Infection Prevention & Control in the Built Environment

Department/ Service:	Estates & Facilities
Originator:	Liz Watkins DIPCC
Accountable Director:	Director of Estates & Facilities
Approved by:	Trust Infection Prevention & Control Committee
Approved by Medicines Safety Committee: *(When medicines are included in the document)*	N/A
Date of approval:	5th May 2026
Revision due: This is the most current document and should be used until a revised version is in place	3 years after date approved, unless HBN 00-09 or other significant guidance is updated sooner. 5th May 2029
Target Organisation(s):	Worcestershire Acute Hospitals NHS Trust
Target Departments:	All services and departments
Target Staff Categories:	All staff groups

Policy Overview:

Provision of a clean and safe environment is a duty of all NHS organisations. Buildings must be planned, designed, built and maintained in line with relevant legislation and national guidance to protect the health of patients, visitors and staff.

This policy sets out the processes the Trust will follow to achieve this, as well as the outcomes which will be achieved.

Key Amendments to this Document

Date	Amendment	Approved by:

Contents page:

1. Introduction

Provision of a clean and safe environment is a duty of all NHS organisations. Buildings must be planned, designed, built and maintained in line with relevant legislation and national guidance to protect the health of patients, visitors and staff.

The healthcare environment can harbour organisms that can infect patients, and in some cases visitors and staff can also be at risk. To reduce healthcare-associated infections (HCAIs), infection prevention and control (IPC) measures must be integrated from the beginning of planning and designing a healthcare facility and maintained throughout the life of the building.

This policy sets out the processes the Trust will follow to achieve this, as well as the outcomes which will be achieved.

2. Scope of this Document

This document covers the lifecycle of built environment management including planning, design, building, commissioning, usage, decommissioning and demolition of healthcare premises for which the Trust is responsible.

Sections of the policy will also apply to buildings not owned by the Trust, but in which we operate services.

This document refers to a range of other Trust policies and guidance, as well as relevant national guidance, evidence-based publications and legislation.

3. Definitions

Definition	Description
AUTHORISING ENGINEER (AE)	An independent, external expert. A qualified engineer in the subject matter (water, ventilation) who will provide advice to the Trust.
BUILT ENVIRONMENT	The totality of all buildings within the Trust. Includes clinical and non-clinical areas, and patient/service user surroundings including the fabric of the building and all fixtures, fittings and services including air and water supplies
COSHH	Control of Substances Hazardous to Health Regulations (2002)
DIPC	Director of Infection Prevention and Control
HBN	Health Building Note
HCAI	Health Care Associated Infection; means any infection acquired by a patient as a consequence of treatment received in healthcare premises or infection acquired by a member of staff while delivering care.
HTM	Health Technical Memorandum
IMMUNO-SUPPRESSED	A patient whose immune response is deficient because of an impaired immune system.
IPC	Infection Prevention and Control
NEW BUILD	Construction of a new building or new part of a building e.g extension
REFURBISHMENT	Renovating, re-equipping, or restoring existing buildings or services within existing buildings
SOP	Standard Operating Procedure

Definition	Description
SUBJECT MATTER EXPERT (SME)	Individuals with significant expertise and qualifications in a specific area of practice (for example: infection prevention, water, ventilation, health & safety)
TEMPORARY CLOSURE	Areas not in use/ unoccupied for a period of more than 4 days.
TIPCC	Trust Infection Prevention and Control Committee

4. Responsibility and Duties

A brief summary of key responsibilities is included below. This is not exhaustive, and more detail is contained within individual job descriptions and annual objectives for all staff.

Managing Director and Trust Board
The Managing Director and Trust Board have overall responsibility for legal compliance, governance and quality of healthcare delivered across the organisation, including in relation to all aspects of the built environment and infection prevention.

Director of Estates & Facilities
The Director of Estates & Facilities has strategic responsibility for the built environment, reporting and providing assurance to Trust Board and the Managing Director via Trust governance processes. Individually reports directly to the Managing Director.

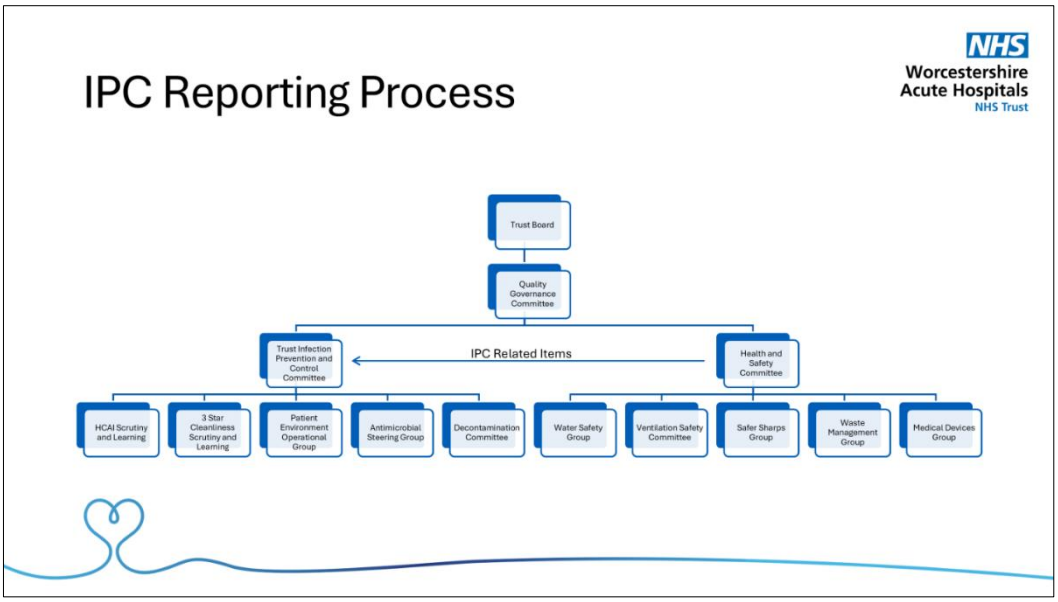
Estates & Facilities Division
The Estates & Facilities Division has operational responsibility to manage the built environment in its entirety, including assurance systems for PFI sites and services, and contractor management and control. This is overseen by the Director of Estates & Facilities.

