

ICRA 2.0 and Beyond, Safety Risk Assessments (SRA) & Other Design Considerations

March 17, 2023

**55th Health Facilities Planning Seminar
Grand Rapids, MI**

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BEYOND ICRA (from 2016 presentation)



ICRA issues relating to Design

ASHE sample ICRA includes:

Step 10. Do plans allow for adequate # of isolation/neg airflow rooms?

Step 11. Do the plans allow for the required # & type of handwashing sinks?

Step 12. Does the infection prevention & control staff agree with the min # of sinks for this project?

Step 13. Does the infection prevention & control staff agree with the plans relative to clean and soiled utility rooms?



Easily
Cleanable?

HFES recommends ICRA include assessment of:

- Types & number of isolation rooms (airborne infectious, contact, and/or protective).
- Proper handwashing design (sink design, splash, travel distances, convenient location that will not get blocked).
- Finishes (countertop materials, scrubbable ceilings).
- Design to minimize dead leg plumbing lines.

**Your Infection Preventionist should review
& weigh in on all these issues!**

Infection Preventionist

This person should be seen as the gatekeeper of the ICRA process and the one whose signature establishes confirmation that the ICRA has taken place. It is the ICRA that will drive mitigation planning for each scope of work conducted in the healthcare facility.

Infection Prevention



ADVOCACY ADVISER

The revamped ICRA 2.0 is more than a matrix

Holistic updates to ASHE's ICRA 2.0 emphasize construction project safety from design to occupancy

October 25, 2022

[Pier-George Zanoni, PE, CIH](#)



ICRA 2.0: Eliminating Guesswork For Safer Healthcare Renovations

Mar 3, 2022



ICRA 2.0: Eliminating Guesswork for Safe Healthcare Renovations



By: Dr. Janet Haas
Principal Consulting Epidemiologist
Innovative Infection Prevention

By JANET HAAS, PhD, RN, CIC, Principal Consulting Epidemiologist, Innovative Infection Prevention

The History of ICRA

In the beginning there was no matrix.....

Facility managers, infection preventionists and contractors have been using infection control risk assessments (ICRA) for preventing infections related to healthcare construction and renovations since the 1996 Facilities Guideline Institute's (FGI) Guidelines for Design and Construction of Healthcare Facilities recommended them. However, the application was quite different in the beginning and has evolved over the years. ***In the beginning, there was no matrix!*** Then a paper describing the matrix based on risk was presented by Kennedy, Barnard and Hackett at the Association for Professionals in Infection Control and Epidemiology (APIC) conference in 1996, *Excerpt from Dr. Janet Haas.*

(PGZ: The matrix was created in 2002 with the help of Judene Bartley, RN, past president of APIC, as a tool to implement the ICRA. The ICRA concept was later incorporated in the 2003 CDC *Guidelines for Environmental Infection Control in HC Facilities.*)

The original ICRA

Infection Control Risk Assessment (ICRA): Matrix of Precautions for Construction and Renovation

Step 1. Using the following table, identify the **Type** of construction project activity (Type A–D).

Step 2. Using the following table, identify the **Patient Risk Groups** that will be affected.

If more than one risk group will be affected, select the higher risk group.

Step 3. Match the . . .

Patient Risk Group (*Low, Medium, High, Highest*) with the planned ...

Construction Project Type (*A, B, C, D*) on the following matrix, to find the ...

Class of Precautions (*I, II, III or IV*) or level of infection control activities required.

Class I–IV Precautions are delineated on the following page.

Note: This form is often referred to as the ASHE [American Society for Healthcare Engineering] ICRA document. It is an example of a form that organizations can adapt for use in their own facilities. While it is a useful tool, organizations should use the form as a source for creating their own matrix that specifically addresses the scope, needs, and characteristics of the particular organization. Simply using the tool “as is” may not provide the most targeted assessment. In addition, organizations should be aware that this particular form does not include assessments of utilities, noise, vibration, airflow, and emergency procedures. These are items that The Joint Commission requires as part of the preconstruction risk assessment.

Sources: Steps 1–3 adapted with permission from V. Kennedy, B. Barnard, **St. Luke Episcopal Hospital, Houston**; C, Fine, CA. Steps 4–14 adapted with permission from **Fairview University Medical Center, Minneapolis**. Forms modified/updated and provided courtesy of Judene Bartley, ECSI, Inc., Beverly Hills, MI, 2002. Updated November 2008.

