Infection Control Risk Assessment Guidelines – VA San Diego Healthcare System

Identify the Type of Construction Project Activity (Types A-D)

A	**Non-invasive activities, including, but not limited to:** a. Removal of ceiling tiles where no dust or asbestos is expected b. Painting, but not sanding c. 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
B	**Small scale, short duration activities which create minimal dust, including but not limited to:** a. Installation of electrical, plumbing, HVAC, telephone and computer cabling b. Access to chase spaces where asbestos is not present c. Cutting of walls or ceiling where dust migration can be controlled.
C	**Work that generates a moderate to high level of dust or requires demolition or removal of any fixed building components or assemblies, including but not limited to:** a. Sanding of surfaces for painting or wall covering b. Removal of floor coverings, ceiling tiles, and casework c. New wall construction d. Minor duct work or electrical work above ceilings e. Major cabling activities f. Any type A, B or C activity that cannot be completed within a single work shift.
D	**Major demolition and construction projects, including but not limited to:** a. Activities requiring heavy demolition or removal of a complete utility or cabling system b. New construction and renovation. c. Friable asbestos and mold abatement projects.

Identify the Patient Risk Group that will be affected. If more than one risk group will be affected, select the higher group. For all construction classes, patients must be removed from the room while work is performed.

Low	Medium	High	Highest Risk
All outpatient clinics, offices areas, administrative and industrial spaces.	All non-critical inpatient areas. cardiology, echocardiography, endoscopy, nuclear medicine, rehabilitation medicine, radiology, MRI, respiratory therapy, dry research labs.	DOU, emergency room, clinical laboratory, wet lab research, ambulatory surgery, pharmacy, surgical and medical inpatient beds, procedure center.	Immunocompromised patient area, cath lab, SPD, ICU, occupied, negative pressure rooms, PACU operating rooms.

Match the Patient Risk Group with the Construction Project Type (A, B, C, D) to find the Class of Precautions (I – V)

Construction Project Type

Patient Risk Group	Type A	Type B	Type C	Type D
Low Risk	I	II	III	V
Medium Risk	I	II	IV	V
High Risk	I	II	IV	V
Highest Risk	II	III	V	V

Description of Required Infection Control Precautions by Class

Class	During Construction Project	Upon Completion of Project
Class I	1. Execute work by methods to minimize raising dust from construction operations. 2. Immediately replace ceiling tile if displaced.	
Class II	1. High Risk patients must remain out of room for one hour after completion of work and cleanup. 2. Execute work by methods to minimize raising dust. 3. Immediately replace ceiling tile if displaced.	1. Remove all visible debris with a wet towel and/or mop. 2. Housekeeping to wipe work surfaces and floors with disinfectant.
Class III	1. Execute work by methods to minimize raising dust. 2. Immediately replace ceiling tile if displaced 3. Provide active means to prevent airborne dust from dispersing into atmosphere. 4. Water-mist work surfaces to control dust while cutting. 5. Seal unused doors with duct tape. 6. Isolate HVAC system in areas where work is being performed to prevent contamination of duct system. 7. Place dust mat at entrance and exit of work area. 8. Cover construction waste before transport in covered containers	1. Cover construction waste before transport in covered containers. 2. Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area. 3. Open previously sealed HVAC registers and grills. 4. Housekeeping to wipe work surfaces and floors with disinfectant.
Class IV	1. Install plastic dust barriers 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. 2. Isolate HVAC system in areas where work is being performed to prevent contamination of duct system. 3. Maintain negative pressure within work site utilizing HEPA equipped air filtration units. 4. Place dust mat at entrance and exit of work area. 5. Cover construction waste before transport in covered containers. 6. All work associated with a major project that has an approved ICRA authorization form will be assessed on an individual basis.	1. Cover construction waste before transport in covered containers. 2. Wet mop and vacuum with HEPA filtered vacuum. 3. Do not remove barriers from work area until a Health System responsible person inspects completed project. 4. Remove barrier materials carefully to minimize spread of dirt and debris associated with construction. 5. Wet mop and vacuum with HEPA filtered vacuum before leaving work area. 6. Remove isolation of HVAC system in areas where work was being performed. 7. Housekeeping to wipe work surfaces and floors with disinfectant.
Class V	1. Construct gypsum board/metal stud dust partition, extend and seal to ceiling. 2. Isolate HVAC system within work areas to prevent contamination of duct system. 3. Seal doors opening to adjacent areas with duct tape. 4. Block off and seal HVAC registers, grills and any openings in ductwork to remain. 5. Maintain negative pressure within work site utilizing HEPA equipped air filtration units. 6. Place dust mat at entrance and exit of work area. 7. Cover construction waste before transport in covered and sealed containers. Biohazards to be double bagged. 8. All work associated with a major project that has an approved ICRA authorization form will be assessed on an individual basis. 9. Provide monitoring and clearance samples for mold/asbestos.	1. Cover construction waste before transport in covered containers. 2. Wet mop and vacuum with HEPA filtered vacuum. 3. Do not remove barriers from work area until a Health System responsible person inspects completed project. 4. Remove barrier materials carefully to minimize spread of dirt and debris associated with construction. 5. Wet mop and vacuum with HEPA filtered vacuum before leaving work area. 6. Remove isolation of HVAC system in areas where work was being performed. 7. Housekeeping to wipe work surfaces and floors with disinfectant.

