5% sodium thiosulphate solution should be applied as soon as possible to limit release of radioiodine to atmosphere. Thoroughly absorb spill then apply sodium thiosulphate solution to the paper towels.
7. Wipe down the spill site with 5% Decon or Count-Off until contamination ceases to transfer to the paper towels.  

Note: other solutions may be more effective at removing certain radioisotopes, e.g. Church Buffer for 32P: 70g SDS + 80ml 0.5M sodium phosphate buffer at pH 7.2 + 2ml 0.5M EDTA up to 1 litre with water.
8. If contamination cannot be completely removed, i.e. it is "fixed", ensure the affected area is adequately shielded.