

## Board of Directors' Meeting 11 July 2024

<b>Agenda item</b>	<b>Report for Board Information Pack</b>		
<b>Report Title</b>	Annual Report from Director of Infection Prevention & Control 2023/24		
<b>Executive Lead</b>	Hayley Flavell, Director of Nursing/Infection Prevention Control		
<b>Report Author</b>	Sara Bailey, Deputy Chief Nurse		
<b>CQC Domain:</b>	<b>Link to Strategic Goal:</b>		<b>Link to BAF / risk:</b>
Safe	√	Our patients and community	BAF 1
Effective	√	Our people	
Caring	√	Our service delivery	<b>Trust Risk Register id:</b> 438, 440, 443, 444, 481, 722
Responsive	√	Our governance	
Well Led	√	Our partners	
<b>Consultation Communication</b>	Infection Prevention Control Operational Group, June 2024 Infection Prevention Control Assurance Committee, June 2024 Quality & Safety Assurance Committee, June 2024		
<b>Executive summary:</b>	<p>The IPC Annual report covers the period 1 April 2023 to 31 March 2024.</p> <p>The most significant issue during this period is the number of C diff cases we have had (97) which although reflective of the national picture has caused cause for concern especially as patients are spending longer in ED &amp; care in corridors is being undertaken. All of this has had an impact on key indicators of Infection Control.</p> <p>We have also breached all of the HCAI targets and the increase in amount of E. coli and MSSA cases is a concern.</p> <p>Cases of Measles and Pertussis increased nationally and regionally at the end of 2023/24. The Trust had 2 positive cases of Measles and 3 of Pertussis by the end of 2023/24 There were no outbreaks associated with either infection.</p>		
<b>Recommendations for the Board:</b>	<p>The Board is asked to:</p> <p>Note the information in the report and mitigation in place to further strengthen the organisations commitment to Infection Prevention and Control</p>		
<b>Appendices:</b>	Appendix 1: Infection Prevention Control Annual Report		



# Infection Prevention and Control Annual Report

## 2023/24



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# Infection Prevention and Control Annual Report 2023/24

## Executive summary

This Annual report covers the period 1 April 2023 to 31 March 2024 and has been written in line with the ten criteria outlined in the Health and Social Care Act 2008 Code of Practice in the Prevention and Control of Infection (updated 2022). The ten criteria outlined in the code are used by the Care Quality Commission to judge a registered provider on how it complies with Cleanliness and Infection Prevention & Control requirements detailed in the legislation. It looks at all aspects of IPC, including monitoring and surveillance, environment, cleaning, staff, policies, and laboratory provision.

The most significant issue during this period is the number of C diff cases we have had (97) which although reflective of the national picture has caused cause for concern especially as patients are spending longer in ED & care in corridors is being undertaken.

All of this has had an impact on key indicators of Infection Control, we have also breached all of the HCAI targets and the increase in amount of E. coli and MSSA cases is a concern.

However, the targets set nationally may not be realistic for the change in activity in acute care since the COVID-19 pandemic. The hospital occupancy is continually full capacity, ED stays are regularly 24-72 hours, ED capacity hasn't been below 150% for several months and average length of stay is ever increasing.

Despite the COVID-19 pandemic the trust continued to undertake root cause analysis (RCA) for significant events such as some cases of hospital acquired infections including C Diff, Escherichia Coli (E. coli) and Meticillin-susceptible Staphylococcus aureus (MSSA), and MRSA. Medical staff, ward nurses, the IPC team, pharmacy, cleanliness staff and microbiology clinical staff participated in these RCAs. RCAs were redesigned as after action reviews following the implementation of PSIRF in December 2023, these AARs have been found to get to the same learning points as an RCA would have but with less time spent completing paperwork and having meetings. This process will be continually adapted to ensure it meets the need and as PSIRF develops.

Cases of Measles and Pertussis increased nationally and regionally at the end of 2023/24. The Trust had 2 positive cases of Measles and 3 of Pertussis by the end of 2023/24 There were no outbreaks associated with either infection.

One significant improvement in year, was the purchase of an additional 13 air purifiers. The Trust now has 23 units in total to be re deployed to areas with COVID outbreaks. These units support with reducing the length of COVID outbreaks in clinical areas.

The Trust external auditors, MIAA completed an Infection Prevention and Control audit in July 2023 where a rating of substantial assurance was achieved.

The Trust maintained their green RAG rating for IPC from NHSE which is a major achievement notwithstanding COVID and other in- hospital outbreaks.



## SECTION 1: KEY POTENTIAL RISKS OF 2023-24

In 2023/2024 the COVID 19 global pandemic continued to be the most significant issue faced in relation to Infection Prevention and Control (IPC) in the Trust and across the NHS.

The COVID 19 pandemic introduced a new and very significant challenge to all acute services and the NHS as a whole in the UK and to health services internationally. The IPC team has continued to be actively involved in planning for patients with COVID- 19 and helping staff with their management. This involved continuous updating and training of staff in line with new guidance being released as knowledge about the virus emerged.

### E.coli Bacteraemia:

The total cases attributed to the Trust for the financial year 2023/24 was 147 compared to last financial year (2022-23) which was a total of 118 cases. This figure is significantly above our nationally set target which was no more than 90 cases. This year we had more cases diagnosed in hospital (48 vs 39 last year) but a higher number of community onset with recent hospital admission cases (99 vs 79 last year). Urinary catheterisation is the commonest avoidable risk factor. COHA E.coli bacteraemia will require a cross healthcare economy approach to look at, and if possible, mitigate factors that lead to community onset E.coli bacteraemia's.

Specific factors to explore would be management of long-term urinary tract infections and also upper airway hygiene in community hospital facilities.

### MSSA Bacteraemia:

The total cases attributed to the Trust for the financial year 2023/24 was 62. This is an increase from the last financial year (2022-23) which was 57 cases. There continues to be no target set for MSSA bacteraemia in 2023-24. Although there are no formal targets for MSSA bacteraemia, these are serious infections often with a HCAI element and require action to look at underlying causes and related practice.

### Clostridioides difficile:

The target for SaTH was to have no more than 32 cases for the financial year 2023/24. The end of year figure was 97 cases. In 2022/23 the year end figure was 60. For the last 2 years our levels of C difficile cases have increased and we are now over our pre pandemic level. An educational roadshow was completed on C. diff in 23/24 and the trust has a thorough C. diff reduction action plan. A C. diff deep dive morning was held in April 2024 to help develop our action plan with clear and tangible areas of improvement including ward processes, hand hygiene for patients and Staff, ED workflow, Decontamination and microbiology and antimicrobial prescribing.

### Klebsiella Bacteraemia:

The total number of cases attributed to the Trust for the financial year 2023/24 was 38. This was an increase from 2022-23 which was a total of 37 cases. This was also above the nationally set target which was no more than 22 cases.

### Pseudomonas aeruginosa Bacteraemia:

The total cases attributed to the Trust for the financial year 2023/24 was 21. This is an increase in cases from the last financial year (2022/23) which was a total of 16 cases. It is above the nationally set target which was no more than 18 cases.

MRSA Bacteraemia. The Trust Meticillin-resistant Staphylococcus aureus (MRSA) bacteraemia target is zero. In 2023/24 the Trust reported 4 cases of MRSA bacteraemia; one of which was due to contamination of the culture (not a true bacteraemia).



Although the remaining 3 cases identified as HOHAs (judged by timing of blood cultures after admission), it appears that all 3 bacteraemia's were present prior to admission and therefore unlikely to have been iatrogenic in nature or related to health care activities.

#### Measles and Pertussis

Cases of Measles and Whooping cough increased regionally and nationally at the latter end of 2023/24. There were 2 confirmed positive measles cases and 3 cases of Pertussis through SaTH in 2023/24. Whilst we had no outbreak associated with either of these infections, considerable amounts of work was undertaken in contact tracing for each suspected case and management of staff who may have been in contact with a suspected case. The Trust has developed policies and SOP's aligned to National guidance for the management of Measles and Pertussis.

#### Audit programme

The IPC audit programme continued in 2023/24. The audits included: commode audits, urinary catheter prevalence audits, PPE use, Quality Ward Walks and Exemplar Ward audits.

#### Flu campaign

The Flu Campaign for 2023/24 was delivered through a combination of co-delivery with COVID vaccinators at our hospital hubs and through a range of pop-up flu clinics and vaccinators visiting our clinical areas across the Trust. All frontline staff were offered the vaccine over the 12-week programme. The campaign this year vaccinated 49% (v 44% last year) of frontline healthcare workers which equates to 3450 staff (v 3,224 staff last year).



## SECTION 2: Abbreviations

AMR	Anti-Microbial Resistance
ASG	Antimicrobial Stewardship Group
CCG	Clinical commissioning groups
<i>C difficile</i>	<i>Clostridoides difficile</i>
CDI	<i>Clostridoides difficile</i> infection
COHA	Community onset, healthcare associated
COVID-19	Coronavirus disease 2019
CQC	Care Quality Commission
CQUIN	Commissioning for Quality and Innovation Payment Framework
DH	Department of Health
DIPC	Director of Infection Prevention & Control
DivDoN	Divisional Director of Nursing
DoN	Director of Nursing
E coli	Escherichia coli
ESBL	Extended Spectrum Beta Lactamase
GDH Ag	Glutamate dehydrogenase antigen of <i>C. difficile</i>
GRE	Glycopeptide Resistant Enterococcus
GP	General Practitioner
HCAI	Health Care Associated Infection
HOHA	Hospital onset, Healthcare associated
IM&T	Information & Technology
IPC	Infection Prevention & Control
IPCAC	Infection Prevention & Control Assurance Committee
IPCOG	Infection Prevention & Control Operational Group
IPCN	Infection Prevention & Control Nurse
IPCT	Infection Prevention & Control Team
MGNB	Multi Resistant Gram-Negative Bacilli
MHRA	Medicines and Healthcare Products Regulatory Agency
MRSA	Meticillin Resistant <i>staphylococcus aureus</i>
NHSE	NHS England
MSSA	Meticillin Susceptible <i>staphylococcus aureus</i>
PCR	Polymerase Chain Reaction
PFI	Private Fund Initiative
PLACE	Patient-led assessments of the Care environment
PPE	Personal Protective Equipment
RAG	Red, amber, green
RCA	Root Cause Analysis
SaTH	Shrewsbury & Telford Hospitals
SSI	Surgical Site Infection
STW ICB	Shropshire Telford & Wrekin Integrated Care Board
UKHSA	United Kingdom Health Security Agency
VNTR	Variable number tandem repeat (a form of DNA typing)





## SECTION 3: INTRODUCTION

The Trust recognises that effectively preventing and controlling healthcare-associated infections (HCAI) is crucial to providing safe and effective care to our patients. Consistent application of these measures in everyday practice is essential to ensure patient safety. Additionally, robust management and organizational processes are vital to maintaining high standards of infection prevention and control.

This report outlines how the Trust complies with the Health and Social Care Act 2008 (updated 2015): Code of Practice for the NHS on the prevention and control of healthcare-associated infections and related guidance.

The Trust is committed to enhancing performance in infection prevention practices. According to the Health and Social Care Act 2008 (2015), this commitment is based on two key principles:

- Delivering continuous improvements in care
- Meeting the needs of the patient

Compliance with the Health Act is evaluated against ten criteria, which will be examined in detail in the next section.

Criterion	Detail
Criterion 1	There are systems to monitor the prevention and control of infection. These systems use risk assessments & consider the susceptibility of service users and any risks that their environment and other users may pose to them
Criterion 2	Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections
Criterion 3	Ensure appropriate antimicrobial use to optimise patient outcomes and reduce the risk of adverse events and antimicrobial resistance
Criterion 4	Provide suitable accurate information on infectious to service users, their visitors and any person concerned with providing further support or nursing/medical care in a timely fashion
Criterion 5	Ensure prompt identification of people 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 other people
Criterion 6	Systems 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.
Criterion 7	Provide or secure adequate isolation facilities
Criterion 8	Secure adequate access to laboratory support as appropriate
Criterion 9	Have and adhere to policies, designed for the individual's care and provider organisations, that will help to prevent and control infections
Criterion 10	Providers have a system in place to manage the occupational health needs and obligations of staff in relation to infection





## SECTION 4: COMPLIANCE

### Criterion 1:

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

#### **1.1 Infection Prevention Team**

The Infection Prevention and Control Team (IPC) provide guidance and assistance to wards and departments.

At the Shrewsbury and Telford Hospital NHS Trust (SaTH), the Director of Infection Prevention and Control (IPC) holds overall accountability for the IPC Team, which is overseen by a Lead Nurse in Infection Prevention and Control.

The organisational structure for Infection Prevention and Control within the Trust is detailed in Appendix 1. Additionally, a Consultant Microbiologist works within the IPC team as the Infection Prevention and Control Doctor (IPCD) for 2 PAs. However there needs to be formalised agreement as this is a reduction

#### **1.2 External reviews**

##### **MIAA IPC Review Assignment Report 2023/24**

This report, prepared by MIAA, provided an audit of the infection prevention and control (IPC) measures at the Trust. The review aimed to ensure IPC requirements are effectively operating, though it did not assess the clinical detail or validity of specific cases. Key findings indicate that the Trust has robust policies and procedures aligned with national standards, comprehensive governance structures, and effective training programs. However, there were issues with the coverage and responsiveness of the Quality Ward Walks (QWW) and minor enhancements needed for the IPC Assurance Committee and IPC Operational Group's terms of reference. Recommendations include expanding QWW coverage, improving action plan responsiveness, and updating reporting practices. The Trust's overall rating was substantial, reflecting a generally strong internal control system with areas for improvement.

