

Livewell Southwest

**Guidelines for the Infection Prevention &  
Control Input into Design, Construction and  
Renovation Projects**

Version No 2.6  
Review: January 2018

**Notice to staff using a paper copy of this guidance**

**The policies and procedures page of LSW intranet holds the most recent version of this document and staff must ensure that they are using the most recent guidance.**

**Author: Director of Infection Prevention and Control.**

**Asset Number: 434**

## Reader Information

<b>Title</b>	Guidelines for the Infection Prevention & Control Input into Design, Construction and Renovation Projects. V. 2.6
<b>Asset number</b>	434
<b>Rights of access</b>	Public
<b>Type of paper</b>	Guidelines
<b>Category</b>	Clinical
<b>Document purpose/summary</b>	Infection control, renovation, new build, projects. To ensure the possibility for cross infection is minimised in healthcare facilities by design.
<b>Author</b>	Director of Infection Prevention and Control.
<b>Ratification date and group</b>	21 <sup>st</sup> January 2015. Policy Ratification Group.
<b>Publication date</b>	30 <sup>th</sup> January 2015
<b>Review date and frequency (one, two or three years based on risk assessment)</b>	Three years after publication, or earlier if minor changes are required.
<b>Disposal date</b>	The PRG will retain an e-signed copy for the archive in accordance with the Retention and Disposal Schedule, all copies must be destroyed when replaced by a new version or withdrawn from circulation.
<b>Job title</b>	Director of Infection Prevention and Control.
<b>Target audience</b>	All staff involved in the design of new build and renovation projects in the NHS or funded by it.
<b>Circulation</b>	Electronic: LSW intranet and website (if applicable)

	<p>Written: Upon request to the PRG Secretary on ☎ 01752 435104.</p> <p>Please contact the author if you require this document in an alternative format.</p>
<b>Consultation process</b>	Estates, Risk Management and Health and Safety
<b>Equality analysis checklist completed</b>	Yes
<b>References/sources of information</b>	<p>NHSLA 1.2.8 &amp; 2.2.8</p> <p>CQC Essential Standards of Quality &amp; Safety</p> <p>The Hygiene Code</p> <p>NHS Estates (2002). Infection Control in the Built Environment. The Stationery Office, London.</p> <p>Department of Health (2000). The NHS Plan. A Plan for Investment. A Plan to Reform. Department of Health. London.</p> <p>Department of Health (2003). Winning Ways. Working together to reduce Healthcare Associated Infection in England. Report from the Chief Medical Officer. Department of Health, London.</p> <p>Department of Health (2010) Core principles Health Building Note 00-09: Infection control in the built environment. The Stationery Office, London.</p> <p>National Audit Office (2000). Report by the Comptroller and Auditor General. The Management and Control of Hospital-Acquired Infection in Acute NHS Trusts in England. HC 230 Session 1999-00. National Audit Office, London.</p>
<b>Associated documentation</b>	See section 5.
<b>Supersedes Document</b>	Adapted from LSW's Guidelines for the Infection Prevention & Control Input into Design, Construction and Renovation Projects.
<b>Author Contact Details</b>	By post: Local Care Centre Mount Gould Hospital, 200 Mount Gould Road, Plymouth, Devon, PL4 7PY. Tel: 0845 155 8085, Fax: 01752 272522 (LCC Reception).

## Document review history

Version Number	Type of Change	Date	Originator of Change	Description of Change
V2.0	Updated	March 2008	P Jenks	Nothing substantial
2.1	Reviewed	June 2010	Inf Ctrl Nurse Lead	Reviewed, no changes made.
2.2	Updated	April 2012	Director of Infection Prevention and Control.	Updated
2.3	Updated	June 2012	Director of Infection Prevention and Control	Line added to section 5.10.1
2.4	Extended	June 2014	Acting Manager Infection Prevention & Control Team	Extended no changes
2.5	Extended	December 2014	Acting Manager Infection Prevention & Control Team	Extended no changes
2.6	Reviewed	January 2015	Infection Prevention and Control Manager	Reviewed, minor changes.

