

A personal membership group of the
American Hospital Association

2016 ASHE UPDATE

HESNI 3.31.16

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a personal membership group of the American Hospital Association
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Chad Beebe, AIA
Deputy Executive Director
Advocacy

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Agenda


- ASHE Programs
- Life Safety Code
- Focus on Compliance
- Risk Categories

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The American Hospital Association

- AHA represents and serves hospitals, health care networks, their patients and communities.
- ASHE is a Personal Membership Group (PMG) of AHA
- The PMGs are an individual's conduit to national hospital information



American Hospital Association



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ASHE

Mission
Dedicated to optimizing the health care physical environment

- Largest association dedicated to health care physical environment
- Nearly 12,000 members
- Diverse membership
- Trusted resource
- National influence



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12 Tactics to Achieve Influence

1. Unified voice
2. Reputation steward
3. Multilateral impact
4. Lobbying
5. Bipartisanship
6. Media relations



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12 Tactics to Achieve Influence


7. Self-regulation
8. Membership mobilization
9. Social media
10. Information resource
11. Coalition building
12. Events




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Benefits of ASHE Membership

- Membership types
 - Professional Active
 - Associate
 - Educator/Student
 - Retired





www.ashe.org/membership



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What to expect from ASHE...

- Issue Briefs
- Monographs
- LISTSERV
- *Inside ASHE*
- Webinars
- On Demand Learning
- Sustainability Roadmap
- Energy University
- Focus on Compliance

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53rd ASHE Annual Conference & Technical Exhibition

2016

53RD ASHE ANNUAL CONFERENCE AND TECHNICAL EXHIBITION

JULY 10-13, 2016 | DENVER, COLORADO





Earn up to 2.05 CEUs*
(20.5 contact hours) in just four days


*Includes separate registration of a preconference program



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2017 PDC Summit
March 12-15
Orlando, FL



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Save the dates!



CONFERENCE & EXPO
THE PREMIER EVENT IN FIRE AND LIFE SAFETY

JUNE 4-7, 2017
Boston, MA

Renew or Join NFPA by: December 1st, 2016

Be there to vote on your future!



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Quick Compare

Get a **10% discount** on the **NFPA Quick Compare™, Life Safety Code 2000 & 2012 for Health Care**, which explains significant changes impacting health care.



The discount applies to both the Quick Compare book and the handy online Quick Compare tool.


www.nfpa.org/ashe

<https://www.101qc.org/site/index>



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Focus on Compliance



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Physical Environment as a Priority

- Leadership must be aware
- Current physical environment requirements may be difficult to achieve
- Facilities staff must be fully educated in operating and maintaining building systems



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Intended Audience

- Hospital Leaders
- Clinicians
- Quality Coordinators
- Facility Managers



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Mission


- Provide a single authorized free resource addressing:
 - Frequently Identified Standards and Elements of Performance
 - Tools and resources to achieve compliance
 - Better patient care and patient safety



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Collaborative Effort

- ASHE and TJC
- Focus Task Force
- On-going Effort
- Got Stuff?
 - Submit online
 - Email to: jflannery@aha.org



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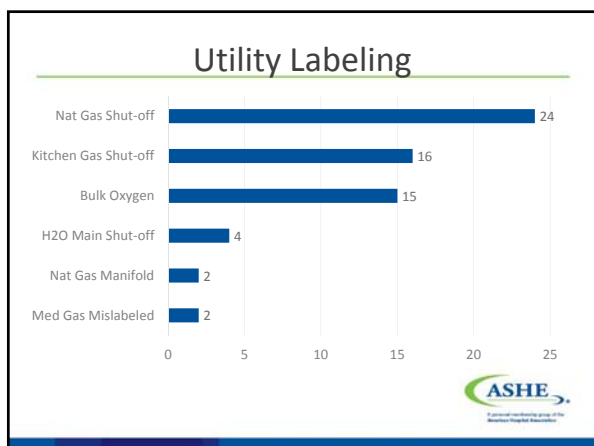
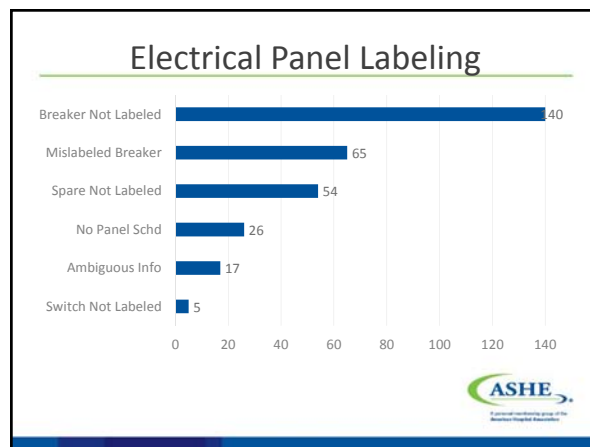


