

# Overview of 2012 NFPA 101 LIFE SAFETY CODE

**Bill Lauzon  
Heather Werner**

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Bill Lauzon Consulting**

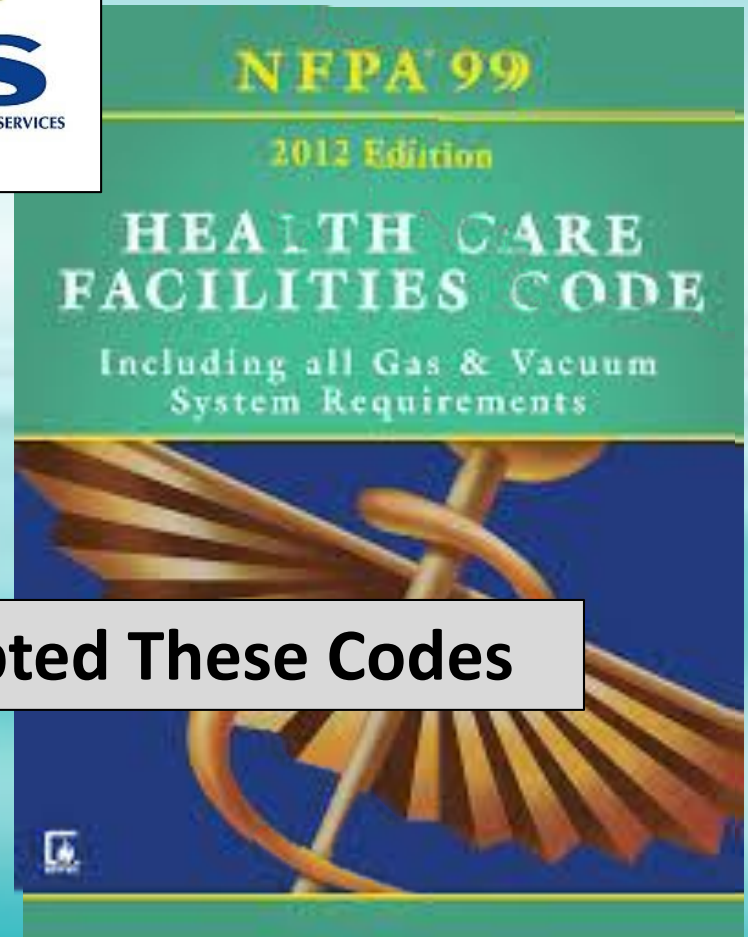
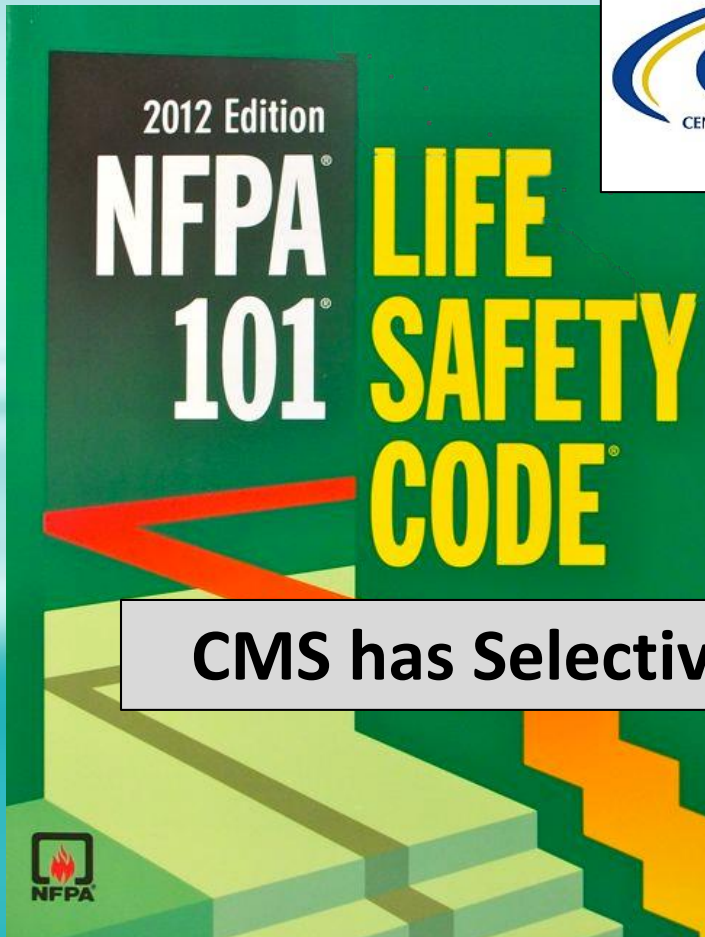


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**262-945-4567**

**WISCONSIN HEALTHCARE ENGINEERING ASSOCIATION**  
*Dedicated to Excellence in Healthcare Engineering*

# Overview of 2012 NFPA 101 LIFE SAFETY CODE



**CMS has Selectively Adopted These Codes**

**Overview of 2012 NFPA 101  
LIFE SAFETY CODE**

# AGENDA



# Overview of 2012 NFPA 101 LIFE SAFETY CODE

# AGENDA

1. Adoption Process
2. New Referenced Codes
3. Things CMS has Added
4. Things CMS has Changed
5. Things NFPA has Changed
6. New Documentation
7. Survey Forecasts

Most  
Time



# Lauzon Life Safety Consulting Bill Lauzon Consulting

This is a tough subject, detailed & new, with limited time available in a 90 min webinar. Therefore ... We make no claim of being all-inclusive of all changes that are in the new CMS codes; and make no claim to understand how these codes may be interpreted by the main AHJs out there. These are our best personal opinions at this time. Read the Code!



# 1. Adoption Process

- a) **Proposed Adoption** (April 2014)
- b) **Adoption** (July 2016)
- c) **Enforcement**

perma  
assumption, ac  
**adoption. verb**  
acquiring, aff  
advocacy, p  
ication

# a) Proposed Adoption

## Proposed Rule

DEPARTMENT OF HEALTH & HUMAN SERVICES  
Centers for Medicare & Medicaid Services  
7500 Security Boulevard, Mail Stop C2-21-16  
Baltimore, Maryland 21244-1850



Center for Clinical Standards and Quality/Survey & Certification Group

Ref: S&C: 14-21- LSC

April 18, 2014

State Survey Agency Directors  
State Fire Authorities

Director  
Survey and Certification Group

**Subject:** Publication of Notice of Proposed Rulemaking (NPRM) for Fire Safety Requirements – *Informational Only*

### Memorandum Summary

**Publication of NPRM for Fire Safety Requirements:** The Centers for Medicare & Medicaid Services (CMS) published a proposed rule that would amend the current fire safety standards for Medicare- and Medicaid-participating providers and suppliers. This proposed rule would adopt the 2012 edition of the Life Safety Code (LSC), National Fire Protection Association, (NFPA) 101. Comments may be accepted until 5 pm EST June 16, 2014.

On April 16, 2014 CMS published a proposal to revise the edition of the LSC referenced in Requirements, Conditions of Participation and Conditions for Coverage for long term care facilities, hospitals, critical access hospitals, ambulatory surgical centers, hospices that provide inpatient services, religious non-medical health care institutions, and programs of all-inclusive care for the elderly facilities. The proposal would eliminate references to all earlier editions of the LSC. CMS also proposes to adopt the 2012 edition of the Health Care Facilities Code, NFPA 99, with some exceptions.

The proposed rule may be viewed at: <https://federalregister.gov/a/2014-08602>, which provides details on how to submit comments. Public comments are due no later than June 16, 2014.

**Effective Date:** Proposed. Comments may be accepted until 5 pm EST June 16, 2014.

/s/  
Thomas E. Hamilton



**FEDERAL REGISTER**  
The Daily Journal of the United States Government

**Published  
Wed April 16, 2014**

## b) Adoption

### ADOPTED Rule



**FEDERAL REGISTER**  
The Daily Journal of the United States Government

**Published**  
**Wed May 4, 2016**

**EFFECTIVE**  
**Tue July 5, 2016**



## FEDERAL REGISTER

Vol. 81                      Wednesday,  
No. 86                      May 4, 2016

Part II

Department of Health and Human Services

Centers for Medicare & Medicaid Services

42 CFR Parts 403, 416, 418, et al.

Medicare and Medicaid Programs; Fire Safety Requirements for Certain Health Care Facilities; Final Rule

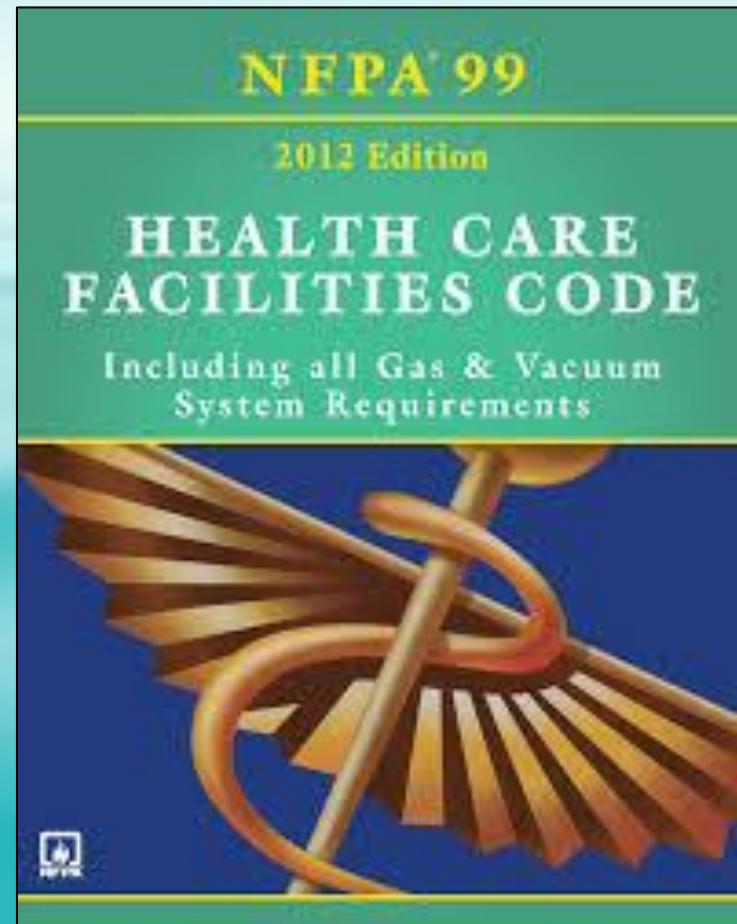
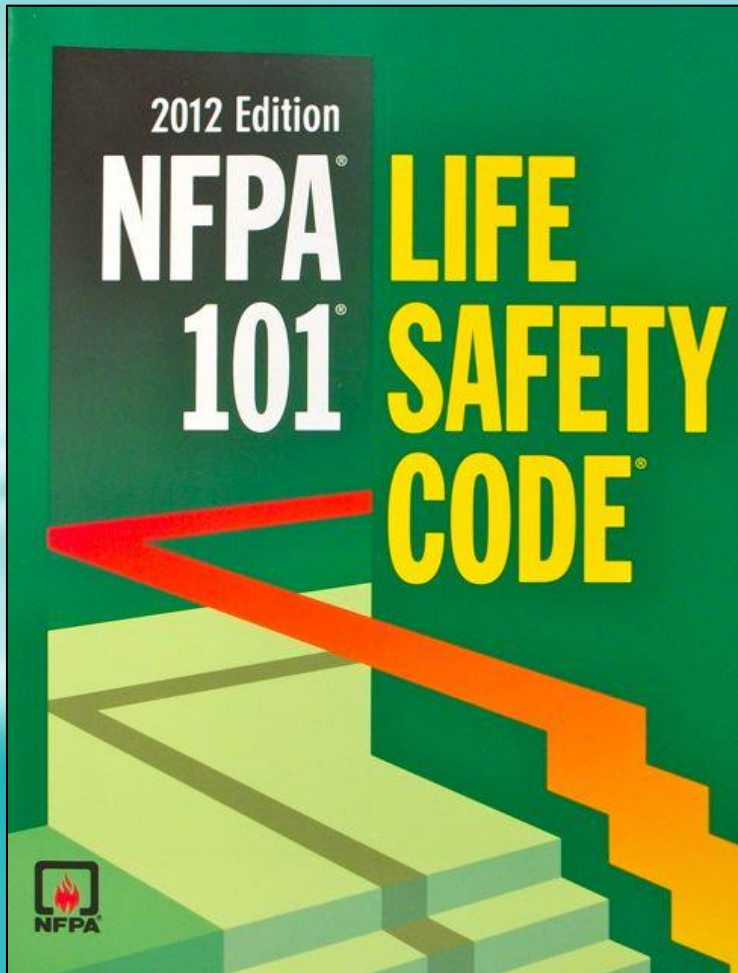


## b) Adoption

2012 NFPA Editions, Issued Aug 11, 2011

+ TIAs

Temporary Interim Amendments  
(prior to proposal date)





## b) Adoption

### NFPA Editions, Issued Aug 11, 2011

## + (4) TIAAs for NFPA 101

- TIA 12-1, issued 8/11/2011  
(Revised Table 8.3.4.2 on Openings in Fire & Smoke Barriers, p.89)
- TIA 12-2, issued 10/30/2012  
(18/19.3.2.5.3) Added Smk Det Info -Corridor Cooking, p.192/209)
- TIA 12-3, issued 10/22/2013  
(Revised Table 17.1.6.1-Constr Types in Educ Occupancies
- TIA 12-4, issued 10/22/2013  
(19.2.2.2.5.2) Fixed sprinkler code ref for Special Locking, p.204)

## b) Adoption

**NFPA Editions, Issued Aug 11, 2011**

**+ (4) TIAAs for NFPA 101**

- **TIA 12-1, issued 8/11/2011  
(Revised Table 8.3.4.2 on Openings in Fire & Smoke Barriers, p.89)**
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(18/19.3.2.5.3) Added Smk Det Info -Corridor Cooking, p.192/209)**
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(Revised Table 17.1.6.1-Constr Types in Educ Occupancies**
- **TIA 12-4, issued 10/22/2013  
(19.2.2.2.5.2) Fixed sprinkler code ref for Special Locking, p.204)**

## b) Adoption

### NFPA Editions, Issued Aug 11, 2011

## + (5) TIAs for NFPA 99

- TIA 12-2, issued 8/11/2011  
(Added Chapter 9 on HVAC)
- TIA 12-3, issued 8/09/2012  
(Electrical-Revised 6.6.2.2.3.2 for Type 3 EES)
- TIA 12-4, issued 3/7/2013  
(Med Gas-5.1.1.6 Added Code Ref applicable to Existing HC)
- TIA 12-5, issued 8/1/2013  
(Elec Equip-10.2.3.6(5) Deleted Power Taps at Isolated Power Sys)
- TIA 12-6, issued 8/3/2014  
(Gas Equip-11.5.1.1 Revised Sources of Ignition when O2 used)

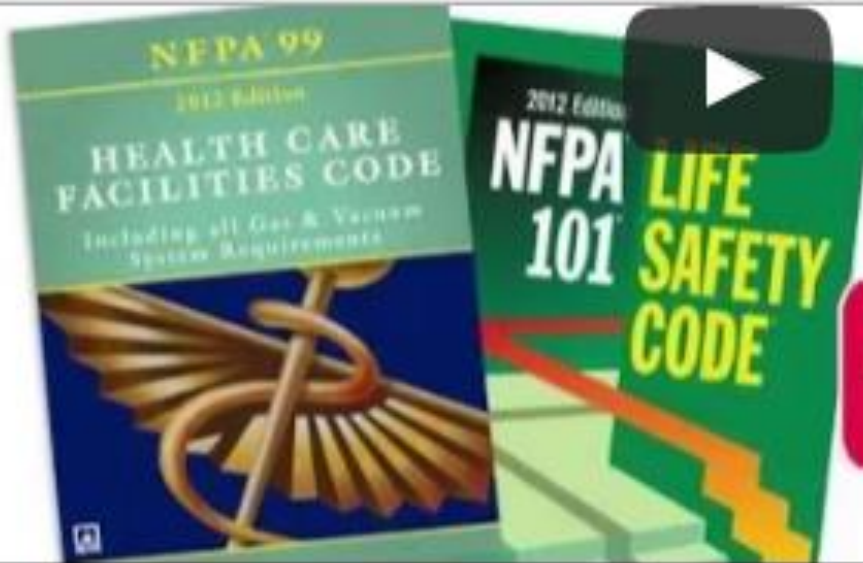
## b) Adoption

**NFPA Editions, Issued Aug 11, 2011**

### **+ (5) TIAs for NFPA 99**

- TIA 12-2, issued 8/11/2011  
(Added Chapter 9 on HVAC)
- TIA 12-3, issued 8/09/2012  
(Electrical-Revised 6.6.2.2.3.2 for Type 3 EES)
- TIA 12-4, issued 3/7/2013  
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- TIA 12-6, issued 8/3/2014  
(Gas Equip-11.5.1.1 Revised Sources of Ignition when O2 used)

## b) Adoption



**TRAINING**  
Available from  
many sources

**EXCLUSIVE VIDEO**  
in NFPA Xchange

**VIDEO PREVIEW:** NFPA's Jonathan Hart provides an in-depth overview of the 2012 editions of NFPA 101 and NFPA 99. [Watch the full, hour-long video for free on NFPA Xchange.](https://community.nfpa.org/community/xchange-exclusives/blog/2016/05/19/cms-adoption-of-the-2012-editions-of-nfpa-101-and-99)

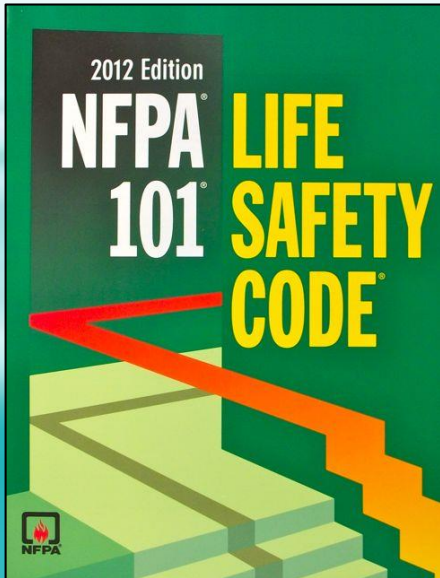
<https://community.nfpa.org/community/xchange-exclusives/blog/2016/05/19/cms-adoption-of-the-2012-editions-of-nfpa-101-and-99>



## c) Enforcement

### 1. Effective Date for Construction...July 5, 2016 (New vs Existing)

### 2. Effective Date for Survey.....TBD



DEPARTMENT OF HEALTH & HUMAN SERVICES  
Centers for Medicare & Medicaid Services  
7500 Security Boulevard, Mail Stop 92-12-25  
Baltimore, Maryland 21244-9801

**CMS**  
CENTERS FOR MEDICARE & MEDICAID SERVICES

Center for Medicare and State Operations/Survey and Certification Group

DATE: April 10, 2009  
TO: State Survey Agency Directors  
FROM: Director  
Survey and Certification Group  
SUBJECT: **Nursing Homes** - Issuance of Revisions to Interpretive Guidance at Several Tags, as Part of Appendix PP, State Operations Manual (SOM), and Training Materials

Ref: S&C-09-31

**Memorandum Summary**

- Revisions have been made to Guidance to Surveyors at several Tags in Appendix PP of SOM concerning Quality of Life and Environment.
- Tag F255 (closets) is deleted and regulatory language and Guidance moved to F461.
- A training document with speaker notes for Centers for Medicare & Medicaid Services (CMS) Regional Offices (ROs) and State Survey Agencies (SAs) to use to train surveyors in this revision to the SOM is included in this memorandum.
- Power point slides will be issued to ROs and SAs under a separate communication.

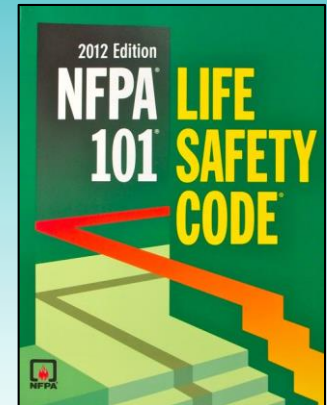
We made changes to the Guidance to Surveyors for several Quality of Life and Environment section Tags in Appendix PP of the SOM in response to public recommendations from the 2008 CMS/Priorities Network, Environment Symposium. These changes add clarifications to assist surveyors in determining compliance with these Tags. Regulatory language is unchanged.

We deleted F255, which contained language about closets and have moved the regulatory text and guidance from F255 to F461 which also covers closets. In addition, since the release of guidance for F371 Sanitary Conditions, we received many questions regarding a Note in the Guidance about compliance with the food government requirements of this Tag when residents accept food brought in by visitors. We have made a change to this Note to clarify that the food government regulations for providers are not intended to diminish the right of residents to accept food from visitors. Since F371 is a long Tag and the change is only to one sentence, for the Advance Copy, we have reprinted only a portion of F371 where this sentence resides. A notice has been placed in the Advance Copy that specifies that all other language at F371 remains the same.

### CMS Timetable of 2000 LSC

- Fed Reg on Jan 10, 2003
- (+2 mo) Effective date Mar 11
- (+ 4 mo) Survey date announced in S&C 03-21 on May 8
- (+4 mo) Survey Effective Date of Sept 11

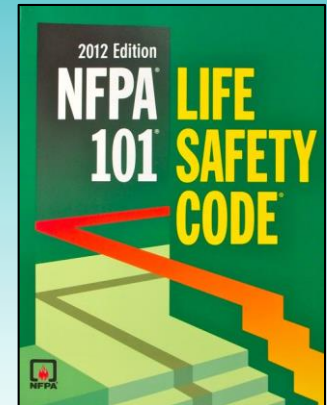
## c) Enforcement



### **LSC Says: Must Meet 2012 NEW REQUIREMENTS**

- IF building plans approved after July 5, 2016
- or
- IF begin construction after July 5, 2016

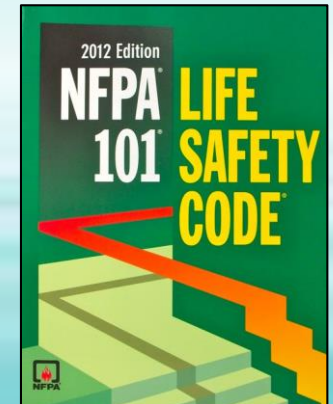
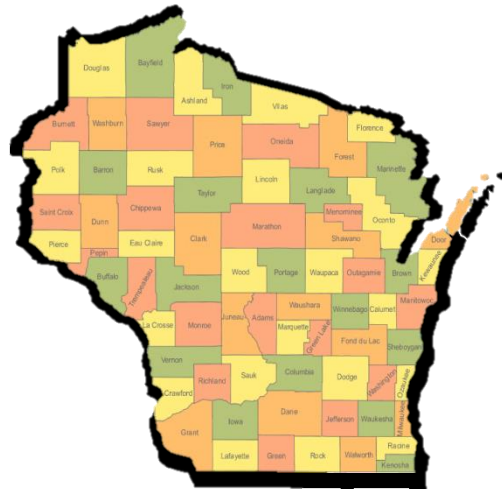
## c) Enforcement



Knowing how long it typically takes DQA to review and approve plans, it is probable that all plans submitted now should be based on the 2012 code.