##### **NHSE Serratia visit November 2023**

NHS England conducted a review of the Neonatal Unit (NNU) at Princess Royal Hospital on 29<sup>th</sup> November 2023), in response to the Serratia Marcescens outbreak affecting 3 babies. This was also declared as an SI as one child involved unfortunately died. Key improvements noted include the removal of unused baby baths, the switch to microwave steam sterilizing for baby bottles, and clear processes for using the washing machine. Recommendations following the visit were made which included regular QWW, improving action plan responsiveness, and updating reporting practices. The review also highlighted the need for ongoing improvements in the decontamination room and hand wash basin use. NHSE positively reported the NNU commitment and caring approach as well as a strong commitment to continued improvements to maintain a safe environment to delivery care.

##### **ICB C diff Peer Review**



A supportive peer review visit from the ICB was undertaken on January 30, 2024 which focused on *Clostridioides difficile* (C.diff) due to the Trusts increased cases.

The ICB reported the Peer Review visit demonstrated a commitment to infection control, positive practices, and high regard for the Infection Control Team's support, including ad-hoc training as needed. No concerns were noted.

### **1.3 Committee Structures and Assurance Processes**

**Infection Prevention and Control Operational Group (IPCOG):** The IPCOG meets monthly and is chaired by the Deputy Chief Nurse. It includes members from the Divisional Teams, Estates, Facilities, and the Integrated Care Board (ICB). This group is crucial for monitoring the organization's Infection Prevention and Control (IPC) performance, including external objectives and compliance. Each division must report monthly on their IPC performance and key actions.

**Reporting Structure:** IPCOG reports to the Infection Prevention and Control Assurance Committee (IPCAC). IPCAC reports monthly to the Quality and Safety Operational Group (QOC) and Quality and Safety Assurance Committee (QSAC). Monthly performance on healthcare-associated infections (HCAIs) is included in the Trust Integrated Performance Report, which is presented to the Quality Operational Committee, Quality and Safety Assurance Committee, and Trust Board.

**Quarterly IPC Update:** A quarterly IPC Update report, which includes the IPC Board Assurance Framework (BAF), is presented to the Trust Board by the Director of Nursing.

**IPC Service:** The IPC service operates through a structured annual programme that provides expert advice, audits, teaching, education, surveillance, and policy development and review. It also offers support to staff, patients, and visitors. The main goal of the annual programme is to maintain and improve IPC standards, addressing both national and local priorities. The annual programme is approved by the IPC Assurance Committee.

#### **Trust Board**

The Code of Practice mandates that the Trust Board collectively acknowledges its responsibilities for Infection Prevention and Control (IPC). The Chief Executive holds overall accountability for infection control at the Trust, while the role of Director of Infection Prevention and Control (DIPC) is fulfilled by the Director of Nursing. The DIPC provides detailed updates on IPC matters at Trust Board meetings.

#### **Quality & Safety Assurance Committee**

The Quality & Safety Assurance Committee (QSAC) is a sub-committee of the Trust Board, responsible for managing organisational quality risks. The QSAC reviews high-level performance data related to infection prevention and control, monitors compliance with statutory obligations, and oversees the management of risks associated with infection prevention and control. QSAC ensures that processes are in place for patient safety and continuous monitoring and improvement in infection prevention. It receives monthly assurance from the IPC Assurance Committee that effective policies and systems are in place.

#### **Antimicrobial Stewardship Group**

The Antimicrobial Stewardship Group (AMG) is a multidisciplinary team responsible for overseeing antimicrobial stewardship within the Trust. Reporting to the Drug and Therapeutics Committee. The AMG were unable to meet bi-monthly in 2023/24 due to clinician engagement. This has been



addressed and we will see in 2024/25 support from Dr Angus McGregor, the Divisional Medical Director for clinical support services and Dr Jenni Rowlands, Deputy Medical Director.

The group is to focus on increasing clinician involvement and re-establish meetings to ensure they are effective and beneficial. The AMG leads local initiatives to implement international and national antimicrobial stewardship programs, such as Start Smart then Focus and the European Antibiotic Awareness Campaign. They should develop and update local antimicrobial guidelines based on local antibiotic resistance patterns, conduct regular audits of these guidelines, and monitor antimicrobial stewardship practices and quality assurance measures. The AMG should also identify and address poor compliance with these guidelines. Monthly antimicrobial audit results are reported quarterly to the IPC Operational Group and IPC Assurance Committee and are included in divisional reports for discussion at Divisional Governance Meetings. There is an escalation process for clinical areas not following guidelines, however this committee needs active executive-level engagement for repeated non-compliance. The Trust benchmarks its antibiotic usage against similar trusts to identify variations and stimulate necessary investigations. The Trust maintains the highest use of World Health Organization (WHO) 'Access' category antibiotics in the region. The Antimicrobial Pharmacy team consisting of an Antimicrobial Pharmacist and an Antimicrobial Pharmacy Technician provide support and advice to the pharmacy team, clinical teams, and microbiology regarding antimicrobial stewardship and prescribing.

**Decontamination Meetings**

The Trust Decontamination Lead has been taken over by the Head of Facilities. The primary purpose of a decontamination meeting within the Trust is to ensure the effective and safe sterilisation and decontamination of medical instruments and equipment as well as environmental decontamination. This meeting is crucial for maintaining high standards of infection prevention and control and patient safety.

**Water Safety Group**

The Water Safety group is a sub-group of IPC Assurance Committee; the Water Safety Group meets quarterly. It is chaired by the Deputy Chief Nurse /Deputy DIPC with Divisional and multi-disciplinary representation.

**Ventilation Safety Group.**

This group has been re-established and plans to meet bi-monthly. Meetings are chaired by Martyn Henefer, estates operations manager.

**Infection Prevention and Control Committees**

The Infection Prevention and Control Operational Group (IPCOG), reports into the into the Infection Prevention and Control Assurance Committee (IPCAC). The following papers/updates are received to the IPCOG:

Monthly	Quarterly
COVID Update	IPC Board Assurance Framework Update
IPC Monthly Report	HCAI Self-Assessment Update
IPC Policy Updates	IPC Strategy Assurance Framework
Divisional Update Reports	Antimicrobial Stewardship Report
Facilities Update (Cleanliness Monitoring)	Specific Area Action Plans (If relevant)
Decontamination Update	Water Safety Group AAAA Report
Estates Update	Decontamination Group AAAA Report
Health and Safety Update (FFP3)	Health and Safety (Sharps and Splashes)
	Re-established: Ventilation Safety Group.
Risk Register	<b>Annually</b>
Flu Plan	Previous year IPC Annual Programme



PHE Update	Next IPC Annual Programme for Approval
<b>Bimonthly</b>	IPC Annual Report
Occupational Health Update	

The following papers/updates are received by the Infection Prevention and Control Assurance Committee:

<b>Monthly</b>	<b>Quarterly</b>
IPC Current Incidents Report	Antimicrobial Stewardship Report
IPC Operational Group AAAA Report	IPC Board Assurance
IPC Risk Register and New Risks	Health Act Self-Assessment Update
Facilities Update	Estates Report
Decontamination Update	<b>Annually</b>
Flu Update	IPC Annual Report

### Groups and Meetings attended by the Infection Prevention Team

<b>Weekly or More Frequently</b>	<b>Monthly</b>
Nursing, Midwifery, AHP & Facilities	IPC Operational Group
Divisional Medicine Safety Huddles	IPC Assurance Committee
COVID outbreak meetings	Housekeepers meetings
	Integrated Care System (ICS) IPC
<b>As Required</b>	Devices, Products and Gases Committee
Cohorting Meetings	<b>Quarterly</b>
Decision Making Group (Staff return)	Water Safety Group
C diff / MSSA / Ecoli RCA Review Meetings	Decontamination Group
Measles/whooping cough/TB	IPC Link Nurse

### 1.4 Infection Surveillance (including external targets)

All organisms of IPC significance are monitored by the IPC team. The IPC Team use an automated surveillance system (ICNET).

#### 1.4 COVID-19

COVID-19 test results are immediately sent from the lab to the IPC team via the ICNET system. This rapid communication allows the IPC team to promptly respond to positive cases. Additionally, the ICNET system enables the IPC team to create Period of Increased Incidence (PII) alerts, which flag when two or more patients may be linked to a single area, thereby triggering outbreak investigations. Between 01/04/2023 and 31/03/2024, there were 66 COVID-19 outbreaks identified in the Trust, compared to 68 outbreaks the previous year. Each outbreak was thoroughly investigated by the IPC team and discussed at weekly outbreak meetings with input from NHSE, UKHSA, and the ICB. Outbreaks are reported online via the NHS outbreak system for both regional and national monitoring.



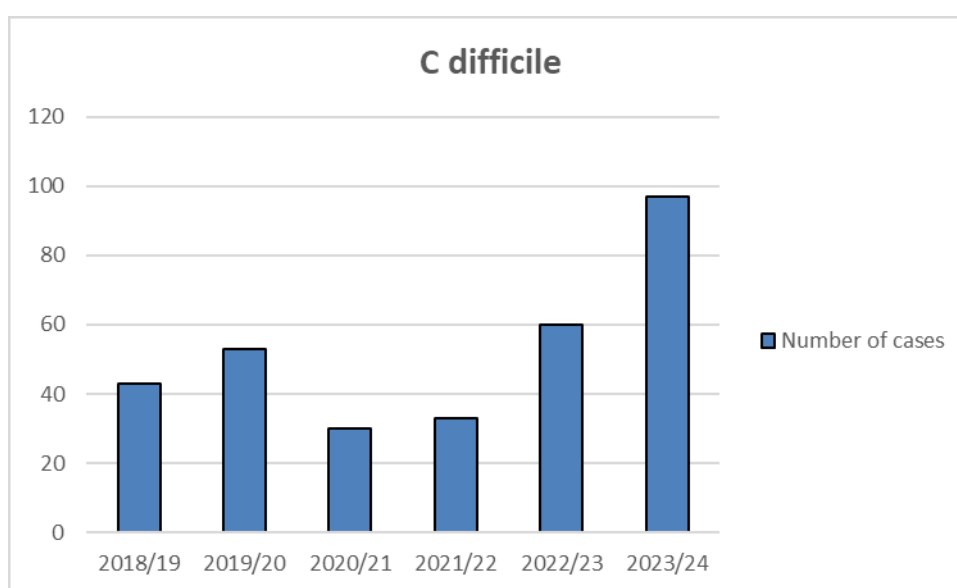
## 1.6 Healthcare Acquired Infections

### Clostridoides difficile

Clostridoides difficile (C.difficile) is a bacterium found in the gut which can cause diarrhoea after antibiotics. It can rarely cause a severe and life-threatening inflammation of the gut called pseudo-membranous colitis. It forms resistant spores which require very effective cleaning and disinfection to remove them from the environment.

Infection is nearly always preceded by antibiotic treatment, but antibiotics may have been stopped up to 6 weeks before the patient presents with symptoms. Although most antibiotics have been implicated, broad-spectrum agents such as cephalosporins, quinolones and carbapenems (e.g., Meropenem) are most likely to cause it as they wipe out the “normal flora” of the gut which usually holds C difficile in check.

The Trust reports all cases of C difficile diagnosed in the hospital laboratory to Public Health England. Prior to April 2019, only cases where the sample was taken later than the third day after admission were considered attributable to the trust. But this definition changed as of April 2019 and now considers cases attributable to the Trust if they are collected after the second day of admission.



The C difficile target for SaTH in 2023/24 was to have no more than 32 Trust apportioned cases in patients over the age of 2 years. By the end of the financial year there were 97 cases apportioned to the Trust which was clearly above the target that was set. This demonstrates a continuation in the significant increase in cases since the low of 2020/21.

Of the 97 cases apportioned to the Trust in 2023/24, 63 cases were Hospital Onset – Healthcare Associated (HOHA) i.e., their sample was collected on day 2 or after of their admission. This was an increase from 34 cases in the previous financial year. There were 34 cases that were Community Onset – Healthcare Associated (COHA) i.e., the patient was positive in the community, but had been an inpatient in the Trust in the preceding 28 days. This was a reduction of two cases from the previous year.

Over a sharp drop during Covid our C difficile rates are back to the pre Covid level seen in 2019-20 in the graph above (2018-19 is not comparable because rules of apportioning cases changed after that).



Our rate per 100,000 bed days over the last 4 years is as below:

2019/20 our rate was 21.2 per 100,000 bed days (pre pandemic)

2020/21 our rate was 14.8 per 100,000 bed days

2021/22 our rate was 13.6 per 100,000 bed days

2022/23 our rate was 22.1 per 100,000 bed days

2023/24 our rate was 35.4 per 100,000 bed days

The exact cause is unclear but similar rises have been observed both nationally and regionally. In part it probably reflects the reduction in patients in hospital during covid and also the change in case mix. SATH as an acute trust has experienced significant demand over the last 2 years and is mostly at full capacity most of the time. A consequence of this is that patients often spend considerable time (24-72 hrs) in the EDs which are ill equipped to care for inpatients in this way. This recent large increase is a cause for concern, and we have developed an action plan to counter it although implementation has been slow and some elements are held back by build and structural issues such as limited side rooms and lack of decant space.