Dr Janet Haas explains actual scope of ICRA per FGI vs what is covered in the ICRA matrix.

Although the FGI Guidelines now include the ICRA process in the multidisciplinary planning and design processes, the ASHE ICRA 2.0 document *focuses on the actual construction phase* of projects. It's important to remember that infection preventionists should be included with other stakeholders *long before the construction begins.*

2003 CDC Guidelines for Environmental Infection Control in Health Care Facilities

Part I of this report, Background Information: Environmental Infection Control in Health-Care Facilities, provides a comprehensive review of the scientific literature. ***Attention is given to engineering and infection control concerns during construction, demolition, renovation, and repairs of health-care facilities. Use of an infection-control risk assessment is strongly supported before the start of these or any other activities expected to generate dust or water aerosols.***

Also reviewed in Part I are infection-control measures used to recover from catastrophic events (e.g., flooding, sewage spills, loss of electricity and ventilation, and disruption of the water supply) and the limited effects of environmental surfaces, laundry, plants, animals, medical wastes, cloth furnishings, and carpeting on disease transmission in healthcare facilities.

Key Recommendations from CDC 2003

(last updated 2019)

- a. infection-control impact of ventilation system and water system performance;
- b. establishment of a multidisciplinary team to conduct infection-control risk assessment;**
- c. use of dust-control procedures and barriers during construction, repair, renovation, or demolition;**
- d. environmental infection-control measures for special care areas with patients at high risk;**
- e. use of airborne particle sampling to monitor the effectiveness of air filtration and dust-control measures;
- f. procedures to prevent airborne contamination in operating rooms when infectious tuberculosis [TB] patients require surgery
- g. guidance regarding appropriate indications for routine culturing of water as part of a comprehensive control program for legionellae;
- h. guidance for recovering from water system disruptions, water leaks, and natural disasters [e.g., flooding];
- i. infection-control concepts for equipment that uses water from main lines [e.g., water systems for hemodialysis, ice machines, hydrotherapy equipment, dental unit water lines, and automated endoscope reprocessors]);
- j. environmental surface cleaning and disinfection strategies with respect to antibiotic-resistant microorganisms;
- k. infection-control procedures for health-care laundry; *Excerpt from Page 15 of 241*

Including ICRA in your Planning & Design

The Infection Control Risk Assessment (ICRA) process is guided by a collaborative, multidisciplinary team. **Central to the team is the infection preventionist,** who should be involved at all stages and **serve as more than just a “rubber stamp”** for architectural drawings or the ICRA matrix put together by the construction manager.

For example, many years ago, a large replacement hospital facility located dietary on the floor directly above surgery. Although state plan reviewers suggested this might be problematic, the design was not changed, resulting in repeated flooding of surgery areas from equipment water leaks and failed sewer lines. Input from infection control along with a water infection control risk assessment during the design phase could possibly have avoided this mess. The new [ICRA 2.0 matrix](#) from the American Society for Health Care Engineering includes a section on assessment of surrounding areas and is helpful in identifying issues.

After risk assessments are made and the matrix is completed, the job is not over. The ICRA is more than just a line item on the monthly meeting agenda. Project managers and infection preventionists should routinely survey work sites and comment on potential issues.

When physical constraints or other changes surrounding a construction project occur, also reevaluate the ICRA. A change in design, such as the location of a sink or placement of air diffusers in the ceiling grid, may sound trivial but they are critical design elements, particularly for the immunocompromised patient. Taking these steps will ensure continued infection control compliance.

Elements of the FGI Guidelines

- **Part 1: General**

- 1.1 Introduction (Minimum Standards, earthquake, other regulations)
- 1.2 Planning, Design and Construction
 - Functional Program
 - Safety Risk Assessment
 - Planning and Design Considerations (Acoustic Design, Sustainable Design, etc.)
 - Commissioning
- 1.3 Site (Lighting, Signage, Parking, Landscaping, etc.)
- 1.4 Equipment

- **1.2-4 Safety Risk Assessment**

- Infection Control Risk Assessment
- Patient Handling & Movement Assessment
- Fall Prevention Assessment
- Medication Safety Assessment
- Behavioral and Mental Health Risk Assessment
- Patient Immobility Assessment
- Security Risk Assessment

Note: 2022 FGI added an Acoustic and Noise Risk Assessment

FGI 1.2-4 Safety Risk Assessment

The SRA proposes built environment solutions to mitigate identified risks & hazards.

