

# **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

- There was one Trust attributed Methicillin Resistant *Staphylococcus aureus* (MRSA) bloodstream infections in 2022/23, compared to 4 the previous year.
- Overall, there were 49 Trust apportioned cases of *Clostridioides difficile* infection compared to 46 in the previous year. This comprised of 34 hospital onset cases and 15 community onset cases where the patient had an overnight stay in the Trust in the preceding 28-days.
- There were 48 Trust attributed Methicillin Sensitive *Staphylococcus aureus* (MSSA) bloodstream infections compared with 35 the previous year. A significant increase in cases is also seen nationally and across the Southwest region.
- There were 87 Trust attributed E. coli bloodstream infections.
- There were 39 Trust attributed *Klebsiella species* bloodstream infections.
- There were 7 Trust attributed *Pseudomonas aeruginosa* bloodstream infections.
- There were 11 norovirus outbreaks.
- There were 439 inpatients with influenza in the Trust this winter and 5 outbreaks.
- There were 461 inpatients with Respiratory Syncytial Virus in the Trust this winter, the majority were children.
- There were 2,386 inpatients with confirmed COVID-19, the majority were not trust apportioned (64%).
- There were 128 inpatient ward outbreaks of COVID-19
- Three categories of surgical site infection surveillance were included in the 2022/22 programme: total knee replacement, total hip replacement and spinal surgery.
- Hand hygiene Trust wide compliance remained good at 94%.
- To ensure infection prevention and control remains embedded throughout the organisation, the Directorates receive monthly IPC performance reports. These include details of infections occurring in the service groups and outcomes of hand hygiene, cleanliness and decontamination of equipment.
- The Trust has a dedicated multidisciplinary Infection Prevention and Control team who provide a specialist service relating to the identification, prevention, and management of healthcare associated infections within the Trust. Due to COVID-19 pressures some aspects of the annual programme of work were not achieved, mainly around policy reviews. These will be carried forward to the next year's programme.
- The full programme of work for 2022/23 was approved by the Infection Prevention and Control Committee in May 2022.

## 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
- Infection Prevention and Control activities undertaken in 2022/23 and plans for the coming year.

## 2 INFECTION PREVENTION AND CONTROL ARRANGEMENTS

### 2.1 Infection Prevention and Control (IPC) team

The IP&C team provide specialist advice on matters relating to the identification, prevention, and management of infection within the Trust. The team works to an agreed annual programme of work.

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) |              |
| - Infection Control Doctor  | 3.0 sessions |
| - Lead Nurse IPC  | 1.0 wte      |
| - Deputy-Lead Nurse IPC   | 1.0 wte      |
| - Senior Infection Control Nurses (Band 7)                          | 2.93 wte     |
| - Infection Control Nurses (Band 6)                                 | 5.36 wte     |
| - Administration Officers (Band 4)                                  | 1.6 wte      |
| - Surgical Site Infection Surveillance Support worker (Band 3)      | 0.3 wte      |
| - Clerical Support (Band 2)   | 1.0 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 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
- Lead Antimicrobial Pharmacist
- Local Health Protection Team representation

The key purpose of this group is to:

- Monitor the IPC 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.

### **2.3 IPC Representation at Relevant Groups**

The IPC team are also members of the following Trust / System wide groups: These include:

- Antimicrobial Stewardship Group
- Cleaning Standards Group
- Clinical Skills Strategy Group
- Decontamination of Equipment and Medical Devices Group (sub-group of ICC)
- Safety Environmental Action Group
- Sharps Safety Group
- Trust Waste Group
- Ventilation Safety Group (sub-group of ICC)
- Water Safety Group (sub-group of ICC)
- Somerset Integrated Care Board IPC Assurance Committee

## 2.4 Reporting Arrangements

The DIPC is accountable directly to the Chief Executive and can report directly to the trust board. IPC reports are submitted monthly to the Board as part of the Trust Performance Assurance Report. This report details performance against MRSA, MSSA, Gram-negative organisms (*E.coli*, *Klebsiella* species, *Pseudomonas aeruginosa*), *Clostridioides difficile* objectives and actions taken in response to HCAI or related incidents in the Trust.

In 2022/23 an annual assurance report on IPC was submitted to the Integrated Quality Assurance Board.

The Infection Control Committee (ICC) meets monthly and monitors progress against the IPC programme of work, incidents, and the management of HCAs in the Trust (including outbreaks). The ICC also receives regular progress reports from relevant sub-groups, including the Decontamination of Equipment & Medical Devices and Water Safety.

## 2.5 IPC Annual Programme of Work

In consultation with the DIPC an annual programme of work is prepared by the Lead IPC Nurse, approved by the Infection Control Committee, and submitted to the Integrated Quality Assurance Board. Progress against the annual programme is monitored monthly at the ICC.

# 3 HEALTH CARE ASSOCIATED INFECTIONS STATISTICS AND SURVEILLANCE

## 3.1 Annual Healthcare Associated Infection (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 HCAs 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 HCAs. 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 HCAs. 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 HCAs 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 shortened 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 3<sup>rd</sup> day or later following the admission date which is counted as day one.

#### 3.3.1 Methicillin Resistant *Staphylococcus aureus* (MRSA) BSIs

There was one Trust attributed MRSA BSI case in 2022/23, compared to 4 cases in the previous year. The Trust rate of MRSA BSIs is 0.3 cases per 100,000 occupied bed days which is lower than the national rate (0.94) and the regional rate (1.0). The source of the MRSA bloodstream infection was likely to be chest.

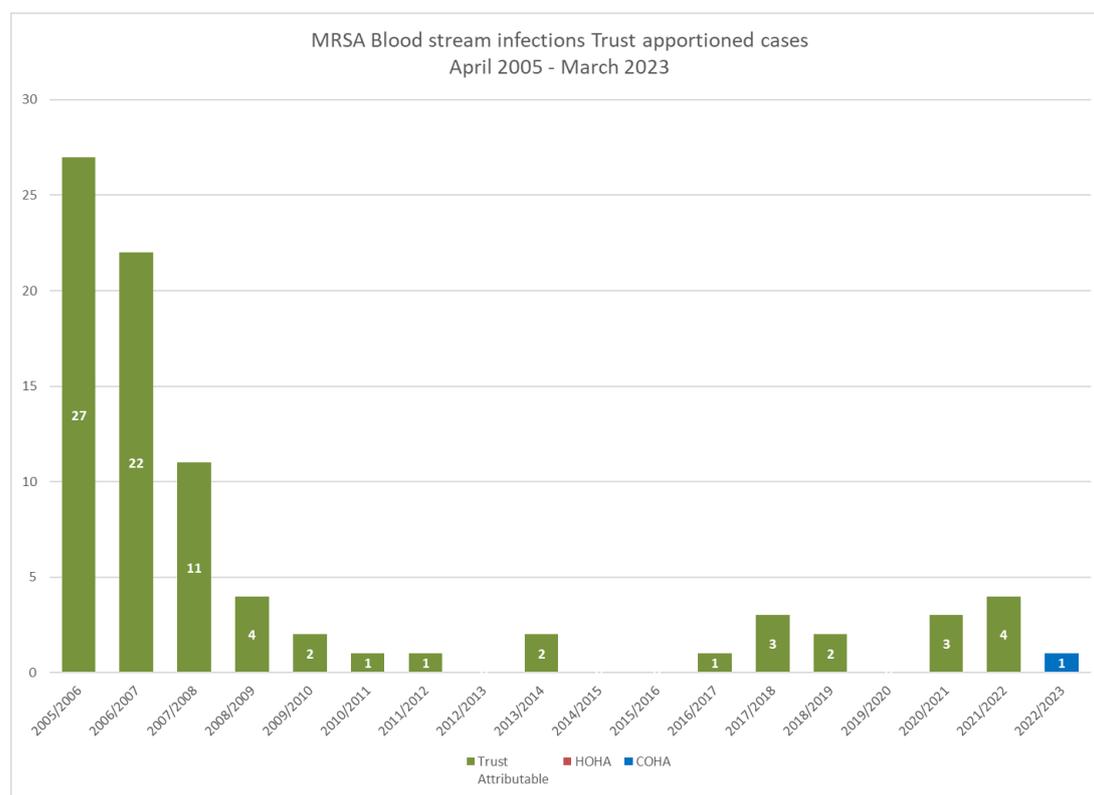


Figure 1 - Number of Trust attributed MRSA BSIs per year April 2005 to March 2023

#### 3.3.2 Methicillin Sensitive *Staphylococcus aureus* (MSSA) BSIs

In 2023/23 the Trust had 48 Trust attributed MSSA bloodstream infection cases, a further increase to the 35 cases identified in the previous year. The Trust rate of MSSA BSIs is 14.34 cases per 100,000 occupied bed days which is slightly higher than the national rate (13.22) but lower than the regional rate (16.61). Whilst Trust case numbers of MSSA BSI have increased the rate per 100, 000 occupied bed days remains similar to the previous

year. The reason for the overall increasing trend of MSSA BSIs is not clear but other Trusts in our region are experiencing a similar upward trend.