A significant amount of work was done by the IPC team in recognition of patients with diarrhoea and timely sample collection in 22//23, on review the amount of C. diff tests requested by SaTH increased by 44% from 2022 (3610 samples sent) to 2023 (5193 samples sent). This may have had some impact on the increased numbers of C. diff cases identified.

The Trust continues to review all cases through investigations to identify any potential lapses in care or any common themes that may have contributed to the infection. All cases have been reviewed, most common contributing factors identified and an action plan created.

The common themes from learning events can broadly be broken down in 5 areas

- Ward Processes
  - Identification of patients with diarrhoea
  - Isolation
  - Decontamination of equipment and environment between patients
- Hand hygiene
  - Patients and staff
- Antimicrobial prescribing
  - Stewardship and Governance
- Emergency Department Flow
- Decontamination of the environment
  - Lack of deep cleaning programme

These themes will be discussed and actions agreed at a deep dive event in Q1 2024/25 which will involve NHSE, Director of Nursing and Deputy Chief Nurse, Medical representatives, Nursing staff from all divisions, Pharmacy, microbiology and the IPC team.

It is envisaged the 5 themes identified from the reviews will form 5 workstreams with a nominated lead for each to progress the work and will be monitored via the IPCOC and IPCAC during 2024/25.

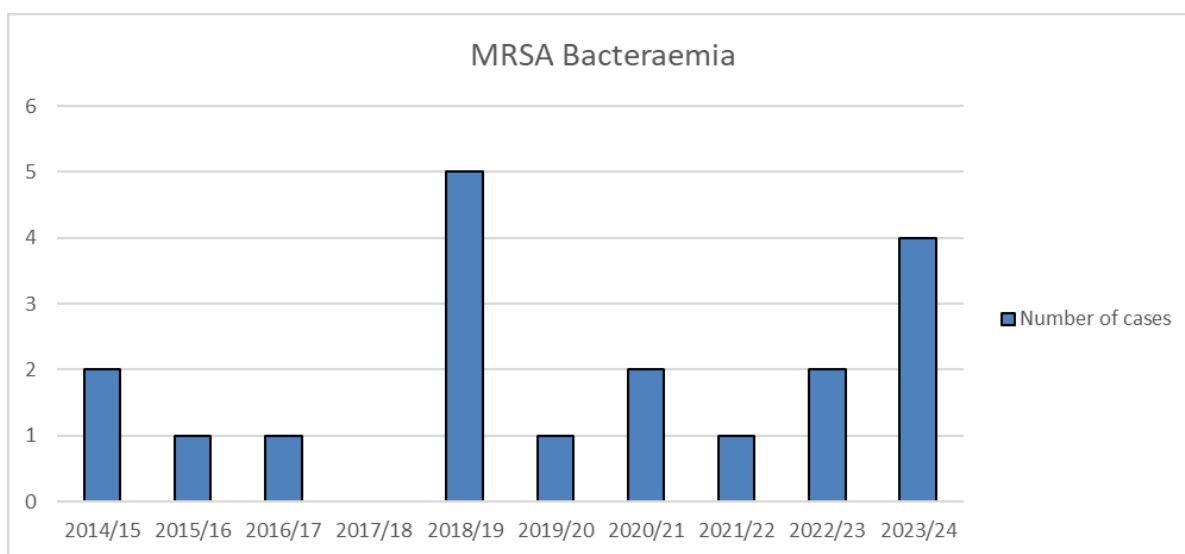


## MRSA Bacteraemia

The Trust Methicillin-resistant *Staphylococcus aureus* (MRSA) bacteraemia target is zero. In 2023/24 the trust had 4 cases, although one was deemed a skin contaminant on investigation. Basic features of the remaining 3 cases:

- Septicaemia in a long standing IV Drug User (IVDU) with groin abscess.
- Bacteraemia related to poorly controlled diabetes and osteomyelitis of the big toe.
- Multiple positive BCs related to uncontrolled endocarditis.

Although identified as HOHAs (judged by timing of blood cultures after admission), it appears that all 3 cases of bacteraemia were present prior to admission and therefore unlikely to have been iatrogenic in nature or related to health care activities.



## MSSA Bacteraemia

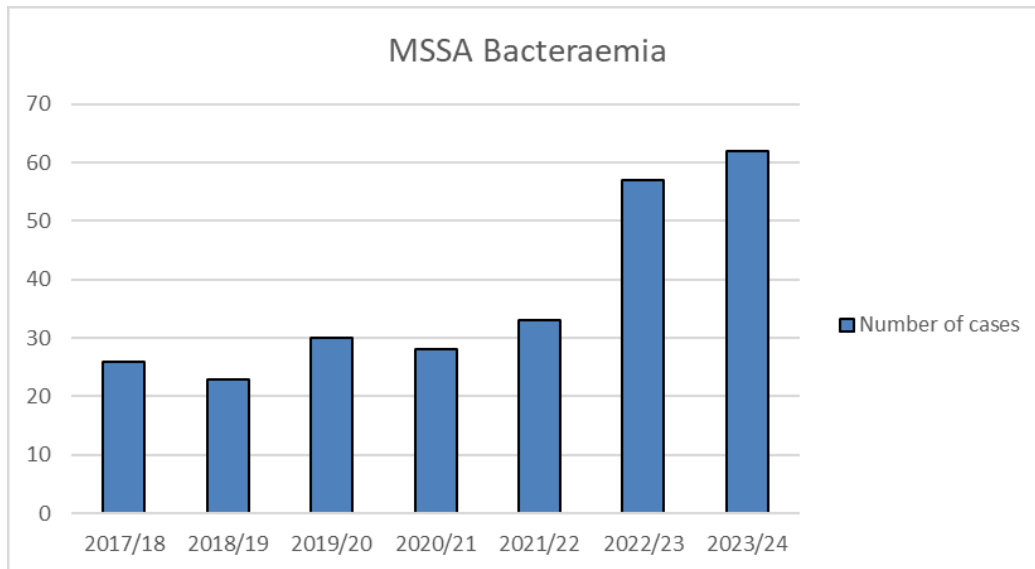
MSSA (Methicillin sensitive *Staphylococcus aureus*) is the much commoner antibiotic sensitive version of *Staphylococcus aureus* and less likely to be hospital acquired.

There were 62 cases apportioned to SaTH in 2023/24 compared with 57 in 2022/23. 24 were considered hospital acquired and 5 of which were related infected IV lines. Numbers have continued to increase since 2020. Our MSSA bacteraemia rate is considerably higher than some comparative regional trusts. Although there are no formal targets for MSSA bacteraemia, these are serious infections often with a HCAI element and require action to look at underlying causes and related practice. This is ongoing.

All device or intervention cases are reviewed with Route Cause Analysis completion, to look for preventable actions and learning. The commonest Health Care Associated source is line infection and we continue to focus on monitoring aseptic technique for IV-line insertion, careful monitoring of the line site for signs of infection and early removal. The second commonest cause in hospitalised patients is LRT infections/pneumonia.







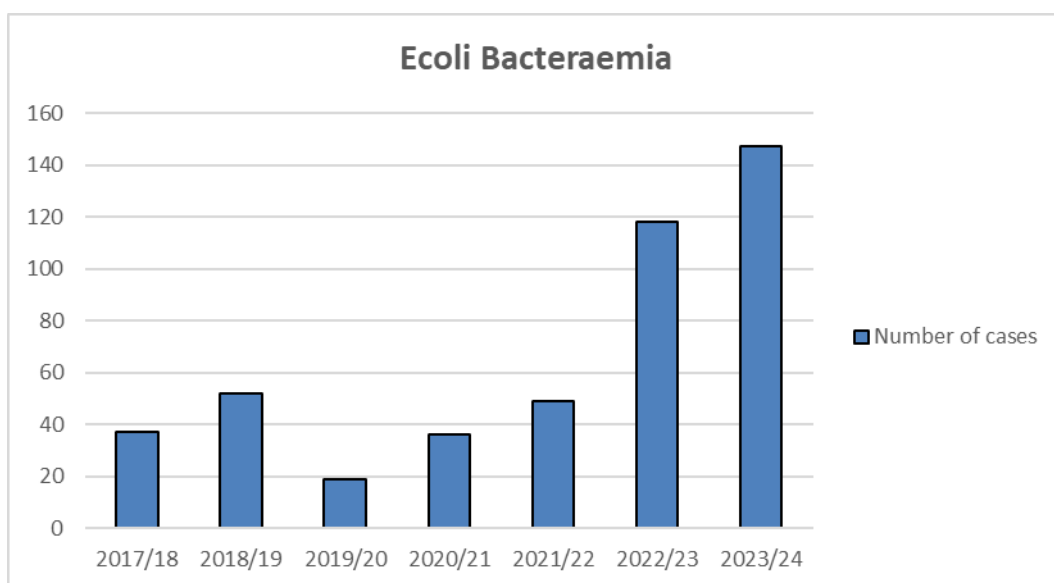
Graph of MSSA bacteraemia cases positive more than 2 days after admission to hospital over the last 7 years (HOHA). This does not include patients admitted with infection who had been in the trust in the previous 28 days.

### Gram Negative Blood Stream Infections

We are required to monitor blood stream infections (or bacteraemia) for three Gram negative bacteria - E coli, Klebsiella and Pseudomonas. These are less amenable to IPC measures as they are often related to UTIs, urinary tract catheterisation or immunocompromising factors.

#### E coli

E. coli is a common commensal of the human colonic flora. If it escapes from the gut, it may become the cause of bacteraemia and sepsis, Most common causes or sources include the urinary tract, intra-abdominal/ biliary sepsis and hospital acquired pneumonia. Severe immunosuppression may allow direct translocation from the gut into the bloodstream, Many cases are associated with the instrumentation of the urinary tract including insertion and maintenance of urinary catheters.

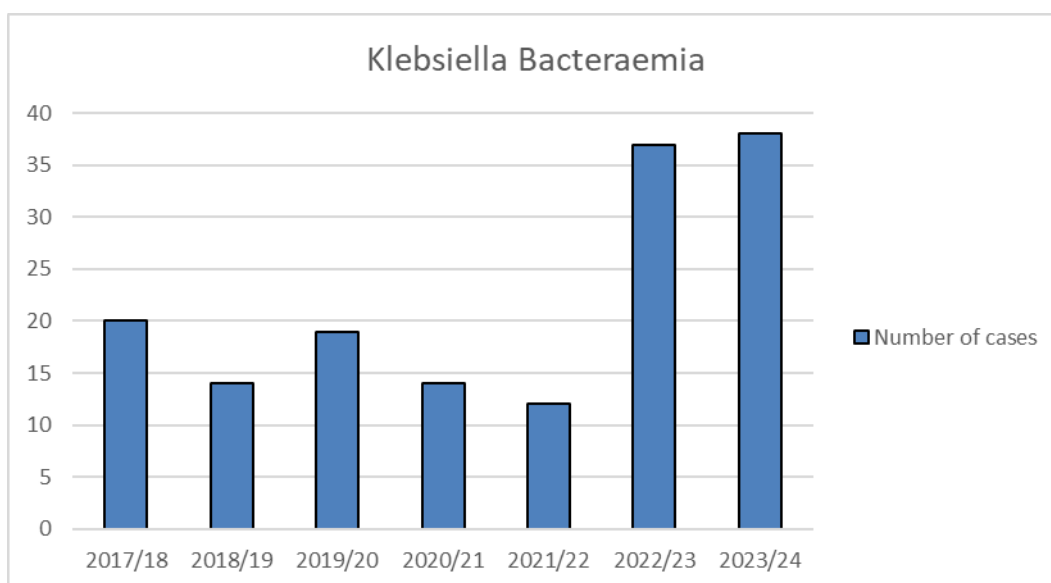


Graph of E coli bacteraemia cases. Please note the attribution rules changed in 2019/20 to include patients who had been in hospital in the last 28 days as well as those who had been in hospital for 2 days or more when the sample was collected.

In 2023/24 we had 147 trust apportioned Escherichia Coli bacteraemia cases, compared to 118 cases in 2022/23. Of these 48 were deemed to be HOHA cases, 8 were thought to be device related, that is, all urinary catheter associated. 63 cases were related to UTIs We are therefore over our target of 90. The numbers are a significant increase from the previous years. All cases were reviewed by Microbiology to determine the source, and if they were considered to be device or intervention related an RCA would be completed to determine any learning points. This is a difficult area to implement IPC policy that will greatly affect the number of cases as most are related to urinary tract infections or urinary catheters, followed by intraabdominal infections then neutropenic sepsis. The most useful intervention is to rationalise the use of catheters and remove those that no longer have clinical utility.

