|  |
| --- |
| Infection Control Risk Assessment Matrix of Precautions for Construction and Renovation |
| **Step One:**Using the following table, **identify the** **TYPE of Construction Project Activity** **(Type A, B, C or D)** |
| **TYPE A** | **Inspection and Non-Invasive Activities**Includes but is not limited to:* Removal of one to two ceiling tiles for ***visual inspection only***
* Painting but NO SANDING
* Wall covering, electric trim work, minor plumbing and other activities which do not generate dust or require cutting of walls or access to ceilings other than for visual inspection
 |
| **TYPE B** | **Small Scale, Short Duration Activities with Minimal Dust Generation**Includes but is not limited to:* Minor telephone and computer cabling installations
* Access to chase spaces
* Cutting of walls or ceilings where dust migration can be controlled using dustless tools, tools with dust control guards and/or dust control systems
 |
| **TYPE C** | **Work That Generates a Moderate to High Level of Dust or Requires Demolition or Removal of Any Fixed Building Components or Assemblies**Includes but is not limited to:* Sanding walls for painting or wall covering
* Removal of floor coverings, ceiling tiles and chase work
* New wall construction, window installations
* Minor duct work or above-ceiling electrical work
* Major cabling activities
* ***Any activity which cannot be completed within a single work shift***
 |
| **TYPE D** | **Major Demolition, Construction and Renovation Projects**Includes but is not limited to:* Activities which require consecutive work shifts
* Heavy demolition or removal of complete cabling systems
* New construction
 |
| **Scope of Work (Brief Description):** |
| **Step One Project Type (circle one): A B C D** |

|  |
| --- |
| **Step Two:**Using the following table, identify the **PATIENT RISK GROUP** that will be affected. If more than one risk group will be affected, ***select the highest risk group***: |
| **Low Risk** | **Medium Risk** | **High Risk** | **Highest Risk** |
| * Office Areas
* Other non-patient care areas (e.g. EMS, Biomed)
 | * Waiting Rooms
* Canteen Services
* Chapel
* Lobbies
 | * Laboratories
* Ambulatory Care Clinics
* CBOCs
* Outpatient Pharmacy/Non-compounding areas
* Outpatient Radiology
* Cardiac Cath Lab
* GI Lab
* Interventional Radiology
* Pain Clinic
* Inpatient Mental Health 3DE
* Food and Nutritional Services
* In patient areas not listed for Highest Risk group
 | * MICU, SICU, 3E
* Emergency Room
* Community Living Center (CLC)
* OR/Pre-Op/PACU/SDPU
* Sterile Processing Service
* Medical Supply & Distribution
* Inpatient Pharmacy IV & Compounding Areas
* Hemodialysis
 |
| **Step Two: PATIENT RISK GROUP IS \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |

|  |
| --- |
| **Step Three: Match the****Patient Risk Group: *(Low, Medium, High, Highest)* with the****Construction Project Type: *(A, B, C or D)* on the following matrix, to find the****Class of Precautions: *(I, II, III, or IV)* which determines the level of infection prevention and control activities required** |
|  |
| **CLASS OF PRECAUTIONS DETERMINATION MATRIX** |
|  | **Construction Project Type:** |
| **Patient Risk Group:** | **TYPE A** | **TYPE B** | **TYPE C** | **TYPE D** |
| **LOW Risk Group** | **Class I** | **Class II** | **Class II** | **Class III/IV** |
| **MEDIUM Risk Group** | **Class I** | **Class II** | **Class III** | **Class IV** |
| **HIGH Risk Group** | **Class I** | **Class II** | **Class III/IV** | **Class IV** |
| **HIGHEST Risk Group** | **Class II** | **Class III/IV** | **Class III/IV** | **Class IV** |