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EC.02.05.01 – Utility Systems

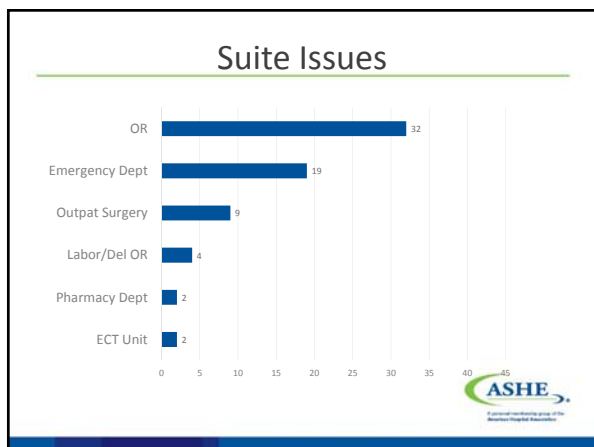
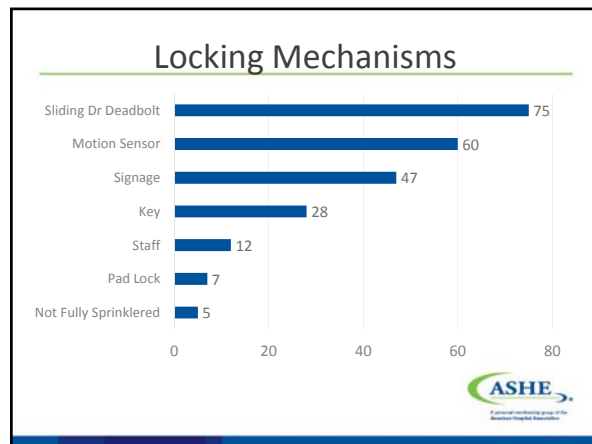
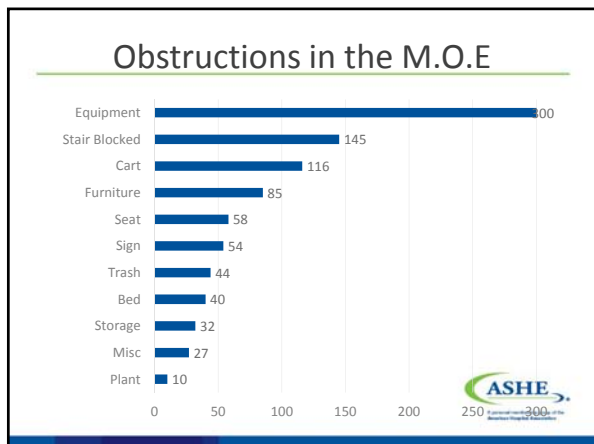
Standard	EP's Evaluated (10% or greater of findings within the Standard)	Top Findings (Based on 1,111 findings)
The hospital manages risks associated with its utility systems Aug/Sept 2015	EP 1 - The hospital designs and installs utility systems that meet patient care and operational needs.	Inappropriate Room Pressurization 469 findings (42.2%) (EP 15)
	EP 8 - The hospital labels utility system controls to facilitate partial or complete emergency shutdowns.	Failure to Label Electric Panels and Utilities – 363 findings (32.7%) (EP 8)
	EP 15 - In areas designed to control airborne contaminants (such as biological agents, gases, fumes, dust), the ventilation system provides appropriate pressure relationships, air-exchange rates, and filtration efficiencies.	Lack of Emergency Lighting 83 findings (7.5%) (EP 1) Inappropriate Electrical Issues 47 findings (4.2%) (EP 1)

