



POLICY FOR THE CONTROL AND USE OF IONIZING RADIATION

1. Deliberate exposure of an individual solely for the purpose of training or demonstration will not be permitted. All images/radiographs must be prescribed before exposures are made.
2. Patient Selection Criteria will be followed.
3. The operator must observe the principles of optimal radiologic health for him/herself by:
 - a. Stepping outside the x-ray room and stepping behind an appropriate barrier
 - b. Never holding the sensor in place for a patient
 - c. Never hand holding the tube housing, cone or film positioning instruments.
4. The operator must observe the principles of optimal radiologic health for the patient by:
 - a. Always shielding the patients from unnecessary scatter radiation by using a leaded apron and a thyroid shield
 - b. Seeking help from a faculty member for any patient who exhibits an unusual condition or behavior, or for whom the sensor or PID placement is questionable.
*****(working independently is encouraged but not at the expense of exposing a patient unnecessarily)*****
 - c. Exposing images/radiographs only after an appropriate clinical examination and patient interview has been completed to determine the need and the exposures which will most effectively contribute to an accurate diagnosis and/or care plan.
 - d. Limiting images/radiographs to the minimum number needed to diagnose dental conditions and determine the patient's treatment needs.
 - e. Basing the decision as to frequency and type of images/radiographs exposed on criteria which focus on routine maintenance of a patient's dental health, on history of caries rate, periodontal status, risk assessment and other specific concerns appropriate for a given patient.

- f. Limiting retakes to only diagnostically unacceptable images and only if the needed information is not present in any other image. Retakes will not be completed merely to improve technical quality of each individual image.
 - g. Limiting retakes to one image per exposure area with a maximum of five retake exposures per FMX, two retake exposures per four-image bitewing series, one retake exposure per two image bitewing series.
 - h. Limiting exposure of an FMX or Panoramic to once every three years.
5. The Department of Dental Hygiene at BridgeValley CTC adheres to the principal of optimal protection from ionizing radiation by:
- a. Utilizing digital sensors for minimal patient exposure
 - b. Equipping each machine with 2.5 mm of aluminum equivalent for filtration
 - c. Providing shielded open end cones, 8 – 12 inches in length and 2.5 inches in diameter for each machine
 - d. Providing x-ray rooms with optimum protection
 - e. Displaying appropriate exposure procedure for all x-ray machines in the immediate area of the machine
6. The prescription, and number of images/films exposed will be documented in the records of each patient.
7. Quality assurance. This program is designed to produce images/radiographs of consistently high quality with minimal patient exposure.
- a. Before students expose patients to radiation they will demonstrate competency utilizing a mannequin..
 - b. Direct supervision will be provided for all students during radiology labs involving patients and all radiographs will be evaluated by departmental faculty.
 - c. Radiographic equipment will be evaluated by radiology instructor routinely.
 - d. The student may ask for assistance with any patient that exhibits any unusual condition or behavior without penalty to grade.
 - e. The student will be supervised by an instructor for **ALL** retakes.
 - f. All students and faculty are required to wear dosimetry badges for all radiology laboratories and patient care clinics. Results are maintained by the department chairperson.

8. All faculty and students will review the “Operating-Safety Procedures” one time per year and will sign the appropriate “Record” form which will be kept on file in the department.

9. All x-ray machines are checked routinely and are in compliance with the regulations set by:

***West Virginia Department of Health and Human Services
Radiation, Toxics and Indoor Air Division***

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