## c) Enforcement

**However, CMS has no jurisdiction in Wis plan review,**



**so it is unclear how officially things will play out in Wis.**











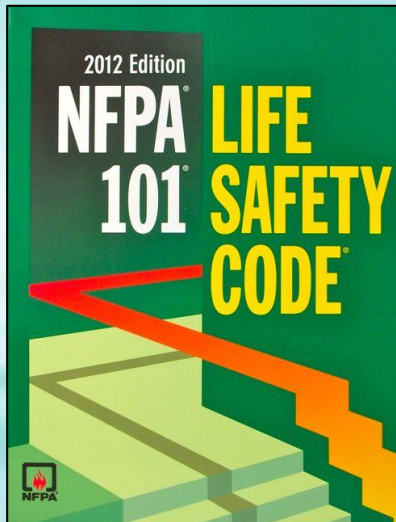
## 2. New Referenced Codes



**GET READY  
For a whole  
NEW  
Set of Code Books**

## 2. New Referenced Codes

Found in  
Chapter 2



Full List at  
[Lauzon-LSC.com](http://Lauzon-LSC.com)

Page 1  
NFPA Codes

differ from the requirements of this Code, the requirements of this Code shall govern.

- (3)\*Existing buildings or installations that do not comply with the provisions of the codes or standards referenced in this chapter shall be permitted to be continued in service, provided that the lack of conformity with these documents does not present a serious hazard to the occupants as determined by the authority having jurisdiction.

**2.2\* NFPA Publications.** National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

NFPA 10, *Standard for Portable Fire Extinguishers*, 2010 edition.

NFPA 11, *Standard for Low-, Medium-, and High-Expansion Foam*, 2010 edition.

NFPA 12, *Standard on Carbon Dioxide Extinguishing Systems*, 2011 edition.

NFPA 12A, *Standard on Halon 1301 Fire Extinguishing Systems*, 2009 edition.

NFPA 13, *Standard for the Installation of Sprinkler Systems*, 2010 edition.

NFPA 13D, *Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes*, 2010 edition.

NFPA 13R, *Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height*, 2010 edition.

NFPA 14, *Standard for the Installation of Standpipe and Hose Systems*, 2010 edition.

NFPA 15, *Standard for Water Spray Fixed Systems for Fire Protection*, 2012 edition.

NFPA 16, *Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems*, 2011 edition.

NFPA 17, *Standard for Dry Chemical Extinguishing Systems*, 2009 edition.

NFPA 17A, *Standard for Wet Chemical Extinguishing Systems*, 2009 edition.

NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*, 2011 edition.

NFPA 30, *Flammable and Combustible Liquids Code*, 2012 edition.

NFPA 30B, *Code for the Manufacture and Storage of Aerosol Products*, 2011 edition.

NFPA 31, *Standard for the Installation of Oil-Burning Equipment*, 2011 edition.

NFPA 40, *Standard for the Storage and Handling of Cellulose Nitrate Film*, 2011 edition.

NFPA 45, *Standard on Fire Protection for Laboratories Using Chemicals*, 2011 edition.

NFPA 54, *National Fuel Gas Code*, 2012 edition.

NFPA 58, *Liquefied Petroleum Gas Code*, 2011 edition.

NFPA 70®, *National Electrical Code®*, 2011 edition.

NFPA 72®, *National Fire Alarm and Signaling Code*, 2010 edition.

NFPA 80, *Standard for Fire Doors and Other Opening Protectives*, 2010 edition.

NFPA 82, *Standard on Incinerators and Waste and Linen Handling Systems and Equipment*, 2009 edition.

NFPA 88A, *Standard for Parking Structures*, 2011 edition.

NFPA 90A, *Standard for the Installation of Air-Conditioning and Ventilating Systems*, 2012 edition.

NFPA 92, *Standard for Smoke Control Systems*, 2012 edition.

NFPA 96, *Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations*, 2011 edition.

NFPA 99, *Health Care Facilities Code*, 2012 edition.

NFPA 101A, *Guide on Alternative Approaches to Life Safety*, 2010 edition.

NFPA 105, *Standard for Smoke Door Assemblies and Other Opening Protectives*, 2010 edition.

NFPA 110, *Standard for Emergency and Standby Power Systems*, 2010 edition.

NFPA 111, *Standard on Stored Electrical Energy Emergency and Standby Power Systems*, 2010 edition.

NFPA 160, *Standard for the Use of Flame Effects Before an Audience*, 2011 edition.

NFPA 170, *Standard for Fire Safety and Emergency Symbols*, 2009 edition.

NFPA 204, *Standard for Smoke and Heat Venting*, 2012 edition.

NFPA 211, *Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances*, 2010 edition.

NFPA 220, *Standard on Types of Building Construction*, 2012 edition.

NFPA 221, *Standard for High Challenge Fire Walls, Fire Walls, and Fire Barrier Walls*, 2012 edition.

NFPA 241, *Standard for Safeguarding Construction, Alteration, and Demolition Operations*, 2009 edition.

NFPA 251, *Standard Methods of Tests of Fire Resistance of Building Construction and Materials*, 2006 edition.

NFPA 252, *Standard Methods of Fire Tests of Door Assemblies*, 2008 edition.

NFPA 253, *Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source*, 2011 edition.

NFPA 257, *Standard on Fire Test for Window and Glass Block Assemblies*, 2007 edition.

NFPA 259, *Standard Test Method for Potential Heat of Building Materials*, 2008 edition.

NFPA 260, *Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture*, 2009 edition.

NFPA 261, *Standard Method of Test for Determining Resistance of Mock-Up Upholstered Furniture Material Assemblies to Ignition by Smoldering Cigarettes*, 2009 edition.

NFPA 265, *Standard Methods of Fire Tests for Evaluating Room Fire Growth Contribution of Textile or Expanded Vinyl Wall Coverings on Full Height Panels and Walls*, 2011 edition.

NFPA 271, *Standard Method of Test for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter*, 2009 edition.

NFPA 286, *Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth*, 2011 edition.

NFPA 288, *Standard Methods of Fire Tests of Floor Fire Door Assemblies Installed Horizontally in Fire Resistance-Rated Floor Systems*, 2007 edition.

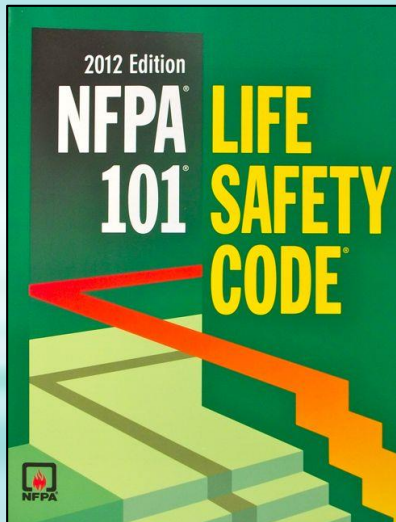
NFPA 289, *Standard Method of Fire Test for Individual Fuel Packages*, 2009 edition.

NFPA 415, *Standard on Airport Terminal Buildings, Fueling Ramp Drainage, and Loading Walkways*, 2008 edition.



## 2. New Referenced Codes

Found in  
Chapter 2



Full List at  
[Lauzon-LSC.com](http://Lauzon-LSC.com)

Page 2  
ANSI, ASTM, ASME  
Codes

NFPA 720, *Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment*, 2012 edition.

NFPA 750, *Standard on Water Mist Fire Protection Systems*, 2010 edition.

NFPA 914, *Code for Fire Protection of Historic Structures*, 2010 edition.

NFPA 1124, *Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles*, 2006 edition.

NFPA 1126, *Standard for the Use of Pyrotechnics Before a Proximate Audience*, 2011 edition.

NFPA 2001, *Standard on Clean Agent Fire Extinguishing Systems*, 2012 edition.

### 2.3 Other Publications.

**2.3.1 ACI Publications.** American Concrete Institute, P.O. Box 9094, Farmington Hills, MI 48333. [www.concrete.org](http://www.concrete.org)

ACI 216.1/TMS 0216.1, *Code Requirements for Determining Fire Resistance of Concrete and Masonry Construction Assemblies*, 2008.

**2.3.2 ANSI Publications.** American National Standards Institute, Inc., 25 West 43rd Street, 4th floor, New York, NY 10036.

ANSI A14.3, *Safety Requirements for Fixed Ladders*, 1992.

ICC/ANSI A117.1, *American National Standard for Accessible and Usable Buildings and Facilities*, 2009.

ANSI/BHMA A156.3 *Exit Devices*, 2008.

BHMA/ANSI A156.19, *American National Standard for Power Assist and Low Energy Power Operated Doors*, 2007.

ANSI Z22-3.1, *National Fuel Gas Code*, 2006.

**2.3.3 ASCE Publications.** American Society of Civil Engineers, 1801 Alexander Bell Drive, Reston, VA 20191-4400. [www.asce.org](http://www.asce.org)

ASCE/SFPE 29, *Standard Calculation Methods for Structural Fire Protection*, 2005.

**2.3.4 ASME Publications.** American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-5990. [www.asme.org](http://www.asme.org)

ASME A17.1/CSA B44, *Safety Code for Elevators and Escalators*, 2007.

ASME A17.3, *Safety Code for Existing Elevators and Escalators*, 2008.

ASME A17.7/CSA B44.7, *Performance-Based Safety Code for Elevators and Escalators*, 2007.

**2.3.5 ASSE Publications.** American Society of Safety Engineers, 1800 East Oakton Street, Des Plaines, IL 60018.

ANSI/ASSE A1264.1, *Safety Requirements for Workplace Floor and Wall Openings, Stairs and Railing Systems*, 2007.

**2.3.6 ASTM Publications.** ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959. [www.astm.org](http://www.astm.org)

ASTM C 1629/C 1629M, *Standard Classification for Abuse-Resistant Nondecorated Interior Gypsum Panel Products and Fiber-Reinforced Cement Panels*, 2006.

ASTM E 2898, *Standard Test Methods for Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing*, 2010.

ASTM E 84, *Standard Test Method for Surface Burning Characteristics of Building Materials*, 2010.

ASTM E 108, *Standard Test Methods for Fire Tests of Roof Coverings*, 2010a.

ASTM E 119, *Standard Test Methods for Fire Tests of Building Construction and Materials*, 2010b.

ASTM E 136, *Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C*, 2009b.

ASTM E 648, *Standard Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source*, 2010.

ASTM E 814, *Standard Test Method for Fire Tests of Through-Penetration Fire Stops*, 2010.

ASTM E 1352, *Standard Test Method for Cigarette Ignition Resistance of Mock-Up Upholstered Furniture Assemblies*, 2008a.

ASTM E 1353, *Standard Test Methods for Cigarette Ignition Resistance of Components of Upholstered Furniture*, 2008a(e1).

ASTM E 1354, *Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter*, 2009.

ASTM E 1537, *Standard Test Method for Fire Testing of Upholstered Furniture*, 2007.

ASTM E 1590, *Standard Test Method for Fire Testing of Mattresses*, 2007.

ASTM E 1591, *Standard Guide for Obtaining Data for Deterministic Fire Models*, 2007.

ASTM E 1966, *Standard Test Method for Fire-Resistive Joint Systems*, 2007.

ASTM E 2072, *Standard Specification for Photoluminescent (Phosphorescent) Safety Markings*, 2010.

ASTM E 2074, *Standard Test Method for Fire Tests of Door Assemblies, Including Positive Pressure Testing of Side-Hinged and Pivoted Swinging Door Assemblies*, 2000, Revised 2004.

ASTM E 2307, *Standard Test Method for Determining Fire Resistance of Perimeter Fire Barrier Systems Using Intermediate-Scale, Multi-Story Test Apparatus*, 2010.

ASTM E 2404, *Standard Practice for Specimen Preparation and Mounting of Textile, Paper or Vinyl Wall or Ceiling Coverings to Assess Surface Burning Characteristics*, 2008.

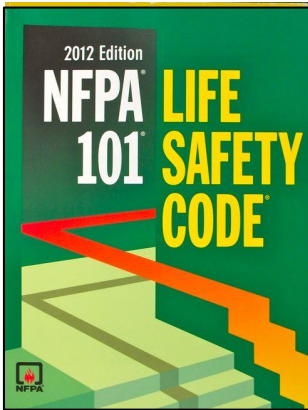
ASTM E 2573, *Standard Practice for Specimen Preparation and Mounting of Site-Fabricated Stretch Systems to Assess Surface Burning Characteristics*, 2007a.

ASTM E 2599, *Standard Practice for Specimen Preparation and Mounting of Reflective Insulation Materials and Radiant Barrier Materials for Building Applications to Assess Surface Burning Characteristics*, 2009.

ASTM E 2652, *Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750 Degrees C*, 2009a.

# 2. New Referenced Codes

## New 2012 LSC



LIFE SAFETY CODE  
NFPA 101-2012 Edition  
(adopted by CMS, DHS, TJC)

OCCUPANCY CHAPTERS  
"Gateway to the Code"  
18/19-Health Care  
20/21-Ambulatory Care  
38/39-Business  
42-Storage

Categorical Waivers based on partial use of 2012 LSC **NO longer applicable**

- "Referenced Standards:"*
- NFPA 220-2012 Construction Types
  - NFPA 99-2012 HEALTH CARE CODE  
(Risk-Based, Elec, Med Gas, Ventilation, Equip)
  - NFPA 110-2010 Generators
  - NFPA 241-2009 Constr Safeguards
  - NFPA 70-2011 Electrical System
  - NFPA 80-2010 Fire Doors & Windows
  - NFPA 221-2012 Fire Walls & Barriers
  - NFPA 10-2010 Fire Extinguishers
  - NFPA 13-2010 Sprinkler Installation
  - NFPA 25-2011 Sprinkler Maintenance
  - NFPA 72-2010 Fire Alarm System
  - NFPA 90A-2012 HVAC
  - NFPA 96-2011 Commercial Cooking
- (And many more)

*"Administrative Chapters:"*

- Chapter 1 Administration
- Chapter 2 Mandatory References
- Chapter 3 Definitions
- Chapter 4 General
- Chapter 6 Occupancy Classes

*"Core Chapters:"*

- Chapter 7 Means of Egress
- Chapter 8 Features of Fire Protections
- Chapter 9 Building Service & Fire Protection Equip
- Chapter 10 Finishes, Contents & Furnishings
- Chapter 43 Building Renovations

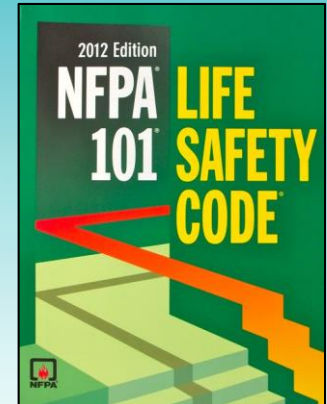


## 2. New Referenced Codes

Referenced Codes have all Changed

### “Major” Codes

- **13-Sprinkler Install Std (2010)**
- **25-Wet Sys ITM Std (2011)**
- **70-Nat Electric Code (2011)**
- **72-Fire Alarm Code (2010)**
- **80-Fire Door Std (2010)**
- **90A-HVAC (2012)**
- **99-Healthcare Code (2012)**
- **110-Generator Std (2010)**



**Recommendation:  
Buy These Codes**

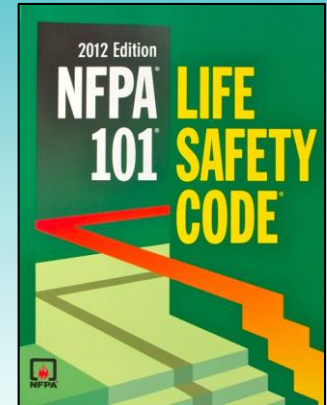
**Get the Handbook**

## 2. New Referenced Codes

Referenced Codes have all Changed

### “Minor” Codes

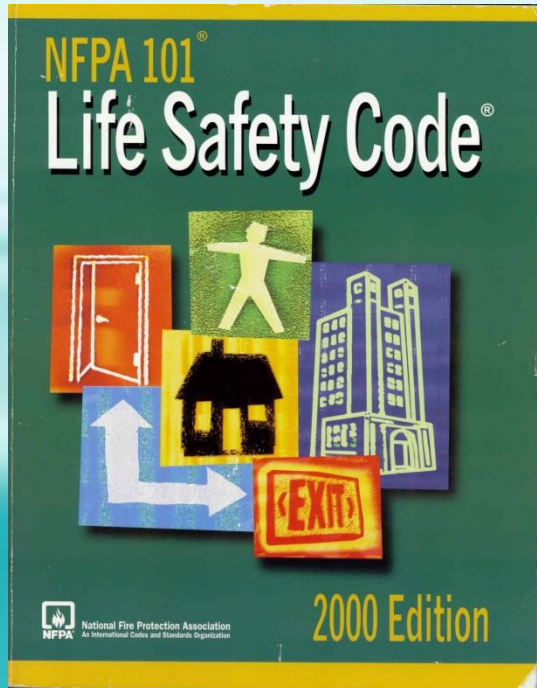
- 10-Fire Extinguisher Std (2010)
- 14-Standpipe Std (2010)
- 30-Flammable Liq Code (2012)
- 96-Cooking Std (2011)
- 101A-FSES (2010)
- 220-Bldg Constr (2012)
- 241-Construction (2009)
- And others



**Recommendation:  
Buy or Use NFPA  
Free Access**

## 2. New Referenced Codes

**CMS will NOT use ANY  
PREVIOUS LSC EDITIONS !**

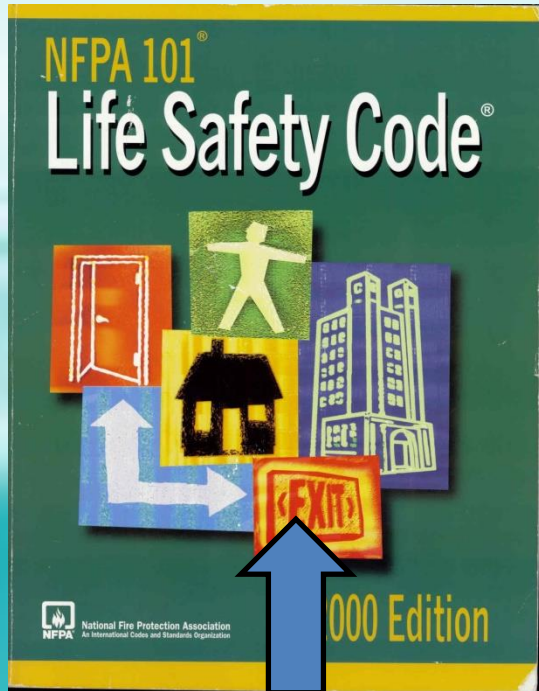


**CMS: “removed references to  
all previous editions of the LSC”.**

Fed Register, 5/4/16, p.26872, ctr col

## 2. New Referenced Codes

**CMS will NOT use ANY PREVIOUS LSC EDITIONS !**



**If Built in  
2010**

For CMS the codes are  
**BLACK & WHITE**

**2012 NEW  
Provisions**

**2012 EXISTING  
Provisions**

**July 5, 2016**

**?**

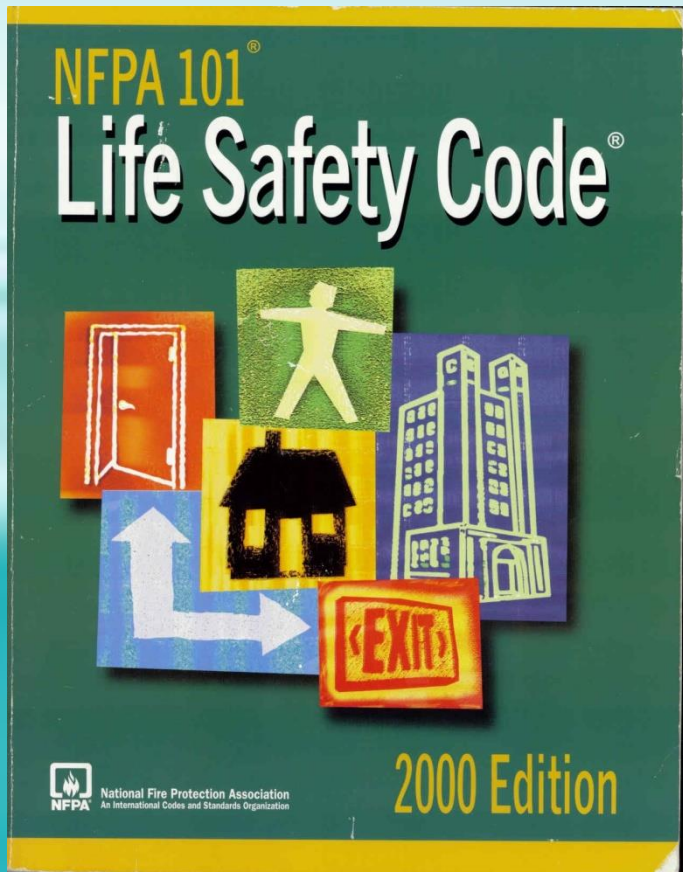
## 2. New Referenced Codes

**CMS will NOT use ANY  
PREVIOUS LSC EDITIONS !**

**Unsure how Wis DQA will apply**

Traditionally, DQA applies the more stringent of the

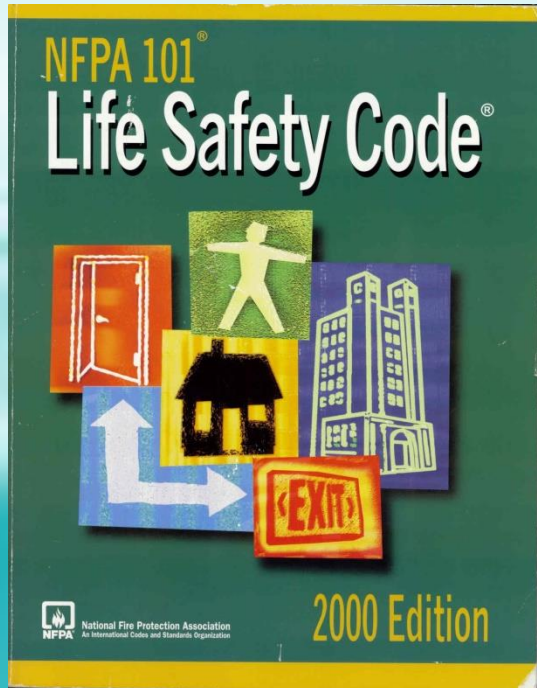
- currently adopted code (ch 19)
- the new code under which it was built





## 2. New Referenced Codes

**CMS has TOSSED-OUT  
ALL PREVIOUS LSC EDITIONS !**



**WISCONSIN-ISM**

Existing occupancies must ensure buildings and equipment are in

**compliance with provisions  
previously adopted by CMS  
at the time they were constructed or  
installed”.**

# 2. New Referenced Codes

## CMS TOSSED-OUT PREVIOUS LSC EDITIONS –Not DQA

### CONSTRUCTION REQUIREMENTS OF PAST EDITIONS OF LSC

For simplicity, CMS typically defaults to the existing requirements of the currently adopted code and does not use previously adopted codes. The Life Safety Code (LSC) assumes that facilities were constructed in compliance with the requirements of ‘new’ construction that were in effect at the time of construction. (LSC 4.6.9.1). All required life safety features must be “continuously maintained” (LSC 4.6.12) to retain their ability to be effective. In practice, this is NOT always the case.

Wisconsin DQA inspectors typically require existing facilities to comply with the more restrictive new requirements that was in effect in the year the facility was built or remodeled. See examples in chart below.

