

INFECTION PREVENTION AND CONTROL

DIPC Annual Report 2023-24



Contents

1. Executive Summary	4
2. Introduction.....	5
2.1 Abbreviations	6
3. Organisation and Governance of IPC Service.....	7
3.1 Governance framework	8
3.2 Infection Prevention and Control Team (IPCT)	8
3.3 Key roles and responsibilities	9
3.4 TIPC membership	10
3.5 IPC Board Assurance Framework (BAF)	10
3.6 Risk assessment	13
3.7 Significant Reportable Incidents	13
4. Healthcare-associated Infection surveillance	13
4.1 Healthcare-Associated <i>S. aureus</i> (MSSA and MRSA) Bloodstream Infections	15
4.1.1 MRSA	15
4.1.2 MSSA	17
4.2 <i>C. difficile</i> infections.....	18
4.3 Gram-negative blood stream infections	19
4.3.1 <i>E. coli</i> Infections.....	20
4.3.2 <i>Pseudomonas aeruginosa</i>	21
4.3.3 <i>Klebsiella species</i>	23
4.4 National Point Prevalence Survey (PPS) - key outcomes and learnings.....	24
4.5 Multi-Drug Resistant Organisms (MDROs).....	25
4.6 Respiratory viruses.....	26
4.7 Other HCAIs.....	26
4.7.1 Norovirus	26
4.7.2 Measles	26
4.7.3 iGAS	27
5. Surgical Site Infection surveillance.....	27
5.1 Orthopaedics.....	28

5.2 Cardiac.....	29
5.3 Breast.....	29
5.4 Large Bowel	30
6. IPC in built environment.....	30
6.1 Facilities	30
6.1.1 Environmental Cleanliness.....	30
6.1.2 National Standards of Cleanliness	31
6.1.3 Automated Room Disinfection.....	31
6.2 Estates and Capital Projects.....	31
6.2.1 Planned Preventative Maintenance.....	32
6.2.2 Ventilation.....	32
6.2.3 Water	32
6.3 Decontamination of medical devices	33
7. Antimicrobial stewardship	33
7.1 Antibiotic consumption.....	34
7.2 CQUINS	35
7.3 National Point Prevalence Survey – Antimicrobial summary.....	35
7.4 Covid 19.....	36
7.5 ASG meetings & Guidelines	36
8. Information on infections.....	36
9. Infection Management	37
10. Health care worker responsibilities	37
10.1 Link Champions.....	37
10.2 Education and training.....	38
10.3 IPC Audit and monitoring.....	38
10.3.1 IPC Environmental spot check	38
10.3.2 IPC Weekly assurance audits	39
10.3.3 Hand Hygiene Compliance audits	39
10.3.4 IPC Commode Audits.....	40

10.4 IPC supporting decarbonising healthcare	40
11. Isolation facilities	41
12. Laboratory support	41
13. Policy	42
14. Staff Health	42
14.1 Staff Winter Vaccination Programme	42
14.2 FFP3 Respiratory Fit testing	42
15. Research and scholarship	43
16. Priorities for 2024-25	44
17. Conclusion	44
18. References.....	45
19. Appendices	45
Appendix 1 Board Assurance Framework - IPC	46
Appendix 2. TIPC Membership.....	67
Appendix 3. Risk Register risk over 12.....	68
Appendix 4. Measles Action Card.....	71
Appendix 5. Outcome technical cleaning scores 2023-24.....	72
Appendix 6 IPC Policies	76
Appendix 7 Summary of IPC Annual Programme 2024/25	77
Appendix 8. Publications	78

1. Executive Summary

This report outlines the Infection Prevention and Control (IPC) measures at University Hospital Sussex NHS Foundation Trust for 2023-24. It summarizes the efforts and projects undertaken to protect patients from healthcare-associated infections. The Trust is broadly compliant with the Health and Social Care Act (The Hygiene Code) and has appropriate governance in place.

Key Points:

- **Risk Management:** Key IPC risks are identified and mitigated, with support from the TIPC and QGSG to the Quality Committee as needed.
- **Infection Rates:** While the Trust's infection rates for the five mandatory surveillance metrics exceeded national thresholds, they are comparable to or better than other hospitals in the South-East when adjusted for bed days.
- **Surgical Site Infections:** Significant improvements have been made in reducing surgical site infections.
- **Ventilation Systems:** Concerns about the maintenance and replacement of air handling systems have been escalated, with improvement plans monitored by the ventilation steering group.
- **Cleanliness:** High standards of cleanliness have been maintained across all sites.
- **Link Champion Programme:** A new programme has been launched to enhance local clinical engagement with IPC.
- **Sustainability:** IPC has contributed to the Trust's sustainability efforts by promoting reduced glove use and exploring alternative decontamination methods.
- **Research:** Under the leadership of Dr. James Price, the research agenda has advanced significantly, with involvement in several projects and publications.

2. Introduction

Welcome to the annual Director of Infection Prevention and Control report for University Hospitals Sussex (UHSussex) for the year 2023-24. UHSussex serves a community of 1.9 million people and employs nearly 20,000 staff across seven main hospital sites and several smaller locations.

What This Report Covers

This report summarises our infection prevention and control (IPC) and antimicrobial stewardship efforts from April 1, 2023, to March 31, 2024. It includes all UHSussex sites:

- **Royal Sussex County Hospital (RSCH)**
- **Royal Alexandra Children's Hospital (RACH)**
- **Princess Royal Hospital (PRH, Haywards Heath)**
- **Worthing Hospital (WH)**
- **Southlands Hospital (SH, Shoreham)**
- **St Richard's Hospital (SRH, Chichester)**

Additionally, it covers services at Crawley & Worthing Sexual Health Service, Brighton General Hospital, Hove Polyclinic, Newhaven Hospital, and Park Centre for Breast Care. We also have IPC service contracts with two hospices in West Sussex.

Compliance and Assurance

We are pleased to report that UHSussex meets requirements of the CQC Health and Social Care Act 2008 regulations and the Hygiene Code. Our IPC Board Assurance Framework assessment confirms our broad compliance with these regulations. We are fully compliant in 4 domains, partially compliant in 6 domains with 1 area of concern which is not compliant in some parts of the trust (table 1 below) related to backlog estates maintenance of critical ventilation. The trust is sighted on areas where we need to make improvement. Any areas of concern identified by the CQC in August 2023 have been addressed. We are compliant with the National Infection Prevention and Control Manual (NIPCM).

Our Commitment to Safety

This report is based on the Hygiene Code framework and outlines our IPC arrangements. It highlights the projects and initiatives we have implemented over the past year to protect our patients from healthcare-associated infections (HCAIs). This ensures that our patients, staff, and the public can trust that we are meeting our obligations for patient safety and clinical governance.

Patient First Ethos

At UHSussex, IPC is a core part of our 'Patient First' ethos. This report showcases how our infection prevention activities have contributed to providing safe and effective care for our patients.

Criteria	Description	
1	Systems to manage and monitor the prevention and control of infection. These systems use risk assessments and consider the susceptibility of the service users and any risks that their environment and other users may pose to them.	Green
2	The provision and maintenance of a clean and appropriate environment in managed premises that facilitates the prevention and control of infections.	Orange
3	Appropriate antimicrobial use and stewardship to optimise outcomes and to reduce the risk of adverse events and antimicrobial resistance.	Yellow
4	The provision of suitable accurate information on infections to service users, their visitors and any person concerned with providing further social care support or nursing/medical care in a timely fashion.	Green
5	That there is a policy for ensuring that people who have or are at risk of developing an infection are identified promptly and receive the appropriate treatment and care to reduce the risk of transmission of infection to other people.	Yellow
6	Systems are in place to ensure that all care workers (including contractors and volunteers) are aware of and discharge their responsibilities in the process of preventing and controlling infection.	Yellow
7	The provision or ability to secure adequate isolation facilities.	Green
8	The ability to secure adequate access to laboratory support as appropriate.	Yellow
9	That they have and adhere to policies designed or the individual's care, and provider organisations that will help prevent and control infections.	Green
10	That they have a system or process in place to manage staff health and wellbeing, and organisation obligation to manage infection, prevention and control.	Yellow

Table 1 Health and Social Care Act 2008: Code of Practice on the prevention and control of infection (Hygiene Code).

2.1 Abbreviations

Abbreviation	Full Text	Abbreviation	Full Text
3Ts	Teaching Tertiary and Trauma	DIPC	Director of Infection Prevention Control
aDIPC	Associate Director Infection Prevention Control	EDU	Endoscopy decontamination units
AMP	Anti-microbial pharmacist	EPRR	Emergency preparedness resilience and response
BAF	Board Assurance Framework	EUCAST	European Committee on Antimicrobial Susceptibility Testing
BSI	Blood stream infection (bacteraemia)	FFP	Filtering Face Piece
CAG	Clinical Advisory Group	HCAI	Healthcare-associated Infection
CDT	<i>Clostridioides difficile</i> toxin	HOHA	Hospital-onset healthcare-associated

CEO	Chief Executive Officer	HPV	Hydrogen Peroxide Vapour
CMO	Chief Medical Officer	HTM	Health Technical Memorandum
CNO	Chief Nursing Officer	ICB	Integrated Care Board
COCA	Community-onset community-associated	iGAS	Invasive Group A Strep
COHA	Community-onset healthcare-associated	IPC	Infection Prevention & control
COIA	Community-onset indeterminate-associated	IPCT	Infection Prevention & control Team
CPA	Clinical Pathology Accreditation	IPOG	Infection Prevention Operational Group
Abbreviation	Full Text	Abbreviation	Full Text
CPE	Carbapenemase-producing Enterobacterales	IV	Intravenous
CQC	Care Quality Commission	<i>K.pneumoniae</i> , <i>K. oxytoca</i> , <i>Klebsiella</i> spp.	<i>Klebsiella pneumoniae</i> , <i>Klebsiella oxytoca</i> and <i>Klebsiella</i> species
CSSD	Central sterile services departments	LIMS	Laboratory information management system
DCS	Data Capture System	LMB	Louisa Martindale building
DDD	Defined Daily Dose	MDRO	Multi drug resistant organisms
MPV	MPox virus (previously Monkeypox)	SRH	St Richards Hospital
MRSA	Meticillin Resistant <i>Staphylococcus aureus</i>	SRO	Senior Responsible Officer
MSM	Men who have Sex with Men	SSD	Sterile Service Department
MSSA	Meticillin Sensitive <i>Staphylococcus aureus</i>	SSI	Surgical Site Infection
NHSE	National Health Service England	SSISS	Surgical Site Infection Surveillance Scheme
PLACE	Patient Led Assessment of the Care Environment	STAM	Statutory and mandatory training
PPE	Personal protective equipment	THR	Total hip replacement
PRH	Princess Royal Hospital	TIPC	Trust Infection Prevention Committee
PSIRF	Patient Safety Incident Response Framework	TKR	Total Knee replacement
QGSG	Quality Governance and Safety Group	UHSussex	University Hospitals Sussex NHS Foundation Trust
QSIP	Quality Safety Improvement Programme	UKHSA	UK Health Security Agency
RACH	Royal Alexandra County Hospital	VIP	Visual infusion phlebitis
RSCH	Royal Sussex County Hospital	WH	Worthing Hospital
SCFT	Sussex Community Foundation Trust	WSP	Water Safety Plan
		WGS	Whole genome sequencing

Table 2 abbreviations used in the document

3. Organisation and Governance of IPC Service

Criteria 1: Systems to manage and monitor the prevention and control of infection. These systems use risk assessments and consider the susceptibility of the service users and any risks that their environment and other users may pose to them.

3.1 Governance framework

Every trust must have a Director of Infection Prevention and Control (DIPC). At UHSussex, the Chief Nurse, Maggie Davies, is the Executive DIPC, with Pat Cattini as the Associate Director handling daily responsibilities, and Sharon Reed as the operational lead nurse.

The Trust’s Infection Prevention and Control Committee (TIPC) oversees all IPC activities and meets quarterly. It reports to the Quality Governance Steering Group (QGSG), which then reports to the Patient and Quality Committee, a sub-committee of the Executive Board.

Monthly IPC Operational Group (IPOG) meetings, chaired by the Deputy DIPC, monitor progress on the IPC work plan. These meetings help address operational issues and escalate them to TIPC if needed. IPOG reports contribute to the quarterly TIPC report, summarizing IPC activities. TIPC also receives reports from subgroups like the Trust Water Safety Group and the Specialist Ventilation Group.

The Associate DIPC prepares the statutory DIPC Annual Report and the Board Assurance Framework (IPC-BAF), which are presented through TIPC.

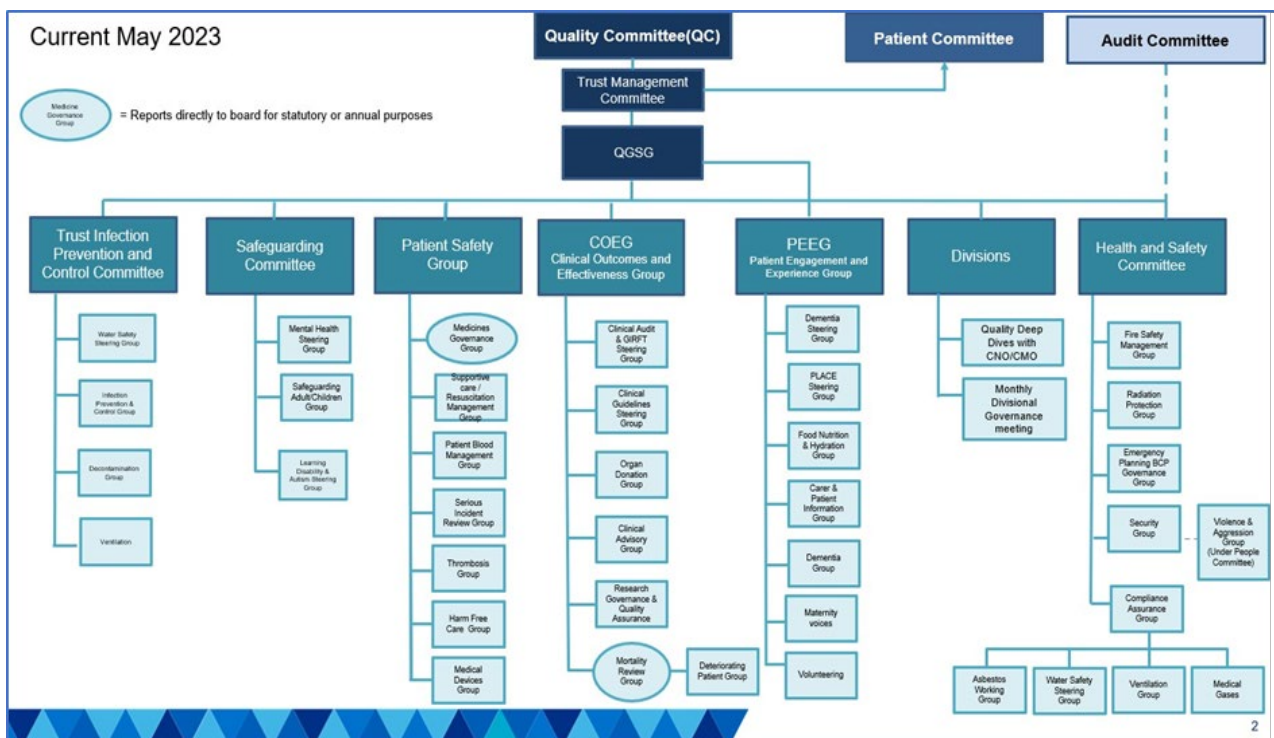


Table 3 Trust Governance structure

3.2 Infection Prevention and Control Team (IPCT)

Infection prevention is part of every role at UHSussex. The Infection Prevention and Control Team (IPCT) provides expert guidance and supports staff in maintaining high IPC standards. They ensure guidelines, policies, and protocols are up-to-date and effectively implemented to reduce healthcare-

associated infections (HCAI). The IPCT focuses on educating staff, promoting proper antimicrobial use, advising on personal protective equipment (PPE), and managing infection outbreaks.

The IPCT works closely with site and clinical teams to ensure safe patient placement and risk reduction. They are supported by Consultant Microbiologists and Virologists, and a part-time Infection Prevention and Control Doctor (ICD). Dr James Price, a Consultant in Infectious Diseases and Microbiology, took on this role Trust-wide in March 2024.

The team is structured to recruit and develop practitioners at various levels, ensuring sustainability. Team members receive ongoing training and attend relevant conferences to stay current. The IPCT has a presence on each of the four main sites, providing consistent advice across the organisation.

To address antimicrobial resistance, the IPCT works with the Trust's Antimicrobial Pharmacists to promote safe antimicrobial use. They also collaborate with the Estates and Facilities teams on environmental hygiene, decontamination, new builds, refurbishments, ventilation, and water safety.

3.3 Key roles and responsibilities

The IPCT is responsible for all aspects of infection control across all staff groups. This includes managing outbreaks, alert organism management, environmental management, antimicrobial stewardship, education, and epidemiology. Their duties include:

- Providing expert advice to staff, patients, and visitors.
- Participating in surveillance, investigation, and management of HCAI and infectious diseases.
- Ensuring compliance with current legislation and guidance.
- Advising the Trust board on IPC legislation and compliance.
- Planning and implementing strategies to reduce HCAI, including mandatory training.
- Ensuring policies and procedures are in place for safe and effective care, such as hand hygiene.

