

INFECTION CONTROL RISK ASSESSMENT

Date:	5/31/2018
Project No.:	502-18-203
Project Title:	Medical Vacuum Replacement and Medical Gas Alarm Installation Project
Location of Construction:	Alexandria
Contractor:	
Project Coordinator:	Kenneth Dillard
Project Start Date:	
Estimated Duration:	60 Days
ICRA Needed:	Yes

Ouida Gibson RN,
Infection Control Nurse

Date _____
Ken Dillard PE,
General Engineer/COR

Kenneth Dillard

Date 5/31/2018

Step 1:

Using the following table, identify the **type** of construction activity (Type A–D).

TYPE A	Inspection and noninvasive activities: Including, but not limited to: Removal of ceiling tiles for visual inspection, limited to one tile per 50 square feet; painting (but not sanding); wall covering; electrical trim work; minor plumbing; activities that do not generate dust or require cutting of walls or ceiling access, except for visual inspection.	X
TYPE B	Small-scale activities of short duration that create minimal dust: Including, but not limited to: Installation of telephone and computer cable; access to chase spaces; and cutting of walls or ceilings where dust spread can be controlled.	
TYPE C	Work that produces a moderate to high amount of dust or requires demolition or removal of any fixed building components or assemblies: Including, but not limited to: Sanding of walls for painting or wall covering; removal of floor covering, ceiling tiles or casework; construction of new walls; minor duct work or electrical work above the ceiling; major cabling work; or any activity that cannot be completed within a single work shift.	
TYPE D	Major demolition and construction projects: Including, but not limited to: Activities that require consecutive work shifts; heavy demolition or removal of a complete cabling system; new construction.	

Step 2:

Using the following table, identify the **patient risk** groups that will be affected. If more than one risk group will be affected, select the highest risk group.

Low Risk (X)	Medium Risk ()	High Risk ()	Highest Risk ()
Office areas Lobbies / Corridors Mechanical Rooms	Cardiology Echocardiography Endoscopy Physical Therapy Imaging/MRI Respiratory Therapy Outpatient Exam Rooms Patient Rooms	Evaluation & Treatment Unit Laboratory (specimen) Outpatient Surgery Pharmacy Recovery Surgical units	Any area caring for immunocompromised patients Central Sterile Supply ICU Medical Unit Negative Pressure Isolation Rooms Oncology Operating Rooms

Step 3: Match the

Patient Risk Group (low, medium, high, or highest), with the planned...

Construction Project Type (A, B, C, D) on the following matrix, to find the...

Class of Precautions (I, II, III, IV) or the level of infection-control activities needed.

Class I–IV Coded precautions are delineated below:

IC Matrix = Class of Precautions: Construction Project by Patient Risk

Patient Risk Group	Construction Project Type		
	Type A	Type B	Type C
LOW-Risk Group	I	II	II
MEDIUM-Risk Group	I	II	X
HIGH-Risk Group	I	II	III/IV
HIGHEST-Risk Group	II	III/IV	III/IV

