



KHEA

Top Violations & Construction Notes

Office of the State Fire Marshal



Inspections are completed by the Prevention Division

Our office consists of 4 Divisions:

Prevention,
Investigation,
Emergency Response &
The Boiler Unit

Inspections fall under the **Prevention Division**

Doug Jorgensen
State Fire Marshal

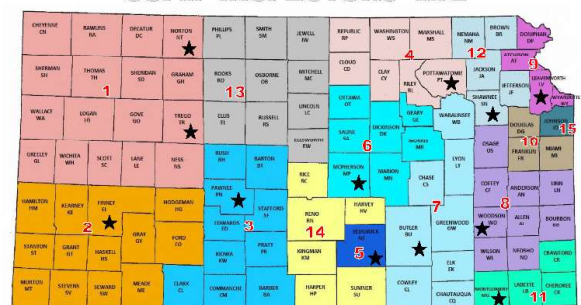


We currently have about 15 inspectors for the state of Kansas.

A few of the places we inspect:

Schools
Daycares
Jails
Propane Tanks
Healthcare Facilities

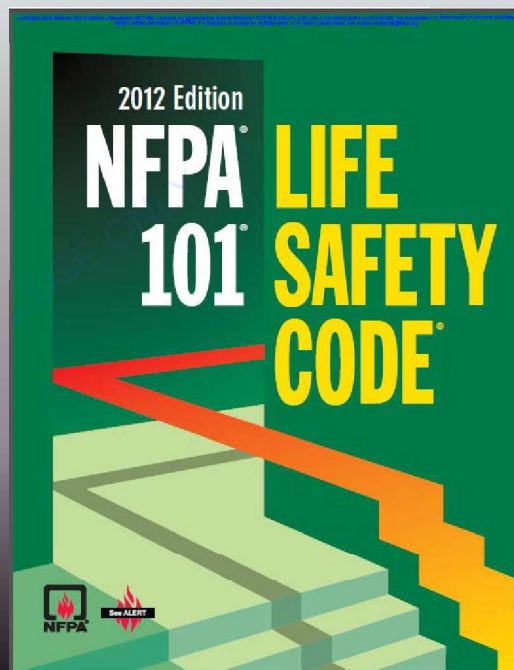
OSFM INSPECTORS MAP



Current Adopted Codes:

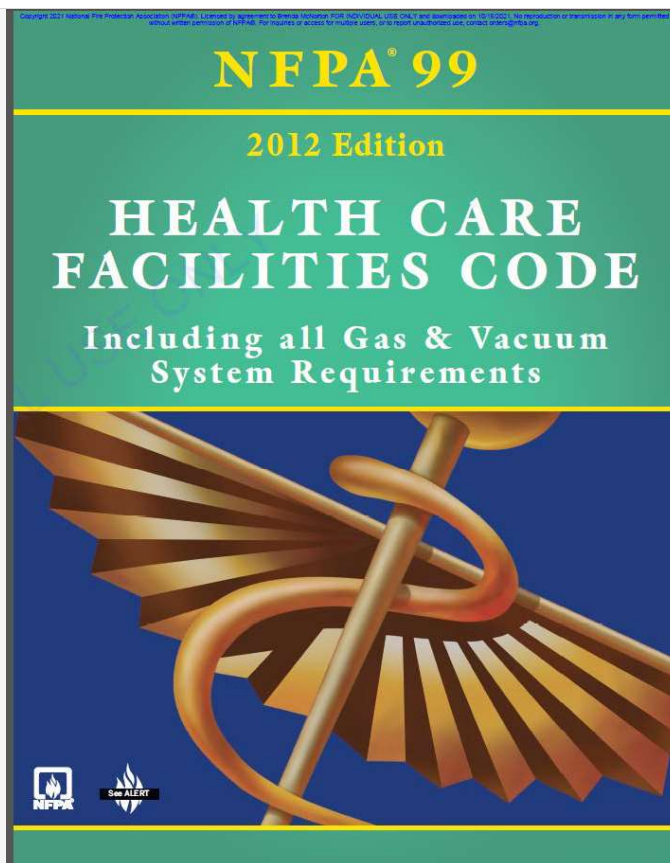
CMS Facilities

2012 NFPA 101 Life Safety Code



3

2012 NFPA 99 Life Safety Code



4

Remember: This is NOT a comprehensive list. Violations may exist which are unique to your facility.

