CONFERENCE COVERAGE
Infection Prevention Takeaways
From APIC’s Annual Conference

COVID-19
College Guidance Counseling:
Get the COVID-19 Vaccine

STERILE PROCESSING
Sterile Processors Make
Great IP Team Members

PREVENTION
Q&A: CDC’s Lynnette Brammer
Says She’s Got Flu in Her Sights

HAND HYGIENE
Bug of the Month: “I’m Easy
to Treat but Difficult to Spot”
The two Elementum formulations were born from the fusion of 4 robust chemical forces in the form of POWERFUL NEW ENZYMES. These ALL NEW Protease, Amylase, Lipase, and Cellulase Enzymes are synergistically blended to produce two BEST-IN-CLASS formulations which rapidly break down tough-to-clean medical soils including the multi-layers of bioburden. Clinically tested for use in manual cleaning AT-THE-SINK, in Ultrasonic Machines and in Automatic Washers, ELEMENTUM HAS SIMPLY BEEN OPTIMIZED TO CLEAN BETTER. Use it and experience ELEMENTUM'S STAR POWER! *ELEMENTUM EXCLUSIVELY MEETS THE QUALIFYING CHARACTERISTICS OF AN OPTIMAL DETERGENT PER AORN, AAMI AND ASTM D8179 GUIDELINES.

FOR THE EFFECTIVE DECONTAMINATION OF SURGICAL INSTRUMENTS & ENDOSCOPES
The two Elementum formulations were born from the fusion of 4 robust chemical forces in the form of **POWERFUL NEW ENZYMES**. These **ALL NEW** Protease, Amylase, Lipase, and Cellulase Enzymes are synergistically blended to produce two **BEST-IN-CLASS** formulations which rapidly break down tough-to-clean medical soils including the multi-layers of bioburden. Clinically tested for use in manual cleaning **AT-THE-SINK**, in Ultrasonic Machines and in Automatic Washers **ELEMENTUM HAS SIMPLY BEEN OPTIMIZED TO CLEAN BETTER**. Use it and experience **ELEMENTUM’S STAR POWER!**

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Questions Linger Around COVID-19’s Origin

Was it natural zoonotic spillover that catapulted SARS-CoV-2 from an emerging virus into a pandemic pathogen or was it something much more sinister? Is it at all possible that a lab leak in Wuhan, China, was the spark that lit the fuse?

Debate and discussion about the origin of the virus that causes COVID-19 have been at the forefront of the global consciousness since the first cases were reported in December 2019.

Early on, whispers of a potentially engineered virus quickly grew to a roar and fueled speculation that China was behind the pandemic. This narrative was so pervasive that, in February 2020, a group of 27 public health scientists published a letter in *The Lancet* disputing the lab leak theory and announcing their support of their counterparts in China: the scientists, public health officials, and medical professionals combating the pandemic.

“The rapid, open, and transparent sharing of data on this outbreak is now being threatened by rumors and misinformation around its origins,” wrote the authors, who all declared no competing interests in their disclosures as recommended by the International Committee of Medical Journal Editors. “We stand together to strongly condemn conspiracy theories suggesting that COVID-19 does not have a natural origin.”

And although it’s true that analyses of the genomic sequence of the virus subsequently pointed to natural origins, the questions regarding China’s role persisted, led by pesky discrepancies and conflicting reports.

Fast-forward to June 2021 and new evidence that has breathed new life into those origin questions. In an update to the February 2020 letter, *The Lancet* has published an addendum with revised disclosure statements from virologist and investigator Peter Daszak, one of the 27 authors. In the revised document, Daszak noted that his remuneration is paid solely in the form of a salary from EcoHealth Alliance, a New York–based nonprofit research foundation of which he is president. The company has reportedly worked directly with Wuhan laboratories and funded gain-of-function research at China’s Wuhan Institute of Virology.

“Consider, too, other odd associations. Recent reports have uncovered financial ties between Google and EcoHealth Alliance. This comes after accusations that the tech giant was censoring lab leak “conspiracy theory” stories in its search results. Google’s health lead, David Feinberg, has dismissed those reports, insisting that the company is simply taking steps to protect users from unverified information.

“Are these coincidences or “where there’s smoke, there’s fire” situations? It’s unclear. But they add to the bank of troublesome questions standing in the way of the truth about COVID-19. The questions extend beyond origin theory, though. With the US Food and Drug Administration’s green-lighting of vaccines for adolescents and young adults comes hesitation over long-term effects: What is the effect on fertility? Do the vaccines cause heart inflammation? Robert Malone, MD, the inventor of the mRNA technology, appeared on television recently, expressing strong concern over the risk-benefit analysis of vaccination for young adults, and the Centers for Disease Control and Prevention’s Advisory Committee on Immunization Practices recently met to discuss instances of myocarditis or pericarditis in people 30 years and younger who have received an mRNA COVID-19 vaccine.

Of course, the answer to our ultimate question is that we may never know. We may never know where this virus came from. We may never know what triggered the global pandemic that has claimed more than 4 million lives. And we won’t know the long-term effects until enough time has elapsed. What we do know for certain is that the incredible strength and collaboration of the scientific community have allowed us to regain some semblance of normalcy. The development and rollout of multiple effective vaccine options have been the medical miracle of our lifetime.

That, right now, will have to be the only answer that matters.

Thank you for reading,

Mike Hennessy Sr
Chairman and Founder
MJH Life Sciences™
I’m Easy to Treat
but Difficult to Spot

Two things that really bug health care providers about me is that I am very treatable and I was nearly eradicated in the United States. By 2000, Primary Me and Secondary Me had declined to 2.1 cases per 100,000 people. That was the lowest rate since public health officials had started keeping an eye on me in 1941. Yes, 2000: That’s when you may have heard the word eradication and my name in the same sentence.

But I began a comeback the next year and haven’t slowed down. Since 2015, I spiked 74%. Each year, about 55,000 people contract me, according to the Centers for Disease Control and Prevention. And I’m going after infants, even before their first breath. Congenital Me reached a new milestone in 2019, increasing 279% over the previous 5 years. In other words, there is more mother-to-child transmission of me than there were mother-to-child transmissions of HIV at the peak of that scourge in 1991. I am connected to HIV in another way: I increase the risk of getting and transmitting that virus.

Do you know what stops Primary Me in my tracks? A shot of penicillin. It’s as simple as that. But Primary Me is difficult to detect; hence my nickname, The Great Imitator.

I am a sexually transmitted disease (STD), and that may be one reason for my resurgence. People don’t always want to talk about what they’ve been up to, especially to a primary care physician (PCP) whom they may have been going to for years. Yet PCPs are the first line of defense.

When the Affordable Care Act passed in 2010, clinics that treated me and other STDs closed. It was assumed they weren’t needed anymore and that PCPs would do the treating. However, that hasn’t happened.

If a patient at an STD clinic came in complaining of feeling tired all the time, the doctor would do a thorough exam, and I mean thorough. PCPs may be less inclined to take such a close look.

It takes me about 14 to 21 days to incubate. Primary Me’s symptoms might include a painless chancre sore in the genital area, skin, mouth, or rectum that goes away in 3 to 6 weeks. You may think, “Well, that’s that.”

But I will continue to grow. Secondary Me isn’t shy at all.

I announce myself in the following ways:

- Mucous patches in or around the mouth, vagina, or penis
- Moist, warty patches in the genitals
- Fever
- General ill feeling
- Rashes, often on the palms of the hands and soles of the feet
- Loss of appetite
- Vision changes
- Hair loss

If any of these appear, that’s when people should know that something is wrong and get treated. Unfortunately, those who wait get hit by Tertiary Me, which attacks the heart and central nervous system and can cause tumors on the liver. Primary Me, Secondary Me, Tertiary Me—the 3 faces of Me.

Who am I?

To discover who I am, visit InfectionControlToday.com/view/july-2021-bug-month
Your needs are evolving. So is Clorox®.

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Infection Preventionists Face Demographic Challenges

BY FRANK DIAMOND

For a while during the COVID-19 pandemic, infection preventionists (IPs) were rock stars, the go-to experts in hospitals that other health care professionals looked to for advice on how to battle a devastating pandemic. IPs were crucial players in turning the tide against COVID-19, but they also have paid the price. The headline for the Infection Control Today® (ICT®) May cover story sums it up: “As COVID-19 Recedes, Infection Preventionists Must Still Battle Stress.”

The article’s author, Saskia v. Popescu, PhD, MPH, MA, CIC, a member of the ICT® Editorial Advisory Board, wrote: “Most people do not know about IPs, but we are always there. We work to ensure education and training, support our fellow [health care workers], review supply chain challenges, try to prevent health care–associated infections, ensure adequate personal protective equipment, and perform myriad other duties in our job descriptions. Helping respond to COVID-19 has been up to IPs.”

Since IPs more than proved their worth during the pandemic, health care organizations need to take steps to bolster their ranks, argues a study in the American Journal of Infection Control (AJIC). If that doesn’t happen, then the next pandemic, health care professionals might look for advice and find that no one is there to give it.

Retirement
“The retention and development of employed IPs should be a priority to increase staff tenure (eg, length of employment), engagement, and to decrease turnover,” the investigators of the AJIC study stated. “Some turnover cannot be controlled, such as the anticipated retirement of nearly 40% of current US IPs. However, other causes of turnover, such as burnout, poor work environments, and a lack of professional opportunities, can be influenced. Retention of current staff is critical as many open IP positions stay vacant for months, suggesting there may not be enough IPs to fill the current need.”

“I believe retiring IPs will be successfully replaced in organizations that invest in training and mentoring the next generation.”

—HEATHER GILMARTIN, PHD, NP, CIC

This “silver tsunami of baby boomer retirements has been discussed for years,” an author of the study, Heather Gilmartin, PhD, NP, CIC, told ICT®.

