



California Society for Healthcare Engineering, Inc.

What are the “Watchers” are Finding?



THE JOINT COMMISSION



CREATING OVERLY COMPLEX SOLUTIONS
TO NONEXISTENT PROBLEMS SINCE 1981.

8 out of the *TJC* Top 10 are consistently present:

1. LS.02.01.20

The hospital maintains the integrity of the means of egress.

EP1 – Doors in a means of egress are not equipped with a latch or lock that requires the use of a tool or key from the egress side.
NFPA 101-2000 18/19.2.2.2.4

(Waiver)

EP13 – Exits, exit access, and exit discharges are clear of obstructions or impediments to the public way, such as clutter (equipment, carts, furniture), construction material...

(Waiver)

EP22 – Doors to patient sleeping rooms are not locked.
NFPA 101-2000 18/19.2.2.2.2

(Waiver)

TJC – Top 8 for the last 3.5

2. EC.02.06.01

The hospital establishes and maintains a safe, functional environment. *Note: The environment is constructed, arranged, and maintained to foster patient safety, provide facilities for diagnosis and treatment, and provide for special services appropriate to the needs of the community.*

EP1 – Interior spaces meet the needs of the patient population and are safe and suitable to the care, treatment, and services provided.

EP13 – The hospital maintains ventilation, temperature, and humidity levels suitable for the care, treatment, and services provided. See also EC.02.05.01, EP15. (**Waiver**, Risk Assessment)

EP20 – Areas used by patients are clean and free of offensive odors.

TJC – Top 8 for the last 3.5

3. EC.02.05.01

The hospital manages risks associated with its utility systems.

EP1 – The hospital designs and installs utility systems that meet patient care and operational needs. See also EC.02.06.05, EP1.

EP8 – The hospital labels utility system controls to facilitate partial or complete emergency shutdowns.

EP15 – In areas designed to control airborne contaminants (such as biological agents, gases, fumes, dust), the ventilation system provides appropriate pressure relationships, air-exchange rates, and filtration efficiencies. See also EC.02.06.01, EP13. (**Waiver**, Risk Assessment)

TJC – Top 8 for the last 3.5

4. LS.02.01.10

Building and fire protection features are designed and maintained to minimize the effects of fire, smoke, and heat.

EP4 – Openings in 2-hour fire rated walls are fire rated for 1 ½ hours. (See also LS.02.01.20, EP3; LS.02.01.30, EP1)

EP5 – Doors required to be fire rated have functioning hardware, including positive latching devices and self-closing or automatic-closing devices. Gaps between meeting edges of door pairs are no more than 1/8 inch wide, and undercuts are no larger than ¾ inches. See also LS.02.01.30, EP, LS.02.01.34, EP2.

EP9 – The space around pipes, conduits, bus ducts, cables, wires, air ducts, or pneumatic tubes that penetrate fire-rated walls and floors are protected with an approved fire-rated material.

TJC – Top 8 for the last 3.5

5. LS.02.01.30

The hospital provides and maintains features to protect individuals from the hazards of fire and smoke.

EP2 – All hazardous areas are protected by walls and doors in accordance with NFPA 101-2000: 18/19:3.2.1. See also LS.02.01.10, EP5, LS.02.01.20, EP18)

EP11 – Corridor doors are fitted with positive latching hardware, are arranged to restrict the movement of smoke, and are hinged so that they swing. The gap between meeting edges of door pairs is no wider than 1/8 inch, and undercuts are no larger than 1 inch. Roller latches are not acceptable.

EP18 – Smoke barriers extend from the floor slab to the floor or roof slab above, through and concealed spaces (such as those above suspended ceilings and interstitial spaces), and extend continuously from exterior wall to exterior wall. **All penetrations are properly sealed.**

TJC – Top 8 for the last 3.5

6. EC.02.03.05

The hospital maintains fire safety equipment and fire safety building features.

EP2 – At least quarterly, the hospital tests water-flow devices. Every 6 months, the hospital tests valve tamper switches. The completion date of the tests is documented.

EP3 – Every 12 months, the hospital tests duct detectors, electromechanical releasing devices, heat detectors, manual fire alarm boxes, and smoke detectors. The completion date of the tests is documented.

EP4 – Every 12 months, the hospital tests visual and audible fire alarms, including speakers. The completion date of the tests is documented.

EP5 – Every quarter, the hospital tests fire alarm equipment for notifying off-site fire responders. The completion date of the tests is documented.

EP19 – Every 12 months, the hospital tests sliding and rolling fire doors for proper operation and full closure. The completion of the tests is documented.

