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MiSHE News: Vol 217

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President's Message

I hope your Spring has started well!

Your MiSHE team is busy working behind the scenes to launch a new and improved website. With the launch of this website our overall control of memberships and webinars and other events will be much more easily managed by our staff. It will also be easier for you as members to navigate, use, browse and sign up for all our events.

Speaking of events, we have many upcoming events for all to participate in. Our North Central, West Michigan, and Southeast Michigan Chapters are each having golf outings. The **West Michigan Outing** will be held **Wednesday June 5th** at Scott Lake Golf and Practice Center. The **North Central Chapter** will be holding theirs on **June 20th** at Twin Birch Golf Club in Kalkaska. Lastly **Southeast Michigan's annual outing** will be held later in the summer, **July 12th** at Cherry Creek Golf Club in Shelby Township. If you haven't already, please take the time to sign up for or sponsor one of these events. Although I can't be at all of them, I do look forward to seeing you out there on the course.

Please check out the new website for more details and our upcoming webinars. We will soon open registration for our Annual Conference, **Roll the Dice and Bet on Healthcare at the Soaring Eagle Casino and Resort September 18th-20th.**

If you haven't already, now is the time to renew your membership. As we go live with the new website there will be some added features to hopefully make it easier to sign up and renew. It does get you access to all the educational opportunities MiSHE has to offer, and a discount to our conference and other events. Please feel free to reach out to me personally if you have any ideas or educational opportunities that

you feel would benefit the membership, after all it is you the members both professional and associate that make MiSHE a great organization.

I look forward to seeing you all at an event or Chapter meeting soon!

Brian Denhoff, MISHE President

Building the Workforce Through Internships — Strategies to Build a Pipeline of Next-generation Facilities Management Leaders

Greg Cole, CHFM, CHC

Director, Facilities Operations at Corewell Health

Greg Posted:

A big thank you to **HFM Magazine** and the **American Society for Health Care Engineering (ASHE)** for the opportunity to speak briefly on a passion of mine - student internships and succession planning,

Read here and below.

Succession planning is an essential component of every organization, ensuring the company's future remains secure by identifying potential future leaders. While team member onboarding and development programs may exist at your organization, future organizational needs (unexpected growth, shifting business models, etc.) may

highlight gaps in your succession planning efforts. One way to address these gaps is through leveraging student internships.

A facilities student internship program can play a key role in your organization's overall succession planning strategy. Providing hands-on experience for potential future leaders allows students to gain practical skills and familiarity with your organization. Identifying and nurturing talent early through internships can help alleviate generational workplace transitions, foster cultural fit, and ensure a pipeline of skilled individuals for future positions.

Whether planning for future technical or leadership openings, partnering with local high schools, trade schools, community colleges, and universities can help organizations create a consistent talent pool for recruiting student internships.

A well-designed program will provide students with valuable experiences while also fulfilling the organization's needs. Developing an internship that is tailored to meet the needs of both parties will secure future organizational support of the program and ensure schools are confident in endorsing your program.

Sentinel Event Alert

A complimentary publication of The Joint Commission Issue 68, Oct. 18, 2023

Updated Surgical Fire Prevention for the 21st Century

"An otherwise healthy patient is taken to the operating room for the removal of a neck mole under monitored sedation. After the patient is given two liters of oxygen through nasal cannula and administered intravenous sedation, an alcohol-based skin preparation is applied to the surgical field.

