

2023 Compliance Update

George Mills

*Director Technical Operations &
Engineering Support*

Agenda

- Joint Commission Leadership Update
- Joint Commission Workplace Violence
- Joint Commission Standards Revisions: EC & LS
- Survey Process Issues
- Often Cited Survey Findings
 - *Top 10 Environment of Care*
 - *Top 10 Life Safety Chapter*
- New Code Requirements [2018, 2021]

CMS Validations Might Resume

The Joint Commission believes the CMS Validation process will resume in October 2023

- October – September is the fiscal year for CMS
 - The Validation process could include those Joint Commission surveys from 60 days prior to October 1
- Validation surveys are conducted by State Agencies under contract with CMS, acting on CMS behalf
- The Validation team may choose to be onsite with the Joint Commission Survey Team
 - If this happens the CMS Validation Team is evaluating the Joint Commission process and should not be writing observations
 - A CMS identified *Immediate Jeopardy* observations could be the exception
 - Joint Commission equivalent is *Immediate Threat to Health & Safety*

Update: Joint Commission Focus: Health Equity; Environmental Sustainability; Workforce

Health Equity

a. Standard LD.04.03.08 (Elevated to NPSG 16.01.01 effective 7/1/2023)

EP 1: Leadership

EP 2: Assess health related social needs of the patient

EP 3: Data analysis

EP 4: Action plan

EP 5: Improve the process

EP 6: Inform stakeholders

b. Universal Design

- Equitable Use
- Flexibility in Use
- Simple & Intuitive Use
- Perceptible Information
- Tolerance for Error
- Low Physical Effort
- Size & Space for Approach and Use

Universal Design:

First introduced by Ron Mace in 1985, Universal Design is defined by the AIA as:

“The design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.”

Health Care Equity Certification

Dr Perlin on the Certification:

“...the optional certification creates more rigorous guidelines than the health equity standards mandated within the accreditation programs. For example, organizations seeking certification will have to identify community-level needs to support care delivery, collect self-reported data from patients and staff, provide enhanced training and perform more advanced data analysis.”

Modern Healthcare

6/27/2023

Update: Joint Commission Focus: Health Equity; Environmental Sustainability; Workforce

Environmental Sustainability

De-Carbonizing healthcare

1. Scope 1: stuff we do
2. Scope 2: stuff we consume
3. Scope 3: stuff we buy (i.e. “carbon label”)

Environmental Sustainability: De-Carbonizing Healthcare

Categorizing Business Emission Scopes (1 – 3)

- **Scope 1, 2 and 3** emissions is a classification system used to bucket greenhouse gas emissions (GHGs) exerted by an organization to help measure, manage, and reduce business emissions
 - This Scope system first appeared in the 2001 Greenhouse Gas Protocol
- **Scope 1:** direct emissions from sources that are owned or controlled by the organization
 - includes on-site fuel combustion and fleet fuel consumption
- **Scope 2:** indirect emissions from sources that are owned or controlled by the organization
 - includes emissions that result from the generation of electricity, heat or steam purchased by the organization from a utility provider
- **Scope 3:** from sources not owned or directly controlled by EPA but related to organization activities
 - Includes employee travel and commuting
 - Includes emissions associated with contracted solid waste disposal & wastewater treatment
 - Can also result from transportation and distribution losses associated with purchased electricity

Joint Commission Announces Sustainable Healthcare Certification

“ This certification is meant to recognize those organizations that are initiating or already doing this critical work. Those leading organizations deserve the spotlight, so they can inspire others to follow in their footsteps. ”

**Jonathan B. Perlin, MD, PhD,
MSHA, MACP, FACMI -
President and CEO - The Joint
Commission Enterprise**

The screenshot shows the top navigation bar of The Joint Commission website with links for 'Who We Are', 'What We Offer', 'Our Priorities', 'Standards', 'Measurement', and 'Resources'. A search bar and 'Our Websites' dropdown are also present. The breadcrumb trail reads: Home > What We Offer > Certification > Certifications by Setting > Hospital Certifications > Sustainable Healthcare.

Sustainable Healthcare Certification

Get started on the path to improving sustainability and reducing your carbon footprint.




[Contact us](#)

[Certification Benefits](#) [What It Takes to Be Certified](#) [We Can Help](#) [Sustainable Healthcare Collaborations](#) [Contact Us](#)

Across the health care sector, hospitals and health systems are pursuing decarbonization efforts without a common framework for setting priorities, creating baselines, and measuring and documenting greenhouse gas (GHG) reductions across the industry. This certification provides a framework to help organizations expand or continue their decarbonization efforts and to receive public recognition of their commitment and achievements in contributing to environmental sustainability.


Certification Benefits

Achieving Sustainable Healthcare Certification is not only beneficial for the environment but also for the organization's bottom line, patient outcomes, reputation, and compliance efforts. It aligns health care organizations with sustainable practices and positions them as mindful and responsible care providers in an increasingly environmentally conscious world.

- **Environmental Impact Reduction**
Certification encourages hospitals to focus on reducing their environmental impact by implementing energy-efficient practices. By achieving sustainability goals, hospitals can contribute to the broader efforts of environmental conservation and preservation.
- **Cost Savings**
By implementing energy-efficient technologies and optimizing waste management strategies, hospitals can achieve operational efficiencies that result in cost reductions. Health systems may also qualify for tax incentives to finance climate resiliency and renewable energy infrastructure projects. These savings can then be redirected to patient care, infrastructure improvements, research, and other critical areas.
- **Improved Health Outcomes**
Sustainable practices in hospitals and health systems can lead to improved health outcomes for patients, staff, and the community. By reducing chemical exposures, improving air quality, and implementing infection control measures, hospitals create healthier environments that promote healing and prevent the transmission of diseases.

Hospital Certifications

Cardiac Certification	+
Orthopedic Certification	+
Stroke Certification	+
Health Care Equity	
Sustainable Healthcare	
Disease-Specific Care	+
Medication Compounding	+
Perinatal Care	+
Palliative Care	
Patient Blood Management	
Primary Care Medical Home	
Pathways and Structures Helping Leaders Advance Quality	
Payor Recognitions	

 [Complete the Pre-application](#)

Update: Joint Commission Focus: Health Equity; Environmental Sustainability; Workforce

Workforce

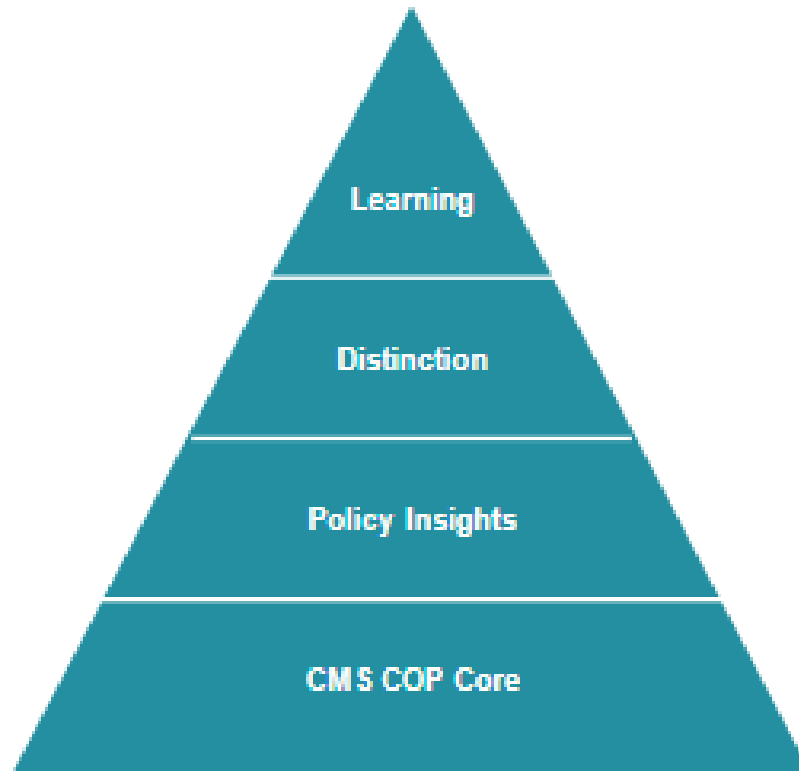
- a. Response to organizational financial strain and healthcare welfare
 - 1. Concern for staff burnout
 - a. Make worker well-being part of the standards
 - 2. Reduce number of standards
 - a. “too many bureaucratic requirements take time from staff performing duties”
- b. 2023 Initiative: “**Mega Review**”
 - 1. Review of “Above and Beyond” of all standards
 - 2. Eliminate non-value standards
- c. Removed 54 Certifications in 2022, created 6 new programs
- d. Revised EM chapter is a model of new approach
- e. **HOWEVER**
 - 1. Unable to modify CMS, OSHA or NFPA standards or requirements

Standards Revision

“We’re always looking at revising,” Dr. Perlin said, “The mantra is really, ‘Evidence-based, data-driven, outcomes-oriented.’”

- The next Standards to be revised are mostly clinical.
- The Standards being retired go beyond state and federal requirements and are an important reduction for providers.
- In total the following will be reduced:
 - 28% of Standards for laboratories
 - 26% for nursing facilities
 - 25% for behavioral health care centers
 - 15% for critical-access hospitals, home health and ambulatory centers

Vision for the Accreditation Survey of the Future



Learning: Advancing Healthcare Priorities

- Test measures, improvement collaboratives for evidence development
- Critical opportunities, such as equity

Distinction: Markers of Excellence

- Sourced from convergence of survey, electronic pre-survey and public data.

Policy Insights: Questions of Policy Interest (to CMS, others)

- Better understand key issues like equity, emergency preparedness / organizational resilience, etc.

COP Core: Foundational CMS, OSHA, NFPA Requirements

- And most meaningful TJC Metrics (i.e., strongest evidence & impact)

Workplace Violence Prevention

An **act or threat** occurring at the workplace that can include any of the following:

- verbal
- nonverbal
- written
- physical aggression
- threatening
- intimidating
- harassing
- humiliating words or actions
- bullying
- sabotage
- sexual harassment
- physical assaults
- or other behaviors of concern

involving staff, licensed practitioners, patients or visitor.

Workplace Violence Prevention

- Leadership Oversight & Commitment
- Environmental Controls
- Policies & Procedures
- Post-incident Response
- Data Collection, Analysis, Corrective Action
- Education & Training

Workplace Violence Prevention

The Joint Commission expanded workplace violence requirements, effective January 1, 2022:

EC.02.01.01 EP 17

The hospital conducts an **annual worksite analysis** related to its workplace violence prevention program. The hospital takes actions to mitigate or resolve the workplace violence safety and security risks based upon findings from the analysis.

Note: A worksite analysis includes a proactive analysis of the worksite, an investigation of the hospital's workplace violence incidents, and an analysis of how the program's policies and procedures, training, education, and environmental design reflect best practices and conform to applicable laws and regulations.

Consider including:

- Multidisciplinary team
- Interior and Exterior
- Mitigation plan and execution

Resource:

OSHA.gov Guidelines for Preventing Workplace Violence for Healthcare and Social Service Workers

Workplace Violence Prevention

The Joint Commission expanded workplace violence requirements, effective January 1, 2022:

EC.04.01.01 [revised]

- EP 1: the organization establishes a process(es) for continually monitoring, internally reporting, and investigating the following *[NOTE: Only the bullet point related to Workplace Violence included here]*
 - Safety and security incidents involving patients, staff, or others within its facilities, *including those related to workplace violence.*
- EP 6: Based on its process(es), the organization reports and investigates the following *[NOTE: Only the bullet point related to Workplace Violence included here]* :
 - Safety and security incidents involving patients, staff or others within its facilities, *including those related to workplace violence.*

Workplace Violence Prevention

The Joint Commission expanded workplace violence requirements, effective January 1, 2022:

HR.01.05.03 EP 29

As part of its workplace violence prevention program, the hospital provides training, education, and resources (at time of hire, **annually**, and whenever changes occur regarding the workplace violence prevention program) to leadership, staff, and licensed practitioners. The hospital determines what aspects of training are appropriate for individuals based on their roles and responsibilities. The training, education, and resources address prevention, recognition, response, and reporting of workplace violence as follows:

- What constitutes workplace violence
- Education on the roles and responsibilities of leadership, clinical staff, security personnel, and external law enforcement
- Training in de-escalation, nonphysical intervention skills, physical intervention techniques, and response to emergency incidents
- The reporting process for workplace violence incidents

Workplace Violence Prevention

The Joint Commission expanded workplace violence requirements, effective January 1, 2022:

LD.03.01.01 EP 9

The hospital has a workplace violence prevention program *led by a designated individual* and *developed by a multidisciplinary team* that includes the following:

- Policies and procedures to prevent and respond to workplace violence
- A process to report incidents in order to analyze incidents and trends
- A process for follow up and support to victims and witnesses affected by workplace violence, including trauma and psychological counseling, if necessary
- Reporting of workplace violence incidents to the governing body

Survey Observations

28 total requirements for improvement

EC.02.01.01 EP17 (21)