LS.02.01.20 – Means of Egress

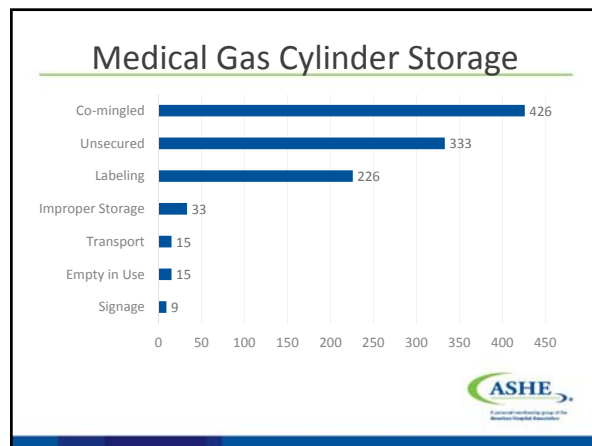
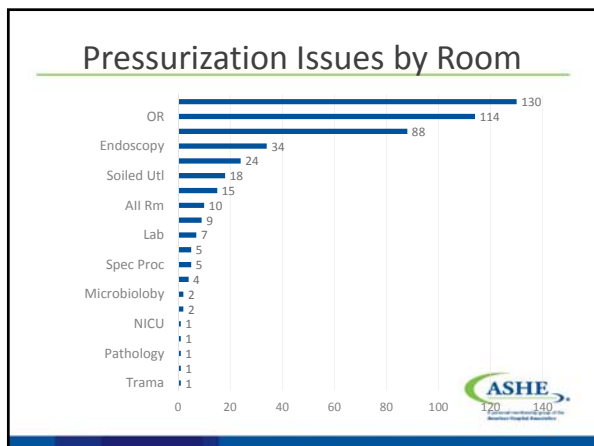
Standard	EP's Evaluated (10% or greater of findings within the Standard)	Top Findings (Based on 1,527 findings)
The hospital maintains the integrity of the means of egress. Oct/Nov 2015	EP 1 - Doors in a means of egress are not equipped with a latch or lock that requires the use of a tool or key from the egress side.	Obstructions in Means of Egress 911 findings (59.7%) (EP 13)
	EP 13 - Exits, exit accesses, and exit discharges are clear of obstructions or impediments to the public way, such as clutter (for example, equipment, carts, furniture), construction material, and snow and ice.	Inappropriate Locking Mechanism 452 findings (29.6%) (EP 1)
		Suite Issues 164 findings (10.7%) (EP13)

