

## INFECTION CONTROL CONSTRUCTION PROJECT COMPLIANCE

I. SCOPE/EFFECT: This Medical Center Policy affects all employees (including Allentown, Sayre, Tobyhanna, Williamsport, and Northampton County clinics), patients, and visitors to our medical center.

II. PURPOSE: This medical center establishes policy for maintaining a safe and healthy environment of care for patients, and a safe and healthy worksite for staff, volunteers, visitors, contractors, and the general public during construction, renovation, and maintenance related activities. The goal is to minimize the risk of acquisition of Healthcare Associated Infections (HAI) which may result when fungi or bacteria are dispersed into the air via dust or water aerosolization.

III. POLICY: It is the policy of this medical center that construction, renovation, and maintenance activities on VA owned property and VA-leased property be conducted in such a way to protect the health and safety of VA patients, employees, contracted staff and the public. It is the policy of this medical center to design projects that comply with VA Construction Standards, National Fire Protection Association Codes (NFPA), Guidelines for design and construction of hospitals and healthcare facilities, 2014 ed., published by the American Institute of Architects (AIA), and Guidelines for Environmental Infection Control in Healthcare Facilities. Compliance to codes and an Infection Control Risk Assessment shall be documented during design and construction phases.

A. A multidisciplinary team with representatives from the following program areas: Infection Prevention, Patient Safety, Safety, VA Police, Facilities Management Service, Projects Management, Green Environmental Management System (GEMS) and Contracting. These team members are responsible to integrate infection prevention and environmental control principles, outlined in this guide, throughout the planning, managing, active phase, through to the completion of each project. This process is identified as the Infection Control Risk Assessment (ICRA).

B. An Infection Control Risk Assessment (ICRA)(Attachment A) will be required for every renovation and new construction project. The ICRA will be performed by a multidisciplinary team with expertise in infection control, facility design, construction, ventilation and safety. The team will provide documentation of the risk assessment during initial planning and in subsequent construction phases. ICRA requirements are noted on the construction drawings and specification documents. For facility maintenance activities performed by FMS staff an ICRA will be completed in conjunction with Infection Prevention Coordinator.

1. The type of Construction Activity, ATTACHMENT A, areas will be assessed for environmental risks for airborne and waterborne disease and measures to contain dust and moisture by appropriate barriers and other means. Adjacent patient care areas, supply storage and areas on levels above and below the proposed project will also be assessed for effects when appropriate.

2. Based on the ICRA an Infection Control permit, ATTACHMENT B, will be issued for each project.

C. All construction workers, including subcontractors and Facility Management Service employees shall follow the Infection Control procedures as identified in the permit, ATTACHMENT B.

D. Infection Prevention Coordinator, Safety Officer, and the project Contracting Officer Technical Representative (COTR) will participate in meetings and area walk through inspections which will be conducted according to the risk assessment. Frequency of area walk through inspections will be conducted on the basis of risk category and will be assigned for each individual project. Refer to ATTACHMENT C.

E. Any employee responsible for purchasing equipment which will require installation is responsible for notifying Infection Prevention Coordinator who will assist with completion of Attachment A.

F. An Infection Prevention educational handout will be provided by project manager to the contract workers prior to the start of the project. ATTACHMENT D.

G. Education to FMS Maintenance Staff related to Infection Prevention Risk Assessment will be provided.

#### IV. PROCEDURE:

A. The multidisciplinary team will ensure compliance with this policy and all applicable codes.

B. Planning Phases:

1. Infection Prevention Coordinator will participate in preliminary design meetings and all planning phases for new construction project specific to the following major components:

- a. Number and placement of isolation rooms with anterooms as required
- b. Staff and patient traffic patterns
- c. Decisions regarding locations for patient care areas, storage and supply areas, etc.
- d. Water supply and plumbing to insure re-circulating lines
- e. Construction waste containment, transport and disposal
- f. Selection and installation of medical equipment as it relates to infection control
- g. Accommodation of personal protective equipment (accessibility, security, sanitation, etc.)

- h. Location of sinks and hand washing products dispensers and automatic devices for sinks, toilets
- i. Air handling systems engineered for optimal performance and easy maintenance and repair
- j. Air changes per hour and pressure differentials to accommodate special patient care areas
- k. Location of fixed sharps containers
- l. Types of surface finishes nonporous versus porous
- m. Appropriate location and type of ice machines
- n. Appropriate flooring (e.g., seamless floors in dialysis units)
- o. Sensible use of carpeting
- p. Properly engineered areas for linen services and solid waste management
- q. Convenient location of soiled utility rooms

## 2. Environmental Control:

- a. Negative air pressure must be maintained within the construction area
- b. Demolition debris is removed in tightly fitted covered carts - use specified traffic patterns
- c. Sticky or walk-off mats are placed immediately outside the construction zone and changed whenever necessary to control the spread of dust and dirt
- d. Exterior- If demolition chutes are used, they must be sealed when not in use; the chute and damper should be sprayed with water, as necessary to maintain dust control
- e. Control, collection and disposal must be provided for any drain liquid or sludge found when demolishing plumbing

## 3. Traffic Control:

- a. Use designated entry and exit procedures
- b. Keep all egress pathways free of debris
- c. No unauthorized personnel should be allowed to enter construction areas
- d. Use designated elevators only

## 4. Cleaning:

- a. Keep the construction area clean on a daily basis
- b. Dust and dirt must be kept to a minimum

5. Requirements for Construction Workers and FMS Maintenance Staff:

- a. Clothing must be free of loose soil and debris when exiting the construction area
- b. Use personal protective equipment (PPE) as indicated for the task at hand
- c. Hand washing is the best method of reducing the transmission of infection: Always wash your hands with soap and water after visiting the restroom, before eating, when leaving the construction site.
- d. Construction workers will receive an educational handout for general infection control practices (Attachment D) and a card with construction safety and infection control requirements to be worn with company identification.

6. Surveillance During Construction - the Infection Prevention Coordinator evaluates the protection of patients, visitors, and employees from injury and illness, as well as occupational and facility-associated infections through surveillance activities.

V. RESPONSIBILITY:

A. FMS Project Supervisor or designee will assure that all project COTRs, Infection Prevention Coordinator and the Safety officer are apprised of plans involving construction or renovation of clinical and administrative areas of the medical center.

B. FMS Project Supervisor or designee will notify the Infection Prevention Coordinator and Safety Officer by electronic email of planning meetings related to construction.

C. Maintenance Supervisor will notify the Infection Prevention Coordinator of maintenance activities.

D. Infection Prevention Coordinator will respond to requests and provide infection prevention and control related recommendations for project development and maintenance of areas during construction, renovation and maintenance projects.

E. The Safety Officer will respond to requests and provide safety and health related recommendations for project development and maintenance of areas during construction and renovation projects.

F. The multi-disciplinary team: Safety Officer, Infection Prevention Coordinator and Project Engineer, will complete the Infection Control Risk Assessment and the inspection check list and a copy will be maintained in the project document file and the Infection Prevention & Control office.

VI. CUSTOMER SATISFACTION: Customer satisfaction issues were considered in developing this policy.

VII. REFERENCES: APIC Infection Control Tool Kit Series: Construction and Renovation, available from the Association of Professional Infection Control Practitioners and Epidemiologists.  
Guidelines for Design and Construction of Hospital and Health Care Facilities, Facility Guidelines Institute 2014  
CDC's Guideline for Environmental Infection Control in Healthcare Facilities, 2003.  
VHA Directive 2011-036 Safety and Health During Construction Activities.  
Medical Center Policy 18S-15-346, Safety and Health During Construction Activities, October 19, 2015.

VIII. RESCISSION: Medical Center Policy 11IC-13-897, Infection Control Construction Project Compliance, dated December 27, 2013.

IX. DISTRIBUTION: Electronic access to all employees

X. ATTACHMENTS: A, B, C, D

11/9/2016

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Russell E. Lloyd  
Medical Center Director  
Signed by: Russell E Lloyd 118065

## Infection Prevention Risk Assessment

### Matrix of Precautions for Construction & Renovation

#### Step One:

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

<b>TYPE A</b>	<p><b>Inspection and Non-Invasive Activities.</b></p> <p>Includes, but is not limited to:</p> <ul style="list-style-type: none"> <li>▪ removal of ceiling tiles for visual inspection limited to 1 tile per 50 square feet</li> <li>▪ painting (but not sanding)</li> <li>▪ wallcovering, 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.</li> </ul>
<b>TYPE B</b>	<p><b>Small scale, short duration activities which create minimal dust</b></p> <p>Includes, but is not limited to:</p> <ul style="list-style-type: none"> <li>▪ installation of telephone and computer cabling</li> <li>▪ opening of no more than 1 tile per 10 square feet</li> <li>▪ access to chase spaces</li> <li>▪ cutting of walls or ceiling where dust migration can be controlled.</li> <li>▪ minor renovation of existing space</li> <li>▪ wet sanding of walls</li> <li>▪ floor covering removal (<b>without</b> sanding or grinding)</li> </ul>
<b>TYPE C</b>	<p><b>Work that generates a moderate to high level of dust or requires demolition or removal of any fixed building components or assemblies</b></p> <p>Includes, but is not limited to:</p> <ul style="list-style-type: none"> <li>▪ dry sanding of walls for painting or wall covering</li> <li>▪ removal of floor coverings (with sanding), ceiling tiles and casework</li> <li>▪ cutting of walls, removal of drywall or building finishes where work is limited to one room or suite</li> <li>▪ new wall construction</li> <li>▪ minor duct work, plumbing work, or electrical work above ceilings (not including system demolition or installation)</li> <li>▪ moderate renovation of existing space</li> <li>▪ major cabling activities</li> <li>▪ any activity which cannot be completed within a single workshift.</li> </ul>
<b>TYPE D</b>	<p><b>Major demolition and construction projects</b></p> <p>Includes, but is not limited to:</p> <ul style="list-style-type: none"> <li>▪ activities which require the closure of a unit/wing or relocation of an entire area</li> <li>▪ activities which require consecutive work shifts</li> <li>▪ demolition, removal, or installation of a complete cabling, HVAC, plumbing, medical gas, or electrical system</li> <li>▪ demolition of major fixed building components, assemblies, fit-out elements, or structural elements</li> <li>▪ new construction located in close proximity (as determined by the ICRA team) of the hospital building</li> <li>▪ outdoor construction of new structures located in close proximity to existing patient care facility</li> <li>▪ excavation activities within close proximity of hospital building.</li> <li>▪ new construction.</li> </ul>