- No or incomplete worksite analysis

LD.03.01.01 EP9 (6)

- No designated leader
- No process for governing body reporting
- Incomplete policy
- No process for reporting nor analyzing incidents

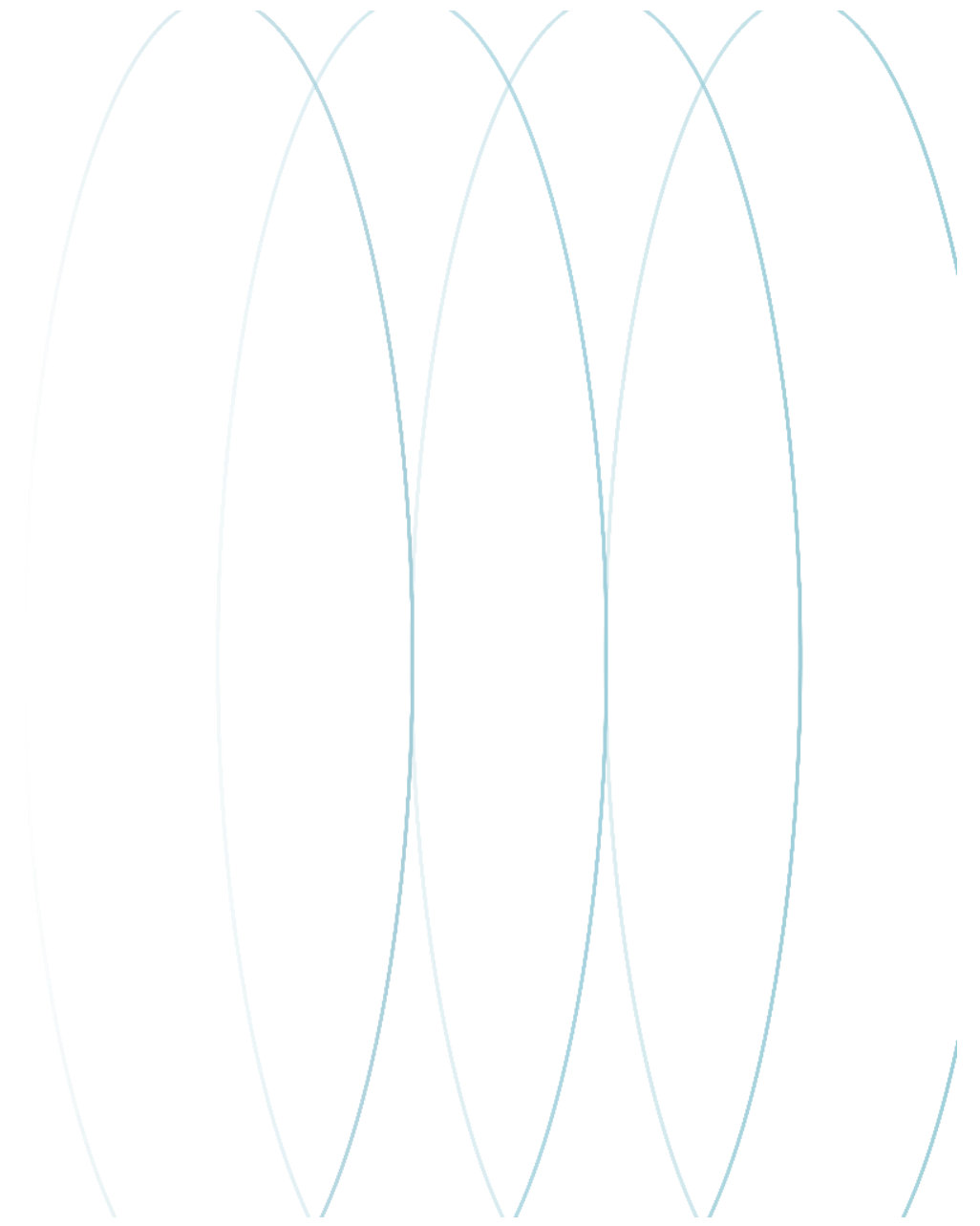
HR.01.05.03 EP29 (1)

- No training for float staff per policy

Additional Joint Commission Information:

<https://www.jointcommission.org/resources/patient-safety-topics/workplace-violence-prevention/>

*Revisions to the
Environment of Care
&
Life Safety Chapters*



EC.01.01.01 EP 9

Existing:

9. The hospital has a written plan for managing the following: Utility systems.

Revision:

9. The hospital has a written plan for managing the following: Utility systems.

Note: In circumstances where the program or service is located in a business occupancy not owned by the accredited organization, the plan may only need to address how routine service and maintenance for their utility systems are obtained.

EC.02.03.01 Periodic Evaluations

EP 11: Periodic evaluations, as determined by the organization, are made of potential fire hazards that could be encountered during surgical procedures. Written fire prevention and response procedures, including safety precautions related to the use of flammable germicides or antiseptics are established.

INTERPRETATION:

SIG's position is limited to only requiring annual fire exit drills in operating room/surgical suites where a surgeon is present and the space is classified as Class C, defined as follows by ASHRAE 170 (definition of Class C Procedure Room):

- Provides for major surgical procedures that requires general or regional block anesthesia and support of vital bodily functions

EC.02.03.03 EP 7

Existing:

~~For hospitals that use aerosol germicides or antiseptics or flammable liquids in conjunction with electrosurgery, cautery, lasers, or other ignition sources, the hospital performs an annual fire drill in anesthetizing locations. The drill may be announced or unannounced. The drill addresses extinguishment of the patient, drapery, clothing, and equipment. (For full text, refer to NFPA 99-2012: 15.13.3.9; 15.13.3.10)~~

- Note 1: This drill involves applicable staff and licensed ~~independent~~ practitioners and focuses on prevention as well as simulated extinguishment and evacuation.
- Note 2: An announced annual ~~anesthetizing location~~ fire drill cannot be used to meet one of the unannounced quarterly fire drills required by NFPA 101-2012: 18/19.7.1.6

EC.02.03.03 EP 7, REVISED

The hospital conducts annual fire exit drills for operating rooms/surgical suites.

(For full text, refer to NFPA 99-2012: 15.13.3.10.3)

- Note 1: This drill involves applicable staff and licensed practitioners and focuses on prevention as well as simulated extinguishment and evacuation.
- Note 2: An announced annual fire exit drill cannot be used to meet one of the unannounced quarterly fire drills required by NFPA 101-2012: 18/19.7.1.6.

EC.02.03.05 EP 1

~~At least quarterly, the hospital tests supervisory signal devices on the inventory (except valve tamper switches). The results and completion dates are documented.~~

- Note 1: For additional guidance on performing tests, see NFPA 72-2010: Table 14.4.5.
- Note 2: ~~Supervisory signal devices include the following: pressure supervisory indicating devices (including both high and low air pressure switches), water level supervisory indicating devices, water temperature supervisory indicating devices, room temperature supervisory indicating devices, valve supervisory switches, and other supervisory initiating devices.~~

EC.02.03.05 EP 1

The hospital tests supervisory signal devices on the inventory **in accordance with the following time frames:**

- **Quarterly for pressure supervisory indicating devices (including both high- and low-air pressure switches), water level supervisory indicating devices, water temperature supervisory indicating devices, room temperature supervisory indicating devices, and other suppression system supervisory initiating devices**
- **Semiannually for valve supervisory switches**
- **Annually for other supervisory initiating devices**
- The results and completion dates are documented.
- Note 1: For additional guidance on performing tests, see NFPA 72-2010: Table 14.4.5.
- Note 2: **Water storage tanks and associated water storage equipment are not required to be tested.**

EC.02.04.01 & EC.02.05.01

Alternative Equipment Maintenance [AEM]

The AEM and manufacturer's recommendations language was removed from the EP's to clarify that maintenance of medical and utilities equipment must be performed, but it is up to the organization to determine how it will perform that maintenance, whether it be through manufacturer-recommended maintenance activities or the use of an AEM program.

- The Appendix GG includes the exact language of CMS's Interpretative Guidelines [requested by CMS].
- If organizations use AEM strategies and activities, they are expected to comply with the expectations included in Appendix GG (effective in July 2023 release of standards).
 - Appendix GG is in the Survey Activity Guide, provided by the Joint Commission to all accredited organizations.

EC.02.05.01 EP 23

Power strips in a patient care vicinity are only used for components of movable electrical equipment **assemblies** used for patient care. These power strips meet UL 1363A or UL 60601-1. Power strips used outside of a patient care vicinity, but within the patient care room, meet UL 1363. In non-patient care rooms, power strips meet other UL standards. (For full text, refer to NFPA 99-2012: 10.2.3.6; 10.2.4; NFPA 70-2011: 400-8; 590.3(D); Tentative Interim Amendment [TIA] 12-5)

- **Note 1: The mounting of power strips to medical equipment assemblies or the reconfiguration of equipment powered by power strips in a medical equipment assembly must be performed by personnel who are qualified to make certain that this is done in accordance with NFPA 99-2012: 10.2.3.6(1 – 4) [not 5, see S&C TIA 12-5].**

EC.02.05.01 EP 23

- **Note 2: Per NFPA 99-2012: 3.3.138, patient care room is defined as any room of a health care facility wherein patients are intended to be examined or treated. Per NFPA 99-2012: 3.3.139, patient care vicinity is defined as a space, within a location intended for the examination and treatment of patients, extending 1.8 meters (6 feet) beyond the normal location of the bed, chair, table, treadmill, or other device that supports the patient during examination and treatment and extending vertically to 2.3 meters (7 feet, 6 inches) above the floor.**
- **Note 3: In new facilities, the number of receptacles shall be in accordance with NFPA 99-2012: 6.3.2.2.6.2. If patient bed locations in existing health care facilities undergo renovation or a change in occupancy, the number of receptacles must be increased to meet the requirements of NFPA 99-2012: 6.3.2.2.6.2 to eliminate the need for power strips.**

EC.02.05.01 EP 23



This is **not** deemed compliant because the thumb screw makes it not a fixed assembly, and the equipment it would support is not attached.



This **is deemed** compliant because the power strip is a permanently attached assembly, and the equipment it supports is attached.

NFPA 70-2011, Article 400: Extension cords are only for temporary use.

Water Management Plan

History of Legionnaires Disease

1. It was discovered in 1976 after an outbreak was identified at the American Legion Convention in Philadelphia. Also, a form of Pontiac fever
2. Legionella Bacterium is compared to pneumonia with aches, shortness of breath, severe cough and a fever. Its very hazardous to individuals with compromised immunity
3. It's a bacterium that resides in water that is stagnant and has not been properly treated.
4. Legionella can be found in any form where water is present even if the water is considered to be a vapor.
5. Even though its present it doesn't necessarily mean it will be contagious and fatal.

Water Management Plan

The Joint Commission expanded the water management EPs:

Previous EP:

- **EC.02.05.01 EP 14**

The hospital minimizes pathogenic biological agents in cooling towers, domestic hot-and cold-water systems, and other aerosolizing water systems

Current EPs (Effective since January 1, 2022):

- **EC.02.05.02 EP 1**

Define oversight multi-disciplinary team/committee.

- **EC.02.05.02 EP 2**

The team evaluates the water system for risk and evaluates patients that may be at a higher risk. Stagnant water is addressed. Monitoring protocols and acceptable ranges are defined.