### Klebsiella

Klebsiella, like E coli, is part of our normal flora and causes similar infections, particularly UTI. However, it is more resistant to antibiotics than E coli and infections are more commonly found to be healthcare acquired. In 2023/24 there were 38 Trust apportioned Klebsiella bacteraemia cases compared with 37 cases in 2022/23. The target is no more than 22 cases, so we have exceeded that and also seen a large rise in cases. Of these 19 were considered to be hospital acquired. Of all cases, 22 were related to UTIs, and 8 were related to intraabdominal infection. As with E.coli bacteraemias the most productive intervention is removal of urinary catheters where clinically possible and rationalisation of their initial use.



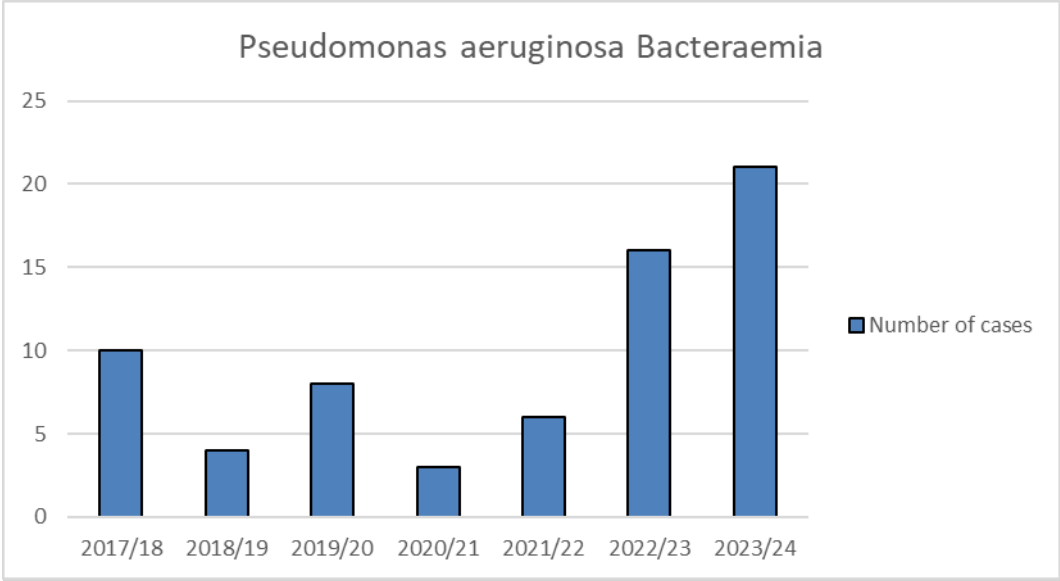
Graph of Klebsiella bacteraemia cases. Please note the attribution rules changed in 2019/20 to include patients who had been in hospital in the last 28 days as well as those who had been in hospital for 2 days or more when the sample was collected.

### Pseudomonas aeruginosa

Pseudomonas aeruginosa, unlike E coli or Klebsiella, is an environmental organism and not part of our normal flora. It is naturally highly resistant to antibiotics and is considered an opportunistic pathogen. This means it is unlikely to cause infection in healthy people but can take advantage of situations where the patient is debilitated by illness or treatment, and also infects after use of broad-spectrum antibiotic use. One of the major problems with this organism is creeping increases in resistance leading to difficulties in treating some infections.



In 2023/24 the Trust had 21 cases of Trust apportioned *Pseudomonas aeruginosa* compared with 16 in 2022/23, we have not met our target of 18 or less cases for the year. 12 of these cases were HOHAs. 7 of the cases were cases of neutropenic sepsis. The increase may reflect at least in part greater demand for oncology and haematological malignancy treatment since the Covid pandemic.



Graph of *Pseudomonas* bacteraemia cases. Please note the attribution rules changed in 2019/20 to include patients who had been in hospital in the last 28 days as well as those who had been in hospital for 2 days or more when the sample was collected.

Overall Summary of Performance

Organism	COHA	HOHA	Total (HOHA/COHA)	Trajectory (target) for 2023/24
CDI	34	63	97	32
MSSA	38	24	62	n/a
MRSA	0	4	4	0
E Coli	99	48	147	90
<i>Pseudomonas</i>	9	12	21	18
<i>Klebsiella</i>	19	19	38	22

HOHA – Hospital Onset Healthcare Associated. Cases where the positive sample was taken on, or after day 2 of admission and therefore assumed to be acquired during current admission.

COHA – Community Onset Health Care Associated. Cases where the patient was admitted with the infection but has been an inpatient at the Trust in the previous 28 days.



## 1.7 Carbapenemase–Producing Enterobacterales cases (CPE)

CPE are Gram negative bacteria which are so resistant to antibiotics that even our last line of defence, carbapenem antibiotics, are ineffective. Infections with these organisms are extremely difficult, and sometimes impossible, to treat.

Identification of CPE has been relatively uncommon at SaTH, however, following an update of the national guidelines on CPE, the Trust policy was updated to reflect the changes in February 2024 which increases the amount of patients who are considered high risk and would need to be screened for carriage on admission.

Patients who are considered to be high risk include

- Patients previously identified as CPE positive
- Patients who have been an inpatient in any hospital, in the UK or abroad
- Patients who have had multiple hospital treatments, for example, are dialysis dependent
- Patients with a known epidemiological link to a known carrier of CPE
- Patients that are admitted into augmented care or high-risk area including oncology and haematology
- Patients who have a recent history of traveling to the Indian sub-continent. These countries include: India, Pakistan, Nepal, Bhutan, Bangladesh and Sri Lanka

These patients will be screened for CPE on admission and isolated according to their respective risk.

In 2023/24 there were 4 cases of CPE detected.

- Resistance Screening- Had a hospital admission Stoke
- Resistance Screening- Recent travel to India
- Resistance Screening- Previous treatment at tertiary referral centre.
- Detected in Sputum- Patient previously lived in Holland.

None of these cases are thought to have been acquired during a SaTH admission.

## 1.8 Audit Programme to Ensure Key Policies are Implemented

There is an extensive IPC audit plan across both sites. To ensure consistent compliance with evidence practice, and national and Trust policies, the audits are conducted as a minimum on an annual basis, by both the clinical areas and the IPC team. To ensure the audit tools used by the IPC team can capture changes in guidance, the IPC team consistently revises the audit template.

Audit results and completion of the actions arising from the audits are reviewed at the IPC Operational group, and through the Divisional Quality meetings, and are reported to the Board via these meetings. All outbreak audits are also analysed during the post infection reviews.

The IPC team aims to visit each clinical area at least every 3 months, although this visit may not include the completion of an audit, and areas with identified issues are visited monthly or weekly, depending on the level of compliance.



Due to the ongoing COVID pandemic and sustained pressure on the Trust, the IPC programme of audit focused on responding to the COVID-19 outbreaks with weekly audits undertaken across the Trust that have had an impact on infection prevention and control practice. Unfortunately, this has affected the number of routine visits carried out during this year.

Audit type	Completed by	Frequency	Reported to:	Details
PPE donning and doffing	IPC  Matron	Weekly on outbreak areas  at least every 3 months in the areas not affected by outbreaks.	Division and DIPC during outbreak meetings and as part of the QWW reports.	<ul style="list-style-type: none"> <li>• Medical staffing lack of compliance escalated to DIPC/ Clinical Directors</li> <li>• PPE donning and doffing training remains an annual mandatory compliance.</li> <li>• Compliance rates reported to DIPC at outbreak meetings</li> </ul>
Hand Hygiene Audits	Matrons	Monthly as part of the Nurse Quality matrix.	Reviewed as part of the Divisional Quality reviews with Matrons and DHoN	<ul style="list-style-type: none"> <li>• Ward managers and matrons are required to complete a monthly quality review of IPC practices on the ward.</li> </ul>
Quality ward walks	IPC	Weekly/ Monthly/ Quarterly	Division and DIPC during outbreak meetings, as well as IPCOG	<ul style="list-style-type: none"> <li>• Routine Quality Ward Walks (QWW) have been undertaken every 3-4 months to audit the IPC practice and environment. This changed in Oct 23 to become a Matron led audit.</li> <li>• Weekly audits have taken place on outbreak areas for assurances.</li> <li>• Consecutive monthly QWW's are completed in areas that fall below the required 90%, and others in-patient areas are audited every 3-4 months.</li> <li>• The QWW's undertaken by the IPC team are often accompanied by cleanliness team members/Ward Managers, Matrons and Heads of Nursing.</li> </ul>
Exemplar Audits	Quality team within Corporate Nursing	Each area is audited 3 monthly	Ward manager/ Matron and Divisional DoN. They are reported through the monthly Quality meetings within the Divisions	<ul style="list-style-type: none"> <li>• Exemplar assessments have been undertaken in various clinical areas by the IPC team in conjunction with the quality team. These audits are to look at standards and improvements required in clinical areas covering all areas of patient care, safety, and management.</li> </ul>



High Impact Interventions including:				
Commode Audit	IPC	ANNUAL	IPCOG and clinical area leads	<ul style="list-style-type: none"> <li>• A total of 61 areas were audited for the purpose of this report. (34 PRH/27 RSH)</li> <li>• This comprised 84 commodes (39 PRH/45 RSH)</li> <li>• All the commodes assessed at PRH were clean. Therefore, adhering to the Trust's guidelines</li> <li>• Two contaminated commodes were seen at RSH. This equates to 96% compliance.</li> <li>• Replacement of commodes was advised for one area.</li> <li>• On the 61 areas that were audited 59 (97%) had the commode cleaning poster that includes the guidelines for safe cleaning and storage of this equipment.</li> <li>• One broken macerator was seen at RSH.</li> </ul>
Sluice Audit	IPC	ANNUAL	IPCOG and clinical area leads	<ul style="list-style-type: none"> <li>• All sluices in the Trust were audited.</li> <li>• The issues found are mix of estates, nursing, cleanliness, and housekeeping matters. There was a return to previous levels of issues after the high level reported in 22-23.</li> </ul> <p>Key concerns:</p> <ul style="list-style-type: none"> <li>• Completion of cleaning checklists</li> <li>• Clutter in sluices and lack of storage</li> <li>• Damage to skirting boards. Doors and frames</li> </ul>
Waste Management	External contractor – Independent Safety Services Ltd	ANNUAL: PRH Aug 2023, RSH October 2023, all sites completed within 2023-24 – Pre acceptance audit	IPCOG/ Assurance/ Director for facilities/ estates	<ul style="list-style-type: none"> <li>• Undertaken by an external company called Independent Safety Services reported through estates/facilities at assurance/IPCOG</li> </ul>
Sharps Audits –	carried out by Sharp smart company.	Monthly	IPCOG/ Assurance/ Directors of; facilities & estates	<ul style="list-style-type: none"> <li>• Review of contents of Sharp Smart containers returned for incineration.</li> </ul>
Credits 4 cleaning (C4C)	Facilities	MONTHLY	Division and then through	<ul style="list-style-type: none"> <li>• Completed monthly and reported through NQM,</li> </ul>



			NQM triangulation	QWW's and IPCOG in facilities monthly report
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## 1.9 Infection Prevention and Control Quality Ward Walks

Quality ward walks (QWW) of the Trust's clinical areas have been undertaken by the IPC team on a quarterly basis, or, when areas fall below the expected standard of 90%, compliance is audited more frequently often accompanied by the ward matron/HON. However, the areas that have outbreaks are monitored weekly and are reported directly to the DIPC through the outbreak assurance meetings.

In October 2023 routine QWWs became an audit to be completed by matrons rather than the IPC team. This change was introduced to ensure that the clinical and operational teams had insight and ownership of the IPC issues in their clinical areas. This took some time to become embedded but by the end of the 2023-2024 was a routine and integral part of the matron- ward relationship.

For routine QWW's the IPC team use a proforma tool based on 45 key points which provide an in depth and rounded audit of a ward/department focusing on several areas including hand hygiene and PPE, cleaning and decontamination, estates and waste management, invasive devices, and isolation. Credits for Cleaning scores are also included to provide a triangulated approach to the status of a clinical area in any point and time. The action plan associated with those findings is attached to the QWW as a "live" hyperlinked document so that the leads for the ward/department can input corrective actions and monitoring notes where required.

A specific audit tool was developed to use in areas where COVID-19 outbreaks are identified, this allows the IPC team to provide relevant assurance to the outbreak control team via internal and external outbreak meetings. These elements are based on essential IPC practice and encompass the guidance regarding PPE, space, ventilation, hand hygiene and environmental cleanliness. This does not produce a score, but a narrative.

In the 2023/24 period the IPC team have completed:

- 83 routine quality walks between April and September 2023
- 184 Covid related quality ward walks completed due to outbreaks
- In addition to this, the IPC team conducted visits to all areas with periods of increased incidence (PII) and was involved in all the Exemplar Assessment Visits until Dec 2023. Due to demands on the service a short break from IPC involvement in Exemplar Assessment Visits was agreed for December 2023. Matrons now complete these monthly for their areas.

