

2016

Challenging Standards & Updates

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Top 10 Findings Comparison

Standard	2014 % Noncompliance	2015 % Noncompliance	2015 Rank	
EC.02.06.01	56%	62%	1	
IC.02.02.01	52%	59%	2	
EC.02.05.01	53%	58%	3	
LS.02.01.20	50%	51%	4	
LS.02.01.30	43%	50%	5	
RC.01.01.01	49%	47%	6	
LS.02.01.10	46%	46%	7	
LS.02.01.35	43%	43%	8	
PC.02.01.03	%	40%	9	
EC.02.02.01	37%	39%	10	



Engineering Department 2016-2

CMS Information



Tuesday May, 3, 2016 CMS issued the final rule adopting the 2012 Life Safety Code[®]. The rule is effective July 5, 2016.

- This rule also adopts most of NFPA 99, 2012 edition. Chapters 7,8,12,13 are excluded from the adoption.
- Emergency Management
 - Pending Still under review





Categorical Waivers



Process



For each Categorical Waiver the organization decides to adopt they must

- 1. Ensure full compliance with the appropriate code reference
- 2. Document the decision to adopt the categorical waiver
 - For Life Safety Code items annotate the "Additional Comments" Section in the Statement of Conditions™ Basic Building Information (BBI)
 - For Environment of Care items document by Minutes in discussion at the Environment of Care Committee (or equivalent)
- 3. Declare the decision at the beginning of any survey

See also November 2013 Perspectives



Relative Humidity (RH)



FGI Guidelines (2010) allows expanding the RH range from 35 – 60% to 20 – 60% RH

> 35 % RH is based on NFPA 99-1999, Section 5-4.1.1

20 – 60% RH is based on ASHRAE 170-2008
See EC.02.06.05 EP 1

CMS S&C 15-27-Hospital, CAH & ASC letter dated 2/20/2015

S&C 13-25-LSC & ASC permits hospitals and CAH to use a LSC categorical waiver to establish



Relative Humidity (RH)

- CMS S&C 15-27-Hospital, CAH & ASC letter dated 2/20/2015 stated
 - S&C 13-25-LSC & ASC permits hospitals and CAH to use a LSC categorical waiver to establish an RH level <35% in *anesthetizing (i.e. OR) locations*
 - Before electing to use the categorical waiver hospitals and CAHs are expected to ensure the humidity levels in their ORs are compatible with manufactures *instructions for use* (*IFUs*) for supplies and equipment used in that setting





CENTERS FOR MEDICAID & MEDICARE SERVICES

STANDARD LEVEL DEFICIENCY CONDITION LEVEL DEFICIENCY



Engineering Department 2016-8

CMS Deeming Issue

- The Joint Commission is required to reconcile our Elements of Performance (EPs) with CMS Conditions of Participation (CoPs)
- CoPs are the expectations of compliance CMS has related to Medicare/Medicaid reimbursements
 - CoPs are based on federal laws





- Determination is based on manner and degree
 - Manner: prevalence, how pervasive, how widespread, number, frequency
 - Degree: criticality, consequence, magnitude, how severe, how significant, how bad
 - Collaboration among survey team members and Central Office staff





- When Condition Level Deficiencies remain after clarification:
 - Follow up survey MUST occur within 45 calendar days of the last day of the accreditation survey
 - If the problem remains a second follow up survey MUST occur within 30 calendar days of the first follow up survey
 - Start correcting the issue immediately DO NOT count on clarifying out of the problem





- When Condition Level Deficiencies remain
 - The follow up survey will focus on the RFIs that were determined to be condition level deficiencies
 - The surveyors can score other issues that are identified during the onsite visit
 - Failure to clear a condition level deficiency after the second survey results in notification of CMS and a decision of Contingent Accreditation





- Governing body CoP (hospital):
 - When any condition level deficiencies are identified during the survey
 - The Joint Commission is required by CMS to include a condition level deficiency in the leadership standards
- Expect to see an RFI and Condition Level Deficiency at LD.01.03.01 EP 2



Immediate Threat to Life (ITL)



Expedited decision of Preliminary Denial of Accreditation (PDA) issued by The Joint Commission President

- PDA remains in effect until corrective action is validated during on-site follow-up survey
- After corrective action is validated, organization's accreditation status will change to Contingent Accreditation pending follow-up survey to assess ongoing implementation of corrective action



What Triggers ITL

- Significantly compromised fire alarm system
- Significantly compromised sprinkler system
- Significantly compromised emergency power supply system
- Significantly compromised medical gas master panel
- Significantly compromised exits



What Triggers ITL



Other situations that place patients, staff or visitors at extreme danger Not limited to EC or LS Since 2013, the clinical situations have been more prominent with Infection Control topping the list ITLs and potential ITLs are almost always situational



ITL Scoring



- An Immediate Threat to Health or Safety exists for patients or the public within the hospital
- CONT01
 - The Immediate Threat to Health or Safety has been successfully abated and verified through the direct observation or other determining method





Survey Process Enhancements



Improvements Pilot Tested



Revised agenda for Life Safety surveyor
 Evaluation starts upon arrival
 Specified OR Survey time

- A single document list and tracking tool for both customers and surveyors
- Time allotted for primary surveyor responsibilities



