



INFECTION PREVENTION AND CONTROL

DIRECTOR OF INFECTION PREVENTION AND CONTROL

ANNUAL REPORT

April 2022 - March 2023

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DIPC Annual Report 2022 / 2023

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EXECUTIVE SUMMARY

- Alison Wootton took over as DIPC for YDH in April 2022, pre the formal merger this role was covered under an honorary contract to YDH as substantive post held in SFT.
- There were 0 Trust attributed Methicillin Resistant *Staphylococcus aureus* (MRSA) bloodstream infections in 2022/23, compared to 1 the previous year. The Trust has one of the lowest rates in the region.
- There were 23 Trust attributed Methicillin Sensitive *Staphylococcus aureus* (MSSA) bloodstream infections compared with 12 cases the previous year.
- There were 15 Trust apportioned cases of *Clostridioides difficile* infection. The Trust has the lowest rate in the region.
- There were 43 Trust attributed E.coli bloodstream infections, compared to 25 in the previous year.
- There were 9 Trust attributed *Klebsiella species* bloodstream infections, compared to 6 in the previous year.
- There were 9 Trust attributed *Pseudomonas aeruginosa* bloodstream infections, compared to 3 in the previous year.
- There was an outbreak of Carbapenemase Producing Organisms (CPO) during the period of this report.
- There was one norovirus outbreaks in 2022/23, a lower number than would normally be seen
- There were 6 outbreaks of influenza, affecting 43 patients
- There were 20 inpatient ward outbreaks of COVID-19 affecting 109 patients
- Hand Hygiene Trust wide compliance remained good at 94%.

1 INTRODUCTION

The purpose of this report is to inform the public, staff, the Trust Board, and Commissioners of:

- Infection Prevention and Control management arrangements within the Trust
- Incidents of Health Care Associated Infection (HCAI) within the Trust in 2022/23 and progress against performance targets.

2 INFECTION PREVENTION AND CONTROL ARRANGEMENTS

2.1 Infection Prevention and Control (IP&C) team

Infection Prevention and Control (IPC) and Tissue Viability currently sit within one team in the Trust. This report is confined to the infection prevention and control arrangements and output from the service. The Infection Prevention and Control (IPC) team provide specialist advice on matters relating to the identification, prevention, and management of infection within the Trust.

The current structure of the team is set out below. The Deputy Chief Nurse is the Director of Infection Prevention and Control (DIPC) and reports directly to the Chief Executive for this part of their role.

Current substantive Infection Prevention and Control team Structure (integrated team for Acute, Community and Mental Health services):

-	Director of Infection Prevention and Control (Deputy Chief
	Nurse at SFT, honorary contract covering role as DIPC at
	YDH)

-	Infection Control Doctor

-	Consultant Nurse IPC	0.5 wte
-	Senior Infection Control Nurse (Band 7)	1.0 wte
-	Infection Control Nurse (Band 6)	1.0 wte
-	Administration Officer (Band 4)	0.5 wte

In addition to the Infection Control Doctor sessions, the other Consultant Medical Microbiologists provide an out of hours infection control advice service via the microbiology on call arrangements.

2.2 Infection Prevention and Control Committee (ICC)

Ahead of the planned merger between Somerset Foundation Trust and Yeovil District Hospital, the Infection Control Committees for each Trust joined from July 2022 as an Infection Control Committee in Common. The Infection Control Committee in common meets monthly. Membership of the committee includes:

- Director of Infection Prevention and Control / Deputy Chief Nurse (Chair)
- Deputy Chief Medical Officer
- Infection Control Doctor

- Lead Nurse, IPC Team Somerset Foundation Trust
- Consultant Nurse IPC Team Yeovil District Hospital
- Infection Control Nurses
- Associate Director of Integrated Governance
- Associate Directors of Patient Care (or deputy) for each Directorate
- Director of Estates and Facilities or deputy
- Decontamination Lead
- Consultant Antimicrobial Pharmacist
- Local Health Protection Team representation

The key purpose of this group is to:

- Monitor the IP&C arrangements, HCAI rates and incidents within the Trust, including compliance with the Health Act 2008, Code of Practice for the Prevention and Control of HCAI.
- Ensure appropriate action plans are in place to address areas of concern and monitor progress.
- Provide assurance to Trust Board and highlight any serious risks, problems or hazards relating to Infection Prevention and Control.
- Monitor the work of short-term working groups set up to address specific IPC challenges.

