

EEOICPA Dose Reconstruction Telephone Interview
Claimant is Covered Employee

As you may know, NIOSH is responsible for estimating the occupational radiation doses received by persons with cancer applying for compensation under the Energy Employees Occupational Illness Compensation Program. Our contractor, Oak Ridge Associated Universities (ORAU), will be conducting the interviews.

This interview provides you with the opportunity to inform NIOSH of any additional information regarding your work history that might not be contained in the exposure monitoring information we receive from the Department of Energy (DOE) or Atomic Weapons Employer (AWE). While we encourage all claimants to participate in the interview process, participation is voluntary. Even though some claimants may not be able to answer all of the questions during the interview or have limited answers to the questions, any information provided during the interview may be useful in the dose reconstruction process.

Interviews with survivors will seek more general information while the interviews with energy employees will contain more detailed questions. This interview should take no more than a half hour, although we may have to call you back for additional information. If we need to divide this interview into a couple of shorter calls, we can do that as well. While we believe that most dose reconstructions can be completed without discussing classified information, we will arrange for a secure interview for those claimants who believe such an arrangement is necessary to complete the interview.

Employment History

1. What jobs have you held working for DOE, DOE contractors, or AWEs?

Employer	Supervisor's Name	Job Title	Start Date (mm/yyyy)	End Date

START WITH THE MOST RECENT JOB AND ASK THE FOLLOWING QUESTIONS IN SECTIONS. REPEAT THESE FOR EACH DOE/AWE JOB INCLUDED IN THE EMPLOYMENT HISTORY.

Detailed Work History:

- 2. How many hours per week did you work on this job? _____ hrs/week
- 3. How many hours per week did your job involve potential exposure to radiation and/or radioactive materials? _____ hrs/week
- 4. Which buildings or locations did you work in, for each of your routine duties?

Building/Location	Duties

5. Describe what you did on the job, as routine duties.

Obtain additional details on duties, as necessary:

5.1 What types of radioactive materials were present or processed, and in what form(s) (solid, liquid, or gas)? Review the list below individually, as necessary.

<u>Radionuclide</u>	<u>Response</u>	<u>Isotope(s) if known</u>	<u>Form</u>		
Tritium	<u> </u> Y <u> </u> N <u> </u> DK	<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
Cobalt	<u> </u> Y <u> </u> N <u> </u> DK	<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
Strontium/Yttrium	<u> </u> Y <u> </u> N <u> </u> DK	<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
Technetium	<u> </u> Y <u> </u> N <u> </u> DK	<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
Iodine	<u> </u> Y <u> </u> N <u> </u> DK	<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
Cesium	<u> </u> Y <u> </u> N <u> </u> DK	<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
Thallium	<u> </u> Y <u> </u> N <u> </u> DK	<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
Lead	<u> </u> Y <u> </u> N <u> </u> DK	<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
Polonium	<u> </u> Y <u> </u> N <u> </u> DK	<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
Radon (progeny)	<u> </u> Y <u> </u> N <u> </u> DK	<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
Radium	<u> </u> Y <u> </u> N <u> </u> DK	<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
Actinium	<u> </u> Y <u> </u> N <u> </u> DK	<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
Europium	<u> </u> Y <u> </u> N <u> </u> DK	<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
Thorium (natural)	<u> </u> Y <u> </u> N <u> </u> DK	<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
Protactinium	<u> </u> Y <u> </u> N <u> </u> DK	<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
Uranium (natural)	<u> </u> Y <u> </u> N <u> </u> DK	<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
Uranium(enriched)	<u> </u> Y <u> </u> N <u> </u> DK	<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
Neptunium	<u> </u> Y <u> </u> N <u> </u> DK	<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
Plutonium	<u> </u> Y <u> </u> N <u> </u> DK	<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
Americium	<u> </u> Y <u> </u> N <u> </u> DK	<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
Curium	<u> </u> Y <u> </u> N <u> </u> DK	<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
Californium	<u> </u> Y <u> </u> N <u> </u> DK	<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
<u>Others</u>					
<u> </u> (1)		<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
<u> </u> (2)		<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G
<u> </u> (3)		<u> </u>	<u> </u> S	<u> </u> L	<u> </u> G

