NFPA 99 Health Care Facilities Code – 2018 Changes

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Agenda

Introduction
Code Cycle Review
Specific Technical Changes to 2018 edition of NFPA 99
Other Items
Questions
DISCLAIMER

Although all participants are members of NFPA 99 technical committees, all opinions stated today are personal opinion and do not necessarily represent the views or official position of NFPA or its Technical Committees.

ADDITIONAL DISCLAIMER

All of the topics discussed today are still subject to change. Nothing discussed today is final until the 2018 edition of NFPA 99 is approved and issued by the NFPA Standards Council.

Panelists

- Jim Bell – Chair, TC on Hyperbaric Facilities
- Mike Crowley – Chair, CC on Health Care Facilities
- Jason D’Antona – Chair, TC on Electrical Systems
- Jim Lathrop – Chair, TC on Piping Systems
Overall Code Cycle

• Public Input Closed:
• First Draft Meetings: August 2015 – Baltimore, MD
• First Draft Posted:
• Public Comment Closed:
• Second Draft Meetings: June 2016 – Dallas, TX
• Second Draft Posted:

“Governing Body”

1.3.4.2 Anesthesia.
It shall be the responsibility of the health care facility’s governing body to designate anesthetizing locations.

1.3.4.3 Wet Procedure Locations.
It shall be the responsibility of the health care facility’s governing body to designate wet procedure locations.

Risk Assessment “Clarification”

4.2.1
The health care facility’s governing body shall establish the processes and operations that are planned for the health care facility.

4.2.1.1
The governing body shall conduct risk assessments and shall determine risk categories based on the character of the processes and operations conducted in the health care facility.
Risk Assessment “Clarification”

4.2.2*
Risk categories shall be classified by the health care facility’s governing body by following and documenting a defined risk assessment procedure.

4.2.2.1
Where required by the authority having jurisdiction, the risk assessment shall be provided to the authority having jurisdiction for review based on the character of the processes and operations conducted in the health care facility.

Risk Assessment “Clarification”

4.2.3
A documented risk assessment shall not be required where Category 1 is selected.

Alarm Notification

16.7.4.3.5*
In patient care spaces where alarm notification adversely affects patient care, as determined by a risk assessment, alarm notification appliances shall not be required as long as an alternative means of alarm notification is provided.
Fire Extinguishers


- MRI Rooms: non-ferrous type
- Combustible cooking media: Class K
- Operating rooms: Clean Agent or Water Mist
- Telco Entrance Facility and Equipment Rooms: Clean Agent

Outdoor Central Supply Locations

5.1.3.3.2* Design and Construction.

(3) If outdoors, they shall be provided with an enclosure (e.g., wall or fencing) constructed of noncombustible materials.

(4) If outdoors and greater than 18.6 m² (200 ft²), they shall be provided with a minimum of two entry/exits.

Central Supply Location Heating

5.1.3.3.2* Design and Construction.

(9) *Fuel-fired equipment shall not be located in the room.

(10) If heat is required the maximum allowable temperature of the in-room heating element shall be 130°C (266°F).
Retroactive Application

5.1.3.3.4.1
Full or empty medical gas cylinders, when not connected, shall be stored in locations complying with 5.1.3.3.2 through 5.1.3.3.3 and shall be permitted to be in the same rooms or enclosures as their respective central supply systems. Approved existing installations shall be permitted to be continued in service.

Simulation Centers

5.1.3.5.2 Permitted Locations for Medical Gases.
(6) Simulation centers for the education, training, and assessment of health care professionals

Oxygen Concentrator Source

5.1.3.5.11* Oxygen Concentrator Supply Units.
5.1.3.9* Oxygen Central Supply Systems Using Concentrator(s).
Vacuum Filtration

5.1.3.7.4 Vacuum Filtration.
Central supply systems for vacuum shall be provided with inlet filtration with the following characteristics:

(1)
- 
(10)

Zone Valve Clarification

5.1.4.6.1

(2) *It is readily operable from a standing position.

A.5.1.4.6.1(2)
A "standing position" is meant to refer to an average-height individual standing with their feet on the floor in front of the zone valve.

Corrugated Medical Tubing

5.1.10.1.4*
Tubes shall be one of the following:

(2) *Listed corrugated medical tubing (CMT) fabricated from copper alloy ....
Corrugated Medical Tubing

5.1.10.2.1 Tubes for Vacuum.
Piping for vacuum systems shall be constructed of any of the following:

(3) CMT meeting the requirements of 5.1.10.1.4(2)

System Inspection

5.1.12.3 System Inspection.
5.1.12.3.1 General.
5.1.12.3.1.1
System inspections shall be performed prior to concealing piping distribution systems in walls, ceilings, chases, trenches, underground, or otherwise hidden from view.

Dental Gas and Vacuum Systems

Chapter 15, Dental Gas and Vacuum Systems

15.3 Category 1 Dental Gas and Vacuum Systems.
15.4 Category 2 Dental Gas and Vacuum Systems
15.5 Category 3 Dental Gas and Vacuum Systems
Electrical Systems

Chapter 6 Electrical Systems

• Reorganized and restructures

Clinical Laboratories

6.3.2.7* Clinical Laboratories.

