### 2018 UPDATES

George Mills, Director Department of Engineering







### LEADERSHIP VISION

Develop <u>one single, comprehensive</u> <u>method</u> of categorizing the risk associated with standards

### Survey Analysis For Evaluating Risk (SAFER) Matrix

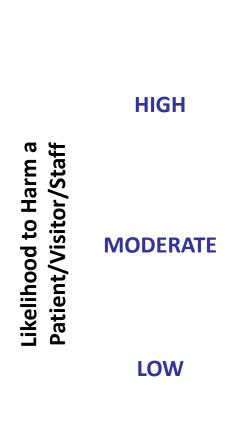


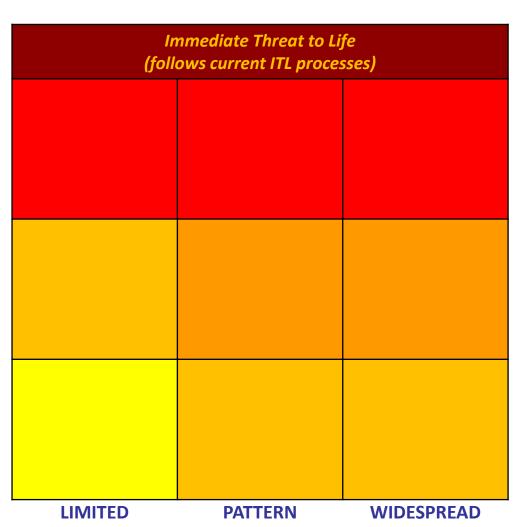
### POST-SURVEY FOLLOW-UP

For more information see January 2017 Perspectives



### A NEW SAFER MODEL





### How is Risk Determined?

- Operational definitions and "anchors"
- Surveyor experience and expertise will provide the support to determine the "scope" and "likelihood to harm" for the finding
- Based on the context of the finding
- Discussion amongst the survey team

### **CUSTOMER IMPACTS**

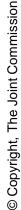
- No more Direct and Indirect EP designations
- ► All ESC now 60-day time frame
  - Consolidated Evidence of Standards Compliance (ESC) into one time frame
- No more Measures of Success (MOS)
- No more Opportunities for Improvement (OFIs)
- See it / Cite it Survey Methodology
- No more 'A' or 'C' categories
- ▼ 50% increase in EC & LS findings

### 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."

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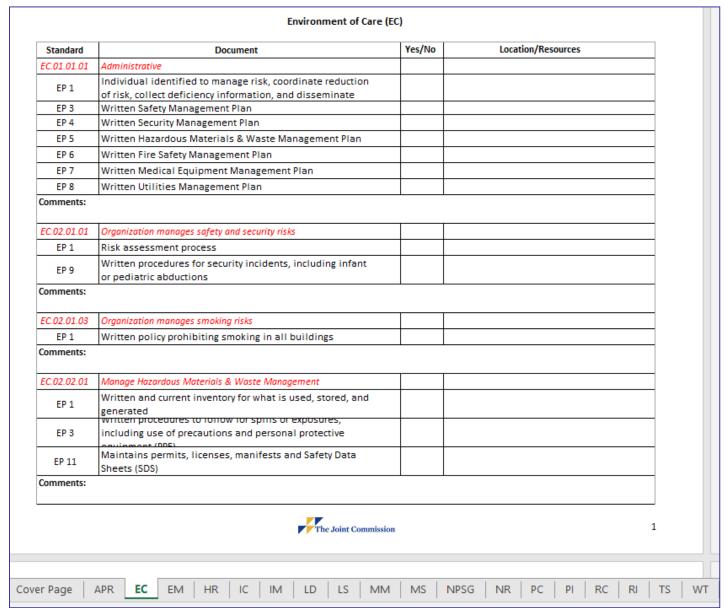


### HOSPITAL CLARIFICATIONS

- In 2016
  - 50% of Hospital Accreditation Programs (HAP) request Clarifications
  - 51% of HAP Clarifications are in the Environment of Care (EC) and Life Safety (LS) Chapters
  - Dominant clarification themes:
    - Lack of Documentation (65%)
    - Incorrect Findings
    - Survey Process Issues

- Embedded in the EPs is the icon
- ✓ NFPA\* requires documentation be available "UPON REQUEST"
  - \*See NFPA 25-2011 4.3 and NFPA 72-2012 14.6.3.2
- Required Documents not available at the time of survey generate Requirements for Improvements (RFIs) that are not eligible for clarification
  - □ The organization should review the "<u>Checklist</u> <u>of Required Documentation</u>" prior to the start of survey

### PRE-SURVEY CHECKLIST





### CMS EMERGENCY MANAGEMENT FINAL RULE AND THE JOINT COMMISSION'S EMERGENCY MANAGEMENT STANDARDS

George Mills, Director
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The Joint Commission



