

Fire in facilities – Sent on 4/7/17

There have been two fires in the Midwest recently where the fire occurred overnight in a locked area and staff did not have access to the room. As a result staff were unable to take appropriate action before things got out of control. There are many code references that cover this situation, for example: NFPA Standard: 2012 NFPA 101, 19.1.1.3.1 All health care facilities shall be designed, constructed, maintained, and operated to minimize the possibility of a fire emergency requiring the evacuation of occupants.

If you have a locked room and none of your staff have keys, how can staff who know there is a fire situation gain access to the area to help fight the fire? Consider your kitchens, staff offices, boiler rooms, laundry rooms, etc. All areas must be maintained and operated to minimize the possibility of a fire.

Have you had a fire? Don't forget to notify your Fire Marshal and State Health Agency.

Fire Watch Policies Sent 5/2017

Did you know that the outage time was increased for sprinkler outages from four hours to ten hours with the adoption of the 2012 Life Safety Code? (The time for fire alarm outages remained the same – four hours.) Does your plan call for a fire watch when there is a water outage? Does your plan say you don't have to do the fire watch if the systems are only down for routine testing and maintenance? If so, you should remove that statement as the fire watch is required for any type of outage. Does your sprinkler impairment plan meet the 2011 edition of NFPA 25?

You can view the requirements for free online at NFPA.org. (Go to the 2011 edition of NFPA 25, chapter 15 Impairments.) Are the staff dedicated to the task? Are the rounds continuous? Do you notify your insurance company when the sprinkler system is out of service? Do you notify the local fire department, Fire Marshal and Health Department? Do you have accurate telephone numbers in the policy or in your emergency numbers/calling tree? Don't forget to in-service staff when you change your policies. Make sure you have a documentation sheet prepared for the person doing fire watch to make it easier – every room, canopies, garages, basement, stairwells, attic spaces – anywhere there are sprinklers.

Don't forget to implement the plan when you have an outage. If your sprinkler system has been determined to be obstructed, that also requires a fire watch until the system is flushed or replaced. Failure to implement the plan can be an Immediate Jeopardy.

Are you ready for the NEW annual requirements due 7/5/2017? Sent 6/2017

There are a few new requirements under the 2012 edition of the Life Safety Code that are coming due on July 5th, 2017.

2010 edition of NFPA 80 - Standard for Fire Doors and Other Opening Protectives

Requirements for all fire-rated door assemblies to be inspected and maintained by a qualified person:

- **3.3.95 Qualified Person.** A person who, by possession of a recognized degree, certificate, professional standing, or skill, and who, by knowledge, training, and experience, has demonstrated the ability to deal with the subject matter, the work, or the project.
- **5.2.3 Functional Testing. 5.2.3.1** Functional testing of fire door and window assemblies shall be performed by individuals with knowledge and understanding of the operating components of the type of door being subject to testing.

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 ³/₄ 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?

2012 edition of NFPA 99 - Health Care Facilities Code

Requirements for receptacle, main and circuit breaker testing and maintenance:

6.3.3.2 Receptacle Testing in Patient Care Rooms

- **6.3.3.2.1** The physical integrity of each receptacle shall be confirmed by visual inspection.
- **6.3.3.2.2** The continuity of the grounding circuit in each electrical receptacle shall be verified.
- **6.3.3.2.3** Correct polarity of the hot and neutral connections in each electrical receptacle shall be confirmed.
- **6.3.3.2.4** The retention force of the grounding blade of each electrical receptacle (except locking-type receptacles) shall be not less than 115 g (4 oz).

6.3.4.1 Maintenance and Testing of Electrical System

- **6.3.4.1.1** Where hospital-grade receptacles are required at patient bed locations and in locations where deep sedation or general anesthesia is administered, testing shall be performed after initial installation, replacement, or servicing of the device.
- **6.3.4.1.2** Additional testing of receptacles in patient care rooms shall be performed at intervals defined by documented performance data.

6.3.4.1.3 Receptacles not listed as hospital-grade, at patient bed locations and in locations where deep sedation or general anesthesia is administered, shall be tested at intervals not exceeding

12 months.

