

Estimation of Actinide Element Skeletal Content in Humans on the Basis of a Limited Number of Samples Collected at Autopsy

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Biokinetic models for actinide elements are largely based on studies with animals and their relevance to humans is still uncertain. Models based on human data have been limited in that most are based on relatively small numbers of tissue samples collected at autopsy. A major effort by the U. S. Transuranium and Uranium Registries (USTUR) is directed toward use of data from autopsy samples to construct biokinetic models for actinides in occupationally exposed humans. Estimation of skeletal content of actinides from a limited number of samples has been especially difficult; however, the analysis of six whole-body donations to the USTUR has been particularly valuable for determining relationships between actinide contents in individual bones and the skeleton.

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