



# Updates to radiation safety standards

On Jan. 9, 2015, The Joint Commission issued “Revised Requirements for Diagnostic Imaging Services,” which took effect July 1, 2015. **The new requirements call for more stringent tracking and recording of X-ray dose performance and making improvements that align with external benchmarks.**

Failure to meet the new standards could put a hospital’s accreditation at risk and adversely impact revenue.

## Here’s a summary of the new safety standards.

### 1. Dose index

The commission calls for hospitals to **record the radiation dose index of every study conducted on a patient during a diagnostic computed tomography (CT) exam.** This includes:

-  - Volume computed tomography dose index (CTDIvol)
-  - Dose length product (DLP)
-  - Size-specific dose estimate (SSDE)

A more reliable dose reporting system — which may involve automated dose reporting — may assist physicians in giving the right radiation dose for each patient.

### 2. Dose data analysis and review

The requirement calls for hospitals to examine instances where the radiation dose index (CTDIvol, DLP, SSDE) exceeds the anticipated dose index range. The results are then compared to external benchmarks.

**Hospitals are asked to analyze data from each radiation-emitting imaging system according to:**

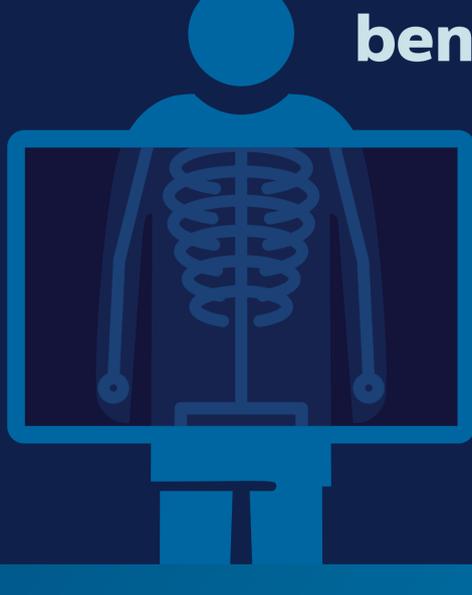
-  - Exam type
-  - Patient characteristics
-  - Staff preferences

### 3. Review excessive dose ranges



After measuring and analyzing radiation doses for all radiation equipment, hospitals should establish diagnostic reference levels (DRLs) to assure they are in accordance with As Low As Reasonably Achievable (ALARA) principles.

### 4. External benchmarks



In an effort to establish industry standards, The Joint Commission requires hospitals to compare the DRLs of each X-ray machine against other healthcare providers (and within their institution) as a way to establish benchmarks. This can mitigate patient and staff exposure to radiation.

### 4. Review and record imaging protocols

**Diagnostic CT imaging protocols are to be reviewed and kept current.** In addition, interpreting radiologists, medical physicists and lead imaging technologists should provide input to make sure protocols adhere to the most current practice standards and factor in changes in imaging equipment. Reviews are conducted at intervals established by the institution.



Maintaining imaging protocol reviews allows for exams to be customized to the patient’s needs, and the lowest possible dose necessary administered.



The goal: **better treatment, greater safety**

The goal of The Joint Commission’s new standards is to create more individualized treatment for patients and reduce excessive exposure to radiation for both patients and staff. **By establishing industry-wide benchmarks and recording vital dose data, hospitals can lay the foundation for an effective radiation program in their facility.**

