

How are Tissues Obtained?

Registrants are volunteers who authorize the Registries to obtain their individual medical and radiation exposure records for research purposes, and to collect tissue samples after death. Tissue samples are obtained at an autopsy performed by an independent qualified pathologist.

Volunteer donors pre-plan the donation by granting the USTUR full consent to collect selected tissues after death; the entire body may also be donated. The consent can be withdrawn at any time by the donor. The donation program is similar to organ donations for medical purposes designated on a driver's license.

When a Registrant dies, the Registries are notified by the hospital, legally-recognized next-of-kin, or other authorities. The Registries then verify with the next-of-kin that the previously-consented autopsy is still desired, and that valid written permissions are on file. If the next-of-kin choose not to provide tissue donations, the Registries comply with the wishes of the family.

If the family agrees to proceed with the pre-planned autopsy, the Registries will make all arrangements and pay for the autopsy. Except in the case of whole body donations, the body is returned to the family for burial or other disposition after autopsy. Autopsy results, research findings and any other information in the Registrant's file are provided to next-of-kin upon written request.

For more information

about the United States Transuranium and Uranium Registries please contact:

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Facts about the United States Transuranium and Uranium Registries



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What is the USTUR?

The United States Transuranium and Uranium Registries (USTUR) is a federal-grant program funded by the U.S. Department of Energy (DOE) Office of Domestic and International Health Studies.

Founded in
1968

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of Pharmacy since

1992

The USTUR was designed as a program to improve radiation protection of nuclear workers. The Registries studies the distribution, dose, and possible health effects of exposure to plutonium, americium, uranium, and thorium (actinides) in radiation workers and other individuals with known exposures.

Use of the Registries

The uniqueness of the USTUR's research lies in its ability to link exposure, work history, medical, and industrial hygiene data with post-mortem measurements of the distribution of radioactive elements in the human body. The USTUR is the only program worldwide that can combine such comprehensive workplace and exposure data with post-mortem results to study the behavior of actinide radionuclides in the human body, and the resulting doses.

Registries research has been documented in more than 270 scientific articles and reports, and continues to benefit future radiation workers by:

- Studying the biological effects of radiation on cells and DNA.
- Validating the effectiveness of US radiation safety standards.
- Testing and improving the mathematical models that are used to calculate worker doses and determine the distribution and clearance of radioactive elements from the human body.
- Contributing to national and international organizations that provide guidance and recommendations on radiation protection.

Furthermore, USTUR research can be used to protect the public following events such as the Chernobyl and Fukushima nuclear accidents.

The NHRTR



The National Human Radiobiology Tissue Repository (NHRTR) is a tissue collection maintained by the Registries. It includes frozen and dried tissues, histological slides and blocks, and tissue solutions and other preparations obtained from volunteer donors with a known history of intake of radioactive elements such as radium, uranium, plutonium and americium. It is available to researchers who may be able to use materials from this unique collection of tissues and associated medical and radiation exposure histories in studies of cancer and other diseases, or other research.

Who is Eligible to Participate?

Individuals with a known history of intake of radioactive materials are suitable candidates for participation in the research of the Registries. Persons with documented internal depositions of at least 2 nCi (74 Bq) of actinides such as plutonium, americium, uranium, or thorium qualify as Registrants. Donations are also accepted from workers with at least 10 rem (0.1 Sv) external dose in combination with exposure to a non-radiological agent such as asbestos or beryllium.