

# U.S. Radiologic Technologists Study Fourth Survey

*A collaborative effort between the University of Minnesota School of Public Health, National Cancer Institute,  
and American Registry of Radiologic Technologists*

(ADDRESS BLOCK FOR WINDOW  
ENVELOPE)

PARTICIPANT NAME  
ADDRESS  
CITY STATE ZIP

## GENERAL INFORMATION

The U.S. Radiologic Technologists Study includes ARRT registrants certified between 1926-1980 in radiology, nuclear medicine, or radiation therapy, regardless of current employment status. Whether you are retired or still working and whether your health has been excellent or if you have been ill, your response is equally important to the study. We realize it may be hard to recall information from years ago. Just do your best to answer those questions. Even if not exact, your best estimates are valuable to the study.

### INSTRUCTIONS:

- USE BLUE OR BLACK INK
- PRINT LEGIBLE NUMBERS AND CAPITAL BLOCK LETTERS IN THE BOXES:

1 2 3      A B C D

- MARK CHECK BOXES:      RIGHT      WRONG
- 

### PRIVACY ACT NOTIFICATION STATEMENT

Collection of this information is authorized by The Public Health Service Act, Section 411 (42 USC 285a). Rights of study participants are protected by The Privacy Act of 1974. Please be assured that all information you provide will be kept private under the Privacy Act and will not be disclosed to anyone but the researchers conducting this study, except as otherwise required by law. Any published results from this survey will be reported in statistical summaries only and will never include a participant's name. Your participation in this study is completely voluntary and failure to answer any particular question or the information collection as a whole will not affect your future contacts with the University of Minnesota, the American Registry of Radiologic Technologists, or the National Institutes of Health.

### NOTIFICATION TO RESPONDENT OF ESTIMATED BURDEN

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: NIH, Project Clearance Branch, 6705 Rockledge Drive, MSC 7974, Bethesda, MD 20892-7974, ATTN: PRA (0925-0405). Do not return the completed form to this address.

1. What is TODAY'S DATE?          
MONTH      DAY      YEAR

2. What is your DATE OF BIRTH?          
MONTH      DAY      YEAR

3. How tall are you without shoes?

FEET   INCHES

4. How much do you weigh without shoes and clothes?     
POUNDS

5. Do you currently smoke cigarettes?

No  Yes → How many cigarettes do you usually smoke per day?    
NUMBER PER DAY

Are you an ex-smoker?

No  Yes → What year did you last smoke cigarettes?      
YEAR LAST SMOKED

6. Do you have an email address that we can use to contact you in the future to reduce study costs?

No  Yes

Email address: \_\_\_\_\_

**WORK HISTORY**

In this questionnaire, "radiation technologist" includes people working in radiology, nuclear medicine, radiation therapy or any other diagnostic or therapeutic medical imaging jobs.

7. Are you currently working as a radiation technologist?  Yes  No → Year last worked as a radiation technologist? 

Y	Y	Y	Y
---	---	---	---

8. What is your lifetime total radiation dose received while working as a radiologic technologist (in mrem)?

<input type="checkbox"/> Unknown	<input type="checkbox"/> Zero	<input type="checkbox"/> 10,000-24,999
<input type="checkbox"/> 1-999 mrem	<input type="checkbox"/> 25,000-49,999	
<input type="checkbox"/> 1,000-4,999	<input type="checkbox"/> 50,000+	
<input type="checkbox"/> 5,000-9,999		

→ Is your lifetime total radiation dose estimated or taken from your dosimetry reports? →  Estimated  
 From dosimetry reports  
 Combination of both

Answer the following questions separately for each time period.

	Before 1945	1945-1964	1965-1979	1980-1989	1990-1999	2000-2009
9. Did you work as a radiation technologist during each time period? .....	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes

	Before 1945	1945-1964	1965-1979	1980-1989	1990-1999	2000-2009
10. How many HOURS PER WEEK did you usually work as a radiation technologist? .....	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

	Before 1945	1945-1964	1965-1979	1980-1989	1990-1999	2000-2009
11. Were you ever removed from working as a radiation technologist because your radiation exposure exceeded the allowable limit? <input type="checkbox"/> No <input type="checkbox"/> Yes → How many TIMES were you removed from working because you exceeded the allowable limit?	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