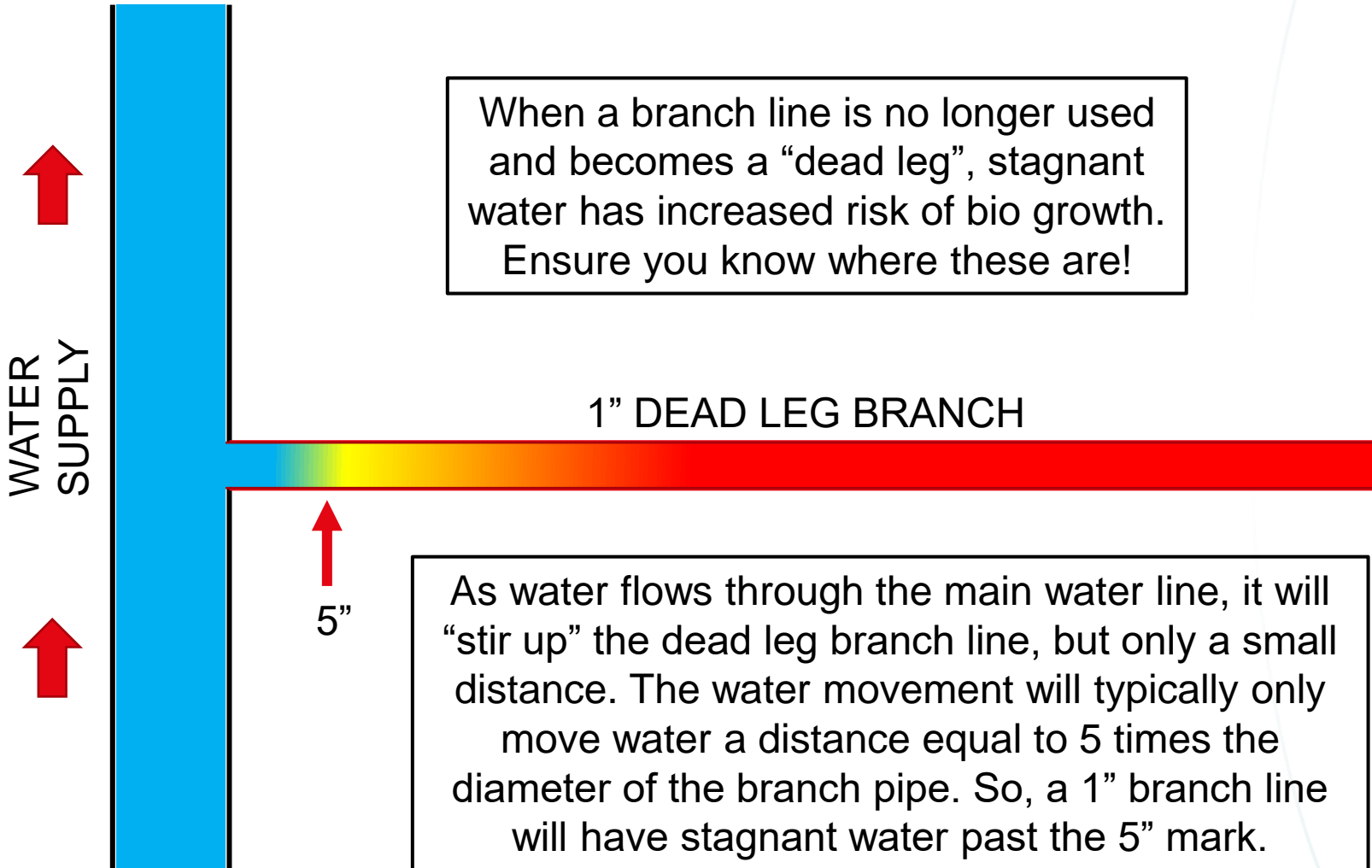
- **EC.02.05.02 EP 3**

Monitoring results are reviewed, and corrective actions are enacted when appropriate.

- **EC.02.05.02 EP 4**

Plan is updated annually and when water systems change or when needed for other reasons.

Water Management Plan – Dead Legs



Emergency Management

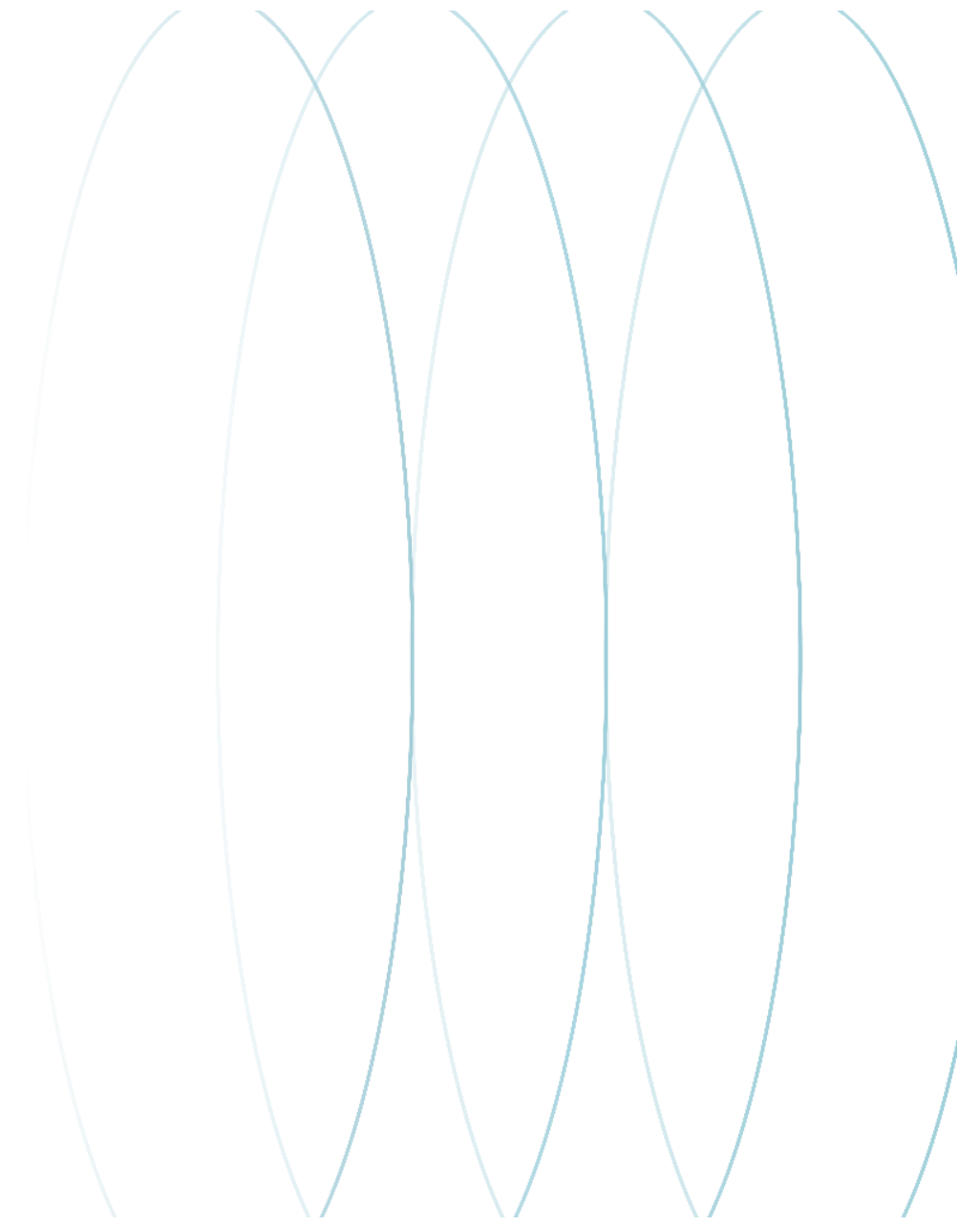
- Until all dead legs are identified and mitigated, any reduction in building water pressure may activate a full building flush

Water Management Plan

Survey Observations Included:

- Lack of a current plan that is for the organization
- Lack of an Annual Evaluation
- Administrative: Lack of Oversight and Implementation

Survey & Process Issues



Safety Briefing

From the Joint Commission Field Directors:

- The Joint Commission adds a Safety Briefing in the Survey Process
 - Effective 1/1/23 surveyors expect accredited organizations to answer questions about safety issues in their facilities

Effective 1/1/23 the Joint Commission is asking their customers to provide a Safety Briefing to the assigned surveyors.

The purpose of this briefing is for the organization to inform surveyors of any current safety or security concerns and how Joint Commission staff should respond if the safety plans are implemented while they are on site.

End of COVID Public Health Emergency (PHE)

The PHE ended on May 11, 2023 and CMS (along with all Accrediting Organizations) adjusted the emergency waivers that were allowed during the PHE.

CMS released additional guidance in a memorandum on May 1, 2023 (Ref: QSO-23-13-ALL)

Link: <https://www.cms.gov/files/document/qso-23-13-all.pdf>

Organizations (especially those who used the emergency waivers to alter their operations in some way) need to know how the expiration will affect them.

Surveyors began surveying to this immediately!

End of COVID Public Health Emergency (PHE)

Plant Operations Highlights:

- Mandatory employee vaccinations ended
- EM drills/exercises = 2 required in 2023
- Using non-healthcare space for surge/quarantine purposes ended with the PHE
- Modified ITM activity allowances ended with the PHE (Medical equipment and building LSC requirements)
- Skipping fire drills for training ended with the PHE
- Temporary wall/barrier between patient allowances ended with the PHE
- Increased ABHR allowance ended with the PHE

Joint Commission Survey Status

- Joint Commission is still working through the surveys that were delayed by COVID travel restrictions
 - The goal is to be caught up by mid-2023
- Corporate Lead Surveyor may resume
- Many organizations still have late surveys, but there has been a noticeable increase in survey activity this year
- Be ready for the pre-COVID survey cadence to resume, meaning some surveys starting 1-3 months early
- Blackout dates will not be allowed, as per CMS
- Once the survey team arrives (between 7:30 and 8am) and is acknowledged by the organization, their bio's are posted
- LSCS occasionally are after the main team leaves

Joint Commission Survey Status

Joint Commission will use pre-COVID survey anniversary dates for future surveys:

- If you had a survey that was late during the COVID pandemic, the most recent survey date is ignored
- TJC will take the last pre-COVID survey date and use that for future scheduling (pre-COVID survey date + 6 years). For example:
 - 03/01/2019 – pre-COVID survey
 - 05/01/2023 – Late survey
 - 03/01/2025 – Next survey due by date

Joint Commission Survey Status

Your Quality leader may receive an email from TJC asking for them to update their application for 2023 in anticipation of the upcoming survey. Subject line typically includes: *“Early General Application Submission Required”*

This is NOT an indication that your survey is close

TJC is simply getting application updates processed so when the surveys are all caught up, they will not have any barriers to complete the surveys on time

Again, starting June 1, be prepared for surveys to happen 1-3 months early, on average

Survey Process Issues

- Document review: see the Survey Activity Guide, which includes the *“Life Safety and Environment of Care—Document List and Review Tool”*
- Resource located at the Joint Commission website:

https://www.jointcommission.org/-/media/tjc/documents/resources/patient-safety-topics/physical-environment/hosp_critaccesshosp_life_safety_ec_documentlist_reviewtool.pdf

Legend: C=Compliant; NC=Not compliant; NA=Not applicable; IOU=Surveyor awaiting documentation

STANDARD - EPs	See Legend				Document / Requirement	Yes	No
	C	NC	NA	IOU			
LS.01.01.01					Buildings serving patients comply w/ NFPA 101 (2012)		
EP 1					Individual assigned to assess Life Safety Code® compliance		
EP 2					Building Assessment to determine compliance with Life Safety (LS) chapter (frequency of assessment is defined by the hospital)		
EP 3					Current and accurate drawings w/ fire safety features & related square footage <ul style="list-style-type: none"> a. Areas of building fully sprinklered (if building only partially sprinklered) b. Locations of all hazardous storage areas c. Locations of all fire-rated barriers d. Locations of all smoke-rated barriers e. Sleeping and non-sleeping suite boundaries, including size of identified suites f. Locations of designated smoke compartments g. Locations of chutes and shafts h. Any approved equivalencies or waivers 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
EP 5					Deemed Hospitals: Documentation of inspections and approvals made by state or local AHJs		
EP 7					The hospital maintains current Basic Building Information (BBI) within the Statement of Conditions (SOC).		
COMMENTS:							

Survey Process Issues: Documentation

- Document review is 'limited' to 4 hours
 - Generally takes between 90 and 120 minutes
- Electronic records are acceptable
 - Ensure the CMMS or other data source works as expected
 - Ensure the CMMS or other data source can sort high risk vs non-high risk
- Documents required for Surveyor review during Survey include:
 - Life Safety Drawings
 - Written Fire Response Plan
 - Documentation and Evaluations of Fire Drills for previous 12 months
 - EC Data
 - EC Management Plans and Annual Evaluations
 - Previous 12 months EC Meeting Minutes
 - ILSM Policy
- Cover Sheet may not be acceptable if it is not integrated into the test results

Survey Process Issues

Building Tour Guidance

https://www.jointcommission.org/-/media/tjc/documents/resources/patient-safety-topics/physical-environment/life-safety-code/building_tour_guidance1.pdf