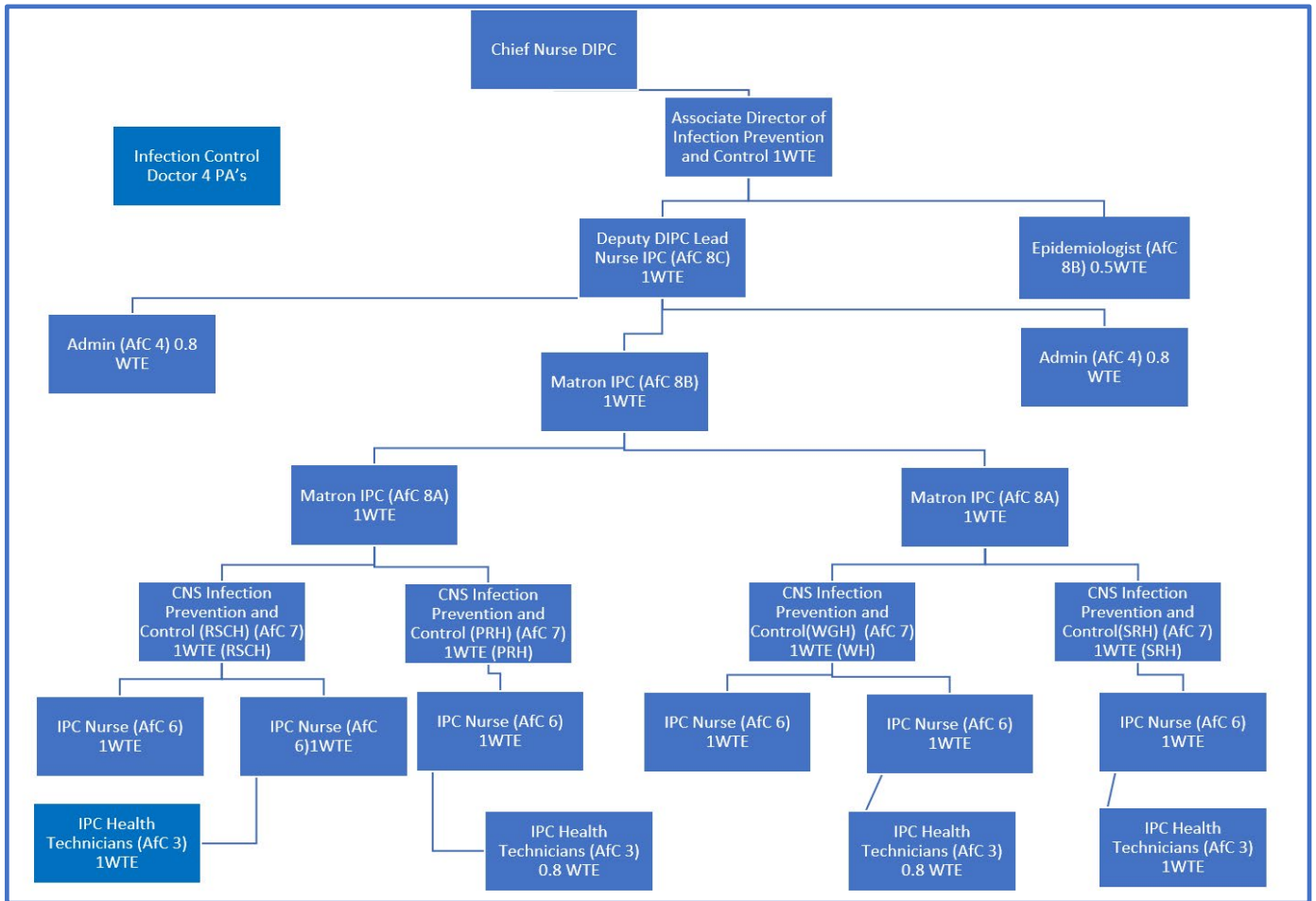


Table 4 Infection Prevention and Control Team structure at UHSussex

3.4 TIPC membership

The TIPC has a broad membership with representation from divisions and our partner organisations (see Appendix 2). TIPC terms of reference are reviewed and agreed annually.

3.5 IPC Board Assurance Framework (BAF)

NHSE published an IPC BAF to assure Trust Board that IPC arrangements align with the National Infection Prevention and Control Manual (NIPCM). The BAF includes 54 key lines of enquiry over the 10 domains of the Hygiene Code. The IPCT conducted an annual BAF assessment in March 2024, finding four domains fully compliant and six partially compliant.

The 10 domains are divided into 54 elements, of which 42 are fully compliant, 10 partially compliant, and two non-compliant. (table 5). The 2 non-compliant elements relate to ventilation requirements. Incomplete domains and elements are escalated through the QGSG for risk oversight. Key areas for

improvement and actions are documented and a summary with associated actions is documented in Table 5a.



Table 5 Summary 2024 BAF assessment (Full assessment appendix 1)

Risk Identified	Actions
Imperfect ventilation strategy and delivery	Physical mitigations (HEPA filtered air scrubbers, open windows/natural ventilation). Trust wide critical ventilation strategy report articulating risk, mitigation and action plan. Trust Ventilation Safety Group in place.
Excess of surgical site infections (SSI)	Investment in surveillance nurses/team. SSI review panel embedded. OneTogether SSI MDT group meeting. Pre-operative skin prep and nasal suppression.
Sub-optimal fit-testing for staff	Effort to prioritise high risk staff for fit testing. Business case approved to invest an inhouse service provision, which monitors and manages via statutory mandatory training (STAM). Bank fit testers on each site.
Discordant Occupational Health service available at UHSussex sites	Planning for enhanced availability and service for screening; staff vaccination support. Plans in place for UHSussex to consider a single trust wide service.
Limited antimicrobial stewardship service across UHSussex	Development of ward specialist pharmacists to support within clinical areas. Business plans for increasing pharmacy workforce.
Laboratory Information management system delays in turnaround times for specimens	New Laboratory Information Management Systems (LIMS) project, bringing in the cross-hospital site WinPath (pathology system) deployment.

Table 5a Themes identified in 2024 BAF assessment

3.6 Risk assessment

Two significant risks are detailed on the risk register: inadequate staff FFP3 fit testing and failures in critical ventilation across UHSussex. Risks and mitigations are shown in Appendix 3.

3.7 Significant Reportable Incidents

The following is a summary list of key incidents impacting IPC during 2023/24.

- In Q1 we had a case of iGAS following elective surgery, associated with endogenous infection.
- In Q2 there was a focused effort to investigate a rise in healthcare-associated *Clostridioides difficile* toxin (CDT) infection. Using sequencing data, transmission was ruled out. The IPC department also managed a spike of patients presenting with probable viral haemorrhagic fever in emergency departments. The team also provided support and training.
- In Q3, use of rapid WGS aided rapid identification and mitigation of multi-drug resistant *Klebsiella* outbreak. Use of WGS is being trialled as part of a Trust wide strategy to aid outbreak detection. In addition, a spike in iGAS cases was seen, with response from IPC and support from local HPT. Lastly, a key learning opportunity arose from an incident involving mould growth in a cold store pharmacy refrigerator, emphasising the need for regular assessment and maintenance of facilities storing medications. This incident reinforced the importance of implementing effective mitigation strategies, including deep cleaning of associated medication fridges and precautionary recall and replacement of potentially compromised medications.
- Q4 saw a rise in influenza and norovirus cases, mimicking national trends, requiring extensive IPC support across the trust to assess patient pathways and mitigate risk of transmission.

4. Healthcare-associated Infection surveillance

Criteria 5: There is a policy for ensuring that people who have or are at risk of developing an infection are identified promptly and receive the appropriate treatment and care to reduce the risk of transmission of infection to other people.

Mandatory Infection Surveillance Reporting

All Trusts in England must submit monthly data on key healthcare-associated infections to the UK Health Security Agency (UKHSA) Data Collection Scheme (DCS).

Key Infection Categories:

- **Hospital Onset Healthcare Associated (HOHA):** Infections detected in the hospital two or more days after admission.

- **Community Onset Healthcare Associated (COHA):** Infections occurring in the community or within two days of admission, if the patient was an inpatient in the reporting Trust within the previous four weeks.
- **Community Onset Indeterminate Association (COIA)**
- **Community Onset Community Associated (COCA)**

Important Notes:

- Clinical information is not included in these definitions.
- HOHA and COHA cases are considered attributable to the Trust.

Performance Summary:

- UHSussex’s infection rates for all five mandatory surveillance metrics exceeded national thresholds (where available).
- When compared to other Trusts in the South-East, our infection rates per 100,000 bed days are comparable to or better than those of other hospitals.
- This highlights the importance of measuring infection rates rather than absolute numbers to understand our performance in infection prevention and control (IPC) over the past year.

Table 6 provides a quarterly overview of attributable healthcare-associated infection numbers. Details are provided below.

Indicator	Q1	Q2	Q3	Q4	FY-2023/24 Total	FY-2023/24 UKHSA ceiling	Difference
MRSA	3	2	0	2	7	0	+7
MSSA	20	23	23	27	93	NA	NA
<i>E.coli</i>	55	63	54	54	226	150	+76
Klebsiella. spp.	22	31	25	16	94	51	+43
<i>P. aeruginosa</i>	4	16	14	7	41	36	+5
<i>C. difficile</i>	26	37	49	45	157	141	+16

Table 6 Summary of mandatory reportable healthcare-associated infections at UHSussex during 2023/24.

Key: NA = no national ceiling available, MSSA = meticillin resistant *S. aureus*, MRSA = meticillin resistant *S. aureus*.

The Infection Prevention and Control (IPC) team is collaborating with the Business Intelligence Unit to implement new surveillance technology. This will enhance our reporting efficiency to the UK Health

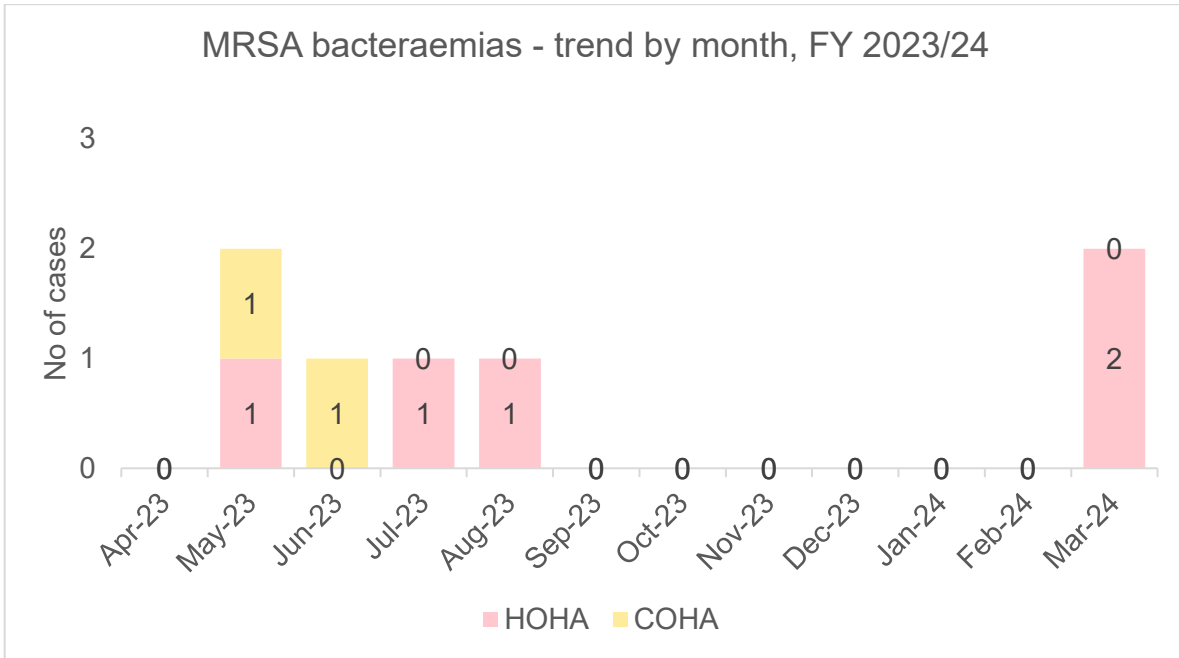
Security Agency (UKHSA). The framework also supports the generation and analysis of risk-factor information using the Patient Safety Incident Response Framework (PSIRF) methodology.

4.1 Healthcare-Associated *S. aureus* (MSSA and MRSA) Bloodstream Infections

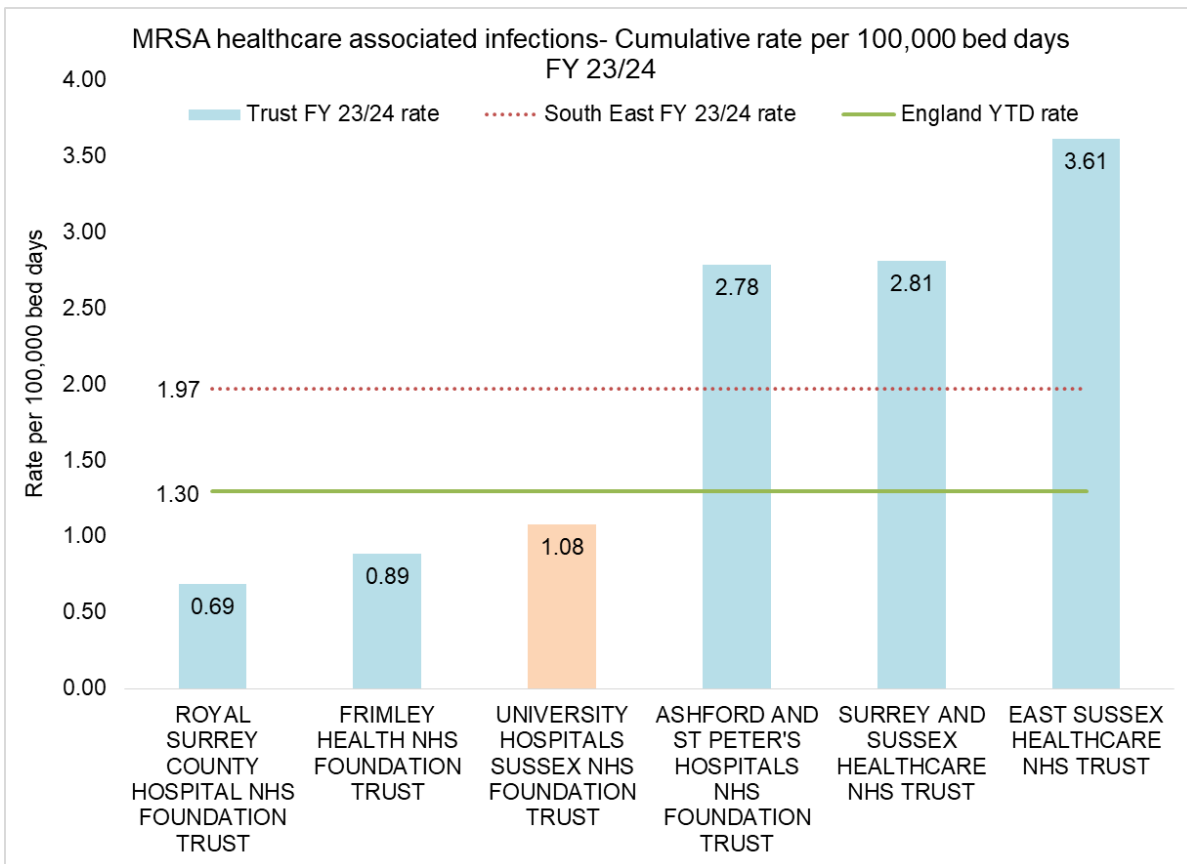
Healthcare-associated *S. aureus* bloodstream infections, including both meticillin-sensitive (MSSA) and meticillin-resistant (MRSA) strains, are significant due to their high morbidity and mortality rates, especially in vulnerable patients. These infections often result from invasive procedures and prolonged hospital stays. MRSA is particularly challenging due to its resistance to many first-line antibiotics. While MSSA can be treated with a broader range of antibiotics, prompt and effective management is crucial to prevent severe complications. Both MSSA and MRSA infections underscore the need for stringent IPC measures to prevent transmission and outbreaks. Early detection and targeted antimicrobial therapy are essential for improving patient outcomes and reducing the healthcare burden.

4.1.1 MRSA

- **Reported Cases:** In 2023/24, there were seven healthcare-associated MRSA bacteraemias (HOHA and/or COHA), against a UKHSA ceiling of zero cases.
- **Infection Rates:** The cross-Trust rate was 1.08 per 100,000 bed days, compared to a South-East rate of 1.97 and a national rate of 1.30. Our rate is similar to five other acute Trusts in the region.
- **Hospital-Onset Cases:** Five out of the seven cases (71%) were hospital-onset.
- **Investigations and Actions:** All cases are investigated, and follow-up actions are taken as needed. Learnings from panel group meetings and investigations are shared with the teams involved. Issues identified included lack of screening, poor documentation, and delayed MRSA suppression therapy.
- **Screening Policy:** In line with national guidance, the Trust introduced a new MRSA screening policy in October 2022. We no longer routinely screen all patients on admission. Three of the MRSA bacteraemia cases occurred in patients who were not screened as they did not meet the risk factor threshold.



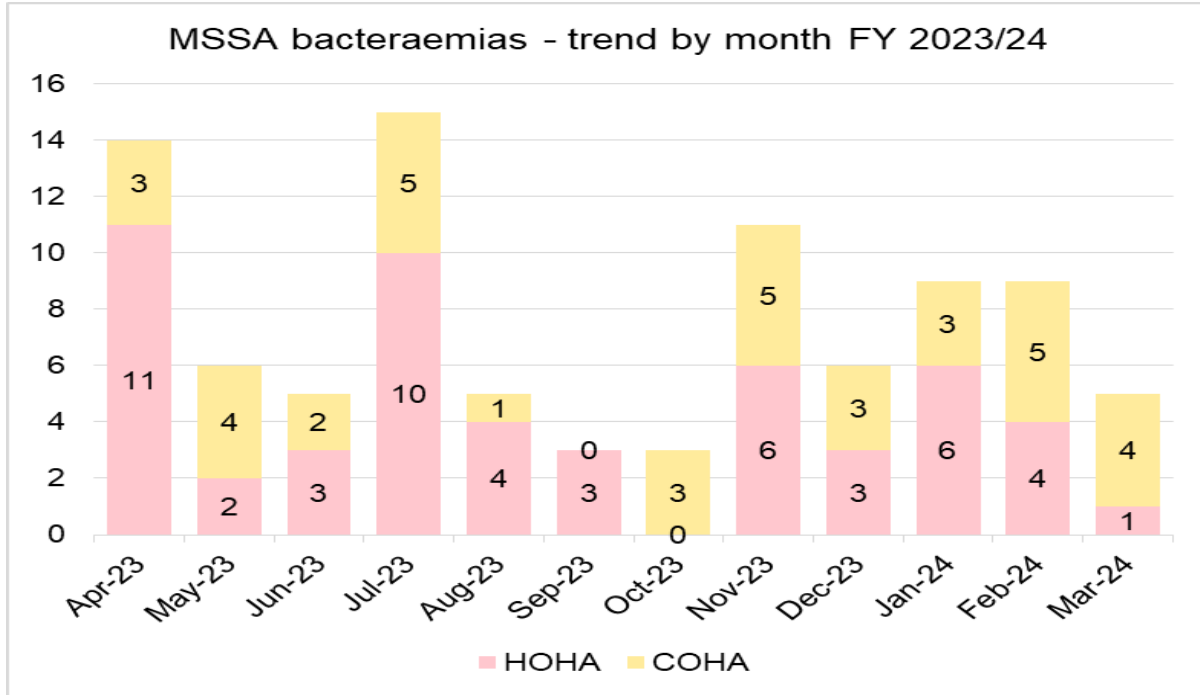
Graph 1: Trend in healthcare-associated MRSA bacteraemia 2023/24, split by HOHA and COHA cases.