Primary LSCS Survey Responsibilities

- LS.01.01.01 (SOC)
- LS.01.02.01 (ILSM)
- EC.02.03.01 (Fire Response Plan)
- EC.02.03.03 (Fire Drills)
- EC.02.03.05 (Fire Equipment Maintenance)
- EC.02.05.01 (EP 15 Pressure Relationships)
- EC.02.05.07 (Emergency Power Testing)
- EC.02.05.09 (Piped Medical Gas Testing)



Survey Resource



- To prepare for document review, the Survey Activity Guide has been updated to include "Life Safety and Environment of Care—Document List and Review Tool"
 - This new resource is located on The Joint Commission website at http://www.jointcommission.org/life_safety

code_information_resources/

■ This resource is also at the *Joint Commission Connect*[™] extranet site





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Pre-Survey Checklist: EC & LS

Life Safety and Environment of Care - Document List and Review Tool

	pilant,	NC=	NOT C	ompila	nt; NA=Not applicable; IOU=Surveyor awaiting documentation				
EC.02.04.03	С	NC	NA	IOU	The hospital inspects, tests and maintains medical equipment	YE	S	N	0
EP 2					High risk equipment				
EP 3					Low-risk equipment				
EP 4					All sterilizers				
EP 5					All dialysis (chemical and biological testing of water used in hemodialysis)				
EP 14					Calibrates nuclear medicine equipment (ANNUALLY)				
COMMENTS:								 	
EC.02.05.01	С	NC	NA	IOU	Manages Utility Systems	YE	S	N	0
EP 1					Design and Installation				
EP 2					The hospital has a written inventory of operating components of utility systems				
EP 4					The hospital identifies activities and associated frequencies				
EP 8					Utility system controls are labeled for partial or complete emergency shutdowns				
EP 9					Written procedures for responding to utility system shutdowns				
EP 15					Ventilation				
EP 16					Mapping of Utilities System				
COMMENTS:									
	С	NC	NA	IOU	The hospital inspects, tests and maintains Utility Systems	YE	S	N	0
EC.02.05.05					Hish risk asvisment				
EC.02.05.05 EP 3					nigh lisk equipment				•
EC.02.05.05 EP 3 EP 4					Infection control utility system components				

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EC Elements of Performance

DELETED

Effective 7/1/2016



EC.01.01.01 EP 2 Deleted Effective 7/1/2016

EP 2. Leaders identify an individual(s) to intervene whenever environmental conditions immediately threaten life or health or threaten to damage equipment or buildings.

Rational: Duplicative of EC.01.01.01 EP 1:

Leaders identify an individual(s) to manage risk, coordinate risk reduction activities in the physical environment, collect deficiency information, and disseminate summaries of actions and results.



EC.02.01.03 EP 4 Deleted Effective 7/1/2016

EP 4 If the hospital decides that patients may smoke in specific circumstances, it designates smoking areas that are physically separate from care, treatment, and service areas. (*See also* EC.02.03.01, EP 2)

Rational: Duplicative of EC.02.01.03 EP 1:

The hospital develops a written policy prohibiting smoking in all buildings. Exceptions for patients in specific circumstances are defined.

Note: The scope of this EP is concerned with all smoking types—tobacco, electronic, or other.



EC.02.03.01 EP 2 Deleted Effective 7/1/2016



EP 2 If patients are permitted to smoke, the hospital takes measures to minimize fire risk. (*See also* EC.02.01.03, EP 4)

Rational: Duplicative of EC.02.03.01 EP 1:

The hospital minimizes the potential for harm from fire, smoke, and other products of combustion.



EC.02.04.03 EP 1 Deleted Effective 7/1/2016



EP 1 The hospital solicits input from individuals who operate and service equipment when it selects and acquires medical equipment.

Rational: Issue that should be left to the discretion of the organization.



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EC.02.05.07 EP 9 & 10 Deleted Effective 7/1/2016

EP 9 If a required emergency power system test fails, the hospital implements measures to protect patients, visitors, and staff until necessary repairs or corrections are completed.

EP 10 If a required emergency power system test fails, the hospital performs a retest after making the necessary repairs or corrections.

Rationale: Part of regular operations/processes



Engineering Department 2016-29

EC.04.01.03 EP 3 Deleted Effective 7/1/2016

EP 3 Annually, representatives from clinical, administrative, and support services recommend one or more priorities for improving the environment of care.

Rationale: Implicit in other EP's in this standard:

EP 1 Representatives from clinical, administrative, and support services participate in the analysis of environment of care data. (*See also* EC.04.01.01, EPs 3-6 and 8- 15; EC.04.01.05, EP 3) EP 2 The hospital uses the results of data analysis to identify opportunities to resolve environmental safety issues. (*See also* EC.04.01.05, EP 1)



EC.04.01.05 EP 3 Deleted Effective 7/1/2016

EP 3 The hospital reports performance improvement results to those responsible for analyzing environment of care issues. (*See also* EC.04.01.03, EP 1; EM.03.01.03, EP 15)

Rationale: Implicit in other EP's in this standard:

EP 1 The hospital takes action on the identified opportunities to resolve environmental safety issues. (*See also* EC.04.01.03, EP 2)

EP 2 The hospital evaluates changes to determine if they resolved environmental safety issues.