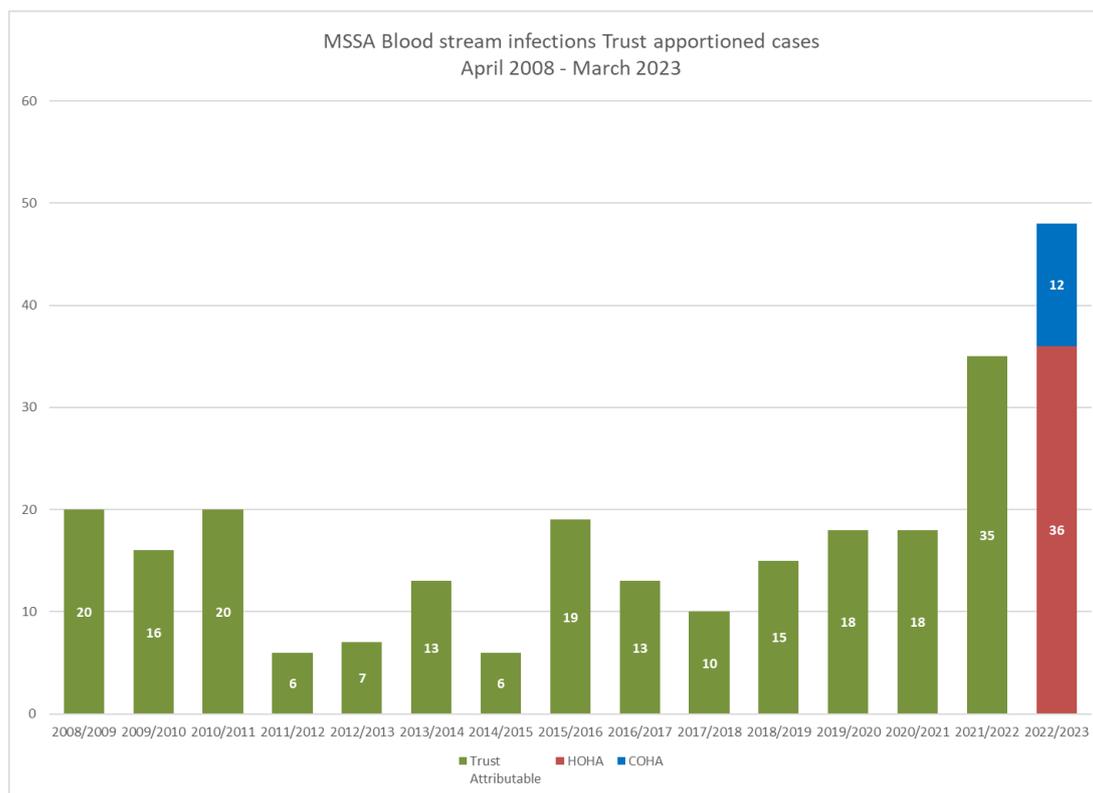


Figure 2 – Number of Trust assigned MSSA BSIs April 2008 to March 2023

The sources of the infections remain diverse, but the two most common sources are vascular devices (mainly peripheral vascular cannulae) and skin / soft tissue. Following the change to the PIR process in August 2022, resources have been directed towards understanding the problems better and more focused improvement work. This work is ongoing and will extend to the new annual programme of work but includes:

- Change to the skin cleansing product prior to peripheral vascular canula insertion for inpatient wards
- Vessel health assessment to improve choice of device
- MSSA screening, decolonisation and MSSA suppression in critical care

### 3.4 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 49 Trust apportioned cases in comparison to 46 cases the previous year. This comprised of 34 Hospital Onset Healthcare Associated cases (HOHAs) where the specimen was taken on day 3 or later following admission and 15 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. Case numbers and case rates have been increasing locally and nationally. The Trust rate is 14.57 cases per 100,000 occupied bed days which is lower than the national

rate of 23.47. When compared to the regional rate (26.99) we still have the second lowest rates in the region.

