Title: Construction Renovation and Maintenance Guidelines - Infection Prevention and Control	
Document #: 4867	**Issuing Authority:** Director, Infrastructure
Last Revised Date: 9/18/2024	**Version Number:** 2.0 (Current)

PURPOSE:
To maintain a safe and healthy environment at the BCHS for all patients, staff, physicians, volunteers, physicians, contractors and visitors. To control the amount of dust and debris from construction, renovation or maintenance related activities as necessary to prevent outbreaks of Aspergillosis or other related hospital acquired illnesses.

POLICY STATEMENT:
Healthcare facilities are frequently undergoing construction and renovations. If dust particles contaminated with bacteria and fungi are dispersed during construction, there may be health risks for patients, staff, physicians, volunteers, visitors or any other individuals within BCHS. Aspergillus and Legionella species are naturally occurring organisms found everywhere in soil, water and decaying vegetation. They are the most frequent causes of construction-related infections especially for immunocompromised individuals.

DEFINITION(S):
Construction
Any activity that may generate dust or disrupt water supply including new construction, renovations to existing areas, installation of new equipment and maintenance.

CSRG
Construction and Safety Resource Group (Multi-Disciplinary Team)

Project Manager
Person or person(s) who are responsible for their staff or a contractor performing construction work.

Qualified Person
A qualified person is one who has completed the approved CSA infection control requirements in construction, renovation and maintenance fundamentals and practical courses or equivalent.

PROCEDURE:
1. The project manager must complete the Infection Control Risk Assessment Tool (ICRA) in accordance with CSA Z317.13:22.
   1.1. The ICRA will include details on the scope of the project and all preventive measures.
   1.2. The ICRA tool must be completed prior to the start of any project work.
2. The project manager must consult with the leader for the unit/department where the construction is taking place.
   2.1. For projects where preventive measure level one or two is required, details of all preventive measures must be entered into the work order system by Engineering and Maintenance.
   2.2. All projects with a preventive measure level three or four will be reviewed by IPAC and may be presented to the CSRG.

DISCLAIMER: This is a CONTROLLED document. The most current version is in electronic format on the BCHS intranet site. Any documents appearing in paper form are NOT controlled.

Title: Construction Renovation and Maintenance Guidelines - Infection Prevention and Control	
Document #: 4867	**Issuing Authority:** Director, Infrastructure
Last Revised Date: 9/18/2024	**Version Number:** 2.0 (Current)

3. Once the ICRA is reviewed, additional infection control specifications may be recommended.
4. Prior to starting any work, the preventive measures will be inspected by IPAC for all level three or level four projects.
   4.1. The appropriate Preventive Measures checklist will be used for sign-off and then saved in the CSRG folder.
   4.2. If IPAC is not available, a qualified person will review the ICRA and complete a preventive measures checklist.
   4.3. IPAC will attach signage outside the project area to indicate that preventive measures have been approved.
5. For unscheduled / emergency construction and renovation projects determined to be preventive measures level three or four, the most responsible department responding (e.g. Environmental Services Department, Information Communication & Technology, Engineering and Maintenance) shall notify Infection Prevention & Control as soon as possible.
6. All completed ICRA tools and checklists will be maintained in the CSRG folder on the common drive.
7. At the completion of the work and prior to occupancy, the project manager, IPAC or a qualified member of the CSRG will perform a site inspection and update the preventive measures checklist for that project.
8. The contractor must perform a construction clean prior to site inspection.
9. The project manager or delegate will coordinate any communication regarding the project to the following:
   - Department or Unit Manager
   - Contractors and vendors
   - Staff carrying out the construction
   - Environmental Services
10. All staff and contractors at BCHS carrying out any construction type activities must implement and adhere to proper infection control risk mitigation which includes the following:
    - Project managers will carry out inspections at regular intervals.
    - Qualified members of IPAC or CSRG will conduct inspections as required.
    - For major projects an inspection schedule will be set up as determined by the CSRG.
    - Scheduled visits to construction sites require pre-approval from the project manager.
    - A qualified CSRG member or IPAC staff can stop work on the project until conditions outlined within the ICRA are met.
    - Any deficiency or breach of the infection control preventive measures, occurring on the project site will be reported to the project manager immediately. The project manager will then notify the appropriate personnel to ensure the deficiency is corrected.
    - The individual who reported the incident must complete a report in the safety incident management system.
    - IPAC will document any identified breaches and follow up items on the original ICRA tool for the project.
    -

DISCLAIMER: This is a CONTROLLED document. The most current version is in electronic format on the BCHS intranet site. Any documents appearing in paper form are NOT controlled.

Title: Construction Renovation and Maintenance Guidelines - Infection Prevention and Control	
Document #: 4867	**Issuing Authority:** Director, Infrastructure
Last Revised Date: 9/18/2024	**Version Number:** 2.0 (Current)

- CSRG will review all incidents at the regular CSRG meetings and recommend changes from lessons learned.
- CSRG will conduct audits of work orders and projects on a regular basis to ensure that this policy is being adhered to.

RELATED PRACTICES AND / OR LEGISLATIONS:
CSRG Terms of Reference

REFERENCES:
CSA Z317.13-22 Infection Control during Construction, Renovation and Maintenance of Health Care Facilities or most recent edition.

