NHS
The Royal Orthopaedic Hospital
NHS Foundation Trust

Infection Prevention and Control Annual Report 2024/25

INFECTION PREVENTION AND CONTROL

PREVENTING HARM
FROM INFECTION

LEAVE BLANK

Foreword

I am pleased to introduce the annual Infection Prevention and Control (IPC) Report for The Royal Orthopaedic Hospital NHS Foundation Trust (ROH) for the financial year 2024/25.

Infection prevention and control remains a core priority for our Trust. Our patients, many of whom undergo complex orthopaedic procedures, place immense trust in us to provide care that is not only excellent but also safe. This year, our teams have continued to demonstrate an unwavering commitment to maintaining the highest standards of infection prevention across all areas of our organisation.

Throughout 2024/25, we have built upon our strong foundations, ensuring that IPC is embedded into every aspect of patient care and Trust operations. Key highlights this year include continued low rates of healthcare-associated infections, successful delivery of key national IPC targets, and further development of our IPC surveillance and audit programmes. We have responded proactively to emerging challenges, such as the evolving antimicrobial resistance agenda and seasonal infection pressures, by strengthening our stewardship initiatives and enhancing our staff education programmes.

Importantly, our success is a direct result of the collaborative efforts of our multidisciplinary teams. IPC is everyone's responsibility, and I would like to thank all colleagues across the Trust — from clinical staff and support services to leadership teams — for their consistent dedication to best practice. The leadership of our Infection Prevention and Control Team has been instrumental in driving continuous improvement, providing expert guidance, and promoting a positive culture of safety.

Looking ahead, we remain committed to evolving our IPC strategy to ensure that we can meet future challenges, support national ambitions and continue delivering outstanding, safe care for our patients.

I commend this report to you and invite you to join me in recognising the achievements of the past year, while maintaining our collective focus on sustaining excellence in infection prevention and control.

Nicola Brockie

Executive Chief Nursing Officer

Director of Infection Prevention and Control (DIPC)

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Abbreviations

AMS	Antimicrobial stewardship
BAF	Board assurance framework
BSI	Bloodstream infection
BSOL	Birmingham and Solihull
CPE	Carbapenemase-producing Enterobacterales
CQUIN	Commissioning for quality and innovation
CVAD	Central venous access device
DIPC	Director of infection prevention and control
HCAI	Healthcare associated infection
HCAI DCS	Healthcare associated infections data capture system
HDU	High dependency unit
ICB	Integrated Care Board
IPC	Infection prevention and control
MDR	Multidrug-resistant
MDT	Multidisciplinary Team
MRSA	Methicillin-resistant *Staphylococcus aureus*
MSSA	Methicillin-susceptible *Staphylococcus aureus*
NHSE	National Health Service England
NIPCM	National infection prevention & control manual
PIVC	Peripherally inserted venous catheter
PPE	Personal protective equipment
PSIRF	Patient safety incident response framework
PSIRP	Patient safety incident response plan
RCN	Royal College of Nursing
RJAH	Robert Jones and Agnes Hunt Orthopaedic Hospital
RNOH	Royal National Orthopaedic Hospital NHS Trust
ROH	Royal Orthopaedic Hospital NHS Foundation Trust
RSV	Respiratory Syncytial Virus
SSI	Surgical site infection
SSIS	Surgical site infection surveillance
UC	Urinary catheter
UHB	University Hospitals Birmingham
UKHSA	UK Health Security Agency
UTI	Urinary tract infections
VAD	Vascular access device
VRE	Vancomycin-resistant Enterococci

Executive summary

- ROH ended 2024/25 below the NHS England threshold for bloodstream infections (BSI) attributable to *Escherichia coli* (*E.coli*). However, equal to the NHS England threshold for healthcare associated *Clostridioides difficile* (*C. difficile*) *infections*, and BSI attributable to *Klebsiella species* and *Pseudomonas aeruginosa*.
- The Trust reported zero bloodstream infections attributable to Methicillin-resistant *Staphylococcus aureus* (MRSA). No MRSA BSI have been reported by ROH for the last 13 years.
- When compared with national data for participating hospitals, the ROH surgical site infection (SSI) risk rate for spinal surgery was identified as a 'higher outlier' during Q2 2024 (April to June).
- The number of SARS CoV-2 cases and associated outbreaks decreased during 2024/25.
- A muti-disciplinary Surgical Site Infection Prevention Group was established which monitors SSI data and reviews evidence-based guidance to ensure this is embedded at the ROH.
- The annual closure, decanting, planned preventative maintenance and deep cleaning of clinical areas continues to be prioritised, significantly supporting efforts to keep HCAIs a low as possible.
- The Trust IPC study day was held in November 2024, which involved internal and external speakers. The day was well attended and evaluated positively by attendees.
- The IPC team Implemented an annual skin check assessment based on guidance related to occupational dermatitis and caring for the skin health of our workforce.
- Organised and celebrated several key events in the IPC calendar across ROH, this included World Hand Hygiene Day, World Antimicrobial Awareness Week, and International Infection Prevention Week 2024.
- Refreshed and reimplemented department cleaning schedules and records.
- Supported and delivered the annual healthcare worker vaccination programme.
- The IPC team became core members of the Trust Green Board, supporting efforts to reduce the carbon footprint of healthcare.
- Set up an 'IPC in Orthopaedics' collaborative pathway with Robert Jones and Agnes Hunt Orthopaedic Hospital, sharing knowledge, support, data and resources to improve IPC and SSI prevention practices.
- Continued to deliver and innovate services in relation to decontamination, water, and ventilation safety.
- Strengthened governance and assurance arrangements to ensure compliance with contractual requirements.
- During November 2025, successfully recruited a band 3 IPC auditor to support the Trusts IPC audit and surveillance programme.
- This report includes a summary of the IPC annual business plan and programme of work for 2025/26.

About The Royal Orthopaedic Hospital NHS Foundation Trust

The ROH is one of the largest providers of elective orthopaedic surgery in the UK and is one of five specialist orthopaedic centres. It offers three tiers of service:

- Routine orthopaedic operations for a local population of 4 million people in Birmingham and North Worcestershire;
- Specialist services such as spinal surgery to 5 million people who live in greater Birmingham and the West Midlands;
- and diagnosis and treatment of malignant bone tumours.

The Trust has 14 operating theatres, 6 wards and 117 beds, including 8 beds for private treatment and 6 being on a High Dependency Unit. Of these, 56 are single occupancy rooms with en-suite and 3 are single occupancy rooms without en-suite. The Trust employs in excess of 1,200 staff. Only a small amount of emergency and urgent activity is undertaken, generally in the field of spinal disorders; the core business of the ROH is elective surgery. The main elective surgery activities are joint replacement surgery (arthroplasty), joint arthroscopy and reconstruction (keyhole surgery and ligament repairs), plus hand and foot surgery.

We are guided by our values in everything we do and reflect the diversity, opportunity and ambition of our communities and the people we serve.

ROH IPC Vision:

Preventing harm from infection by delivering clean, safe care.

ROH IPC Mission:

To deliver a patient focused, expert infection prevention service that supports and empowers staff and patients through education, innovation, and role modelling, to ensure harm free care for all.

Healthcare-associated infection (HCAI) surveillance

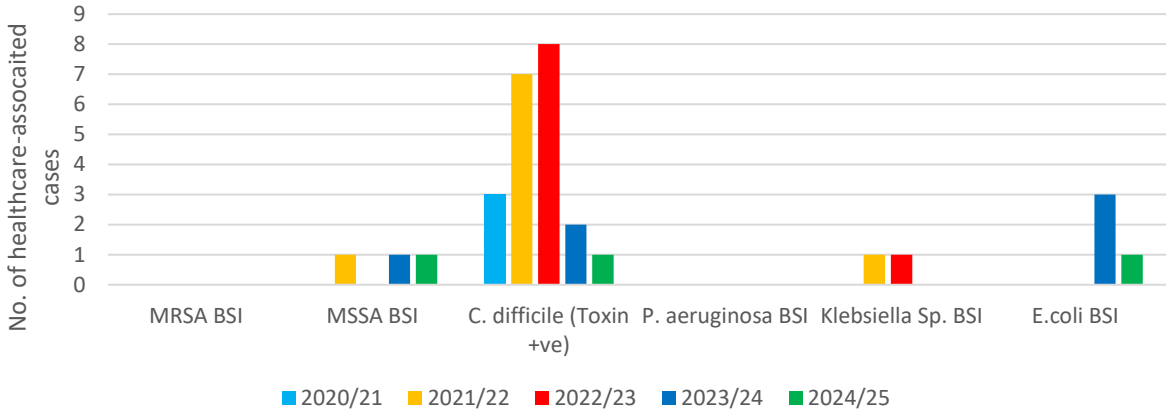
The Trust participates in the mandatory HCAI surveillance programme facilitated by the UK Health Security Agency (UKHSA) including:

- *Clostridioides difficile* infection (CDI) – toxin positive cases
- Methicillin-resistant *Staphylococcus aureus* (MRSA) bacteraemia
- Methicillin-sensitive *Staphylococcus aureus* (MSSA) bacteraemia
- *Escherichia coli* (*E. coli*) bacteraemia
- *Klebsiella species* bacteraemia
- *Pseudomonas aeruginosa* (*P. aeruginosa*) bacteraemia
- Quarterly Mandatory Laboratory Return (QMLR)

Performance is monitored by Birmingham and Solihull Integrated Care Board (BSOL ICB).

The NHS Standard Contract includes quality requirements for NHS trusts to minimise rates of both *C. difficile* and of Gram-negative bloodstream infections to threshold levels set by NHS England. Objectives have been set for five of the six HCAI included in mandatory surveillance. MSSA is the only HCAI without a national objective.

