

CEDR

Comprehensive Epidemiologic Data Resource

What is CEDR?

The **Comprehensive Epidemiologic Data Resource** (CEDR) is a Department of Energy (DOE) public-use repository of data from occupational and environmental health studies of workers at DOE facilities and nearby community residents. DOE is the federal agency responsible for the development, testing, and production of nuclear weapons. Because this work involves exposures to ionizing radiation and other potentially hazardous materials, DOE established an epidemiologic program in the 1960's to monitor the health of its workforce. Later, an environmental dose reconstruction program was initiated to study the potential health risks due to releases that traveled off-site to communities near DOE facilities.

Data collected during DOE epidemiologic studies are available through CEDR. In 1990, the Department of Health and Human Services assumed responsibility for many aspects of the epidemiology programs and provides CEDR data from these studies as well. CEDR staff organize the electronic documentation files essential for the use and understanding of the data.

CEDR is a unique and unparalleled repository of data, providing access to information critical to understanding radiation health effects. The sharing of these research data encourages open and independent scientific inquiry among researchers, public health officials, policymakers, community groups, and other interested individuals.

What's in the CEDR data collection?

Much of CEDR's large data collection pertains to epidemiologic studies of DOE workers. Causes of death and detailed individual-level exposure measurements are available for many workers. CEDR also includes data

from studies of past releases of hazardous materials from DOE sites, Japanese atomic bomb survivors, and radium dial painters.

Epidemiologic Studies of DOE Workers

About 300 data files and accompanying documentation provide de-identified information on thousands of workers employed at various DOE weapons facilities. Many studies were long-term, cohort mortality studies in which data were collected on a continuing basis. Follow-up of many of these cohorts continues, with updates being added to CEDR.

CEDR's Mission

To enhance DOE's epidemiologic program by facilitating public access to data collected for studies of the health impacts associated with working at or living near DOE operations.

Some Recent Additions to CEDR

- **Childhood Cancer and Parental Radiation Exposure:** This case-control study examined the potential association between childhood cancer risk and parental occupational radiation exposure. Childhood cancers in populations around three large DOE sites were investigated. Data include the cumulative radiation dose received by each parent prior to a child's conception.
- **Case-Control Study of Multiple Myeloma:** This study evaluated the risk of multiple myeloma among a cohort of 115,143 workers at four large DOE sites. Prior work history, smoking, medical x-rays, and occupational hazards were considered.
- **Uranium Gaseous Diffusion Plant Cohort Mortality Study:** This study examined the causes of death of workers at the Portsmouth Gaseous Diffusion Plant where uranium was processed. Occupational exposures to internal and external ionizing radiation, certain chemicals, and electromagnetic fields were considered. (Available soon)
- **Mortality Among Female Nuclear Weapons Workers:** This is the first multi-site study of mortality among female workers at twelve facilities. Death rates were calculated by facility for radiation and nonradiation workers, and dose response was examined.

Other CEDR Holdings

- **Atomic Bomb Survivor Study:** One of the longest epidemiologic follow-up studies on acute radiation exposure health effects is that of about 85,000 Japanese atomic bomb survivors. Extensive data on cancer mortality, cancer incidence, and organ dose from the Life Span Study are available from CEDR.
- **Radium Dial Painters:** CEDR has 25 files containing data for about 6,000 individuals exposed to radium, including hundreds of women who worked with

radium paint in the dial painting industry. Many of the 600+ variables were not analyzed for previous publications.

- **Historical Environmental Dose Reconstruction Studies at DOE Sites:** Historical dose reconstruction is the multi-disciplinary process of estimating doses of radioactive or other hazardous agents received by populations living near DOE sites that released contaminants to the environment. CEDR portrays reconstructed concentrations and dose estimates resulting from historical releases of radioactive iodine at Hanford. CEDR users can visualize these estimates at locations of interest for the highest release years, 1945-1951, using an interactive, geographic information system (GIS). Estimates from recently completed dose reconstructions at the Oak Ridge and Rocky Flats sites will be portrayed similarly.

CEDRView: Web Access to CEDR <http://cedr.lbl.gov>

CEDRView, the CEDR web site, is the simplest way of seeing and using CEDR materials. The centerpiece of CEDRView is the extensive collection of documented data file sets. A brief list is shown on the reverse side.