As the surgeon uses electrocautery to coagulate bleeding, a flash occurs, and the surgical drapes ignite. After extinguishing the fire by pouring water on the surgical field, assessment of the patient reveals second-degree burns on the patient's face. Oxygen from the nasal canula had accelerated the fire and caused the nasal

cannula to melt and adhere to the patient's face. The patient was transferred to the burn unit for care, and ultimately required reconstructive plastic surgery.[1]

This case illustrates one type of injury that can be sustained during a surgical fire. Surgical fires continue to occur and represent a significant risk to patients and healthcare professionals. This Sentinel Event Alert provides updated information and replaces one on this topic that published in 2003. The Joint Commission issues this alert to help healthcare organizations recommit to surgical fire prevention. There is no national repository collecting data on surgical fires, therefore, reliable data is difficult to obtain. ECRI, an independent, nonprofit organization dedicated to improving the safety, quality and cost-effectiveness of care across all healthcare settings worldwide, estimates that 90 to 100 surgical fires occur annually in the United States.[2] Surgical fires may not be reported because of embarrassment, potential adverse publicity, or the fear of investigation and possible litigation.[3]"

Once these partnerships have been established, organizations should cultivate ongoing relationships with schools by maintaining open communication, participating in career-related events, and staying engaged with faculty and students.

The American Society for Health Care Engineering (ASHE) has numerous **resources** to assist organizations on their succession planning journey, including the "Succession Planning: Preparing for the Future of Your Facility and Your Career" monograph. Local and regional chapters may have scholarship opportunities and additional resources to support building the foundation for successful student internship programs. It's never too early to start planning for the future.

A Really Good Question and Several Great Insights from a 'Facilities Guy'

Joshua Bitson, **CHFM**

Dir of Plant Operations at Encompass Health

My question for healthcare FMD's:

Many healthcare Facilities Directors carry the full burden of EOC and Life Safety compliance for their organizations. They are required to understand complex codes and make sure they are being followed 100% of the time. Not doing their jobs

correctly could put patients, visitors, and employees at risk. So, with those responsibilities and with the role of Facilities Director continuing to be given additional responsibilities within hospital operations regularly, I pose the following question: Is your opinion on matters of hospital operation discounted due to being the "facilities guy"?

I have been at the senior leader level in healthcare for 10 years and have listened to daily hospital operations reports since starting in that role. I understand what makes my organization(s) run and how decisions and circumstances affect everything including staffing, patient outcomes, quality metrics, patient experience, employee engagement and the bottom line. When it comes to decisions that have to be made that affect the hospital, I am often an unbiased party that understands the consequences of the decision being made but am rarely asked to provide input.

In my past, I have had my CEO makes statements like, "I didn't think you could write like that". I've had regional leadership say, "you ask such great questions for an individual in facilities". I had the same education as the people making these comments so what could be the reason for those opinions to exist?

I say all of this to make the statement that healthcare organizations are missing out on great feedback and insights from people who touch every square foot of the hospital building AND every department within hospital operations. They are passing overqualified individuals for roles outside of facilities management due to biases that continue to exist regarding people that are involved with trade work.

Interpretations for ASHRAE 170

Aug 2010 to Feb 2020

NOTE: All documents linked from this page are in PDF format.

Interpretation 170-2008-1 - August 18, 2010 (Refers to the requirements in ANSI/ASHRAE/ASHE Standard 170-2008, Table 71 note “u”, regarding AII rooms.)

Interpretation 170-2008-2 – June 8, 2012 (Refers to the requirements in ANSI/ASHRAE/ASHE Standard 170-2008, Section 7.4.1b, regarding Class B and C Operating Rooms.)

Interpretation 170-2008-3 – November 5, 2012 (Refers to the requirements in ANSI/ASHRAE/ASHE Standard 170-2008, Section 7.4.1a, regarding the average air velocity of the diffusers in operating rooms.)

Interpretation 170-2008-4 – November 5, 2012 (Refers to the requirements in ANSI/ASHRAE/ASHE Standard 170-2008, Section 7.4.1a, regarding the average air velocity of the diffusers in operating rooms.)

Interpretation 170-2008-5 – May 15, 2013 (Refers to the requirements in ANSI/ASHRAE/ASHE Standard 170-2008, Table 7-1, requirements for Operating Rooms and Sterile Storage to both be positive.)

Interpretation 170-2008-6 – June 25, 2013 (Refers to the requirements in ANSI/ASHRAE/ASHE Standard 170-2008, Section 7.1.1b, regarding ventilation rates in spaces other than those found in Table 7-1.)