1.2-4.2.3.2 The ICRMR shall be prepared by the ICRA team.

ICRMR = Infection Control Risk Mitigation Recommendations

What is the SRA/PCRA?

Per the ASHE ICRA 2.0 article published in Jan 2023 HFMM

“A safety risk assessment (SRA) or pre-construction risk assessment (PCRA) is a necessary component of the early project planning phase needed to identify and assess potential impacts and/or risks to the facility systems as well as potential impacts to patients, staff and visitors.

This pre-assessment includes a review of the potential impact to building systems (medical gas, electrical, plumbing, mechanical, communication, security, life safety and other systems supporting patient care) and spaces.

The SRA/PCRA recommendations will need to be evaluated during the ICRA process, which comes later in the design phase when the actual work activities have been determined.”

The Role of Healthcare Facilities Planning in *Leading the Way to Zero*TM

Sylvia Garcia-Houchins, MBA, RN, CIC

Director, Infection Prevention and Control

The Joint Commission

September 17, 2021



Infection Prevention should be included from concept through occupancy. Sylvia Garcia-Houchins, Dir of Infection Prevention, TJC

- The Joint Commission standards on the physical environment Elements of Performance include EP 2 which requires the hospital to conduct a **Preconstruction Risk Assessment (PCRA)** for air quality requirements, infection control, utility requirements, noise, vibration and other hazards that affect care, treatment, and services.
- Infection prevention & control measures must be implemented during all phases of construction including **planning, design, construction, commissioning, and occupancy.**

Sylvia Garcia-Houchins, RN,CIC, Dir of Infection Prevention, TJC

FGI: Two Types of Risk Assessment

1. ICRA: Planning, Design, Construction and Commissioning

- "...infection control risk assessment shall be part of the integrated facility planning, design, construction, and commissioning activities and shall be incorporated into the safety risk assessment."
- Includes development of "infection control risk mitigation recommendations"

2. Infection Control Risk Mitigation Recommendations

- Plans that describes the specific methods by which transmission of contaminants will be avoided during maintenance, renovation, construction and commissioning

FGI: ICRA Planning Elements

- ❑ Number, location, type of airborne isolation and protective environment rooms
- ❑ Special HVAC needs
- ❑ Water/plumbing system
 - ❑ Minimum hand hygiene and first aid equipment
 - ❑ Water management program
- ❑ Selection of materials for surfaces and furnishings
- ❑ Testing and certification of installed systems
- ❑ Assessment of external and internal construction activities
- ❑ Location of known hazards

IC should be included from concept
through occupancy

EXAMPLE: Risk Mitigation Document

Infection Control Construction Permit		Project No:			
Location of Construction:		Project Start Date:			
Project Coordinator:		Estimated Duration:			
Contractor Performing Work:		Permit Expiration Date:			
Supervisor:		Telephone:			
YRS	NO	CONSTRUCTION ACTIVITY	YRS	NO	INFECTIOUS CONTROL RISK GROUP
		TYPE A: Suspension, non-sterile activity			GROUP 1: Low Risk
		TYPE B: Small scale, short duration activities in high areas			GROUP 2: Medium Risk
		TYPE C: Activity processes involve a high level of dust, vapors, aerosols, or smoke and/or the completion of major activities			GROUP 3: Medium/High Risk
		TYPE D: Major activities and construction activities			GROUP 4: Highest Risk
CLASS I		1. Ensure work up methods to contain dust from electrical or mechanical construction activities are used for the duration of the work.	1. Minor Disturbance for Smoking		
CLASS II		1. Provide active means to prevent airborne dust from escaping into clean areas. 2. When work involves the control dust while using seal around doors with bar type. 3. Check off seal and bar type. 4. Wipe surfaces with disinfectant.	6. Control construction areas before transport to tightly controlled conditions. 7. Remove seal or remove seal/door if used before setting work area. 8. Place dust seal or barrier to separate work areas from HVAC systems in clean areas. 9. Seal and clean work area.		
CLASS III		1. Check active air control procedures construction begins. 2. Verify HVAC system is shut down with a valid date in permit construction of the area. 3. Complete all control barriers or engineering control before construction begins.	4. Verify work area is sealed. 5. The work area is sealed.		
CLASS IV		1. Check active air control procedures construction begins. 2. Verify HVAC system is shut down with a valid date in permit construction of the area. 3. Complete all control barriers or engineering control before construction begins.	10. Control equipment susceptible to contamination. 11. Tape covering. 12. Upon completion of work HVAC systems shall not be returned.		