CEDR Data File Sets

Analytic Files from Worker Studies

Fernald Cancer Mortality Study FRC94A02
Fernald Respiratory Morbidity Study FRW83A01
Hanford Cohort Mortality Study, 1989 HFC78A01
Hanford Cohort Mortality Study, 1993 HFI89A01
Hanford Lung Cancer-control Study HFLCAA01
Hanford Congenital Malformation Case Control HFMC02
Hanford Prevalence of Congenital Malformations .. HFMPVA02
Hanford Mortality Reanalysis, 1993 HFS93A03
Los Alamos Lab Female Mortality Study LAFEMA01
Los Alamos Lab Pu Worker Mortality Study LAHSWA04
Los Alamos Lab Male Mortality, 1993 LAMENA03
Los Alamos Lab Female Suicide Study LASUIA02
Los Alamos Lab Follow-up of Select Pu Workers LAUPUA01
Linde Air Prods. Male Mortality Study LND87A01
Mallinckrodt Chemical Works Uranium Worker
Mortality Study MCD94A01
Mound Plant External Radiation Mortality Study MDEXTA02
Mound Plant Polonium Worker Mortality Study MDPOLA03
Mound Plant Cohort Mortality (SMR) Study MDSMRA01
Oak Ridge K-25 Nickel Exposure Mortality Study . ORK25A01
Oak Ridge K-25 Cohort Mortality Study ORK25A02
Oak Ridge K-25 Centrifuge Worker
Cancer Incidence ORK25A03
Oak Ridge Facilities Welders Mortality Study ORMULA01
Oak Ridge Facilities WWII Worker
Mortality Study ORMULA02
Oak Ridge Facilities Case-control Mortality Study . ORMULA03
Oak Ridge Facilities Welders Mortality, Update ORMULA04
Oak Ridge Facilities Cohort Mortality Study ORMULA05
Oak Ridge National Lab (X-10) Mortality Study ORX10A01
Oak Ridge National Lab Mortality Study, Update ORX10A02
Oak Ridge National Lab Cancer
Case-control Study ORX10A03
Oak Ridge National Lab Mortality Study, Update ORX10A04
Oak Ridge National Lab Expanded Mortality Study . ORX10A05
Oak Ridge Y-12 Plant Cohort Mortality Study ORY12A01
Oak Ridge Y-12 Plant Mercury Exposure
Mortality Study ORY12A02
Oak Ridge Y-12 Uranium Worker Mortality Study . ORY12A03
Oak Ridge Y-12 Phosgene Exposure
Mortality Study ORY12A04
Oak Ridge Y-12 Plant Expanded Cohort
Mortality Study ORY12A05
Pantex Weapons Facility Cohort Mortality Study PXSMRA01
Rocky Flats Cohort Mortality Study RFPLUA01
Rocky Flats Cohort Mortality, Prelim Update RFANLA02
Savannah River Plant Cohort Mortality Study SRC88A01
Savannah River Plant Cohort Mortality, Update SRC94A02
Zia (at Los Alamos) Cohort Mortality Study ZARADA01

Studies of Workers at More than One DOE Site

Hanford, Rocky Flats & Oak Ridge
Mortality Study HFMULA02
Respiratory Cancer Study at 4 Uranium Plants MFD94A01
Study of Workers with Doses Exceeding 5 Rems .. MFF94A02
Hanford Rocky Flats & Oak Ridge (IARC)
Mortality Study MFF94A02
Multiple Myeloma Case Control Study
at 4 DOE Sites MFM98A01

Other CEDR Holdings

Atomic Bomb Survivor Study (RERF)
Life Span Study JALSSA03
Atomic Bomb Survivor Study (RERF)
Cancer Incidence JALSSA02
Nevada Test Site Historical Dose
Reconstruction NTORPW01
Radium Dial Painter Studies RADPDW01
Salmon Site Descriptive Study, Cancer Mortality TDBSRA01
U.S. Transuranium and Uranium Registry Data USTURW01
Epidemiologic Surveillance Reports for Selected DOE Sites
Guides to Records Inventories at Selected DOE Sites

More Information about CEDR

Visit CEDRView at <http://cedr.lbl.gov> to view or download the current CEDR catalog.

To request a hardcopy catalog, send email to cedr@cedr.lbl.gov or call (510) 486-5458.

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