

Step One:

Using Table 1, Identify the Activity Type (A-D).

Table 1 - Activity Type:

	Inspection and non-invasive activities. Includes but is not limited to:
Туре А	 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., pneumatic tube station, HVAC system, fire suppression system, electrical and carpentry work to include painting without sanding) that does not create dust or debris.
	Clean plumbing activity limited in nature.
	Small-scale, short duration activities that create minimal dust and debris.
Turne D	 Includes but is not limited to: Work conducted above the ceiling (e.g., prolonged inspection or repair of firewalls and
Туре В	barriers, installation of conduit and/or cabling, and access to mechanical and/or
	electrical chase spaces).
	• Fan shutdown/startup.
	• 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 produce minimal dust and debris.
	Large-scale, longer duration activities that create a moderate amount of dust and debris.
	Includes but is not limited to:
	 Removal of preexisting floor covering, walls, casework or other building components.
Туре С	New drywall placement.
	 Renovation work in a single room.
	 Non-existing cable pathway or invasive 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.
	Major demolition and construction activities.
	Includes but is not limited to:
Type D	 Removal or replacement of building system component(s).
	Removal/installation of drywall partitions.
	 Invasive large-scale new building construction.
	Renovation work in two or more rooms.



Step Two:

Using Table 2, identify the Patient Risk Group(s) that will be affected. If more than one risk group will be affected, select the higher risk group.

Table 2	- Patient	Risk Grou	p:

Low Risk	Medium Risk	High Risk	Highest Risk
Non-patient care areas such as:	Patient care support areas such as:	Patient care areas such as:	Procedural, invasive, sterile support and highly compromised patient care areas such as:
 Public hallways and gathering areas not on clinical units. Office areas not on clinical units. Breakrooms not on clinical units. Bathrooms or locker rooms not on clinical units. Mechanical rooms not on clinical units. EVS closets not on clinical units. 	 Waiting areas. Clinical engineering. Materials management. Sterile processing department - dirty side. Kitchen, cafeteria, gift shop, coffee shop, and food kiosks. 	 Patient care rooms and areas All acute care units Emergency department Employee health Pharmacy - general work zone Medication rooms and clean utility rooms Imaging suites: diagnostic imaging Laboratory. 	 All transplant and intensive care units. All oncology units. OR theaters and restricted areas. Procedural suites. Pharmacy compounding. Sterile processing department - clean side. Transfusion services. Dedicated isolation wards/units. Imaging suites: invasive imaging.

Step Three:

Match the Patient Risk Group (*Low, Medium, High, Highest*) from Step Two with the planned Construction Activity Project Type (*A, B, C, D*) from Step One using Table 3 to find the Class of Precautions (*I, II, III, IV or V*) or level of infection control activities required. The activities are listed in Table 5 – Minimum Required Infection Control Precautions by Class.

Table 3	- Class	of Precautions:	

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

Infection control permit and approval will be required when Class of Precautions III (Type C) and all Class of Precautions IV or V are necessary.

Environmental conditions that could affect human health, such as sewage, mold, asbestos, gray water and black water will require Class of Precautions IV for LOW and MEDIUM Risk Groups and Class of Precautions V for HIGH and HIGHEST Risk Groups.

*Type C [Medium Risk groups] and Type D [Low Risk Groups] work areas [Class III precautions] that cannot be sealed and completely isolated from occupied patient care spaces should be elevated to include negative air exhaust requirements as listed in Class IV Precautions.



Step Four:

Assess potential risk to areas surrounding the project. Using Table 4, identify the surrounding areas that will be affected and the type of impact that will occur. If more than one risk group will be affected, select the higher risk group using Table 2 - Patient Risk Group.