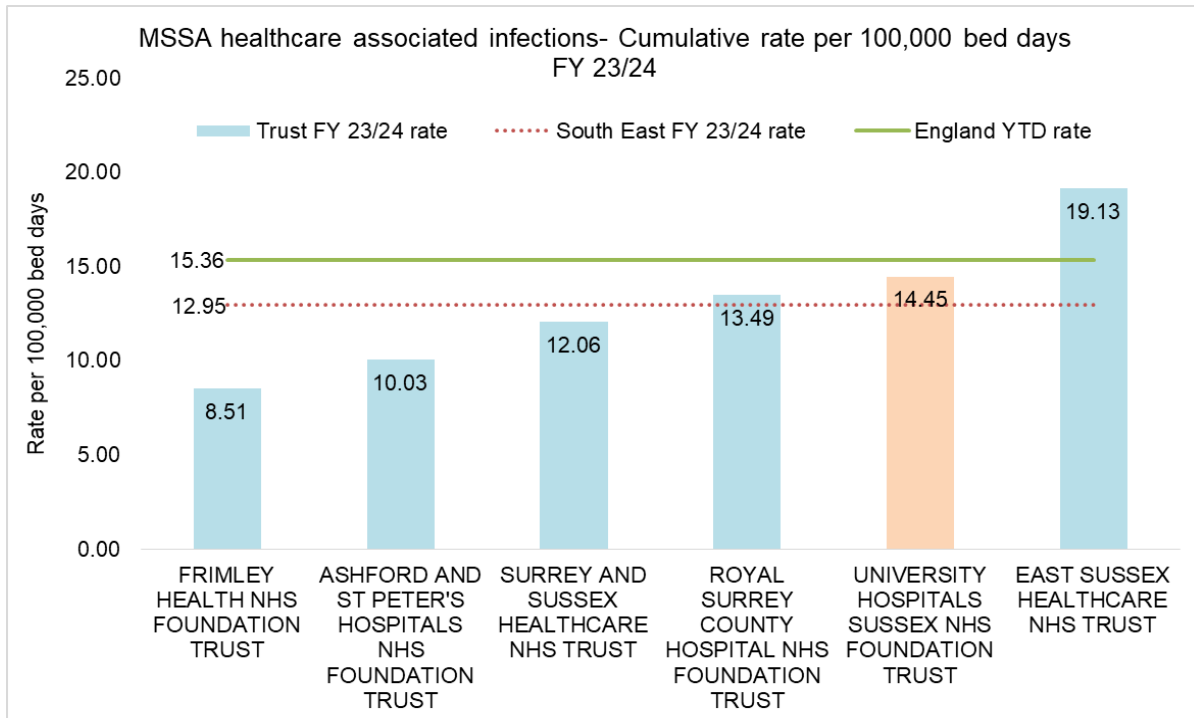
Graph 2: National and regional benchmarking graph – MRSA healthcare associated bacteraemia rate per 100,000 bed days, comparison against hospital Trusts in the South-East and England average rate.

4.1.2 MSSA

In 2023/24, there were 93 cases of MSSA bacteraemia reported. There is no national target for these cases. The rate for UHSussex was 14.45 per 100,000 bed days, which is higher than the South-East average and just below the England rate. This makes UHSussex the second highest among Acute Trusts in the South-East. (Graph 3 and 4 below).



Graph 3: Trend in healthcare-associated MSSA bacteraemia 2023/24, split by HOHA and COHA cases.



Graph 4: Regional benchmarking – MSSA healthcare associated bacteraemia rate per 100,000 bed days, comparison against hospital Trusts in the South-East and England average rate.

4.2 C. difficile infections

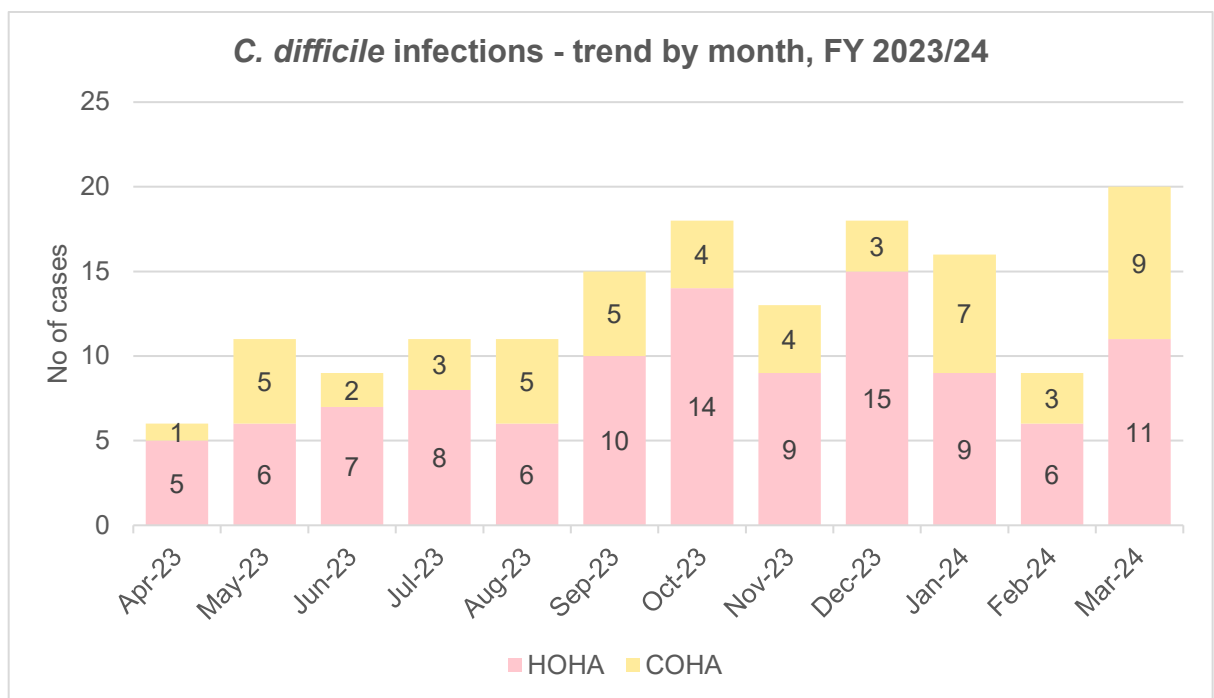
C. difficile infections are a major concern due to their high morbidity, mortality, and healthcare costs, especially among elderly and immunocompromised patients. These infections often occur after antibiotic use, which disrupts normal gut bacteria, leading to severe diarrhoea and potentially life-threatening complications like toxic megacolon and sepsis. The recurrent nature of these infections makes treatment challenging and increases the risk of long-term health issues.

Prevention and Management:

- **Stringent IPC Measures:** Hand hygiene, environmental cleaning, and careful antibiotic use are crucial to prevent the spread within healthcare facilities.
- **Early Diagnosis and Management:** Prompt diagnosis and targeted antimicrobial therapy are essential to improve patient outcomes.

Surveillance Data:

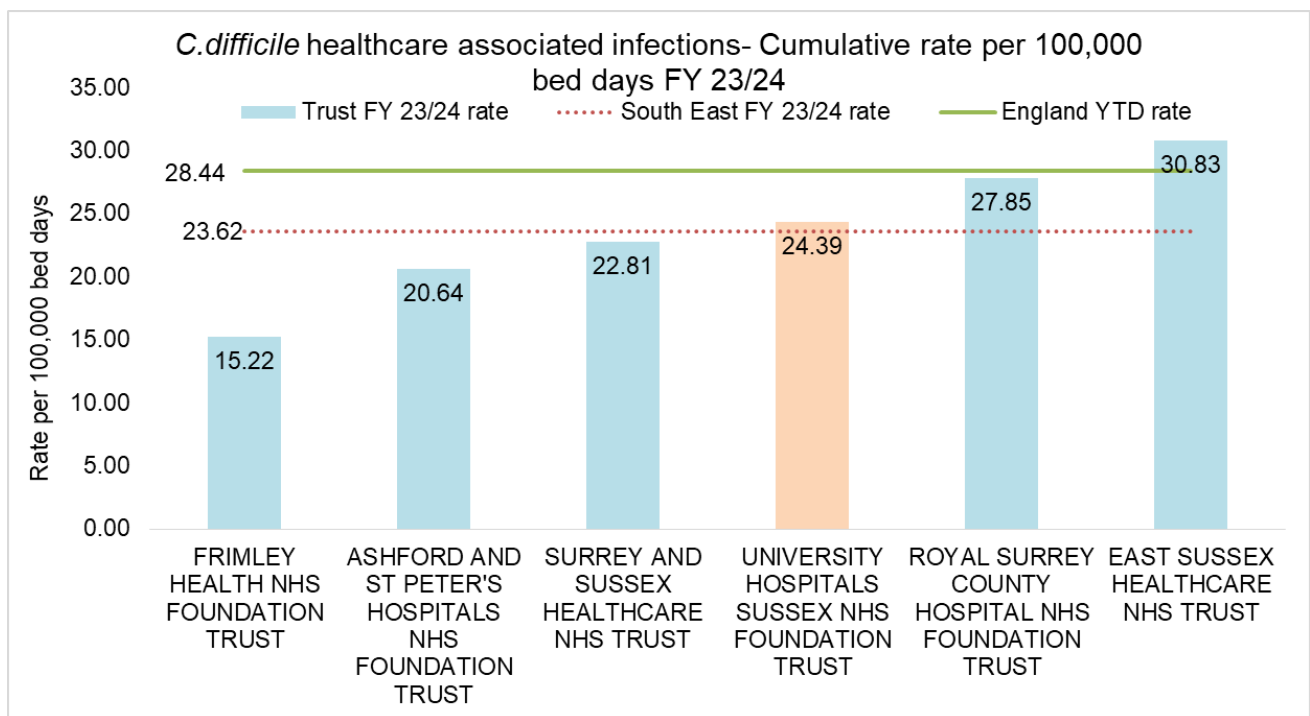
- All stool samples testing positive for C. difficile toxin (CDT) are reported as part of mandatory surveillance.
- In 2023/24, there were 157 cases of healthcare-associated CDT, exceeding the UKHSA ceiling of 141.
- The infection rate was 24.39 per 100,000 bed days, which is on par with the South-East average and lower than the England rate of 28.44.
- Most healthcare-associated cases were hospital-onset, reflecting national trends



Graph 5: Trend in healthcare-associated C. difficile infections, FY 2023/24, split by HOHA and COHA cases.

Ribotyping helps identify specific strains of *C. difficile* that are hard to control during outbreaks or may lead to poor clinical outcomes. This method is used when there is an increase in cases or suspected transmission within the same area and time frame.

Rapid reviews are conducted for all *C. difficile* infection cases. In Q4, there was a steady increase in *C. difficile* cases, along with a rise in norovirus cases, which is typical for that time of year. Starting in Q2 of 2024/25, we will use the Patient Safety Incident Response Framework (PSIRF) for cluster reviews.



Graph 6: National and regional benchmarking graph – *C. difficile* infection rate per 100,000 bed days, comparison against hospital Trusts in the South-East and England average rate.

4.3 Gram-negative blood stream infections

Infections caused by Gram-negative bacteria like *E. coli*, *Pseudomonas aeruginosa*, and *Klebsiella* species are serious due to their high morbidity, mortality, and increasing antibiotic resistance. These infections often occur in patients with long hospital stays, invasive devices, or underlying health conditions, leading to severe complications such as septic shock and organ failure.

- **E. coli:** Commonly originates from urinary or gastrointestinal sources.
- **P. aeruginosa and Klebsiella:** Notable for their ability to develop resistance to multiple antibiotics.

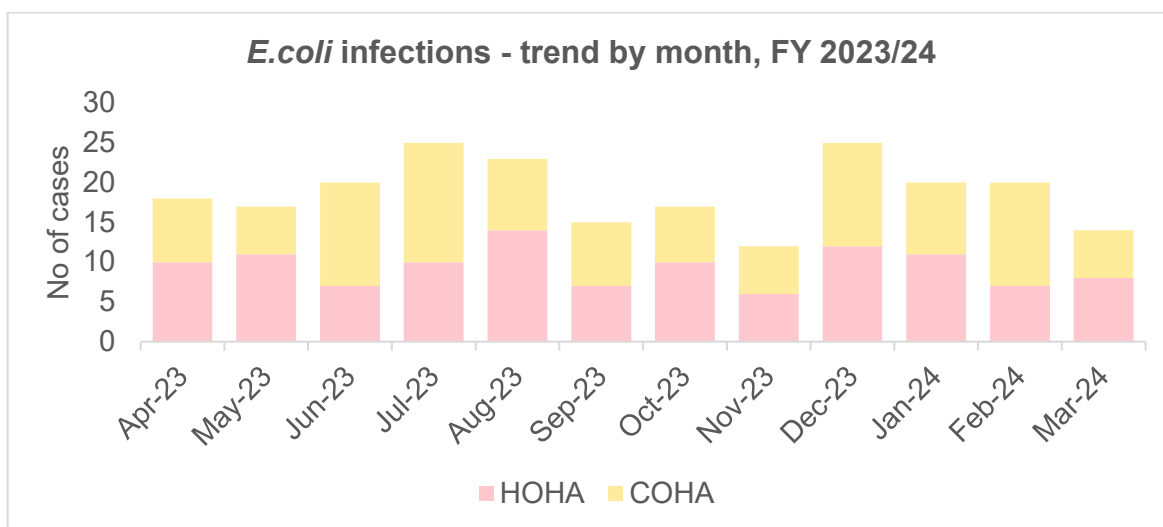
- **Multidrug-Resistant Strains:** The rise of strains like Carbapenem-Resistant Enterobacterales (CRE) complicates treatment, requiring more toxic and less effective therapies.

Prevention and Management:

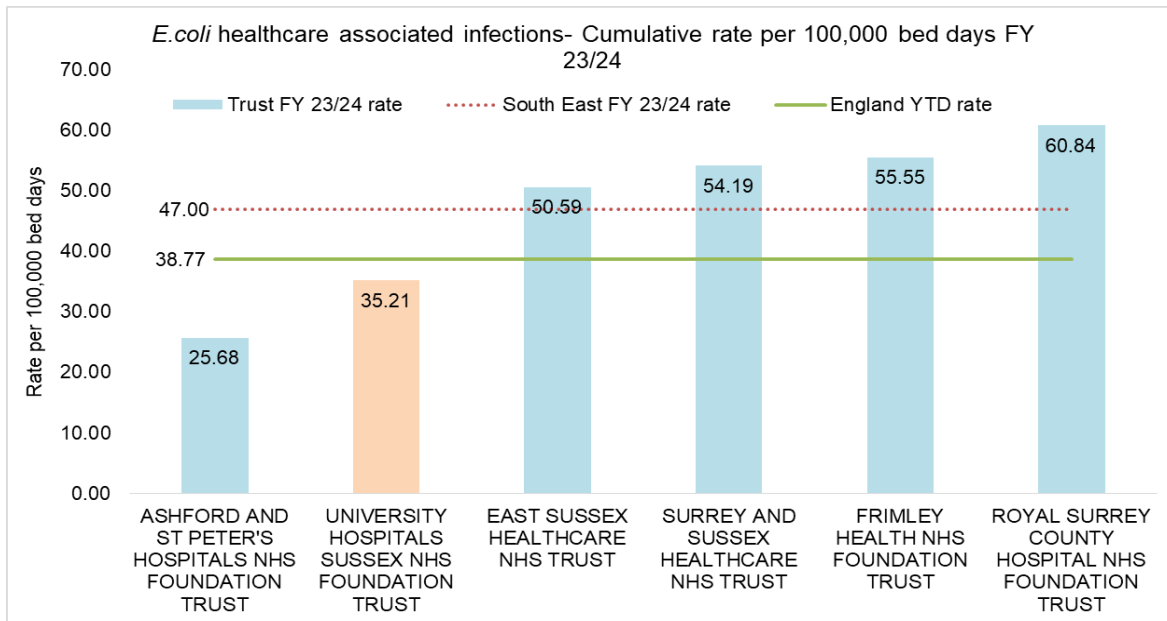
- **Effective IPC Measures:** Crucial to prevent the spread of these infections.
- **Prompt Diagnosis and Targeted Therapy:** Essential to manage infections and improve patient outcomes.

4.3.1 E. coli Infections

- **Reported Cases:** There were 226 healthcare-associated E. coli bacteraemias, exceeding the threshold of 150.
- **Infection Rate:** The rate for 2023/24 was 35.21 per 100,000 bed days, which is lower than the South-East average.
- **National Trend:** Healthcare-associated E. coli bloodstream infections have been consistently increasing nationwide.



Graph 7: Trend in healthcare-associated E. coli bacteraemia, FY 2023/24, split by HOHA and COHA cases.

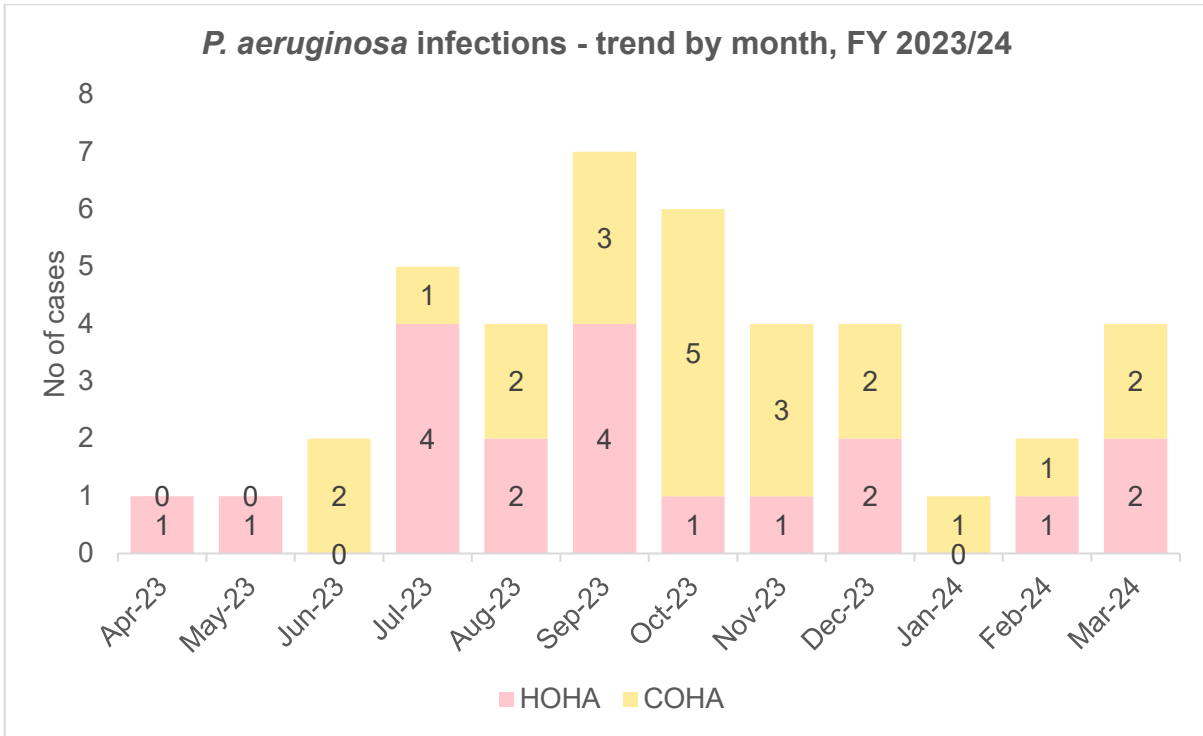


Graph 8: National and regional benchmarking graph – *E. coli* bacteraemia rate per 100,000 bed days, comparison against hospital Trusts in the South-East and England average rate.

