



*Optimizing health care facilities*

# **Q3 ASHE Chapter Leaders, Sustainability and Advocacy Liaison Meeting**

**6 September 2023**

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a professional membership group of the American Hospital Association  
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# Agenda

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- Welcome
- NFPA Update HITF & Tech Meeting
- Academic Medical Center Sustainability Interest Group
- ASHRAE Update
  - 241, 170, GP-43
- Speakers Request Data Base
- ICC Update
- FGI Update
- Environmental Sustainability and Decarbonization
  - Roadmap - Operation Decarbonization/HealQuest
- 2023 Meeting Dates and Upcoming Events
  - Liaison/Chapter Leader Calls
  - MTTF Prioritization and Challenge Meeting

# Liaison Slide Deck

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This slide deck will be shared in the myASHE Liaison Community and SharePoint site.

The slide deck is intended to be used by the liaisons and chapter leaders to assist in sharing information with chapters. The slide deck is not to be shared with others.

By downloading the presentation slides, you agree to use it for sharing information purposes only.

# NFPA Update

# NFPA Standards

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- NFPA Annual Conference was held in June in Las Vegas
- Health Interpretations Task Force Meeting
  - Meeting minutes have not yet been published
  - Topics included hazardous storage rooms in business and ambulatory occupancies, zone valve locations, cross corridor door latching, multiple-outlet connections, and levels of sedation
- Technical Meeting
  - NFPA 99 - Health Care Facilities Code, 2024
    - No one stood to make a motion on the CAMs we were monitoring
  - NFPA 101 – Life Safety Code, 2024
    - There were no CAMs affecting healthcare facilities
  - Both documents are expected to be published soon

# Standards open for Public Input

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- **NFPA 70** – National Electrical Code
  - Ends tomorrow (9/7/23)!
- **NFPA 90A** - Standard for the Installation of Air-Conditioning and Ventilating System
- **NFPA 90B** - Standard for the Installation of Warm Air Heating and Air-Conditioning Systems
- **NFPA 99B** - Standard for Hypobaric Facilities
- **NFPA 241**- Standard for Safeguarding Construction, Alteration, and Demolition Operations
  - Until 6/4/24

# Academic Medical Center Sustainability Interest Group

# AMC Sustainability Interest Group

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- Collaborative community supported by ASHE, the Association of American Medical Colleges (AAMC), and Practice Greenhealth
  - Bimonthly meetings to connect on critical topics of sustainability and climate action specific to academic medicine.
  - Online platform to connect, share, and learn virtually.
  - In-person opportunities at national meetings such as CleanMed, ASHE Conferences, and AAMC Annual Meeting.

# AMC Sustainability Interest Group

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- First event will be on **Wednesday, October 17th** at 3pm Eastern
  - Session will be recorded but registration in advance is required to have access.
- If you are with an Academic Medical Center and want to get involved, please reach out to [awallace@aha.org](mailto:awallace@aha.org).



# ASHRAE Update

# ASHRAE 514

- Risk Management for Building Water Systems: Physical, Chemical, and Microbial Hazards
  - The purpose of this standard is to establish minimum requirements to reduce illness and injury from physical, chemical, and microbial hazards from water systems in buildings.
- **Published June 2023**
  - Now available via ASHRAE
  - Has not been adopted



ANSI/ASHRAE Standard 514-2023

## **Risk Management for Building Water Systems: Physical, Chemical, and Microbial Hazards**

Approved by the ASHRAE Standards Committee on June 24, 2023; by the ASHRAE Board of Directors on June 24, 2023; and by the American National Standards Institute on June 26, 2023.

This Standard is under continuous maintenance by a Standing Standard Project Committee (SSPC) for which the Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely, documented, consensus action on requests for change to any part of the Standard. The change submittal form, instructions, and deadlines may be obtained in electronic form from the ASHRAE website ([www.ashrae.org](http://www.ashrae.org)) or in paper form from the Senior Manager of Standards. The latest edition of an ASHRAE Standard may be purchased from the ASHRAE website ([www.ashrae.org](http://www.ashrae.org)) or from ASHRAE Customer Service, 1791 Tullie Circle, NE, Atlanta, GA 30329-2305. E-mail: [orders@ashrae.org](mailto:orders@ashrae.org). Fax: 678-539-2129. Telephone: 404-636-8400 (worldwide), or toll free 1-800-527-4723 (for orders in US and Canada). For reprint permission, go to [www.ashrae.org/permissions](http://www.ashrae.org/permissions).