Unit in Front: Unit Below: Unit Above: Unit Lateral: Unit Behind: **Risk Group: Risk Group:** Risk Group: **Risk Group:** Risk Group: Contact: Contact: Contact: Contact: Contact: Phone: Phone: Phone: Phone: Phone: Additional Controls: **Additional Controls:** Additional Controls: Additional Controls: Additional Controls: □ Noise □ Noise □ Noise □ Noise □ Noise □ Vibration □ Vibration □ Vibration □ Vibration □ Vibration □ Dust control □ Dust control Dust control □ Dust control □ Dust control □ Ventilation □ Ventilation □ Ventilation □ Ventilation □ Ventilation □ Pressurization □ Pressurization □ Pressurization □ Pressurization □ Pressurization □ Vertical Shafts □ Elevators/Stairs □ Elevators/Stairs □ Elevators/Stairs □ Elevators/Stairs □ Elevators/Stairs Systems impacted: Systems impacted: Systems impacted: Systems impacted: Systems impacted: Data Data Data Data □ Data Mechanical Mechanical Mechanical Mechanical Mechanical □ Med Gases Med Gases □ Med Gases Med Gases Med Gases □ Hot/Cold Water Hot/Cold Water □ Hot/Cold Water Hot/Cold Water □ Hot/Cold Water **Noise & Vibration Mitigation Strategies** □ Use diamond drills instead of powder-actuated fasteners. □ Schedule noise-making periods with adjacent spaces. □ Use beam clamps instead of shot. □ Prefab where possible. □ Use tin snips to cut metal studs instead of using a chop saw. □ Install metal decking with vent tabs, then use cellular floor deck hangers. □ Consider compression style fittings instead of soldering, brazing or welding. Wet core drill instead of dry core or percussion. □ Instead of jackhammering concrete, use wet diamond saws. □ Use HEPA vacuums instead of standard wet/dry vacuums. Use mechanical joining system sprinkler fittings instead of threaded. U Where fumes are tolerated, use chemical adhesive remover (flooring glue) instead of mechanical. □ To remove flooring, consider abrasive blasting instead of using a floor scraper. Use electric sheers instead of reciprocating saw for ductwork cutting. □ Install exterior man/material lifts. Ventilation & Pressurization Mitigation Strategies □ HEPA to exterior. □ Install temporary ductwork. □ Utilize temporary HVAC equipment. □ Vacate the area. □ Install temporary partitions. Use carbon filtration to filter odors. Impact to Other Systems Mitigation Strategies □ Schedule outages. Provide temporary systems. □ Back-feed electricity or medical gases.

Table 4 - Surrounding Area Assessment



Table 5 - Minimum Required Infection Control Precautions by Class | Before andDuring Work Activity

Performed Before and During Work Activity) Perform noninvasive work activity as to not block or interrupt patient care. Perform noninvasive work activities in areas that are not directly occupied with patients. Perform noninvasive work activity in a manner that does not create dust. Immediately replace any displaced ceiling tile before leaving the area and/or at end of noninvasive work activity. Perform only limited dust work and/or activities designed for basic facilities and engineering work. Perform limited dust and invasive work following standing precautions procedures approved by the organization. This Class of Precautions must never be used for construction or renovation activities. Provide active means to prevent airborne dust dispersion into the occupied areas. Means for controlling minimal dust dispersion may include hand-held HEPA vacuum devices, polyethylene plastic containment, or isolation of work area by closing room door.
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Means for controlling minimal dust dispersion may include hand-held HEPA vacuum devices,
Remove or isolate return air diffusers to avoid dust from entering the HVAC system.
Remove or isolate the supply air diffusers to avoid positive pressurization of the space,
If work area is contained, then it must be neutrally to negatively pressurized at all times.
Seal all doors with tape that will not leave residue.
Contain all trash and debris in the work area.
Nonporous/smooth and cleanable containers (with a hard lid) must be used to transport trash and
debris from the construction areas. These containers must be damp-wiped cleaned and free of
visible dust/debris before leaving the contained work area.
Install an adhesive (dust collection) mat at entrance of contained work area based on facility policy.
Adhesive mats must be changed routinely and when visibly soiled.
D. Maintain clean surroundings when area is not contained by damp mopping or HEPA vacuuming
surfaces.
Construct and complete critical barriers meeting NFPA 241 requirements including: Barriers must
extend to the ceiling or, if ceiling tile is removed, to the deck above, and all penetrations through the
barrier shall meet the appropriate fire rating requirements.
All (plastic or hard) barrier construction activities must be completed in a manner that prevents dust
release. Plastic barriers must be effectively affixed to ground and ceiling and secure from movemer
or damage. Apply tape that will not leave a residue to seal gaps between barriers, ceiling or floor.
Seal all penetrations in containment barriers, including floors and ceiling, using approved materials
(UL schedule firestop if applicable for barrier type).
Containment units or environmental containment units (ECUs) approved for Class IV precautions in
small areas totally contained by the unit and that has HEPA-filtered exhaust air.
Remove or isolate return air diffusers to avoid dust entering the HVAC system.
Remove or isolate the supply air diffusers to avoid positive pressurization of the space.
Negative airflow pattern must be maintained from the entry point to the anteroom and into the
construction area. The airflow must cascade from outside to inside the construction area. The entire
construction area must remain negatively pressurized.
Maintain negative pressurization of the entire workspace by use of HEPA exhaust air systems
directed outdoors. 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 exhaust is directed indoors, then the system must be HEPA filtered. Prior to start of work, HEPA
filtration must be verified by particulate measurement as no less than 99.97% efficiency and must
not alter or change airflow/pressure relationships in other areas.
). Exhaust into shared or recirculating HVAC systems, or other shared exhaust systems (e.g.,
bathroom exhaust) is not acceptable.
I. Install device on exterior of work containment to continually monitor negative pressurization. To
assure proper pressure is continuously maintained, it is recommended that the device(s) have a
visual pressure indicator.
2. Contain all trash and debris in the work area.