A.6.3.2.7
A clinical laboratory is a space where diagnostic tests are performed as part of patient care.

Wet Procedure Location – Risk Assessment

6.3.2.3.5
If the risk assessment conducted by the health care facility’s governing body, as defined in Chapter 3, determines that the operating room is not a wet procedure location, then the special protection of 6.3.2.3 shall not be required.
Grounding in Patient Care Spaces

6.3.2.5.1.4 Grounding of Receptacles and Fixed Electrical Equipment in Patient Care Spaces.

Category 2 Spaces

6.5.2 Category 2 spaces served by a Type 1 or Type 2 EES shall be served by circuits from a branch panel(s) served from a single automatic transfer switch and a minimum of one circuit served by the normal power distribution system or by a system originating from a second automatic transfer switch.

Fuel Cells

6.7.1.4.6 Systems shall be listed for emergency use.
Circuit Breaker Maintenance

6.7.4.1.2.1* Circuit Breakers.
Main and feeder circuit breakers shall be inspected annually and maintained in accordance with the manufacturer’s instructions and industry standards. A program for periodically exercising the components shall be established according to the manufacturer’s instructions.

Suspended Ceilings

7.3.1.2.3.9 Other Requirements.
Suspended ceilings shall not be required in the EF, TER, and TR.

Clinical IT-Network

7.3.3.5 Wireless Phone and Paging Integration.

7.3.3.7 Clinical Information Systems.
Hyperbaric Risk Categories

14.1.3.1 Category 1 Hyperbaric Care.
14.1.3.1.1 Where interruption or failure of medical gas supply is likely to cause major injury or death of patients, staff, or visitors, the medical gas system shall be Category 1 for use in this chapter.
14.1.3.1.2 Where interruption or failure of electrical service is likely to cause major injury or death of patients, staff, or visitors, the electrical service shall be Category 1 for use in this chapter.

Applicable Code – Hyperbaric

14.1.4 Applicable Code.
Hyperbaric facilities that are conducting any form of treatment and are not located in a designated health care facility, including residential occupancies, shall comply with the requirements of the applicable code.

Fire Extinguishers

14.2.1.2.2 The room housing a Class A, Class B, or Class C chamber shall contain a minimum of one 2-A:10B:C portable fire extinguisher.
Cylinders Connected to Chambers

14.2.1.5.4.7 Medical air systems shall comply with Section 5.2 as applicable, except as follows:

(3) A medical air cylinder directly connected to a Class B or Class C chamber and used to provide air to that chamber shall be permitted to be in the same room as the chamber.

(4) Where a cylinder is used as described in 14.2.1.5.4.7(3), the cylinder shall be considered to be “in use” and shall not be counted when determining the total volume of medical gas outside a storage area in Section 11.3.

Lithium and Lithium Ion Batteries

14.2.9.3.17.5 Battery-Operated Devices. Battery-operated devices shall meet the following requirements:

(7) Lithium and lithium ion batteries shall be prohibited in the chamber during chamber operations, unless the product has been accepted or listed for use in hyperbaric conditions by the manufacturer or a nationally recognized testing agency.

Safety Check

14.3.1.6.1.3* Prior to each hyperbaric treatment a pretreatment, safety check to identify and remove prohibited items shall be performed and documented by a qualified person.
14.3.1.6.4.5 Upholstered Furniture.
• (A) Upholstered furniture (fixed or portable) shall be resistant to ignition in accordance with one of the following:
  (1) The components of the upholstered furniture shall meet the requirements for Class 1 when tested in accordance with NFPA 260.
  (2) Mocked-up composites of the upholstered furniture shall be tested in accordance with NFPA 261.
• (B) Upholstered furniture shall be tested in accordance with ASTM E1537, Standard Test Method for Fire Testing of Upholstered Furniture, or with California Technical Bulletin 133, Flammability Test Procedure for Seating Furniture for Use in Public Occupancies.

14.3.1.6.4.6 Mattresses.
• (A) Mattresses and mattress components shall be tested in accordance with 16 CFR 1632, Standard for the Flammability of Mattresses and Mattress Pads (FF 4-72); or NFPA 260.

14.3.4 Inspection, Testing and Maintenance.
Electrical Equipment

10.1 Applicability.

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

Multiple Outlet Connection—Relocatable Power Taps

10.2.3.6 Multiple Outlet Connection—Relocatable Power Taps.

(1) *The receptacles are permanently securely attached to the equipment assembly.

(4) *The electrical and mechanical integrity of the assembly is and its securement method are regularly verified and documented.

Gas Equipment

11.1 Applicability.

11.1.1 This chapter shall apply to the performance, maintenance, and testing of gas equipment in new and existing health care facilities, as specified in Section 1.3.
Cylinder Storage

11.3 Cylinder and Container Storage Requirements.

11.3.1 For the purpose of this section, the health care facility’s governing body shall define criteria for determining full cylinders and containers.

11.3.2 Full cylinders and containers shall be stored in accordance with this section.

11.3.3 Full cylinders and containers shall be segregated from all others.

Minimal Changes

- Plumbing Systems – Chapter 8
- HVAC – Chapter 9
- Emergency Management – Chapter 12
- Security Management – Chapter 13

Questions
Thank You

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