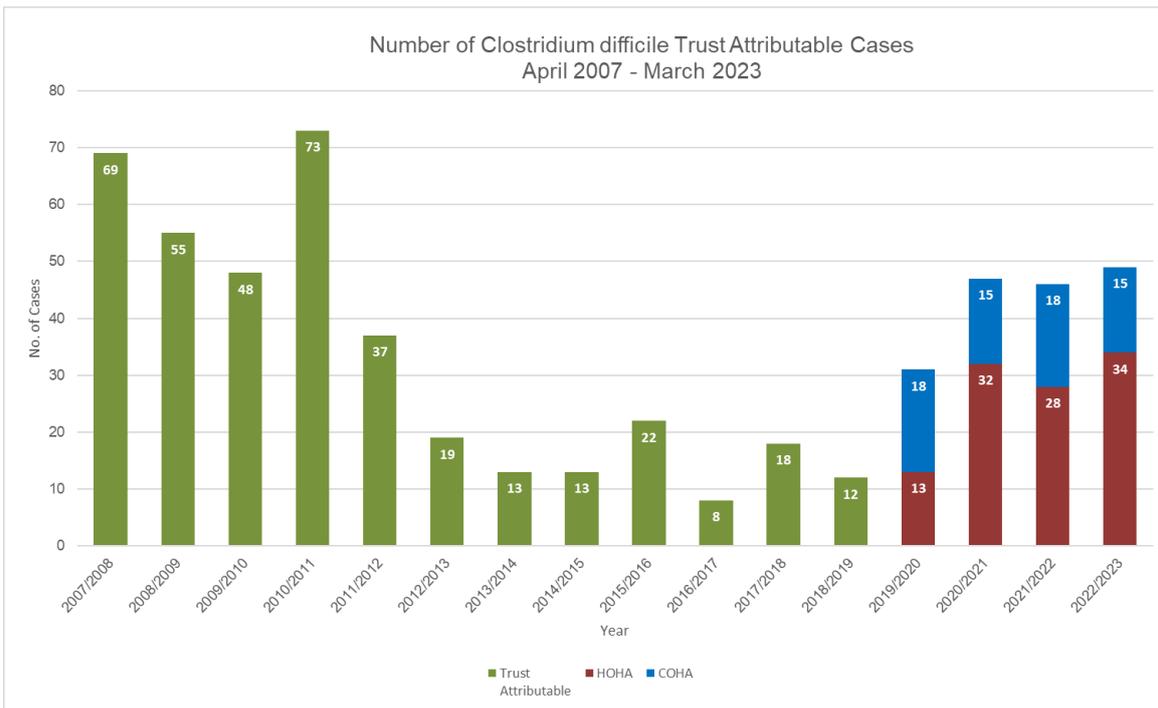


Figure 3 – Number of Trust attributed CDI cases April 2007 to March 2023

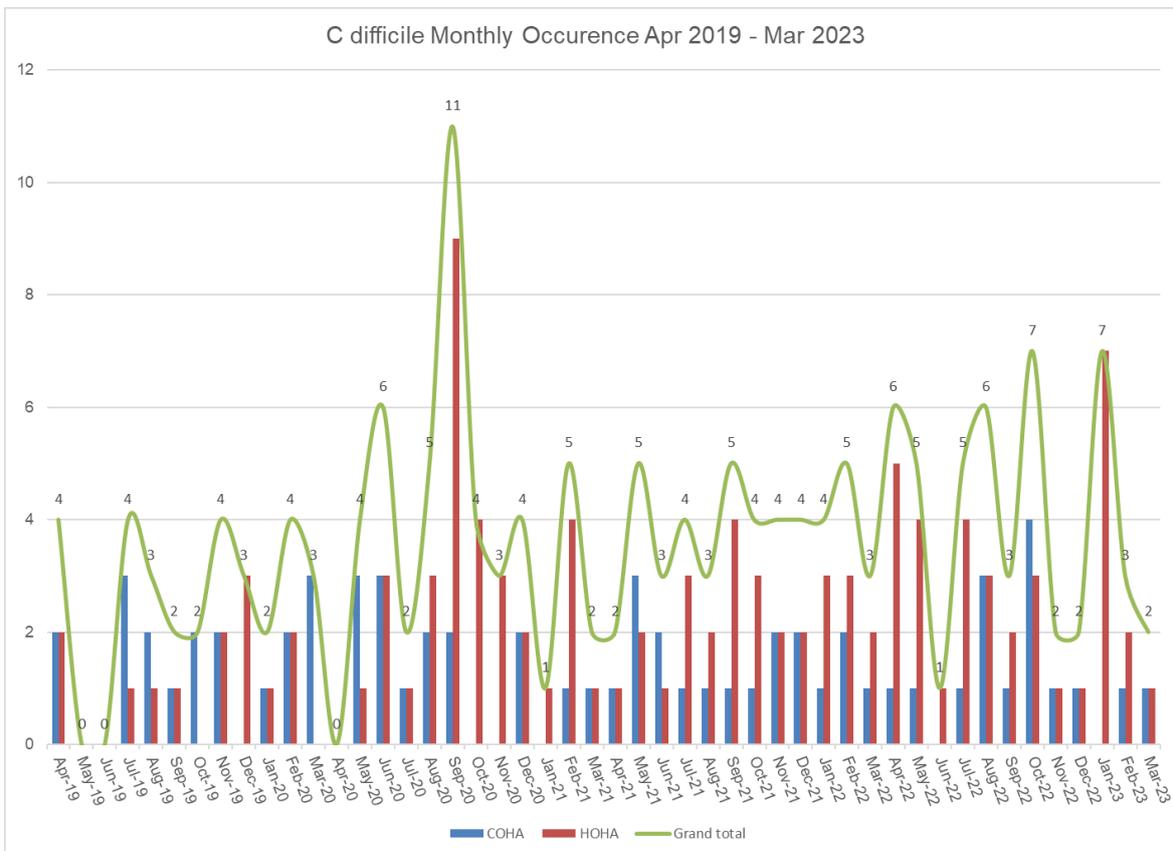


Figure 4 – Monthly occurrence of CDI April 2019 to March 2023

Figure 4 shows the monthly incidence of CDI in the Trust between April 2019 to March 2023.

Antibiotics continue to be the main driver for CDI cases across the trust and nationally. During the latter half of the year CDI case numbers in the trust remained 3 or less per month except January where the Trust identified 7 cases. Similar increases have been noted nationally. One of the reasons for this spike in cases could be due to antibiotic usage during the summer and early winter in response to increased cases of scarlet fever and invasive Group A streptococcus (iGAS) disease, particularly in children. Whilst the reason for higher case numbers of GAS infections including scarlet fever are not fully known yet, it could be a combination of increased population mixing plus higher numbers of respiratory viruses circulating this year.

The Southwest collaborative which was set up last financial year to gather more detailed information on CDI cases in our region continues to operate.

### **3.4.1 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 two PIIs in the Trust. The first occurred in May 2022. As there are many different strains of *Clostridioides difficile*, enhanced testing is carried out to identify the specific strain and determine whether there had been cross transmission between patients. Enhanced testing confirmed no cross transmission.

The second PII occurred in October 2022. A cluster of 3 cases were identified in the same ward, with the same ribotype (006). As this is an uncommon ribotype, only causing between 1 in 500 to 1 in 1000 cases of CDI in England, enhanced testing was not undertaken by the national reference lab and a link between cases was presumed. Several actions were taken at ward level in response to this outbreak including an environmental audit, a deep clean and enhanced focus on cleaning of equipment. No further cases have occurred.

## **3.5 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*.

### **3.5.1 *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 the period covered by this report there were a total of 282 *E. coli* bloodstream infections. Of these, 195 patients were admitted with the infection (occurred in the community) and 87 were Trust attributable. Compared to the previous year, there was a slight increase in case numbers, but the burden of disease continues to be in the community. The Trust rate is 25.60 cases per 100,000 occupied bed days which is lower than both the national rate (31.82) and the regional rate (33.92). The most common source of the trust apportioned infections remains the urinary tract (51 cases) with around 18 related to urinary catheters.

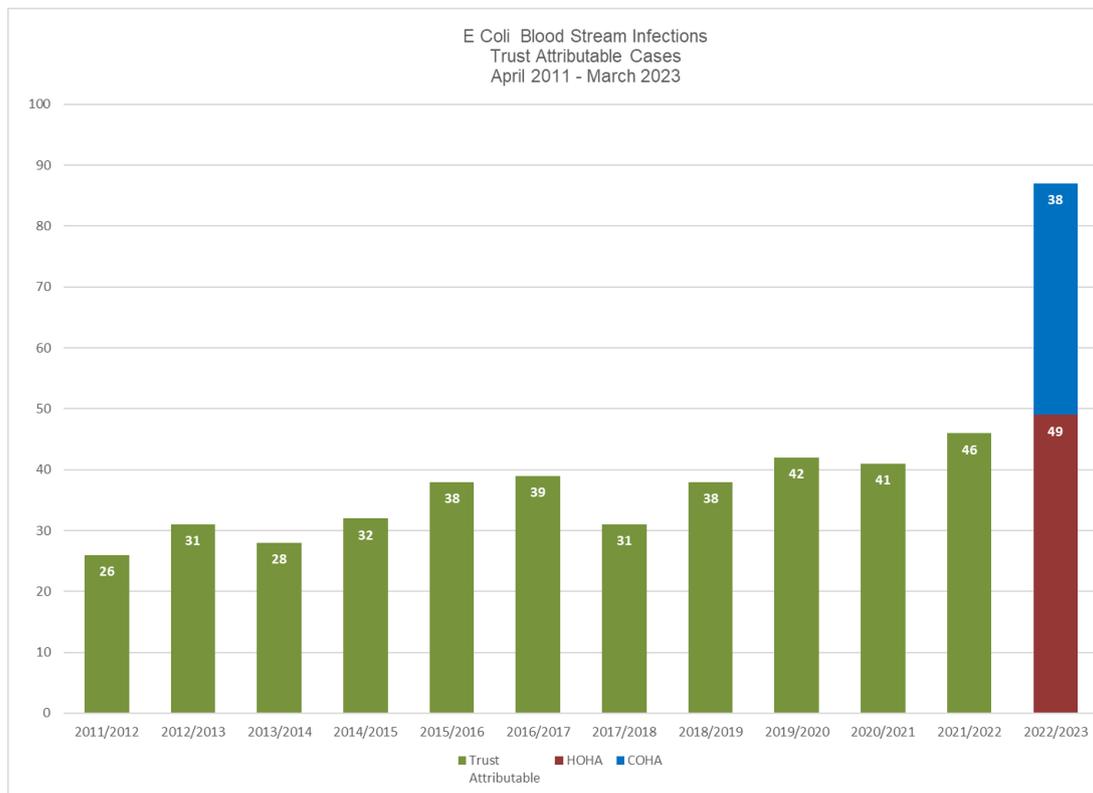


Figure 5 – Number of Trust and Community Attributable E Coli BSI cases April 2011 to March 2023

### 3.5.2 *Klebsiella species* Bloodstream Infections

In 2022/23 there were a total of 96 *Klebsiella* bloodstream infections, of which 39 were trust apportioned compared to 16 in the previous year. Whilst this is a significant increase, the burden of disease continues to be community, accounting for almost 60% of cases.