3 HEALTH CARE ASSOCIATED INFECTIONS STATISTICS AND SURVEILLANCE

3.1 Annual HCAI Surveillance Programme

The Infection Prevention and Control team completed an annual programme of HCAI surveillance. This includes daily 'alert organism' surveillance, with follow up of individual patients to ensure safe and appropriate infection control precautions are in place. The data is also used to monitor the number of cases over time and identify clusters / outbreaks of infection and ensure appropriate action is taken.

It is a mandatory requirement for English NHS Acute Trusts to report Methicillin Resistant *Staphylococcus aureus* (MRSA), Methicillin Sensitive *Staphylococcus aureus*, *Escherichia coli* (E.coli), *Klebsiella, Pseudomonas aeruginosa* bloodstream infections and *Clostridioides difficile* Infections (CDIs) to the Department of Health via the HCAI Data Capture system, hosted by UK Health Security Agency. Thresholds for the mandatory reportable HCAIs are set for each Trust by NHS England. These were released at the end of April 2022.

3.2 Post Infection Review

For several years, post infection reviews (PIRs) have been undertaken on Trust attributed cases of the mandatory reportable HCAIs. During the period of this report this process was reviewed and changed. PIRs were originally introduced nationally during the mid-2000s in the form of a root cause analysis, in response to high levels of MRSA bloodstream infections

in UK hospitals. They gradually developed into a post-infection review and were mandated for MRSA BSIs until 2014.

When thresholds for C difficile infection were introduced in 2014, commissioners had the authority to apply financial sanctions to acute trusts for any case over threshold where a contributory lapse in care was identified. The PIR became the method of assessing lapses in care. Across Somerset, over time the use of the PIRs has evolved and was applied to all the mandatory reportable HCAIs. Within the new HCAI objectives the use of financial sanctions linked to contributory lapses in care has been removed and there is no mandatory national requirement to routinely undertake PIRs.

The purpose of a PIR is to determine the source of infection and identify any learning or actions to reduce the risk of future similar cases. However, for some time very few new themes or areas of learning have emerged and focusing on the investigation was not reducing the numbers of HCAIs or improving patient care. As a trust a review was instigated which was extended to include the Integrated Care Board, the regional infection control team, and Yeovil District Hospital. Routine PIRs were subsequently stopped from August 2022. The process of reviewing HCAIs now involves a shorted review of identifying the likely source plus collecting of risk factors to inform theme analysis. This is then used to direct improvement programmes.

3.3 Staphylococcus aureus Blood Stream Infections

Staphylococcus aureus (S.aureus) is a bacterium that commonly colonises human skin and mucosa without causing any problems. However, if the bacterium enters the body, for example via a break in the skin or a medical procedure, it can cause disease, including blood stream infections (BSIs). Most strains of *S.aureus* are sensitive to the more commonly used antibiotics and infections can be effectively treated. These are termed Methicillin Sensitive *Staphylococcus aureus* (MSSA). Other strains are resistant to many antibiotics and treatment may be harder; these are termed Methicillin Resistant *Staphylococcus aureus* (MRSA).

A Trust attributed BSI is one where the blood culture was taken on the 3rd day or later following the admission date which is counted as day one.

3.2.1 Methicillin Resistant *Staphylococcus aureus (MRSA)* BSIs

There were 0 Trust attributed MRSA BSI cases in 2022/23, compared to 1 case in the previous year. The Trust has the lowest rate of MRSA BSI in the region.