Interpretation 170-2008-7 – June 25, 2013 (Refers to the requirements in ANSI/ASHRAE/ASHE Standard 170-2008, Section 7.1.1b and Table 7-1, regarding ventilation rates for Examination rooms.)

Interpretation 170-2008-8 – January 21, 2014 (Refers to the requirements in ANSI/ASHRAE/ASHE Standard 170-2008, Section 7and Table 7-1, regarding air change rates.)

Interpretation 170-2008-9 – January 21, 2014 (Refers to the requirements in ANSI/ASHRAE/ASHE Standard 170-2008, Section 7and Table 7-1, regarding to simultaneous heating and cooling.)

Interpretation 170-2008-10 – January 21, 2014 (Refers to the requirements in ANSI/ASHRAE/ASHE Standard 170-2008, Section 7and Table 7-1, regarding to ER Waiting and Radiology waiting rooms.)

Interpretation 170-2008-11 – January 21, 2014 (Refers to the requirements in ANSI/ASHRAE/ASHE Standard 170-2008, Table 7-1, regarding outdoor air changes per hour (ACH) for hospitals.)

Interpretation 170-2008-12 – October 29, 2014 (Refers to the requirements in ANSI/ASHRAE/ASHE Standard 170-2008, Table 7-1, regarding air recirculation by means of room unit.).

Interpretation 170-2008-13 – June 26, 2018 (Refers to the requirements in ANSI/ASHRAE/ASHE Standard 170-2008, Section 6.1.1, regarding ventilation and pressure relationships upon loss of electrical power.)

Interpretation 170-2008-14 – February 4, 2020 (Refers to the requirements in ANSI/ASHRAE/ASHE Standard 170-2008, Section 6.1.1, regarding the requirement for Class B operating rooms to maintain pressure and ventilation relationships in the event of a loss of normal electrical power for a specific ambulatory health care facility that is certified by The Centers for Medicare & Medicaid

Sample:

Interpretation IC 170-2008-1 of ANSI/ASHRAE/ASHE Standard 170-2008 Ventilation of Health Care Facilities

Date Approved: August 18, 2010

Reference: This request for interpretation refers to the requirements in ANSI/ASHRAE/ASHE Standard 170-2008, **Table 7-1 note "u", regarding AII rooms**.

Background: Due to the 2nd sentence of note "u" which states: "The design of AII rooms shall include the provision for normal patient care during periods not requiring isolation precautions."

Various state department of public health officials are requiring AII rooms to be switched to neutral pressure relative to the corridor in order for the hospital to assign normal acute care patients to the AII room. As long as the AII has a negative pressure relative to the adjacent corridor, the state department of public health officials will only allow infectious/ contagious patients to be assigned to AII rooms. Within these states, normal acute care patients are only allowed to be assigned to patient rooms that are neutral in pressure relative to the adjacent corridor.

In the current 2010 Guidelines for Design and Construction of Health Care Facilities, paragraph 2.1-2.4.2.1(3) allows the use of AII rooms for normal acute care patients. Also in the 2010 Guidelines, paragraph 2.1-8.2.2.1(1) states the following: "Use of AII rooms for routine patient care during periods not requiring isolation precautions

shall be permitted. Differential pressure requirements shall remain unchanged when the AII room is used for routine patient care."

Interpretation No.1: Table 7-1, note "u", requires all AII rooms to be neutral in pressure relative to the adjacent corridor in order for normal acute care patients to be assigned to those rooms, as interpreted by the various state department of public health officials.

Question No.1: Is this interpretation correct?

Answer No.1: No. The AII room must always be maintained at a negative pressure even when being used for normal acute care.

Interpretation No.2: The phrase "The design of AII rooms shall include the provision for normal patient care during periods not requiring isolation precautions" intends for the rooms to be switched to a negative pressure mode when used for infectious/contagious patients and then switched to a neutral pressure mode (pressures relative to the adjacent corridor) when used for normal acute care patients.