LSC Edition --> Comply with Code in effect on Plan Approval Date	CMS Application		<-- DQA Code Application -->				
	2012 (New)	2012 (Existing)	2000 (New)	1985 (New)	1981 (New)	1967 (New)	1967 (Existing)
	After 7/05/16	Before 7/05/16	3/11/03 to 7/5/16	5/8/88 to 3/11/03	11/26/82 to 5/8/88	10/29/71 to 11/26/82	Prior to 10/29/71
Corridor Width (also Aisles & Ramps)	8' in pt; 44" in adjunct (18.2.3.4)	4' Clear (19.2.3.4)	8' in pt; 44" in adjunct (18.2.3.3)	8' in pt; 44" in adjunct (12-2.3.3)	8' in pt; 44" in adjunct (12-2.5.2)	8' (10-1233)	48" in pt sleep area (10-2233)
Door Widths-Egress	41.5" clear width in pt area; 32" non-pt; 32" in stairs (18.2.3.6 & 7)	32" in Pt Use Areas (19.2.3.6 & 7)	41.5" clear width in pt area; 32" non-pt; 32" in stairs (18.2.3.5)	44" in pt area; 34" non-pt; 36" in stairs (12-2.3.6)	44" in pt area; 36" Psych (12-2.2.5(6))	44" in pt area; 28" non-pt (10-1243)	40" in pt area; 28" non-pt (10-2242)
Dead End Corridor Length (also Aisles & Ramps)	Max 30' (18.2.5.2)	Alter if Possible (19.2.5.2)	Max 30' (18.2.5.10)	Max 30' (12-2.5.6)	Max 30' (12-2.5.8)	Max 30' (10-1234)	Are undesirable & should be altered, if possible (10-2235)
Hazardous Rm: 1 hr Wall OR Sprinkled	None	Soiled, trash, paint, kitchens. Laundry, boiler, repair, locker; Storage > 50 SF. (19.3.2.1)	None	Laundry, lab, boiler, repair, locker, gift shop (12-3.2.1)	Laundry, lab, boiler, repair, locker, gift shop (12-3.2.1)	soiled, trash, paint, lab, kitchens. Laundry, boiler, repair, locker, gift shop (10-1371)	soiled, trash, paint, lab, kitchens. Laundry, boiler, repair, locker, gift shop (10-2351)
Hazardous Rm: 1-hr Wall AND Sprinklers	1 hr Wall & Spklr in All Haz Rms (18.3.2.1)	If Severe Haz (19.3.2.1)	All Haz Rms (18.3.2)	Soiled Linen, Kitchens, Paint, Trash, Storage (12-3.2.1)	Soiled Linen, Kitchens, Paint, Trash, Storage (12-3.2.1)	If Severe Haz (10-1371)	If Severe Haz (10-2351)
Smoke Barrier Walls	1-hr (18.3.7.3)	30 Min (19.3.7.3)	1-hr (18.3.7.3)	1-hr (12-3.7.3)	1-hr (12-3.7.3)	1-hr (10-1314)	30 Min (10-2313)
Smoke Barrier Doors	Solid core or 20 min label (18.3.7.6); Vision Panels (18.3.7.9)	Solid Core-no label (19.3.7.6)	Solid Core or 20 min label (18.3.7); Vision Panels (18.3.7.7)	Solid Core, Astragal, no mullion (12-3.7.8); Vision Panels (12-3.7.7)	Solid Core, Astragal, no mullion (12-3.7.8); Vision Panels (12-3.7.7)	Solid Core-no label (6-6111); Vision Panels (10-1317)	Solid Core-no label (10-2313)
Vertical Opening Wall Rating	2-hr if 4 or more; 1-hr if 3 or less (18.3.1 & 8.6.9.1)	1-Hr (19.3.1.1)	2-hr if 4 or more; 1-hr if 3 or less (18.3.1.1 & 8.2.3.2.3.1)	2-hr; 1-hr if max 3 stories+spkled (12-3.1.1)	2-hr; 1-hr if max 3 stories+spkled (12-3.1.1)	2-hr if 4 or more stories in non-comb bldgs; other 1-hr (10-1341; 6-1114)	1-hr (10-2322)

Updated for 2012 LSC, 5/12/16

# 2. New Referenced Codes

## CMS TOSSED-OUT PREVIOUS LSC EDITIONS –Not DQA

### CONSTRUCTION REQUIREMENTS OF PAST EDITIONS OF LSC

For simplicity, CMS typically defaults to the existing requirements of the currently adopted code and does not use previously adopted codes. The Life Safety Code (LSC) assumes that

## Example of DQA Survey Use of Former “New” Codes

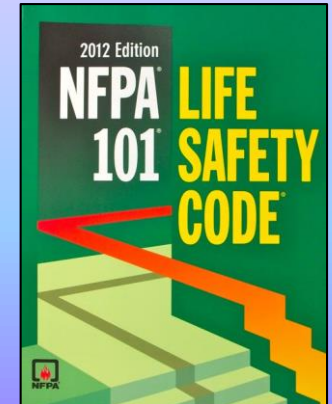
LSC Edition -->	2012 (New)	2012 (New)	2000	1985	1981 <-- DQA Code Application -->	1967N	1967E
Comply with Code in effect on Plan Approval Date	After 7/05/16	Before 7/05/16	3/11/03 to 7/5/16	5/8/88 to 3/11/03	11/26/82 to 5/8/88	10/29/71 to 11/26/82	Prior to 10/29/71
<b>Corridor Width - Aisles &amp; Ramps</b>	8' in pt area; 44" non-pt (18.2.3.6 & 7)	4' Clear (19.2.3.4)	8' in pt; 44" adjunct (18.2.3.6)	8' in pt; 44" adjunct (12-2.2.5)	8' in pt; 44" adjunct (12-2.2.5)	8' (10-2233)	48" in pt; 44" non-pt area (10-2233)
<b>Door Widths-Egress</b>	41.5" clear width in pt area; 32" non-pt; 32" in stairs (18.2.3.6 & 7)	32" in Pt Use Areas (19.2.3.6 & 7)	41.5" clear width in pt area; 32" non-pt in stairs (18.2.3.6 & 7)	44" in pt area; 34" non-pt; 36" in stairs (12-2.3.6)	44" in pt area; 36" Psych (12-2.2.5(6))	44" in pt area; 28" non-pt (10-1243)	40" in pt area; 28" non-pt (10-2242)
<b>Dead End Corridor Length (also Aisles &amp; Ramps)</b>	Max 30' (18.2.5.2)	Alter if Possible (19.2.5.2)	Max 30' (12-2.5.10)	Max 30' (12-2.5.6)	Max 30' (12-2.5.8)	Max 30' (10-1234)	Are undesirable & should be altered, if possible (10-2235)
<b>Hazardous Rm: 1 hr Wall OR Sprinkled</b>	None	Soiled, trash, paint, kitchens. Laundry, boiler, repair, locker; Storage > 5 SF. (19.3.2.1)	None	Laundry, lab, boiler, repair, locker, gift shop (12-3.2.1)	Laundry, lab, boiler, repair, locker, gift shop (12-3.2.1)	soiled, trash, paint, lab, kitchens. Laundry, boiler, repair, locker, gift shop (10-1371)	soiled, trash, paint, lab, kitchens. Laundry, boiler, repair, locker, gift shop (10-1371)
<b>Hazardous Rm: 1-hr Wall AND Sprinklers</b>	1-hr Wall & Spklr in All Haz Rms (18.3.2.1)	If Severe Haz (19.3.2.1)	All Haz Rms (18.3.2.1)	Soiled Linen, Kitchens, Paint, Trash, Storage (12-3.2.1)	Soiled Linen, Kitchens, Paint, Trash, Storage (12-3.2.1)	If Severe Haz (10-1371)	If Severe Haz (10-1371)
<b>Smoke Barrier Walls</b>	1-hr (18.3.7.3)	30 Min (19.3.7.3)	1-hr (12-3.7.3)	1-hr (12-3.7.3)	1-hr (12-3.7.3)	1-hr (10-1341)	1-hr (10-2322)
<b>Smoke Barrier Doors</b>	Solid core or 20 min label (18.3.7.6); Vision Panels (18.3.7.9)	Solid Core or 20 min label (18.3.7.6); Vision Panels (18.3.7.9)	Solid Core or 20 min label (18.3.7.6); Vision Panels (18.3.7.9)	Solid Core, Astragal mullion (12-3.7.6)	Solid Core, Astragal mullion (12-3.7.6)	Solid Core or 20 min label (10-1341)	Solid Core or 20 min label (10-2322)
<b>Vertical Opening Wall Rating</b>	2-hr if 4 or more; 1-hr if 3 or less (18.3.1 & 8.6.9.1)	2-hr if 4 or more; 1-hr if 3 or less (18.3.1 & 8.6.9.1)	2-hr if 4 or more; 1-hr if 3 or less (18.3.1 & 8.6.9.1)	2-hr; 1-hr if 3 stories or less (12-3.1.1)	2-hr; 1-hr if 3 stories or less (12-3.1.1)	2-hr; 1-hr if 3 stories or less (10-1341)	1-hr (10-2322)

↑  
If Built in  
**2010:**  
**DQA**  
**Says**

**Wis DQA MAY Apply  
Prior Codes**

Updated for 2012 LSC, 5/12/16

# 3. Things CMS has Added



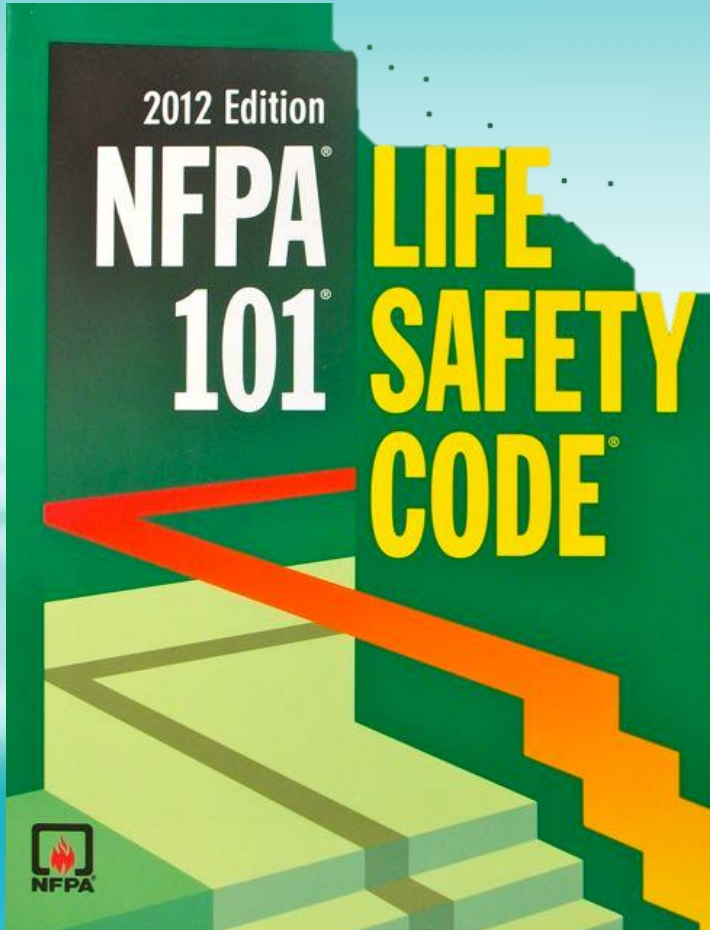
## **CMS has Added 2 Extra Requirements**

- a) Access to ABHR**
- b) Window Sill Height**

Don't expect CMS to issue any additional official notification beyond the May 4 Fed Reg



### 3. Things CMS has ADDED



## IMPORTANT:

MARK the sections in your

Code Book that

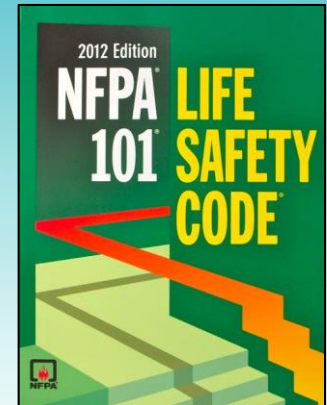
- DO NOT APPLY or
- Have been REVISED

✂ Copy & Paste ✂

### 3. Things CMS has ADDED

#### a) ACCESS TO ABHR, 18/19.3.2.6

LSC lists 11 requirements on ABHR  
(very similar to current)

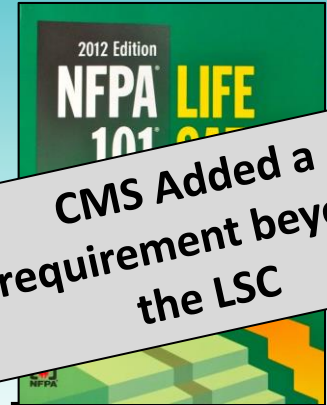


### 3. Things CMS has ADDED

#### a) ACCESS TO ABHR, 18/19.3.2.6

CMS ADDED an additional requirement:

CMS Added a requirement beyond the LSC



 + #12. Dispensers must be installed in a manner that adequately protects against inappropriate access

 Copy & Paste in your 2012 LSC at 18/19.3.2.6 (p.193 & p.210) 

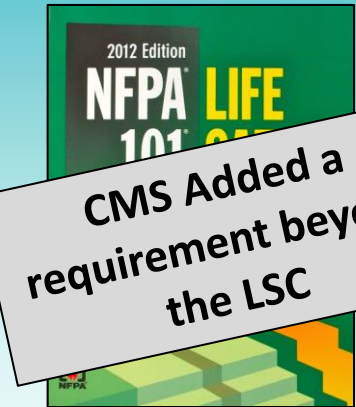
# 3. Things CMS has ADDED

## a) ACCESS TO ABHR, 18/19.3.2.6

WHY Added?

Intent:

- Restrict access to who abuse (arson, suicide, etc)
- Limit access to who need



### Suicide/Drug Abuse



### Arson

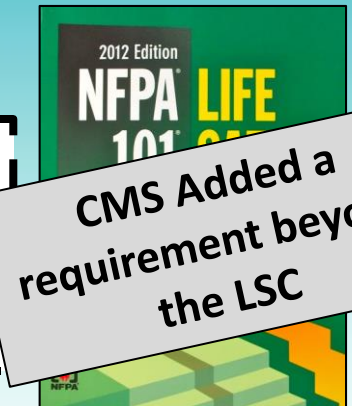




### 3. Things CMS has ADDED

#### a) ACCESS TO ABHR, 18/19.3.2.6

+ #12. Dispensers must be installed in a manner that adequately protects against inappropriate access



CMS has NOT defined  
“Inappropriate Access”

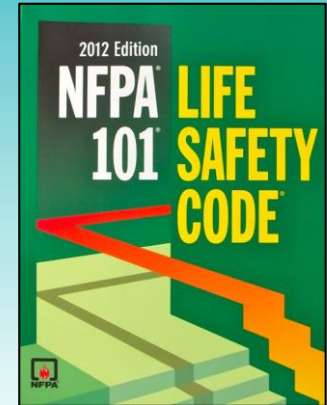
Another Opportunity for:  
→ Risk Assessment

### 3. Things CMS has ADDED

#### b) OUTSIDE WINDOWS & SILL HEIGHT

**NFPA 18/19.3.8-2000 LSC** *Every patient sleeping room shall have an outside window or outside door. The allowable sill height shall not exceed 36" above the floor.*

**NFPA 18-2012 LSC** – *No requirement*



CMS 2014 Proposal: “Since outside windows and doors may be used for smoke control, building entry, patient and resident evacuation, we propose to retain the 2000 requirement” for new & existing healthcare.

CMS adopted so applies to new constr only

### 3. Things CMS has ADDED

#### b) OUTSIDE WINDOWS & SILL HEIGHT

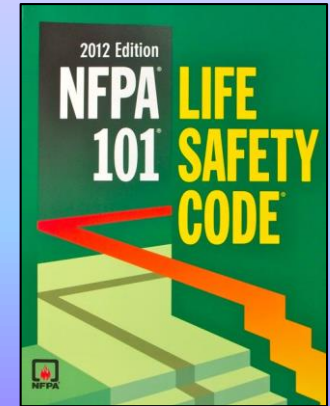
**CMS:** § 482.41 (b)(9) Buildings must have an outside window or outside door in every sleeping room, and for any building constructed after July 5, 2016 the sill height must not exceed 36 inches above the floor. Windows in atrium walls are considered outside windows for the purposes of this requirement.

(i) does not apply to newborn nurseries and rooms intended for occupancy for less than 24 hours.

(ii) The sill height in special nursing care areas of new occupancies must not exceed 60 inches.

 Copy & Paste in your 2012 LSC at 18.3.8 (p. 196) 

# 4. Things CMS has Changed



## CMS has Changed 3 Requirements

- a) Health care Definition
- b) Ambulatory Definition
- c) 4" vs 6" Projection
- d) Roller Latch Exception

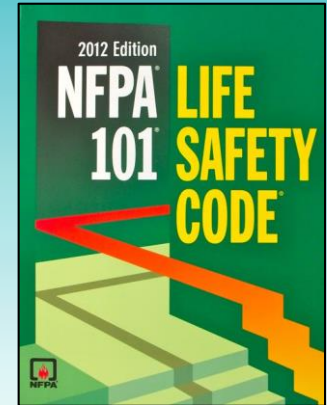
Don't expect CMS to issue any additional official notification beyond the May 4 Fed Reg on these items

## 4. Things CMS has CHANGED

### a) HEALTH CARE DEFINITION - # Inpts

#### >3 Inpatient = Healthcare

**3.3.188.7** Healthcare is “an occupancy used to provide medical care simultaneously to 4 or more patients on an inpatient basis ... who are mostly incapable of self preservation due to age, physical or mental disability, or because of security measures not under the occupants control.”



**CMS:** Proposed that any space used by a single inpatient must be classified as healthcare, regardless of frequency.

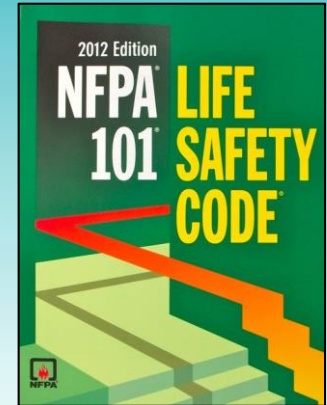


## 4. Things CMS has CHANGED

### a) HEALTH CARE DEFINITION - # Inpts

### >3 Inpatient = Healthcare

**CMS:** Has WITHDRAWN its single inpatient proposal



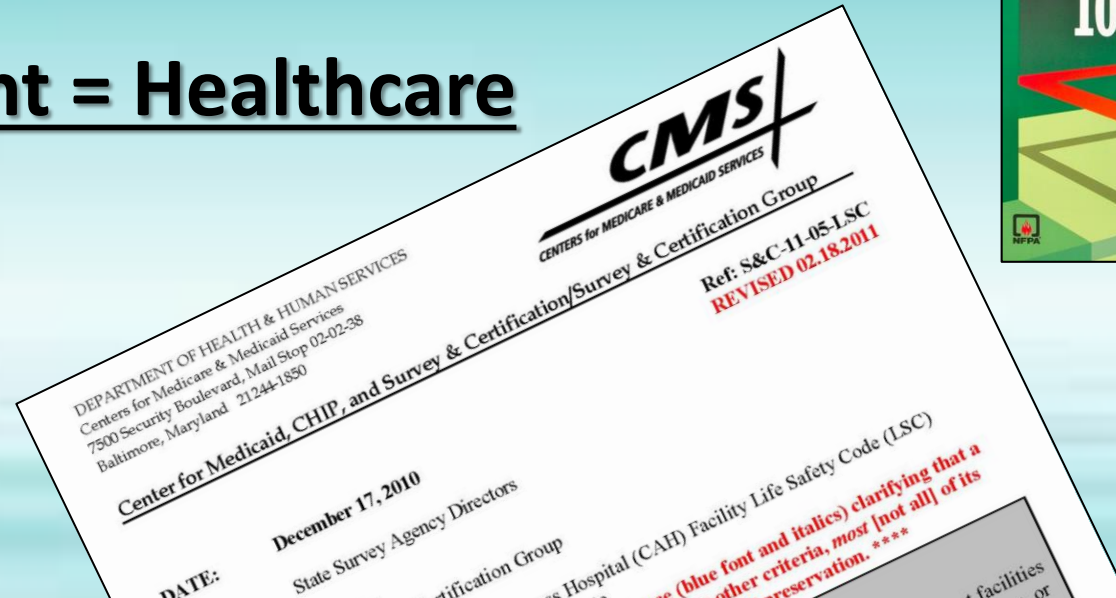
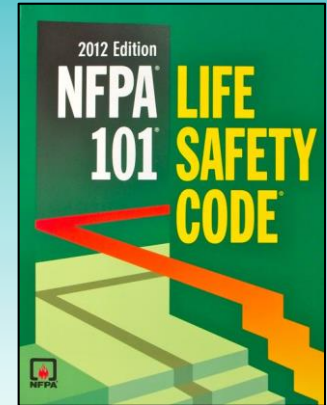
### **Fed Reg, p26887, Middle Column:**

“We agree with the commenters that meeting a more stringent occupancy classification is not necessary for very small health care occupancies with less than 4 patients at a given time, and therefore are withdrawing our proposal.”

## 4. Things CMS has CHANGED

### a) HEALTH CARE DEFINITION - # Inpts

>3 Inpatient = Healthcare



### **CAUTION: There may be other considerations:**

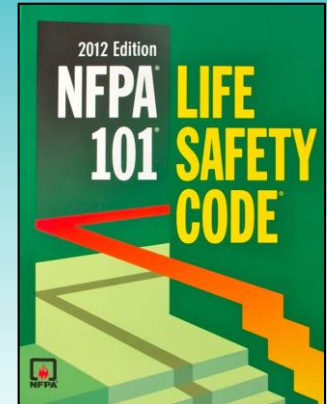
- CMS S&C Letter 11-05  
(not rescinded; states 1 pt = healthcare)
- If moving Inpatient into another occupancy, must be Capable of Self-Preservation

## 4. Things CMS has CHANGED

### b) AMBULATORY DEFINITION

#### >3 Outpatient = Ambulatory

**3.3.188.1** Facilities “used to provide services simultaneously for 4 or more patients ... who are incapable of self preservation...”



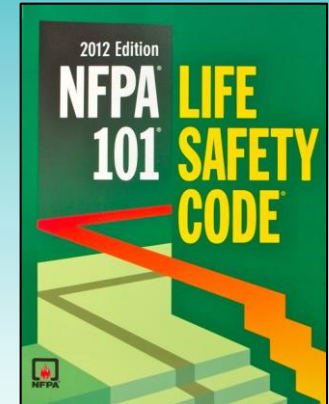
**CMS:** “ the only CMS-regulated facilities that would be subject to AHC would be ASC’s”

“ we believe that hospital outpatient surgical depts are comparable to ASCs ...and should be required to meet the provisions of AHC regardless of the number of patients served.

## 4. Things CMS has CHANGED

### b) AMBULATORY DEFINITION

#### 1 Outpatient = Ambulatory



**3.3.188.1** Facilities “used to provide services simultaneously for ~~4 or more~~ patients ... who are incapable of self preservation...”