Executive Director of Infection Prevention & Control (EDIPC) and the DIPC
The EDIPC and DIPC have legal responsibility for ensuring Trust compliance with all aspects of the *Health & Social Care Act (2008): code of practice on the prevention and control of infections (2022)* including those relating to infection prevention in the built environment. This includes ensuring assurance via TIPCC and the Trust governance framework. Individually reports directly to the Managing Director.

Infection Prevention & Control Team (IPCT), including Infection Control Doctors (ICDs)
The IPCT have operational responsibility for advising on, monitoring and reporting on infection prevention standards, including those relating to the built environment. This responsibility includes provision of expert advice, risk assessment, and escalation of concerns via the DIPC and managers across the Trust as needed to ensure patient, visitor and staff safety from infection. The team reports directly to the DIPC.

Managers, Clinical Leads and All Staff
All staff across the organisation have responsibility, in line with their individual job descriptions, to follow policy and engage with Estates & Facilities teams and the IPCT to ensure the built environment is managed effectively, and patients, visitors and staff are protected from infection risks associated with the built environment.

Governance Reporting Route
A summary of the governance route is below (taken from TIPCC Terms of Reference):



5. Policy detail

Strategic Context and Risks

Healthcare environments can act as reservoirs for micro-organisms which have the potential to cause infections in patients, visitors and staff. These potential risks to health can be found within the fabric of buildings, fixtures and fittings, and within water and ventilation systems, unless the entire built environment is properly managed, including during building and refurbishment works. Detail of most significant risks can be found in Appendix 1.

Specific legislation, national guidance, Health Building Notes (HBNs) and Health Technical Memoranda (HTMs) exist, setting out the duties and responsibilities of NHS organisations to identify, manage and mitigate the risks posed by the built environment. This includes but is not limited to infection risks. These documents are detailed in the *Standards To Be Met* and *References* section of this policy.

Stages of Managing The Built Environment

The main stages of managing the built environment are summarised in the table below:

Design and Planning	Construction	Commissioning and Handover	Managing Buildings In Use	Decommissioning and Demolition
Including - Concept/ feasibility study - Financial planning - Designing in prevention of infection	Including - Contractor management - Risk management - Dust control and cleaning	Including - Snagging - Testing to ensure microbial safety - Cleaning	Including - Cleaning - Maintenance - Refurbishment	Including - Management od decommissioned buildings until demolition - Control of dust, rubble and hazardous materials
Underpinned At ALL Stages by: • Risk Assessment and Risk Management; documented and dynamic • Monitoring and Governance; embedded as part of formal Trust processes				

- Involvement of Subject Matter Experts, including Infection Prevention & Control
- Involvement of Authorising Engineers (AEs) relevant to water and ventilation
- Stakeholder involvement and clinical input to ensure patient safety

The lead directorate/division with responsibility for ensuring safe, effective management of the built environment is Estates & Facilities. To do this, members of the Estates & Facilities Team are guided by a number of key documents, which are set out in the standards to be met section.

Summary of Responsibilities At Each Lifecycle Stage

Project and Programme Managers: Capital and Estates Works

Responsibilities	Details
Ensure IPC involvement at all stages	• Engage IPC team at all stages of lifecycle from planning through post-project evaluation. • This prevents design flaws, costly redesigns, delays, and infection risks by early involvement.
Comprehensive risk assessment throughout project.	• Create a live risk assessment at the planning stage, covering operational and regulatory issues: documented and dynamic. • Update the risk assessment throughout the project. Link to risk register as needed.
Adopt the principle of *designing-in* the prevention of infection as part of design and planning, in line with industry and healthcare standards. Ensure project is in line with the *standards to be met*.	• Identify all relevant HBN, HTM and other documents relating to the project and ensure these are taken into account by designers and architects • Ensure all designs comply with relevant guidance: HBNs and HTMs, and especially HBN 00-09 • Identify and record all proposed derogations at this stage to share with IPCT and stakeholders. • At design and planning stage, identify any microbial testing which will be required as part of commissioning work, especially (but not exclusively) relating to ventilation and water systems. • Ensure financial planning takes account of IPC requirements.
Stakeholder Engagement throughout.	• Consult all stakeholders (clinical, non-clinical, estates, IPC, internal and external SMEs.) • Consider setting up a Clinical Stakeholder Group for major projects.
Sign-off of plans and risk assessments relating to methods of work to prevent infection and clinical risks.	• Ensure sign-off by all stakeholders, including IPC, clinical and other relevant stakeholders and SMEs, before work begins, using Trust-approved documentation. • Ensure approved methods of work and infection mitigation measures are implemented in line with risk assessments,
Modifications to plans, methods of work or control measures.	• Involve IPC and all relevant stakeholders in change reviews and ensure sign-off approved.
Contractor control and management throughout construction and building works/refurbishment.	• Ensure contractors are informed and trained on IPC requirements. • Ensure contractors are monitored and methods of work checked to ensure infection prevention measures are