3.2.2 Methicillin Sensitive Staphylococcus aureus (MSSA) BSIs

In 2022/23 the Trust had 23 Trust attributed MSSA bloodstream infection cases, a significant increase to the 12 cases identified in the previous year. The Trust rate of MSSA BSIs is 16.02 cases per 100,000 occupied bed days which is higher than the national rate (13.22) but slightly below the regional rate (16.61).

3.3 *Clostridioides difficile* Infection

Clostridioides difficile Infection (CDI), formally known as *Clostridium difficile*, is a disease that can cause diarrhoea and colitis and can be life threatening. CDI is mainly a complication of antibiotic therapy, particularly affecting the frail and elderly who have been prescribed broad spectrum antibiotics. CDI has been linked to serious outbreaks in hospital.

A CDI case is defined as those detected by a combination of two tests: a glutamate dehydrogenase (GDH) test and a toxin enzyme immunoassay test. In addition, polymerase chain reaction (PCR) testing is carried out to help identify patients who may be carriers. Patients with CDI and those identified as carriers are cared for in side-rooms to prevent cross transmission to vulnerable patients.

In 2022/23 the Trust had 15 Trust apportioned cases. This comprised of 7 Hospital Onset Healthcare Associated cases (HOHAs) where the specimen was taken on day 3 or later following admission and 8 Community Onset Healthcare Associated cases (COHAs), where the specimen is taken in the community or within 2 days of admission **and** the patient had been an inpatient in the Trust in the previous 28 days.

The Trust rate is 9.91 cases per 100,000 occupied bed days which is lower than the national rate of 23.47 and lower than the regional rate of 26.99. As a Trust Yeovil has the lowest rate of CDI in the region.

3.3.1 Period of Increased Incidence of CDI

A Period of Increased Incidence (PII) is defined as two or more Trust attributed CDI cases where the specimen was taken on the same ward within a 28-day period (Dept. of Health 2008). When this occurs a standard set of actions are put in place including environmental and isolation practice audits, together with weekly antimicrobial review of all patients on the ward. During the period covered by this report there were no PII in the Trust.

3.4 Gram-Negative Bloodstream Infections

The NHS Long Term Plan supports a 50% reduction in Gram-negative bloodstream infections by 2024/25. Gram negative organisms are commonly found in the gut and whilst most of these are harmless, pathogenic strains can cause a range of infections including urinary tract, intestinal and blood stream infection. The most common gram-negative organisms that result in bloodstream infections are *Escherichia coli, Klebsiella* species, and *Pseudomonas aeruginosa.* In addition to the threshold for E.coli, this was the first year thresholds were also applied to *Klebsiella* and *P. aeruginosa* BSIs.

3.4.1 Escherichia coli (E.coli) Bloodstream Infections

E.coli accounts for around 55% of the gram-negative bloodstream infections with the majority occurring in the community. In 2022/23 there were 43 Trust apportioned cases in comparison to 25 in the previous year, therefore a significant increase. The Trust rate is 33.49 cases per 100,000 occupied bed days which is higher than the national rate (31.82) but in line with the regional rate (33.92).

3.4.2 *Klebsiella species* Bloodstream Infections

In 2022/23 there were 9 Trust apportioned *Klebsiella* BSIs which is a slight increase on the 6 cases identified in the previous year. The Trust rate is 7.56 cases per 100,000 occupied bed days which is lower than the national rate (13.45) and the regional rate (11.09).

3.4.3 *Pseudomonas aeruginosa (P. aeruginosa)* Bloodstream Infections

In 2022/23 there were 9 Trust apportioned *P. aeruginosa* BSIs which is an increase on the 3 cases identified in the previous year. The Trust rate is 6.85 cases per 100,000 occupied bed days which is slightly higher both the national (5.89) and regional (5.05) rates.

3.5 Multi Resistant Gram-Negative Organisms Including Carbapenemase-Producing Organism (CPO)

Gram-negative organisms are bacteria often found living naturally in the human gut, and can sometimes cause disease, including urine, chest, wound, and bloodstream infections. These bacteria can develop resistance to several antibiotics and infections due to antibiotic resistant strains, which can be difficult to treat, and are becoming increasingly common.

