The Division of Compensation Analysis and Support (DCAS) is a part of the National Institute for Occupational Safety and Health (NIOSH). DCAS provides scientific support for claims involving workers with cancer due to radiation exposure.

Since World War II, many workers have taken part in nuclear weapons-related activities for the Department of Energy, its contractors and subcontractors, and atomic weapons employers. Many jobs at sites involved in these activities worked with radiation and radioactive materials. The Energy Employees Occupational Illness Compensation Program Act (the Act) of 2000, enables current and former workers in the nation's nuclear weapons program, or their survivors, to file claims for compensation if they believe they have an illness due to workplace exposures to hazardous substances or radiation. DCAS is primarily responsible for estimating work–related radiation exposure (dose reconstruction) for certain workers with cancer who filed claims under Part B of the Act. Part B is a portion of the Act that provides compensation and medical benefits to employees (or their survivors) for illness caused by exposure to radiation, beryllium, and silica during their employment at DOE, its contractor, or subcontractor facilities.

Additionally, DCAS is responsible for the following activities:

- Developing methods to estimate worker exposure to radiation
- Developing scientific guidelines to determine the likelihood that an employee’s cancer is related to their occupational exposure to ionizing radiation
- Applying a process for adding classes of employees to the Special Exposure Cohort
- Providing staff support to an independent advisory board

Technology & Product Highlights

Probability of Causation
DCAS developed guidelines to determine the probability that a worker’s cancer was the result of occupational radiation exposure. This probability is determined by combining risk analysis and the worker’s reconstructed radiation dose. When the probability is fifty percent or greater that the cancer was caused by radiation the U.S. Department of Labor awards compensation.

Radiation Dose Reconstruction
DCAS established radiation dose-estimation methods using available sampling data, radiation sources used, and facility production records from the sites to determine radiation doses of individual claimants.

Special Exposure Cohort
DCAS developed guidelines for adding classes to the Special Exposure Cohort (SEC) and evaluates petitions for adding classes. The SEC is a designation created by the Energy Employees Occupational Illness Compensation Program Act of 2000. NIOSH makes recommendations to add classes of workers to the SEC when it is not possible to reliably estimate the workers’ radiation exposure. Additions to the SEC usually involve workers at a specific site who worked during a defined period of time. SEC members are awarded compensation without requiring a dose reconstruction if they developed certain cancers.
This image depicts the entities, inputs and activities involved in reconstructing radiation doses. It illustrates the interconnectedness of these elements, but is not intended to be a flowchart of the process.

**OUR STAFF**

DCAS has 36 full time positions and has offices in Cincinnati, Ohio. Staff have experience in the following areas:

Health Physicists| Statisticians | Health Communication Specialists | Program Specialists | Records Management Specialists | Information Technology Specialists | Research Scientists