Health Care Facilities Code

2021 NFPA 99 Changes Live Virtual Training

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- Introduction
- Code Change Process
- 2021 NFPA 99 Changes
- Questions

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Standard Development Process and Change Indicators

REVISION SYMBOLS IDENTIFYING CHANGES FROM THE PREVIOUS EDITION

Text revisions are shaded. A Δ before a section number indicates that words within that section were deleted and a Δ to the left of a table or figure number indicates a revision to an existing table or figure. When a chapter was heavily revised, the entire chapter is marked throughout with the Δ symbol. Where one or more sections were deleted, a • is placed between the remaining sections. Chapters, annexes, sections, figures, and tables that are new are indicated with an *N*.

Note that these indicators are a guide. Rearrangement of sections may not be captured in the markup, but users can view complete revision details in the First and Second Draft Reports located in the archived revision information section of each code at www.nfpa.org/docinfo. Any subsequent changes from the NFPA Technical Meeting, Tentative Interim Amendments, and Errata are also located there.

Shaded text = Revisions Δ = Text deletions and figure/table revisions • = Section deletions *N* = New material

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References: Code and NFPA Training

NFPA LiNK™

4

2021 Changes

5

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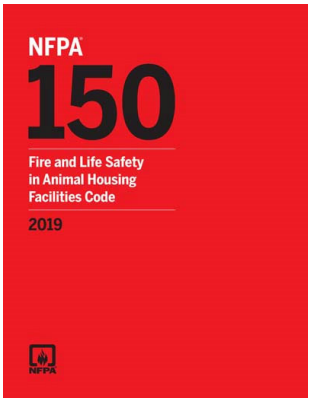
Animal Care

- **1.3.1** This code shall apply to all health care facilities other than home care and veterinary care, except as required by 1.3.1.1.
- **1.3.1.1** Hyperbaric chambers for veterinary care shall be in accordance with the requirements of Chapter 14.



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Home Care

- **3.3.77 Home Care**. Medical services or equipment provided in residential ~~occupancies~~ settings that purposely facilitate the provision of medical or custodial care; excludes commercial facilities
- **A.3.3.77** …home care should not include commercially-operated facilities housing of four or more occupants not related by blood or marriage receiving personal care or medical services.

Signage

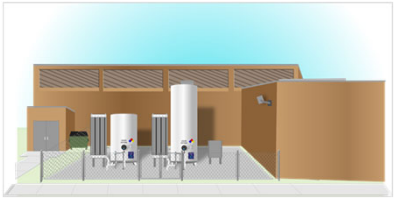
- **5.1.3.1.8.1 & 5.1.3.1.9.1**
- Existing signage that is not in strict compliance with the provisions of this code shall be permitted to be continued in use as long as the authority having jurisdiction has determined that such use does not constitute a distinct hazard to life.

Cryogenic

- 5.1.3.3.1.7-10
- Cryogenic needs to comply with NFPA 55 & appropriate CGA Standard
  - Oxygen
  - Nitrous oxide
  - Carbon dioxide
  - Inert gasses
- Terminology Change: Bulk Cryogenic → Cryogenic

Outdoor Sources

- If outdoors, they shall be well drained and provided with an enclosure constructed of noncombustible materials.
- If outdoors, cylinders and containers shall be protected from prolonged contact with soil.
- ~~If outdoors and greater than 18.6 m^2 (200 ft^2), they shall be provided with a minimum of two entry/exits.~~
- ~~If outdoors, bulk cryogenic liquid systems shall be provided with a minimum of two entry/exits.~~



Emergency Oxygen Supply Connection

5.1.3.5.13.2 (8)

Four alarm connection points installed to both master alarm panels to allow the temporary supply to be monitored while in use

Courtesy of Amico Corporation.