<b>Contents</b>		<b>Page</b>
1	Introduction	6
2	Purpose	6
3	Definitions	7
4	Duties & Responsibilities	7
5	Associated Guidelines and Protocols.	8
6	Training	15
7	Monitoring Compliance and Effectiveness	15
Appendix 1	Stages at which input from IPCT into construction and renovation projects should be sought	17
Appendix 2	Infection control risk assessment during construction/ refurbishment of a healthcare facility and matrix	19
Appendix 3	Infection Control Risk Assessment for dust control	22

# Guidelines for the Infection Prevention & Control Input into Design, Construction and Renovation Projects

## 1. Introduction.

- 1.1 There are approximately 100,000 healthcare-associated infections per year which cost the NHS £1 billion. To reduce the burden of healthcare-associated infection it is imperative that architects, designers and builders be partners with healthcare staff and infection control teams when planning new facilities or renovating older buildings. Infection control teams need to help non-clinical professionals to understand the main principles of how infection is spread in the context of the built environment. These principles should inform the planning, design and maintenance stages of health service facilities projects. This guideline outlines the infection control implications for planning construction and renovation and where risk assessment will help to mitigate environmental sources of microbes and prevention of infection through architectural design, e.g. hand-wash facilities; separation of patients with communicable disease; ventilation. Communication at an early stage of the planning process is also essential where prevention of cross-infection and infection control issues impinge upon project management in healthcare premises.

## 2. Purpose

- 2.1 The healthcare environment is a secondary reservoir for micro-organisms that have the potential for infecting patients. If Healthcare Associated Infection (HCAI) is to be reduced, it is important that infection control requirements are designed in at the planning and design stages of healthcare facilities, including new builds or renovation projects. Department of Health Core Principles Health Building Note 00-09 2010 advises that input should continue until the final stages of each project. (DOH 2010).
- 2.2 These guidelines aim to provide guidance on infection control and on the prevention of cross-infection in healthcare facilities to those responsible for the planning, design, construction and maintenance of such facilities.
- 2.3 This is achieved by:
- a. **Outlining the Department of Health/NHS Estates recommendations that underpin infection control practices relating to the planning, design and maintenance of healthcare buildings for both refurbishments and new builds.**
  - b. **Acting as a guide for infection control best practice in existing healthcare facilities.**
  - c. **Providing information regarding the role and responsibilities of the Project Manager, Head Nurse/Matron and the Infection Prevention and Control Team (IPCT) during projects.**
- 2.4 This document is predominantly for new builds and renovation projects, and acknowledges that some clinical areas may not currently comply with recommended standards. The information and guidance contained with this

policy has been derived from the Department of Health (2010) document “Core principles Health Building Note 009-09. Infection Control in the Built Environment” . For further or more detailed information, please refer to this document. This document recognises that statutory requirements including Firecode, DDA, Health and Safety at work Act and Building Regulations also need to be met. On occasions, compromise will need to be made between these regulations and infection control recommendations.

### 3. Definitions

IPCT Infection Prevention and Control Team

DIPC Director Infection Prevention and Control

HWB Hand wash basin

HCAI Health Care Associated Infections

ADL Kitchen Assisted daily living kitchen i.e. Occupational therapy kitchen

### 4. Duties and Responsibilities

#### Duties & Responsibilities

4.1 The **Chief Executive** is ultimately responsible for infection prevention and control and the content of all Policies and their implementation. The Chief Executive delegates the day to day responsibility of implementation of the policies to the **Director of Infection Prevention and Control (DIPC)** and the Infection Prevention and Control Team (IPCT).

4.2 **Locality Managers** are responsible for identifying, producing and implementing Livewell Southwest Policies relevant to their area.

4.3 The **Deputy Locality Managers** will support and enable operational Clinical Leads and Managers to fulfil their responsibilities and ensure the effective implementation of this Policy within their speciality.

#### 4.4 Staff Responsibilities

##### 4.4.1 Project Manager

The Project Manager should enlist the guidance and support of the IPCT for all stages of each new build or renovation project (see Appendix 1). This includes sending intent to commence design and construction memoranda and copies of all relevant building plans. Where possible, a member of the IPCT should attend all relevant meetings. The Project Manager should also promote compliance with the infection control specifications listed in section 4 of this policy. Furthermore, they should ensure that the Director of Infection Prevention and Control/ IPCT agrees with the final building plans.

