

## Appendix A Infection Prevention Risk Assessment and Infection Prevention Mitigation Plan including Preventive Measures Checklist for Medical Center Construction and Renovation

### Instructions for Completing the Checklist

The Risk Assessment and Plan including the Preventive Measures Checklist will be completed during the design planning phase of the construction/renovation project by the multidisciplinary planning group. Infection Prevention personnel must be involved in each phase of the project to ensure that the appropriate prevention measures are initiated and maintained. The Infection Prevention Risk Assessment and Infection Prevention Mitigation Plan will automatically expire 90 days from the signed approval date. A new Infection Prevention Risk Assessment and Infection Prevention Mitigation Plan must be completed on or before the expiration date.

**Table A** describes the type of construction activity. The type of “Construction Activity” is first identified by selecting the level of activity that best describes the project being planned.

**Table B** identifies the “Population and Geographic Risk Group” that may be affected by the project because of its physical proximity or potential exposure to the activity.

**Table C** identifies the appropriate class of infection prevention measures by matching the construction activity with the population risk group. As indicated in Table C, the appropriate dust mitigation measures for the project are identified. A copy will be reviewed and approved by HEIP and filed by Design and Construction or Facilities Management for all Class III and IV categories. Adaptations to the prevention measures may be made only after approval has been provided by HEIP.

### Construction compartment negative air monitoring

- A. If required for the project, negative air pressure must be monitored at all times during the duration of the project and documented daily by Design and Construction.
- B. If positive or neutral air pressure is identified, work must be suspended, barrier investigation must be completed, and negative air pressure restored before resuming work.
- C. When the option to vent the exhaust of the HEPA filter unit is determined either not to be feasible or necessary, the Project Manager in consultation with HEIP and Facilities Management may conclude that the HEPA unit be used as a “scrubber only”.

**➔ A copy of the Infection Prevention Risk Assessment and Mitigation Plan must be sent to HEIP when matrix indicates Class III or Class IV preventive measures are required.**



HOSPITAL EPIDEMIOLOGY AND  
INFECTION PREVENTION :  
**GUIDELINES FOR CONSTRUCTION/RENOVATION/DEMOLITION  
PROJECTS AND ENVIRONMENTAL CONTROL OF  
INVASIVE FUNGAL INFECTION AND  
OTHER NOSOCOMIAL INFECTIONS**

**POLICY 5.1A**  
**Issued: 12/06**  
**Last Approval: 02/23**

**Infection Prevention Risk Assessment**

Project # and Location:	Project Start Date:	Estimated Duration:
Project Manager (PM):	Contractor(s):	Infection Preventionist (IP):
PM's phone number:	Contractor's phone number:	IP's phone number:

Comments:

**Table A Type of Construction Activity**

Type A	<p><b>Inspection and non-invasive activities.</b> These include, but are not limited to:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> removal of ceiling tiles for inspection (up to 4 sq. feet)</li> <li><input type="checkbox"/> movement of equipment, building structures, etc. for visual inspection</li> <li><input type="checkbox"/> painting (but not sanding)</li> <li><input type="checkbox"/> putting up wall covering, electrical trim work, minor plumbing, and activities which do not generate dust or require cutting of walls or access to ceilings other than for visual inspection.</li> </ul>
Type B	<p><b>Small scale, short duration activities that create minimal dust.</b> These include, but are not limited to:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> installation of telecommunications cabling</li> <li><input type="checkbox"/> access to chase spaces</li> <li><input type="checkbox"/> cutting of walls or ceiling where dust migration can be controlled.</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 (e.g., counter tops, cupboards, sinks).</b> These include, but are not limited to:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> sanding of walls for painting or wall covering</li> <li><input type="checkbox"/> removal of floor and wall coverings, baseboards, ceiling tiles and casework</li> <li><input type="checkbox"/> new wall construction</li> <li><input type="checkbox"/> minor duct work or electrical work above ceilings</li> <li><input type="checkbox"/> major cabling activities</li> <li><input type="checkbox"/> any activity which cannot be completed within a single work shift.</li> </ul>
Type D	<p><b>Major demolition, construction and renovation projects.</b> These include, but are not limited to:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> activities which require consecutive work shifts</li> <li><input type="checkbox"/> heavy demolition or removal of a complete cabling system is required</li> <li><input type="checkbox"/> new construction.</li> </ul>