Multi-Resistant Gram-Negative Organisms (MRGNOs) are graded within the Trust according to their antimicrobial resistance, with Grade A* organisms being the most resistant and Grade C the least. Wherever possible isolation precautions are implemented for patients

identified with an MRGNO. If there are insufficient side rooms available, those with higher levels of antimicrobial level of resistance are given priority for isolation.

Carbapenemase Producing Organisms (CPO) are gram-negative organisms that are resistant to nearly all antibiotics including carbapenems, a powerful group of antibiotics used to treat severe infections which cannot be treated with more conventional antibiotics. This resistance makes infections with these organisms extremely difficult to treat. Outbreaks with these organisms have occurred in several countries and some areas of the UK, including hospitals in London, Northwest England and the Midlands.

In line with PHE guidance, the Trust has a policy in place to identify and screen patients who may be at an increased risk of CPO, including all patients admitted to the Intensive Therapy and High Dependency (Critical Care) unit.

3.5.1 Carbapenemase- Producing Organism Outbreak

There has been a significant outbreak of CPO affecting a total of 18 patients since January 2022. The Trust has received support from UKHSA in managing the outbreak. The source of the outbreak is not clear but is likely to be environmental. Several actions have been taken including:

- Enhanced screening of patients for early identification of new cases
- Environmental testing of the environment
- Targeted deep cleaning
- Switch to disposable patient wash bowls
- Change in process of disposal of grey water
- Chemical disinfection of drainage system
- Replacement of equipment that is harder to clean

Work continues to manage the outbreak and reduce the risk of transmission.

3.6 Surgical Site Infection (SSI)

There is good evidence that prospective surgical site infection surveillance, together with timely feedback to clinicians will reduce infection rates. It is a mandatory requirement for NHS Trusts in England to complete orthopaedic surgical site infection surveillance for a minimum of a three-month period each year, using the National Surgical Site Infection Surveillance Service (NSSIS). This service is co-ordinated by the Communicable Disease Surveillance Centre at UK Health Safety Agency in Colindale. For the period covered by this report surveillance was undertaken over 3 quarters in the year:

- a) Total Hip Replacements April to June During this quarter there were no infections identified
- b) Fractured neck of femur July to September During this quarter there were no infections identified
- c) Total Hip Replacements January to March During this quarter a total of 59 operations were undertaken, 2 infections were identified giving an infection rate of 3%.

4. UNTOWARD INCIDENTS INCLUDING OUTBREAKS

4.1 Norovirus

Norovirus, also called the winter vomiting bug, is highly contagious and is the most common cause of hospital outbreaks of viral gastroenteritis. To control the outbreak, wards are usually

closed to new admissions until the outbreak is brought under control, and this can cause major operational disruption to the hospital. In 2022/23 there was one confirmed norovirus outbreak in the Trust (defined as 2 or more cases on a ward in a 48-hour period), a lower number of outbreaks than would normally be seen.

4.2 Influenza

There were 6 outbreaks of influenza between January and March affecting 43 patients.

4.3 COVID-19 Outbreaks

There were 20 inpatient ward closures due to COVID outbreaks. A total of 109 patients were affected. Outbreaks were managed in line with the Trust Management of COVID-19, Standard Operating Procedure, and the Southwest Regional Healthcare Setting Outbreak Framework. Key controls included isolation of all confirmed cases either in side-rooms or cohorted in bays and closing affected areas to new admissions.

5 HAND HYGIENE

5.1 Hand Hygiene

Hand hygiene (HH) is considered the single most important measure for preventing the transmission of infection. All wards and clinical departments carry out a monthly audit of HH compliance in their area against the World Health Organisation's 5 moments for hand hygiene. The monthly Trust wide average compliance rate for the period covered by this report was 94%.