	Before 1945	1945-1964	1965-1979	1980-1989	1990-1999	2000-2009
12. Did you ever work as a radiation technologist in a military hospital or clinic, not including VA medical facilities? <input type="checkbox"/> No <input type="checkbox"/> Yes → How many YEARS did you work in a military hospital or clinic, not including VA facilities?	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

	NEVER DID	NUMBER OF TIMES PER WEEK					
		Before 1945	1945-1964	1965-1979	1980-1989	1990-1999	2000-2009
13. How many TIMES, in a typical WEEK, did you perform or assist with the following procedures?							
Diagnostic x-ray .....	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Routine fluoroscopy .....	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Fluoroscopically-guided .....	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Diagnostic radioisotope .....	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Brachytherapy .....	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Other therapeutic radioisotope .....	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
External beam radiotherapy .....	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Ultrasound .....	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

	Before 1945	1945-1964	1965-1979	1980-1989	1990-1999	2000-2009
14. When performing diagnostic x-ray procedures, did you usually have to go into a control booth or shielded area to turn on the x-ray beam? .....	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes

**HEALTH HISTORY**

Please answer the next questions to let us know if you have been diagnosed with cancer or any of the conditions listed.

15. Did a doctor ever tell you that you had any type of skin cancer?

- No (Go to Q16)  Yes ↘

Please mark YES for each type of skin cancer you had and provide your age when first diagnosed.

For each type of skin cancer you had, how many skin cancers did you have at each body location?  
(If lesion was located on a "side", choose nearest location)

TYPE OF SKIN CANCER (mark all that apply)	YES	AGE FIRST DIAGNOSED	FRONT OF	BACK OF	FRONT OF	BACK OF	FRONT OF	BACK OF	ARMS
			HEAD OR NECK	HEAD OR NECK	TORSO	TORSO	LEGS	LEGS	OR HANDS
Basal cell carcinoma . . . . .	<input type="checkbox"/>	→ <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Squamous cell carcinoma . . . . .	<input type="checkbox"/>	→ <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Melanoma . . . . .	<input type="checkbox"/>	→ <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Other or type unknown . . . . .	<input type="checkbox"/>	→ <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

16. Did a doctor ever tell you that you had any other type of cancer?

- No (Go to Q17)  Yes ↘

Please mark YES for each type of cancer you had and provide your age when first diagnosed.

TYPE OF CANCER (mark all that apply)	YES	AGE FIRST DIAGNOSED	TYPE OF CANCER (mark all that apply)	YES	AGE FIRST DIAGNOSED
Bone . . . . .	<input type="checkbox"/>	→ <input type="text"/> <input type="text"/>	Lung, trachea, or bronchus . . . . .	<input type="checkbox"/>	→ <input type="text"/> <input type="text"/>
Brain or nervous system . . . . .	<input type="checkbox"/>	→ <input type="text"/> <input type="text"/>	Lymphoma:		
Breast: . . . . .	<input type="checkbox"/>		Hodgkin's disease . . . . .	<input type="checkbox"/>	→ <input type="text"/> <input type="text"/>
			Non-Hodgkin's lymphoma (NHL) . . . . .	<input type="checkbox"/>	→ <input type="text"/> <input type="text"/>
			Multiple myeloma . . . . .	<input type="checkbox"/>	→ <input type="text"/> <input type="text"/>
			Ovary . . . . .	<input type="checkbox"/>	→ <input type="text"/> <input type="text"/>
			Pancreas . . . . .	<input type="checkbox"/>	→ <input type="text"/> <input type="text"/>
			Prostate . . . . .	<input type="checkbox"/>	→ <input type="text"/> <input type="text"/>
			Rectum . . . . .	<input type="checkbox"/>	→ <input type="text"/> <input type="text"/>
			Salivary gland . . . . .	<input type="checkbox"/>	→ <input type="text"/> <input type="text"/>
			Stomach . . . . .	<input type="checkbox"/>	→ <input type="text"/> <input type="text"/>
			Testis . . . . .	<input type="checkbox"/>	→ <input type="text"/> <input type="text"/>
			Thyroid . . . . .	<input type="checkbox"/>	→ <input type="text"/> <input type="text"/>
			Uterus (endometrium) . . . . .	<input type="checkbox"/>	→ <input type="text"/> <input type="text"/>
			Other or unknown cancer (specify) . . . . .	<input type="checkbox"/>	→ <input type="text"/> <input type="text"/>

If YES: ↓

Which breast?	What type was it?				AGE FIRST DIAGNOSED
	Left	Right	Ductal Invasive Cancer	Other Or Type In Situ Unknown	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	→ <input type="text"/> <input type="text"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	→ <input type="text"/> <input type="text"/>

**HEALTH HISTORY, (continued)**

**17. Did a doctor ever tell you that you had any of the following medical conditions . . . ?**

For each medical condition you mark YES, please provide your age when you were first diagnosed.