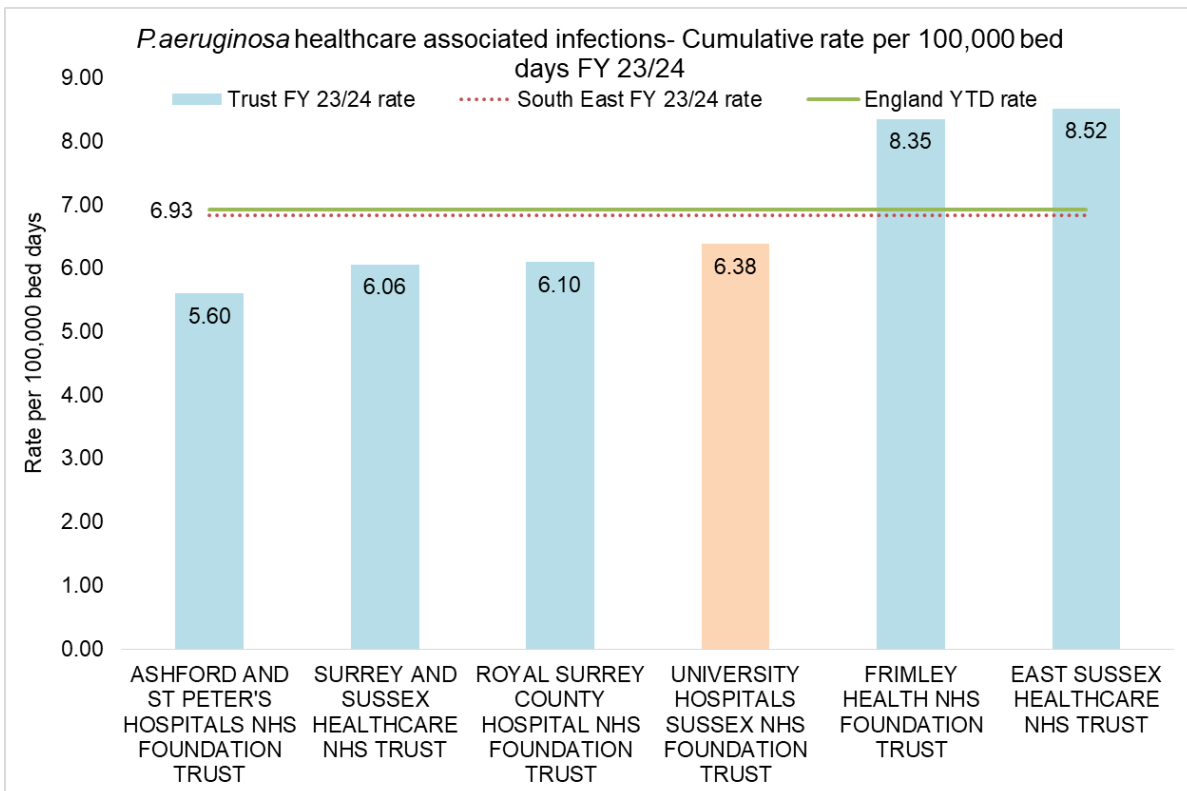
Hydration is increasingly recognized as a crucial factor in reducing Gram-negative bacteraemia. The Trust is part of a Sussex-wide project led by the ICB to explore how promoting hydration can help reduce these infections. This two-year collaborative project focuses on improving the hydration status of people over 65 living in their own homes. It involves using a hydration plan and addressing educational barriers to proper hydration. Additionally, we aim to better understand the origin and specialty of *E. coli* bacteraemia, starting with healthcare-associated infections, to develop a targeted strategy for reducing their incidence.

4.3.2 *Pseudomonas aeruginosa*

There were 41 healthcare-associated bacteraemias reported, exceeding the UKHSA ceiling of 36. Nationally, healthcare-associated *P. aeruginosa* bacteraemias have been consistently increasing, according to UKHSA surveillance. For the fiscal year 2023/24, the rate was 6.83 per 100,000 bed days, which is lower than both the South-East and England averages of 6.93. (Graph 9 and 10 below).



Graph 9: Trend in healthcare-associated *P.aeruginosa* bacteraemia, FY 2023/24, split by HOHA and COHA cases.

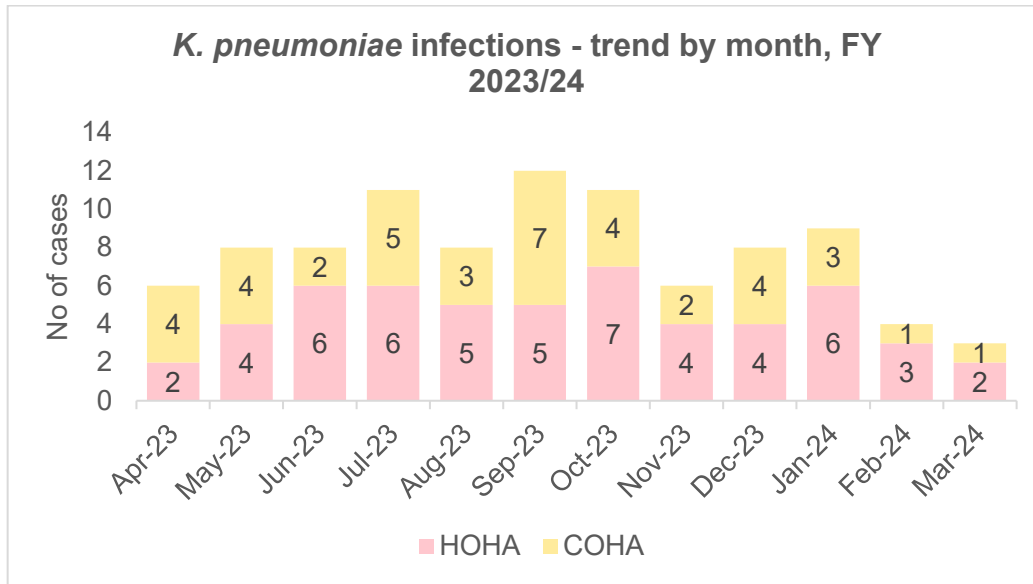


Graph 10: National and regional benchmarking graph – All *P.aeruginosa* bacteraemia infection rate per 100,000 bed days, comparison against hospital Trusts in the South-East and England average rate.

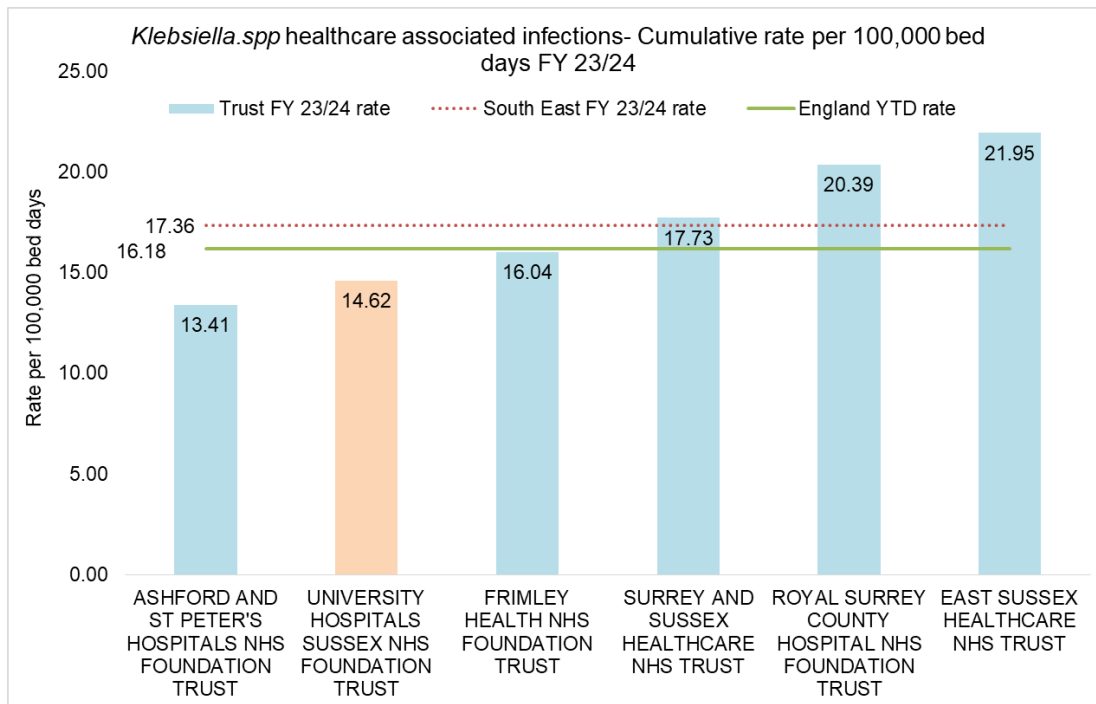
4.3.3 *Klebsiella species*

Klebsiella pneumoniae, *K. oxytoca*, and other species are reportable to the UKHSA. In 2023/24, there were 94 cases of *Klebsiella* bacteraemia, exceeding the threshold of 51. Nationally, healthcare-associated *K. pneumoniae* bloodstream infections have been consistently rising.

At UHSussex, we are investigating these cases further using whole genome sequencing to identify any environmental links. The infection rate for 2023/24 was 14.62 per 100,000 bed days, which is lower than both the South-East rate of 17.00 and the England rate of 16.18. (Graph 11 and 12).



Graph 11: Trend in healthcare-associated *Klebsiella species* bacteraemia, FY 2023/24, split by HOHA and COHA cases.



Graph 12: National and regional benchmarking graph – *Klebsiella spp* bacteraemia rate per 100,000 bed days, comparison against hospital Trusts in the South-East and England average rate.

4.4 National Point Prevalence Survey (PPS) - key outcomes and learnings

In September 2023, the Infection Prevention and Control (IPC) and Pharmacy teams at UHSussex participated in the national point prevalence survey on healthcare-associated infections (HCAIs), antimicrobial use (AMU), and stewardship. This survey, conducted for the sixth time in the UK, included data from 124 trusts and independent healthcare providers, covering over 55,000 patients. The survey aimed to illustrate the total burden of HCAIs and AMU, understand antimicrobial use and resistance patterns, and raise awareness. The national results will be published in a peer-reviewed journal.

UHSussex key findings are as follows, alongside preliminary national figures where available:

- 1795 patients were surveyed.
- Overall HCAI prevalence, calculated as the proportion of patient surveyed who had an infection at the time was 6.1%. Published literature notes national infection rates at around 7%.
- Overall antimicrobial use (AMU) prevalence was calculated at 29.7%. Published literature notes up to 40% of patients in hospital are on at least one antibiotic at any given point.
- Table 7 details the top 5 largest proportion of HCAIs which make up the prevalence rate of 6.1%, and its comparison of UHSussex and national figures.

Diagnosis site	Patients with HCAI, UHSussex (%)	Patients with HCAI (%), nationally
Pneumonia/lower respiratory tract infection	40.0	30.5
Urinary Tract Infections	10.9	16.7
Sepsis and disseminated infections	10.9	10.5
COVID-19 Infections	10.0	8.9
Gastro-intestinal tract infections	8.2	8.7

Table 7 UH Sussex and National data for the top 5 HCAIs

- From the table above we note that UHSussex figures for patients with pneumonia or any lower respiratory tract infection sits at 40%, higher than the 30% that category makes of HCAIs nationally. Similarly, UHSussex saw more HCAIs owing to COVID-19, than nationally, 10% and 8.9% respectively.
- The table below details the top five specialities which accounted for the largest proportion of patients with HCAI, and how that compares to national figures.

Patient specialty	Patients with HCAI, UHSussex (%)	Patients with HCAI (%), nationally
Medical	29.1	45.2
Geriatrics	26.4	17.6
Surgical	23.6	24.4
Intensive Care Medicine (ICU)	12.7	5.9
Paediatrics (excluding ICU)	4.5	1.8

Table 8 UHSussex and National HCAI data for the top 5 specialties

- From Table 8 above we note that the specialties of geriatrics, ICU and paediatrics (excluding ICU) accounted for a larger percentage of patients with HCAI at UHSussex as compared to national figures.
- The specialties of medicine, geriatrics and surgery accounted for the three largest proportions of patients with HCAI.
- In terms of the percentage of patients who at the time of the survey had a catheter *in-situ*, table 9 outlines the proportions at UHSussex, and a comparison to national figures.

Device	Patients (%), UHSussex	Patients (%), nationally
Central-venous catheter (CVC)	5.7	7.1
Peripheral-venous catheter (PVC)	41.2	46.9
Urinary catheter (UC)	22.3	20.3
Mechanical intubation	1.2	1.6

Table 9 UHSussex and National data for invasive devices

- 5.7% of patients surveyed had a CVC *in-situ*, 41.2% had a PVC, 22.3% a urinary catheter and 1.2% were on mechanical ventilation. All prevalence figures for devices present, except urinary catheter, were below the national figures.

4.5 Multi-Drug Resistant Organisms (MDROs)

MDROs are bacteria resistant to multiple antibiotics, making infections difficult to treat. At UHSussex, MDROs are not endemic, and cases remain sporadic, highlighting the effectiveness of our IPC strategies. We have a comprehensive screening programme for high-risk individuals, ensuring early detection and appropriate management. An outbreak of *Klebsiella pneumoniae* OXA-48, a highly resistant Carbapenemase-producing Enterobacterales (CPE), occurred at UHSussex. Seven cases

were identified, and whole-genome sequencing confirmed a point source outbreak. The outbreak was managed through enhanced screening, hand hygiene training, and cleaning, concluding in early January 2024.

4.6 Respiratory viruses

4.6.1 Influenza A and B: The influenza season peaked in January and February, leading to ward closures to prevent transmission. By March 2024, fewer ward closures and outbreak declarations were needed. Affected wards received daily reviews by the IPC team.

4.6.2 COVID-19: Symptomatic COVID-19 patients were seen throughout the year, with a peak in winter. This led to bay closures but few full ward closures. Continuous education and training on IPC precautions were promoted. National testing guidance shifted to prioritize laboratory tests over lateral flow tests, but the IPC team advised continuing the use of LFTs for early diagnosis.

4.6.3 RSV: The RSV season was consistent with national rates, with no healthcare-associated outbreaks.

4.7 Other HCAs

4.7.1 Norovirus

Throughout the year, there were intermittent cases of Norovirus, consistent with national trends. Several ward outbreaks occurred, with a significant one at WH in February and another affecting six wards at SRH in March. The SRH outbreak led to significant bed loss, prompting the Trust to declare a critical incident and activate business continuity plans. Daily outbreak meetings were held, and the IPC team provided intensive support to the affected wards. A total of 36 patients were confirmed cases, with additional symptomatic patients presumed positive. Several staff members were also affected. The outbreak was controlled by early April. Key learnings included ensuring full attendance at outbreak control meetings for comprehensive situational reports, improving communication and coordination during incidents, and enhancing education for all staff on outbreak recognition and management.

4.7.2 Measles

In February, the UKHSA declared a national incident in England due to a rise in measles cases, mainly in the West Midlands and London. Measles is highly contagious, with one person typically infecting 12-18 others, 90% of whom will get measles if not immune or wearing full protective equipment. Enhanced training was provided in key areas, especially Emergency Departments, to ensure prompt recognition and management of cases. The communications team and IPC developed an action card with key messages, widely shared across UHSussex. There were no suspected or confirmed cases in the Trust up to March 24.

4.7.3 iGAS

UHSussex has seen sporadic spikes in iGAS cases, in line with national trends. Notably, there were seven cases at one site, each requiring extensive IPC-led investigation and support for local specialties. Epidemiological investigations confirmed the sporadic nature of these cases, ruling out healthcare transmission.

5. Surgical Site Infection surveillance

Criteria 4: The provision of suitable accurate information on infections to service users, their visitors and any person concerned with providing further social care support or nursing/medical care in a timely fashion.

The National Surgical Site Infection Surveillance (SSIS) Program program in England, established in 1999 and run by the UK Health Security Agency (UKHSA), monitors patient outcomes after surgery to track and reduce surgical site infections (SSI). This program helps healthcare providers collect and compare data, identify infection causes, and promote improvements. Providers receive quarterly reports comparing their data with others, and an annual report is published. Monitoring for orthopaedic surgeries (total hip and knee replacements) is mandatory for at least three months each year, while other specialties participate optionally.

SSIS at UHSussex

At UHSussex, the SSIS program is well-established for primary (elective) hip and knee replacements at SRH and WH. In April 2023, we expanded our surveillance to include:

- Sussex Orthopaedic Treatment Centre (SOTC) at PRH
- Breast surgery at both WH and SRH
- Coronary artery bypass graft (CABG) surgery at RSCH

To strengthen SSI prevention, we have ratified a new Trust-wide SSI prevention policy and introduced specialty-specific interventions. Table 10 shows the results of SSI surveillance over the past 15 months

Operation	2023 Q1 (Jan-Mar)	2023 Q2 (Apr-Jun)	2023 Q3 (Jul-Sept)	2023 Q4 (Oct-Dec)	2024 Q1 (Jan-Mar)	National (5 year rolling average)
TKR SRH	0.0%	1.5%	0.0%	0.0%	0.8%	0.4%
THR SRH	2.2%	0.0%	0.0%	0.0%	0.8%	0.6%
THR PRH	0.0%	2.2%	0.0%	2.0%	0.0%	0.4%
TKR PRH	0.0%	2.2%	0.0%	0.0%	0.0%	0.4%
#NoF WGH	–	–	–	–	2.6%	0.9%
Breast SRH	0.0%	0.0%	0.0%	1.4%	0.0%	0.5%
Breast WGH	1.2%	0.0%	1.1%	1.0%	0.0%	0.5%
Large Bowel RSCH	–	–	–	–	4.3%	8.0%
Cardiac RSCH	2.0%	10.5%	4.5%	20.0%	3.5%	4.0%

Table 10 Surgical site infection results for 2023/24

Key: – = SSI Data unavailable

*Source: [Surveillance of surgical site infections in NHS hospitals \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

5.1 Orthopaedics

The surgical divisions regularly hold multi-disciplinary meetings using the ‘OneTogether’ framework to review and improve the surgical pathway. This framework provides a comprehensive, evidence-based approach to prevent surgical site infections (SSI) and improve patient outcomes through standardized best practices and collaboration among healthcare professionals.

From these meetings, new improvement actions are trialled to see if they can enhance patient safety. Quarterly multi-disciplinary team (MDT) meetings, led by the Chiefs of Surgery, review all SSI cases to identify learning opportunities. Efforts are ongoing to identify high-risk patients early and implement targeted preventative measures, such as using negative pressure dressings.

Training sessions have been conducted to promote effective hand hygiene, proper donning and doffing of protective gear, draping, and scrub techniques.

(Photo 1).



Photo 1 Surgical staff at PRH undertaking hands on training skills

5.2 Cardiac

The cardiac division started a surveillance program in October 2022. Infection rates have varied, peaking from October to December. To reduce cardiac SSIs, the IPC team has provided intensive support to develop and implement targeted strategies. These include multi-disciplinary team (MDT) workstreams focused on optimizing patient pathways, documentation, cultures and behaviours, data analysis, surgical practices, the built environment, and decontamination. These workstreams report to the SSI Steering Group, chaired by the Divisional Leads. Weekly surveillance monitoring allows for real-time recognition of potential cases, and enhanced clinical incident reporting facilitates thematic case reviews.

All cardiac theatres have been reviewed and meet required ventilation standards, although some improvements have been identified. Plans for environmental improvements are underway. Infection rates significantly improved to below the national benchmark from January to March, and support is ongoing.