EP25 – Documentation of maintenance, testing, and inspection activities for fire alarm and water-based fire protection systems includes the following:

- Name of the activity
- Date of the activity
- Required frequency of the activity
- Name and contact information, including affiliation, of the person who performed the activity
- NFPA standard(s) referenced for the activity
- Results of the activity

TJC – Top 8 for the last 3.5

7. LS.02.01.35

The hospital provides and maintains systems for extinguishing fires.

EP4 – Piping for approved automatic sprinkler systems is not used to support any other item.

EP5 – Sprinkler heads are not damaged and are free from corrosion, foreign materials, and paint.

EP6 – There are 18 inches or more of open space maintained below the sprinkler deflector to the top of storage.

8. EC.02.02.01

The hospital manages risks related to hazardous materials and waste.

EP5 – The hospital minimizes risks associated with selecting, handling, storing, transporting, using, and disposing of hazardous chemicals.

EP7 – The hospital minimizes risks associated with selecting and using hazardous energy sources (radiation, x-ray, lasers, MRI).

TJC – Top 8 for the last 3.5

The Physical Environment Portal:

A collaboration between The Joint Commission and The American Society for Healthcare Engineering



The portal is a collection of online resources and tools to help hospitals comply with the 8 most challenging Joint Commission Life Safety (LS) and Environment of Care (EC) standards.

The portal is available free to the public on The Joint Commission website, with links to solutions from ASHE and Joint Commission Resources. Joint Commission-accredited organizations have access to additional resources, such as surveyor comments.
www.jointcommission.org/JCPEP

Each standard is highlighted in 2-month modules. The first month features information for facilities managers; the second month focuses on strategies for leadership and clinical impact.

The standards to be covered are:

Utility Systems
EC.02.05.01 (Aug/Sept 2015)



Means of Egress
LS.02.01.20 (Oct/Nov 2015)



Built Environment
EC.02.06.01 (Dec/Jan 2015/16)



Fire Protection
EC.02.03.05 (Feb/March 2016)



General Requirements
LS.02.01.10 (April/May 2016)



LS Protection
LS.02.01.30 (June/July 2016)



Automatic Suppression Systems
LS.02.01.35 (Aug/Sept 2016)



Haz Mat/Waste Management
EC.02.02.01 (Oct/Nov 2016)



The Physical Environment

Portal Modules

- [▶ Portal Home](#)

- [Utility Systems - EC.02.05.01](#)

- [Means of Egress - LS.02.01.20](#)

- [Built Environment - EC.02.06.01](#)

Future Module Release Schedule:

- ▶ Available Dec/Jan 2016 - Built Environment EC.02.08.01
- ▶ Available Feb/Mar 2016 - Fire Protect. EC.02.03.05
- ▶ Available Apr/May 2016 - General Req. LS.02.01.10
- ▶ Available Jun/Jul 2016 - LS Protection LS.02.01.30
- ▶ Available Aug/Sept 2016 - Automated Suppression Sys. LS.02.01.35
- ▶ Available Oct/Nov 2016 - Haz Mat/Waste Mgmt EC.02.02.01

Intended Audience:

- ▶ Hospital Leaders
- ▶ Facilities Managers
- ▶ Clinicians
- ▶ Quality Coordinator/Leaders

The purpose of this portal is to provide guidance and education to reduce instances of non-compliance with the top eight Environment of Care/Life Safety standards.

About this Portal

The Joint Commission has identified several Standards that have been frequently cited during survey activity over the past few years. This portal, in partnership with the American Society for Healthcare Engineering (ASHE), will provide information to reduce findings of non-compliance.

Focus of the Portal:

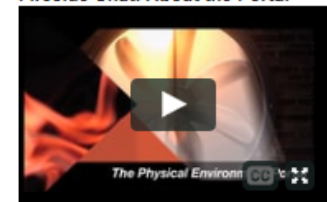
- Eight identified Standards
 - Each Standard will be addressed over two months;
 - First month - requirements and compliance
 - Second month – Leadership, evaluating organization level compliance
- Improved patient safety with:
 - Best practices in the patient care environment
 - High Reliability practices for leadership to assess and ensure compliance

Get e-Alerts on the Physical Environment [Sign up here](#)

Mission:

To provide a single, authorized resource where information specific to frequently identified Standards and Elements of Performance (EP) of the Joint Commission can be accessed. This resource is to be free to all seeking this information. The specific Standards and associated EPs are discussed by the Joint Commission and possible solutions presented by Joint Commission Resources. The site is partnering with the [American Society for Healthcare Engineering \(ASHE\)](#) to provide world class examples of successful compliance from high reliability organizations.

Fireside Chat: About the Portal



Visit [FOCUS on Compliance](#) for more physical environment resources.