Addendum “f” also states that “Switching controls for rooms with reversible airflow provisions shall not be permitted.”

Comments: According to the clinical community, there is no increased risk of infection when a normal patient is in a room that is under a negative pressure to the corridor. The ventilation system supplying air to the corridor is filtered at the same MERV level as the air being supplied to the airborne infection isolation room. **It must be noted that the committee is still adamant about not permitting switchable systems in rooms used for airborne infection isolation, even those controls that would take the room from negative to equal.**

The Joint Commission Clarifies Its Stance on Spare Breakers

The accrediting organization shares its reasoning behind citations issued for spare circuit breakers switched to the ‘on’ position

February 26, 2024

Leah Hummel, AIA, CHFM, CHC, SASHE

During the National Fire Protection Association's (NFPA's) Conference & Expo in June 2023, the Healthcare Interpretations Task Force (HITF) was asked to clarify several questions pertaining to the 2012 editions of the NFPA 101®, Life Safety Code®; NFPA 99, Health Care Facilities Code; and their respective referenced publications. The Centers for Medicare & Medicaid Services' (CMS') Conditions of Participation references these documents, making them enforceable in most health care facilities across the United States.

The HITF meets at least annually to discuss interpretation issues. The task force is comprised of members representing key organizations, such as accrediting organizations (AOs), Department of Defense facilities, Veterans Health Administration facilities and others that are involved in the code-making process for health care facilities, including Chad Beebe, AIA, CHFM, CFPS, CBO, FASHE, deputy executive director of the American Society for Health Care Engineering Regulatory Affairs.

"The HITF meetings give us an opportunity to debate the code when it is not entirely clear and determine how it should be enforced so that all authorities can be consistent," Beebe says.

One of the issues discussed at the June 2023 meeting was spare electrical circuit breakers. Specifically, the question posed to the task force was, "Does the 2011 edition of NFPA 70®, National Electrical Code®, and subsequent editions require properly labeled spare breakers to be kept in any specific position, either 'on' or 'off?'"

Even though NFPA 70 is silent on the issue, the positioning of spare circuit breakers, either on or off, has become a matter that surveyors are noting as deficiencies during surveys.

Although the task force determined the answer to that question to be, "No. They can be in either the on or off position," The Joint Commission has taken a different stance. Leaders from the AO say the organization sees it as a safety issue and requires all spare breakers to be in the off position for its accredited hospitals.

“The code is silent on this issue, so it’s not a code issue. But for The Joint Commission, it is still a safety issue,” notes Herman McKenzie, MBA, CHSP, director of the physical environment department in the Standards Interpretation Group at The Joint Commission.

The Joint Commission has clarified that it still considers properly labeled spare breakers in the on position to be a safety risk based on the experiences of Joint Commission surveyors, leading many surveyors to question the accuracy of the “spare” label when it is in the on position.

“What our surveyors are experiencing is that when they question representatives from the facility about the position of the spare breaker that is in the on position, the facility staff are unwilling to turn it off, not trusting that the label is correct.”

The Environment of Care (EC) Chapter of The Joint Commission’s *Comprehensive Accreditation Manual* requires that, “The Hospital manages risks associated with its utility systems (EC.02.05.01). If a spare breaker was noted not to be in the off position, it would be a deficiency under Element of Performance 9, which states, ‘The hospital labels utility system controls to facilitate partial or complete emergency shutdowns.’”

Facilities that are not accredited by The Joint Commission should reference the HITF decision if questioned by a surveyor about the position of breakers labeled as “spare.”

2024 Hospital Construction Survey results

Annual outlook finds price, labor and supply concerns are still impacting the health care construction market

March 14, 2024 *Chris Dimick* *and* *Jamie Morgan*

High inflation and low skilled labor availability continued to hammer health care construction over the last year. Mix in supply chain shortages, which are still limiting

the availability of key equipment and building materials, and it's easy to see why hospital construction managers may be banging their hard hats in frustration.