Project Refresh





What is Project Refresh?

- A series of 11 inter-related and/or interdependent process improvement initiatives underway at The Joint Commission
 - Guiding principles: Simplification, Relevancy, Innovation
- Major initiatives to highlight at this time:
 - SAFER Matrix
 - Post-Survey Follow-up
 - Clarifications



Outcomes of REFRESH Projects

Real-time information gathering between surveyors and Standards Interpretation Group during survey Enhanced mobile technology Fewer standards Revised criticality models Easier & less complex decision process Streamlined post-survey process Higher consistency in interpretation of standards





Survey Analysis for Evaluating Risk (SAFER) Matrix



Current State



- There are multiple different "taggings" that The Joint Commission uses for our Elements of Performance (EPs).
- For example, we tag EPs as "Direct" versus "Indirect", "A" category vs. "C" category, Measure of Success (MOS) required or not, Risk Icon or not, etc.
- These multiple taggings were identified by different groups of staff, at different points in time, and are used for different reasons (ESC timeframe, decision rules, ICM, etc.).


Problem



- The existing multiple EP taggings require extensive upkeep (some have not been updated in years), are confusing to our customers, and at times contradict each other.
- While the taggings attempt to prioritize those EPs that are most critical, they often result in "one size fits all" follow-up as the follow-up is determined by the EP itself rather than the context of the actual finding written under it.







A new SAFER concept







A New SAFER Matrix





Benefits of SAFER Matrix



- Focus on patient safety/risk to patients
- Critical thinking
 - Takes each finding to the next level the "so-what?" as to why the finding is important
 - Helps surveyors think through each finding to cite at appropriate level of scope and severity



Benefits of SAFER Matrix (cont.)



 Visual representation of survey
 Indicates severity of findings to organizations for prioritization

More clearly identifies the highest risks

Aggregate data for standards refinement, improving consistency, etc.





Post-Survey Follow-up



Current State

- After the final report posts to the organization's extranet site, the org has either 45 (Direct Impact) or 60 (Indirect Impact) days to submit their Evidence of Standards Compliance (ESC).
- Voice of customer has expressed dissatisfaction with the multiple ESC timeframes, as well as with the Measure of Success (MOS) process.



Future Vision

- Recognize that the potential for an EP to be related to a risk/safety issue depends on the context of the situation during a given survey, and not just on the EP itself.
- Opportunity to use new SAFER Matrix to direct more *customized* and *prioritized* follow-up based on each finding, and better utilize our systems and structures that support improvement.



Follow-up Actions

	Lesser Intensity		To align with CMS's minimum requirements for an acceptable Plan of Correction			
			To align with CMS's minimum requirements for an acceptable Plan of Correction – PLUS – additional validation of implementation and/or evidence of sustainment			
	Greatest Intensity		To align with maximum requirements related to follow-up/action for Immediate Threat to Life situations			

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Beginning June 6th, 2016

Starting with Psychiatric Deemed Hospital Surveys only:

The SAFER matrix will be generated and embedded within the survey process and the final report

Matrix data will be shared with the customer

Updated post-survey process



Customer Impacts:

No more Direct and Indirect EP designations
No more A or C categories
No more OFIs
Visual grids will be included within the report





Reducing Post-Survey Clarifications





What is Clarification?

"After a survey event, organizations have the opportunity to submit clarifying ESC if they believe that their organization was in compliance with a particular standard at the time of Survey".

ACC-60





Analyze: Hospital Clarifications

50% of Hospitals (HAP) request Clarifications

Dominate clarification themes:

- Lack of Documentation (65%)
- Incorrect Findings
- Survey Process Issues
- 51% of HAP Clarifications are in the EC & LS Chapters



Analyze: Hospital Clarifications

- Lack of Documentation
 - Hospitals cannot produce all required documents for LSCS review when requested
 - Some documentation is available after the LSCS leaves
 - Remaining survey team unable to review





Analyze: Hospital Clarifications

Incorrect findings

- Findings cited at incorrect Standard/EP
 - Survey finding does not document non-compliance at the cited EP
- Mis-interpretation of standards compliance
 - Corridor clutter in a Suite (not required)
- Limited opportunities to follow-up with Surveyors
 - i.e. observations discussed but implied they will not be cited...until the observation appears in the final report...leaving no opportunity to discuss with the surveyor



Improve: Documentation

- **Issue:** Required documentation is not available upon request
 - NFPA requires that documentation related to testing of safety systems must be available at any time, for any inspector, to review
 - By not having the required documentation available at the time of survey, the facility is not in compliance with NFPA requirements
 - Clinical EPs also require documentation
 - i.e. "**D**" icons





Improve: Documentation NFPA 25-1998

Documentation must be readily available as per NFPA 25-1998

- 1-8 Records. Records of inspections, test and maintenance of the system and its components shall be made available to the authority having jurisdiction upon request. Typical records include, but are not limited to, valve inspections, flow, drain, and pump tests, and trip tests of dry pipe, deluge and preaction valves.
- 1-8.1 Records shall indicate the procedure performed (e.g., inspection, test or maintenance), the organization that performed the work, the results and the date.
- 1-8.2 Records shall be maintained by the owner. Original records shall be retained for the life of the system. Subsequent records shall be retained for a period of one year after the next inspection, test or maintenance required by the standard.