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# ASHRAE 241

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- ASHRAE 241 Control of Infectious Aerosols
  - **PURPOSE:** The purpose of this standard is to establish minimum requirements for control of infectious aerosols to reduce risk of disease transmission.
  - **Published 24 June**
    - Available via ASHRAE
- Has not been adopted to date
- Looking for organizations to pilot standard



ASHRAE Standard 241-2023

## Control of Infectious Aerosols

Approved by the ASHRAE Standards Committee on June 24, 2023.

This Standard is under continuous maintenance by a Standing Standard Project Committee (SSPC) for which the Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely, documented, consensus action on requests for change to any part of the Standard. Instructions for how to submit a change can be found on the ASHRAE® website ([www.ashrae.org/continuous-maintenance](http://www.ashrae.org/continuous-maintenance)).

The latest edition of an ASHRAE Standard may be purchased from the ASHRAE website ([www.ashrae.org](http://www.ashrae.org)) or from ASHRAE Customer Service, 180 Technology Parkway, Peachtree Corners, GA 30092. E-mail: [orders@ashrae.org](mailto:orders@ashrae.org). Fax: 678-539-2129. Telephone: 404-636-8400 (worldwide), or toll free 1-800-527-4723 (for orders in US and Canada). For reprint permission, go to [www.ashrae.org/permissions](http://www.ashrae.org/permissions).

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# ASHRAE/ASHE 170

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- ASHRAE/ASHE 170 Ventilation for HC Facilities
  - Following addenda approved for publication
- Addendum i – 2<sup>nd</sup> Publication Public Review
  - Exhaust discharge roof locations
    - 10 ft (3 m) above service access level.
    - Higher than any roof surface within 4 feet (1.2 m).
    - 6 feet (1.8 m) from exterior walls.
    - 30 feet (9 m) from outdoor air intakes, openable windows/doors, and areas that are normally accessible to the public.

# ASHRAE/ASHE 170

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- ASHRAE/ASHE 170 Ventilation for HC Facilities
  - Following addenda approved for publication
- Addendum k – 1<sup>st</sup> Publication Public Review
  - 6.1.2 Heating and Cooling Sources Central Systems
    - Provide heating, cooling sources and *essential accessories* in number and arrangement sufficient to accommodate the facility needs
    - Reserve design capacity shall include equipment, accessories, and the controls necessary to ensure safe and reliable operation to support the owner's operation plan
    - Provide onsite fuel storage to ensure facility operation upon loss of primary energy source based on the facility operational plan

# ASHRAE/ASHE 170

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- ASHRAE/ASHE 170 Ventilation for HC Facilities
  - Following addenda approved for publication
- Addendum I – 1<sup>st</sup> Publication Public Review
  - Section 10 – Construction and System Start Up
    - Section rewrite
      - Reorganize the subheadings
      - Improve sequencing of requirements
      - More clearly describe precautions required when using the HVAC system in active construction areas
      - Clarify that construction areas need to be maintained under negative differential pressure relative to occupied areas except where an ICRA has determined other appropriate protection measures.

# ASHRAE/ASHE GP 43

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- Guideline 43 - Operations Guideline for Ventilation of Health Care Facilities
  - PURPOSE: The purpose of this guideline is to provide recommendations for the operation of heating, ventilation and air conditioning (HVAC) systems that provide environmental control in health care facilities for the safety and comfort of health care facility occupants.
  - Approved for 1<sup>st</sup> Public Review
    - Should be issued by mid-September for public review
  - Covers:
    - Implementation
    - Monitored spaces
    - Operating Practices
    - Recommended Inspection and Maintenance Tasks