### CMS EMERGENCY MANAGEMENT: FINAL RULE

- CMS Final Rule September 16, 2016
  - Effective Date: November 15, 2016
  - Implementation Date: November 15, 2017
- ✓ Joint Commission submitted revised Emergency Management Chapter to CMS for review
- CMS sponsored portal:

https://www.cms.gov/Medicare/Provider-Enrollmentand-Certification/SurveyCertEmergPrep/Emergency-Prep-Rule.html



### JOINT COMMISSION EMERGENCY MANAGEMENT

- Six Functional Areas:
  - Communication
  - Resources & Assets
  - Staffing
  - Utilities
  - Safety & Security
  - Patient Care
- Exercises

### CMS EMERGENCY MANAGEMENT: FINAL RULE

- CMS Structure
  - Emergency Plan
  - Policies & Procedures
  - Communication Plan
  - Training and Testing
  - Integrated Healthcare Systems (option)
  - Transplant Hospitals
- Annual Review and Update of the functional areas of the Emergency Management program

### EMERGENCY PLAN

- Annual review and update of Emergency Plan
- Risk Analysis of Community-based risks
- Continuity of operations & succession plans
  - Succession plan of key leaders
- Document collaboration with Emergency Management community officials
  - local, tribal, regional, state, & federal

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### POLICIES & PROCEDURES

- Annual update of Policies & Procedures related to Emergency Management program
- Scope of responsibilities for evacuated patients
- Communication with external sources of assistance for emergency response
- Role of volunteers and integration of federal health care workers
- Subsistence needs of sheltered/evacuated patients & staff
- Inform state/local officials of on-duty staff & patients that can't be located

### COMMUNICATION PLAN

- Annual review and update
- Contact information on
  - Volunteers, Sub-contractors and Physicians
  - tribal groups
  - Specify primary/secondary means of communicating w/external authorities
- How information is provided on condition or location of patients to community & local ICS

### TRAINING & TESTING

- Annual documented training of all new and existing staff, contractors, volunteers in
  - emergency procedures
  - specific to their expected role in emergency management functions
- Two exercises per year
  - Facility/Community
  - Functional/Tabletop
    - NOT ALLOWED BY THE JOINT COMMISSION AS AN EXERCISE



### INTEGRATED HEALTHCARE SYSTEMS

- Integrated Healthcare Systems option
  - Participate in community-based assessment activities with the system
  - Establish coordinated system communication
  - Coordinate site and system emergency plans
  - Participate in site and system joint training
  - Participate in site and system joint exercises

### TRANSPLANT HOSPITALS

- If a hospital has one or more transplant centers
  - A representative from each transplant center must be included in the development and maintenance of the hospital's emergency preparedness program

### TRANSPLANT HOSPITALS

- If a hospital has one or more transplant centers
  - The hospital must develop and maintain mutually agreed upon protocols addressing the duties and responsibilities of the
    - Hospital

e Joint Commission

- each transplant center
- the organ procurement organization (OPO)
  - unless the hospital has been granted a waiver to work with another OPO, during an emergency

### LIGATURE RISKS



### EC.02.06.01 EP 1

- Interior spaces meet the needs of the patient population and are safe and suitable to the care, treatment and services provided.
  - □ Ligature/self harm risks (i.e. BHC)
    - Current Risk Assessment
    - Best Practice Guidelines
      - Design Guide for the Built Environment of Behavioral Health Facilities

### LIGATURE RISKS — PSYCHIATRIC SETTINGS

- Inpatient and Designated Non-behavioral settings for treatment
  - Ligature and self-harm risks identified and eliminated
  - No additional time beyond 60 days from last day of survey

See also *Joint Commission Online, May 24, 2017*<a href="https://www.jointcommission.org/issues">www.jointcommission.org/issues</a>

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### CFR TITLE 42: PUBLIC HEALTH... §488.28(D)

Ordinarily a provider or supplier is expected to take the steps needed to achieve compliance within 60days of being notified of the deficiencies, but the State survey agency may recommend that additional time be granted by the Secretary in individual situations, if in its judgment, it is not reasonable to expect compliance within 60-days, for example, a facility must obtain the approval of its governing body, or engage in competitive bidding



### LIGATURE RISKS — PSYCHIATRIC SETTINGS

- Process: self-harm risks identified
  - Determination if previously identified
  - Evaluate existing plans for removing the risks
  - Evaluate the environmental risk assessment process

See also *Joint Commission Online, May 24, 2017*<a href="https://www.jointcommission.org/issues">www.jointcommission.org/issues</a>

### LIGATURE RISKS — PSYCHIATRIC SETTINGS

- Further evaluation
  - Plans and policies on mitigation of harm posed by risks while removal occurs
  - Adequacy of staffing patterns to the mitigation plans
  - The patient suicide risk assessment process

See also *Joint Commission Online, May 24, 2017*<a href="https://www.jointcommission.org/issues">www.jointcommission.org/issues</a>