Low Risk	Medium Risk	Highest Risk
<ul style="list-style-type: none"> Office areas 	<ul style="list-style-type: none"> Cardiology Echocardiography Endoscopy 	<ul style="list-style-type: none"> Any area caring for immunocompromised patients Isolation Unit Cardiac Cath Lab Central Sterile Supply Intensive Care Units Medical Unit Negative pressure isolation rooms Oncology Operating rooms including C-section rooms

The Joint Commission Does Not require a specific form

A few shortcomings:

- Does not work well for multiple phase projects
- Does not include all elements specified in FGI or CDC
- May be too general for implementation

Cleveland Clinic Infection Control Risk Assessment Training (ICRA) Policy

April 28, 2016

From: Cleveland Clinic, Planning, Design & Construction

To: Our Project Delivery Partners

Beginning May 1st we will begin implementation of our policy regarding mandatory Infection Control Risk Assessment (ICRA) training for all of our valued partners that help us plan, design, construct and activate our projects.

WHY: PATIENTS FIRST!

WHO: All people working on our projects, who will at any time during the project (design, construction & activation) visit the construction site or the effected facility, must have training in Infection Control Risk Assessment (ICRA). Our Construction Managers and General Contractors are responsible to verify the compliance by all persons regardless of the company or subcontracting, consultant or vendor tier.

A Word from ASHE



The concern that the ICRA process has not been fully incorporated into the design and operations of many organizations is an issue that ASHE had determined needed to be addressed. Jonathan Flannery, Sr Dir of Advocacy, ASHE

To access the ICRA 2.0 form and permit from ASHE's website, [click here](#).

Infection Control Risk Assessment 2.0



Infection Control Risk Assessment 2.0
Matrix of Precautions for Construction, Renovation and Operations

Step One:
Using Table 1, identify the Construction Project Activity Type (A-C)

Table 1 - Construction Project Activity Type

Type A	<p>Inspection and non-invasive activities. Includes but is not limited to:</p> <ul style="list-style-type: none"> • Removal of ceiling tile for visual inspection limited to 1 tile per 50 square feet with limited exposure time • Limited building system maintenance (e.g., pressure tube valves, HVAC system, fire suppression system, electrical and capacity work to include painting without sanding that does not create dust or debris) • Clean shoring activity limited to interior
Type B	<p>Small scale, short duration activities that create minimal dust and debris. Includes but is not limited to:</p> <ul style="list-style-type: none"> • Work conducted above the ceiling (e.g., pre-punch inspection or repair of firewalls and barriers, installation of conduit and/or cabling, and access to mechanical and/or electrical clean rooms) • Fan maintenance/repair • Installation of electrical devices or new flooring that produces minimal dust and debris • The removal of drywall where minimal dust and debris is created • Controlled sanding activities (e.g., wet or dry sanding that produces minimal dust and debris)
Type C	<p>Large scale, longer duration activities that create a moderate amount of dust and debris. Includes but is not limited to:</p> <ul style="list-style-type: none"> • Removal of preexisting floor covering, walls, ceilings or other building components • New ground placement • Renovation work in a single room • Reconfiguring cable pathways or in-room electrical work above ceilings • The removal of drywall where a moderate amount of dust and debris is created • Dry sanding where a moderate amount of dust and debris is created • Work creating significant vibration and/or noise • Any activity that cannot be completed in a single work shift
Type D	<p>Major demolition and construction activities. Includes but is not limited to:</p> <ul style="list-style-type: none"> • Removal or replacement of building system components • Reconfiguration of drywall partitions • In-room large scale new building construction

The use of infection control risk assessments (ICRAs) during hospital design and construction projects has been evolving for the past several decades. In July 2020, ASHE put together a multidisciplinary team consisting of infection prevention and control, industrial hygiene, construction, facility management specialists and authorities having jurisdiction to evaluate the existing ICRA matrix and to see how it could be improved to better serve health care organizations. This team met on a weekly basis throughout 2020 and into the first quarter of 2021 to accomplish this objective.