“I believe retiring IPs will be successfully replaced in organizations that invest in training and mentoring the next generation,” said Gilmartin, of Denver/Seattle Center of Innovation for Veteran-Centered and Value-Driven Care at the VA Eastern Colorado Healthcare System. “These organizations should look for professionals with diverse backgrounds [eg, nursing, public health, laboratory sciences] to broaden the applicant pool. It will take work, but it will happen.”

The investigators found that 67% (294) of respondents had worked in their current position for 4 years or more, and 52% (230) said that 1 or 2 members of their infection control department would retire in the next 5 years.

To explain why IPs left their health care organizations, 445 respondents cited the following reasons:

- Personal reasons—222 (49%)
- Professional advancement—153 (34.4%)
- Increases in workloads—127 (28.5%)
- Work-life balance problems—125 (28.1%)
- Relationships with colleagues or supervisors—102 (22.9%)
- Financial reasons—81 (18.2%)
- Internal support issues—79 (17.8%)
- Getting fired—56 (12.6%)

In addition, respondents said there are ways health care organizations could improve IP retention.

These suggestions included:

- Continuing education support—353 (79.3%)
- Certification support—322 (72.4%)
How to Reenergize the Field

What can infection preventionists (IPs) expect after COVID-19? Sara M. Reese, PhD, MPH, CIC, and Sarah Smathers, MPH, CIC, are trying to answer that question. They are 2 of the authors of a study, recently published in the *American Journal of Infection Control*, that examined ways in which hospitals can recruit and train IPs and keep them on staff. Reese is the system director of infection prevention at SCL Health, a nonprofit health care system headquartered in Broomfield, Colorado. Smathers is the system director for infection prevention and control at Children’s Hospital of Philadelphia in Pennsylvania. In a recent email exchange with *Infection Control Today* (ICT®), Reese and Smathers discussed key takeaways.

**ICT®**: Do you sense that there’s more interest in infection prevention as a profession? Do you think younger people might be more drawn to it since COVID-19?

**Reese**: I feel that after the COVID-19 pandemic, there will be a draw to this profession and really a draw to public health and epidemiology in general. Infection prevention has been highlighted more than ever, so the timing could not be better for trying to recruit to the field.

**Smathers**: Similar to what we have seen in public health and a number of health-related fields, the interest in medicine and public health has increased with the pandemic. Personally, I have seen increased interest from internal candidates looking to learn more about infection prevention as well as students who are entering the field and considering a future career in infection prevention.

It is estimated that about 40% of IPs will reach retirement age in the next decade or so. How could they ever be replaced?

**Reese**: There must be recruitment efforts in academia that specialize in the relevant professions [specifically, nursing [and] public health laboratory scientists] and development of IP-focused education. Academia programs need to be developed for IPs to come out of school ready to hit the ground running.

**Smathers**: It is challenging to think about replacing the depth of experience and knowledge that retiring IPs have developed during their careers, but...we have to ensure that we are building the bench and actively engage our retirees in their succession planning so they can help mentor and train the next generation of IPs. I’m also very excited by the APIC [Association for Professionals in Infection Control and Epidemiology] announcement of the Infection Prevention Academic Pathway and think this is the first step to ensuring that we have a pipeline of diverse future talent.
How to Reenergize the Field (continued)

Do you think or hope that states will consider mandating that nursing homes have full-time IPs on staff?

Reese: The need for full-time IPs in nursing homes was definitely made clear in this past year. I believe that states are moving in that direction with the risk of infection and outbreaks in the nursing homes with a susceptible population.

Smathers: Although we did not report specifically on long-term care facilities in our publication, I can share my personal thoughts. I agree with APIC’s recommendation that for the safety of the residents and employees in long-term care, we need dedicated full-time infection prevention support. IPs in these environments often wear more than 1 hat and are unable to devote full-time attention to the important work of prevention and responding to infections in long-term care.

In terms of IP staffing, do you think COVID-19 may have had an effect? If so, how?

Reese: I think the effect was 2-fold. I think that many people left the position due to the stress of the past year leaving many openings in roles. Those that were close to retirement may have left a bit earlier than they planned. However, I think COVID-19 also demonstrated the importance of our role in health care, which likely opened new positions and, once open positions are filled, will increase the IP to bed ratio.

Smathers: This pandemic has been life altering for everyone living through it. Many people have found a passion for emergency response and a true commitment and desire to support their health care facilities and public health departments to keep communities, employees, residents, and patients safe during the past year. We also have to be aware that, as [Popescu] so eloquently wrote, many IPs are burned out, and we need to talk openly about how we can help ourselves and our colleagues to recover mentally and physically from the stress of the past year.

This interview was edited for clarity and length.

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Deal Opens Door to US Production of More Than 2 Billion Nitrile Gloves

BY FRANK DIAMOND

A merica’s dependence on foreign manufacturers for the supply of personal protective equipment (PPE) became all too painfully obvious during the first months of the COVID-19 pandemic.¹ And the role of infection preventionists in the monitoring of the supply and proper use of PPE also became evident. As stockpiles of PPE became dangerously depleted, US businesses both old and new shifted into entrepreneurial mode to address the problem.

A step to lessen this dependence was taken with an announcement by the US Department of Defense that it signed a $63.6 million deal with a company called US Medical Glove to produce more nitrile gloves in this country. The deal was reached at the urging of the US Department of Health and Human Services (HHS).

“This effort allows US Medical Glove to increase production capacity of nitrile glove production by 2.31 billion gloves per year by May 2023,” US Medical Glove said in a news release. “The deal was reached at the urging of the US Department of Health and Human Services (HHS).”

Nitrile gloves can be used in place of latex gloves, according to the to the Centers for Disease Control and Prevention. And according to the Occupational Safety and Health Administration (OSHA) guide to PPE, latex gloves provide flexibility and comfort, whereas nitrile gloves are more durable and better able to protect the wearer from chemicals and punctures.

OSHA states that latex gloves “are comfortable to wear, which makes them a popular general-purpose glove. They feature outstanding tensile strength, elasticity, and temperature resistance. In addition to resisting abrasions caused by grinding and polishing, these gloves protect employees’ hands from most water solutions of acids, alkalis, salts, and ketones.” However, the agency adds that “latex gloves have caused allergic reactions in some individuals and may not be appropriate for all employees.”

As for nitrile gloves, OSHA says that they “are made of a copolymer and provide protection from chlorinated solvents such as trichloroethylene and perchloroethylene. Although intended for jobs requiring dexterity and sensitivity, nitrile gloves stand up to heavy use even after prolonged exposure to substances that cause other gloves to deteriorate. They offer protection when working with oils, greases, acids, caustics, and alcohols, but are generally not recommended for use with strong oxidizing agents, aromatic solvents, ketones, and acetates.”

The deal also ensures that the machines to manufacture the nitrile gloves will be built in the United States. This represents a “decoupling from China as the company brings the business of making high-performance industrial manufacturing equipment back to the United States,” US Medical Glove said in its news release. The company plans to buy about 1 billion lb of US steel and 535 miles of copper wire made in the United States, among many other American-made components that will be used in the manufacturing process.

Dylan Ratigan, managing partner at US Medical Glove, said in the news release that “we are honored to be called upon by our government to lead the solution to this problem.”

REFERENCES AVAILABLE AT INFECTIONCONTROLTODAY.COM
Amazon to Launch Health Care Accelerator Program

BY KEITH A. REYNOLDS

Online retail behemoth Amazon is looking to shape the next crop of technological health care solutions with the Amazon Web Services Healthcare Accelerator Program.

According to a news release, the company will choose 10 health care start-ups with an established product-market fit and existing customers and revenue to take part in a 4-week technical, business, and mentorship accelerator program. It will seek to accelerate growth in the cloud with a focus on remote patient monitoring, voice technology, analytics, patient engagement, and virtual care.

This is just another example of Amazon wading deeper into the health care field after the company announced earlier this year that its hybrid telehealth and in-person service would be rolled out across the country.²

The Amazon Care pilot program was opened to Amazon employees in the state of Washington about 2 years ago. It is a 2-part program, involving virtual care connecting patients to physicians through the Amazon Care app, and in-person attention (involving a health care professional dispatched to the patient’s home for additional care).

In November,³ the company announced its foray into the pharmacy space by opening its own digital one. The Amazon Pharmacy store allows customers to purchase prescription drugs from their desktop or mobile device through the Amazon app. By creating a secure pharmacy profile, customers can add their health insurance information, manage their prescriptions, and choose their payment options before checking out.

Last July,⁴ the company announced its Neighborhood Health Center Pilot Program in partnership with Crossover Health.

Through the initial phase of the program, the plan is to establish 20 clinics in 5 US cities with the goal of improving access and care for the 115,000+ Amazon employees in Phoenix, Arizona; Detroit, Michigan; Dallas-Fort Worth, Texas; Louisville, Kentucky; and San Bernadino-Moreno Valley, California. If the pilot program succeeds, Amazon will seek to expand to other cities. ▪️

REFERENCES AVAILABLE AT INFECTIONCONTROLDOTCOM

TO READ MORE, SCAN THE QR CODE

I AM READY

Now that it’s safe to take the leap and travel, it’s time to get ready for the 2021 IAHCSSM Conference & Expo. Be brave, bump elbows, mix and mingle, and broaden your professional horizons.

World-class education and in-person/face-to-face networking await you in Columbus, Ohio. Hurry, as standard registration rates end September 24. Visit us at www.iahcsm.org/GreatExpectations for more information.
Health Care Workers: Get the COVID-19 Vaccine Now
Paul Sax, MD: “It’s almost inevitable that even though we’re at very low infection rates right now that that’s going to increase when the season changes again, in the fall and winter. Coronaviruses are seasonal.”
WATCH: https://bit.ly/3vYw4Hw

Slowly but Surely, Infection Prevention Moves Beyond COVID-19
Jody Feigel, RN, MSN: “A few years ago, nobody wanted to hear from infection prevention. Now, everybody wants to hear from infection prevention.”