MEDICAL CONDITION (mark all that apply)	YES	AGE FIRST DIAGNOSED	MEDICAL CONDITION (mark all that apply)	YES	AGE FIRST DIAGNOSED
<b>Benign tumor of brain or nervous system:</b>			<b>Eye conditions:</b>		
Meningioma.....	<input type="checkbox"/>	<input type="text"/>	Cataract.....	<input type="checkbox"/>	<input type="text"/>
Schwannoma or neuroma .....	<input type="checkbox"/>	<input type="text"/>	<div style="border: 1px solid black; padding: 5px;">                     Did you have any cataracts removed? ..... <input type="checkbox"/> No <input type="checkbox"/> Yes                      ↓                      Age first removed ..... <input type="text"/> AGE                 </div>		
Other (specify) _____	<input type="checkbox"/>	<input type="text"/>	Macular degeneration .....	<input type="checkbox"/>	<input type="text"/>
<b>Thyroid conditions:</b>			Glaucoma.....	<input type="checkbox"/>	<input type="text"/>
Thyroid nodule .....	<input type="checkbox"/>	<input type="text"/>	<b>Other conditions:</b>		
Goiter (enlarged thyroid) .....	<input type="checkbox"/>	<input type="text"/>	Sleep apnea .....	<input type="checkbox"/>	<input type="text"/>
Benign thyroid tumor (adenoma).....	<input type="checkbox"/>	<input type="text"/>	Osteoporosis .....	<input type="checkbox"/>	<input type="text"/>
Thyroiditis (Hashimoto's Disease).....	<input type="checkbox"/>	<input type="text"/>	Hip fracture.....	<input type="checkbox"/>	<input type="text"/>
Hypothyroidism (underactive thyroid).....	<input type="checkbox"/>	<input type="text"/>	Multiple sclerosis.....	<input type="checkbox"/>	<input type="text"/>
<div style="border: 1px solid black; padding: 5px;">                     If YES, did you take medication (e.g. synthroid, levothyroxine) for hypothyroidism? ..... <input type="checkbox"/> No <input type="checkbox"/> Yes                 </div>			Parkinson's Disease.....	<input type="checkbox"/>	<input type="text"/>
Grave's Hyperthyroidism or Grave's Disease .....	<input type="checkbox"/>	<input type="text"/>	Lupus .....	<input type="checkbox"/>	<input type="text"/>
<div style="border: 1px solid black; padding: 5px;">                     Were you treated (e.g. surgery, I-131 drugs) for hyperthyroidism? ..... <input type="checkbox"/> No <input type="checkbox"/> Yes                 </div>			Osteoarthritis.....	<input type="checkbox"/>	<input type="text"/>
			Rheumatoid arthritis.....	<input type="checkbox"/>	<input type="text"/>
			Scleroderma.....	<input type="checkbox"/>	<input type="text"/>

**18. Did a doctor ever tell you that you had any of the following CARDIOVASCULAR OR RELATED CONDITIONS?**

For each medical condition you mark YES, please provide your age when you were first diagnosed.

