STARC

Keeping Up With ASHE ICRA 2.0™ Adoption

Survey Reveals Key Trends, PLUS Best Practices for Challenging Situations

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Acknowledgement

At ASHE, we believe the key to successful guidance is to engage the talents of a multidisciplinary team. ASHE thanks STARC for their dedicated work on this survey, as well as for producing this eBook to further the education around ASHE ICRA 2.0™. Thank you to STARC for initiating this important conversation and taking the initiative to address the survey findings, seamlessly tying them to the ASHE ICRA 2.0™ Process Guide. The value of these survey results is immense, as they will help us answer questions on the ASHE ICRA 2.0™ content and will be considered in future updates to the ICRA standard.

The importance of ICRA cannot be overstated, as it plays a critical role in ensuring the health and safety of patients, staff, and visitors within healthcare facilities. By fostering a deep understanding of infection control and risk assessment, we can create environments that prioritize the well-being of all.

ASHE is committed to providing the best support possible to improve assessment, precautions, implementation, and monitoring to reduce or eliminate infections associated with CRM activity. We continuously strive to enhance our practices and share knowledge, ultimately contributing to safer healthcare environments.

ASHE
Optimizing health care facilities

ASHE ICRA 2.0™ THREE YEARS LATER

Infection prevention is a cornerstone of patient safety, and few areas demand more precision than healthcare construction and renovation. The introduction of ASHE ICRA 2.0™ three years ago marked a significant leap forward in standardizing infection control practices during construction, renovation, and maintenance activities.

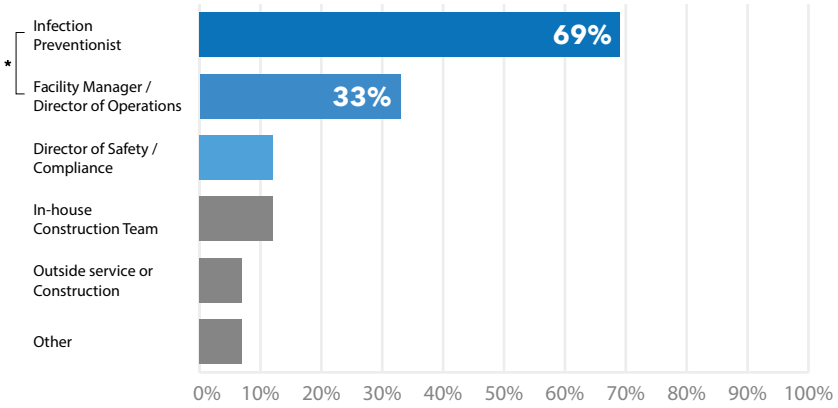
STARC Systems partnered with ASHE to conduct a comprehensive survey exploring the adoption, implementation, and impact of ASHE ICRA 2.0™. Through this survey, healthcare facilities managers, infection preventionists, and construction professionals shared their successes, struggles, and areas requiring greater clarity.

This eBook distills those findings, providing a roadmap for applying ASHE ICRA 2.0™ best practices. Featuring expert commentary, practical solutions, and actionable takeaways, it's designed to help your team safeguard patients, streamline processes, and elevate infection control to new heights.

Adoption and Leadership: A Snapshot of Progress

Who is the primary ICRA champion at your facility?

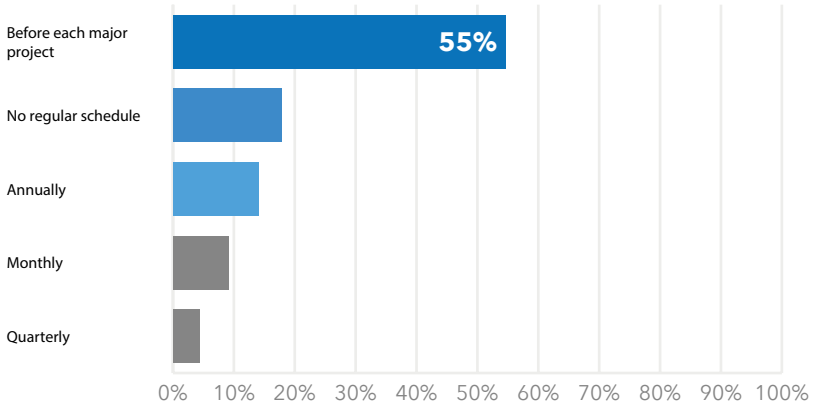
69% of respondents say Infection Preventionists champion ICRA, followed by 33% listing Facilities Managers/Operations. 22% list ICRA as a shared responsibility.