How Infection Preventionists, OR Nurses Work Better Together
Linda Spaulding, RN, BC, CIC: “It only takes you saying something a couple times that the OR knows is absolutely absurd and incorrect, and it’s going to ruin the relationship for a long time. Infection preventionists really need to take the responsibility of learning.”
WATCH: https://bit.ly/3zQS6PP

To see more interviews with expert clinicians and healthcare professionals, visit www.medicalworldnews.com

Notable Quotables
“I’ve spent a lot of time writing and researching (and talking) about how neglected infection prevention and control is and what that means [not only] for health care, but also biodefense. This was pre–COVID-19, but as I hear the heartbreak of so many IP friends and colleagues, I think it’s important to write this. Before the first cases were even identified in the United States, IPs were worriedly watching, and the moment the first case was announced in Washington, we began preparing. For many of us, the 24/7 on-call work began around this time.”
— SASKIA V. POPESCU, PHD, MPH, MA, CIC, INFECTION CONTROL EXPERT

Top Tweets
I rarely have seen infection preventionists mentioned in COVID response news coverage. This is an ode to my fellow IPs—you’re magical humans and I adore you. Thank you for all you do 😍 https://bit.ly/3STbBwm

@SaskiaPopescu speaking truth. Everything she says in this article I’ve been saying to anyone who will listen for months. We have come through the worst year of our professional lives, but I am so proud to be in this profession. #InfectionPrevention https://bit.ly/3STxBwm

In interview, @CDCFlu’s Lynnette Brammer said dampened flu activity amid COVID-19 mitigation could actually benefit flu shots: “I think we saw as much or maybe even more of what was out there. It was just so little [to] be seen.” https://bit.ly/3vVGJCM

This interview with @ICT_magazine featuring Prof Joachim L. Schultz, MD, highlights how single-cell analysis is aiding COVID-19 research, using instruments such as the BD Rhapsody™ Single-Cell Analysis System. https://bit.ly/3jahOc0

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Findings From the APIC Annual Conference: Tackling IP Shortages, Nursing Home Problems, and *Clostridioides difficile*

It wasn’t all COVID-19, all the time, last month at the annual conference of the Association for Professionals in Infection Control and Epidemiology (APIC), but the biggest health care story in 100 years couldn’t be ignored either. Officially, the pandemic continues, for one thing. Society and the health care system haven’t really had a chance to fully process what we’ve been going through, what we continue to go through, and what we may go through in the future. Remember the variants? They remind us that coronaviruses mutate all the time. Those mutations so far—so far, as of this writing—can be thwarted by the COVID-19 vaccines.

Vaccinations, better testing, better treatments, a public health care system that’s on guard: These are a few of the factors that promise a return to a pre–COVID-19 normal. However, a return to normal for infection preventionists (IPs) involves battling a host of deadly pathogens, including bacterial superbugs that continue to resist most of the antibiotics thrown at them. Also, the pre–COVID-19 normal for many IPs meant being marginalized and underutilized. Their stock skyrocketed during COVID-19 surges but may be earthbound now.

In addition, the IP profession faces systemic and demographic hurdles that APIC addresses. These include diminishing ranks, a lack of state mandates that require IPs be certified, and the absence of IPs at nursing homes (NHs), which turned out to have horrific consequences during COVID-19 surges.

Here is some of the reportage of the APIC conference provided by *Infection Control Today®* (ICT®). Readers can find more ICT® conference coverage at infectioncontroltoday.com/conference/apic.

Calling All (Retired) Infection Preventionists: You’re Needed

The demographic challenges facing the infection prevention field represent an almost existential threat. The hard question must be asked: Will the specialty dry up? Despite the crucial role IPs played in helping patients and their fellow health care professionals weather COVID-19 surges, the post–COVID-19 normal might dishearteningly resemble the pre–COVID-19 normal. IPs again may start to feel underappreciated and underutilized, while their ranks continue to thin. It’s a situation much on the minds of working IPs, including those who are APIC officials, as they lobby US states to mandate that NHs and other long-term care facilities hire full-time IPs, and encourage hospitals to layer the IP career path—novice, becoming proficient, proficient, and expert—through training programs that are often tied to teaching institutions.

In the meantime, though...there’s the meantime. A study unveiled last month at APIC’s annual conference looked at a creative approach to keep infection prevention departments fully staffed while also giving younger health care workers who want to become IPs the training they need.

The infection prevention department at Ascension Texas managed to shore up IP ranks by calling a couple of IPs out of retirement and asking another if she would postpone her retirement during a COVID-19 surge. The 3 IPs helped with remote monitoring, thereby freeing the IPs on site to take a more hands-on approach.

*“The [retired] IPs required no onboarding or training due to prior knowledge...*
of surveillance methodology, electronic health records, and surveillance software systems,” writes study author Holly Taylor, MPH, CIC, the infection prevention director at Ascension Texas in the study. “An [as-needed] status was preferred over [full-time] or part-time status by both the IPs and the organization. Full-time IPs reported increased availability for unit-based activities.”

Taylor relates to ICT® that not only did the retired IPs help with the workload, they also helped ease new IPs into the profession. “When you are a novice coming into infection prevention, there is so much content, so much work. It’s incredibly fast-paced,” she tells ICT®. “And we know novice IPs often come in without a lot of support. The attrition rate is pretty high. So even just being able to offload some of those administrative tasks, administrative burden, to help facilitate a [better] learning environment, [was appreciated]. I’ve had feedback from my novice IPs talking with the retired IPs to be an educational experience.

“I have one who was an endoscopy manager for an extended period of time,” says Taylor. “She brings just a really invaluable set of skills and level of expertise related to high-level disinfection of endoscopes, and so she has come in to round with folks or get perspectives and give feedback, consult with them, to help prioritize any follow-up actions, and so forth.”

Taylor hopes that the arrangement might be more than a stopgap. Ascension Texas administrators so far have made no indication that they want to end the program even as COVID-19 ebbs.

“I know that they are helping support and work through expanding the staffing complement of my department,” Taylor tells ICT®. “I see this as something that they allow me to keep for a while. I have not heard that they have put an end date on it for me at all.”

REFERENCES

The infection prevention department at Ascension Texas managed to shore up IP ranks by calling a couple of IPs out of retirement and asking another if she would postpone her retirement during a COVID-19 surge.

Clostridioides difficile Controlled at Hospital During COVID-19 Surge

One of the bigger challenges during COVID-19 surges for IPs involved keeping tabs on the host of other deadly pathogens that cause health care–acquired infections (HAIs). However, just as the mitigation measures used to fight COVID-19 in the public—hand hygiene, social distancing, wearing a mask—reduced the incidence of influenza in the 2020-2021 flu season to historic lows, the measures used to combat COVID-19 in hospitals may have helped reduce incidents of HAIs. Better hand hygiene compliance may have been especially important, according to a study unveiled last month at the APIC annual conference.

According to investigators with Mount Sinai Morningside in New York, the rates of Clostridioides difficile infection (CDI) laboratory-identified events remained about the same in March, April, and May
of 2020 as they were during the same 3 months in 2019. Investigators compared the \textit{C. diff} rates per 10,000 patient days for both periods, as well as the number of \textit{C. diff} tests ordered.

"Additionally, the doctor of pharmacy from our antibiotic stewardship team reviewed all orders for oral vancomycin to determine if empiric CDI treatment was initiated without confirmatory testing," the study authors state.

Among those authors is Barbara Smith, RN, BSN, MPA, CIC, an infection preventionist at Mount Sinai Morningside. She tells ICT® that there was 1 case in 2020 in which the patient who’d been given oral vancomycin did in fact have \textit{C. diff}. “So that was valid,” Smith tells ICT®. “There was another woman who had come in with \textit{C. diff}. She was valid to receive that treatment.” Smith said she decided to study incidents of \textit{C. diff} when hospital providers noticed an increase in the number of central line–associated bloodstream infections, although she realized that the increase “was understandable given the crisis situation [with COVID-19] and the condition of the patients.

The rates of \textit{Clostridioides difficile} infection laboratory-identified events remained about the same in March, April, and May of 2020 as they were during the same 3 months in 2019, according to the findings. "You would think that with the amount of antibiotics these COVID-19 patients received that that [the \textit{C. diff} rate] would have gone through the roof, but it didn’t," Smith added.

Investigators found a minuscule increase in \textit{C. diff} during the 3 months in 2020: 0.48 per 10,000 patient days compared with 0.00 in 2019. In addition, the number of tests rose in 2020 to 17.5 per 10,000 patient days from 15.8 during the 2019 months. In 2020, 3 patients received oral vancomycin.

“We speculate that the lack of an increase in CDI rates may be attributed to increased hand hygiene by staff—compliance increased to 91% in 2020 compared with 83% in 2019—enhanced attention to cleaning and high-level disinfection, and improved adherence to use of personal protective equipment,” the authors concluded.

Smith tells ICT® that she wanted to make sure there were no mitigating factors, such as a decrease in testing for \textit{C. diff}. “Were people not testing the same amount? Maybe the doctors were just starting treatment without testing. But that, too, was not found to be statistically significant,” notes Smith. “The volume of patients tested in 2019 was the same, or similar, as the volume in 2020. We didn’t feel like people were just missing the cases. The [patients] who were diagnosed and who did need treatment were getting it.”

Smith says that patients with \textit{C. diff} are put in isolation; they cannot leave their hospital room for anything other than a medical test. “People who are entering the room [of a patient with \textit{C. diff}] can use a sanitizer to go in. They do wear full gloves and gowns, which they should be removing before they leave the room. And [they should be] using soap and water when they exit the room,” points out Smith, “because, as you know, the alcohol sanitizers don’t kill the spores. Actually, neither does the soap and water. It just flushes it down the drain.”

**REFERENCE**

of Michigan. “Hand hygiene and use of personal protective equipment have [had] heightened priority during the COVID pandemic. NHs have made significant progress operationalizing many evidence-based infection prevention practices, but gaps exist.”