Infection Control Construction Permit For Class IV and V Precautions

	Location of Activity: Multipurpose Room Stage	**Project Start Date:**
	Project Coordinator: Sean Kelly	**Estimated Duration:**
	Contractor Performing Work:	
	Supervisor:	**Telephone:**

Construction Type: D	**Risk Group: LOW**	**Precaution Class: V**

Class I	1. Execute work by methods to minimize raising dust from construction operations.	2. Immediately replace ceiling tile if displaced. 3. Clean work area upon completion of task.
Class II	1. High Risk patients must remain out of room for one hour after completion of work and cleanup. 2. Execute work by methods to minimize raising dust.	3. Immediately replace ceiling tile if displaced. 4. Remove all visible debris with a wet towel and/or mop. 5. Housekeeping to wipe work surfaces and floors with disinfectant.
Class III	1. Execute work by methods to minimize raising dust. 2. Immediately replace ceiling tile if displaced 3. Provide active means to prevent airborne dust from dispersing into atmosphere. 4. Water-mist work surfaces to control dust while cutting. 5. Seal unused doors with duct tape. 6. Isolate HVAC system in areas where work is being performed to prevent contamination of duct system.	7. Place dust mat at entrance and exit of work area. 8. Cover construction waste before transport in covered containers 9. Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area. 10. Open previously sealed HVAC registers and grills. 11. Housekeeping to wipe work surfaces and floors with disinfectant.
Class IV	1. Obtain infection control permit before construction begins. 2. Install plastic dust barriers 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. Isolate HVAC system in areas where work is being performed to prevent contamination of duct system. 4. Maintain negative pressure within work site utilizing HEPA equipped air filtration units. 5. Place dust mat at entrance and exit of work area. 6. Cover construction waste before transport in covered containers.	7. All work associated with a major project that has an approved ICRA authorization form will be assessed on an individual basis using the Risk Assessment and Exposure Control Checklist. 8. Wet mop and vacuum with HEPA filtered vacuum. 9. Do not remove barriers from work area until a Health System responsible person inspects completed project. 10. Remove barrier materials carefully to minimize spread of dirt and debris associated with construction. 11. Wet mop and vacuum with HEPA filtered vacuum before leaving work area. 12. Remove isolation of HVAC system in areas where work was being performed. 13. Housekeeping to wipe work surfaces and floors with disinfectant. 14. Complete daily log documenting work activity and completion of remedial and preventive procedures required.
Class V	1. Obtain infection control permit before construction begins. 2. Construct gypsum board/metal stud dust partition, extend and seal to ceiling. 3. Isolate HVAC system within work areas to prevent contamination of duct system. 4. Seal doors opening to adjacent areas with duct tape. 5. Block off and seal HVAC registers, grills and any openings in ductwork to remain. 6. Maintain negative pressure within work site utilizing HEPA equipped air filtration units. 7. Place dust mat at entrance and exit of work area. 8. Cover construction waste before transport in covered containers. 9. All work associated with a major project that has an approved ICRA authorization form will be assessed on an individual basis using the Risk Assessment and Exposure Control Checklist.	10. Wet mop and vacuum with HEPA filtered vacuum. 11. Cover construction waste before transport in covered and sealed containers. Biohazards to be double bagged. 12. Provide monitoring and clearance samples for mold/asbestos. 13. Do not remove barriers from work area until a Health System responsible person inspects completed project. 14. Remove barrier materials carefully to minimize spread of dirt and debris associated with construction. 15. Wet mop and vacuum with HEPA filtered vacuum before leaving work area. 16. Remove isolation of HVAC system in areas where work was being performed. 17. Housekeeping to wipe work surfaces and floors with disinfectant. 18. Complete daily log documenting work activity and completion of remedial and preventive procedures required.