Trust-wide mandatory healthcare-associated surveillance case numbers over the last five financial years:

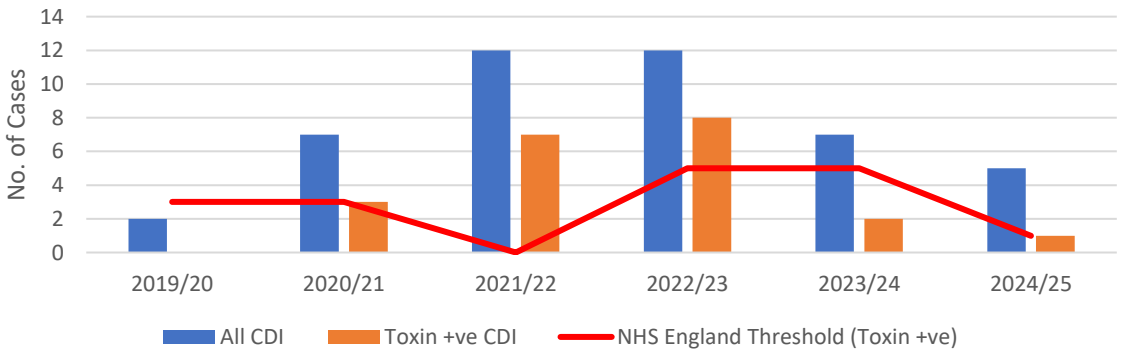


ROH contributes relatively few cases of HCAIs to the overall Birmingham and Solihull (BSOL) system totals – monthly data for ROH and other Trusts within BSOL are available here: MRSA, MSSA, Gram-negative bacteraemia and CDI: monthly data, 2024 to 2025 - GOV.UK

***Clostridioides difficile* infection**

- During 2024/25 there was 1 healthcare-associated *C.difficile* toxin-positive (reportable), against the NHS England threshold of 1.
- There has been a 50% decrease in toxin positive cases and a 33% decrease in all cases since 2023/24.
- An IPC review using the Patient Safety Incident Response Framework (PSIRF) approach is undertaken for each healthcare-associated reportable infection; no lapse in care or quality due to cross-transmission or antibiotic choices were identified.

Total number of C. difficile cases reported by ROH annually:



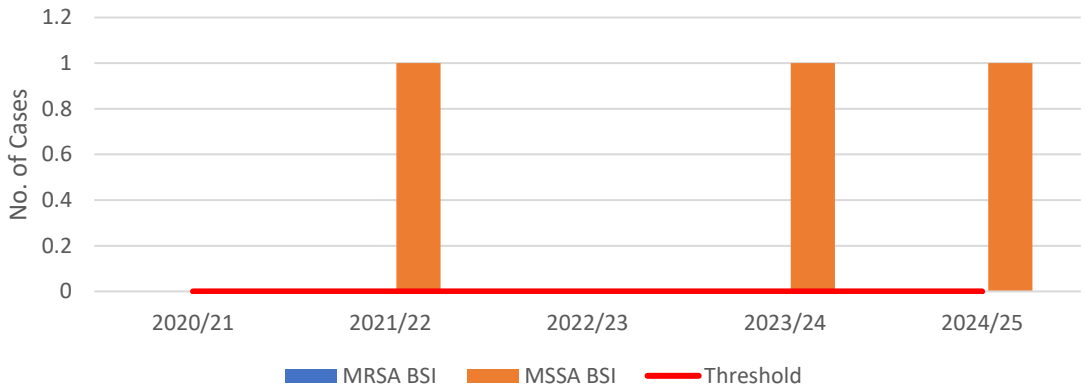
Methicillin-resistant *Staphylococcus aureus* (MRSA) bloodstream infections

- During 2024/25 there was 0 healthcare-associated MRSA BSI. There remains a zero-tolerance approach for MRSA BSIs nationally.
- ROH have not reported an MRSA BSI for the last 13 years (last case reported during 2011/12).

Methicillin-sensitive *Staphylococcus aureus* (MSSA) bloodstream infections

- During 2024/25 there was 1 hospital-onset, healthcare associated MSSA BSI and 1 community-onset, healthcare associated MSSA BSI; there is currently no national threshold provided by NHS England.
- This is equal to the number of cases reported during 2023/24 (1 HOHA case).

Total number of HOHA MRSA and MSSA BSI cases reported by ROH annually:



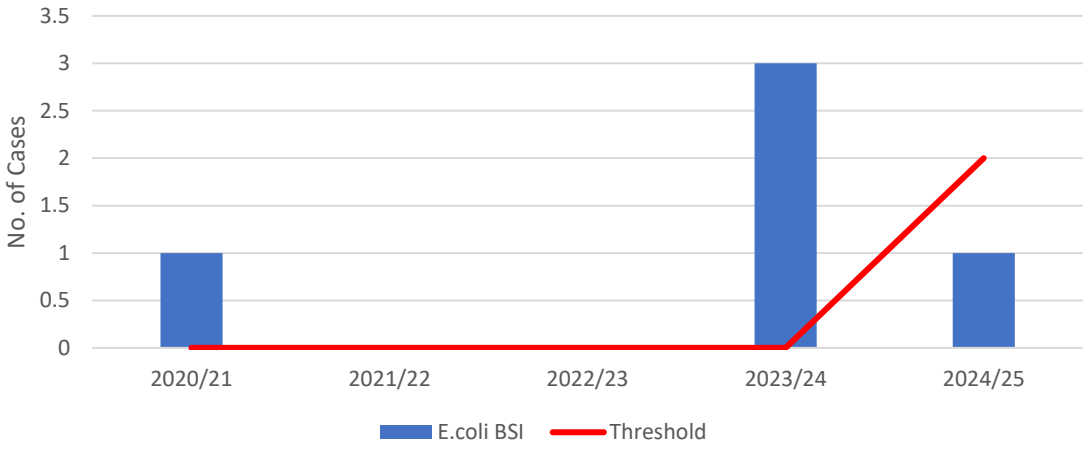
Gram-negative bloodstream infections

Gram-negative bacteria such as *E. coli*, *Klebsiella sp.,* and *P. aeruginosa* are the leading causes of healthcare-associated BSI. Each healthcare-associated Gram-negative associated BSI is individually reviewed to identify source (if possible), risk and contributing factors.

***Escherichia coli* bloodstream infections**

- During 2024/25 there was 1 healthcare-associated *E.coli* BSI, against the NHS England threshold of 2.
- There has been a 67% decrease in cases reported during 2024/25 (1 case), compared to 2023/24 (3 cases).
- IPC review highlighted no care or management concerns that are believed to have contributed to this blood stream infection whilst the patient was under the care of the ROH.

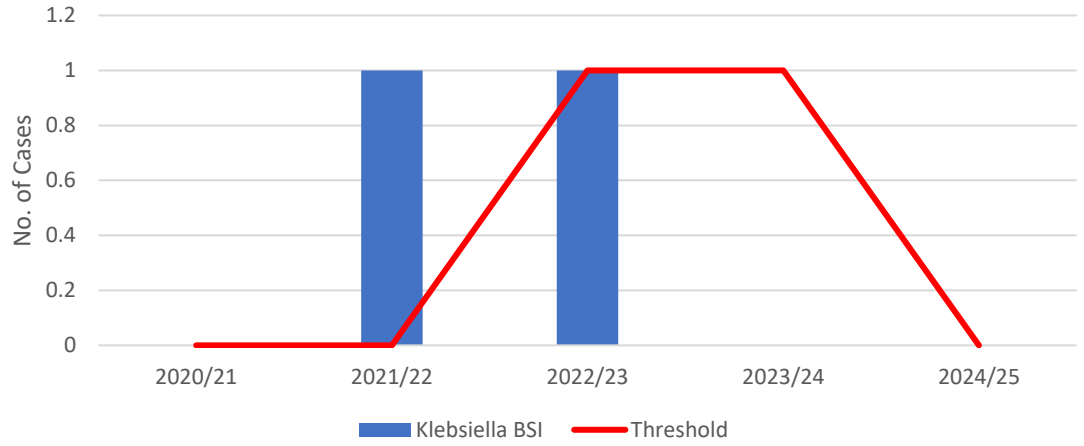
Total number of *E.coli* BSI cases reported by ROH annually:



Klebsiella species blood stream infections

- During 2024/25 there was 0 healthcare-associated *Klebsiella sp.* BSI, against the NHS England threshold of 0.
- This is equal to the number of cases reported during 2023/24 (0 cases).

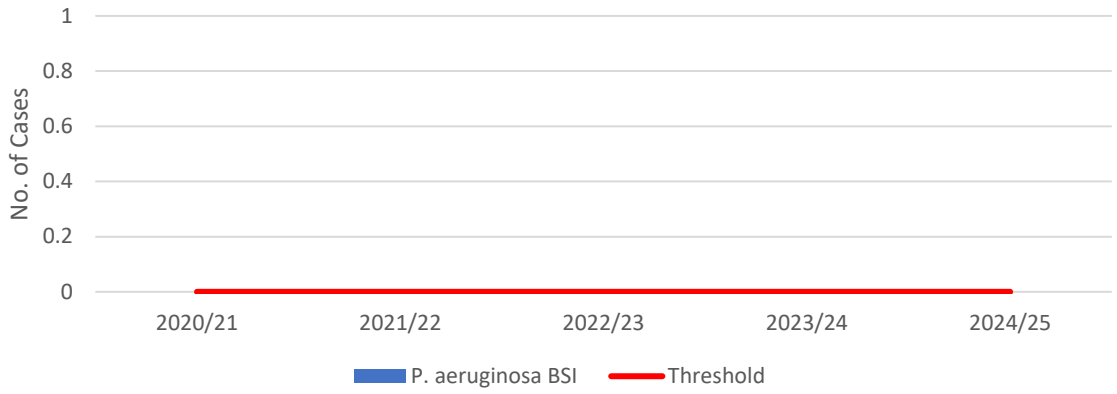
Total number of *Klebsiella sp.* BSI cases reported by ROH annually:



Pseudomonas aeruginosa bloodstream infections

- During 2024/25 there were 0 healthcare-associated *P. aeruginosa* BSI, against the NHS England threshold of 0.
- This is equal to the number of cases reported during 2023/24 (0 cases).

