RADIATION SAFETY INSTRUCTIONS
DENTAL RADIOGRAPHY

In accordance with the California Code of Regulations, title 17, the registrant/supervisor is responsible for radiation safety. Radiation safety responsibilities include: 1) assuring only competent persons operate the x-ray equipment under his/her jurisdiction; 2) the supervisor must provide safety rules to each individual operating x-ray equipment under his/her control and 3) no supervisor shall operate or permit the operation of x-ray equipment unless the equipment and installation meet the applicable requirements of all regulations.

Items pertinent to radiation safety include:

A. No individual occupationally exposed to radiation shall be permitted to hold patients or films during exposure, nor shall any individual be regularly used for this purpose.

B. The operator shall stand at least 6 feet from the patient or behind a protective barrier when making an exposure.

C. Only the patient shall be in the x-ray beam.

D. Neither the x-ray tube housing or the cone shall be hand held during exposure.

E. Each patient undergoing dental radiography shall be covered with a protective apron of not less than 0.25 mm lead equivalent material to shield the gonadal area.

NOTE: Repeated folding will eventually causes "stress cracks" in the leaded material. Lead aprons should be hung over a rounded bar or rolled up.

F. The operator must adhere to the radiation safety rules.

G. Any apparent malfunction of the x-ray machine must be immediately reported to the person responsible for radiation safety.

H. Women should be questioned as to the possibility of pregnancy prior to any x-ray examination. If a woman states she is pregnant then follow the operating procedures that addresses this condition.

STRUCTURAL SHIELDING

Operatories containing x-ray machines shall be provided with barriers at all areas struck by the useful beam. When dental x-ray units are installed in adjacent rooms, protective barriers shall be provided between the rooms. In many cases two layers of 5/8 inch thick dry wall will provide an adequate protective barrier from scatter radiation. However, a radiation health physicist should be consulted prior to construction or remodeling to assure compliance is met.