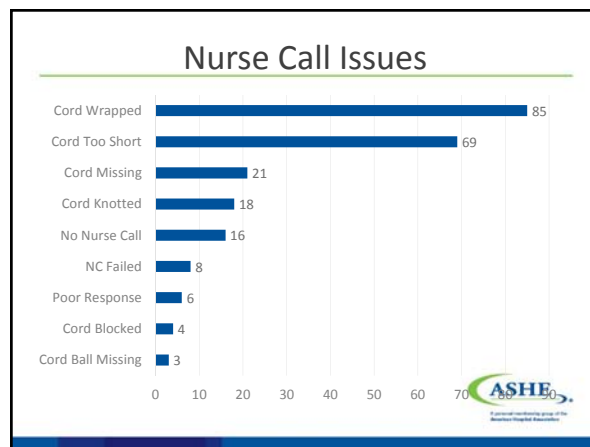
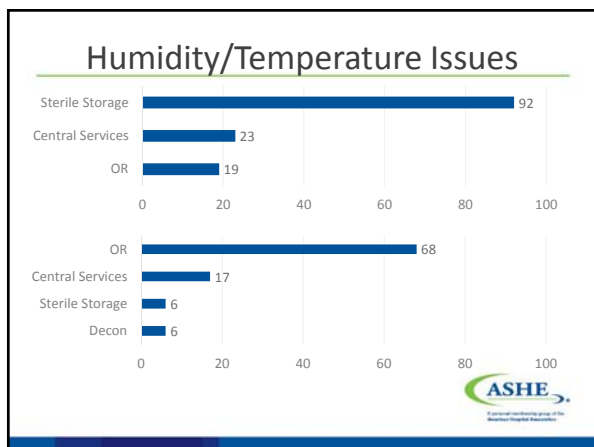
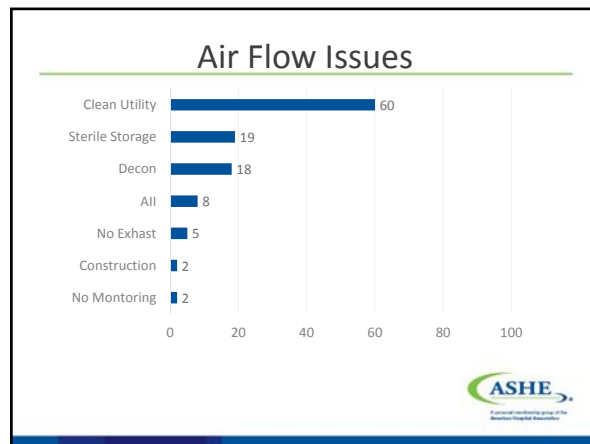
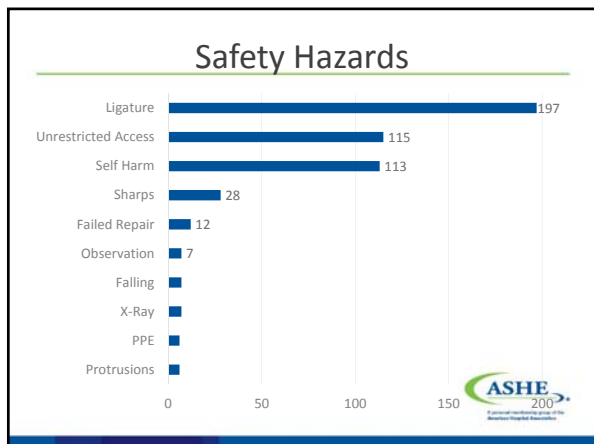




EC.02.06.01 – Built Environment

Standard	EP's Evaluated (10% or greater of findings within the Standard)	Top Findings (Based on 3,109 findings)
The hospital establishes and maintains a safe, functional environment. <small>Dec/Jan 2015/16</small>	EP 1 - Interior spaces meet the needs of the patient population and are safe and suitable to the care, treatment, and services provided.	Medical Gas Storage – Cylinder 934 findings (30.0%) (EP 1)
	EP 13 - The hospital maintains ventilation, temperature, and humidity levels suitable for the care, treatment, and services provided.	Safety Hazards 506 findings (16.3%) (EP 1) Air Flow & HVAC Issues 273 findings (8.8%) (EP 13) OR Humidity 238 findings (7.7%) (EP 13) Nurse Call – Pull Cord 205 findings (6.6%) (EP 1)





EC.02.03.05 – Fire Protection


Standard	EP's Evaluated (10% or greater of findings within the Standard)	Top Findings (Based on 2,172 findings)
The hospital maintains fire safety equipment and fire safety building features. Feb/Mar 2016	EP 2 - At least quarterly, the hospital tests water-flow devices. Every 6 months, the hospital tests valve tamper switches. The completion date of the tests is documented.	Lack of Inventory 651 findings (30.0%) (EP's 2, 3, 4, 19 & 25)
	EP 3 - Every 12 months, the hospital tests duct detectors, electromechanical releasing devices, heat detectors, manual fire alarm boxes, and smoke detectors. The completion date of the tests is documented.	
	EP 4 - Every 12 months, the hospital tests visual and audible fire alarms, including speakers. The completion date of the tests is documented.	Insufficient Documentation 618 findings (28.5%) (EP's 2, 3, 4, 5, 19 & 25)
	EP 5 - Every quarter, the hospital tests fire alarm equipment for notifying off-site fire responders. The completion date of the tests is documented.	