MEDICAL CONDITION (mark all that apply)	YES	AGE FIRST DIAGNOSED	DIAGNOSIS AND TREATMENT	NO	YES
Heart attack (myocardial infarct).....	<input type="checkbox"/>	<input type="text"/>	→ Did you have a coronary bypass, angioplasty, or stent? .....	<input type="checkbox"/>	<input type="checkbox"/>
Angina pectoris.....	<input type="checkbox"/>	<input type="text"/>	→ Was the angina confirmed by angiogram? .....	<input type="checkbox"/>	<input type="checkbox"/>
Ischemic heart disease.....	<input type="checkbox"/>	<input type="text"/>	→ Was it confirmed by ECG, stress test, or angiogram?.....	<input type="checkbox"/>	<input type="checkbox"/>
Stroke .....	<input type="checkbox"/>	<input type="text"/>	→ Was stroke confirmed by arteriography, CT scan, or MRI? ..	<input type="checkbox"/>	<input type="checkbox"/>
High blood pressure .....	<input type="checkbox"/>	<input type="text"/>	→ Do you currently take blood pressure medication?.....	<input type="checkbox"/>	<input type="checkbox"/>
Diabetes .....	<input type="checkbox"/>	<input type="text"/>	→ Do you currently take insulin?.....	<input type="checkbox"/>	<input type="checkbox"/>

**PERSONAL DIAGNOSTIC RADIATION EXAMS**

19. Please indicate how many times you had the following diagnostic radiation exams during each time period. If you never had a specific exam, mark the box “never had” and leave all other columns blank. Count the number of exams that you had, NOT the number of individual films taken. Please provide your age(s) at first and last exam.

X-RAY exams performed ON YOU	NEVER HAD	AGE 1ST EXAM	AGE LAST EXAM	NUMBER OF EXAMS BY TIME PERIOD				
				<1965	1965-1979	1980-1989	1990-1999	2000-2009
Dental								
Bite-wing .....	<input type="checkbox"/>							
Panoramic x-ray .....	<input type="checkbox"/>							
Skull .....	<input type="checkbox"/>							
Sinus .....	<input type="checkbox"/>							
Neck and soft tissue .....	<input type="checkbox"/>							
Spine								
Full .....	<input type="checkbox"/>							
Cervical .....	<input type="checkbox"/>							
Cervical-thoracic .....	<input type="checkbox"/>							
Thoracic .....	<input type="checkbox"/>							
Thoracic-lumbar .....	<input type="checkbox"/>							
Lumbar .....	<input type="checkbox"/>							
Lumbosacral .....	<input type="checkbox"/>							
Ribs .....	<input type="checkbox"/>							
Abdomen .....	<input type="checkbox"/>							
Pelvis .....	<input type="checkbox"/>							
Sacrum .....	<input type="checkbox"/>							
Mammogram .....	<input type="checkbox"/>							

FLUOROSCOPY exams performed ON YOU with or without X-Rays	NEVER HAD	AGE 1ST EXAM	AGE LAST EXAM	NUMBER OF EXAMS BY TIME PERIOD				
				<1965	1965-1979	1980-1989	1990-1999	2000-2009
Cerebral arteriogram .....	<input type="checkbox"/>							
Carotid arteriogram .....	<input type="checkbox"/>							
Cardiac angiogram or catheterization .....	<input type="checkbox"/>							
Cardiac angioplasty or stent placement .....	<input type="checkbox"/>							
Pulmonary arteriogram .....	<input type="checkbox"/>							
Upper GI series .....	<input type="checkbox"/>							

**Attachment 1A**

FLUOROSCOPY exams performed ON YOU with or without X-Rays, continued	NEVER HAD	AGE 1ST EXAM	AGE LAST EXAM	NUMBER OF EXAMS BY TIME PERIOD				
				<1965	1965-1979	1980-1989	1990-1999	2000-2009
Esophagram (barium swallow).....	<input type="checkbox"/>							
Liver, gallbladder, or bile ducts.....	<input type="checkbox"/>							
Small bowel series.....	<input type="checkbox"/>							
Lower GI series (barium enema).....	<input type="checkbox"/>							

TOMOGRAPHY or CT scans performed ON YOU with or without radionuclides	NEVER HAD	AGE 1ST SCAN	AGE LAST SCAN	NUMBER OF SCANS BY TIME PERIOD				
				<1965	1965-1979	1980-1989	1990-1999	2000-2009
Head.....	<input type="checkbox"/>							
Neck.....	<input type="checkbox"/>							
Chest.....	<input type="checkbox"/>							
Spine.....	<input type="checkbox"/>							
Abdomen.....	<input type="checkbox"/>							
CT angiography.....	<input type="checkbox"/>							