### LIGATURE RISKS — PSYCHIATRIC SETTINGS

- Further evaluation
  - Policies and practices related to actions needed for patients identified at risk
  - Policies and processes of ensuring staff awareness of a patient's level of risk
  - □ The organization's internal processes for improvement, including:
    - The history of patient safety events and the process for root cause analysis of these events



### LIGATURE RISKS — PSYCHIATRIC SETTINGS

- Further evaluation
  - □ The organization's internal processes for improvement, including:

### [continued]

- The organization's process for monitoring its compliance with its policies
- Actions taken when noncompliance was identified

### LIGATURE RISKS - NON BEHAVIORAL SETTINGS

- Not designated
  - Temporary location for psychiatric patient
    - Ligature/self-harm issues must be identified
    - Remove physical risks not required for treatment
      - If able

ne Joint Commission

- Implement surveillance if risks remain
- P&Ps adequately guide staff in assessment
- Implement measures based on patient needs

### **OCCUPANCIES**

### **EMERGENCY DEPARTMENTS**

### LS.02.01.10 EP 1: ED OCCUPANCY

### Health Care

□ Facilities that provide sleeping accommodations for persons who are mostly incapable of self-preservation, or that provide housing on a 24-hour basis for occupants, are classified as health care occupancies, per National Fire Protection Association (NFPA) 101-2012, 18/19.1.1.1.5 and 18/19.1.1.1.9.

See also *Joint Commission Online, May 24, 2017*<a href="https://www.jointcommission.org/issues">www.jointcommission.org/issues</a>



### LS.03.01.10 EP 1: ED OCCUPANCY

- Ambulatory Health Care
  - Used to provide services or treatment simultaneously to four or more patients that provides, on an outpatient basis, one or more of the following:
    - Treatment for patients that renders the patients incapable of taking action for selfpreservation under emergency conditions without the assistance of others
    - Anesthesia that renders the patients incapable of taking action for selfpreservation under emergency conditions without the assistance of others

### LS.03.01.10 EP 1: ED OCCUPANCY

- Ambulatory Health Care
  - Used to provide services or treatment simultaneously to four or more patients that provides, on an outpatient basis, one or more of the following:
    - Emergency or urgent care for patients who, due to the nature of their injury or illness, are incapable of taking action for self-preservation under emergency conditions without the assistance of others.

See also *Joint Commission Online, May 24, 2017*<a href="https://www.jointcommission.org/issues">www.jointcommission.org/issues</a>

## ADOPTION OF THE

LIFE SAFETY CODE (NFPA 101-2012)

AND

HEALTH CARE FACILITIES CODE (NFPA 99-2012)

#### SURVEY-RELATED DEFICIENCIES: PROCESS

- All survey-related deficiencies are cited as RFIs
- All survey-related deficiencies are to be corrected within 60-days from the end of survey
- For those survey related deficiencies that may take greater than 60 days the organization will need to create a SPFI within **30** days
  - This initiates the Time Limited Waiver request process
- Failure to complete the TLW on time will result in an AFS action

#### CFR TITLE 42: PUBLIC HEALTH... §488.28(D)

Ordinarily a provider or supplier is expected to take the steps needed to achieve compliance within 60days of being notified of the deficiencies, but the State survey agency may recommend that additional time be granted by the Secretary in individual situations, if in its judgment, it is not reasonable to expect compliance within 60-days, for example, a facility must obtain the approval of its governing body, or engage in competitive bidding



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#### TIME-LIMITED WAIVER (TLW)

If additional time is required the organization must submit a Time Limited Waiver

- This is managed in Salesforce, and a notification is sent to the organization affirming the TLW request submittal
- A second email is sent from the Department of Engineering accepting the application and forwarding it to CMS
  - This second notification will be used if a MEDDEF or ESC review occurs as Evidence of Compliance (ESC)
- A final decision will be emailed and the SOC SPFI will be modified



# INTERIM LIFE SAFETY MEASURES

- STANDARDS CHANGE
- Inclusion in the SPFI Process
- Inclusion in the Survey Process