EC.02.03.05 – Fire Protection

Standard	EP's Evaluated (10% or greater of findings within the Standard)	Top Findings (Based on 2,172 findings)
The hospital maintains fire safety equipment and fire safety building features. Feb/Mar 2016	EP 19 - Every 12 months, the hospital tests automatic smoke-detection shutdown devices for air-handling equipment. The completion date of the tests is documented.	Standard not Listed 446 findings (20.5%) (EP 25)
	EP 25 - Documentation of maintenance, testing, and inspection activities for fire alarm and water-based fire protection systems includes the following: - Name of the activity - Date of the activity - Required frequency of the activity - Name and contact information, including affiliation, of the person who performed the activity - NPSA standard(s) referenced for the activity - Results of the activity	Incorrect Duration 316 findings (14.5%) (EP's 2, 3, 4, 5, & 19)

LS.02.01.10 – General

Standard	EP's Evaluated <small>(10% or greater of findings within the Standard)</small>	Top Findings <small>(Based on 2,354 findings)</small>
Building and fire protection features are designed and maintained to minimize the effects of fire, smoke, and heat. <small>April/May 2016</small>	EP 4 - Openings in 2-hour fire-rated walls are fire rated for 1 1/2 hours.	Fire Doors 1,203 findings (51.1%) (EP's 4 & 5)
	EP 5 - Doors required to be fire rated have functioning hardware, including positive latching devices and self-closing or automatic-closing devices. Gaps between meeting edges of door pairs are no more than 1/8 inch wide, and undercuts are no larger than 3/4 inch.	
	EP 9 - The space around pipes, conduits, bus ducts, cables, wires, air ducts, or pneumatic tubes that penetrate fire-rated walls and floors are protected with an approved fire-rated material.	Penetrations 1,041 findings (14.5%) (EP's 4 & 9)





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NFPA 99 Risk Categories

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Fundamental Change to Risk-Based

- NFPA 99 before 2012 (Occupancy Based)
 - Non-Patient Focused
- NFPA 2012 (Risk-Based)
 - Patient Focused



Why the Change?


- To provide equal level of safety to patients based on the risk to the patient
- Create flexibility in the design of healthcare organizations
- Equalize the cost of codes in comparison to the safety of the patient (put money where the risk is)



Poor Codes Cost Money without Improving Safety


Current Building Codes are:

- outdated
- conflicting
- unnecessary



Money spent each year unnecessarily

- \$6 billion in operational costs
- \$10 billion in capital costs




What does a 5.5% operating margin mean?

- For every \$1 in gross revenue
 - \$0.945 is required to cover the expense of providing services
 - \$0.055 is left to fund capital investments in new facilities and sustainment of legacy facilities
- Every \$1 of capital investment requires \$18.13 of gross revenue




What does a 5.5% operating margin mean?

- Example:
 - Citation made to require all penetrations of tack holes to be filled in any fire or smoke barrier throughout the hospital.
 - Hospital hires a contractor to go through facility at a cost of \$7,338.00
 - (1 person, 40 hours plus materials and tax)
 - Hospital needs to recover that money, so needs to bill \$133,037.90




NFPA 99 Risk Layout

Chapters 1-4	Administrative items
Chapters 5-9	Risk of systems
Chapters 10-11	Risk of equipment
Chapter 12	Risk of emergency management needs
Chapter 13	Security needs of all healthcare facilities (SVA)
Chapter 14	Hyperbaric facilities (type of chamber)
Chapter 15	Features of fire protection for all healthcare facilities



How the Code Works


- Determine what the room or space is used for.
- Determine the risk to the patient.
- Select the appropriate risk category.
- Select the systems or procedures in the code that are prescribed by that level of risk category.



Fundamentals (Chapter 4)

Risk Categories


- Category 1 - Facility systems in which failure of such equipment or system is likely to cause major injury or death of patients or caregivers shall be designed to meet system Category 1 requirements as defined in this code.