**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
<ul style="list-style-type: none"> <li>Office areas</li> <li>Mechanical spaces</li> </ul>	<ul style="list-style-type: none"> <li>Cardiology</li> <li>Echocardiography</li> <li>Endoscopy</li> <li>Nuclear Medicine</li> <li>Physical Therapy</li> <li>Radiology/MRI/CT/PET</li> <li>Respiratory Therapy</li> <li>Primary care spaces</li> <li>Community Based outpatient clinics</li> </ul>	<ul style="list-style-type: none"> <li>Emergency Room</li> <li>Laboratories (specimen)</li> <li>Outpatient Surgery</li> <li>Pediatrics</li> <li>Pharmacy</li> <li>Post Anesthesia Care Unit</li> <li>Surgical Units</li> <li>Central Sterile supply storage</li> <li>Canteen/Kitchen</li> </ul>	<ul style="list-style-type: none"> <li>Any area caring for immunocompromised patients</li> <li>Cardiac Cath Lab</li> <li>Sterile Processing</li> <li>Intensive Care Units</li> <li>Medical Units</li> <li>Negative pressure isolation rooms</li> <li>Oncology</li> <li>Operating rooms</li> <li>PACU</li> <li>Community Living Center</li> </ul>

**Step 2** \_\_\_\_\_

**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**

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

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

**Step 3** \_\_\_\_\_

Description of Required Infection Prevention Precautions by <u>Class</u>	
During Construction Project	Upon Completion of Project
<p>1. All workers shall wear appropriate personal protective equipment (PPE) including hard hats, safety glasses, and gloves.</p> <p>2. All workers shall be vaccinated against COVID-19.</p> <p>3. All workers shall maintain social distancing of at least 6 feet from others.</p> <p>4. All workers shall wear face masks at all times.</p> <p>5. All workers shall avoid handshakes and other close contact.</p> <p>6. All workers shall avoid sharing food and drinks.</p> <p>7. All workers shall avoid public transportation and other crowded places.</p> <p>8. All workers shall avoid travel to high-risk areas.</p> <p>9. All workers shall avoid travel to high-risk countries.</p> <p>10. All workers shall avoid travel to high-risk regions.</p>	<p>1. All workers shall wear appropriate personal protective equipment (PPE) including hard hats, safety glasses, and gloves.</p> <p>2. All workers shall be vaccinated against COVID-19.</p> <p>3. All workers shall maintain social distancing of at least 6 feet from others.</p> <p>4. All workers shall wear face masks at all times.</p> <p>5. All workers shall avoid handshakes and other close contact.</p> <p>6. All workers shall avoid sharing food and drinks.</p> <p>7. All workers shall avoid public transportation and other crowded places.</p> <p>8. All workers shall avoid travel to high-risk areas.</p> <p>9. All workers shall avoid travel to high-risk countries.</p> <p>10. All workers shall avoid travel to high-risk regions.</p>

CLASS I	<ol style="list-style-type: none"> <li>1. <b>Execute</b> work to minimize the rise of dust from construction operation.</li> <li>2. Immediately <b>replace</b> any ceiling tile displaced for inspection.</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean work area upon completion of task.</li> </ol>
CLASS II	<ol style="list-style-type: none"> <li>1. <b>Provides</b> active means to prevent air-borne dust from dispersing into atmosphere (surrounding environment.)</li> <li>2. <b>Water mist</b> work surface to control dust while cutting</li> <li>3. <b>Seal</b> unused doors with duct tape.</li> <li>4. <b>Block</b> off and <b>seal</b> duct vents.</li> <li>5. <b>Wipe</b> surfaces with disinfectant.</li> <li>6. <b>Contain</b> construction waste before transport in tightly covered containers.</li> <li>7. Wet <b>mop</b> and/or <b>vacuum</b> with HEPA filtered vacuum before leaving work area.</li> <li>8. <b>Place</b> dust mat at entrance and exit of work area.</li> <li>9. <b>Remove</b> or <b>isolate</b> HVAC system in area where work is being performed.</li> </ol>	<ol style="list-style-type: none"> <li>1. Wipe work surfaces with disinfectant.</li> <li>2. Contain construction waste before transport in tightly covered containers.</li> <li>3. Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area.</li> <li>4. Remove isolation of HVAC system in areas where work is being performed.</li> </ol>
CLASS III	<ol style="list-style-type: none"> <li>1. <b>Obtain</b> infection control permit before construction begins.</li> <li>2. <b>Isolate</b> HVAC system in area where work is being done to prevent contamination of the duct system.</li> <li>3. <u><b>Complete</b> all critical barriers or implement control cube method before construction begins.</u></li> <li>4. <u><b>Maintain</b> negative air pressure within work site utilizing HEPA equipped air filtration units.</u></li> <li>5. <b>Remove</b> or <b>isolate</b> HVAC systems in area where work is being performed.</li> <li>6. <b>Do not remove</b> barriers from work site until complete and project is thoroughly cleaned by EMS.</li> <li>7. <b>Vacuum</b> work with HEPA filtered vacuum.</li> <li>8. <b>Wet</b> mop with disinfectant.</li> <li>9. <b>Remove</b> barrier material <b>carefully</b> to minimize spreading of dust and debris associated with construction.</li> <li>10. <b>Contain</b> construction waste before transport in tightly covered containers.</li> <li>11. <b>Cover</b> transport receptacles or cart and tape covering in place.</li> </ol>	<ol style="list-style-type: none"> <li>1. Do not remove barriers from work area until completed project is inspected by the owner's Safety Department and Infection Prevention Coordinator and thoroughly cleaned by (EMS) Environmental Management Services.</li> <li>2. Remove barrier materials carefully to minimize spreading of dirt and debris associated with construction.</li> <li>3. Vacuum work area with HEPA filtered vacuums.</li> <li>4. Wet mop area with disinfectant.</li> <li>5. Remove isolation of HVAC system in areas where work is being performed.</li> </ol>
CLASS IV	<p><b>Same as Class III plus the following:.</b></p> <ol style="list-style-type: none"> <li>1. <b>Seal</b> holes, pipes, conduits and penetrations appropriately.</li> <li>2. <b>Construct</b> anteroom &amp; <b>require</b> all personnel to pass through this room so they can be vacuumed using a HEPA vacuum cleaner before leaving worksite or they can wear cloth or paper coveralls that are removed each time they leave the work site.</li> <li>3. <u><b>Wear</b> shoe covers when within entering work site.</u></li> </ol>	<p><b>Same as above plus:</b></p> <ol style="list-style-type: none"> <li>1. Contain construction waste before transport in tightly covered containers.</li> <li>2. Cover transport receptacles or carts. Tape covering unless solid lid</li> <li>3. Vacuum work area with HEPA filtered vacuums.</li> <li>4. Wet mop area with disinfectant.</li> </ol>



**Step 4. 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 5. Identify specific site of activity eg, patient rooms, medication room, etc.****Step 6. Identify issues related to: ventilation, plumbing, electrical in terms of the occurrence of probable outages.** \_\_\_\_\_**Step 7. Identify containment measures, using prior assessment. What types of barriers? (Eg, solids wall barriers); Will HEPA filtration be required?**

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

**Step 8. Consider potential risk of water damage. Is there a risk due to compromising structural integrity? (eg, wall, ceiling, roof)****Step 9. Work hours: Can or will the work be done during non-patient care hours?****Step 10. Do plans allow for adequate number of isolation/negative airflow rooms?****Step 11. Do the plans allow for the required number & type of handwashing sinks?****Step 12. Does the infection control staff agree with the minimum number of sinks for this project?**  
(Verify against AIA Guidelines for types and area)**Step 13. Does the infection control staff agree with the plans relative to clean and soiled utility rooms?****Step 14. Plan to discuss the following containment issues with the project team.**  
**Eg, traffic flow, housekeeping, debris removal (how and when),**


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<b><i>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</i></b>
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## Infection Prevention Construction Permit

