

For some common radiographic examinations, the EU has published guidelines that give diagnostic requirements, criteria for radiation dose and examples of good radiographic technique. The implementation of diagnostic reference levels has led to a reduction in patient absorbed doses and must be considered as a successful radiological protection action and a first step towards achieving optimal imaging conditions. Internationally, the concept of diagnostic reference levels (see Chapters 22 and 24) has been implemented in some countries and diagnostic standard doses are periodically measured locally in the hospitals and compared with the reference levels. If the reference level is exceeded in a particular X ray room, the hospital needs to review their imaging conditions and to consider, and possibly implement, corrective action to reduce the dose if the clinical image quality requirements can still be met. For example 'visually sharp reproduction' means that the details are clearly defined, whereas 'visualization' reflects a situation where the details are detected but not fully reproduced. The image criteria relate to important anatomical structures that should be visible in the images.