5.3 Breast

The IPC team continues to support the development of SSI surveillance following breast surgery. Formal UKHSA SSI surveillance for breast surgery is conducted at SRH and WH. An internal review of breast SSI was conducted at PRH and Brighton hospitals for Q4 (January to March) to assess infection rates, with the aim of establishing a formal SSI surveillance program for the service.

5.4 Large Bowel

Large bowel SSI surveillance was conducted for the first time at RSCH from January to March 2024 and will continue for another quarter. The infection rate was below the national benchmark. If it remains low, the surveillance nurse resource will switch to another surgical category.

6. IPC in built environment

Criteria 2: The provision and maintenance of a clean and appropriate environment in managed premises that facilitates the prevention and control of infections.

6.1 Facilities

The Trust manages its facilities contract in-house. Ward sisters conduct weekly checks of clinical areas against The Hygiene Code, with monthly validation by matrons. Results are recorded on the Tendable system (formerly known as 'Perfect Ward').

All NHS Trusts must conduct an annual PLACE assessment, which evaluates non-clinical aspects impacting patient care, such as cleanliness, maintenance, privacy, food quality, and dementia-friendly facilities. At UHSussex, PLACE assessments are part of weekly routines, conducted by patient assessors and staff teams, including facilities, estates, and infection prevention and control. These assessments cover all clinical departments and some non-clinical areas like main receptions and gardens. Outcomes from weekly inspections lead to both immediate and future improvements in patient environments. Results are discussed at bi-monthly PLACE review meetings, and a quarterly report with an action plan is provided to the Patient Engagement and Experience Committee.

6.1.1 Environmental Cleanliness

The Facilities and Estates Division ensures a safe, clean environment for patients, staff, and visitors. The Domestic department uses both manual and automated cleaning methods. Technical audits of all hospital areas are conducted, categorized into four risk levels, with very high-risk areas being the top priority. Audit results are reviewed monthly at IPOG meetings, with multi-disciplinary discussions to drive continuous improvements.

6.1.2 National Standards of Cleanliness

New national Standards of Cleanliness were implemented in 2021. The Estates and Facilities team uses Synbiotix to record scores against 50 key cleaning elements. Reports are broken down into Domestic, Nursing, and Catering categories, with daily distribution to all departments. The Division also performs various deep cleans and infectious cleans within the hospitals. (Table 11).

Apr 23	May 23	Jun 23	Jul 23	Aug 23	Sept 23	Oct 23	Nov 23	Dec 23	Jan 24	Feb 24	Mar 24	Total	Site
270	280	190	218	240	243	221	229	410	390	307	256	3254	RSCH
91	110	69	72	107	87	82	69	148	100	88	88	1111	PRH
783	648	615	514	561	754	611	692	1036	1051	760	699	8715	WH
468	606	432	374	411	386	610	459	637	1061	495	548	6487	SRH

Table 11 Number of deep cleans 2023-24, per site

6.1.3 Automated Room Disinfection

Effective room decontamination is crucial to prevent cross-infection, especially for pathogens like *C. difficile* and multi drug-resistant organisms. Automated systems, such as Hydrogen Peroxide Vapour (HPV), are used for enhanced disinfection. HPV is available at SRH and WH, with usage ranging from 9 to 35 times per month at WH and 2 to 30 times per month at SRH. Ultraviolet light technology is being trialled, with plans to implement it at RSCH and PRH in 2024.

Apr 23	May 23	Jun 23	Jul 23	Aug 23	Sep 23	Oct 23	Nov 23	Dec 23	Jan 24	Feb 24	Mar 24	Total	Site
18	18	21	24	22	35	28	16	9	29	15	12	247	WH
30	6	25	21	16	2	18	13	16	18	2	11	178	SRH

Table 12 Number of HPV disinfections 2023-24, per site

6.2 Estates and Capital Projects

The IPC team collaborates with the Estates and Capital Project Teams to ensure facilities meet IPC standards. A significant project in 2023 was the opening of the Louisa Martindale Building at RSCH, which includes many single rooms, 10 isolation suites, improved ventilation, compliant handwash basins, spacious treatment rooms, and an easy-to-maintain fabric.

6.2.1 Planned Preventative Maintenance

Maintaining buildings and equipment is crucial for safe patient care. The Trust has a significant backlog of maintenance work, but progress has been made in replacing flooring in many areas. The Estates team conducts weekly and quarterly maintenance, servicing, and filter changes for ventilation systems.

6.2.2 Ventilation

Proper ventilation is essential in healthcare settings to provide a safe environment and control odours. Specialised ventilation reduces airborne infection risks in areas like operating rooms and critical care. The Estates department manages ventilation systems, following HTM 03-01 guidelines. The Trust wide Ventilation Safety Group (VSG), a multidisciplinary team, oversees ventilation, monitors reports, and recommends improvements. The VSG met 3 times during the year. Many theatre air handling units are nearing the end of their lifespan, causing frequent breakdowns and operational disruptions. A capital plan is being progressed for replacement of units over the next few years. The VSG have requested robust logs be kept of each system, any failings and remedial works needed to ensure that the systems remain safe to use.

The VSG maintains logs of system performance and updates the trust risk register. A comprehensive ventilation report has been requested to prioritize improvement work, requiring significant investment over several years

6.2.3 Water

Water is essential in healthcare settings for keeping patients clean and hydrated, and for running equipment. Common water outlets include handwash basins, showers, toilets, hydrotherapy facilities, ice machines, and drinking fountains. However, these outlets can pose risks to patient safety by exposing them to waterborne pathogens like *P. aeruginosa* and *Legionella pneumophila*.

The Trust follows national guidance (HTM 04-01: Safe water in healthcare premises), monitored by the Trust wide Water Safety Group (WSG). This multidisciplinary group is responsible for developing and managing the water safety plan (WSP). They also advise on remedial actions when water systems or outlets are contaminated, increasing risks to vulnerable patients. The WSG meet 3 times during the year, while the local teams for SRH/WH and PRH/RSCH met 6 times. The WSG is working to further develop process and governance. The WSG reports to TIPC and escalates identified risks to QGSG for mitigation.

The Trust continuously monitors for signs of *Legionella pneumophila* across all services and *P. aeruginosa* in augmented care areas, which provide advanced medical support and continuous monitoring for patients with critical or complex health conditions.

6.3 Decontamination of medical devices

UHSussex operates four Central Sterile Services Departments (CSSD), one at each main site. These departments are responsible for reprocessing instruments used in surgeries and other procedures that require sterile equipment. The performance of CSSDs is benchmarked against national regulations to ensure high standards.

In addition to CSSDs, UHSussex has Endoscope Decontamination Units (EDU) that aim to meet international standards (ISO 13485) for JAG accreditation. This accreditation signifies that an EDU meets rigorous standards of quality, safety, and patient care as set by the Joint Advisory Group on Gastrointestinal Endoscopy. However, during 2023-24, two EDUs did not meet the required standards due to insufficient decontamination auditing and outdated air handling units, leading to the withdrawal of their JAG accreditation. Since then, necessary decontamination audits have been conducted, and upgrades to the air handling units are planned for next year.

The Trust-wide Decontamination Committee did not meet as planned, but regular discussions were held with local users to understand and address concerns. A governance refresh has been implemented for the coming year.

7. Antimicrobial stewardship

Criteria 3: Appropriate antimicrobial use and stewardship to optimise outcomes and to reduce the risk of adverse events and antimicrobial resistance.

Antimicrobial resistance is one of the biggest challenges in modern healthcare, with significant social and economic impacts. The UK Government's 20-year vision includes national objectives to manage antimicrobial resistance, emphasizing the appropriate use of antimicrobials. The 5-year action plan sets specific targets to reduce antimicrobial consumption in both primary and secondary care. The current goal in secondary care is to reduce the use of broad-spectrum antimicrobials compared to narrow-spectrum ones, which is challenging, especially post-COVID-19. The plan also aims to reduce unintentional exposure to antibiotics through effective infection control policies.

The Trust employs three Antimicrobial Pharmacists (plus one rotational post at RSCH) to oversee stewardship and guide appropriate prescribing practices. Two pharmacists at RSCH also support the infectious diseases ward. With the opening of the new Louisa Martindale Building in July 2023, the infectious diseases service now has 11 additional beds and is commissioned by NHS England as a Specialised Regional Infectious Disease Centre.

Specialist pharmacists support Consultant Microbiologists in managing infections in patients, including those who may acquire infections during their stay or as a side effect of other treatments. This includes cancer patients needing antibiotics to prevent infections during immunosuppressant therapies and intensive care patients with multiple invasive devices.

National workforce challenges, including a shortage of trained Pharmacists and Consultant Microbiologists, have impacted stewardship activities. This has reduced the number of general ward Pharmacists and pulled Antimicrobial Specialist Pharmacists into core pharmacy services.

7.1 Antibiotic consumption

Antibiotic consumption is tracked using data from 'RxInfo'.

For 2023/24, the target was updated to reduce the use of 'watch' and 'reserve' antibiotics by 10%, compared to a previous target of 4.5%. The baseline year was also changed from 2018 to 2017, making this a more challenging goal.

Interim Results (June 2024):

The Trust recorded 2051 defined daily doses (DDD) per 1000 admissions, an increase of 11.5%. The target was to use less than 1656 DDDs per 1000 admissions.

Note: This figure is not final as Q4 admissions data is provisional and will be confirmed in September 2024.

Many trusts did not meet the target, but some succeeded. The Antimicrobial Stewardship Group (ASG) is investigating what successful trusts did and plans to implement those strategies at UHSussex.

Factors Contributing to Increased Use:

Ongoing COVID-19 impacts, with waves of infection leading to more admissions for chest infections, especially in winter.

Changes in patient demographics, with fewer elective (low antibiotic use) admissions and more medical (high antibiotic use) admissions.

Increasing numbers of complex patients with multiple health issues requiring longer and broader-spectrum antibiotic treatments.

Longer patient stays due to social care constraints, leading to more hospital-acquired infections.

EUCAST recommendations for higher antibiotic dosages for some organisms, increasing the use of broad-spectrum agents like ciprofloxacin, ceftazidime, and piperacillin-tazobactam for *P. aeruginosa*, and ceftriaxone for *S. aureus*.

An increase in atypical respiratory infections and S. pneumonia, impacting antimicrobial use.

7.2 CQUINS

UHSussex participated in the national IV to Oral CQUIN in 2023-24. The target was for less than 40% of IV antibiotics to meet the criteria for switching to oral administration. The Trust achieved 18% compliance for the year, meeting the CQUIN criteria for full payment.

		minimum target for payment	target for full payment	% compliance
Quarter 1	April- Jun 23	60%	40%	29%
Quarter 2	July - Sept 23	60%	40%	11%
Quarter 3	October- Dec 23	60%	40%	11.88%
Quarter 4	Jan- Mar 24	60%	40%	12%

7.3 National Point Prevalence Survey – Antimicrobial summary

In September/October 2023, antimicrobial pharmacists and microbiologists supported data collection for the national point prevalence survey. Of the 1795 patients audited, 534 (29.75%) were on antimicrobial treatment, close to the national average. Local data showed minimal surgical prophylaxis beyond 24 hours and greater use of narrow-spectrum antibiotics compared to the national dataset.

Identified areas for further work from the results-

1. ITU antimicrobial use -percentage of patients on antimicrobials in local ITU was nearly double the national figure (6.2% vs 3.9%). The ASG has identified this as an area for review and audit.
2. 17% of prescriptions audited were deemed non-compliant with guidelines. A further deep dive into this dataset is to be conducted to understand the indications and areas where non-compliance occurred to generate some ongoing actions.
3. 23% of antimicrobial prescriptions were deemed suboptimal or inadequate. Suboptimal prescriptions included those where – there was a mild allergy mismatch, choice of treatment, dose, route or duration was an unreasonable choice for the likely causative/cultured pathogen including spectrum too broad, unnecessary overlap in multi drug regimes, excessive dose or course length or a failure to appropriately de-escalate with results. Inadequate prescriptions included choice, route, dose, or duration deemed unlikely to treat the pathogen, indication did not warrant antimicrobial treatment, life threatening allergy mismatch, toxicity due to interaction or surgical prophylaxis greater than 24 hours (except where guidelines endorsed this). Further

analysis of this dataset will be completed to look for themes and plan actions to reduce numbers in future audits.

7.4 Covid 19

Work to support the covid medicines delivery unit at RSCH continued in 23-24 with a significant requirement for specialist Pharmacist advice from the AM Pharmacist at Brighton.

7.5 ASG meetings & Guidelines

Cross-site ASG meetings have continued, and joint priorities and action plans have been agreed. Work to unify the empiric antimicrobial guidelines across the organisation has continued this year and an ongoing workplan of outstanding guidelines to unify has been put in place. ASG work has been impacted by the staffing challenges in both pharmacy and microbiology which has impeded progress this year. The significant shortages in Microbiology staffing have impacted the ASGs ability to progress several stewardship activities this year and the ongoing staffing challenges in both Microbiology and Pharmacy will continue to impact in the next year.

8. Information on infections

Criteria 4: The provision of suitable accurate information on infections to service users, their visitors and any person concerned with providing further social care support or nursing/medical care in a timely fashion.

The Infection Prevention and Control Team (IPCT) is dedicated to supporting public health by effectively managing and communicating important IPC results to both internal and external stakeholders. This year, we enhanced our services by hiring an IPC epidemiologist, which has improved our ability to use data for better patient safety and quality outcomes. Additionally, UHSussex is in the process of acquiring a new Laboratory Information Management System (LIMS) to improve data management.

Patient and Staff Communication

Information leaflets are available for staff to discuss with patients, and the IPCT provides additional support as needed. The IPCT also collaborates with the communications team to ensure important information is effectively communicated to staff and patients, promoting safe care and compliance with national guidelines. An example of this collaboration is the measles action card (Appendix 4), developed with the communications team.

9. Infection Management

Criteria 5: That there is a policy for ensuring that people who have or are at risk of developing an infection are identified promptly and receive the appropriate treatment and care to reduce the risk of transmission of infection to other people.

At UHSussex, we continuously monitor for infections to ensure early detection and effective management. During working hours, the Infection Prevention and Control Team (IPCT) visits clinical areas daily, attends operational site meetings, and reviews microbiology and virology results throughout the day. Outside of these hours, site teams continue to monitor and manage patients with suspected or known infections, passing this information to the IPCT as soon as possible. The Microbiology team communicates any key infection indicators or early warnings to the IPCT and is available on call for urgent specialist advice outside of regular hours.

Guidelines and Policies

UHSussex follows the National Infection Prevention and Control Manual (NIPCM) for England, which is referenced in our IPC policies. Additionally, we use Microguide, an IT system that provides clear Antimicrobial Stewardship (AMS) principles to support the prescribing of targeted antimicrobial therapies.

10. Health care worker responsibilities

Criteria 6: Systems are in place to ensure that all care workers (including contractors and volunteers) are aware of and discharge their responsibilities in the process of preventing and controlling infection.

During 2023-24 the IPCT have supported a series of initiatives aimed at enhancing healthcare workers engagement, awareness, and involvement in IPC.

10.1 Link Champions

In March 2024, we launched the new link champion scheme, open to all Trust staff. The first meeting was a success, with 51 champions attending from various disciplines, including cleaners, healthcare assistants, nurses, physiotherapists, and radiologists (Photo 2). Over the coming year, we have planned a series of teaching events. IPC staff will collaborate with these champions to promote and embed good practices across the Trust.



Photo 2. Participants at IPC Champion Launch

10.2 Education and training

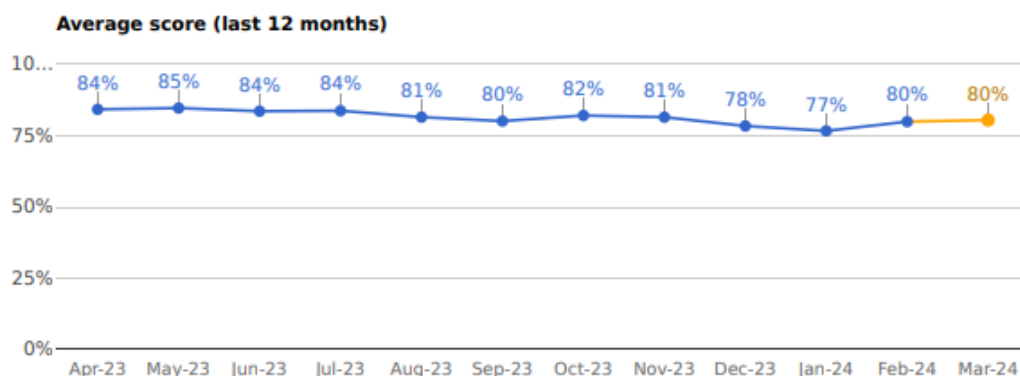
All staff members, both clinical and non-clinical, receive Infection Prevention and Control (IPC) training during their induction. Clinical staff also complete annual virtual IPC training through the Health Education England e-learning tool. Currently, overall IPC training compliance is 89%, with clinical staff at 82% and non-clinical staff at 95%. To improve uptake, we plan to reintroduce face-to-face training sessions over the coming year, based on feedback.

10.3 IPC Audit and monitoring

10.3.1 IPC Environmental spot check

The rolling programme of monthly environmental audits in clinical areas has continued in conjunction with the Matrons and members of the domestic team where possible.

Average audit score for 2023-2024: 80.5% from 742 audits (Graph 13).



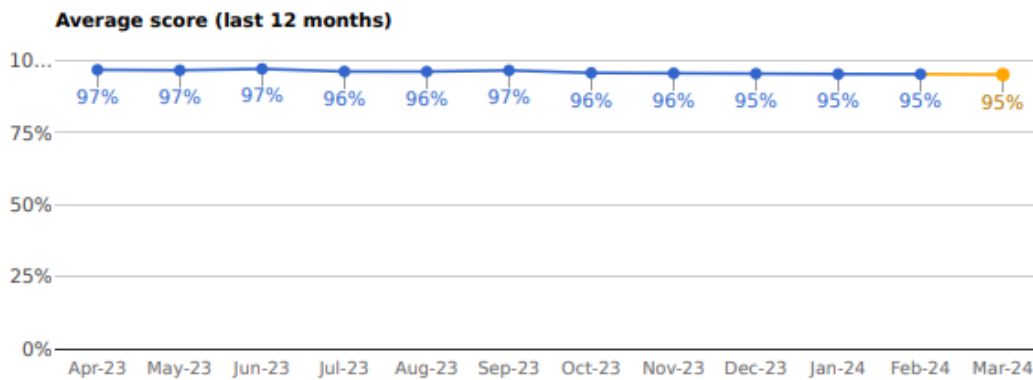
Graph 13 IPC environmental spot check scores 2023/24

Audit scores are fed back to the clinical teams at both local and divisional level for actioning. Identified issues are also shared with the facilities.

10.3.2 IPC Weekly assurance audits

IPC Weekly Assurance audits are conducted using Tendable across the Trust and undertaken by the senior departmental nursing team.