<b>Construction Class:</b> I, II, III, IV <b>Project Name and Number:</b> <b>Location of Construction:</b> <b>Contractor Performing Work:</b> <b>FMSS Project Engineer:</b>	<b>Type:</b> A, B, C, D  <b>Risk Group:</b> Low, Medium, High, Highest <b>Permit #:</b>  <b>Project start date:</b>  <b>Estimate completion date:</b>  <b>Telephone:</b>
Type A: Inspection and non-invasive activities, minimal dust levels Type B: Small scale, short duration moderate dust level Type C: Generates moderate to high levels of dust Type D: Major duration and construction activities requiring consecutive work shift	
CLASS I	1. Work performed is limited to inspections and minor installations. 2. Execute work by methods to minimize raising dust from inspection operations. 3. Immediately replace ceiling tiles displaced for visual inspection. Only 3-5 tiles may be removed at one time 4. Permit does not need to be posted for this classification.
CLASS II	1. Obtain and post infection control permit at work location before work begins. 2. Provide active means to prevent air borne dust from dispersing into atmosphere. 6 mil/fire resistant poly (plastic) barrier at entrance for short term work. Water mist work surfaces to control dust while cutting or use vacuum device. 3. Place dust mat at entrances and exits of work sites. Seal unused doors with tape. 4. Isolate HVAC and seal/cover air vents. 5. Contain construction waste before transport in tightly covered containers using assigned exit route. 6. Wipe surfaces with disinfectant. Wet mop and/or vacuum with HEPA filtered vacuum before leaving.
CLASS III	1. Obtain and post infection control permit at work location before work begins. 2. Follow all requirements listed for Class II in addition to requirements listed below. 3. Isolate HVAC supply and return ductwork to prevent contamination of system. 4. Complete all critical dust barriers (hard wall) as well as the creation of an anti-room where required for inspection by ICRA Inspection Team (Safety Officer, IC Nurse, Project Engineer) before work begins. 5. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units. Change filters 6. Vacuum work area with HEPA filtered vacuums. Wet mop with disinfectant. 7. Obtain ICRA Inspection Team approval before construction and prior to removal of any dust partitions 8. Contain construction waste before transport in tightly closed containers using the assigned exit route.
CLASS IV	1. Obtain and post infection control permit at work location before work begins 2. Follow all requirements listed for Class II & III in addition to requirements listed below 3. Isolate HVAC supply and return ductwork to prevent contamination of system. 4. Complete all critical dust barriers (hard wall barrier) as well as the creation of an anti-room where required. All personnel entering and leaving work site must be vacuumed using a HEPA filtered vacuum cleaner or wear cloth or paper coveralls and shoe covers that are removed each time they leave the work site. 5. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units. Change filters regularly. Seal holes, pipes, conduits and punctures appropriately. 6. Wet mop with disinfectant. Vacuum work area with HEPA filtered vacuums. 7. Contain construction waste before transport in tightly closed containers using the assigned exit route.
<b>Additional Requirements:</b>	
<b>Infection Prevention Coordinator:</b>	<b>Date:</b>
<b>Safety Officer:</b>	<b>Date:</b>
<b>FMS Project Engineer:</b>	<b>Date:</b>

**INFECTION PREVENTION CONSTRUCTION CHECKLIST****Location:** \_\_\_\_\_ **Date:** \_\_\_\_\_**Project COTR:** \_\_\_\_\_**Safety Representative:** \_\_\_\_\_**Infection Prevention Coordinator:** \_\_\_\_\_**Contractor Performing Work:** \_\_\_\_\_**CONSTRUCTION ACTIVITY:** **YES** **NO****Type A: Inspection and non-invasive activities,  
minimal dust levels**☐☐**Type B: Small scale, short duration moderate  
dust levels**☐☐**Type C: Generates moderate to high levels  
of dust**☐☐**Type D: Major duration and construction activities  
requiring consecutive work shift**☐☐**INFECTION PREVENTION RISK GROUPS:****Low Risk:** \_\_\_\_\_**Medium Risk:** \_\_\_\_\_**High Risk:** \_\_\_\_\_**Highest Risk:** \_\_\_\_\_**Scope of work:** \_\_\_\_\_

Date: \_\_\_\_\_ Location: \_\_\_\_\_ Class of Precautions: \_\_\_\_\_

**BARRIERS:****YES****NO**

Construction signs posted for the area

- Construction site- DO NOT ENTER

- Emergency contact information

- Infection Control Instructions

Door properly closed and sealed

Floor mats/dust tacks mats at entrance and changed

Floor area clean, no dust tracked

Barrier intact

Door sweep

Door closure device

Door/tools locked when no one in area

**AIR HANDLING**

All windows closed behind barrier

Negative air at barrier entrance

Negative air machine running

Hepa filter below 2 (above 2 filter change)

**PROJECT AREA:**

Debris removed in covered container daily

Debris removed via designated exit route

Trash in appropriate container

Routine clearing done on job site

If chute used, it is not adjacent to open windows or

HVAC air intakes

HVAC systems isolated, return ducts covered

**TRAFFIC CONTROL:**Restricted to construction workers and necessary  
staff only

All doors and exits free of debris

ID badges worn and visible by construction workers

**Comments:****Signatures:****Project COTR:** \_\_\_\_\_**Safety Representative:** \_\_\_\_\_**Infection Prevention:** \_\_\_\_\_

## Infection Prevention – Construction Services

*The goal of the Infection Prevention Program is to identify and reduce the risks of acquiring and transmitting infections among patients, employees, and visitors.*



During construction, renovation and minor improvement projects, hidden infectious disease hazards may be released into the air, carried on dust particles or on clothing - for example, fungal organisms such as *Aspergillus*. *Aspergillus* species may be found in decaying leaves and compost, plaster and drywall, and settled dust. These organisms usually do not cause problems in healthy people, but a hospital is full of sick patients! *Aspergillus* and other fungal organisms can cause illness and even death in transplant patients, cancer treatment patients, and patients with lung problems or poor immunity. Therefore, it is critical that you do your part to keep our patients, employees, and visitors as safe and healthy as possible. We, in turn, will make conditions as safe as possible for you.

### 1. Medical Waste:

- a. We will remove any medical waste, including sharps containers (for used needles and syringes), from construction areas prior to the start of the projects.
- b. If you (contract workers) find any needles, syringes, sharp medical objects, please notify Infection Control IMMEDIATELY.

### 2. Barrier Walls:

- a. The construction areas MUST be kept separated from patient care areas by barriers that keep the dust and dirt inside the worksite.
- b. The walls must provide a complete seal of the construction area from adjacent areas.
- c. The barrier types must be constructed with the following materials/specifications and comply with National Fire Protection Association (NFPA) standards such as fire retardant polyethylene barrier (minimum 6-mil thickness.) for projects less than 72 hours, gypsum wall board, fire rated reinforced plastic fiberglass, masonite painted with fire resistant paint.
- d. Zip walls/door in polyethylene for entrances.

### 3. Environmental Control:

- a. Negative air pressure must be maintained within the construction area.
- b. Demolition debris is removed in tightly fitted covered carts - use specified traffic patterns.
- c. Exterior window seals are to be used to reduce the amount of outside excavation debris coming into the building.
- d. If demolition chutes are used, they must be sealed when not in use; the chute and damper should be sprayed with water, as necessary to maintain dust control.
- e. Control, collection and disposal must be provided for any drain liquid or sludge found when demolishing plumbing.
- f. Sticky or walk-off mats are placed immediately outside the construction zone and changed whenever necessary to control the spread of dust and dirt.
- g. Containment cubes keep air from dissipating into the halls.



### 4. Traffic Control

- a. Use designated entry and exit procedures.
- b. Keep all egress pathways free of debris.
- c. No unauthorized personnel should be allowed to enter construction areas.
- d. Use designated elevators only.

### 5. Cleaning

- a. Keep the construction area clean on a DAILY basis.
- b. Dust and dirt **must** be kept to a minimum. Use of HEPA vacuum should be used.



### 6. Workers

- a. Clothing must be free of loose soil and debris when exiting the construction area.
- b. Use personal protective equipment (masks, face shields, etc.) as indicated for the task at hand.
- c. Handwashing is the best method of reducing the transmission of infection: always wash your hands with soap and water after visiting the restroom, before eating, when leaving the construction site.

### 7. Accidents

- a. For needlesticks or other sharps accidents and body fluid exposures; wash skin with soap and water and flush eyes/nose/mouth with large amounts of water.
- b. Report the incident to your supervisor and report to the Safety and Health Manager for further treatment options.

**Questions? Please feel free to call Infection Prevention at ext. 7979.**

## SAFETY AND HEALTH DURING CONSTRUCTION ACTIVITIES

1. SCOPE/EFFECT: This Medical Center Policy (MCP) affects all employees, patients and visitors.

2. PURPOSE:

a. To establish policy and procedures to ensure that construction projects will be planned, coordinated and regularly inspected to ensure compliance with applicable fire, infection control, environmental, security, safety and occupational health regulations and policies.

b. Construction activities shall be defined to include delegated minor, non-recurring maintenance projects and major projects, performed by contractors or purchase and hire personnel, as well as station-level projects performed by contractors, purchase and hire personnel or station Maintenance and Operations (M&O) personnel.

3. POLICY:

a. In order to protect patients, staff, visitors and contractors from safety and health hazards associated with construction activities, this policy is established for the VAMC, Wilkes-Barre and for all property where construction is undertaken. This policy requires that strategies be established to control the hazards inherent in conducting construction or maintenance operations in areas that are occupied by patients, visitors or healthcare staff. These strategies include the assignment of appropriate responsibility at all levels of the organization, establishing and maintaining the necessary expertise to manage an effective construction health and safety program, applying technical guidance and best practices to assist in managing the program and providing a construction safety multi-disciplinary team to oversee and enforce the application of this policy.

b. In addition, it is the intention of this construction safety program to reduce the potential for injury and illness to VA patients, employees and visitors that might result from unsafe construction activities; to increase the level of construction safety expertise of VA employees; to decrease the potential for serious Occupational Safety and Health Administration (OSHA) violations; to provide a guideline for addressing safety-related construction issues; and to reduce the potential for property and liability exposures due to construction-related activities.

c. Proper application of this program will reduce the potential for liability, which could result from construction accidents, life safety deficiencies or infection control failures.

#### 4. PROCEDURE:

a. The medical center has established a multi-disciplinary Construction Safety Committee with representatives from the following areas:

- ☐ Infection Prevention & Control
- ☐ Patient Safety
- ☐ Occupational Safety and Health
- ☐ Police
- ☐ Engineering
- ☐ Local Union Safety Representatives (from affected bargaining units)
- ☐ Contracting
- ☐ Green Environmental Management Systems (GEMS)

b. This multi-disciplinary committee performs the following functions:

(1) Protect patients, visitors, and employees from traumatic injury, as well as occupational and facility-associated infections.

(2) Oversee compliance with OSHA and State construction safety regulations.

(3) Oversee compliance with Environmental Protection Agency (EPA) and state environmental regulations.

(4) Respond to, investigate and report violations of these policies to upper management.

(5) Meets monthly and files reports to the VAMC Safety/Environment of Care Committee quarterly.

(6) Determines the scope and depth of safety, infection control, environmental and security procedures appropriate for all construction work.

(7) Develops threshold criteria for each level of intervention. For example, after review, some projects may require only VA Competent Person surveillance to ensure employee safety and OSHA compliance, while other projects will require all disciplines to be involved.