In Michigan, 56 NHs (of 58 asked) agreed to participate in a 5-year survey in which investigators sought to learn if better relations between NHs and hospitals might help foster better infection prevention in NHs. “A 36-question survey on IPC [infection prevention and control] characteristics was distributed … for [the] years 2018-2020,” the study states. “All surveys were completed prior to March 2020, when the first case of COVID-19 was identified in Michigan. Surveys were completed by IPs, directors of nursing, and/or NH administrators.”

The respondents at 93% of the NHs were aware of their institution’s UTI rates, and 87% were aware of its CAUTI rates. Policies were in place at the NHs regarding catheter insertion and care, as well as other methods to prevent UTI/CAUTI infection. Those methods include hydration, discontinuing the catheter use, stop orders, and electronic alerts.

Staff training at the NHs was uneven, however. “Less than half (44%) were aware of their hand hygiene rates; 35% were aware of gown/glove use,” the study authors state, adding that “100% shared infection data with NH leadership, 69% with bedside nursing staff, and 26% with residents and families.”

Among the study authors is Karen Jones, MPH, RN, CIC, who works in the Department of Internal Medicine at the University of Michigan. She tells ICT® that face-to-face meetings between NH and hospital officials were originally supposed to be a major part of the third year of the project. Because of COVID-19, though, those meetings had to be held virtually. The data reported in the APIC conference abstract reflect a 3-year period of surveys. An enrollment year was considered to be from March 1 to February 28.

“Our third year…was challenged due to COVID,” Jones tells ICT®. “We anticipate enrolling another cohort of NHs for this project this summer. We had to adjust the planned enrollment year due to the chaos COVID caused. The entire project is 5 years.”

Jones says it was good that the meetings in the third year of the project were held—even if they had to be virtual—because “it was even more important during that time of COVID to build those relationships, to have open lines of communication, especially when it came to things like personal protective equipment allocation, visitation, and staff education. It benefited everyone to have those relationships strengthened during [that] COVID year.” For an additional 1 or 2 years, continues Jones, the team will continue to collect the same kinds of data that were presented at this year’s APIC conference.

Still, Jones and colleagues detected a disturbing trend: Even NHs that had IPs had trouble keeping them.

“The NHs that we surveyed had almost two-thirds of their IPs turn over in the course of just 12 months,” Jones tells ICT®. “Keeping someone in that role is very, very important: They need to be properly educated and to have the time not only to get education but [also] to set up their program and properly run it and not to be pulled in many different directions [at once] at work. If they’re an IP, they need to focus on [infection prevention]. They should not also be responsible for all the different tasks in the [facility].”

REFERENCE

A 5-year survey in Michigan seeks to determine if enhanced relationships between nursing homes and hospitals might facilitate better infection prevention in nursing homes.

Find these additional articles about APIC’s annual conference on Infection Control Today®’s website.

• IPs in Early Stages of COVID-19 Were Wanted to Point of Exhaustion
• When Exhausted Infection Preventionists Saved the Day
• APIC Backs Mandatory COVID-19 Vaccines for Health Care Workers
• Quick Infection Prevention Response Stymies C. Auris
• Battling C. Auris and COVID-19 at Same Time
The importance of ventilation in health care and non–health care settings has become evident amid the COVID-19 pandemic. Decreased performance of health care facility heating, ventilation, and air-conditioning (HVAC) systems, including filter inefficiencies, improper installation, and poor maintenance, can contribute to the spread of health care–associated infections (HAIs), according to various research findings. Infection preventionists (IPs) who have a basic understanding of ventilation systems and associated risks might feel more confident and comfortable collaborating with architects, facility designers, and engineers. COVID-19 is 1 of many diseases transmitted from a respiratory source.
How does air play a role in disease transmission? The aerosolized transmission of disease happens through droplet and airborne means.7 Droplet transmission of disease can occur when bacteria or viruses travel on relatively large respiratory particles that people sneeze, cough, or exhale through talking, singing, or shouting. These droplets travel short distances (usually less than 6 ft) before settling and can be loaded with infectious particles. Infectious particles that contact a person’s eyes, nose, or mouth can cause infection. If they fall on surfaces, they can be transferred onto the hand of someone who unknowingly rubs their eyes, nose, or mouth, causing possible self-contamination.

Airborne transmission is defined as infections transmitted through exposure to infectious, pathogen-containing, small droplets and particles suspended in the air over long distances that can persist in the air for long times.2 The main differences between these 2 transmission types come down to particle size and distance traveled: Droplets are thought to be larger and don’t travel as far; aerosols are smaller and can travel quite a distance. The Centers for Disease Control and Prevention (CDC) recommended isolation precautions for diseases like measles and chickenpox, which are airborne, and mumps, which is transmitted by droplet.1 IPs understand the importance of these precautions but may know less about how these measures work to protect patients and staff.

“The importance of good air quality in controlling and preventing airborne infections in health care facilities cannot be overemphasized,” wrote Anjali Joseph, PhD, the director of research at the Center for Health Design, a company that plans health care facilities, in a 2006 study. “Providing clean filtered air and effectively controlling indoor air pollution through ventilation are 2 key aspects of maintaining good air quality.”

## Cover Story

Knowing how important air quality and ventilation are, IPs might better converse with health care architects, designers, and facilities groups if they understand the basics of clean, filtered air and ventilation. Basic terms include the following:

1. Filtration refers to controlling air quality at the source and is defined as the physical removal of particulates from the air, a key step toward achieving acceptable indoor air quality by removing contaminants.
   - Filters that are 90% efficient are sufficient for most patient care areas in ambulatory care facilities and hospitals, including the operating room.
   - High-efficiency particulate air (HEPA) filters should be used for special care areas of the hospital such as surgical areas, burn units, and protective environments for patients who are immunocompromised.
   - HEPA filters are required to be 99.97% efficient for removing particles 0.3 μm or larger (eg, COVID-19 = 0.06-0.2 μm; measles = 0.2 μm; *Mycobacterium tuberculosis* = 1.0 μm). This means for every 10,000 particles 0.3 μm in diameter, HEPA filters allow only 3 particles to pass through.
   - The principle of Brownian motion applies to HEPA filters for particles less than 0.3 μm. These smaller particles bounce off other molecules when they collide and move in random patterns. They hit the HEPA filter fibers and get stuck. So HEPA filters actually better capture these smaller particles.3

2. Ventilation guidelines are defined in terms of air volume per minute per occupant. They assume that the people in the room and their activities are responsible for most of the contaminants in the space.
   - Supply vents are where conditioned air blows into the room, usually from the ceiling; return vents (exhaust) pull the room air in, usually near the floor.
   - Most ventilation rates for health care facilities are stated as room air changes per hour (ACH). ACH refers to the number of times that air gets replaced in each room every hour, mixing in outside air to dilute microbial contamination.
   - Peak efficiency for particle removal in an airborne infection isolation room (AIIR) occurs between 12 and 15 ACH, per CDC guidelines.6
   - Ventilation rates vary with different patient care areas of a health care facility. Look at the most recent edition of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 170, Ventilation of Health Care Facilities, which is now integrated into the Facility Guidelines Institute (FGI) Guidelines for Design and Construction of Health Care Facilities.7
   - ASHRAE Standard 170 speaks to the removal of airborne pathogens through a combination of filtration, direct exhaust of contaminated air, and dilution through introduction of outdoor air. Most IPs are familiar with ASHRAE and FGI. These resources are highly recommended and often consulted, especially when renovation and construction are planned for a facility.
Be aware that the Joint Commission, through its Environment of Care standards, also audits ventilation systems for appropriate pressure relationships, air exchange rates, and filtration efficiencies because it views the proper design and maintenance of isolation rooms as vitally important in preventing the transmission of disease through the air for patients, staff, and visitors.

Interestingly, studies have found that ASHRAE 170 2008 and the 2005 CDC guidelines recommendations for minimum ventilation rates of 12 ACH for hospital isolation rooms are not necessarily the optimum ACH to control infection transmission. Increasing ventilation airflow rate dilutes concentrations but does not increase ventilation effectiveness. The results of a study by Memarzadeh and Xu suggest that the most important contributing factor to contaminant transmission in an AIIR is the path between the patient and the exhaust, not the ACH. When this path is disrupted by airstreams, the contaminants can move to other places in the room. If this path is not disrupted, then the contaminant is not likely to migrate, so changing the number of air exchanges does nothing for ventilation effectiveness.

This is why thoughtful ventilation design and placement of exhaust and supply vents in relation to patient placement in the room are important. Simply introducing extra amounts of outdoor air in hopes of diluting the room air may not be effective in providing protection from airborne infection because it does not increase ventilation effectiveness. It is very important to not block the path to the exhaust and returns.

Humidity is defined as the concentration of water vapor present in the air.

The recommended relative humidity range for hospitals is between 40% and 60% (also check local standards). The minimum relative humidity level for an operating room should be 20% and the maximum level should be 60%, per ASHRAE Standard 170-2017, Ventilation of Health Care Facilities.

Relative humidity greater than 60% can promote growth of fungus.

Humidity control allows patients and health care workers to breathe easily, avoiding dryness of the respiratory tracts and reducing the amount of airborne dust in closed spaces.

According to Stephanie Taylor, MD, an infection prevention consultant at Harvard Medical School, “At low relative humidity, indoor air was strongly associated with higher infection rates. When we dry the air out, droplets and skin flakes carrying viruses and bacteria are launched into the air, traveling far and over long periods of time....In addition to this increased exposure to infectious particles, the dry air also harms our natural immune barriers, which protect us from infections.”

Ideal humidity conditions can also improve working conditions for health care workers and help medical electrical equipment operate properly by reducing static electricity (Figure 1 demonstrates the relationship between microorganisms and humidity).

