

X-Ray Technician Safety Stats and Facts



FACTS

1. X-Ray and Radiation Exposure

Radiologists are responsible for the medical imaging used for diagnostic purposes. This means that radiation exposure is a potential risk. Lead aprons and leaded glass shields are essential as frontline equipment against radiation exposure. While average radiation doses from an x-ray are not enough to harm, long-term exposure to x-ray radiation can lead to cancer risks.

2. Cancer Risk

Overexposure can lead to cancer risk in some workers, especially if the protective equipment is not up to standard.

3. Other dangers of x-ray technicians

- Exposure to airborne and bloodborne pathogens is a daily concern.
- Potential for needle sticks during procedures and IV insertions.
- Emotional trauma from seeing results of horrible accidents and abuse.
- Being physically attacked by deranged or drunk/drugged patients.
- Long term physical injury from standard daily job duties.
- Excessive radiation exposure from equipment not up to standard.

STATS

- Of the total number of radiology technicians at risk currently staffed across the country, a minimal number (between 0.53% and 0.87%) will see complications from radiation over their lifetime.
- According to the (VHA), 42% of all radiology technologists have had a work-related injury. They also report that at least 26% have had multiple injuries, and 7% have had more than 10 injuries.
- The shoulder, wrist and back injuries suffered by radiologic technologists are similar. Also, a study of 401 American Society of Radiologic Technologists members found that more than half (251, 62.6%) experienced occupational injuries, with the majority of those being muscular injuries (205, 81.7%).
- The practicing radiologist in the United States receives an annual average

x-ray dose of 3.2 mSv. This dose of radiation results in between 17 and 28 cancer deaths among the 19,000 radiologists at risk, or an excess cancer risk of between 0.53% and 0.87%. The sub-population of cardiologists and radiologists who perform special procedures is expected to be at a higher risk of death from cancer than the general or therapeutic radiologist. The genetic risk to the children of the radiologist corresponds to a 0.09 to 1.26 excess of cases of genetically determined disease among the 4047 children in the first generation, or between a 0.02% to 0.31% increase above the expected incidence.