* 22% of respondents list ICRA as a shared responsibility of IPs and Facilities teams.

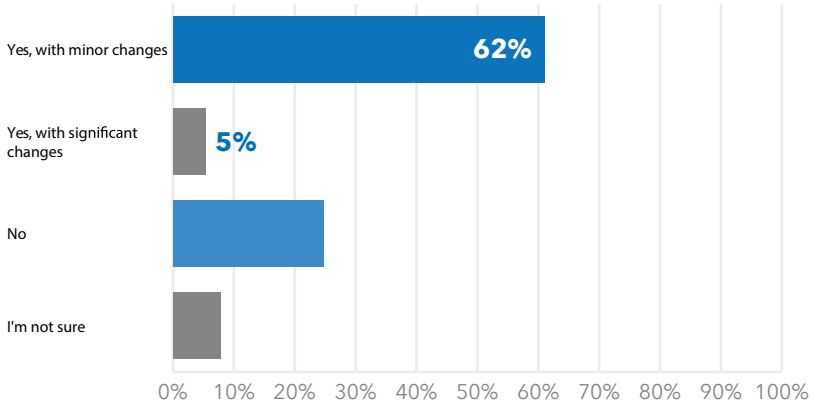
How frequently does your ICRA team review and update your risk assessment response to ongoing CRM activities?

55% of respondents review ICRA plans before major projects—proactive planning at its best.



Have you implemented ASHE's ICRA 2.0™ at your facility or health system?

67% of responding healthcare facilities have adopted ICRA 2.0™, with major and minor changes.

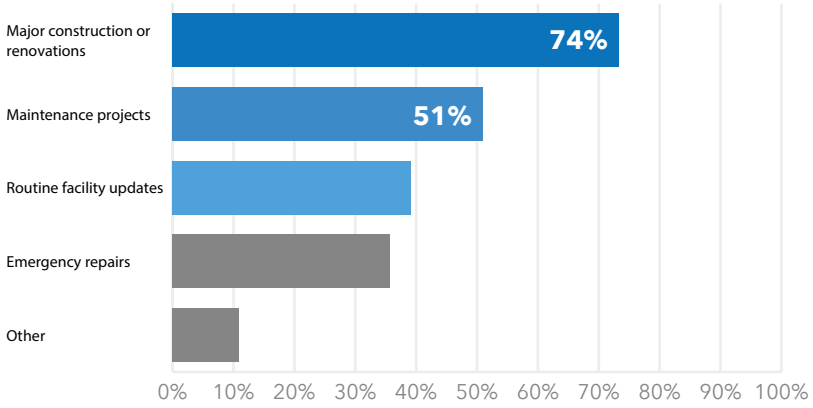


ICRA's Impact: Projects, Equipment, and Adaptability

Which healthcare construction and renovation projects have benefited most from ASHE ICRA 2.0™, and has adopting these guidelines prompted facilities to invest in new equipment?

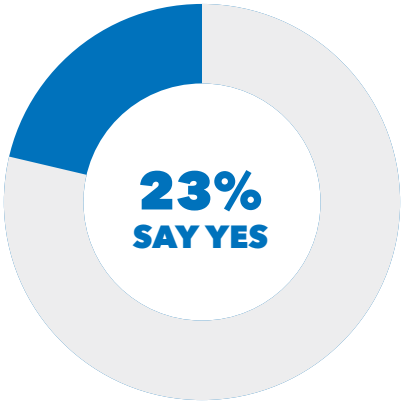
Which CRM projects at your facility have benefited the most from the newest ASHE ICRA 2.0™ guidelines?

74% found ICRA 2.0 most helpful for clarifications around major renovations, followed by 51% finding benefit for everyday maintenance clarification.



Have you purchased new or additional equipment to be compliant with ASHE ICRA 2.0™?

23% recall upgrading or adding new equipment to support their ICRA needs.



