HEADS UP...

TOPIC: Inspection, testing and maintenance of high-risk equipment
***SETTING:* Ambulatory Health Care (AHC)**

Why is this important?

The inspection, testing and maintenance of high-risk equipment is vital to patient care and safety. High-risk equipment is often used in emergency situations leaving no room for equipment malfunction or failure. However, organizations continue to be frequently cited for findings related to this standard and EP (EC.02.04.03 EP 2) for ambulatory health care settings.

Scope of the Problem:

Time period: **January 1, 2019 – December 31, 2019**
Number of full surveys performed: **720**
Number of surveys which had high-risk findings related to the inspection, testing and maintenance of high-risk equipment (EC.02.04.03 EP 2): **17 (2%)**

Observations identified within a specific topic area (e.g., high-risk equipment) may reveal systemic areas for improvement across the organization. These improvement opportunities might be reflected in additional standards/EPs within the EC chapter and/or other chapters/standards/EPs. *See also EC.02.04.03 EP 3, EC.02.04.01 EP 6, LD.04.01.11 EP 4, 5, LD.04.03.09 EP 4, 5, 6, 7*

Sample survey observations [from surveyor notes] and contributing factors

- The portable suction unit on the crash cart was not being tested while unplugged. The battery in the unit was not charged.
- A review of the various laryngoscope blades and handles identified that there were three blades that were not compatible with the fiber-optic only handles.
- There was no documentation that AEDs were checked daily per manufacturers' instructions (e.g., lacked or expired pediatric and/or adult electrodes.)

Potential contributing factors:

- Lack of or incomplete checklist or equipment log with all high-risk equipment and components that need to be monitored and inspected (daily, weekly, etc.) (e.g., AED pad expiration dates, presence of adult and pediatric pads).
- Failure to order supplies and no mechanisms for reporting.
- Leadership failed to assign roles and responsibilities to staff for inspecting and testing of high-risk equipment.
- Lack of training on how to inspect and test the high-risk equipment (e.g., AEDs and portable suction units).
- Staff were not aware that daily, weekly, or monthly inspections and/or tests were required to be performed on high-risk emergency equipment.
- Lack of documentation regarding inspection, testing and maintenance.

How to identify potential problems in your organization

Review your policies and procedures

☐ Does the organization have policies and procedures for ensuring the inspection, testing and maintenance of high-risk equipment (and supplies)?

- Is this process periodically reviewed?
- Is this process in alignment with manufacturers' instructions for all high-risk equipment?
- Does the policy indicate how often inspections should occur for high-risk equipment?
- Does the policy indicate how to respond when medical equipment fails?
- Does the policy and procedure address staff responsibilities (e.g., Who is responsible for the inspections, testing and maintenance? Who is responsible for reviewing that corrective actions are being completed?)

Interview staff (clinicians, support staff)

☐ Can staff demonstrate knowledge regarding preventive maintenance, quality checks, and associated documentation needed for high-risk equipment?

☐ Are staff knowledgeable regarding the frequency that high-risk equipment needs to be inspected and tested?

☐ Are staff aware of the steps/process to take when high-risk medical equipment fails inspections?

Assess your environment

☐ Is there an available equipment checklist that outlines the schedule and type of inspections and tests that need to be completed?

☐ Does the organization document the outcomes from inspections and tests on all high-risk equipment?

☐ Are the high-risk equipment manufacturers' instructions readily available? Are inspections and maintenance performed according to the manufacturers' instructions?

Evaluate implementation

☐ Conduct periodic checks of emergency equipment and carts for the operability of high-risk equipment.

☐ Review/monitor maintenance and supply logs.

What are some resources that can assist in mitigating risks in these areas?

- Consult manufacturers' instructions for use (IFU) and user guides for guidance regarding inspection, testing and maintenance.