

## **Plutonium in Tissues of Occupationally Exposed Individuals**

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The United States Transuranium and Uranium Registries (USTUR) studies actinide biokinetics and tissue dosimetry by following up occupationally exposed workers. The USTUR research relies heavily upon postmortem autopsy findings and radiochemical analysis of tissues. Tissue analysis provides data on actinide distribution, retention, and radiation dose estimation from internally deposited radionuclides. In this study, 1,678 tissue samples from 295 voluntary donors to the USTUR were analyzed for plutonium using alpha-spectroscopy. The activity concentrations of <sup>239+240</sup>Pu were measured in 288 lung tissues, 265 thoracic lymph nodes (LNTH), 285 liver samples, and 840 bones from 253 cases. For each case,

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