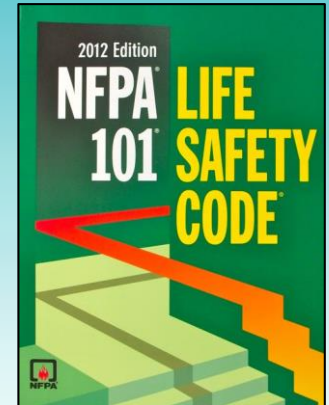
**CMS**: Surgical AHC’s used by a single patient must meet ambulatory requirements.

✂ Copy & Paste in your 2012 LSC at 3.3.188.1 (p.32);

at 18/19.1.3.4.1 (p.185 & p.202) ✂

## 4. Things CMS has CHANGED

### c) CORRIDOR PROJECTIONS



### Max 6" projections

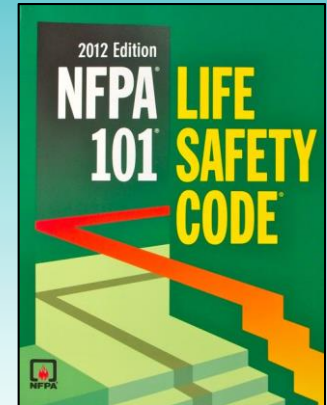
**18/19.2.3.4(2)** “Noncontinuous projections not more than 6” from the corridor wall, positioned not less than 38” above the floor, shall be permitted.”

**CMS:** ADA restricts the projection of wall-mounted objects to no more than 4”



## 4. Things CMS has CHANGED

### c) CORRIDOR PROJECTIONS



### Max 4" projections

~~18/19 2.3.4(2) "Noncontinuous projections not more than 6" from the corridor wall, positioned not less than 38" above the floor, shall be permitted"~~

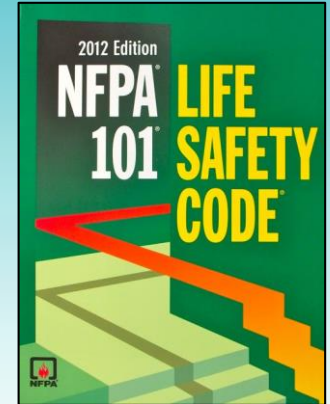


**CMS:** wall-mounted objects can protrude no more than 4" when located more than 27" but less than 80" above the floor.

✂ Change & Paste in your 2012 LSC at 18/19.2.3.4(2) (p.188 & p.205) ✂

## 4. Things CMS has CHANGED

### d) ROLLER LATCHES



### Roller Latch Exception

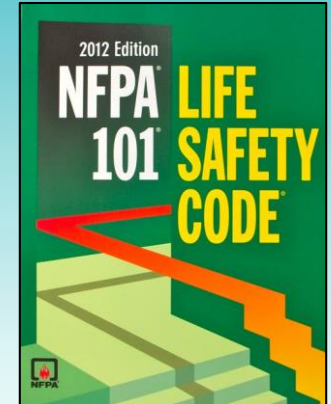
**18.3.6.3.9.1;**

**19.3.6.3.5** “Roller latches shall be prohibited, except ... for certain acute psychiatric settings




## 4. Things CMS has CHANGED

### d) ROLLER LATCHES




### Roller Latch: No Exception

18.3.6.3.9.1; 19.3.6.3.5 “Roller latches shall be prohibited, ~~except ... for certain acute psychiatric settings~~”

 **CMS:** There is no exception; roller latches are always prohibited in corridors and hazardous spaces in new & existing health care

 Change & Paste in your 2012 LSC at 18.3.6.3.9.1(p.195)

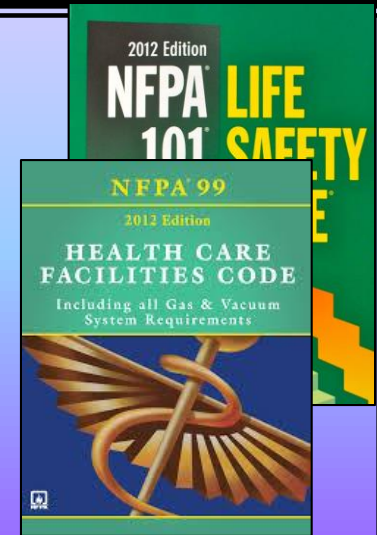
& at 19.3.6.3.5(2) (p.213) 

# 5. Things NFPA has Changed

## NFPA has Revised Many Code Requirements

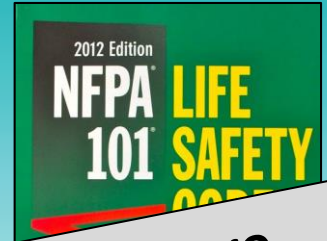
- **101** (20)
- **25** (5)
- **72** (6)
- **90A** (2)
- **99** (15)
- **110** (5)

Review the more significant



## 5. Things NFPA has CHANGED

# NFPA 101 CHANGES\*



**\*The More  
Significant  
Changes**

- a) Exceptions Re-Worded
- b) Chapter 43-Renovations
- c) Unoccupied Openings
- d) Multiple Delayed Locks
- e) Door Inspections
- f) Sprinkler Plans
- g) Special Door Locking
- h) Suite Size
- i) Suite 2<sup>nd</sup> Exit
- j) Suite – Other Revisions
- k) Equipment in Corridor
- l) Furniture in Corridor
- m) Corridor Cooking
- n) Foam ABHR
- o) One Inch ABHR Clearance
- p) Direct Vent Fireplaces
- q) Wood Fireplaces
- r) Fire Response Plan “Call”
- s) Combustible Decorations
- t) Recycling Containers



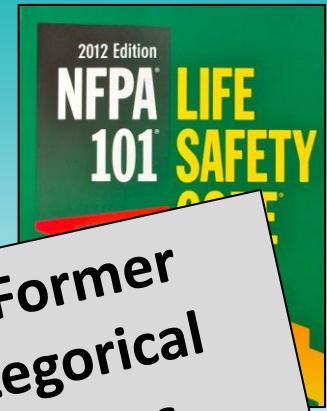
## 5. Things NFPA has CHANGED

# NFPA 101 CHANGES

13 Former  
Categorical  
Waivers

After July 5, health care facilities will no longer have to request these waivers, include in policies, or announce it during surveys.

- a) Exceptions
- b) Categorical Waivers
- c) Fire Response Plan
- d) Locks
- e) Inspections
- f) Sprinkler Plans
- g) Special Door Locking
- h) Suite Size
- i) Suite 2<sup>nd</sup> Exit
- j) Suite – Other Revisions
- k) Equipment in Corridor
- l) Furniture in Corridor
- m) Corridor Cooking
- n) Foam ABHR
- o) One Inch ABHR Clearance
- p) Direct Vent Fireplaces
- q) Wood Fireplaces
- r) Fire Response Plan “Call”
- s) Combustible Decorations
- t) Recycling Containers

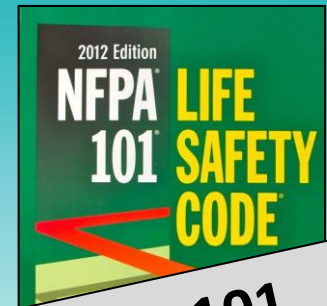


## 5. Things NFPA has CHANGED

### a) ELIMINATE EXCEPTIONS

#### ELIMINATED “EXCEPTION” WORDING

(to provide more consistency and easier reading)



NFPA 101  
CHANGES

#### Example:

2000, 18.3.6.4: Transfer Grilles, “*Exception: Doors to toilet rooms, bathrooms, shower rooms, sink closets, and similar auxiliary spaces that do not contain flammable or combustible materials shall be permitted to have ventilating louvers or to be undercut*”

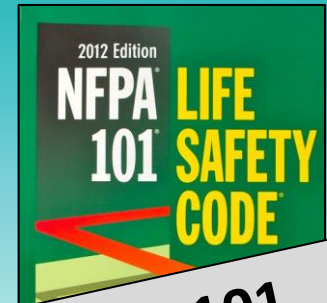
More “dots”

2012, 18.3.6.4.2: Doors to toilet rooms, bathrooms, shower rooms, sink closets, and similar auxiliary spaces that do not contain flammable or combustible materials shall be permitted to have ventilating louvers or to be undercut”

Same/similar  
wording

# 5. Things NFPA has CHANGED

## a) ELIMINATE USE OF EXCEPTIONS



**NFPA 101  
CHANGES**

### 2000 LSC, Corridor Separation

18.3.6.1 Corridors shall be separated from all other areas by partitions complying with 18.3.6.2 through 18.3.6.5. (See also 18.2.5.9.)

*Exception No. 1:* Spaces shall be permitted to be unlimited in area and open to the corridor, provided that the following criteria are met:

- (a) The spaces are not used for patient sleeping rooms, treatment rooms, or hazardous areas. *see p 152 SSD or OBS*
- (b) The corridors onto which the spaces open in the same smoke compartment are protected by an electrically supervised automatic smoke detection system in accordance with 18.3.4, or the smoke compartment in which the space is located is protected throughout by quick-response sprinklers.
- (c) The open space is protected by an electrically supervised automatic smoke detection system in accordance with 18.3.4, or the entire space is arranged and located to allow direct supervision by the facility staff from a nurses' station or similar space. *SSD or OBS*
- (d) The space does not obstruct access to required exits.

*Exception No. 2:* Waiting areas shall be permitted to be open to the corridor, provided that the following criteria are met:

- (a) The aggregate waiting area in each smoke compartment does not exceed 600 ft<sup>2</sup> (55.7 m<sup>2</sup>). *SSD or OBS*
- (b) Each area is protected by an electrically supervised automatic smoke detection system in accordance with 18.3.4, or each area is arranged and located to allow direct supervision by the facility staff from a nursing station or similar space.
- (c) The area does not obstruct access to required exits.

*Exception No. 3:\** Spaces for nurses' stations.

*Exception No. 4:* Gift shops open to the corridor where protected in accordance with 18.3.2.5. *p 151*

*Exception No. 5:* In a limited care facility, group meeting or multipurpose therapeutic spaces shall be permitted to open to the corridor, provided that the following criteria are met:

- (a) The space is not a hazardous area.
- (b) The space is protected by an electrically supervised automatic smoke detection system in accordance with 18.3.4, or the space is arranged and located to allow direct supervision by the facility staff from the nurses' station or similar location.
- (c) The area does not obstruct access to required exits.

### 2012 LSC, Corridor Separation

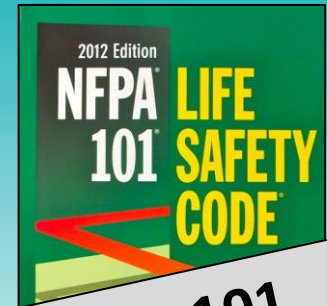
**18.3.6.1 Corridor Separation.** Corridors shall be separated from all other areas by partitions complying with 18.3.6.2 through 18.3.6.5 (see also 18.2.5.4), unless otherwise permitted by one of the following:

- (1) Spaces shall be permitted to be unlimited in area and open to the corridor, provided that all of the following criteria are met:
  - (a)\*The spaces are not used for patient sleeping rooms, treatment rooms, or hazardous areas.
  - (b) The corridors onto which the spaces open in the same smoke compartment are protected by an electrically supervised automatic smoke detection system in accordance with 18.3.4, or the smoke compartment in which the space is located is protected throughout by quick-response sprinklers.
  - (c) The open space is protected by an electrically supervised automatic smoke detection system in accordance with 18.3.4, or the entire space is arranged and located to allow direct supervision by the facility staff from a nurses' station or similar space.
  - (d) The space does not obstruct access to required exits.
- (2) Waiting areas shall be permitted to be open to the corridor, provided that all of the following criteria are met:
  - (a) The aggregate waiting area in each smoke compartment does not exceed 600 ft<sup>2</sup> (55.7 m<sup>2</sup>).
  - (b) Each area is protected by an electrically supervised automatic smoke detection system in accordance with 18.3.4, or each area is arranged and located to allow direct supervision by the facility staff from a nursing station or similar space.
  - (c) The area does not obstruct access to required exits.
- (3)\*This requirement shall not apply to spaces for nurses' stations.
- (4) Gift shops not exceeding 500 ft<sup>2</sup> (46.4 m<sup>2</sup>) shall be permitted to be open to the corridor or lobby.
- (5) In a limited care facility, group meeting or multipurpose therapeutic spaces shall be permitted to open to the corridor, provided that all of the following criteria are met:
  - (a) The space is not a hazardous area.
  - (b) The space is protected by an electrically supervised automatic smoke detection system in accordance with 18.3.4, or the space is arranged and located to allow direct supervision by the facility staff from the nurses' station or similar location.

**Gives the LSC a  
Whole New  
Look**

## 5. Things NFPA has CHANGED

### b) ADDED CHAPTER 43 - REHABILITATION



**NFPA 101  
CHANGES**

# New Chapter

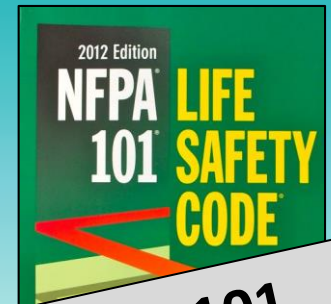
The 2000 LSC had required minor renovation projects to meet the same stringent requirements as those applied to completely new construction.

**2012 Code requirements VARY WITH amount of  
REHABILITATION WORK (by CATEGORY)**

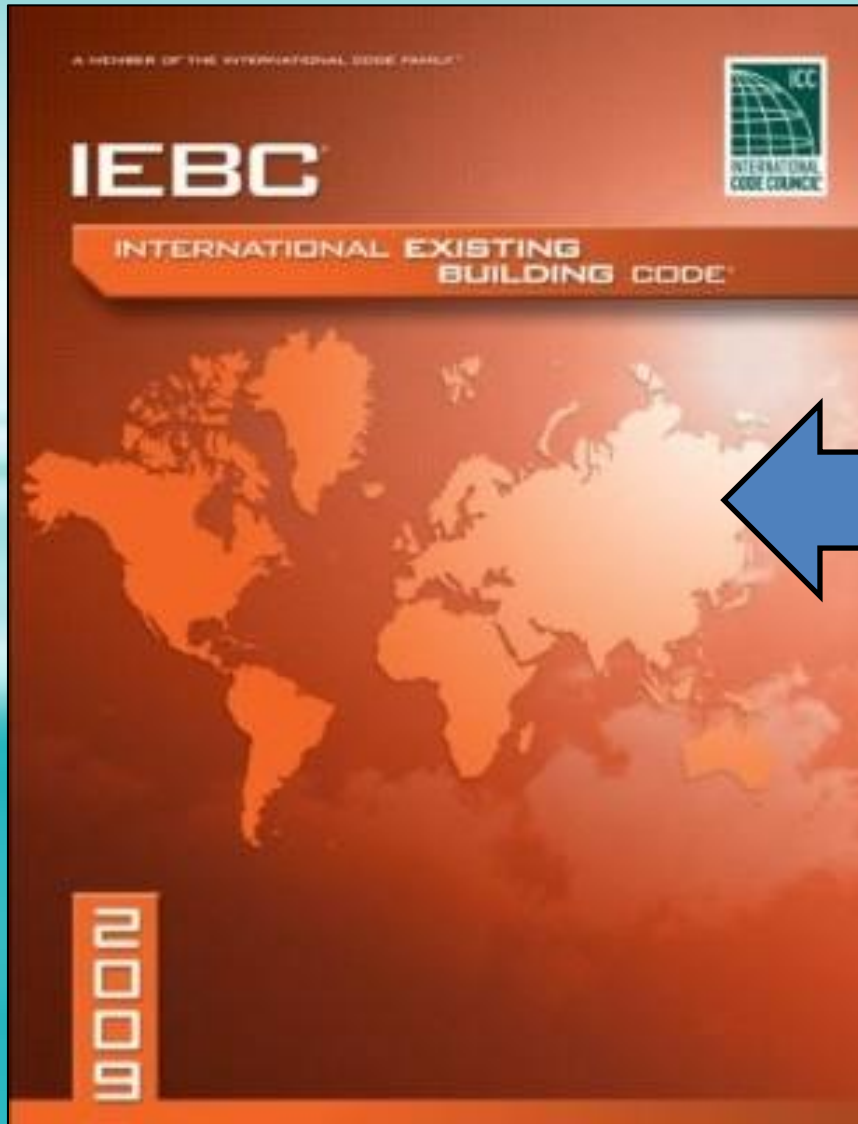


## 5. Things NFPA has CHANGED

### b) ADDED CHAPTER 43 - REHABILITATION



**NFPA 101  
CHANGES**

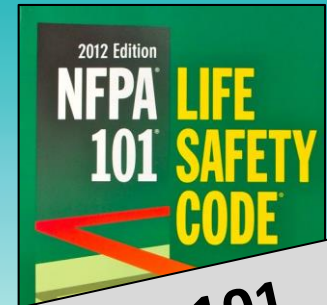


**Similar to  
International Existing  
Building Code**



## 5. Things NFPA has CHANGED

### b) ADDED CHAPTER 43 - REHABILITATION



**NFPA 101  
CHANGES**

### Meet 2012 REHAB REQUIREMENTS

- IF changes made to existing buildings

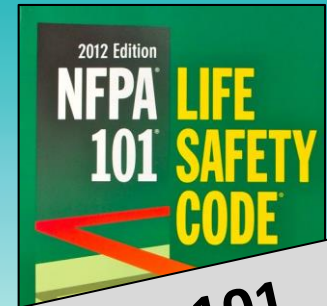
- 1.Repair
- 2.Renovation
- 3.Modification
- 4.Reconstruction
- 5.Change Of Use
- 6.Change Of Occupancy
- 7.Addition

**DESIGNERS:**  
Declare on plan  
submittal which  
category is being  
applied. DON'T make  
the reviewer guess  
-----

**DIFFERENT  
Categories than IEBC**

## 5. Things NFPA has CHANGED

### c) UNOCCUPIED OPENINGS IN EXISTING EXITS §7.1.3.2.1(9)(c)



NFPA 101  
CHANGES

Formerly a  
CATEGORICAL  
WAIVER

Existing unoccupied  
Mech Equip spaces may  
Open into Exit Enclosures

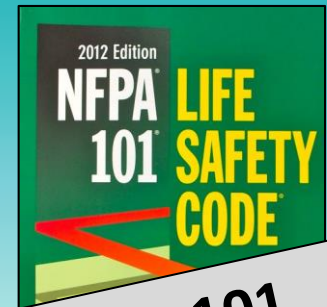
#### CHECKPOINTS:

- Applies only to existing
- Building is fully sprinkled
- Door must be properly rated
- No Fuel-fired equipment
- Space used solely for mechanical
- No storage of combustibles

## 5. Things NFPA has CHANGED

### d) MULTIPLE DELAYED EGRESS LOCKS

§7.2.1.6.1 and §18/19.2.2.2.4(2)



NFPA 101  
CHANGES

More than 1 Delayed Egress Lock  
May be in the Path of Egress

#### CHECKPOINTS:

- **Follow 7.2.1.6.1:** Listed Device, Low/Ordinary Haz, Irreversible Release
- **Bldg Fully Sprinkled & Supervised**
- **Unlock with Power Loss**
- **Unlock w/ Spklr or Heat**
- **Manual Relock**
- **Sign-1" letters, contrasting background**
- **Audible signal by door**

Formerly a  
CATEGORICAL  
WAIVER

## 5. Things NFPA has CHANGED

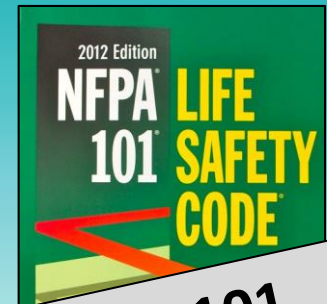
### e) DOOR INSPECTIONS §7.2.1.15

1. Written Performance-Based Program  
(per 5.2.2 of NFPA 80)

2. Written documentation

3. By Qualified Personnel

- Can demonstrate knowledge & understanding of door operation
- Visual inspection from both sides of door opening

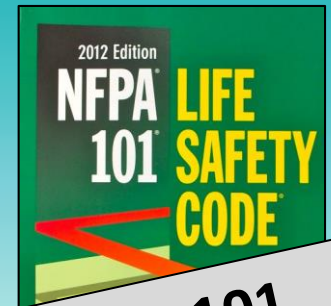


**NFPA 101  
CHANGES**



## 5. Things NFPA has CHANGED

### e) DOOR INSPECTIONS §7.2.1.15



### NFPA 101 CHANGES

#### 4. Inspections – annual minimum for:

- Panic Hardware
- Exits
- Electronically Controlled
- Special Locking Arrangements
- Fire Rated (per NFPA 80)
- Smoke Barriers (per NFPA 105)

#### 5. Make Repairs without delay



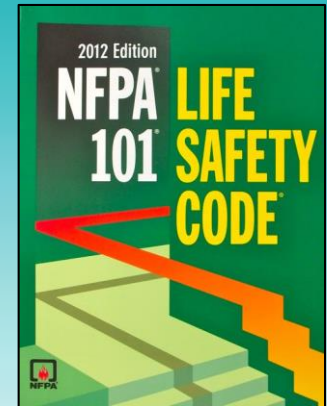


## 5. Things NFPA has CHANGED

### e) DOOR INSPECTIONS §7.2.1.15

#### 6. 11 Point Inspection (min)

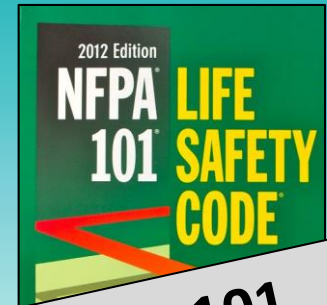
1. Floor clear of obstructions; Open fully & close freely
2. Force with allowable limits
3. Working latch & locks
4. Working release hardware
5. Working pairs of leaves
6. Working closers, per accessibility
7. Swing doesn't encroach on egress path
8. Working Powered doors
9. Signage intact & legible
10. Working special locking
11. No security devices that impede egress



**Caution: NFPA 80  
has a different  
Checklist**

## 5. Things NFPA has CHANGED

### f) SPRINKLER DOCUMENTATION §9.7.7



**NFPA 101  
CHANGES**

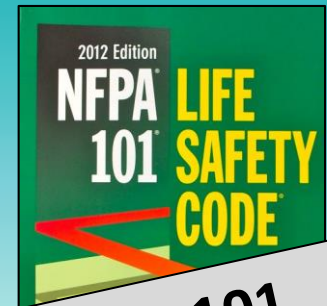
**“All documentation on design, maintenance & testing shall be kept in an approved, secured location for the life of the fire protection system”**



## 5. Things NFPA has CHANGED

### g) SPECIAL DOOR LOCKING §18/19.2.2.2.5.2

PERMITS DOOR LOCKING if the SPECIAL NEEDS of patients require special protective measures for their safety, under certain conditions



NFPA 101  
CHANGES

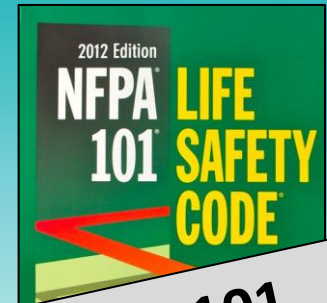
Formerly a  
CATEGORICAL  
WAIVER



## 5. Things NFPA has CHANGED

### g) SPECIAL DOOR LOCKING §18/19.2.2.2.5.2

PERMITS DOOR LOCKING if the SPECIAL NEEDS of patients require special protective measures for their safety, under certain conditions