Fundamentals (Chapter 4)

Risk Categories


- Category 2 - Facility systems in which failure of such equipment is likely to cause minor injury to patients or caregivers shall be designed to meet system Category 2 requirements as defined in this code.



Fundamentals (Chapter 4)

Risk Categories


- Category 3 - Facility systems in which failure of such equipment is not likely to cause injury to the patients or caregivers, but can cause patient discomfort shall be designed to meet system Category 3 requirements as defined in this code.



Fundamentals (Chapter 4)

Risk Categories


- Category 4 - Facility systems in which failure of such equipment would have no impact on patient care shall be designed to meet system Category 4 requirements as defined in this code.



Fundamentals (Chapter 4)


Application

- The risk categories of chapter 4 shall apply to chapter 5-11.
- Chapter 12 contains it own categories
- Chapters 13 – 15 apply to all without different categories.





Fundamentals (Chapter 4)


- 4.2* Risk Assessment. Categories shall be determined by following and documenting a defined risk assessment procedure.
- A.4.2 Risk assessment should follow procedures such as those outlined in ISO 31010, NFPA 551, SEMI S10-0307 or other formal process. The results of the assessment procedure should be documented and records retained.



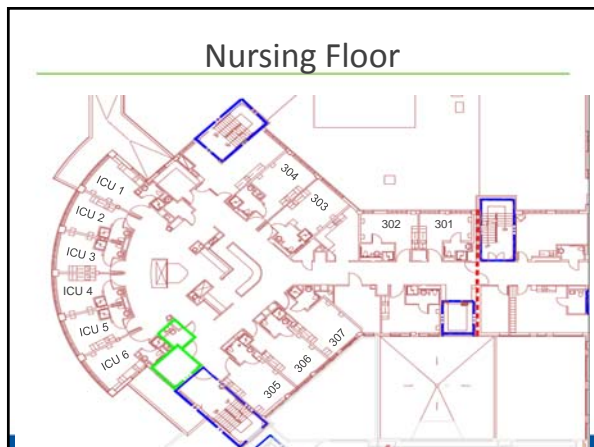
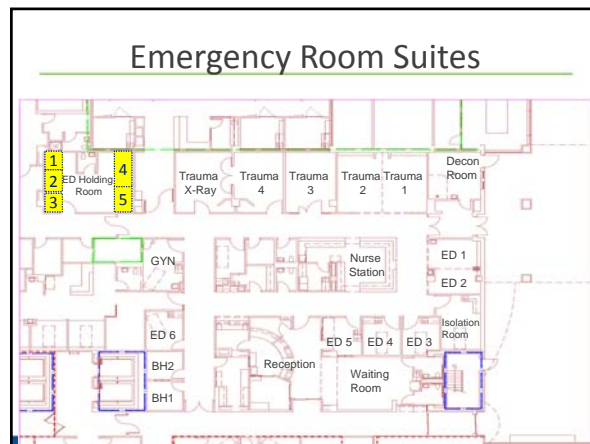
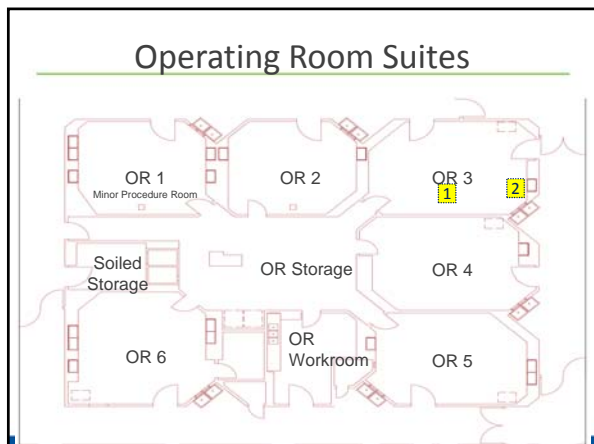
Sample Risk Assessment

Using the ASHE Risk assessment TOOL



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Risk Assessment Tool for Equipment

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Risk Assessment for Electrical Equipment (Chapter 10)

- 10.1* Applicability.
- 10.1.1 This chapter shall apply to the performance, maintenance, and testing of electrical equipment in health care facilities,
- as specified in Section 1.3.