(8) Ensures submittals for contract construction or renovation work include the names, qualifications, and training dates for the contractors' Competent Person designated to administer the site-specific safety program, as well as the Competent Person for other activities as required by OSHA regulations (such as scaffolds, cranes, excavations, etc.).

(9) Conducts Infection Control Risk Assessments (ICRA). Using the current American Institute for Architects Guidelines, the staff must conduct and document ICRA for all construction projects during the design or planning stage of the work. ICRAs must be documented in writing and focus on eliminating, or minimizing, the risk of infection during construction and renovation activities. The complexity of the ICRA report is determined by the complexity of the threats posed by the construction project.

Assigned VA staff, including resident engineers or project managers for major construction, must maintain compliance during the construction phase of the work.

(10) Identifies Interim Life Safety Measures (ILSMs). Facility Safety and Engineering staff must ensure that ILSMs are implemented on all construction work in accordance with The Joint Commission Environment of Care standards. ILSMs are required when construction activities pose significant temporary Life Safety Code deficiencies or hazards. Each medical facility must have a local policy addressing ILSMs in accordance with The Joint Commission requirements. Implementing ILSMs is the responsibility of the local medical facility and construction contractors in accordance with VA Master Specification 01010, General Requirements.

(11) Participates in all phases of construction work from planning through completion. This includes review and approval the construction plans, contract specifications, and contract submittals related to construction safety and health and any other documents that may assist in the implementation of an effective construction safety program. The Construction Safety Committee must be involved early in the process and continue oversight on a regular basis to avoid costly and disruptive delays.

(12) Ensures the construction safety program includes periodic construction site hazard surveillance activities with appropriate membership, scope, and frequency for each project as determined by the Competent Person, the ILSMs and ICRA reports, Hazard Surveillance deficiencies, type of corrective action, and time and date of correction. Ensures corrective actions are tracked to completion.

(13) Implements procedures to ensure general contractors exercise their responsibility for ensuring subcontractors comply with this safety and health policy, and all other related contract requirements.

(14) Ensures all contractors entering VA property comply with the security management program. At a minimum, contractors must notify and obtain permission of the VA Police, be identified by project and employer, and be restricted from unauthorized access.

(15) Requires the contractors' Competent Person to implement and maintain effective safety programs that identify and control hazards that may cause injury or illness to VA patients, staff, visitors, and contractor employees.

(16) Evaluates the effectiveness of the construction safety program in an annual report to the facility Safety and Environment of Care Committee, or equivalent committee.

c. General and Subcontractors Training Requirements: All on-site general and subcontracting construction workers are required to complete the OSHA 10-hour construction worker course and/or the 30-hour construction course. The determination for training is based on the project hazards and complexity, State and Federal regulations and VA requirements.



d. VA staff training requirements

(1) All appointed Competent Persons, Contracting Officer Representative (COR) and facility Safety Program Managers are required to complete OSHA's 30-hour construction safety training and maintain 10-hours of construction safety-related training every two years.

(2) Engineering Supervisors and foreman who oversee construction work complete OSHA 10-hour and 30-hours construction safety course and maintain 10-hours of construction safety-related training every two years.

(3) The construction safety training has to be documented in each person's training record.

5. RESPONSIBILITY:

a. Director, Wilkes-Barre VA Medical Center

(1) Establish and monitor an effective facility construction safety program.

(2) Insure funding is available for appropriate staff to receive training in construction safety.

(3) Develop a written facility policy addressing the responsibilities of the Construction Safety Committee.

b. Associate Director, Wilkes-Barre VA Medical Center receives delegated responsibility from the Director, Wilkes-Barre VA Medical Center, as appropriate, for oversight of these policies.

c. Chief, Facilities Management Service

(1) Receives delegated responsibility from the Associate Director, Wilkes-Barre VA Medical Center, as appropriate, for oversight of these policies.

(2) Insures policies are addressed by all sections of engineering having oversight of construction.

(3) Participates in VHA or OSHA's 30-hour Construction Safety Training and refresher courses.

(4) Nominates individual to be appointed as Construction Safety Officer (CSO) for each project.

d. Supervisory Project Engineer

(1) Chairs the Construction Safety Committee, which will meet monthly.

(2) Works through safety and health staff, CORs, maintenance staff, contractors and the Construction Safety Committee to plan, coordinate and monitor the construction safety program for all projects at the facility.

(3) Participates in VHA or OSHA's 30-hour construction safety training and refresher courses.

(4) Supports the competent person, Safety Officer, Infection Control Practitioner, Contracting Officer and engineering staff in implementation of the construction safety program.

(5) Works with contracting staff to insure competent staff are assigned as CORs to oversee work.

(6) Participates in periodic inspections of construction sites to ensure compliance with safety elements of the construction contract and performance of the program.

(7) Works with competent person, Safety Officer, Infection Control Practitioner to identify and complete the attached Pre-Construction Risk Assessment (PCRA) for each project. (Attachment B)

e. Maintenance and Operations Foreman

(1) Participates in VHA or OSHA's 30-hour construction safety training and refresher courses.

(2) Participates in periodic inspections of in-house construction sites to ensure compliance with safety elements of the construction contract and performance of the program.

(3) Insures in-house work forces have necessary training and competency for tasks being performed.

f. Supervisory Biomedical Engineer

(1) Insures all construction accomplished in support of major equipment installations (as a part of the equipment purchase) are in compliance with this policy and these procedures.

(2) Participates in VHA or OSHA's 30-hour construction safety training program and refresher courses.

g. Contracting Officer

(1) Participates in OSHA's 30-hour construction safety training and refresher courses.

(2) Ensures safety elements of this policy are included in each construction contract.

(3) Evaluates past safety records of prospective contractors and considers this information in the contract award process.

(a) At a minimum, ensures that all solicitation and contracts specify that contractors must not have more than three serious, one repeat, or one willful OSHA violations(s) in the past (3) years.

(b) Ensures that all Solicitations and contracts specify that Contractors have an Experienced Modifications Rate (EMR) of equal to or less than 1.0.

(4) Serves on the facility Construction Safety Committee/subcommittee to ensure contracts meet the committee's requirements.

(5) Supports the competent person, Safety Officer, Resident Engineer, and appropriate staff in implementing the construction safety program.

(6) Works with the Supervisory Project Engineer to assign necessary competent COR.

(7) Ensure that construction contracts awarded after July 31, 2005, specify that on-site general and sub-contractor's construction workers have completed the OSHA 10-hour construction worker course, the 30-hour construction course, or other relevant competency training, as determined by the VA CP with input from the Construction Safety Committee. The determination for training is based on the project hazards and complexity, State and Federal regulations and VA requirements.

(8) Appoints individual to be appointed as Construction Safety Officer (CSO) for each project.

h. Contracting Officer's Representative (COR)

(1) Participates in VHA or OSHA's 30-hour construction safety training program and refresher courses.

(2) Is trained and designated as a competent person for the purposes of this policy.

(3) As the team member most familiar with the technical aspects of his/her designated project, inspects his/her projects on a daily basis to identify and document deficiencies in the work including safety and infection control. Acts to correct deficiencies on-the-spot whenever possible.

(4) Participates in the VHA facility multi-disciplinary team established for construction.

(5) Consults with other members of the team, as appropriate, to assure that all deficiencies are handled properly.

(6) Consults with member of the team, during design or planning to establish the risks to be addressed and the degree of protection appropriate to the situation.

(7) Monitors compliance with relevant safety and health requirements by the contractor in the field. Completes Construction Rounds Log on a daily basis to document contractor compliance for Safety, ILSM, and Infection Control Issues. (Attachment E)

(8) Ensures that the specific safety requirements for construction operations are implemented and continuously observed during the course of all projects subject to this policy.

i. Safety and Occupational Health Manager

(1) Participates in VHA or OSHA's 30-hour construction safety training and refresher courses.

(2) Ensuring that VHA policy for the construction safety program is implemented within the Medical Center.

(3) Ensures necessary and relevant ILSMs (Interim Life Safety Measures) are established and implemented using the attached the Interim Life Safety Measures form. (Attachment C) - Conducts required additional training for compliance with identified ILSMs.

(4) Renders technical advice and assistance as required in connection with life safety and fire protection issues during construction and project design and development.

(5) Oversees compliance with OSHA and other relevant construction safety regulations.

(6) Ensures VAMC staff receives training required by this memorandum.

(7) Conducts weekly inspections of construction sites to ensure compliance with safety elements of the construction contract using the attached Job Safety Check Sheet. (Attachment A)

(8) Stops unsafe work or activities not complying with the contract or OSHA, and notifies the Contracting Officer immediately.

(9) Approves corrective actions.

(10) Ensures the construction safety program includes appropriate periodic construction site hazard surveillance.

j. Infection Prevention Nurse

(1) Advises and/or provides recommendations on exposure mitigation and the prevention of facility associated infections in patients, staff, and visitors.

(2) Coordinates with the manager of each construction project (in-house and contract) to conduct an Infection Control Risk Assessment (ICRA) during the planning and/or design stage of the work. ICRA's must be documented in writing and focus on eliminating, or minimizing, the risk of infection during construction and renovation activities using the attached Infection Control Risk Assessment form. (Attachment D)

(3) Monitors infection control during construction activities as indicated in ICRA for that project.

(4) Participates in VHA or OSHA 10 Hour Construction Safety Training and refresher courses.

k. GEMS Coordinator

(1) Provides guidance on environmental issues during design stage.

(2) Monitors contractor conformance to contract specifications, including environmental compliance and pollution prevention.

(3) Participates in VHA or OSHA 10 Hour Construction Safety Training and refresher courses.

I. Police and Security

(1) Ensures all contractors entering VAMC property comply with the security management program. At a minimum, contractors must notify and obtain permission of the VAMC Police, be identified by project and employer, and restricted from unauthorized access.

(2) Conducts periodic surveillance of site security and the integrity of barriers for trenches and other hazards.

(3) Participates in VHA or OSHA 10 Hour Construction Safety Training and refresher courses.

