

Working in Healthcare Facilities  
Infection Control Risk Assessment (ICRA)




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Disclaimer

This presentation is not intended to be a comprehensive program covering all aspects of this topic. All technicians are encouraged to read and follow all applicable standards, codes and regulations related to this topic.

- ✓ It is the responsibility of each individual contractor to follow local building codes and licensing requirements and to work safely in accordance with OSHA guidelines.
- ✓ It is the contractor's responsibility to take proper precautions on each project to prevent cross contamination. Always take the health and safety of the building occupants into consideration before you conduct any cleaning procedures.
- ✓ All of the following tips are only general tips. They do not cover every situation and it is your responsibility to adapt these tips to the individual system you are working on.
- ✓ The Instructor is not responsible in any way for the work you perform after viewing this slide show. You are responsible for your own work.
- ✓ The views and opinions following are the instructors opinions and not necessarily the official position of the National Air Duct Cleaners Association.

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What We'll Learn

- Health Care Facts
- ICRA Item Checklist
- Infection Control during Construction, Renovation, Repair and Maintenance
- Infection Control Risk Assessment (ICRA)

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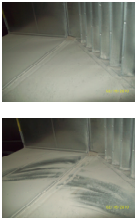
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Infection Control Risk Assessment (ICRA) Regulations

Infection Control during Construction, Renovation, Repairs, and Maintenance



All workers engaged in the construction, renovation, repair, and/or maintenance of Hospital Facilities are responsible for providing a safe environment

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### HealthCare Facts

- Construction, renovation, repair, and maintenance at hospital facilities is typically different than work at most other sites
- Patients who are ill and have unhealthy immune systems are considered "at risk patients"




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### HealthCare Facts



- Thousands of patient deaths around the world are reported each year from infections acquired during a hospital stay.
- Construction dust and debris can be a source of infection.

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### Infection Control during Construction, Renovation, Repairs, and Maintenance

- **Working Above Ceilings**
- **Dust and Debris Containment**
- **Traffic Control**
- **Clean Up of Work Site**
- **Departing the Work Site**
- **Removing Trash & Debris**

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### Checklist for Infection Control during Construction, Renovation, Repair and Maintenance

Infection Control Construction Permit	
Item	Notes
1. Is the permit required for this work?	
2. Has the permit been obtained?	
3. Has the permit been reviewed by the infection control department?	
4. Has the permit been reviewed by the construction department?	
5. Has the permit been reviewed by the maintenance department?	
6. Has the permit been reviewed by the safety department?	
7. Has the permit been reviewed by the environmental health and safety department?	
8. Has the permit been reviewed by the facility management department?	
9. Has the permit been reviewed by the risk management department?	
10. Has the permit been reviewed by the legal department?	
11. Has the permit been reviewed by the insurance department?	
12. Has the permit been reviewed by the finance department?	
13. Has the permit been reviewed by the human resources department?	
14. Has the permit been reviewed by the information technology department?	
15. Has the permit been reviewed by the marketing department?	
16. Has the permit been reviewed by the operations department?	
17. Has the permit been reviewed by the patient services department?	
18. Has the permit been reviewed by the quality management department?	
19. Has the permit been reviewed by the research and development department?	
20. Has the permit been reviewed by the senior management?	

- Know the Infection Control Risk Assessment (ICRA) results.
- The Infection Control Construction Permit needs to be completed when working in a patient area or hallway.

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Checklist for Infection Control during Construction, Renovation, Repair and Maintenance

Item	Requirement	Compliance	Notes
1	Establish dust and debris control		
2	Maintain ventilation and environmental controls		
3	Develop pedestrian and equipment traffic control		
4	Schedule continuous work site clean up		

- Understand requirements for working in ceilings (including cutting access openings).




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Checklist for Infection Control during Construction, Renovation, Repair and Maintenance

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Item	Requirement	Compliance	Notes
1	Health Care facilities have strict guidelines to keep patients safe		
2	Plan ahead – know the hospital specific guidelines before the project begins		

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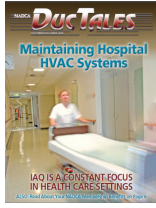
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Infection Control Risk Assessment (ICRA)



- The ICRA is a process to determine:
  - the risk of patient exposure to dust and debris contamination;
  - and the classification of the work involved;
  - Impact on areas above, below and adjacent to the work site

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- Routinely completion of the ICRA is the responsibility of the Hospital Facility Services Department
- Complete the ICRA in any patient area or hallway
- Results of the ICRA determine the safest methods to be used in completing the work

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Working Above the Ceiling



- The ceiling is a prime area for major dust and debris.
- Mold and bacteria grow above the ceiling.