RADIONUCLIDE tests performed ON YOU with or without CT or PET scans	NEVER HAD	AGE 1ST TEST	AGE LAST TEST	NUMBER OF TESTS BY TIME PERIOD				
				<1965	1965-1979	1980-1989	1990-1999	2000-2009
Brain scan.....	<input type="checkbox"/>							
Thyroid scan.....	<input type="checkbox"/>							
Thyroid uptake or function.....	<input type="checkbox"/>							
Cardiac scan.....	<input type="checkbox"/>							
Lung scan.....	<input type="checkbox"/>							
Liver scan.....	<input type="checkbox"/>							
Renogram.....	<input type="checkbox"/>							
Bone scan.....	<input type="checkbox"/>							

**PERSONAL THERAPEUTIC RADIATION PROCEDURES**

20. Please indicate how many times you had the following radionuclide therapy procedures during each time period and provide your age(s) at first and last treatment.

RADIONUCLIDE THERAPY procedures performed ON YOU for the following medical conditions:	NEVER HAD	AGE 1ST TREATED	AGE LAST TREATED	NUMBER OF TREATMENTS BY TIME PERIOD					
				<1965	1965-1979	1980-1989	1990-1999	2000-2009	
Hyperthyroidism.....	<input type="checkbox"/>								
Thyroid cancer or ablation.....	<input type="checkbox"/>								
Leukemia.....	<input type="checkbox"/>								
Non-Hodgkin's lymphoma .....	<input type="checkbox"/>								
Liver tumor.....	<input type="checkbox"/>								
Bone metastases.....	<input type="checkbox"/>								
Polycythemia vera .....	<input type="checkbox"/>								
Cardiac dysfunction.....	<input type="checkbox"/>								
Colloid (Phosphorus-32).....	<input type="checkbox"/>								
Colloid (Gold-198).....	<input type="checkbox"/>								

21. Please indicate how many times you had X-Ray therapy to any of the following body areas during each time period for cancer or non-cancer conditions and your age(s) at first and last treatment. If you had a treatment series for a single cancer occurrence, count as one treatment. For non-cancer conditions, count the number of individual treatment sessions that you had.

X-RAY THERAPY procedures performed ON YOU to the following body areas:	NEVER HAD	AGE 1ST TREATED	AGE LAST TREATED	NUMBER OF TREATMENTS BY TIME PERIOD							
				<1980		1980-1989		1990-1999		2000-2009	
				Cancer (series)	Non-cancer (sessions)	Cancer (series)	Non-cancer (sessions)	Cancer (series)	Non-cancer (sessions)	Cancer (series)	Non-cancer (sessions)
Head.....	<input type="checkbox"/>										
Neck.....	<input type="checkbox"/>										
Chest (including breast).....	<input type="checkbox"/>										
Spine.....	<input type="checkbox"/>										
Abdomen.....	<input type="checkbox"/>										

WOMEN ONLY - Men go to Page 9, Question 28)

**FEMALE REPRODUCTIVE, GYNECOLOGICAL HISTORY**

22. Have you ever given birth?  No  Yes

For each birth please complete the following questions (Include still births. Exclude step- or adopted children).

Birth Order	Year of birth	Did you breast feed this baby?	How many months?
First	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/> No <input type="checkbox"/> Yes →	<input type="text"/> <input type="text"/>
Second	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/> No <input type="checkbox"/> Yes →	<input type="text"/> <input type="text"/>
Third	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/> No <input type="checkbox"/> Yes →	<input type="text"/> <input type="text"/>
Fourth	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/> No <input type="checkbox"/> Yes →	<input type="text"/> <input type="text"/>
Fifth	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/> No <input type="checkbox"/> Yes →	<input type="text"/> <input type="text"/>

Please list any additional births on a separate piece of paper and return with this form.

23. Did a doctor ever tell you that you had postpartum mastitis?

No  Yes

↓  
 Age when first diagnosed?  AGE  
 Age when last diagnosed?  AGE  
 Number of times?  NO. TIMES

24. Have your menstrual periods stopped permanently (i.e., no period for at least six months)?

Yes →  AGE STOPPED  
 No, still having periods  
 No, menstrual periods are irregular or using hormones  
 Never menstruated

25. Did you have surgery to remove your uterus or ovaries? (Mark all that apply)

No  
 Yes, uterus removed →  Ages when removed?  
 Yes, one or both ovaries removed →  FIRST  SECOND