##### 4.4.2 Matron /Ward Manager

It is the responsibility of the relevant Matron or Ward Manager to ensure that all infection control issues that relate to each building or renovation project in

a clinical area are discussed with a member of the IPCT and, to ensure that proposed fittings/patient related equipment not only complies with all regulations but, are also fit for purpose, regarding the patient group.

#### **4.4.3 Infection Prevention and Control Team**

It is the responsibility of the IPCT to provide input to the specific stages highlighted in Appendix 1 and to work with the Project Team to identify appropriate solutions. Risk assessments will also be conducted by the IPCT, for example the risk of infection during building work to immunocompromised patients from airborne mould spores. This should identify the construction activity type and the infection control risk groups by area which then identifies the 'risk class' by correlating the construction type with the risk groups in a matrix (appendix 2) and then provides guidance to the risk measures advice for each class and detailed in the Dust control risk assessment (appendix 3).

#### **4.4.4 Contract Staff**

Contract staff should be familiar with and comply with current Livewell Southwest Infection Control Policies and Procedures. They should contact the IPCT for further advice if this is required.

### **5. Associated Guidelines and Protocols.**

The following are the key infection control recommendations to comply with extant NHS guidance. Each project will require separate discussion and there may be different issues that are viewed as a priority. Not all the infection control specifications will be applicable to all projects.

#### **5.1 Sizing/space**

- a. Bed centres (and chairs used for ambulatory care) should be at least the recommended distance apart (according to latest national guidance including the relevant Health Building Notes). Bed groupings should contain the smallest possible number of beds. The actual number will vary according to the new build or renovation.
- b. There should be a sufficient number of single rooms to accommodate patients who require source isolation, to prevent the spread of infection. The actual number will vary according to the new build or renovation.
- c. Where large numbers of beds are grouped in bays, more single rooms will be needed.
- d. Design, accessibility and space in patient areas should facilitate ease of cleaning and maintenance.
- e. Spacing should take into account access to equipment around the bed and access for staff to hand wash facilities.

- f. There should be the provision of enough sanitary facilities and showers/bathrooms to ensure easy access, convenience and patient independence where possible. The actual number will vary according to the new build or renovation.
- g. Toilet facilities for renovation projects should be the recommended distance (according to latest national guidance including the relevant Health Building Notes) from the bed area or day room. For new builds, all single rooms and four-bedded bays should have en-suite facilities.
- h. Service panels should ideally open onto corridors rather than clinical areas.

## **5.2 Isolation rooms/single rooms/ventilation**

- a. Isolation requirements should be considered during the design of a new build or renovation of an existing build. Current NHS guidance suggests 50% single rooms.
- b. With an increase in antibiotic resistant bacteria and immunocompromised inpatients, the following should be considered:
  - en suite single rooms
  - isolation rooms
- c. Parameters for natural ventilation, general extract ventilation and ventilation for specialist areas such as theatres should comply with the Health Building Notes for relevant departments such as wards, theatres and other specialist areas and Health Technical Memorandum 03-01 (Ventilation in Healthcare Premises) or latest guidance.

## **5.3 Hand Wash Basins (HWB)**

Hand hygiene is of the utmost infection control importance and the following should be adhered to in order to facilitate this important action.

- a. There should be a minimum of one HWB in each single room. En suite single rooms should have a HWB in the en suite facility in addition to one in the patient's room.
- b. Isolation rooms should have a HWB in the ante-room (if applicable), isolation room and en suite facilities.
- c. Intensive and critical case areas: a HWB shall be provided for each bed space.
- d. A HWB should be provided as appropriate in each bay.
- e. In outpatients, a HWB should be close to where clinical procedures are carried out.

- f. All HWBs should be accessible and should not be situated behind curtains.
- g. All toilet facilities should have a HWB (e.g. cleaning bowls).
- h. HWBs should not be used for other purposes.
- i. Wall-mounted cartridge soap and paper towels should be available at each HWB in clinical areas. Consideration to providing moisturising hand cream should also be given.
- j. Elbow-operated or non-touch mixer taps are required in clinical areas and these should not have spray attachments. The jet of water should be set to miss the grated waste.
- k. HWBs in clinical areas should not have a plug or overflow.
- l. Waterproof splash backs, preferably melamine, vinyl or similar material should be used for all basins. Tiles if used should have waterproof grout.
- m. There should be sufficient space for the placement of foot-operated waste bins adjacent to HWBs.
- n. There should be sufficient space for the placement of foot-operated waste bins and linen trolleys adjacent to HWBs in lobbies to isolation rooms.