Total number of Pseudomonas aeruginosa BSI cases reported by ROH annually:

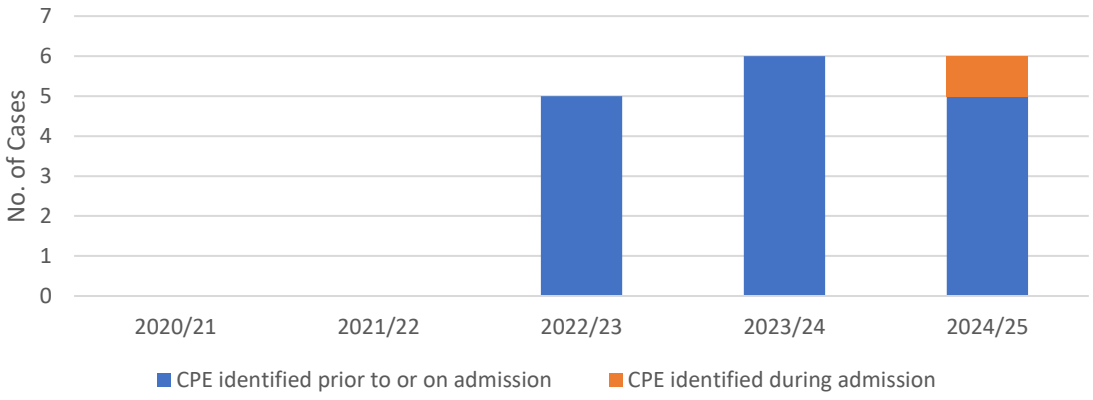


Carbapenemase-producing Enterobacterales (CPE)

CPE is considered a high-risk transmission hazard and in healthcare settings can lead to poor clinical outcomes due to limited therapeutic options. Increased incidence of CPE has significant cost and operational implications for healthcare providers. The Trust closely monitor for CPE by undertaking screening based on risk factors to promptly identify and isolate patients who are colonised with the organism. During 2022/23, ROH CPE screening guidance was updated to reflect changes to the national CPE screening guidance as described in Framework of actions to contain Carbapenemase-producing Enterobacterales (UKHSA, 2022).

- During 2024/25, A total of 7 CPE cases were identified compared to 7 in 2023/24.
- 3 of the cases were identified prior to admission, from pre-admission screening. 3 cases were identified on admission following transfer from another acute NHS Trust. 1 case was identified as an acquisition, positive tissue sample identified 72 days following admission to the ROH.
- Whole ward screening was conducted over a period of 4 weeks on the ward where the acquisition was identified, this yielded no additional positive CPE results.

Total number of CPE identified via screening prior to, on or during admission to ROH annually:

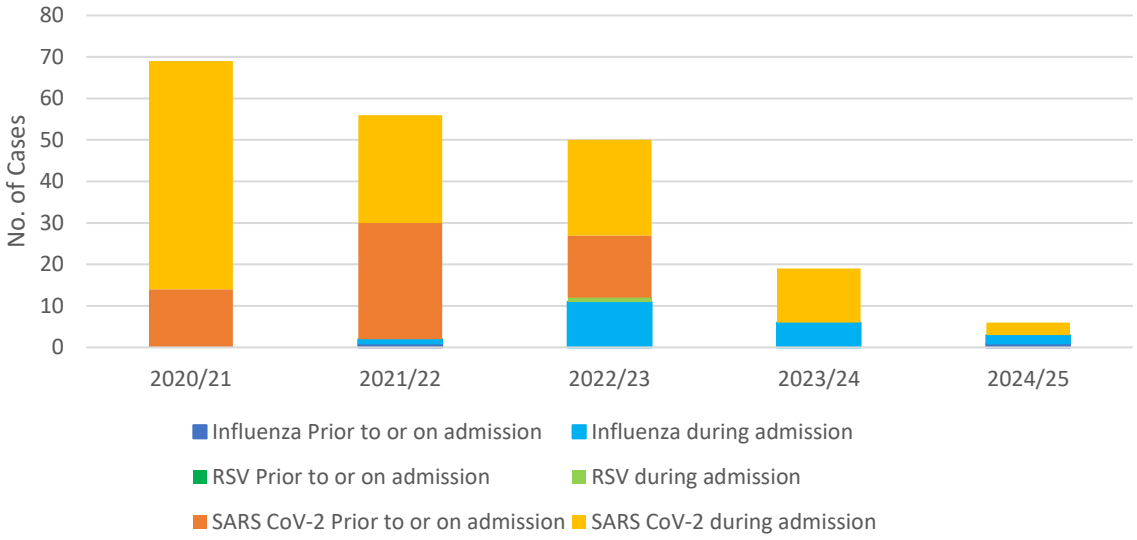


Respiratory virus infections

Respiratory viral infections such as Influenza and Respiratory Syncytial Virus (RSV) typically peak during the winter months, however, cases can arise throughout the year depending upon community prevalence.

- During 2024/25, a total of 3 Influenza A, 0 RSV and 3 SARS CoV-2 cases were identified, compared to 6 Influenza A, 0 RSV and 13 SARS CoV-2 cases identified in 2023/24.

Total number of respiratory viral infections identified prior to, on and during admission to ROH annually:

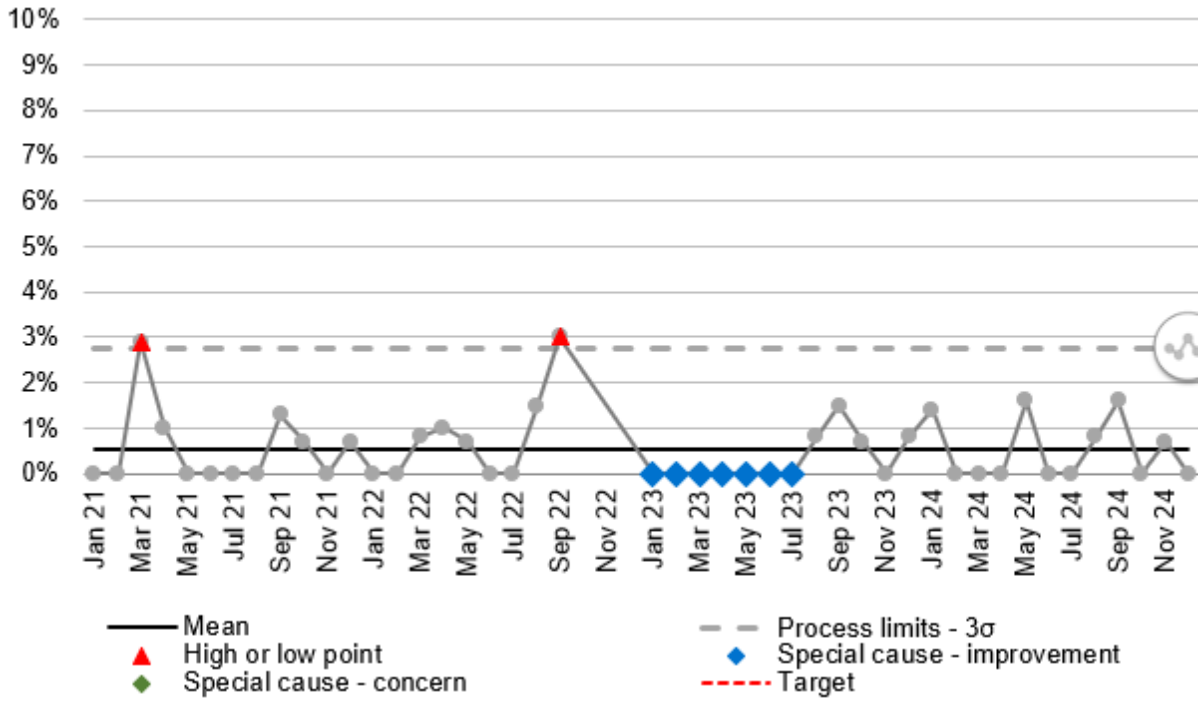


Surgical Site Infection Surveillance (SSIS)

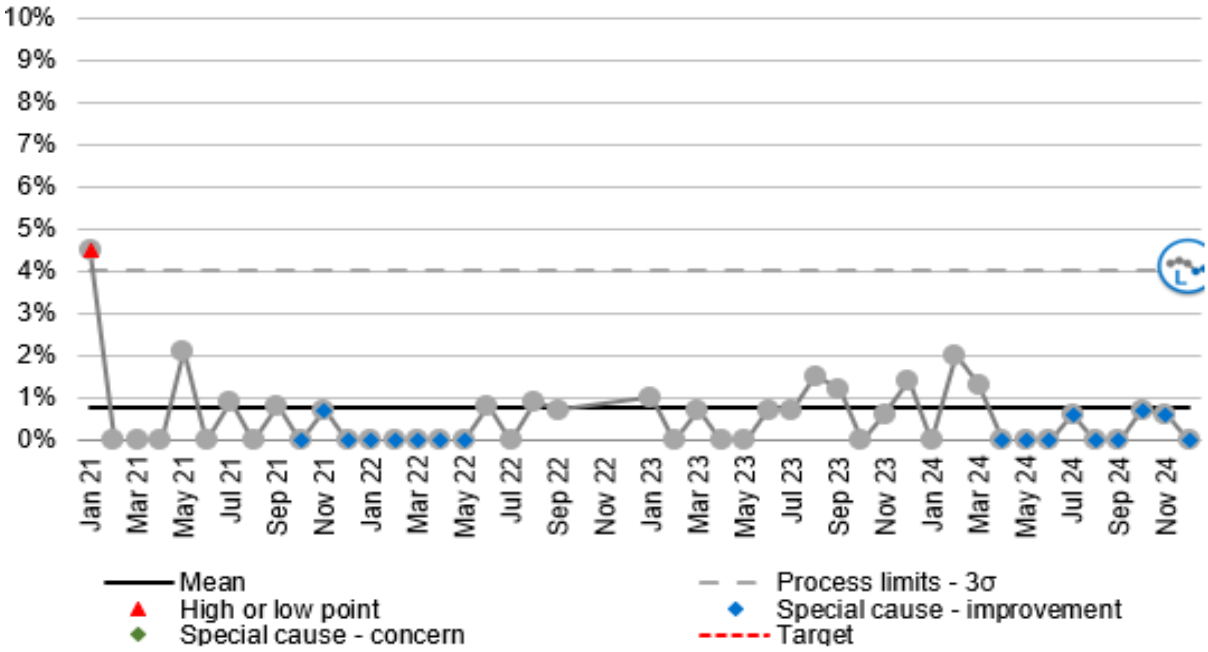
- Rates of SSI are monitored by the IPC team for arthroplasty surgery (total hip and knee replacement – mandatory) and spinal surgery (voluntary).
- During February 2025 we reduced from 2 SSI coordinators to 1. We were still able to continue with the surveillance programme as planned and there are no anticipated issues or plans to fill this vacancy.
- When compared with national data for participating hospitals, the ROH SSI risk rate for spinal surgery was identified as a 'higher outlier' during Q2 2024 (April to June).
- The main risk factors for SSI continue to be raised BMI. Work continues to pre-optimise patients for surgery with a focus on education and support pre-operatively whilst awaiting a surgery date.
- The reduction of SSI risk rate for total knee replacement and spinal surgery was made a Trust quality priority for 2024/25.
- The existing 'Theatre Focus Group' was developed into a multi-disciplinary Surgical Site Infection Prevention Group (SSIPG) to monitor SSI data, review current practice against evidence-based guidance (NICE NG125 SSI prevention and treatment), and identify actions and interventions to help minimise the risk of SSI.

