



## **The Use and Care of Personal Protective Equipment for X-Ray Exposure**

### **Use of Aprons or Other Protective Equipment**

Full aprons should cover the front of the body from the throat to within 10 cm of the knees, as well as the sides of the body.

- Other than the patient being examined, all individuals shall be positioned such that no part of the body will be struck by the useful beam unless protected by 0.5 millimeter (mm) lead equivalent.
- Staff and ancillary personnel shall be protected from the direct scatter radiation by protective aprons or whole body protective barriers of not less than 0.25 mm lead equivalent.
- Patients who cannot be removed from the room shall be protected from the direct scatter radiation by whole body protective barriers of 0.25 mm lead equivalent or shall be positioned so that the nearest portion of the body is at least two meters from both the tube head and the nearest edge of the image receptor.
- Gonadal shielding of not less than 0.5 mm lead equivalent shall be used for patients who have not passed the reproductive age during radiographic procedures in which the gonads are in the useful beam. The exception is for cases in which gonadal shielding would interfere with the diagnostic procedure.
- Hand-held x-ray operators must wear a whole body protective apron and thyroid collar of 0.25 mm of lead equivalent when using the unit, unless allowed otherwise by an exemption.
- Only individuals whose presence is necessary are allowed in a CT scan room during exposure. Each individual, except the patient, shall be protected by at least 0.5 millimeter lead equivalent aprons or a whole body protective barrier.

### **Monitoring Badges**

If a monitoring badge is worn, it must be placed on the collar outside the apron.

For individuals monitored using two monitoring badges, one should be worn on the collar outside the apron; the other should be worn at the waist level under the apron.

### **Storing Aprons**

Protective aprons should be stored or draped to prevent cracks. Ideally, they should be hung by the shoulder(s) or stored on an approved apron hanger. Aprons should never be folded or creased as cracks can develop at the fold.

### **Checking Aprons/Gloves/Shields**

Aprons, gloves, and shields are required to be checked annually for defects such as holes, cracks, and tears. The first check should be a visual inspection of the equipment. If a potential problem is found, fluoroscopy or radiography may be used to look for defects. If a significant defect is found, the item must be removed from service until repaired. A record of this check must be maintained and readily available for inspection by the Authority.