

HEADS UP...

TOPIC: Utility systems risk management

SETTING: Behavioral Health Care (BHC)

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 individuals served, 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: **1891**

Number of surveys with findings at EC.02.05.01 EP 9: **314 (17%)** 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 utility main system controls used to facilitate shutoff for electric, gas, and water were not labeled, increasing risk of confusion in the case of emergency.
- The location of the shutoff switches was unknown, not labeled, or labeled in a manner that could not be easily identified.
- The electrical panel did not have an accurate legend determining what the circuit breakers serve.
- Individual circuits were not labeled, main shut-off valves and switches were unknown.
- Breaker switches in electrical panel box were labeled “receptacles” without the identifying their specific locations.

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.
- Equipment had not been tested to determine branch switches and facilitate labeling.
- 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.
- Staff were not educated on how to locate and shut off utilities when necessary [in a residential areas, where landlords would be responsible for this, staff should be aware how to identify labels in the event of an emergency].

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/>