Average audit score for 2023-2024: 95.7% from 4312 audits (Graph 14)



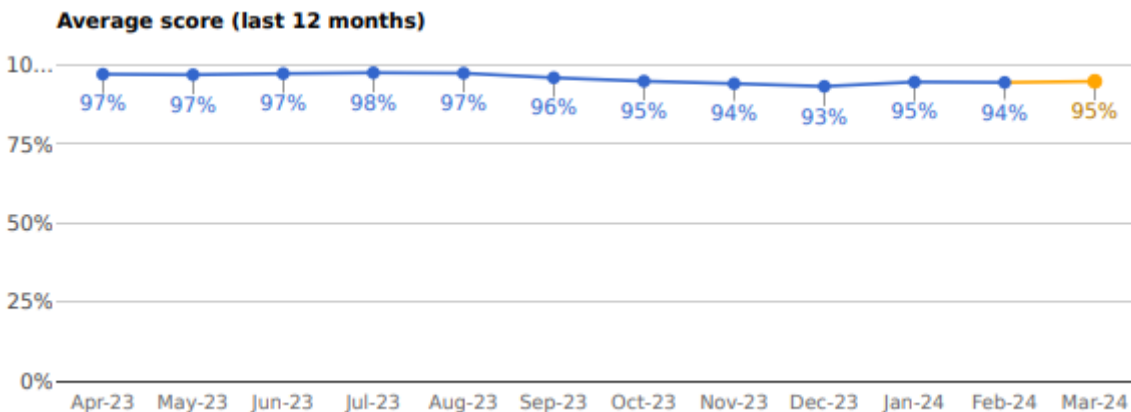
Graph 14 weekly IPC assurance audit scores 2023/24

The IPC weekly assurance audit allows clinical leads to directly review key aspects of IPC and action any issues identified.

10.3.3 Hand Hygiene Compliance audits

The rolling programme of monthly IPC Hand Hygiene compliance audits in clinical areas continues conducted by clinical staff.

Average audit score for 2023-2024: 95.5% from 2782 audits (Graph 15)



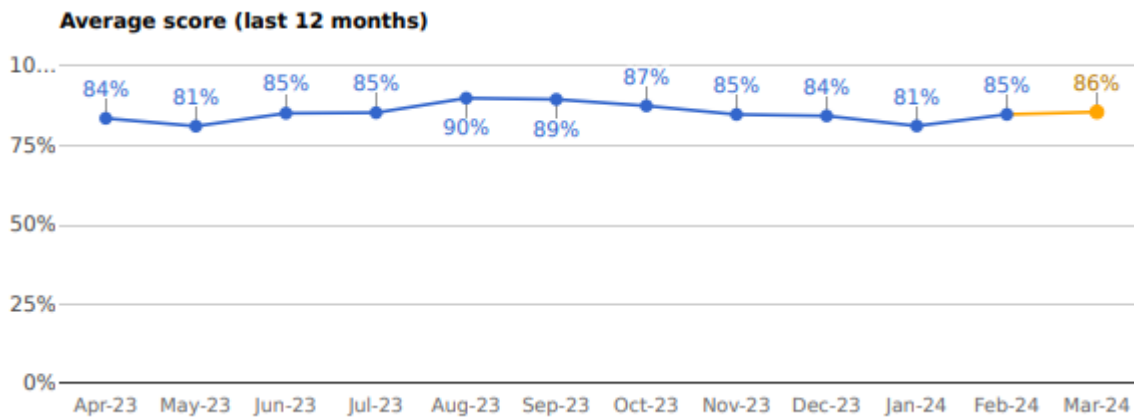
Graph 15 Monthly hand hygiene audit scores 2023/24

Hand Hygiene audit scores inform the IPC team of areas that require additional support with hand hygiene compliance through targeted education sessions.

10.3.4 IPC Commode Audits

The IPCT aim to complete monthly commode cleaning validation audits across all sites. These reviews include commodes, shower chairs, raised toilet seats and bed pans.

Average audit score for 2023-2024: 85.7% from 707 audits (Graph 16).



Graph 16 Monthly commode audit scores 2023/24

Audit scores are fed back to the clinical teams at both local and divisional level. Where poor compliance is identified the IPC team provide support through clinical education sessions.

10.4 IPC supporting decarbonising healthcare

Since January 2023, the 'Gloves Off' project has been actively running. The project's infographic poster has been widely used across the Trust, and the IPC team has conducted multiple education sessions at UHSussex and other local Trusts' IPC champions days. Our efforts were showcased with a poster and presentation at the Infection Prevention Society 2023 annual conference. Significant reductions in glove use have been seen in the sexual health and ENT departments, thanks to strong project leadership. Further workshops are planned to reinforce the "gloves off" message throughout UHSussex.

New Initiatives

In March 2024, we launched several new projects, including a task and finish group to explore more sustainable options for disposable curtains and reducing the use of paper couch rolls.

To support point-of-care decontamination and reduce the carbon footprint associated with decontamination methods, the ENT department at RSCH has introduced a novel method for disinfecting non-lumened nasendoscopes. The ultraviolet (UVC) cabinet (Photo 3) offers a safe and

efficient alternative to automated washer disinfectors, reducing turnaround time and minimizing damage to the scopes. The IPC team recommends rolling out this equipment to other sites for use with nasendoscopes and ultrasound probes.



Photo 3. UVC light cabinet in the ENT department at RSCH

11. Isolation facilities

Criteria 7: The provision or ability to secure adequate isolation facilities.

UHSussex currently has a reasonable proportion of single rooms, although many lack *en suite* facilities. Isolation rooms are in the minority, and most do not have the appropriate mechanical ventilation to support negative or positive pressure ventilation. Additionally, the distribution of isolation rooms is uneven, with the majority located at RSCH. The Louisa Martindale Building at RSCH is equipped with 60% single rooms, including 10 isolation rooms in the new infectious diseases' unit and ICU. Where there are difficulties in locating a single room, risk assessments are used to determine priority.

12. Laboratory support

Criteria 8: The ability to secure adequate access to laboratory support as appropriate.

Having reliable laboratory support is essential for effective infection prevention and control. Our Trust operates two Clinical Pathology Accreditation (CPA) accredited microbiology laboratories at RSCH and SRH. These labs are working to harmonize their approaches following the merger and are implementing a new Laboratory Information Management System (LIMS).

Challenges and Solutions

The laboratories face significant challenges, including chronic vacancies in microbiology consultants, which are currently being mitigated with the help of locums, and shortages in microbiology laboratory staff. Additionally, the increasing volume of samples has led to delays in turnaround times for releasing results. Despite these challenges, our laboratory teams are diligently working to address staffing shortages and streamline processes to improve efficiency and support the Trust's infection prevention and control (IPC) efforts.

13. Policy

Criteria 9: That they have and adhere to policies designed for the individual's care, and provider organisations that will help prevent and control infections.

All IPC policies are up to date as per Appendix 6 and surgical site infection prevention policy was newly developed (see section 5).

14. Staff Health

Criteria 10: That they have a system or process in place to manage staff health and wellbeing, and organisation obligation to manage IPC.

14.1 Staff Winter Vaccination Programme

Vaccination uptake fell as compared to previous years with 36% of staff receiving influenza vaccine and 30% receiving a COVID-19 vaccine. These figures are in line with national uptake figures and Sussex had the 2nd highest regional uptake in the country. IPCT continues to work with divisions, occupational health, communications team and pharmacy to optimise uptake through information giving and ease of access to the vaccine.

14.2 FFP3 Respiratory Fit testing

Filtering Face Piece 3 (FFP3) respirators provide the highest level of protection against airborne particles, including viruses and bacteria, filtering at least 99% of airborne particles. They are commonly used in healthcare settings to protect against highly infectious diseases.

Fit Testing Requirements

FFP3 respirator fit testing is mandated for patient-facing staff every two years, in line with NHS England resilience principles. During 2023/24, this service was provided by bank staff, leading to inconsistent availability across Trust sites. When staff pass a fit test, the mask type is recorded in their Health Roster profile.

Data and Challenges

The fit testing data from Health Roster does not differentiate between patient-facing and non-patient-facing staff. Table 13 shows the fit testing numbers across UHSussex.

Total Patient Facing Staff Fit Tested	Passed on 1 mask	Passed on 2 or more masks
4012	3175	836

Table 13 Staff Fit Testing data

15. Research and scholarship

During 2023-24 the IPC department has made significant strides in expanding its research capabilities. Under the leadership of Dr James Price, the team welcomed new members, including PhD student Ida Sey, who is studying the role of whole-genome sequencing in outbreak management, and academic clinical fellow Opeyemi Makanjuola, who is exploring the safe reuse of surgical equipment with novel technologies to support healthcare decarbonisation. Furthermore, the IPCT has secured funding for an academic IPC epidemiology post (recruitment summer 2024), and IPC Matron Andrew Davies was appointed to the Chief Nurse Fellowship Programme to develop artificial intelligence prediction tools for preventing healthcare-associated infections. The department also added a clinical fellow and two academic foundation doctors to support their research.

The IPC department has also demonstrated remarkable scholarship and national involvement. Notably, Dr James Price has been an active member of several prestigious advisory groups, including the Epic4 (national guidelines for the prevention of HCAI in hospitals in England), the UK Health Alliance on Climate Change, and the UKHSA's Panton-Valentine Leucocidin and Surgical Site Infection Advisory Panels. The IPC team's research has gained significant recognition, with presentations at the national and international conferences and expert speaking engagements at the Infection Prevention Society and OneTogether annual conference. Additionally, James Price was honoured with the Healthcare Infection Society Early Career Award 2023, highlighting the department's dedication to excellence in infection prevention.

These efforts underscore the department's continuous drive to advance the field of IPC through innovative research and collaboration.

16. Priorities for 2024-25

Planned IPC Programme for 2024/25

- **Streamline IPC Audit Methodology:** Ensure a consistent approach across all Trust sites.
- **Embed Audit Feedback Process:** Focus on audit results and actions within divisions.
- **Review Audit Databases:** Ensure consistent data output.
- **Increase IPC Reviews/Visits:** Extend reviews and visits to departments and services outside the main Trust sites.
- **Develop PSIRF Methodology:** Integrate this into infection investigation processes.
- **Establish a Fit Testing Team:** Provide a filtering face piece testing service at each main Trust site.
- **Expand SSI Workforce:** Support further surgical site surveillance in additional surgical categories.
- **Promote IPC Link Champion Programme:** Continue to grow this programme across all Trust departments.
- **Ensure HTM Guidance Alignment:** Seek assurance for water and ventilation standards at all Trust sites.
- **Broaden Research Skills and Initiatives:** Continue to enhance research capabilities within the IPC team and beyond.
- **Support Project Work:** Focus on sustainability initiatives and hydration/mouth care matters

17. Conclusion

The Trust demonstrates compliance with the Hygiene Code across all its sites, as outlined in the Board Assurance Framework.

The Infection Prevention and Control Team (IPCT) works collaboratively with staff across UHSussex to ensure that infection prevention is fully integrated into all activities. This helps protect both patients and staff from avoidable infections.

For the year ahead, there is a comprehensive IPC programme that incorporates learning opportunities, experience, and empirical research. This programme aims to improve patient safety and experience while reducing infection rates.

18. References

[English surveillance programme for antimicrobial utilisation and resistance \(ESPAUR\) report 2023 to 2023 \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

[NHS England » National infection prevention and control manual \(NIPCM\) for England](#)

[Health and Social Care Act 2008: code of practice on the prevention and control of infections - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

19. Appendices

Appendix 1 - IPC BAF

Appendix 2 - TIPC Membership

Appendix 3 - Risk Register risk over 12

Appendix 4 - Measles Action Card

Appendix 5 - Outcome technical cleaning scores 2023-24

Appendix 6 - IPC Policies

Appendix 7 - Summary of IPC Annual Programme of work 2024/25

Appendix 8 - Publications

Appendix 1 Board Assurance Framework - IPC

Infection Prevention and Control board assurance framework v0.1						
	Key Lines of Enquiry	Evidence	Gaps in Assurance	Mitigating Actions	Comments	Compliance rating
1. Systems to manage and monitor the prevention and control of infection. These systems use risk assessments and consider the susceptibility of service users and any risks their environment and other users may pose to them						
Organisational or board systems and process should be in place to ensure that:						
1.1	There is a governance structure, which as a minimum should include an IPC committee or equivalent, including a Director of Infection Prevention and Control (DIPC) and an IPC lead, ensuring roles and responsibilities are clearly defined with clear lines of accountability to the IPC team.	The Executive DIPC is the chief Nurse. There is a board level Associate DIPC to manage day to day DIPC responsibilities of a big Trust. IPC Team Structure refreshed and expanded in 2022. Hospital epidemiologist employed from Nov 23. The trust now has a cross-site ICD (4pa's). There is a Trust Infection Prevention and Control Committee (TIPC) with terms of reference, annual programme of work and an annual report. There is a monthly operational group (IPOG). TIPC feeds into the Quality Governance Steering Group (QGSG), Trust Management Committee (TMC) and The Patient & Quality Committee (PQC). All meetings above are minuted.	Would like to further improve local work with the divisions to improve their oversight and ownership of IPC related issues.	Planning annual divisional deep dives to commence in 2024. IPC senior leadership to attend divisional governance meeting quarterly.		

1.2	There is monitoring and reporting of infections with appropriate governance structures to mitigate the risk of infection transmission.	IPOG, TIPC, TMC and QC minutes. Trust DIPC Annual Report. A monthly dashboard is compiled from DCS data by BI and a Power BI report is in development. A risk register is held and reviewed regularly with risks escalated through TIPC and QGSG. SSI surveillance is undertaken across site. Results are reviewed by clinical leads and appropriate actions initiated.	Concern re higher rates of SSI in cardiac surgery which have not improved despite collective divisional and IPC input	Continuous surveillance of SSI. Planning move of service into LMB to allow refurbishment works to theatres and wards in Millenium wing. SSI action group focussing on key areas for improvement with weekly oversight of cases.	UKHSA changes to DCS reporting from April 2024 will increase UHSussex attributable cases. Patients on 'virtual wards' will be included as hospital associated.	
1.3	That there is a culture that promotes incident reporting, including near misses, while focusing on improving systemic failures and encouraging safe working practices, that is, that any workplace risk(s) are mitigated maximally for everyone.	IPOG, TIPC, minutes. Risk register, SIRG and DATIX reports. PowerBI reporting will further improve focus to provide assurance and direct action for improvement.		Working with BI to improve PIR process, better capture learning and monitor outputs. New epidemiology post will help with data analysis and targeting of clinical priorities.		
1.4	They implement, monitor, and report adherence to the <u>NIPCM</u> .	IPOG, TIPC, minutes. All IPC policies for the Trust are available on the intranet. Policies from Legacy trusts now merged. None contradict national policy and they all enhance going over and above the basic national policy. link to the NIPCM on the Trust intranet. Hyperlink within specific policies. Policies are audited via the			NIPCM is referenced in Trust policies which are more comprehensive. Work ongoing to ensure standardisation of audit practice among IPC team and others undertaking audits and validation audits of other auditors.	

		Tendable platform in addition to ad hoc audits.				
1.5	They undertake surveillance (mandatory infectious agents as a minimum) to ensure identification, monitoring, and reporting of incidents/outbreaks with an associated action plan agreed at or with oversight at board level.	SSI surveillance in place. Mandatory data surveillance in place and reported via UKHSA Data capture System (DCS). Results reported in TIPC reports. IPOG, TIPC, Trust Board and Quality Committee minutes show review and discussion of results with action planning as appropriate. SSI surveillance is undertaken across site, led by divisions and supported by IPC. Results are reviewed by clinical leads and appropriate actions initiated.	Surveillance of alert organisms or alert conditions has improved since employing epidemiologist but is limited due to current lack of automated data capture. Aiming to use iPads to input and export data but would prefer if data already in system could be pulled automatically. Paper based system for surveillance may lead to errors in reporting therefore lengthy triangulation of data to ensure accuracy, which impacts significantly on IPN time resources and therefore limiting ward based clinically focussed work. Shortage of Microbiology staff to support early identification of infection.	Working with business intelligence Team (BI) to improve capture of data. Epidemiologist role includes looking at systems to improve productivity and give strategic direction.	Improved reporting with benchmarked graphs giving comparison with local trusts as well as regional and national data. Will be including Shelford Group trusts in 2024. Micro lab staffing at RSCH, and the LIMS often cause delay to specimen results.	
1.6	Systems and resources are available to implement and monitor compliance with infection prevention and control as outlined in the responsibilities section of the <u>NIPCM</u> .	IPC Team Structure. SSI Data. DCS data. Quarterly IPC reports. Annual Report. TIPC Terms of reference. IPOG, TIPC, Trust Board and Quality Committee minutes. Audits carried out on 'Tendable' system. Results collated for reporting through TIPC. Regular senior IPC walkabouts with Hospital	Aiming to further improve local work with the divisions to improve their oversight and ownership of IPC related issues by undertaking divisional deep dives and attending their divisional governance/quality meetings.			

		directors of Nursing, DDoNs, heads of Nursing to identify issues and initiate actions.				
1.7	All staff receive the required training commensurate with their duties to minimise the risks of infection transmission.	STAM records. Face to face induction reinstated post pandemic. Other STAM on-line. Training programme currently covers mandatory infection control and complies with new national guidance. New Link Champion forum commenced in March 24.	Don't currently have an annual refresh for ANTT/IV care which might help improve care. Link Champion Forum commenced March 24.	IV policy in place	Implement a programme of mandatory training and assessment for ANTT for relevant healthcare professionals	
1.8	There is support in clinical areas to undertake a local dynamic risk assessment based on the hierarchy of controls to prevent/reduce or control infection transmission and provide mitigations. (<u>primary care, community care and outpatient settings, acute inpatient areas, and primary and community care dental settings</u>)	HoC assessments were completed in 2021/2. Risk register, IPOG and TIPC Minutes demonstrate review of risks. Previous BAFs. Notes from Clinical Advisory Group (CAG) show risk assessments regarding PPE during pandemic. MRSA screening in place for high-risk patients including orthopaedic and cardiac implant surgery to enable patient placement and management.	No longer focussing on COVID-19 risk assessments. HoC sits with divisions.			

2. Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections						
System and process are in place to ensure that:						
2.1	There is evidence of compliance with National cleanliness standards including monitoring and mitigations (excludes some settings e.g. ambulance, primary care/dental unless part of the NHS standard contract these setting will have locally agreed processes in place).	Cleanliness audits. Score on doors. PLACE results. IPC environmental spot check audits undertaken regularly in key clinical areas. Facilities team supervisors undertake weekly audits.	Issues with the fabric of the estate. These may impact on the effectiveness of cleaning processes. Significant maintenance needed in clinical areas to repair damage to floors and walls. Some reconfigurations to improve storage in clinical areas also required.	Discussion with Estates and operational teams to initiate repairs as soon as possible	Slow to progress due to clinical acuity and finance.	
2.2	There is an annual programme of Patient-Led Assessments of the Care Environment (PLACE) visits and completion of action plans monitored by the board.	Records of PLACE visits. PLACE results. E&F SDR meeting minutes. IPC have a weekly facilities meeting. Regular IPC /F&E correspondence. Spot check audit feedback.				
2.3	There are clear guidelines to identify roles and responsibilities for maintaining a clean environment (including patient care equipment) in line with the national cleanliness standards.	IPC and F&E policies detail necessary steps and responsibilities. Weekly IPC and Facilities huddle. IPOG and TIPC minutes.				
2.4	There is monitoring and reporting of water and ventilation safety, this must include a water and ventilation safety group and plan. 2.4.1 Ventilation	Monitoring in place as per recommendations. Minutes of water, ventilation and decontamination committees. IPOG and TIPC minutes. Water	Ventilation in some parts of the trust is below HTM standards. This includes critical ventilation systems in Theatres and CSSDs. The water safety plan is out of date as of November 23.	A ventilation position paper is in preparation by the Director of Estates and the IPC have requested a comprehensive list of remedials needed so that	Theatres at SRH of particular concern. Many air handling units including SRH, Southlands, SEH need urgent replacement. New LMB greatly improves situation at County as Barry	

	<p>systems are appropriate and evidence of regular ventilation assessments in compliance with the regulations set out in HTM:03-01.</p> <p>2.4.2 Water safety plans are in place for addressing all actions highlighted from water safety risk assessments in compliance with the regulations set out in HTM:04-01.</p>	<p>Safety Plan. External AE Water contracted.</p>	<p>A redraft has been requested. There are issues with provision of handwash basins. Many of them are non-compliant with HTM standards, many are also aged and damaged. Water and Ventilation Safety Group meetings were not held regularly and not always quorate.</p>	<p>appropriate plans and actions may be implemented. A list of IPC concerns has been escalated via the DIPC and CMO. A redraft of the water safety plan has been requested. A new schedule for water and Ventilation Safety Group meetings has been established as well as regular meetings with estates Director and IPC. Priority areas identified by IPC have been reviewed. Non-compliant ward ventilated areas are mitigated with air scrubbers with HEPA filter, opening windows and where possible not using for respiratory positive patients. It is not possible to 'not use' these areas as they are required for clinical capacity. Estates team prioritising assessment of existing ventilation with plans for upgrades as appropriate.</p>	<p>building demolished. Princess Royal has little ventilation. Requests have been made for detailed assessment, but this has not been actioned by capital due to cost. Necessary remedial work will be in the £millions. Hence use of air scrubber devices. Worthing Hospital and St Richards also need a fuller assessment in clinical areas. Need to improve the attendance at Ventilation and water Safety Committee level to ensure relevant feedback can be actioned.</p>	
--	---	---	---	---	--	--

2.5	There is evidence of a programme of planned preventative maintenance for buildings and care environments and IPC involvement in the development new builds or refurbishments to ensure the estate is fit for purpose in compliance with the recommendations set out in HBN:00-09	Minutes of water, ventilation and decontamination committees. IPOG and TIPC minutes. Notes from capital building projects including stage 1 and 2 of 3Ts.	Areas which need PPM have been identified but there have been delays in actioning due to operational pressures These issues impact on the effectiveness of cleaning process. There is a significant backlog of works on all site. Work in progress to improve wards at Worthing. TKT at RSCH needs attention. Some reconfigurations to improve storage in clinical areas also required.	Estates working with IPC to devise plan, particularly with respect to ventilation and water.	Difficult to progress due to finance	
2.6	The storage, supply and provision of linen and laundry are appropriate for the level and type of care delivered and compliant with the recommendations set out in HTM:01-04 and the NIPCM.	New state of the art laundry opened at SRH in 2022. Linen from RSCH and PRH to going to SRH from May 2023.	Some issues with laundry cupboards including non-compliant shelving.	Plan to replace non-compliant shelving with proper trollies.		
2.7	The classification, segregation, storage etc of healthcare waste is consistent with HTM:07:01 which contains the regulatory waste management guidance for all health and care settings (NHS and non-NHS) in England and Wales including waste classification, segregation, storage, packaging, transport, treatment, and disposal.	IPOG minutes. Waste officers in place. Regular F&E meetings including SDR. Duty of care visit records (undertaken by waste officers). Sustainability group look at recycling and waste reduction.				

2.8	There is evidence of compliance and monitoring of decontamination processes for reusable devices/surgical instruments as set out in HTM:01-01, HTM:01-05, and HTM:01-06.	Minutes of Decontamination user group meeting and Trust wide decontamination committee. Endoscopy user group meetings. Validation standards verification documents for the 4 CSSDs. IPOG and TIPC minutes.	Poor attendance at user group meetings. Lack of planning for scope decontamination in the new urology centre at PRH	Refresh of decontamination committee for 2024 including review of attendance.		
2.9	Food hygiene training is commensurate with the duties of staff as per food hygiene regulations. If food is brought into the care setting by a patient/service user, family/carer or staff this must be stored in line with food hygiene regulations.	F&E records. PLACE assessment				

3. Ensure appropriate antimicrobial stewardship to optimise service user outcomes and to reduce the risk of adverse events and antimicrobial resistance

Systems and process are in place to ensure that:

3.1	If antimicrobial prescribing is indicated, arrangements for antimicrobial stewardship (AMS) are maintained and where appropriate a formal lead for AMS is nominated.	AM Stewardship Committee Minutes. AMS leads across Trust				
-----	--	--	--	--	--	--

3.2	The board receives a formal report on antimicrobial stewardship activities annually which includes the organisation's progress with achieving the UK AMR National Action Plan goals.	AMS leads across Trust prepare reports on progress. EPMA in place across site. AMS activity is reported at TIPC and through to QC.				
3.3	There is an executive on the board with responsibility for antimicrobial stewardship (AMS), as set out in the UK AMR National Action Plan.	DIPC				
3.4	NICE Guideline NG15 'Antimicrobial Stewardship: systems and processes for effective antimicrobial medicine use' or Treat Antibiotics Responsibly, Guidance, Education, Tools (TARGET) are implemented and adherence to the use of antimicrobials is managed and monitored: <ul style="list-style-type: none"> • to optimise patient outcomes. • to minimise inappropriate prescribing. • to ensure the principles of Start Smart, Then Focus are followed. 	AMS reports and minutes	Not all wards have a pharmacist. Auditing could be more frequent if staffing allowed. More education could be provided to staff especially prescribers.	Business plans for more pharmacy staff	Aim to have at least one pharmacist for every ward	

3.5	<p>Contractual reporting requirements are adhered to, progress with incentive and performance improvement schemes relating to AMR are reported to the board where relevant, and boards continue to maintain oversight of key performance indicators for prescribing, including:</p> <ul style="list-style-type: none"> • total antimicrobial prescribing. • broad-spectrum prescribing. • intravenous route prescribing. • treatment course length. 	<p>AMS reports and minutes. Audit reports from AM pharmacists.</p>				
3.6	<p>Resources are in place to support and measure adherence to good practice and quality improvement in AMS. This must include all care areas and staff (permanent, flexible, agency, and external contractors)</p>	<p>Pharmacy structure</p>	<p>Some wards do not have their own pharmacist and thus may be missing out on AMS advice.</p>	<p>Pharmacy business case re staffing</p>		

4. Provide suitable accurate information on infections to patients/service users, visitors/carers and any person concerned with providing further support, care or treatment nursing/medical in a timely fashion

Systems and processes are in place to ensure that:

4.1	Information is developed with local service-user representative organisations, which should recognise and reflect local population demographics, diversity, inclusion, and health and care needs.	Work with patient engagement team. Information leaflets. Posters				Epidemiologist helping with local benchmarking.	
4.2	Information is appropriate to the target audience, remains accurate and up to date, is provided in a timely manner and is easily accessible in a range of formats (e.g. digital and paper) and platforms, taking account of the communication needs of the patient/service user/care giver/visitor/advocate.	Information leaflets. Posters					
4.3	The provision of information includes and supports general principles on the prevention and control of infection and antimicrobial resistance, setting out expectations and key aspects of the registered provider's policies on IPC and AMR.	Information leaflets. Posters. Website					

4.4	<p>Roles and responsibilities of specific individuals, carers, visitors, and advocates when attending with or visiting patients/service users in care settings, are clearly outlined to support good standards of IPC and AMR and include:</p> <ul style="list-style-type: none"> • hand hygiene, respiratory hygiene, PPE (mask use if applicable) • Supporting patients/service users' awareness and involvement in the safe provision of care in relation to IPC (e.g. cleanliness) • Explanations of infections such as incident/outbreak management and action taken to prevent recurrence. • Provide published materials from national/local public health campaigns (e.g. AMR awareness/vaccination programmes/seasonal and respiratory infections) should be utilised to inform and improve the knowledge of patients/service users, care givers, visitors and 	<p>Information leaflets. Posters. Website. Trust policies. IPC team presence on wards to support patients and staff. Trust's communications team have been posting updates to the UHSussex media pages inclusive of keeping the internet up to date. Comms have produced useful info graphics for key issues such as measles and norovirus. Within trust sites information is clearly displayed, surgical face masks and alcohol gel dispensers are readily available at all entrances.</p>				
-----	--	---	--	--	--	--

	advocates to minimise the risk of transmission of infections.					
4.5	Relevant information, including infectious status, invasive device passports/care plans, is provided across organisation boundaries to support safe and appropriate management of patients/service users.					

5. Ensure early identification of individuals who have or are at risk of developing an infection so that they receive timely and appropriate treatment to reduce the risk of transmitting infection to others.

Systems and processes are in place to ensure that patient placement decisions are in line with the NIPCM:

5.1	All patients/individuals are promptly assessed for infection and/or colonisation risk on arrival/transfer at the care area. Those who have, or are at risk of developing, an infection receive timely and appropriate treatment to reduce the risk of infection transmission.	IPC policy. Swabbing protocols in place. ED staff aware to look out for signs of infection. MRSA screening in place for high-risk patients including orthopaedic and cardiac implant surgery to enable patient placement and management. CPE screening carried out for high-risk patients as per policy. SSI surveillance established.	Issue with timely lab reporting at RSCH on occasion due to LIMS and staffing. Could benefit from a wider CPE screening protocol but hindered by lab capacity. Would benefit from MSSA screening of orthopaedic and cardiac surgery patients as this is more likely pathogen for SSI. This is prevented by lab capacity.	Instigation of pre-operative skin prep and nasal suppression for selected Pre-op e.g. orthopaedics or cardiac with implant. SSI review panel. OneTogether SSI group meeting to review practice in multidisciplinary forum.		
-----	---	--	---	--	--	--

5.2	Patients' infectious status should be continuously reviewed throughout their stay/period of care. This assessment should influence placement decisions in accordance with clinical/care need(s). If required, the patient is placed /isolated or cohorted accordingly whilst awaiting test results and documented in the patient's notes.	Daily operational bed meetings with IPC attendance, IPC outbreak meetings. MRSA screening for high-risk patients e.g. implant surgery	Shortage of side rooms and significant operational pressures can make prompt isolation difficult to maintain at all times.	IPC work closely with site teams to manage patient moves. New LMB made a big improvement to side room and isolation provision at RSCH site. Working with Symphony team to improve alert system for patients not on Careflow.		
5.3	The infection status of the patient is communicated prior to transfer to the receiving organisation, department, or transferring services ensuring correct management/placement .	Patient discharge records				
5.4	Signage is displayed prior to and on entry to all health and care settings instructing patients with respiratory symptoms to inform receiving reception staff, immediately on their arrival.	ED entrances. Trust policy				

5.5	Two or more infection cases (or a single case of serious infection) linked by time, place, and person triggers an incident/outbreak investigation and this must be reported via governance reporting structures.	Investigation reports and action plans. DCS data. Typing results. IPOG and TIPC minutes. Datix records. SSI surveillance established across the Trust.				
-----	--	--	--	--	--	--

6. Systems are in place to ensure that all care workers (including contractors and volunteers) are aware of and discharge their responsibilities in the process of preventing and controlling infection

Systems and processes are in place to ensure:						
6.1	Induction and mandatory training on IPC include the key criteria (SICPs/TBPs) for preventing and controlling infection within the context of the care setting.	Induction and STAM programme in place. STAM records				
6.2	The workforce is competent in IPC commensurate with roles and responsibilities.	Training records. Policy audit of practice e.g. hand hygiene, sharps disposal and commode cleaning.				
6.3	Monitoring compliance and update IPC training programs as required.	STAM records				
6.4	All identified staff are trained in the selection and use of personal protective equipment / respiratory protective equipment (PPE/RPE) appropriate for their place of work including how to safely put on and	Fit testing recorded on health roster. Business case for fit testing service.	Despite effort, not all staff are fit tested	Effort to prioritise high risk staff for fit testing. Bank fit testers on each site.		

	remove (donning and doffing) PPE and RPE.					
6.5	That all identified staff are fit tested as per Health and Safety Executive requirements and that a record is kept.	Fit testing recorded on health roster.	Despite best efforts it is difficult to get all staff through testing and compliance is not as high overall as required.	Priority given to higher risk staff e.g. ED, respiratory medicine, anaesthetics.		
6.6	If clinical staff undertake procedures that require additional clinical skills, for example, medical device insertion, there is evidence staff are trained to an agreed standard and the staff member has completed a competency assessment which is recorded in their records before being allowed to undertake the procedures independently.	Competency assessment records. Practice development team records.	Oversight and audit of records is unclear. Don't currently have an annual refresh for ANTT/IV care which might help improve care. Need to implement a programme of mandatory training and assessment for ANTT for relevant healthcare professionals		Area for development in conjunction with Practice Development and IV Teams.	

7. Provide or secure adequate isolation precautions and facilities						
Systems and processes are in place in line with the NIPCM to ensure that:						
7.1	Patients that are known or suspected to be infectious as per criterion 5 are individually clinically risk assessed for infectious status when entering a care facility. The result of individual clinical assessments should determine patient placement decisions and	Swabbing protocols in place. ED staff aware to look out for signs of infection (e.g. rash or PUO) and isolate as per policy		Regular review of poster information e.g. Measles identification. Comms produced helpful infographics		

	the required IPC precautions. Clinical care should not be delayed based on infectious status.					
7.2	<p>Isolation facilities are prioritised, depending on the known or suspected infectious agent and all decisions made are clearly documented in the patient's notes. Patients can be cohorted together if:</p> <ul style="list-style-type: none"> • single rooms are in short supply and if there are two or more patients with the same confirmed infection. • there are situations of service pressure, for example, winter, and patients may have different or multiple infections. In these situations, a preparedness plan must be in place ensuring that organisation/board level assurance on IPC systems and processes are in place to mitigate risk. 	<p>IPC work with site teams to prioritise beds. Daily IPC attendance at operational bed meetings. Patients cohorted where required. IPC involvement in 'boarding' or escalation bed plans to ensure safety. New LMB has 60% side rooms which increased capacity significantly. LMB also provides 10 rooms with positive pressure ventilated lobbies.</p>		<p>Risk of crowding in ED has to be balanced with risk of boarding extra patients in wards.</p>		

7.3	Transmission based precautions (TBPs) in conjunction with SICPs are applied and monitored and there is clear signage where isolation is in progress, outlining the precautions required.	IPC policies. IPC audits of care. Isolation posters.				
7.4	Infectious patients should only be transferred if clinically necessary. The receiving area (ward, hospital, care home etc.) must be made aware of the required precautions.	Patient discharge records				

8. Provide secure and adequate access to laboratory/diagnostic support as appropriate

Systems and processes to ensure that pathogen-specific guidance and testing in line with UKHSA are in place:

8.1	Patient/service user testing for infectious agents is undertaken by competent and trained individuals and meet the standards required within a nationally recognised accreditation system.	Accredited microbiology labs on site at Worthing, St Richards and RSCH	Short staffing of microbiologists, particularly significant at RSCH.	Mitigated at SRH and WGH with locums		
8.2	Early identification and reporting of the infectious agent using the relevant test is required with reporting structures in place to escalate the result if necessary.	Labs on site. IPC policies. Records of IPC team reporting and actioning key results	Outdated LIMS which is due for upgrade	Sussex wide LIMS due for roll out later in year		

8.3	Protocols/service contracts for testing and reporting laboratory/pathology results, including turnaround times, should be in place. These should be agreed and monitored with relevant service users as part of contract monitoring and laboratory accreditation systems.	Pathology system in place.	There are some issues with reporting from the lab at RSCH to IPC. These have been flagged on risk register. This may occasionally lead to delay in resulting and therefore impact on timely treatment of the patient.		This has been escalated on the risk register with no progress.	
8.4	Patient/service user testing on admission, transfer, and discharge should be in line with national guidance, local protocols and results should be communicated to the relevant organisation.	Trust and lab policy. MRSA screening of high-risk patients including orthopaedic and cardiac surgery, ITU, Haem-oncology and renal.	Need to screen implant surgery patients for MSSA but no capacity in lab	Use suppression regime to reduce risk at time of surgery		
8.5	Patients/service users who develops symptom of infection are tested / retested at the point symptoms arise and in line with national guidance and local protocols.	Relevant testing undertaken. Checks by internal audit team.				
8.6	There should be protocols agreed between laboratory services and the service user organisations for laboratory support during outbreak investigation and management of known/ emerging/novel and high-risk pathogens.	Weekly formal clinical meeting with IPC and micro colleagues to discuss pathways and approaches to current and evolving situations.				

8.7	There should be protocols agreed between laboratory services and service user organisations for the transportation of specimens including routine/ novel/ emerging/high risk pathogens. This protocol should be regularly tested to ensure compliance.	Trust and lab policy. TIPC minutes				
-----	--	------------------------------------	--	--	--	--

9. Have and adhere to policies designed for the individual's care and provider organisations that will help to prevent and control infections						
9.1	Systems and processes are in place to ensure that guidance for the management of specific infectious agents is followed (as per UKHSA, A to Z pathogen resource, and the NIPCM). Policies and procedures are in place for the identification of and management of outbreaks/incidence of infection. This includes monitoring, recording, escalation and reporting of an outbreak/incident by the registered provider.	Policies all updated since merger and available on intranet.			New SSI Policy added.	

10. Have a system in place to manage the occupational health needs and obligations of staff in relation to infection						
Systems and processes are in place to ensure that any workplace risk(s) are mitigated maximally for everyone. This includes access to an occupational health or an equivalent service to ensure:						
10.1	Staff who may be at high risk of complications from infection (including pregnancy) have an individual risk assessment.	Assessments carried out by managers and Occupational Health Team OH provision at SRH Worthing by TP Health and in house at RSCH/PRH. FFP3 Fit testing available to book on all sites.			Plans in place for HR to look at a single trust wide service.	
10.2	Staff who have had an occupational exposure are referred promptly to the relevant agency, for example, GP, occupational health, or accident and emergency, and understand immediate actions, for example, first aid, following an occupational exposure including process for reporting.	IPC work with OH and HR to ensure staff confidentiality while giving relevant advice.		Staff vaccination plans in place for Flu campaign 2024. Active work with OH to ensure staff are measles immune. Active staff information via comms on measles, pertussis and flu.		
10.3	Staff have had the required health checks, immunisations and clearance undertaken by a competent advisor (including those undertaking exposure prone procedures (EPPs)).	OH records.	OH relies on paper records for RSCH/PRH, awaiting an electronic system			

Appendix 2. TIPC Membership

TIPC membership includes:

- Chief Nurse /DIPC (Chair)
- Associate DIPC (Co chair)
- Medical Director
- Infection Prevention & Control Doctor / Consultant Microbiologist
- Deputy DIPC
- Infection Prevention Matron(s)
- Surgical Site Surveillance Lead Nurses
- Antimicrobial Pharmacist(s)
- Decontamination Lead(s)
- Divisional Director of Nursing (DDoN) /Head of Nursing (HoN) - Medicine
- DDoN/ HoN Surgery
- DDoN/ HoN Women & Children
- DDoN/ HoN Cancer
- DDoN/ HoN Women and Children
- Director of Estates & Facilities/ Associate Director of Estates & Facilities
- Health and Safety Lead(s)
- Occupational Health Manager(s)
- UKHSA representative
- NHS Sussex Integrated Care Board (ICB) Infection Prevention Lead Nurse(s)

Appendix 3. Risk Register risk over 12.