The Trust rate is 11.65 cases per 100,000 occupied bed days which is slightly higher than the regional rate (11.09) but lower than the national rate (13.45). The two most common sources of these infections are urinary tract infections and hepatobiliary.

### 3.5.3 *Pseudomonas aeruginosa (P. aeruginosa)* Bloodstream Infections

In 2022/22 there were a total of 21 *Pseudomonas aeruginosa* bloodstream infections, of which 7 were trust apportioned which was the same as the previous year and below the threshold set by NHSE. The Trust rate is 2.08 cases per 100,000 occupied bed days which is below the national rate (5.89) and the regional rate (5.09). The trust has the lowest rate of *P. aeruginosa* BSIs in the region. Most cases are due to a hepatobiliary source.

## 3.6 Multi Resistant Gram-Negative Organisms Including Carbapenemase-Producing Organisms (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. During the period of this report, this screening programme has been extended to adult haematology and oncology wards.

In 2022/23 a total of 9 cases of CPO were identified from specimens taken in the trust, 6 were identified as part of the screening programme and 3 were identified in clinical specimens and were incidental findings. There were no links between any of the cases.

### 3.7 Surgical Site Infection Surveillance (SSIS)

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.

The Infection Prevention & Control team undertakes a continuous surveillance programme of SSI (rather than just a 3-month period) as this gives a more accurate infection rate. For the period covered by this report, surveillance for all total knee replacements (TKR), total hip replacements (THR) and spinal surgery was undertaken. Results of the surveillance are disseminated to Clinical Leads, Surgeons, and service group management teams each month, who take appropriate actions where required.

- a) **Total Knee Replacements** – In the period covered by this report a total of 182 operations were undertaken. Of these only one infection was identified giving an infection rate of 0.55%. The national SSI incidence reported to UKHSA between April 2017 and March 2022 was 0.4%. Whilst this is a different period to the trust rolling year rate and is therefore not directly comparable, it indicates that our rates are in line with the national level.
- b) **Total Hip Replacements** – In the period covered by this report a total of 343 operations were undertaken. Of these, two infections were identified giving an infection rate of 0.58%. The national SSI incidence reported to UKHSA between April 2017 and March 2022 was 0.5%. Whilst this is a different period to the trust rolling year and is therefore not directly comparable, it indicates that our rates are in line with the national level.
- c) **Spinal Surgery** – In the period covered by this report a total of 309 operations were undertaken. Of these, two infections were identified giving an infection rate of 0.65%. The national SSI incidence reported to UKHSA between April 2017 and March 2022 was 1.3%. Whilst this is a different period to the trust rolling year and therefore is not directly comparable, it indicates that our rates remain in line with national levels.
- d) **Caesarean Section** – In the period covered by this report, a 6-month period of surveillance was undertaken following Caesarean section (C-section) surgery. This was in response to departmental concerns that they appeared to be an increase in infections. There is currently no UKHSA surgical site infection surveillance module for C-section, it remains in draft form. However, the draft protocol was obtained and utilised as a framework for this surveillance. During the 6-month period a total of 440 wounds were monitored and four infections identified giving an infection rate of 0.9%. Without data from UKHSA it is not possible to make comparisons however, the literature suggests varying rates between 3% to 15% worldwide following this procedure.

## 4 RESPIRATORY VIRUSES INCLUDING OUTBREAKS

4.1 Respiratory viruses have continued to challenge the Trust over the period of this report. Over the winter period in line with the whole of NHS England, the Trust managed patients with COVID-19, Influenza and Respiratory Syncytial Virus. The period November to January were a particular issue when all three respiratory viruses occurred simultaneously.

### 4.2 Influenza

There were 439 inpatient cases of influenza identified during the period of this report, the majority were influenza A (421 cases) and mainly occurred between November and January. There were 48 patients had had co-infection with COVID-19 at the same time as influenza. There were five outbreaks of influenza during November and December, a total of 19 patients were affected.

### 4.3 Respiratory Syncytial Virus (RSV)

There were 461 inpatient cases of Respiratory Syncytial Virus (RSV) identified during the period of this report. Around 60% of these cases were children, most affecting those 5 years or under. There was one outbreak of RSV in February which affected 2 patients.

### 4.4 COVID-19

Coronavirus disease (COVID-19) is caused by SARS-CoV-2, a newly emergent coronavirus that was first recognised in Wuhan, China in December 2019. Cases are apportioned to trusts depending on the time frame between the first positive specimen and admission date:

- **Community** onset, positive specimen date  $\leq 2$  days after admission or hospital attendance (CO)
- Hospital-onset, **Indeterminate** healthcare-associated, positive specimen date 3-7 days after admission (HOIHA)
- Hospital-onset, **Probable** healthcare-associated, positive specimen 8-14 days after admission (HOPHA)
- Hospital-onset, **Definite** healthcare-associated, positive specimen 15 days or more after admission (HODHA)

Between April 2022 and March 2023 there were a total of 2,386 inpatients with confirmed COVID-19 across the Trust. This was an increase on the previous year where the Trust cared for 1,489 inpatients. The majority were community or indeterminate cases (64%) however, the portion of Trust attributable (probable and definite) increased this year to 35% compared to 23% last financial year.