Responsibilities	Details
	consistently implemented. This includes dust control measures and cleaning requirements. • Act immediately to mitigate risk if control measures are breached, and report this to the IPC.
Suspension of Works	• Work with and support IPC if the need to suspend works is identified due to new infection risks or unusual infections being identified, pending investigation and mitigation.
Commissioning and Handover	• Plan time for IPC review of environments prior to completion of works, and at key points to facilitate early identification and rectification of unexpected issues, including during snagging phase. • Arrange any microbial testing required as part of commissioning process and ensure timeline for commissioning takes account of this. • Include IPC review of commissioning data, plans for phased occupation, cleaning/disinfection, and staff training. • Involve IPC in post-handover project reviews to capture lessons learned.
Managing buildings in use – planned preventative maintenance and emergency works	• Ensure risk assessment in place for all maintenance activities, and for emergency works which are likely to recur, with IPC involvement and sign-off of method statements. • Planned maintenance should follow new works principles. • Emergency works must minimise risk, involve IPC as needed, and be followed by incident reporting and review as needed.
Decommissioning and demolition of buildings or services to follow the principles set out in the sections above.	• Ensure rigorous dust control measures implemented as well as others identified in the risk assessment. • Ensure processes to contain and remove building waste from site follow agreed control measures.
Ensuring projects involving PFI buildings and services follow these principles	• Follow contract-specific procedures, ensuring requirements are communicated, understood and adopted by PFI teams.

Infection Prevention & Control Team Responsibilities

The IPC team will help ensure that patients are cared for in a clean, well-managed environment that minimises the risk of healthcare associated infection (HCAI).

Issues that will be addressed by the IPC team at all project stages will include:

- Purpose of the build/room – including if planned to be for single or multiple different uses
- Spacing and overall design
- Storage – including waste collection points and delivery areas
- Kitchen and food storage and safety
- Decontamination of medical equipment if required

- Hand hygiene facilities
- Furnishings and fittings
- Flooring, walling, ceilings and surface materials and finishes
- Clean and Dirty utilities
- Specialised ventilation considerations
- Impact on water services and water safety considerations
- Cleaners rooms and facilities
- Specific products to meet IPC requirements e.g., space for waste bins, soap dispensers, alcohol hand rub dispensers

Failure to assess these risks properly can lead to unnecessary clinical risks and / or expensive redesign later and potentially expose the patient, visitors and healthcare workers to infection hazards.

Specific Responsibilities	Details
Ensure IPC involvement at all stages	• Engage cooperatively with the Project Manager (PM) at all stages of lifecycle from planning through post-project evaluation. • Identify to the Project Manager when a project is likely to exceed the available IPC capacity
Comprehensive risk assessment throughout project.	• Input to risk assessments at all stages. • Lead on IPC elements of risk assessment.
Adopt the principle of *designing-in* the prevention of infection as part of design and planning, in line with industry and healthcare standards.	• Ensure all designs comply with relevant guidance: HBNs and HTMs, and especially HBN 00-09 • Review all proposed derogations at this stage, identify and escalate associated risks and concerns. • Advise on any microbial testing which will be required as part of commissioning work, especially (but not exclusively) relating to ventilation and water systems.
Stakeholder Engagement throughout.	• Advise and work collaboratively with other stakeholders (clinical, non-clinical, estates, IPC, internal and external SMEs.)
Sign-off of plans and risk assessments relating to methods of work	• Review method statements and design plans provided, ensure written IPC risk assessments and control measures are identified, and sign-off approval.
Modifications to plans, methods of work or control measures.	• Review and risk assess all proposed changes and ensure revised risk assessment and IPC sign-off approved.
Contractor control and management throughout construction and building works/refurbishment.	• Support training and information for contractors on IPC requirements. • Consider spot-checking contractors are adopting approved infection prevention measures. This includes dust control measures and cleaning requirements. • Act immediately to mitigate risk if control measures are breached.
Suspension of Works	• Work with PMs if the need to suspend works is identified due to new infection risks or unusual infections being identified • Lead investigation and advise on further control measures.

Specific Responsibilities	Details
Commissioning and Handover	• Review environments prior to completion of works, and at key points to facilitate early identification and rectification of unexpected issues, including during snagging phase. • Review the results of microbial testing required as part of commissioning process, and advise on further actions or approve for handover and occupation. • Participate in post-handover project reviews to capture lessons learned. •
Managing buildings in use – planned preventative maintenance and emergency works	• Participate as requested in risk assessment for maintenance activities, and for emergency works.
Decommissioning and demolition of buildings or services to follow the principles set out in the sections above.	• Advise on rigorous dust control measures as well as other issues identified in the risk assessment. • Advise on processes to contain and remove building waste from.
Ensuring projects involving PFI buildings and services follow these principles	• Liaise with PFI teams as needed to support built environment management within PFI facilities.