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Improve: Documentation

- Required Documents not available at the time of survey generate RFIs that are not eligible for clarification.
 - The organization must complete the "Required Documentation" check list prior to the start of survey
 - Sign and date the attestation statement on the checklist
 - In off-survey years, discussion of Required Documentation during ICM events will occur



Improve: Survey Process Issues

- Issue: Findings are cited in error; not at the correct Standard/EP or the finding is a mis-interpretation of standards compliance
- Recommended Solutions:
 - SIG real-time calls during the survey
 - Improved quality of written survey findings
 - As RFIs are identified, surveyors point them out to the customer, explaining why they are RFIs and clearly stating they will be part of the survey report.



Improve: Survey Process Issues

- Issue: Organizations are unclear about what to Clarify or how to Clarify
- Solution:
 - There will continue to be a need for a Clarification Process.
 - Organizations can only clarify observations that they believe have been made in error and are not document related.





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Pre-Survey Checklist: EC & LS

Life Safety and Environment of Care - Document List and Review Tool

	annar n.	110-	094 ~	ompila	direct the element to a control of a control of the					
EC.02.04.03	С	C NC NA IOU The hospital inspects, tests and maintains medical equipment		YES			NO			
EP 2	2 High risk equipment									
EP 3	3 Low-risk equipment									
EP 4	4 All sterilizers									
EP 5	P 5 All dialysis (chemical and biological testing of water used in hemodialysis)									
EP 14					Calibrates nuclear medicine equipment (ANNUALLY)					
COMMENTS:										
EC.02.05.01	С	C NC NA IOU Manages Utility Systems		YES			NO			
EP 1					Design and Installation					
EP 2					The hospital has a written inventory of operating components of utility systems					
EP 4					The hospital identifies activities and associated frequencies					
EP 8					Utility system controls are labeled for partial or complete emergency shutdowns					
EP 9					Written procedures for responding to utility system shutdowns					
EP 15					Ventilation					
EP 16					Mapping of Utilities System					
COMMENTS:										
	С	NC	NA	IOU	The hospital inspects, tests and maintains Utility Systems	YES			NO	
EC.02.05.05	Ŭ		_							
EC.02.05.05 EP 3	-				High risk equipment					
EC.02.05.05 EP 3 EP 4					High risk equipment Infection control utility system components					







CLINICAL ALARM SAFETY



National Patient Safety Goals (NPSGs)



- Promote specific improvements in patient safety
- Highlight problematic areas in healthcare
- Derived from sentinel event alerts and recommendations from professional organizations/agencies and the Patient Safety Advisory Group



62

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Previous National Patient Safety Goal

- In the past there was a NPSG on clinical alarms
 - It focused on the "audibility" of clinical alarms
 - Goal retired, but we were still able to survey the issue under Environment of Care EC.02.04.01, EC.02.04.03 (CoP Physical Environment 482.41)
 - Also, under Provision of Care, Leadership and Patient Rights (CoPs: Nursing 482.23 and Patient Rights 482.13)





ECRI Institute Top 10

- 1. Inadequate Cleaning of Flexible Endoscopes before Disinfection Can
 - Spread Deadly Pathogens
- 2. Missed Alarms Can Have Fatal Consequences
- 3. Failure to Effectively Monitor Postoperative Patients for Opioid-Induced Respiratory Depression Can Lead to Brain Injury or Death
- 4. Inadequate Surveillance of Monitored Patients in a Telemetry Setting May Put Patients at Risk
- 5. Insufficient Training of Clinicians on Operating Room Technologies Puts Patients at Increased Risk of Harm
- 6. Errors Arise When HIT Configurations and Facility Workflow Do Not Support Each Other
- 7. Unsafe Injection Practices Expose Patients to Infectious Agents
- 8. Gamma Camera Mechanical Failures Can Lead to Serious Injury or Death
- 9. Failure to Appropriately Operate Intensive Care Ventilators Can Result in Preventable Ventilator-Induced Lung Injuries

10. Misuse of USB Ports Can Cause Medical Devices to Malfunction



The Alarming Problem



- More and more devices and alarms
- More patients connected to alarms or alarmbased devices
- 150-400+ alarms per patient per day in a typical critical care unit
- Alarm-based devices are not standardized in many organizations
- Inconsistent use of alarms due to flexible alarm setting features



Medical device alarm safety

Scope of problem $100s \rightarrow 1,000s \rightarrow 10,000s$

100s of alarm signals per patient, per day = 1,000s of alarm signals on each unit = tens of thousands of alarm signals throughout a hospital per day

85-99% of alarms don't require clinical intervention





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Alarm Fatigue Clinicians become desensitized, overwhelmed or immune to the sound of an alarm.



Fatigued clinicians may:

- Turn down alarm volume
- Turn off alarm
- Adjust alarm settings

These actions can have serious or fatal consequences.