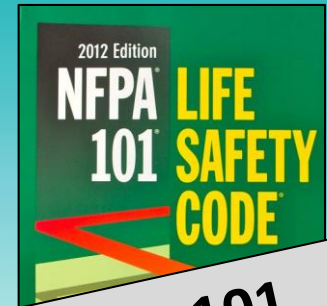
**NFPA 101  
CHANGES**

- (1) All staff must have keys;
- (2) Smoke detection systems must be in place; and
- (3) Facility must be fully sprinkled;
- (4) Electrical locks will release upon loss of power and
- (5) Locks release by independent activation of the smoke detection system and the sprinkler water flow

CMS may require documentation of the “Special Needs” by the appropriate official

## 5. Things NFPA has CHANGED

### h) SUITE SIZE §18/19.2.5.7.2.3 & 18/19.2.5.7.3.4



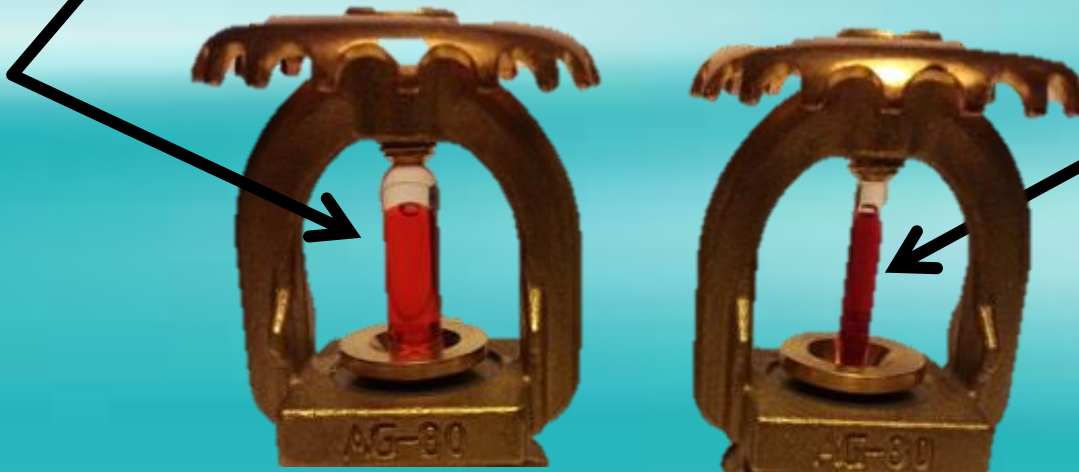
NFPA 101  
CHANGES

Sleeping Suites may be larger than the 5,000 SF max if meet requirements

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WAIVER

#### CHECKPOINTS: 7,500 FS Max

- Fully sprinkled w/Quick Response Heads
- or Fully Sprinkled + Full Smoke Detection



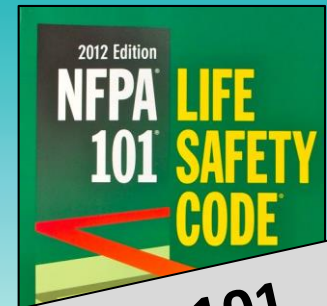
Bulb Thickness  
NOT the color;



## 5. Things NFPA has CHANGED

### h) SUITE SIZE §18/19.2.5.7.2.3 & 18/19.2.5.7.3.4

Sleeping Suites may be larger than the 5,000 SF max if meet requirements



**NFPA 101  
CHANGES**

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CATEGORICAL  
WAIVER**

### CHECKPOINTS: 10,000 FS Max

- Fully sprinkled w/Quick Response Heads
- + Full Smoke Detection
- + Direct Visual Supervision

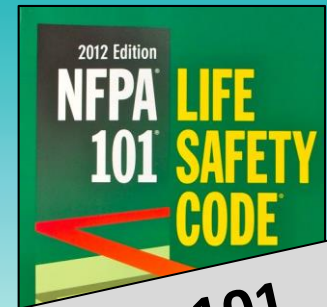
**Detectors in  
EVERY space**

**Who Knows  
What This  
Means?**

## 5. Things NFPA has CHANGED

### i) SUITE 2nd EXIT

§18/19.2.5.7.3.1B & 18/19.2.5.7.3.2(C)



**NFPA 101  
CHANGES**

**2<sup>nd</sup> Exit Can Egress Through a  
Suite, Stair, Outside**

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CATEGORICAL  
WAIVER**

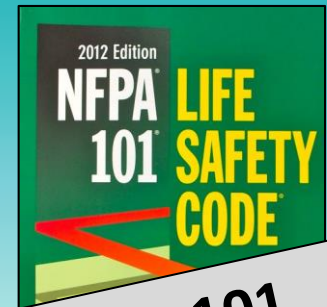
### CHECKPOINTS:

- **Applies to Sleeping Suites > 1,000 SF**
- **Applies to Pt Care Suites > 2,500 SF**
- **1<sup>st</sup> Exit must be to Corridor**
- **2<sup>nd</sup> Exit may be Corridor, Stair, Outside, or Adjacent Suite**

## 5. Things NFPA has CHANGED

### j) SUITE – Other Revisions

§18/19.2.5.7.2.4 & 18/19.2.5.7.3.4



**NFPA 101  
CHANGES**



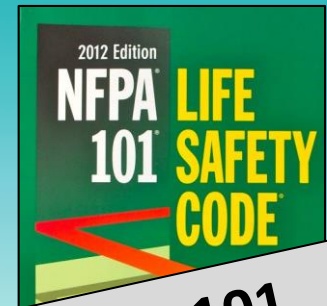
### KEY CHANGES:

- No 50' Travel Distance Limit Through 2 Rooms
- Perimeter Wall/Doors Same as Corridor
- Hazardous Suites recognized
- OR Sterile Supply Exemption, if 1 day
- Non-Pt Care Suites: No Size Limit; Follow Std TD

## 5. Things NFPA has CHANGED

### k) EQUIPMENT IN THE CORRIDOR

§18/19.2.3.4(4)



NFPA 101  
CHANGES

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CATEGORICAL  
WAIVER

Wheeled equipment is permitted to be placed in the corridors for more timely patient care

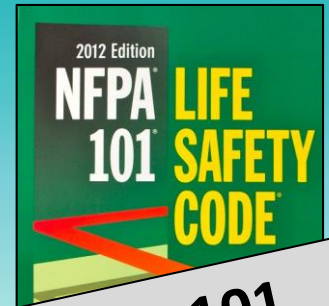
#### CHECKPOINTS:

- Leave Min 5' Clearance
- Any time: Emergency/Isolation, Lift & Transport
- In-Use: Carts & other Equip  
    ("In-use" not defined in code; apply 30 min rule?)
- Equip "Storage" Not Permitted
- Must have/apply Policy to Remove on Alarm

## 5. Things NFPA has CHANGED

### I) FURNITURE IN THE CORRIDOR

§18/19.2.3.4(5)



**NFPA 101  
CHANGES**

**Formerly a  
CATEGORICAL  
WAIVER**

**Permanent Seating Can  
Encroach on Corridor Width**

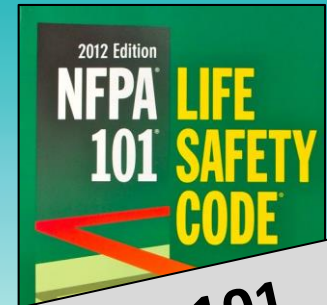
#### CHECKPOINTS:

- Corridor must be at least 8' wide
- Furniture must be fixed to wall or floor
- All on same side of corridor
- Grouping: Max 50 SF each; Min 10' apart
- Can't obstruct access to Pulls, Extinguishers
- Corridor Smoke Detection or Direct Supervision



## 5. Things NFPA has CHANGED

### m) CORRIDOR COOKING §18/19.3.2.5.3



NFPA 101  
CHANGES

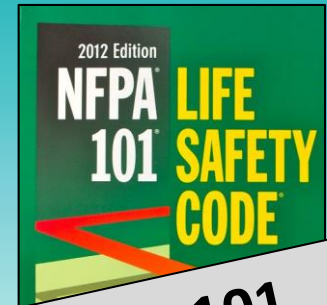
Cooking facilities are  
ALLOWED IN CORRIDORS,  
provided the following conditions are met.

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## 5. Things NFPA has CHANGED

### m) CORRIDOR COOKING §18/19.3.2.5.3I



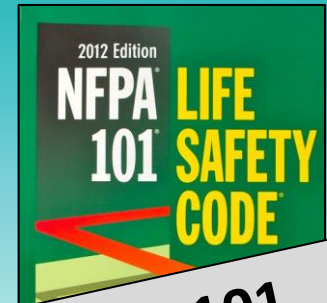
**NFPA 101  
CHANGES**

**Cooking facilities are  
ALLOWED IN CORRIDORS,  
provided the following conditions are met.**

- The area being served is limited to 30 beds or less;
- The area separated from rest of facility by a smoke barrier;
- The range hood and stovetop meet certain standards
- A switch in the area to deactivate equip when area is not under staff supervision & has auto-off timer after 2 hrs
- Two smoke detectors located in a zone 20-25' from the cooktop or range.

# 5. Things NFPA has CHANGED

## m) CORRIDOR COOKING §18/19.3.2.5.3l



**NFPA 101  
CHANGES**

*Extinguishing System Units for Residential Range Top Cooking Surfaces, in accordance with the applicable testing document's scope.*

(b) A manual release of the extinguishing system is provided in accordance with NFPA 96, *Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations*, Section 10.5.

(c) An interlock is provided to turn off all sources of fuel and electrical power to the cooktop or range when the suppression system is activated.

(6)\* The use of solid fuel for cooking is prohibited.

(7)\* Deep-fat frying is prohibited.

(8) Portable fire extinguishers in accordance with NFPA 96 are located in all kitchen areas.

(9)\* A switch meeting all of the following is provided:

(a) A locked switch, or a switch located in a restricted location, is provided within the cooking facility that deactivates the cooktop or range.

(b) The switch is used to deactivate the cooktop or range whenever the kitchen is not under staff supervision.

(c) The switch is on a timer, not exceeding a 120-minute capacity, that automatically deactivates the cooktop or range, independent of staff action.

(10) Procedures for the use, inspection, testing, and maintenance of the cooking equipment are provided with Chapter 11 of NFPA 96 and the manufacturer's instructions and are followed.

(11)\* Not L

*Extinguishing System Units for Residential Range Top Cooking Surfaces, in accordance with the applicable testing document's scope.*

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(10) Procedures for the use, inspection, testing, and maintenance of the cooking equipment are provided with Chapter 11 of NFPA 96 and the manufacturer's instructions and are followed.

(11)\* Not L

**Don't forget to Use  
101 TIA 12-2**

initiate a local audible

the detector is not required to initiate a building-

occupant notification signal.

(d) The detector is not required to notify the emergency

forces.

(e) The local audible signal initiated by the detector is

permitted to be silenced and reset by a button on the

detector or by a switch installed within 10 ft (3.0 m) of

the system smoke detector.

(14) System smoke detectors that are required to be

installed in corridors or spaces open to the corridor by

other sections of this chapter are not used to meet the

requirements of 18.3.2.5.3(11) and are located not closer

than 25 ft (7.6 m) to the cooktop or range.

initiate a local audible

the detector is not required to initiate a building-

occupant notification signal.

(d) The detector is not required to notify the emergency

forces.

(e) The local audible signal initiated by the detector is

permitted to be silenced and reset by a button on the

detector or by a switch installed within 10 ft (3.0 m) of

the system smoke detector.

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other sections of this chapter are not used to meet the

requirements of 19.3.2.5.3(11) and are located not closer

than 25 ft (7.6 m) to the cooktop or range.

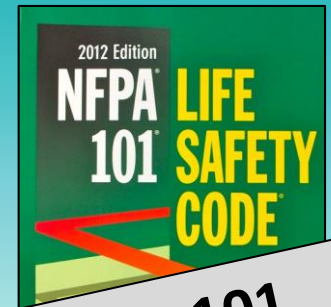
(15) The smoke compartment is protected throughout

by an approved, supervised automatic sprinkler system

in accordance with Section 9.7.

## 5. Things NFPA has CHANGED

### n) PERMIT FOAM ABHR §18/19.3.2.6



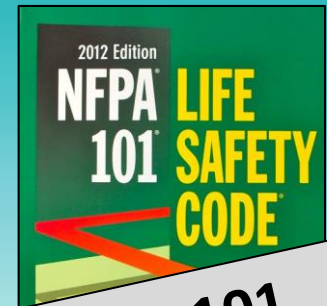
**NFPA 101  
CHANGES**

Code now explicitly ALLOWS  
AEROSOL DISPENSERS, in  
addition to gel hand Rub  
Dispensers, subject to  
limitations on size, quantity,  
and location.



## 5. Things NFPA has CHANGED

### n) PERMIT FOAM ABHR §18/19.3.2.6



### NFPA 101 CHANGES

Permitted, if:

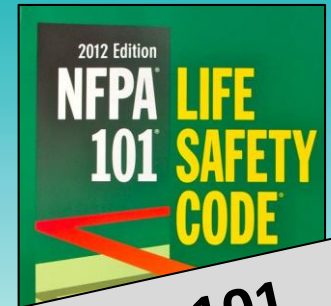
- (1) They do not release contents unless they are activated;
- (2) the activation occurs only within 4" of the sensing device;
- (3) any object left near the sensor causes only 1 activation;
- (4) the dispenser must not dispense more than the amount required for hand hygiene per the label instructions;
- (5) the dispenser is designed, constructed and operated in a way to minimize accidental or malicious dispensing; and
- (6) all dispensers are tested per the mfg.'s instructions each time a new refill is installed.



## 5. Things NFPA has CHANGED

### o) ABHR CLEARANCE §18/19.3.2.6

The provision refines prior language regarding “above or ADJACENT to an ignition source” as being “WITHIN 1 INCH” of the ignition source.



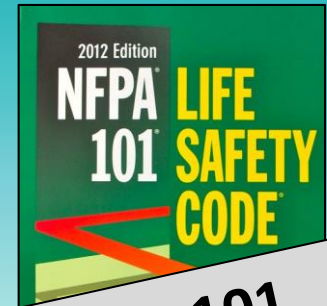
**NFPA 101  
CHANGES**



## 5. Things NFPA has CHANGED

### p) DIRECT VENT FIREPLACES

§18/19.5.2.3(2)



**NFPA 101  
CHANGES**



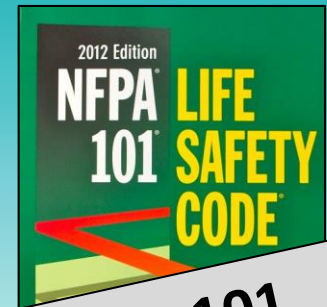
Allows DIRECT-VENT GAS FIREPLACES in smoke compartments without the 1 hour fire wall Rating (not inside of any patient sleeping room).

**Formerly a  
CATEGORICAL  
WAIVER**

## 5. Things NFPA has CHANGED

### q) **SOLID-FUEL FIREPLACES**

§18/19.5.2.3(3)



**NFPA 101  
CHANGES**

**Formerly a  
CATEGORICAL  
WAIVER**



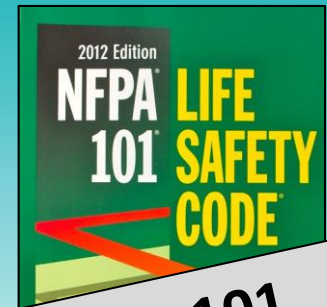
Allows SOLID-FUEL FIREPLACES if

- Separated with 1 hour fire wall rating from sleeping area
- Fireplace complies with §9.2.2
- Fireplace has min 4" hearth
- Fireplace enclosure guaranteed from breakage up to 650°F & made of heat-treated glass
- Supervised Carbon Monoxide detection in room



## 5. Things NFPA has CHANGED

r) FIRE RESPONSE PLAN –Phone Call  
§18/19.7.2.2(3)



**NFPA 101  
CHANGES**



**Add this Mandatory  
Element to Fire Response  
Plan:**

**(3) Emergency phone call to  
fire department  
(or monitoring station)**

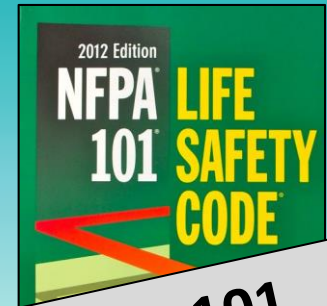
**Also:**

**Remove all carts &  
equipment from corridor** 81

## 5. Things NFPA has CHANGED

### s) COMBUSTIBLE DECORATIONS

§18/19.7.5.1



NFPA 101  
CHANGES

### CHECKPOINTS:

- Not Interfere with Door Latching
- Flame-Retardant/Treated, NFPA 701, or <100kW Heat Release
- Or Not exceed Max % of ceiling/wall area
  - 20% in non-sprinkled
  - 30% in fully sprinkled smoke compartment
  - 50% in pt room in fully sprinkled SC

Formerly a  
CATEGORICAL  
WAIVER



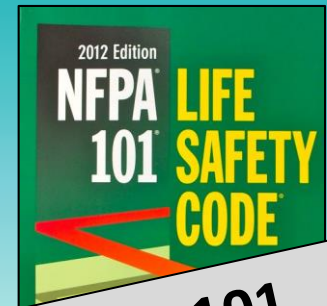
## 5. Things NFPA has CHANGED

### t) RECYCLE CONTAINERS §18/19.7.5.7.2

#### CHECKPOINTS:

- Used solely for recycling clean waste or Pt records waiting destruction
- Max capacity of a 96 GALLONS
- Labeled to meet FM Std 6921 or equal

Formerly a  
CATEGORICAL  
WAIVER



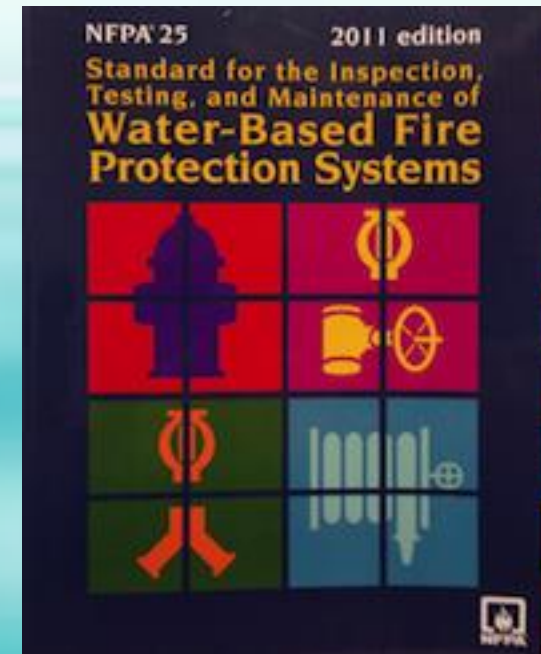
NFPA 101  
CHANGES



## 5. Things NFPA has CHANGED

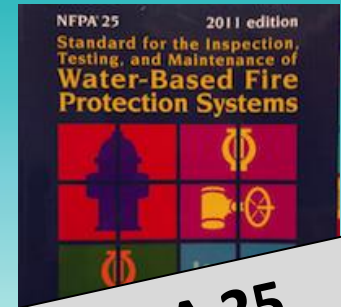
# NFPA 25 CHANGES

- a) 10 Hr Sprinkler Outage
- b) Water Flow Testing
- c) Fire Pump No Flow Test
- d) Standpipe Inspections
- e) Dry Sprinkler-10 yr Replace



## 5. Things NFPA has CHANGED

### a) SPRINKLER OUTAGE 25, 15.5.2



**NFPA 25  
CHANGES**

### All sprinkler impairments ...

#### Part 1

#### CHECKPOINTS:

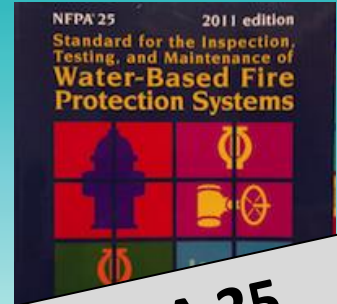
- Must have an Impairment Coordinator
- Must determine the extent and expected duration of outage
- Must determine & inspect the areas involved & increased risk anticipated
- Must submit to management

#### Part 2

- If outage for > 10 hrs must arrange for one of the following:
  - (a) Evacuate the portion of the building affected by the outage
  - (b) An approved fire watch
  - (c) **Provide a temporary water supply**
  - (d) **Implement an approved program to eliminate potential ignition sources & limit the amount of fuel available to the fire**

## 5. Things NFPA has CHANGED

### b) Water Flow Testing 25, §5.2.5



**NFPA 25  
CHANGES**

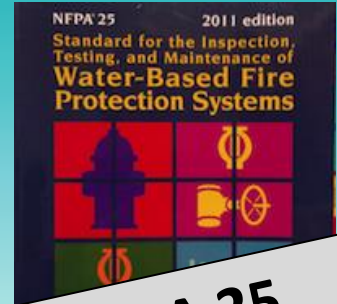


**Flow Switch Testing –  
Semi-Annual (5.3.3.2)**  
to be consistent with  
NFPA 72

## 5. Things NFPA has CHANGED

### c) Fire Pump No-Flow Operation

25, §8.3.1



**NFPA 25  
CHANGES**

## Reduces testing from weekly to monthly

- |                                                                             |                                                                           |                                                                                  |
|-----------------------------------------------------------------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| <input type="checkbox"/> Electric motor fire pump no-flow monthly operation | <input type="checkbox"/> Start pump automatically or auto-timer           | <input type="checkbox"/> Qualified operator in attendance when pump is operating |
| <input type="checkbox"/> Diesel driven operated weekly                      | <input type="checkbox"/> Run for at least 10 min with no flow             | <input type="checkbox"/> Fill out specified visual checklist                     |
|                                                                             | <input type="checkbox"/> Must have safety valve to permit water discharge |                                                                                  |

