

Wound Counting Techniques Used  
for  
Np Accident Response and Follow-Up  
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Lessons Learned from a Recent Incident

a presentation by  
Debbie Kruchten and Tracey Simpson  
Lawrence Livermore National Laboratory  
for the  
41st Annual Conference on Bioassay, Analytical, and Environmental Radiochemistry

In April 1995, an accident occurred at Lawrence Livermore National Laboratory involving Np-237, U-238, and Th-232. One person was injured and sustained wounds on the face, neck, chest, and hand. A portable wound counting system with a thin-window NaI detector was used to respond to the LLNL decontamination facility at the Health Services department. This system played a key role in the determination of an initial dose estimate as well as in the decision for possible excision.

Follow-up monitoring occurred at first daily and then less frequently with the portable system at both the Health Services department and Whole Body Counter. Once the individual was able to return to work, a LEGe detector was used in addition to the NaI detector. This presentation will cover the initial response and follow-up monitoring, and include a comparison of the different detector systems used, the intricacies of counting Np-237 on these different systems, and the significance of the data provided by each.