- **6.3.4.1.4** The LIM circuit shall be tested at intervals of not more than 1 month by actuating the LIM test switch (see 6.3.2.6.3.6). For a LIM circuit with automated self-test and self-calibration capabilities, this test shall be performed at intervals of not more than 12 months. Actuation of the test switch shall activate both visual and audible alarm indicators.
- **6.3.4.1.5** After any repair or renovation to an electrical distribution system, the LIM circuit shall be tested in accordance with 6.3.3.3.2.

6.4.4.1.2 Maintenance and Testing of Circuitry

6.4.4.1.2.1* Circuit Breakers. Main and feeder circuit breakers shall be inspected annually, and a program for periodically exercising the components shall be established according to manufacturer's recommendations.

2012 edition of NFPA 99 - Health Care Facilities Code

This requires training of personnel who work with medical gases.

11.5.2.1 Qualification and Training of Personnel

- 11.5.2.1.1* Personnel concerned with the application and maintenance of medical gases and others who handle medical gases and the cylinders that contain the medical gases shall be trained on the risks associated with their handling and use.
- 11.5.2.1.2 Health care facilities shall provide programs of continuing education for their personnel.
- **11.5.2.1.3** Continuing education programs shall include periodic review of safety guidelines and usage requirements for medical gases and their cylinders.
- **11.5.2.1.4** Equipment shall be serviced only by personnel trained in the maintenance and operation of the equipment.
- **11.5.2.1.5** If a bulk cryogenic system is present, the supplier shall provide annual training on its operation.

Fire Alarm System Inspection, Testing and Maintenance (ITM) 7-2017

All devices connected to your fire alarm system need to have evidence that each individual device was tested. That means you also need an accurate inventory of every device, complete with a description as to where it is located. The test report needs to list each and every individual device (<u>individually itemized</u>), a description of where it is located, and whether it passed or failed its test.

Get those fire alarm interface relays included in the fire alarm testing process and document each one individually, with a "Pass" or a "Fail" notation. Here is a list of the most common interface relays used in healthcare fire alarm systems:

- Magnetic hold-open devices
- Air handler shutdown
- Kitchen hood suppression system
- Elevator recall
- Magnetic locks
- Fire pump
- Smoke dampers
- Clean agent suppression systems
- Sprinkler dry pipe/pre-action systems
- Overhead rolling fire doors

If the company that completes the fire alarm ITM is different than the range hood and sprinkler company vendors, then provide a copy of that report to the fire alarm company and they can write in the comments section that these devices were tested by 'vendor' on 'date', and pass/fail.

Don't forget to keep a disposition of the devices that failed or had a comment regarding how the system is not to code with your semi-annual inspection and testing. That way we know corrections were made and you don't have to search for paperwork during a survey.

A note about dampers: Electric fire and smoke dampers must be tested annually with the fire alarm system. Fusible link dampers are required to be exercised and lubricated once every four years in LTC/once every six years in hospitals. Electric fire/smoke dampers are required to be tested annually with the fire alarm.

References: NFPA 72 National Fire Alarm and Signaling Code

Useful Websites sent 8/2017

Would you like to read the new 2012 Life Safety Code K-tags? Go to:

https://www.cms.gov/Medicare/CMS-Forms/CMS-Forms/CMS-Forms-List.html

Enter 2786; then choose your form based on your occupancy type. LTC and hospitals use the Healthcare form, 2786R.

Would you like to view the NFPA codes referenced in the K-tags? Go to NFPA.org and sign up (it's free). Then go to the list of codes and standards. Choose free access:

http://www.nfpa.org/codes-and-standards/all-codes-and-standards/free-access

Choose your book and appropriate year (Here is a list to get you started):

NFPA 101, 2012 (LSC)

NFPA 25, 2011 (Sprinkler Systems)

NFPA 72, 2010 (Fire Alarms)

NFPA 99, 2012 (Health Care Facilities)

NFPA 110, 2010 (Generators)

NFPA 70, 2011 (Electrical)

Would you like to see the Life Safety Code survey and certification memos? Go to:

https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Policy-and-Memos-to-States-and-Regions.html

Enter LSC to filter out the other type of memos.

