



*Optimizing health care facilities*

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

14 September 2022

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a professional membership group of the American Hospital Association  
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# Agenda

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- Update to Chapter Awards Benefits for 2022 – 5 Minutes (AG)
- NFPA Update 2023 2<sup>nd</sup> Draft Review – 10 Min (JF)
- Environmental Sustainability and Decarbonization – 5 Min (KB)
  - Open discussion with liaisons – 10 Min
- ASHRAE Update – 15 Mins (JF/KB)
  - 514, 170, GP-43, 90.1 Publish
- Elections – 15 Minutes (TM)
- ICC Update – Public Comment Hearings – 5 Min (JF)
- Project Firstline - Ventilation Assessment Tool – 5 Min (KB)
- Benchmarking – 15 Minutes (LW)
- 2022 Meeting Dates and Upcoming Events – 5 Min (KB/JF)
  - MTTF
  - PDC/Annual 2023

# 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.

# 2022 Chapter Awards

# 2022 Chapter Applications

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- Applications were due on April 1, 2022
  - ✓ Upload Documents in SharePoint
- Education Opportunities
  - ✓ Points
- Participation In Awards Program
  - ✓ Chapter Benefits

# NFPA Update

# NFPA Standards

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- Current NFPA Cycle Activities
- Technical Meeting for 2022 Editions
  - 5 NITMAM's of concern reviewed by Health Care Committee

# NFPA Standards

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- NFPA 25 (3)
  - Non-system components are not to be supported from sprinkler piping
    - Approved – clarifies that items touching are not a violation
  - Concealed Sprinkler 5 year inspection
    - Rejected – to provide data for next edition
  - Annual inspection of the clearance between sprinklers and storage
    - Rejected

# NFPA Standards

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- NFPA 70
  - Electrical plug load demand Factors for hospitals updated
- NFPA 55
  - Maximum Allowable Quantities
    - Requirements consistent with tables in the Fire Code, but the Fire Code exempts health care from complying with the tables and refers code users to NFPA 99.

# NFPA Standards

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- 2023 Editions
  - NFPA 90A/90B
    - Second Draft Meeting Held
      - Report to be posted 28 February 2023
      - NITMAM Closing 28 March 2023
  - NFPA 70E, 99 & 101
    - Second Draft Meetings Held
      - Report to be posted 28 February 2023
      - NITMAM Closing 28 March 2023
    - **Note: Proposal for existing operational requirements rejected by NFPA 99 MEC Committee**

# NFPA Standards

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- 2024 Editions
  - NFPA 13, 72, 80, 101A, 105, 110 & 111
    - Public Input Closed
    - First Draft Report Posting 22 March 2023

# Environmental Sustainability and Decarbonization



# Advocating for setting reasonable EUI/GHG targets

- ASHRAE Standard 100
- WA specific ASHRAE Standard 100 published July, 2021

**Table 7-2a Building Activity Site Energy Targets (EUI<sub>11</sub>) (I-P Units)**

<i>Building Activity Type</i> <sup>1,2</sup>					Climate Zone 4C	Climate Zone 5B
No.	Portfolio Manager Types	Portfolio Manager Subtypes	Subtypes: Detailed	Notes	EUI <sub>t</sub>	EUI <sub>t</sub>
51	Healthcare	Hospital (general medical and surgical)*			215	215

- Standard 100 Addendum C – out for public review

**Table 7-2a Building Activity Site Energy Targets (EUI<sub>11</sub>) (I-P Units)**

No.	Commercial Building Type	EUIs by Building Type by Climate Zone (kBtu/ft <sup>2</sup> -yr)																			
		ASHRAE Climate Zone																			
		0A	0B	1A	1B	2A	2B	3A	3B Coast	3B Other	3C	4A	4B	4C	5A	5B	5C	6A	6B	7	8
33	Hospital/inpatient health	181	185	169	177	178	158	174	156	160	162	175	159	164	168	156	154	175	165	181	192