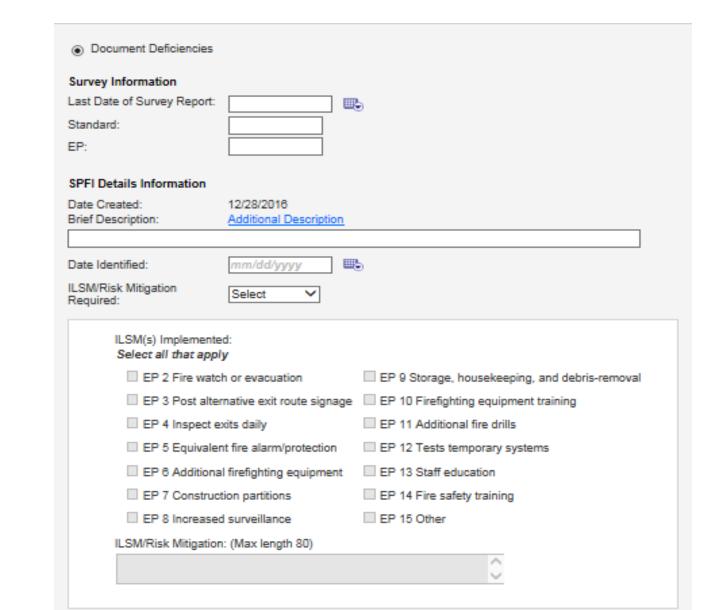
#### CHANGES TO THE ILSM PROCESS

- ILSM assessment occurs when a new SPFI is created
  - □ There is a drop down menu that includes the 14 ILSM in LS.01.02.01 (EP's 2 15)
  - The selected ILSM appear in the SPFI
- EC deficiencies may require ILSM (as needed)
- Survey process:
  - When a deficiency is discovered the surveyor will discuss which ILSM the organization will implement
  - □ The identified ILSM are included in the Requirement for Improvement (RFI)



## , , ,

#### CREATING A NEW SPFI WITH ILSM ASSESSMENT







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# **EXTENSIONS**

# EXTENSIONS ARE NO LONGER GRANTED

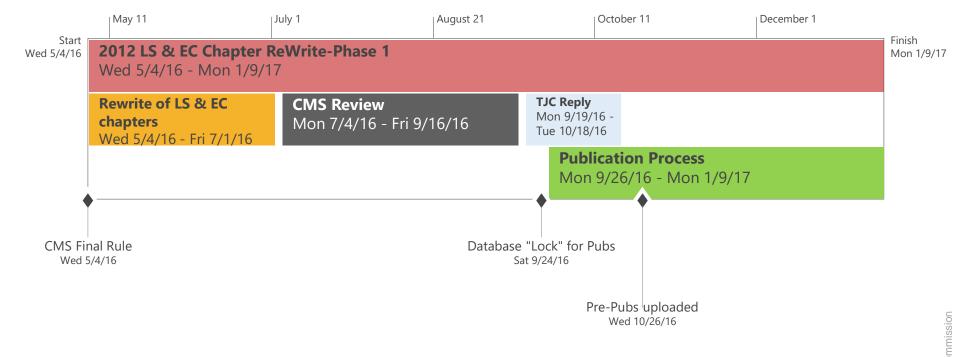
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#### 2017

#### **ADOPTION OF THE**

- LIFE SAFETY CODE (NFPA 101-2012)
- HEALTH CARE FACILITIES (NFPA 99-2012)

# Timeline for Creation of 2012 Standards — Part 1



## Timeline for Creation of 2012 Standards, K-Tag Creation, Phase Two





# 2018

# ENVIRONMENT OF CARE CHAPTER

#### EC.01.01.01 EP 3 (K921, K924)

- The organization has a library of
  - service manuals
  - instructions manuals
  - procedures provided by manufacturer's, maintenance manuals
  - technical bulletins
  - specification information and other information for the inspection, testing and maintenance of equipment and systems
- See NFPA 99-2012 10.5.3 and 10.5.6

#### EC.02.03.01 EP 9 (K711)

The written fire response plan describes ....

- how to assist and relocate patients, and how to evacuate to areas of refuge. [2017]
- □ Employees are periodically instructed and kept informed with their duties under the plan.
- □ A copy of the plan is readily available with the telephone operator or security. [2018]

Note: For additional guidance, see NFPA 101, 2012 edition, 18/19: 7.1; 7.2.



#### EC.02.03.01 EP 11 (K932)

The organization meets all other Health Care Facilities Code fire protection requirements, as related to NFPA 99-2012: Chapter 15.



#### EC.02.03.03 EP 4 (K933)

- Periodic evaluations are made related to fire loss prevention in operating rooms, including hazards that could be encountered during surgical procedures, and fire prevention procedures are established.
- Procedures are established for operating room emergencies including alarm activation, evacuation, equipment shutdown, and control operations.
- Emergency procedures include the control of chemical spills, and extinguishment of drapery, clothing and equipment fires.



#### EC.02.03.03 EP 4 (K933) (CONT.)

#### Continued ...

- Training is provided to new OR personnel (including surgeons), continuing education is provided, incidents are reviewed monthly, and procedures are reviewed annually.
- When flammable germicides or antiseptics are employed during surgeries utilizing electrosurgery, cautery or lasers:
  - packaging is non-flammable
  - applicators are in unit doses
  - ....

## EC.02.03.03 EP 4 (K933) (CONT.)

- Preoperative "time-out" is conducted prior the initiation of any surgical procedure to verify:
  - application site is dry prior to draping and use of surgical equipment
  - pooling of solution has not occurred or has been corrected
  - solution-soaked materials have been removed from the OR prior to draping and use of surgical devices
  - policies and procedures are established outlining safety precautions related to the use of flammable germicide or antiseptic use.
- (For full text refer to NFPA 99-2012: 15.13)

#### EC.02.03.05 EP 26 (K531)

✓ Elevator Firefighter's Service is operated monthly with a written record. NFPA 101-2012: 9.4.2.