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**FIGURE 1.** Relationship between microorganisms and humidity

<table>
<thead>
<tr>
<th>Microorganisms</th>
<th>Relative Humidity %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacteria</td>
<td>0-100</td>
</tr>
<tr>
<td>Viruses</td>
<td>0-100</td>
</tr>
<tr>
<td>Mould</td>
<td>0-100</td>
</tr>
<tr>
<td>Mites</td>
<td>0-100</td>
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<tr>
<td>Respiratory Infections</td>
<td>0-100</td>
</tr>
<tr>
<td>Rhinitis and Allergic Asthma</td>
<td>0-100</td>
</tr>
<tr>
<td>Chemical Interactions</td>
<td>0-100</td>
</tr>
<tr>
<td>Production of Ozone</td>
<td>0-100</td>
</tr>
</tbody>
</table>

Room pressurization involves technology that controls movement of air contaminants by causing drafts between spaces, usually rooms and hallways. Pressurization can be positive or negative.

- In health care, certain rooms are positively or negatively pressurized with respect to surrounding areas.
- Negative pressure (depressurized) means airflow into the room.
- AIIRs are set at negative pressure with respect to adjacent areas to prevent airborne microorganisms in the room from entering hallways, corridors, and other areas.
- AIIRs provide negative pressure in the room (so that air flows under the door gap into the room), with an airflow rate of 6 to 12 ACH (6 ACH for existing structures; 12 ACH for new construction or renovation) and direct exhaust of air from the room to the outside of the building or recirculation of air through a HEPA filter before returning to circulation.12
- Positive pressure means air flows out of the room (pressurized).
- Protective environment rooms, used to protect neutropenic patients, are set at positive pressure to keep airborne pathogens in adjacent spaces or corridors from coming into and contaminating the airspace.
- Rooms should be positively or negatively pressurized with respect to surrounding areas (Figure 2). The 2014 FGI Guidelines/Standard 170-2013 provides guidance on how certain rooms should be pressurized.
- Self-closing doors are mandatory for both of these areas to help maintain the correct pressure differential.
- Variable pressure rooms (rooms where the ventilation can be manually switched between positive and negative pressure) are no longer permitted in new construction or renovation, and their use in existing facilities has been discouraged because of difficulties in assuring the proper pressure differential, especially for the negative pressure setting, and the potential for error associated with switching the pressure differentials for the room. Continued use of existing variable pressure rooms depends on collaboration between engineering and infection control. Both positive- and negative-pressure rooms should be maintained according to specific engineering specifications.13
- ASHRAE Standard 170, Ventilation of Health Care Facilities, requires each isolation room to have a permanently installed visual device or mechanism to constantly monitor the air pressure differential of the room when occupied by a patient who requires isolation. The CDC states that airflow direction should be maintained and verified, preferably daily, even when the room is unoccupied, using either a visual means of indication (eg, smoke tubes and flutter strips) or manometers.24

Temperature is defined as the degree of hotness or coldness measured on a definite scale.

- In health care, normal operating temperature set points should be maintained based on the existing licensing requirements for the space use and occupancy. Consult FGI for specific guidance.
- ASHRAE Standard 170 requires temperatures ranging from 68-75 °F for most patient care areas. Cool temperature standards (68-73 °F [20-23 °C]) are usually related to operating rooms, clean workrooms, and endoscopy suites.
- Temperatures above about 75 °F (24 °C) appear to universally lower airborne bacterial survival.15
- Virus survival, in general, decreases as temperatures rise. However, many factors, such as humidity, presence of organic matter, and whether they are DNA or RNA viruses, influence survivability. Much more research regarding temperature and its effect on viruses is ongoing.

As the above tutorial indicates, the current information on air in health care and public buildings can be overwhelming. The really heavy engineering and design details of ventilation are best left to the architects, engineers, and the facilities groups. But knowing the basics of air quality and air handling, as well as their relationship to possible disease transmission, could benefit IPs. □

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REFERENCES AVAILABLE AT INFECTIONCONTROLTODAY.COM
The second Sunday of every October marks the first day of Sterile Processing Week, running this year from October 10 through 16. As is the case every year, well-planned, meaningful, and memorable events should properly celebrate the vital contributions of our nation’s quality-focused professionals in the sterile processing (SP) field who promote patient safety and positive patient outcomes.

The International Association of Healthcare Central Service Materiel Management (IAHCSMM) has always viewed SP professionals as crucial contributors to patient care, not unlike frontline caregivers. The association also knows that, unfortunately, some facilities still don’t give members of the SP department (SPD) the acknowledgment and appreciation they deserve. In some cases, facility executives may not be aware of Sterile Processing Week because SP leadership hasn’t taken the time to inform them; perhaps, the leadership has never taken the time to meet with those in the C-suite to help explain the difficult and crucial processes that take place within the walls of the SPD—and how those processes affect patient outcomes.

Some SP professionals themselves, in fact, may be unaware that there’s an entire week dedicated to them and their discipline. Some may be new to the profession, and others may not have the opportunity to read IAHCSMM’s many articles, tips, and tributes for them each year. Even some who are aware of the dedicated week each October may lack a celebratory spirit if their SP leaders and interdisciplinary colleagues fail to acknowledge their profession and the hard work it requires. Ultimately, one key point remains: This yearly honorary week should never be overlooked. Regardless of their title or tenure, every SP professional should be recognized for their hard work and dedication to quality customer service and patient safety.

**Tap SPD’s Top Allies**
Managers who haven’t already begun their Sterile Processing Week planning still have time to create thoughtful and successful events to honor their teams and get other disciplines involved.

Although celebrating within the department’s walls is a good approach, casting a wider net can yield even more success. In many facilities, SP professionals remain the “unsung heroes,” primarily because members of other health care disciplines often lack understanding of what SP entails and how challenging the jobs are. Sterile Processing Week presents a perfect opportunity to invite other health care professionals to tour the department and see for themselves what it takes to process instruments; they can ask questions and even participate in or contribute to some education. Drawing other disciplines into Sterile Processing Week festivities isn’t just good for SP professionals’ morale; it also can help set the stage for improved interdisciplinary communication and teamwork.

It’s prudent to invite professionals from the surgical services department and other departments the SPD serves to planned Sterile Processing Week events, but it’s equally important to include the

**Technicians: Feeling Forgotten? Follow these tips!**

Technicians who work in the sterile processing department but haven’t heard from their managers about Sterile Processing Week and how it will be celebrated should take matters into their own hands. Remind the manager that Sterile Processing Week is just around the corner and that the team would like to be recognized. Share some of the team’s ideas and ask the manager whether they can set aside some time to discuss Sterile Processing Week further. Due to their day-to-day responsibilities, managers may be unaware that the week is on the horizon, so a gentle nudge and sharing ideas can help put successful plans in motion.
Infection preventionists are integral members of the extended sterile processing department team and can be among the department’s biggest supporters.

IAHCSMM has created a number of free Sterile Processing Week templates and celebration materials (including posters, thank-you cards, certificates of excellence, and Sterile Processing Week departmental tour invitation letters) that can be customized, downloaded, printed, and easily posted/shared.

Visit www.iahcsmm.org/about/sp-week.html.

Note: Templates will be updated for 2021 in the coming weeks.

Don’t Let Budgets Derail Plans

Nearly every year, IAHCSMM hears from SP professionals who lament that limited budgets lead their facilities and managers to overlook Sterile Processing Week. IAHCSMM consistently reminds all SP professionals that some of the best ways to honor the profession and those who are in it require little or no outlay of capital.

Heartfelt words of appreciation from their bosses, interdepartmental colleagues, and top-level executives typically matter more than, say, pizza parties or celebratory trinkets—which are nice add-ons if budgets allow but certainly aren’t a requirement. SP managers should consider carving out time to personally thank each employee for their specific contributions, recognize their strengths and growth areas, and share how they contributed to the team’s success. Leaders can also discuss career ladder opportunities with each employee and initiate a plan to help put them on the path to professional growth.

Other low-cost ways to honor the SP team include hosting departmental tours and fun in-department educational offerings such as vendor-led in-services or trivia-style games that the SP team and other health care professionals who visit the department during SP Week can participate in to broaden their knowledge. Ideally, managers will plan 1 event per shift for every day of SP Week.

Above all, SP leaders should work to remind their technicians and educators that they are valued, appreciated, supported, and heard—not just during Sterile Processing Week, but every day of the year.

JULIE E. WILLIAMSON is the communications director/editor for the International Association of Healthcare Central Service Material Management, an Infection Control Today® Strategic Alliance Partner.

REFERENCES AVAILABLE AT INFECTIONCONTROLTODAY.COM
First came COVID-19; then, blessedly, the vaccines. But then...vaccine resistance.

About 47.7% of Americans 12 years and older are fully vaccinated as of this writing but—doing the math—that leaves about 52.3% who are not. The holdouts offer a variety of reasons for delaying or refusing vaccinations, so states and communities are dangling a variety of carrots, according to their means and what their reluctant residents are likely to respond to.

Most incentives are relatively low-key: free beer in New Jersey, a complimentary beverage in Connecticut, and free weed in Washington state. In New York, New York, the vaccinated can opt for free tickets to Lincoln Center and the Bronx Zoo, among other offers. Maine residents can choose from a free park pass, a hunting or fishing license, or an L.L.Bean gift card. In Alabama, vaccinated residents can drive 2 laps on the Talladega Superspeedway.

At UCLA, investigators have interviewed more than 75,000 people over the past 10 months, testing the effectiveness of different messages about getting vaccinated. For example, framing the benefits as "It will protect you" or "It will protect you and those around you" produced similar results: About two-thirds of each group said they intended to get the shots.

For some, like the vaccine hesitant, money talks loudest. In the UCLA study, roughly one-third of 7249 respondents said a cash payment would make them more inclined to get a shot. Interestingly, the percentages were close, whether the amount was $25, $50, or $100, although willingness did increase in the $100 group by 6 points over the $25 group.

