

## **HEADS UP...**

**TOPIC:** *Utility systems risk management*

**SETTING:** *Ambulatory Care (AHC)*

### **Why is this important?**

Labeling main valves, main switches, and other controls in utility systems are essential to facilitating partial and emergency shutdowns. Accurately labeling components of a utility system helps to quickly identify and isolate a hazard during emergencies. Inaccurate labels may cause improper shutdowns placing patients, staff, and visitors at risk. Labels must be completed to ensure the appropriate level of risk management during emergencies.

### **Scope of the problem:**

Time period: **October 1, 2021 – September 30, 2022**

Number of full surveys performed: **770**

Number of surveys with findings at EC.02.05.01 EP 9: **243 (32%)** for all SAFER placements

**Relevant standard: EC.02.05.01** The organization manages risks associated with its utility systems. **EP 9** The organization labels utility system controls to facilitate partial or complete emergency shutdowns.

### **Sample survey observations [from surveyor notes] and contributing factors**

- The natural gas line that feeds the emergency generator was not labeled.
- The electrical feed for the fire alarm control panel (FACP) could not be located after looking through 8 electrical panels.
- Circuit breakers in an electrical panel were not labelled to distinguish between emergency and non-emergency (normal) power.
- The fire alarm circuit disconnect/electrical breaker was not identified.
- Circuit breakers labeled as a spare were found in the “on” position, posing a safety risk.

### **Possible contributing factors**

- Visual inspection for labeling of the utility system was not assessed on a routine basis.
- The maintenance team had not been trained on or informed of the system requirements.
- Utility system modifications such as added circuits, appliances, medical equipment, or construction projects in which the valves, breakers, or controls are not labeled or updated.

## How to identify potential problems in your organization

### Review your policies and procedures

- How does the organization manage risks associated with utility systems?
  - Does the policy address labeling the utility system to facilitate partial or emergency shutdowns?
- Does the organization have a process to ensure that controls in utility systems are labelled appropriately?
  - Does the process define what steps should be taken in order to label main valves or controls?
- Does the organizational policy outline the training and competencies needed for staff who have access to the utility system?
  - Does the policy outline how to assess or verify staff competency and the intervals for competency assessment?

### Interview staff

- Can staff describe the protocol for shutting down the utility system during partial or complete emergencies?
- Does staff know how to correctly identify and label all circuit breakers?
- Does staff have a plan to communicate with the clinical team the status of the utility system from shutdown to return of normal operations?

### Assess and monitor

- Is the utility system control in an accessible area enabling staff to identify labels?
- Is a visual inspection done to assess which breakers and fire alarms are labelled correctly/incorrectly?
- Is the utility system maintained according to the vendor's or manufacturer's requirements?

### Evaluate implementation

- Review documentation to identify history of visual inspections.
- Review documentation regarding adherence to vendor's or manufacturer's requirements, including the appropriate placement and number of control and shutoff valves.

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

The Physical Environment: Utility Systems <https://www.jointcommission.org/resources/the-physical-environment/utility-systems/>