If you're having trouble viewing this email, you can see it online.

**MiSHE News: Vol 220**

**In This Issue...**

**MiSHE President's Message**

**WM-MiSHE Holiday Meeting**

**Lighting in Healthcare – Glare is hard on the Eyes and Productivity …**

**MyASHE Gas Cylinders Stored Outside**

**ASHRAE/ASHE Guideline 43 open public comment until Jan 6, 2025**

**Separation of Essential Elec Branches**

**MiSHE Letter to CMS urging adoption of 2024 NFPA 101 & 99**

**President's Message**

**Dear MiSHE Members,**

As we close out 2024, I want to take a moment to reflect on what has been an incredibly successful year for the Michigan Society for Healthcare Engineering. This year has been filled with meaningful achievements, impactful events, and countless opportunities for us to grow as a community and as professionals in healthcare engineering.

**Highlights of 2024**

• **Educational Events & Conferences:**

We hosted several well-attended conferences and workshops, providing invaluable insights into the latest trends and challenges in healthcare engineering. These events fostered learning and networking, helping us stay ahead in an ever-evolving industry.

• **Membership Growth:**

Our membership base has continued to expand, bringing in diverse expertise and fresh perspectives. It's a testament to the value of being part of this incredible organization.

• **Collaboration & Advocacy:**

We've strengthened our partnerships with other professional organizations and regulatory bodies, advocating for improved standards and best practices in healthcare engineering.

• **Sponsor Support:**

Thanks to our sponsors, we were able to enhance our offerings, provide better resources, and create memorable experiences at our events. Your support truly makes a difference.

• **Community Impact:**

Beyond professional development, we've also focused on giving back to the community, aligning our mission with broader goals that improve healthcare environments for all.

**Save the Date!**

We are excited to announce the dates for our **2025 Annual Conference**, which will be held **September 22-24 at the Grand Traverse Resort in Traverse City, Michigan**. Mark your calendars for this premier event and stay tuned for more details in the coming months.

**Special Thanks**

I'd like to extend my heartfelt gratitude to **Brian Denhoff** for his outstanding leadership and dedication as President over the last two years. His guidance and vision have been instrumental in our success, and we are grateful for his continued commitment to the Society.

A sincere thank-you as well to our **Board of Directors**, whose expertise, hard work, and passion have been the driving force behind our achievements this year. Their dedication ensures that the Michigan Society for Healthcare Engineering remains a strong, vibrant, and effective organization.

**Looking Ahead**

While we celebrate the achievements of this year, we are already planning for 2025, with new initiatives, events, and opportunities for engagement. Our commitment to advancing healthcare engineering remains steadfast.

**Gratitude**

None of this would have been possible without the dedication and support of our members and sponsors. Your participation, ideas, and contributions drive our success. I am deeply grateful for the trust you place in us and for the enthusiasm you bring to this organization.

As we move into the new year, I encourage you to stay involved, share your ideas, and continue being a part of this vibrant community. Together, we can achieve even greater things in 2025.

Thank you for making 2024 an exceptional year for the Michigan Society for Healthcare Engineering. Wishing you all a happy holiday season and a successful start to the new year!

Warm regards,

**Joe Saldivar**

MiSHE President

**WM-MiSHE Holds Holiday Lunch & Learn at Corewell Health Place – Grand Rapids**

MiSHE Members,

On behalf of MiSHE, I want to personally wish everyone a Merry Christmas and a Happy New Year. It's hard to believe that it's already been 4 months since the MiSHE Annual Conference in Mt. Pleasant. I hope you were able to enjoy the wonderful Fall weather and have now prepared for the inevitable winter chill that has already begun enveloping this amazing state.

For MiSHE, the holiday season is filled with many events and chapter gatherings. We hope that you've been able to attend your local chapter's meetings and enjoyed the entertainment, learning experiences and networking opportunities. As the MiSHE Board is already looking forward to 2025, I know that all five chapters have some great events already on the schedule. Please keep an eye out, and check the website often, for future communications regarding Q1 chapter meetings, educational opportunities, and Spring golf outings!