# ASHRAE/ASHE GP 43

Table 4-6.1 Thresholds for Response to Temporary Increase in Rh

| Relative humidity $\leq 5\%$ over upper limit ( $>60\%$ up to $65\%$ Rh)   |   | Relative humidity $>5\%$ over upper limit ( $> 65\%$ Rh)  |
|--|---|---|
| $> 6$ hours continuously   | $> 12$ hours continuously   | $> 2$ hours continuously  |
| <ul style="list-style-type: none"> <li>Facility engineer will take corrective action and adjust the mechanical system to bring the Rh down within acceptable range.</li> <li>Notify manager and/or designee of the respective departments (i.e., Periop and IP&amp;C) that efforts are underway to correct the humidity.</li> <li>When resolved, notify the manager and/or designees of the respective departments</li> <li>Assure documentation on date/time of return to design specifications is retained.</li> </ul> | <ul style="list-style-type: none"> <li>Facility engineer will take corrective action and notify the leader or designee of the respective departments of the involved space.</li> <li>The leader or designee will convene with the key stakeholders to complete a risk assessment for the environmental conditions and make decisions as to continuing use of the space, relocate care to another space with compliant conditions or cancel care services until the issue is resolved.</li> <li>Consider factors described in 4.6.1.5 during the evaluation.</li> <li>If leader or designee decides to continue with care in the effected space, the following measures must be taken.               <ul style="list-style-type: none"> <li>Limit traffic</li> <li>Monitor for accumulation of condensation</li> <li>Perform terminal cleaning after the case.</li> <li>Assure documentation of date/time of return to design specifications is retained.</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>Facility engineer will take corrective action and notify the leader or designee of the respective departments.</li> <li>The leader or designee and key stakeholders will convene to complete a risk assessment for the environmental conditions and make decision as to continued use of the space, relocation of care or cancel care services until the issue is resolved.</li> <li>Consider factors described in 4.6.1.5 during the evaluation.</li> <li>Assure documentation of date/time of return to design specifications is retained</li> </ul> |

## 4.6.2 Temperature Variances:

4.6.2.1 Temperature Variances: When temperature is changed based on clinical needs or comfort no action is needed. Spaces where clinical needs or comfort may require room temperatures that fall outside the design ranges in ASHRAE/ASHE 170 the primary consideration should be the clinical needs of the patient within the space. Secondly consideration for temperatures should be comfort of the occupants.

4.6.2.2 Variations in temperature not based on clinical needs or comfort of  $\pm 5^{\circ}\text{F}$  ( $\pm 3^{\circ}\text{C}$ ) from design parameters are acceptable for periods not longer than 2-hours per occurrence. If variations of more than 2-hours or greater than  $\pm 5^{\circ}\text{F}$  ( $\pm 3^{\circ}\text{C}$ ) occur the following steps should be taken:

- a. Facility engineer should take *corrective action* and adjust the mechanical system to bring the temperature within acceptable range.
- b. Notify manager and/or designee of the respective departments that efforts are underway to correct the temperature.
- c. When resolved, notify the manager and/or designee and retain documentation.

# ASHRAE/ASHE GP 43

Table 5.2: Humidity Testing Frequency

| Function of Space   | Criticality   | Humidity Control | Humidity Testing Frequency |       |
|---|---|------------------|----------------------------|-------|
|   |   |                  | Best Practice              | Min   |
| Wound intensive care (burn unit)  | High  | High 60%         | Hourly                     | Daily |
| Operating room, Operating/surgical cystoscopic rooms, Delivery rooms (caesarean), Procedure room, GI Endoscopy Procedure Room   | Low 20%<br>High if Rh + temperature are elevated for prolonged period of time | High 60%         | Hourly                     | Daily |
| X-ray (surgery/critical care & catheterization), Airborne Infection Isolation (All) room, Combination All/PE room, PE room  | High  | High 60%         | Hourly                     | Daily |
| Critical and intensive care, Recovery room, Treatment room, Continued care nursery, Newborn nursery suite, Laser eye room, Newborn intensive care, Trauma room (crisis or shock)  | Low 30%   |                  | Hourly                     | Daily |
| Patient room, Labor/delivery/recovery (LDR), Labor/delivery/recovery/postpartum (LDRP), Intermediate Care, Emergency Department exam/treatment room, X-ray (diagnostic & treatment), General examination room, Special examination room, Triage, Treatment room, Physical therapy, ECT procedure room, Emergency Department public waiting room, Radiology Waiting Rooms, Medication room, Clean workroom, Sterile storage room | High  | High 60%         | Hourly                     | Daily |

# ASHRAE Public Review

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- Watch for notices within



## CODES & STANDARDS

### The latest ASHRAE updates

Updates from ASHRAE include public commenting on an energy-efficiency standard and progress on a new standard for management of building water systems.