While the foundation of the ICRA, The IC Matrix - Class of Precautions matrix, remains the fundamental process of the ICRA 2.0 one of the key improvements the team made was to expand on the descriptive language throughout all portions of the ICRA. The team spent several months discussing the various changes to ensure that all aspects of the tables were considered. This provides greater clarity in the application of the ICRA.

Download Tool

ICRA 2.0 Five Step Process



ASHE ICRA 2.0 is organized into five distinct steps that occur at the onset of project design, before any work is underway. Completing an ICRA involves selecting several assessment elements to determine the necessary “class of precautions” to implement for the project or work activities. The steps include the following:

Step 1: Define the activity.

Step 2: Identify patient risk.

Step 3: Define class of precaution.

Step 4: Assess surrounding area. (a new step)

Step 5: Establish mitigation plan.

ICRA 2.0 Infection Control Risk Assessment and Permit		Project Name:	
		ICRA Number:	
		Requested by	
Location of Work Activity		Project Start Date	
Estimated Duration		Completion Date	
Foreman/Supervisor		Phone	
Contractor Performing Work		Phone	
Approving Authority		Phone	
Please note that the above signature is approval of the work activity as described and assessed documented here. Should the scope of work change or the discovery of additional toxic or biological substances. STOP WORK and seek additional approval and guidance before proceeding.			

1. Type of Activity	Explain this reasoning for this assessment
Type A: Non-invasive	
Type B: Small-scale, short duration	
Type C: Large-scale, longer duration	
Type D: Major demolition, construction	

2. Patient Risk Area	Describe key patient risks
Low: Non-patient care areas	
Medium: Patient care support areas	
High: Patient care areas	
Highest: Invasive, sterile or highly compromised care	

3. Class of Precautions				
	Type A	TYPE B	TYPE C	TYPE D
Low	I	II	II	III
Medium	I	II	III	IV
High	I	III	IV	V
Highest	III	IV	V	V

4. Surrounding Area					
Unit	Below:	Above:	Lateral:	Behind:	In Front:
Risk group					
Contact					
Phone					
Controls	<input type="checkbox"/> Noise <input type="checkbox"/> Vibration <input type="checkbox"/> Dust <input type="checkbox"/> Ventilation <input type="checkbox"/> Pressurization	<input type="checkbox"/> Noise <input type="checkbox"/> Vibration <input type="checkbox"/> Dust <input type="checkbox"/> Ventilation <input type="checkbox"/> Pressurization	<input type="checkbox"/> Noise <input type="checkbox"/> Vibration <input type="checkbox"/> Dust <input type="checkbox"/> Ventilation <input type="checkbox"/> Pressurization	<input type="checkbox"/> Noise <input type="checkbox"/> Vibration <input type="checkbox"/> Dust <input type="checkbox"/> Ventilation <input type="checkbox"/> Pressurization	<input type="checkbox"/> Noise <input type="checkbox"/> Vibration <input type="checkbox"/> Dust <input type="checkbox"/> Ventilation <input type="checkbox"/> Pressurization
Systems impacted:	<input type="checkbox"/> Data <input type="checkbox"/> Mechanical <input type="checkbox"/> Med Gas <input type="checkbox"/> Water Systems <input type="checkbox"/> Other	<input type="checkbox"/> Data <input type="checkbox"/> Mechanical <input type="checkbox"/> Med Gas <input type="checkbox"/> Water Systems <input type="checkbox"/> Other	<input type="checkbox"/> Data <input type="checkbox"/> Mechanical <input type="checkbox"/> Med Gas <input type="checkbox"/> Water Systems <input type="checkbox"/> Other	<input type="checkbox"/> Data <input type="checkbox"/> Mechanical <input type="checkbox"/> Med Gas <input type="checkbox"/> Water Systems <input type="checkbox"/> Other	<input type="checkbox"/> Data <input type="checkbox"/> Mechanical <input type="checkbox"/> Med Gas <input type="checkbox"/> Water Systems <input type="checkbox"/> Other
Were there discoveries in surrounding areas that would serve as cause to increase the class of precautions and necessitate additional controls? If so, please summarize.					

