

## What about radiation risk?

People tend not to distinguish high-dose radiation of the kind that killed people in Hiroshima and Nagasaki and firefighters in the Chernobyl reactor from low-dose radiation, which is common in every day life. Concrete a foot thick stops high-dose radiation. You can calculate your own radiation dose by going to <http://www.ans.org/pi/resources/dosechart/>

- Natural background radiation from rocks, soil, water, and cosmic rays exposes people living in the U.S. to about 300 millirem per year on average (a millirem is a unit by which radiation is measured).
- The highest dose of manmade radiation an American is likely to be exposed to is from therapeutic and diagnostic medical radiation. It saves millions of lives annually. Americans on average now receive as much radiation from medical sources as they do from nature, about 300 millirem.
- One chest X-ray gives a person a dose of 10 millirem.
- Residents of Denver are exposed to 700 millirem per year from natural radiation.
- People moving from the Chernobyl area to Denver would be increasing their level of radiation exposure.
- Residents of the area around Three Mile Island nuclear plant, which had a reactor meltdown in 1979, received on average an exposure of 1 additional millirem. If they had moved to Denver they would have increased their radiation exposure sevenfold.
- Epidemiological surveys of people living in regions of the world with naturally higher natural background radiation do not find that rates of radiation-associated diseases are higher than average in these areas.
- Airline pilots and cabin crews who fly regularly between Tokyo and New York receive an average of 900 millirem per year.
- The Columbia University's Mailman School of Public Health has found that nuclear workers are healthier than comparable groups in other industries. Similarly, nuclear submarine crews are healthier than comparable groups.
- Our food and water contain radioactive substances. Eating one banana exposes a person to 0.01 millirem.
- Living within 50 miles of a nuclear plant exposes a person to an estimated 0.009 additional millirem per year. The National Cancer Institute performed a large survey of people living near nuclear plants and other nuclear facilities and found no increase in radiation-related diseases.