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

Description of Required Infection Control

Precautions by Class

	During Construction Project	Upon Project Completion
CLASS I X	<ol style="list-style-type: none"> 1. Execute work by methods that minimize creating dust from construction work 2. Safety barriers to be constructed and maintained. 3. Monitor and re-route traffic, including foot traffic 4. Contain construction waste before transport in appropriate containers. 5. Remove construction waste routinely to prevent overfilled bins 	<ol style="list-style-type: none"> 1. Do not remove barriers from the work area until completed project is inspected by the owner's Safety department and Infection Control department and thoroughly cleaned by the owner's Environmental Services department or Construction Crew, Grounds, ETC.
CLASS II	<ol style="list-style-type: none"> 1. Provide active means to prevent airborne dust from dispersing from the area 2. Water-mist work surfaces to control dust while cutting 3. Seal unused doors with duct tape 4. Block off and seal air vents 5. Place dust mats at the entrance and exit door(s) of work areas 6. Remove or isolate HVAC system in areas where work is being performed 	<ol style="list-style-type: none"> 1. Wipe work surfaces with disinfectant 2. Contain construction waste before transport in tightly covered containers 3. Wet-mop and/or vacuum with HEPA-filtered vacuum before leaving the area 4. Remove isolation of HVAC system in areas where work was performed
CLASS III	<ol style="list-style-type: none"> 1. Remove or isolate HVAC system in area where work is being done to prevent contamination of the duct system. 2. Complete all critical barriers—sheetrock, plywood, plastic—to seal the area from non-work areas or implement control-cube method* before construction begins. 3. Maintain negative air pressure within the work site, utilizing HEPA-equipped air filtration units. 4. Contain construction waste before transport in tightly covered containers. 5. Cover transport containers or carts. Tape covering unless the lid is solid. 	<ol style="list-style-type: none"> 1. Do not remove barriers from work area until completed project is inspected by the Infection Control and Safety departments, and is thoroughly cleaned by Housekeeping. 2. Remove barrier materials carefully to minimize risk of spreading dust and debris associated with construction 3. Vacuum work area with HEPA-filtered vacuums 4. Wet-mop area with disinfectant. 5. Remove isolation of HVAC system in area(s) where work was performed

CLASS IV	<ol style="list-style-type: none"> 1. Isolate the HVAC system in an area where work is being done to prevent contamination of duct system. 2. Complete all critical barriers—sheetrock, plywood, plastic—to seal area from non-work area or implement control-cube method* before construction begins. 3. Maintain negative air pressure within work site, utilizing HEPA-equipped air filtration units. 4. Seal holes, pipes, conduits, and punctures appropriately. 5. Construct anteroom and require all personnel to pass through it so that they can be vacuumed using a HEPA vacuum cleaner before leaving work site; or they can wear cloth or paper coveralls, removing them each time they leave the work site. 6. All personnel entering work site are required to wear shoe covers. Shoe covers must be changed each time the worker exits the work area. 7. Do not remove barriers from the work area until completed project is inspected by the owner's Safety department and Infection Control department and thoroughly cleaned by the owner's Environmental Services department. 	<ol style="list-style-type: none"> 1. Remove barrier material carefully to minimize spreading of dirt and debris associated with construction. 2. Contain construction waste before transporting in tightly covered containers. 3. Cover transport receptacles or carts. Tape covering unless solid lid. 4. Vacuum work area with HEPA-filtered vacuums. 5. Wet-mop area with disinfectant. 6. Remove isolation of HVAC system in areas where work was performed.
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Step 4. Identify the areas surrounding the project area, assessing potential impact:

Unit below	Unit above	Lateral	Lateral	Behind	Front
Low	Low	Medium Staff Offices	High Sterile Supplies	High Decon	High Clean /Sterile Supplies
Risk group	Risk group	Risk group	Risk group	Risk group	Risk group

Step 5	Identify specific site of activity:	Medical Vacuum Replacement and Medical Gas Alarm Installation Project
Step 6	Identify issues related to ventilation, plumbing and electrical (in the event of probable outages).	
Step 7	Identify containment measures:	
	What type of barriers needed:	
	Is HEPA filtration required?	No
Step 8	Consider potential risk of water damage.	If rain is in the Vicinity, contractor to seal off area from water damage
Step 9	Work Hours: Can or will the work be done outside of patient care hours?	Regular Business Hours.
Design Considerations	Do plans allow for an adequate number of isolation/negative airflow rooms?	NA
	Do plans allow for the required number and type of hand washing sinks or dispensers?	NA
	Plans relative to clean and soiled utility rooms?	NA
Containment Issues	Traffic Flow	N/A
	Housekeeping	Yes
	Debris Removal	Yes, every day and will be covered

Steps 1–3 Adapted from V. Kennedy & B. Barnard, St. Luke Episcopal Hospital, Houston, TX; C. Fine, CA.
 Steps 4–14 Adapted from Fairview University Medical Center, Minneapolis, MN, by ECSI Inc., 2001.
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