**Table B Population and Geographic Risks Groups\***

GROUP 1 LOWEST RISK	GROUP 2 MEDIUM RISK	GROUP 3 HIGH RISK	GROUP 4 HIGHEST RISK
<input type="checkbox"/> Office areas <input type="checkbox"/> Administrative areas <input type="checkbox"/> Areas not used for patient care, patient holding or transport of patients	<input type="checkbox"/> Lobby <input type="checkbox"/> Cafeteria <input type="checkbox"/> Clinical Labs	<input type="checkbox"/> Emergency Department <input type="checkbox"/> Radiology/CT scan <input type="checkbox"/> Labor and Delivery <input type="checkbox"/> Well Baby Nurseries <input type="checkbox"/> Pediatrics Med/Surg <input type="checkbox"/> Nuclear Medicine <input type="checkbox"/> Admission/Discharge area <input type="checkbox"/> Rehabilitation Therapy <input type="checkbox"/> Echocardiography <input type="checkbox"/> General Medical/Surgical Units <input type="checkbox"/> Outpatient Care Clinics	<input type="checkbox"/> All Critical Care areas <input type="checkbox"/> Comprehensive Cancer Center <input type="checkbox"/> Peri-operative areas (including PACU, L&D OR) <input type="checkbox"/> Sterile Processing <input type="checkbox"/> Cardio-Pulmonary Acute Care Units <input type="checkbox"/> Cardiac Catheterization & Angiography areas <input type="checkbox"/> Dialysis areas <input type="checkbox"/> Inpatient Oncology & Bone Marrow Transplant Units <input type="checkbox"/> Endoscopy areas <input type="checkbox"/> Pharmacy admixture areas <input type="checkbox"/> Ambulatory Surgery Center <input type="checkbox"/> Pediatric Treatment Center

Permit Request By: _____ (PM)	Permit Authorized By: _____ (ICP)
Date: _____	Date: _____



**HOSPITAL EPIDEMIOLOGY AND  
INFECTION PREVENTION :  
GUIDELINES FOR CONSTRUCTION/RENOVATION/DEMOLITION  
PROJECTS AND ENVIRONMENTAL CONTROL OF  
INVASIVE FUNGAL INFECTION AND  
OTHER NOSOCOMIAL INFECTIONS**