NPSG on Alarm Mgmt



In Phase I (2014) Hospitals will be required to:

- Establish alarms as an organization priority
- Identify the most important alarms to manage based on their own internal situations.
 - Input from medical staff and clinical depts
 - Risk to patients due to lack of response, malfunction
 - Are specific alarms needed or contributing to noise/fatigue
 - Potential for patient harm based on internal incident history
 - Published best practices/guidelines



NPSG on Alarm Mgmt



In Phase II (as of January 2016) Hospitals will be expected to:

- Develop and implement specific components of policies and procedures that address at minimum:
 - Clinically appropriate settings
 - When they can be disabled
 - When parameters can be changed
 - Who can set and who can change parameters and who can set to "off"
 - Monitoring and response expectations
 - Checking individual alarm signals for accurate settings, proper operation and detectability
- Educate those in the organization about alarm system management for which they are responsible





NEMA XR-29-2013

Standard Attributes on CT Equipment Related to Dose Optimization and Management


NEMA XR-29-2013



Standard Attributes on CT Equipment Related to Dose Optimization and Management

Background: 4/1/2014 H.R. 4302 "Protecting Access to Medicare Act of 2014 (PAMA) signed into law

- Included provisions of XR-29
- Applicable to outpatient imaging
- Has financial penalty associated with performing CT exams on noncompliant scanners starting 1/1/2016 (technical component)



NEMA XR-29-2013

Identifies common CT system factors that focus on radiation dose optimization

- DICOM RDSR (Radiation Dose Structured Report)
- CT Dose Check (NEMA XR-25)
- Automatic Exposure Control
- Reference Pediatric and Adult Protocols



NEMA XR-29-2013

- RDSR
 - Structured report encoded in DICOM
 - Structured data is recoverable
 - Incorporates most study information including CTDI and DLP (used to estimate radiation dose)
- Reference Pediatric and Adult Protocols
 - Protocols pre-loaded on a CT system that may be selected at the operator's discretion
- CT Dose Check (NEMA XR 25-2010)
 - If estimated dose index exceeds established thresholds, operator is notified prior to beginning scan
- Automatic Exposure Control
 - Adjust radiation output based on patient size, shape, composition



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NEMA XR-29-2013

Joint Commission revised requirements for diagnostic imaging services do **not** reference NEMA XR-29 **HOWEVER....**

Verbiage in H.R. 4302 states: Secretary shall require information be provided and attested to by a supplier and hospital out-patient that CT meets the attributes of XR 29. The claim shall be **verified** as part of periodic accreditation of suppliers (*e.g. JC, ACR, IAC, etc.*)



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NEMA XR-29-2013

- Estimated that 1/3 of OP CT scanners will need to replaced.
- In general these are systems over 10 years old
- Organizations will need to evaluate
 - Upgrade vs replace
 - Financial impact (\$ loss vs upgrade/replace \$)
 - 5% payment loss 2016, 15% in 2017
 - Move scanners (or patients) around in system
- Manufacturer's can help determining compliance with standard (info on websites)





Statement of Conditions™

- Plan For Improvement (PFI) Modifications
- Interim Life Safety Measures



PFI: A Proactive Process



- When a Life Safety Code deficiency is found during survey it results in a survey action:
 - If the organization has a PFI already identifying the deficiency, the finding (RFI) is not written
 - All open PFIs will be imported into the final survey report
 - No ESC required as the PFI has the Projected Completion Date already identified
 - If the organization does not have a PFI identifying the deficiency, then a finding is written as a RFI



Plan For Improvement



All PFIs may be edited by the organization until they are *accepted* during survey

- On the first day of survey by the LSCS they will review all open PFIs
- The Surveyor will evaluate each PFI for validity
- The Surveyor will "accept" the Open PFI which locks the PFI

NOTE: A PFI is associated with the Life Safety Code and the Life Safety Chapter



Plan For Improvement

- The PFI process is currently under review while Joint Commission leadership is supportive of the process – we may be required to modify some components of the SOC
 - May remove the grace period
 - May remove extension requests
 - □ Projected Completion Date (PCD) → Scheduled Completion Date (SCD)
- PFIs will need to be tightened down better descriptions of deficiencies and corrective actions needed





Interim Life Safety Measures

- Standards Change
- Inclusion in the PFI process
- Inclusion in the Final Report



Re-ordered the First 3 EP's – Effective July 1st 2016

- ILSM assessment occurs when a new PFI is created
- There is a drop down menu that includes the 13 ILSM in LS.01.02.01 (EP's 2 – 14)
- The selected ILSM will appear in the PFI
- The selected ILSM will also appear in the Final Survey Report in the Open PFI Summary
- To facilitate these actions the numbering of the first three EP's was changed
 - EP 1 & 2 are now ILSM actions, joining the original 11



LS.01.02.01 EP 1



EP 1 The hospital has a written interim life safety measure (ILSM) policy that covers situations when Life Safety Code deficiencies cannot be immediately corrected or during periods of construction. The policy includes criteria for evaluating when and to what extent the hospital implements LS.01.02.01, EPs 2–14 to compensate for increased life safety risk. The criteria include the assessment process to determine when interim life safety measures are implemented. (See also LS.01.01.01, EP 3)