6. CUSTOMER SATISFACTION: Employee and patient customer satisfaction were considered in the development of this policy.

7. RESCISSION: Medical Center Policy 18S-12-346 dated September 11, 2012, same subject.

8. REFERENCES: VHA Emerging Pathogens Guidebook, 1998, Center for Engineering and Occupational Safety and Health available electronically at: <http://vaww.ceosh.med.va.gov>  
National Fire Protection Association (NFPA) Standards  
APIC Infection Control Tool Kit Series: Construction and Renovation available from the Association of Professional Infection Control Practitioners and Epidemiologists (APIC).  
Guidelines for Design and Construction of Hospital and Health Care Facilities, American Institute of Architects, Washington DC 2014.  
Guidelines on Assessment and Remediation of Fungi in Indoor Environments, New York City Department of Health, Bureau of Environmental and Occupational Disease Epidemiology, at: [http://www.lchd.org/envirohealth/aq/pdfs/NYC DOH Guidelines.pdf](http://www.lchd.org/envirohealth/aq/pdfs/NYC%20DOH%20Guidelines.pdf)  
Infection Control during Construction. A Guide to Prevention and JCAHO Compliance, Wayne Hansen, Editor, Opus Communications, 2002.  
OSHA Regulations for Construction Safety, 29 CFR 1926, Available at: <http://www.osha.gov>  
Current JCAHO Standards from the Joint Commission on the Accreditation of Healthcare Organizations.  
VHA Directive 7701, Occupational Safety and Health.  
VHA Handbook 7701.1, Occupational Safety and Health Program Procedures.  
VA Directive 7700, Occupational Safety and Health.  
Construction Safety Council, at: <http://www.buildsafe.org>

VHA Directive 2011-036, Safety and Health during Construction Activities.

9. DISTRIBUTION: Electronic Access to All Employees.

10. ATTACHMENTS: A, B, C, D, E

Attachment A - Job Safety Check Sheet

Attachment B - Pre-Construction Risk Assessment

Attachment C - Interim Life Safety Measures

Attachment D - Infection Control Risk Assessment

Attachment E - Construction Daily Rounds Log – Safety/ILSM/Infection Control Issues



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X

*Michael D. Adelman, MD.*

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Signed by: Adelman, Michael

## JOB SAFETY CHECK SHEET

Company: \_\_\_\_\_ Division: \_\_\_\_\_ Date: \_\_\_\_\_

Time: \_\_\_\_\_

Job Name/Location: \_\_\_\_\_ Job Number: \_\_\_\_\_

Crew Size: \_\_\_\_\_

Type of Work: \_\_\_\_\_

Weather: \_\_\_\_\_ Temperature: \_\_\_\_\_

Inspected By: \_\_\_\_\_

Title: \_\_\_\_\_

Inspected By: \_\_\_\_\_

Title: \_\_\_\_\_

	No.	Grade 1 to 5 (5 is Best)	N/A	COMMENTS – Note Improvements Needed:
<b>A. Personal Protective Equipment:</b>				
1. Hard hats in use by all personnel.	A1	1 2 3 4 5		
2. Eye protection in use by all personnel.	A2	1 2 3 4 5		
3. Hearing protection (engineering controls, double protection for high noise areas, rotation of employees).	A3	1 2 3 4 5		
4. Proper footgear and protective clothing.	A4	1 2 3 4 5		
5. Fall protection in use.	A5	1 2 3 4 5		
6. Respirators/face masks in good condition and used as required (medical evaluation and fit test).	A6	1 2 3 4 5		
<b>B. Tools and Equipment:</b>				
1. Tools and equipment in good condition.	B1	1 2 3 4 5		
2. All equipment properly guarded.	B2	1 2 3 4 5		
3. Electrical equipment connected properly, grounded and in good condition; GFCI; automatic magnetic cut-off for woodworking tools.	B3	1 2 3 4 5		

- |   |           |          |          |          |          |          |
|---|-----------|----------|----------|----------|----------|----------|
| 4. Air/sandblast hoses in good condition and properly wired.            | <b>B4</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| 5. Compressors equipped with automatic shut-off.                        | <b>B5</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| 6. Ladders in good condition; tied back; extended 3 ft. beyond landing. | <b>B6</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |

**C. Scaffolding:** ☐ Suspended ☐ Tubular ☐ Other (***Rope Falls Not Permitted***)

- |  |           |          |          |          |          |          |
|--|-----------|----------|----------|----------|----------|----------|
| 1. Scaffold in good repair; guardrails; toe boards and wire mesh in place. | <b>C1</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| 2. Counterweights marked with weight and in proper ratio.                  | <b>C2</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| 3. Scaffold tied back and tied in.   | <b>C3</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| 4. Passageways under scaffold blocked.                                     | <b>C4</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |

**D. Hazardous Chemicals/Air Contaminants:**

- |  |           |          |          |          |          |          |
|--|-----------|----------|----------|----------|----------|----------|
| 1. Hazard Communication Right-To-Know poster / written program on job. | <b>D1</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| 2. List of hazardous materials on job.                                 | <b>D2</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| 3. Material Safety Data Sheets.  | <b>D3</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| 4. Employees are familiar with program.                                | <b>D4</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| 5. Proper containers in use with correct labels.                       | <b>D5</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |

**E. General:**

- |  |           |          |          |          |          |          |
|--|-----------|----------|----------|----------|----------|----------|
| 1. Safe access to work area.                                       | <b>E1</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| 2. Good housekeeping and material storage.                         | <b>E2</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| 3. Barricades/debris protection/warning signs in place.            | <b>E3</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| 4. Floor and wall openings properly protected.                     | <b>E4</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| 5. Shoring properly installed; engineer's stamped drawings on job. | <b>E5</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| 6. Eye wash available.   | <b>E6</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| 7. Fire extinguisher: Good condition; current                      | <b>E7</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |



inspection tag; within 50 ft.

8. First aid: Kit and certified employees. **E8**    **1 2 3 4 5**

9. Trucks: Safe/good condition; D.O.T. regulation compliance. **E9**    **1 2 3 4 5**

**F. Paperwork and Other Postings:**

1. OSHA poster/log. **F1**    **1 2 3 4 5**

2. Emergency phone number card. **F2**    **1 2 3 4 5**

3. Drug-Free Workplace Policy Summary and poster (if applicable). **F3**    **1 2 3 4 5**

4. Job logs and Job Safety Check Sheets. **F4**    **1 2 3 4 5**

5. Site-Specific Safety Plan (if applicable). **F5**    **1 2 3 4 5**

<h2 style="margin: 0;">Pre-Construction Risk Assessment</h2> <h3 style="margin: 0;">Infection Control and Safety Construction Permit</h3>		
<b>Location of Construction:</b>	<b>Project Start Date:</b>	
<b>Project Coordinator:</b>	<b>Estimated Duration:</b>	
<b>Contractor Performing Work:</b>	<b>Permit Expiration Date:</b>	
<b>Supervisor:</b>	<b>Telephone:</b>	
<b>Description of Project:</b>		
<b>Construction Activities:</b>		
The following projects /activities do not require completion of the Pre-Construction Risk Assessment form:		
1. Paint and wallpaper in business offices and non-patient areas.		
2. Paint in patient room if closed for painting and less than 3 sq. ft. of wall needs patched. Filter for room unit changed after painting.		
3. Installation of soap dispenser/needle box/paper towel holder in patient room.		
4. Repair of window blind.		
5. Ceiling tile replacement for areas less than 50% of the total square footage of the room in Risk Group I areas.		
6. Ceiling tile replacement for area less than (5) 2 X 2 tiles in a patient area if patient is out of the immediate area and clean up can be accomplished before patient returns.		
7. Minimum repair of nurse call system/TV/Bed/Telephone.		
8. Check or replace electric outlet.		
9. Replace light bulb.		
10. Unstop sink/commode with no water on floor.		
11. Unstop commode when water on floor requires maintenance to have Housekeeping clean area immediately.		
12. Repair medical gas outlet. (Front Body)		
13. Air balance readings.		
14. Check air-conditioning.		
<b>UTILITY SHUTDOWNS</b>		
Yes	No	
		<b>Will temporary shutdown of any utilities or systems be required?</b>
		<i>(All shutdowns must be scheduled not less than 10 days in advance through FES. Confirmation is required by all departments: FES, Safety, Fire Chief, and others if identified.)</i>
		• Fire alarm – <i>(If out for more than 4 hours, Interim Life Safety Measures must be implemented.)</i>
		• Sprinkler – <i>(If out for more than 4 hours, Interim Life Safety Measures must be implemented.)</i>
		• Electrical
		• Domestic water
		• Oxygen
		• Sewage
		• HVAC
		• Other (Specify)
		<b>Is this an emergency shutdown for repairs?</b>

