

# Radiation Safety and ALARA

## 01 ▶ Time

### As Low As Reasonably Achievable

Reduction of time of exposure can directly reduce radiation exposure and reduce radiation dose. Exposure is a measure of the strength of a radiation field at some point in the air. Absorbed dose is the amount of energy that ionizing radiation imparts to a given mass of matter.

## 02 ▶ Distance

By doubling the distance between your body and the source of radiation, it will cut the radiation exposure by a factor of 4. Good use of the inverse-square law principles can significantly reduce radiation exposure for medical personnel and patients.

## 03 ▶ Shielding

Lead or lead equivalent shielding for x-rays and gamma rays is an effective way to reduce radiation exposure. There are various types of shielding used in the reduction of radiation exposure including lead aprons, mobile lead shields, lead glasses, and lead barriers.