



ALARA: As Low As Reasonably Achievable

Understanding its Importance to Employee Health and Department Operations

ALARA is an industry standard, well-known to Radiation Safety Officers

LANDAUER radiation monitoring dosimetry services include routine reporting of radiation dose levels per participant. Those found reaching ALARA levels are notified so that occupational radiation safety is monitored, and exposures can be mitigated.

As defined in Title 10, Section 20.1003, of the Code of Federal Regulations, ALARA is an acronym for “as low as (is) reasonably achievable,” which means making every reasonable effort to maintain exposures to ionizing radiation as far below the dose limits as practical, consistent with the purpose for which the licensed activity is undertaken, taking into account the state of technology, the economics of improvements in relation to state of technology, the economics of improvements in relation to benefits to the public health and safety, and other societal and socioeconomic considerations, and in relation to utilization of nuclear energy and licensed materials in the public interest.

Source: Standards for Protection Against Radiation, U.S. Code of Federal Regulations, 2014 Ed., 10 CFR 20, 1 Jan 14.

LANDAUER Offers Legal Dose of Record

Supplement with Real-time Dosimetry System (RTDS)

Most hospital staff in the U.S. wear LANDAUER dosimeters for ongoing legal dose of record. And while all who wear a dosimeter are monitored, their dose reports are periodic -- as defined by the hospital radiation safety officer -- and received well after procedures occurred.

Now, LANDAUER offers a way to see real-time dose exposure during fluoroscopic procedures. These readings with the RaySafe i3 Real-time Dosimetry system supplement dose exposure readings. For many health care professionals participating in high radiation-emitting procedures like interventional cardiology, the benefits of a real-time dosimeter can lead to reduced exposure. Seeing dose readings during a procedure in the interventional suite can lead to immediate behavior changes and reduce radiation exposure. That way, physicians and others in high-dose procedures can track exposure and keep within ALARA limits for safety.

Real-time knowledge can produce just-in-time behavioral activities, such as:

Avoidance: Use protective clothing and shielding screens

Behavior: Watch your habits when near radiation

Control: Know and control your X-ray exposure

RaySafe i3 RTSD System: Quick Facts

- RaySafe Real-time personal radiation system includes dosimeters, a display and software
- The system allows you to visualize radiation exposure using easy-to-read bar graphs
- It provides instant feedback to learn and adapt behavior, to minimize radiation exposure
- The system stores measurements for post-procedure analysis, learning, and for user comparisons

LANDAUER Insights

LANDAUER notifies customers when participants exceed ALARA limits. We look forward to speaking to you about ways to reduce radiation dose exposure.



Learn More

Visit landauer.com/real-time-radiation-monitoring