Early on, payments seemed to have a negative effect on some people. With the hesitant group, however, payment has an edge, and some states are getting creative—maybe desperately creative—to take advantage of that. In parts of Alaska, getting vaccinated might get someone $500 for groceries or food. In Ohio, it could earn a person a million bucks.

In a press conference in May, Gov Mike DeWine (R) of Ohio said, "Now, I know that some of you are shaking your head and saying, 'That Mike DeWine, he's crazy!' Why? Because he had just announced 5 Ohio Vax-a-Million drawings—a lottery for vaccinated residents.'"

Asked at a mid-May press conference whether the $5 million might have been better spent in some other way—public service announcements, for instance—Ohio Health Director Stephanie McCurdy said that, in fact, the previous Friday the state had seen its highest vaccination numbers since April 23. Specifically, she pointed to a 6% increase in vaccination rates among people aged 30 to 74—and this was after 3 weeks of steady decline. "I don't know for $5 million...that this would be something we could have spent in other ways to get this much attention, interest, uptake."

It seems to be working just fine. In the week following the lottery launch, vaccinations in Ohio increased 94% among those 16 and 17 years old, 46% among those aged 18 and 19, and 55% among those between 20 and 49 (the first lucky winners were announced May 26), according to a statement from DeWine's office.

In the spirit of one-upmanship, Gov Larry Hogan (R) of Maryland launched a $2 million lottery on May 20, with dozens of $40,000 cash prizes for vaccinated state residents, as well as 1 grand prize of $400,000.

On the Fence

The push to vaccinate is now targeting teens and young adults. A College Finance survey of more than 1000 college students found that although 88% said they are planning to get vaccinated, 8% said they’re unsure and 4% said they won’t.

A little more than 7 in 10 believe it should be compulsory for college admission. Those who don’t often mirror an opinion...
found in the general US public: One junior at Rutgers, The State University of New Jersey and the first university to mandate COVID-19 vaccination, said, “I’m not antivax, I’m antimandate. My education should not be restricted based on my personal decision to receive the COVID-19 vaccination.”

What happens on college campuses may seem somewhat far afield of what infection preventionists (IPs) do in hospitals except that—as Infection Control Today® reported in our March 2021 issue—there may be a growing demand for IPs outside traditional health care settings such as hospitals. Businesses, public health departments, and schools, including colleges and universities, all need infection prevention guidance.

Unfortunately, although young adults have been the source of some of the worst spikes in COVID-19 cases, until recently, they have been last on the priority list for vaccination. In April, Rochelle Walensky, MD, MPH, the director of the Centers for Disease Control and Prevention (CDC), said that more younger adults are being admitted with COVID-19 as more contagious variants spread. In New York State, the COVID-19 positivity rate among people aged 18 to 24 years is on the rise, as of this writing. In Michigan, case rates are at an all-time high for those aged 19 years and younger.

Not incidentally, given the young age of many vaccine-un sure people, Ohio is also giving away 5 full college scholarships to vaccinated students. And in West Virginia, everyone aged 16 to 35 will get a $100 savings bond for getting vaccinated.

In a press briefing in late April, Gov Jim Justice announced that the median age of West Virginians testing positive for COVID-19 had dropped to 34. “When it recently came down to 44 years of age, we thought, ‘Uh-oh. We’ve got a problem,’” he said. “But now we’re down to 34, and that means we’ve got a ton of young people that are testing positive. We’ve absolutely got to get our young people vaccinated.”

As part of the “Call to Arms” vaccine initiative, state COVID-19 pandemic response leaders set a goal of administering at least 1 dose to 65% of all eligible residents by West Virginia’s 158th birthday on June 20, 2021. “We are at 57% right now, so we’ve only got 8% to go,” Justice said 2 weeks ahead of the deadline. (As of this writing on July 12, 2021, the number stood at 58%, according to the CDC.)

To help move the needle on the number of young, vaccinated people, schools, like states, are offering rewards, bribes, and outright cash, no strings attached—other than getting vaccinated. The intent is to not only encourage vaccination but also make it easier for schools to get back to normal, with in-person classes and some form of regular school activities.

Rowan University in Glassboro, New Jersey, is planning an in-person commencement for the Class of 2021, with 20 ceremonies. To help make that possible, the university is offering a $500 credit to full-time students who show proof of vaccination; residential students will receive an additional $500 credit to their housing bill. The school is also developing incentives for employees (in compliance with union regulations). “Our message today is simple,” Ali Houshmand, PhD, the university’s president, said in a letter to the college community. “We believe the path to normalcy is through widespread vaccination, and we want our entire community to commit to reaching the goal of widespread vaccination. If we work together, we can reach this goal and offer the Rowan University experience that we all deserve.”

A senior admissions information coordinator at Bucknell University, a well-respected liberal arts college in rural Pennsylvania, says her school is mandating vaccination for the students. Staff and faculty will have to wear masks and get tested every 2 weeks. When asked how Bucknell will manage having half the school community (the students) inoculated and the other half (staff and faculty) not, she laughs. The incentive for staff: “If you get vaccinated, you won’t have to get tested every 2 weeks.”

**Risks and Benefits**

All 50 states have at least some vaccine mandates for elementary and high schools, and colleges often require vaccinations for certain diseases,
such as measles and meningitis. Those mandates all have medical exemptions and sometimes religious or even philosophical exemptions. The American College Health Association has recommended that colleges require all students on campus to receive a COVID-19 vaccine, calling it “the most effective way for institutions of higher education to return to a safe, robust on-campus experience.” So far, hundreds of colleges and universities have said vaccinations will be mandatory for the fall 2021 semester.

Schools are walking a tightrope, though, and it’s wrapped in thorns. There’s a downside to virtually every choice. If they demand vaccination, they’re bound to lose some prospective students, and the past year has made the coming year critical for enrollment. According to the National Student Clearinghouse Research Center, spring undergraduate enrollment is down 5.9%—the steepest decline since the beginning of the pandemic. Overall postsecondary enrollment is down 4.2% from a year ago.

If schools don’t mandate vaccination—well, consider the fact that rising infections among young adults create a “reservoir of disease” that eventually “spills over into the rest of society,” Judith Malmgren, PhD, an epidemiologist at the University of Washington, said in an NPR interview.

Implementing vaccine coverage comes with a multitude of practical headaches. “At this point, I would like the reassurance that anyone I come in contact with at the college has been vaccinated,” said Patricia Johannsen, PhD, professor and coordinator of graphic design in the Media Arts and Technologies Department at Montgomery College, a community college in Rockville, Maryland, that enrolls more than 50,000 students each year. “But how do you enforce that every day and night? Guards to check everyone as they drive or walk on to campus or get off the buses? Our campus boundaries are too porous. Guards at every entrance to every building—on all 3 of our main campuses and our numerous auxiliary sites.”

College administrators have yet another balancing act to perform: keeping students and staff safe while offering the activities that make campus life enjoyable. Older teens and young adults are more likely to be involved in high-risk behaviors, such as going out to bars.

Johannsen added this point: “What about the college’s on-campus activities for the community? It’s more than students coming for classes and employees coming to work.”

Then there’s the issue of whether the college or university should provide the place to get vaccinated. Nearly all the college-attending respondents to the College Finance survey believe colleges are responsible for the well-being of their students, but only those at the larger schools are likely to get the shot where they attend classes. Smaller colleges were least likely to offer vaccines and vaccination sites, and only about 35% and 46%, respectively, of larger universities were likely to offer those services, according to the survey.

Cue the Lawsuits

Not surprisingly, the pushback through lawsuits and legislation began almost preemptively and largely on political divides. Whereas blue states like California and Maryland are encouraging state schools to require vaccination and some New York lawmakers are considering legislation requiring vaccinations for private and public colleges, several typically red states are actively moving in the opposite direction. For instance, in Utah, Gov Spencer Cox (R) signed legislation prohibiting colleges or universities from requiring proof of vaccination to enroll. Gov Ron
DeSantis (R) of Florida signed legislation preventing businesses from requiring vaccines, which is having a knock-on effect among higher education institutions. In Texas, Gov Greg Abbott (R) issued an executive order prohibiting state-funded organizations—including colleges receiving state aid—from requiring vaccinations. Their decisions meant schools such as St Edward’s University in Texas and Nova Southeastern University in Florida, which had announced a mandatory vaccine policy, were forced to backpedal.16,17

However, other colleges and universities with mandates are holding their ground. For one thing, mandatory immunizations during a public health crisis were approved 100 years ago by the US Supreme Court (Jacobson v Massachusetts). And the ground has been tested with influenza vaccines for health care workers—21 states have a law in place. Similarly, employers in general have the right to require influenza shots unless an established exemption is present.18 Mandates have been effective: For the 2013-2014 influenza season, the highest coverage of health care workers was nearly 98%—where vaccination was required. Elsewhere, coverage among health care workers in general was 75%.

Requiring vaccination for staff raises both legal and ethical concerns. On one hand, sharing vaccination status with an employer is legal. On the other, employers cannot always ask about vaccination status. “I’m sure [our] college is concerned about the bottom line, if we lose students who won’t or can’t get vaccinated,” Johannsen said. “And then there are all the employees. Do you fire the ones who won’t or can’t get vaccinated? Sounds like lawsuits in the making.”

When it’s necessary for the job, it’s legal for employers to require vaccination, but according to health care labor and employment attorney Kevin Troutman, interviewed for The Washington Post, “They’ve got to be able to establish and prove why it’s a job-related requirement.” Employers can not only ask whether a job candidate is vaccinated; they can require proof. But if a potential job candidate is qualified but unvaccinated, the employer might not know that it’s because of a disability or religious beliefs and cannot pry to find out.19

Lawyers have OK’d the legality of mandating vaccines, but the largest schools with the safest bank balances (like Harvard and Yale) are the ones that can probably defend the decision most easily. Other smaller, less well-endowed schools have to weigh the risk of lawsuits and effects on enrollment with the benefits of requiring vaccinations.