	
	13. Nonporous/smooth and cleanable containers (with a hard lid) must be used to transport trash and
	debris from the construction areas. These containers must be damp-wiped cleaned and free of
	visible dust/debris before leaving the contained work area.
	14. Worker clothing must be clean and free of visible dust before leaving the work area. HEPA
	vacuuming of clothing or use of cover suits is acceptable.
	15. Workers must wear shoe covers prior to entry into the work area. Shoe covers must be changed
	prior to exiting the anteroom to the occupied space (non-work area). Damaged shoe covers must be
	immediately changed.
	16. Install an adhesive (dust collection) mat at entrance of contained work area based on facility policy.
	Adhesive mats must be changed routinely and when visibly soiled.
	17. Consider collection of particulate data during work to monitor and ensure that contaminates do not
	enter the occupied spaces. Routine collection of particulate samples may be used to verify HEPA
	filtration efficiencies.
Class V	1. Construct and complete critical barriers meeting NFPA 241 requirements including: Barriers must
	extend to the ceiling, or if ceiling tile is removed, to the deck above, and all penetrations through the
	barrier shall meet the appropriate fire rating requirements.
	2. All (plastic or hard) barrier construction activities must be completed in a manner that prevents dust
	release. Plastic barriers must be effectively affixed to ground and ceiling and secure from movement
	or damage. Apply tape that will not leave a residue to seal gaps between barriers, ceiling or floor.
	3. Seal all penetrations in containment barriers, anteroom barriers, including floors and ceiling using
	approved materials (UL schedule firestop if applicable for barrier type).
	4. Construct anteroom large enough for equipment staging, cart cleaning, workers. The anteroom must
	be constructed adjacent to entrance of construction work area.
	5. Personnel will be required to wear disposable coveralls at all times during Class V work activities.
	Disposable coveralls must be removed before leaving the anteroom.
	6. Remove or isolate return air diffusers to avoid dust entering the HVAC system.
	 Remove or isolate the supply air diffusers to avoid positive pressurization of the space. Negative airflow pattern must be maintained from the entry point to the anteroom and into the
	8. Negative airflow pattern must be maintained from the entry point to the anteroom and into the construction area. The airflow must cascade from outside to inside the construction area. The entire
	construction area must remain negatively pressurized.9. Maintain negative pressurization of the entire workspace using HEPA exhaust air systems directed
	outdoors. Exhaust discharged directly to the outdoors that is 25 feet or greater from entrances, air
	intakes and windows does not require HEPA-filtered air.
	10. If exhaust is directed indoors, then the system must be HEPA filtered. Prior to start of work, HEPA
	filtration must be verified by particulate measurement as no less than 99.97% efficiency and must
	not alter or change airflow/pressure relationships in other areas.
	11. Exhaust into shared or recirculating HVAC systems, or other shared exhaust systems (bathroom
	exhaust) is <u>not acceptable</u> .
	12. Install device on exterior of work containment to continually monitor negative pressurization. To
	assure proper pressure is continuously maintained, it is recommended that the device(s) have a
	visual pressure indicator.
	13. Contain all trash and debris in the work area.
	14. Nonporous/smooth and cleanable containers (with a hard lid) must be used to transport trash and
	debris from the construction areas. These containers must be damp-wiped cleaned and free of
	visible dust/debris before leaving the contained work area.
	15. Worker clothing must be clean and free of visible dust before leaving the work area anteroom.
	16. Workers must wear shoe covers prior to entry into the work area. Shoe covers must be changed
	prior to exiting the anteroom to the occupied space (non-work area). Damaged shoe covers must be
	immediately changed.
	17. Install an adhesive (dust collection) mat at entrance of contained work area based on facility policy.
	Adhesive mats must be changed routinely and when visibly soiled.
	18. Consider collection of particulate data during work to monitor and ensure that contaminates do not
	enter the occupied spaces. Routine collection of particulate samples may be used to verify HEPA
	filtration efficiencies.



