

Project Name: _____
Project # _____

Infection Control Risk Assessment
Matrix of Precautions for Construction & Renovation
 (Complete the 3-Step Assessment to Determine the Level of Infection Control Precautions Required)

Step 1:

Using the following table, *identify* the Type of *Construction Project Activity (Type A-D)*

Type A	<p>Inspection and Non-Invasive Activities. Includes, but is not limited to:</p> <ul style="list-style-type: none"> ▪ Removal of ceiling tiles for visual inspection limited to 1 tile per 6 ceiling tiles ▪ Painting (but not sanding) ▪ Wall covering, electrical trim work, minor plumbing, and activities which do not generate dust or require cutting of walls or access to ceilings other than for visual inspection.
Type B	<p>Small scale, short duration activities which create minimal dust. Includes, but is not limited to:</p> <ul style="list-style-type: none"> ▪ Installation of telephone and computer cabling ▪ Access to chase spaces ▪ Cutting of walls or ceiling where dust migration can be controlled
Type C	<p>Work that generates a moderate to high level of dust or requires demolition or removal of any fixed building components or assemblies. Includes, but is not limited to:</p> <ul style="list-style-type: none"> ▪ Sanding of walls for painting or wall covering ▪ Removal of floor coverings, ceiling tiles and casework ▪ New wall construction ▪ Minor duct work electrical work above ceilings ▪ Major cabling activities ▪ Any activity which cannot be completed within a single work-shift.
Type D	<p>Major demolition and construction projects. Includes, but is not limited to:</p> <ul style="list-style-type: none"> ▪ Activities which require consecutive work shifts ▪ Requires heavy demolition or removal of a complete cabling system ▪ New construction

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Step 2:

Using the following table of Example Risk Units, *identify the Patient Risk Groups* will be affected. If more than one risk group will be affected, select the higher risk group:

Low Risk	Medium Risk	High Risk	Highest Risk
<ul style="list-style-type: none"> Office areas 	<ul style="list-style-type: none"> Cardiology Echocardiography Endoscopy Nuclear Medicine Physical Therapy Radiology/MRI Respiratory Therapy Behavioral Health Unit 	<ul style="list-style-type: none"> Emergency Room Labor & Delivery Laboratories (specimen) Cardiac Cath Lab Newborn Nursery Outpatient Surgery Medical Unit Pediatrics Pharmacy Post Anesthesia Care Unit 	<ul style="list-style-type: none"> Any area caring for immunocompromised patients Intensive Care Units Burn Unit Negative pressure isolation rooms Oncology Operating rooms including section rooms Surgical Units Central Sterile Supply

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 or Color-Coded Precautions **are delineated on the following page.**

IC Matrix – Class of Precautions: Construction Project by Patient Risk

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

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

Project Name: _____
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Description of Recommended Infection Control Precautions by Class

During Construction Project

Upon Completion of Project

	During Construction Project	Upon Completion of Project
Class I	<ol style="list-style-type: none"> 1. Execute work by methods to minimize raising dust from construction operations 2. Immediately replace a ceiling tile displaced for visual inspection 	
Class II	<ol style="list-style-type: none"> 1. Provide active means to prevent airborne dust from dispersing into atmosphere. 2. Water mist work surfaces to control dust while cutting. 3. Seal unused doors with duct tape. 4. Block off and seal air vents. 5. Place dust mat at entrance and exit of work area. 6. Remove or isolate HVAC system in areas where work is being performed 	<ol style="list-style-type: none"> 1. Wipe work surfaces with disinfectant. 2. Contain construction waste before transport in tightly covered containers. 3. Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area. 4. Remove isolation of HVAC system in areas where work is being performed.
Class III	<ol style="list-style-type: none"> 1. Remove or isolate HVAC system in area where work is being done to prevent contamination of duct system. 2. Complete all critical barriers i.e. sheetrock, plastic, to seal area from non-work area or implement control cube method (cart with plastic covering and sealed connection to work site with HEPA vacuum for vacuuming prior to exit) before construction begins. 3. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units. 4. Contain construction waste before transport in tightly covered containers. 5. Cover transport receptacles or carts. Tape covering unless solid lid. 	<ol style="list-style-type: none"> 1. Do not remove barriers from work area until completed project is inspected by Occupational Health and Safety and/or Health System Project Manager with consultation of Infection Control as necessary. 2. Remove barrier materials carefully to minimize spreading of dirt and debris associated with construction. 3. Vacuum work area with HEPA filtered vacuums. 4. Wet mop area with disinfectant. 5. Remove isolation of HVAC system in areas where work is being performed.
Class IV	<ol style="list-style-type: none"> 1. Isolate HVAC system in area where work is being done to prevent contamination of duct system. 2. Complete all critical barriers i.e. sheetrock, plastic, to seal area from non-work area or implement control cube method (cart with plastic covering and sealed connection to work site with HEPA vacuum for vacuuming prior to exit) before construction begins. 3. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units. 4. Seal holes, pipes, conduits, and punctures appropriately. 5. Construct vestibule and require all personnel to pass through this room so they can be vacuumed using a HEPA vacuum cleaner before leaving work site or they can wear cloth or paper coveralls that are removed each time they leave the work site. 6. All personnel entering work site are required to wear shoe covers. Shoe covers must be changed each time the worker exits the work area. 7. Do not remove barriers from work area until completed project is inspected by the owner's Safety Department and Infection Control Department. 	<ol style="list-style-type: none"> 1. Remove barrier material carefully to minimize spreading of dirt and debris associated with construction. 2. Contain construction waste before transport in tightly covered containers. 3. Cover transport receptacles or carts. Tape covering unless solid lid. 4. Vacuum work area with HEPA filtered vacuums. 5. Wet mop area with disinfectant. 6. Remove isolation of HVAC system in areas where work is being performed.