**POLICY 5.1A  
Issued: 12/06  
Last Approval: 02/23**

**Infection Prevention Risk Mitigation Plan and Preventive Measures Checklist**

Project # and Location:	Project Start Date	Estimated Duration:	
Project Manager (PM):	Contractor(s):	Infection Preventionist (IP):	
PM's phone number:	Contractor's phone number:	IP's phone number:	
<b>Please check the ICRM Plan for the project determined by the ICRA</b>			
<p style="text-align: center;">CLASS I</p> <p style="text-align: center;"><input type="checkbox"/></p>	<ol style="list-style-type: none"> <li>1. Execute work by methods that minimize generating dust from construction operations.</li> <li>2. Immediately replace ceiling tile displaced for visual inspection.</li> </ol>	<ol style="list-style-type: none"> <li>3. Immediately remove incidental dust using HEPA vacuum or damp dusting.</li> <li>4. Clean work area upon completion of task.</li> </ol>	
<p style="text-align: center;">CLASS II (includes Class I)</p> <p style="text-align: center;"><input type="checkbox"/></p>	<ol style="list-style-type: none"> <li>1. Obtain infection prevention permit before construction begins.</li> <li>2. Provide active means to prevent dust from dispersing into atmosphere</li> <li>3. Water mist work surfaces to control dust while cutting.</li> <li>4. Seal unused doors with tape.</li> <li>5. Air vents may require sealing; consult w/ Facilities Mgmt.</li> <li>6. Wipe surfaces with disinfectant.</li> </ol>	<ol style="list-style-type: none"> <li>7. Construction workers will vacuum clothes with HEPA Vacuum before leaving work area.</li> <li>8. Contain construction waste before transport in covered containers.</li> <li>9. Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area.</li> <li>10. Place adhesive walk-off mats inside work area (and outside of work area if safety allows).</li> <li>11. Ceiling or wall access outside construction zone may require separate enclosure (permit required).</li> </ol>	
<p style="text-align: center;">CLASS III (includes Class II)</p> <p style="text-align: center;"><input type="checkbox"/></p> <p style="text-align: center;">_____</p> <p style="text-align: center;">Initial</p>	<ol style="list-style-type: none"> <li>1. Seal air vents and Isolate HVAC system in area where work is being done. Consult with project specifications.</li> <li>2. Complete all critical barriers or implement portable mitigation unit before construction begins.</li> <li>3. Seal all holes, pipes, conduits and penetrations appropriately.</li> <li>4. Maintain negative air pressure within work site utilizing HEPA-equipped air filtration units.</li> </ol>	<ol style="list-style-type: none"> <li>5. Do not remove barriers from work area is thoroughly cleaned.</li> <li>6. Vacuum work with HEPA filtered vacuum</li> <li>7. Wet mop with disinfectant.</li> <li>8. Remove barrier materials to minimize dirt and debris.</li> <li>9. Moisten construction waste before transport in covered containers.</li> <li>10. Air sampling required for work performed for Groups 3 and 4 populations and geographic risk groups meeting one of the following criteria:               <ol style="list-style-type: none"> <li>a. Projects lasting &gt; 2 weeks duration</li> <li>b. Projects requiring repair of water damaged areas in which water damage has been present for &gt;72 hrs. or unknown duration.</li> </ol> </li> </ol>	
<p style="text-align: center;">CLASS IV (includes Class III)</p> <p style="text-align: center;"><input type="checkbox"/></p> <p style="text-align: center;">_____</p> <p style="text-align: center;">Initial</p>	<ol style="list-style-type: none"> <li>1. If walls are not full height, exposed wall or ceiling space must be sealed.</li> <li>2. Construct vestibule and require all personnel to vacuum off in this room using a HEPA vacuum cleaner before leaving work site. Alternatively, they can wear cloth or paper coveralls that are removed each time they leave the work site.</li> <li>3. Continuous Differential Pressure Monitoring required for Groups 3 and 4 populations and geographic risk groups.</li> <li>4. Air Sampling required for Groups 3 and 4 populations and geographic risk groups.</li> </ol>	<ol style="list-style-type: none"> <li>5. Do not remove barriers from work area until completed project is inspected by Design and Construction or Facilities Management representatives and thoroughly cleaned. Remove barrier materials to minimize dust and debris.</li> <li>6. Upon completion of work, remove isolation of HVAC system in areas where work is being performed. Follow established procedures for re-starting HVAC or water.</li> <li>7. All personnel entering work site are required to wear shoe covers. Shoe covers must be changed each time the worker exits the work area.</li> </ol>	
<p>_____ Exceptions/Additions to this permit are noted below or by attached memoranda</p>		<b>Date</b>	<b>Initials</b>
Permit Request By:	(PM) Date:	Permit Authorized By:	(ICP) Date:
		Permit Expiration Date:	(Permit expires 90 days from above date)



**HOSPITAL EPIDEMIOLOGY AND  
 INFECTION PREVENTION :**  
**GUIDELINES FOR CONSTRUCTION/RENOVATION/DEMOLITION  
 PROJECTS AND ENVIRONMENTAL CONTROL OF  
 INVASIVE FUNGAL INFECTION AND  
 OTHER NOSOCOMIAL INFECTIONS**

**POLICY 5.1A**  
**Issued: 12/06**  
**Last Approval: 02/23**

**Table C: Construction Activity and Risk Group Matrix**

CONSTRUCTION ACTIVITY→	TYPE “A”	TYPE “B”	TYPE “C”	TYPE “D”
RISK LEVEL ↓				
Group 1	Class I	Class II	Class II	Class III/IV
Group 2	Class I	Class II	Class III	Class IV
Group 3	Class II	Class III	Class III/IV	Class IV
Group 4	Class III	Class III/IV	Class III/IV	Class IV

\*Designation of Grouping for any location may be changed at the discretion of HEIP

*This guideline is intended for use by UCSF Medical Center staff and personnel and no representations or warranties are made for outside use. Not for outside production or publication without permission. Direct inquiries to the Office of Origin or Medical Center Administration at (415) 353-2733.*