- As part of the quality priority, the SSIPG has been working on developing a ROH bespoke SSI prevention bundle. This work is still currently underway, and the quality priority will continue into 2025/26. It is anticipated the bundle will be ready for implementation at the end of Q1 (June) 2025.

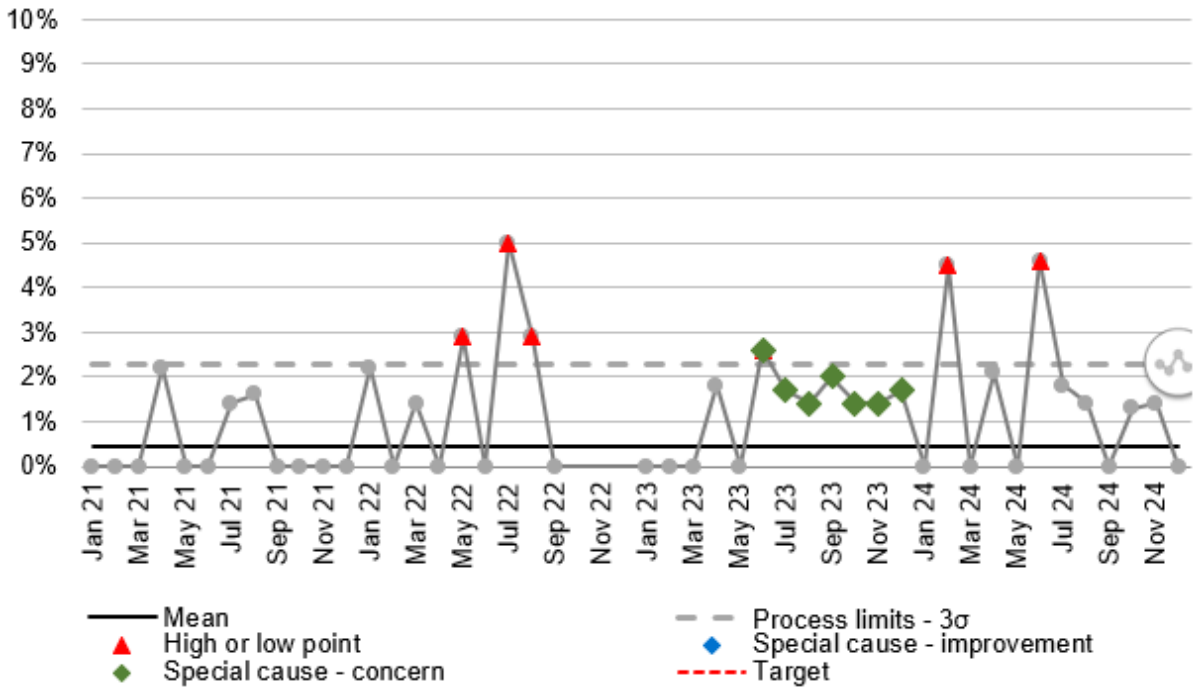
Total hip replacement surgery SSI risk rate per month, identified from inpatients or on readmission - January 2021 to December 2024:



Total knee replacement surgery SSI risk rate per month, identified from inpatients or on readmission - January 2021 to December 2024:



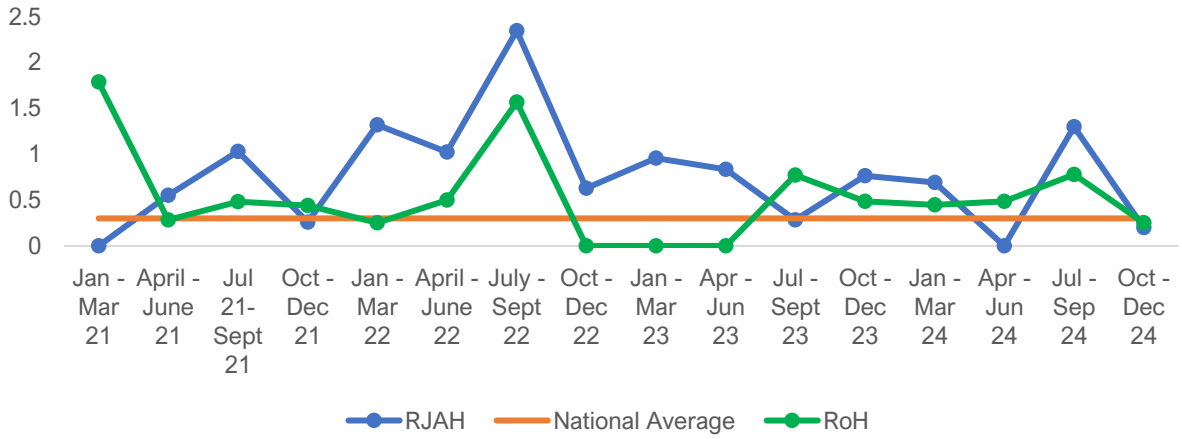
Spinal surgery SSI risk rate per month, identified from inpatients or on readmission – January 2021 to December 2024:



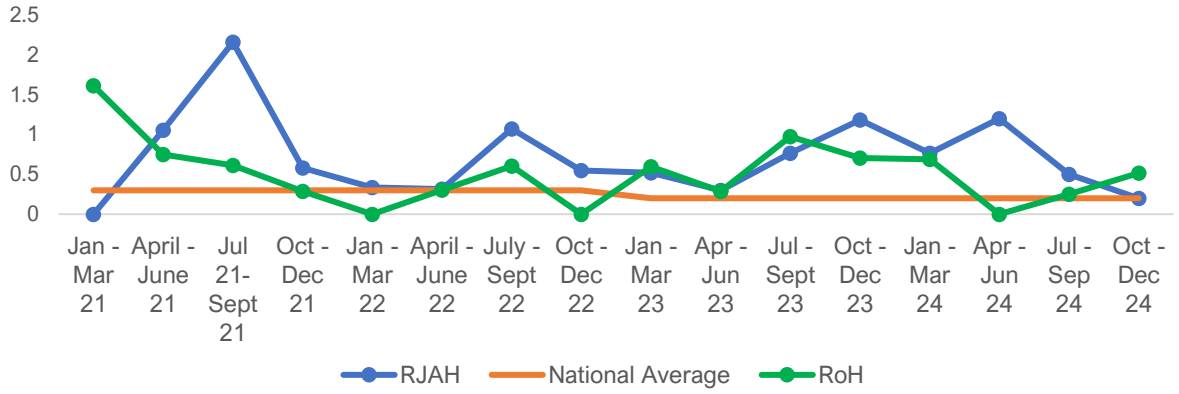
Note: we withdrew from SSI surveillance for Q4 2022 due to lack of surveillance team personnel due to sickness.

Inpatients and readmission SSI risk rates benchmarked with other specialist orthopaedic trusts:

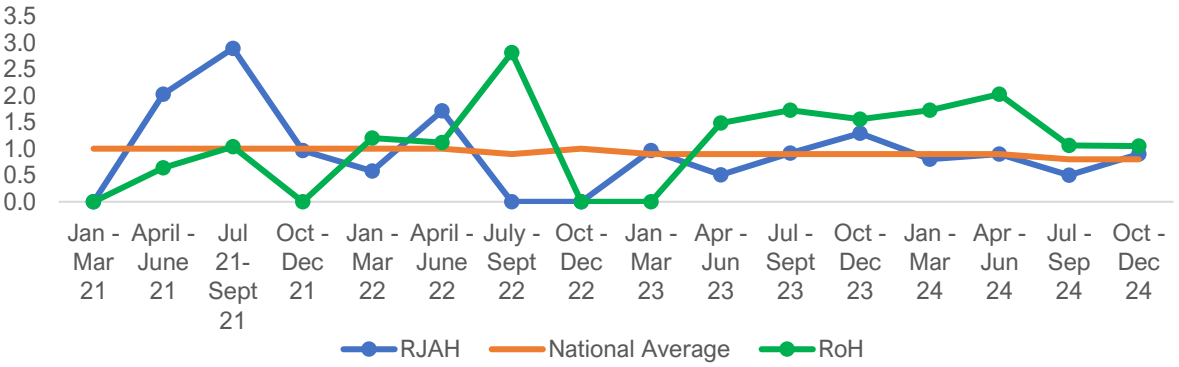
Total hip replacement:



Total knee replacement:



Spinal surgery:



Note: Only data from The Robert Jones and Agnes Hunt Orthopaedic Hospital was shared.

Clinical Activity and Incidents

The IPC team continues to support the development of guidance for managing the risk of infectious diseases that are updated in response to changes in local prevalence and national guidance.

Incidents:

- During May 2024, a SARS CoV-2 outbreak was declared on ward 3 involving 3 patients. The outbreak was recognised and responded to efficiently, minimising the impact and duration of the outbreak. Peer reviews of the Trust response by UKHSA and ICB IPC team reported that the response to the outbreak was comprehensive.
- During October 2024, routine 6-monthly legionella and *Pseudomonas aeruginosa* testing identified several outlets were positive for *Pseudomonas aeruginosa*. Remedial work and retesting was carried out in accordance with HTM 04:01 Safe

water in healthcare premises, this included the use of point of use filters whilst pending negative results. All outlets were cleared and returned to use.

Clinical activity:

- Governance process for investigations into SSIs were updated, in line with the ROH PSIRF. This enables more timely feedback to clinical service leads and a structured approach to thematic reviews if there are higher or lower outlier notifications received for any quarter.
- All in patient wards and theatres were deep cleaned as part of the annual shut down and planned preventative maintenance schedule.
- An annual skin check assessment and guidance related to occupational dermatitis was created and implemented. This provides staff and line managers with guidance on how to manage and monitor skin health of our workforce.
- Organised and celebrated several key events in the IPC calendar across ROH, this included World Hand Hygiene Day, World Antimicrobial Awareness Week, and International Infection Prevention Week 2024.
- Refreshed and reimplemented department cleaning schedules and records. This project was done in conjunction with the facilities team and department staff to ensure they are user friendly and provide assurance of cleaning taking place.
- The IPC team became core members of the Trust Green Board, supporting efforts to reduce the carbon footprint of healthcare.
- An 'IPC in Orthopaedics' collaborative pathway with Robert Jones and Agnes Hunt Orthopaedic Hospital was created to share knowledge, support, data and resources to improve IPC practices. During August 2024, ROH IPC lead Nurse and Senior IPC Nurse visited RJAH to observe their theatres and practices.
- The Trust IPC study day was held in November 2024, which involved internal and external speakers. The day was well attended and evaluated positively by attendees.
- Supported the annual Patient led assessment of the care environment (PLACE) assessment.
- Support was provided to the theatre department through auditing activities and direct engagement with theatre staff. Several spinal surgery lists were observed, during which aspects of clinical practice were identified that require improvement.

