

SUBJECT: DESIGN/CONSTRUCTION AND MAINTENANCE RISK ASSESSMENT:
POLICIES AND PROCEDURES INFECTION CONTROL POLICY GUIDELINES
PROCEDURE NO: 918.01

Definitions: Construction - Construction or work is defined here as building additions, demolition, retrofit, alterations work, and maintenance activities.
Design Consultants – architect, engineer or other vendor providing design services for a County health facility.
General Conditions – County contract conditions that General Contractor is required to follow during the duration of a project. General Conditions are typically found in the project specifications.
General Contractor – lead contractor or maintenance service doing work in a health facility.
General Requirements – County contract requirements that General Contractor is required to follow during the duration of a project. General Requirements are typically found in the project specifications.
Facility Manager – individual representing the health facility that manages projects for the facility or coordinates with project managers.
Health facility – any Los Angeles County Department of Health Service facility or site. Infection Control Coordinator – individual appointed by either the Infection Control Committee health facility administration or by the Service Planning Area Medical Director to represent the health facility for issues pertaining to infection control during construction.
Project Manager – individual who manages construction projects at a health facility. A project manager may be an employee of Public Works, ISD or Health Services.
Work - Construction or work is defined here as building additions, demolition, retrofit, alterations work, and maintenance activities.
Supplementary Conditions – County contract conditions that General Contractor is required to follow during the duration of a project. Supplementary Conditions are conditions written specifically to address a specific project. Supplementary Conditions are typically found in the project specifications.
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Purpose: To provide guidelines for Design Consultants, General Contractors, Infection Control Coordinators, Facility Managers, and Project Managers to implement the *Infection Control During Construction Policy*. These guidelines are to be used in conjunction with the *Infection Control During Construction Policy*. Determination for the use of these guidelines is to be made by the Facility Manager and/or by the Project Manager after consultation with the Infection

EFFECTIVE DATE: February 16, 2004

SUPERSEDES:

APPROVED: Thomas Garthwaite

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Control Coordinator since construction projects vary in terms of duration, complexity and impact to the health facility.

Procedures:

I. Construction:

- A. The *Infection Control During Construction Policy* shall be incorporated in the design and planning phases of project for implementation during construction.
- B. Infection Control Classification Drawings, identifying the area of work and its Risk Classification, shall be prepared by the Design Consultant during the design development phase and submitted to the Infection Control Coordinator of the health facility through the Project Manager.
 - This drawing shall indicate the names and boundaries of area/s where work is to be performed and the associated construction access ways.
 - The Infection Control Classification Drawings and project specifications shall include details of physical barriers required to separate work area from the public as well as detailed requirements for isolating HVAC systems from the area of work.
- C. This plan, along with applicable project specifications, shall be presented to the Infection Control Coordinator to review, verify and approve of Risk Groups and work boundaries.
- D. The Infection Control Coordinator shall review, verify and approve the Infection Control Risk Group for each area of work and associated construction access ways shown on the Infection Control Classification Plans and return the marked up plans to Design Consultant through the Project Manager to be incorporated into the construction documents.
- C. Upon bid award and one month prior to the issuance of the construction Notice to Proceed the General Contractor shall submit a preliminary shop drawing describing the contractor's work plan for implementing infection control during construction. The Infection Control Coordinator and the Design Consultant shall review the work plan for general compliance to the *Infection Control During Construction Policy*.

The work plan shall include the following:

1. Schedule of the project (for information only. Not to be approved by the Design Consultant or the Infection Control Coordinator)
2. Drawings showing all phases of the project
3. Drawings identifying required boundaries for the work areas

4. Drawings labeled with Activity Types
 5. Drawings labeled with the Class of Precaution
 6. General Contractor proposes route for ingress and egress of construction workers and material during the phases.
- Prior to each phase of construction, the General Contractor shall submit detailed shop drawings to the Design Consultant and the Infection Control Coordinator for review and approval.
 - The Project Manager shall determine the duration required between submission of the detailed shop drawing and start of the construction phase required prior to each phase of construction. This duration shall be included in the project specification.
 - The General Contractor shall prepare all shop drawings in accordance with the *Infection Control During Construction Policy*. Note the following:
 1. The Infection Control Shop Drawings shall indicate the Infection Control Risk Group, Construction Activity Type and Class of Precaution as indicated in the requirements set forth in the *Infection Control During Construction Policy* for each area of work.
 2. The determination of the Class of Precautions is a three-step process.
 - ◆ Step One - Determine the Construction Activity Type, using information provided in the contract documents and the *Infection Control During Construction Policy*, and indicate activity types on the Infection Control Shop Drawings.
 - ◆ Step Two - Determine and confirm the Infection Control Risk Group boundaries, which are indicated on the construction documents. This step shall be done in consultation with the Infection Control Coordinator.
 - ◆ Step Three - Utilize the Infection Control Matrix – The Class of Precautions Table to determine the Class of Precautions based on the stipulated Construction Activity Type and the Infection Control Risk Group.
 3. The Infection Control Shop Drawings shall indicate the infection control measures to contain dust, debris, and so on, and protect the patients, employees, visitors and environment.