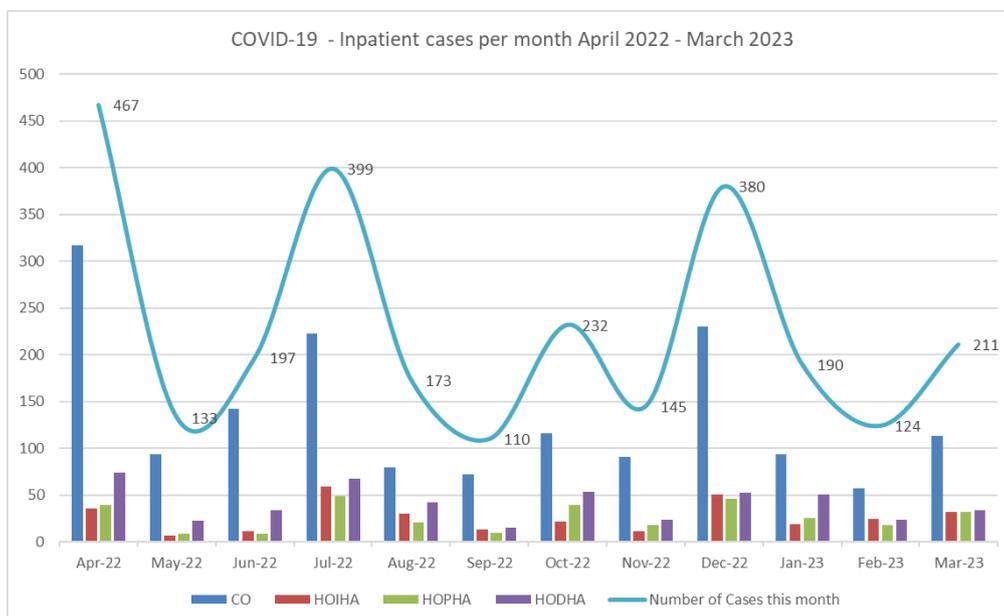


Figure 6 – COVID-19 Inpatient Cases per month March 22 – March 23

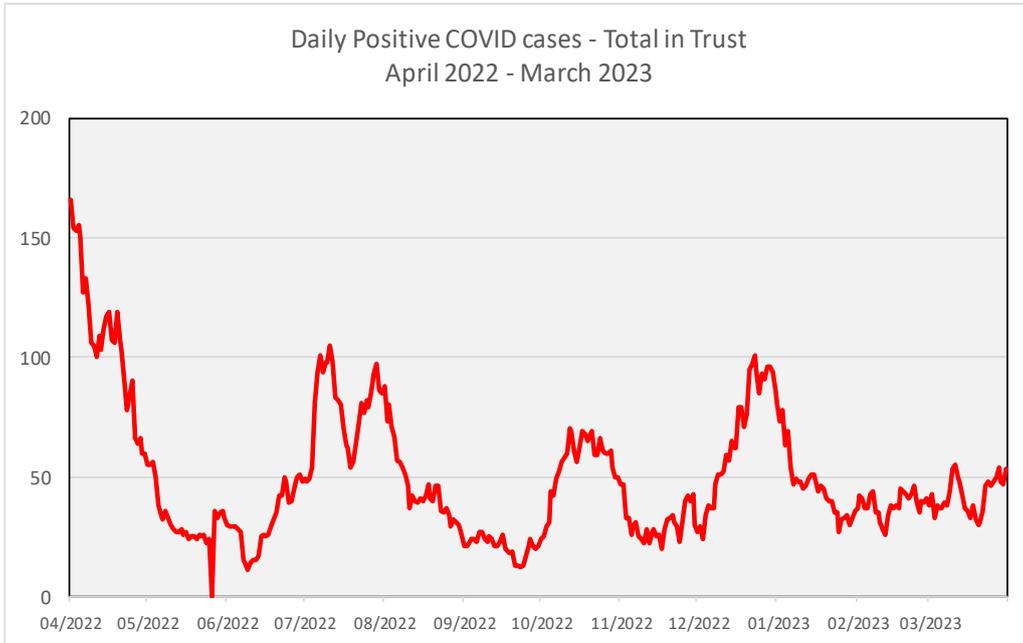


Figure 7 – COVID 19 - Daily Number of Positive Inpatient COVID-19 Cases – April 2022 – March 2023

#### 4.4.1 COVID-19 Outbreaks

Between April 2022 and March 2023, there were 128 inpatient ward closures due to COVID (figure 8). Most of the outbreaks occurred between October and March when 77 outbreaks occurred.

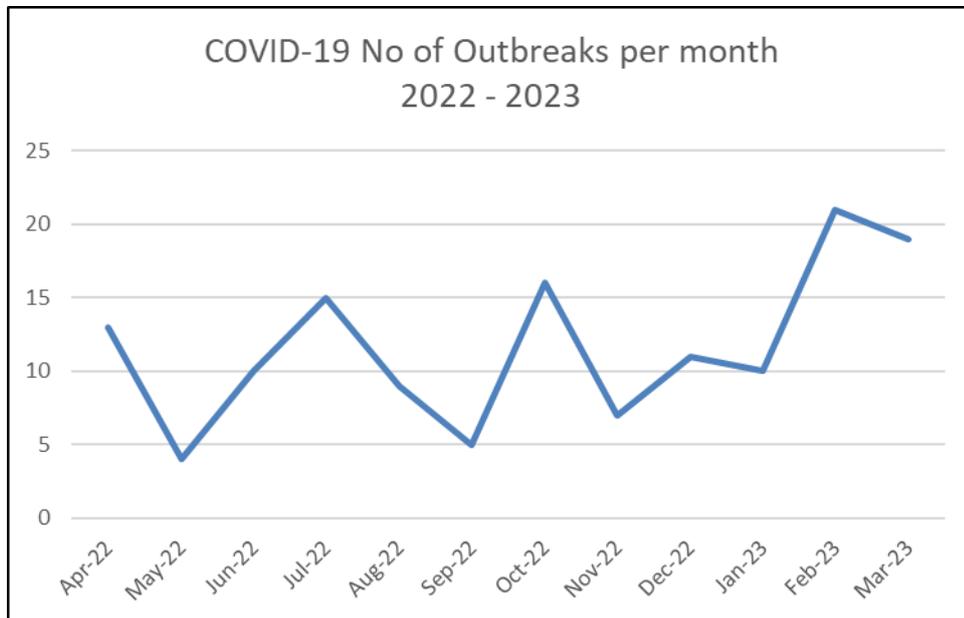


Figure 8 – COVID-19 Outbreaks per month

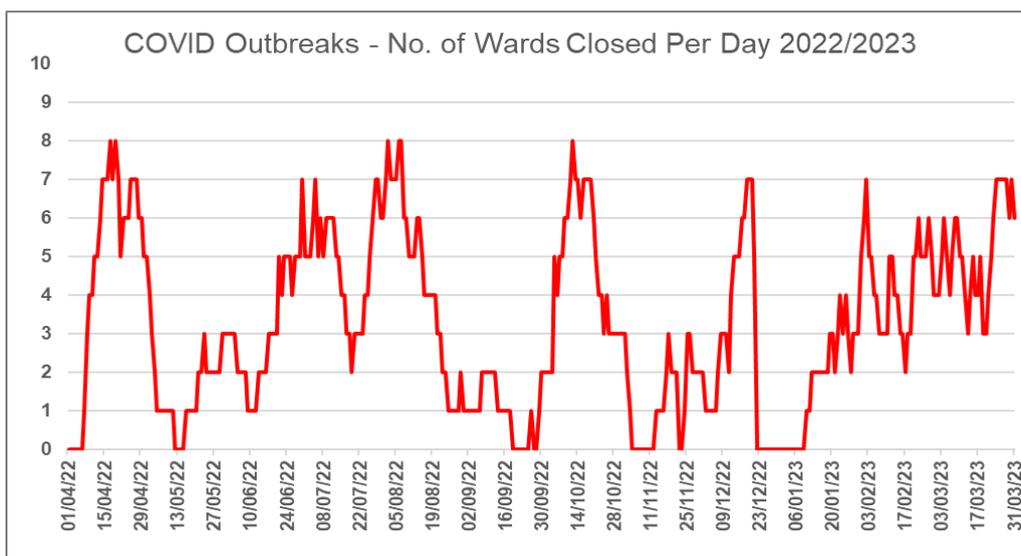


Figure 9 – Number of wards closed per day

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. A total of 990 patients were affected. Restrictions were in place for a total of 1,315 days with 1,253 bed days lost. By the 21<sup>st</sup> December an unprecedented decision was taken to stop closing inpatient wards due to COVID-19 outbreaks. At this point, every effort was made to isolate confirmed COVID cases, but it became impossible to achieve due to the extreme pressure the Trust and the NHS was under during this period. As pressures eased by the end of January the usual management of outbreaks was reinstated.

## 5 NOROVIRUS

5.1 Norovirus, also called the winter vomiting bug, is highly contagious and is the most common cause of hospital outbreaks of viral gastroenteritis. To control outbreaks, 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 were 11 confirmed norovirus outbreaks in the Trust (defined as 2 or more cases on a ward in a 48-hour period).

There has not been a significant norovirus season in the Trust since 2018/19. COVID-19 restrictions since 2020 is likely to have reduced norovirus transmission across the population. Two distinct periods of outbreaks were noted. The first occurred between May and June 2022 when there were 5 norovirus outbreaks. The second occurred during January when there were 6 norovirus outbreaks. A total of 106 patients were affected and 222 bed days lost.

## 6 HAND HYGIENE

### 6.1 Hand Hygiene

Hand hygiene (HH) is an important intervention 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 93%.

## **7 ANTI-MICROBIAL STEWARDSHIP (AMS)**

**7.1** This is an update on 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.

**7.2** 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 ToR has been reviewed and agreed as has the antimicrobial prescribing policy. SASC oversees antimicrobial stewardship.

### **7.3 Key Issues/Emergent themes**

#### **7.3.1 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. Actions have been identified to reduce use. MIUs are one of the highest users and have had increasing attendances which do not reflect in denominator. TTA packs of smaller sizes have been procured as 7-day packs are being given for 3-day indications giving a falsely elevated use. Guidelines are being reviewed, while maintaining safety and efficacy. Ward rounds are focusing on appropriate use of Watch and Reserve antimicrobials and course lengths.

#### **7.3.2 Antimicrobial prescribing audits**

Previous audit plan has been discontinued, massive overburden of data collection with little dissemination or action. Audits completed in January has highlighted high prevalence of patients on antimicrobials compared to other Southwest 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.