Fire and Smoke Door ITM - S&C Memo 17-38

The latest S&C memo is 17-38. This is in reference to fire door inspection, testing and maintenance. According to the memo, the new compliance date is 1/1/2018. (It

was 7/5/2017). If you have a citation and are unable to complete the work timely, you may use the new compliance date in your Plan of Correction.

Plan review Sent 9/2017

Are you planning on making changes to equipment in your facility? Examples might be a new fire alarm system, sprinkler system, boiler, elevator, generator, range hood, HVAC, locking devices, electrical work, lighting or walk-in refrigerator/freezer? Or perhaps you are thinking of doing some renovations such as adding/removing doors, walls, smoke barriers, wall coverings, ceilings, changes to locking devices (such as the timing of delayed egress), outdoor storage room, outdoor smoking area, canopy, or exits? Do you know the construction type of your facility? (This is important! If it is of non-combustible construction, you can't use wood studs during your renovation.) Have you run the proposed changes through your State Agency plan review team? If not, you might be making a change that does not comply with the Life Safety Code and/or Health Care regulations. Please send your information in just to make sure. Depending on your State Agency, you might need a code foot print, blue print, stamped/sealed documents from an architect or engineer, or specification sheets on your new finishes, fire stopping products, etc.

Sprinkler Systems – Sent 10/2017

When it is required that all areas of a facility be completely sprinkler protected, make sure that you have coverage under that garage door. We frequently see these areas with a sprinkler above the door, but when the garage door is in the open position, that sprinkler pattern is blocked. You might need to add a side wall sprinkler to ensure full coverage under the garage door.

Do you have painted, loaded (other substances – kitchen grease, cigarette tar, bird nest) or corroded (green or rusty) sprinklers? These are required to be **replaced**, not cleaned – there is no such thing as a UL listed paint remover.

5.2.1.1 Sprinklers shall be inspected from the floor level annually.

- **5.2.1.1.1** Sprinklers shall not show signs of leakage; shall be free of corrosion, foreign materials, paint, and physical damage; and shall be installed in the correct orientation (e.g., upright, pendent, or sidewall).
- **5.2.1.1.2** Any sprinkler that shows signs of any of the following shall be replaced:
- (1) Leakage
- (2) Corrosion
- (3) Physical damage
- (4) Loss of fluid in the glass bulb heat responsive element
- (5) Loading
- (6) Painting unless painted by the sprinkler manufacturer
- **5.2.1.1.3** Any sprinkler that has been installed in the incorrect orientation shall be replaced.
- **5.2.1.1.4** Any sprinkler shall be replaced that has signs of leakage; is painted, other than by the sprinkler manufacturer, corroded, damaged, or loaded; or is in the improper orientation.
- **5.2.1.1.5** Glass bulb sprinklers shall be replaced if the bulbs have emptied.

Is your sprinkler system obstructed? You must then complete a flush of the system. If this is not possible and the system must be replaced — **don't forget to** implement a fire watch until the flush and/or replacement is completed.

- **4.1.9.1** Where an impairment to a water-based fire protection system occurs, the procedures outlined in Chapter 15 of this standard shall be followed, including the attachment of a tag to the impaired system.
- **4.1.9.2** Where a water-based fire protection system is returned to service following an impairment, the system shall be verified to be working properly by means of an appropriate inspection or test.

Don't forget to keep a disposition of the devices that failed or had a comment regarding how the system is not to code with your inspection and testing. That way everyone knows corrections were made and you don't have to search for paperwork during a survey.

- **4.3.1** Records shall be made for all inspections, tests, and maintenance of the system and its components and shall be made available to the authority having jurisdiction upon request.
- **4.3.2** Records shall indicate the procedure performed (e.g., inspection, test, or maintenance), the organization that performed the work, the results, and the date.

References: 2011 edition of NFPA 25 Inspection, Testing and Maintenance of Water-Based Fire Protection Systems

Fire plans Sent 12-2017

With all the scrutiny on emergency preparedness, take a fresh look at your fire plan. Do you have one complete plan or do you have multiple versions in your disaster manual? Do you have multiple 'sections' that are not incorporated into one complete plan? Make sure that everything is in <u>one</u> plan, so there are no conflicts and that the reader does not think they are done reading 'the' plan when in fact there are multiple editions/sections. Also make sure every manual in your facility has been updated.