5.2 What quantities of radioactive materials were present or processed (ounces, pounds, kilograms, drums) over what time periods? _____

5.3 What types of production processes involving radioactive materials occurred in areas where you worked? _____

5.4 What types of radiation-generating equipment were present or used (e.g., neutron devices, radiography equipment)? _____

5.5 What specific tasks did you perform, using what types of radioactive materials (in what quantities), and/or radiation generating equipment? _____

5.6 What exposure/contamination control measures were used to protect you?

<u>Measure</u>	<u>Frequency of use</u>
<input type="checkbox"/> Hoods	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never
<input type="checkbox"/> Glove boxes	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never
<input type="checkbox"/> Shielding	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never
<input type="checkbox"/> Other enclosures (explain)	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never
<input type="checkbox"/> Local ventilation	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never
<input type="checkbox"/> Anti-contamination clothing	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never
<input type="checkbox"/> Respirators	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never
<input type="checkbox"/> Other personal protective equipment (specify)	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never
<input type="checkbox"/> Showers	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never

5.7 Did you conduct your work under a radiation work permitting system?

- Yes
 No
 Don't know

IF "NO" OR "DON'T KNOW", GO TO QUESTION 6, IF "YES":

5.8 During what time period(s)? _____

Radiation Monitoring

6. Did you or your co-workers (working in the same area as you) routinely wear radiation dosimetry badges? Yes
 No
 Don't know

IF "NO" OR "DON'T KNOW", GO TO QUESTION 7, IF "YES":

6.1 For which duties or in which buildings or locations, and during what time periods (e.g., which years) did you or your co-workers (working in the same areas as you) routinely wear radiation dosimetry badges?

Building/ Location	Time Period	Duties	Wore badge (check = yes)	Only co-worker wore badge

IF THE CLAIMANT DID NOT WEAR A BADGE, GO TO QUESTION 7, IF CLAIMANT WORE A BADGE: I'll ask you several questions about badge practices. I realize that badge practices changed over time, so please recall to the best of your ability any changes and the time period that they cover:

6.2 How often did you wear your badge?

Time Period Frequency

_____	_____
_____	_____
_____	_____
_____	_____

6.3 How often was your badge exchanged?

Time Period Frequency

_____	_____
_____	_____
_____	_____
_____	_____

6.4 Where on your body was your badge worn?

Time Period Body Location

_____	_____
_____	_____
_____	_____
_____	_____

7. Did you participate in a biological radiation monitoring program (urine/fecal/breath)?

- Yes, urine
- Yes, fecal
- Yes, breath
- No
- Don't know

8. Do you have copies of your dosimeter badge or biological monitoring records?

- Yes, badge
- Yes, biological
- No

IF "NO" GO TO QUESTION 9, IF "YES" :

8.1 Would you provide copies to us? Yes
 No

IF "YES" GO TO QUESTION 9, IF "NO" EXPLAIN THE IMPORTANCE OF THIS INFORMATION AND ADDRESS ANY CONCERNS, AS FEASIBLE. IF THE ANSWER REMAINS "NO":

8.2 Why not? _____

9. Did you routinely survey yourself (frisk) for external contamination?

IF "NO" GO TO QUESTION 10, IF "YES":

9.1 When did you survey yourself, before or after showering? Before
 After

10. Was there general area air monitoring for radiation performed in the work environment?
 Yes
 No
 Don't know

IF "NO" OR "DON'T KNOW" GO TO QUESTION 11, IF "YES":

When (over what time periods) did this occur? _____

11. Were there any radiation surveys taken to characterize potential for external exposure?
 Yes
 No
 Don't know

IF "NO" OR "DON'T KNOW" GO TO QUESTION 12, IF "YES":

When did these occur? _____

IF CLAIMANT WORKED AT FERNALD, MALINCKRODT, OR FUSRAP, OR IF THE CLAIMANT RESPONDED IN QUESTION 4 THAT HE WORKED WITH RADIUM AND/OR THORIUM, ASK THE FOLLOWING QUESTION; IF NOT, GO TO QUESTION 13:

12. Was there monitoring in any of the buildings or areas you worked for exposure to radon?
 Yes
 No
 Don't know

IF "NO" OR "DON'T KNOW" GO TO QUESTION 13, IF "YES":

12.1 Which buildings or areas? _____

13. Were you ever restricted from the workplace or certain job duties because you had reached a radiation dose limit? Yes
 No

Radiation Incidents

14. Were you ever involved in an incident involving radiation exposure or contamination?
 Yes
 No

IF “NO” GO TO QUESTION 15, IF “YES” ASK THE FOLLOWING QUESTIONS FOR EACH INCIDENT IDENTIFIED:

- 14.1 What happened and when? _____
- 14.2 Which radioactive materials were involved, and in what form and quantity? _____
- 14.3 Which radiation-generating equipment was involved? _____
- 14.4 Where did it take place? _____
- 14.5 Who was involved? _____
- 14.6 What actions were taken to remedy the exposure or contamination? _____
- 14.7 What were your location and activities during the incident? _____
- 14.8 What precautions were taken to protect you? _____
- 14.9 What types of personal protective equipment, if any, did you use? _____
- 14.10 How long were you exposed during the incident? _____
- 14.11 Did you receive chelation therapy or other medical treatment as a result of radiation exposure from this incident? Yes
 No
 Don't Know

IF “NO” OR “DON'T KNOW” GO TO QUESTION 14.12, IF “YES”:

Please describe the medical treatment you received:

_____ Chelation Therapy

_____ Other Medical Treatment

14.12 Did you receive biological monitoring after the incident? Yes
 No

IF “NO” GO TO QUESTION 15, IF “YES”:

14.13 What type of biological monitoring? whole body measurement
 urine
 fecal
 breath

14.14 Do you have records of this monitoring? Yes
 No

IF “NO” GO TO QUESTION 15, IF “YES”:

14.15 Are you willing to provide copies of these records to NIOSH?
 Yes
 No

IF “YES” GO TO QUESTION 15, IF “NO” EXPLAIN THE IMPORTANCE OF THIS INFORMATION AND ADDRESS ANY CONCERNS, AS FEASIBLE. IF THE ANSWER REMAINS NO:

14.16 Why not? _____

Required medical screening x rays

15. Were you ever required to have medical x rays for this job, as a condition of employment?
 Yes
 No

IF “NO” GO TO QUESTION 16, IF “YES” :

15.1 How often were you x-rayed, and over what time period(s)?

Time Period	Frequency of x rays

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- 15.2 Do you have records of these x rays? Yes, for all x rays
 Yes, for some x rays
 No

IF "NO" GO TO QUESTION 16, IF "YES":

- 15.3 Would you provide us with copies of these records? Yes
 No

Other relevant information

16. Have we missed asking you about any conditions, situations, or practices that occurred during this job which you think may be useful to us in estimating your radiation doses?
 Yes
 No

IF "NO", GO TO QUESTION 17, IF "YES":

- 16.1 Describe this with as much detail as possible, in terms of what occurred, where, when, for how long, and who was involved:

17. Are you aware of any records related to the information you have provided that may help us estimate your doses? Yes: Source/Type
 Personal Physician
 Site Medical Records
 Incident Reports
 Safety Meeting Notes
 _____ Other (describe)
 No

IF "NO" AND THIS IS THE LAST JOB TO REVIEW, GO TO QUESTION 18.

IF "YES" AND THE RECORDS ARE FROM A PERSONAL PHYSICIAN, ASK THE CLAIMANT TO OBTAIN AND PROVIDE THE RELEVANT MEDICAL RECORDS TO NIOSH.

Final Questions – Identifying co-workers and other witnesses

18. Can you name co-workers or other witnesses, such as consulting industrial hygienists or

radiation safety specialists, who can confirm or expand upon the information you have provided us?

Yes
 No

IF "YES", OBTAIN UP TO FIVE NAMES AND ANY CONTACT INFORMATION AVAILABLE:

1. _____
2. _____
3. _____
4. _____
5. _____

Example