Antimicrobial Stewardship Programme 2024/25

The Trust Antimicrobial Stewardship Steering Group (AMSSG) continues to meet quarterly and includes representatives from pharmacy, microbiology, nursing, and medical staff. This group produces and manages policies regarding AMS and responds to concerns in this area. The group produces upward reports and escalates concerns via the Drugs and Therapeutics Committee (DTC) and IPCC. The Trust's Antimicrobial Pharmacist reports quarterly antimicrobial consumption which is then reported at DTC and IPCC.

Antimicrobial Consumption Report 2024/25

Consumption of antibiotics is monitored by the Chief Pharmacist and analysed for trends by the Antimicrobial Pharmacist. The audits outlined above were conducted during 2024/25 for oversight on antimicrobial stewardship activities.

Since 2019 the NHS Standard Contract, set out by NHSE has contained a requirement on trusts to make 1% year-on-year reductions in their rate of total antibiotic usage per 1000 admissions – in accordance with the direction set in the UK's five-year national action plan (NAP) tackling antimicrobial resistance 2019-2024. ROH has continued to work towards this outside of the renewal of this requirement for the NAP 24/25 action plan. The UK 5-year action plan for Antimicrobial Resistance 2024-2029, outlines that by 2029, we should aim to reduce total antibiotic use in human populations by 5% from the 2019 baseline. The 2024/2025 standard contract outlines the aim to reduce 10% of total use of antibiotics from the Watch and Reserve categories (UK 2024 categorisation) across the secondary healthcare system, from the 2017 baseline. The consumption report from Q1 2025/26 will outline the progress to monitor the above.

ROH antimicrobial baseline data for the year 2018/19:

2018/19 Baseline Data	Total DDD	42008
	DDD / 1000 patients	3239
NHSE target (2022/23)	Target DDD / 1000 patients	3093

DDD = Defined daily doses

The pharmacy team continue to undertake interventions relating to inappropriate antibiotic usage with prescribing teams to maintain good antimicrobial stewardship. Total antibiotic usage is monitored quarterly and ROH continues to maintain usage below the England average.

All antibiotics

Total Antibiotic consumption data in defined daily doses (DDDs) and DDD per 1000 admissions compared to the 2018 reference year (Jan to Dec) for all antibiotics including those prescribed by the Bone Infection Service (BIS):

All antibiotics including BIS Abx

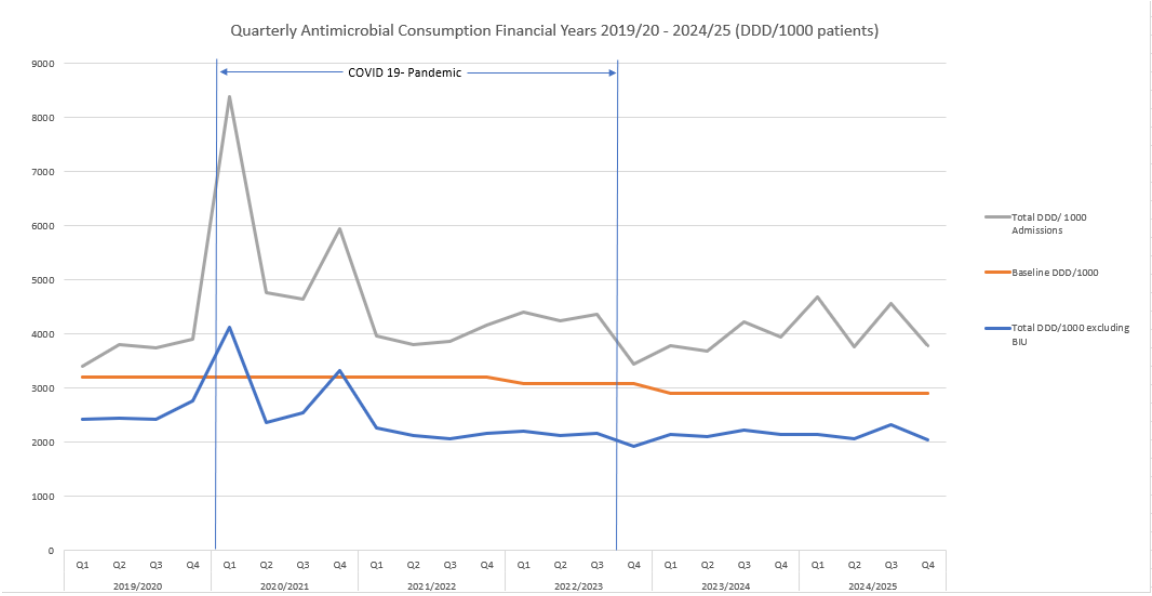
Year	**2019/20**	**2020/21**	**2021/22**	**2022/23**	**2023/24**	**2024/25**
Total Antimicrobial consumption (DDD)	48607	39194	50179	54639	53814	61351
Target Total DDD	41587.9	41587.9	41587.9	40117	37807.2	41732
Antimicrobial consumption Per 1000 admission	3719	5518	3947	4114	3892	4292
Target DDD/ 1000	3206	3206	3206	3093	2915	2888

All antibiotics excluding BIS Abx

Year	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Total Antimicrobial consumption (DDD) (Excluding BIS)	27647	20549	27400	27984	29813	31410
Target Total DDD	41587.9	41587.9	41587.9	40117	37807.2	41732
Antimicrobial consumption Per 1000 admission (Excluding BIS)	2115	2894	2159	2107	2156	2197
Target DDD/ 1000	3206	3206	3206	3093	2915	2888

The table above provide a breakdown of overall antimicrobial consumption for each financial year since 2018. Both graphs show we have reached back to pre-pandemic levels, however with an overall incline can be seen in total consumption but aligns with an increased in bone infection unit patients, as excluding BIS the consumption remains consistent over the past 2 years.

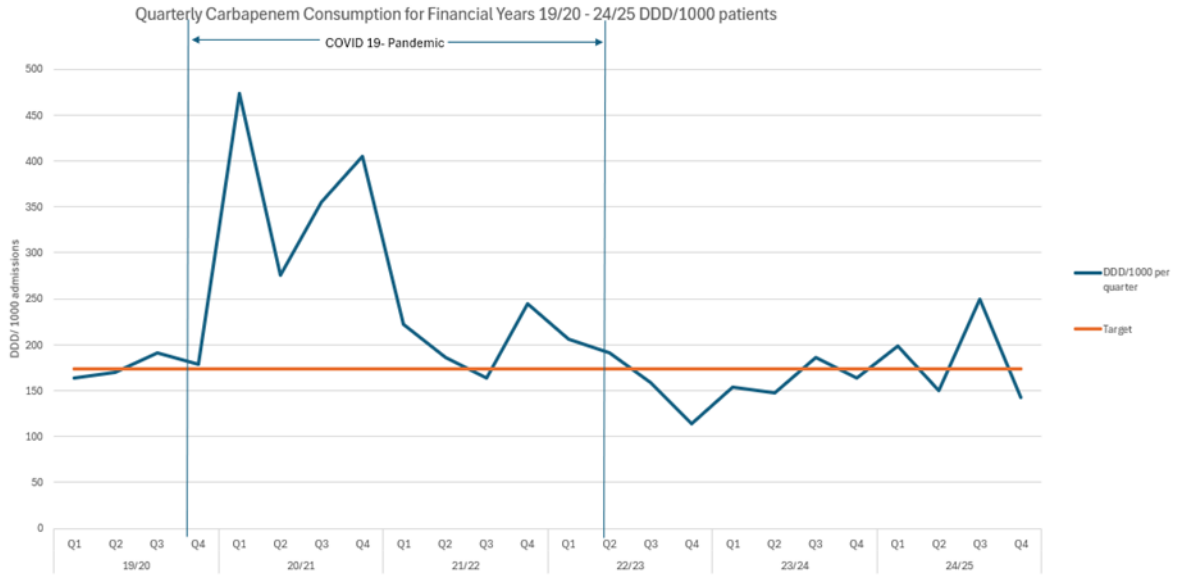
Total antimicrobial consumption (DDD) 2019/20 to 2024/25:



Carbapenem Usage

Total Carbapenem consumption data in DDDs and DDD per 1000 admissions compared to the 2018 reference year:

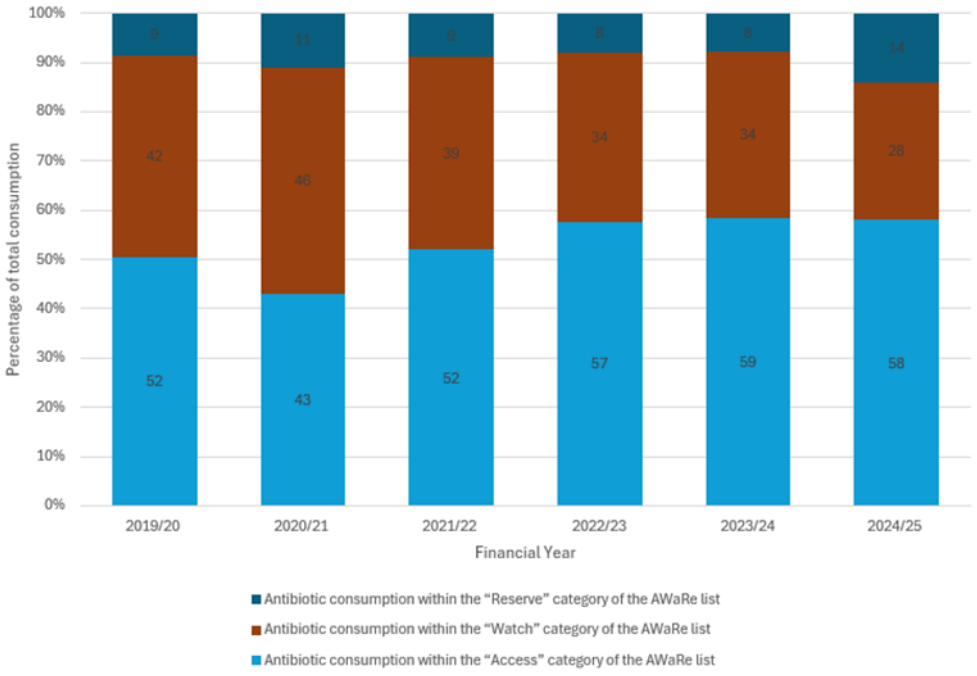
Year	2018	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Carbapenem consumption (DDD)	2420.8	2300.5	2548.8	2586	2202	2258	2677
Carbapenem consumption (DDD Per 1000 admission)	177.5	176.01	358.9	204	166	163	187
Target DDD/ 1000		173.9	173.9	173.9	173.9	173.9	173.9



The graph above shows quarterly carbapenem usage has decreased significantly over the last quarter.