Gray Area

Some schools have already been sued for vaccine mandates. The University of California was sued after mandating the influenza vaccine for the 2020-2021 influenza season. It won the case, but universities should note a key distinction, wrote Michael Vernick, Brennan Meier, Molly Whitman, and Jessica Mannon in University Business: “Historically, only vaccines with full FDA approval have been mandated. There is little precedent indicating whether mandatory COVID-19 vaccines will receive the same treatment in court; the available vaccines currently have only FDA emergency use authorization.” (In early May, Pfizer and its vaccine partner BioNTech started an application to request full FDA approval.)

The authors said that some states are considering or have enacted legislation providing universities with limited legal immunity for claims related to COVID-19, and some legislation includes protection related to claims for tuition and fees.

However it pans out and whatever new rules they have to satisfy this year, students are eager to get back to the nonvirtual college experience—that heady mix of study and social whirl—that they missed so much this past year. The respondents to the College Finance survey were cautiously optimistic: About 70% were at least somewhat hopeful that things would get back to normal this semester, but about half really thought it would take until spring 2022.

An admissions officer at a liberal arts college in central Pennsylvania, who did not wish to be identified, has 3 children, 2 of whom are college age. One is starting at Hawaii Pacific University this fall, and another is going back to Stetson University in Florida. Neither school is requiring vaccinations at this point. But it doesn’t matter—the kids would be fine with it, they say. “I’m OK if it gets mandated. They make us take other vaccines before we can attend, so this is just another one,” the college freshman said. “But I know some people think this is different since it’s so new.”

As for the high-school senior heading to Hawaii—well, he’s a high school senior heading to Hawaii. But that actually isn’t the best part, he says: “I’m excited about going since it will be my first year at college and I’ll have 2 roommates in my dorm.”

JAN DYER is a writer and editor specializing in clinical topics. She lives in Suffern, New York.

REFERENCES AVAILABLE AT INFECTIONCONTROLTODAY.COM

The push to vaccinate is now targeting teens and young adults.

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CDC’s Flu Czar Says She’s Ready for the Fall Offensive

Did you see much influenza this year? Neither did anybody else. That’s because mitigation measures used to fight COVID-19—hand hygiene, masking, social distancing—might have been only somewhat effective against SARS-CoV-2 (or perhaps not applied with enough effort, many medical experts would argue), but they stopped the flu. Does that present a problem for the incoming 2021-2022 flu season as government officials ease up on those measures? Not really, says Lynnette Brammer, who heads the Domestic Influenza Surveillance team at the Centers for Disease Control and Prevention (CDC). True, the vaccines that will be used to fight the flu this fall are already being manufactured, and those vaccines, as is the case with flu vaccines each year, are created based on the previous year’s flu data—of which, as mentioned, there’s a dearth. “We haven’t had as much data as we have had in previous years, but we did still have a good bit of data,” Brammer tells Infection Control Today (ICT). In addition, fighting COVID-19 greatly improved the health care system’s surveillance capabilities when it comes to respiratory diseases. That and a huge influx of funding to improve state public health departments, along with technological and systemic innovations created because of COVID-19, will keep flu manageable, Brammer says. Still, she warns that “the diagnosis of respiratory disease this coming fall will probably be a little bit more complex than it was over the past year.”

ICT®: Will influenza cause us a lot of problems in the fall?

Lynnette Brammer: Flu can cause lots of problems every fall. We say all the time—and I know people get tired of hearing it, but I think right now it’s truer than ever—that flu is incredibly unpredictable. Just in a regular year there can be huge variation in how severe flu season is. And the upcoming one will be no different. It could be severe or it could be a mild flu season; we don’t know. But there will be a lot of new factors at play this coming year.

ICT®: Such as?

Brammer: We’re coming off all these mitigation measures, which did do a really good job at combating flu. We’re starting to loosen up on those—[for instance], the mask wearing for people that are vaccinated against COVID-19. And we’re starting to get together with our families again. Eventually, we’ll start domestic and international travel again, I assume, and, you know, all those things...And the kids will go back to school in the fall. And all of those things will have an impact on flu virus circulation.

ICT®: Can you walk through the process of developing the flu vaccine each year?

Brammer: Well, it’s done in this collaborative, worldwide process. We work with the World Health Organization to participate in international surveillance for influenza. Countries across the world collect specimens from people with respiratory illness and test them for influenza. And then the positives—a subset of those go on to specialized centers around the world where more detailed characterization of the viruses occurs. We see what they look like. We look at people who’ve been vaccinated—their responses against those viruses that look a little bit different. We look at the vaccine effectiveness for the current year against those viruses and decide what viruses look like: No. 1, they’re spreading and have a chance to become a predominant virus; No. 2, which one of those you might not be protected against with the current vaccine components. And from that, they’ll then decide: “We think we need to update this component or that component.”

There are always 4 in the vaccine. There are 2 influenza B’s and 2 influenza A’s. And these decisions are made in February, late February, early March. And the vaccines are produced and start getting distributed in the very late summer months and are administered in the fall.

ICT®: Do we have enough data to figure out what we can expect from the flu this year?

Brammer: We haven’t had as much data as we did in previous years, but we did still have a good bit of data. There weren’t a lot of influenza viruses circulating anywhere, but there were some. And what we saw back...I guess it was back in late fall. In some areas of the world, as they started to loosen up some of their mitigation measures,
[such as mask wearing], they started to see flu outbreaks. And so we had access to those viruses and have looked at those. And we looked at the antibody responses people made against last fall’s flu vaccine and tested it against those viruses to see if it looked like they would cover or not.

**ICT**: Relatively speaking, how much less data do you have this year as opposed to any other year?

**Brammer**: I don’t know. I don’t remember the numbers well enough to know exactly how many viruses were looked at. But we feel like it’s not so much the number that you look at. When there’s very little out there, there’s less to see. If you think of it as a proportion of what’s out there, I think we saw as much or maybe even more of what was out there. It was just so little [has been] seen. You’re not missing anything if the viruses aren’t circulating. Because of this huge international network, we feel like we’ve got a really good representation of the viruses that were circulating.

**ICT**: Because there’s so little data, does that call into question what conclusions health experts reached?

**Brammer**: I don’t think so. Because, yes, there were fewer viruses, but those are the viruses that are there, and those are the viruses that will give rise to the viruses that circulate, you know, if they do, in the coming fall.

**ICT**: What is different about this year? What has changed?

**Brammer**: Oh, a lot has changed. In a lot of ways, flu and SARS-CoV-2 viruses are similar enough that our surveillance systems can be pretty similar. As we’ve expanded surveillance for COVID-19, surveillance for flu is improving, too. All the investment being made in state public health departments and public health laboratories—it’s a huge advantage for COVID-19. But it’ll be a huge advantage for flu, too. We are adding new surveillance pieces. There will be some new electronic data that becomes available to us. We’re hoping to have a more robust surveillance—high alert, at least in emergency departments—our hospital emergency department syndromic data. We’ve worked with our colleagues over in T cells at CDC,1 and that network is expanding. We’re going to have much more robust data and a much better geographic coverage. That will work for COVID-19, but it also works for flu. We’re getting a lot more data and we learned a lot. We always had talked about being prepared for an influenza pandemic and being able to scale up our systems. COVID-19 scaled up our systems way more than we ever dreamed about scaling up for. But now we’ve got systems that can handle really large volumes of data. And that’s going to be really nice. Flu will certainly benefit from those improvements in the coming years—we’ll continue to evolve our surveillance systems to deal with some of the unanticipated issues that we saw over the past year.

**ICT**: Last year, infection preventionists and other health care professionals were worried about emergency rooms being filled with people who had respiratory illness and they weren’t going to be able to tell whether they had influenza or COVID-19. That did not really materialize.

**Brammer**: Right.

**ICT**: Is that still a possible problem that you have to deal with this coming flu season? Do they have flu? Or do they have COVID-19?

**Brammer**: I think it will be an issue that people are going to have to deal with this fall. I mean, as mitigation measures loosen up, we’re starting to see some of the other respiratory viruses begin to circulate again at a little bit higher level; so far, not flu, but...
how quickly. But, again, some of the things that happened in the last year will help us. There’s more testing available. There are some of these multiplex tests that will test for flu and SARS-CoV-2 and respiratory syncytial virus. The tools will be there.2

ICT*: Can you talk a bit more about the multiplex test?

Brammer: There have always been these multiplex respiratory panel tests that had multiple respiratory viruses on them. They were less available in point-of-care sites—doctors’ offices, emergency departments, perhaps. But now there are some that are point-of-care multiplex tests. Public health labs have a multiplex test for flu and SARS-CoV-2. So, there are more tools available to more people.

ICT*: Have things been invented because of COVID-19 that you can now use during flu season?

Brammer: Yes, I think just across the board. Like I mentioned earlier, our ability to handle large amounts of data at CDC is improving every day. It has gotten much better. We’re getting new assays that are available. The financial support that’s coming to state public health is going to be hugely helpful. The public health system in the country had been underfunded for a long time, and now they’re getting a lot of money, and that infrastructure is being rebuilt. That’s going to be an advantage for COVID-19, for flu, for all of public health.

ICT*: You mentioned improvements in surveillance systems. Can you provide an idea of what that might look like on the ground?

Brammer: Let me think of some good examples: just simple things, like we monitor influenza-like illness through ILINet,3 which is our system for that. We’ve added about 1000 new providers. The National Syndromic Surveillance Platform, which collects syndromic surveillance data, which we use in ILINet4—they’re now pushing to have all hospitals participate in that. That’ll be a huge advantage. We had it in the majority of states, but there were a couple of states still that were really underrepresented. That’s going to basically help us fill these gaps that we had beforehand. And then we’re working with new partners to get additional data sources—electronic health record data and a lot of new sources of data that we just didn’t have available to us in the past.

ICT*: Is there anything else about the coming flu season or how infection preventionists need to react to it that you would like to add?

