2012 Life Safety Code Requirements

James D. Scott Jeffrey Wortley

Regulation

On May 4, 2016, CMS adopted the 2012 LSC and the 2012 HCFC by final rule. The final rule was published in the Federal Register (Vol. 81, No. 86), is entitled "Medicare and Medicaid Programs; Fire Safety Requirements for Certain Health Care Facilities", and is effective July 5, 2016. The final rule also adopted 2012 LSC Tentative Interim Amendments (TIA) 12–1, 12– 2, 12–3, and 12–4, and 2012 HCFC TIA 12–2, 12–3, 12–4, 12–5 and 12–6.

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: 16-29-LSC

DATE: June 20, 2016

TO: State Survey Agency Directors

FROM: Director

Survey and Certification Group

SUBJECT: Adoption of the 2012 edition of the National Fire Protection Association (NFPA)

101 - Life Safety Code (LSC) and 2012 edition of the NFPA 99 - Health Care

Facilities Code (HCFC)

Memorandum Summary

- The Centers for Medicare & Medicaid Services (CMS) has adopted by regulation the 2012 LSC and the 2012 HCFC. The regulation effective date is July 5, 2016.
- CMS will begin surveying for compliance with the 2012 LSC and HCFC on November 1, 2016.
- CMS will offer an online transitional training course for existing LSC surveyors to provide an update on the new requirements. The course will be available on September 2, 2016 via the CMS Surveyor Training Website.
- CMS will update the ASPEN program (i.e., the information system which tracks surveys) and CMS Fire Safety Forms (2786) prior to the November 1, 2016 survey start date.

CMS LSC 2012 ADOPTION

CMS is replacing the current LSC (NFPA 101) 2000 edition adopted in 2003 with the 2012 edition of the LSC issued August 11, 2011. The 2000 edition of the LSC will no longer be used.

CMS is also adopting the 2012 edition of the NFPA 99 (HCFC) issued August 11, 2011 for the first time.

EFFECTIVE DATE: JULY 5, 2016

The effective date, July 5, 2016, is important as it determines whether the facility is surveyed as "new" or "existing".

Facilities with plan approval on or before the effective date, or constructed/renovated before the effective date, are considered to be an "existing" facility, and are surveyed using the existing chapters of the LSC and the provisions applicable to existing (new) facilities in the NFPA 99 (HCFC).

Facilities with plan approval after the effective date, or constructed/renovated after the effective date, are considered to be a "new" facility, and are surveyed using the new chapters of the LSC and the provisions applicable to existing (new) facilities in the NFPA 99 (HCFC).

IMPLEMENTATION DATE: NOVEMBER 1, 2016

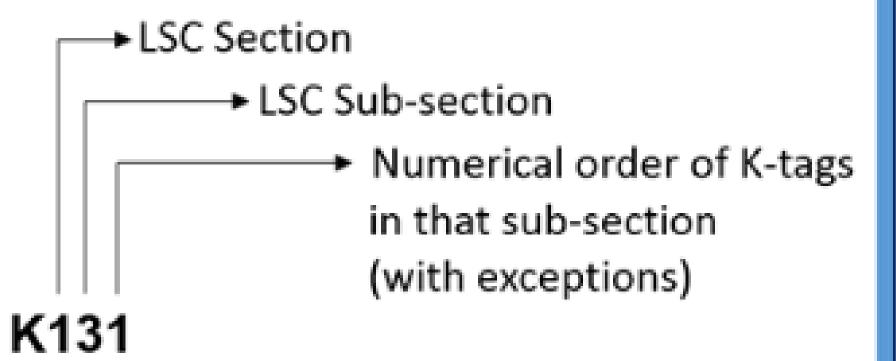
The implementation date, November 1, 2016, is the date that States and ROs will start using the 2012 edition of LSC and NFPA 99 (HCFC) to complete surveys of CMS certified facilities. States will use new forms to perform these surveys that have been updated to contain the appropriate 2012 *Code* language.

NEW K-TAG SERIES

The K-tag series for the CMS-2786 forms have been revised as part of the 2012 LSC updates.

The K-tag series includes three digits in which the first digit represents the Code section and the second digit represents the Code sub-section. The third digit represents the numerical order in which that K-tag is listed in that sub-section; however, K-tags related to "existing" residential board and care facilities that are identified as having an Evacuation Capability of "slow" or "impractical" do not follow this pattern.