## 1.10 Audits of Hand Hygiene Practice

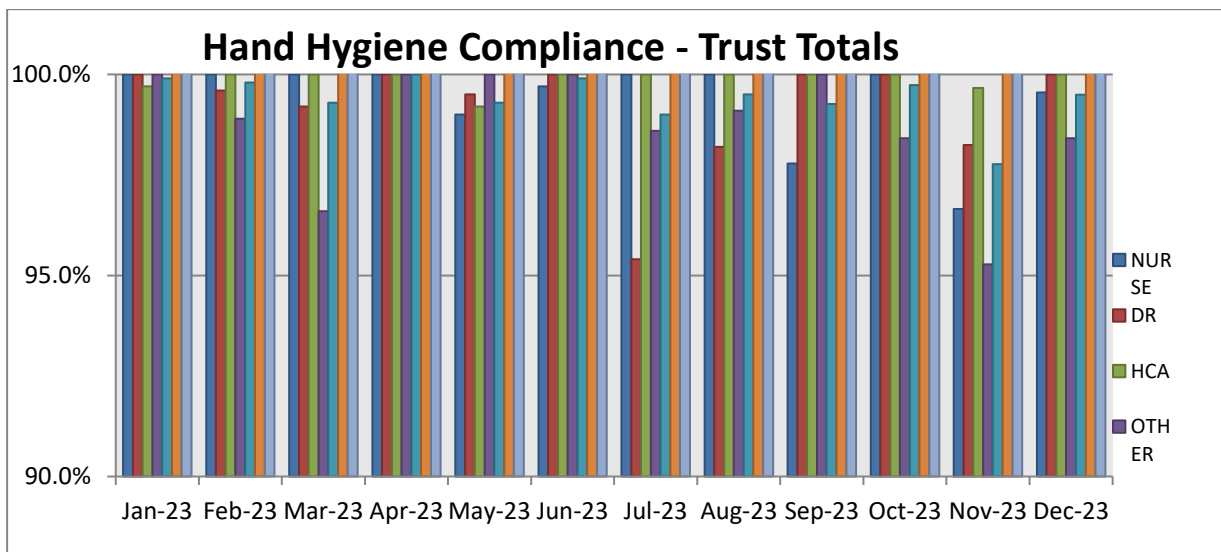
Hand Hygiene audits moved from paper completion to completion on the electronic audit and reporting system, Gather, in early 2024.

The table below shows compliance figures from audits completed in 2023.





	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23
Medical	83.3%	83.3%	83.3%	85.7%	71.4%	100.0%	96.2%	98.0%	83.3%	61.9%	100.0%	85.4%
Surgery	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	81.7%	82.3%	100.0%	100.0%	66.7%	95.8%
Oncology / Haematology	99.5%	100.0%	75.0%	50.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	25.0%
Musculoskeletal	100.0%	100.0%	100.0%	100.0%	100.0%	50.0%	75.0%	75.0%	75.0%	75.0%	75.0%	100.0%
Head & Neck / Ophthalmology	100.0%	85.7%	100.0%	100.0%	75.0%	100.0%	100.0%	100.0%	100.0%	66.7%	83.3%	83.3%
Patient Access	100.0%	95.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	50.0%	100.0%	100.0%
Theatres, Anaes & Critical Care	100.0%	100.0%	99.3%	75.0%	100.0%	98.8%	100.0%	72.5%	100.0%	66.7%	94.0%	100.0%
Women's & Children's	78.6%	86.9%	78.6%	83.3%	76.9%	69.2%	88.1%	61.5%	55.8%	75.0%	73.3%	75.0%
Diagnostics	100.0%	100.0%	98.3%	100.0%	100.0%	100.0%	98.2%	100.0%	100.0%	66.7%	98.0%	100.0%



### Hand hygiene technique assessments

The Trust Hand Hygiene Policy stipulates that all staff should have their hand hygiene technique assessed within one month of starting their employment and reviewed every three years. It is the responsibility of the Ward Manager, the individual staff member, and the IPC link nurses to ensure these assessments are carried out.

The overall compliance rate for 2023-24 is 79% and includes all staff groups within the Trust. This is a reduction from the reported result for 2022-23 of 94%.

During the 2023-24 year the overall compliance for all staff groups was 79%



The results listed in the table below show compliance by staff group. The figures are broadly comparable to 2022-23: the lowest percentages were in the medical and dental group.

Staff Group	Hand Hygiene		
	Staff	Competent	Compliance
Add Prof Scientific and Technical	136	107	79%
Additional Clinical Services	1702	1345	79%
Administrative and Clerical	36	28	78%
Allied Health Professionals	443	359	81%
Estates and Ancillary	649	604	93%
Healthcare Scientists	47	30	64%
Medical and Dental	576	276	48%
Nursing and Midwifery Registered	2290	1918	84%
Students	6	4	66%
Grand Total	5885	4671	79%

## Criterion 2:

Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections.

### 2.1 Cleanliness Team

The Cleanliness Team provides a 24/7 service to the Trust in accordance with the National Standards of Healthcare Cleanliness. Cleanliness Technicians are trained and adhere to, robust method statements and IPC Protocols.

### National Standards of Healthcare Cleanliness

The National Standards of Healthcare Cleanliness (2021) has been adhered to by the trust, with the Micad Auditing system (C4C) as well as ensuring internal auditing which reviews responsibility of all areas, logging the fails and providing the cleanliness technician with corrective actions and deadlines dependant on risk areas.

### Monitoring Processes for In-House Cleaning

The Trust Monitoring Team carry out visible checks of all elements of cleanliness using the Micad Audit software to record the results. The system then generates a report showing the percentage score that the area has achieved, and any actions required. This is then automatically sent to the Ward/Area Manager, Estates and Cleanliness Teams for corrective action to be taken.

Matrons and Ward Managers are encouraged to join the audits. The results of the audits are reported monthly to IPC Operational Group and exceptions presented at IPC Assurance Committee.

The Senior Cleanliness Manager or Site Cleanliness Managers participate in any outbreak or periods of increased incidents (PII) meetings when issues are identified on site as well as joining Exemplar Audits.



The Cleanliness Management Team carry out twice monthly audits. The first audit is to check cleanliness responsibility elements on all areas and feedback to Cleanliness Technicians any corrective actions needed. The next audit takes place one week later to ensure all actions are complete. This is currently recorded on paper but it is the intention that this will move to the Micad audit system in the near future.

The twice per month audits, consist of:

Check 1 – auditing the elements of responsibility on all areas, logging the fails and providing the cleanliness technician with corrective actions, deadlines dependant on risk area.

Check 2 – takes place one week after the first check to ensure all fails have been rectified.

### **Decontamination**

Decontamination is carried out in infected rooms/bays as required, using Hydrogen Peroxide or Ultraviolet Light Systems, in accordance with the Cleanliness Team RAG Poster. The Team also carries out a programme of proactive decontamination of bathrooms and toilets as well as any other areas requested of them.

### **Terminal Cleans**

All terminal cleans at the Trust are requested via the internal bleep system during. Hydrogen Peroxide decontamination of side rooms is requested as per the Cleanliness Team RAG poster.

### **Radiator Cleaning**

The Trust has a planned programme of radiator cover removal to allow for cleaning. It has also been agreed that radiator covers are removed, and radiators cleaned after any outbreak of infection.

## **Criterion 3:**

**Ensure appropriate antibiotic use to optimise patient outcomes and to reduce the risk of adverse events and antimicrobial resistance.**

### **3.1 Antimicrobial Stewardship (AMS)**

The Trust antimicrobial stewardship group (AMG) membership includes representatives from pharmacy, microbiology, nursing, and medical staff. This group manages policy with regard to antimicrobial stewardship, formulates policy with regard to antimicrobial stewardship and responds to concerns in this area. The group feeds back actions and concerns via the Drug and Therapeutic committee and reports into the Infection Prevention and Control Operational Group and through to the IPC Assurance Committee.

The AMG has not met in the year 2023-24 due to continued pressures within the microbiology and pharmacy workforce and lack of engagement from medical representatives and senior clinical leadership. Trust senior leadership tasked with re-establishing the group with increased focus on engagement and accountability. Pharmacy team continue to engage in antimicrobial stewardship activities and antimicrobial stewardship actions are communicated through direct contact. The Integrated Care System has an Antimicrobial Stewardship Committee with contributions from other local healthcare providers and future efforts for a local health economy wide approach to antimicrobial stewardship.



The group undertakes the following actions.

- Production of the antibiotic guidelines publishing them on the micro guide app
- Yearly update of the antibiotic guidelines or more frequently as necessary
- A rolling Antimicrobial Audit Programme in line with Start Smart then Focus has been in place across the Trust for a number of years.
- Review of guidelines and issue of temporary alternative guidance when certain key antibiotics are unavailable due to global and national shortages.
- The Antimicrobial Guideline App (Micro-guide) is in use for all desktop and mobile devices, this continues to be popular with prescribers, facilitating easy access of antimicrobial guidelines at the point of prescribing. The Antimicrobial policy for both Adults and Paediatrics are available via the app.
- The Integrated Care System are in the process of bringing the primary and secondary care platforms together to provide all policies in once place.

Basic audits of prescribing are undertaken on a monthly basis and fed back to IPCOG and Clinical Governance Meetings. More detailed audits and direct prescriber feedback of not able to be undertaken due to lack of electronic prescribing within the trust. Regular monitoring of prescribing at ward level continues and pharmacist antibiotic related interventions are reviewed each month.

The Pharmacy Antimicrobial Team structure was reviewed and altered due to inability to recruit to second antimicrobial pharmacist post at PRH, the team now consists of a Pharmacy Team Leader for Antimicrobials and a Senior Pharmacy Technician for Antimicrobials. Together the team is able to support the wider Pharmacy and IPC teams and work on tasks more effectively.

The Antibiotic Pharmacist continues to undertake FY1 junior doctor teaching in August/September for the new intake and attends medical and surgical clinical governance meetings to communicate information where necessary.

The work of the Sepsis Nurse and team has led to positive work surrounding sepsis and sepsis boxes and drawers or a sepsis trolley to assist in the prompt treatment of those patients suspected of having sepsis are fully embedded. Work continues on emphasising the use of the sepsis pathway across the Trust in the management of sepsis and the success of these changes is monitored by the Sepsis Nurses.

As in previous years, there have been challenges as a result of ongoing shortages of various antimicrobials during the year due to manufacturer's supply problems continues to be managed by the pharmacy team. The AMG, Microbiology and Pharmacy Departments work collectively to ensure that alternative agents are available for patients in a timely manner.

- Antimicrobial guidelines were reviewed, and alternative agents chosen taking into account antimicrobial stewardship and local resistance patterns, benefits, and risks of proposed substitute agents, including cost pressure to the Trust as a result of using more expensive alternatives.
- Where necessary, alternative medicines are sourced, purchased, and made available in key areas via review of stock lists.
- Information on dosing, administration and side effects of alternatives are communicated to prescribers, nursing staff and pharmacists.
- Antibiotics that are in short supply are restricted to those conditions considered highest priority or where an appropriate alternative is not available.

In collaboration with the ICB and Shropshire Community Health Trust, SaTH has launched an Outpatient Parenteral Antimicrobial Therapy (OPAT) Service to support the administration of intravenous antimicrobials in the outpatient setting. This work has enhanced antimicrobial



stewardship and assisted patient flow through early discharge and admission avoidance in line with the wider NHS plan of bringing care closer to home.

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

#### 4.1 Communication Programme

Communications have continued to be a priority for the IPC team in 2023/24.

The team have ensured that changes in national or local guidance, changes to policy, and lessons learned from outbreak investigations have been shared throughout the Trust and have worked closely with the communications team to ensure that this has happened in a timely manner. This has been through presentations at The Director of Nursing’s weekly meetings, teaching on wards, adding content to mandatory teaching sessions, and the creation of posters and process flow-charts.

The Director of Infection Prevention and Control and Director of Nursing also includes IPC related information in her column in the local newspaper, The Shropshire Star.

The IPC team continue to be part of the Trust’s Silver Command meeting, that have varied in frequency in line with the pressures experienced. Communications are sent out trust-wide following these meetings and signed off by the Medical Director, Director of Nursing or Chief Operating Officer.

Colleague alerts are also sent out to signal a change in practice.



In the past 12 months the IPC and Communications Teams have worked together to:

- To update patient information leaflets for common infections
- To share COVID, Measles and Pertussis (whooping cough) updates including policy change/SOP development
- Shared IPC improvement news and lessons learned following outbreak investigations.
- Shared findings from in depth analysis of C.diff cases
- Update the Trust website and intranet.
- Issue media statements during outbreaks.
- Support the annual flu vaccination campaign.