Clinical waste bins should be separate from other waste bins and clearly identified.

#### **5.4 Ancillary areas**

- a. Ancillary areas should be easily accessible, fit for the purpose and safe from an infection control and health and safety perspective.
- b. These areas should have the ability to be easily cleaned, have facilities for hand washing, and for disposal of fluid and clinical waste. Sufficient storage of supplies and equipment should also be facilitated.
- c. Clean and dirty areas should be kept separate and the workflow pattern and management of each area should be clearly defined.

Waste bin storage areas should where possible be located adjacent to dirty utilities ideally with an interconnecting door.

Ancillary rooms should have sufficient space for appropriate waste bins.

#### **5.5 Engineering services**

- a. Estates should provide specifications that will comply with all statutory and NHS requirements.

## **5.6 Storage**

- a. Patients should be provided with a locker for their personal possessions and clothing.
- b. Domestic cleaning equipment, laundry and clinical waste should be stored in separate purpose-built areas to prevent cross-contamination.
- c. Storage should be provided for equipment and medical consumables. Cupboards are preferable to shelves and should be floor to ceiling where practicable. Ideally, wall-mounted cupboards should be constructed where there is no gap between the top of the cupboard and the ceiling. When this is not possible, a sloped top should be put on top of the units to stop these areas being used for storage, whilst ensuring that they can be adequately cleaned/wiped down.
- d. Storage should be provided for large pieces of equipment that are currently not in use.
- e. Storage should be provided for staff personal effects away from clinical areas.
- f. Consideration should be given to providing coat hooks at the entrance to clinical areas for staff and visitors to leave their jackets and coats.

## **5.7 Finishes and floors, walls, ceilings, doors, windows, interior design, fixtures and fittings**

- a. The quality of finishes in all areas should be fit for required purpose.
- b. Soft furnishings should be covered in an impervious textile, e.g. vinyl, within all clinical and associated areas. Pervious material coverings should not be used for any piece of patient-related furniture.
- c. Flooring should be appropriate to the area and as smooth as possible whilst maintaining sufficient non-slip properties. It should be easy to clean and appropriately wear-resistant.
- d. Carpets should not be laid within any clinical or associated area that is used by patients. This includes waiting and reception areas, corridors and stairways. Attractive vinyl flooring is available which can provide aesthetic appeal. The IPCT, however, will advise accordingly to areas where it is felt that carpets are necessary to enhance patient care.
- e. All joints and crevices should be sealed.
- f. Disposable curtains are the preferred option, but tracking should be installed that is suitable for disposable and non-disposable curtains. If non-disposable curtains are used, they should be able to withstand recommended washing and finishing temperatures and sufficient sets purchased to allow for laundering.

- g. Window blinds should be used with caution. If purchased, they should be vertical or roller blind and made of a wipeable material. Textile blinds and those with horizontal slats (e.g. Venetian blinds) should not be installed, except if they are contained within an integral double glazed unit.
- h. All surfaces should be designed for easy cleaning.
- i. Smooth, hard impervious surfaces should be used for walls.
- j. All surfaces, fittings, fixtures and furnishings should be designed for easy, repeated cleaning and durability.

## **5.8 Decontamination**

- a. Local reprocessing should be the exception rather than the norm and advice should be sought from the IPCT if decontamination in clinical areas is deemed to be the only option.
- b. Facilities should be designed with adequate and appropriate storage to facilitate the use of the Sterilisation and Disinfection Unit.

## **5.9 Laundry and linen services**

- a. There should be separate storage areas for clean and used laundry that is awaiting collection.
- b. Delivery of clean linen and removal of used linen should be via a main corridor, not through a clinical area.
- c. Domestic washing machines and tumble dryers are not permitted. Domestic washing machines must not be used as they are not allowed under the Water Regulations which demand that washing machines and dishwashers in health care premises are to a standard at least equivalent to Category 5, this deals with separation of the incoming water supply from possible back contamination of category 5 type fluids. Domestic type appliances do not conform to this requirement.
- d. All linen should be able to withstand recommended washing and finishing temperatures (as outlined in Health Service Guideline (95)18 or latest guidelines).