Building Tour Guidance

Construction Areas	LS.01.02.01
Verify implementation of ILSMs at demolition, construction and renovation locations within the facility	EC.02.06.05
MAIN Fire Alarm Control Panels	LS.01.02.01 EP1
a If panel is in not working/in trouble without staff knowledge	LS.02.01.34
b Installed in properly protected area	LS.02.01.34 EP2
MAIN Piped Medical Gas Panels	
a Working condition of main medical gas alarm panels (i.e., trouble indications)	EC.02.05.09 EP 7
b Not at a continuously attended location (e.g., PBX, ED, etc.);	EC.02.05.09 EP 7
Bulk Oxygen/Medical Gas Tank Farm or Main Medical Gas Storage Area	
a Condition of equipment – status, open valves, piping, tanks flexible attached connections	EC.02.05.09 EP1
b Storage configuration and labeling (i.e., cylinder, precautionary room/are signage, full/empty)	EC.02.05.09 EP 7
c Outdoor storage (weather protection for outside cylinders)	EC.02.05.09 EP 7
d Proper labeling and accessibility of main control and source valves	EC.02.05.09 EP5
OR Suite - done early in the survey to allow the organization time to correct while on site. The review of corrective action must include documentation that other areas supplied by same air handler were not negatively impacted by corrective work	
a Pressure relationships (check during survey), air exchange rates (balance reports)	EC.02.05.01 EP15
b Temperature/humidity levels	EC.02.05.01 EP 15
b Surgical fire prevention activities	EC.02.03.01 EP1
MAIN Engineering Locations – boilers, chillers, electrical distribution hub	EC.02.05.05,
a Equipment - leaks, general maintenance issues, equipment out of service (ask about risk to patients)	EP4, EP5, EP6
b Room - rated wall separation, penetrations, opening protection, fire proofing damage	LS.02.01.30 (if hazardous area) LS.02.01.10
c Minimal storage in Air Handling Control rooms (i.e., only AHU filters)	EC.02.03.01 EP1
d Eye wash station (and shower if required)	EC.02.02.01 EP5
e Open J-boxes	EC.02.05.05 EP6
All Generators	
a Overall condition/readiness of the generators - is it on auto start? Oil and coolant leaks, clearances, check how batteries are maintained, amount of fuel on hand, cold weather protection	EC.02.05.05 EP4
b Battery powered task lighting lacking	EC.02.05.03 EP 10
c Room – rated wall separations, sealed penetrations, opening protection, fire proofing damage	LS.02.01.10
d Sprinkler (based on construction type) /heat detectors (if required)	LS.02.01.10 EP1 LS.02.01.34 EP4
e Open J-boxes	EC.02.05.05 EP 6
f Remote annunciator alarm panel - continuously attended location (e.g., PBX, ED, etc.)	EC.02.05.03 EP10
Auto. Transfer Switches	EC.02.05.07 EP7
a Explore ATS's (inventory, circuit diagrams, interview)	EC.02.05.03 EP1
Fire Pump(s)	

Survey Process Issues

Fire Drill Matrix

<https://www.jointcommission.org/resources/patient-safety-topics/the-physical-environment/>

Hospital Name: _____ Score at EC.02.03.03 EP3																
Quarterly Hospital Fire Drills (NFPA 101-2012 16/19 19.7.1)																
Day - M, Tu, W, Th, F, Sa, Su Time: 24 hour formatted		Q1			Q2			Q3			Q4					
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.			
1st Shift	Normal	Location/Building														
		Day														
		Date														
	ILSM	Location/Building														
		Day														
		Date														
2nd Shift	Normal	Location/Building														
		Day														
		Date														
	ILSM	Location/Building														
		Day														
		Date														
3rd Shift	Normal	Location/Building														
		Day														
		Date														
	ILSM	Location/Building														
		Day														
		Date														
Required Annual Fire Drills (NFPA 99-2012 15.13.3.10.3 & 14.3.1.4.5 and 14.2.4.5.4/14.2.4.5.4.1 - if applicable)																
	Previous	Current	Location/Building	Previous	Current	Time?										
OR			Hyperbaric													
Day			Day													
Date			Date													
Time			Time													
Quarterly Ambulatory Fire Drills																
1st Shift	Q1				Q2				Q3				Q4			
	Location/Building				Location/Building				Location/Building				Location/Building			
	Day				Day				Day				Day			
	Date				Date				Date				Date			
	Time				Time				Time				Time			
	Annual Business Occupancy Fire Drills (2 Years of Drills)															
	Previous	Current	Building	Previous	Current	Building	Previous	Current	Building	Previous	Current	Building	Previous	Current		
Day			Day			Day			Day			Day				
Date			Date			Date			Date			Date				
Time			Time			Time			Time			Time				
DEFINITIONS OF SHIFTS: PREVIOUS TIME FRAME FOR SHIFTS																
Hours below (e.g. 1st shift: 0700-1600, 2nd shift: 1600-2400, 3rd shift: 2400-0700)																
	1st						NA	Not applicable for night, building, location or ILSM.								
	2nd						NC	Not completed or mixed								

Survey Process Issues

*See it . . .
. . . Cite it*

Survey Process Issues: Immediate Threat to Health or Safety (ITHS)

- An Immediate Threat to Health or Safety (ITHS) exists for patients, staff, or the public within the hospital.
- No option to clarify out of observations related to the ITHS
- On deemed surveys, CMS is notified within 2 business days and is provided additional information about the ITHS within 10 calendar days, observation is documented as a condition-level deficiency (CLD)
- Organization will have up to 72 hours to eliminate the situation entirely or the organization must implement emergency interventions to abate the risk within 72 hours and must be fully eliminated within 23 calendar days.
- Once corrective action is in place, status changes to AFS11

Survey Process Issues: ITHS

What may trigger an ITHS in the Physical Environment:

- Significantly compromised fire alarm system
- Significantly compromised sprinkler system
- Significantly compromised emergency power supply system
- Significantly compromised medical gas master panel
- Significantly compromised exits
- Other situations that place patients, staff or visitors in extreme danger

EC.02.05.01 OR Temp. Ranges Outside Established Ranges

- The Joint Commission references NFPA 99-2012 Ch 9, which requires the use of ASHRAE 170-2008 Ventilation Table 7-1
 - NOTE: the Joint Commission uses the edition of the FGI Guidelines the space was designed & built to, unless renovated (see NFPA 101-2012 Ch 42)
- The ASHRAE document provides allowances to exceed minimum temperature ranges.
 - To use this exception it must be done *by following established organization policy.*
 - This must be on a case by case basis, and restored to normal ranges following the procedures.
 - Based on either surgeon, patient or procedure
 - **IT IS NOT ACCEPTABLE TO APPLY THIS EXCEPTION CONSISTENTLY**
 - **“THIS IS NOT A BLANKET WAIVER”**
- *Expectation is the Operating Room RH range is $\leq 60\%$*
 - *Operating Room Temperature range is 68°F – 75°F*

EC.02.05.01 OR Temp. Ranges Outside Established Ranges

For critical spaces, to include operating rooms, standard EC.02.05.01 EP 15 uses the 2008 ASHRAE 170, Ventilation Table 7-1.

- Note "l" has an allowance to deviate from the prescribed temperature ranges. It states, "lower or higher temperature shall be permitted when patients' comfort and/or medical conditions required those conditions."
- Note "o" states, "Surgeons or surgical procedures may require room temperatures, ventilation rates, humidity ranges, and/or air distribution methods that exceed the minimum indicated ranges".

These notes indicate that organizations may take allowances to meeting the range requirements however these are not blanket allowances but based on specific patient, surgeon and or procedure requirements.

- This is inferred by Note "o" as the guidance begins with "Surgeons or surgical procedures..."

EC.02.05.01 OR Temp. Ranges Outside Established Ranges

- Many organizations have a team check ventilation at the beginning of each procedure
 - Delivers 'real-time' information
 - Exception reporting may be an option
 - If out of range, the work order process can assist in documentation trail
- Set Backs are allowed provided there is a policy and procedure
- OR's that are NOT wet locations must be documented as NOT WET

Interim Life Safety Measures (ILSM) LS.01.02.01

- Interim Life Safety Measures (ILSM) must have a policy and process available during survey
 - Be prepared to implement if a deficiency is identified during survey
 - Once identified it must be followed through, including the ESC submission
- ILSM is NOT an ESC
- “Policy follows practice / Practice follows policy”
 - Joint Commission Field Director
- Fire Watch:
 - Is the plan fully developed?
 - Does it meet the requirements of the local, State or other AHJ’s?

EOC Rounding

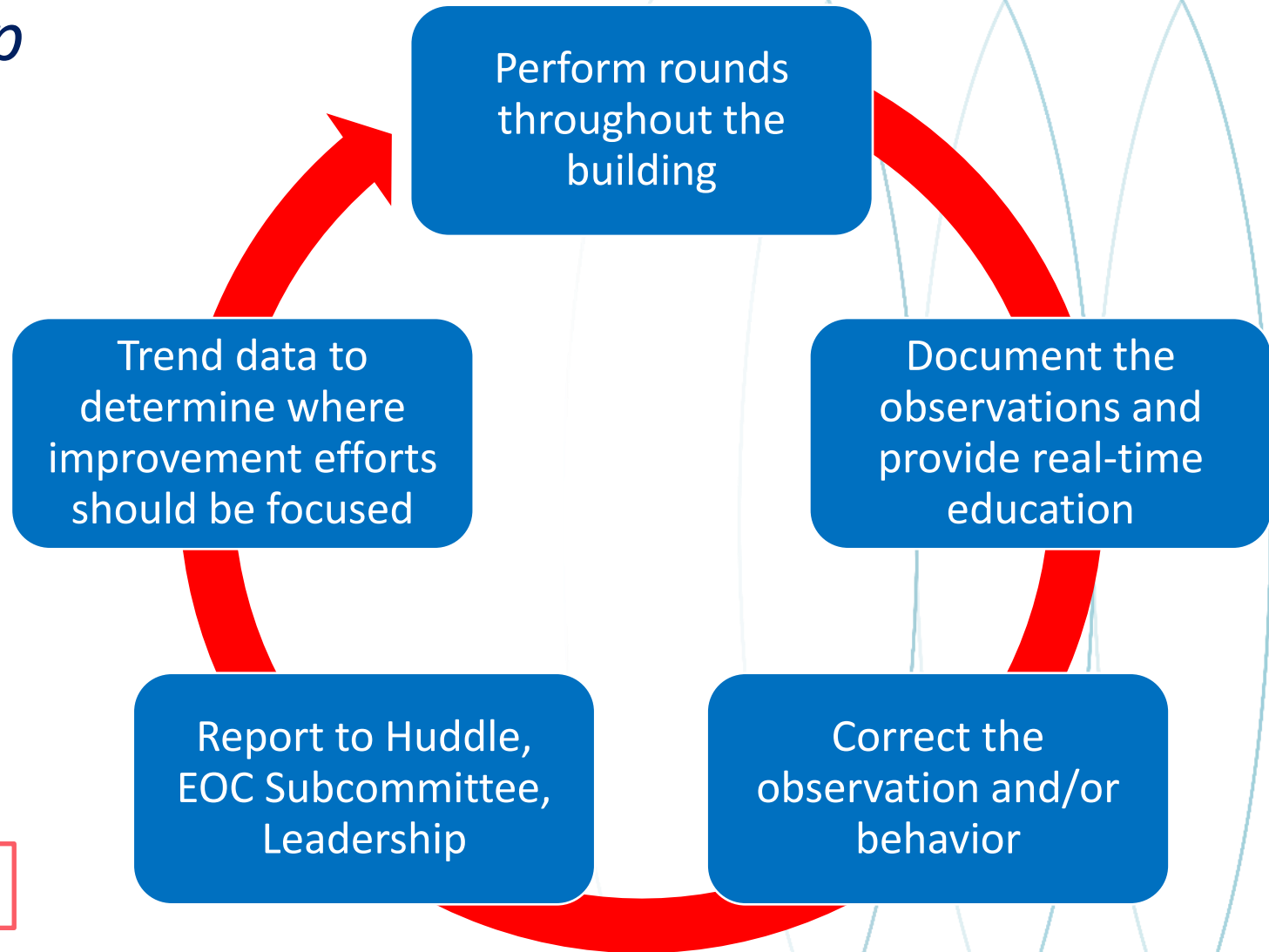
Joint Commission removed the EC Session from surveys and the EOC rounding frequency requirement, but that doesn't mean they won't be looking for compliance:

- EC standard for rounding was removed (semiannually in patient care areas and annually everywhere else)
- LS.01.01.01 EP 2 – **In time frames defined by the hospital**, the hospital performs a building assessment to determine compliance with the “Life Safety” (LS) chapter
- Be ready to show where the frequency is defined in policy/plan
- The hospital must prove rounds are being completed, but they do not have to show the results of the rounds
- Suggest providing a completed schedule and be prepared to show the process/tools

Environment of Care Issues: Closing the Loop

**DO NOT
FORGET
TO CLOSE
THE LOOP!**

i.e. Recalls: Close the Loop!