TOP CITED VIOLATIONS 2020-21

CMS locations



PART 1

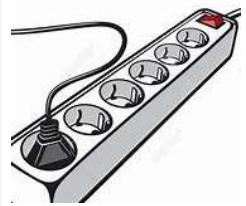
TOP VIOLATIONS



Emergency Plans



Sprinkler System
Maint. & Testing



Power Cords &
Extension Cords



Corridor Doors



Fire Alarm System
Testing & Maint.



Emergency Lighting

Emergency Plan

The administration of every healthcare facility shall have, in effect and available to all personnel, written copies of a plan for protecting all persons in the event of emergency, for keeping persons in place, for evacuating persons to areas of refuge, and for evacuating persons from the building when necessary.

The emergency plan shall include special staff response, including the procedures needed to ensure the safety of any resident, and shall be amended or revised whenever any resident with unusual needs is admitted to the home.

-Applies to all Medicare and Medicaid Participating Providers and Suppliers

-Required as of 11/15/2017

-Documented annual review & update required. Make sure that all copies of the plan are updated and identical.

- a. ensure that all contact lists are up to date
- b. ensure that hazard assessment is current and all hazards applicable to facility are addressed
- c. ensure that all contracts, MOUs, or agreements are current

-Full-scale community-based exercise (or a documented actual event) required annually.

-Table top exercise required annually.

7

Emergency Plan

19.7.2.2 Fire Safety Plan.

A written health care occupancy fire safety plan shall provide for all the following:

- (1) Use of alarms
- (2) Transmission of alarms to fire department
- (3) Emergency phone call to fire department
- (4) Response to alarms
- (5) Isolation of fire
- (6) Evacuation of immediate area
- (7) Evacuation of smoke compartment
- (8) Preparation of floors and building for evacuation
- (9) Extinguishment of fire

19.7.2.3 Staff Response

All health care occupancy personnel shall be instructed in the use of and response to fire alarms.

All health care occupancy personnel shall be instructed in the use of the code phrase to ensure transmission of an alarm under any of the following conditions:

- (1) When the individual who discovers a fire must immediately go to the aid of an endangered person
 - (2) During a malfunction of the building fire alarm system
- 19.7.2.3.3 Personnel hearing the code announced shall first activate the building fire alarm using the nearest manual fire alarm box and then shall execute immediately their duties as outlined in the fire safety plan.

8

HEALTHCARE

-A fire drill must be held once per shift per quarter. A silent drill may be conducted between the hours of 9:00PM and 6:00AM, a coded announcement may be used instead of the audible alarm.

-Once the fire emergency is discovered, the basic response of staff shall include the removal of all residents directly involved with the fire, provide notification to other building occupants, close all doors to try and confine the fire, and the relocation of residents to another protected area

-After the evacuation, faculty and staff should verify that all occupants have evacuated. Restrooms and other closed areas should be checked out by sight and voice.