Table with comms messages related to IPC published throughout year 2023/24

Date	Topic
31 Mar 2023	Winter bulletin: facemasks in hospitals
11 April 2023	Updated Infections in staff, management
11 April 2023	Blood Borne Virus policy for the Management of Patients IPC Policy update
11 April 2023	Transmissible Spongiform Encephalopathy (TSE) IPC policy update
16 May 2023	MRSA policy update



26 May 2023	Changes to patient testing and face masks
25 May 2023	Colleague Message from your Assistant Chief Executive: The NHS steps down the Covid-19 Level 3 incident
22 May 2023	Changes to Covid testing from 22 May 2023
31 May 2023	Seasonal Respiratory Infections (including COVID-19 and Influenza)
16 June 2023	Spring bulletin: lifting of requirement to wear facemasks in clinical areas and waiting rooms
16 June 2023	Spring bulletin: IPC manual appendices with guidance on the wearing of FFP3 masks
20 June 2023	Measles vaccination status
24 July 2023	Diarrhoea and Vomiting including Norovirus Policy update
24 July 2023	ESBL and other Resistant Gram Negative IPC Policy update
24 July 2023	Hand Hygiene Policy update
24 July 2023	Streptococcal Infection Group A, C and G IPC Policy update
8 August 2023	Clostridium Difficile policy update
15 Sep 2023	Covid testing update
25 Sep 2023	Aspergillus policy update
25 Sep 2023	Operational use of COVID face mask stations - SOP
25 Sep 2023	Seasonal Respiratory Infections (including COVID-19 and Influenza) - IPC52
18 Oct 2023	Updated IPC guidance on Covid-19, 'flu and RSV
15 Nov 2023	Mask wearing update
8 Jan 2024	Measles
12 Jan 2024	Winter Bulletin: Think measles
6 Feb 2024	Measles Immunity Verification
22 Feb 2024	Managing Suspected / Confirmed Measles Including Exposure to Measles and other Rash Illnesses IPC Policy update
22 March 2024	Spring Bulletin Measles update

### **Attendance at Microbiology Journal Club**

A member of the IPC team attended the journal club for the microbiology staff in February 2024 to explain the role of the IPC nurse and to answer questions from the team.

### **Weekly Nursing, Midwifery, AHP & Facilities meetings**

The IPC team have a permanent section in agenda for weekly Nursing, Midwifery, AHP & Facilities meeting. Presentation with updates on all changes, lessons learnt from outbreaks and RCAs are discussed and shared with all attendees.





## Take your gloves off

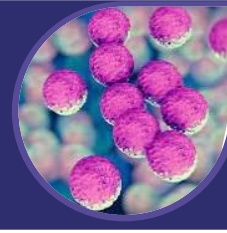


You do not need gloves when in contact with patient, such as holding their hands.

Correct hand hygiene before and after patient contact is the most effective way to prevent the spread of infection.

## MRSA bacteraemia lessons learnt

- Screen the patient as per policy. In this situation the screen at 36 weeks during pregnancy was missed
- The system used did not alert the need for screening – this is under review
- The raised temperatures did not trigger the sepsis screen – the document is under review (maternity)



## MRSA colonisation - lessons learnt



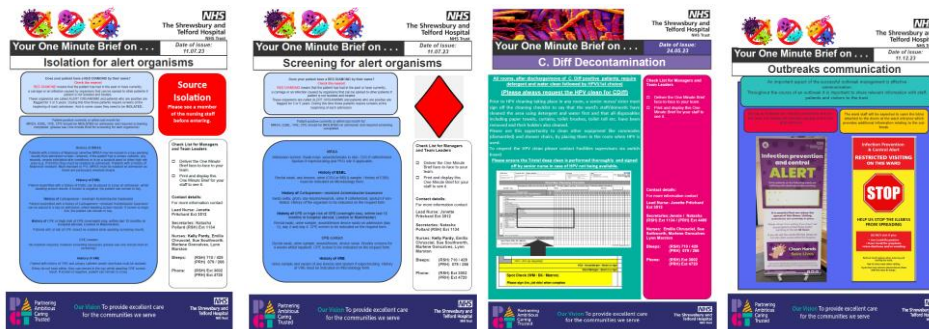
- Timely review of the screen results
- Isolation of the positive patient
- Appropriate treatment to be commenced immediately
- IPC care plan to be completed on the identification of the positive result
- Hand hygiene as per 5 moments
- PPE to be changed between patients

## One Minute Briefs

The IPC team have created and published number of One Minute Briefs through the year 2023/24.

The following topics have been raised:

- Isolation for alert organisms
- Screening for alert organisms
- Cdiff decontamination
- Outbreak communication



## 4.2 Trust Website and Information Leaflets

The Trust website also promotes the IPC information page for general IPC issues and guidance including link nurse information, information on MRSA, Clostridoides *difficile* and other organisms. This is also the media area to review a range of information leaflets on various organisms and access the regularly updated policies and guidance.





The following IPC patient and visitors' leaflets are available on Intranet:

- Clostridium difficile leaflet
- Clostridium difficile carrier leaflet
- Norovirus leaflet
- Reducing the Risk of Infection Whilst in Hospital
- Washing clothes patient leaflet
- A guide to MRSA
- MRSA Screening and Guidance leaflet
- Hand Hygiene
- Seasonal Flu
- CPE
- Vancomycin Resistant Enterococcus (VRE)
- Scabies
- Group A Streptococcal Infections
- Group B Streptococcus Infections
- A Guide to ESBL and other Multi Gram-Negative Organisms (MDRGNO)

The following Staff leaflets are also available on Intranet.

- How to take a Blood Culture
- MRSA guidelines for non-clinical staff
- Advice for bank and agency staff
- Estates and Contractors Leaflet

#### **Criterion 5:**

**Ensure prompt identification of people 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 other people.**

Infection Prevention Nurses are alerted of daily laboratory alert organisms.

The Trust has a policy for screening both elective and emergency patients for MRSA and a system is in place for monitoring compliance.

#### **5.1 Clinical Portal System/SEMA**

ICNET now updates the IPC team regarding patient alerts. Due to the constraints of the SEMA system ICNET was unable to add a patient flag on SEMA, therefore the IPC Team manually flag all patients, this remains the same on Care Flow, the new PAS system. The current list of flags that are used include: MRSA, C difficile, PVL toxin producing *Staphylococcus aureus*, extended spectrum beta-lactamase (ESBL), Vancomycin resistant enterococcus (VRE) or Carbapenemase producing multi-resistant Gram-Negative Bacilli, Flu, blood borne viruses, and COVID 19 cases and contacts.

These alerts produced a red diamond on the PSAG board on wards which enable ward staff and departments to promptly identify patients that have an active IPC alert, this allows the ward to isolate in a timely manner, follow-up patients appropriately and to prescribe appropriate empiric antibiotics if antibiotic treatment is indicated. Alerts were automatically added to clinical portal from SEMA, and now from Care Flow to ensure the information is available on all systems used.



In April 2024 the Trust will switch over to CareFlow EPR from SEMA, there are differences in the way that IPC alerts show on this system which has an impact on the visibility of IPC alerts to ward staff and other visiting members of the MDT. In addition, PSAG boards will be replaced with Flow boards which do not always show patient IPC alerts automatically. The IPC team will continue to work with the digital team in 2024/25 to find a design resolution to these issues with the software developers. In the interim staff have received training from the digital team on checking alerts by looking into each patient's record in preparedness for the switch over to CareFlow.

**5.2 Surgical Site Infection Surveillance (SSISS)**

Surgical site infection (SSI) is a healthcare-associated infection in which a wound infection occurs following a surgical Procedure. A National Surveillance System was established in England in 1997 through the Public Health England (PHE), which has now transferred its health protection functions into UK Health Security Agency (UKHSA) this continues with the same functions targeting different categories of surgical procedures that are relatively common or associated with relatively high risk of infection. Standardised definitions and monitoring systems enable the SSISS national centre to provide high quality comparative data, which is shared between hospitals.

Mandatory surveillance of surgical site infections began in 2004, specifying each Trust should conduct surveillance for at least one orthopaedic surgical category for one period in a financial year. The categories include total hip replacement, total knee replacement, repair of neck of femur, and reduction of long bone fracture. In addition to the orthopaedic surgery surveillance, there are 14 other categories, which can be reported. These are selected by using the 3-year surveillance programme which can be adapted if there are any concerns in a particular area.

The team collect local evidence of surgical site wound infections, which develop whilst the patient is in hospital and once discharged home. Data collection continues for 30 days postoperatively, (if an implant is present this can continue up to one year) and is followed up with a patient review using positive microbiology wound swab results, patient's readmissions due to wound healing problems, and the review of hospital follow up appointments.

Cases of identified SSIs are reviewed through a Root Cause Analysis (RCA). The definitions for a deep, superficial and organ space infection are described in the SSISS guidelines via UKHSA. An RCA ensures that a robust process is in place for the identification of any SSI and identifies where improvements can be made in clinical practice.

The table below shows a summary of Surveillance Carried out at SaTH during 2023-24.

Type of Surgery	Qtr	No. of Cases	No. Inpatient Readmission Infections (%)	National infection Rate	% Last 4 quarters	No. Eligible for post discharge/ review	Post Discharge infections
Neck of Femur RSH	1	96	2 (2.1%)	0.7%	1%	94	0
Neck of Femur PRH	1	67	0 (0%)	0.7%	0.7%	64	0



Abdominal Hysterectomy	1	49	0 (0%)	0.7%	0%	49	2
Gastric Surgery	1	32	0 (0%)	2.2%	0%	32	0
Total Hip Replacement	1	46	0 (0%)	0.3%	0.9%	44	0
Total Knee Replacement	1	23	0 (0%)	0.2%	0%	23	0
Neck of Femur RSH	2	84	3 (3.6%)	0.7%	1.6%	81	1
Neck of Femur PRH	2	64	0 (0%)	0.7%	0.4%	60	0
Breast Surgery	2	150	3 (2.0%)	0.5%	Not available	150	2
Total Hip Replacement	2	49	0 (0%)	0.3%	0%	49	0
Total Knee Replacement	2	46	0 (0%)	0.2%	0%	46	0
Abdominal Hysterectomy	2	38	1 (2.6%)	0.6%	0.6%	38	0
Neck of Femur RSH	3	106	1 (0.9%)	0.7%	1.8%	101	1
Neck of Femur PRH	3	73	0 (0%)	0.7%	0.4%	71	0
Long Bone RSH	3	75	3 (4%)	0.7%	1.7%	74	0
Long Bone PRH	3	62	0 (0%)	0.7%	0%	62	0
Total Hip Replacement	3	43	0 (0%)	0.3%	0%	43	0
Total Knee Replacement	3	23	0 (0%)	0.2%	0%	23	0
Abdominal Hysterectomy	3	52	0 (0%)	0.8%	0.6%	52	3
Neck of Femur RSH	4	Data not available until July 2024					
Vascular Surgery	4	Data not available until July 2024					



Abdominal Hysterectomy	4	
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We have reviewed 4 general categories over the year.

Gastric surgery: Reviewed for one quarter; 32 operations with no inpatient/readmission or post discharge infections.

Breast surgery: Reviewed for one quarter 150 operations with 3 readmission infections (2%) The national infection rate is 0.5%. Last 4 periods are unavailable. All 3 patients had several co-morbidities. All with a high BMI, signs of a surgical wound infection within the first 2 weeks of operation.

The breast care specialist nurses continue to collect data on post discharge infections. We will review this category of surgery during 2024.

Orthopaedic Categories:

Total Hip Replacement: Reviewed for 3 quarters, 138 operations with no surgical wound infections the national infection rate 0.3%.

Total Knee Replacement: Reviewed for 3 quarters, 92 operations with no wound infections. The national infection rate 0.2%.

Reduction of long bone was reviewed across SaTH for one quarter, PRH site we had no inpatient/readmission infections in 62 operations. Paediatrics was also reviewed which included children 15 years and under, no infections in 43 operations.

RSH site we had 3 infections in 75 operations a 4% infection rate. This is much higher than the national infection rate of 0.7%. The last 4 periods our infection rate was 1.7%. We received a high outlier letter from UKHSA. An RCA was carried out on the 3 patients, two readmissions and one inpatient infection, 2 were deep and the other superficial. Two had MSSA in deep tissue microbiology swabs, all given the appropriate antibiotic cover and skin decontamination. All had high BMI's and several co-morbidities, no operating theatre staff were the same.

### 5.3 Managing Outbreaks of Infection - Responses to Incidents and Outbreaks

The IPC Team are involved in the management of outbreaks, periods of increased incidence and incidents.

The IPC team monitors all alert organisms to identify trends and potential links between cases based on their location and time frame. If links are identified, a Period of Increased Incidence (PII) investigation is commenced and a meeting to discuss potential cases is held within 3 working days wherever possible. Since August 2021, the ICNET system has alerted us to PIIs and allow the IPC nurses to carry out rapid investigations and potentially trigger outbreak investigations.

In 2023/24 15 non-COVID PIIs were identified and investigated as potential outbreaks, following typing only 6 were confirmed as outbreaks.

In 2023/24 66 COVID outbreaks were identified and managed compared to 108 COVID outbreaks in 2022/23.

All outbreaks are discussed for the purpose of shared learning and service development through divisional governance meetings. Recurring themes from these investigations are disseminated through the IPC operational and assurance committees. Lessons learnt are shared with the trust and disseminated through communications.



Action plans that are put in place by the ward manager and/or matron are monitored by the IPC team for compliance, once compliance has been demonstrated the action plans are signed off by the lead nurse or Infection Prevention and Control and the Matron or Head of Nursing for the area.

If further PIIs are linked to the same area, previous action plans are revisited.

