

ESTIMATING INTERNAL DOSE EXPOSURE FROM AMERICIUM-241 INCORPORATION – THE WORK CONTINUES

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As a follow-up of the work started in 2014 investigating the origin, physical and chemical form and amount of incorporation of a radiocontamination caused by aerosol-form Am-241 further gamma spectrometric measurements were performed and evaluated on the persons involved by a specifically calibrated set of whole body and body part counters. Additionally urine samples were analysed by radiochemical separation followed by alpha spectrometry parallel to mass spectrometric assessment. Dose estimation methods based on excretion analysis and model calculations for uptake by lungs are compared. The estimated committed effective dose can be further reduced by ongoing excretion.