# What does ASHE Data tell us?

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## Energy to Care Site EUI Distributions for Hospitals

- Average High Performance Median for 400,000-700,000 GSF Climate Zone 5B based on 2018 and 2019 data is 175 kBtu/SF
- Publishing data in late 2022 or early 2023

# Discussion

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# ASHRAE Update

- **Task Force for Building Decarbonization**
- Determining and engaging with other organizations
- Providing information to policy makers
- Providing recommendations and best practices for industry stakeholders by:
  - Identifying existing portfolio of technical resources
  - Packaging these technical resources in a useful way
  - Providing tools for energy efficiency, embodied carbon, and reducing operational carbon
  - Identifying knowledge gaps and developing resources to address those gaps

# ASHRAE TFBD and Health Care

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- Standards integrating decarbonization into TPS
- Working group specific to health care
  - Developing Decarbonization Design Guide focusing on Hospitals

# ASHRAE/ASHE 170

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- ASHRAE/ASHE 170 Ventilation for HC Facilities
  - 2021 Edition Available via ASHE or ASHRAE
- No current addenda posted for public review
- Currently working on the following topics
  - OR Air
    - Reviewing proposal for OR's as clean rooms
- Fan assisted natural ventilation

- Guideline 43 - Operations Guideline for Ventilation of Health Care Facilities
  - PURPOSE: The purpose of this guideline is to provide information and guidance for the operation of ventilation systems that provide environmental control in new and existing health care facilities.
- Continuing to work on this guideline
  - TPS changes approved
  - Rejection of NFPA 99, Chapter 9, Operations will enhance need to complete this guideline prior to next NFPA 99 cycle

# ASHRAE 514

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- 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.
  - Public review comments being reviewed and responded to by committee
    - Anticipate a 2<sup>nd</sup> Draft Independent Substantial (ISC) review to be issued towards end of this calendar year

# ASHRAE Public Review

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- Watch for notices within



## CODES & STANDARDS

### Health care ventilation standard open for public comment

A proposed addendum to Standard 170-2017, Ventilation of Health Care Facilities, is open for public comment.

HFM

# 2022 Chapter Leadership Forum

# ICC Update

- 2024 ICC Code Development Cycle
  - Public Comment Hearings Group B start today
- Have 2 Public Comments to address:
  - EB98 – Guards on Roofs – allow higher guards for patient safety around outdoor patient garden/exercise areas on a roof
    - PC for Disapproval – need to protect patients from self-harm
  - EB116 – Temporary Uses Appendix
    - PC to modify to address editorial concerns

# ICC CHC

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- CHC to testify concerning 8 other PC's
  - EB47, 48, 75, S 74, 75, 76, 77 &78 – Changes to Risk Category Tables increasing risk category requirements for health care facilities
  - S116 – Temporary Uses
  - G2 – Life Safety Components – adds confusion to the existing language

# Project Firstline

# Project Firstline – CDC National Training Collaboration



## Project Firstline

[Ashe.org/project-firstline](https://ashe.org/project-firstline)



### CLINICAL STAFF

Resources on infection prevention and ventilation for clinical staff.

[Access >](#)



### FACILITIES MANAGERS

Resources on ventilation and negative pressure rooms for health care facilities managers.

[Access >](#)



### CONTRACTORS/TECHNICIANS

Resources on ventilation and negative pressure rooms for outside contractors and technicians.

[Access >](#)

ASHE AHA  
1.02K subscribers

Topics for Clinicians

SUBSCRIBED

Share

VIDEOS COVER  
A WIDE RANGE OF  
**VENTILATION TOPICS  
FOR CLINICIANS**

Watch on YouTube

## Ventilation Assessment Tool

PROJECT FIRSTLINE

Environmental Services | Health Care Facilities | Enhancing Teamwork | Infection Control Training

### 1) Select an Area

Patient Care Area

### 2) Select the best description of the main activity in this space

Examination room

Hide Results

Clear Filters

### Selections: Patient Care Area: Examination room

1. Air Change Per Hour  
6
2. Outdoor Air Change Per Hour  
No Recommendation
3. Room Pressurization  
No Recommendation
4. All Room Air Exhausted Directly to Outdoors  
No Recommendation
5. Air Recirculated by Means of Room Units  
No Recommendation

View the definitions of these terms by looking up their corresponding number in the table to the right.