SAFETY / ENVIRONMENTAL		
Yes	No	
		<b>Are Emergency Procedures in place and posted on each job for accidental events that could greatly impact Patient Care or Life Safety to the facility? Included in these procedures are such things as:</b>
		<ul style="list-style-type: none"> <li>Emergency telephone numbers of emergency responders and key departments.</li> </ul>
		<ul style="list-style-type: none"> <li>A plan that indicates the locations of main valves, switches and controls for the area in case of an emergency.</li> </ul>
		<ul style="list-style-type: none"> <li>A contingency plan for unexpected utility outages.</li> </ul>
		<b>Will any work require implementation of the Interim Life Safety Measures (ILSM) during this project per JCAHO requirements? Actions for which ILSM's must be implemented include but are not limited to:</b>
		<ul style="list-style-type: none"> <li>Any construction that impacts an egress path from an area, an EXIT or stairs</li> </ul>
		<ul style="list-style-type: none"> <li>Any construction that breaches fire or smoke-rated walls or enclosures</li> </ul>
		<ul style="list-style-type: none"> <li>Taking the main fire protection system out of service (sprinkler)</li> </ul>
		<ul style="list-style-type: none"> <li>Taking the main fire alarm system out of service</li> </ul>
		<ul style="list-style-type: none"> <li>Taking any "area" fire-detection or fire alarm system out of service for more than 4 hours within a 24-hour period</li> </ul>
		<b>Implementation of the ILSM requires a fire watch and the ILSM forms to be completed (forms are to be obtained from the Safety Office)</b>
		<b>Will the project affect <i>pedestrian or vehicular</i> traffic patterns in area? Attach a proposed plan showing how traffic flow will be maintained during each phase of construction. Include locations and types of temporary traffic, directional, information and egress signage as required. Include signage in Contract for construction projects.</b>
		<b>Prior to any construction activities, the following must be completed:</b>
		<ul style="list-style-type: none"> <li>Separation wall must be constructed. (Applies to any required separation – fire/safety, environmental or infection control)</li> </ul>
		<ul style="list-style-type: none"> <li>Fire protection systems must remain functional.</li> </ul>
		<ul style="list-style-type: none"> <li>Provide fire extinguishers in all work areas in accordance with OSHA and NFPA requirements.</li> </ul>
		<ul style="list-style-type: none"> <li>Maintain exit signs and lights in all work areas.</li> </ul>
		<ul style="list-style-type: none"> <li>Provide new exit signs and emergency egress lighting for all areas outside of the construction area where means of egress, exit path or signage have been modified or obscured by construction separations in accordance with Code requirements.</li> </ul>
		<ul style="list-style-type: none"> <li>Attach signs reading, "Construction Area – Do Not Enter", to the outsides of doors at all construction area entrances.</li> </ul>
		<ul style="list-style-type: none"> <li>Adhere to all Infection Control requirements indicated below.</li> </ul>
		<b>Maintain a clean and orderly work area.</b>
		<b>Will any of the following environmental hazards be present?</b>
		<ul style="list-style-type: none"> <li>Hazardous chemicals – Identify how fumes and odors will be controlled. <b>MSDS Sheets are required.</b></li> </ul>
		<ul style="list-style-type: none"> <li>Asbestos / abatement – <b>Notify Safety and FES prior to any work activities.</b></li> </ul>
		<ul style="list-style-type: none"> <li>Silica – <b>If concrete block will be cut, review requirements with Safety and the COTR.</b></li> </ul>
		<b>Will there be hot work done on this project?</b>
		<ul style="list-style-type: none"> <li>If so, then a current Hot Work Permit must be posted on the job site and daily inspection logs maintained.</li> </ul>
		<ul style="list-style-type: none"> <li>All hot work must have a fire watch assigned to each area while the hot work is being performed <b>and until 30 minutes after completion (or 2-hours after completion for torch-applied roofing).</b></li> </ul>
		<b>Will noise or vibration be generated that will impact a department adjacent to, above, or below the construction area?</b>
		<ul style="list-style-type: none"> <li>If so, Safety and FES must be notified and the work must be scheduled in coordination with the affected Departments.</li> </ul>

		<ul style="list-style-type: none"> <li>How will the noise / vibration be reduced to an acceptable level?</li> </ul>
		<b>Will a Confined Space Entry be required on this project? If so, the Medical Center's confined space entry program must be followed.</b>
<b>INFECTION CONTROL</b>		
<p>The minimum required Infection Control (IC) prevention measures are listed for each of four classifications. An IC prevention measure classification must be assigned for each construction/work area. This assigned classification is based upon two factors: (1) Construction Activity Type and (2) the Risk Group of the surrounding occupancies. The Construction Activity Types are defined by the anticipated amounts of dust generated. The Risk Groups categorize departments/functions based on their risk for infection or contamination due to the airborne particles and micro-organisms. Contact the Safety Office and the Infection Control Coordinator if any activity is questionable under these guidelines.</p>		
<b>Construction Activity Type</b> <i>(complete the following itemized list)</i>		
Yes	No	
		<b>Type A – Inspections and Non-Invasive Activities</b>
		<ul style="list-style-type: none"> <li>Removal of ceiling tiles for visual inspection (limited to &lt; <b>10%</b> of total area)</li> <li>Painting (limited sanding to &lt;10% of area)</li> <li>Wall covering—Describe work to be done:</li> <li>Electrical trim work. Describe:</li> <li>Minor plumbing. Describe:</li> </ul>
		<b>Type B – Small scale, short duration activities that create minimal dust</b>
		<ul style="list-style-type: none"> <li>Installation of telephone and computer cabling</li> <li>Access to chase spaces through access doors/panels</li> <li>Sanding of walls for painting or wall covering (minor repairs only – not sanding for drywall finishing)</li> </ul>
		<b>Type C – Activities that generate moderate to high dust levels / Removal of fixed building components or assemblies</b>
		<ul style="list-style-type: none"> <li>Sanding of walls (&gt;50% of surface area) – including drywall finishing</li> <li>Removal of <input type="checkbox"/> floor coverings <input type="checkbox"/> ceiling tiles <input type="checkbox"/> casework (&gt;50% of surface area) Describe:</li> <li>Cutting of walls or ceiling. Describe:</li> </ul> <p><b><i>(Note that concrete/concrete block cutting requires special attention due to Silica dust exposure.)</i></b></p> <ul style="list-style-type: none"> <li>New wall construction</li> <li>Minor ductwork or electrical work above ceilings</li> <li>Major cabling activities</li> <li>Activity cannot be completed within a single work shift</li> </ul>
		<b>Type D – Major demolition and construction activities</b>
		<ul style="list-style-type: none"> <li>Consecutive work shifts</li> <li>Heavy demolition or removal of a complete ceiling system</li> <li>New construction</li> </ul>

Permit Request By (please print)	Safety Office Approval	Infection Control Coordinator Approval
Date:	Date:	Date:

**INTERIM LIFE SAFETY MEASURES (ILSM) EVALUATION SHEET**  
**For Deficiencies or Conditions as a Result of Construction**

Project No. \_\_\_\_\_

Date: \_\_\_\_\_

Project Title: \_\_\_\_\_

The following ILSM will be evaluated individually and initiated as needed to compensate for deficiencies or conditions as a result of construction. ILSM implementation will be documented on Attachment C.

1. Ensuring free and unobstructed exits. Buildings or areas under construction must maintain escape routes at all times for all occupants including construction workers. Affected personnel will be trained on any designated alternate exits. (Attachment B, Column A.) Exits in construction areas will be inspected daily.

Will any exits be obstructed or compromised?	Yes	No	N/A
--	-----	----	-----

If **yes** then:

a. Did the COR coordinate and document that affected personnel received training on alternate routes and exits?	Yes	No	N/A
---	-----	----	-----

b. Does the construction area(s) have designated and marked exit?	Yes	No	N/A
---	-----	----	-----

c. Are construction areas inspected daily to ensure exits are clear?	Yes	No	N/A
--	-----	----	-----

2. Ensuring free and unobstructed access to emergency services such as fire department, police etc. Every building and area will remain accessible and roadways will be maintained unobstructed within 20 feet of all buildings. (Attachment B, Column B.)

a. Were the construction plans reviewed to maintain access for emergency services?	Yes	No	N/A
--	-----	----	-----

b. Were the construction areas inspected daily and results recorded?	Yes	No	N/A
--	-----	----	-----

c. If necessary, were outside emergency services notified about the construction? (Attachment B, Column C.)	Yes	No	N/A
---	-----	----	-----

d. Were VA Police notified?	Yes	No	N/A
-----------------------------	-----	----	-----

Ensuring that fire alarm, detection and suppression systems are in good working order. A temporary, equivalent system will be provided when any fire system is impaired. Temporary systems will be inspected and tested monthly and results recorded. (Attachment B, Column D.)

*Note: The Life Safety Code, NFPA 101, requires that the municipal fire department be notified and a fire watch be provided whenever an approved fire alarm system is out of service for more than four (4) hours in a 24-hour period in an occupied building, or automatic sprinkler system is out of service for more than twelve (12) hours in a 24-hour period in an occupied building.*

Will any fire systems be impaired?	Yes	No	N/A
------------------------------------	-----	----	-----

If yes then:

a. Are temporary systems inspected and tested monthly & results recorded?

Yes	No	N/A
-----	----	-----

3. Ensuring that temporary construction partitions are smoke tight and built of noncombustible or limited combustible materials that will not contribute to the development or spread of fire. (Attachment B, Column E.)

a. Was the contractor briefed at pre-construction conference?	Yes	No	N/A
---	-----	----	-----

b. Are areas inspected daily and deficiencies recorded?	Yes	No	N/A
---	-----	----	-----

4. Providing additional fire-fighting equipment and training staff in its use. Evaluate the impact to emergency response teams and provide notification, if necessary. (Attachment B, Column F & G.)

Will additional fire-fighting equipment be needed?	Yes	No	N/A
--	-----	----	-----

If yes then:

a. Was additional training conducted and documented?	Yes	No	N/A
--	-----	----	-----

b. Were code teams notified?	Yes	No	N/A
------------------------------	-----	----	-----

c. Was the fire department notified?	Yes	No	N/A
--------------------------------------	-----	----	-----

d. Was the contractor briefed at the pre-construction conference of the need to provide adequate fire-fighting equipment and to train the construction workers?

Yes      No      N/A

5. Prohibiting smoking throughout the medical center buildings and in and near the construction areas. Smoking is only allowed in designated areas. The contractor will be briefed on the medical center's smoking policy at the pre-construction meeting. (Attachment B, Column H.)

Was the contractor briefed on the medical center's smoking policy?

Yes      No      N/A

6. Developing and enforcing storage, housekeeping, and debris removal practices that reduce the flammable and combustible fire load of the building to the lowest feasible level. (Attachment B, Column I)

a. Was the contractor briefed at the pre-construction conference of the storage and housekeeping requirements?

Yes      No      N/A

b. Are areas inspected daily and results recorded?

Yes      No      N/A

7. Conducting a minimum of two fire drills per shift per quarter. The COR will inform the Safety Manager of the need to conduct more fire drills. The Safety Manager will assume responsibility for completing the drills. (Attachment B, Column J)

a. Are fire drills being conducted as necessary?