***\*\*Note: Infection Control consultation is REQUIRED for all Class III and Class IV projects at 65% Design, 100% Design Completion AND before construction or renovations begin.***

|  |
| --- |
| **Step Three: CLASS OF PRECAUTIONS IS (CIRCLE ONE) I II III IV** |

|  |
| --- |
| **Required Infection Prevention & Control Activities by Class of Precautions**  |
|  | **During Construction Project** | **Upon Project Completion** |
| **Class I** | 1. **Execute work by methods to minimize raising dust from construction operations.**
2. **Immediately replace any ceiling tiles displaced for visual inspection**
 | **1. Ensure that work area is left clean and  dust-free** |
| **Class II** | 1. **Execute work by methods to minimize raising dust from construction or renovation operations.**
2. **Immediately replace any ceiling tiles displaced for visual inspection**
3. **Isolate HVAC system in area where work is being done to prevent contamination of the duct system.**
4. **Seal unused doors**
5. **Block off and seal air vents**
6. **Place dust mat at entrance and exit of work area.**

**7. Contain construction waste before transport in tightly covered containers.** | 1. **Vacuum with HEPA filtered vacuum**
2. **Wipe surfaces with cleaner/disinfectant**
3. **Wet mop floors**
4. **Remove isolation of HVAC system in areas where work had been performed.**
5. **Ensure that work area is left clean and dust-free**
 |
| **Class III** | 1. **Obtain infection control risk assessment (ICRA) permit before project begins, and keep permit posted for project duration**
2. **Complete all critical barriers to seal work area from non-work areas before construction begins**
3. **Isolate HVAC system in area where work is being done to prevent contamination of duct system.**
4. **Place dust mats at entrance/exit of work area.**
5. **Cover up or remove all supplies and equipment that could potentially come in contact with construction dust/dirt/debris**
6. **Set up and maintain negative air pressure within work site utilizing HEPA equipped air filtration units.**
7. **Use additional HEPA equipped air scrubbers within project containment area to minimize spreading and aerosolization of dirt and dust. The number of units used must be sufficient to adequately filter the air given the size of the containment area.**

**8. Contain construction waste before transport in tightly  covered containers.** | 1. **Do not remove barriers from work area until completed project is thoroughly cleaned by contractor**
2. **Vacuum work area with HEPA filtered vacuums.**
3. **Wipe surfaces with cleaner/disinfectant**
4. **Wet mop floors**
5. **Remove isolation of HVAC system in areas where work has been completed**
6. **Remove barrier materials carefully to minimize spreading of any remaining dirt and debris associated with construction.**
7. **After barrier materials are removed, ensure that area is thoroughly terminally cleaned again by EMS before it is released to the end user(s).**
 |
| **Class IV** | 1. **Obtain infection control risk assessment (ICRA) permit before project begins, and keep permit posted for project duration.**
2. **Complete all critical barriers i.e. sheetrock, plywood, plastic, to seal area from non-work area or implement control cube method (cart with plastic covering and sealed connection to work site with HEPA vacuum for vacuuming prior to exit) before construction begins.**
3. **Remove or isolate HVAC system in area where work is being done to prevent contamination of duct system.**
4. **Place dust mats at entrance/exit of work area.**
5. **Cover/seal or remove all supplies and equipment that could potentially come in contact with construction dirt/debris before construction begins.**
6. **Set up and maintain negative air pressure within work site utilizing HEPA equipped air filtration units.**
7. **Use additional HEPA equipped air scrubbers within project containment area to minimize spreading and aerosolization of dirt and dust. The number of units used must be sufficient to adequately filter the air given the size of the containment area.**
8. **Construct anteroom and require all personnel to pass through this room so they can be vacuumed using a HEPA vacuum cleaner before leaving work site or they can wear cloth or paper coveralls that are removed each time they leave the work site.**
9. **All personnel entering work site are required to wear shoe covers. Shoe covers must be changed each time the worker exits the work area**