#### EC.02.04.03 EP 8 (K931) (K919)

All occupancies containing hyperbaric facilities comply with construction, equipment, administration, and maintenance requirements of NFPA 99-2012, Chapter 14.

**NEW** 



#### EC.02.05.01 EP 2 (K901)

- Building systems are designed to meet Categories 1
   4 requirements.
  - These are established by formal and documented risk assessment procedure by qualified personnel.
  - See NFPA 99-2012 Chapter 4 for description of the four categories related to gas, vacuum, electrical and electrical equipment.

Suggested placement: EC.02.05.01 EP 2

**NEW** 



#### EC.02.05.01 EP 20 (K323)

Areas designated for administration of general anesthesia (i.e., inhalation anesthetics) using medical gases or vacuum are in accordance with 8.7 and NFPA 99.

- Zone valves are located immediately outside each anesthetizing location for medical gas or vacuum; readily accessible in an emergency; and arranged so shutting off any one anesthetizing location will not affect others.
- Area alarm panels are provided to monitor all medical gas, medical-surgical vacuum, and piped WAGD systems.



#### EC.02.05.01 EP 20 (CONT.)

#### Continued...

- Panels are at locations that provide for surveillance, indicate medical gas pressure decreases of 20% and vacuum decreases of 12-inch gauge HgV, and provide visual and audible indication.
- Alarm sensors are installed either on the source side of individual room zone valve box assemblies or on the patient/use side of each of the individual zone box valve assemblies.

For full text refer to NFPA 101-2012: 18/19.3.2.3; NFPA 99-2012: 5.1.4.8.7, 5.1.4.8.7.2, 5.1.9.3, 5.1.9.3.4, 6.4.2.2.4.2



#### EC.02.05.01 EP 21 (K323)

Areas designated for administration of general anesthesia (i.e., inhalation anesthetics) has the EES critical branch supplying power in accordance with 8.7 and NFPA 99.

The EES critical branch supplies power for task illumination, fixed equipment, select receptacles, and select power circuits, and EES equipment system supplies power to ventilation system.

For full text refer to NFPA 101-2012: 18/19.3.2.3; NFPA 99-2012: 6.4.2.2.4.2



#### EC.02.05.01 EP 22 (K323)

Areas designated for administration of general anesthesia (i.e., inhalation anesthetics) has the heating, cooling and ventilation systems in accordance with 8.7 and NFPA 99.

▶ Heating, cooling, and ventilation are in accordance with ASHRAE 170. Medical supply and equipment manufacturer's instructions for use are considered before reducing humidity levels to those allowed by ASHRAE.



## EC.02.05.01 EP 22 (K323) (CONT.)

#### Continued...

Supply and exhaust systems for windowless anesthetizing locations have smoke control system(s) to automatically vent smoke, prevent the recirculation of smoke originating within the surgical suite, and prevent the circulation of smoke entering the system intake, without interfering with exhaust function.

For full text refer to NFPA 101-2012: 18/19.3.2.3; NFPA 99-2012: 9.3.1, 9.3.3, 9.3.7, 9.3.8, 9.3.9.



#### EC.02.05.01 EP 23 (K913)

- Operating rooms are considered wet procedure locations, unless otherwise determined by a risk assessment conducted by the facility governing body.
- Operating rooms defined as wet locations are protected by either isolated power or ground-fault circuit interrupters.
- ➤ A written record of the risk assessment is maintained and available for inspection. (For full text refer to NFPA 99-2012: 6.3.2.2.8.4, 6.3.2.2.8.7, 6.4.4.2)



## EC.02.05.01 EP 25 (K914, K917)

- Hospital-grade receptacles at patient bed locations and where deep sedation or general anesthesia is administered
  - are tested after initial installation, replacement or servicing
    - In pediatric locations, receptacles in patient rooms, bathrooms, play rooms, and activity rooms (other than nurseries), are listed tamperresistant or employ a listed cover
  - Electrical receptacles or cover plates supplied from the life safety and critical branches have a distinctive color or marking
  - □ (For full text refer to NFPA 99-2012: 6.3.2; 6.3.3; 6.3.4; 6.4.2.2.6; 6.5.2.2.4.2; 6.6.2.2.3.2)



#### EC.02.05.01 EP 26

- All power strips are used with general precautions.
- Extension cords are not used as a substitute for fixed wiring of a structure.
  - Extension cords used temporarily are removed immediately upon completion of the purpose for which it was installed and meets the conditions of 10.2.4.
- (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)

#### EC.02.05.03 EP 3 (K292)

- The hospital provides emergency power within 10 seconds for new buildings equipped with or requiring the use of life support systems (electro-mechanical or inhalation anesthetics) have illumination of
  - means of egress
  - emergency lighting equipment
  - □ exit
  - emergency lighting at emergency generator locations
  - directional signs supplied by the life safety branch of the electrical system described in NFPA 99.