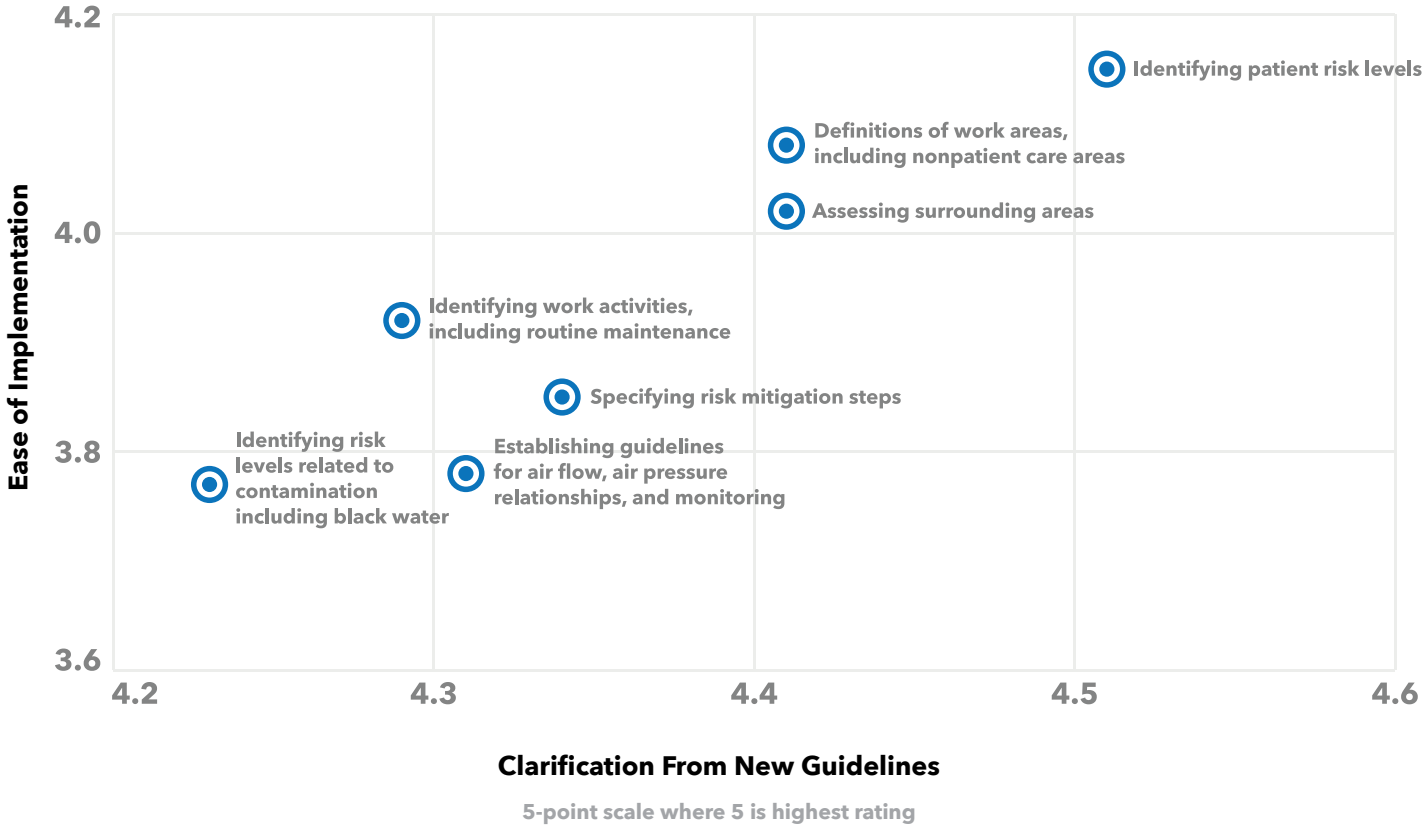
Equipment most frequently mentioned:

Hard ICRA barriers
Hepa machines
Pressure monitors
Mobile containment carts
Particle counters

Bridging Clarity and Action: ICRA Guidelines in Focus

Survey respondents offered strong scores for ASHE ICRA 2.0's improved clarifications across (7) key areas. However, survey respondents also highlighted (3) areas and described situations that can be relatively difficult to put in place, or require additional situational alignment in the field.