Yes      No      N/A

b. Are any additional drills required?

Yes      No      N/A

8. Increasing hazard surveillance of buildings, grounds, and equipment with special attention to excavations, construction areas, construction storage, and field offices. (Attachment B, Column K.)

a. Are areas inspected daily and results recorded in a daily log?

Yes      No      N/A

- Means of egress are clear in construction areas.
- Access for the fire department and emergency services is clear.
- Note the status of fire detectors and sprinkler systems.
- Construction partitions are being maintained.

- Good housekeeping practices are being used in construction areas.
- Flammable and combustible fire loads are being kept to a minimum.
- Buildings, grounds, and equipment are being maintained in a safe manner.
- Smoking regulations are being enforced.

9. Training staff to compensate for impaired structural or compartmentalization features of fire safety. (Attachment B, Column L.)

a. Was all the required staff training completed?	Yes	No	N/A
---	-----	----	-----

10. Conducting organization-wide safety education programs to promote awareness of any life safety building deficiencies, construction hazards, and ILSM. (Attachment B, Column M.)

a. Was all the necessary information provided?	Yes	No	N/A
--	-----	----	-----



		A	B	C	D	E	F	G	H	I	J	K	L	M
	<b>Deficiencies or Conditions as a Result of Construction</b>	<b>Ensuring Egress</b>	<b>Emergency forces access</b>	<b>Emergency forces notification</b>	<b>Ensuring operational life safety systems (Provide fire watch if necessary)</b>	<b>Temporary construction barriers</b>	<b>Additional fire fighting equipment</b>	<b>Conducting additional training of incident response team</b>	<b>Prohibiting Smoking</b>	<b>Controlling combustible loading</b>	<b>Conducting 2 fire drills per shift in all areas</b>	<b>Increased hazard surveillance</b>	<b>Compartmentation training of personnel</b>	<b>Conducting organizational training on life safety</b>
1	Door locked against egress			X	X				X	X		X	X	
2	Lacking a code complying smoke barrier							X	X				X	
3	Fire exit stairs discharge improperly			X				X	X		X		X	X
4	Excessive travel distance to an approved exit								X	X		X	X	
5	Lack of two remote exits							X	X	X		X	X	
6	Nonconforming building construction type						X		X	X	X	X		X
7	Improperly protected vertical openings								X	X			X	
8	Large penetrations in fire/smoke barriers							X	X	X		X		
9	Corridor walls do not extend to the structure								X	X		X	X	
10	Hazardous areas not properly protected								X	X				
11	Blocking off an approved exit	X		X	X			X	X	X		X	X	
12	Rerouting of traffic to Emergency Room		X	X					X					
13	Major renovation of an occupied floor	X			X	X	X		X	X		X	X	
14	Replacing fire alarm system (out-of-service)			X	X			X	X	X		X		
15	Installing sprinkler system (out-of-service)			X	X		X		X	X		X		X
16	Significantly modifying smoke/fire barrier walls					X			X	X		X	X	
17	Adding an addition to an existing structure	X	X	X	X	X		X	X					X
18	Taking a fire alarm system out-of-service			X	X			X	X					
19	Taking a sprinkler system out-of-service			X	X			X	X					
20	Disconnecting alarm devices			X	X				X					

Based on the responses to the evaluation questions, provide a description of the Interim Life Safety Measures that will be implemented during the project to compensate for the deficiency or condition. Attach additional sheets if necessary.

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Project COR: \_\_\_\_\_ Date: \_\_\_\_\_

1. Safety Manager: \_\_\_\_\_ Date: \_\_\_\_\_

2. Chief Engineer: \_\_\_\_\_ Date: \_\_\_\_\_

## Infection Prevention 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><b>Inspection and Non-Invasive Activities.</b></p> <p>Includes, but is not limited to:</p> <ul style="list-style-type: none"> <li>▪ removal of ceiling tiles for visual inspection limited to 1 tile per 50 square feet</li> <li>▪ painting (but not sanding)</li> <li>▪ wallcovering, 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.</li> </ul>
TYPE B	<p><b>Small scale, short duration activities which create minimal dust</b></p> <p>Includes, but is not limited to:</p> <ul style="list-style-type: none"> <li>▪ installation of telephone and computer cabling</li> <li>▪ opening of no more than 1 tile per 10 square feet</li> <li>▪ access to chase spaces</li> <li>▪ cutting of walls or ceiling where dust migration can be controlled.</li> <li>▪ minor renovation of existing space</li> <li>▪ wet sanding of walls</li> <li>▪ floor covering removal (<b>without</b> sanding or grinding)</li> </ul>
TYPE C	<p><b>Work that generates a moderate to high level of dust or requires demolition or removal of any fixed building components or assemblies</b></p> <p>Includes, but is not limited to:</p> <ul style="list-style-type: none"> <li>▪ dry sanding of walls for painting or wall covering</li> <li>▪ removal of floor coverings (with sanding), ceiling tiles and casework</li> <li>▪ cutting of walls, removal of drywall or building finishes where work is limited to one room or suite</li> <li>▪ new wall construction</li> <li>▪ minor duct work, plumbing work, or electrical work above ceilings (not including system demolition or installation)</li> <li>▪ moderate renovation of existing space</li> <li>▪ major cabling activities</li> <li>▪ any activity which cannot be completed within a single work shift.</li> </ul>
TYPE D	<p><b>Major demolition and construction projects</b></p> <p>Includes, but is not limited to:</p> <ul style="list-style-type: none"> <li>▪ activities which require the closure of a unit/wing or relocation of an entire area</li> <li>▪ activities which require consecutive work shifts</li> <li>▪ demolition, removal, or installation of a complete cabling, HVAC, plumbing, medical gas, or electrical system</li> <li>▪ demolition of major fixed building components, assemblies, fit-out elements, or structural elements</li> <li>▪ new construction located in close proximity (as determined by the ICRA team) of the hospital building</li> <li>▪ outdoor construction of new structures located in close proximity to existing patient care facility</li> <li>▪ excavation activities within close proximity of hospital building.</li> <li>▪ new construction.</li> </ul>

**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
<ul style="list-style-type: none"> <li>Office areas</li> <li>Mechanical spaces</li> </ul>	<ul style="list-style-type: none"> <li>Cardiology</li> <li>Echocardiography</li> <li>Endoscopy</li> <li>Nuclear Medicine</li> <li>Physical Therapy</li> <li>Radiology/MRI/CT/PET</li> <li>Respiratory Therapy</li> <li>Primary care spaces</li> <li>Community Based outpatient clinics</li> </ul>	<ul style="list-style-type: none"> <li>Emergency Room</li> <li>Laboratories (specimen)</li> <li>Outpatient Surgery</li> <li>Pediatrics</li> <li>Pharmacy</li> <li>Post Anesthesia Care Unit</li> <li>Surgical Units</li> <li>Central Sterile supply storage</li> <li>Canteen/Kitchen</li> </ul>	<ul style="list-style-type: none"> <li>Any area caring for immunocompromised patients</li> <li>Cardiac Cath Lab</li> <li>Sterile Processing</li> <li>Intensive Care Units</li> <li>Medical Units</li> <li>Negative pressure isolation rooms</li> <li>Oncology</li> <li>Operating rooms</li> <li>PACU</li> <li>Community Living Center</li> </ul>

**Step 2** \_\_\_\_\_

**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

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

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

**Step 3** \_\_\_\_\_

**Description of Required Infection Prevention Precautions by Class**  
**During Construction Project** **Upon Completion of Project**

<b>CLASS I</b>	<ol style="list-style-type: none"> <li>1. <b>Execute</b> work to minimize the rise of dust from construction operation.</li> <li>2. Immediately <b>replace</b> any ceiling tile displaced for inspection.</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean work area upon completion of task.</li> </ol>
<b>CLASS II</b>	<ol style="list-style-type: none"> <li>1. <b>Provides</b> active means to prevent air-borne dust from dispersing into atmosphere (surrounding environment.)</li> <li>2. <b>Water mist</b> work surface to control dust while cutting</li> <li>3. <b>Seal</b> unused doors with duct tape.</li> <li>4. <b>Block</b> off and <b>seal</b> duct vents.</li> <li>5. <b>Wipe</b> surfaces with disinfectant.</li> <li>6. <b>Contain</b> construction waste before transport in tightly covered containers.</li> <li>7. Wet <b>mop</b> and/or <b>vacuum</b> with HEPA filtered vacuum before leaving work area.</li> <li>8. <b>Place</b> dust mat at entrance and exit of work area.</li> <li>9. <b>Remove</b> or <b>isolate</b> HVAC system in area where work is being performed.</li> </ol>	<ol style="list-style-type: none"> <li>1. Wipe work surfaces with disinfectant.</li> <li>2. Contain construction waste before transport in tightly covered containers.</li> <li>3. Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area.</li> <li>4. Remove isolation of HVAC system in areas where work is being performed.</li> </ol>
<b>CLASS III</b>	<ol style="list-style-type: none"> <li>1. <b>Obtain</b> infection control permit before construction begins.</li> <li>2. <b>Isolate</b> HVAC system in area where work is being done to prevent contamination of the duct system.</li> <li>3. <u><b>Complete</b> all critical barriers or implement control cube method before construction begins.</u></li> <li>4. <u><b>Maintain</b> negative air pressure within work site utilizing HEPA equipped air filtration units.</u></li> <li>5. <b>Remove</b> or <b>isolate</b> HVAC systems in area where work is being performed.</li> <li>6. <b>Do not remove</b> barriers from work site until complete and project is thoroughly cleaned by EMS.</li> <li>7. <b>Vacuum</b> work with HEPA filtered vacuum.</li> <li>8. <b>Wet</b> mop with disinfectant.</li> <li>9. <b>Remove</b> barrier material <b>carefully</b> to minimize spreading of dust and debris associated with construction.</li> <li>10. <b>Contain</b> construction waste before transport in tightly covered containers.</li> <li>11. <b>Cover</b> transport receptacles or cart and tape covering in place.</li> </ol>	<ol style="list-style-type: none"> <li>1. Do not remove barriers from work area until completed project is inspected by the owner's Safety Department and Infection Prevention Coordinator and thoroughly cleaned by (EMS) Environmental Management Services.</li> <li>2. Remove barrier materials carefully to minimize spreading of dirt and debris associated with construction.</li> <li>3. Vacuum work area with HEPA filtered vacuums.</li> <li>4. Wet mop area with disinfectant.</li> <li>5. Remove isolation of HVAC system in areas where work is being performed.</li> </ol>
<b>CLASS IV</b>	<p><b>Same as Class III plus the following:</b></p> <ol style="list-style-type: none"> <li>1. <b>Seal</b> holes, pipes, conduits and penetrations appropriately.</li> <li>2. <b>Construct</b> anteroom &amp; <b>require</b> all personnel to pass through this room so they can be vacuumed using a HEPA vacuum cleaner before leaving worksite or they can wear cloth or paper coveralls that are removed each time they leave the work site.</li> <li>3. <u><b>Wear</b> shoe covers when within entering work site.</u></li> </ol>	<p><b>Same as above plus:</b></p> <ol style="list-style-type: none"> <li>1. Contain construction waste before transport in tightly covered containers.</li> <li>2. Cover transport receptacles or carts. Tape covering unless solid lid</li> <li>3. Vacuum work area with HEPA filtered vacuums.</li> <li>4. Wet mop area with disinfectant.</li> </ol>