4. The Infection Control Shop Drawings shall indicate the required signage, type of signs, and location of signs.
 5. The Infection Control Shop Drawings shall provide construction details of barrier types that shall be used and other physical measures of protection. The shop drawings shall indicate the exact locations for each type of barrier, and the type and location of other physical measures of protection to be used.
 6. As part of the shop drawings, the General Contractor shall complete and sign the Infection Control Construction Consultation Forms Numbers 1 and 2 (attached to this procedure) for each area where work is to be performed prior to the commencement of work. The General Contractor may consult with the Infection Control Coordinator to complete the forms. Note the following:
 - a. In signing the Infection Control Construction Consultation Forms Numbers 1 and 2, the General Contractor acknowledges that work shall be accomplished in strict compliance and in accordance with the requirements specified for the Class of Precaution for the designated areas of work.
 - b. Information provided in the Infection Control Construction Consultation Forms Numbers 1 and 2 shall be consistent with the class of Infection Control Precautions as indicated in the shop drawings for each project work area including construction access ways prior to commencement for each phase of construction.
- D. The General Contractor shall abide by the Infection Control Classification Plans, the *Infection Control During Construction Policy*, the General and Supplementary Conditions and the Supplementary Requirements of the specification, all other applicable project specifications and the approval process for the Infection Control Shop Drawings.
- The Shop Drawings shall be reviewed and approved by the Infection Control Coordinator and the Design Consultant. Note the following:
 1. The Infection Control Coordinator and the Design Consultant shall, within a maximum of 5 working days, indicate all corrections, changes, additions and deletions to the Infection Control Shop Drawings that may be required. Shop drawings requiring corrections are to be revised and resubmitted by the General Contractor, for approval within a maximum of 10 working days.

2. If there are no further corrections to the Infection Control Shop Drawings, the Infection Control Coordinator shall mark “No Exceptions Taken”, sign and date the Shop Drawings.
 3. The Infection Control Coordinator shall then return copies of the shop drawings to the Design Consultant who will in-turn review the shop drawing for compliance to drawings and specifications, and process the submittal by forwarding them to the General Contractor for implementation.
 4. The General Contractor will not be authorized to proceed without approved shop drawings for an area or phase.
- E. Prior to the commencement of work, the General Contractor shall notify Infection Control Coordinator who shall inform appropriate staff as required of all pending work.
- F. The Infection Control Coordinator shall notify staff of the precautions being taken during construction.
- G. During work, the General Contractor shall provide and maintain all infection control construction measures as indicated on the approved shop drawings, *Infection Control During Construction Policy* and the Infection Control Construction Consultation Forms Numbers 1 and 2.
- H. The Project Manager (or designee) shall be responsible for managing the General Contractor for compliance with this policy.
- I. The Inspector of Record and the Hospital Facilities Management shall also be responsible for monitoring work to ensure compliance with this policy.
- J. If non-compliance is discovered, the General Contractor may be required to shut down work and be responsible for all costs associated with the noncompliance.

II. OTHER RELATED CONCERNS

The above procedures were written as guidelines for work being done in operating health facilities. During the design phase of any new building project, the Facilities Manager and/or Project Manager shall consult with the Infection Control Coordinator to ensure that the appropriate measures incorporated in the drawings and specifications include measures to protect the patients, staff, and visitors of the adjacent health facility.

