

How much radiation will the public receive from the Clinch River Breeder Reactor Plant ?

When the plant is in full operation, a person *spending his entire time at the boundary of the plant* would receive a total of only .03 mrem per year from this source. *A mrem is the unit of measure of radiation most commonly used. It takes into account the effects of various kinds of radiation on the body.*

A person receives five times this amount from watching television for one hour every day. For a person who lives more than two miles from the site, there will be no measurable radiation due to operation of the plant.

The radiation exposure which an individual can expect varies according to location and his activities. One of the most significant sources is outer space from which we receive cosmic rays. These rays lose strength as they pass through the earth's atmosphere, so they are more intense at high altitudes. Other natural sources are the food and water we consume, the earth itself, and the structures in which we work and live.

D diagnostic X-rays are a man-made source of radiation to which most of us are exposed.



XRAYS

For More Information Contact:

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COMPUTE YOUR OWN RADIATION DOSE

We live in a radioactive world. Radiation is all about us and is part of our natural environment. By filling out this form, you will get an idea of the amount you are exposed to every year and compare this to the amount you might receive from the Clinch River Breeder Reactor Plant.

| | Common Source of Radiation | Your Annual Inventory |
|---|--|-----------------------|
| WHERE YOU LIVE | Location: Cosmic radiation at sea level Elevation: Add 1 for every 100 feet of elevation <i>Example: If you live in Pittsburgh, add 12.</i> Typical elevations: Pittsburgh 1200; Minneapolis 815; Atlanta 1050; Las Vegas 2000; Denver 5280; St. Louis 455; Salt Lake City 4400; Dallas 435; Bangor 20; Spokane 1890; Chicago 595. (Coastal cities are assumed to be zero, or sea level.) Tennessee: Knoxville 890; Memphis 275; Nashville 450; Chattanooga 675. | 44 _____ |
| | House construction (based on ¾ of time indoors) Brick 45 Stone 50 Wood 35 Concrete 45 | _____ |
| | Ground: (based on ¼ of the time outdoors) U.S. average | 15 _____ |
| | | _____ |
| WHAT YOU EAT, DRINK, & BREATHE | Water Food U.S. average Air | 25 _____ |
| | Weapons test fallout | 4 _____ |
| HOW YOU LIVE | X ray diagnosis Chest X ray 9 Gastrointestinal tract X ray 210 | _____ |
| | Jet airplane travel: For every 1500 miles add 1 | _____ |
| | Television viewing: For every hour per day add .15 | _____ |
| | Compare your annual dose to the U.S. Annual Average of 148 mrem. | _____ |
| HOW CLOSE YOU LIVE TO CLINCH RIVER PLANT | At site boundary: 24 hours per day .03 mrem | _____ |
| | Two miles away: 24 hours per day .001 mrem | _____ |
| | Five Miles away: 24 hours per day NONE | _____ |

One mrem per year is equal to: Moving to an elevation 100 feet higher.

 Increasing your diet by 4%.

 Taking a 4- to 5-day vacation in the Sierra Nevada Mountains.