Standards To Be Met

The standards to be met are contained in detail in key documents. It is the responsibility of everyone involved in the management of the built environment to ensure they are familiar with relevant sections of these documents. Specifically, but not exclusively:

- Health Building Note (HBN) 00-09: Infection Control in the Built Environment. https://www.england.nhs.uk/publication/infection-control-in-the-built-environment-hbn-00-09/

- Health Building Note 04-01: Adult In-patient Accommodation https://www.england.nhs.uk/publication/adult-in-patient-facilities-planning-and-design-hbn-04-01/

- Health Building Note 04-01 Supplement 1: Special ventilated isolation facilities for patients in acute settings https://www.england.nhs.uk/wp-content/uploads/2009/12/health-building-note-04-01-supplement-1-july-2025.pdf

- Health Technical Memorandum (HTM) 03-01: Specialised ventilation for healthcare premises https://www.england.nhs.uk/publication/specialised-ventilation-for-healthcare-buildings/

- Health Technical Memorandum 04-01: Safe water in healthcare premises https://www.england.nhs.uk/publication/safe-water-in-healthcare-premises-htm-04-01/

- Health & Safety Executive Legionnaires' Disease: The control of Legionella bacteria in water systems. Approved Code of Practice (L8) https://www.hse.gov.uk/pubns/books/l8.htm

- Health & Social Care Act (2008): code of practice on the prevention and control of infections (2022) https://www.gov.uk/government/publications/the-health-and-social-care-act-2008-code-of-practice-on-the-prevention-and-control-of-infections-and-related-guidance

Additionally, there are a range of HBN and HTM focussed on the design of specific types and aspects of healthcare facilities. Specific standards within relevant HBNs and HTMs must also be included by those involved in management of the built environment. The lists can be found at the following links:

HBNs: https://www.england.nhs.uk/estates/health-building-notes/

HTMs: https://www.england.nhs.uk/estates/health-technical-memoranda/

Cleanliness
The Trust has a range of policies, guidance and SOPs which can be found on the intranet, with cleaning standard information also displayed in wards and departments. These set out the requirements and responsibilities for cleanliness of the built environment within the Trust. These documents are not repeated in this policy, but apply to all stages of managing the built environment, and must be referred to and monitored as part of environment management.

Responsibility and Due Diligence At Each Stage of Built Environment Management
Project and Programme Managers within the Estates & Facilities Team have a duty to ensure all elements are properly considered as part of built environment management, including prevention of infection. To demonstrate due diligence at each stage, this policy is supported by a series of checklists which must be used by Project and Programme Managers. These checklists ensure that infection prevention advice is included at each stage, and they can be found in the supporting Standard Operating Procedure (In development Spring 2026).

Assessment and Management of Infection Risks
At each stage of built environment management, and on a continuing basis, there is a requirement for assessment and management of infection risks, to keep patients, visitors and staff safe from those risks.

To support this a formal risk assessment must be completed and signed off by an infection prevention expert before construction, refurbishment, commissioning, decommissioning and demolition. The risk assessment includes required control measures to mitigate risk. The risk assessment tool in use within WAHT can be found at Appendix 2.

Additionally, infection prevention oversight and advice is embedded within the ongoing management of the built environment via the following:

- Water risks and mitigating actions are identified and contained within the Water Safety Plan, overseen by the Water Safety Group.
- Risks relating to specialised ventilation are contained within the Ventilation Safety Plan, overseen by the Ventilation Safety Committee.
- Cleanliness standards are overseen by the Patient Environment Operational Group chaired by the Director of Estates & Facilities.
- These groups report within the Estates & Facilities Directorate, and also report to TIPCC to ensure there is direct scrutiny of standards by clinical stakeholders and the DIPC.

6. Implementation

6.1. Plan for Implementation

All members of the Trust will be alerted to this policy via internal communications, with specific teams and individuals receiving an electronic copy as set out below.

6.2. Dissemination

This policy will be disseminated as follows:

- To all Estates & Facilities team members (Responsibility of Deputy Director Estates & Facilities – Strategic Estates)
- To all Infection Prevention & Control Team members, including Infection Control Doctors (Responsibility of DIPC)
- To all members of TIPCC (Responsibility of Deputy Director Estates & Facilities – Strategic Estates)
- To all other clinical leaders and staff members via email briefing (Responsibility of Deputy Director Estates & Facilities – Strategic Estates and Communications Team)

6.3. Training and Awareness

In line with the Trust Statutory and Mandatory Training Policy WAHT-HR-039 (2020), Appendix A. The following training is required:

Infection Prevention and Control - Level 1	NHS|CSTF|Infection Prevention and Control - Level 1 - 3 Years|	ALL NON PATIENT FACING STAFF
Infection Prevention and Control - Level 2	NHS|CSTF|Infection Prevention and Control - Level 2 - 1 Year|	PATIENT FACING STAFF

In addition:

Staff who fulfil the role of Project and Programme Managers within the Estates & Facilities Division will receive additional briefings via team and individual meetings to ensure they are familiar with, and have the knowledge to implement the requirements in this policy.

Staff within the IPCT will demonstrate expert clinical infection prevention knowledge and competency in risk assessment in order to fulfil their responsibilities under this policy. This will be developed for each individual via specialist training, mentorship from senior IPC nurses and ICDs, and work-place learning.

7. Monitoring and Compliance

Section / page no:	Key control:	Checks to be carried out to confirm compliance with the policy:	How often the check will be carried out?	Responsible for carrying out the check:	Results of the check reported to: *(Responsible for also ensuring actions are developed to address areas of non-compliance)*	Frequency of reporting:
No.	**WHAT?**	**HOW?**	**WHEN?**	**WHO?**	**WHERE?**	**WHEN?**
P.11	Assurance check to confirm Project and Programme Manager checklists, and built environment risk assessments (the key control documents highlighted in this policy) have been used.	A random selection of minimum 3 projects will be selected, and documentation checked to ensure it was used during the project.	Once per year during Q4. Future development: May also be included within post-project reviews.	Deputy Director Estates and Facilities- Strategic Estates will ensure this takes place. Check will be delegated to suitable individual.	Included annually within the E&F report to TIPCC on the Built Environment and prevention of infection risks.	Once per year. TIPCC meeting held during Q1 of the following year.

8. Policy Review

This policy will be reviewed 3-years after approval, or sooner if there is significant change in relevant legislation or HBN 00-09.