## **5.10 Catering/Food hygiene**

### **5.10.1. Patient areas – ward /ADL/Therapy kitchens**

- a. Equipment purchased should conform to the standards in the current Food Safety Act and regulations under the act. This includes the need for a separate HWB and the finishes used for the floors, walls, etc.
- b. There should be a separate, designated area for the storage of cleaning equipment.

- c. The kitchen will need to be large enough to accommodate the cook-freeze system regeneration oven and have acceptable ventilation.
- d. Window blinds should not be installed and consideration should be given to pest proofing windows and doors.
- e. Dishwashers should conform to current national guidelines for use in healthcare premises.
- f. Waste disposal units to be fitted in all kitchens.

#### **5.11 Staff areas/rooms**

- a. A separate HWB should be provided.

#### **5.12 Segregation, storage and disposal of waste**

- a. Systems in place should be capable of protecting patients, staff, contractors and the environment from harm.
- b. Waste should be segregated, stored and disposed of in accordance with current legislation to decrease the risk of injury and contamination by blood and body fluids.
- c. Waste should be removed via a main corridor, not through a clinical area.

#### **5.13 Changing Facilities**

- a. Consideration should be given to providing changing facilities for staff to encourage them to change out of their uniform in the workplace.
- b. HWBs and sanitary facilities (showers) should be provided in the event of contamination by blood and or body fluids.

#### **5.14 Service lifts/pneumatic delivery systems**

- a. Specifications shall comply with all statutory and NHS requirements.
- b. The final location of a pneumatic delivery system should be discussed with the IPCT.

#### **5.15 Design for a safe environment**

- a. Areas to consider include:
  - Surfaces that facilitate easy cleaning (smooth, hard, impervious floor finishes, walls and ceilings).
  - Walls and corner protection to reduce impact damage.
  - Welded / sealed joints to prevent water egress.
  - Sealed skirting boards.

- low retention fixtures/fittings.
- splash-backs to sinks and intact seals around sinks.
- adequate storage facilities for equipment not in use and to prevent items being stored on the floor.
- storage for cleaning equipment.
- adequate supplies of equipment and personal protective equipment.
- colour-coded segregation of cleaning equipment.
- Flooring should be installed with integral skirting, preferably prior to the installation of cupboards, fitted units and other fixtures and fittings.

- b. Cleaning equipment should be cleaned and stored in appropriate accommodation. This facility should include a designated sink for disposal of potentially contaminated water, mop racks, a facility to clean floor pads and shelving. A HWB should also be provided.

### **5.16 Construction and the role of cleaning**

- a. A planned and funded cleaning programme is essential when building work of any nature is planned.
- b. Workflow and agreed time-scales should be devised and adhered to.
- c. Frequent auditing of the area involved should be undertaken to highlight any problems.
- d. Early involvement of the IPCT in the planning process will alleviate potential infection control issues.
- e. Areas that are involved in building projects should be fully sealed to prevent dust/dirt travelling to adjacent areas. See Appendix 2 for an example of a risk assessment and appropriate action.
- f. Consideration should be given to pest control and maintenance of a tidy site during building work.

## **6. Training**

All staff attend mandatory/ induction training and will be informed by the IPCT that IPCT should be involved in all design, renovation and construction projects.

## **7. Monitoring Compliance and Effectiveness**

### **Post-project evaluation**

#### **7.1 Post-project evaluation**

- a. Post-project evaluation will be facilitated by the Project Team with contribution from relevant parties, including infection control, patient representatives, clinicians and Estates.

- b. The purpose of this evaluation is to improve future project appraisal, design, management and implementation.
- c. The evaluation will need to be undertaken when the facility has been in use for some time.
- d. It is a learning process and should not be seen as allocating blame.
- e. The three stages are:
  - Project appraisal.
  - Monitoring and evaluation of the project.
  - Review of project operations.

