

Infection Control Risk Assessment Matrix of Precautions for Construction & Renovation

Step One:

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 50 square feet • 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</p> <p>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 or <u>electrical</u> work above ceilings • <u>major cabling</u> 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.

STEP 1: Type C.

Step Two:

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:

Low Risk	Medium Risk	High Risk	Highest Risk
Office areas	Cardiology Echocardiography Endoscopy Nuclear Medicine Physical Therapy Radiology/MRI Respiratory Therapy	CCU Emergency Room Labor & Delivery Laboratories (specimen) Newborn Nursery Outpatient Surgery Pediatrics Pharmacy Post Anesthesia Care Unit Surgical Units	Any area caring for immunocompromised patients Burn Unit Cardiac Cath Lab Central Sterile Supply Intensive Care Units Medical Unit Negative pressure isolation rooms Oncology Operating rooms including C-section rooms

Step 2 Medium Risk

Step Three: 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 Construction Project Type

Patient Risk Group	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

Step 3 Type C - Medium Risk

Description of Required Infection Control Precaution by Class

Class	During Construction Project	Upon Completion of Project
I INI date	<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. 	
II INI date	<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.
III INI date	<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, plywood, 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 worksite 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 the owner's Safety Department and Infection Control Department and are thoroughly cleaned by the Environmental Management Service (EMS). 2. Remove barrier materials carefully to minimize spreading of direct 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. 6. Legionella Mitigation Plan (see Step 6 next page)
IV INI date	<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, plywood, 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 anteroom 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. 	<ol style="list-style-type: none"> 1. Do not remove barriers from work area until completed project is inspected by the owner's Safety Department and Infection Control Department and are thoroughly cleaned by the Environmental Management Service (EMS). 2. When Removing 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. 7. Legionella Mitigation Plan (see Step 6 next page)

Elevators Shaft

Step 4: Identify the areas surrounding the project area, assessing potential impact

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

Step 5: Identification of specific site of activity (patient rooms, medication room, etc.) _____

Step 6: Identify issues related to probable outages for:

Ventilation? Q

Electrical? Short period

Plumbing? Q

- o Flush shower heads and sinks first with cold water for five or more minutes followed with hot water for five or more minutes. Clean any debris, scale or deposits associated with the flush: YES / NO / N/A
- o Hyper chlorinate or Administer Chlorine Dioxide prior to use. YES / NO / N/A
- o Other: _____

Step 7: Identify containment measures expected:

Type of Barrier (plastic, solid, etc) Solid

Negative Pressure Required with HEPA filtration? ✓

Note: Renovation/construction area shall be isolated from the occupied areas during construction and shall be negative with respect to surrounding areas

Step 8: Is there a risk of water damage due to compromising structural integrity? YES / NO

Step 9: Will the noise level interfere with patient care activities? YES / NO

If yes, can or will the work be done during non-patient care hours? YES / NO

Step 10: Does the plan allow for adequate numbers of:

Isolation/negative airflow rooms? YES / NO or N/A

Hand washing sinks? YES / NO or N/A

Step 11: Does the plan allow for proper plans for the clean and soiled utility rooms? YES / NO or N/A

Step 12: Expectation for containment of:

Traffic flow: Should be OK

EMS Clean-up: ✓

Debris Removal: yes

Step 13: Is there a risk to the Construction Worker to have contact with or have shared air space with a patient with TB disease or a clinical specimen that might contain M. tuberculosis? YES / NO

a. If YES, what PPE is required? _____

b. If YES, has the contractor provided written certification that all contract employees assigned to the work site have had a pre-placement tuberculin screening within 90 days prior to assignment to the worksite and been found have negative TB screening reactions. YES / NO / N/A

Appendix: Identify and communicate the responsibility for project monitoring that includes infection control concerns and risks. The ICRA may be modified throughout the project. Revisions must be communicated to the Project Manager.