Comparing How Helpful ICRA 2.0™ Updates Were For *Clarifying* Risk Areas Against *Ease of Implementation* of Key Areas



Real-World Challenges

Practical Solutions in the Field

ASHE ICRA 2.0™ sets the standard for infection control during healthcare construction, providing a proven framework for patient safety. But real-world implementation often requires applying best practices to your specific situation.

Survey respondents shared their toughest challenges—now, industry experts weigh in with practical strategies to help you navigate them while staying aligned with ICRA 2.0 best practices.

Meet The Experts

Janet Haas, PhD and Leon Young share their knowledge, offering guidance on implementing ASHE ICRA 2.0™ and tackling real-world challenges. Their contributions are instrumental in shaping the practices and strategies that protect patients and streamline projects.

Janet Haas, PhD, RN, CIC, FSHEA, FAPIC

Consulting Epidemiologist
Innovative Infection Prevention

Dr. Janet Haas has over 20 years of experience in infection prevention and control. Dr. Haas has led several hospital infection prevention departments and is a recognized leader in the field. She has authored several peer-reviewed papers, and has presented nationally and internationally on Infection Prevention topics.

Leon Young, BS, MLS (ASCP), CIC

Network Infection Prevention Manager, Facilities and Construction
Allegheny Health Network

Leon Young has been practicing Infection Prevention for over 15 years. Leon is a subject matter expert regarding the relationship between patient safety and healthcare construction/maintenance activities. As a leader in the field, he has managed many complex projects including several hospital demolitions and a multi-phased demolition and renovation of a 3-winged transplant intensive care unit. Leon has been a contributing editor for the Joint Commission and has presented nationally on healthcare construction topics and measures.

Patient Areas Beyond Acute Care

Janet Haas, PhD, RN, CIC, FSHEA, FAPIC

Several comments submitted in response to Question 10 concerned areas that are not inpatient acute care areas. It's important to note that ASHE ICRA 2.0™ is intended to be adaptable to your specific situation, so the following guidelines can be starting points for those discussions or assessments.

Behavioral Health Facilities

See pages 30-33 in the ASHE ICRA 2.0™ Process Guide

There are additional safety rules for behavioral health that are usually unfamiliar to contractors. Be sure to include the safety officer and someone knowledgeable in behavioral health requirements on your ICRA team.

- Looping Hazards: Any area where a loop of rope or materials could create a suicide risk for patients. Assess containment doors and other doors within the construction area to ensure that standard door and faucet fixtures are replaced with safety hardware.
- Chemicals used throughout healthcare may be dangerous in behavioral health (including alcohol-based hand sanitizers and bleach). Review use and storage and make sure all who are working on site know the protocol to keep potentially poisonous chemicals out of the area. Remember that patients or clients may have substance abuse issues, so the utmost care must be taken to assure that chemicals are managed safely.
- Group settings are key to the therapeutic environment of behavioral health. If construction or maintenance must be done in these areas, consider doing them at times when sessions are not normally held, if possible. If the scope of work is too large for that, the unit should identify an alternate location for group activities throughout the construction period.

Long Term Care Centers

See pages 33-35 in the ASHE ICRA 2.0™ Process Guide

Residents live in facilities rather than staying for some acute issue. Therefore, a homelike environment is important and additional services such as beauty care and recreational activities.

- Routine maintenance and small repairs may be done in a resident's room while they are out at an activity, if feasible. Take care to protect personal items and furnishings from dust or other contamination and coordinate with housekeeping for cleaning after the work is finished. If longer term construction or maintenance projects will take place in rooms used by staff and residents be sure to find another temporary location for the resident or the activity. One strategy is to use an empty room that is cleaned after a discharge as a swing room to move people into temporarily while upgrades or repairs are done one by one in other rooms.

Outpatient Care Areas

See pages 33-35 in the ASHE ICRA 2.0™ Process Guide

Many invasive procedures now take place in outpatient facilities, and there are highly immune suppressed patients at many outpatient clinics. Care must be taken to protect these patients.