26. Did you ever take prescription hormone replacement therapy for symptoms of menopause?

No  Yes  
 ↓  
 Age started taking?  AGE STARTED  
 Total number of years taken?  YEARS  
 Currently taking?  No  Yes

**BREAST BIOPSY**

27. Did you ever have a breast biopsy (or aspiration)?

No  Yes

↓  
 Age at time of first biopsy/aspiration?  AGE  
 Number of biopsies/aspirations?  NUMBER

Did any biopsy or aspiration lead to a diagnosis of . . .	AGE FIRST DIAGNOSED?	Reason for biopsy or aspiration? (Mark all that apply)			
		Abnormal Self-exam (e.g. lump, pain, discharge)	Abnormal physician exam	Abnormal screening mammogram	Abnormal diagnostic mammogram
Breast cancer or ductal carcinoma <i>in situ</i> . . . . . <input type="checkbox"/> Yes →	<input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atypia or atypical hyperplasia . . . <input type="checkbox"/> Yes →	<input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hyperplasia without atypia . . . . . <input type="checkbox"/> Yes →	<input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fibroadenoma . . . . . <input type="checkbox"/> Yes →	<input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



WOMEN and MEN complete remainder of Questionnaire.

The following questions will help us understand whether these factors may be related to health for people working in the field of medical radiation.

**BIRTH AND INFANCY**

28. How much did you weigh when you were born?   POUNDS   OUNCES

29. Were you breastfed as a baby?  No  Yes

30. Were you born premature?  No  Yes

31. During the year before you were born, were your parents working outside of the home?

FATHER  No  Yes → What was his job title  
(the year before you were born)?

MOTHER  No  Yes → What was her job title  
(the year before you were born)?

**FAMILY MEDICAL HISTORY**

32. Have any of your BLOOD-RELATED parents, siblings, or children had any of the following primary cancers? (Mark all that apply)

	YOUNGEST age any of these relatives were first diagnosed					
	Under age 40	40-49	50-59	60-69	Age 70 or older	Age Unknown

Brain cancer.....	<input type="checkbox"/> Yes →	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Breast cancer.....	<input type="checkbox"/> Yes →	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thyroid cancer.....	<input type="checkbox"/> Yes →	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leukemia, lymphoma, or multiple myeloma .....	<input type="checkbox"/> Yes →	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lung cancer.....	<input type="checkbox"/> Yes →	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**PREVENTIVE HEALTH CARE**

33. How many TIMES did you visit a medical facility or clinic for a ROUTINE PREVENTIVE CARE (exam)?

	NUMBER OF EXAMS (at each age)				
	Age 30-39	Age 40-49	Age 50-59	Age 60-69	Age 70 or older
Physical exam .....	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Sigmoidoscopy or colonoscopy.....	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Gynecologic exam (women only).....	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Breast exam other than during a gynecologic exam .....	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**PHYSICAL ACTIVITY**

The following questions will allow us to evaluate physical activity and health in the USRT Study.

34. During the PAST YEAR, how many HOURS did you . . .	NUMBER OF HOURS PER WEEK							11 hours or more
	NONE	½ hr	1 hr	1-½	2-3	4-6	7-10	
Walk for exercise.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walk for daily activities other than for exercise (e.g. at work, shopping) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Strenuous aerobic exercise such as jogging, running, bicycling (including stationary), swimming, playing tennis, treadmill, stairmaster, dance .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Yoga or Pilates .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Weight training or resistance exercises (e.g. weight machines, free weights) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

35. During the PAST YEAR, how many HOURS did you . . .	NUMBER OF HOURS PER DAY							13 hours or more
	NONE	1-2	3-4	5-6	7-8	9-10	11-12	
Sit at work, at home (e.g. watching TV, at computer), or while travelling (e.g. by car, bus) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SLEEP PATTERNS, BEDROOM LIGHTING**

The following questions will allow us to evaluate sleep patterns and health in the USRT Study.