Review is the responsibility of the Deputy Director Estates & Facilities – Strategic Estates.

9. References

National documents

Control Of Substances Hazardous to Health Regulations (2002) https://www.legislation.gov.uk/uksi/2002/2677/regulation/7

HAI-SCRIBE (Scottish Health Facilities Note) 30 https://www.nss.nhs.scot/publications/hai-scribe-shfn-30/

Health & Safety at Work Act (1974) https://www.legislation.gov.uk/ukpga/1974/37/contents

Health & Safety Executive Legionnaires' disease. The control of legionella bacteria in water systems. Approved Code of Practice and guidance (2013). (Known as the L8) https://www.hse.gov.uk/pubns/books/l8.htm

Health and Social Care Act 2008: code of practice on the prevention and control of infections (2022) https://www.gov.uk/government/publications/the-health-and-social-care-act-2008-code-of-practice-on-the-prevention-and-control-of-infections-and-related-guidance

Health Building Note 00-09: Infection Control in the Built Environment (2024) https://www.england.nhs.uk/publication/infection-control-in-the-built-environment-hbn-00-09/

Health Building Note 00-10: Design for flooring, walls, ceilings, sanitary ware and windows (2024) https://www.england.nhs.uk/publication/design-for-flooring-walls-ceilings-sanitary-ware-and-windows-hbn-00-10/

Health Technical Memorandum 03-01: Specialised ventilation for healthcare premises (2024) https://www.england.nhs.uk/publication/specialised-ventilation-for-healthcare-buildings/

Health Technical Memorandum 04-01: Safe water in healthcare premises (2024) https://www.england.nhs.uk/publication/safe-water-in-healthcare-premises-htm-04-01/

Health Technical Memorandum 07-01: Safe and sustainable management of healthcare waste (2024) https://www.england.nhs.uk/publication/management-and-disposal-of-healthcare-waste-htm-07-01/

Note: The full list of HBNs and HTMs which must be checked can be found at:

HBNs: https://www.england.nhs.uk/estates/health-building-notes/

HTMs: https://www.england.nhs.uk/estates/health-technical-memoranda/

Trust Policies and Documents

Cleaning Policy – WAHT-CG-494

Cleaning Standard Operating Policy

Management of Ventilation Systems – WAHT-TWI-008

Management of Contractors Standard Operating Procedure

Policy for the Control of Contractors- WAHT-CG-772

Waste Management Policy WAHT-CG-481

Water Safety Policy – WAHT-CG-817

10. Background

10.1. Equality requirements

[A brief description of the findings of the equality assessment Supporting Document 1]

10.2. Financial risk assessment

[A brief description of the financial risk assessment Supporting Document 2]

10.3. Consultation

Contribution List This key document has been circulated to the following individuals for consultation:	
Name	**Designation**
Liz Watkins	DIPC
Jo Anyon	Deputy Director of E&F – Strategic Estates
Tracey Cooper	Estates and Facilities Consultant
All members of the Trust Infection Prevention & Control Committee (TIPCC)	As per TIPCC Terms of Reference
This key document has been circulated to the chair(s) of the following committees / groups for comments:	
Trust Infection Prevention & Control Committee (TIPCC)	
Water Safety Group	
Waste Management Group	
Ventilation Safety Committee	

10.4. Approval Process

Step 1: Wide consultation, including with key stakeholders, Estates & Facilities Teams, the IPCT, and PFI services via TIPCC.

Step 2: Approval by TIPCC and onward to finalise the clinical governance approval process.

10.5. Version Control

[This section should contain a list of key amendments made to this document each time it is reviewed (copy table from overview)]

Date	Amendment	Approved by:

11. Appendices

11.1. Appendix 1 – Infection Risks Associated With The Built Environment

Overview

There is a very wide range of microorganisms which can reside in healthcare built environments, and pose a risk of patients, as well as staff and visitors. In relation to building or refurbishment works, the following are especially significant:

Organism	***Aspergillus species***
Infection Risk	Fungal infections: pneumonia, fungus balls in brain and lungs
Those Potentially Affected	Vulnerable patients, immunocompromised
Environmental Reservoir	Soil, dust from walling materials, air conditioning systems, damp
Risk Increases Due To….	Disturbance of soil, demolishing or disturbing fabric of building
Key Control Measures	Dust control, cleaning, protection of ventilation systems

Organism	***Legionella pneumophilia***
Infection Risk	Bacterial lung infections and pneumonia: Legionnaires Disease, Pontiac Fever
Those Potentially Affected	Patients, staff and visitors. Most at risk are immunocompromised individuals, those with lung disease and other chronic diseases.
Environmental Reservoir	Water systems and water reservoirs
Risk Increases Due To….	Inhalation or aspiration into the lungs of water aerosols. Showering and other direct contact with water systems
Key Control Measures	Implementation of Water Safety Plan and all key controls listed in L8 and HTM 04-01.

Organism	***Pseudomonas aeruginosa***
Infection Risk	Bacterial lung infections and pneumonia, blood-stream infection
Those Potentially Affected	Vulnerable patients, especially those in augmented care areas
Environmental Reservoir	Water systems and water reservoirs
Risk Increases Due To….	Inhalation or aspiration into the lungs of water aerosols. Showering and other direct contact with water systems. Contamination of vulnerable sites (wounds, invasive devices) by the organism transferred via the environment or hands.
Key Control Measures	Implementation of Water Safety Plan and all key controls listed in L8 and HTM 04-01 Appendix.