- Gather the team for your outpatient facilities and review the types of patients served and the procedures that are performed in the areas proposed for construction or maintenance. This will allow a best approximation for risk purposes.
- Most outpatient care areas are closed on nights and weekends. Assess the possibility of doing the work when the unit is closed. Ensure that care items are removed and barriers are erected as needed before the work begins. Appoint someone to oversee the work and assure that environmental services/housekeeping can be coordinated after the work is done and before patients return to the area.

Emergency Department (ED)

See pages 36-37 in the ASHE ICRA 2.0™ Process Guide

- Emergency Departments never close, making construction and renovation a challenge. Based on the amount and type of work to be done, assess the possibility of closing a bay or section at a time for construction. Try to bring materials in and waste out during the least busy hours.
- If the work is long-term and large, an alternate site for the ED should be found.

Outdoor Construction Considerations

See pages 21-24 in the ASHE ICRA 2.0™ Process Guide

Sometimes there is construction, renovation or repair work that occurs outdoors, near the care setting.

- Any construction that disturbs earth or raises dust has the potential to flow into the care setting if the work is close to air intakes or open doors or windows. Assess the situation, including by use of particle counters, and decide on mitigation strategies based on the work, and the proximity to means of ingress.

Active Health Care Spaces

Janet Haas, PhD, RN, CIC, FSHEA, FAPIC

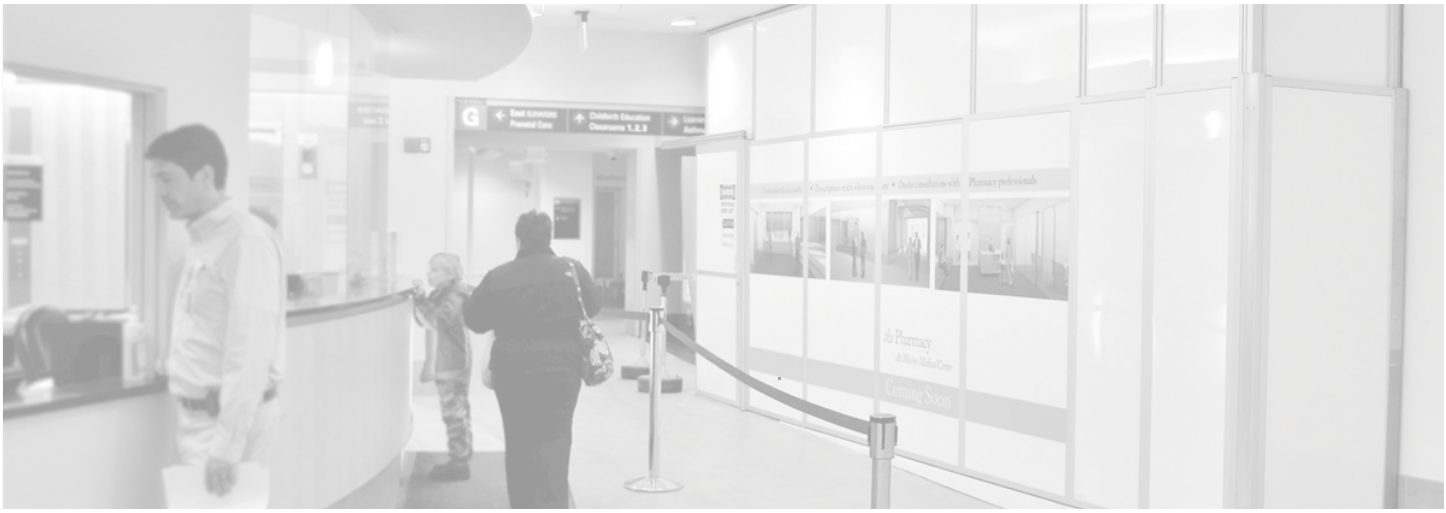
Effective infection control during construction relies on clear communication, consistent adherence to protocols, and collaboration among all stakeholders. Below, let's consider some practical strategies for managing patients, visitors, staff, and contractors to ensure safety and compliance throughout every phase of a project.

Managing Patients, Families, and Visitors During Construction

- Managing families and visitors for construction and repairs is not that different from managing them for other facility activities.
- Provide clear direction as to what is going on and what is needed from them.
- Signage should be clear and noticeable.
- In plain words, set the expectation with the reminder that this is for everyone's safety.

Make sure that you are providing the appropriate alternative routes, supplies, etc. so that they can get what they need without going through the construction area.