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### Working Above the Ceiling

- Infection Prevention Rules:
  - Routinely when looking above the ceiling thru one ceiling tile for 5 minutes or less no containment is needed.



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### Working Above the Ceiling

- Infection Prevention Rules:
  - If looking or working longer than 5 minutes above the ceiling, (i.e., access openings, insulation repair, duct cleaning, etc.) a containment **MUST** be used



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### Example of Containment for Ceiling Work



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### Dust and Debris Containment



- Bacteria and other harmful germs travel in dust and can harm patients and hospital staff
- If a job, (regardless of type), includes disturbing existing dust, or creating new dust, containment must be used

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### Dust and Debris Containment



- Doors in affected areas should be closed and sealed with duct tape
- This helps prevent the dust and debris from escaping.

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### Dust and Debris Containment



- If the work area cannot be contained by walls and doors, use a plastic, fire rated barrier and seal all seams with duct tape
- Tape up any holes so the wall is solid and will maintain negative pressure

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### Dust and Debris Containment



- If working in high risk area (ICRA 3 or 4) Hepa filtration will be needed in the containment area
- Re-assess your containment area daily to assure dust is not escaping

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### ICRA Assessment Matrix

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

Note: Infection Control approval will be required when the Construction Activity and Risk Level indicate that **Class II** or **Class I** control procedures are necessary.

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### Traffic Control



- Entry and exit routes must be limited to those openings that result in the least amount of exposure to patients, staff, and visitors.
- When possible use dedicated doors, elevators, and stairways.

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Traffic Control

- All trash must be completely contained and covered when being removed from the work site
- Watch for dust on the wheels of the cart also.
- Many require double bagging of trash




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Engineering Controls

- All vacuum equipped with HEPA filtration system should be used to remove dust from clothing.




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Ventilation and Environmental Control

- If mandated by the ICRA, negative air pressure must be maintained in the construction area
- Use HEPA Filter System to help maintain negative air pressure




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Ventilation and Environmental Control



- Supply ducts should be blocked off and return air ducts should be covered with pleated air filters.
- Exhaust fans may be used in conjunction with a HEPA Filter System and must run continuously.

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Clean up of Work Site



- Walk off or tacky mats/ wet towels must be used at the entrance and exit of each site
- Workers are responsible maintaining tacky mats

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Clean up of Work Site

- Vacuum cleaners must be equipped with a HEPA filtration system
- HEPA stands for **High Efficiency Particulate Arresting**. This means that HEPA filters have a high efficiency at arresting, or capturing particles. HEPA is a type of air filter.




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Clean up of Work Site

- Any dust or debris outside of the work site area must be vacuumed/damp mopped immediately




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Leaving The Work Site

- What comes in, STAYS IN!!
- Dust on your clothing can be easily transferred from your clothes to a patient in the health care environment




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Leaving The Work Site

- When leaving the worksite on breaks or for meals, be sure to remove dust from clothes and shoes **AT THE WORK SITE.**



- Use the buddy system to make sure all dust is removed completely




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Leaving The Work Site

- Make sure trash and equipment are covered before leaving work site and transporting thru the healthcare facility



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Leaving The Work Site

- All debris removed from construction site **must be covered.**



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Leaving The Work Site

- Roll wheels over sticky mat/wet towel to remove dust



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Leaving The Work Site

- Follow path with least patient/visitor involvement



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Patient Safety is # 1

- As a member of our healthcare team, it is important that you join them in their commitment to make the facility a 100% SAFE HOSPITAL
- Attention to details can help save patients' lives

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**Q&A**

*You have Questions*

*We have Answers*

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**References**

- **Guidelines for Environmental Infection Control in Health-Care Facilities**  
<https://www.cdc.gov/infectioncontrol/guidelines/environmental/index.html>
- **Healthcare Infection Control Practices Advisory Committee (HICPAC)**  
<http://www.cdc.gov/hicpac/>

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**Handouts**

- 2008 NADCA Ductales Safety Issues Come First
- ICRA Assessment Document
- Pre-Construction Risk Assessment

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Thank you  
for  
Participating!



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