# Benchmarking

# The HFTB



- ASHE's \*New\* Health Care Facility Tailored Benchmarking Program



# Benchmarking has always been a priority because it...

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Allows health care engineering professionals to track their own progress on key performance indicators

Allows health care engineering professionals to compare themselves against similar others

Provides a refutational data source to justify strategic and financial decision-making to leadership

# ASHE's Previous Benchmarking Efforts

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## ASHE/IFMA 2.0

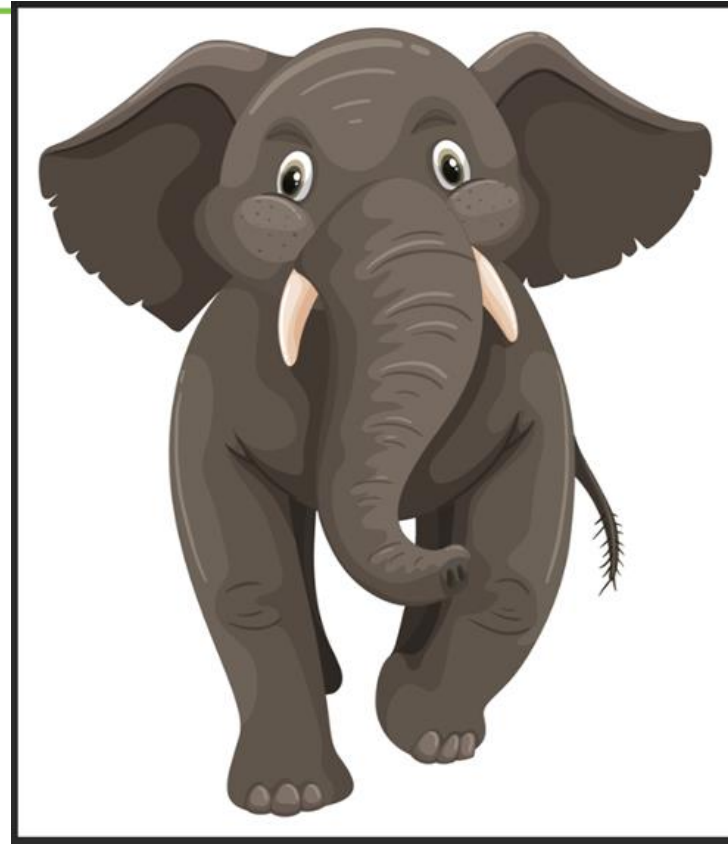
- Strengths
  - Illustrated value by capturing valued metrics
- Weaknesses
  - Small sample size
  - Outdated results that may not apply to today's HFM world

## Key Performance Indicator Dashboard (KPID) Project

- Strengths
  - Newly designed & methodologically verifiable
  - User friendly interface
- Weaknesses
  - Poor roll out timing
  - Cumbersome data capture

# Benchmarking Challenges

- ❖ High degree of participation needed to ensure sample sizes large enough to yield “generalizable” findings
- ❖ High level of methodological vigor needed to ensure “apples to apples” comparison
- ❖ Must incorporate input from professionals working within the field (consensus driven) with as little participation burden as possible



