OUTLINE FOR QUALITY ASSURANCE AND INFECTION CONTROL LECTURE

Steven R. Singer, DDS
October 1999

Quality Assurance in Oral Radiology

Plan of action for consistently high quality radiographs that includes assessments and correctives.

Reference Film
  Optimally exposed film processed in fresh chemistry
  Posted where films are mounted and viewed
  Used for comparison

Stepwedge Film
  Expose 20
  Process one each day
  Compare with first one for variations in density indicating exhausted solutions

Film
  Fresh dated
  Correctly stored in a cool, dry, dark area. Not in refrigerator, darkroom, nor near radiator. Rotate stock so that oldest film is used first.

Cassettes and Screens
  Clean regularly
  Fix or replace cassettes with light leaks

Exposure Tables
  Posted in each X-ray room
  List optimal exposure factors for each type of film, exposure, and area of the mouth
  For most common intraoral X-ray machines, only the time (impulses) varies.

Processing
  Clean tanks and machines
  Replenish solutions daily per instructions
  Check temperature of solutions before processing
  Use time/temperature charts (Posted in Darkroom) to determine processing times
  Replace solutions no less frequently than every other week
  Change water daily in automatic processors

Retake Log
  Determine pattern of errors made in exposure and processing
Infection Control in Oral Radiology

Barriers
   Plastic bags and wrap
   Changed for each patient regardless of # of radiographs exposed
   Protects electronics from moisture

Gloves
   Fresh for each patient
   Changed before processing

Disinfectants
   Spray and wipe non-critical areas such as chairs, etc.

Automatic Processor
   Not a sterilizer
   Sleeves are easily contaminated
   Processed films are usually contaminated

Autoclaving
   All aligning instruments are autoclaved
   This is the only acceptable form of sterilization
   If no bagged and autoclaved aligning instruments are available, re-appoint the patient

Panoramic X-ray Machine
   Disinfect the chin rest and guides with appropriate wipes
   Use a new disposable bite stick for each patient
   Wear gloves