See pages 34-36 in the ASHE ICRA 2.0™ Process Guide



Ensuring Facility Staff Adherence to ICRA 2.0™

See pages 30-37 in the ASHE ICRA 2.0™ Process Guide

Staff adherence for everything (not just construction) depends on having:

- Policies that set out the expectation
- Communication about what the expectation is and how it applies to their role
- Education about how and why this practice needs to be followed
- Appropriate support (e.g., supplies available to be compliant) and finally
- Accountability to the policy and practice

Construction and maintenance are no different than any other job in a facility—everyone must follow facility policies. The difference may be the degree to which non-compliance is noticed—which is why monitoring the site is key, and the leadership support for holding people accountable. Ultimately, habitual non-compliance is a leadership failure, and many accrediting bodies have started citing leaders for these failings.

Improving Outside Contractor Compliance

See pages 18-19, & 37 in the ASHE ICRA 2.0™ Process Guide

Outside contractors must also follow facility policies as above. Your facility may want to:

- Select a contractor with healthcare experience
- Assure that the contract specifies compliance with facility policies and lays out the penalties for non-compliance
- Provide orientation for all contracted staff who will be working on site.
- Monitor the site during work, answer any questions and troubleshoot any needs, and if compliance doesn't follow, institute the non-compliance penalties outlined in the contract.

Maintenance & Emergency Repairs

Janet Haas, PhD, RN, CIC, FSHEA, FAPIC

Maintenance and emergency repairs demand swift action while maintaining rigorous infection control standards. Below, we explore practical insights to help facilities balance the urgency of repairs with the need to safeguard patients, staff, and the care environment.

Infection Control for Small-Scale Maintenance Projects

Such as paint and patch, are not covered in ICRA 2.0.

- ICRA 2.0 is made to be customized to your facility. If you want to keep track of smaller maintenance projects, consider creating standard practice templates for various types of maintenance. These can be web based or faxed. Train the staff in the protocols and how to submit them.

See pages 21-25 in the ASHE ICRA 2.0™ Process Guide

Addressing Compliance Challenges in Emergency Repairs

There are times when a situation demands an immediate response and there is not time to meet and create an ICRA plan.

See pages 25 & 37 in the ASHE ICRA 2.0™ Process Guide

- Decide as a facility what constitutes an urgent/emergent issue, and how you will manage these. Water leaks and floods often are in this category, while repairs that must be made before another patient is admitted to a room are usually not emergent.
- Consider a flood response drill with the maintenance team so all are aware of what protections are needed immediately, and what communication is required.
- Emergency alert systems may be used to streamline communication to departments such as administration and infection prevention and control.
- If you can't let Infection Prevention and Control know about an emergency repair 'in the moment,' they should be notified when administration is alerted.
- Remember that there may be additional work after the immediate response; this may include assuring that any carpeting or sheetrock is completely dried, assessing for mold growth, or checking on air quality. Communication to the multidisciplinary team can help assure nothing is missed.

Airflow & Filtration

Leon Young, BS, MLS (ASCP), CIC

Proper airflow and exhaust management are critical to preventing contamination during healthcare construction. Containment strategies must ensure effective filtration, pressure relationships, and air movement to protect patient care areas.

Particle Counting & Filtration Requirements Explained

- The preferred method for exhausting negative air is directing it outdoors through a window. Exhaust discharged directly to the outdoors that is 25 feet or greater from entrances, air intakes and windows does not require HEPA-filtered air.
- If outdoor exhaust isn't feasible, HEPA-filtered air may be discharged into an adjacent space, but it must be verified as HEPA filtered and must not disrupt airflow or pressure relationships.
- Particle counting is an effective way to confirm HEPA filtration efficiency, detect containment breaches, and validate that negative air prevents dust migration.
- To ensure proper HEPA filtration, compare particle counts from the intake and discharge—a significant reduction confirms filtration is functioning correctly.

See pages 45-46, 80-82 in the ASHE ICRA 2.0™ Process Guide

Space-Constrained Areas

Leon Young, BS, MLS (ASCP), CIC

Construction in tight spaces presents challenges for establishing negative pressure and maintaining containment. Adapting strategies for airflow control and containment integrity is essential to reducing risk.