## COVID 19

PRH					
Ward	Month/Year	Date first case	Number of pts	Number of staff	Total involved
Renal PRH	April 2023	10.04.23	14	2	16
Ward 7	April 2023	29.03.23	3	0	3
Ward 4	May 2023	24.04.23	9	7	16
Ward 7	June 2023	02.06.23	3	0	3
Ward 10	August 2023	24.08.23	3	0	3
Ward 7	September 2023	01.09.23	2	0	2
Ward 7	September 2023	25.09.23	5	6	11
Ward 9	September 2023	01.09.23	4	0	4
Ward 9	September 2023	28.09.23	2	0	2
Ward 6	September 2023	07.09.23	3	0	3
Ward 6	September 2023	12.09.23	3	0	3
Ward 10	October 2023	09.10.23	18	0	18
Ward 16	October 2023	09.10.23	4	0	4
Ward 17	October 2023	09.10.23	4	0	4
Ward 10	November 2023	10.11.23	4	0	4
Ward 6	December 2023	19.12.2023	8	0	8
Day Ward	December 2023	20.12.23	2	0	2
Ward 11	January 2024	15.01.24	4	1	5
Ward 4	January 2024	18.01.24	4	0	4
Day Ward	January 2024	16.01.24	2	0	2
Ward 10	March 2024	12.03.24	13	0	13
Ward 11	March 2024	14.03.24	2	0	2
Ward 11	March 2024	14.03.24	9	1	10
Ward 6	March 2024	27.03.24	3	0	3
Day Ward	March 2024	28.03.24	5	0	5
RSH					
Ward	Month/Year	Date first case	Number of pts	Number of staff	Total involved
Ward 27	April 2023	04.04.23	3	0	3
Ward 27	April 2023	19.04.23	6	0	6
Ward 28	April 2023	19.04.23	14	0	14
Ward 35	April 2023	24.04.23	3	0	3
Ward 22SS	May 2023	02.05.23	2	0	2
Ward 27		05.05.23	9	0	9
Ward 28		09.05.23	9	0	9
Ward 35		03.05.23	2	0	2
Ward 18		10.05.23	2	0	2
Ward 35	June 2023	05.06.23	2	0	2
Ward 26		09.06.23	2	0	2
Ward 28		09.06.23	4	0	4
Ward 26	July 2023	17.07.23	6	1	7
Ward 24		17.07.23	5	2	7
Ward 25		07.07.23	11	4	15
Ward 18		20.07.23	2	0	2
Ward 27		18.07.23	5	0	5
Ward 23	August 2023	14.08.23	8	0	8



Ward 26		15.08.23	16	0	16
Ward 18	September 2023	11.09.23	2	0	2
Ward 22 SS		06.09.23	4	0	4
Ward 27		07.09.23	3	0	3
Ward 28		19.09.23	4	0	4
Ward 23		18.09.23	13	5	18
Ward 24		15.09.23	13	10	23
Ward 27		29.09.23	6	0	6
Ward 26	November 2023	01.11.23	3	0	3
Ward 27		07.11.23	3	0	3
Ward 26		24.11.23	2	0	2
Ward 28		21.11.23	8	0	8
Ward 25	December 2023	07.12.23	2	0	2
Ward 27		13.12.23	2	0	2
AMA	January 2024	09.01.24	3	0	3
Ward 32		09.01.24	5	1	6
Ward 24		19.01.24	2	0	2
Ward 23		22.01.24	13	4	17
Ward 27		23.01.24	7	0	7
Ward 28		28.01.24	2	0	2
Ward 25	February 2024	29.02.24	7	0	7
Ward 29	March 2024	04.03.24	3	0	3
Ward 26		12.03.24	5	0	5

## Other Organisms

PRH					
Ward	Month	Organism	No. of cases	Typing results	Outcome
Ward 11	August 2023	C diff	3	1 <sup>st</sup> case – CE (015) 2 <sup>nd</sup> case – CE (0137) 3 <sup>rd</sup> case – CE (174)	PII
Ward 23NNU	September 2023	Serratia	3	Samples from the 2 of the patients were not sent for typing. Unable to exclude the possibility of not being an outbreak hence was considered and investigated as an outbreak.	Outbreak
Ward 11	December 2023	C diff	2	1 <sup>st</sup> case CE (002), 2 <sup>nd</sup> case CE (026)	PII
Ward 9	December 2023	C diff	2	1 <sup>st</sup> case CE (014) 2 <sup>nd</sup> case CE (020)	PII
Ward 4	February 2024	C diff	2	Both cases were type 005	Outbreak
Ward 9	February 2024	C diff	3	All 3 cases were type 020	Outbreak
RSH					
Ward	Month	Organism	No. of cases	Typing results	Outcome
Ward 27	May 2023	C diff	3	1 <sup>st</sup> case CE (002), 2 <sup>nd</sup> case CE (015) 3 <sup>rd</sup> case CE (029)	PII
Ward 37	August 2023	C diff	3	1 <sup>st</sup> case CE (198) 2 <sup>nd</sup> case CE (078) 3 <sup>rd</sup> case sample has not been typed, hence	Outbreak



				considered, and investigated as an outbreak.	
Ward 26	August 2023	C diff	5	1 <sup>st</sup> case CE (001 on 03.07.23 and 002 on 25.08.23) 2 <sup>nd</sup> case CE (198) 3 <sup>rd</sup> case CE (014) 4 <sup>th</sup> case CE (002) 5 <sup>th</sup> case CE (002)	Outbreak
Ward 22SS	October 2023	C diff	2	1 <sup>st</sup> case CE (002) 2 <sup>nd</sup> case not typed.	PII
Ward 24	October 2023	C diff	2	1 <sup>st</sup> case CE (020) 2 <sup>nd</sup> case CE (163)	PII
Ward 25	November 2023	C diff	2	1 <sup>st</sup> case CE (003), 2 <sup>nd</sup> case CE (150)	PII
Ward 18	December 2023	C diff	2	1 <sup>st</sup> case CE (020) 2 <sup>nd</sup> case CE (011)	PII
SAU	January 2024	C diff	2	1 <sup>st</sup> case CE (081) 2 <sup>nd</sup> case CE (015)	PII
Ward 37	February 2024	VRE	3	The samples were sent for typing and found to be linked.	Outbreak

### Serratia outbreak ward 23NNU

An outbreak of Serratia Marcescens outbreak was identified in September 2023, affecting 3 babies (This was declared an outbreak and an SI as 1 child involved unfortunately died.

The below are the issues identified and the actions to rectify those issue

Issue		Action
Disposal of Breast milk/ Formula/ Enteral feeds	Milk being disposed of into sinks, provides nutrients to organisms in the drains which proliferate	Staff education and signage at all sinks/basins not to dispose of anything down the drain
Integral baby bath basins	Not compliant with any guidance, design of the basin/tap doesn't adequately control splashback from the drain	Removed entirely
Water	Serratia found in drains of some sinks and also fresh water samples from baby bath taps in 2 bays	Taps and pipework replaced until water samples clear of Serratia conformed by retesting
Ventilators	All ventilators set up with circuits ready for use, circuits broken twice daily to check. Not dated or changed on a schedule, not stripped on discharge if not used leading to introduction of contamination into a sterile circuit.	Maximum of 2 vents to be set up in case of emergency. Not to be stored in the bed space, circuits must not be broken to check, circuits must be dated and changed weekly, if





		ventilator not used then must be stripped down.
Identification & reporting of the outbreak	Outbreak was not declared when the results of the first 2 cases (twins) were available. Definition of an outbreak is 2 cases linked in time and place.	Alert created in ICNET for Serratia
Parent information and education	Information given to parents needed to be readdressed as lapses in information given re basic IPC precautions including hand hygiene	NNU team have reviewed parent information and education
Sterilisation of bottles etc.	Unit was using Milton to sterilise, when up to date guidance advices microwave sterilisation	Moved to microwave sterilisation.
Cleanliness of equipment and environment	Lapses in cleanliness of the equipment and patient environment	Senior nurse on NNU must sign off cleaning checklists daily to assure of cleaning standards

An NHSE/ICB review of NNU in light of this outbreak reported that the Trust demonstrated a strong commitment to IPC, and follow-up support was offered to ensure continuous improvement.

No further cases were identified.



## Criterion 6:

Systems 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.

At the Trust, Infection Prevention responsibilities and expectations are included in all job descriptions. All clinical staff must complete a Trust Induction that includes IPC training as well as regular updates at Level 1 &/or 2 depending on staff group. The IPC team provides bespoke training for different groups including on the Ward Transition Programme for international nurse recruits. Training is also provided as part of the Ward Readiness Programme for new HCAs. There are leaflets for contractors explaining their responsibilities (recently updated March 2024) and external work must be signed off by the IPC team with Estates to ensure appropriate cross infection measures are in place, such as, dust control.

### 6.1 Staff Training & Education

Face to face statutory training sessions have been reintroduced in April 2023 and include the FY1 inductions. However, due to large number of staff members with outstanding statutory training the IPC module can still be completed via online learning (LMS).

The table below shows the average compliance by staff group for all levels of IPC training and Hand Hygiene competence as of end of April 2024.

Staff Group	Infection Prevention & Control	Hand Hygiene Competence
Add Prof Scientific and Technic	75.0%	75.18%
Additional Clinical Services	81.87%	78.82%
Administrative and Clerical	88.51%	69.77%
Allied Health Professionals	90.4%	78.75%
Estates and Ancillary	92.61%	92.14%
Healthcare Scientists	85.64%	60.42%
Nursing and Midwifery Registered	89.89%	83.48%
Medical and Dental	82.48%	46.88%
Students	100%	66.67%
<b>Subject Total</b>		

For those areas who fall below the Trust's target of 95% compliant with any area of mandatory training, is managed within the division as per the respective policy. Through review of training records a gap has been identified in the assurance gained from certain divisions through the IPC governance route. In 24/25, we aim to remedy this gap and provide assurance through the appropriate governance channels and increase compliance.

The IPC team continue to complete quality ward walks and take part in exemplar assessments to identify lack in knowledge within staff groups and take this opportunity to deliver short educational discussions. The increased prevalence of c diff cases and gaps in knowledge identified during root cause analysis investigations, have led to short support sessions being offered to wards. Improved hand hygiene assessor training and provision of face-to-face education both within departments and planned education sessions (nursing and medical teams) continue to be delivered to address basic Infection Prevention education.

### 6.2 Infection Prevention and Control Team/Team Development

In February 2024 a new band 6 joined the team and is reviewing/ completing IPC competencies and has started to attend the Marian Reed development programme 2024.



One band 7 has started an MSc in Infection Prevention & Control in January 2024. The other band 7 is finishing BSc in Infection Prevention & Control at the University of Dundee.

## Criterion 7: Provide or secure adequate isolation facilities

The average proportion of single rooms available in NHS acute trusts in England in 2016/17 was 30.2%. The average for single rooms with en-suite was 20.7% (Public Health England).

SaTHf are significantly below the national average; 20% of all beds are in single rooms, 17% if the more modern Women's and Children's Centre building is excluded. Single rooms with en-suite facilities account for 10% of all beds but only 5% when the Women & Children's centre is excluded. This significantly impacts the ability to isolate all patients who should be isolated according to national guidelines. Therefore, when side room capacity is low, a risk assessment is completed to assist with decision making.

This risk assessment tool is available to help staff in making these decisions and ensuring that practice is consistent. The IPC team work closely with ward staff and Clinical Site Managers, including attendance at twice-daily meetings, to ensure the most effective use of side rooms according to risk assessment.

As a mitigation for the lack of side rooms the Redi-rooms procured during 2020 & 2022 remain in use and are utilised for infections other than Covid-19 that require isolation. The Rediroom is a mobile "pop up" isolation facility with a Hepa filter, which fits into a bed space. One can be accommodated per bay (except some bays in PRH as they are smaller). These are still being used on daily basis to facilitate and increase isolation capacity.

The Trust bioquell pods comprise four in RSH ITU and two in PRH ITU plus four on Ward 24 respiratory RSH.



**Ward 24**

Covid variants continue to appear, leading to outbreaks amongst patients and, sometimes, staff. Improving air quality may prevent outbreaks and/or reduce the length and number of patients affected by an outbreak.

For wards & ED departments where it is not possible to make any modifications to the existing ventilation system, or where mechanical ventilation is not provided, the portable AIRQON COMBI-



1200 HEPA and UV-C air purification systems continue to be used to improve air quality and maintain patient safety, by preventing further outbreaks of COVID-19 and other respiratory infections. These units are often deployed to outbreak areas to improve the air quality and reduce the length of an outbreak.

In total the Trust now has 23 mobile air purification units available to be used; eleven at RSH and twelve at PRH.



#### **Criterion 8: Secure adequate access to laboratory support as appropriate.**

Laboratory services for SaTH are located in the purpose-built Pathology Laboratory on-site at both sites (Royal Shrewsbury Hospital & Princess Royal Hospital). The Microbiology Laboratory has full Clinical Pathology Accreditation (CPA).

Due to a series of unfortunate events and loss of key members of staff the microbiology consultant team was reduced to, at its worst, to 2.5 WTE consultants. The team is now being rebuilt with the recruitment and addition of 3 clinical scientists and the prospect of a further fulltime recruitment later in the year. The microbiologist team intends to resume physical presence ICU ward rounds etc at PRH site in the near future.

#### **Criterion 9: Have and adhere to policies, designed for the individual's care and provider organisations that help to prevent and control infections.**

The IPC team has a rolling programme that highlights policies that require updating each year so that they are in line with the annual reviews and overarching Trust Governance policy. This policy outlines the requirement for the responsibility, auditing, and monitoring of IPC policies to provide assurance that they are being adhered to and are compliant with changes. Both policy and manual are available for staff to view on the Trust intranet.

