



CPWR – The Center for  
Construction Research  
and Training

Building & Construction  
Trades Department,  
AFL-CIO

Duke University  
Medical Center

University of Cincinnati  
Medical Center

Zenith American Solutions

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Serving Construction  
Workers from the  
following DOE sites:

Amchitka

Argonne-West

Ashtabula

Battelle Labs – King Ave.

Battelle Labs –  
West Jefferson

Brookhaven  
National Laboratory

Brush Luckey

Fernald

G.E. Evendale

Hanford

Huntington Pilot Plant

INL

Kansas City Plant

Mallinckrodt

Mound

National Energy Tech  
Laboratory

Oak Ridge

Paducah

Pinellas

Piqua

Portsmouth

Rocky Flats

Savannah River Site

Shippingport

Waste Isolation Pilot Plant

Weldon Spring

Yucca Mountain

## Building Trades National Medical Screening Program

P.O. Box 900960 ▪ Seattle, WA 98109 ▪ 1-800-866-9663

### RADIATION

- Radiation is a form of intense energy. *Ionizing* radiation is powerful enough to break chemical bonds in molecules, creating *ions*. Ionizing radiation is what we usually mean when we use the word “radiation.” It can come from naturally radioactive materials like uranium or from x-ray machines. Radioactive materials are used to produce nuclear power and nuclear weapons.
- If you get an x-ray or if you have radon in your basement, you are exposed to ionizing radiation. We are all exposed to small amounts from natural sources in the earth and atmosphere. Workers can be exposed to higher levels of radiation by breathing in radioactive materials or having them contact their skin, or by being exposed to x-rays or gamma rays.
- Ionizing radiation can cause cancer in many different organs, including skin, thyroid, blood-forming organs (leukemia), lung, breast, and colon. Your chances of getting cancer increase as your radiation dose increases.

#### What were we looking for in this exam?

We looked mainly for signs of cancer in these organs: skin, thyroid, lung, breast, colon, and blood-forming organs (leukemia). Many of these cancers are common in the general population and have many possible causes. So for any one person, it is hard to tell whether a case of cancer was caused by radiation or another cause.

The doctor checked your skin for signs of skin cancer and felt your neck for possible lumps on your thyroid gland. The doctor examined your chest or breasts for lumps and other signs of breast cancer.

You were given a blood test to check for leukemia. We checked your stool sample for hidden blood. This blood is an early warning sign of colon cancer. There are no reliable tests to check for early signs of lung cancer.

All your results are confidential, as defined in your Consent Statement.

We can not be certain that your risk for cancer is higher because of your work without detailed information about the dose and the amount of time you were exposed to radiation. If you do have a cancer that can be caused by radiation, the Department of Labor will obtain your exposure records, if any, and figure out if radiation was the cause.

### **What should I do now?**

- See your own doctor or a specialist if follow-up tests or treatment have been recommended.
- Stop smoking. Although smoking causes 85% of lung cancers, smoking and exposure to radiation together increase your risk of getting lung cancer. *As soon as you stop smoking, your risk starts to go down.*
- Get regular medical check-ups, including exams for skin, thyroid, and colon cancer. The American Cancer Society recommends that if you are over 50, you should have annual stool testing for blood, and periodic colon screening with a flexible sigmoidoscope to look for *polyps* (small growths on the colon). Detecting cancer in its early stages may save your life
- If you still work around radiation, follow all available precautions to protect yourself.

### **What if I have more questions?**

If you have questions after this exam, ask your personal physician. Or call our toll-free number at 1-800-866-9663. We will refer you to a professional who can answer your questions.