I want to say a special "Thank you" to the members of the West Michigan chapter for their attendance at the recent "Holiday Lunch and Learn". Over 50 attendees enjoyed lunch and a presentation by Shelton Kilby, Corewell Health's Sr. Director of Facility Operations/Construction. In addition, many enjoyed a tour of Corewell Health's new downtown Grand Rapids conference and administrative center-Corewell Health Place. Also, "thank you" to Cathy Waggoner, Craig Scully and Bill Ledger, of The Design Collaborative, for sponsoring Happy Hour at the nearby Garage Bar. I've already received positive feedback of how those in attendance appreciated Shelton's captivating discussion related to the realities of building an 8-story office building and renovating what was a historical brass factory, in both a compact urban environment and during the COVID-19 pandemic.

Thank you for your continued support of MiSHE and have a Merry Christmas and Happy New Year!

Matt Hoekzema

West Michigan Chapter - MiSHE

**Lighting in the Healthcare Space:**

**Glare is hard on the eyes. And productivity…….**

Glare is a productivity thief often disguised as a minor annoyance. And it can be just about anywhere, affecting the wellness of staff and caregivers, preventing them from feeling and doing their best. Let's take a look at how glare affects people and what to do about it.

Glare occurs when there's excessive brightness or light contrast. Inside healthcare facilities, glare is typically direct or reflected. Either the light shines directly from the source, (such as too much sunlight streaming through a window or shining on the subject from a bright light fixture) or the light is diffused or reflected off a surface (light bouncing off a light-colored wall or reflecting off a shiny tabletop).

The results of temporary glare are relatively short, lasting just seconds or minutes, and range from discomfort to a brief altering of visual acuity that makes it harder to discern details.

**Prolonged exposure to glare is cause for concern.**

Prolonged exposure to glare throughout the day is more serious and can cause eye strain, fatigue,[1] headaches, and reduced productivity.[2] There are ways everyday glare can take a toll on the staff and caregivers at a healthcare facility -- and the organization's bottom line.

Glare can create:

- a negative effect on visual function that can affect the safety and well-being of patients and residents, especially seniors whose eyesight is already diminished by age[3]

· decreased employee satisfaction and motivation, and an increase in absenteeism[4]

· inefficiency, fatigue, and mistakes among employees[5]

· an increase in distraction and lapses in concentration, too[6]

·

**WELL v2 acknowledges the importance of glare control in supporting well-being.**

The most recent version of the well-respected and internationally recognized Well Building Standard, or WELL V2, includes in its science-backed criteria for certification the optimization of lighting – including minimizing glare – to protect the visual acuity and comfort of building occupants.

By supporting the implementation of control strategies, such as proper fixture placement, shielding, and diffusing techniques, WELL V2 certification standards aim to minimize direct and reflected glare that could disrupt occupants' visual comfort and well-being.

**Using UGR as a luminaire-level glare metric.**

UGR, or Unified Glare Rating, is a glare metric that predicts the amount of discomfort-causing glare created by luminaires for a fixed set of conditions. The UGR scale ranges from 5 to 40, with 5 being the lowest discomfort-causing glare rating possible.

The UGR rating system is commonly used in the lighting industry. For example, Discreet Linear low-glare lighting from Cooper Lighting Solutions can help interior spaces achieve a UGR of less than 6 using black baffle and less than 13 using white baffle – even lower than the recommended low UGR levels for office environments.

Remember, UGR is based on a *fixed* set of conditions. As a result, the metric is used more as a reference than an accurate measure.

**Designing to minimize the discomfort of glare.**

Even if you're not yet seeking WELL V2 certification, there are steps you can take to minimize the negative effects of glare in your healthcare facility.

**Understand staff, caregiver, even patient needs:** Begin by understanding the specific requirements and tasks of the healthcare facility's occupants. Also, consider the preferences of the occupants.

**Select appropriate light fixtures:** Choose lighting that has good glare control properties. Look for fixtures with shielding or diffusing elements that help minimize glare by directing light where it's needed and reducing light spillage.

**Optimize fixture placement:** Pay attention to the placement of light fixtures to avoid direct glare. Position them strategically to minimize direct line-of-sight between the light source and people's eyes. Consider the angles at which light is emitted to ensure it doesn't cause discomfort.