Exceptions or additions to this permit are noted on the attached page.	☐ **Yes**	☐ **No**
Permit Requested By: SEAN KELLY	**Date: 08-08-2014**	**Approval By Service Affected: See Attached Affected Service List**
Approval by Safety Officer/ IH:	**Date:**	**Approval by Infection Control:** **Date:**

Risk Assessment and Exposure Control Checklist - Construction

VA San Diego Healthcare System

Project: **MULTIPURPOSE ROOM STAGE DEMOLITION**

Date: 08-08-2014

Hazard	Concern? Y/N	Control Measure	Remarks
Asbestos	Y	2,4,6,10,11,12,13,14,15,17 & 18	
Dust	Y	2,3,4,5,6,7,8,10,11,15, & 17	
Moisture/water leaks	N		
Vapors/fumes	Y	2,4,6 & 15	
Noise	Y		ALL IMPACTED AREAS WILL BE NOTIFIED PRIOR TO START.
Vibration	Y		ALL IMPACTED AREAS WILL BE NOTIFIED PRIOR TO START.
Air pressure relationships	Y	2,4, & 6	
Traffic flow	N		
Open outside walls	N		
Impact to levels above and below	Y		ALL IMPACTED AREAS WILL BE NOTIFIED PRIOR TO START.
Proximity of air intakes	Y	3,5 & 16	
Pest control within construction area	N		
Proximity of immune suppressed patients	N		
Potential TB exposure e.g., work in TB pt room, exhaust ducts or TB lab?	N		

Approval Signatures:

Project Manager: _____ Chief Engineering Section: _____

Infection Control (Class IV/V only): _____ Safety Officer/ IH: _____

Contractor: _____ Service/Section/Program Chief: **See Attached Affected Service List**

Certification of ICRA implementation prior to start of construction:

Project Manager: SEAN KELLY Date:08-08-2014 Contractor: _____Date: ____

Control Measures

Asbestos

1. Contractor has hired an asbestos abatement contractor for control and cleanup.
2. VA to hire independent IH to inspect and clear area for reoccupancy based on monitoring and/or professional judgment.
3. Published asbestos protocol to be followed for work thru ceiling.
4. Published asbestos protocol to be followed for work above ceilings.
5. Perimeter barrier will be constructed in the interstitial space to isolate the construction area with other areas in the interstitial.
6. Project area will be encased with spray applied hard surface encasement material.
7. Provide mini containments under negative air in public areas.
8. Sealed gypsum board barrier will be constructed to isolate the construction area from the public.
9. Transit Panels will be removed which is considered Class B removal

Dust

1. Sealed gypsum board barrier will be constructed to isolate the construction area from the public.
2. Trash carts will be covered when transported thru the building.
3. Provide negative air machine exhausted to outside.
4. Provide mini containments under negative air in public areas.
5. Provide negative air machine in space as air scrubber.
6. Provide walk off mats at entrances to work area
7. Perimeter barrier will be constructed in the interstitial space to isolate the construction area with other areas in the interstitial.

Moisture Water Leaks

1. Contain any water from core drilling activities.
2. Dike any floor penetrations to minimize risk of leaks from construction zone.

Vapors/Fumes

1. Use of products with low VOC's.
2. Provide negative air in construction zone exhausted to outside away from intakes.
3. Seal work area airtight barrier.
4. Cut all metal outside the building.
5. Seal any floor penetrations to minimize risk of fumes thru construction zone.
6. Shut down air handler to minimize infiltration of fumes from outside.

Noise

1. Schedule demolition work after normal work hours.
2. Cut all metal outside the building.

Vibration

1. Schedule demolition work after normal work hours.
2. Coordinate with occupants in surrounding areas to explain the work occurring

Air Pressure Relationships

1. Provide negative air during asbestos abatement.
2. Provide negative air during construction
3. Seal off supply and exhaust HVAC registers.
4. Provide anti room under negative pressure at entrance to project zone.

Traffic Control

1. Access construction area via exterior door.
2. Schedule delivery of large quantities of material and demolition haul out after hours.

Open Outside Walls

1. Construct temporary outside wall to limit the infiltration of wind, air, and temperature differences into the project site.

Impact to Levels Above and Below

1. Coordinate with occupants in surrounding areas to explain the work occurring.
2. Follow asbestos protocol when doing under floor work
3. Vacate areas when doing below floor work off of the catwalk.

Proximity of Air Intakes

1. Shut down air handlers to reduce infiltration of fumes from exterior activities such as painting, gasoline powered engines, roofing operations, equipment, etc.

Pest Control within Construction Area

1. Provide barriers to any open outside walls
2. Contact Pest Controller if any evidence of pests are found during the course of the work.

Proximity of immune suppressed patients

1. Relocate patients away from construction zone for entire project.
2. Relocate patients away from construction zone during demolition operations.

Potential TB exposure

1. Relocate patient and close door for negative air to clear room before work (Ref MCM 11-36 Attach B)
2. Contractor to ensure workers meet TB screening guidelines within 90 days prior to working in area in accordance with VHA Directive 2011-036 Sep 22, 2011.

LIST OF AFFECTED SERVICES
ICRA Notification/ Approval

PROJECT NAME: **MULIPURPOSE ROOM STAGE DEMOLITION**

PROJECT MANAGER: **SEAN KELLY**

SERVICE/SECTION/PROGRAM AFFECTED	NAME OF PERSON NOTIFIED	SIGNATURE	DATE NOTIFIED
1			
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