A scoping exercise was carried out to help focus on the stewardship activities that are required outside of bone infection services. Additional work around monitoring carbapenem usage has been carried out this quarter and de-escalated appropriately.

Yearly usage of antimicrobials within the WHO “Access” category of the AWaRe list financial years 2019/20 – 2024/25:

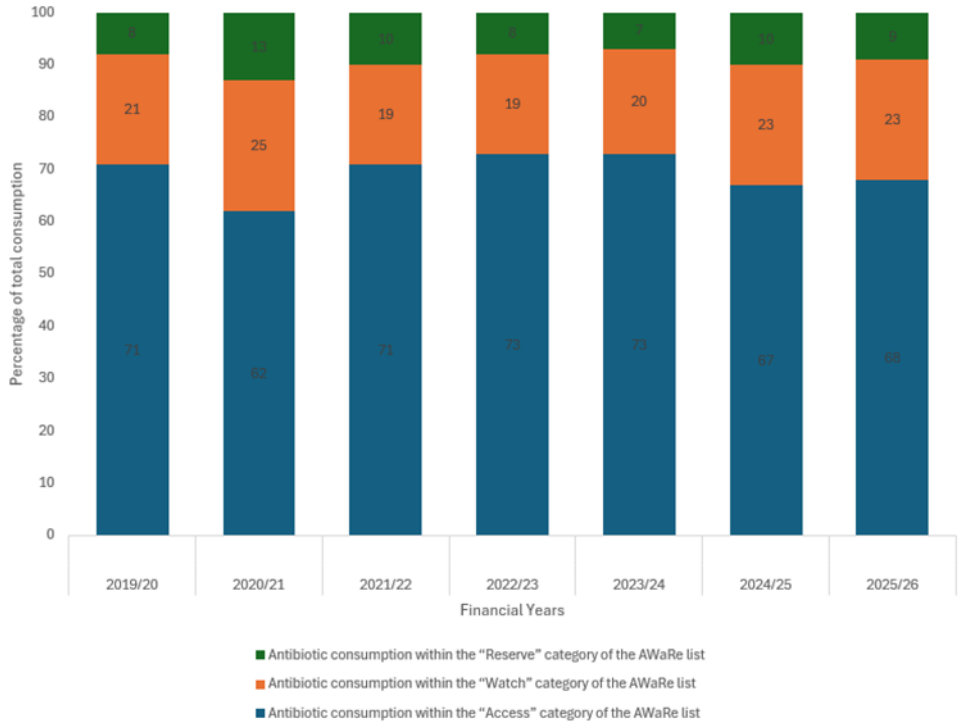


The percentage of antibiotics within the Access group category has been steady over the past 5 years. An increase in the reserve category antimicrobials is outlined below.

The NAP target for 2024-2029, states we should aim to achieve 70% of total use of antibiotics from the Access category (new UK category) across the human healthcare system- this is not isolated to the hospital settings. We sit below this target when excluding BIS for 2024/25 YTD.

It is important to note antibiotics routinely used for BIS MDT are mostly found within either the Reserve or Watch categories; therefore, as activity remains high for BIS Outpatient then this impacts on the percentage consumption of Access antibiotics.

Excluding BIS antibiotics causes the Trust to comfortably achieve the CQUIN targets as evidenced below:



Care and Management of the Healthcare Environmental and Equipment

Decontamination

- No decontamination of critical devices is undertaken onsite at ROH. This is contracted out to Steris who deliver an accredited decontamination service and oversee the process and management of all decontamination of surgical instruments. No other equipment used onsite or offsite as part of ROH services requires sterile decontamination.
- Steris have taken over from BBraun for ROH's reprocessing of surgical instruments since November 2024. The transition included lots of meetings to implement the new processes, training for Steris staff and theatre personnel and exchange of tray data. The transition was not without issues but have now settled down and ROH will

be in contract with Steris for the next 20 years or 10 years if Pan-Birmingham Trusts and Steris decide to not renew.

- ROH have an appointed Sterile Services Manager (SSM) who takes responsibility for coordinating activity between the theatre, decontamination, and supply/purchase teams. They ensure that the inventory of surgical instruments is proactively reviewed and managed in accordance with Health Technical Memorandum (HTM) 01-01, which offers best practice guidance on the whole decontamination cycle including the management and decontamination of surgical instruments used in acute care as well as local guidance, clinical requirements, and industry best practice.
- The SSM reports to the Trust's Decontamination lead. In the absence of a formal Decontamination Lead, this responsibility is held by the DIPC. The SSM provides an upward report on decontamination at the IPC committee.

Water

- The Water Safety Group (WSG) continues to meet bi-monthly and reports upwardly to the IPC Committee. The group is chaired by the Deputy Director of Delivery (Estates). The Trust continues to monitor and review work and actions undertaken toward the water safety plan (WSP). The plan was developed based on the peer review and reflects the status and identified risks of the Trust's water systems. This is monitored at the WSG.
- The Estates Department carried out planned preventive maintenance in accordance with the relevant water safety guidance documentation. Every two years the Trust commissions an independent Legionella risk assessment to be completed across the site, the outcome/actions from the assessment are discussed at the WSG.
- Six monthly Legionella water sampling to several fixed and random points was undertaken. Following an in-depth *Pseudomonas aeruginosa* risk assessment, from January 2024, this also included testing for *P. aeruginosa* in 'higher risk' areas which include ward 1, ward 3 and HDU. The results are reported through the WSG. As noted in the clinical activity section, during October 2024, routine 6-monthly water testing identified several *Pseudomonas aeruginosa* positive outlets. Remedial work and retesting was carried out in accordance with HTM 04:01 Safe water in healthcare premises, this included the use of point of use filters whilst pending negative results. All outlets were cleared and returned to use.
- The water quality in our hydrotherapy pool is tested on a weekly basis, the tests are undertaken and monitored by our hydrotherapy staff and exceptions are reported to the WSG.

Ventilation

- The ventilation safety group (VSG) continues to meet bi-monthly and reports via upward report to the IPC committee. The DIPC is responsible for reporting on activities and recommendations of the VSG to the Quality and Safety Committee which feeds into Trust Board.

- As per the requirements set out in HTM 03:01 specialised ventilation for healthcare premises, the VSG is a multidisciplinary group whose remit is to assess all aspects of ventilation safety and resilience required for the safe development and operation of the ROH healthcare premises.
- The Trust have 15 operating theatres, 14 of which have ultra clean air (UCA) enclosures, these are serviced and maintained by the Estates Department, the UCAs are serviced/validated twice yearly by a specialist external provider.

Estate

The IPCT continue to advise and support estates with refurbishments and new building projects within the Trust. This has required attendance at key design and planning meetings and the review of plans and minimum build standards.

During 2024/25 the IPCT have advised on:

- Routine programme of ward and theatre closures to allow routine maintenance and deep cleaning to take place.
- Replacement of worn theatre flooring within theatres 5, 6 and 7 as well as the corridor outside theatre 8.
- The creation of a staff wellbeing room on HDU.
- Repair of Hydrotherapy roof.
- Male theatre changing room refurbishment and maintenance of theatre 1, 2 and 4.
- Estate challenges are ongoing throughout the theatre complex and orthotics department. These areas are historic buildings that require investment to ensure prolonged use.

Environmental Hygiene (Cleanliness)

Cleaning and environmental decontamination services provided at ROH are undertaken by an in-house team within the Facilities department. These services are provided by a dedicated team of environmental cleaners and an enhanced cleaning team. Environmental cleaners provide cover in all patient areas from 06:00 to 22:00hrs Monday to Friday and 08:30 to 19:00hrs Saturday & Sunday. The enhanced cleaning team undertake all enhanced cleaning and terminal cleaning requests which includes ultraviolet light cleaning (UV-C) and Bioquell (hydrogen peroxide vapour misting) between the hours 08:30 to 05:30hrs (split over two long shifts) Monday to Sunday.

Training for domestic staff continues to be provided by the housekeeping coordinators which includes the completion of a training manual. The training manual was updated during 2024/25 to reflect greater narratives and training in relation to control of substance hazardous to health (COSHH) and health and safety.

Environmental cleaners are responsible for ensuring that cleaning methodologies are rigorously applied, and frequencies are maintained. All cleaning staff play an essential role in ensuring that the Trust maintain low incidence of HCAI which helps to promote confidence in patients and visitors.

Facilities audit programme:

Auditing Principles and Frequencies		
Functional Risk Category	**Frequency of Audit**	**Outcome Required %**
FR 1 – Theatres & supporting areas	Weekly	98% or above
FR 2 - General Wards & Clinics	Monthly	95 % or above
FR 3 – Outpatients & public access areas	Bi-Monthly	90% or above
FR 4 – Offices	Every 3 Months	85% or above
FR 5 – Not introduced	Every 6 Months	80% or above
FR 6 – Not introduced	Every 12 Months	75% or above

Star ratings

Star ratings are displayed to give patients, staff, and the public an easily understood visual score of the standard of cleanliness being met. It reflects the cleanliness of a functional area regardless of which staff group is responsible for cleaning each element. Our star ratings are derived from the original audit score at the time of audit. Scores can only be updated following the next full re-audit. The monthly star ratings are displayed within all patient facing locations displays. This system enables easier administration and allows monitoring to take place. All areas achieved 5 stars at each audit during 2024/25.

Efficacy audits

Annual efficacy audits are designed to assess the process of cleaning and infection prevention and control practices related to cleaning. The audit is carried out by Facilities Management, Infection Prevention and Control and Clinical teams.