LS.01.02.01 EP 2

EP 2 When the hospital identifies Life Safety Code deficiencies that cannot be immediately corrected or during periods of construction, the hospital does the following: Notifies the fire department (or other emergency response group) and initiates a fire watch when a fire alarm or sprinkler system is out of service more than 4 hours in a 24-hour period in an occupied building. Notification and fire watch times are documented. (For full text and any exceptions, refer to NFPA 101-2000: 9.6.1.8 and 9.7.6.1) (See also LS.01.01.01, EP 3)



LS.01.02.01 EP 3

EP 3 When the hospital identifies Life Safety Code deficiencies that cannot be immediately corrected or during periods of construction, the hospital does the following: Posts signage identifying the location of alternative exits to everyone affected. (See also LS.01.01.01, EP 3)

▼ NOTE: No change to LS.01.02.01 EP's 4 – 14



Creating a New PFI With ILSM Assessment – Change will be seen late summer /early fall

Site:	Bidg:
Test 73 - Hospital site name revised has CERT 🛩	Main_HAP 😽
9F1 :	
Nodified	
Detail Page for PFI Items: Deficiency	
Document Deficiencies Previously Accepted No Deficience	cies
Date Created: 7/17/2013	
Brief Description: Additional Description	
2 hour barrier has large penetration at deck	
Date Identified: 07/01/2013	
ILSM Assessment Tes	
ILSM Assessment 198 V	
Date Identified: 07/01/2013 USA	
Date Identified: 07/01/2013 450	
Date Identified: 07/01/2013 USD	
Date Identified: 07/01/2013 450	
Date Identified: 07/01/2013	V 2 hour barrier at c
Date Identified: 07/01/2013 USC ILSM Assessment 198 V ISMAs Implemented: PET Assigned Unique ID. 202 Floor: 3 Room: 345 Use/Location:	2 hour barrier at (
Date Identified: 07/01/2013 USC ILSM Assessment 195 V SMMs Implemented: Altrinistrative Actions: PFI Assigned Unique ID 523 Floor: 3 Room: 345 Use/Location: Go to Resolution	2 hour barrier at c



Final Report, Identifying ILSM Implementation



The Joint Commission				
Site:	Joint Commission Customer Hospital			
Building Name:	Main Campus: HAP			
PFI Id:	1410010			
Floor: third Room: Nursing Sta	tion Use/Location: above ceiling utility room			
Deficiency Description:	Spray on fire proofing (approximately 6" x 14") delaminated from structural beam above 3W Nursing Station in Oncology, adjacent to Clean Utility Room			
ILSM Assessment Completed:	Yes			
IL SM Implementation:	 Provide additional firefighting equipment (EP 6) Provide additional training on firefighting (EP 10 Conduct one additional fire drill in affected area (EP 11) Educate staff in area of defect (EP 13) 			
Proposed Corrective Action:	Remove de-laminated fire proofing and repair with UL System approved for troweling over sprayed on fire proofing. Coordinate with Nursing to protect patients.			
Projected Completion Date:	12/31/2015			
Funds Committed:	Yes			





New Resource:

JCPEP

Joint Commission Physical Environment Portal

http://www.jointcommission.org/topics/ the_physical_environment.aspx



Aging Infrastructure



- Many existing hospitals were built with Hill-Burton funds, including the power plant
 - Estimated average age of the health care power plant is 30-40+ years old (U.S. Energy Information Administration, 2008)
 - Equipment life cycle is between 20-30 years
- Air distribution and conditioning systems may not have been designed for the current airborne issues facing health care today
 - 1987 AIA Guidelines was 15 air exchanges per hour (ac/h) in an operating room
 - 2010 FGI Guidelines is for 20 ac/h in an operating room



Aging Infrastructure (cont'd)

- 30% of hospitals responding to an ASHE survey indicated they were in the process of proactively upgrading utility systems
- 58% in the same survey replace as needed due to malfunctions or equipment failure
 - Often due to aging equipment



Physical Environment as a Priority

- - Leadership must be aware that the clinical needs of the organization cannot be met if the physical environment fails
 - Leadership must show support to those responsible for the EC/LS programs
 - Facilities staff must understand the current physical environment requirements, which may be difficult to achieve with the current building technologies
 - Facilities must partner with Leadership in managing the infrastructure



Leadership & Facilities Working Together

Strategies to build Leadership and Facilities Partnership:

- Include Facilities Management as a module for newly hired leadership orientation
- Use performance improvement measures to monitor Environment of Care and Life Safety contracts
- Ensure Senior Leaders received regular updates on Environment of Care and Life Safety Compliance Issues
- Involve facilities management staff and clinical staff in EC Tours/Rounds
- Use building equipment life cycle data to support requests for funding to replace/update old equipment
- Implement an "above the ceiling" permit policy
- Facilitate collaboration, and clarify responsibilities, between clinical staff and facilities management staff



Action Plan: JCPEP

Joint Commission Physical Environment Portal

- Purpose: Provide guidance and education to reduce instances of non-compliance with the top eight EC/LS standards.
- Target Audiences:
 - Hospital Leaders
 - Facilities Managers
 - Clinicians
 - Quality Coordinator/Leaders
- Available on the Joint Commission website; links to the ASHE website