#### **7.3.3 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 antimicrobial stewardship pharmacy time.

#### **7.3.4 CQUIN: CCG and NHSE**

We have no anti-microbial stewardship 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 anti-microbial stewardship team being in post and limited resource was able to be put into it, there are current data validation issues, published data suggests failure however data validation suggests errors that mean we should achieve the target. This is being escalated via governance who assist with data collation and commissioners.

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 assessment report 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.

### **7.3.5 ePMA AMS functionality**

A limited dashboard has been released on EPMA (electronic prescribing medications administration) to identify patients requiring review by the AMS team and those on high risk/broad spectrum antibiotics. There are several issues 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.

### **7.3.6 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 were 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.

### **7.3.7 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 4 days 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.

### **7.3.8 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, we will revisit this once post holder returns from maternity leave.

MIUs make up a very large proportion of antimicrobial use and particularly Watch use with clarithromycin and co-amoxiclav prominent. Working with the MIU teams it was identified that pack sizes available significantly increase apparent use. **Current action:** working with procurement to source smaller prepacks for bites, skin and soft tissue and UTIs where 3-5 days is required over the standard 7day pre-pack size.

The set up of Hospital at Home is resulting in more patients receiving IVs in the community. Localised protocols for administration and monitoring are now available on microguide for commonly used OPAT antibiotics. Elastomeric pumps have been implemented to allow for flucloxacillin and piperacillin-tazobactam to be given with just one nurse visit a day. A working group is being set up to improve communication and governance around antibiotic use in the community.

### **7.3.9 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.

### **7.4 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.

Increasing use of IVs in the community without a formal OPAT and MDT including infection specialised. A working group is to be set up in May 2023 to address this risk and improve governance around IVs in the community. This will impact watch and reserve use.

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.

## **8 INFECTION PREVENTION & CONTROL POLICIES**

The IPC team have a programme of at least 3 yearly reviews of Infection Prevention and Control policies and guidelines to ensure they are up to date and based on latest evidence. In the period covered by this report, seven IP&C policies / guidelines were reviewed and updated.

The Trust's IPC policies and guidelines are available to staff via the Trust intranet and on the IPC website. Compliance with policies is audited as part of the IPC team annual work programme.

## **9 INFECTION PREVENTION & CONTROL AUDIT PROGRAMME**

The IPC Annual Programme of work sets out the Trust's IPC audit plan for the year, to ensure key policies and practices are being monitored and implemented appropriately. This programme includes both Directorate Led and IPC Team led audits.

### **9.1 Directorate Led IPC Audits**

Audits carried out monthly for the period covered by this report included:

- Hand Hygiene audits
- Environmental Cleanliness audits
- Decontamination of Equipment audits
- MRSA Screening Compliance

Monthly IPC performance reports detailing infection rates and audit results are compiled by the IPC Team for each of the service groups; exceptions and remedial actions are monitored via the governance structures and reported to the Infection Control Committee.

### **9.2 IPC Team Audits**

In addition to the monthly service group audit programme, the IPC team carry out an annual programme of Trust wide audits. These are reported to the Infection Control Committee and actions are agreed in response to findings.

## **10 EDUCATION AND TRAINING**

Education and training continue to be an important part of the work of the IPC team. It is a mandatory requirement that all staff receive an infection control update every 3 years, service groups receive regular compliance reports and are responsible for addressing individual areas of non-compliance.

Clinical staff undertake their mandatory update via the Trust's online Infection Prevention and Control update training programme. The overall compliance rate with mandatory infection control update training as of March 2023 was 92%.

## **11 DECONTAMINATION**

Effective decontamination of hospital equipment and reusable medical devices is critical in reducing the risk of hospital associated infections. 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. After a period of no meetings, a new Decontamination Lead was appointed in May 2022 and the group has reconvened with a wider membership, new terms of reference and an annual programme of work.

The Trust has a new 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.

### **11.1 Facilities**

The Trust has a dedicated Sterile Services Department (SSD) which complies with national decontamination standards and guidelines and is based on the Musgrove Park Hospital (MPH) site in Taunton providing steam sterilization and low temperature sterilization. Decontamination of flexible endoscopes is undertaken in two Endoscopy Units based on the main MPH site and at Bridgwater Hospital. In addition, there are processes in place for the local decontamination of nasendoscopes, transoesophageal echocardiography probes and transvaginal probes.

### **11.2 Audit and Monitoring Arrangements**

Compliance requirements 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 a new 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.

#### **a) Sterile Services Department**

Construction of the new SSD unit is now complete on the Musgrove Park Hospital site. Currently, the SSD does not hold formal accreditation to provide sterilisation services for external companies outside of the Trust. The old SSD previously held this accreditation but when it was due for renewal it was halted as it would not be valid in the new building and

would need to be repeated. This decision was approved as SSD does not currently provide external sterilisation services. Once the new building has been occupied for a few months and has the monitoring data necessary for accreditation an assessment and application will be made. However, all the internal monitoring of the equipment and processes has continued and there are no concerns to raise.

#### **b) Endoscopy**

Decontamination of flexible endoscopes is undertaken in the Endoscopy Units on the main site (Musgrove Park Hospital), SSD and at Bridgwater Hospital. External inspections and annual validations are undertaken.

#### **c) Local Decontamination**

Across the Trust there are some medical devices that cannot be centrally decontaminated either because they are not suitable for Steam Sterilisation, Low Temperature Sterilisation or because limited numbers of equipment mean rapid turnaround times are required to meet patient capacity. There are three pieces of equipment where local decontamination methods have been reviewed and currently agreed via the Decontamination Group:

- **Transoesophageal Echocardiographic (TOE) probes** – Due to limited numbers of TOE probes in the system, decontamination is undertaken within the Cardiology department. This is delivered via an Ultraviolet decontamination machine which has been fully operational since the summer of 2019. This enables rapid, high-level disinfection via an automated process. This process is subject to external annual validation and therefore fully meets compliance with HTM 01-06.
- **Nasendoscopes** – This equipment is used in several sites across the Trust. Due to geographical location of some of the scopes it is not yet possible to have a fully automated service across the whole Trust. Therefore, for some sites local decontamination using manual, high-level disinfection systems, in line with basic requirements of HTM 01-06 is in place. The main users of nasendoscopes are the Outpatient Department on the acute site at Musgrove Park Hospital. Due to high numbers of nasendoscope procedures in the department, decontamination is undertaken within the outpatient department. This is delivered via an ultraviolet decontamination machine. This enables rapid, high-level disinfection via an automated process. This process is subject to external annual validation and therefore fully meets compliance with HTM 01-06.
- **Transvaginal (TV) probes** – There are insufficient numbers of TV probes to meet capacity demands therefore currently they are locally decontaminated using a manual high-level disinfection process, in line with the basic requirements of HTM 01-06.

#### **d) Other Hospital Equipment**

Each ward and clinical department are responsible for the cleaning and decontamination of other non-critical medical equipment. Monthly auditing is undertaken at Ward level, overall compliance in 2022/23 was 94%.

## **12 CLEANING SERVICES**

### **12.1 Management Arrangements**

The Cleaning Service is managed centrally on the acute site by Facilities Directorate and by the clinical teams across the community sites. Some elements of the service are contracted out.

Whilst cleaning is not directly managed by facilities across the community, Matrons or Unit Managers are responsible for managing the cleaning through the Facilities Team. This is supported by the Facilities Manager and Deputy Facilities Manager based within the community setting. They collate the cleanliness audit results and provides up to date procedural documentation, training, and support.