(For full text refer to NFPA 101-2012: 18.2.9.2, 18.2.10.5;

and NFPA 99-2012: 6.4.2.2.3)

Note: 6.4.2.2.3; and NFPA 110-2010, 4.1; Table 4.1(b)



#### EC.02.05.05 EP 7 (K914, K912)

Hospital-grade receptacles at patient bed locations and where deep sedation or general anesthesia is administered, are

- Tested after initial installation, replacement or servicing
- Additional testing is performed at intervals defined by documented performance data
- Receptacles not listed as hospital-grade at these locations are tested at intervals not exceeding 12 months.
- Line isolation monitors (LIM), if installed, are tested at intervals of ≤ 1 month by actuating the LIM test switch per 6.3.2.6.3.6, which activates both visual and audible alarm.



#### (CONT.)

#### Continued ...

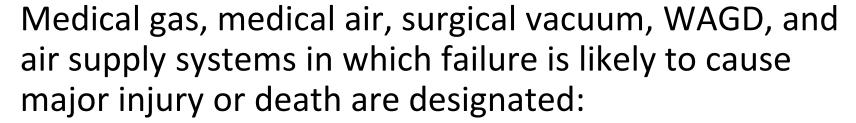
- For LIM circuits with automated self-testing, this manual test is performed at intervals ≤ 12 months.
- LIM circuits are tested per 6.3.3.3.2 after any repair or renovation to the electric distribution system.
- Records are maintained of required tests and associated repairs or modifications, containing date, room or area tested, and results.
- (For full text refer to NFPA 99-2012: 6.3.2; 6.3.3; 6.3.4)

#### EC.02.05.07 EP 5

- At least monthly, the hospital tests each emergency generator beginning with a cold start under load for at least 30 continuous minutes.
- The cool down period is not part of the 30 continuous minutes.
- The test results and completion dates are documented.
- For further information, refer to NFPA 99-2012: 6.4.4.1



#### EC.02.05.09 EP 1 (K903)



- Category 1: Systems in which failure is likely to cause minor injury to patients are designated
- Category 2: Systems in which failure is not likely to cause injury, but can cause discomfort is designated
- Category 3: Deep sedation and general anesthesia are not administered when using Category 3 medical gas system
- (For full text refer to NFPA 99-2012: 5.1.1.1; 5.2.1; 5.3.1.1; 5.3.1.5)



#### EC.02.05.09 EP 2 (K907)

✓ All master, area, and local alarm systems used for medical gas and vacuum systems comply with the appropriate Category warning system requirements. (For full text refer to NFPA 99-2012: 5.1.9, 5.2.9, 5.3.6.2.2)



#### EC.02.05.09 EP 5 (K909)

- The hospital makes main supply valves and area shutoff valves for piped medical gas and vacuum systems accessible and clearly identifies what the valves control.
- Piping is labeled by stencil or adhesive markers identifying the gas or vacuum system, including the name of system or chemical symbol, color code (see Table 5.1.11), and operating pressure if other than standard.

#### EC.02.05.09 EP 5 (CONT.)

#### Continued...

- Labels are at intervals not more than 20 ft., are in every room, at both sides of wall penetrations, and on every story traversed by riser.
- Piping is not painted.
- Shutoff valves are identified with
  - the name or chemical symbol of the gas or vacuum system,
  - room or area served,
  - caution to not use the valve except in emergency.
- (For full text refer to NFPA 99-2012: 5.1.11.1; 5.1.11.2; 5.1.14.3; 5.2.11; 5.3.13.3; 5.3.11)



#### EC.02.05.09 EP 6 (K906, K928, K929)

- The hospital implements a policy on all cylinders within the hospital that includes the following:
- Cylinders are labeled and handled in accordance with NFPA 99-2012 11.5.3.1 and 11.6.2
- Proper handling and transporting (for example, in carts, attached to equipment, on racks) to ensure safety
   Physically segregating full and empty cylinders from each other in order to assist staff in selecting the proper cylinder
- Adaptors or conversion fittings are prohibited
- Oxygen cylinders, containers, and associated equipment are protected from contact with oil and grease, from contamination, protected from damage, and handled with care



## EC.02.05.09 EP 6 (CONT.)

- Cylinders are kept away from heat and flammable materials, and are prevented from exceeding 130°F
- Nitrous oxide and carbon dioxide cylinders are prevented from reaching temperatures lower than manufacture recommendations or 20°F
- Valve protection caps are secured in place if supplied and cylinder is not in use
- Labeling empty cylinders

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Note: (For full text refer to NFPA 99-2012: 5.1.3.2; 5.1.3.3; 5.2.3.2; 5.2.3.3; 5.3.6.20; 11.6.2; 11.6.2.3; 11.6.5; 11.6.5.2; 11.6.5.3; 11.7.3.2).
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#### EC.02.06.05 EP 3

The [ORGANIZATION] takes action based on its assessment to minimize risks during demolition, construction, renovation or general maintenance.

