SAVANNAH RIVER SITE

Facts enterprise·srs

SRS Environmental Monitoring

SRS conducts an extensive environmental monitoring program to determine impacts, if any, from SRS operations to the surrounding communities and the environment. In addition to the environmental monitoring activities conducted on the Site, SRS also monitors a 2,000-square-mile area beyond the Site boundary. SRS collects environmental samples both on and off site in neighboring cities, towns, and counties located in Georgia and South Carolina. The samples are checked for radionuclides (radioactive atoms with an unstable nucleus), metals, and other chemicals that could be in the environment because of activities at SRS. In addition to those associated with SRS, many of the radionuclides occur naturally or are present because of other activities and have nothing to do with SRS operations. SRS collects more than 5,000 samples of air, water, soil, sediment, food products, fish and seafood, wildlife, plants and trees each year.

South Carolina and Georgia Counties Where Monitoring Occurs

Results are reported in annual Savannah River Site Environmental Report, which can be accessed electronically at

http://www.srs.gov/general/pubs/ERsum/index.html

Data collected for these programs are consistent with data collected in previous years and indicate that releases (radiological and non-radiological) by SRS operations have a minimal effect on public health and the environment.

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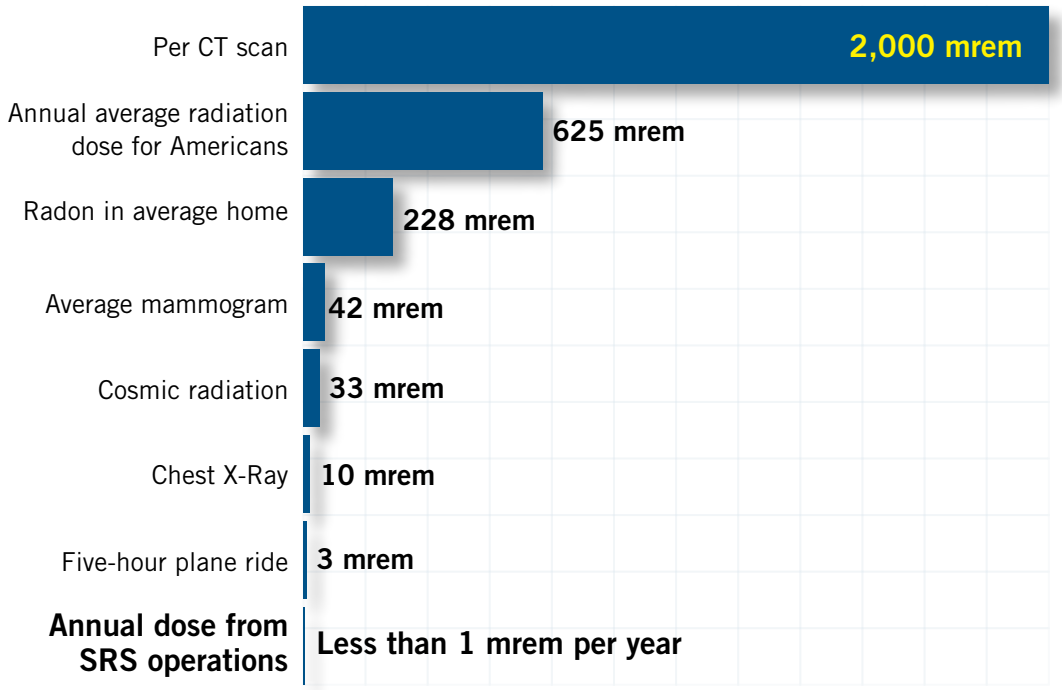
Radiation Dose

Potential impacts from radionuclides released by SRS operations are calculated based on environmental monitoring data. This impact, commonly called a dose, can be caused by radionuclides released into the air or water, or radiation emanating directly from buildings or other objects at SRS. The United States Environmental Protection Agency (EPA) sets a 10 millirem (mrem)/year limit for the dose from radionuclides released to the air, and DOE sets a 100 mrem/year limit for the dose from radionuclides from all potential pathways (inhalation, ingestion, skin absorption, and external exposure).



Humans, plants, and animals receive radiation doses from natural and man-made sources. The average annual background dose for Americans is 625 mrem; this includes an average background dose of 311 mrem from naturally occurring radionuclides found in our bodies and in the earth, and radiation from the sun. It also includes 300 mrem from medical procedures like X-rays, 13 mrem from products you use every day, and less than 1 mrem from industry and work.

Radiation Dose from SRS Operations: Far Below Dose and Health Limits

The annual Savannah River Site Environmental Report presents the radiological dose to the public from radionuclides released to the environment. The maximum dose that a member of the community could receive from radiation released from SRS is less than 1 mrem, based on a maximum dose from airborne and liquid releases.

This dose calculation uses a worst-case approach; that is, the calculation assumes that the same individual receives hypothetically the maximum exposure due to SRS operations from each pathway. This dose is significantly less than the 100 mrem/year limit set by DOE for the dose to a member of the community from all potential pathways.

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