**Incorporate dimming and lighting controls:** These provide flexibility in adjusting lighting levels based on user preferences and specific task requirements. This allows individuals to personalize the lighting to their desired comfort level and helps avoid discomfort glare from excessively bright lighting.

**Control daylight:** Although daylighting provides a connection to the outdoors and reduces the need for artificial lighting during the day, it can also be a major source of discomfort glare. Effective daylighting strategies, such as using interior blinds, sunshades, and light shelves, can mitigate the potential for glare in a space.

**MyASHE Gas Cylinders Stored Outside**

Jerry Galu, Dir Facilities Mgt, Nashville, TN

Question re outside cylinder storage requirement NFPA 99-2012, 11.6.5.4 .

*Cylinders stored in the open shall be protected as follows: (1) Against extremes of weather and from the ground beneath to prevent rusting.*

Everyone including our vendor is at a loss on an approved method for keeping cylinders off the pad to prevent rusting. Any suggestions would be appreciated.

Replies:

1. Jerry, I had moved our outdoor cylinder storage to an approved 'hybrid indoor' storage area a few years back. I would be happy to send you pictures of the new "indoor" storage area we created. When we had them stored in a shed outdoors, I had them on HDPE flat pallets to keep them off the concrete. -Robert Whalley, Assonet, MA

2. Jerry, I have found that **rubber mats with holes** in them, similar to a kitchen mat, has been extremely successful around the country in multiple climates and weather zones. Also, I have had a couple locations build a small cage for the bottom of the storage rack holder to elevate the tanks slightly off the ground. Good luck. – Tyson Prickett VP, JT Service Contractor Corp, Coral Springs, FL

3. We use a product similar to this. It was the first that came up on my search, Grainger is a good company, but I am not suggesting they are the only place to purchase this Serrated, Galvanized, A1011 Carbon Steel Rectangular Grating - 49N180|22125R100-C2 - Grainger Bobby Baird, FASHE, Dir Facility Operations, UF Health, Gainesville, FL

4. Jerry, the 2021 edition of NFPA 99 re-wrote this section to clarify the actual concerns with outdoor gas cylinder storage. You will see that there is no mention of "rust" in the re-written language. If you take a closer look at the proposal to make this change **(see attached PDF)**, it is apparent that rust itself shouldn't have ever been the concern and, as you and many others have found, it is very difficult to prevent when they are stored outdoors.

11.6.5.4
Cylinders stored in exterior locations shall be as follows:
(1) Secured against falling or tipping
(2) Stored in a well-drained location and protected from prolonged contact with soil
(3) Prevented from reaching temperatures lower than the recommendations of the medical gas supplier

(4) Screened against continuous exposure to direct rays of the sun where the ambient temperature exceeds 52°C (125°F)

I know this may not be helpful given that the 2012 edition of NFPA 99 is what is currently being enforced by CMS, but it does shed light on the difficulty that you're experiencing.

---

Cary Darden, Pres,Envir & Med Gas Services Inc, Villa Rica GA

Public Input 224-NFPA-99-2018-11.6.5.4.pdf

5. Cary hit it on the head with his reference. **Securing against tipping/falling is a notable concern** that should be addressed when cylinders are stored outside, I've seen a racks that hold the bottles a few inches off the ground. The bottom is either a bar down the center of the cylinder slot, or a supported heavy mesh for the cylinders to rest upon. The rack is secured from tipping, and also has chains with clasps to secure the cylinders. Unfortunately, I do not have a picture of this. Ben Davis CHC, CHFM, Proj Mgr, Nika Solutions,Ephraim UT

6. All of our hospital have outside storage and we use grating and it has been acceptable by both TJC and AHCA. Just search it on google and there are many options. **Michael Neely, CHFM,** Facilities Mgt Sys Dir, **BayCare Health System,** Tampa, FL

7. Good question. We were **cited** by Joint Commission for this same issue. We ended up putting **eyebrows above tanks** to protect from weather and placed expanded metal on concrete surface to keep above rainwater/moisture. This was deemed adequate for our outdoor bottle storage locations. Hope this helps. David Worthylake CHFM, Facilities Operations Mgr,Legacy Emanuel & Randall Childrens Hospitals, Portland OR

8. Good morning, Jerry! Robert and Tyson both have excellent suggestions. Outside storage also requires protection from accumulations of ice/snow and not directly exposed to sun rays. I included 11.3.2.1 outdoor requirements- I have seen that be anything from a separate storage freestanding, ventilated building to an outdoor, 3-

sided shed with a gate and an overhang/awning to protect from the sun/winter elements.