Location	Date performed	Scoring %
X-Ray	May 24	86%
MRI	May 24	100%
Hydro pool	June 24	79%
HDU	July 24	100%
Discharge Lounge	June 24	93%
OPD / CYPD	Jan 25	98%
Ward 1	Jan 25	98%

Patient led assessment of the care environment (PLACE)

PLACE assessments assist organisations to understand how well they are meeting the needs of their patients and identify where improvements can be made. Assessments were performed over a one-day period with Trust volunteers and uses information gleaned directly from patient assessors to report how well our trust has performed – in terms of national standards and against other similar trusts. Assessments were undertaken on our wards, clinics, out-patient departments, and public areas.

Discipline	National Average	ROH 2024/25	Comment
Cleanliness	98%	99%	Above National Average
Food	91%	94%	Above National Average

Organisational Food	92%	90%	Below National Average
Ward Food	91%	95%	Above National Average
Privacy, Dignity	88%	92%	Above National Average
Condition/Appearance	96%	99%	Above National Average
Dementia	84%	91%	Above National Average
Disability	85%	92%	Above National Average

Successes:

- Revised local cleaning manual currently being rolled out.
- Cleanliness policy has been reviewed and update.
- Additional staff have been training on the safe use of the Bioquell system.

Future Plans:

- Continue to explore possible chemical free alternatives to cleaning chemical materials, that has limited or zero impact on the environment.
- Exploring new technologies and innovation, trialling new digital cleanliness audit system.
- To increase staff training with the safe use of the decontamination Bioquell system.

IPC Training and Education

- The IPC team deliver training sessions year-round according to a training needs analysis.
- Mandatory IPC training continues to be delivered in-person (level 1 – all staff) and online (level 2 – clinical staff). Trust compliance is monitored at the IPC Committee.
- Ad-hoc, turbo tutorials are delivered by the IPC team in clinical settings to share updates, important messages, and target education on specific subjects.
- The IPC team has a dedicated full time FFP3 respirator fit tester that delivers the fit testing programme for the Trust. Much work has gone into ensuring clinical staff are tested on at least one UK manufactured respirator as well as providing training on the use of the Trusts respirator hoods.
- There is an active link champion programme in place with good engagement from clinical departments. Quarterly in-person link champion meetings are held by the IPC team.
- Engagement and training undertaken by the IPCT during 2024/25:
  - Facilitated quarterly meetings for IPC link champions (from each ward and department).
  - Continued to utilise educational ‘grab packs’ for hand hygiene, Influenza, MRSA, PPE, and CPE across ROH to support staff with effective application of theory into practice within their areas of work.
  - Continued to work collaboratively with suppliers, estates, and facilities teams to ensure that infection risk is considered and managed when commissioning works, new equipment, or processes.

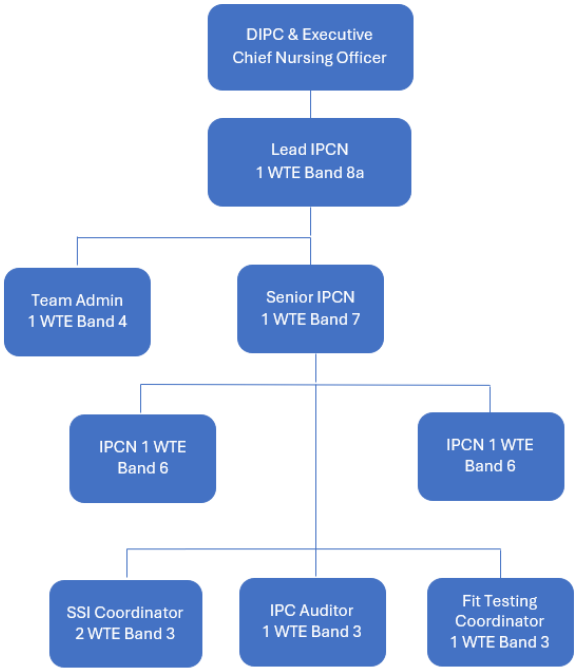
- Continued to facilitate communication of key messages via several media methodologies including social network, newsletters, and emails.
- Facilitated the national antibiotic awareness and hand hygiene days across ROH.
- Supported new and updated policy roll out and dissemination utilising external industry partners.

Governance and Assurance Arrangements

The IPC team support the Trust in meeting its obligations under the Health and Social Care Act 2008 code of practice for prevention and control of infections and related guidance and other relevant legislation and guidance from, for example, the Department of Health and Social Care, UKHSA, and the Care Quality Commission. The service is led by the Lead Specialist IPC Nurse, (holding a formal qualification in IPC) with the Chief Nursing Officer as director of IPC (DIPC) and executive lead.

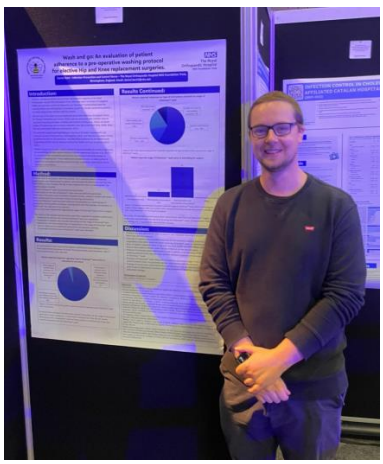
- The team operates between the hours of 08:30 and 16:30hrs Monday to Friday (except bank holidays). The Trust has 24-hour access to expert Consultant Microbiology advice and support via a Service Level Agreement (SLA) with the University Hospitals Birmingham NHS Foundation Trust (UHB).
- A Consultant Microbiologist is the designated Infection Prevention and Control Doctor (IPCD) which is also provided via an SLA with UHB. This allows for the weekly allocation of 2 programmed activities (PAs) of Infection Control Doctor time. Cover for leave of absence of the IPCT and out of hours service is provided by the on-call Microbiology team at UHB which is covered in the SLA.
- ROH do not have access to an onsite laboratory. Laboratory services are provided by UHB which has purpose-built laboratories onsite at both The Queen Elizabeth Hospital and Heartlands Hospital where ROH samples are processed. The UHB microbiology laboratory has full (UKAS) accreditation ISO Standard 15189. ROH has electronic access to microbiology results to facilitate prompt identification and response.
- Occupational Health services are provided via an SLA by UHB. Occupational Health (OH) staff from UHB provide one session (1 day) per week to support the OH requirements of ROH staff. The OH team carry out preplacement health assessment and immunisation checks, skin health surveillance (from line manager referral) and management of inoculation injuries.
- The IPC service is provided through a structured annual business plan and associated programme of work which includes expert advice, audit, teaching, education, surveillance, policy development and review as well as advice and support to staff, patients, and visitors. The main objective of the annual programme is to maintain the high standards already achieved and enhance or improve on other key areas. The programme addresses national and local priorities and encompasses all aspects of healthcare provided across the Trust. The annual programme is agreed at the IPC committee.

ROH Infection Prevention and Control Service Structure 2024/25:



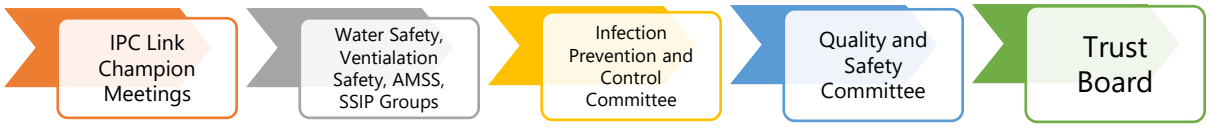
During 2024/25, the IPC team took part in the following development opportunities:

- Lead IPC Nurse continued to pursue a master's degree in IPC at Dundee University.
- Lead IPC Nurse continued to undertake a DIPC development course.
- Senior IPC completed the internal nurse leaders development programme.
- IPCN presented a poster on QI work at the annual Infection Prevention Society Conference which was held in Birmingham during November 2024.
- An away day to review previous year's performance and plan for the year ahead.
- Several Infection Prevention Society study days attended focusing on key topics that benefit service provision at ROH.
- SSI team undertook annual SSI surveillance training refresher provided by UKHSA.
- Continued to hold monthly journal clubs to discuss new and emerging research evidence related to IPC to inform continuous improvement.



Governance

- A bi-monthly Trust Infection Prevention and Control Committee (IPCC) is chaired by the Chief Nursing Officer and reports to the Trust Board. It receives regular reports and updates from each Clinical Group and the following sub-committees:
  - Water Safety Group
  - Ventilation Safety Group
  - Antimicrobial Stewardship Steering Group
  - Surgical Site Infection Prevention Group
- The IPCC also receives updates from our regional UKHSA Advanced Health Protection Nurse, Integrated Care Board IPC lead, estates, facilities, and UHB Occupational Health team.
- Assurances associated to Trust IPC matters is provided three times a year by the DIPC to the Quality and Safety committee, which reports directly to Trust Board. Any interim exceptional reporting to the Trust board is undertaken via existing reports from the Chief Nurse's Office.
- As part of the Trusts PSIRF approach, the IPCT supports timely reviews of reportable HCAI and IPC incidents which are presented and discussed at divisional governance meetings.
- To keep IPC high on the agenda the IPCT regularly attend and champion IPC at relevant groups, committees, and forums.
- Improved communication and patient flow lead to positive outcomes for patients and their families when the system works together. The IPCT have been actively engaged in maintaining and expanding networks locally, regionally, and nationally. This has included:
  - Regional and national meetings with NHS England.
  - Birmingham and Solihull system IPC Meetings.
- No external reviews of IPC practice were undertaken during 2024/25.



Assurance

The IPC audit programme demonstrates compliance with the Health and Social Care Act 2008: code of practice on the prevention and control of infections. Audits are undertaken by both clinical teams, as self-assessments and the IPCT, as assurance of practice and data validation. Where additional risks are identified or upon the declaration of a period of increased incidence/outbreak, the IPCT undertake additional audits, outside of the routine programme, in accordance with risk requirement.