Sprinkler System

All required documentation regarding the design of the fire protection system and the procedures for maintenance, inspection, and testing of the fire protection system shall be maintained at an approved, secured location for the life of the fire protection system

- ✓ Clean
- ✓ Maintained
- ✓ NO Rust
- ✓ NO Paint
- ✓ In Working Order
- ✓ Nothing Hanging From Sprinkler Head
- ✓ No Gaps Around Sprinkler Head

Power & Extension Cords

inside the patient care vicinity -> personal items = No. They must be plugged into the wall outlet

inside the patient care vicinity - medical items (not motorized) - UL60601-1

outside the patient care vicinity - personal items - UL1363

UL1363A can be used inside or outside the PCV but must be permanently mounted to a mobile medical equipment platforms such as IV poles and crash carts and can only be used for medical equipment.

remember the sum of the amp rating of all items plugged into the power strip cannot exceed 75% of the amp rating of the strip

Now, let's cover the definition of "Patient Care Vicinity". The patient care vicinity is defined as the Space within a location intended for the examination and treatment of patients, extending 1.8 m (6 ft.) beyond the normal location of the bed, chair, table, treadmill or other device that supports the patient during examination and treatment and extending vertically to 2.3 m (7 ft. 6 in.) above the floor

CMS does require documentation of inspections of power strips annually, or when there is a change in use.

11

Corridor Doors

- ✓ Resist passage of smoke
- ✓ Clearance between the bottom of the door and the floor covering shall be no more than 1 in.
- ✓ Door shall have latching device that keeps the door completely shut.
- ✓ Doors shall not be held open by devices other than those that release when the door is pushed or pulled
- ✓ No holes
- ✓ Doors must be 1 3/4 thick, solid bonded core wood OR Material that resists fire for a min of 20 min

12

Fire Alarm System

- ✓ Emergency Forces Notification – Fire Dept
 - ✓ Occupant Notification – audible alarm
 - ✓ An approved automatic smoke detection system shall be installed in all corridors of limited care facilities
 - ✓ Where a required fire alarm system is out of service for more than 4 hours in a 24 hr period, the AHJ shall be notified, and the building shall be evacuated or an approved fire watch shall be provided for all parties left unprotected until the fire alarm system has been returned to service.
 - ✓ Needs to have an approved maintenance and testing complying with NFPA 70 & 72
-

13

Emergency Lighting

- ✓ Emergency illumination shall be provided for a min of 1.5 hours in the event of failure of normal lighting
 - ✓ Not less than an average of a 1 ft. candle
 - ✓ Shall be arranged to automatically provide lighting in case of emergency
 - ✓ Functional testing conducted monthly with documentation
 - ✓ The emergency lighting system shall be either continuously in operation or shall be capable of repeated automatic operation without manual intervention
-

14

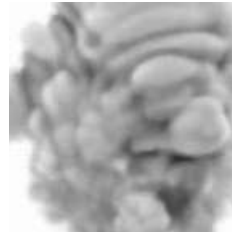


PART 2

TOP VIOLATIONS



Egress Doors



Smoke Barriers



Hazardous Areas



Portable Fire
Extinguishers

15

Egress Doors

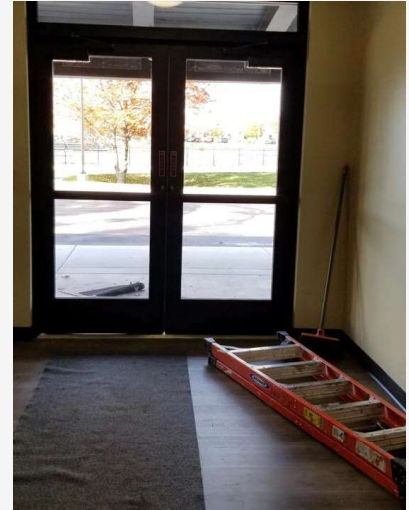
- ✓ Door locks shall not be permitted on patient sleeping room doors
 - ✓ Door locking arrangements shall be permitted where the clinical needs of patients require specialized security measures or where patients pose a security threat, provided that the staff can readily unlock doors at all time in accordance with 19.2.2.2.6
 - ✓ Any door in an exit passageway, stairway enclosure, horizontal exit, smoke barrier, or hazardous area enclosure shall be permitted to be held open only by an automatic release device that complies with 7.2.1.8.2
 - ✓ No holes, obstructions or passage of smoke
-

16

Temporary egress

Use common sense to avoid common errors

- Cover normal exits that have windows and are blocked due to construction to prevent staff going to the light of day.
- Remember to consider human nature when looking for a way to get out of the building. If they see daylight through an opening, they will try to go through it.