Contents

Lead Authors.....	4
A Culture of Infection Prevention.....	6
From ICRA to ICRA 2.0.....	8
ICRA 2.0 Five-Step Process.....	12
ICRA 2.0 Organization.....	12
Build Your ICRA 2.0 Team.....	15
Team Alignment Discussion Questions.....	20
Step 1: Define the Activity.....	21
Worker Activities in the Health Care Environment.....	21
Diagnosing the Activity Type.....	22
Type A: Inspection and non-invasive activities.....	24
Type B: Small-scale, short duration activities that create minimal dust and debris.....	24
Type C: Large-scale, longer duration activities that create a moderate amount of dust and debris.....	25
Type D: Major demolition and construction activities.....	25
Additional Step 1 Considerations.....	25
Team Alignment Discussion Questions.....	27

Step 2: Identify Patient Risk	28
Low Risk: Non-patient-care areas.....	30
Medium Risk: Patient care support areas	31
High Risk: Patient care areas.....	31
Highest Risk: Procedural, invasive, sterile support and highly compromised patient care areas	32
Additional Step 2 Considerations	33
Team Alignment Discussion Questions	34
Step 3: Define Class of Precaution	35
Types of Infection Prevention Controls	35
Class I: Basic Precautions.....	37
Class II: Minimally Controlled Precautions	37
Class III: Moderately Controlled Environment	38
Class IV: Highly Controlled Environment.....	40
Class V: Extremely Controlled Environment	41
Additional Step 3 Considerations	42
ICRA 2.0 Work Practices Using Standing Orders.....	42

Team Alignment Discussion Questions	45
Step 4: Assess Surrounding Area	46
Building Systems	52
Team Alignment Discussion Questions	54
Step 5: Establish Mitigation Plan	55
Class I: Basic Precautions.....	59
Class II: Minimally Controlled Environment	60
Class III: Moderately Controlled Environment	61
Class IV: Highly Controlled Environment.....	62
Class V: Extremely Controlled Environment	63
Use of Barrier Protection.....	64
Ventilation System Design for Negative Pressurization	65
Team Alignment Discussion Question.....	71
ICRA 2.0 Across Project Phases.....	72
Standard Project Phases Impacting ICRA 2.0	73
Approval	75
ICRA 2.0 During Ongoing Work and Monitoring.....	78

ICRA 2.0 Across Project Phases.....	72
Standard Project Phases Impacting ICRA 2.0	73
Approval	75
ICRA 2.0 During Ongoing Work and Monitoring.....	78
Setup of Controls and Precautionary Measures	79
Trash and Debris Disposal.....	81
Monitoring ICRA Controls.....	82
Environmental Testing and Monitoring	83
Interpreting Sampling Results	86
Stopping Work.....	89
ICRA 2.0 at the Close of a Project.....	91
Conclusion	94
Team Alignment Discussion Questions	95

ICRA to ICRA 2.0: What's Changed?

- More complete descriptions of the various categories in the matrix
- Routine maintenance and 'refresh' activities are included in the appropriate construction type descriptions not just construction activities
- Added an official Step 4 for assessment for surrounding areas and list of concerns to evaluate expanded to include noise, vibration and impact to data, mechanical and medical gas systems.
- Lists different mitigation strategies which are very useful addition to the tool.
- Different risk categories for patient areas.
- Added 5th Class of Precaution (Class V) that could result from matrix combining project type with patient risk group.
- Separate tables describing precautions for active construction (Table 5) and when work activity has completed (Table 6) such as during cleaning and removal of critical barriers.