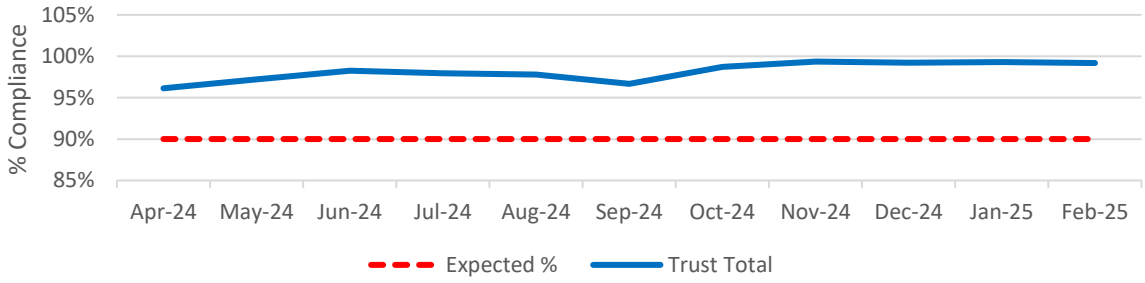
Action plans are devised by the departments where issues are highlighted, and completion of these are monitored within the responsible division and reported on at fortnightly divisional governance meetings. Details of audits undertaken by clinical

areas and associated actions are upwardly reported by the divisional Head of Nursing to IPCC by exception or to champion good practice. Details of audits undertaken by the IPCT are included in the IPC summary report provided by the Lead IPC Nurse at the IPCC.

Hand hygiene (inc. bare below the elbows) and Personal Protective Equipment:

Overall compliance from hand hygiene auditing was 99%, this is a 3% increase from 2023/24. Audits undertaken by IPC nurses showed a lower level of overall compliance rate at 91%. This is in part due to the competence of those undertaking the audit and audit bias (observation, observer, and selection bias). Overall compliance from PPE audits undertaken by the IPC team was 91%. Work to address hand hygiene and PPE compliance was a 2024/25 priority for the IPC team, with the intention of introducing formal hand hygiene and PPE training for all staff and audit training for link champions. An application was made to the Training and Development committee to make hand hygiene and PPE training mandatory; however, this approval was denied by the group due to changes being made to mandatory training at a national level. The absence of mandated hand hygiene and PPE training has been added as a risk to the IPC risk register.

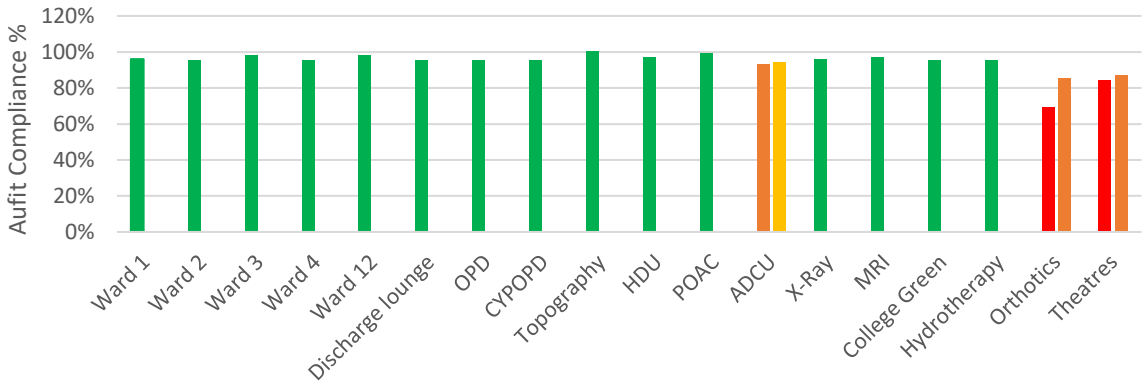
Trust Hand Hygiene Audits - % Monthly Average:



IPC Practice Audit:

All clinical areas are audited by the IPCT in conjunction with the facilities team, every year. A RAG based scoring system is used and a formal process for audit escalation followed should an audit fail. This involves escalation to senior management within the division, re-audit within a specified time frame (dependent upon severity of findings) and feedback of corrective actions/measures taken to address issues. All audits that fail (<95%) have improvement recommendations made. There are ongoing estates issues within the theatre, orthotics and ADCU departments that continue to bring down the departments IPC audit compliance scores.

Annual IPC Audits Scores:



Policy

All IPC policies and guidelines are available for staff to view via the Trust intranet. There is a formal governance structure in place for reviewing and ratifying such documents within the Trust and the corporate governance team produce a directory of documents alerting lead authors when policies are due for review. Policies are also updated prior to review date if national guidance or evidence base is updated/changed. All polices are agreed and approved for use at the IPCC (if minor or no change) or Quality and Safety Committee (if the changes are major or introduction of new policy).

The Trust has adopted the new NHS England National Infection Prevention and Control Manual (NIPCM) to guide its policies and procedures.

During 2024/25 the IPCT reviewed and/or updated the following polices and documents:

- Carbapenemase-producing Enterobacterales Policy
- Blood and Body Fluid Spillages Policy
- Isolation Policy
- Outbreak Policy
- Standard Infection Control Precautions Policy
- Personal Protective Equipment for Clinical Use Policy
- Communicable Diseases and Notification Policy
- Respiratory Illnesses Policy
- IPC risk assessment during construction or refurbishment of a healthcare facility Procedure
- Staff Immunisation Policy
- UKHSA SSI Surveillance Guide
- Procedure for the Management of Occupational Dermatitis
- ROH Audit Programme
- Patient Safety Incident Response Plan for Infection Prevention and Control Related Incidents
- *Clostridioides difficile* Standard Operating Procedure

The following polices/documents were removed as they were deemed no longer relevant, superseded or included within existing polices:

- ROH SSI SOP
- Influenza Policy
- Major Outbreak Policy
- High Impact Interventions SOP

Risk

- The IPC board assurance framework has been updated throughout 2024/25. Actions arising from the framework are monitored via the IPC committee.
- IPC risks are included on a risk register which is reviewed bi-monthly at the IPC committee.
- 5 risks were closed during 2024/25:
  - February 2025 – risk relating to the exposure of staff, visitors and patients to respiratory illnesses. This risk was closed as mitigated as far as is reasonably possible with ongoing monitoring in place.
  - January 2025 – risk relating to the lack of a staff immunisation policy. This was closed as a policy was written and implemented.
  - November 2024 – risk relating to the IT issues within the ROH and the IPC team not being able to access the UKHSA data capture website from Trust computers. This was closed as the issue was resolved.
  - November 2024 – risk relating to insufficient access to respiratory protective equipment. This risk was closed as there was a good supply of FFP3 respirators and the Trust had procured 28 respirator hoods for clinical use.
  - June 2024 – risk relating to UHB microbiology staff (Consultants and Registrars) not being able to access the ROH PICS. This was closed as access was arranged by the lead IPC nurse and a process implemented to endure this is kept up to date with new starters and leavers.
- 1 new risk was added to the IPC risk register:
  - February 2025 - risk relating to the use of Excel spreadsheets to store patient information for surveillance purposes. Data can be easily inputted incorrectly, overwritten or deleted. Surveillance database solution required to provide better digital solution to monitoring HCAI trends and alerting new issues.

Annual Plan

Below is a snapshot of the IPC business plan priority objectives and programme of work for 2025/26, mapped against our Trust strategic objectives (1=Care, 2=Expertise, 3=People, 4=Community, 5=Services, 6=Collaboration).

Quality & Continuous Improvement

📋 Decontamination Processes - Conduct a comprehensive review to assess effectiveness and compliance. (1, 2, 5)

🤝 SSI Prevention Bundle - Collaborate with SSIPG to develop and implement a tailored ROH-specific bundle. (1, 2, 5, 6)

🎓 IPC Training Review - Use the NHS England IPC Education Framework to assess current training and explore innovative delivery methods. (1, 2, 3, 5)

🗣️ Patient Feedback - Develop and roll out an inpatient IPC survey. Use insights to drive improvements and audits. (1, 2, 4, 5)

📹 Lived Experience Videos - Partner with Comms and Patient Experience to create videos highlighting inpatient HCAI stories. (2, 4, 6)

🌱 Sustainability via Bed Linen QI - Apply QI methods to assess frequency of changes and analyse carbon footprint reduction. (2, 5, 6)

Productivity

💻 Digital SSI Data Collection - Move fully from paper to digital systems for UKHSA SSIS submissions. (2, 5)

📊 Enhanced Outpatient Surveillance - Collaborate to improve SSI data collection in OPD & ROCS settings. (2, 5, 6)

🏥 Reactive Duty Role Evaluation - Refine this role to support bed management and improve isolation resource use. (2, 5)

📚 Journal Club & CI Huddles - Integrate both to promote QI workstream development. (2, 5)

Financial Control

📋 Staffing & Service Review - Streamline IPC structure to optimise efficiency. (3, 5)

🖨️ Reduce Printing - Cut printing and laminating reliance to align with sustainability goals. (5)

🧪 Consumables Standardisation - Align with UHB on fit testing supplies and use joint procurement to reduce costs. (1, 3, 5, 6)

Conclusion

Overall, our performance in infection prevention and control is measured by our adherence to the Health and Social Care Act 2008: Code of Practice on the prevention and control of infections and related guidance. This code underpins all elements of our IPC programme, including governance systems, environmental cleanliness, decontamination, staff training, and robust policies—all designed to protect patients, staff, and visitors.

Throughout 2024/25, the IPC team has continued to lead with innovation and professionalism, successfully delivering the IPC programme with measurable progress in reducing healthcare-associated infections.

The Trust's ongoing priority is to maintain and improve IPC standards across all care settings, supporting safe and effective patient care pathways throughout the wider health economy. The IPC team remains committed to undertaking detailed reviews of every case of infection in collaboration with clinical teams, ensuring that learning is captured and translated into practice improvements.

It is evident that our IPC specialists play a critical leadership role in safeguarding the health of both patients and staff. As we move forward, it is essential that we continue to evaluate our practices with rigour, placing patient safety and staff wellbeing at the heart of everything we do. The dedication and resilience of our teams remain the foundation of our success.

Related Documents

Department of Health (DOH) The Health and Social Care Act 2008 Code of Practice of the prevention and control of infections and related guidance. Health and Social Care Act 2008: code of practice on the prevention and control of infections - GOV.UK

WHO access, watch, reserve, classification of antibiotics for evaluation and monitoring of use. 2021 AWaRe classification (who.int)

Confronting antimicrobial resistance 2024 to 2029. UK 5-year action plan for antimicrobial resistance 2024 to 2029 - GOV.UK

Protocol for the Surveillance of Surgical Site Infection Surgical Site Infection Surveillance Service Version 6 (June 2013) Protocol for the Surveillance of Surgical Site Infection version 6 (publishing.service.gov.uk)

NHS England (2022) National Infection Prevention and Control Manual for England. NHS England » National infection prevention and control manual (NIPCM) for England