

APPENDIX V.

RECOMMENDATIONS FOR THE PROTECTION OF X-RAY OPERATORS.

THE following recommendations for the protection of X-ray operators are issued by the Röntgen Society :

The harmful effects produced by X rays are cumulative and do not generally appear until some weeks or months after the damage has been done. It is to be noted that X rays of any degree of hardness are capable of producing ill effects, although it is commonly supposed that soft rays only are harmful.

It is undesirable that any X-ray treatment should be carried out except under the direction of a qualified medical practitioner experienced in X-ray work.

All X-ray tubes must be provided, when in use, with a protecting shield or cover which prevents the access of rays to the operators and which encloses the tube, leaving an adjustable opening only sufficiently large to allow the passage of a sheaf of rays of the size necessary for the work in hand. Even with this shielding the operator may not be completely protected in all cases (*e.g.*, especially in screen work), and the use of movable screens, gloves and aprons is recommended.

Operators should be warned that shields obtainable commercially are often ineffective and tests of their opacity should be made.

Whenever possible the cubicle system should be used for X-ray treatment and the operator should be able to make all adjustments from a protected space.

When screen examination is required it is essential that the screen should be covered with thick lead glass of proved opacity and that the screen should be independently supported and not held in the hands of the operator. If the hands are so used they should be properly protected.

The hand or any portion of the body of the operator should never be used to test the hardness or quality of the X-ray tube ; any simple form of penetrometer can be easily arranged for this purpose.

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