Scripps

Policy: Lead Apron (Apparel) and Shields Inventory and Inspections

Effective: 03/14/23 **Identifier: S-FW-EC-3510**

Acute Care: **ENC ☒ GR ☒ LJ ☒ MER ☒ Ambulatory ☐ SHAS ☒**

PURPOSE: In compliance with California Title 17 (30307 Fluoroscopic Installations), this policy establishes the requirements for lead apparel and shields regarding: purchase, lead equivalency (millimeters of lead), inventory, storage, handling, inspection, and cleaning.

I. POLICY

For the protection of workers and patients from unnecessary x- ray radiation exposure from diagnostic radiology procedures, lead apparel and shields will be worn in the fluoroscopy room by all personnel in compliance with this policy.

II. RESPONSIBILITIES

A. Supply Chain Management

1. Identify Scripps approved vendor for lead apparel.
2. Ensure that Lead equivalency requirements are met:
   a. All protective lead apparel will be a minimum of 0.25mm lead equivalent per Title 17.
   b. It is recommended that the front of all lead apparel be 0.5mm lead equivalent.
   c. All lead used in patient shielding will be 0.5 mm lead equivalent.
   d. All new lead apparel ordered will be delivered to Radiology/Imaging to be entered into the third-party vendor inventory system.

B. Department Managers

1. Purchase all lead apparel and patient shields through an approved Scripps approved vendor (check with purchasing if you have questions).
2. All new lead apparel or shields will be delivered to the radiology department at that site unless a department such as the Cath Lab or EP departments have access to third party vendor inventory system. Vendors that have their own personal lead apparel shall meet the requirements of this policy, provide documentation to support this, and maintain the information in RepTrax. See Related Document “Vendor Representatives; S- FW-EC-1155".
3. Access and validate department inventory on third-party vendor inventory system.
4. Provide appropriate storage as follows:
   a. All protective lead apparel will be stored properly to prevent damage.

b. Always hang lead aprons by the shoulders or on an approved apron hanger.
c. Lead gonad / patient shields are stored flat.
d. Lead protective devices are never to be folded or draped across equipment tables or chairs.

C. End User staff:
1. Personnel who are required to wear lead apparel or use shields for patients will visually inspect these protective devices prior to each use for obvious signs of damage such as tears or sagging of lead. Note: color-coded visual indicator or tag is placed on the piece of lead apparel or shield to indicate that the item was inventoried and checked for damage.
2. Clean lead protective devices (lead apparel and shield) when visibly soiled, referencing the manufacturer's instructions for use (MIFU) and using only a health care approved disinfectant.
3. Store lead apparel as required.

D. Radiology Department:
1. All lead protective devices will be inventoried annually.
2. All new lead apparel or shield will be delivered to the Radiology Department at that site and assigned to the proper owner by the administrator for the site. This will ensure all new lead apparel and shields are properly inventoried and are correctly labeled/ tagged.
3. All lead apparel and shields must be inventoried and tagged/labeled prior to use.
4. Inventory is performed using third party inventory system, which uses a tag reader, and a tag is placed on the front of the piece of lead apparel or shield to provide a visual indicator that the item was inventoried and checked for damage.
5. Lead apparel or shield may need to be retrofitted with tags and color-coded visual indicator to current visual management system.
6. Provide an annual inspection of protective lead apparel and shields:
a. First perform tactile and visual inspections. Inspect the protective lead apparel or shield for visible damage (wear and tear) and feel for sagging or deformities.
b. In cases of questionable condition, fluoroscopy or radiography should be used to check for holes and cracks.
c. During fluoroscopic inspections, use manual settings and low technique factors (e.g., 80 kVp). Do not use the automatic brightness control, as this will drive the tube current and high voltage up, resulting in unnecessary radiation exposure to personnel and wear on the tube.
d. Staff completing the inspection will document the date of inspection and note any signs of damage using the third-party inventory system or web-based application.
e. Lead protective apparel or shield found to have defects greater than 1 cm in an area to shield a critical organ (reproductive organs and thyroid) will

be removed from service. Lead protective apparel or shield found to have defects greater than 3 cm in any location will be removed from service.

f. If unsure whether a piece of lead apparel or shield has cracks, holes, or tears, it should be removed from service with the area identified with tape, then the apparel/shield reviewed by the Medical Physicist Department or designee.

g. If the lead apparel or shield needs the Velcro straps repaired, the vendor will be contacted to schedule repairs.

h. If a lead apron or shield is not located during the annual inventory, a note will be entered for that item, and it will be moved to archived inventory list. If lead apron or shield is found during a subsequent inspection it will be moved back into active inventory.

i. All lead protective devices removed from service shall be disposed of following hazard materials guidelines and should not be discarded in regular trash.

III. PERSONNEL

A. Department Management
B. Radiology staff
C. Supply Chain Management staff

IV. REFERENCES

A. California Code of Regulations, Title 17
B. Joint Commission Standards, current edition
C. Centers for Medicare and Medicaid Services

V. RELATED PRACTICE DOCUMENTS

Vendor Representatives, Standards of Conduct and Management; S-FW-EC-1155

VI. SUPERSEDED

Lead Apron (Apparel) and Shields Inventory and Inspections; S-FW-EC-3510, 02/20

Document Chronology		
ORIGINAL: 10/16	**REVISED: 02/20, 02/23**	**REVIEWED:**