6 ANTIMICROBIAL STEWARDSHIP

- **6.1** This is an update of the activities of Somerset Antimicrobial Stewardship Committee (SASC), highlighting the decisions made and areas of concern raised at the group meetings and Trust performance around antimicrobial prescribing.
- **6.2** SASC (formerly T&S antimicrobial prescribing group) oversees the development and implementation of the annual antimicrobial stewardship programme of work. There had been no meetings since May 2021 due to vacancies. In 2022 3 new antimicrobial pharmacists started, a lead pharmacist for each acute site YDH and MPH and a consultant pharmacist for Somerset. SASC was reformed in October 2022 and meets quarterly. The terms of reference have been reviewed and agreed as has the antimicrobial prescribing policy. SASC oversees antimicrobial

6.3 Key Issues / Emergent Themes

6.3.1 Antibiotic Consumption

In 2022/23 the national contract stipulated a 4.5% reduction in broad-spectrum (Watch and Reserve) antimicrobials from a 2018 baseline. Neither SFT nor YDH achieved this target and both saw an increase in use. While this requires improvement and action is required SFT (MPH, CMH and MIUs) remain the lowest user of Watch and Restricted antimicrobials / admission in the region and YDH is a low user.

Guidelines are being reviewed with this in mind while maintaining safety and efficacy. Ward rounds are focusing on appropriate use of Watch and Reserve antimicrobials and course lengths.

6.3.2 Antimicrobial prescribing audits

The previous audit plan has been discontinued, due to a massive overburden of data collection with little dissemination or action. Audits completed in January have highlighted high prevalence of patients on antimicrobials compared to other South West trusts, high use of IV antibiotics and long durations. New quarterly audit will be initiated in Q1 2023 focusing on IV to oral switch and durations.

Previous work discussions with Governance support team will be picked up to improve dissemination of data from ward to board.

6.3.3 AMS staffing:

Improved microbiologist availability with the recruitment of two substantive Consultant Microbiologists. Locum support has also been available. There is a new Consultant Microbiologist supporting antimicrobial prescribing role since joining trust and will be taking over this role from the previous lead. Three new antimicrobial pharmacists have started across the two acute sites in Q2, with other responsibilities this equates to 2.4WTE of anti-microbial stewardship pharmacy time.

6.3.4 CQUIN: CCG and NHSE

No AMS CQUIN for MPH this year.

YDH signed up to the CCG2 Appropriate antibiotic prescribing for UTI in adults aged 16+. This was agreed prior to new AMS team being in post and limited resource was able to be put into it, we did not meet the CQUIN target, this hasn't affected block contract.

The National Target was to reduce Watch and Restricted antimicrobial use/1000 admissions by 4.5% compared to 2018 baseline. Both sites have seen over a 10% growth in use. An SBAR was submitted to the contracts team outlining a number of reasons for this increase including extremely low baseline and MPH acute merging with community hospitals. This was presented to clinical risk and commissioners and while accepted that improvement is required the set objectives were unattainable.

The 2023/24 target is to reduce to 10% below a 2017 calendar year baseline. Based on current use this would require a 20% reduction in use / 1000 admissions. Discussions are in progress with NHSE colleagues to set realistic and encouraging targets, that take into consideration the changing trust structure.

6.3.5 ePMA AMS functionality

A limited dashboard has been released on EPMA to identify patients requiring review by the AMS team and those on high risk/ broad spectrum. There are several bugs within this, limiting its utility. The AMS team are working with the EPMA team to improve functionality and utility to identify patients in a more efficient way.

The original design scope which is yet to be met will hopefully mean this dashboard will also be able to be used for the actual patient review, linking to the prescription edit function and provide the ability to record the activity and recommendations of the AMS team for individual patients.

The AMS team have worked with Business analytics to obtain a backend report from EPMA. This has enabled identification of patients for regularly established ward rounds however is time consuming and the upgrade of the dashboard is eagerly anticipated.

