How Risky is Your Career – Working with Radiation Exposure

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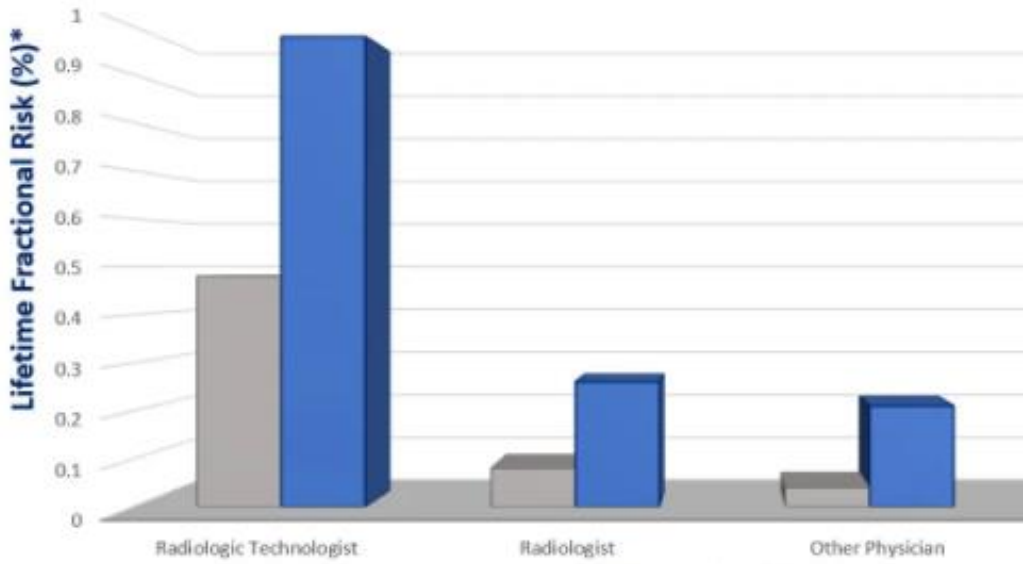
OMEGA Medical Imaging

Patient health and safety are always a key priority for any health care professional. This is no less true for those that work in the interventional field. But what about the health and safety of the health care providers themselves? How risky is their career?

Interventionalists use medical imaging such as X-ray fluoroscopy to perform minimally invasive procedures. Fluoroscopy provides real-time images to the interventionalist with the use of a continuous X-ray beam. But fluoroscopy works with ionizing radiation and that represents a risk to the patient as well as to the physician and staff.

Omega has collected and posted several studies and articles on the risks of ionizing radiation. These are categorized as risks to patients, to patients and staff, and the risks that staff must face in their careers. The medical staff is clearly at risk due to the number of cases (procedures) they perform each year. The risks to staff should not be taken lightly, but there are precautions and best practices that can help to protect medical professionals.

In a study conducted by Maria Grazia Andreassi, Ph.D., and reported in Medical News Today, healthcare professionals working in cath labs experienced 7.1 times greater risk for orthopedic problems, 6.3 times greater risk for cataracts, and 2.8 times greater risk for skins lesions when compared to those who did not. As expected, the radiation exposure was highest for cardiologists and electrophysiologists, but the risk of radiation is high for anyone working in any interventional lab.



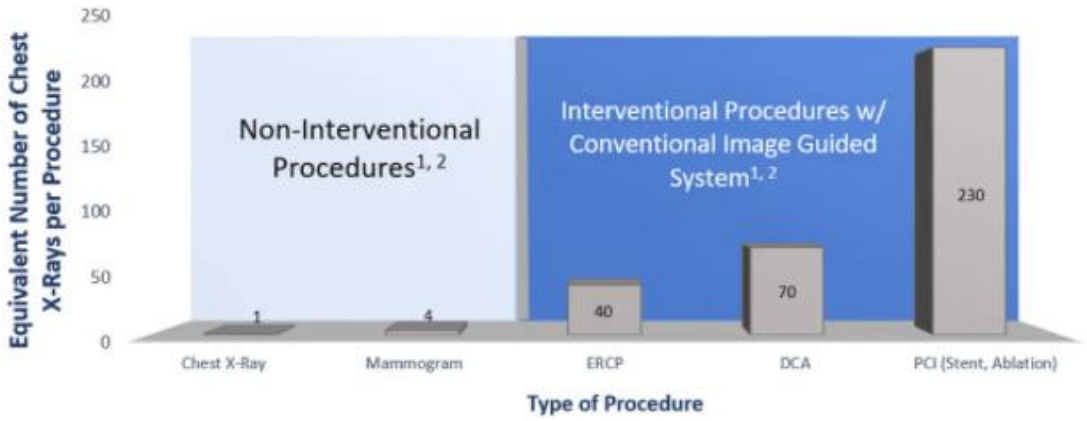
What then can be done to make a career in interventional labs safer? Most hospitals follow the principles of ALARA – as low as reasonably achievable. But what does that mean? ALARA assumes that no dose of radiation is safe and that every precaution possible should be taken to prevent radiation exposure to patients and to the healthcare professionals that treat them.

In addition to the fundamentals of time, distance, and shielding as key to radiation safety, Omega, in a previous article, proposed a fourth fundamental for safety – technology. Technology can dramatically reduce radiation exposure to patients as well as to their physicians and staff.

It is true that interventionalists often use the latest techniques and cutting-edge technology, but many are also slower to embrace newer innovations. Notable among these advancements is the field of medical imaging. Just as technology can improve procedures and the medical systems that are used to perform them, so too can technology help to reduce the risk that radiation exposure represents.

The interventional X-ray systems designed and built by Omega provide an automatic, hands-free solution to radiation reduction – delivering the benefit of consistent and repeatable radiation reduction to patients and to staff beyond anything else in use today.

AI image-guided ROI systems are proven to be safer than non-AI systems and are quickly becoming the new standard of care for interventional imaging. The publications and science on the advantages of AI are clear and proven in a new study that compares an Omega AI image-guided ROI system to a competitor's non-ROI system.



Omega represents a new standard of care as it is the only FDA-cleared AI image-guided interventional system proven to reduce radiation exposure by up to 84%. This reduction is in addition to any current ALARA best practices for radiation exposure and is far better than any conventional non-AI system. Omega's AI-enabled system goes beyond merely managing radiation to provide an actual reduction in dose. The result is a groundbreaking solution that provides safer healthcare for both patients and the staff that cares for them.

Omega systems allow physicians and hospitals to provide the best care and radiation safety to their patients as well as to their staff – improving the quality of their careers.

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