New K-tag Series



NEW K-TAG CROSSWALKS

K-tag crosswalks have been developed for each CMS-2786 form to provide a reference to the updates that have been made.

K-tags will be listed as either new, deleted or converted to a new K-tag. The crosswalks are available at the following links:

CMS 2786R Crosswalk

LSC AND HCFC TIA ADOPTION

All Tentative Interim Amendments (TIAs) 1-4 issued prior to April 16, 2014 have been adopted with the 2012 edition of the LSC. Click on each button below to learn more:









TIA 12-4: Revises section 19.2.2.2.5.2 concerning door locking arrangements

All TIAs 2-6 issued prior to April 16, 2014 have been adopted with the 2012 edition of NFPA 99 (HCFC), except for the chapters below. Click on each button to learn more:

- 7, Information Technology and Communications Systems
- 8, Plumbing
- · 12, Emergency Management
- 13, Security Management



TIA 12-3 TIA 12-4 TIA 12-5 TIA 12-6

TIA 12-6: Revises section 11.5.1.1.2 through 11.5.1.1.4 and annex material, concerning the "Elimination of Sources of Ignition"

WAIVERS

Regulation for waivers has been updated based on the CMS adoption of the 2012 editions of LSC and HCFC (NFPA 99).

Click on each image below to view updates to waivers.



HCFC Waivers

The regulation includes and continues the ability to grant waivers.

If application of the LSC would result in unreasonable hardship for the facility (except Residential Board and Care facilities unless meeting health care chapters), CMS may waive specific provisions of the LSC, but only if the waiver does not adversely affect the health and safety of residents.

O

on

WAIVERS

Regulation for waivers has been updated based on the CMS adoption of the 2012 editions of LSC and HCFC (NFPA 99).

Click on each image below to view updates to waivers.





The regulation also includes the ability to grant waivers of requirements in the HCFC.

If application of the NFPA 99 (HCFC) would result in unreasonable hardship for the facility (except Residential Board and Care facilities unless meeting the health care chapters), CMS may waive specific provisions of the NFPA 99 (HCFC), but only if the waiver does not adversely affect the health and safety of residents.

FIRE SAFETY EVALUATION SYSTEM

CMS is replacing the current Fire Safety Evaluation System (FSES), NFPA 101A edition (2001) adopted in 2003 with the 2013 edition of the FSES, NFPA 101A. The 2001 edition of the FSES, NFPA 101A will no longer be used.

This will become effective upon the implementation date of the regulation adopting the 2012 edition of the LSC.

There is no FSES for AHCOs or ASCs that CMS regulates.

Implementation date to begin surveying: November 1, 2016.

ADA

While CMS does not directly enforce the Americans with Disabilities Act (ADA), CMS does expect compliance with the requirements as additional Federal requirements that facilities are required to follow.

An example of this is corridor projections where the LSC allows a noncontinuous projection to be no more than 6 inches from the corridor wall.

Section 307 of the "ADA Accessibility Guidelines for Buildings and Facilities"
(http://www.ada.gov/regs2010/2010ADAStandards/2010ADAStandards.htm#c4)
requires that projections be not more than 4 inches from the corridor wall. Facilities are required to meet this more stringent requirement as set forth by the ADA.

FRTW

The 2012 LSC includes three new sections regarding use of FRTW in health care occupancies. The requirements apply equally to buildings classified as both "new" and "existing." Click on each button below to learn more.

LSC Section 18/19.1.6.3(2)

LSC Section 18/19.1.6.5

LSC Section 18/19.1.6.6

LSC Section 18/19.1.6.3(2): This section allows a roof/ceiling assembly to be constructed of FRTW, meeting the requirements of NFPA 220, Standard Types of Building Construction.

FRTW

The 2012 LSC includes three new sections regarding use of FRTW in health care occupancies. The requirements apply equally to buildings classified as both "new" and "existing." Click on each button below to learn more.

LSC Section 18/19.1.6.3(2)

LSC Section 18/19.1.6.5

LSC Section 18/19.1.6.6

LSC Section 18/19.1.6.5: This section allows interior nonbearing walls, that are required to be at least 2-hour fire resistance rating, to be constructed of FRTW enclosed inside noncombustible or limited-combustible materials.