**8. Contain construction waste before transport in tightly  covered containers.** | 1. **Do not remove barriers from work area until completed project is thoroughly cleaned by contractor**
2. **Vacuum work area with HEPA filtered vacuums.**
3. **Wipe surfaces with cleaner/disinfectant**
4. **Wet mop floors**
5. **Remove isolation of HVAC system in areas where work has been completed**
6. **Remove barrier materials carefully to minimize spreading of any remaining dirt and debris associated with construction.**
7. **After barrier materials are removed, ensure that area is thoroughly terminally cleaned again by EMS before it is released to the end user(s).**
 |

|  |  |
| --- | --- |
| **Step Four:** | **Identify the areas surrounding the project area for any potential impacts** |



|  |  |
| --- | --- |
| **Step Five:** | **Identify specific site of activity e.g. patient room, medication room:** |
| **Step Six:** | **Identify issues related to ventilation, plumbing, electrical in terms of possible outages:** |
| **Step Seven:** | **Identify specific containment measures to be used e.g. plastic vs. solid walls:** |
| **Step Eight:** | **Identify potential risk of water intrusions OR aerosolizations:** |
| **Step Nine:** | **Identify work hours e.g. nights, weekends, non-patient care hours:** |
| **Step Ten:** | **Identify any infection prevention-related design issues e.g. adequate number/location of hand washing sinks:** |
| **Step Eleven:** | **Identify other containment issues e.g. traffic flow, debris removal pathway:** |

|  |  |
| --- | --- |
| **Step Twelve:****TUBERCULOSIS****ASSESSMENT** | **THE DCVAMC IS CLASSIFIED AS “LOW RISK” FOR TUBERCULOSIS. DOES THIS PROJECT INVOLVE RISK OF AIRBORNE EXPOSURE TO KNOWN OR SUSPECTED TUBERCULOSIS PATIENTS (check YES or NO below):** |



|  |  |
| --- | --- |
| **Step Thirteen:****INFECTION CONTROL CONSTRUCTION PERMIT PREPARATION** | * **Use the template provided below to create the Infection Control Construction Permit based on the above twelve step ICRA.**
* **The Permit *must* be hung in a visible location at every entrance to the project site for the duration of the project.**
* **The Permit *must* display the appropriate project “CLASS” (I, II, III or IV) with required infection prevention and control activities that pertain to that CLASS. The other CLASS sections of the permit template can be deleted from the final version of the permit.**
* **All permits *must* have a completed TB Exposure Determination Section**
* **Any exceptions to the activities required by the Permit must be attached to all final copies on display at the project site.**
* **All Permits must be signed by the project COR**
* **Classes III and IV Permits must be signed by an Infection Prevention & Control staff member**
 |