**All policies are required to be electronically signed by the Lead Director. Proof of the electronic signature is stored in the policies database.**

**The Lead Director approves this document and any attached appendices. For operational policies this will be the Locality Manager.**

**The Executive signature is subject to the understanding that the policy owner has followed the organisation process for policy Ratification.**

Signed:       Lead Nurse, Director of Infection, Prevention and Control

Date:         30 January 2015

## Appendix 1

Stages at which input from the IPCT into Construction and Renovation Projects should be sought.

### 1. Concept/Feasibility Study

The IPCT should review operational policies and procedures, such as the 1:200 scale plans. Examples:

- Adding beds to ward areas may mean extra sluice, single/isolation rooms or hand washing facilities.
- Adding extra theatres will need a review of decontamination facilities for instruments.
- Additional specialist areas will need extra infection control input.

### 2. Sketch Plans

- The IPCT need to give a broad view of infection control issues at this stage.

### 3. Detail Planning/Design (1)

1:50 scale designs (early period). Example:

- Discussion regarding the locations of rooms for correct workflows/infection control practice, e.g. wards, theatres.

### 4. Detail Planning/Design (2)

1:50 scale designs (later period). Example:

- Discussion of finer details: location and type of fixtures and fittings, for example hand wash basins/types of basins; airflows in theatres, flooring.

### 5. Construction

- The IPCT will need input here, if new build is attached to existing healthcare building only, to prevent risks to patients.

### 6. Equipment

- Decision on equipment should be made as an ongoing process.

### 7. Trust commissioning/equipping

- The IPCT should have an input during this stage if costly mistakes are not to be made.

### 8. Evaluation

- Stage at which lessons learnt can be highlighted for future projects.

## Appendix 2

Infection control risk assessment during construction/refurbishment of a healthcare facility and matrix

<b>1. Construction Activity</b>				
<p><b>Type A</b> Inspection of non-invasive activities, includes but not limited to:</p> <ul style="list-style-type: none"> <li>○ Removal of ceiling tiles for visual inspection on corridors and non-clinical areas;</li> <li>○ Painting and minimal preparation in corridors and non-clinical areas</li> <li>○ Electrical trim work (all plugs, switches, light fixtures, smoke detectors, ventilation fans);</li> <li>○ Minor plumbing and activities that do not generate dust or require cutting of walls or access to ceilings other than for inspection.</li> </ul>				
<p><b>Type B</b> Small scale, short duration activities that create minimal dust. Includes:</p> <ul style="list-style-type: none"> <li>○ Removal of a limited number of ceiling tiles in low risk clinical area for inspection only;</li> <li>○ Installation of telephone and computer cabling</li> <li>○ Access to chase spaces</li> <li>○ Cutting of walls or ceiling where dust migration can be controlled in non-clinical areas.</li> </ul>				
<p><b>Type C</b> Any work of long/short duration which generates a moderate-to-high level of dust or requires minor building works, demolition or removal of any fixed building components or assemblies. Includes, but not limited to ;</p> <ul style="list-style-type: none"> <li>○ Sanding of walls for painting or wall covering</li> <li>○ Removal of floor coverings, ceiling tiles, panelling, and wall-mounted shelving and cabinets;</li> <li>○ New wall construction</li> <li>○ Minor duct work or electrical work above ceilings</li> <li>○ Major cabling activities</li> </ul>				
<p><b>Type D</b> Major demolition and construction projects. Including, but not limited to new construction/machinery and equipment installations, rectifications and modifications.</p>				
<b>2. Infection control risk group</b>				
Group 1 (low risk)	Group 2 (medium risk)		Group 3 (high risk)	
Office areas/corridors plant rooms/service ducts	Radiology/magnetic resonance imaging Clinical departments Outpatients Pharmacy Examination rooms		LSW do not have high risk areas	
<b>3. Now identify the 'risk class' by correlating 'construction type' with 'risk group' in the matrix below.</b>				
<b>Risk group</b>		<b>Construction type</b>		
Group 1	<b>Type A</b>	<b>Type B</b>	<b>Type C</b>	<b>Type D</b>
Group 2	Class 1	Class 2	Class 2	Class 3

Group 3	Class 1 Class 2	Class 2 Class 3	Class 3 Class 3	Class 3 Class 4
---------	--------------------	--------------------	--------------------	--------------------