17

Smoke Barriers

- ✓ Smoke barriers shall be provided to divide every story used for sleeping rooms for more than 30 patients into not less than two smoke compartments
- ✓ No holes or penetrations
- ✓ Required smoke barriers shall be constructed in accordance with section 8.5 and shall have a min. of ½ hr fire resistance rating
- ✓ Openings in smoke barriers shall be protected by using one of the following:
 - ✓ Fire rated glazing
 - ✓ Wired glass panels in steel frames
 - ✓ Doors such as 1 ¾ in thick, solid bonded wood-core doors
 - ✓ Construction that resist fire for a min of 20 min

18

Hazardous Areas

- ✓ Any hazardous areas shall be safe-guarded by a fire barrier having a 1-hour fire resistance rating or shall be provided with an automatic extinguishing system in accordance with 8.7.1
 - ✓ Where a sprinkler option is used, the area shall be separated from other spaces by smoke partitions
 - ✓ Doors shall be self or auto-closing
 - ✓ Hazardous areas include but are not limited to: boiler and fuel-fired heater rooms, central / bulk laundry larger than 100 ft, paint shops, repair shops, soiled linen rooms, trash rooms, rooms larger than 50 ft with combustible materials, & Laboratories.... These are not ALL of the hazardous rooms, just an example.
-

Fire Extinguishers

- ✓ Shall be installed, inspected, maintained
 - ✓ NFPA 10 Standard for Portable Fire Extinguishers
 - ✓ Tag needs to be readily available and on extinguishers for inspection purposes
 - ✓ Extinguishers need to be cleaned and free from obstructions
 - ✓ Signage
 - ✓ Located in an accessible area
-

Construction Separation Walls

The requirements for construction separation walls do not seem consistent from one project to the next. Granted, site situations change, evolve and are unique, but seems like we have seen everything from fire resistant plastic, to full drywall partitions with rated openings be required. Help clarify this situation.

- The biggest issue that occurs with improper separation is that the architect misrepresents, or misunderstands the extent of the renovation, hot work, etc. Secondly, we find that the contractors occasionally fail to provide the separation as reviewed and approved.
- Keep in mind, healthcare is the most stringent due to CMS requirements, on top of those required by Life Safety Code.
- The following slide should give you a better idea of what needs to be in place and when a separation design is inadequate.

21

Construction Barriers

- If you are working in a facility with an active sprinkler system and an active fire alarm, you only need a smoke partition that resists the passage of smoke for 30 minutes between construction and occupied areas.
- Once the sprinklers are out of service, a fire watch or a 1-hour rated separation is then required.
- Once the fire alarm is out of service, a fire watch or a 1-hour rated separation is required.
- If either the sprinkler or alarm will be out of service for longer than 4 hours, then a fire watch is required.
- HOWEVER - If the facility's fire watch policy states a fire watch is implemented immediately upon a system being down, then you must abide by their policy instead of the 4-hour time frame. If the protection systems are broken into zones and can be shut down for just the construction area, this could change the requirements, but it is situational.

22

Construction Barriers (continued)

- If you are working in a facility where the ceiling grid is removed, upright sprinkler heads could be installed, or a fire watch could be implemented, and the separation maintained. If the ceiling grid will be out and the sprinkler will be out of service, then a fire watch and a 1-hour rated separation will be required.
- If you are working in a building with a fire alarm but without a sprinkler system, a 1-hour rated separation is required between construction and occupied areas. Once the fire alarm is out of service, a fire watch will be required, and the 1-hour fire rated separation must be maintained



23

Fire watch during construction

If you are in a facility with an active sprinkler system and an active fire alarm, you only need a smoke partition that resists the passage of smoke for 30 minutes between construction and occupied areas.