36. During the PAST YEAR, how many HOURS did you sleep in a typical 24-hour period on:	HOURS OF SLEEP PER DAY							10 hours or more
	TIME	1-4	5	6	7	8	9	
WEEKDAYS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WEEKENDS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

37. During the PAST YEAR, how many TIMES in a typical week were your daily activities adversely affected because you got too little sleep? .....	TIMES PER WEEK					8 or more
	None	1	2-3	4-5	6-7	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

38. During the PAST YEAR, how much light was visible in your bedroom while you slept? .....	AMOUNT OF LIGHT		
	Bright light (e.g. to read)	Some light (night light)	Completely dark
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

39. During the PAST YEAR, did you go to bed after midnight at least once a week for at least three months?	What was your USUAL BEDTIME after midnight?				About how many TIMES PER MONTH did you go to bed after midnight?			
	12:00 to 1:00 am	1:00 to 2:00 am	2:00 to 3:00 am	After 3:00 am	1-4	5-8	9-15	16+
<input type="checkbox"/> No <input type="checkbox"/> Yes →	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

40. What type of person do you generally consider yourself?

Morning person

Evening person

Neither

Both

**VITAMIN SUPPLEMENT USE**

41. During the PAST YEAR, did you take any of the following supplements? How many DAYS PER WEEK did you take?

	NO	YES	→	□	□	→	□	□	
--	----	-----	---	---	---	---	---	---	--

Multivitamins .....   →   →

What was the brand name of the multivitamin?

<input type="checkbox"/> Centrum®	<input type="checkbox"/> One-A-Day® Essential®
<input type="checkbox"/> Centrum Silver®	<input type="checkbox"/> One-A-Day® Women's®
<input type="checkbox"/> Theragran-M®	<input type="checkbox"/> Other _____

  

Calcium (separately or in Tums but not in multivitamins) .....   →   →

What was the total dosage (mg) of calcium per day?

<input type="checkbox"/> Less than 500 mg	<input type="checkbox"/> 900-1299	<input type="checkbox"/> 1600 or more
<input type="checkbox"/> 500-899	<input type="checkbox"/> 1300-1599	

  

Vitamin D (separately or in calcium but not in multivitamins) .....   →   →

What was the total dosage (IU) of Vitamin D per day?

<input type="checkbox"/> Less than 400 IU	<input type="checkbox"/> 800-1399	<input type="checkbox"/> 2000-3999
<input type="checkbox"/> 400-799	<input type="checkbox"/> 1400-1999	<input type="checkbox"/> 4000 or more

To help us understand skin cancer risk in the USRT study, we have included questions about ultra-violet (UV) radiation exposure.

**SUNLAMP AND TANNING BOOTH USE**

42. Have you EVER used a SUNLAMP for tanning or to treat a skin condition?

No  Yes →

How old were you the FIRST time you used a sunlamp?	How old were you the LAST time you used a sunlamp?	How many times did you use a sunlamp in your life?
<input type="checkbox"/> Under 13 years old	<input type="checkbox"/> Under 13 years old	<input type="checkbox"/> 1-2 times
<input type="checkbox"/> 13-9	<input type="checkbox"/> 13-9	<input type="checkbox"/> 3-4
<input type="checkbox"/> 20-39	<input type="checkbox"/> 20-39	<input type="checkbox"/> 5-9
<input type="checkbox"/> 40-64	<input type="checkbox"/> 40-64	<input type="checkbox"/> 10-19
<input type="checkbox"/> Age 65 or older	<input type="checkbox"/> Age 65 or older	<input type="checkbox"/> 20 times or more

43. Have you EVER used a TANNING BOOTH or TANNING BED?

No  Yes →

How old were you the FIRST time you used a tanning booth or tanning bed?	How old were you the LAST time you used a tanning booth or tanning bed?	How many times did you use a tanning booth or tanning bed in your life?
<input type="checkbox"/> Under 13 years old	<input type="checkbox"/> Under 13 years old	<input type="checkbox"/> 1-2 times
<input type="checkbox"/> 13-9	<input type="checkbox"/> 13-9	<input type="checkbox"/> 3-4
<input type="checkbox"/> 20-39	<input type="checkbox"/> 20-39	<input type="checkbox"/> 5-9
<input type="checkbox"/> 40-64	<input type="checkbox"/> 40-64	<input type="checkbox"/> 10-19
<input type="checkbox"/> Age 65 or older	<input type="checkbox"/> Age 65 or older	<input type="checkbox"/> 20 times or more