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Action Plan



- JCPEP Content:
 - Provided at no cost
 - Joint Commission Home Page, TOPICS
 - www.jointcommission/JCPEP
 - Limited to compliance strategies for the eight EC/LS standards that are most frequently cited as noncompliant identified in 2014
 - Videos and pictures to illustrate compliance
 - Articles, customer strategies, surveyor insights
 - Fireside Chats
 - Two for each of the eight standards
 - Conducted every month



Overview of the Eight PEP Standards



Fire Safety





Barriers



Forced - Air HVAC System



Environment of Care

EC.02.05.01 Manage risks with utility systems



EC.02.03.05 Maintain and test fire safety equipment



LS.02.01.30

Maintain features to protect individuals from fire and smoke



EC.02.06.01

Humidity Air Quality Temperature

Maintain safe functional environment



LS.02.01.35 Maintain systems for extinguishing fires



EC.02.02.01 Manage risks for hazardous materials and waste



Reference: Non-Compliant Standards and EPs

Standard	EP	Issue		Corresponding COP	
	15	Air pressure, filtration and air changes in critical care areas such as the OR	32.78	§482.42 (A-0747)	
EC.02.05.01	8	Label utility system controls for partial or complete emergency shutdown	21.39	§482.41(a) (A-0701)	
	1	Design and Installation of utilities to meet patient care and operational needs	10.39	§482.41 (A-0700)	
	13	Corridor Clutter	22.41	§482.41(b)(1)(i) (A-0710)	
L3.02.01.20	1	Doors unlocked in the direction of egress	16.84	§482.41(b)(1)(i) (A-0710)	
EC 02 06 01	1	Interior spaces are safe and suitable to care, treatment and services provided	38.8	§482.41(a) (A-0701)	
EC.02.00.01	13	Maintaining ventilation, temperature and humidity	16.84	§482.41(c)(4) (A-0726)	
	25	Lack of documentation related to the maintaining, inspecting and testing	16.5	§482.41(b)(1)(i) (A-0710)	
	3	Annual testing of smoke detectors, duct detectors, etc.	14.4	§482.41(c)(2) (A-0724)	
EC.02.03.05	19	Automatic air handling unit (AHU) shutdown	13.6	§482.41(c)(2) (A-0724)	
	4	Annual testing of visual and audible fire alarms	11.43	§482.41(c)(2) (A-0724)	
	2	Water flow device testing	10.3	§482.41(c)(2) (A-0724)	
	5	Quarterly testing of fire alarm notification to off-site fire responders	10.08	§482.41(c)(2) (A-0724)	
LS.02.01.10	9	Unprotected openings in fire rated walls and floors	24.21	§482.41(b)(1)(i) (A-0710)	
	5	Fire doors hardware and gaps	20.45	§482.41(b)(1)(i) (A-0710)	
	4	Openings in 2-hour fire rated walls for 1 1/2 hours	17.44	§482.41(b)(1)(i) (A-0710)	
	2	Hazardous storage area issues	20.6	§482.41(b)(1)(i) (A-0710)	
LS.02.01.30	11	Corridor doors	18.67	§482.41(b)(1)(i) (A-0710)	
	18	Smoke barriers do not have unsealed penetrations	13.5	§482.41(b)(1)(i) (A-0710)	
	4	Sprinkler piping not to be used to support other materials such as cables	16.84	§482.41(b)(1)(i) (A-0710)	
LS.02.01.35	14	Other observations	16.84	§482.41(b)(1)(i) (A-0710)	
	5	Sprinkler heads not corroded or painted	11.73	§482.41(b)(1)(i) (A-0710)	
	6	18" clear under sprinkler heads	10.98	§482.41(b)(1)(i) (A-0710)	
EC.02.02.01	5	Minimizes risk associated with selecting, handling, storing, transporting, using, and disposing of hazardous chemical	18.22	§482.41(a) (A-0701)	
	7	Minimize risk associated with selecting and using hazardous energy sources	11.28	§482.26(b) (A-0535)	
Top Eig	ght mo	st often scored standards with associated Elements of Performance that v	were scored		
	at	east 10% of the time during survey. Analysis period was 1/1/2014 – 6/30/2	2014.		



The JCPEP Implementation Timeline









Automated Suppression Sys. - LS.02.01.35 Aug/Sep 2016

Haz Mat/Waste Mgmt -EC.02.02.01 Oct/Nov 2016

Intended Audience:

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

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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 <u>American Society for Healthcare Engineering (ASHE</u>) to provide world class examples of successful compliance from high reliability organizations.