Are the numbers in your plan or calling tree out of date? Or did you use a sister facility's plan that has different phone numbers for your area – Fire Marshal, Health Department and Fire Department?

Do you have an assignment for an evacuation point outside? If you used a sister facility's plan, is the evacuation point accurate for your facility? Have you shared this plan with the local fire department? They might want to set up command in that very spot.

Do you have an assignment for who will be the designee to call 911? This is a new requirement to the 2012 Life Safety Code. This might be a redundant concept, but there is a good reason – what if the fire alarm did not transmit? Or, if it did

transmit and the fire department is on the way, staff can now give them good information: (for example) yes, we have a real fire, it is this big, in this room, we used two fire extinguishers and it is not extinguished, we are evacuating to this wing and we will meet you at the front door. Don't forget to have a backup for the night shift if your assignment is the receptionist and that is not a 24/7 position.

Does everyone know to pull a pull station for a fire no matter what? Old plans for 'major' and 'minor' fires are not current/acceptable.

Do you have a plan for the preparation and evacuation of a floor or wing?

Do you have a smoke compartment evacuation plan? Once staff determine the need to evacuate, start with residents in immediate surrounding area of fire, then the triangle of rooms around the room of fire origin (next to and across the hall from the room of origin), then the remaining rooms in the smoke compartment working away from the room of origin, trying not to cross the line of fire with the residents. Some residents may be evacuated outside while others may be evacuated beyond a set of smoke doors.



Do your evacuation and fire plans say to evacuate based on if the residents are ambulatory, use wheelchairs or are bedridden? After evacuation of the compartment of origin, and you find the need to evacuate further away, then it would be prudent to evacuate based on ambulation status (ambulatory, wheelchair, bedridden) since you can move faster. But it would not be fair to residents occupying the triangle of rooms around the room of fire origin to be last out because they are bedridden. If you have separate fire and evacuation plans, make sure they are consistent.

Keep this as simple as possible – if you have a smoke compartment plan from every smoke zone in your building, will staff be able to remember all of those instructions? If they know the above information, they should be able to find the safe zone every time, no matter where they are in the building (*and* be able to articulate this to a surveyor).

Do you have cross-corridor doors? Examples might be at the entrance to a memory care unit or doors to a service hall. Cross-corridor doors are access control doors that are not smoke barrier doors. You need to evaluate your building and identify where all of your smoke/fire barriers are and if you have cross-corridor doors. Make sure staff know these are not part of the smoke compartment plan as they sometimes look like smoke barrier doors.

If you care for residents with specialized needs (such as ventilator or bariatric units), have a general plan in place and make sure staff know what to do. If the bed won't fit through the door, you need to have a plan in place for rescue. Always make sure you are adequately staffed for emergencies when you are providing care to special populations.

Does your plan or training materials cover all aspects of what your facility offers staff to fight a fire? Does it cover a bit about the construction, the fire alarm and sprinkler systems, the generator, the smoke barriers, identification of smoke doors, identification of cross—corridor doors that are not smoke barrier doors, all types of fire extinguishers in your facility—including the K or halon, the range hood, etc. It is important for all staff to know what equipment is in the kitchen. There was a recent IJ as a result of a fire where the night shift nursing staff were unable to extinguish the fire because they used the wrong type of extinguisher and didn't know about the range hood or how to activate it.

Do you have the required print copies at the security station or nurse's station? Don't just rely on the computer – it will be the first thing to go down in the event of an emergency.

Don't forget to in-service staff when you change your policies.

19.7.2.1* Protection of Patients.

- **19.7.2.1.1** For health care occupancies, the proper protection of patients shall require the prompt and effective response of health care personnel.
- **19.7.2.1.2** The basic response required of staff shall include the following:
- (1) Removal of all occupants directly involved with the fire emergency
- (2) Transmission of an appropriate fire alarm signal to warn other building occupants and summon staff
- (3) Confinement of the effects of the fire by closing doors to isolate the fire area
- (4) Relocation of patients as detailed in the health care occupancy's fire safety plan
- **19.7.2.2 Fire Safety Plan.** A written health care occupancy fire safety plan shall provide for all of 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