*11.3.2.1 Storage locations shall be outdoors in an* ***enclosure*** or within an enclosed interior space of noncombustible or limited- combustible construction, with doors (or gates outdoors) that can be secured against unauthorized entry.

Great question! Donna Gerengher, Facilities Mgt, Mgr Fire Protection Sys, MetroHealth System' Cleveland, OH

**ASHRAE/ASHE Guideline 43 open public comment until Jan 6, 2025**

A list of ASHRAE addenda, revisions and drafts affecting health care open for public comment Nov 25, 2024 HFM Staff

*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. The intent of Guideline 43 is to provide an operational guideline for health care facilities that will work in collaboration with the design standard ASHRAE/ASHE Standard 170, Ventilation of Health Care Facilities, which has been adopted by reference by the Centers for Medicare & Medicaid Services. The guideline covers the implementation of a maintenance program through defining the responsible party, a minimum maintenance program and the elements of the program along with providing guidance on legacy systems, condition indicators, excursion variations and program improvement opportunities.*

*Visit the ASHRAE portal to make comments on the above addenda.*

**Public input periods open**

The 2028 editions for the following standards are open for public input until June 4, 2025:

- NFPA 13, Standard for the Installation of Sprinkler Systems

- NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection
- NFPA 80, Standard for Fire Doors and Other Opening Protectives
- NFPA 105, Standard for Smoke Door Assemblies and Other Opening Protectives

To submit a public input using the online submission system, go directly to the standard's page using the links above and select the "Submit Public Input Online" button to begin the process. Users will be asked to log in or create a free online account with NFPA before using this system.

**Don Page, MBA, CHFM**

Director of Facilities

ASHE Region 5 Advisory Board Member

*"One Person Can Make a Difference, and Everyone Should Try" JFK*

**SEPARATION OF THE ESSENTIAL ELEC BRANCHES**

**MyASHE  OCT 2024**

When did the electrical code change to require true separation of the electrical branches for new installations ...

When did the electrical code change to require true separation of the electrical branches for new installations (Life Safety, Critical, Equipment) Reason I ask is, we got cited in one of our older buildings by the JC for not having our Fire Alarm Panel connected to the Life Safety Branch, and when the building was built, this requirement did not exist, so am thinking we are fine with the current setup and should not have to rewire the existing emergency feeds to separate out the branches

and loads.  No major renovations to the Electrical system have taken place since the building was built (1979) and the location of the FACP has not changed.

Chris Sibell CHFM, M Health Fairview Southdale Hospital
Minneapolis MN

Benjamin Thurston

Chris,

I assume you have pointed out to the surveyor the language from EC.02.05.03 EP 1, that "For facilities that were constructed, or had a change in occupancy type, or have undergone an electrical system upgrade since 1983", this change is required. If you don't fall into one of these categories, then it isn't required. (Actually, this is from the 2023 EC standard; but I'm assuming it hasn't changed for 2024, for one thing because the underlying code hasn't changed).

The EP also references NFPA 99-2012, 6.4.2.2. Look at NFPA 99-2012-6.12, and you'll find that 6.4.2.2, which requires this separation, is not applied retroactively, except for two minor sections dealing with cover plates and switches in lighting circuits.

If you're within 10 working days of the end of the survey, you can challenge this finding through the "clarification" process. If you're past that point, it's a little more difficult, but still possible.

Benjamin Thurston SASHE, PE, Life Member,La Mesa CA
(619)463-8754  benthurston@att.net

The Michigan Society of Healthcare Engineers recently submitted a letter to the CSM, advocating for the continued importance of NFPA 99 and 101 standards in ensuring the safety and reliability of healthcare facilities.

Read Here

**CORPORATE SPONSORS**

**Questions?**
**Contact us at**
**info@mishe.org**

This email was sent to {{Recipient Email}}. Click here to unsubscribe.