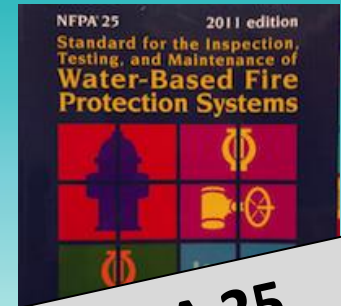
**Formerly a  
CATEGORICAL  
WAIVER**



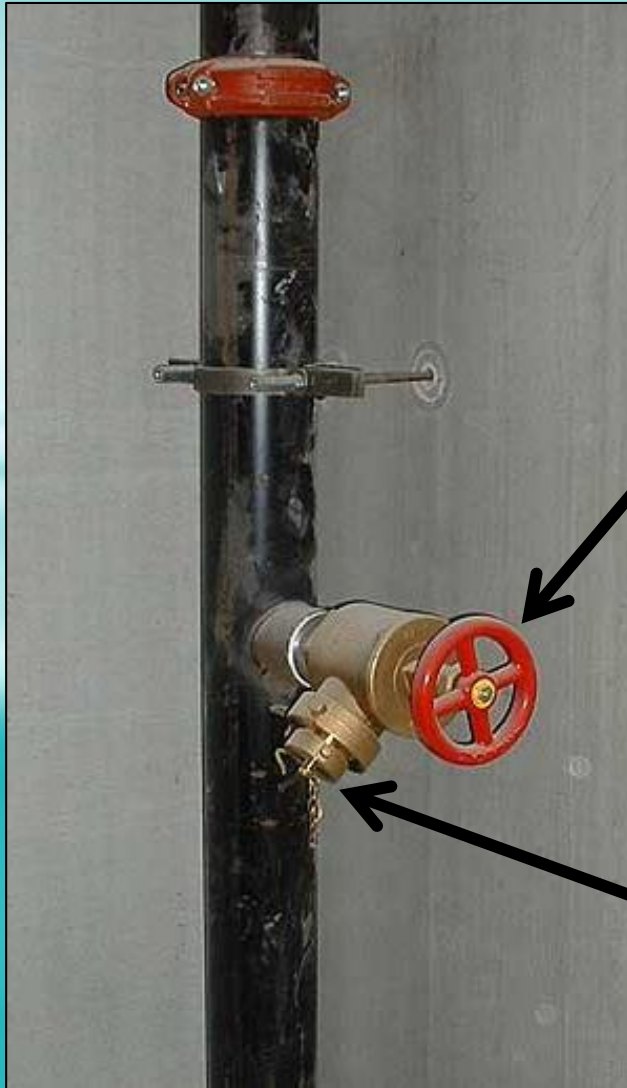


## 5. Things NFPA has CHANGED

### d) Standpipe Testing 25, §13.5.6.2.1



**NFPA 25  
CHANGES**



**Valves must be fully opened & closed annually**

**(caps may be left in place for no flow)**

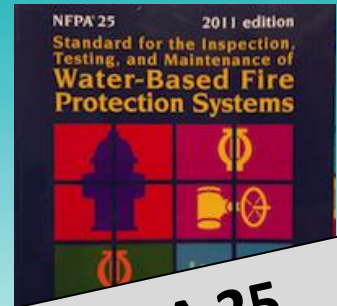
## 5. Things NFPA has CHANGED

### e) Dry Pipe Sprinkler 25, §5.3.1.1.1.6

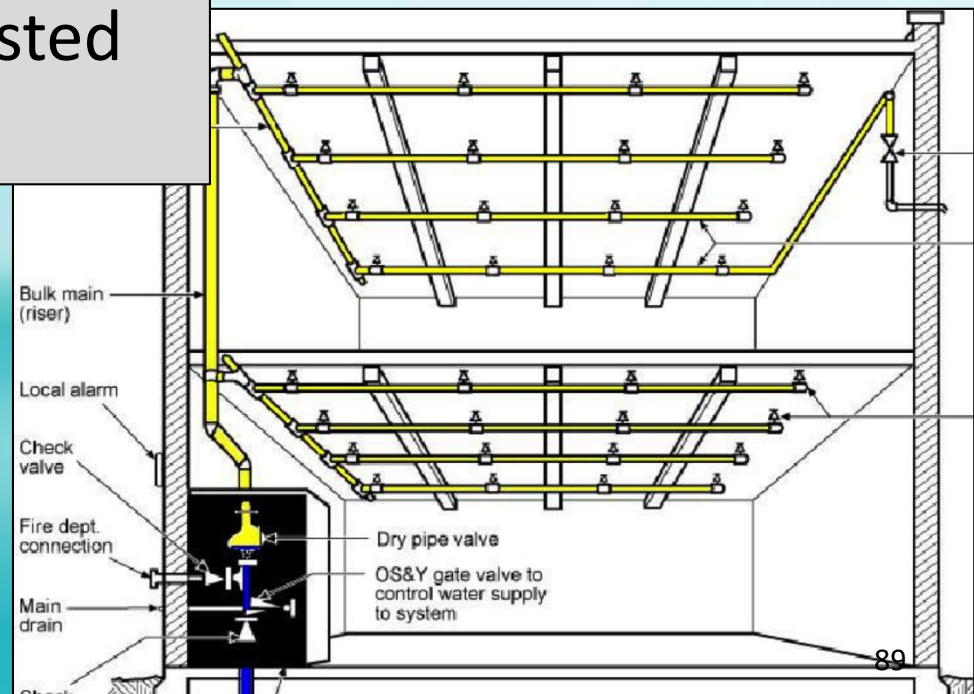
Dry sprinklers that have been in service for 10 years shall be:

- replaced or
- representative samples shall be tested and then retested at 10-year intervals.

The failure rate of dry-type sprinklers in service for 10 years is approximately 50 percent.



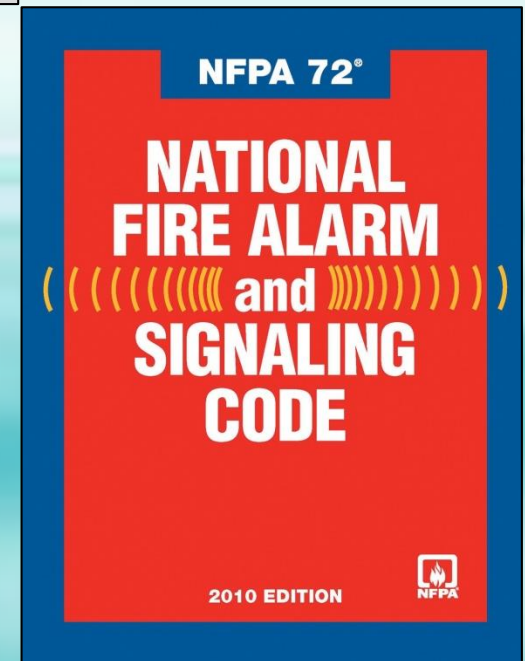
**NFPA 25  
CHANGES**



## 5. Things NFPA has CHANGED

# NFPA 72 CHANGES

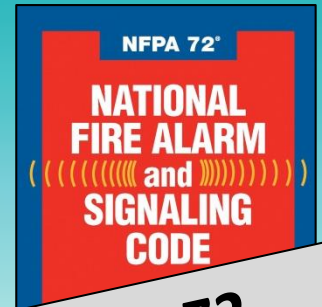
- a) “And Signaling”
- b) Reorganized
- c) Added Chapters
- d) Expanded “Survivability”
- e) Performance-Based Inspections
- f) Risk Analysis



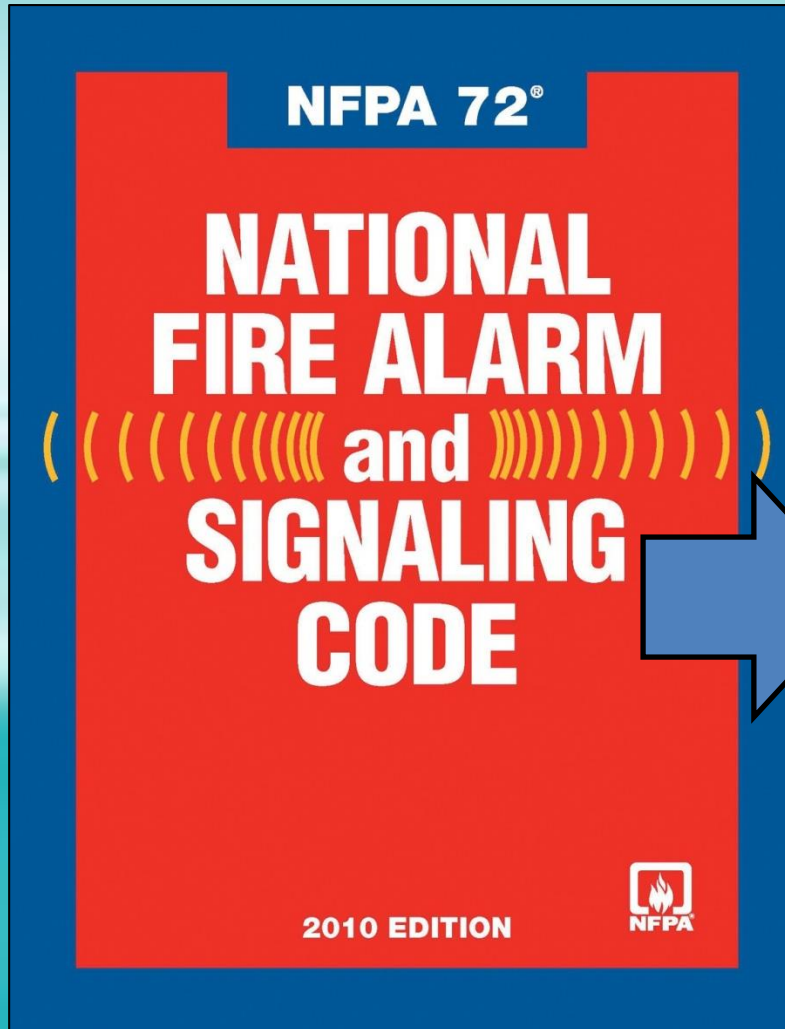
## 5. Things NFPA has CHANGED

a) “And Signaling”

25, §5.3.1.1.1.6



**NFPA 72  
CHANGES**



### Now more than Fire ...

- Weather Alerts
- Terrorists Attacks
- Chemical Releases
- Others

10.6.3 – Emergency Mass Notification can have priority over Fire Alarm signals

# 5. Things NFPA has CHANGED

## b) Reorganized NFPA 72-2010

### Administrative Chapters 1 - 9

1. Administration
2. Referenced Publications
3. Definitions
4. Reserved
5. Reserved
6. Reserved
7. Reserved
8. Reserved
9. Reserved

### Support Chapters 10 - 19

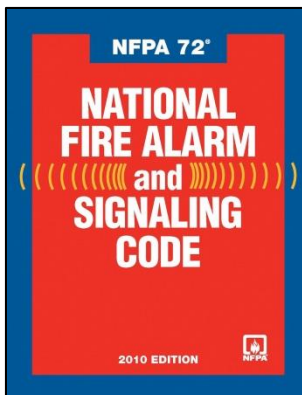
10. Fundamentals
11. Reserved
12. Circuits and Pathways
13. Reserved
14. Inspection, Testing, and Maintenance
15. Reserved
16. Reserved
17. Initiating Devices
18. Notification Appliances
19. Reserved

### System Chapters 20 - 29

20. Reserved
21. Emergency Control Functions and Interfaces
22. Reserved
23. Protected Premises Fire Alarm Systems
24. Emergency Communications Systems
25. Reserved
26. Supervising Station Alarm Systems
27. Public Emergency Alarm Reporting
28. Reserved
29. Single- and Multiple-Station Alarms and Household Fire Alarm Systems

### Usability Annexes A - I

- A. Explanatory Material
- B. Engineering Guide for Automatic Fire Detector Spacing
- C. System Performance and Design Guide
- D. Speech Intelligibility
- E. NEMA SB 30, Fire Service Annunciator and Interface
- F. Sample Ordinance Adopting NFPA 72
- G. Informational References
- H. Cross-Reference Table
- I. Index



**NFPA 72  
CHANGES**



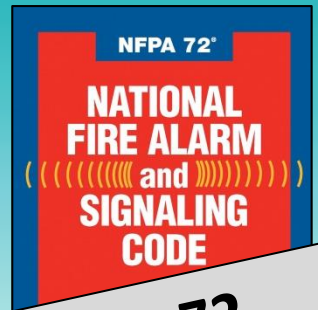
## 5. Things NFPA has CHANGED

c) Added Chapters: 12, 21, 24

**Chapter 12**  
*Circuits and  
Pathways*

**Chapter 21**  
*Emergency  
Control Functions  
and Interfaces*

**Chapter 24**  
*Emergency  
Communications  
Systems*



**NFPA 72  
CHANGES**

## 5. Things NFPA has CHANGED

c) Added Chapters: 12, 21, 24

### Chapter 21 *Emergency Control Functions and Interfaces*

21.3 Elevator Recall for Fire Fighters' Service

21.4 Elevator Shutdown

21.5 First Responders Use Elevators

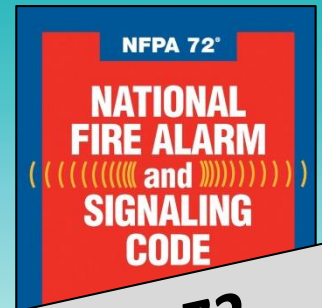
21.6 Elevators for Occupant-Controlled Evac

21.7 HVAC Systems

21.8 Door Release Service

21.9 Electrically Locked Doors

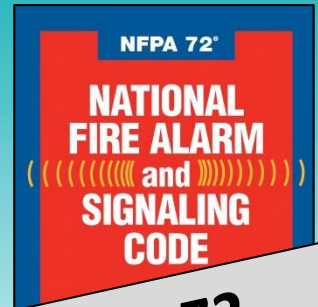
21.10 Exit Marking Audible Notification Sys



**NFPA 72  
CHANGES**

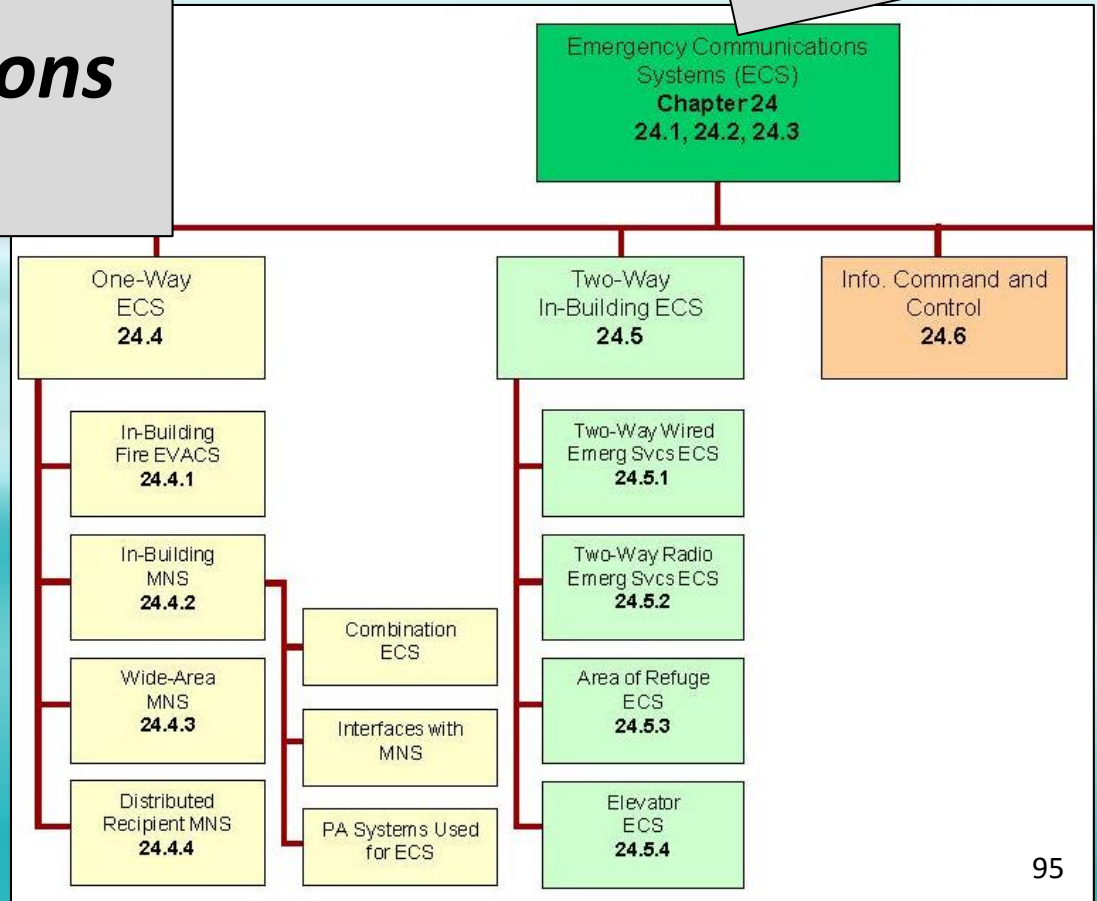
# 5. Things NFPA has CHANGED

c) Added Chapters: 12, 21, 24



**NFPA 72  
CHANGES**

## Chapter 24 *Emergency Communications Systems*



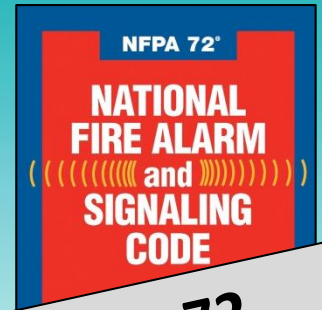
## 5. Things NFPA has CHANGED

### d) Expanded “Survivability”

#### **New Chapter 12** **Circuits and Pathways**

Chapter describes the performance and survivability characteristics for defined class designations of signaling paths (interconnections).

Survivability has been assigned "levels" (0, 1, 2, 3) in recognition that one size does not fit all.



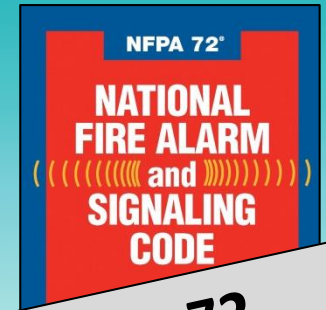
**NFPA 72  
CHANGES**

## 5. Things NFPA has CHANGED

### e) Performance-Based Inspections

**14.2.8 - Components and systems shall be permitted to be inspected and tested under a performance-based program**

**Must submit to the AHJ for review and approval.**



**NFPA 72  
CHANGES**



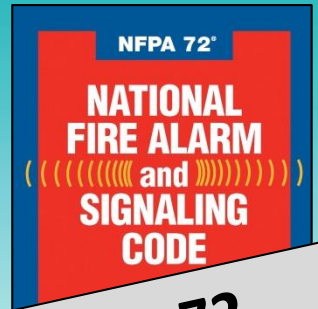
## 5. Things NFPA has CHANGED

### f) Risk Analysis

**“Risk Analysis” Appears  
~44 times in New Ch 24**

A process to characterize the

- likelihood,
- vulnerability, and
- magnitude



**NFPA 72  
CHANGES**

of incidents associated with

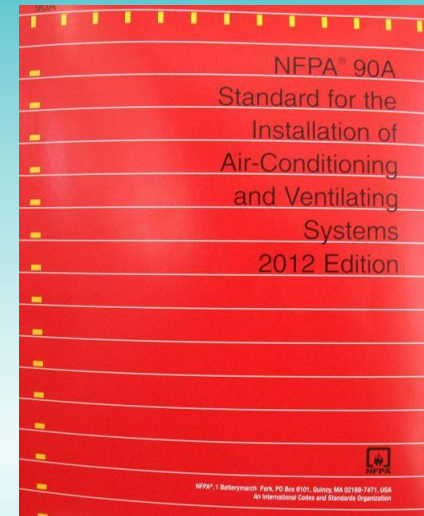
- natural,
- technological, and
- manmade disasters and other emergencies

that address scenarios of

- concern,
- their probability, and
- their potential consequences.

## 5. Things NFPA has CHANGED

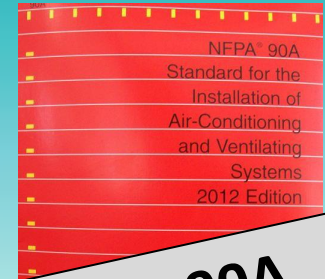
# NFPA 90A CHANGES



- a) Corridor Air Flow
- b) 6 year Damper Inspection

## 5. Things NFPA has CHANGED

a) Corridor Air Movement      90A, §4.3.12.1.2



**NFPA 90A  
CHANGES**

**4.3.12.1.2 Air movement between rooms and egress corridors in hospitals and ambulatory care facilities shall be permitted where the transfer of air is required for clinical purposes by other standards.**

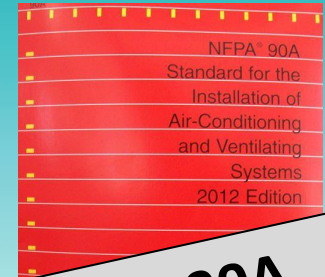
## 5. Things NFPA has CHANGED

### b) 6 Year Damper Inspection 90A,

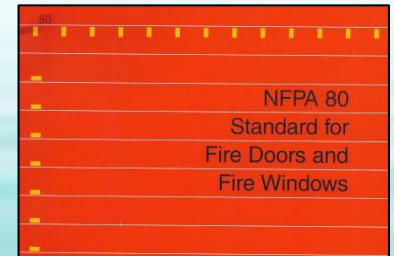
**90A, §5.4.8.1** Fire dampers and ceiling dampers shall be maintained in accordance with NFPA 80, *Standard for Fire Doors and Other Opening Protectives*.

**80, §19.4.1** Each damper shall be tested and inspected 1 year after installation.

**§19.4.1.1** The test and inspection frequency shall then be every 4 years, except in hospitals, where the frequency shall be every 6 years.

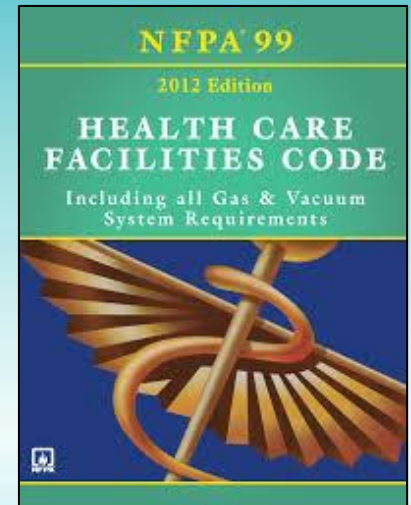


**NFPA 90A  
CHANGES**



## 5. Things NFPA has CHANGED

# NFPA 99 CHANGES



See Supplement 5 in back of Code Book:

“Technical/Substantive Changes to 2012 Ed of NFPA 99

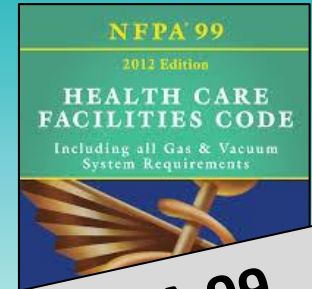
1. **New Chapters: Partial Adoption**
2. **Risk Assessment Based**
3. **Med Gas: Wood O2 Racks Prohibited; Computer Alarms**
4. **Elec: Panel Access, Outlets, OR Wet, Battery Lites**
5. **HVAC: 170, Commissioning, OR Smoke Purge**
6. **Elec Equip: Strip Plugs**
7. **Sprinklers: Mobile Storage, ORs**



## 5. Things NFPA has CHANGED

a) Code; Adopted all but 7-8, 12-13

Now Applies to All CMS Providers ... not just some



NFPA 99  
CHANGES

The NFPA 99 was upgraded from a standard to a code.