Creating Effective Negative Pressure in Tight Spaces

- When containment space is limited, place the HEPA machine outside the work area to pull air out, rather than pushing it through.
- If an anteroom cannot be built, increasing negative air pressure inside the construction zone helps compensate.
- Position the construction entrance away from patient travel areas to reduce exposure risks.

See pages 77-80 in the ASHE ICRA 2.0™ Process Guide

Infection Prevention Strategies for Above-Ceiling Work

- The above-ceiling plenum is a high-risk area for dust and fungal spores—proper containment is critical.
- ICRA 2.0 Class Matrix guidelines should be followed to determine the required precautions based on the work activity and patient risk level.
- In high-risk areas (e.g., oncology units), use environmental containment units (ECUs) with HEPA exhaust to prevent airborne dust migration.
- Contractors must seal ceiling penetrations as completely as possible. If gaps remain, increase negative air pressure inside the containment area to prevent dust escape.

See pages 42-47, 71-75 in the ASHE ICRA 2.0™ Process Guide

Plumbing & Blackwater: Infection Control Considerations

Leon Young, BS, MLS (ASCP), CIC

While plumbing repairs and routine maintenance are generally low-risk and produce minimal dust, they still require a proactive infection control strategy—especially when performed in sensitive healthcare environments.

Guidelines for Routine Maintenance

See pages 21-25 in the ASHE ICRA 2.0™ Process Guide

- Plumbing work is typically classified as a Type A activity under ICRA 2.0™, meaning it is "clean in nature." However, the ICRA team must evaluate access points and work locations when determining necessary infection prevention precautions and issuing an ICRA permit.
- Where is the work taking place? A low-risk area (e.g., an EVS closet) presents fewer concerns than work performed inside a transplant intensive care unit, where additional precautions may be required.
- Wall cuts and mold exposure risks. Accessing plumbing lines often requires cutting or demolishing walls, which introduces dust containment considerations. Additionally, mold impaction is commonly found on wallboards near water sources and plumbing lines (e.g., patient room sinks, EVS slop sinks, ice machines).
- Why proactive ICRA assessment matters. The unexpected discovery of mold reinforces the importance of a structured ICRA process in healthcare facilities. The ICRA team must assess environmental risks, designate the appropriate ICRA Class, and implement necessary precautions before work begins.

Takeaway

Effective infection control during construction and maintenance is a shared responsibility that requires careful planning, clear communication, and the right tools. By applying the best practices outlined in this eBook, healthcare facilities can mitigate risks, protect patients and staff, and ensure compliance with ASHE ICRA 2.0™ standards—no matter the complexity of the project.

A Solution For Any Situation

At STARC, we understand that infection control isn't just about compliance—it's about protecting lives. Our high-performance temporary wall systems are engineered to support healthcare teams in maintaining safer environments, minimizing disruption, and meeting the highest infection prevention standards. Whether managing routine maintenance, large-scale renovations, or emergency repairs, STARC delivers a solution for any situation.

RealWall™

Less noise.
More stable.

- Real wall appearance & stability
- Reduces noise up to 50%
- Unmatched durability

LiteBarrier™

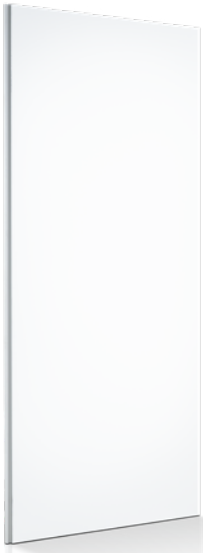
Lighter weight.
Extra durable.

- Lightweight
- Very durable
- Lower up-front costs

FireblockWall™

Stops fire.
Saves time.

- One-hour fire-rated assembly
- Up to 4X faster to install
- Superior noise blocking



StackBarrier™

More height.
More versatility.

- Tall builds. 8-32 feet
- Versatility
- ASTM E-84 Certified

STARC®

UNDISRUPT RENOVATION.™

About STARC

STARC temporary construction walls have the flexibility to handle any containment challenge. We provide wall systems that are customizable, and meet the strictest regulations for health and safety. All of our products are backed by our best-in-class customer service.

Contact us today and one of our team members will help you identify the best wall for your project.

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