#### EC.03.03.01 EP 1

Personnel responsible for the maintenance, inspection and testing and use of medical equipment, utility systems and equipment, fire safety systems and equipment, and the safe handling of hazardous materials and waste are competent and receive continuing education and training.

(K50, K712, K718, K901, K907, K920, K921, K926, K933)



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## LIFE SAFETY CHAPTER

2018

#### LS.02.01.10 EP 2 (K111)

► EP 2 When building rehabilitation occurs, the hospital incorporates both NFPA 101-2012: chapters 18, 19 and 43 (Building Rehabilitation). (For full text, refer to NFPA 101-2012: Chapter 43; 18/19.1.1.4.3; 18.4.3.1 – 18.4.3.5 and 19.4.3)



#### LS.02.01.10 (K111)

EP 3: Any building undergoing change of use or change of occupancy classification complies with Chapter 43.7, unless permitted by 18/19.1.1.4.2.

EP 4: When an addition is made to a building the building is in compliance with Chapter 18 and Chapter 43.8 of the NFPA 101-2012 Life Safety Code.



#### LS.02.01.20 EP 11 (K211)

The capacity of the means of egress shall be in accordance with 7.3. (For full text refer to NFPA 101-2012: 18/19.2.3.1)

**NEW** 



#### LS.02.01.20 EP 33 (K291)

- ► EP 39 Illumination in the means of egress, including exit discharges, is arranged so that failure of any single light fixture or bulb will not leave the area in darkness (< 0.2 foot candles).</p>
- ✓ Emergency lighting of at least 1½-hour duration is provided automatically in accordance with 7.9.
- (For full text, refer to 101-2012: 18/19.2.8; 18/19.2.9.1; 7.8.1.4; 7.9.2)



## LS.02.01.20 EP 40 (K293)

- Exit signs are visible when the path to the exit is not readily apparent.
- Signs are adequately lit and have letters that are four or more inches high (or six inches high if externally lit).
- Exit and directional signs are displayed with continuous illumination also served by the emergency lighting system unless the building is one story with less than 30 occupants, and the line of exit travel is obvious.
- (For full text, refer to NFPA 101-2012: 18/19.2.10; 18/19.2.10.1; 18/19.2.10.5; 7.10.1.4; 7.10.1.5.1; 7.10.5; 7.10.6; 7.10.7)



#### LS.02.01.30 EP 6 (K325)

- ► EP 6 Alcohol-Based Hand Rubs (ABHR) are protected in accordance with 8.7.3.1, unless all conditions are met:
  - □ Corridor is at least 6 feet wide
  - Maximum individual dispenser capacity is 0.32 gal. (0.53 gal. in suites) of fluid and 18 oz. of Level 1 aerosols
  - □ Dispensers shall have a minimum of 4-foot horizontal spacing
  - □ Not more than an aggregate of 10 gallons of fluid or 135 oz. aerosol are used in a single smoke compartment outside a storage cabinet, excluding one individual dispenser per room



## LS.02.01.30 EP 6 (CONT.)

- Storage in a single smoke compartment greater than 5 gallons complies with NFPA 30
- Dispensers are not installed within 1 inch of an ignition source
- If floor is carpeted, the building is fully sprinkler protected
- ABHR does not exceed 95% alcohol •
- Operation of the dispenser shall comply with Section 18.3.2.6(11) or 19.3.2.6(11)
- ABHR is protected against inappropriate access

(For full text refer to NFPA 101-2012: 18/19.3.2.6; 8.7.3.1; CFR 416.44)



#### LS.02.01.34 EP 1 (K341)

A fire alarm system is installed with systems and components in accordance with NFPA 70, National Electric Code, and NFPA 72, National Fire Alarm Code to provide effective warning of fire in any part of the building.



## LS.02.01.34 EP 2 (K341)

- The master fire alarm control panel is located in an area with a smoke detector or is in an area that is a continuously occupied and protected environment, which is an area enclosed with one-hour—fire-rated walls and 3/4-hour—fire-rated doors.
- In areas not continuously occupied, detection is installed at each fire alarm control unit.
- In new occupancy, detection is also installed at notification appliance circuit power extenders, and supervising station transmitting equipment.
- Fire alarm system wiring or other transmission paths are monitored for integrity. (For full text refer to NFPA 101-2012: 18/19.3.4.1; 9.6; 9.6.1.8; 9.6.4; 9.6.6)



## LS.02.01.34 EP 4 (K342)

- Initiation of the fire alarm system is by manual means and by any required sprinkler system alarm, detection device, or detection system.
- Manual alarm boxes are provided in the path of egress near each required exit.
  - Manual alarm boxes in patient sleeping areas shall not be required at exits if manual alarm boxes are located at all nurse's stations or other continuously attended staff location,
    - provided alarm boxes are visible, continuously accessible, and 200 feet travel distance is not exceeded.
  - □ (For full text refer to NFPA 101-2012: 18/19.3.4.2.1; 18/19.3.4.2.2; 9.6.2.5)
- Suggested placement: LS.02.01.34 EP 3