# Step 1:

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- ❖ Unit of Analysis ~ the smallest level in which you collect and can “drill down” into your data
- ❖ In an excel file – this would be the individual row
  - ❖ All rows must “capture” the same conceptual thing at the same conceptual level\*
- ❖ Examples (consider your excel spreadsheets)A teachers grade book
  - ❖ Census data
  - ❖ Energy to Care: The building?
  - ❖ The \*New\* HFTB
- ❖ In some cases, this is not possible. When this happens, you have additional “covariates”
  - ❖ Covariates are actually “Columns” that are not your KPIs, but, are rather variables that you can then segment your groups to only look at entries that meet some sort of a category definition
- ❖ **If a unit of analysis is not stable across all entries (or at least “controlled” by the use of “covariates” then benchmarking will not be valid.**

# Proposed Unit of Analysis for HFTB For those with at least one hospital\*

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## **BASIC UNIT OF ANALYSIS: The hospital + any associated properties that are covered by the same license**

- BUT we know there will be lots of “but” ... “ands” so we will have to make sure that we have a stable unit of analysis across all potential lines of data. So additional decision-making will take into account:
- How FM currently reports finances/staffing to leadership

# Which reporting scenario best describes your current practices?

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- I am a FM (or analyst) who:
  - 1) Runs one hospital and associated properties and I report on that entity.
  - 2) Runs a few (or a lot of) hospitals and associated properties which falls under one license. However, I still **break them out individually when reporting.**
  - 3) Runs a few (or a lot of) hospitals and associated properties, but they all fall under their own licenses. **I report financials individually.**
  - 4) Runs a few (or a lot of) hospitals and associated properties, where chunks of these hospitals fall under one license, and other chunks fall under other licenses. However, **I still break out each hospital and associated properties' financials individually when I report.**
  - 5) Runs a few (or a lot of) hospitals and associated properties, chunks of these hospitals fall under one license, and other chunks fall under other licenses. However, **I report my financials all together, in one single report.**
  - 6) Runs a few (or a lot of) hospitals and associated properties, chunks of these hospitals fall under one license, and other chunks fall under other licenses. **My organization groups these hospitals for reporting based on licensing determinations.**
  - 7) Runs a few (or a lot of) hospitals and associated properties, chunks of these hospitals fall under one license, and other chunks fall under other licenses. **My organization groups these hospitals for reporting based on regional determinations.**
  - 8) Runs a few (or a lot of) hospitals and associated properties, chunks of these hospitals fall under one license, and other chunks fall under other licenses. However, I report my financials in different chunks (not by license). Rather my organization uses some other rationale to determine “reporting buckets”
  - 9) I run a facility that does not include a hospital\*

# Quick Debrief:

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- ❖ What percentage of us were able to find one single line that described our reporting scenario?
- ❖ What were the major issues to picking a reporting scenario?
- ❖ What other factors could systematically influence reporting and “like vs. like” that might not get captured in this unit of analysis comparison?

# We Need You: Ways to get Involved

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Sign up to get notifications on upcoming  
Benchmarking activities!  
NOW



Soon...



Join your specific  
facility-type  
Benchmarking  
Network



Volunteer as a  
**Benchmarking  
Ambassador**



Volunteer as an  
**Innovator/Beta  
Tester**



To learn more visit:



[my.ashe.org/home](https://my.ashe.org/home)

# 2022 Meeting Dates and Upcoming Events

# 2022 Sustainability and Advocacy Liaison Dates

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## 2022 Webinar Dates

Q4: Wednesday, December 7, 2022

*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)**

# Submit Abstracts

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## 2023 Call for Speakers Now Open

Join ASHE in celebrating the 60th Annual Conference & Technical Exhibition, August 6 – 9, 2023 in San Antonio, TX!

If you have new approaches, best practices or groundbreaking insights to share, we invite you to submit a speaking proposal **by September 30**.

[Submit Abstract](#)



# Celebrate!

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## National Health Care Facilities and Engineering Week

**Celebrate Health Care Facilities and Engineering Week | October 23-29, 2022**

This year's theme is "Collaboration is Key" Every year, in the last week of October, we celebrate the important role that facility team members have in ensuring a safe and efficient environment for all patients, residents, visitors and staff within hospitals.

# Convene

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# Questions or Discussion?

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# Thank you!

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