- CODES describe what to do;
- STANDARDS describe how to comply

**CMS: Adopted NFPA 99, except Chapters 7, 8, 12, & 13**

Chapter 7 - Telecommunication

Chapter 8 - Plumbing

Chapter 12 – Emergency Prep

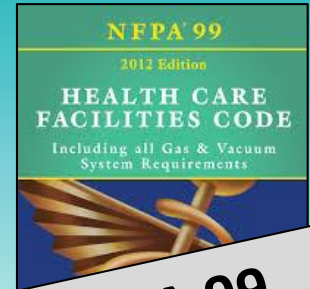
Chapter 13 – Security

“X” them out  
on your code  
book

## 5. Things NFPA has CHANGED

### b) Chapter 4 – Risk Assessment

NFPA 99 requirements based on  
“categories” determined by a  
Risk-based Assessment by Facility



**NFPA 99  
CHANGES**

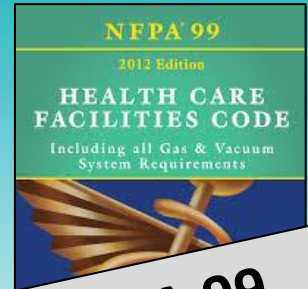
**VIEW MAY, 2016 L&L ON: “UTILITY RISK ASSESSMENT”**

- Risk assessment conducted by qualified facility personnel
- Implement less stringent requirements in areas of lower risk
- Implement more stringent requirements higher risk areas

## 5. Things NFPA has CHANGED

### c) Chapter 5 – Medical Gases

Many Tech revisions



**NFPA 99  
CHANGES**



- Tank Storage Racks must be made of non-combustible or limited-combustible materials, *5.1.3.3.2(9)*

- Computer Monitored Med Gas Alarms

**5.1.9.4**

Master alarms must be provided in 2 separate locations; central computer monitoring may be used for one of them

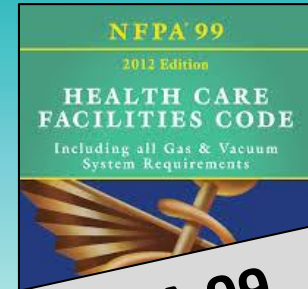
**Formerly a  
CATEGORICAL  
WAIVER**

# 5. Things NFPA has CHANGED

## c) Chapter 5 – Medical Gases

### Computer Monitored Med Gas Alarms

#### §5.1.9.4



**NFPA 99  
CHANGES**

#### Computer Sys:

- Be in continuous uninterrupted operation
- Powered to ensure reliability
- Be continuously attended by a responsible person or Remotely signal responsible parties via pager, auto-dialer, etc.
- Interface devices supervised to alarm any failure
- Signal switch/sensors must be powered by the computer sys or by Life Safety ATS

- Computer communicates directly with signal switch/sensors & comply with same 10 requirements as med gas panels
- Computer connections with signal switch/sensors are supervised so failure generates alarm
- Audio alert loud enough to inform system operator
- Communication devices do not use elec wiring for signals
- Transmission is supervised so failures initiate an alarm

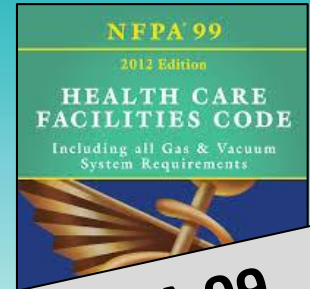
#### Computer Program:

- Med Gas alarm must have Life Safety priority signal
- Med Gas alarm must interrupt all lower priority alarms
- Program includes audible alert, remote signaling, display of specific alarm condition
- Must separately display each condition monitored, remain in alarm until problem resolved, be cancelable, visual/audible alarm if communication with any device is disrupted; reinitiate alarm signals even if audible is silenced during prior alarm

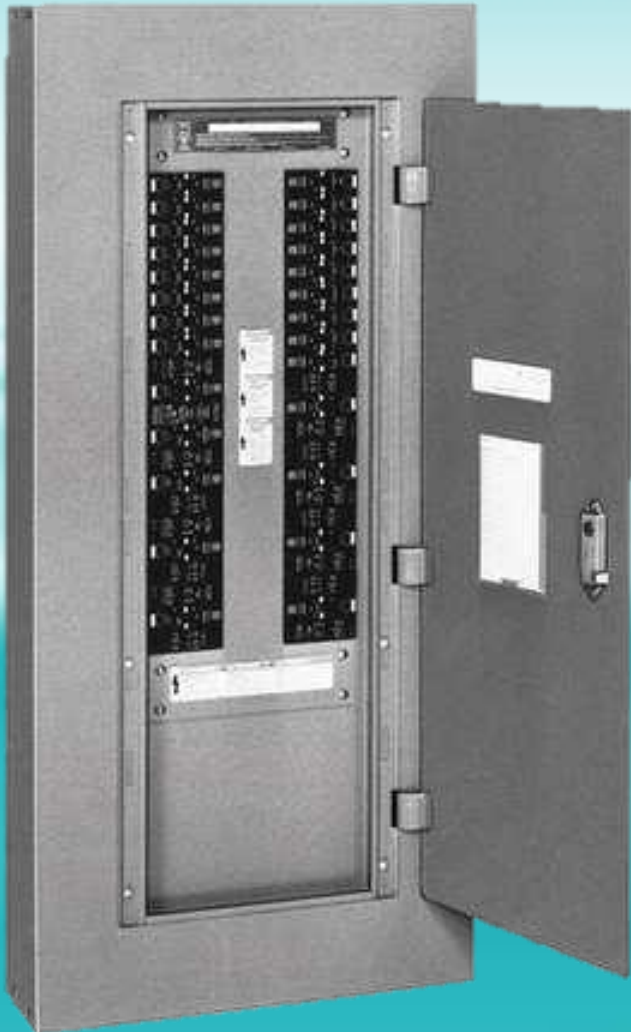
## 5. Things NFPA has CHANGED

### d) Chapter 6 – Electrical

Many Tech Revisions, according to Risk Category



**NFPA 99  
CHANGES**



### PANEL ACCESS (6.3.2.2.1.3)

#### Risk Category 1 & 2:

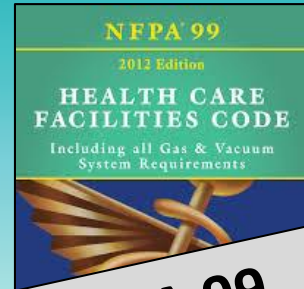
- Panel access limited to authorized personnel
- Panels not permitted in public access spaces



## 5. Things NFPA has CHANGED

### d) Chapter 6 – Electrical

Many Tech Revisions, according to Risk Category



**NFPA 99  
CHANGES**

#### RECEPTACLES (6.3.2.2.6)

Risk Category 1 (critical care): min 14

Risk Category 1 (operating rm): min 36

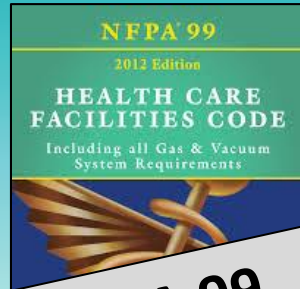
Risk Category 2: min 8

- Panel access limited to authorized personnel
- Panels not permitted in public access spaces



## 5. Things NFPA has CHANGED

### d) Chapter 6 – Electrical



**NFPA 99  
CHANGES**

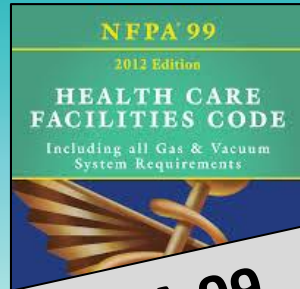


#### OR WET LOCATION (6.3.2.2.8.4)

- ORs defined as a wet procedure location, unless a risk assessment determines otherwise  
*Use Supplement 4: "Eval of Health Care Operating Rooms as Wet/Dry Locations"*
- Applies to new & existing

## 5. Things NFPA has CHANGED

### d) Chapter 6 – Electrical



**NFPA 99  
CHANGES**



#### **BATTERY POWERED LIGHTS (6.3.2.2.11)**

**Must be provided at**

- deep sedation areas &
- general anesthesia areas

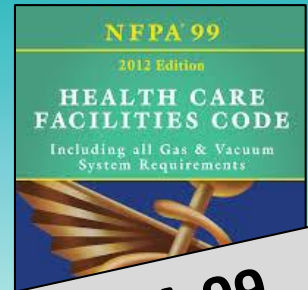


## 5. Things NFPA has CHANGED

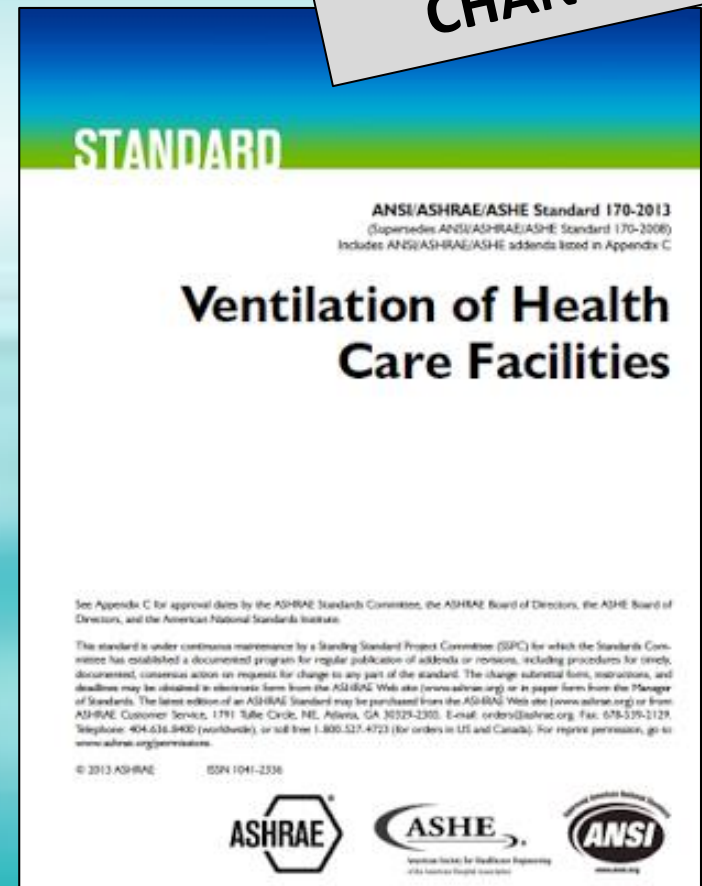
### e) Chapter 9 – HVAC

- New chapter
- HVAC systems must comply with ASHRAE STANDARD 170 – 2008, Ventilation of Health Care Facilities, to create acceptable indoor air quality.

Does not apply to existing HVAC systems, but would apply to the construction of new health care facilities, and the altered, renovated, or modernized portions of existing systems or individual components.



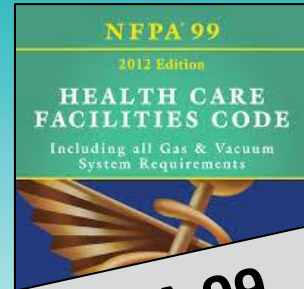
**NFPA 99  
CHANGES**



## 5. Things NFPA has CHANGED

### e) Chapter 9 – HVAC

COMMISSIONING is required to verify new HVAC systems and assemblies meet performance objectives and criteria.



**NFPA 99  
CHANGES**

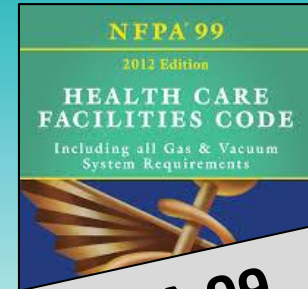




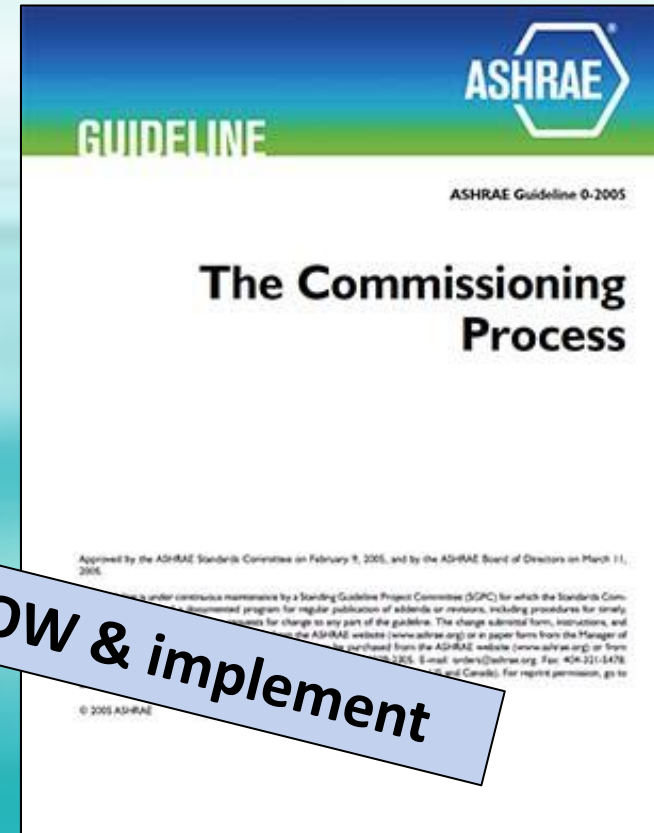
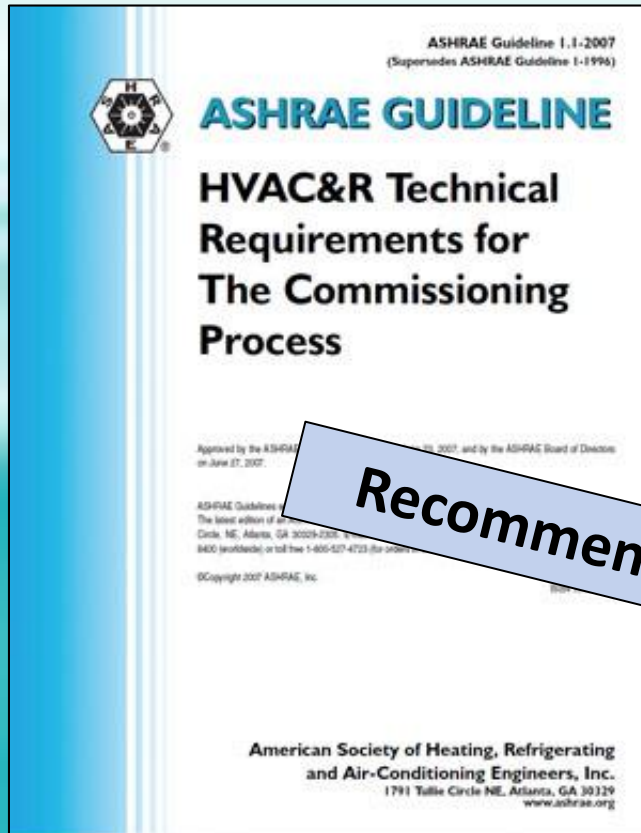
# 5. Things NFPA has CHANGED

## e) Chapter 9 – HVAC

- 9.3.3: Must use ASHRAE Guideline 0 & Guideline 1.1 (only acceptable documents guiding the commissioning process.)



**NFPA 99  
CHANGES**

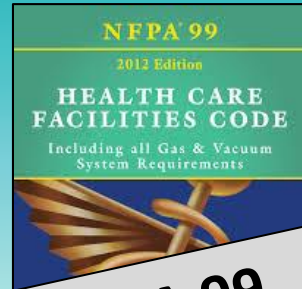


**Recommend: Buy NOW & implement**

# 5. Things NFPA has CHANGED

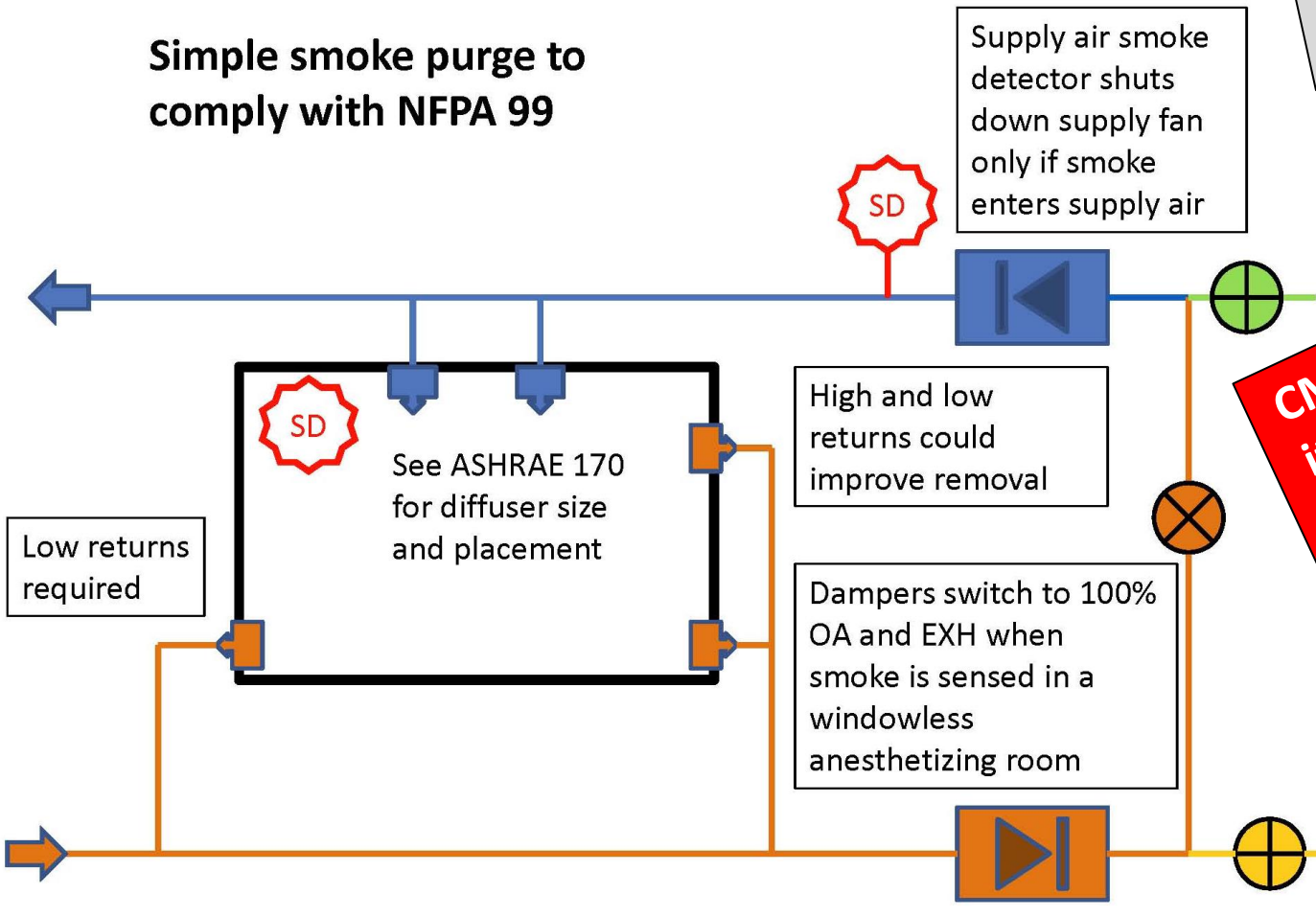
## e) Chapter 9 – HVAC

### ELIMINATED OR SMOKE VENTING



**NFPA 99  
CHANGES**

Simple smoke purge to  
comply with NFPA 99



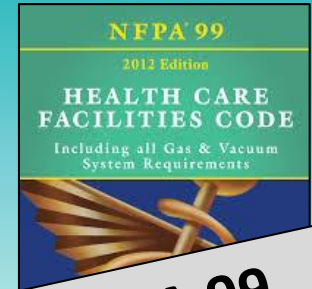
**CMS withdrew  
its Proposal to  
Keep Requiring**

## 5. Things NFPA has CHANGED

### f) Chapter 14 – Electrical Equipment

#### Use of Plug Strips & Extension Cords

10.2.4



**NFPA 99  
CHANGES**

**Strip plugs are a type of extension cord**



=

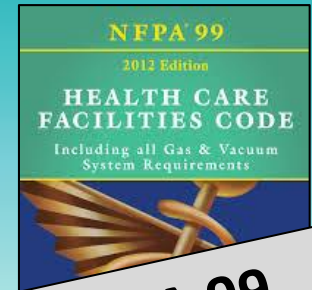


Also known as  
“Relocatable Power Taps” (RPT)

## 5. Things NFPA has CHANGED

### f) Chapter 14 – Electrical Equipment

#### Use of Extension Cords 10.2.4



**NFPA 99  
CHANGES**



#### General Rules for Extension Cords:

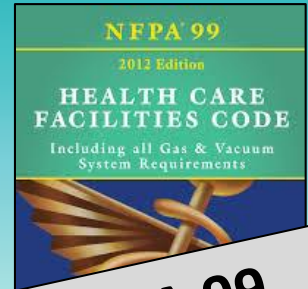
1. Cannot be used as a substitute for permanent wiring, except for 90 days for construction or holiday decoration
2. Cords must be visually inspected for physical integrity (documentation not required)
3. Cords must be periodically tested for polarity & grounding
4. Cannot be a trip hazard; cannot be daisy chained; cannot be walked on
5. Outlets must be grounded; 2-prong adapters prohibited

## 5. Things NFPA has CHANGED

### f) Chapter 14 – Electrical Equipment

Use of Plug Strips

10.2.4



**NFPA 99  
CHANGES**

**Strip plugs have additional requirements**

#### General Rules for Strip Plugs:

1. Can only be used with portable equipment
2. Must be installed, used & maintained per manufacturer instructions

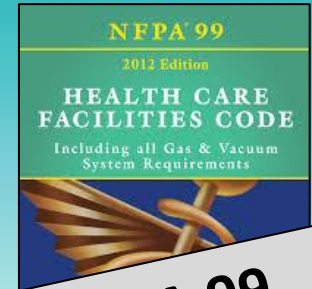


**Formerly a  
CATEGORICAL  
WAIVER**



## 5. Things NFPA has CHANGED

### f) Chapter 14 – Electrical Equipment



**NFPA 99  
CHANGES**

**Strip plugs have additional requirements**

### Added Special Rules for Strip Plugs (Patient Care Vicinity)

1. Applies to Strip Plug & equipment located within 6' from a patient bed or treatment space
2. Must be UL Listed 1363A or 60601-1
3. Must be permanently attached to a rack, table, or cart
4. Sum of amps of appliances must be less than 75% of cord ampacity
5. Must have method to ensure more devices can't be added
6. Non-care equipment can be plugged in only if grounded or double insulated (10.4.2.3)

## 5. Things NFPA has CHANGED

### f) Chapter 14 – Electrical Equipment

NFPA 99  
2012 Edition  
HEALTH CARE  
FACILITIES CODE  
Including all Gas & Vacuum  
System Requirements

**NFPA 99  
CHANGES**

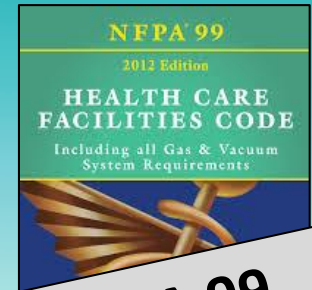
**Strip plugs have additional requirements**

#### **Added Special Rules for Strip Plugs (Patient Care Vicinity)**

7. Must have testing policy for equipment & cords
8. Must test before first use, after repairs, and periodically, as defined in the policy

## 5. Things NFPA has CHANGED

### f) Chapter 14 – Electrical Equipment



**NFPA 99  
CHANGES**

**Strip plugs have additional requirements**

### **Added Special Rules for Strip Plugs (Non-Patient Care Vicinity)**

1. Plug & equipment must be located at least 6' away from a patient bed or treatment space
2. Must be UL Listed 1363
3. Can be used for both patient care & non-patient care equipment
4. Items must be portable

## 5. Things NFPA has CHANGED

### f) Chapter 15 – Sprinklers

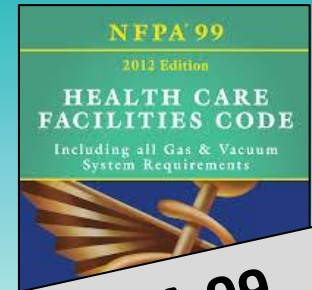
- Applies to New & Existing
- Extracts many requirements from LSC
- Removed Lab requirements