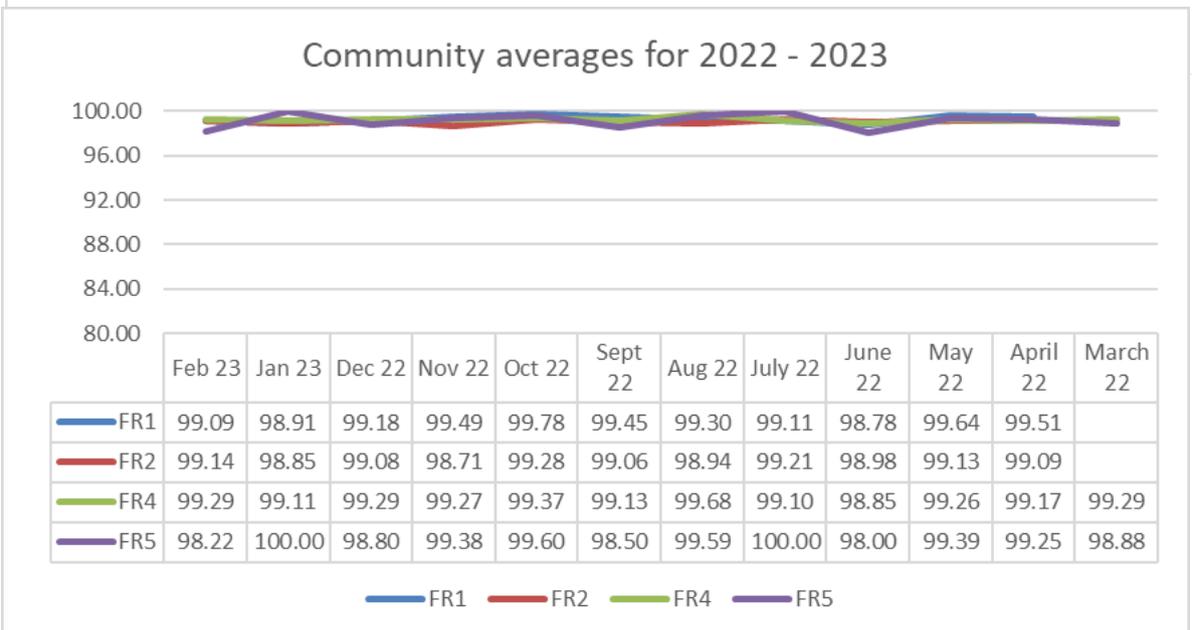
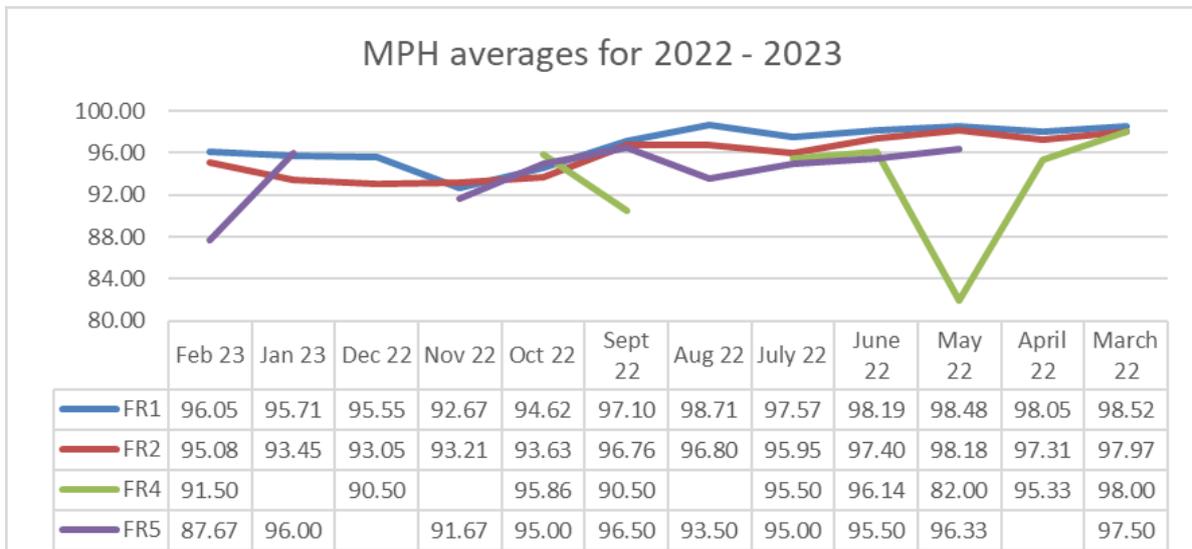
## 12.2 Monitoring Arrangements

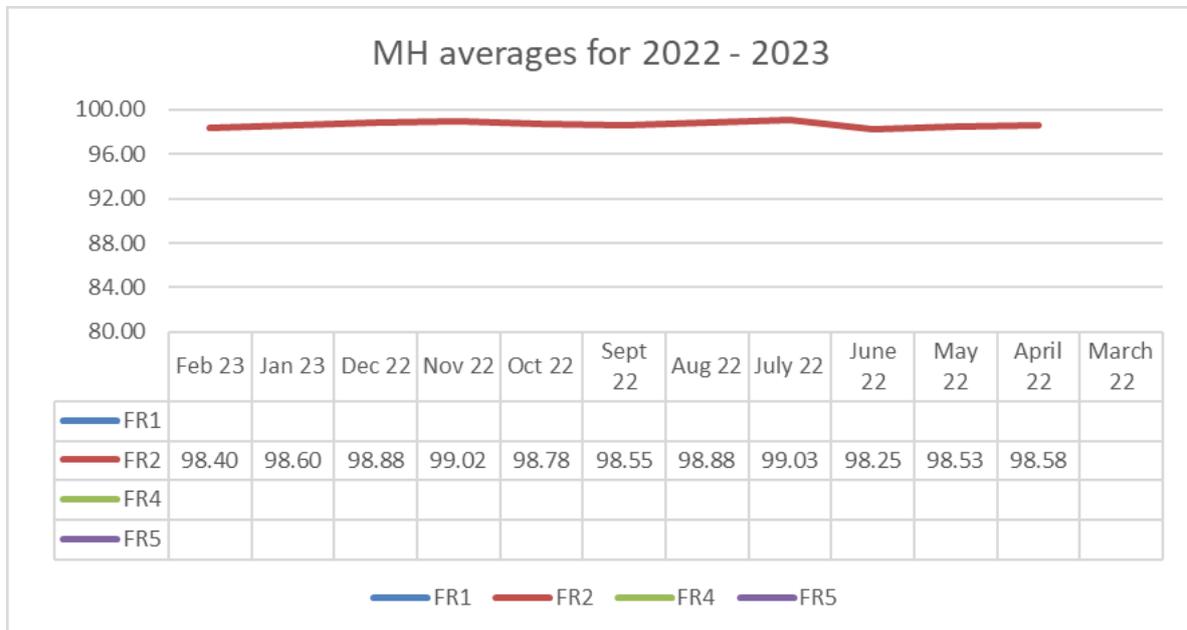
The Trust has a Cleaning Standards group, this group provides an assurance report quarterly to the Infection Control committee. The group is responsible for ensuring the Trust meets the required standards of environmental cleanliness.

The Musgrove Park Hospital site have a dedicated Cleanliness Audit Team, whose role is to ensure audits are completed at the required frequency, data is collated, corrective actions taken and this data is submitted for scrutiny to the Quality Performance Team each month.

Audits for Community, Mental Health (CMH) and Dental premises, is undertaken either by soft FM team leaders who are managed by the clinical teams at CMH premises, or the Cleaning contractor where cleaning services are contracted out. This audit system is overseen by the Senior Facilities Manager for CMH.

The frequency of audits is regulated by the 2021 Cleaning Standards with the areas presenting the highest risk of infection being audited weekly, through to those areas least likely to cause an infection risk being audited 6-monthly.





### 13 WATER SAFETY

#### 13.1 Summary of risk

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 55 degrees centigrade. Pseudomonas is found in water and moist environments and may proliferate in sink and shower traps.

#### 13.2 Responsible Person for Water – Acute, Community and Mental Health (CMH)

Due to a restructure of the Estates Maintenance Management Team the responsible person for water at the Acute, Musgrove Park Hospital Site has changed from Neil Hughes (Head of Community Estates and Backlog) to Paul Luxton (Head of Acute Estates & Infrastructure). Neil Hughes continues to be the responsible person for water at the Community and Mental Health Sites. The current Chair for the Acute Water Safety Group is Paul Luxton and Neil Hughes for the Community and Mental Health water safety group.