Appendix 2: CAPITAL AND ESTATES WORK
Infection Prevention and Control Risk Assessment v3

Project title and Workstream	
Lead	
Contact Number	
Date Sent To IPC For Review	
Date Work To Commence	

Purpose: This Risk Assessment is designed to assist Project Leads, Estates Teams, Infection Prevention and Control, and Clinical Leads to identify and mitigate potential risk from maintenance and capital works within the Trust.

Evidence Base: This document is based upon the information contained in Health Building Note (HBN) 00-09: Infection Control in the Built Environment (2013), and Scottish Health Facilities Note (SHFN) 30 (2014), as well as more recently published evidence relating to infection risks in the built environment and their control.

Timescales: Building/upgrades/engineering installation works should not commence until this form has been completed. In normal circumstances a minimum of 10 working days is required for Infection Prevention Team (IPT) review and advice. In an emergency, advice can be obtained more quickly, but justification for the short timescale must be provided. If repair work is urgently required work out-of-hours, the work should commence and the IPT contacted during the next normal working day.

Guidance on Completion: This risk assessment must be completed fully, and in line with Appendix A at the end of this document, as well as the more detailed guidance contained within relevant IPC and Estates policies.

Section 1: Identification of Risk (to be completed by the contractor/works team)

1.1 Description of the Works

From Appendix A identify the **activity type** from Table 1.	**Type**

1.2 Exact Location of the Works (include area/zone/template details if possible)

From Appendix A identify the infection control **risk group** by area from Table 2.	**Group**

1.3 Identified Construction Activity Hazards / Disruptions

Hazard / Disruption	Yes	No	Brief Description
Access to specific areas (i.e.: clinical rooms, ceiling voids, etc)			
Electrical Supply			
Water Supply			
Sanitary Facilities and/or Drains			
Ambient Temperature			
Asbestos (see register), other hazards e.g: fibreglass, silica dust			
Known Contamination Hazard			
Dust and/or Debris			
Vibration			
Noise			
Chemicals			
Fumes			
Slips, Trips & Falls hazards			
Working in patient area (to include Privacy & Dignity issues)			
Effects on other ward/depts/services			

1.4 Additional/Other Construction Activity Hazards / Disruptions Not listed Above

Section 2: Assessment of Risk Level (to be completed by the IPT or person with relevant expertise)

2.1 Initial Risk Class

From Appendix A, identify the infection control **risk class** from Table 3 (Activity Type x Risk Group)	**Class**

2.2 Adjacent Locations

From Appendix A, identify the infection control **risk group** of any adjacent areas from Table 2.	**Group**

2.3 Final Risk Class

From Appendix A, identify the infection control **risk class** from Table 3 considering any **relevant adjacent locations**. (Activity Type x Risk Group) If the risk class of the relevant adjacent location is higher than that of the exact location of works identified in the initial risk class, then the works must be completed under the **higher of the two risk class measures**.	**Final Risk Class**

2.4 Any Additional Risk Considerations Relating to Specific Hazards and Disruptions Identified

Yes/No. If yes, please list risks:

Risk Scores Please use the NHS 5 x 5 scoring matrix to assess consequence and likelihood of infection and harm occurring.	**Initial Risk Score - No Additional Control Measures**	**Final Risk Score With Control Measures in Section 3 Implemented**
Consequence 1 2 3 4 5 X Likelihood 1 2 3 4 5		

If the final risk score is 9 or below, work can proceed in line with required control measures.

If the risk score is 10 or higher, additional advice must be obtained from a Trust Infection Control Doctor in relation to control measures. Where water, drainage, ventilation or food hygiene related risks have been identified, the relevant external experts should also be consulted regarding control measures.

If despite these actions the risk score is 12 or above, acceptance of the risk must be escalated via the Divisional Management Team and the DIPC for approval before work can commence. The risk and actions taken must be recorded on the Trust Risk Register.

Section 3: Control Measures Required

3.1 Note:

- All control measures below that are required for the works covered by this risk assessment will be highlighted.
- Measures listed in Class 1 will always apply to all works.

Class 1	Execute work by methods to minimise dust from construction
	Immediately replace any ceiling tile displaced for visual inspection
	Excludes any areas where patient is in protective isolation
	Clean hands by use of alcohol hand gel/rub on arrival in area, and on completion of works/leaving area.
Class 2	**In addition to measures highlighted above:**
	Where appropriate, isolate HVAC (heating, ventilating, and air conditioning) system in areas where work is being performed
	Provide active means to prevent airborne dust from dispersing into atmosphere if practicable, i.e. dust extractor attachment to drills
	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 if large quantities of dust are likely to be generated
	Clean work surfaces with suitable cleaning agent: Clinell GREEN wipes or Trust-approved detergent/disinfectant product and disposable cloths.
	Vacuum with HEPA-filtered vacuum cleaner during works
	Contain construction waste before transport in containers with tight-fitting lids.

	Place dust-attracting mat at entrance and exit of work area (tacky mat)
	Remove isolation of HVAC system in areas where work has been done and appropriate checks performed
	Amber clean required after work completed
Class 3	**In addition to measures highlighted above:**
	Complete all critical barriers and implement dust control methods before construction begins
	Maintain negative air pressure within work site. Use HEPA filtration (high efficiency particulate air) to remove dust from the work area.
	Do not remove barriers from work area until complete project is clinically clean
	Wet-mop area during works
	Remove barrier materials carefully to minimise spreading of dust and debris associated with construction
Class 4	**In addition to measures highlighted above:**
	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 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
	Red Clean required after works completed

3.2 Any Additional Control Measures to be Implemented

If yes, list these here:

The Project Lead shall ensure a high standard of cleanliness and good housekeeping throughout the project and shall make provision for a Facilities clean at the appropriate standard before hand over of completed work.