|  |
| --- |
| **Infection Control Construction Permit** |
| **Location of Construction:** | **Project Start Date:**  |
| **Scope of Project:**  | **ICRA Review Date:**  |
| **Estimated Duration:**  |
| **VA COR:**  | **Telephone:**  |
| **Contractor Performing Work:**  | **Telephone:** |
| **Contractor’s Supervisor:**  | **Telephone:**  |
|  | **CONSTRUCTION ACTIVITY TYPE** |  | **INFECTION CONTROL RISK GROUP** |
| [ ]  | TYPE A: Inspection and Non-Invasive Activities | [ ]  | GROUP I: Low Risk |
| [ ]  | TYPE B: Small scale, short duration, minimal dust | [ ]  | GROUP 2: Medium Risk |
| [ ]  | TYPE C: Activities generate moderate to high levels of dust, or require demolition or removal of any fixed building component  | [ ]  | GROUP 3: High Risk |
| [ ]  | TYPE D: Major demolition and construction activities | [ ]  | GROUP 4: Highest Risk |
| **Class I** | **Before/During Construction**:1. Execute work by methods to minimize raising dust from construction operations.
2. Immediately replace any ceiling tiles displaced for visual inspection
 | **Upon Completion of Project:**1. Ensure that work area is left clean and dust-free
 |
| **Class II** | **Before/During Construction**:1. Execute work by methods to minimize raising dust from construction operations.
2. Immediately replace any ceiling tiles displaced for visual inspection
3. Isolate HVAC system in area where work is being done to prevent contamination of the duct system.
4. Seal unused doors with duct tape.
5. Block off and seal air vents
6. Place dust mat at entrance and exit of work area.
7. Contain construction waste before transport in tightly covered containers.
 | **Upon Completion of Project**:1. Vacuum with HEPA filtered vacuum and wet mop before leaving work area.
2. Remove isolation of HVAC system in areas where work had been performed.
3. Ensure that work area is left clean and dust-free
 |
| **Class III** | **Before/During Construction:**1. Obtain infection control risk assessment (ICRA) permit before project begins, and keep permit posted for project duration
2. Complete all critical barriers to seal work area from non-work areas before construction begins
3. Isolate HVAC system in area where work is being done to prevent contamination of duct system.
4. Place dust mats at entrance/exit of work area.
5. Cover/seal or remove all supplies and equipment that could potentially come in contact with construction dirt/debris before construction begins.
6. Set up and maintain negative air pressure within work site utilizing HEPA equipped air filtration units.
7. Use additional HEPA equipped air scrubbers within project containment area to minimize spreading and aerosolization of dirt and dust. The number of units used must be sufficient to adequately filter the air given the size of the containment area.
8. Contain construction waste before transport in tightly covered containers.
 | **Upon Completion of Project:**1. Remove isolation of HVAC system in areas where work has been completed
2. Do not remove barriers from work area until completed project is thoroughly cleaned by contractor
3. Vacuum work area with HEPA filtered vacuums.
4. Wet mop work area
5. Remove barrier materials carefully to minimize spreading of any remaining dirt and debris associated with construction.
6. After barrier materials are removed, ensure that area is thoroughly terminally cleaned again by EMS before it is released to the end user(s).
 |
| **Class IV** | **Before/During Construction**:1. Obtain infection control risk assessment (ICRA) permit before project begins, and keep permit posted for project duration.
2. Complete all critical barriers i.e. sheetrock, plywood, plastic, to seal area from non-work area or implement control cube method (cart with plastic covering and sealed connection to work site with HEPA vacuum for vacuuming prior to exit) before construction begins.
3. Remove or isolate HVAC system in area where work is being done to prevent contamination of duct system.
4. Place dust mats at entrance/exit of work area.
5. Cover/seal or remove all supplies and equipment that could potentially come in contact with construction dirt/debris before construction begins.
6. Set up and maintain negative air pressure within work site utilizing HEPA equipped air filtration units.
7. Use additional HEPA equipped air scrubbers within project containment area to minimize spreading and aerosolization of dirt and dust. The number of units used must be sufficient to adequately filter the air given the size of the containment area.
8. Construct anteroom and require all personnel to pass through this room so they can be vacuumed using a HEPA vacuum cleaner before leaving work site or they can wear cloth or paper coveralls that are removed each time they leave the work site.
9. All personnel entering work site are required to wear shoe covers. Shoe covers must be changed each time the worker exits the work area
10. Contain construction waste before transport in tightly covered containers (tape cover or use solid lid)
 | **Upon Completion of Project:**1. Do not remove barriers from work area until complete project is thoroughly cleaned by contractor
2. Remove isolation of HVAC system in areas where work has been completed
3. Vacuum work area with HEPA filtered vacuums.
4. Wet mop work area
5. Remove barrier materials carefully to minimize spreading of any remaining dirt and debris associated with construction.
6. After barrier materials are removed, ensure that area is thoroughly cleaned again by EMS.
 |
| **TUBERCULOSISEXPOSUREDETERMINATION (check YES or NO)** |
| **Summary of Operational Impacts:**  |
| **Summary of Utility Impacts:**   |
| **Staff Safety Issues:**  |
| **Permit Requested By (COR):** | **Permit Issued By (IC Staff):** |
| **Date:**  | **Date:** |