- Once the Sprinklers are out of service, a fire watch or a 1hr separation is then required.
- Once the fire alarm is out of service, a fire watch or a 1hr separation is required.
- If either of these systems will be out of service for longer than 4hrs then a fire watch is required regardless.

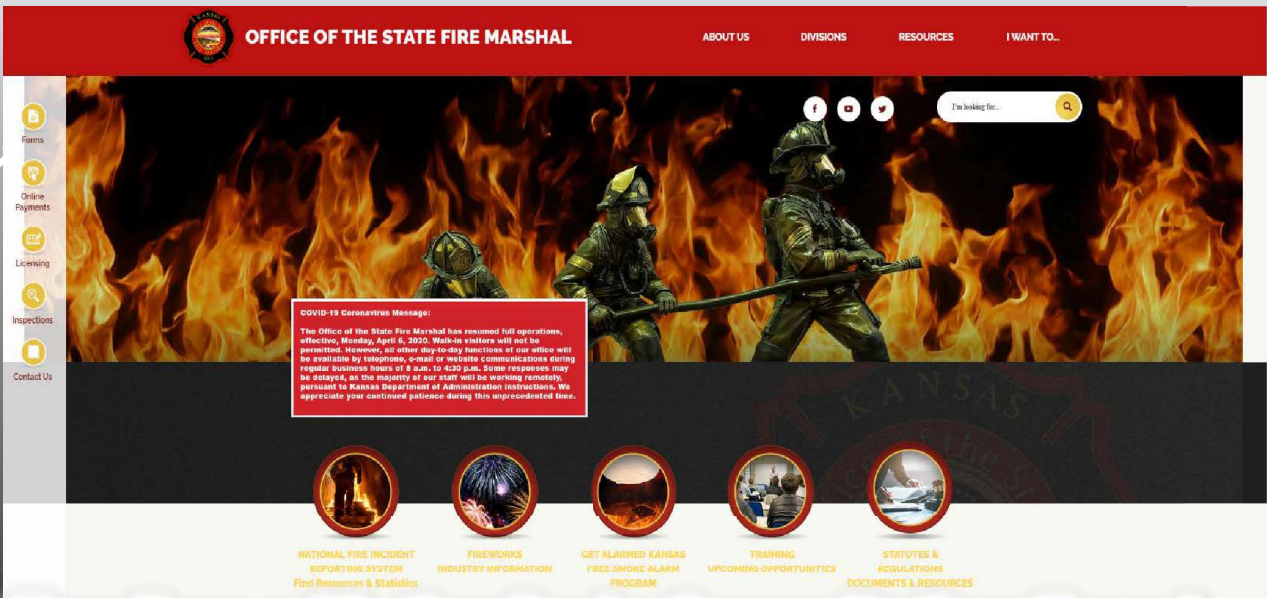
HOWEVER - If the facility's fire watch policy states a fire watch is implemented immediately upon a system being down, then you must abide by their policy instead of the 4-hour time frame. If the protection systems are broken into zones and can be shut down for just the construction area, this could change the requirements, but it is situational.

- If you are in a facility where the ceiling grid is removed, then they can install upright heads or implement a fire watch and maintain the separation. If the grid will be out and the sprinkler out of service, then a fire watch and a 1hr will be required.
- If you are in a building with a fire alarm and without a sprinkler system, a 1hr separation is required between construction and occupied areas. Once the fire alarm is out of service, a fire watch will be required and the 1hr separation maintained.

24

Have a Code Question?

FORMS



Email us with the Code Consultation Form!
www.firemarshal.ks.gov

Questions?

- John Sprague
Education Consultant
- john.sprague@ks.gov



- Brian Love
Fire Prevention Supervisor
- Brian.love@ks.gov