Section 4: Clinical Assessment (to be completed by the relevant clinical/departmental lead)

The final section of the Risk Assessment is the Clinical Assessment which must be completed by the Matron/Ward Manager or other Service Lead in conjunction with the Project Lead where applicable.

4.1 Clinical Assessment By Service Lead

Name of Matron/Ward Manager/Lead (responsible for identifying risks and co-ordinating works from a clinical perspective).	
Contact Details	

Issue	Yes	No	Additional Information/Control Measures	Action By
Will clinical/service activity be disrupted?				
Can clinical/service activity be relocated?				
Are there susceptible patients?				
Are there potential Privacy & Dignity issues?				

Issue	Yes	No	Additional Information/Control Measures	Action By
Have hotel services been contacted re: any additional cleaning as part of work and/or following completion of works.				
Other issues identified				
Building information notice to be placed upon staff notice board/shared with staff				
Provision made for cleaning of ward/dept – pre, during and post as applicable.				
The Lead shall ensure that the ward / environment is free of sharps, clinical waste, medications, debris and any such materials that could pose a risk to the contractor or any persons under their charge whilst conducting normal working activity.				

Section 5: Approvals

5.1 By signing off the Risk Assessment you are confirming that you have planned and understood the requirements of the Estates Maintenance and Capital Works Infection Prevention and Control Policy, and the control measures required as set out in this document.

	Print Name and Role	Signature	Date
Project Lead/Estates Lead			
Infection Prevention and Control Team			
Matron/Ward Manager/Nurse in Charge			
Facilities Management (as required)			
Other: i.e: relevant Authorising Engineer			
Contractor			

5.2 If final risk score is 12 or above, what is the Risk Register ID:

Approval is also required from the following:

	Print Name and Role	Signature	Date
Divisional Management Team			
Director of Infection Prevention & Control			

Lead Author: Tracey Cooper, Nurse Consultant Infection Prevention (Estates & Facilities)
Approval By: Trust Infection Prevention & Control Committee (TIPCC)
Risk Assessment Approval Date: 6th November 2025
Risk Assessment Review Date: 1 year from approval

11.2. IPC Risk Assessment Guidance

Adapted from the information contained in Health Building Note (HBN) 00-09: Infection Control in the Built Environment (2024), and Scottish Health Facilities Note (SHFN) 30 (2014), as well as more recently published evidence relating to infection risks in the built environment and their control

Table 1: Identify Activity type

Identify the construction activity type from the table below:

Type A	Inspection and non-invasive activities, includes but not limited to: • removal of ceiling tiles for visual inspection in non-clinical areas; • painting and minimum preparation in corridors and clinical areas; • electrical trim work (all plugs, switches, light fixtures, smoke detectors, ventilation fans) provided they do not generate dust/where dust can be controlled; • minor plumbing and activities that do not generate dust or require cutting of walls or access to ceilings other than for visual inspection.
Type B	Small scale, short duration activities that create minimal dust. Includes: • removal of a limited number of ceiling tiles in clinical areas for inspection only; • installation of telephone and computer cabling; • installation of fire detectors where dust migration can be controlled; • access to chase spaces; • cutting or drilling of walls or ceiling where dust migration can be controlled.
Type C	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 is not limited to: • sanding of walls for painting or wall covering; • removal of floor coverings, panelling, and wall-mounted shelving and cabinets; • cutting of ceiling tiles; • new wall construction; • minor duct work or electrical work above ceilings; • major cabling activities. • Cutting or drilling of walls or ceiling where dust migration cannot be controlled in patient access areas.
Type D	Major demolition and construction projects. Includes, but is not limited to new construction/machinery and equipment installations, rectifications and modifications. • Dust and debris likely to be significant, and not easily controlled.

Table 2: Identify Patient Risk Group

Group 1 Low risk	Group 2 Medium risk	Group 3 High risk	Group 4 Very high risk
• Office areas • Unoccupied clinical areas • Corridors • Plant rooms/ service ducts	• Emergency Department (excluding Resus) • Radiology/ magnetic resonance imaging • Wards • Nuclear Medicine • Admissions/ discharge units • Echocardiography • Out-patient departments – non invasive • Pharmacy (general) • Laboratories • Endoscopy • Primary care/ community treatment rooms • Food preparation areas/Kitchens	• Day surgery units • All intensive care units • All operating theatres (corridors/similar) • All high dependency units • Dialysis units • Cardiac catheterisation suite • Sterile services department (offices and ancillary areas) • Out-patient departments – invasive • Emergency Department (Resus Area) • Birch Day Surgery (Ward 11) • Marlow Unit (Ward 5) Acute Respiratory • Pharmacy Aseptic Suite (ancillary areas)	• Areas of protective isolation • Transplant units • Oncology • Pharmacy clean rooms/Aseptic suite • Bone marrow transplant • Chemotherapy Units • Garden Suite (Ward 1) • Theatre suites (areas of enhanced ventilation) • Sterile Service Units (production areas)

Table 3: Identify Risk Class

Activity Type x Risk Group = Risk Class

Risk Group	Construction activity type			
	Type A	Type B	Type C	Type D
Group 1	Class 1	Class 2	Class 2	Class 3
Group 2	Class 1	Class 2	Class 3	Class 3
Group 3	Class 2	Class 3	Class 3	Class 4
Group 4	Class 4	Class 4	Class 4	Class 4

