

**Information Notice Number 17
(November 1997)**

For Florida Radiation Machine Registrants

Department of Health, Bureau of Radiation Control

TYPICAL SHIELDING REQUIREMENTS FOR DENTAL REGISTRANTS

The State of Florida administrative rules require radiation machine registrants to adequately shield the x-ray beams and scattered radiation produced by their machines. The purpose of this requirement is to ensure machine operators and members of the general public are not unnecessarily exposed to radiation and are kept below their legal dose limits. Shielding requirements will be determined by this potential exposure to humans and must take into consideration occupancy factors, distance, work load, energy, and direction of the primary beam, and other related factors.

For dental intraoral units (bite wing) a protected position or six-foot distance is required for the operator. Normally, no additional shielding is required for scattered radiation when the walls are equivalent to two thicknesses of drywall (paneling only is not sufficient). Panoramic units incorporate a film holder and a beamstop and do not require shielding. They may be placed in any room or hallway which allows the operator to maintain a four-foot distance from the patient while using the machine.

Additional shielding (three thicknesses of drywall instead of two) is recommended when sharing a wall with another office or tenant where you do not have administrative control. Dental machines shared by two rooms should have the pass-through opening located at the foot end of the rooms so the primary radiation cannot pass directly through the opening. Doors on this pass-through are recommended, not as a specific regulation, but as an extension of the regulations requiring either distance or shielding.

Keep in mind that film badges are not required unless there is the potential to receive 10 percent of the annual permissible dose. This should not be the case in dental facilities where operators remain at a safe distance or in a protected position.

If you have questions or need guidance, please contact this office at:

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