Infection Control Construction Permit

Attachment B:

This permit must be displayed at construction site at all times.

Project Name: _____
Project # _____

Environmental Health and Safety Construction Permit								
Location of Construction:				Permit No.:				
Project Manager:				Project Start Date:				
Contractor Performing Work:				Estimated Duration:				
Supervisor:				Permit Expiration Date:				
				Telephone:				
Yes	No	Construction Activity		Yes	No	Infection Control Risk Group		
		TYPE A: Inspection, non-invasive activity				GROUP 1: Low Risk		
		TYPE B: Small scale, short duration, moderate to high levels				GROUP 2: Medium Risk		
		TYPE C: Activity generates moderate to high levels of dust, requires greater 1 work shift for completion.				GROUP 3: Medium/High Risk		
		TYPE D: Major duration and construction activities requiring consecutive work shifts.				GROUP 4: Highest Risk		
CLASS I								
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> 1. Executive work by methods to minimize raising dust from construction operations. 2. Immediately replace any ceiling tile displaced for visual inspection. </td> <td style="width: 50%; border: none; vertical-align: top;"> 3. Minor Demolition for Remodeling. </td> </tr> </table>							1. Executive work by methods to minimize raising dust from construction operations. 2. Immediately replace any ceiling tile displaced for visual inspection.	3. Minor Demolition for Remodeling.
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Date								
Initial								
Additional Requirements:								
Date				Attached memoranda note Exceptions/ Additions to this permit.				
Initials				Date				
Permit Request By:				Permit Authorized By:				
Date:				Date				
Infection Control Representative:								
Date:								

Pre-Construction Risk Assessment

Attachment C:

Project Name: _____
Project # _____

Step 1. Identify the areas surrounding the project area, assessing potential impact.

Unit Below	Unit Above	Lateral	Lateral	Behind	Front
Risk Group	Risk Group	Risk Group	Risk Group	Risk Group	Risk Group

Step 2. Identify specific site of activity e.g., patient rooms, medication room, etc.

Step 3. Identify issues related to: ventilation, plumbing, electrical in terms of the occurrence of probable outages.

Step 4. Identify containment measures, using prior assessment. What types of barriers? (E.g., solids wall barriers); Will HEPA filtration be required?

(Note: Renovation/construction area shall be isolated from the occupied areas during construction.)

Step 5. Consider potential risk of water damage. Is there a risk due to compromising structural integrity? (E.g., wall, ceiling, roof)

Step 6. Consider impact of noise/vibration to surrounding occupants. How will it be mitigated? _

Step 7. Work hours: Can or will the work be done during non-patient care hours?

Step 8. Do plans allow for adequate number of isolation/negative airflow rooms?

Step 9. Do the plans allow for the required number & type of hand-washing sinks?

Step 10. Does the infection control staff agree with the minimum number of sinks for this project?
(Verify with AIA Guidelines for types and area)

Step 11. Does the infection control staff agree with the plans relative to clean and soiled utility rooms?

Step 12. Plan to discuss the following containment issues with the project team. E.g., traffic flow, housekeeping, debris removal (how and when)

Appendix: Identify and communicate the responsibility for project monitoring that includes Environmental Health and Safety concerns and risks. The Pre-Construction and Infection Control Risk Assessments may be modified throughout the project.

Revisions must be communicated to the Project Manager.

ELEMENTS of PERFORMANCE for LS.01.02.01
ILSM PREPARATION CHECKLIST

Floor: _____ Location: _____
Checklist preparation date: _____ Start date: _____
PFI Number: _____ Completion date (est): _____

Description of deficiency/project: _____

Y N N/A

Will the hospital need to notify fire department and initiate a fire watch due to a protection system being down for 4 hours out of 24?	
Will the hospital need to post signage identifying alternative exits from affected areas?	
Will the hospital need to inspect exits daily from the affected spaces according to ILSM policy?	
Will the hospital need to provide temporary fire alarm/detection equipment in the affected spaces according to ILSM policy?	
Will the hospital test and inspect temporary systems monthly according to ILSM policy?	
Will the hospital need to provide additional fire fighting equipment according to ILSM policy?	
Will the hospital need to provide smoke partitions made of non/limited combustible material according to ILSM policy?	
Will the hospital need to increase surveillance of the premises, especially for construction and storage areas according to ILSM policy?	
Will the hospital enforce storage/housekeeping/debris removal practices to reduce fire hazard according to ILSM policy?	
Will the hospital need to provide fire fighting training to those affected by the project according to ILSM policy?	
Will the hospital need to conduct one additional fire drill per shift per quarter according to ILSM policy?	
Will the hospital need to conduct staff education concerning deficiencies and hazards related to fire safety according to ILSM policy?	
Will the hospital need to train those affected by the project concerning compartmental/structural impairments according to ILSM policy?	

ILSM Plan: ~~XXXXXXXXXXXX~~

Additional notes: _____
_____ **Á**

ILSM approval: _____ Date: _____