Alcohol-Based Hand Rubs (ABHR)

- ABHR dispensers must be installed away from an ignition source by at least 1 inch
- Typical ignition sources are light switches and electrical outlets
- Dispensers can never be above an ignition source
- Ensure you are not exceeding maximums per smoke compartment:
 - Max of 10 gallons in dispensers per smoke compartment
 - Max of 5 gallons in storage per smoke compartment
 - 1 dispenser inside each patient room is omitted from total



Infection Control

Joint Commission, CMS, and State AHJs are putting a lot of focus on Infection Control:

- Ice machine dirty or build up
- Dirty/dusty HVAC vents
- Non-cleanable counter and wall surfaces
- Mixed clean and soiled storage
- Dirty filters
- Dish machine temperatures

These are often scored at EC.02.05.05 EP 5



GFCI Outlets

Joint Commission has been scoring the lack of GFCIs on equipment that they haven't scored in the past:

- Soda Dispensers
- Coffee Machines
- Water/Ice Machines
- Ice Bin (Kitchen)
- Vending Machines
- Water Fountains
- Bottled Water Dispensers



Kitchen Issues

Kitchens have been identified as an issue:

- Dish machine temps low or log incomplete
- Dirty floors, ceiling, and HVAC vents
- Rusty sprinklers and HVAC vents
- Dirty ice machines
- Dry storage room door blocked open
- Eyewash station blocked
- K-type fire extinguisher blocked or too far away
- Ansul system nozzles not lined up
- Exhaust hood filters dirty and gaps
- Expired or undated food

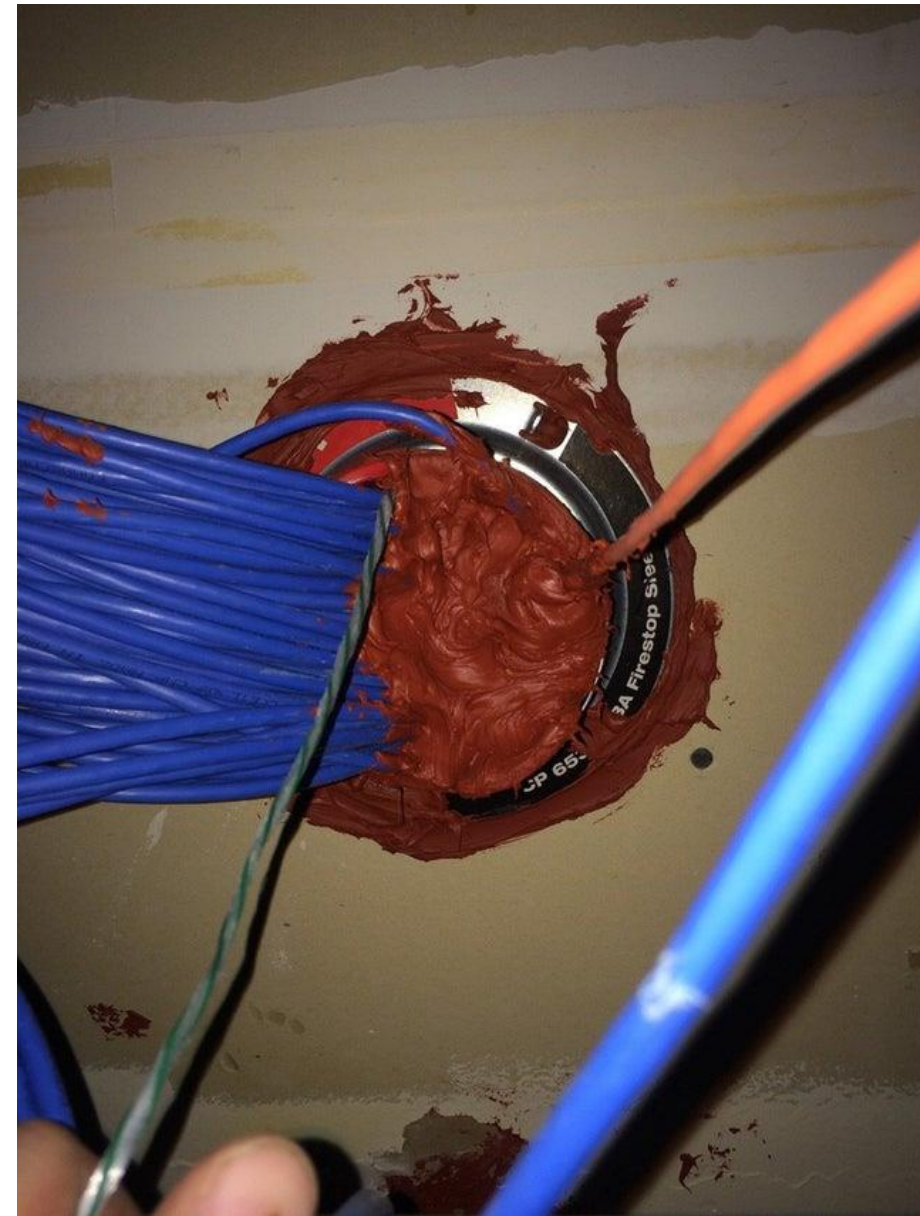


Rated Barriers & Penetrations

Compliance Tips

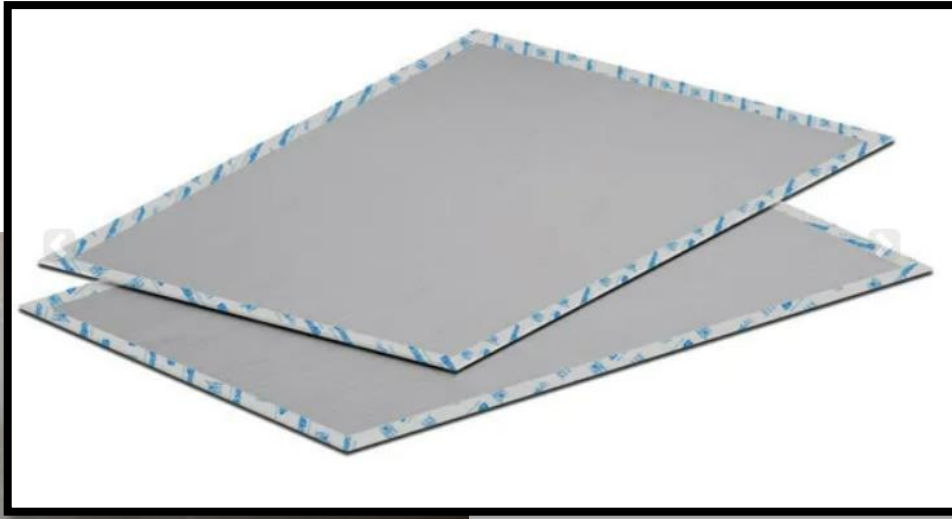
- Above Ceiling Permit Program
- During above ceiling inspections:
 - check both sides of the wall
 - open a tile on the left and the right to see all angles
- Use products and systems where the solution seems more complicated than caulk or putty
- Check your non-rated walls for old or incorrect rating stenciling
 - Surveyors can score an inconsistency between the stenciling and drawings

Fire Barriers **WRONG**



Fire Barriers

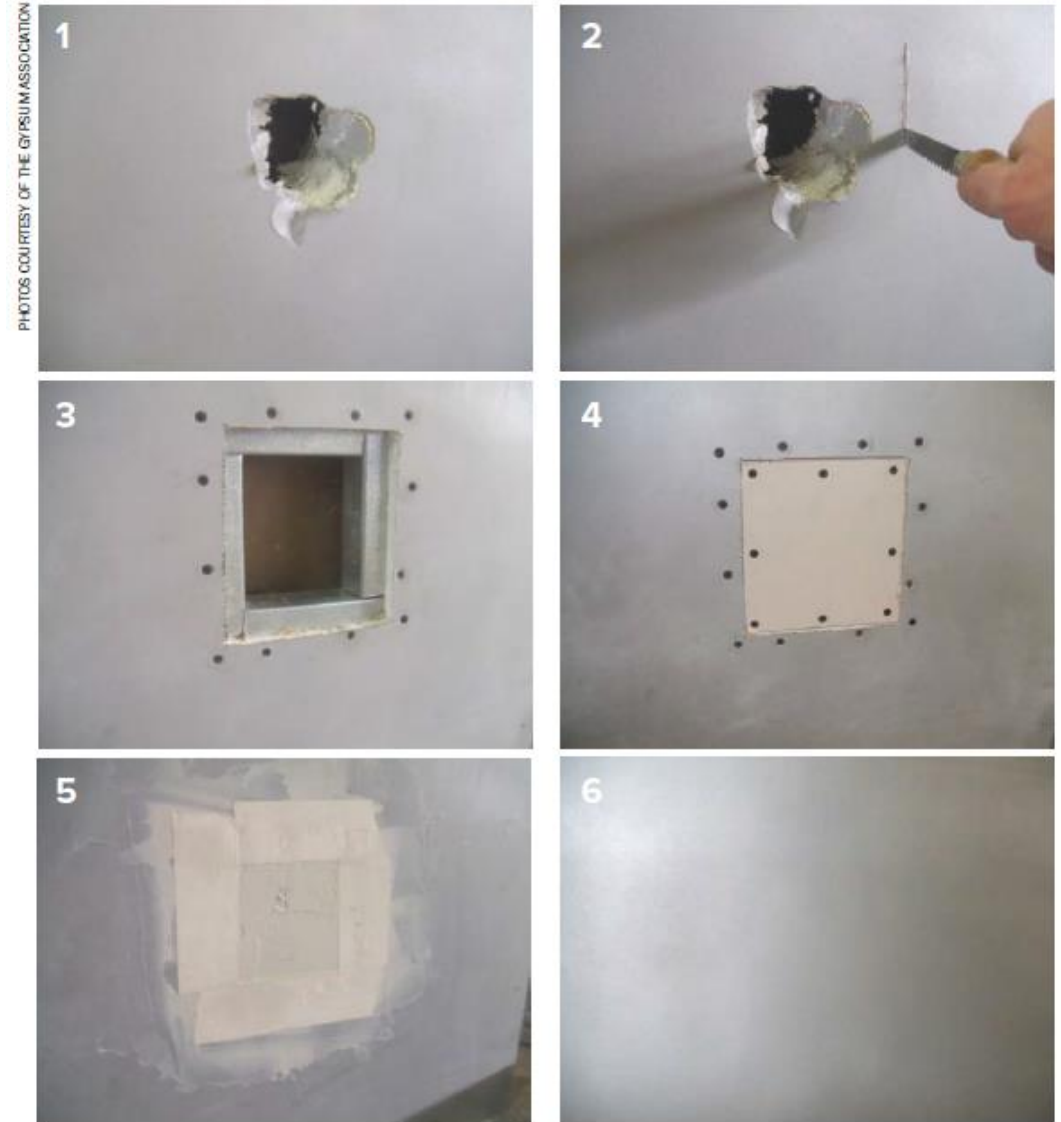
RIGHT



Fire Barrier Scab Patches

“Scab/Blowout Patches” are being scored now in fire-rated barriers

- Not acceptable to place a large piece of sheetrock over a hole
- Has never been acceptable but has been ignored by surveyors in the past
- Proper repair steps:
<https://gypsum.bnibooks.com/product/ga-225-15-repair-of-fire-rated-gypsum-panel-product-systems>
- Need to evaluate existing patches



The above images show the correct way to patch a gypsum board penetration.

Often Cited Survey Findings

History of the Average RFI's per Survey (HAP)

2022	2021	2020	2019	2018	2017	2016	2015	2014
17.64	15.5	14/01	17.04	16.33	13.3	10/96	11/17	10.52
Covid-19			SAFER & See It/Cite It			"C" Category & OFI's		

The Joint Commission Top 10 Findings

Most Frequently Scored EC/LS EP's		
EC.02.06.01 EP 1	1,027	Safety catch all (odors in geriatrics)
LS.02.01.35 EP 4	934	Items on sprinkler piping
EC.02.05.01 EP 9	923	Utility controls labeling (FA Circuit)
EC.02.05.05 EP 6	866	Non-HR Utility components ITM
LS.02.01.10 EP 14	797	Fire wall penetrations
LS.02.01.35 EP 14	763	Fire Extinguisher on Floor / Blocked
EC.02.02.01 EP 5	720	Haz Chem: selecting, storing, handling
LS.02.01.10 EP 11	677	Fire door latching, gaps, propping
EC.02.06.01 EP 26	666	Furnishings & Equipment condition
LS.02.01.35 EP 5	608	Sprinkler escutcheons, painted, dusty

17.64

**Rough average number of EC & LS RFI's
Hospitals received during full survey's
last year.**

36%

**Rough percentage of hospitals with at
least 1 Condition Level Deficiency (CLD)
last year**

Top 10 Survey Findings: EC

Rank	Standard	EP	Description	Examples	Surveys Scored
1	EC.02.06.01	1	Interior space meets the needs of the patient population	Stained ceiling tiles; defective flooring; wall stains; peeling paint	1,027
2	EC.02.05.01	9	The hospital labels utility system controls for partial or complete emergency shutdown	Identify fire alarm circuit; Spare circuit breaker in off position	923
3	EC.02.05.05	6	Hospital ITM non-high risk utility system components on the inventory, with doc. date and activity results	Open J boxes; exceeding ITM schedules	866
4	EC.02.02.01	5	Minimizes risks associated with selecting, handling, storing, transporting, using, and disposing of haz. chem.	Eye Wash stations weekly testing (AN358.1); Manifests & DOT	720
5	EC.02.06.01	26	Furnishings and equipment are safe and in good repair	Damaged equipment/furniture	666
6	EC.02.06.01	20	Clean and free from odors	Dirty environment; Geriatric odors	597
7	EC.02.05.01	15	Critical areas ventilation (pressure relationships, temperature, and humidity)	Rooms out of balance; Rooms out of range for temp & RH	587
8	EC.02.05.09	12	Oxygen Cylinder management	Storage, signage and policy	552
9	EC.02.05.01	15	Critical areas ventilation (pressure relationships, temperature, and humidity)	Rooms out of balance; Rooms out of range for temp & RH	520
10	EC.02.05.07	4	Weekly Emergency Power Supply System (EPSS) inspection and documentation	Component inspection	500

Stained Ceiling Tiles, Peeling Paint & Damaged Flooring



#2 Utility Labeling

EC.02.05.01 EP 9

This EP covers labels on all utility system valves or controls. This is typically scored for:

- Medical gas source/main shutoff valves
- Kitchen gas shutoff valves
- Electrical breaker schedule accuracy
- Medical gas isolation valves
- Sprinkler system valves



#2 Utility Labeling: Fire Alarm Panel

EC.02.05.01 EP 9

Fire Alarm Panel

- Identify where the fire alarm panel is being supplied power from
- At the electrical panel, clearly identify the fire alarm circuit [RED]
- Ensure the fire alarm panel is either in a protected environment that is continuously occupied **or** has a smoke detector
 - Protected environment: 1 hour fire rated walls with $\frac{3}{4}$ hour rated door and continuously occupied

#3 Inspection Testing & Maintaining (ITM)

Incomplete maintenance

- >100% completion rates for **NON-High Risk** Equipment on the inventory



HOW TO CLEAN YOUR GOLF CART WINDSHIELD



WATER RIDES



#4 Haz Mat

- Provide Safety Glasses, Hearing Protection for Maintenance & EVS
- Ensure Eye Wash & Showers are tested weekly as per ANSI Z358.1



Personal Protective Equipment Testing



**DOSIMETRY
BADGES**

- Accurate inventory
- Testing frequencies (based on policy)
- Training for PPE users

#5 Furnishings in good repair



#6 Clean and free of odors

The Nose of A Nurse: Dealing with Bad Smells in the Hospital



Florence was disappointed when she saw how dirty the hospitals in Crimea were. Nurses



How to handle bad smells in the hospital

Which brings us to the next obvious question...how do you handle intense odors with grace and compassion? The first step is to recognize that one of your jobs as a nurse is to care for people who are vulnerable. [bctt tweet="By maintaining grace in an ungraceful situation, you help that patient retain his/her dignity at a very difficult time." username="StraightANurse"] NEVER let your patient know that you are affected by any unpleasant odors...if you have to leave the room for a minute, make up excuse and leave the room...but don't let it show. Please.