#### LS.02.01.34 EP 6 (K344)

Activation of the required fire alarm control functions occurs automatically and is provided with an alternative power supply in accordance with NFPA 72. (For full text refer to NFPA 101-2012: 18/19.3.4.4; 9.6.1; 9.6.5; NFPA 72)



#### LS.02.01.34 EP 8 (K347)

Smoke detection systems are provided in spaces open to corridors as required by 18/19.3.6.1. (For full text refer to NFPA 101-2012: 18/19.3.4.5.2; 18/19.3.6.1)



#### LS.02.01.50 EP 1 (K511)

✓ Equipment using gas or related gas piping complies with NFPA 54, National Fuel Gas Code, electrical wiring and equipment complies with NFPA 70, National Electric Code. Existing installations can continue in service provided they are not a hazard to life. (For full text refer to NFPA 101-2012: 18/19.5.1.1; 9.1.1; 9.1.2)



#### LS.02.01.50 EP 2 (K521)

✓ Heating, ventilation, and air conditioning will comply with 9.2 and will be installed in accordance with the manufacturer's specifications. (For full text refer to NFPA 101-2012: 18/19.5.2.1; 9.2)



## LS.02.01.50 EP 8 (K532)

- Escalators, dumbwaiters, and moving walks comply with the provisions of 9.4.
  - All existing escalators, dumbwaiters, and moving walks conform to the requirements of ASME/ANSI A17.3, Safety Code for Existing Elevators and Escalators.
  - Includes escalator emergency stop buttons and automatic skirt obstruction stop.
  - □ For power dumbwaiters, includes hoist way door locking to keep doors closed except for floor where car is being loaded or unloaded.
  - (For full text refer to NFPA 101-2012: 18/19.5.3; 9.4.2)



#### LS.02.01.70 EP 3 (K751)

- Draperies, curtains (including cubicle curtains) and loosely hanging fabric or films shall be in accordance with 10.3.1. (For full text refer to NFPA 101-2012: 18/19.7.5.1; 18/19.3.5.11; 10.3.1)
- NOTE: Exception: at showers and baths; on windows in patient sleeping room located in sprinklered compartments; and in non-patient sleeping rooms in sprinklered compartments where individual drapery or curtain panels do not exceed 48 square feet or total area does not exceed 20% of the wall.

#### LS.02.01.70 EP 7 (K771)

- When installed, new engineered smoke control systems are tested in accordance with NFPA 92, Standard for Smoke Control Systems.
- Existing engineered smoke control systems are tested in accordance with established engineering principles.
- Test documentation is maintained on the premises.
- (For full text refer to NFPA 101-2012: 18/19.7.7)

Standard	2016 Rank	% Non- compliant	EP	Summary	
	1	47	4	Manage systems for extinguishing fires including the integrity (nothing supported by sprinkler piping, missing escutcheons)	
LS.02.01.35		40	5	Sprinkler heads are not damaged. They are free of corrosion, foreign materials, paint, and have necessary escutcheon plates installed	
		34	14	Other issues, including:	



	Standard	Standard 2016 % Non- Rank compliant		EP	Summary
			46%	3	Building and fire protection features: Existing Hazardous Areas
	LS.02.01.30 2		32 18 Smoke Barrio		Smoke Barrier integrity
		2	30	11	Corridor doors
			28 2		Building and fire protection features: New Hazardous area doors
			19	23	Smoke Barrier doors

Standard	2016 Rank	% Non- compliant	EP	Summary
		73	8	Labels utility system controls to facilitate partial or complete emergency shutdowns
EC.02.05.01	3	38	15	In critical areas the organization manages risk associated with Utility Systems, including - Supply, Exhaust, Filtration and Air Exchanges (ac/h)
		23	16	In non-critical areas the organization manages risk associated with Utility Systems, including - Supply, Exhaust, Filtration and Air Exchanges (ac/h)
EC.02.06.01	4	68	1	Maintain a safe, functional environment

	Standard	2016 Rank	% Non- compliant	EP	Summary	
		5	66%	7	Building and fire protection general requirements: Fire-rated door	
	LS.02.01.10			10	Building and fire protection general requirements: Barrier Penetrations	
			38	5	Ensure proper door rating	
	EC.02.02.01	6	62	5	Minimizes risk associated with selecting, handling, storing, transporting, using, and disposing of hazardous chemicals	
			25	12	Labels hazardous materials and waste	

	Standard	2016 Rank	% Non- compliant	EP	Summary
LS.		7	60	11	Means of Egress clear and unobstructed
	LS.02.01.20		24	13	Floors or compartments have two or more approved exits constructed remotely from one another
		7	60	6	Non-high risk utility equipment completion
[	EC.02.05.05		29	3	



Standard	2016 Rank	% Non- compliant	EP	Summary
EC.02.03.03	8	47	3	Fire drills
EC.02.05.09	9	35	6	Cylinder storage and handling
EC.02.03.05	10	25	10	Quarterly fire department water supply connections



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