In this case, the facility may not use walls as shaft enclosures.



4 of 11

FRTW

The 2012 LSC includes three new sections regarding use of FRTW in health care occupancies. The requirements apply equally to buildings classified as both "new" and "existing." Click on each button below to learn more.

LSC Section 18/19.1.6.3(2)

LSC Section 18/19.1.6.5 LSC Section 18/19.1.6.6

LSC Section 18/19.1.6.6: This section allows use of FRTW to support fixtures and equipment when it is installed behind noncombustible or limited-combustible sheathing.

FIRE WATCH POLICY

In the 2012 LSC, if the fire alarm system is out of service for more than 4 hours in a 24-hour period, the authority having jurisdiction (AHJ) must be notified, and a building must be evacuated or a fire watch must be provided until the system has been returned to service (NFPA 101, 9.6.1.6).

The same actions must occur if the sprinkler system is out of service for more than 10 hours in a 24-hour period (NFPA 25, 15.5.2).

In the 2000 LSC, AHJ notification and evacuation or fire watch was required when either the fire alarm or sprinkler system were out of service for more than 4 hours in a 24-hour period.

LSC Section 18/19.3.4.3

How to Notify

- Call Complaint Hotline
- 1-800-882-6006
- Staffed During Normal Business Hours
- Monitored Nights and Weekends

K-TAG

Under the new K-tag numbering system, the K-tag in the following table is related to fire alarm systems.

K-tag Number	K-tag Title	K-tag Content
K343	Fire Alarm – Notification	2012 EXISTING Positive alarm sequence in accordance with 9.6.3.4 are permitted in buildings protected throughout by a sprinkler system. Occupant notification is provided automatically in accordance with 9.6.3 by audible and visual signals. In critical care areas, visual alarms are sufficient. The fire alarm system transmits the alarm automatically to notify emergency forces in the event of a fire. 19.3.4.3, 19.3.4.3.1, 19.3.4.3.2, 9.6.4, 9.7.1.1(1) 2012 NEW Positive alarm sequence in accordance with 9.6.3.4 are permitted. Occupant notification is provided automatically in accordance with 9.6.3 by audible and visual signals. In critical care areas, visual alarms are sufficient. The fire alarm system transmits the alarm automatically to notify emergency forces in the event of a fire. Annunciation and annunciation zoning for fire alarm and sprinklers shall be provided by audible and visual indicators and zones shall not be larger than 22,500 square feet per zone.
		18.3.4.3 through 18.3.4.3.3, 9.6.4

NURSING HOMES

The Centers for Medicare & Medicaid Services (CMS) has required that all nursing homes be equipped with sprinkler protection since August 13, 2013, per regulation.

As a retroactive measure, the 2012 LSC now requires that buildings containing nursing homes be protected throughout by an approved, supervised automatic sprinkler system.

The 2012 LSC continues to require that all buildings containing new health care occupancies be protected by a sprinkler system.

LSC Section 18/19.3.5.1.



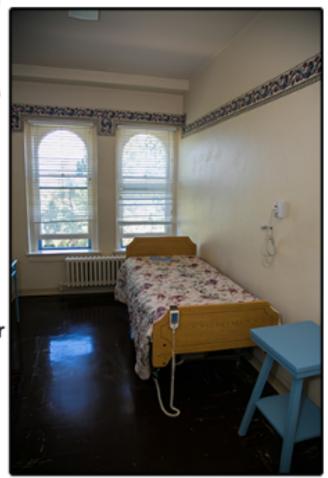
PATIENT SLEEPING ROOMS

The 2012 LSC no longer requires "new" or "existing" health care occupancy patient sleeping rooms to have an outside window or door. However, the Centers for Medicare & Medicaid Services (CMS) regulation still requires all patient sleeping rooms to have an outside window or door, with certain exceptions:

- Newborn nurseries and rooms intended for occupancy for less than 24 hours have no sill height requirements
- Windows in atrium walls shall be considered outside windows for the purposes of this requirement
- The window sill height in special nursing care areas shall not exceed 60 inches above the floor

For new construction, the window sill must not exceed 36 inches above the floor:

- The sill height requirement does not apply to newborn nurseries and rooms intended for occupancy less than 24 hours. Observation bedrooms must have an outside window if occupied more than 24 hours
- The sill height in special nursing care areas of "new" occupancies must not exceed 60 inches



Last, we'll learn about the updates to K-tags.