Manufactured Assembly Leakage Test

5.1.6.2

The leakage from a completed manufactured assembly shall not exceed ~~0.5 percent~~ 0.006 cm^3/sec (0.00037 $in.^3$/sec) of the starting pressure when tested at 20 percent above operating pressure for pressure pipelines and 0.002 cm^3/sec (0.00012 $in.^3$/sec) for vacuum and WAGD systems started at 635 mm (25 in.) HgV

Standing Vacuum Test

5.1.12.2.7.5*

~~At the conclusion of the test, there shall be no change in the vacuum other than that attributed to changes of~~ The leakage over the 24-hour test shall not exceed 0.5 percent of the starting pressure [e.g., 0.3 mm (0.125 in.) HgV starting at 635 mm (25 in.) HgV] except that attributed to specific changes in ambient temperature.

Responsible Facility Authority

- Responsibilities
  - Advise risk assessment and the interpretations of Chapter 5
  - Involvement in development of facility's emergency plan
  - Developing and enforcing permit-to-work rules
  - Evaluation and acceptance of the test reports
  - Maintenance of the MGV records
- Qualifications
  - ASSE 6010, 6020, 6030, 6040 or other approved program

Permit to Work System

- Communication prior to any work on MGV system
- Alternative supply or adjustments in patient care in place prior to system interruption,
- All work is performed by competent, qualified individuals
- Procedures are in place and communicated for the shutdown and restoration of medical gases
- Safety procedures are in place
- This code is followed
- The affected portions of the systems are tested

Medical Gas Space Change

5.1.14.3.5*

When clinical spaces are converted to nonclinical spaces, medical gas inlets and outlets that are not accessible for maintenance and testing shall be either removed or decommissioned.

Cylinder Storage > 3000 ft^3

- Requirements for design and construction of gas storage location for gas greater than 3000 ft^3 were duplicated in Chapter 11 (11.3.5) for ease of use, instead of just referring to chapter 5.

Cylinder Storage 300 ft^3 – 3000 ft^3

11.3.6.8

Ventilation for indoor medical gas storage rooms shall comply with 9.3.6.

Cylinder Storage Signage

2018

CAUTION
OXIDIZING GAS(ES)
STORED WITHIN
NO SMOKING

Change

2021

CAUTION
NO OPEN FLAME
OXIDIZING GAS(ES) STORED
WITHIN

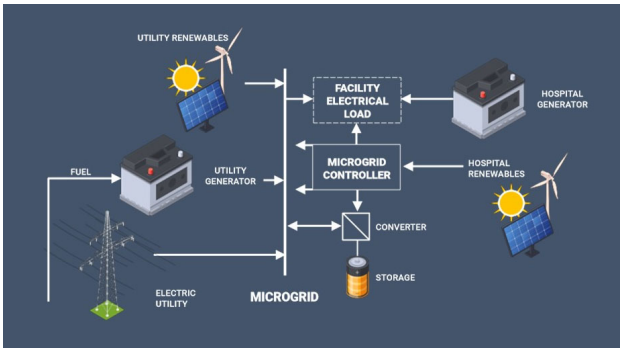
CAUTION
NO Smoking or Open Flame
Positive Pressure Gases
Room May Have Insufficient Oxygen
Open Door and Allow Room to
Ventilate Before Entering

Electrical Systems and Equipment

- Battery powered lighting units now required in indoor emergency power supply locations
- Relocatable power taps (RPTs) are not allowed to be plugged into other RPTs

Electrical Systems and Equipment

- 6.10 Health Care Microgrids.
  - 6.10.1 General Requirements.
  - 6.10.2 Sources.
  - 6.10.3 Reliability.
  - 6.10.4 Interconnection to an Electrical Utility.
  - 6.10.5 Distribution System. (Reserved)
  - 6.10.6 Control System.
  - 6.10.7 Commissioning.
  - 6.10.8 Inspection, Testing, and Maintenance.



NFPA LiNK

Electrical Systems and Equipment

- New section on Site Acceptance Testing
  - Done in accordance with industry-recognized standards and practices for:
    - Equipment Testing
    - System Commissioning
  - Records of acceptance testing must be kept for 5 years

Electrical Systems and Equipment

- New Section on Electrical Preventative Maintenance.
  - New definition
- The EPM program shall include the following elements:
  - Listing of all equipment and systems included as part of the program
  - Schedule of inspection, testing, and servicing (maintenance) of equipment
  - Survey and analysis of electrical equipment and systems to determine maintenance requirements and priorities
  - Scheduled routine inspections and tests
  - Review of inspection and test reports so that proper corrective measures can be prescribed
  - Performance of necessary work
  - Complete records
- EPM Intervals in Table 6.9.4.1

Electrical Systems and Equipment

- Moved a lot of Emergency Power Supply System information from NFPA 110 into Chapter 6.
  - For example, the classification information is now also located in NFPA 99.