6.3.6 Guideline review and update

There is a significant backlog of guidelines pending review, due to low staffing prior to 2022 recruitment. An annual work plan was collated and guidelines that are out of date or missing have been prioritised based on clinical need for review or creation. To date the flu and obstetrics treatment have been reviewed and updated. New guidelines for amikacin, ambulatory orthopaedic procedures, renal dosing, childhood mastoiditis and outpatient IV guides have been published. Paediatrics and UTI guidelines are currently under review. We also worked with the hand team to stop the use of prophylactic antibiotics in procedures where the evidence supported no use.

6.3.7 Ward focused antimicrobial team

Ward rounds have been in place since August 2023. The use of the EPMA report at MPH is helping to identify patients for review. Priority review is for broad spectrum IVs, gentamicin exceeding 4days and IVs exceeding 5 days.

At MPH in the 6months of recorded interventions 39 ward rounds took place equating to 3 every 2 weeks. In this time 397 patients were reviewed and 299 had an active intervention. At YDH in the same timeframe data from 9 ward rounds. 163 patients have been seen with 87 interventions. Note the lack of EPMA makes identifying patients more challenging, and there is less microbiology and AMS pharmacist resource available there.

6.3.8 AMS across SFT

The community and mental health wards make up a very small amount of antimicrobial use. The consultant antimicrobial pharmacist is supporting the locality pharmacists with any antimicrobial enquiries. No active audit in place at present due to no AMS lead in the area, will revisit once post holder returns from maternity leave.

6.3.9 AMS across the county

The recruitment into a county wide consultant post is helping link up AMS across the county. A quarterly meeting run by the ICB has been set up and runs alongside infection control initiatives to progress quality schemes. This group is in its infancy, outcomes to report in 2023/24.

Consultant pharmacist working closely with NHS Somerset pharmacist who works with GPs and Primary care on AMS and prescribing guidelines. Review of off-formulary prescribing has resulted in change to guidance and formulary for better enablement.

6.10 Key Risks

Multiple antibiotic guidelines are out of date. They have been reviewed for safety and prioritised based on clinical need and current evidence. Action plan to get all key documents in date within 12 months and all reviewed within 24 months.

National contract for 2022/23 has not been met and this is likely to occur again in 2023/24 due to several cofounding factors. A review of targets is underway with NHSE and a realistic target for improvement will be agreed with commissioners.

7 DECONTAMINATION

7.1 Introduction

The Decontamination Group is a sub-group of the Infection Control Committee. The Decontamination Group is responsible for ensuring decontamination processes are in place to meet the statutory and regulatory requirements. YDH's Decontamination Lead was appointed in March 2020. This is the end of year report covering the period April 2022 to March 2023. Compliance requirements for decontamination are governed by several pieces of guidance or directives including:

- Medical Devices Directive
- HTM 01-01 Decontamination of Surgical Instruments
- HTM 01-06 Management & Decontamination of Flexible Endoscopes
- HTM 01-05 Decontamination in primary care dental practices
- ISO 13485: 2016 Quality Management Systems

The Trust has an Authorised Engineer for Decontamination (AED) who is an independent, external individual who verifies our compliance against national standards through audit as well as providing specialist advice.

7.2 Facilities

Simply Serve Limits Sterile Services Department started being built in 2009 and became operational in September 2010. It was the first units to be recognised under a rating of Excellence for BREEAM <u>BREEAM - BRE Group</u> which is the code for sustainable buildings.

YDH has a certified and recognised Sterile Services Department (SSD), which includes certification of ISO13485: 2016 and Medical Device Directives. The Sterile Services unit also has a dedicated Endoscopy Decontamination Department, which is accredited in line with the Joint Advisor Group (JAG). This also complies with the national decontamination standards and guidelines and is based on Simply Serve Limited (SSL) providing porous load steam sterilisation and the decontamination of flexible endoscopes.