Risk Assessment for Electrical Equipment

Electrical and Gas Equipment			
Equipment	Equipment Tag #	Risk	
Defibrillator			<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> 1 Health systems in which failure of such equipment is likely to cause major injury or death of patients or caregivers shall be designed to meet System Category 1 requirements as defined in 2015 ASHE 10.1.3.1. </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> 2 Health systems in which failure of such equipment is likely to cause minor injury to patients or caregivers shall be designed to meet System Category 2 requirements as defined in 2015 ASHE 10.1.3.1. </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> 3 Health systems in which failure of such equipment is not likely to cause injury to patients or caregivers but are used exclusively to provide other care designed to meet System Category 3 requirements as defined in 2015 ASHE 10.1.3.1. </div> <div style="border: 1px solid black; padding: 5px;"> 4 Health systems in which failure of such equipment would have no impact on patient care shall be designed to meet System Category 4 requirements as defined in 2015 ASHE 10.1.3.1. </div>
Ultrasound unit			
Anesthesia Delivery unit			
Ventilator			
Pulse Oximeter			
Vital Signs monitor			
Scale			
Infusion Pump			
Electronic Thermometer			
Contrast Injector			

Risk Assessment for Electrical Equipment

- Lets practice applying a risk assessment using the tool for electrical equipment



Defibrillator



Ultrasound



Anesthesia Cart



Ventilator



Scale






Risk Assessment of Gas Equipment (Chapter 11)


11.1 Applicability

11.1.1* This chapter shall apply to the use, at normal atmospheric pressure, of all of the following:

- (1) Nonflammable medical gases
- (2) Vapors and aerosols
- (3) Equipment required for the administration of 11.1.1(1) and (2)



Risk Assessment for Gas Equipment

Electrical and Gas Equipment 


Equipment	Equipment Tag #	Risk
Defibrillator		
Ultrasound unit		
Anesthesia Delivery unit		
Ventilator		
Pulse Oximeter		
Vital Signs monitor		
Scale		
Infusion Pump		
Electronic Thermometer		
Contrast injector		

1 Facility systems in which failure of such equipment or system is likely to cause "Major" status of death of patients or permanent injury are designated as "Level System Category 1" requirements as defined in this code.

2 Facility systems in which failure of such equipment is likely to cause injury, harm to patients or permanent injury are designated as "Level System Category 2" requirements as defined in this code.

3 Facility systems in which failure of such equipment is not likely to injure or permanently harm any individual equipment or patients, other than designated as "Level System Category 3" requirements as defined in this code.

4 Facility systems in which failure of such equipment would have no impact on patient care should be designated as "Level System Category 4" requirements as defined in this code.



Risk Assessment for Gas Equipment

- Lets practice applying a risk assessment using the tool for gas equipment



Regulator



Nasal Cannula



Non-Rebreather Mask



Nebulizer



Emergency Management

- 12.1.2 Applicability. This chapter shall be applicable to any health care facility that is intended to provide medical care during an emergency or maintain services for patients during a disaster and for the protection of visitors and staff.

- 12.3 Matrix Categories. The application of requirements in this chapter shall be based on the category of the healthcare facility.



Using the tool for
emergency
management

Emergency Management Categories

Emergency Management


1	These inpatient facilities that remain operable to provide advanced life support services to injured responders and disaster victims. These facilities manage the existing inpatient load as well as plan for the influx of additional patients as a result of an emergency.
2	These inpatient or outpatient facilities that augment the critical mission. These facilities manage the existing inpatient or outpatient loads but do not plan to receive additional patients as a result of an emergency.

Building	Category
Main Hospital	
Medical Office Building	
Same Day Surgery Center	
Oncology Center	
Radiation Clinic	
Office Lab/Draw	
Urgent Care Center	

Emergency Management Categories

- Lets practice applying the emergency management tool


Urgent Care Center



Same Day Surgery



Medical Office Building



Imaging Center



Radiation Oncology Center



Offsite Blood Draw



Questions?



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