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

Class of	Mitigation Activities
Precautions	(Performed upon Completion of Work Activity)
Classes I, II and III	 Cleaning: 1. Clean work areas including all environmental surfaces, high horizontal surfaces and flooring materials. 2. Check all supply and return air registers for dust accumulation on upper surfaces as well as air diffuser surfaces.
Classes III,	 HVAC Systems: 1. Remove isolation of HVAC system in areas where work is being performed. Verify that HVAC systems are clean and operational. 2. Verify the HVAC systems meet original airflow and air exchange design specifications. Class III (Type C Activities only), IV, and V precautions require inspection and documentation for
IV and V	downgraded ICRA precautions.
	Construction areas must be inspected by an infection preventionist or designee and engineering representative for discontinuation or downgrading of ICRA precautions.
	 Work Area Cleaning: 1. Clean work areas including all environmental surfaces, high horizontal surfaces and flooring materials. 2. Check all supply and return air registers for dust accumulation on upper surfaces as well as air diffuser surfaces.
	 Removal of Critical Barriers: Critical barriers must remain in place during all work involving drywall removal, creation of dust and activities beyond simple touch-up work. The barrier may NOT be removed until a work area cleaning has been performed. All (plastic or hard) barrier removal activities must be completed in a manner that prevents dust release. Use the following precautions when removing hard barriers: Carefully remove screws and painter tape. If dust will be generated during screw removal, use hand-held HEPA vacuum. Drywall cutting is prohibited during removal process. Clean all stud tracks with HEPA vacuum before removing outer hard barrier. V.
	 Negative Air Requirements: 1. The use of negative air must be designed to remove contaminates from the work area. 2. Negative air devices must remain operational at all times and in place for a period after completion of dust creating activities to remove contaminants from the work area and before removal of critical barriers.
	 HVAC systems: 1. Upon removal of critical barriers, remove isolation of HVAC system in areas where work is being performed. 2. Verify that HVAC systems are clean and operational. 3. Verify the HVAC systems meets original airflow and air exchange design specifications.

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ICRA 2.0 Infection Control Risk Assessment and Permit

ICRA 2.0 Infection Control Risk	Project Name:				
Assessment and Permit	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 k	ey patient risks	
Low: Non-patient care	Low: Non-patient care areas				
Medium: Patient care support areas					
High: Patient care are	as				
Highest: Invasive, ster	Highest: Invasive, sterile or highly compromised care				
3. Class of Precautions					
	Туре А	TYP	ЕB	TYPE C	TYPE D
Low	Low I I			II	III
Medium I II			III	IV	
High	l		Ι	IV	V
Highest		١١	/	V	V

4. Surrounding Area										
	Below:	Above:	Lateral:	Behind:	In Front:					
Unit										
Risk group										
Contact										
Phone										
Controls	Noise	□ Noise	□ Noise	Noise	□ Noise					
	Vibration	Vibration	Vibration	Vibration	Vibration					
	🗆 Dust									
	Ventilation	Ventilation	Ventilation	Ventilation	Ventilation					
	Pressurization	Pressurization	Pressurization	Pressurization	Pressurization					
Systems	🗆 Data									
impacted:	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical					
	Med Gas									
	□ Hot/Cold Water									
	□ 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.										

5. Detailed Plan of ICRA Controls for this Work										
Final Class of Precautions being applied	I	II	III	IV	V					
Controls required for this project	Specifications/ Materials		ials	Verification method and frequency						
				πειαθητικά						
Exceptions/Additions to this permit Date and Initials are noted by attached memoranda										
Initials			Date							
Permit Request By			Date							
Permit Authorized By			Date							
Approval Signature				.						

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