The 5 Classes of Precautions

- **Class I** continues to be for *inspection* activities.
- **Class II** type now only for *maintenance* activities (for standing practices, no ICRA permit required)
- **Class III** may require a permit and approval from infection control if more involved - the first category for actual construction or demolition – example would be renovation of a single room.
- **Class IV** always requires an IC permit and approval – use if have maintenance in highest risk areas – need barrier separation, neg pressure, and HEPA filter if discharged to inside.
- **Class V** includes requirement of Class IV plus need ante room and Workers also must wear coveralls at all times in the work area

Patient Risk Group	Construction Project Type			
	TYPE A	TYPE B	TYPE C	TYPE D
LOW Risk Group	I	II	II	III/IV
MEDIUM Risk Group	I	II	III	IV
HIGH Risk Group	I	II	III/IV	IV
HIGHEST Risk Group	II	III/IV	III/IV	IV

Table 3 - Class of Precautions:

Patient Risk Group	Construction Project Type			
	TYPE A	TYPE B	TYPE C	TYPE D
LOW Risk Group	I	II	II	III*
MEDIUM Risk Group	I	II	III*	IV
HIGH Risk Group	I	III	IV	V
HIGHEST Risk Group	III	IV	V	V

Tables in the new ICRA 2.0

Table 1: Construction Project Activity Type (under Step 1)

Table 2: Patient Risk Group (under Step 2)

Table 3: Class of Precautions (under Step 3)

Table 4: Surrounding Area Assessment (under Step 4)

Table 5: Minimum Required Infection Control Precautions by Class | Before and During Work Activity (This table lists the various Mitigation Activities within each by Risk Precaution Class)

Table 6: Minimum Required Infection Control Precautions | Upon Completion of Work Activity

Application of ICRA 2.0

While in the past ICRA was used primarily for construction-related work, to encourage a patient-first culture with infection control embedded into processes, ASHE recommends ICRA be used more comprehensively. This means using the ICRA in work involving contractors or construction personnel, but it can also include work performed by health care facilities' in-house personnel.

ICRA and the AHJ – documentation & covering your bases

At some point the project will be visited by an AHJ. From an AHJ perspective, what do we look for and how can you be better prepared.

Of course, we have to start with documentation. If its not documented it didn't happen. Or as my co-worker was fond of saying, "In God we trust, all other must document." The ASHE ICRA 2.0 Process manual states this in more polished English, "An effective ICRA program must maintain documentation in order to demonstrate compliance."

Have your ICRA documentation readily available and well organized. It can be electronic, but note to self, if it takes longer to find and review the information electronically than hard copy, then go with the hard copy. You will both have a more pleasant experience. Large single documents such as a 100 page air balance report could fall into the category of being more easily reviewed electronically.

In your ICRA documentation be sure to include:

- ICRA Matrix of Precautions (also SRA, WICRA, PCRA, and ILSM if applicable)
- ICRA permit
- ICRA team meeting minutes. Include members present, issues discussed, decisions made, action items and follow up on previous action items
- Phasing plans including phasing description and marked up floor plans identifying phases as well as route of supplies in and trash out, etc. For example, identify who's new office gets to be used for storing the room full of paint buckets or all those boxes of preordered sink faucets.
- Training records for contractor and employees
- Weekly (or daily) inspection checklists, and
- Monitoring logs (pressure checks, barrier conditions, particle counting, etc.)

**IMPATIENT
PARKING
ONLY**

7:00 am - 5:00 pm

**ALL UNAUTHORIZED VEHICLES
WILL BE TOWED AT PATIENCE EXPENSE**











- **Problem not identified in daily rounding for ICRA**
- **Blue plastic dust covering ripped on all 3 OR return air ducts**
- **Contractor not cleaning up after themselves regularly – notice relatively clean floor but inside duct not cleaned.**