Comply with tough EC, LS & EM challenges

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Joint Commission Resources

- ▶ [Web Store: Environment of Care Resources](#)
- ▶ [Need Additional Information? JCR Consulting](#)

Special Instructions

- ▶ [How to access JCR Web Store Content](#)

Utility Systems EC.02.05.01

Portal Modules

Portal Home

➤ Utility Systems EC.02.05.01

EC.02.05.01 - Leadership

EC.02.05.01 - Clinical Impact



Visit [ASHE FOCUS on Compliance](#) for more physical environment tools and resources.

Improved Compliance

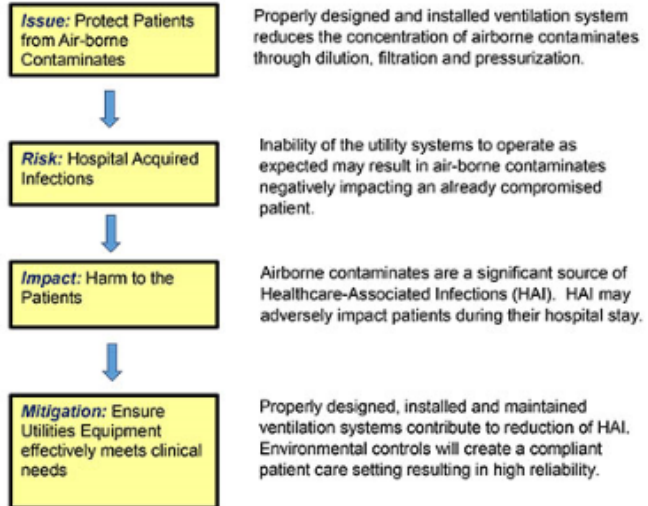
➤ [Download examples for 02.05.01](#)

EC.02.05.01: The hospital manages risks associated with its utility systems

Standard Scoring Analysis

Standard	EP	Issue	% Non-compliant	COP
EC.02.05.01	15	Air pressure, filtration and air changes in critical care areas such as the OR	32.78	\$482.42 (A-0747)
	8	Label utility system controls for partial or complete emergency shutdown	21.39	\$48241(a) (A-0701)
	1	Design and installation of utilities to meet patient care and operational needs	10.39	\$482.41 (A-0700)

Example of Improved Compliance for EP 1 and 15



EC.02.05.01 - Leadership

Portal Modules

[Portal Home](#)

[Utility Systems EC.02.05.01](#)

[EC.02.05.01 - Leadership](#)

[EC.02.05.01 - Clinical Impact](#)



Visit [ASHE Focus on Compliance](#) for more physical environment tools and resources.



Leadership Awareness

- Leadership Orientation
- Design and Installation of Utility Systems (EC.02.05.01 EP 1)
- Ventilation, air filtration and air changes in critical areas (EC.02.05.01 EP 15)
- Practical Test
- During Survey
- Evaluation of Compliance

[Download This File](#)

EC.02.05.01 - Clinical Impact

Portal Modules

Portal Home

Utility Systems EC.02.05.01

EC.02.05.01 - Leadership

EC.02.05.01 - Clinical Impact

This content includes information linking Environment of Care and Life Safety Code deficiencies and their impact on patient care and patient safety.

Standard Scoring Analysis - EC.02.05.01: The hospital manages risks associated with its utility systems

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According to the Centers for Disease Control (CDC), "There were an estimated 722,000 HAIs [Healthcare-Associated Infections] in U.S. acute care hospitals in 2011. About 75,000 hospital patients with HAIs died during their hospitalizations. More than half of all HAIs occurred outside of the intensive care unit." [CDC Data & Statistics Web Page, 5/13/2015]

The CDC National Healthcare Safety Network (NHSN) Web Page, dated 5/13/2015 stated in the summary of the HAI Action Plan the following:

Healthcare-associated infections, or HAIs, are infections that people acquire while they are receiving treatment for another condition in a health care setting. HAIs can be acquired anywhere health care is delivered, including inpatient acute care hospitals....HAIs may be caused by any infectious agent, including bacteria, fungi, and viruses, as well as other less common types of pathogens. These infections are associated with a variety of risk factors, including:

- Use of indwelling medical devices such as bloodstream, endotracheal, and urinary catheters
- Surgical procedures
- Injections
- Contamination of the health care environment
- Transmission of communicable diseases between patients and healthcare workers
- Overuse or improper use of antibiotics

Contamination of the physical environment is fourth on the list in the CDC action plan.

Research:

Air changes per hour (ACH) is a measure of how many times the air in a defined space is replaced. Studies have shown a relationship between ACH and infectious disease transmission. A 2007 study by Li and colleagues concluded "there is a strong and sufficient evidence to demonstrate an association between ventilation and air movements in buildings and the transmission and spread of infectious diseases such as measles, Mycobacterium (M.tb), chickenpox, influenza, smallpox and severe acute respiratory syndrome (SARS)."



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Thank you