**SUN EXPOSURE**

44. How many MONTHS PER YEAR did you usually have a TAN FROM SUN EXPOSURE at each age listed below?

Under 13 years old	13-19	20-39	40-64	Age 65 or older
<input type="checkbox"/> Never had a tan	<input type="checkbox"/> Never had a tan	<input type="checkbox"/> Never had a tan	<input type="checkbox"/> Never had a tan	<input type="checkbox"/> Never had a tan
<input type="checkbox"/> 1-3 months	<input type="checkbox"/> 1-3 months	<input type="checkbox"/> 1-3 months	<input type="checkbox"/> 1-3 months	<input type="checkbox"/> 1-3 months
<input type="checkbox"/> 4-6	<input type="checkbox"/> 4-6	<input type="checkbox"/> 4-6	<input type="checkbox"/> 4-6	<input type="checkbox"/> 4-6
<input type="checkbox"/> 7-9	<input type="checkbox"/> 7-9	<input type="checkbox"/> 7-9	<input type="checkbox"/> 7-9	<input type="checkbox"/> 7-9
<input type="checkbox"/> 10-12 months	<input type="checkbox"/> 10-12 months	<input type="checkbox"/> 10-12 months	<input type="checkbox"/> 10-12 months	<input type="checkbox"/> 10-12 months

**Attachment 1A**

**45. HOW OFTEN did you protect yourself from the sun by wearing a long-sleeve shirt or long pants, when you were in the sun on a typical day in the summer at each age listed below?**

Under 13 years old	13-19	20-39	40-64	Age 65 or older
<input type="checkbox"/> Never	<input type="checkbox"/> Never	<input type="checkbox"/> Never	<input type="checkbox"/> Never	<input type="checkbox"/> Never
<input type="checkbox"/> Rarely	<input type="checkbox"/> Rarely	<input type="checkbox"/> Rarely	<input type="checkbox"/> Rarely	<input type="checkbox"/> Rarely
<input type="checkbox"/> Sometimes	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Sometimes
<input type="checkbox"/> Usually	<input type="checkbox"/> Usually	<input type="checkbox"/> Usually	<input type="checkbox"/> Usually	<input type="checkbox"/> Usually
<input type="checkbox"/> Always	<input type="checkbox"/> Always	<input type="checkbox"/> Always	<input type="checkbox"/> Always	<input type="checkbox"/> Always

**NIGHT SHIFT WORK**

When answering the next two questions about “night shift” work, please include ANY jobs held during your lifetime. By “Night shift” we mean working 3 or more hours during 12:00-5:00 AM for 6 months or more.

46. Did you ever work PERMANENT night shifts at this age?			During how many YEARS did you work PERMANENT night shifts at this age?					On average, how many PERMANENT NIGHT SHIFTS did you work PER MONTH at this age?					
AGE	NO	YES	1	2-3	4-5	6-7	8 or more	3	4-5	6-9	10-14	15-19	20 or more
Under age 30	<input type="checkbox"/> No	<input type="checkbox"/> Yes →	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30-39	<input type="checkbox"/> No	<input type="checkbox"/> Yes →	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40-49	<input type="checkbox"/> No	<input type="checkbox"/> Yes →	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Age 50 or older	<input type="checkbox"/> No	<input type="checkbox"/> Yes →	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

47. Did you ever work ROTATING OR ON-CALL night shifts at this age?			During how many YEARS did you work ROTATING OR ON-CALL night shifts at this age?					On average, how many ROTATING OR ON-CALL night shifts did you work PER MONTH at this age?					
AGE	NO	YES	1	2-3	4-5	6-7	8 or more	3	4-5	6-9	10-14	15-19	20 or more
Under age 30	<input type="checkbox"/> No	<input type="checkbox"/> Yes →	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30-39	<input type="checkbox"/> No	<input type="checkbox"/> Yes →	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40-49	<input type="checkbox"/> No	<input type="checkbox"/> Yes →	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Age 50 or older	<input type="checkbox"/> No	<input type="checkbox"/> Yes →	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**WORK HISTORY WITH FLUOROSCOPICALLY-GUIDED OR RADIOISOTOPE PROCEDURES**

**48. Did you perform or assist with FLUOROSCOPICALLY-GUIDED medical radiation procedures at least once a month for a year or more?**  No  Yes → **Complete Section B - blue**

**49. Did you perform or assist with DIAGNOSTIC OR THERAPUTIC RADIOISOTOPE procedures at least once a month for a year or more?**  No  Yes → **Complete Section C - green**