[ASHRAE](#)



[Read More »](#)

# Speaker Request Data Base

# ASHE 2023 Elections

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- President Elect – Mike Hatton
- Associate Member – Lindsey Brackett
- Region 3 – Dennis Ford
- Region 6 – Danielle Gathje
- Region 7 – John Wilson
- Region 8 – Rick Sanders
- Region 10 – Katy Quinn

# ICC Update

- 2027 ICC Code Development Cycle
  - Code Changes due January 2024



## Changes to the ICC Code Development Process Current Cycle vs New Process in 2024 - 2026 Cycle

|              | January                      | Feb/Mar                                      | April  | May  | June   | Sept/Oct   | Oct/Nov | Next Edition   |
|--------------|------------------------------|--|--|--|--|--|---------|--|
|              | 2024 - 2026 Cycle            |  |  |  |  |  |         |  |
| Year 1: 2024 | CC due – Grp A               |  | CAH #1 – Grp A<br>9 days / 2 tracks                          |  | Comments due on CAH<br>#1 action                                   | Annual Conf.<br>CAH #2 – Grp A Comments<br>9 days / 2 tracks |         |  |
| Year 2: 2025 | CC due – Grp B               | Grp A<br>Public Comments due<br>(PCH year 3) | CAH #1 – Grp B<br>9 days / 2 tracks                          | Initiate publication process<br>for Group A codes w/o<br>Public Comments | Comments due on CAH<br>#1 action                                   | Annual Conf.<br>CAH #2 – Grp B Comments<br>9 days / 2 tracks |         |  |
| Year 3: 2026 | Grp B<br>Public Comments due |  | PCH – Public Comments<br>for Grps A & B<br>10 days / 1 track | OGCV – Grps A & B<br>3 weeks   | Cycle Complete<br>Continue publication process<br>for next edition | Annual Conf.   |         | 2027 I-Codes<br>October – December<br>Next cycle starts Jan / 2027 |

Acronyms: CC - Code Changes; CAH - Committee Action Hearings; PCH - Public Comment Hearings; OGCV - Online Government Consensus Voting

# ICC Committee on Healthcare

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- Currently working on:
  - Carbon Monoxide detection exceptions
    - Not served by a carbon monoxide producing forced-air furnace.
    - Where carbon monoxide detection is installed in an enclosed room or area containing the carbon monoxide source that is not contiguous to the sleeping unit, and an alarm signal shall be transmitted to an approved location
  - ABHR
    - Align with current health care practices
    - Align MAQ's with NFPA 30 and GHS requirements
  - Microgrids
    - Alignment with NFPA 99 and NEC

# ICC Committee on Healthcare

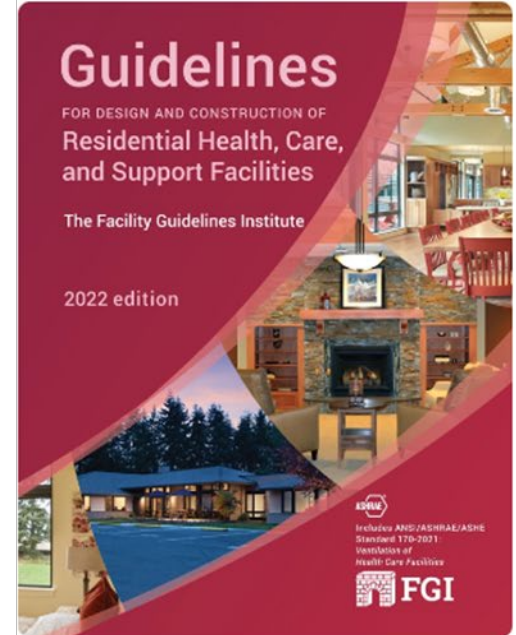
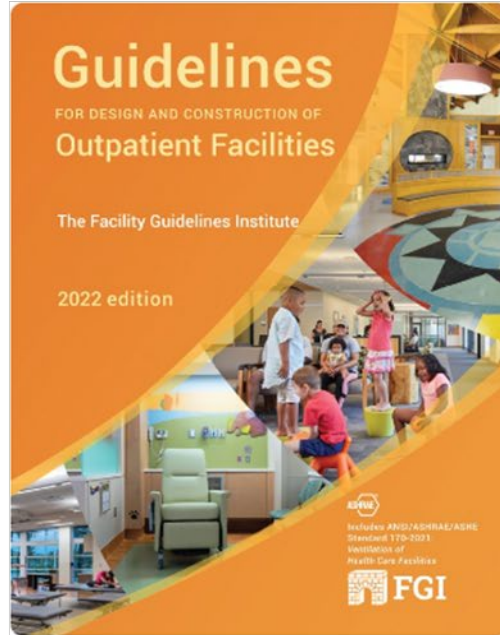
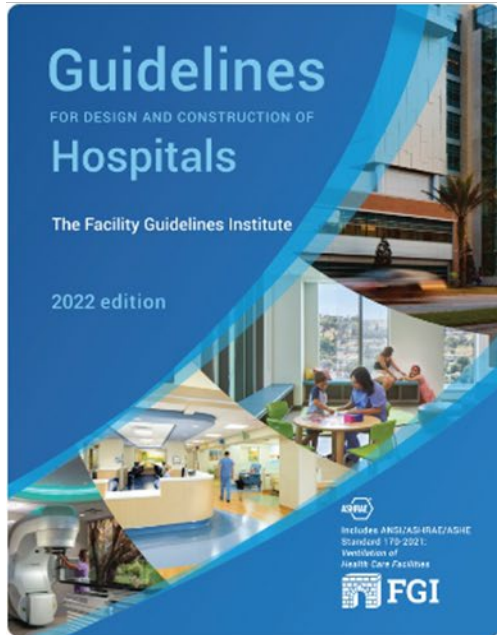
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- Currently working on:
  - Control Vestibules
    - Allowance for high security areas
  - Locking of doors for 'Clinical Need'
    - Concern that security issues are not clinical need
  - Structural Risk Categories
    - Group I-2, Condition 2 from Category 2 to 4
    - Concern about existing facilities being renovated
  - Align with ASHRAE/ASHE 170
    - Allowance of Natural Ventilation
    - Update Outpatient Ventilation Rates
      - ASHRAE/ASHE 170 Tables 8.1 & 8.2

