



This policy provides a brief overview of the purposes and objectives of the Registries.

The broader USTUR mission

The broader USTUR mission is to:

- Evaluate health outcomes, causes of death, and life expectancy of former nuclear workers (volunteer Registrants) whose accidental exposures to uranium and transuranic elements were documented.
- Obtain, preserve, and make available for future research, samples of tissues from autopsy.
- Serve as a national and international resource for testing and improving the application of excreta monitoring, and other contemporary bioassay data to predict tissue dose rates measured at autopsy.
- Study the uptake, translocation and retention (biokinetics), and tissue dosimetry of uranium, plutonium, americium, and other actinides in occupationally exposed humans over their whole lifetime, using records generated from exposure through their full lifespans.
- Conduct radiochemical analyses, as necessary, to validate and develop new state-of-the-art methods for quantifying tissue doses and their associated uncertainties.
- Apply USTUR case study data to refine dose assessment methods for internal alpha emitters as the basis for reliable

epidemiological studies, risk projection, and credible standards for radiological protection.

- Assess adequacy of historical and current U.S. regulatory controls and practices in limiting tissue doses to workers having the greatest health risk from intakes of uranium and transuranic elements.

'Core' USTUR mission functions

Given the limited grant funding available to the Registries, the 'core' USTUR mission functions are to (i) accept and process future Registrant donations, (ii) complete radiochemical analysis of previous Registrant donations, and (iii) complete the development and population of USTUR databases. These will be the 'core' functions of the USTUR Research Center, i.e., the "intramural" part of the broader USTUR mission. However, continued progress toward the broader goals and applications of USTUR research remains crucially important to organizations in the U.S. and worldwide that are concerned with policymaking and implementation of radiological and health protection for actinide-exposed workers and the general public. Therefore, a critical function of the USTUR Research Center will also be interaction with "extramural projects" and research collaborators. This will continue to address the broader USTUR mission.

The Registries promote collaborative research and maintain the National Human Radiobiology Tissue Repository (NHRTR)

The establishment of formal "extramural" research collaborations and externally

sponsored research contracts between the USTUR Research Center and other organizations or specialist researchers is an important task. The NHRTR maintains frozen and preserved tissues, tissue solutions, histopathology slides, and other tissue-related materials from autopsied persons with known intakes of radium (e.g. radium dial painters), or actinide elements. Materials from the NHRTR are used by the Registries for research and are made available to U.S. and international scientists for collaborative and individual research including histopathology, radiation dosimetry, biokinetic, and cytogenetic studies.