According to the 2024 Hospital Construction Survey, nearly half of health care respondents have seen construction cost increases and delays on 76% to 100% of their recent projects.

To see full article with all percentage increase details **click here**.

NFPA Issues TIA 24-2 on Medical Plume (Surgical Smoke) Aug 2023

Tentative Interim Amendment

NFPA® 99

Health Care Facilities Code

2024 Edition

Reference: 9.3.8 and 9.3.8.1
TIA 24-2
(SC 23-8-60 / TIA Log #1723)

Note: Text of the TIA was issued and approved for incorporation into the document prior to printing.

1. Revise 9.3.8 and 9.3.8.1 to read as follows:

9.3.8 Medical Plume (Surgical Smoke) Evacuation and Filtration.
9.3.8.1* ~~Plumes from~~ All medical plumes (i.e., surgical smoke) generated by the use of energy devices (e.g., electrosurgical units, lasers) during medical and surgical procedures shall be captured as close as possible to the point of generation (i.e., point where the energy device contacts the tissue) by one or a combination of the following methods:
(1)* Dedicated local exhaust ventilation system that discharges in accordance with 9.3.8.2
(2) Connection ~~and~~ to return or exhaust duct after air cleaning through ~~HEPA~~ ULPA and gas phase filtration (e.g., activated carbon)
(3) Point of use surgical smoke evacuator with ULPA and gas phase filtration (e.g., activated carbon) for air cleaning and return to the space
(4) Medical-surgical vacuum system with an in-line filter with ULPA and gas phase filtration (e.g., activated carbon) for small amounts of plume in accordance with 5.1.3.7.4

Issue Date: August 25, 2023

Effective Date: September 14, 2023

(Note: For further information on NFPA Codes and Standards, please see www.nfpa.org/docinfo**)**

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NATIONAL FIRE PROTECTION ASSOCIATION

Michigan Backflow Prevention Assembly Tester Credentials Frequently Asked Questions Revised August 30, 2023

The following questions relate to the joint interpretive statement by the Michigan Department of Licensing and Regulatory Affairs (LARA) Bureau of Construction Codes (BCC) and the Michigan Department Environment, Great Lakes, and Energy (EGLE). The statement was sent on July 13, 2023, via a LARA email subscription list to licensed plumbers.

- **What is EGLE's involvement in this issue?**

EGLE's Drinking Water and Environmental Health Division (DWEHD) regulates cross connection control programs at public water supplies. One requirement of a cross connection control program is the testing of backflow prevention assemblies. This issue impacts who can legally test backflow prevention assemblies in Michigan and, therefore, impacts public water suppliers and EGLE's approach to determining compliance.

- **What prompted this change?**

There has been no change in the law. A question was raised to the State Plumbing Board regarding what activities constitute the practice of plumbing under the Michigan Skilled Trades Regulation Act, 2016 PA 407, as amended, (STRA). According to the BCC's interpretation, the practice of plumbing includes the testing of backflow prevention assemblies.

- **When does this go into effect**?

There has been no change in the STRA, so it is in effect now. Therefore, public water supplies are advised by EGLE to ensure local testing activity is in accordance to the law. However, EGLE acknowledges the impact this interpretation will have in some parts of the state and the public health importance of testing backflow preventers. EGLE intends to allow a phase-in period of 12 months (July 31, 2024) before we actively pursue enforcement under the Safe Drinking Water Act (SDWA). EGLE has also contacted state testing schools so they can make their prospective students aware.

- **Who made this change?**

There has been no change in the STRA. However, based on the question raised to the State Plumbing Board and review of the STRA and the Michigan Plumbing Code, the BCC came to this conclusion.