Below are a few tips that might help your encounter with rough odors a not-so-traumatizing experience:

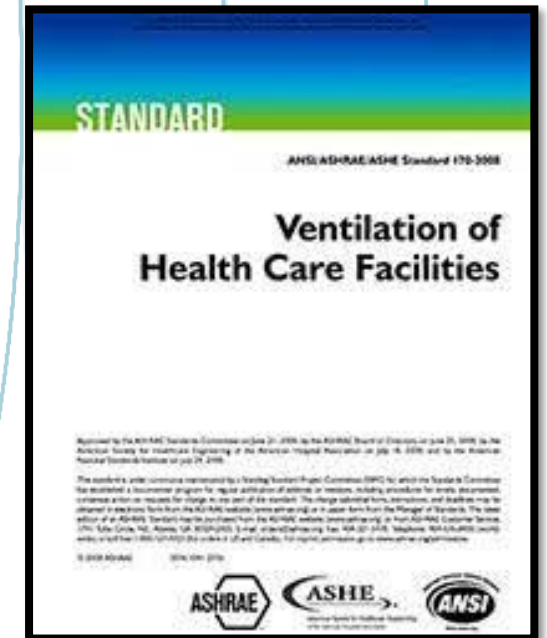
- Put a scented sachet or bag inside a face mask and smell the scent of lemon or mint instead
- Put a few drops of essential oil inside a face mask (peppermint is good one!)
- Rub a little Vicks Vapor Rub under your nose
- Put a menthol cough drop before you head into the room
- Keep a small container of coffee beans in your work bag; as soon as you leave the room, rub the whiff of the coffee beans to clear any residual unpleasant odors out of your bag
- When changing ostomy bags, immediately place a washcloth or hand towel over the bag and set it aside as you finish cleaning and caring for the patient.
- When cleaning a soiling stool, coverage is the key. Immediately cover the stool on the absorbent pad with another pad (or fold the one you are using over) or a towel. Use

...smells. But beyond
...ID know what you
...patient's health. In
...odor all their own.
...there are times

#7 Air Pressure Relationships

Improper air-pressure relationships in critical spaces are frequently **scored at elevated risk levels and as a CLD!**

- There are many ways to verify air movement, but the surveyors will all use a Vaneometer™
 - Some hospitals give vaneometers to clinical staff so they can check before cases
- Frequency of testing can vary based on each hospital's needs and equipment
 - ASHRAE 170 has many spaces defined, so focus efforts on critical spaces
 - Ensure your inventory matches ASHRAE 170



#8 Oxygen Cylinders



Partially Full

- According to Joint Commission, as soon as tanks or cylinders leave the tank room they are considered "Partially Full"



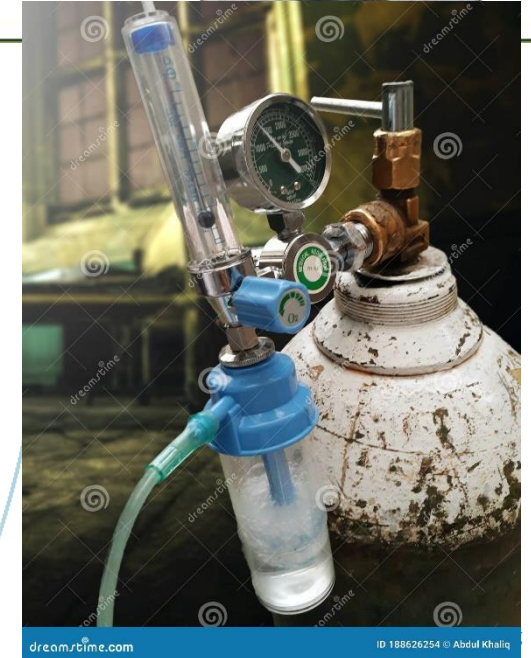
Labeling

Empty cylinder holder labeled "Empty Cylinders"

Partially full cylinders will be labeled "Partially Full Cylinders"

CAUTION: Do not co-mingle "Empty Cylinders" and "Partially Full Cylinders" on the same cart.

This helps eliminate confusion and delay in care. Transportation carts should be clearly labeled with a "partially full" sticker. Do not leave partially full cylinders in carts.



#9 NON critical HVAC



WATER RIDES



#10 Emergency Power Supply System (EPSS)

Weekly Inspection issues:

- Components include:
 - Prime mover
 - Fuel system
 - Lubrication system
 - Cooling system
 - Exhaust system
 - Electrical distribution system
 - including the ATS
 - Battery system



Emergency Power Supply System (EPSS)

Weekly Inspection issues

- Batteries
 - Weekly
 - For sealed or valve-regulated lead-acid batteries and nickel-cadmium
 - Check battery voltage levels
 - Vented/flooded lead acid batteries
 - Either electrolyte levels or battery voltage
 - Nickel cadmium batteries
 - See manufacturers specifications

Emergency Power Supply System (EPSS)

- What if the in-phase control module in the ATS system prevents the organization from transferring within 10 seconds during testing
 - According to NFPA 99-2012 6.4.4.1.1.2 the ≤ 10 second criteria does not apply during monthly testing of an essential electrical system.
 - If the ≤ 10 second criteria cannot be verified the organization must set up an annual process to confirm that the power is restored to the life safety and critical branch circuits within 10 seconds of a power outage
 - See NFPA 99-2012 6.4.3.1
- **Remote Stop**
 - Outside the enclosure/room, safe from exposure if a catastrophic failure occurs
 - If more than one, each needs to be clearly labeled

Business Occupancies: LS.05.xx.xx

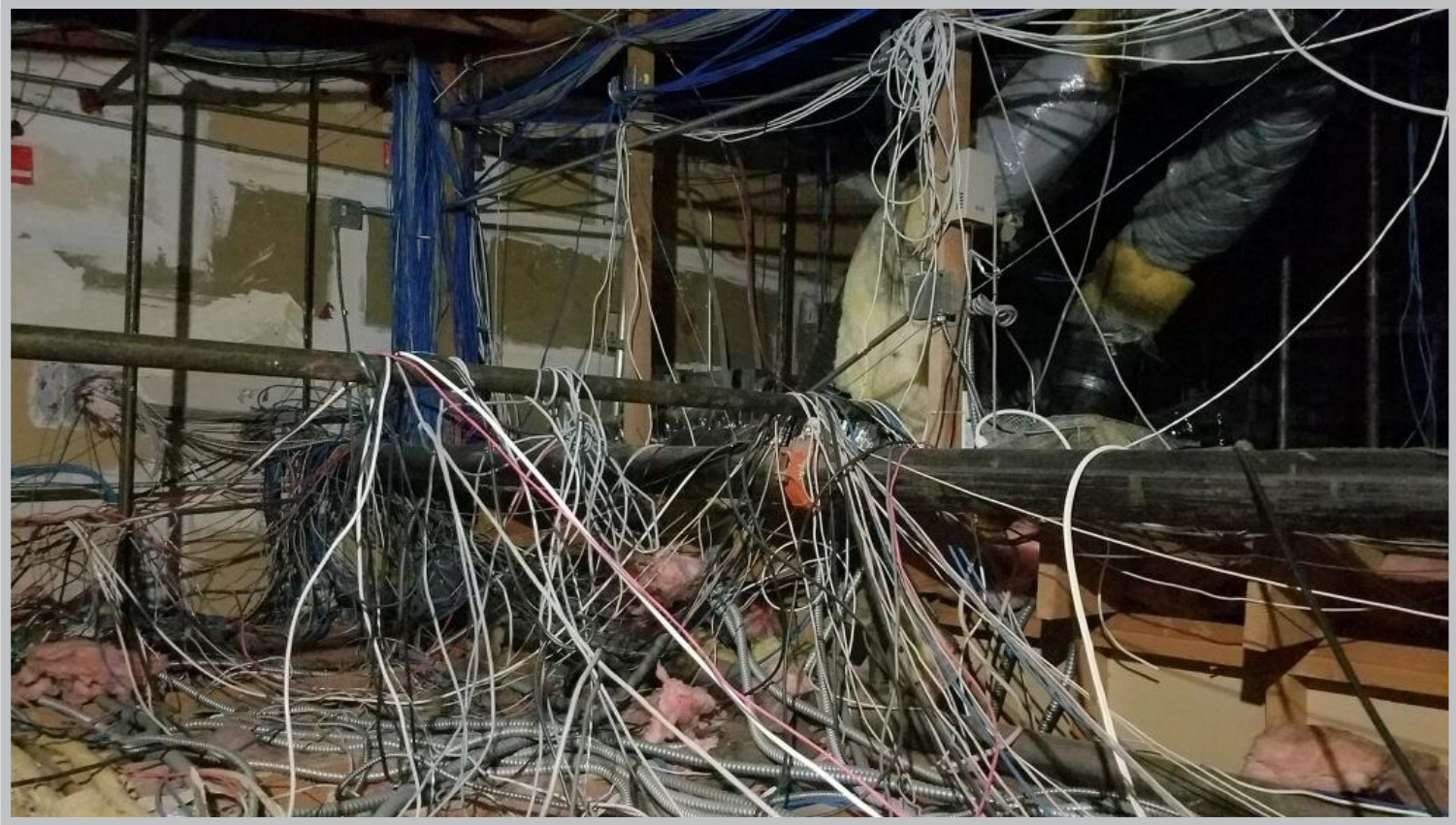
- Includes any ancillary space that provides patient care support
 - This could include
 - Laundry
 - Remote Kitchen
 - Etc.