Table 6.11.1(a) Classification of EPSSs

Class	Minimum Time
Class 0.083	0.083 hr (5 min)
Class 0.25	0.25 hr (15 min)
Class 2	2 hr
Class 6	6 hr
Class 48	48 hr
Class X	Other time, in hours, as required by the application, code, or user

[**110**:Table 4.1(a)]

Table 6.11.1(b) Types of EPSSs

Designation	Power Restoration
Type U	Basically uninterruptible (UPS systems)
Type 10	10 sec
Type 60	60 sec
Type 120	120 sec
Type M	Manual stationary or nonautomatic — no time limit

Telecom Equipment

- Access to EF, TER, and TR based on Security Vulnerability Assessment now instead of just 'restricted.'
- A TR shall only serve the floor where it is located and can't have a cable length greater than 295 ft.

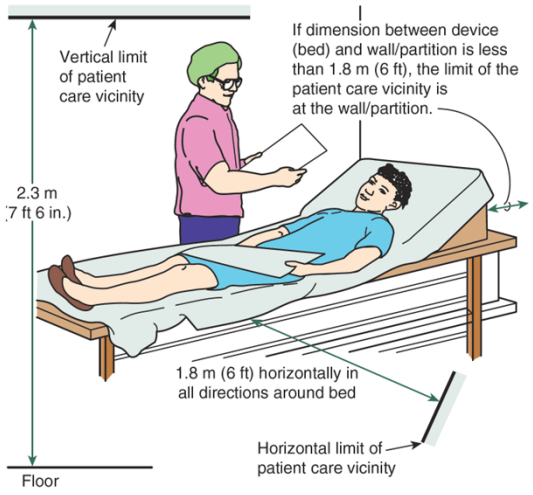
Fire Protection Features

- New section requiring compliance with NFPA 418 for heliports added.
- Flammable-liquid solution soaked materials no longer have to be removed from operating room, now they just have to be removed from patient care vicinity.
- Flammable liquid germicides or antiseptics are allowed to be in flammable packaging, previously they were not allowed to be in flammable packaging.

What is considered to be the patient care vicinity?

Please enter your responses in the chat function.

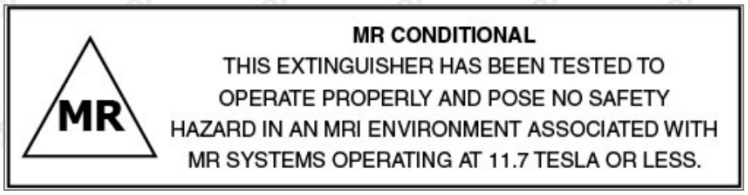
Patient Care Vicinity



Fire Protection Features

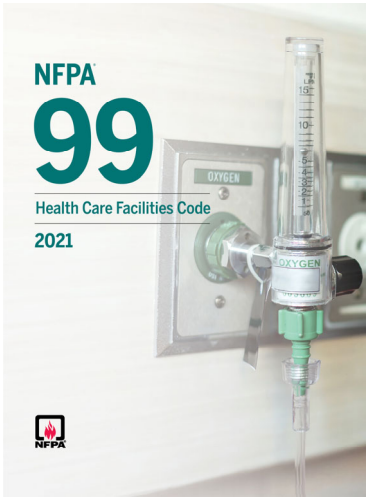
- Portable Fire Extinguisher
  - MR Conditional or MR Safe for MRI rooms and associated spaces
  - Class K fire extinguishers not required where residential cooking equipment is used for food warming or limited cooking

Figure A.16.10.1.1.1 Example of a Label on an Extinguisher for an MRI Environment.



NO MAJOR CHANGES

- Chapter 8
- Chapter 9
- Chapter 10
- Chapter 12
- Chapter 13
- Chapter 15



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RESOURCES & SUPPORT

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