- **Does this mean I cannot test backflow preventers anymore?**

That depends on an individual's credentials. For a public water supply official to accept backflow prevention testing results, the tester must be a master plumber, journey plumber, or apprentice plumber working under direct supervision of a journey plumber or master plumber and have a valid American Society of Sanitary Engineers (ASSE) 5110 certification.

- **Do I still need ASSE-5110 certification to test in Michigan?**

Yes. For a public water supply official to accept backflow prevention testing results, the tester must be a master plumber, journey plumber, or apprentice plumber working under direct supervision of a journey plumber or master plumber and have a valid ASSE 5110 certification. Refer to Rule 1405 (R 325.11405) of the SDWA, 1976 PA 399, as amended.

- **If I am not a licensed plumber, does this mean I lose my ASSE 5110 certification?**

No. Anyone who qualifies and earns their ASSE 5110 certification can retain the certification if continuing education requirements are met, and the certification is

not revoked. The state of Michigan has no authority to issue or revoke certifications issued by the ASSE. However, the ASSE 5110 certification alone will not allow individuals to test in Michigan. If you test in other states, check with the applicable state agency for requirements in that state.

• If I am not a licensed plumber, but have my ASSE 5110 certification, can I test backflow preventers within a building that I, or my company, own?

According to the BCC's interpretation of the STRA, there are no exceptions or provisions for this situation. If your building is classified as a public water supply or is served water by a public water supply, backflow prevention assembly testing can only be done by an individual who is a master plumber, journey plumber, or apprentice plumber working under direct supervision of a journey plumber or master plumber and has a valid ASSE 5110 certification.

• How will this be enforced?

Primarily, this will be enforced locally by public water supply officials when requiring water customers to test backflow prevention assemblies. Upon receiving documentation of backflow preventer testing results, public water supply officials must verify individual tester credentials. Public water supplies are regulated by EGLE under the authority of the SDWA and must follow the rules under Part 14 of the SDWA related to their local cross connection control programs. If public water supplies knowingly accept backflow prevention assembly testing results from unqualified testers after the transition period, EGLE has the authority to take enforcement action against the public water supply. Licensing requirements related to plumbers and plumbing work are enforced by the DLARA's BCC.

• This will cause a tester shortage and/or price gouging. What is the state going to about that?

EGLE acknowledges the impact this may cause in parts of the state related to tester availability and possible increased costs of testing. EGLE has no authority over what private companies charge for testing. However, we are working with the ASSE and the BCC to determine what resources we can provide to help customers shop for

local testers. To promote a fair market, EGLE also encourages public water supplies to educate local testers and their water customers on the purpose, meaning of, and typical costs of assembly testing.

To verify a plumbing license in Michigan, navigate to the following website and click on “Plumber” under the “Skilled Trades” heading: Find / Verify a Licensed Professional or Business (michigan.gov)

To verify an ASSE 5110 certification in Michigan, navigate to the following website and use the search options for state, last name, and certification type: ASSE International (iapmo.org).

• What if Michigan residents and business owners cannot find testers with the necessary credentials in their area?

First, they should contact their local public water supply. The public water supply may be able to provide testing contacts or provide an extension to their testing deadline. If water supplies experience a regional shortage of testers, they should contact their local EGLE district office. Page 4

• How do I report individuals who are testing without proper credentials?

Individuals testing or conducting other activities such as backflow preventer repairs or installation without a plumbing license should be reported to LARA BCC at: LARA-BCC-Compliance@Michigan.gov or 517-241-0130. They may use the Statement of Complaint form to report these issues.

Individuals testing with a fraudulent ASSE 5110 certification or using testing/reporting methods contrary to ASSE Standard 5110 should be reported by filing an “ASSE Professional Certification Program Complaint Form” to the ASSE’s Testing and Credential Services.

• I do not agree with this interpretation - what recourse do I have?

You can direct questions and comments regarding licensing requirements in the STRA to the BCC at **LARA-BCC-Licensing@Michigan.gov** or **517-241-9313**. For concerns

related to wording of the STRA you can contact your Michigan legislative representatives to advocate for changes.

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