Brammer: I think—and I’m sure they’ll be acutely aware—that the diagnosis of respiratory disease this coming fall will probably be a little bit more complex than it was over the past year. But there are these new assays out there that can be useful. And we expect that there are more resources for the states to do surveillance. They will have better surveillance data on which they can depend to help make treatment decisions.

REFERENCES AVAILABLE AT INFECTIONCONTROLTODAY.COM

This interview has been edited for clarity and length. To watch the whole video interview online, visit infectioncontroltoday.com or scan the QR code!
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Momentum has been building for months for the World Health Organization (WHO) to acknowledge that SARS-CoV-2, the virus that causes COVID-19, is spread predominantly through the air. It’s an effort that might profoundly improve resources for infection prevention and, therefore, affect the way infection preventionists (IPs) do their jobs. Since July 2020, leading scientists have been pointing toward and signing open letters supplying evidence of the airborne transmission of the disease. Recently updated WHO language reflects this evidence. As of April 30, 2021, the WHO updated its guidance advising that the virus can be spread in poorly ventilated and crowded settings because aerosols remain suspended in the air.

This means that all signs point to the inability to supply safe indoor air as the probable cause of a government shutdown and the transmission mode that some long-term care residents had little hope to avoid. Gone are the days when society accepts pathogens spread from public sewers (typhoid), diseased water (cholera), or poor ventilation (COVID-19). This is a watershed moment for the regulation of indoor air quality (IAQ).

Use Available Funding

In May 2020, the federal government began releasing payments from the Coronavirus Aid, Relief, and Economic Security Act Provider Relief Fund through the US Department of Health & Human Services (HHS). These funds came in the form of general and targeted distributions that expired June 30, 2021. Therefore, if a facility didn’t make investments with these funds, the hospital or long-term care facility stands to leave money on the table.

It is time to stop spending this money on medical consumables and apply it to a lasting solution. If these consumables are billed elsewhere in the facility’s provider fees, that could be construed as double-dipping.

This practice is not allowed and will result in unused funds. These valuable dollars should be used to make lasting improvements. How the organization allocates the money is important, and flexibility exists in sorting appropriate uses even now.

Timothy Crouch, a principal at the accounting company CliftonLarsonAllen (CLA), has been providing CLA accounting software to help health care providers identify appropriate uses. CLA recognized that many of its clients found it confusing to navigate how these funds can be used. The product they developed assists in tracking expenses and is continually updated by HHS.

The federal funds allocated for pandemic relief resulted in hundreds of thousands, and often millions, of dollars showing up in eligible health care provider accounts. Hospitals, nursing homes, and facilities in between began receiving direct deposits from the federal government. Executives and accountants have been trying to figure out what will be forgiven, what is a loan, and what will need to be returned. These funds provide a resource for moving forward on a solution. If alarm bells are ringing, it might not be too late to capitalize on this money for infection control. CLA is in discussion with IPs to place unused funds under contracts to be used for assessment services and infection control. The company can offer information on timelines and advise on provider relief funds.

No Quick Fix

Air management is a broad issue involving many components. Don’t expect to discover a quick, all-in-one fix, and caution other decision makers against such solutions. A sound air management solution will require addressing many pollutants. People spend approximately 90% of their time in enclosed spaces, according to the International WELL Building Institute. Inhalation exposure to indoor air contaminants leads to a variety of health
problems, such as headaches, asthma, cancer, ischemia, high blood pressure, heart disease, and infections caused by pathogenic viruses similar to SARS-CoV-2. Indoor pollutants are about 1000 times more likely to be transmitted to the lungs; thus, indoor air quality management is very important. Effective monitoring and proactive precautionary measures can prevent exposure.

The COVID-19 pandemic has spurred groundbreaking technological advances in products. For example, veriDART by SafeTraces leverages patented DNA-tagged tracer particles that safely mimic aerosol mobility and exposure to identify high-risk infection hot spots and transmission routes. The tracer can be released at a location mimicking a sick patient and the preceding pathway identified. This is a real-world, data-driven tool for assessment and remediation of infection pathways. In a recent project led by Kevin Grosskopf, PhD, a professor of architecture at the University of Nebraska–Lincoln, the Department of Energy used veriDART to assess and validate ventilation measures in residential care environments.

RHP Risk Management, which specializes in evaluating IAQ, building ventilation, and biological contaminants, currently employs the technology for clients and finds veriDART to be essential in providing validation for environmental controls, according to RHP Risk Management.

When it comes to air management, manufacturers have embraced a quote attributed to management expert Peter Drucker: “If you can’t measure it, you can’t improve it.” It is considered a hallmark in business.

Currently, manufacturers are offering assorted air cleaning solutions that include the good, the bad, and the unhealthy. One question to ask prior to purchase: Do these technologies provide integrated monitoring of the air? Without monitoring the air, the application and functionality of the technology are immediately cast into doubt. For example, a UV-C lamp may lack the required exposure time required for disinfection. This is a bit analogous to running a large facility heating and cooling system with a window unit.

Obtaining reliable and tested systems that use high-efficiency particulate air (HEPA) and UV-C technology is one thing; application to achieve functionality (the proper selection of technology) is another. Without the ability to measure air quality, air improvement is subjective.

“In recognizing the nature of the airborne spread of COVID-19, it is paramount to establish and maintain an adequate level of indoor air quality,” Gary Shubinsky, PhD, the president and CEO of LightWave SensorTech LLC, a Chicago, Illinois–based technology company that engineers and manufactures advanced UV systems for IAQ, said in an interview with Infection Control Today. “The correct path to achieve this level is only via an integrated system of complementary air management technologies, including a combination of airflow management, filtration, purification, and real-time monitoring.”

**Consistent Performance**

LightWave’s methodology is correct. A lasting air management solution will require proper engineering and not a pileup approach involving unproven products. One concern is that decision makers will fall into the nearsighted trap of selecting piecemeal products that require frequent maintenance, with inconsistent performance and low reliability. Essentially, the concern is about using a short-term Band-Aid solution for a long-term problem. Little, if any, improvement in the ability to supply healthy indoor air and face seasonal influenza or future pandemics will come of this approach. A holistic integrated IAQ solution, one that is informed and addresses core IAQ problems, is required.

An integrated solution implies the use of complementary technologies across building management, and there are several elements involved.

**This requires:**

- an alignment of heating, ventilation, and air-conditioning system performance with building pressurization;
- air filtration requirements and a customizable safe air-purification system; and
- a network of air management sensors (differential pressure, carbon monoxide, carbon dioxide, thermal, moisture, and airflow) that supply real-time building analytics.

Combined, these parameters optimize cost, performance efficiency, and infection control for a lasting and consistently healthier quality of life. A solution where air quality can be quantified and improved will provide a healthy environment and a future ventilation solution. The ability to respond to current and future infection control concerns will be addressed, and the improved indoor air quality will be measurable. These solutions are obtainable, and the technology and services exist.

To get to this point, you need to look for a partner that is not just selling a HEPA filter or UV light but will provide a measurable understanding of indoor air quality and thus infection control within a building.

CEDRIC STEINER is a licensed nursing home administrator in Lancaster County, Pennsylvania, who has a specific interest in addressing infection control in the long-term care setting. Steiner is seeking partners for a webinar that he hopes will promote a holistic approach to indoor air management. Contact him at steiner@gshcure.org or @SteinerGS for integrated solutions and infection control concerns related to indoor air quality.

**REFERENCES AVAILABLE AT INFECTIONCONTROLTODAY.COM**
Wipes Said to Target 42 Pathogens

Hard, nonporous surfaces in hospitals and other health care settings have a new disinfectant wipe to contend with. A company called Metrex recently launched its CaviWipes 2.0 surface disinfectant wipes. The wipes are effective against 42 pathogens, including SARS-CoV-2, the company says in a press release. The product was approved by the Environmental Protection Agency (EPA) under its emerging viral pathogen claim (EVPC). Created by the EPA in 2016, an EVPC provides a “voluntary, 2-stage process to enable use of certain EPA-registered disinfectant products against emerging viral pathogens not identified on the product label,” according to the EPA.

James Chia, Metrex's director of research and development, said in the company press release that “during unpredictable public health crises, infection preventionists and health care professionals learn new behaviors and use new tools to maintain employee and patient safety. As frontline workers navigate today's extremely demanding environment, access to quick-working surface disinfectants like CaviWipes 2.0 gives them confidence that they are cleaning and disinfecting against ever-evolving pathogens.”

The wipes use a neutral pH of 7.5 and a low amount of alcohol. The company says that the wipes contain a “next-generation formula that uses a multipronged approach for attacking and destroying pathogens while remaining gentle on material surfaces.”

The CaviWipes 2.0 joins a host of other disinfection products that Metrex has been selling for over 30 years for use in hospitals, liquid medical waste disposal products, hand hygiene products, eye shields, and many other infection prevention products.

www.metrex.com

Adaptors Built to Test Light Cord Integrity

Infection preventionists and other health care workers, as part of their jobs, often have to test the integrity of light cords to see if there’s been any fiber optic damage, and to ensure the correct intensity of the light. Healthmark Industries recently launched a product called Light Cord Adapters that is designed to connect light cords to a light source for inspection, according to the company.

“Simply choose the appropriate light cord adapter, attach to the light cord, and secure together,” the company says in a press release. “Then, attach a light source to the light cord adapter and secure together, activate the light source, and inspect. If any defects or damage are identified, remove the light cord from service.”

The Healthmark Light Cord Adapters can be used with these cords: Storz, Stryker, ACMI, and Wolf. Light Cord Adapters are available for individual purchase, and the available light sources are sold separately.

Healthmark has been developing and marketing for decades what the company describes as “innovative solutions” that help health care facilities transport surgical instruments and other medical devices to patients.

www.hmark.com
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**More Sustainable:** The new softpack format contains 80% less plastic and reduces the overall waste footprint.²

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1. GHX Intelligence Date 2020 Q4
2. In comparison to weight of plastic for similar canister format; data on file