United States Energy Employees Occupational Illness Compensation Program: Adjudication of Radiation-related Cancer Claims Utilizing Dose Reconstruction and Probability of Causation Procedures

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INTRODUCTION

Overview

- Covers approximately 650,000 nuclear weapons production workers employed by the US Department of Energy and it contractors since the 1940's.
- U.S. Congress passed the Energy Employees Occupational Illness Compensation Program Act in October 2000.
  - Purpose of the act was to establish a compensation program for:
    - Cancer
    - Beryllium Disease
    - Silicosis
  - Benefit
    - $150,000 (US$)
    - Medical Coverage
- Department of Labor determines compensation eligibility based on probability that the cancer was "at least as likely as not" (50% or greater probability) caused by radiation doses incurred in the line of duty.
  - Determinations based on upper 99% confidence interval (credibility limit) of the probability of causation.
- December 2000, the President of the United States issued Executive Order 13179 assigning several policymaking and technical roles under EEOICPA to the Department of Health and Human Services (DHHS).
  - Develop Guidelines for Determining the Probability of Causation (42 CFR Part 81)
  - Develop Methods for Radiation Dose Reconstruction (42 CFR Part 82)

DISCUSSION

Methods for Dose Reconstruction (42CFR Part 82)

- Based on standard research approaches employed by many epidemiological studies.
- Systematic inclusion of claimant in dose reconstruction process.
- Trade-off of reduced precision for increased processing efficiency.
- Triage approach to husband resources in which increased precision is important and to expedite conclusion of dose reconstructions for claims in which outcome is not affected by increased precision.
- Accounts for uncertainty and effectiveness factors of radiation dose.

Guidelines for Determining Probability of Causation (42CFR Part 81)

- Based on the cancer risk models developed by the National Institutes of Health (NIH).
- Cancer risk models updated by a joint workgroup of the National Cancer Institute and the Centers for Disease Control and Prevention (CDC).
- NIOSH incorporated additional changes with particular importance for claims under EEOICPA.
  - Risk models for skin cancer
  - Adjustments to risk models to account for unique types of radiation exposure
- Accounts for uncertainty associated with risk.
- Provide the Department of Labor with systematic objective procedures for handling claims with unusual characteristics.
  - Primary cancer identification from secondary cancers