APPENDICES:
Appendix A - Construction Activity Type
Appendix B - Population Risk Groups and Geographical Areas
Appendix C - Infection Control Risk Assessment Tool (ICRA) Construction, Renovation, Maintenance
Appendix D - Preventive Measures Level I or II Checklist
Appendix E - Preventive Measures Level III or IV Checklist
Appendix F - Signage - Project Sign Off

DISCLAIMER: This is a CONTROLLED document. The most current version is in electronic format on the BCHS intranet site. Any documents appearing in paper form are NOT controlled.

Title: Construction Renovation and Maintenance Guidelines - Infection Prevention and Control	
Document #: 4867	**Issuing Authority:** Director, Infrastructure
Last Revised Date: 9/18/2024	**Version Number:** 2.0 (Current)

Appendix A - Construction Activity Type

Type A	**Inspection and Non-Invasive Activities** *Includes, but not limited to:* • Activities that require single controlled opening in a wall or ceiling for minor work or visual inspection by removing no more than one ceiling tile or access panel • Painting (not sanding) or wall covering • Electrical trim work • Minor plumbing that disrupts water supply for less than 15 minutes in localized patient care area (i.e. one room) • Other maintenance 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, Minimal Dust Activities** *Includes but not limited to:* • Activities that require access to and use of chase spaces • Cutting a small opening in a contained space where dust mitigation can be controlled (e.g. cutting of walls or ceilings to provide an access point for installing or repairing minor electrical work, ventilation components, telephone wires or computer cables) • Sanding, or repair of small area of walls • Plumbing work that disrupts water supply for less than 30 minutes in more than one patient care area
Type C	**Activities that Generate a Moderate to High Level of Dust, cause a Moderate Service Disruption, Requires Demolition or Removal of Any Fixed Facility Component (e.g. a sink) or Assembly (e.g. a countertop or cupboard) or Cannot be Completed in a Single Work Shift** Includes but is not limited to: • Sanding of walls in preparation for painting or wall covering • Removal of floor coverings, ceiling tiles and casework • New wall construction • Minor duct work • Electrical work above ceilings • Major cabling activities • Plumbing work that disrupts water supply for more than 30 minutes but less than 1 hour in more than one patient care area
Type D	**Activities that Generate a High Level of Dust, Activities that Necessitate Significant Service Disruptions and Major Demolition and Construction Activities Requiring Consecutive Work Shifts to Complete** Includes but is not limited to: • Activities requiring heavy demolition or removal of a complete cabling system • New construction that requires consecutive work shifts • Plumbing work that disrupts water supply for greater 1 hour or more in more than one patient care area • Soil excavation

DISCLAIMER: This is a CONTROLLED document. The most current version is in electronic format on the BCHS intranet site. Any documents appearing in paper form are NOT controlled.

Title: Construction Renovation and Maintenance Guidelines - Infection Prevention and Control	
Document #: 4867	**Issuing Authority:** Director, Infrastructure
Last Revised Date: 9/18/2024	**Version Number:** 2.0 (Current)

Appendix B - Population Risk Groups and Geographical Areas

Population Risk Group	Typical Areas	
Group 1 Lowest risk	• Office areas • Unoccupied wards • Public areas	• Laundry and soiled linen sorting or storage areas • Physical plant workshops • Housekeeping rooms and closets
Group 2 Medium risk	• Patient care areas, unless listed in Group 3 or Group 4 • Outpatient clinics (except oncology and surgery) • Admission and discharge units • Waiting rooms	• Autopsy and morgue • Occupational therapy areas remote from patient care areas • Physical therapy areas remote from patient care areas
Group 3 Medium to High risk	• Emergency (except trauma rooms) • Diagnostic imaging • Labor and birthing rooms without OR capacity • Nurseries for healthy newborns • Nuclear medicine • Hydrotherapy • Echocardiography • Laboratories	• General medical and surgical wards (all areas including soiled and clean utility rooms) • Pediatrics • Geriatrics • Long-term care • Mental Health In-Patient area • Food preparation, serving, and dining areas • Respiratory therapy • Clean linen handling and storage areas
Group 4 Highest risk	• Intensive care units (ICUs) • Operating rooms (including prep, induction, post-anesthetic care unit (PACU), and scrub areas) • Anesthesia storage areas and workrooms • Oncology units and outpatient clinics for cancer patients • Transplant units and outpatient clinics for transplant patients • Wards and outpatient clinics for patients with AIDS or other immunodeficiency diseases • Dialysis units • Critical care nurseries (NICU or SCN) • Labor and delivery operating rooms • Cardiac catheterization and angiography • Interventional radiology or high-risk diagnostic imaging • Cardiovascular and cardiology patient areas	• Pharmacy admixture rooms • Medical device reprocessing • Clean and sterile storage • Burn care units • Animal rooms • Trauma rooms • Protective environment isolation rooms • Tissue culture laboratories • Bronchoscopy • Cystoscopy • Pacemaker insertion rooms • Dental procedure rooms • Endoscopy

DISCLAIMER: This is a CONTROLLED document. The most current version is in electronic format on the BCHS intranet site. Any documents appearing in paper form are NOT controlled.

Title: Construction Renovation and Maintenance Guidelines - Infection Prevention and Control	
Document #: 4867	**Issuing Authority:** Director, Infrastructure
Last Revised Date: 9/18/2024	**Version Number:** 2.0 (Current)

DISCLAIMER: This is a CONTROLLED document. The most current version is in electronic format on the BCHS intranet site. Any documents appearing in paper form are NOT controlled.