7.3 Sterile Services Department

Simply Serve Limited was established in February 2018 and is a wholly owned subsidiary of Yeovil District Hospital NHS Foundation Trust. The sterile Services Department has had recent replacement provisions:

- 2021 Endoscopy machines were replaced with 4 new Getinge ED Flows
- New endoscopy RO plant which eradicated high TVC's and now thermal disinfects the system eliminating the requirements of chemically disinfections every 3 months
- 2022-2023 New SSD washers disinfectors, sterilisers and trolley washer were purchased and installed
- 2023 Ventilation duct work and AHU refurbishment
- Recently procured a new low temperature steriliser and ultrasonic washer to meet the requirements of decontaminating DaVinci Robot instruments and equipment.

The Sterile Services department & Endoscopy Suite has full track and trace systems provided by HealthEdge (HESA and HESSDA), this also enables full traceability on supplementary items by the use of key dots. The Healthedge system was recently extended into theatres, allowing the full site of where equipment is and allocating equipment and instruments to patients.

In addition to this, each machine is fitted with Independent Monitor System, which works in link with the Healthedge system giving assurance on the processes in meeting the required parameters.

7.4 Endoscopy

The decontamination of endoscopes is undertaken within the Sterile Services Department. All staff are trained to work in all areas within it.

The Endoscopy department extends the use of HealthEdge (HESA) to the endoscopy procedure rooms and outpatient departments for associating endoscopes to patients for full traceability.

We use endoscopes manufactured by Olympus for continuity across the Trust, but we do have two Karl Storz endoscopes in use.

7.5 Policy and Procedures

Simply Serve Limited's Sterile Services Department is audited by an external notified body. The purpose of this audit is making sure the department has a Quality Management System in place that meets the standards and requirements needed. This also includes having Standard Operating Procedures (SOP) in place.

IPC audit the decontamination unit prior to the JAG audit commencing and this is used as a supporting document. The JAG audit takes place annually by our AED.

7.6 Summary

Simply Serves Limited's Sterile Services Department adheres to best practice of HTM 01-01 and HTM 01-06 and through the external notified body audits strive for continual improvement.

8 WATER SAFETY

8.1 Water Safety Group

The most significant infectious risks from the water supply are infections caused by legionella pneumophilia or pseudomonas aeruginosa bacteria. Both can cause serious respiratory infections, with immunocompromised and ventilated patients being particularly at risk.

Legionella is most likely to proliferate in water systems where the temperature is between 20 to 50 degrees centigrade. Pseudomonas is found in water and moist environments and may proliferate in sink and shower traps.

8.2 Responsible Person for Water

The responsible person for water in the Trust is currently the Head of Estates, Ian Robins and is the current Chair for the Water Safety Group. Dan Neale, Contracts manager is the Deputy Responsible Person.

A Water Safety audit by an external independent water safety consultant was carried out on the 13 December 2022, the action plan has been implemented and the two high risk items, Legionella risk assessment (completed 17 March) and Pseudomonas risk assessment (planned for May 2023) have been actioned.

8.3 Controls Procedures and Testing

The primary method of controlling legionella in the Trust is to monitor and keep domestic cold-water temperatures below 20 degrees centigrade and domestic hot water temperatures above 55 degrees centigrade. These temperatures should be achieved within two minutes when drawing water from the cold and one minute of drawing water from the hot outlets. The incoming cold-water supply from the water supply company can exceed 20 degrees centigrade during extremely hot weather in the summer months the requirement is to ensure that the cold water delivered to outlets is not greater than 2 degrees centigrade above the water company supplied temperature.

To help reduce the risk of pseudomonas & CPE, controls are in place in high-risk areas to ensure that hand wash sinks and shower traps cleaned in such a way as to avoid contaminating taps from the sink traps (top-down approach). In addition, all underused outlets are flushed regularly to ensure a sufficient water flow through the system and traps cleaned with Clinell Drain Disinfectant. The sink traps on 7a are being surveyed and will be replaced.

Water outlets in augmented areas (Intensive Care High Dependency Units & SCBU) and in areas where temperature monitoring indicates the controls are out of range, are routinely tested for legionella (now pre-flush). In addition, all outlets in augmented care areas are tested for pseudomonas every 6 months.