The Physical Environment Portal:

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

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November 12, 2015 SEMINAR | Exploring the Life Safety Chapter December 9, 2015 WEBINAR | 2015 Environment of Care and Life Safety Code Webinar Series: Session 4 Comply with tough EC, LS EM challenges Subscribe Now > Joint Commission Resources Web Store: Environment of Care Resources Need Additional Information? JCR Consulting

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Page 2 of 2

Accreditation Ce	runcation	Standards	Measuremei	nt le	opics	About Us	Daily Updat
Home > Utility Systems EC.02.05.01	l				C Twitter	Facebook	Google+ Share
Utility Systems EC	2.02.05.01					-	80ay 11.42 031, 30ly 23
Portal Modules	EC.02.05.01: systems	: The hospital n	nanages risks assoc	iated with i	its utility		
Portal Home	Standard Sco	ring Analysis				-	
Utility Systems EC.02.05.01	Standard	EP	Issue	% Non- compliant	COP	3	he Physical Environment I
EC.02.05.01 - Leadership		15 Air pressur changes in as the OR	e, filtration and air critical care areas such	32.78	§482.42 (A-0747)	Additional	Videos
EC.02.05.01 - Clinical Impact	EC.02.05.01	8 partial or co shutdown	system controls for omplete emergency	21.39	§48241(a) (A-0701)	> Tour: In	side an Air Handle
		Design and meet patier needs	Installation of utilities to t care and operational	10.39	§482.41 (A-0700)	George Ventilat	Mills explains ion
Visit ASHE FOCUS for more physical environment tools and resources.	An example of Issue: Properties for borne Con Risk: Hos Acquired I Impact: H Patients	of improved comp otect rom Air- ntaminates	Aging ventilation syste inability to deliver desir quality, results in non-c during survey, scored a Inability of the utility sy expected may result in a contaminates negatively already compromised p Patients are not protec contaminants, and the of considered to be a high organization. Equipment systems coo reliability is evaluated b Leadership, a strategic (terms resulting ed air volume ompliance id t EC.02.05.01 ystems to op air-borne y impacting a atient. ted from airb organization i ly reliable ndition and y Facilities w capital plan i	in the e or entified EP 15. erate as in orne s not	Joint (Resou > The Top Issues i > The Rol in Prese	Commission rccs D Five Hot Button in EC: Ventilation le of HVAC System: erving Patient Safet

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Page 1 of 2

Thursday 11:48 CST, July 23, 2015

EC.02.05.01 - Clinical Impact

Portal Modules

Portal Home

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

Utility Systems EC.02.05.01

EC.02.05.01 - Leadership

EC.02.05.01 - Clinical Impact

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)

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 soace is replaced. Studies have shown a relationship between ACH and infectious



Page 2 of 2





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ASHE Focus on Compliance



🛉 Home



COMPLIANCE HOME

Home > Compliance > Ec 02 05 01 > 01 > Room Pressurization

EC.02.05.01

The hospital manages risks associated with its utility systems. (August/September 2015)

LS.02.01.20 The hospital maintains the integrity of the means of egress. (October/November 2015)

EC.02.06.01

The hospital establishes and maintains a safe, functional environment. (December/January 2016)

EC.02.03.05 The hospital maintains fire safety equipment and fire safety building features. (February/March 2016)

LS.02.01.10

Building and fire protection features are designed and maintained to minimize the effects of fire, smoke, and heat. (April/May 2016)

LS.02.01.30

The hospital provides and maintains building features to protect individuals from the hazards of fire and smoke. (June/July 2016)

LS.02.01.35 The hospital provides and maintains equipment for extinguishing fires.



ROOM PRESSURIZATION

Certain rooms within a health care building should be positively or negatively pressurized with respect to surrounding areas. Positively pressurized rooms are usually designed to protect a patient, clean supplies, or equipment within the room. Negative pressure is used to contain airborne contaminants within a room. The 2014 FGI *Guidelines/Standard* 170-2013 provides lists of rooms that should be positively or negatively pressurized with respect to surrounding areas. The following are examples:

- Operating rooms
- Delivery rooms
- Trauma rooms
- Newborn intensive care
- Laser eye rooms
- Protective environment rooms
- Pharmacy
- Laboratory, media transfer
- Clean central medical and surgical supply rooms

A room may be pressurized so that it is positive with respect to adjacent areas for several reasons. It may be done to protect patients in operating rooms and protective environment rooms from airborne pathogens that may be present in adjacent areas. It may be done to protect sterile medical and surgical supplies in supply rooms from airborne contaminants that may be present in adjacent rooms. If these rooms are not properly pressurized, airborne contaminants from adjacent areas may be pulled into them. Increased concentrations of airborne bacteria, fungi, and viruses within these rooms may contaminate clean equipment or promote increases in nosocomial infections. Positively pressurized rooms are usually the cleanest environments in a hospital. Loss of positive pressure compromises the aseptic environment within the room.

According to the FGI Guidelines, the following are examples of rooms in hospitals and outpatient facilities that should be negatively pressurized with respect to adjacent areas:

- ER waiting rooms
- Radiology waiting rooms
- Triage
- Toilet rooms
- Airborne infection isolation (All) rooms
- Darkrooms
- Cytology, glass washing, histology, microbiology, nuclear medicine, pathology, and sterilizing laboratories
- Autopsy rooms
- Soiled workrooms or holding rooms
- · Soiled or decontamination room for central medical and surgical supply
- · Soiled linen and trash chute rooms
- Janitors' closets

Rooms such as airborne infection isolation rooms are negatively pressurized with respect to adjacent areas to prevent airborne contaminants (e.g., microbial pathogens, chemicals) from drifting to other areas. Loss of negative pressure within these rooms allows unpleasant odors to migrate through the building and may promote the spread of airborne contaminants. One common use of airborne infection isolation rooms is for patients with active tuberculosis, a disease caused by the bacteria *Mycobacterium*





Questions?





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