

Miller, Diane M.

From: Tim Takaro [ttakaro@u.washington.edu]
Sent: Monday, November 05, 2001 5:38 PM
To: niocindocket@cdc.gov
Subject: Comments on radiation dose reconstruction



nioshdose1101.docCard for Tim Takaro

**Please find the attached comments for:
Methods for Radiation Dose Reconstruction Under the Energy Employees
Occupational Illness Compensation Program Act of 2000; Interim Final
Rule With Request for Comments
42 CFR Part 82
RIN 0920-ZA00
10/05/2001**

November 5, 2001

NIOSH Docket Officer
Robert A. Taft Laboratories
M/S C34
4676 Columbia Parkway
Cincinnati, OH 45226
to niocindocket@cdc.gov

Re: Methods for Radiation Dose Reconstruction Under the Energy Employees
Occupational Illness Compensation Program Act of 2000; Interim Final Rule With
Request for Comments
42 CFR Part 82
RIN 0920-ZA00
10/05/2001

Dear NIOSH Docket Officer:

We appreciate the opportunity to comment on the interim final rule on Methods for Radiation Dose Reconstruction Under the Energy Employees Occupational Illness Compensation Program Act of 2000. We also appreciate the practice of making applicable documents available on web pages, which facilitates the ability to comment for persons geographically distant from Washington, D.C. Please accept the attached written comments; contributors to these comments are: Tim K. Takaro, MD, MPH; and William C Griffith, Ph.D. The commenters are faculty (T.T.) and staff affiliated with the University of Washington, whose research has been supported in part by DOE. However, responsibility for these comments lies with the contributors as individuals. The views expressed have not been endorsed by the University, the State of Washington, nor the Department of Energy. Please feel free to contact me at 206-616-7458 on any matter related to these comments.

Sincerely,

[original signed]
Tim K. Takaro, M.D., MPH
University of Washington
4225 Roosevelt Way NE
Suite 100
Seattle, Washington 98105

Comments sent to niocindocket@cdc.gov regarding:

BILLING CODE: 4160-17-U
DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

Methods for Radiation Dose Reconstruction Under the Energy Employees Occupational Illness Compensation Program Act of 2000; Interim Final Rule With Request for Comments

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The proposed rule appears to be unfair in that workers primarily exposed to internally deposited radionuclides will have their reconstructed doses multiplied by a larger uncertainty factor than do workers who primarily receive their dose from external radiation. This will lead to workers with lower doses from internal exposure receiving compensation, while workers with higher doses from external exposure are denied compensation. Exposures to many types of internally deposited radionuclides commonly used at Department of Energy facilities, such as Pu-239, have a larger degree of uncertainty in estimation of their radiation doses. This larger degree of uncertainty occurs because many internal radionuclide exposures are more difficult to detect, evaluate and quantify. The proposed rule calls for taking into account the uncertainty distributions for dose reconstruction and utilizing methods to maximize the dose. This leads to a biased overestimation of internal doses compared to the methods used for estimation of external dose. As a result this will unfairly compensate those whose dose comes primarily from internal sources compared to workers whose dose comes primarily from external sources.

Unfairness may also be built into the rule by prejudging that there are special cohorts who will be compensated without a dose reconstruction. For many USDOE workers radiation dose records are incomplete or missing. Special cohort status should not be reserved only for those where such deficiencies are exposed prior to the legislative process (due primarily to increased scrutiny at those four sites with Special Cohorts). It is likely that given similar scrutiny at other sites additional Special Cohorts would be established. However, USDOE is not likely to put effort into such discovery without similar political pressure, and post hoc petitions will have to meet a higher standard of proof.