K-TAGS (cont.)

The K-tag in the following table is related to the subdivision of building spaces.

K-tag Number	K-tag Title	K-tag Content
K374	Subdivision of Building Spaces – Smoke Barrier Doors	2012 EXISTING Doors in smoke barriers are 1%-inch thick solid bonded wood-core doors or of construction that resists fire for 20 minutes. Nonrated protective plates of unlimited height are permitted. Doors are permitted to have fixed fire window assemblies per 8.5. Doors are self-closing or automatic-closing, do not require latching, and are not required to swing in the direction of egress travel. Door opening provides a minimum clear width of 32 in for swinging or horizontal doors. 19.3.7.6, 19.3.7.8, 19.3.7.9
		2012 NEW Doors in smoke barriers have at least a 20-minute fire protection rating or are at least 1%-inch thick solid bonded core wood. Required clear widths are provided per 18.3.7.6(4) and (5). Nonrated protective plates of unlimited height are permitted. Horizontal-sliding doors comply with 7.2.1.14. Swinging doors shall be arranged so that each door swings in an opposite direction. Doors shall be self-closing and rabbets, bevels, or astragals are required at the meeting edges. Positive latching is not required. 18.3.7.6, 18.3.7.7, 18.3.7.8

NFPA 99

2012 Edition

HEALTH CARE FACILITIES CODE

Including all Gas & Vacuum System Requirements



ASSUMPTIONS ON THE EFFECT OF SYSTEM'S FAILURE

Before we explore categories of systems, it is important to recognize that the assumptions on the effect of a system's failure assumes no human intervention.

Introduction

Electrical Systems

Essential Electrical System

Electrical Equipment

K-tags

Knowledge Check

Conclusion

Chapter 6 in the 2012 *Code* indicates that the chapter applies to new systems only, however, there are a few portions of the chapter that apply to existing systems as well.

The table shows what sections of Chapter 6 also apply to existing facilities.

NFPA 99 Section 6.1.2

ELECTRICAL SYSTEMS: APPLICABILITY

The 2012 edition of NFPA 99 has clarified the applicability of the *Code* to existing and new systems.

It is important to note that while the *Code* defines new and existing system requirements, it does not permit the removal of existing systems without review by the authority having jurisdiction (AHJ).

Generally, the Code provides for the removal of a system only when that system exceeds the requirements of a new occupancy.

	Chapter o dections that apply to Existing I acilities
	NFPA 99 Section 6.3.2.2.2.3
	NFPA 99 Section 6.3.2.2.4.2
	NFPA 99 Section 6.3.2.2.6.1
	NFPA 99 Section 6.3.2.2.6.2(F)
	NFPA 99 Section 6.3.2.2.8.5(B) (2), (3), and (4)
	NFPA 99 Section6.3.2.2.8.7
'	NFPA 99 Section 6.3.4
	NFPA 99 Section 6.4.1.1.17.5
	NFPA 99 Section 6.4.2.2.6.2(C)
	NFPA 99 Section 6.4.2.2.6.3
	NFPA 99 Section 6.4.4
	NFPA 99 Section 6.5.4
	NFPA 99 Section 6.6.2.2.3.2
	NFPA 99 Section6.6.3.1
	NFPA 99 Section 6.6.4

Chapter 6 Sections that apply to "Existing" Facilities

ELECTRICAL SYSTEMS: DISTRIBUTION (cont.)

Recognizing the ever increasing demand for electronically powered devices in medical care areas, the *Code* has increased the number of receptacles required in certain patient care rooms. The list below pertains to new installation, with the exception of #5 which, applies to both new and existing installations. Click on each button below for more information.

1

 Patient bed locations in general care areas (Category 2) now require a <u>minimum</u> of eight receptacles (previously the *Code* required four).

From the Surveyor's Perspective

FIRE SAFETY PLAN

In the 2000 LSC, eight components were required for a fire safety plan. In the 2012 LSC, one more component was added as a requirement.