**4. After identifying the risk class from above, follow the risk measures advised for each class.**

**Class 1**

- Execute work by methods to minimise dust from construction
- Immediately replace any ceiling tile displaced for visual inspection

**Class 2**

- Where appropriate, isolate HVAC (Heating, Ventilating, Air conditioning) system in the area where work is to be performed.
- Provide active means to prevent airborne dust from dispersing into atmosphere if practicable, i.e. dust bag to machine
- Water–mist work surfaces to control dust while cutting
- Avoid pooling of water which may be prolonged
- Seal unused doors with duct-tape
- Block off and seal air vents
- Wipe surfaces with detergent
- Contain construction waste before transport in tightly covered containers
- Wet-mop and vacuum with filtered vacuum cleaner before leaving work area
- Place dust-attracting mat at entrance of work area (tacky mat)
- Remove isolation of HVAC system

**Class 3**

- Where appropriate isolate HVAC system in area where work is being done to prevent contamination of duct system
- Complete all critical barriers and implement dust control methods before construction begins
- Maintain negative air pressure within work site. Use HEPA equipped air filtration unit if there be a risk that air will enter building
- Do not remove barriers from work area until complete project is clinically clean
- Vacuum with filtered vacuum cleaner during works
- Wet-mop during works
- Remove barrier materials carefully to minimise spreading of dust and debris associated with construction
- Contain construction waste before transport in tightly covered containers
- Remove isolation of HVAC system in areas where work has been done and appropriate checks performed.

**Class 4**

- Isolate HVAC system in area where work is being done to prevent contamination of duct system
- Complete all critical barriers and implement dust control methods before construction begins
- Maintain negative air pressure within work site using HEPA-equipped air filtration unit
- Seal holes, pipes, conduits and punctures appropriately
- Construct airlock and require all personnel to remove dirty apparel and

clean down before leaving the work site. The use of cloth/paper disposable overalls/shoes etc.. may be required

- Do not remove barriers from work area until completed project is thoroughly cleaned (as before) and repeat clinical clean after barrier removed
- Vacuum work area with filtered vacuum cleaner
- Wet-mop area with detergent during works
- Remove barrier materials carefully to minimise spreading of dust and debris associated with construction
- Contain construction waste before transport in tightly covered and sealed containers
- Remove isolation of HVAC system in areas where work has been done and appropriate checks performed

## Appendix 3

### Infection Control Risk Assessment for Dust Control

To be completed by the IPCT and Project Manager prior to work commencing

Risk Group:

Construction Activity:

Scheme Title:

.....

	Generic Requirement	Applicable (Yes / No)
<b>1</b>	<b>Dust Resistant Barrier(s) which meet fire regs required</b>	
1.1	Robust sealed plastic dustsheets	
1.2	Framed sheetrock or drywall sealed with duct tape	
<b>2</b>	<b>Air extract required to provide negative pressure</b>	
2.1	Air extract with external venting positioned to avoid air intakes	
2.2	Air extract with HEPA filtration	
<b>3</b>	<b>Dedicated access for construction staff</b>	
3.1	Clinical areas should be clinically cleaned prior to permitting contactor access	
<b>4</b>	<b>Demolitions to be removed in sealed bins</b>	
4.1	May be done during normal working hours	
4.2	Must be done outside normal working hours	
4.3	Bins must be clean when leaving the sealed area	
<b>5</b>	<b>Control of dust &amp; dirt at construction staff access areas Construction staff, tools &amp; equipment must be free of visible dust &amp; dirt if entry to clinical / public areas is unavoidable</b>	
5.1	Vacuuming of clothes on exit	
5.2	Dedicated changing area	
5.3	Sticky floor strips at site exit points to catch dirt & dust	
5.4	Tools to be cleaned prior to entering a public or clinical area.	
5.5	Floors and walls adjacent to site access point to be damp cleaned twice daily	
<b>6</b>	<b>Construction staff access to air ducts or ceiling spaces</b>	
6.1	If air duct or spaces above the ceiling are entered, and if the ceiling space is not above an area sealed from floor to ceiling, then the ceiling space needs to be thoroughly vacuumed before work is performed.	
6.2	Existing false ceilings above areas of construction should be vacuumed at the end of construction work.	
<b>7</b>	<b>Additional recommendations</b>	