#### Section 15.11 – Compact Mobile Storage

- Hazardous, if > 50 SF
- Must have smoke detection above units

#### Section 15.13 - Operating rooms

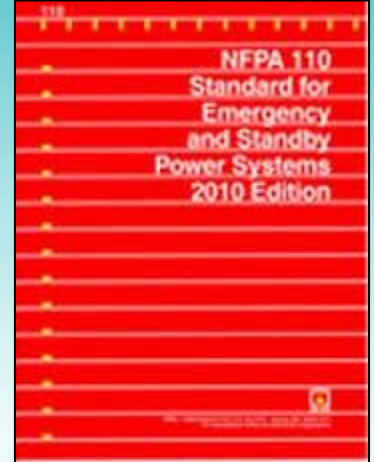
- Must classify as A (locals), B (minor), C (major)
- Must perform risk assessment of hazards during surgery
- Must periodically review surgical operations and procedures
- Must establish procedures for fire prevention, emergency, annual fire drill



**NFPA 99  
CHANGES**

## 5. Things NFPA has CHANGED

# NFPA 110 CHANGES



- a) **Battery Inspections**
- b) **Natural Gas Monthly Exercise**
- c) **Generator Load Bank-No 50% for 30 min**
- d) **36 Month Exercise**
- e) **Annual Fuel Quality Test**

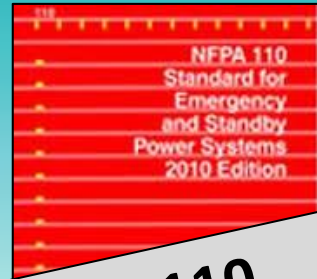


## 5. Things NFPA has CHANGED

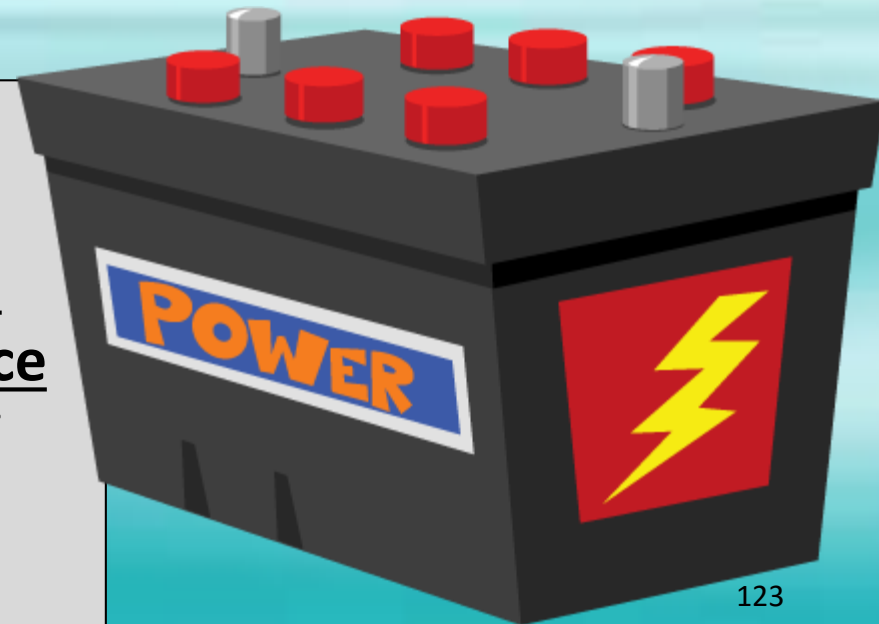
### a) Generator Battery Inspection 110, §8.3.7

**8.3.7** Storage batteries, including electrolyte levels or battery voltage, used in connection with systems shall be inspected weekly and maintained in full compliance with manufacturer's specifications.

**8.3.7.1** Maintenance of lead-acid batteries shall include the monthly testing and recording of electrolyte specific gravity. Battery conductance testing shall be permitted in lieu of the testing of specific gravity when applicable or warranted.



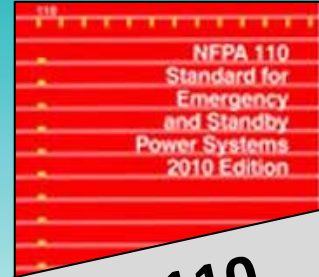
**NFPA 110  
CHANGES**



## 5. Things NFPA has CHANGED

### b) Natural Gas Generator Exercise

110, §8.4.2.4



**NFPA 110  
CHANGES**

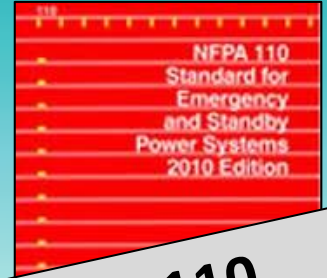
**No more 30% Load for Natural Gas !**

**8.4.2.4** Spark-ignited generator sets shall be exercised at least once a month with the available EPSS load for 30 minutes or until the water temperature and the oil pressure have stabilized.



## 5. Things NFPA has CHANGED

### c) Generator Load Bank 110, §8.4.2.3



**NFPA 110  
CHANGES**

Diesel generators may use the 2-hr load bank test in lieu of the monthly 30% load **(Eliminated 30 min @ 25% load)**

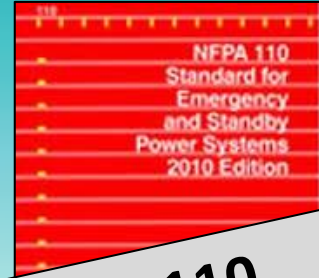
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WAIVER**

- Applies to Diesel only
- Run monthly at avail load

- Annual Load bank for min 1-1/2 hr, and:
  - @Min 50% load for 30 min
  - @Min 75% load for 60 min

## 5. Things NFPA has CHANGED

### d) 36 Month Generator Exercise 110, §8.4.9



**NFPA 110  
CHANGES**

All Level 1 Emergency Generators must be exercised for 4 continuous hours every 36 months

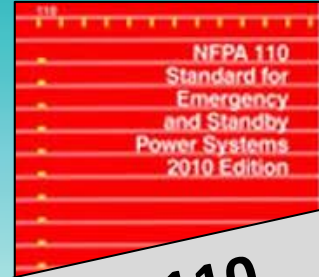
4.4.1\* Level 1 systems shall be installed where failure of equipment could result in loss of human life or serious injuries.

**A.4.4.1** Typically, Level 1 systems are intended to automatically supply illumination or power, or both, to critical areas and equipment

- (1) Life safety illumination
- (2) Fire detection and alarm systems
- (3) Elevators
- (4) Fire pumps
- (5) Public safety communications systems

## 5. Things NFPA has CHANGED

### d) 36 Month Generator Exercise 110, §8.4.9



**NFPA 110  
CHANGES**

**All Level 1 Emergency Generators must be exercised for 4 continuous hours every 36 months**

Level 2 systems are intended to supply power automatically to selected loads (other than those classed as emergency sys) in the event of failure of the primary source.

Level 2 systems typically are:

- (1) Heating and refrigeration
- (2) Communications systems
- (3) Ventilation and smoke removal
- (4) Sewage disposal
- (5) Lighting



## 5. Things NFPA has CHANGED

### d) 36 Month Generator Exercise 110, §8.4.9

All Level 1 Emergency Generators must be exercised for 4 continuous hours every 36 months



NFPA 110  
Standard for  
Emergency  
and Standby  
Power Systems  
2010 Edition

**NFPA 110  
CHANGES**

Diesel: Run at Min 30% nameplate kW rating,  
or Min exhaust gas temp

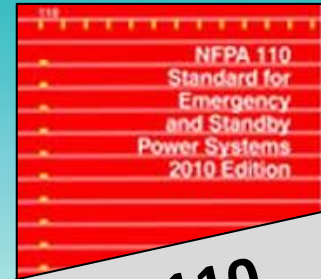
Nat Gas: Run at available load

May be combined with a regular monthly or annual test

## 5. Things NFPA has CHANGED

### e) Annual Fuel Quality Test 110, §8.3.8

Quality of Fuel must be tested at least annually, using an ASTM method

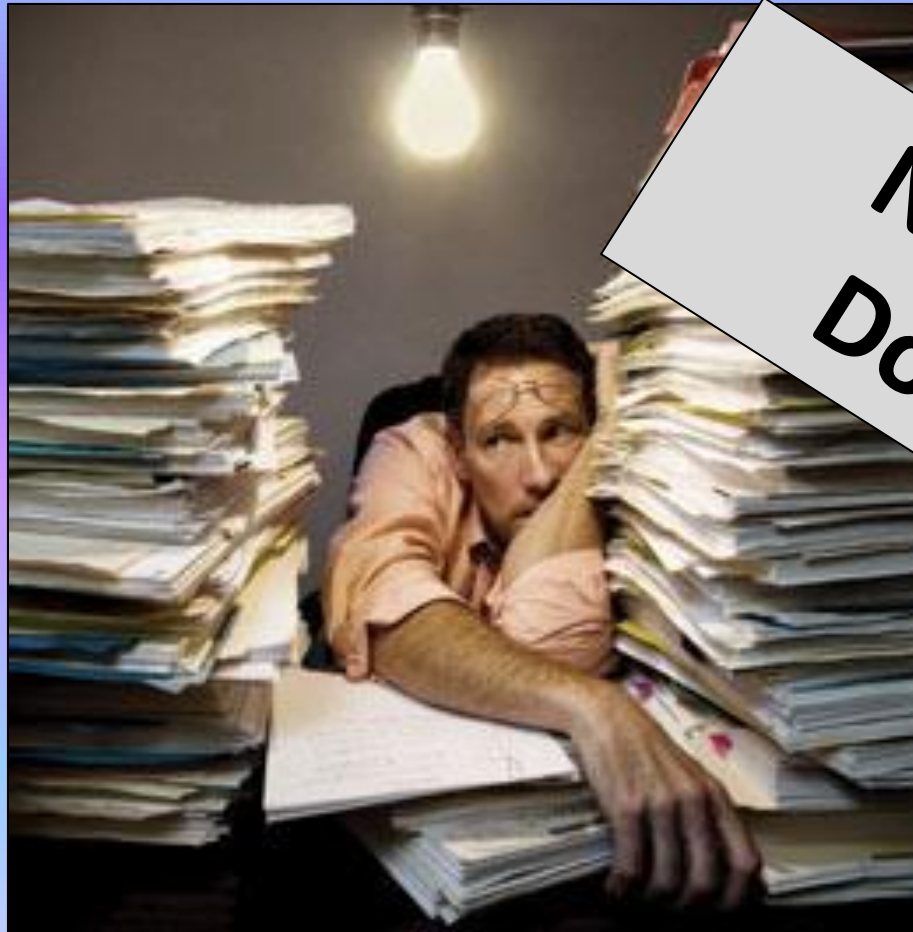
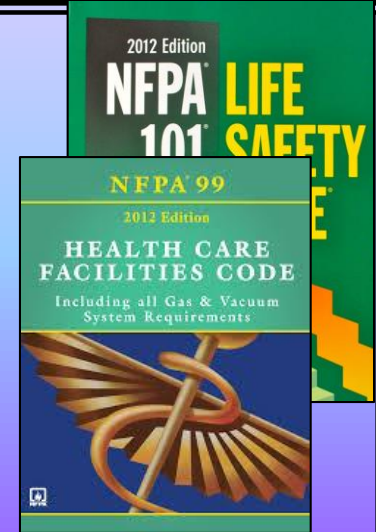


**NFPA 110  
CHANGES**

Fuel quality and fuel management are a concern since many generator failures are attributed to poor fuel quality, contamination, and other fuel system problems.

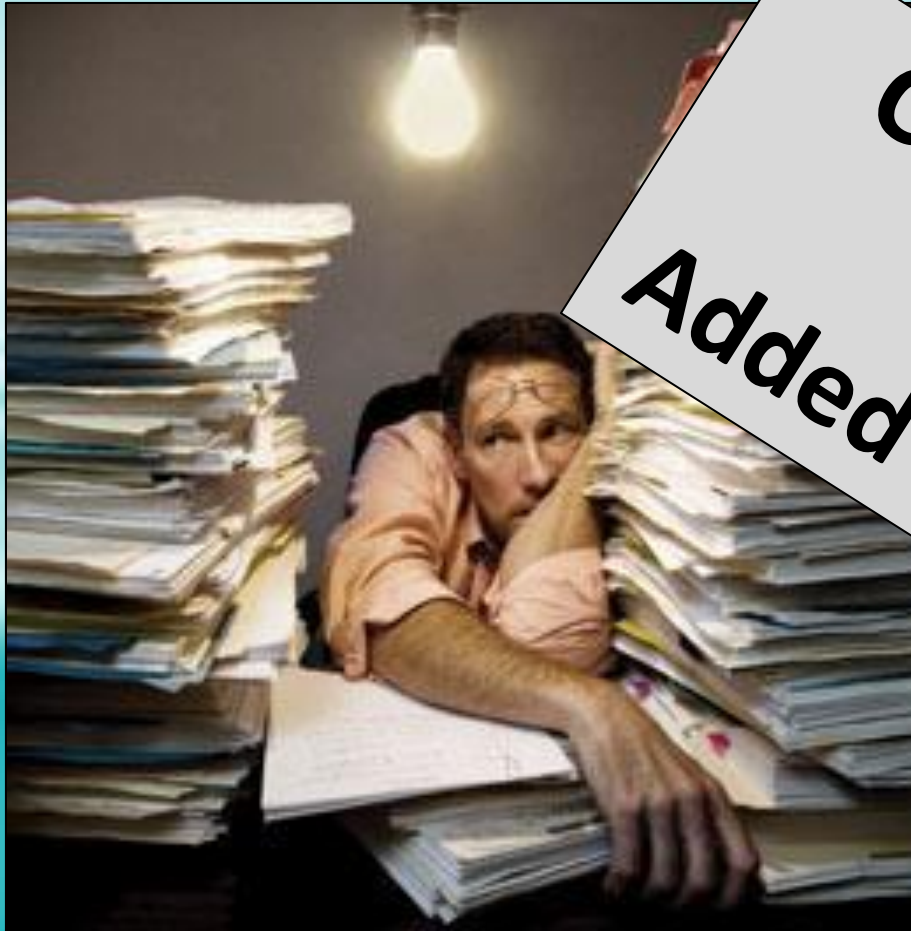
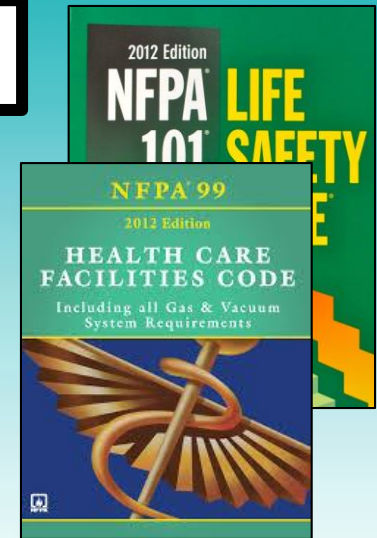
It is advisable to sample the bottom of the storage tank to verify that the stored fuel is as clean and dry as practicable, and that water, sediment, or microbial growth on the tank bottom is minimized.

# 6. New Documentation



**NFPA has Added  
Documentation**

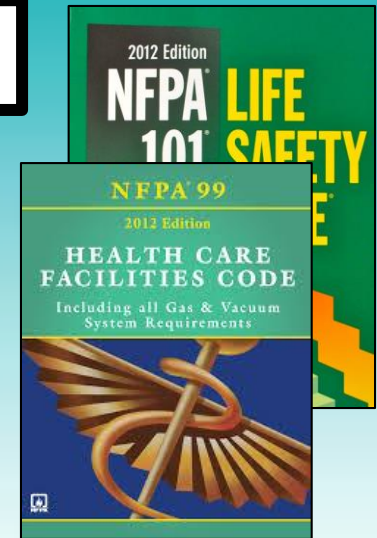
## 6. New Documentation



**CMS Feels there is  
LITTLE  
Added Documentation**

## 6. New Documentation

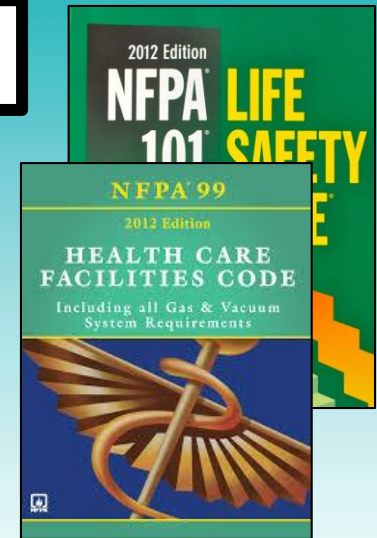
1. Self-Preservation Eval when moving pts
2. Door Inspections
3. Rehabilitation Category of projects
4. Special Needs Eval to justify locking
5. 1 Day Surgical Storage Eval to justify storage
6. Corridor Equipment Policy
7. ABHR Eval of Quantity & Accessibility
8. Combustible Decoration Calc
9. Recycle Container FM Rating





## 6. New Documentation

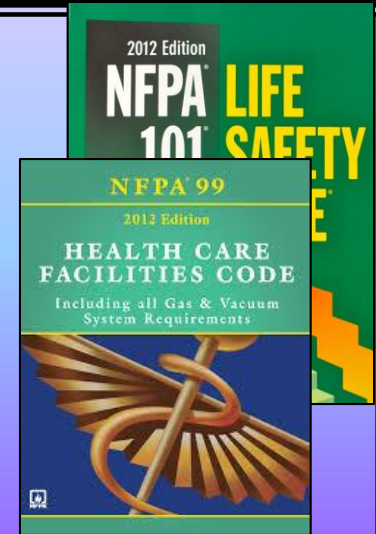
10. Recycle Container FM Rating
11. Sprinkler Outage Risk Evaluation
12. Dry Sprinkler Replacement
13. Utility Risk Assessments
14. Surgery Wet Location Assessment
15. Battery Lights in Surgery
16. HVAC Commissioning
17. Strip Plug & Extension Cord Inspections
18. Surgery Fire Risk Assessment
19. Generator Fuel Quality Test



# 7. Survey Forecasts



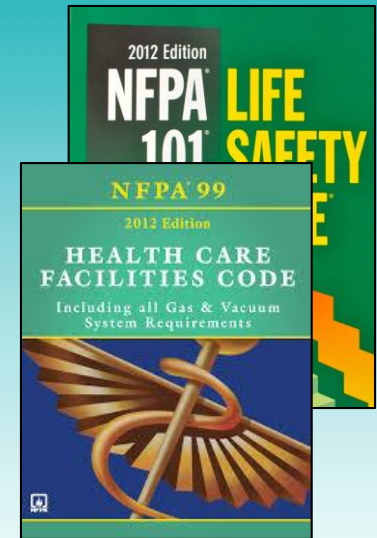
**Bill's predictions of  
what's Ahead**



## 7. Survey Forecasts

### Bill's predictions of what's Ahead

These are only guesses. Nothing is a sure thing. Use your own judgment

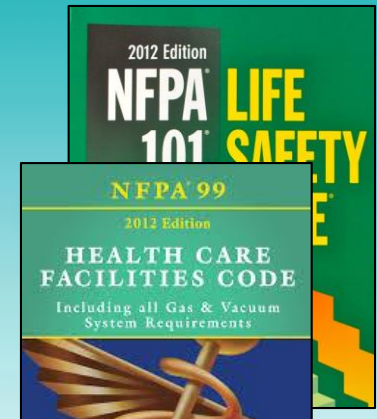


## 1. CMS Timetable

- May 4 Fed Register Adoption
- July 5 Effective Date for New vs Existing
- **Predict S&C Letter on Adoption around Sept, 2016**
- **Predict Survey Effective Day around Jan 5, 2017**

## 7. Survey Forecasts

Bill's predictions of what's Ahead



## 2. Slow Question Response

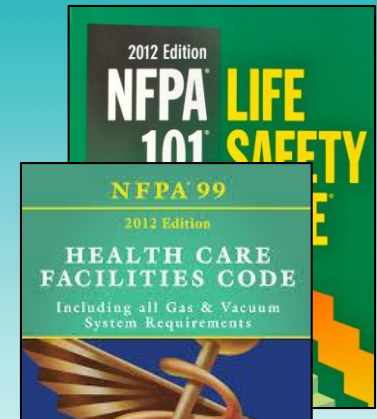
- DQA has not received any training yet
- CMS provided training will be late & minimal
- Training will put DQA behind in PR

## 3. Survey Inconsistency

- Code puts authority in AHJ to determine details
- “It Depends” will continue to be the slogan
- Don't look for CMS/DQA written clarifications

## 7. Survey Forecasts

Bill's predictions of what's Ahead



## 4. More Documentation Emphasis

- Facilities getting better; Gives more doc review time
- Training will refresh surveyors of required tests
- May develop fuller checklists of requirements

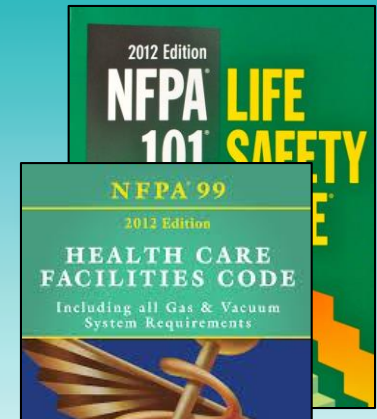
## 5. Risk Assessments

- Will be needed to justify installation & maintenance
- Learn the QA jargon to impress the inspector
- Be methodical; Develop the RA tools



## 7. Survey Forecasts

Bill's predictions of what's Ahead



## 6. CMS & TJC Bickering

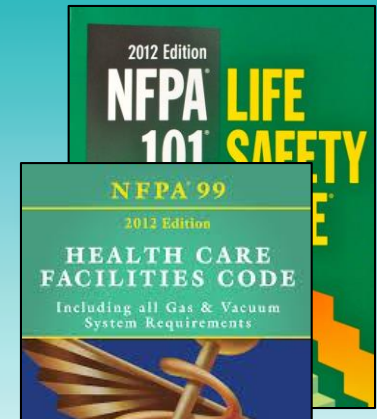
- New codes = Differences in Opinion = Friction
- Continued pressure for TJC to be like CMS
- More follow-up/verification surveys

## 7. Varied DQA Inspectors

- DQA will continue to cross-train TLC & Hosp staff
- Territories may shift as workload shifts
- Continue to see team-inspections

## 7. Survey Forecasts

Bill's predictions of what's Ahead



## 8. Surveyor Frustration

- Differences between NFPA & ICC editions
- More workload, Fewer workers, More questions
- Please be patient with them

## 9. CMS Code Direction

- Look forward to using 2012 for 10 years
- Will use Categorical Waivers as “adoption” tool

# Overview of 2012 NFPA 101 LIFE SAFETY CODE

# AGENDA



# Overview of 2012 NFPA 101 LIFE SAFETY CODE

# AGENDA

1. Adoption Process
2. New Referenced Codes
3. Things CMS has Added
4. Things CMS has Changed
5. Things NFPA has Changed
6. Things NFPA has Changed
7. New Documentation
8. Survey Forecasts



# Overview of 2012 NFPA 101 SAFETY CODE

Questions?  
E-mail to:

**Bill Lauzon**  
**Heather Werner**

**Lauzon Life Safety Consulting**



**Lauzon.LSC@gmail.com**

**262-945-4567**

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