

## **REQUIRED INFORMATION FOR RADIATION SHIELDING EVALUATION AT NEW OR RENOVATED FACILITIES**

We will need the following information from you to complete the required **radiation shielding evaluation** at your new or renovated location:

- Number ("high estimate") of x-ray exams taken per week (or year); ave. kV and mAs/shot
- Location of the x-ray tube head in the room, i.e., the distance to walls, floor, ceiling from x-ray tube focal spot
- Name and model no. of the x-ray unit; manufacturer dose profile and/or web site
- Dimensions of the x-ray room(s), i.e., length of each wall and height to the ceiling; i.e., a building engineering drawing (or hand drawn sketch if necessary)
- Location of all doors to the x-ray room(s); location of x-ray unit control panel(s)
- Direction(s) of the primary x-ray beam during use; if panoramic unit, sketch arc or ref. web site where this is available
- On what floor level is the facility located; location of any outside wall(s)
- Use and occupancy of adjacent rooms including the areas above and below the x-ray room(s)
- Thickness and composition, e.g. concrete, wood, of each x-ray room floor and space above the ceiling tiles if any
- Composition of existing walls (e.g., ½ inch wall board)

A copy of a section of the building engineering drawings showing the x-ray rooms and adjacent areas for your location will allow us to determine much of the above information. In addition, the MRCP will most likely require you to submit an engineering drawing of the facility as part of the shielding evaluation, so you should contact the building engineer for assistance as we discussed. Otherwise, please make accurate area measurements and a drawing for each room for our review and use.

A complete shielding evaluation requires a follow-up radiation confirmation survey using TLD radiation dosimeters placed on each x-ray room interior wall at chest height for 3 months. We will supply these dosimeters for your placement and return to us for analysis with a final report. This third-party data will verify our calculated radiation scatter dose to persons outside the x-ray rooms from your current workload.