# FGI Update

# Facility Guidelines Institute

## Updated Every 4 Years



# 2026 Revision Cycle

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- ✓ February-June 2023      Public Proposal Period
- **July-September 2023**      **Proposal Review and Comment**
- October-Dec 2023      HGRC Votes on Proposals
- April-June 2024      First Draft
- July-September 2024      Public Comment Period
- Dec 2024-Jan 2025      HGRC Voting on Comments
- May-October 2025      Final Manuscript
- November 2025      HGRC Voting on Final Manuscript
- April 2026    2026      Guidelines Published

# Major 2026 Proposals for Hospital Document

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- Advocacy Alert will be issued today via email to members
    - Will also run in HFM Insider September 12
  - Identifies major proposals and proposal numbers
  - Users may comment on the proposals at [www.fgiguilines.net](http://www.fgiguilines.net)
- We are asking you to do so!

# Major 2026 Proposal Topics for Hospital Document

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- Phasing during renovations
- Disaster planning
- Service spaces in restricted and semi-restricted areas
- Nitrous oxide systems
- Airborne infection isolation room anterooms
- Specialty infection control exam rooms
- Multiple diagnosis patient care units
- Redefining procedure, operating, and imaging room definitions
- Rural emergency hospitals

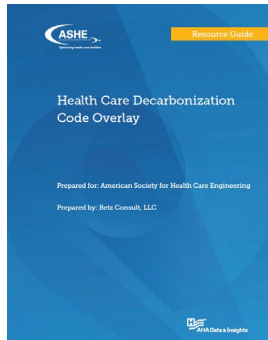
# Environmental Sustainability and Decarbonization

# Sustainability Roadmap for Health Care



a Health Care Executive's guide to

**SUSTAINABILITY &  
DECARBONIZATION**



HEALQUEST

- e-Learning course
- How to in 7 modules:
  - The game plan
  - The mission
  - The players
  - The starting point
  - The business case
  - The action plan
  - The winning strategy
- Adapt framework for other sustainability “operations”





## HealQuest

- Tier 1: Operation Decarbonization eLearning
- Tier 2: On-site multidisciplinary team-building
- Tier 3: On-site team exploration to identify savings opportunities
- Tier 4: Goal-setting, action planning and accountability

# 2023 Meeting Dates and Upcoming Events

# 2023 AL/CL/SL Dates

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## 2023 Webinar Dates

Q4: Wednesday, December 6, 2023

*All webinars begin at 12:00 noon CST.*

*Webinar reminders - myASHE Liaison Community  
and Liaison SharePoint site*

**Don't forget the many ASHE on-line educational opportunities**  
**[ashe.org/calendar](https://ashe.org/calendar)**

# Upcoming Events

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- Member Tools Task Force Prioritization and Challenge Meeting
  - Hybrid Meeting
  - Thursday-Friday, 12 & 13 October
  - Salt Lake City
- Currently calling for topic submissions



# Questions or Discussion?

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# Thank you!

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