NATIONAL CANCER INSTITUTE
Division of Cancer Epidemiology & Genetics

SAVE THE DATE

Radiation Epidemiology & Dosimetry Course

December 14-17, 2026

NCI Shady Grove, 9609 Medical Center Drive, Rockville, MD

Registration link: https://events.cancer.gov/dceg/rad-epi-course

Course participants will learn about the health effects of radiation exposure. Lectures will begin with fundamentals and progress to topical sessions on medical, occupational, and environmental radiation exposures, including exposure assessment and risk of cancer and non-cancer diseases. The course will run from 9am to 5pm daily.

Featured topics:

Overview of Radiation Health Effects & Exposure Assessment
- Principles of Ionizing Radiation Epidemiology & Disease Risk
- Principles of Radiation Exposure Assessment
- Principles of Radiobiology
- Principles of Non-Ionizing Radiation Epidemiology & Disease Risk

Medical Radiation Exposures: Diagnostic & Screening Procedures
- CT Scans
- Interventional Fluoroscopy

Medical Radiation Exposures: Radiotherapy
- Photon Radiotherapy
- Emerging Radiotherapy Techniques
- Nuclear Medicine

Occupational Radiation Exposures
- Medical Workers
- Non-Medical Workers

Environmental Radiation Exposures
- Atomic Detonations
- Natural Background Radiation & Radon
- Nuclear Accidents

Genomics & Radiation-Related Disease Risks
- Germline Genetic Susceptibility to Radiation-Related Diseases
- Somatic Genomics of Radiation-Related Cancer
- Transgenerational Effects of Radiation Exposures

Topical Issues
- Space Radiation
- Radiation Risk Communication

Practical Applications
- NCI Dosimetry Tools (NCICT, NCINM, NCIRF, Phantoms)
- Epicure Modeling
- NCI Radiation Risk Assessment Tool (RadRAT)