If legionella or pseudomonas is detected, appropriate remedial actions are undertaken in line with Trust policy. This includes the chlorination or changing the outlet out of use; a review of the installation including identification of any potential dead legs and flexible hoses; and cleaning and disinfecting the system until two negative results are achieved.

8.4 Water Safety Group

The Trust has a Water Safety Group, chaired by the Responsible Person for Water (Head of Estates) which meets 6 times a year. The function of this group includes monitoring the performance of the water systems in the Trust and progress against the Water Safety plan. Remedial actions taken in response to any positive testing results are also reviewed, to ensure appropriate actions have been taken.

The group includes Infection Prevention and Control staff to give assurance that appropriate controls to ensure water safety are in place and report on remedial actions taken where compliance had fallen below the acceptable standard.

8.5 Significant Achievements

We have had copper/silver installed to the cold water in the main hospital and YWH, this now means that all water services have copper/silver treatment.

The water safety policy has been updated as has SOP's for water flushing of little used outlets.

Training has been completed for three members of staff to Legionella RP level.

We have engaged the services of an AE (W), who will provide advice when required, attend the Water Safety Council meetings (where possible) and carry out an annual audit

9 VENTILATION

- **9.1** The purpose of Specialist Healthcare Ventilation systems is to protect patients from surgical site and other infections. They are used in operating theatres, procedure rooms and isolation rooms. Trusts should comply with Health Technical memorandum 03-01 Specialised Ventilation for Healthcare Premises 2021. Compliance requires annual inspection and validation to ensure the system is performing to the required standard. Testing of ventilation systems is a specialist job and is currently completed by AirisQ (Independent Air Quality Consultants) on behalf of Estates.
- **9.2** In 2019 Joe Gill of Gill Consulting Engineers Ltd was appointed as the Trust Authorising Engineer for Ventilation in accordance with HTM 03-01 (2021).

We currently have two Ventilation AP's, one CP plus another pending training which is booked for December 2023

The Ventilation committee was established in January 2012 as a joint forum between IPC & Estates to review the annual test results of Specialist Ventilation systems and recommend actions. The last meeting was 18th February 2022, this is due to workload and staffing resource issues, and we are planning to arrange ASAP. The current policy is dated April 2022

10 INFECTION PREVENTION AND CONTROL PLAN AND AMBITIONS FOR 2022/23

Infection Prevention and Control remains a high priority in the Trust, and we are committed to reducing healthcare associated infections and ensuring the highest standards of infection control practice are delivered throughout the hospital.

Key ambitions for 2022/23:

- To merge the IPC teams from the legacy trusts into one single team with a single Annual Programme of work
- To review and align IPC policies and guidance across the legacy trusts
- To support the Trust in the restoration of other services alongside COVID-19 requirements
- To support Trust wide improvement work related to peripheral vascular cannulae and urinary catheters, to reduce related bloodstream infections
- To focus on achieving more sustainability and reducing unnecessary waste related to personal protective equipment
- Implement a comprehensive winter awareness campaign to include recognition and infection control management of patients with influenza or norovirus.

- Continue to monitor the number of surgical site infections in total knee and hip replacements and spinal surgery for the Musgrove Park Hospital Site.
- To instigate continuous surgical site infection surveillance for the Yeovil District Hospital Site covering a single module of total hip replacements
- Continuing to deliver a comprehensive programme of surveillance, IP&C audit, education and policy review and development.
- To complete the upgrading of the Clinical Surveillance Platform for infection control (ICNet NG).

The IP&C annual programme of work for the new Somerset Foundation Trust 2022/23 was agreed by the Infection Prevention & Control Committee in May 2022 and submitted to the Quality and Governance Committee. Progress against the plan will be monitored by the IP&CC and an annual report submitted to the Quality and Governance Committee.

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- Ian Robins, Head of Estates
- Nicola Murphy, Administrative Assistant to the Infection Control Team, Somerset Foundation Trust
- James Leeson, Administrative Assistant to the Infection Control Team Yeovil District Hospital
- Rizah Bearneza, Senior Infection Control Nurse, Yeovil District Hospital