INFECTION CONTROL CONSTRUCTION CONSULTATION FORM NUMBER 1

DATE _____

BUILDING_FLOOR _____ AREA _____

START DATE _____ SHIFT _____

ESTIMATED COMPLETION DATE _____

CONSTRUCTION HOURS _____

PURPOSE OF CONSTRUCTION _____

SUMMARY OF CONSTRUCTION TO BE PERFORMED _____

SPECIAL HAZARD (S) _____

POSSIBLE INCONVENIENCES _____

HANDLING OF CONSTRUCTION DEBRIS _____

INSTALLATION OF CONSTRUCTION BARRIER/S OR WALL/S? _____

MECHANICAL DEVICE(S) TO PREVENT OR LIMIT EXPOSURE _____

SECURING AIR DISTRIBUTION SYSTEM? _____

SPECIAL PROCEDURES _____

CONTRACTOR _____ PHONE _____

SUPERINTENDENT _____ PHONE _____

INFECTION CONTROL COORDINATOR _____ PHONE _____

PROJECT MANAGER _____ PHONE _____

INFECTION CONTROL CONSTRUCTION CONSULTATION FORM NUMBER 2

Project #:			Job #:		Control No:	
Project Area:			Project Start Date:			
Project Coordinator:			Estimated Completion Date:			
General Contractor:		Pager #:	OSHPD Permit #:			
Contractor Superintendent:			Superintendent Telephone #:			
YES	NO	CONSTRUCTION ACTIVITY		YES	NO	INFECTION CONTROL RISK GROUP
		TYPE A: Inspection, non-invasive activity.				GROUP 1: Lowest Risk
		TYPE B: Small scale; short duration, minimal dust generating activity.				GROUP 2: Medium Risk
		TYPE C: Activity that generates moderate to high levels of dust				GROUP 3: High Risk
		TYPE D: Major demolition and construction activities requiring consecutive work shifts.				GROUP 4: Highest Risk
RISK GROUP		CONSTRUCTION ACTIVITY				
		TYPE A	TYPE B	TYPE C	TYPE D	
GROUP 1	Low Risk	CLASS I	CLASS II	CLASS II	CLASS III or CLASS IV	
GROUP 2	Medium Risk	CLASS I	CLASS II	CLASS III	CLASS IV	
GROUP 3	High Risk	CLASS I	CLASS II	CLASS III or CLASS IV	CLASS IV	
GROUP 4	Highest Risk	CLASS III	CLASS III or CLASS IV	CLASS III or CLASS IV	CLASS IV	
CLASS I		<ul style="list-style-type: none"> a. Must obtain infection control consult before construction begins. b. Signage will be required and posted at the facility by the Infection Control Coordinator or their designee. c. Execute work by methods to minimize raising dust from construction operation. d. Immediately replace a ceiling tile displaced for visual inspection. 				
CLASS II		<ul style="list-style-type: none"> a. Must obtain infection control consult before construction begins. b. Signage will be required and posted at the facility by the Infection Control Coordinator or their designee. c. Isolate HVAC system in areas where work is being performed. d. Block and seal airvents. e. Provide active means to prevent airborne dust from dispersing into atmosphere. f. Water mist or wet work surfaces to control dust while cutting. g. Seal unused doors with ducttape h. Place/replace dust mat at entrance and exit of work area daily. i. Contractor will wet mop areas with hospital approved disinfectant daily. j. Environmental Services will wipe all surfaces within immediate patient care environment and staff areas with a hospital approved disinfectant daily. k. Contain construction waste before transport in tightly covered containers. l. Contractor shall vacuum with HEPA filtered vacuum before leaving area daily. m. Provide biological monitoring by a third party (consultant) during work that generates a moderate to high level of dust. 				
CLASS III		<ul style="list-style-type: none"> a. Must obtain infection control consult before construction begins. b. Signage will be required and posted at the facility by the Infection Control Coordinator or their designee. c. Remove or isolate HVAC system in areas where work is being done to prevent contamination of duct system. d. Complete construction of all critical barriers before construction begins. (see Infection Control During Construction Policy) e. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units. f. Seal holes, pipes, conduits and punctures with duct tape or other material. g. Do not remove barriers from work area until complete project is thoroughly cleaned and approved by Infection Control Coordinator. h. Vacuum work area with HEPA filtered vacuum. i. Remove barrier material carefully folding inward to minimize the spread of dirt and debris. j. Vacuum all surfaces with HEPA filtered vacuum to remove dust. k. Contain construction waste before transport in tightly covered containers. l. Cover transport receptacles or carts. m. Tape covering unless receptacle has a solid lid. n. Contractor shall wet mop areas with hospital approved disinfectant daily. o. Environmental Services will wipe all surfaces within immediate patient care environment and staff areas with a hospital approved disinfectant daily. p. Provide biological monitoring by a third party (consultant) during work that generates a moderate to high level of dust. 				
CLASS IV		<ul style="list-style-type: none"> a. Must obtain infection control consult before construction begins. b. Signage shall be required and posted at the facility by the Infection Control Coordinator or their designee. c. Remove or isolate HVAC system in areas where work is being done to prevent contamination of duct system. d. Complete construction of all critical barriers before construction begins. (see Infection Control During Construction Policy) e. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units. f. Seal holes, pipes, conduits and punctures with duct tape or other material. g. Do not remove barriers from work area until work area is thoroughly cleaned by the Contractor and inspected/approved by the Environmental Services Manager or the Infection Control Coordinator. h. Vacuum work area with HEPA filtered vacuum. i. Remove barrier material carefully folding inward to minimize spreading of dirt and debris. j. Vacuum all surfaces with HEPA filtered vacuum to remove dust. k. Contain construction waste before transport in tightly covered containers. l. Cover transport receptacles or carts. Tape covering unless receptacle has a solid lid. m. Contractor will wet mop areas with hospital approved disinfectant daily. Any dust tracked outside the area shall be removed immediately. n. Environmental Services will wipe all surfaces within immediate patient care environment and staff areas with a hospital approved disinfectant daily. o. Provide biological monitoring by a third party (consultant) during work that generates a moderate to high level of dust. 				
Additional Requirements:						
Contractor: (print)			Sign:		Date:	
Project Manager: (print)			Sign:		Date:	
Infection Control Coordinator: (print)			Sign:		Date:	