12. Supporting Document 1 – Equality Impact Assessment Form

Equality and Health Inequalities Impact Assessment (EHIA) Tool

Herefordshire & Worcestershire STP - Equality and Health Inequalities Impact Assessment (HEIA) Form
Please read HEIA guidelines when completing this form

Section 1 - Name of Organisation (please tick)

Herefordshire & Worcestershire STP		Herefordshire Council		Herefordshire CCG	
Worcestershire Acute Hospitals NHS Trust	✓	Worcestershire County Council		Worcestershire CCGs	
Worcestershire Health and Care NHS Trust		Wye Valley NHS Trust		Other (please state)	

Name of Lead for Activity	**Jo Anyon, Deputy Director E&F – Strategic Estates**

Details of individuals completing this assessment	**Name**	**Job title**	**e-mail contact**
	Tracey Cooper	Nurse Consultant Infection Prevention (Estates & Facilities)	**tracey.cooper53@nhs.net**
Date assessment completed	**22-01-26**		

Section 2

Activity being assessed (e.g. policy/procedure, document, service redesign, policy, strategy etc.)	**Title: Infection Prevention & Control in the Built Environment Policy**			
What is the aim, purpose and/or intended outcomes of this Activity?	Provision of a clean and safe environment is a duty of all NHS organisations. Buildings must be planned, designed, built and maintained in line with relevant legislation and national guidance to protect the health of patients, visitors and staff. This policy sets out the processes the Trust will follow to achieve this, as well as the outcomes which will be achieved.			
Who will be affected by the development & implementation of this activity?	x❑ x❑ ❑ x❑	Service User Patient Carers Visitors	x❑ ❑ ❑ ❑	Staff Communities Other _____
Is this:	x❑ Review of an existing activity			

	❑ New activity ❑ Planning to withdraw or reduce a service, activity or presence?
What information and evidence have you reviewed to help inform this assessment? (Please name sources, eg demographic information for patients / services / staff groups affected, complaints etc.	Published national guidance and evidence-based studies highlighting infection risks and actions required in relation to built environment.
Summary of engagement or consultation undertaken (e.g. who and how have you engaged with, or why do you believe this is not required)	Nil required beyond policy consultation.
Summary of relevant findings	All individuals will be protected from infection arising from the built environment by adoption of this policy. No group is adversely affected. Without this policy, those who are immunocompromised will be at increased risk of infection due to the built environment, compared to those who are immunocompetent.

Section 3

Please consider the potential impact of this activity (during development & implementation) on each of the equality groups outlined below. **Please tick one or more impact box below for each Equality Group and explain your rationale**. Please note it is possible for the potential impact to be both positive and negative within the same equality group and this should be recorded. Remember to consider the impact on e.g. staff, public, patients, carers etc. in these equality groups.

Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Age	x			This group are more likely to be immunocompromised due to age-related immune system deterioration, and therefore more at risk of infection due to the built environment.
Disability		x		
Gender Reassignment		x		
Marriage & Civil Partnerships		x		
Pregnancy & Maternity	x			Young babies are likely to be immunocompromised due to their immature immune systems, and therefore more at risk of infection due to the built environment.
Race including Traveling Communities		x		
Religion & Belief		x		
Sex		x		

Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Sexual Orientation		x		
Other Vulnerable and Disadvantaged Groups (e.g. carers; care leavers; homeless; Social/Economic deprivation, travelling communities etc.)		x		
Health Inequalities (any preventable, unfair & unjust differences in health status between groups, populations or individuals that arise from the unequal distribution of social, environmental & economic conditions within societies)		x		

Section 4

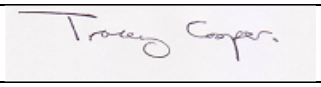
What actions will you take to mitigate any potential negative impacts?	Risk identified	Actions required to reduce / eliminate negative impact	Who will lead on the action?	Timeframe
	Nil identified	.		
How will you monitor these actions?				
When will you review this EIA? (e.g in a service redesign, this EIA should be revisited regularly throughout the design & implementation)	**At policy review.**			

Section 5 - Please read and agree to the following Equality Statement

1. Equality Statement

1.1. All public bodies have a statutory duty under the Equality Act 2010 to set out arrangements to assess and consult on how their policies and functions impact on the 9 protected characteristics: Age; Disability; Gender Reassignment; Marriage & Civil Partnership; Pregnancy & Maternity; Race; Religion & Belief; Sex; Sexual Orientation

1.2. Our Organisations will challenge discrimination, promote equality, respect human rights, and aims to design and implement services, policies and measures that meet the diverse needs of our service, and population, ensuring that none are placed at a disadvantage over others.
1.3. All staff are expected to deliver services and provide services and care in a manner which respects the individuality of service users, patients, carer's etc, and as such treat them and members of the workforce respectfully, paying due regard to the 9 protected characteristics.

Signature of person completing EIA	
Date signed	22-01-26
Comments:	
Signature of person the Leader Person for this activity	
Date signed	
Comments:	

NHS Worcestershire Acute Hospitals NHS Trust

NHS Herefordshire and Worcestershire Health and Care NHS Trust

NHS Wye Valley NHS Trust

Herefordshire General Practice Taurus Healthcare

worcestershire county council

Herefordshire Council

13. Supporting Document 2 – Financial Impact Assessment

To be completed by the key document author and included when the document is submitted to the appropriate committee for consideration and approval.

ID	Financial Impact:	Yes/No
1.	Does the implementation of this document require any additional Capital resources	No
2.	Does the implementation of this document require additional revenue	No
3.	Does the implementation of this document require additional manpower	No
4.	Does the implementation of this document release any manpower costs through a change in practice	No
5.	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programmes or allocated training times for staff	No
Other comments:		
Neutral		