The IPC team ensure the patient and staff information leaflets are also amended in line with the policy updates and are available on the Trust internet. In addition, policies are updated prior to review date if national guidance changes to ensure the Trust is in line with those amendments.

In 2023/24 the team reviewed and updated the following IPC policies:

- Influenza Seasonal Flu merged into a complete seasonal Respiratory Infections Policy



- IPC Diarrhoea and Vomiting including Norovirus Management of Affected Patients and Staff Policy
- ESBL and other resistant gram-negative organisms Policy
- IPC arrangements and responsibilities
- IPC C Diff Policy
- Managing suspected/confirmed Measles, including exposure to measles and other rash illnesses.
- VRE Policy
- Aspergillus and Norcardia policy
- Management of patients with a blood borne virus policy
- Infection in staff - management infections in staff
- CPE policy
- Streptococcal infection group A,C and G policy
- Hand Hygiene Policy
- Standard Precautions
- TSE policy

An Infection Prevention & Control A-Z of Common Infections is available on the trust's intranet which has been updated to reflect the amendments to the policies highlighted above. This significantly enhances the quick location of key infection prevention guidance by our front-line staff regarding common infections and has been promoted as part of the IPC face to face training.

**Criterion 10:  
Providers have a system in place to manage the occupational health needs of staff in relation to infection.**

The Trust has a contract with TP Occupational Health who are contracted to carry out preplacement health assessment and immunisation needs.

TP Occupational Health working alongside the Workforce Team is responsible for the staff Influenza and COVID-19 vaccination program. All front-line staff have been offered influenza and COVID-19 vaccinations to protect themselves and the patient they look after.

**10.1 Safer Sharps Directive**

The Trust requires that all sharps are disposed of in dedicated SharpSmart bins which are widely available. Wheeled bins are taken to the point of the procedure to prevent unnecessarily walking with dirty sharps.

Staff are required to complete the SharpSmart e-Learning package for which departmental compliance is monitored through the H&S policy compliance audits.

Sharps incidents and near misses are reported through Datix which are then investigated by the H&S Team to ensure that staff receive the appropriate follow-up care, are reminded of safer sharps features where appropriate and opportunities for improvement to work practices are taken. These are collectively reported on a quarterly basis to the IPC Operational Committee and HSSF.

**Dirty Sharps Injuries per 100,000 Bed Days FY 2023-24 -SATH NHS Trust starting 1/4/23**



<b>Incidents reported</b>	<b>Q1 2023_24</b>	<b>Q2 2023_24</b>	<b>Q3 2023_24</b>	<b>Q4 2023_24</b>	<b>Totals</b>
Dirty sharps injuries	38	27	32	37	134
Blood/ body fluids contact with eyes/nose/mouth/ broken skin	6	9	9	8	32
Inappropriate disposal of sharps not leading to injury	2	14	11	8	35
<b>Totals</b>	<b>46</b>	<b>50</b>	<b>52</b>	<b>53</b>	<b>201</b>

<b>Rates per 100,000 bed-days</b>	<b>Q1 2023_24</b>	<b>Q2 2023_24</b>	<b>Q3 2023_24</b>	<b>Q4 2023_24</b>	<b>Year</b>
Dirty sharps injuries	54.9	40.1	44.8	50.9	47.7
Blood/ body fluids to eyes/nose/mouth/ broken skin	8.7	13.4	12.6	11.0	11.4

There were 3 RIDDOR reportable injuries,

2 sharps injuries from one green eclipse needle, themes from investigation include rushing as patient was aggressive and shouting, patients had a bloodborne virus.

One involved a discarded standard insulin needle, the source patient had a bloodborne virus

One splash to face during ABG due to cap not being attached to syringe problem/ squirt to ceiling, no visor was worn Th source patient had a bloodborne virus.

As a result, alternative stocks are now in use of syringe caps to prevent recurrence.

No occupational infections resulted. All were protected by post-exposure protocols including source bloods.

Throughout the year standard insulin needles were a problem and wards were reminded that patients self-administering medications must be risk assessed and have sharps bins to hand via Datix report follow-ups.



## SECTION 5: IPC FOCUS FOR 2024-2025

Infection Prevention & Control (IPC) is a top priority for The Shrewsbury and Telford Hospital (SaTH). Ensuring patient safety from avoidable harm is a collective responsibility. Our focus for 2024/25 includes:

- Reducing the incidence of *Clostridioides difficile* infection at SaTH through a collaborative health economy approach involving surveillance, best practice implementation, auditing, and root cause analysis. A deep dive event will be held in April 2024 around the 5 key themes identified in the main body of the report.
- Training programme for IPC, HH and PPE.
- Reviewing environmental decontamination practices. Due to the Trust's high occupancy rates (90%+), it is challenging to perform HPV terminal cleaning in certain areas.
- Continuing campaigns and educational initiatives to remind staff to wash hands with soap and water after caring for patients with diarrhoea and/or vomiting.
- Ongoing efforts related to COVID-19, using the latest IPC guidance to address and rectify compliance gaps. This will be monitored through the Board Assurance Framework with regular updates presented to the Trust Board.
- Encouraging microbiologists to tighten antibiotic prescribing practices, particularly regarding the use of Tazocin for conditions such as community-acquired pneumonia (CAP) and lower urinary tract infections.
- Continuing efforts to reduce device-related healthcare-associated infections (HCAIs).
- Ensuring compliance with all core IPC standards.
- Utilising the published NHS IPC Board Assurance Framework to address all guidance and risks associated with complex problems and promptly act on compliance gaps. This will be presented at the IPC Operational Group and IPC Assurance Committee and included in a Quarterly IPC Report to the Trust Board.





## SECTION 6: CONCLUSION

Overall, our success is measured by our compliance with the Health Act, which encompasses all aspects of infection prevention and control, including management systems, environment, cleaning, training, and policies to protect patients and staff. Our current compliance is very high at 97% an increase on 3% on last year. Outstanding issues include clinical engagement at antimicrobial stewardship committee meetings. Low levels of isolation facilities remain a constant issue.

We have also completed 91% of our IPC program from last year. Incomplete tasks will be addressed in the first three months of the 2024/25 programme.

C diff levels remain a concern and the exact cause is unclear but similar rises have been observed both nationally and regionally. In part it probably reflects the reduction in patients in hospital during covid and also the change in case mix. However, this recent large increase is a cause for concern and we have developed an action plan to counter it.

### Summary of compliance

Health and Social Care Act 2008: code of practice on the prevention and control of infections and related guidance				
Self-Assessment Tool				
Shrewsbury and Telford Hospitals NHS Trust				
Criterion	Statement of Compliance	Compliance Score	Score	Potential Score
<b>Criterion 1</b>	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 that their environment an other users may pose to them.	95%	120	126
<b>Criterion 2</b>	Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections.	93%	75	81
<b>Criterion 3</b>	Ensure appropriate antimicrobial use and stewardship to optimise service user outcomes and to reduce the risk of adverse events and antimicrobial resistance.	79%	19	24
<b>Criterion 4</b>	Provide suitable accurate information on infections to service users, their visitors and any person concerned with providing further health and social care support or nursing/ medical care in a timely fashion.	100%	66	66



<b>Criterion 5</b>	Ensure that people who have or 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.	100%	6	6
<b>Criterion 6</b>	Systems 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.	100%	18	18
<b>Criterion 7</b>	Provide or secure adequate isolation facilities.	92%	11	12
<b>Criterion 8</b>	Secure adequate access to laboratory support as appropriate.	100%	15	15
<b>Criterion 9</b>	The service provider should have and adhere to policies designed for the individual's care, and provider organisations that will help to prevent and control infections.	99%	405	408
<b>Criterion 10</b>	The registered provider will have a system or process in place to manage health and care worker health and wellbeing and organisational obligation to manage infection, prevention and control.	100%	48	48
<b>Total Compliance</b>		<b>97%</b>	<b>783</b>	<b>804</b>

## SECTION 7: REFERENCE

Department of Health: The Health and Social Care Act 2008 (Revised Dec 2022): Code of Practice on the prevention and control of infections and related guidance.

<https://www.gov.uk/government/publications/the-health-and-social-care-act-2008-code-of-practice-on-the-prevention-and-control-of-infections-and-related-guidance>

Department of Health: Improving outcomes and supporting transparency

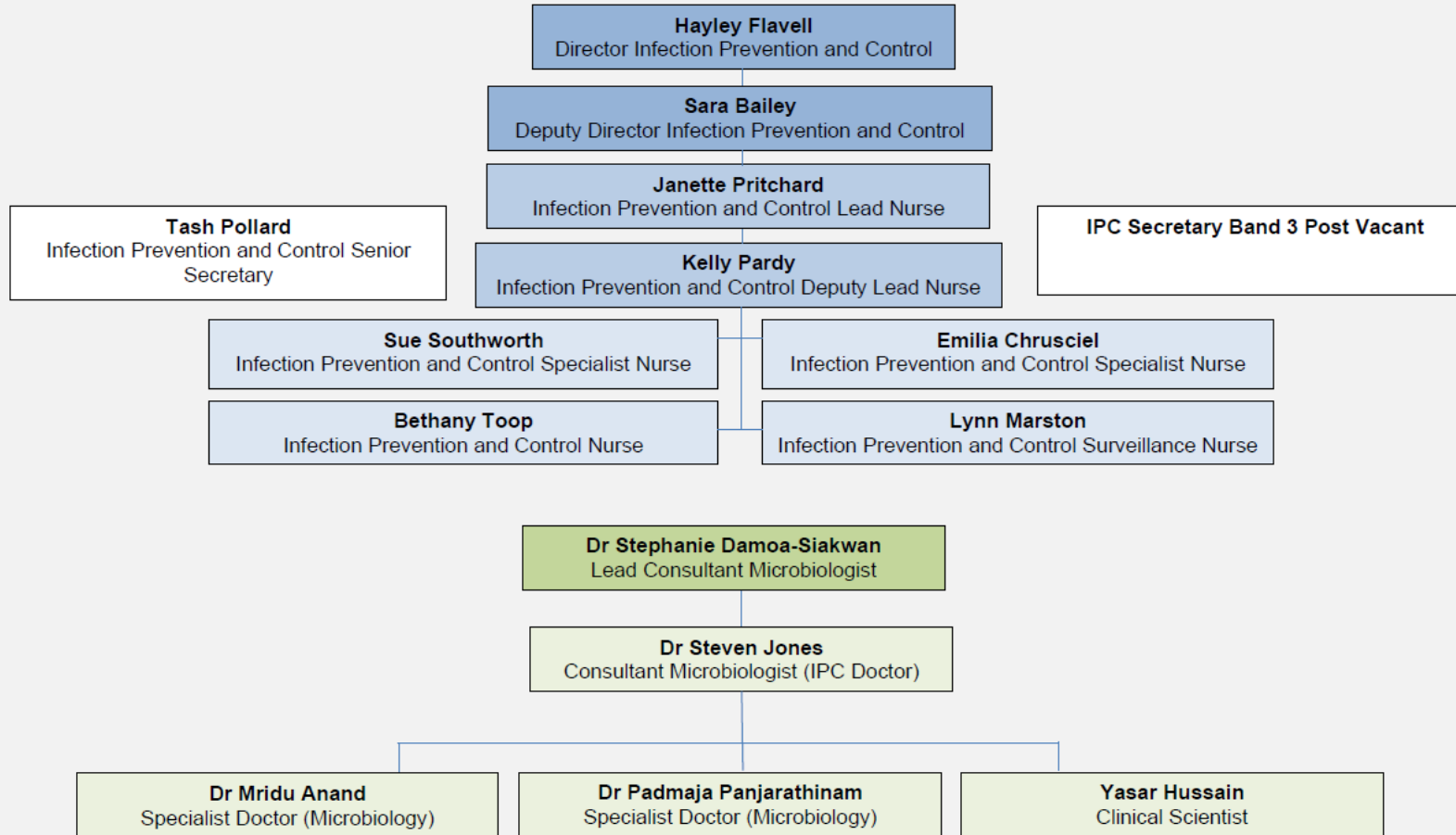
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/545605/PHOF\\_Part\\_2.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/545605/PHOF_Part_2.pdf)

Infection Prevention Society Audit tools. <http://www.ips.uk.net/professional-practice/quality-improvement-tools/quality-improvement-tools/>



**Appendix 1: Infection Prevention and Control Structure**

**Infection Prevention and Control Team 2023/24**



Revised June 24

We have had reduced secretarial support since April 2023, our fulltime senior secretary was seconded to corporate nursing and we were unable to replace her. This has significantly impacted the workload for our remaining secretary.

The team is behind on flagging infections for community patients, posing a risk as patients with alert organisms may enter the hospital without staff being aware, causing a risk to both patients and staff. Additionally, we are delayed in sending letters to GPs to inform them of their patients' results, some of which require treatment. There are also delays in checking blood-borne viruses with the consultant microbiologist to determine if they need to be flagged on the PAS system, risking unawareness of such conditions among incoming patients. Furthermore, there are delays in identifying if an RCA is needed for patients with bacteraemia's, and we are unable to update the internet page regularly.



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