Top 10 Survey Findings: LS

Rank	Standard	EP	Description	Examples	Surveys Scored
1	LS.02.01.35	4	Piping for Approved Automatic Sprinkler Systems (AASS) is not to be used to support any item other than the AASS	Wires on piping	934
2	LS.02.01.10	14	Space around pipes, conduits, bus ducts, cables, wires, air ducts, or pneumatic tubes penetrating rated walls or floors are protected with approved fire-rated material	Holes, gaps or improperly repaired barriers	797
3	LS.02.01.35	14	The hospital meets all other Life Safety Code automatic extinguishing requirements related to NFPA 101-2012	Stained ceiling tiles	763
4	LS.02.01.10	11	Fire door non-compliance	Fire door issues	677
5	LS.02.01.35	5	Sprinklers are not damaged and have escutcheons	Escutcheon plates missing, foreign materials on heads	608
6	LS.02.01.34	9	Ceiling membrane maintained	Gaps in ceiling tiles	525
7	LS.02.01.35	6	18" clearance below sprinkler	Compromised space	522
8	LS.02.01.30	3	Hazardous area door closures	Hazardous areas door issues	505
9	LS.02.01.20	14	Means of Egress (Exit Access, Exit, and Exit Discharge) clear of obstructions	Means of Egress are compromised	498
10	LS.02.01.30	19	Smoke barriers are penetration free	Holes, gaps or scab patches	457

#1 Items on Sprinkler Piping

LS.02.01.35 EP 4

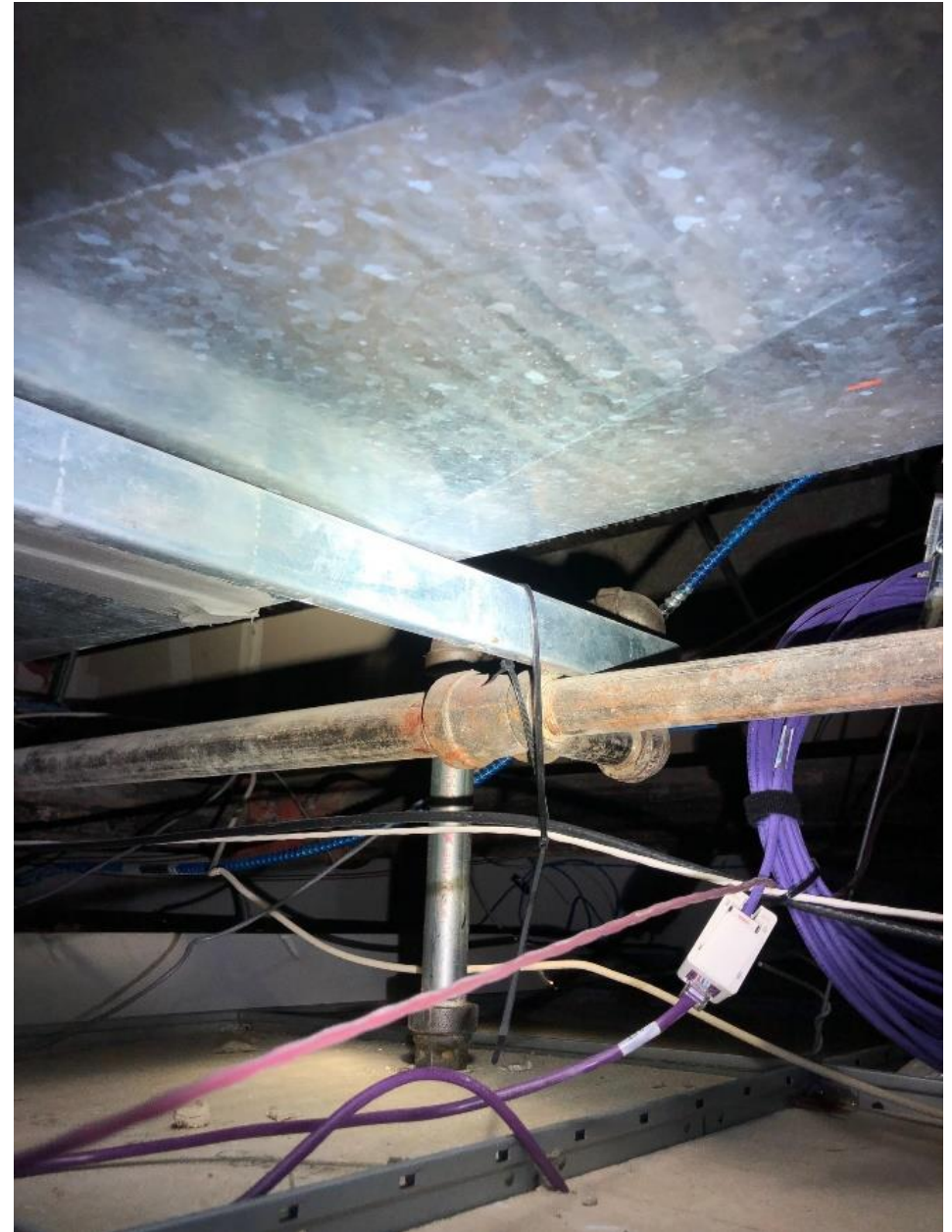


Items on Sprinkler Piping

LS.02.01.35 EP 4

Observations typically scored:

- IT cables draped over sprinkler piping
- Electrical conduit on sprinkler piping
- HVAC ducting on sprinkler piping
- Cables zip-tied to piping or treaded supports
- Exterior piping has debris or bird nests
- Signs hanging from sprinkler piping
- Ceiling grid supported by sprinkler piping



Items on Sprinkler Piping

LS.02.01.35 EP 4

■ A Few Allowances:

Required valve
or system
signage/
tagging



Heat tracing for
piping exposed
to low temps



Earthquake
support
bracing



Sprinkler pipe
cutout
"coupons"



#2 space around pipes



#3 stained ceiling tiles



#4 Doors

FIRE DOORS

- Must not be blocked
- Must self-close
- Must self-latch



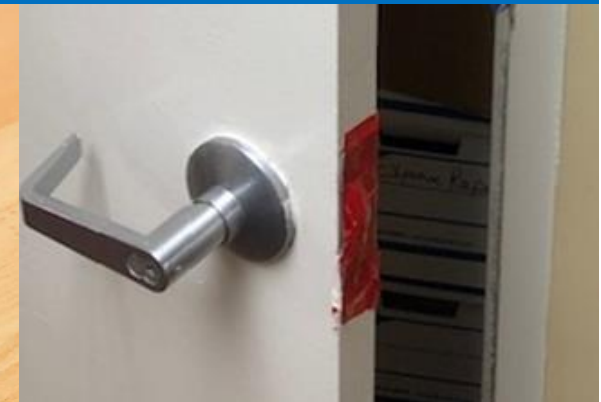
SMOKE DOORS

- Must not be blocked
- Must self-close



CORRIDOR DOORS

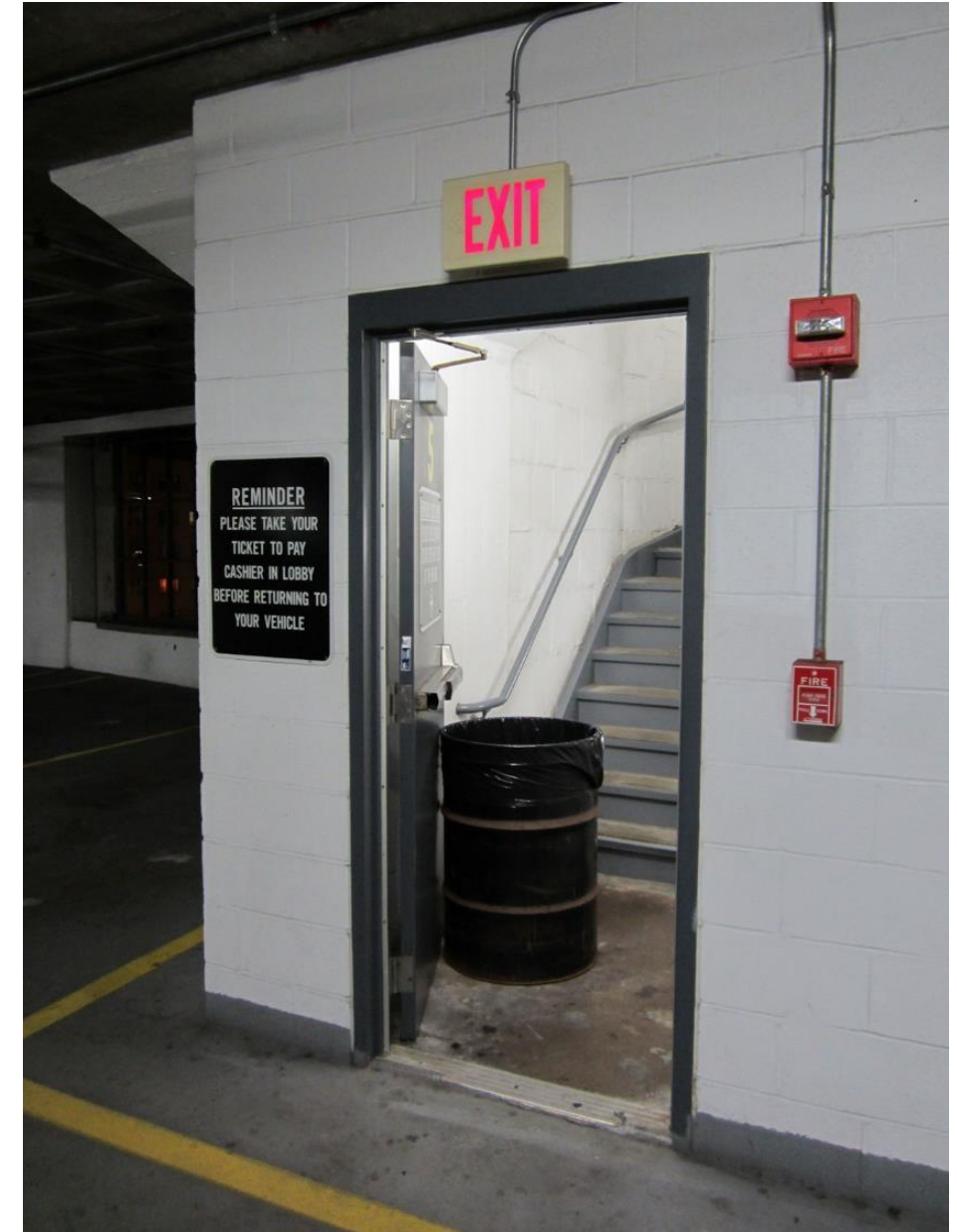
- Must not be blocked
- Must self-latch



Rated Doors

Observations typically scored:

- Not latching
- Blocked or tied open
- Excessive leading-edge gaps on pair of doors
- Excessive bottom gap
- Signs screwed into door
- Missing or painted rating label
- Not self-closing
- Missing required hardware (bottom rods)

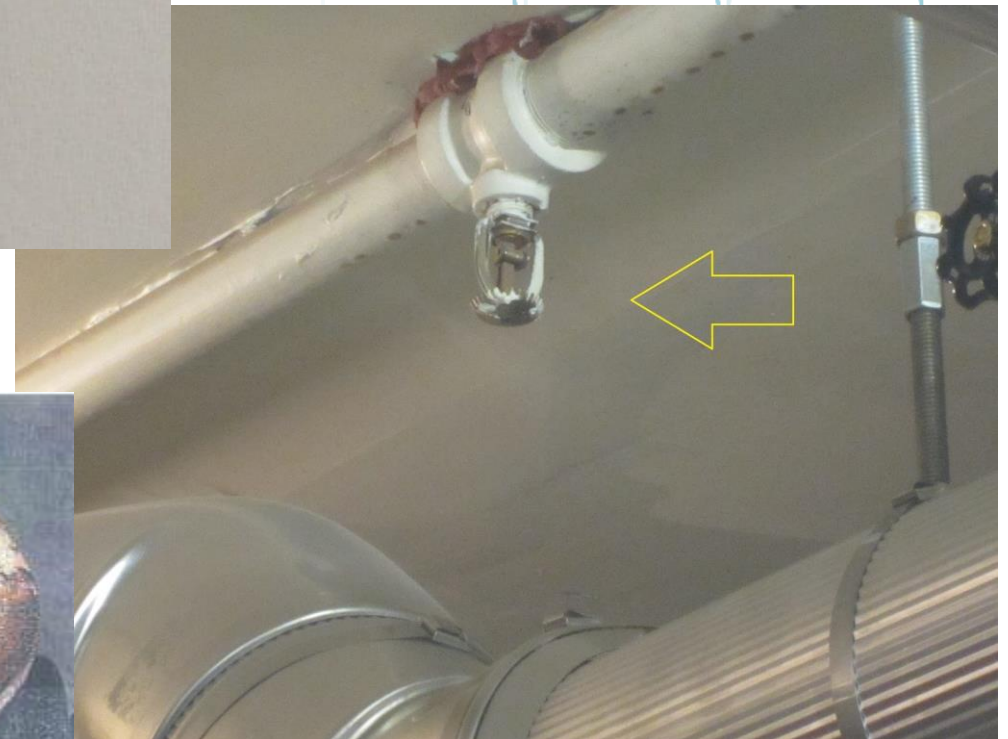


Smoke Doors

- Observations typically scored:
 - Not self-closing
 - Blocked open
 - Excessive leading-edge gaps on pair of doors
 - Excessive bottom gap
 - If serving as a smoke door, but equipped with latching hardware, the hardware must be operational



#5 Sprinkler Damaged



"Loaded" SSP fire sprinkler head. Dust/dirt will act like thermal insulating layer and possibly delay operation. Replace per NFPA 25