Project # 512A5-14-303

VA MARYLAND HEALTH CARE SYSTEM

Infection Control Construction Permit

Project: <u>Modernize Traction Elevators 23H</u>		Permit No: <u>512A5-14-303</u>	
Location of Construction: <u>23H</u>		Project Start Date: <u>6/1/15</u>	
Project Coordinator: <u>Lynn Butler</u>		Estimated Duration: <u>12-18 months</u>	
Contractor Performing Work:		Permit Expiration Date: <u>12/31/16</u>	
Supervisor:		Telephone: <u>5169111</u>	

YES	NO	CONSTRUCTION ACTIVITY	YES	NO	INFECTION CONTROL RISK GROUP
		TYPE A: Inspection, non-invasive activity			GROUP 1: Least Risk
		TYPE B: Small scale, short duration, moderate to high levels			GROUP 2: Medium Risk
<input checked="" type="checkbox"/>		TYPE C: Activity generates moderate to high levels of dust, requires more than 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

- Execute work by methods to minimize raising dust from construction operations.

- Immediately replace any ceiling tile displaced for visual inspection
- Minor Demolition for Remodeling

CLASS II

Date _____

Initials _____

- Provides active means to prevent air-borne dust from dispersing into atmosphere
- Water mist work surfaces to control dust while cutting.
- Seal unused doors with duct tape.
- Block off and seal air vents.
- Wipe surfaces with disinfectant.

- Contain construction waste in tightly covered containers prior to transport.
- Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area.
- Place dust mat at entrance and exit of work area.
- Remove or isolate HVAC system in areas where work is being performed.

CLASS III

Date 3/31/15

Initials NTS

- Obtain infection control permit before construction begins.
- Isolate HVAC system in area where work is being done to prevent contamination of the duct system.
- Complete all critical barriers or implement control cube method before construction begins.
- Maintain negative air pressure within work site utilizing HEPA equipped air filtration units.
- Do not remove barriers from work area until complete project is thoroughly cleaned by Environmental Management Service (EMS).

- Vacuum work with HEPA filtered vacuums.
- Wet mop with disinfectant
- Remove barrier materials carefully to minimize spreading of dirt and debris associated with construction.
- Contain construction waste before transport in tightly covered containers. Container must be free of dust and debris on the outside (including wheels).
- Cover transport receptacles or carts. Tape covering.
- Remove or isolate HVAC system in areas where work is being performed.

CLASS IV

Date _____

Initials _____

- Obtain infection control permit before construction begins.
- Isolate HVAC system in area where work is being done to prevent contamination of duct system.
- Complete all critical barriers or implement control cube method before construction begins.
- Maintain negative air pressure within work site utilizing HEPA equipped air filtration units.
- Seal holes, pipes, conduits, and punctures appropriately.
- Construct anteroom 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.

- All personnel entering work site are required to wear shoe covers
- Do not remove barriers from work area until completed project is thoroughly cleaned by Environmental Management Service (EMS).
- Vacuum work area with HEPA filtered vacuums.
- Wet mop with disinfectant.
- Remove barrier materials carefully to minimize spreading of dirt and debris associated with construction.
- Contain construction waste before transport in tightly covered containers. Container must be free of dust and debris on the outside (including wheels).
- Cover transport receptacles or carts. Tape covering.
- Remove or isolate HVAC system in areas where is being done.

ALL CLASSES Safety Data Sheets (SDS) will be provided to VAMHCS Safety Office no less than 10-days in advance of the onset of work for all materials/chemicals (ie. Paint, flooring compound/adhesive, carpet glue) that will be brought into the VAMHCS facility for use during this project.

Has VAMCHS Safety been contacted to determine if asbestos-containing material is a consideration? ☒ Yes ☐ No.

Work may not commence without prior documentation of location, type and amount of ACBM.

TB risk assessment: Is there a risk to the Construction Worker to have contact with or have shared air space with a patient with TB disease or a clinical specimen that might contain M. tuberculosis? YES/NO

If YES, has the contractor provided written certification that all contract employees assigned to the work site have had a pre-placement tuberculin screening within 90 days prior to assignment to the worksite and been found have negative TB screening reactions. YES/NO (N/A)

Summary Description of Project:

Modernize Traction elevators
P1 + P2 on 23H

***Legionella mitigation for stagnant water necessary:**

Yes ☐ No ☒

If yes, see page 4 step 6 for plan.

Does this project require walk through monitoring

Yes ☒ No ☐ (If yes, specific time frame) 1C

Daily ☒ Weekly ☒ Bi Weekly ☐

Monthly ☐ Other (specify) _____

Permit Authorized By:

Date 3/31/15

Signature [Signature]