**Step 4. 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 5. Identify specific site of activity e.g., patient rooms, medication room, etc.****Step 6. Identify issues related to: ventilation, plumbing, electrical in terms of the occurrence of probable outages.****Step 7. 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 and shall be negative with respect to surrounding areas)

**Step 8. Consider potential risk of water damage. Is there a risk due to compromising structural integrity? (e.g., wall, ceiling, roof)****Step 9. Work hours: Can or will the work be done during non-patient care hours?****Step 10. Do plans allow for adequate number of isolation/negative airflow rooms?****Step 11. Do the plans allow for the required number & type of handwashing sinks?****Step 12. Does the infection control staff agree with the minimum number of sinks for this project?** (Verify against AIA Guidelines for types and area)**Step 13. Does the infection control staff agree with the plans relative to clean and soiled utility rooms?****Step 14. 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 infection control concerns and risks. The ICRA may be modified throughout the project. Revisions must be communicated to the Project Manager**

<b><i>Infection Prevention Construction Permit</i></b>	
<b>Construction Class:</b> I, II, III, IV <b>Project Name and Number:</b> <b>Location of Construction:</b> <b>Contractor Performing Work:</b> <b>FMSS Project Engineer:</b>	<b>Type:</b> A, B, C, D <b>Risk Group:</b> Low, Medium, High, Highest <b>Permit #:</b> <b>Project start date:</b> <b>Estimate completion date:</b> <b>Telephone:</b>
Type A: Inspection and non-invasive activities, minimal dust levels Type B: Small scale, short duration moderate dust level Type C: Generates moderate to high levels of dust Type D: Major duration and construction activities requiring consecutive work shift	
<b>CLASS I</b>	1. Work performed is limited to inspections and minor installations. 2. Execute work by methods to minimize raising dust from inspection operations. 3. Immediately replace ceiling tiles displaced for visual inspection. Only 3-5 tiles may be removed at one time. 4. Permit does not need to be posted for this classification.
<b>CLASS II</b>	1. Obtain and post infection control permit at work location before work begins. 2. Provide active means to prevent air borne dust from dispersing into atmosphere. 6 mil/fire resistant poly (plastic) barrier at entrance for short term work. Water mist work surfaces to control dust while cutting or use vacuum device. 3. Place dust mat at entrances and exits of work sites. Seal unused doors with tape. 4. Isolate HVAC and seal/cover air vents. 5. Contain construction waste before transport in tightly covered containers using assigned exit route. 6. Wipe surfaces with disinfectant. Wet mop and/or vacuum with HEPA filtered vacuum before leaving.
<b>CLASS III</b>	1. Obtain and post infection control permit at work location before work begins. 2. Follow all requirements listed for Class II in addition to requirements listed below. 3. Isolate HVAC supply and return ductwork to prevent contamination of system. 4. Complete all critical dust barriers (hard wall) as well as the creation of an anti-room where required for inspection by ICRA Inspection Team (Safety Officer, IC Nurse, Project Engineer) before work begins. 5. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units. Change filters regularly. 6. Vacuum work area with HEPA filtered vacuums. Wet mop with disinfectant. 7. Obtain ICRA Inspection Team approval before construction and prior to removal of any dust partitions. 8. Contain construction waste before transport in tightly closed containers using the assigned exit route.
<b>CLASS IV</b>	1. Obtain and post infection control permit at work location before work begins 2. Follow all requirements listed for Class II & III in addition to requirements listed below 3. Isolate HVAC supply and return ductwork to prevent contamination of system. 4. Complete all critical dust barriers (hard wall barrier) as well as the creation of an anti-room where required. All personnel entering and leaving work site must be vacuumed using a HEPA filtered vacuum cleaner or wear cloth or paper coveralls and shoe covers that are removed each time they leave the work site. 5. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units. Change filters regularly. Seal holes, pipes, conduits and punctures appropriately. 6. Wet mop with disinfectant. Vacuum work area with HEPA filtered vacuums. 7. Contain construction waste before transport in tightly closed containers using the assigned exit route.
<b>Additional Requirements:</b>	
<b>Infection Prevention Coordinator:</b>	<b>Date:</b>
<b>Safety Officer:</b>	<b>Date:</b>
<b>FMS Project Engineer:</b>	<b>Date:</b>

**INFECTION PREVENTION CONSTRUCTION CHECKLIST****Location:** \_\_\_\_\_ **Date:** \_\_\_\_\_**Project COTR:** \_\_\_\_\_**Safety Representative:** \_\_\_\_\_**Infection Prevention Coordinator:** \_\_\_\_\_**Contractor Performing Work:** \_\_\_\_\_

<b>CONSTRUCTION ACTIVITY:</b>	<b>YES</b>	<b>NO</b>
<b>Type A: Inspection and non-invasive activities, minimal dust levels</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Type B: Small scale, short duration moderate dust levels</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Type C: Generates moderate to high levels of dust</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Type D: Major duration and construction activities requiring consecutive work shift</b>	<input type="checkbox"/>	<input type="checkbox"/>

**INFECTION PREVENTION RISK GROUPS:****Low Risk:** \_\_\_\_\_**Medium Risk:** \_\_\_\_\_**High Risk:** \_\_\_\_\_**Highest Risk:** \_\_\_\_\_**Scope of work:** \_\_\_\_\_



Date: \_\_\_\_\_ Location: \_\_\_\_\_ Class of Precautions: \_\_\_\_\_

**BARRIERS:****YES****NO**

Construction signs posted for the area

- Construction site- DO NOT ENTER
- Emergency contact information
- Infection Control Instructions

Door properly closed and sealed

Floor mats/dust tacks mats at entrance and changed

Floor area clean, no dust tracked

Barrier intact

Door sweep

Door closure device

Door/tools locked when no one in area

**AIR HANDLING**

All windows closed behind barrier

Negative air at barrier entrance

Negative air machine running

Hepa filter below 2 (above 2 filter change)

**PROJECT AREA:**

Debris removed in covered container daily

Debris removed via designated exit route

Trash in appropriate container

Routine clearing done on job site

If chute used, it is not adjacent to open windows or  
HVAC air intakes

HVAC systems isolated, return ducts covered

**TRAFFIC CONTROL:**Restricted to construction workers and necessary  
staff only

All doors and exits free of debris

ID badges worn and visible by construction workers

**Comments:****Signatures:****Project COTR:** \_\_\_\_\_**Safety Representative:** \_\_\_\_\_**Infection Prevention:** \_\_\_\_\_

Construction Daily Rounds Log - Safety / ILSM / Infection Control									
Signature of Construction Superintendent									
Signature of Project Manager (COR)									
Signature of Person doing Rounds									
Project Title				Name of Contractor					
Station				Contract Number					
Area				Project Number					
Project COTR									
Check only if no problems are noted. If issues are found annotate on this form.									
Safety / ILSM / IC Issue				M	T	W	Th	F	Comments
Subcontractors are trained in safety/environmental issues.									
Means of egress is clear in construction and adjacent areas.									
Construction exits designated during construction?									
Doors are closed to construction site and proper signage is in place									
Access for the fire department and emergency services is clear									
Fire suppression and/or fire alarm system are active, or are temporary systems/measures are in place									
Fire extinguishers are readily available in construction area									
Area is secured from public and at the end at end of day									
Are smoking regulations being followed									
Exterior balconies, corridors and stairways are clear of storage									
Flammables and combustibles kept to a minimum and in proper containers. SDS are maintained on site and all product are labeled									
Gas cylinders properly stored									
Lock out/tag out policy in place and being followed									
Building, grounds and equipment and maintained in a safe manner									
Hard hats are used per protocols									
Extension cords protected/disconnected at end of day.									
Exterior storm drain flushed and cleaned of debris.									
Floor Penetrations properly marked and protected									
Construction storage area maintained and secured									
Dust barriers are maintained, secured and tested. Barriers are monitored consistently for integrity and NPV airflow (Clean to Dirty)									
Negative air ventilation in work area is maintained utilizing HEPA equipped air filtration									
Pressure gages checked and show neg. air pressure in construction									
Compliance with traffic patterns for both construction workers and debris movement									
Windows and doors are properly closed and sealed to prevent circulation of dust, debris and inclement weather.									
Walk off mats are provided and changed when needed by the									
All adjacent areas are cleaned daily and more often as needed by contractor of EMS									
There are no signs of water leakage									
There are no signs of pest									
All construction debris is transported in tightly covered containers									
Emergency numbers are posted.									