#6 Gaps in Ceiling Tiles



#7 18" Clearance

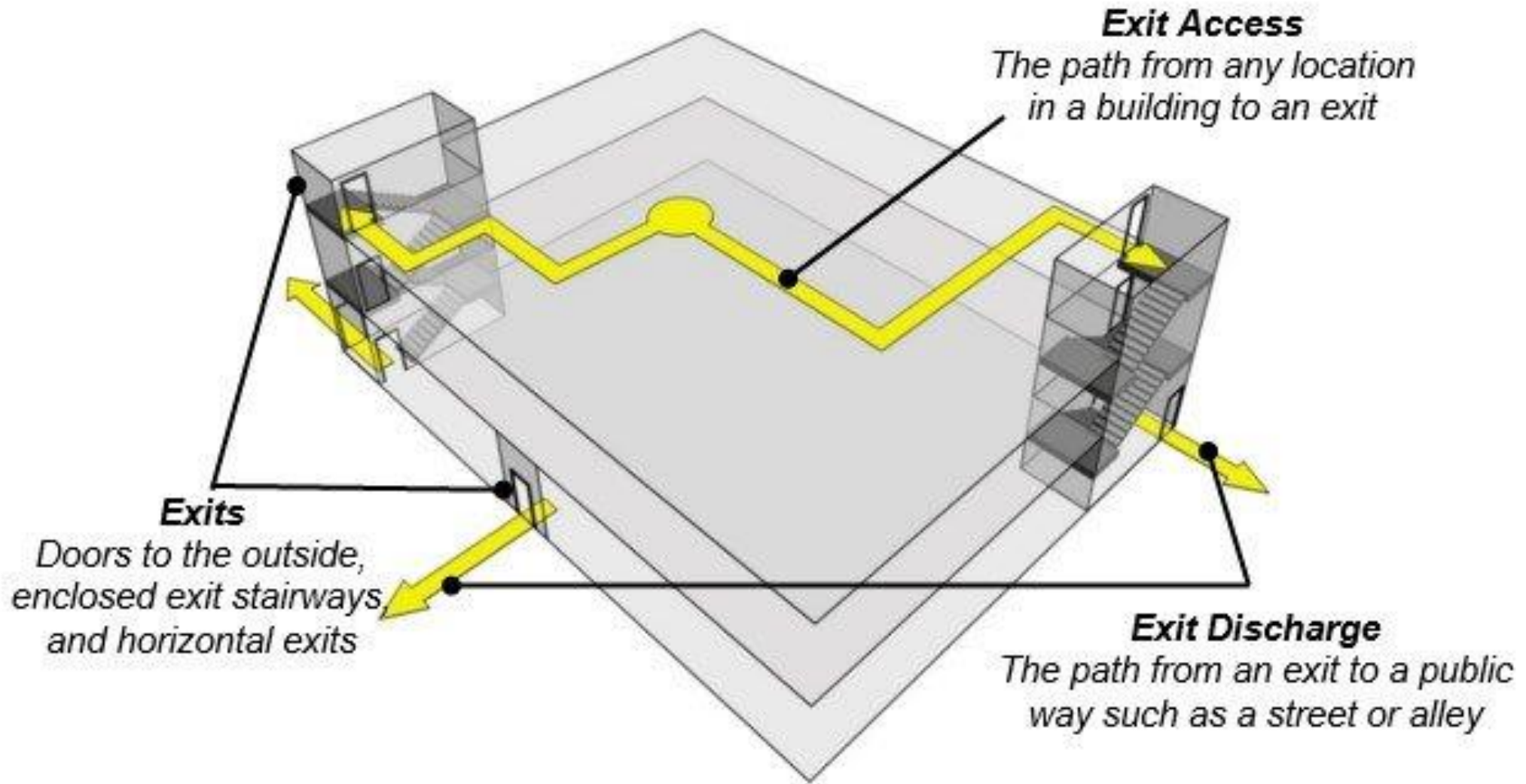


#8 Hazardous Area Door Problems



#9 Means of Egress

Exit Access - Corridors



Means of Egress

Exit Access - Corridors

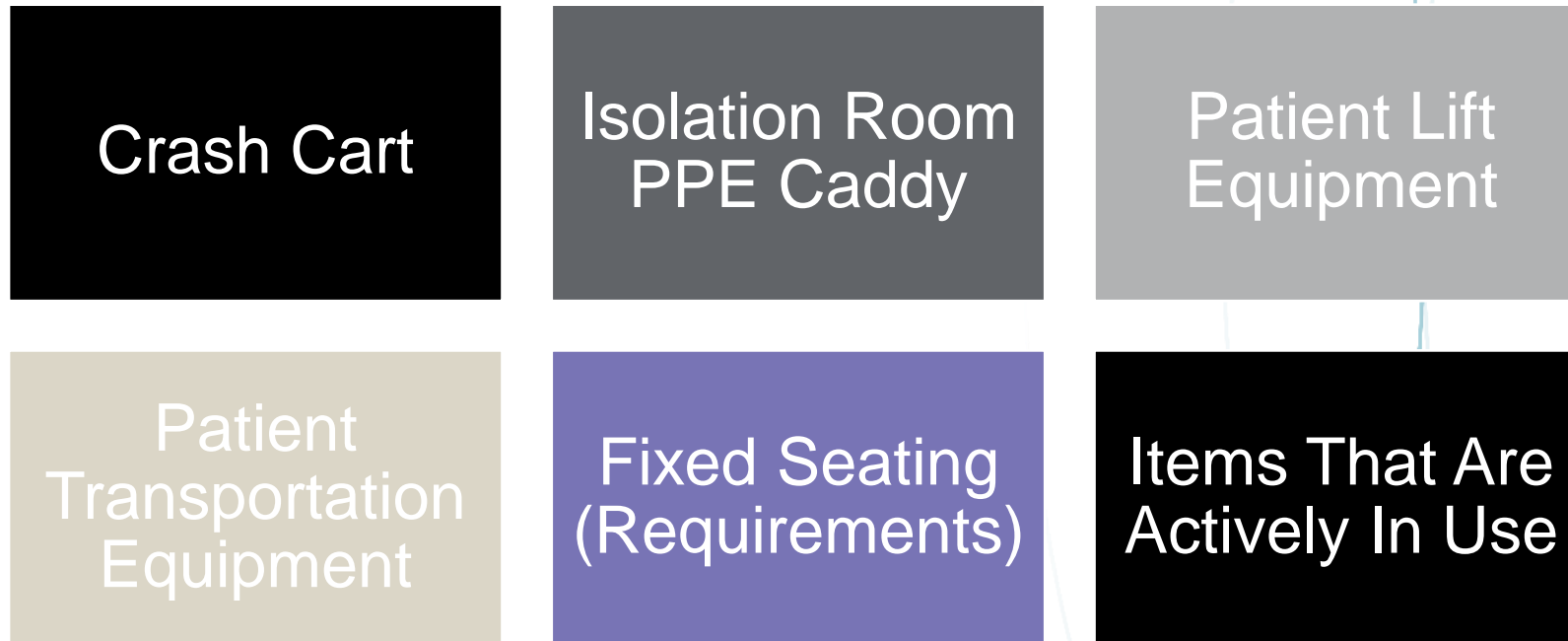
- Corridors are a vital component of our defend in place strategy
- There is no longer a “30 min” rule.
 - It’s in use, or it’s not
- Don’t waste alcoves on things that are allowed in the corridor
- Look for areas at the end of the corridor that are beyond the exit
 - Ensure not to block the pull station or other related items



Means of Egress

Exit Access - Corridors

Only 6 items are allowed to be in the corridor:





*Means of Egress
Exits – Stairwells*



Means of Egress

Exits – Door Signs



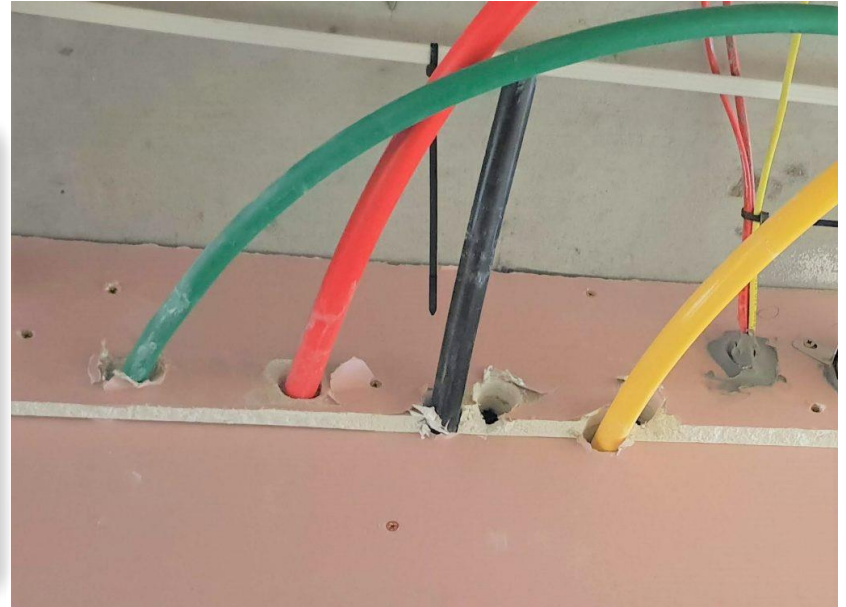
Means of Egress

Exit Discharge

Don't forget to check all the way to the public way...



#10 Smoke Barriers Issues



New Code Changes in

- *NFPA 101*
- *NFPA 99*

NOTE:

CMS must adopt a more current edition of the LSC for these changes to take effect.

Self-Latching Doors

Self-closing or automatic closing door leaves, which become self-latching upon operation of approved smoke detectors, shall be considered as meeting all the self-latching provisions.

■ Added #3 in NFPA 101-2021, 18.3.6.3.7

Powered doors that comply with the requirements of 7.2.1.9 shall not be required to meet the latching requirements of 18.3.6.3.5, provided that **all** of the following are met:

- 1) The door is equipped with a means of keeping the door closed that is acceptable to the AHJ
- 2) The device used is capable of keeping the door fully closed if a force of 5lbf is applied at the latch edge of the swinging door and applied in any direction to a sliding or folding door, whether or not power is applied
- 3) **Where door leaves are operated by power by any automatic mechanism, the automatic opening of the doors shall cease to function upon operations of approved smoke detectors installed in accordance with the provisions of NFPA 72 for door release service.**

Smoke Compartment Size Increase

Changed in 2018 & again in 2021

- Smoke compartments may be increased in size to:
 - 40,000 sf for smoke zones with all patient sleeping rooms configured for only one patient and suites in accordance with 18.2.5.7
 - 40,000 sf for smoke zones with no patient sleeping rooms
 - 22,500 sf in nursing homes and unlimited care facilities
- Looking at impacts to other code sections (i.e. ABHR)

NON-Sleeping Suite Size Increase

Changed in 2015 & again in 2018

- Currently: shall not exceed 10,000 sqft
- In 2018: Shall not exceed 12,500 sqft 101-2021
18.2.5.7(A)
 - May be increased to 15,000 sqft with automatic smoke detection 101-2021 18.2.5.7.3.2(B)

Alcohol Based Hand Rubs

- Relocated in 2018 to 18/19.4.3
- Relocated in 2021 to 18/19.4.4
- In 2021 the requirement for dispensers to be tested each time they are refilled was removed



Exit Sign Inspections

Changed in 2021

- 7.10.9 sends the user to 7.9.3
- 7.9.3 provides four options for testing
- 7.9.1.3 eliminated the requirement for exit signs to have visual inspections for operation of the illumination sources every 30 days



Temporary Construction Separation

Changed in 2021 & again in 2024

- 101-2021 18.7.9.3:
 - Added that flame resistant plastic barriers used during construction on rehabilitation activities shall be permitted for not more than 30 days
- NFPA 241-2024
 - Flame resistant plastic barriers shall be permitted during rehabilitation projects

Responsible Facility Authority

NFPA 99-2021 5.1.14.1 Requirement that a “Responsible Facility Authority” is designated to oversee the medical gas and vacuum system

- Advising on the risk assessment
- Writing and upkeep of portions of the emergency plan that might affect piped gas
- Ensuring the emergency plan addresses unusual requirements necessary for patient and staff safety during design and construction
- Develop permit to work rules
- Evaluation and acceptance of test reports
- Maintenance of facility records for piped gas
- 5.1.14.1.2.2

New Chapter for Dental Medical Gas & Vacuum

- New requirements for medical gas & vacuum systems used in dental facilities added in 2015
 - NFPA 99-2015 5.3.3.6 Dental Air Supply Systems
 - NFPA 99-2015 5.3.3.6.2 Dental Air Cylinder Supply Systems
 - NFPA 99-2015 5.3.3.4 Medical-Surgical Vacuum
 - NFPA 99-2015 5.3.12.2 Category 3 Dental Vacuum Supply Systems
- Moved to new Chapter 15 in NFPA 99-2018



Fire Protection Feature: OR Solution Soaked Materials

Changed in NFPA 99-2021 16.14.3.4

- Solution-soaked materials are no longer required to be removed from the operating room prior to draping or using electro surgery, lasers, or cautery
- Now it is only required to be removed from the patient care vicinity

Fire Protection Feature: OR Extinguishers

Changed in NFPA 99-2018 16.9.1.3

- Clean Agent-type or Water Mist-type extinguishers shall be provided in operating rooms





George Mills, MBA, FASHE, AAMIF, FRSPH, CEM, CHSP, CHOP-DNV
Director of Operations

Kathy Tolomeo, CHEM, CHSP
Director, Compliance Strategies

Britt Berek, MBA, CHFM, CHSP
Implementation & Assessment

Tony Castrilla, CHFM
Director, Engineering Support

Jason Beers, CHFM, CLSS-HC, CFI-I
Director, Engineering Support

Lance Woolf, MBA, CHSP
Director, Engineering Support

Ken Blackwell, CHSP
Director, Engineering
Support

Rob Campbell, CHFM
Director, Engineering Support