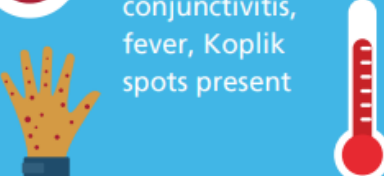


Risk ID	Date Created	Risk Title	Risk Description	Initial Rating	Current Rating	Target Rating	Control/Mitigation
211	08-Jul-22	2590 Inadequate Fit testing of Staff to ensure FFP3 resilience	<p>FFP3 fit testing needs to be brought in house across the Trust. There needs to be a minimum of 4 fit testers to accommodate approximately 12,000 patient facing staff who require testing every 2 years. All patient facing staff need to have passed on at least 2 FFP3 masks.</p> <p>Workforce challenges make it difficult for staff to attend fit testing appointments.</p> <p>Raised as a risk as part of Trust IPC BAF on 09.01.2024.</p> <p>SRH/WH bank fit testers are leaving the organisation early February 2024. This will increase risk for FFP3 staff testing as no service provision on two main Trust sites.</p>	12	12	1	<p>RSCH/PRH – Bank Fit Tester in place, providing a service 5 days a week.</p> <p>SRH/WH – Q4/Q1 limited fit testing provision. Potential to use another bank staff member to cover WH but this needs escalation.</p> <p>Recommend Trust mandates fit testing into STAM, to support staff health and protection as per HSE Guidance.</p> <p>Business case for fit testing team agreed in principle but has not been enabled due to financial constraints. Currently no funding for fit testing service and recruiting bank fit testers at cost pressure.</p> <p>Portacount fit testing machines – machines are serviced, calibrated and available on all sites. Hood/spray methodology no longer considered best practice for testing.</p> <p>Health Roster used across all sites, to record all passed FFP3 tests as a skill. Data extraction is challenging.</p> <p>08/04/2024 -18/04/2024 Sharon Reed Deputy DIPC risk review - Separate cost code set up (no budget allocated) for trust fit testing provision at a cost pressure.</p>


							<p>Expression of interest sent to bank service and 2 bank staff to be trained to become fit testers (1 SRH/1 WH). This training will commence 22/04/2024. Communications will be released as soon as fit testers are ready to test staff members,</p> <p>20/03/2024 - Escalated via QGSG and QC, also through Health and Safety committee. Will affect the EPRR service as Trust not conforming to HSE expected standards.</p>
1705	09-Jan-24	Critical ventilation failures	<p>There are several reports of failure in critical ventilation systems across the Trust. This includes SSD on all main Trust sites and operating theatres at WH and SRH.</p> <p>There are concerns about pharmacy and lack of clarity around mortuary and laboratory ventilation systems.</p>	16	16		<p>Mitigation at ward level includes use of portable HEPA air scrubbers and opening windows however there is no budget for the HEPA air scrubbers used to reduce risk so they will need to be withdrawn.</p> <p>Theatres and SSD have repairs as needed but require significant PPM including AHU replacement to maintain expected standards.</p> <p>Ventilation concerns outlined to DIPC and CMO in a written report. Escalated to QGSG and QC.</p> <p>Most operating theatres need new AHUs and PPM work. All 4 SSDs need new AHUs. Other depts including pharmacies, labs and mortuary need assessment and a plan of required work. The exact AC/H on most wards is unknown but believed to be below HTM limits.</p>

						<p>Assisted ventilation schemes need to be installed but are time consuming and very expensive. Ventilation assessments of critical systems is planned early 2024.</p> <p>The ventilation committee has not met regularly and the Estates workforce/funding are depleted. The recent CQC inspection has flagged a theatre fail which currently the Estates team cannot identify.</p> <p>20/03/2024 - This risk is significant and has shown no progress to make any improvements.</p>
--	--	--	--	--	--	---

Appendix 4. Measles Action Card

Think Measles Action Card

<p>1 Isolate immediately if fever and rash present.</p> 	<p>2 Think Measles if coryza, cough, conjunctivitis, fever, Koplik spots present</p> 	<p>3 Wear single use gloves, apron, FFP3 mask and face visor when caring for suspected or known measles</p> 
<p>4 Notify the local Health Protection team 0344 225 3861</p> 	<p>5 Inform UHSussex Infection Prevention Team</p> <p>uhsussex.InfectionControlTeam UHSussex@nhs.net</p> 	<p>6 It is recommended only staff who have been vaccinated against MMR should manage patients with measles</p> 

Know your vaccination status, contact your GP, occupational health or a family member. 

Appendix 5. Outcome technical cleaning scores 2023-24

Technical Cleaning Scores - Year 2023-24 – Worthing Hospital												
CATEG ORY & TARGET	Apr-23	May-23	Jun-23	Jul-23	Aug 23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
FR 1 - 98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%
FR 2 - 95%	97%	97%	96%	97%	96%	96%	96%	96%	96%	96%	96%	96%
FR 4 - 85%	92%	90%	90%	92%	90%	89%	90%	89%	89%	90%	88%	89%
FR 6 - 75%	88%	91%	ND	ND	ND	83%	88%	88%	ND	ND	ND	85%

Technical Cleaning Scores - Year 2023-24 - St Richards Hospital												
CATEG ORY & TARGET	Apr-23	May-23	Jun 23	Jul-23	Aug 23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
FR 1 - 98%	99%	99%	99%	99%	98%	98%	99%	98%	98%	98%	97%	97%

FR 2 - 95%	99%	99%	99%	99%	97%	97%	98%	98%	98%	96%	96%	95%
FR 4 - 85%	97%	100%	99%	96%	94%	95%	93%	96%	95%	93%	94%	92%
FR 6 - 75%	ND	96%	98%	97%	94%	ND	94%	88%	93%	92%	ND	ND

Technical Cleaning Scores - Year 2023-24 - Southlands Hospital												
CATEGO RY & TARGET	Apr -23	May- 23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
FR 1 - 98%	98%	98%	99%	99%	100%	99%	99%	98%	99%	99%	99%	100%
FR 2 - 95%	95%	96%	100%	100%	98%	96%	97%	97%	97%	97%	97%	100%
FR 4 - 85%	91%	96%	96%	80%	98%	98%	94%	ND	99%	92%	97%	93%
FR 6 - 75%	87%	ND	ND	94%	ND	ND	81%	ND	ND	78%	ND	ND

Technical Cleaning Scores - Year 2023-24 - Royal Sussex County Hospital												
CATEGORY & TARGET	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
FR 1 - 98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98.4	97.9	97.7
FR 2 - 95%	96%	96%	97%	97%	97%	97%	97%	96%	96%	96.6	96.4	96.5
FR 4 - 85%	78%	96%	96%	91%	99%	95%	92%	94%	94%	85.4	96.7	96.3
FR 6 - 75%	88%	ND	99%	ND	ND	ND	ND	ND	ND	ND	87.4	80.7

Technical Cleaning Scores - Year 2023-24 – Princess Royal Hospital												
CATEGORY & TARGET	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
FR 1 - 98%	99%	99%	99%	99%	99%	99%	99%	98%	99%	99.2	99.2	98.9

FR 2 - 95%	99%	99%	98%	98%	97%	94%	98%	98%	98%	97.8	98	97.2
FR 4 - 85%	ND	ND	97%	ND	96%	94%	ND	ND	96%	ND	96.7	95.5
FR 6 - 75%	ND	ND	ND	97%	ND	ND	ND	ND	98%	ND	ND	92.2

Technical Cleaning Scores - Year 2023-24 (Newhaven, SHAC)												
CATEG ORY & TARGE T	Apr-23	May-23	Jun 23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec 23	Jan-24	Feb-24	Mar-24
FR 2 (95%)	98%	98%	98%	98%	98%	97%	98%	96%	97%	98.1	96.4	96.6

Appendix 6 IPC Policies

Policy Title	Review Date
UHSIC001 Infection Prevention and Control Organisational and Assurance Framework Policy	01/06/2025
UHSIC002 Standard and Transmission Based Precautions Policy	01/09/2026
UHSIC004 Isolation of Patients Policy	01/03/2027
UHSIC006 Decontamination Policy	01/10/2025
UHSIC007 Prevention and Control of Meticillin Resistant Staphylococcus Aureus (MRSA) Policy	01/10/2025
UHSIC008 Clostridioides difficile Infection Policy	01/10/2025
UHSIC009 Norovirus (Viral gastro-enteritis) Policy	01/03/2027
UHSIC010 Blood Borne Virus Policy (Including Management of Sharps Exposure Incidents and HIV Post Exposure Prophylaxis)	01/11/2025
UHSIC0011 Infection Control and Prevention Management of Tuberculosis Policy	01/03/2025
UHSIC0012 Aseptic Non-Touch Technique Policy	01/06/2025
UHSIC013 Respiratory Viruses Policy	01/03/2026
UHSIC014 Creutzfeldt Jacob Disease (CJD) and variant CJD (vCJD) Policy	01/09/2025
UHSIC015 Policy for the prevention of surgical site infection	01/03/2026
UHSIC017 Prevention of Aspergillus and infection from other fungi during demolition/construction and renovation activities Policy	01/06/2025
UHSIC018 Infestation Policy	01/06/2025
UHSIC020 Control of Multi Drug Resistant Organisms (MDRO) (including glycopeptide-resistant enterococci (GRE) and multidrug resistant Gram negative bacilli Policy	01/06/2025
UHSIC026 Management of a Patient's Body Following Death with an Infection Policy	01/06/2025
UHSIC027 Surgical Instrument Loan Policy	01/06/2025
UHSIC049 Viral Haemorrhagic Fevers: Management and Control Policy	01/06/2025
UHSIC059 Blood Culture Collection Technique Policy	01/06/2025
UHSTW014 Animals and Pets in Hospital Policy	01/06/2025
UHSTW015 Outbreak Management of Healthcare Associated Infection Policy	01/09/2026

Appendix 7 Summary of IPC Annual Programme 2024/25

Objective	What steps need to be taken	How we will measure success
The IPC team will endeavour to reduce HCAI to below the mandatory NHSi set thresholds for 2024/25.	IPC Epidemiologist will analyse trends and identify areas for improvement to formulate ongoing strategy. Collaborate with microbiology laboratory to provide a consistent CPE screening process. Review the clinical review process using PSIRF methodology.	Meet and improve on national IPC targets with improved learning from clinical review process. Development of a streamlined MDRO policy which aligns to National guidance and includes local trust modifications.
With support from IPC the Divisions will ensure SSI rates are within expected or lower than National average for each quarter.	SSI prevention review using OneTogether Framework across all surgical specialities. Analyse internal SSI reporting process for additional learning opportunities. Review SSI workforce structure and present paper to executive team.	Robust and efficient SSI Surveillance programme in place and benchmarked against national frameworks. SSI results within expected or lower ranges. An enhanced SSI workforce within divisions to collate further surgical categories to improve surgical site surveillance.
There will be IPC representation at all relevant Estates meetings (Water, ventilation, new builds, and refurbishments) over the fiscal year.	Review commissioning and validation reports for specialist ventilation, providing advice as appropriate and ensuring Authorised Engineer (Water/Ventilation) is involved at every stage. Evaluate options for enhanced mechanical ventilation systems. IPCT to re-introduce pre and post maintenance audits and air testing within operating theatre environments.	Measured improvements in ventilation systems. Planned preventative maintenance is implemented for operating theatres. In house air testing to pass every test. Water testing in place with appropriate actions. Governance to evidence and risks/mitigations/actions.
The antimicrobial pharmacists, with support of IPC, will ensure appropriate antimicrobial prescribing for 2024/25.	Work proactively with AMPs to increase awareness of AMR. Conduct audits to demonstrate improvements in prescribing practice. IPCT to be an active part of AMMSG. AMP to become IPC champions.	Up to date Micro Guide. Use of PPS data to be included in future education and training.
The IPC team will engage and support relevant IPC research, both locally and nationally over the next year 2024/25.	Ensure all members of the IPCT have the opportunity to participate in locally developed and national research/projects/clinical trials. Continue to present research outcomes through (i) regional, national, and international forum and (ii) peer-review publications. To monitor engagement in research and impact.	Abstract and conference presentations. Publications in journals. Poster presentations at National IPS conference.
The IPC team will work with UHSussex sustainability team members to decarbonise healthcare over the next year 2024/25	Continue supporting the Gloves off campaign. Collaborate with the sustainability team on initiatives to reduce waste Chair the task and finish group focussing on curtain usage. Support the couch roll reduction project. Work with BSMS to validate alternative decontamination techniques such as UVC.	Achieve reduced glove usage across the Trust. Waste reductions. Reduced usage of couch roll. Explore and implement more sustainable options for curtains.

Appendix 8. Publications

Panca M, Blackstone J, Stirrup O, Cutino-Moguel MT, Thomson E, Peters C, Snell LB, Nebbia G, Holmes A, Chawla A, Machin N, Taha Y, Mahungu T, Saluja T, de Silva TI, Saeed K, Pope C, Shin GY, Williams R, Darby A, Smith DL, Loose M, Robson SC, Laing K, Partridge DG, **Price JR**, Breuer J. Evaluating the cost implications of integrating SARS-CoV-2 genome sequencing for infection prevention and control investigation of nosocomial transmission within hospitals. *J Hosp Infect.* 2023.10.1016/j.jhin.2023.06.005

Otter JA, Zhou J, **Price JR**, Reeves L, Zhu N, Randell P, Sriskandan S, Barclay WS, Holmes AH. SARS-CoV-2 surface and air contamination in an acute healthcare setting during the first and second pandemic waves. *J Hosp Infect.* 2023;132:36-45.10.1016/j.jhin.2022.11.005

Landelle C, Birgand G, **Price JR**, Mutters NT, Morgan DJ, Lucet J-C, Kerneis S, Zingg W. Considerations for de-escalating universal masking in healthcare centers. *Antimicrobial Stewardship & Healthcare Epidemiology.* 2023;3(1):e128.<https://doi.org/10.1017/ash.2023.200>

Jauneikaite E, Baker KS, Nunn JG, Midega JT, Hsu LY, Singh SR, Halpin AL, Hopkins KL, **Price JR**, Srikantiah P, Egyir B, Okeke IN, Holt KE, Peacock SJ, Feasey NA, Group SGSW. Genomics for antimicrobial resistance surveillance to support infection prevention and control in health-care facilities. *Lancet Microbe.* 2023.10.1016/S2666-5247(23)00282-3

Desta K, Aklillu E, Gebrehiwot Y, Enquoselassie F, Cantillon D, Al-Hassan L, **Price JR**, Newport M, Davey G, Woldeamanuel Y. Methicillin Resistant Staphylococcus aureus contamination of Health care worker gowns and Uniforms: A cross-sectional Study from the biggest teaching hospital in Ethiopia. *Ethiopian Journal of Health Development.* 2023;37(1)

Baltas I, Gilchrist M, Koutoumanou E, Gibani MM, Meiring JE, Otu A, Hettle D, Thompson A, **Price JR**, Crepet A, Atomode A, Crocker-Buque T, Spinos D, Guyver H, Tausan M, Somasunderam D, Thoburn M, Chan C, Umpleby H, Sharp B, Chivers C, Vaghela DS, Shah RJ, Foster J, Hume A, Smith C, Asif A, Mermerelis D, Reza MA, Haigh DA, Lamb T, Karatzia L, Bramley A, Kadam N, Kavallieros K, Garcia-Arias V, Democratis J,

Waddington CS, Moore LSP, Aiken AM. Exploring the views of infection consultants in England on a novel delinked funding model for antimicrobials: the SMASH study. *JAC Antimicrob Resist.* 2023;5(4):dlad091.10.1093/jacamr/dlad091

Named collaborator on high-impact publications

Wheeler NE, Price V, Cunningham-Oakes E, Tsang KK, Nunn JG, Midega JT, Anjum MF, Wade MJ, Feasey NA, Peacock SJ, Jauneikaite E, Baker KS, Group SGSW. Innovations in genomic antimicrobial resistance surveillance. *Lancet Microbe.* 2023.10.1016/S2666-5247(23)00285-9

Muloi DM, Jauneikaite E, Anjum MF, Essack SY, Singleton DA, Kasudi MR, Wade MJ, Egyir B, Nunn JG, Midega JT, Peacock SJ, Feasey NA, Baker KS, Zadoks RN, Group SGSW. Exploiting genomics for antimicrobial resistance surveillance at One Health interfaces. *Lancet Microbe.* 2023.10.1016/S2666-5247(23)00284-7

Escrhuella-Vidal F, Kaasch AJ, Von Cube M, Rieg S, Kern WV, Seifert H, Song KH, Liao CH, Tilley R, Gott H, Scarborough M, Gordon C, Llewelyn MJ, Kuehl R, Morata L, Soriano A, Edgeworth J, De Gopegui ER, Nsutebu E, Cisneros JM, Fowler VG, Thwaites G, Lopez-Contreras J, Barlow G, Ternavasio-De La Vega HG, Rodriguez-Bano J, Lopez-Cortes LE, International Staphylococcus Aureus Collaboration Study Group TESO-CM, Infectious Diseases Study Group For Bloodstream Infections E, Sepsis. Impact of adherence to individual quality-of-care indicators on the prognosis of bloodstream infection due to Staphylococcus aureus: a prospective observational multicentre cohort. *Clin Microbiol Infect.* 2023;29(4):498-505.10.1016/j.cmi.2022.10.019

Cotton S, McHugh MP, Dewar R, Haas JG, Templeton K, Consortium C-GU. Investigation of hospital discharge cases and SARS-CoV-2 introduction into Lothian care homes. *J Hosp Infect.* 2023;135:28-36.10.1016/j.jhin.2023.02.010

Baker KS, Jauneikaite E, Nunn JG, Midega JT, Atun R, Holt KE, Walia K, Howden BP, Tate H, Okeke IN, Carattoli A, Hsu LY, Hopkins KL, Muloi DM, Wheeler NE, Aanensen DM, Mason LCE, Rodgus J, Hendriksen RS, Essack SY, Egyir B, Halpin AL, MacCannell DR, Campos J, Srikantiah P, Feasey NA, Peacock SJ, Group SGSW. Evidence review and recommendations for the implementation of genomics for antimicrobial resistance surveillance: reports from an international expert group. *Lancet Microbe.* 2023.10.1016/S2666-5247(23)00281-1

Baker KS, Jauneikaite E, Hopkins KL, Lo SW, Sanchez-Buso L, Getino M, Howden BP, Holt KE, Musila LA, Hendriksen RS, Amoako DG, Aanensen DM, Okeke IN, Egyir B, Nunn JG, Midega JT, Feasey NA, Peacock SJ, Group SGSW. Genomics for public health and international surveillance of antimicrobial resistance. *Lancet Microbe*. 2023.10.1016/S2666-5247(23)00283-5