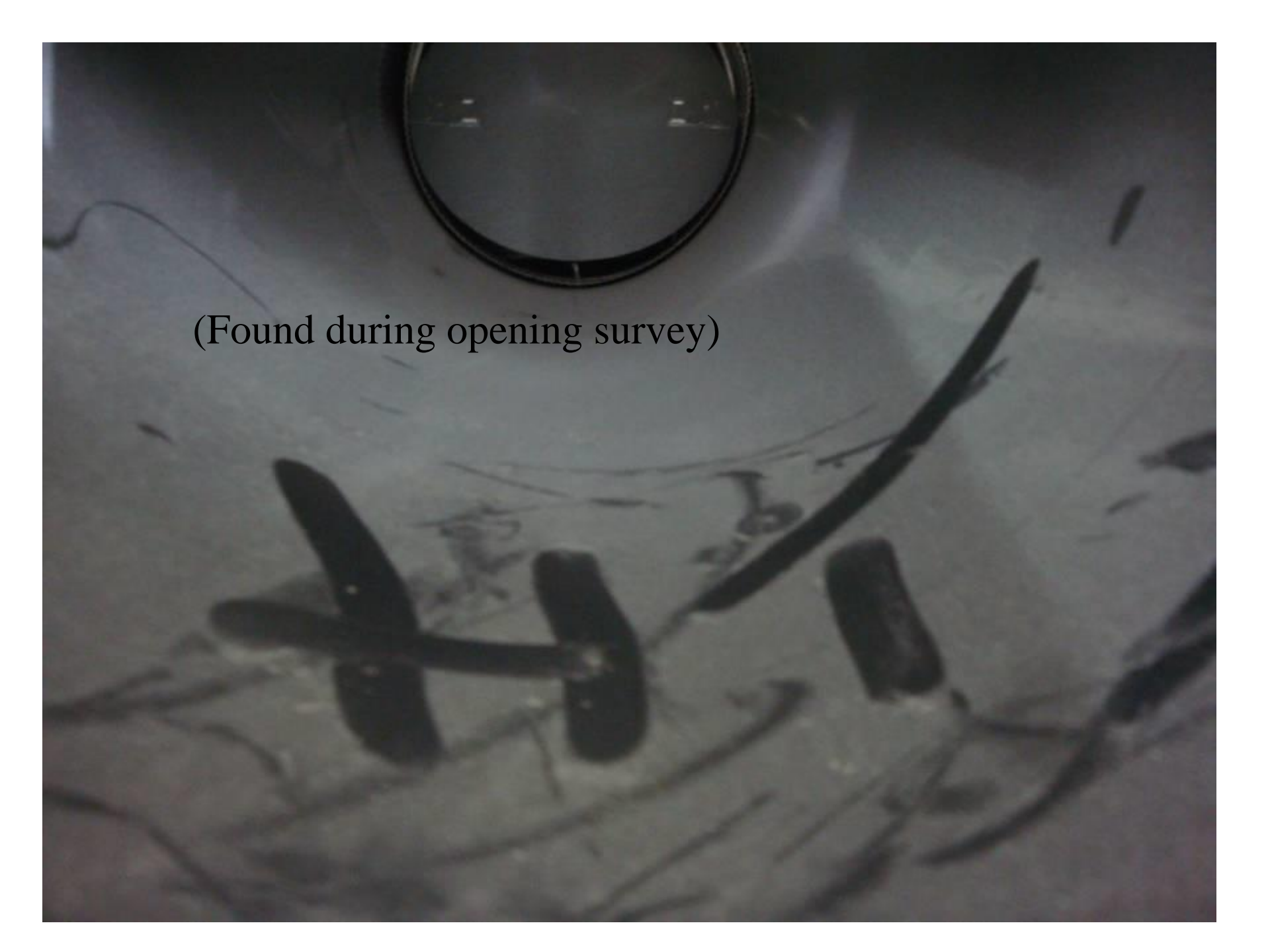
All Ductwork Protected from Dust



- **Non-operational ducts sealed**
- **Active return ducts filtered**



Maybe Not All – Be Sure to Check



(Found during opening survey)

Room Mockup



Common Findings in
the Surgical Suite



That's All
Folk's
The End

Poor Understanding of Isolation may lead to:
Putting Reverse isolation patient in neg pressure
isol room because it was one of their only private
rooms ...



Sign reads: “Stop Reverse Isolation”

Another Successful Renovation?



A Few Hot Topics





Isolation Rms - to ante or not to ante?

- Ventilation (12 ACH, 0.01 in wc neg)
- To Ante or not (Ante rooms not required but recommended)
- Pressure monitors: audible, visual, where to place
- All isolation room exit doors required to have self-closers.

Checking for Quality In the Making You get what you inspect..



Facility Guidelines Institute (FGI)



The Facility Guidelines Institute (FGI) was formed in 1998 in an effort to create a more formal procedure and process of review and revision, and to ensure the document is kept current.

The latest is the 2018 edition in 3 volumes:
Hospital, Residential & Outpatient



Isle Royale



LSC surveying in the UP

04/11/2023

60



Bad day in the U.P. - Not maintaining clear view for patients

Planning your
next move?
Contact HFES.