The 2012 components are:

- Use of alarms
- Transmission to alarms to fire department
- Emergency phone call to fire department *new to 2012 LSC
- Response to alarms
- Isolation of fire
- Evacuation of immediate area
- Evacuation of smoke compartment
- Preparation of floors and buildings for evacuation
- Extinguishment of fire

See LSC Section 18/19.7.2.2 for details.

18/19.2.2.2.4 7.2.1.6.1

Delayed Egress Locking Systems

LSC 101 – 2000: Delayed-egress locks complying with 7.2.1.6.1 shall be permitted, provided that not more than one such device is located in any egress path.

LSC 101 – 2012: Delayed-egress locks complying with 7.2.1.6.1 shall be permitted.

Delayed Egress Locking Systems

- More then one delayed egress lock can be used in the path of egress.
 - Example: Mag Lock delay egress at stairway exit door, additional Mag Lock delay egress at exit door at bottom of stairway to outside exit.

18/19.2.3.4 Corridor Storage

Projections into the required width shall be permitted for wheeled equipment, provided that all of the following conditions are met:

- Wheeled equipment does not reduce the clear unobstructed corridor width to less than 60 inches.
 - Fire Safety plan and training address the relocation of equipment during an emergency
 - Equipment limited to:
 - Equipment IN USE
 - Medical Emergency Equipment NOT IN USE
 - Patient Lift and Transport Equipment

18/19.2.3.4 Corridor Storage Furniture

KEY POINT (8 criteria to be met)

Corridor Width is at least 8 Feet

- Fixed furniture is securely attached to the floor or the wall
- Furniture does not reduce unobstructed width to less than 6 feet
 - Located only on one side of the corridor
- Grouped such that each group does not exceed an area of 50 square feet

NFPA 99 / NFPA 70 Relocatable Power Taps "Surge Bars" "Power Strips"

In Patient Care Vicinity: Patient Care Equipment

UL 1363A / UL 60601-1

Outside Patient Care: Non Care Equipment

UL 1363

NFPA 80 (2010 ed.) Fire Rated Doors Inspection

Requires all fire-rated door assemblies to be inspected annually

Is the door and frame free from holes and breaks in all surfaces?

Are all the glazing, vision light frames and glazing beads intact and securely fastened?

Are the doors, hinges, frame, hardware and threshold secure, aligned and in working order with no visible signs of damage?

Are there any missing or broken parts?

Is the clearance from the door edge to the frame no more than 1/8 inch?

Is the door undercut no more than ¾ inch?

Does the active door leaf completely closes when operated from the full open position?

Does the inactive leaf close before the active leaf when a coordinator is used?

Does the latching hardware operate and secure the door in the closed position?

Is the door assembly free from are auxiliary hardware items which could interfere with its operation?

Has the door been modified since it was originally installed?

If gasketing and edge seals are installed, have they been verified for integrity and operation?

Hazard Rooms 18/19.3.2.1.5

- Soiled linen rooms containing no more than 64 gallons of soiled linen are not considered hazardous
 - Trash collection rooms are now defined as 'Rooms with collected trash' and are not considered hazardous if they contain no more than 64 gallons of trash

*** These may be hard to regulate for size and are recommended to be maintained as hazardous room***

18/19.7.5.6 Decorations

New requirements for decorations:

- Combustible decorations may not exceed 30 percent of the wall and ceiling area in a sprinklered smoke compartment
- Combustible decorations may not exceed 50 percent of wall and ceiling area inside patient sleeping rooms having a capacity not exceeding 4 persons, in a sprinklered smoke compartment

Generator Testing NFPA 110 (2010 ed.)

Generator Testing

If your monthly generator load test does not meet the 30% capacity of the nameplate rating, then an annual load test is required.

- The new 2010 edition of NFPA 110, referenced by the 2012 LSC only requires a 90-minute load test, rather than a 2-hour load test.
- The new annual test will begin at 50% load for 30 minutes, then move to 75% load for 60 minutes, for a total of 90-minutes of continuous test.
 - Natural Gas Generators are tested monthly with the Available Load
 - (> 30% not required)

Questions?

Contact Us

Health Facilities Evaluation Section 517-241-3408

• Jim Scott 517-241-3420

ScottJ6@Michigan.gov

• Jeff Wortley 517-243-9608

WortleyJ@Michigan.gov

• Kim Osborn 517-284-8948

OsbornK@Michigan.gov

Web Site www.Michigan.gov/hfes