The Associate Director of Estates & Facilities has discharged the operational maintenance management to Paul Luxton for the Acute, Musgrove Park Hospital site and Neil Hughes for the Community and Mental Health sites. Paul and Neil hold overall responsibility for the development and implementation of Legionella and Pseudomonas aeruginosa prevention and control procedures, to comply with all appropriate legislation, regulations, and standards.

A Water Safety Risk audit is undertaken quarterly including an annual report by an external independent water safety consultant, to help formulate the Water Safety plan.

### **13.3 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, controls are in place in high-risk areas to ensure that dirty water is not disposed of down hand wash sinks, and sinks are 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.

Water outlets in augmented areas (Intensive Therapy Unit, High Dependency Units, Neonatal Unit, Haematology and Oncology wards) and in areas where temperature monitoring indicates the controls are out of range, are routinely tested for legionella. 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 immediate installation of a point of use HEPA filter or taking 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.

### **13.4 Water Safety Group – Acute, Community and Mental Health**

The Trust has separate Water Safety Groups (WSG), The Acute WSG is chaired by the Responsible Person for Water, Paul Luxton (Head of Acute Estates & Infrastructure). The Acute WSG meets 4 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 reports to the Infection Prevention and Control Committee 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.

In 2022/23 the Acute WSG has the following areas of concern:

#### **Planned Preventative Maintenance**

Compliance with completing the planned routine maintenance schedule of water systems to check the performance and operation of the system. There has now been extra investment in and a refocus of the estates maintenance team to address areas of non-compliance; however, with the current recruitment and retention issues, staffing levels have changed and where new staff have joined the team, to perform the role optimally, development and experience is needed.

#### **Water safety management within the Beacon Centre**

The PFI provider is responsible for ensuring the efficacy of the water within the facility. The Trust had not received sufficient assurance that water safety measures within the facility were suitable and adequate. Therefore, initially the Trust carried out routine legionella sampling of outlets resulting in sporadic positives. Points of use (POU) hepa filters were immediately deployed to positive outlets. Further sampling requested by the DIPC indicated more positive outlets resulting in POU hepa filters being deployed on all water outlets in clinical and patient areas in line with the Water Safety Plan. Contractual discussions have now been held with the PFI provider to review the controls and management of legionella. The PFI provider has retaken control of the sampling regime and further sampling of outlets continues to show the building has a high percentage of positive results. The PFI provider has employed the services of an external AE-Water, Tom Makin and Tom is supporting the team to regain control of the water system POU filters continue to be in place to protect the end user. The provider has requested to carry out a full chlorination of the building, but this request has been denied due to operational demand as it would require the whole building to be out of use for a set period of time.

At present the trust is seeking the assurance of the following measures:

1. Are all water outlets filtered, or are they being assessed? including toilets, and macerators.
2. Has the PFI reviewed their risk assessment.
3. Could the PFI provide full sampling list of the building in a tracker document with all outlets listed.
4. Reassurance around the lifecycle maintenance regime e.g., EPDM seals, solenoids and TMV cartridges (Expected to last no more than 10 years).

### **Jubilee Building – Loss of control of the Water Temperature**

Following the use of Jubilee Building as a COVID area and recognition of poor temperature control of the hot water services sampling was carried out. A significant number of positive legionella results emerged resulting in point of use filters being deployed and a review of engineering design and infrastructure. Investigations indicated that several thermostatic control valves have failed. An engineering solution has been developed to reduce the quantity of thermostatic control valves and regain thermal control; however, due to patient pressures and the need to release of a block of beds to undertake works, this has not progressed. Meanwhile POU filters are still being deployed and regular sampling is taking place to ensure the safety of the end user.

To help mitigate the risk the Acute site is at the later stage of mobilising a project to introduce a water treatment plant to the Musgrove Park Hospital Site. The unit which uses ionisation (Copper and Silver) to treat the water will help us control water quality on the site. During financial year 2022/23 we were awaiting town planning approval for the plant to be situated on the outskirts of the estate. The approval was granted early 2023. The next stage is a planned project mobilising meeting in April to agree a location of the plant as the location is key to maximise the system effectiveness in dosing the water supply.

### **Strategic Development – Sub-optimal quality of water systems**

One of the main areas of concern is the ongoing site development and the challenges with safe water quality being achieved during refurbishing existing or delivering new buildings. The Acute Authorising Engineer has yet to sign off any water system as safe for the past four years. In many cases as an interim measure point of use filters are deployed until safe water systems are achieved. The trust has a significant backlog of project defects which is slowly being addressed by the Strategic Project Team. Another area of concern is derogations, as per Water Safety Policy, derogations need to be agreed by the Water Safety Group. At

present, the Water Safety Group are not informed of derogations and often must manage derogations post project.

The Trust has separate Water Safety Groups (WSG), the Community and Mental Health WSG is chaired by the Responsible Person for Water, Neil Hughes (Head of Estates & Backlog). The Community and Mental Health WSG similarly meets 4 times a year. The function of this group includes monitoring the performance of the water systems in the CMH Estate 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 reports to the Infection Prevention and Control Committee 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.

In 2022/23 the CMH WSG has the following area of concern:

### **Hydrotherapy Pool, Dene Barton**

Since its commissioning the hydrotherapy pool continues to lose water during the backwash cycle which is a process which supports the cleaning of the pool. During this process the pool should automatically refill to normal levels and the appropriate calculated amount of chemicals should be added to the pool automatically. Since the pool does not refill to normal levels the estates operative responsible for the maintenance of the pool is 'shot' dosing the chemical. Since this is 'shot' dosed it can take several days for the chemical balance of the water to settle. This does not pose a risk for anyone using the pool as daily monitoring ensures chemical treatment remains at the correct level.

## **13.5 Significant Achievements**

During the reporting period significant improvement has been made to the hot and cold-water infrastructure in the Maternity block with replacement of old contaminated pipework and valves. The system has been rebalanced and from routine monitoring, we have seen that Thermal control has improved since the refurbishment works. There are still some areas that require further works and we are addressing remedial works via the inhouse maintenance team.

Another achievement is we have moved all the mains cold-water services from the old building voids and created a new tank fed supply to the old building roof. This has not only achieved a decrease in CWS temperatures but also provides a 12-hour water supply resilience compared to mains which could be isolated at any time. We have also seen via routine monitoring that this year has been the first time since reporting that we have had not out of range cold water services temperatures in the old building.

Following the future merger of Somerset NHS FT with Yeovil District Hospital stakeholders are currently discussing the merger of water safety groups to establish one merged water safety group and one single water safety policy. Paul Luxton has produced a draft merged water safety policy which is currently with the Estates Merger Programme board for initial review. The ideology is a brief water safety policy and site-specific water safety plans.

At CMH sites flushing is monitored by IP&C who continue to report that flushing compliance is at a high compliance level, most sites being 100% compliance, any dip in performance is followed up direct with the relevant areas by IP&C colleagues.

The CMH Authorising Engineer (AE) carries out six monthly audits across all sites and areas of control and reports back at the CMH WSG. No significant findings have been identified, where areas of concern have been raised i.e., condition of water tanks etc these are addressed immediately.

Finally training of teams in the CMH continues to remain compliant and additional training has been rolled out to members of the soft FM and facilities team members to provide them with an understanding of water safety management, controls and the requirement to flush infrequently used outlets.

## **14 VENTILATION**

### **14.1 Situation**

Annual testing of the ventilation systems has been completed in all Theatre areas, Maternity Procedure Room, Endoscopy, Emergency Department Resuscitation Room, Intensive Therapy Unit, Mortuary, Interventional X-Ray, MRI 2&3 and OTS 1&2 and the Theatre at Minehead Community Hospital. Significant historic issues remain with the systems supplying Day Surgery Theatres.

### **14.2 Background**

Ventilation systems within healthcare are to provide a safe and comfortable environment for patients and staff. Specialist healthcare systems protect patients from infections so are used in operating theatres, procedure rooms and isolation rooms.

The Trust must comply with Health Technical Memorandum 03-01 – Specialised Ventilation for Healthcare Premises 2007 (Revised 2021). Compliance requires annual inspection and validation to ensure the system is performing to the required standard. Testing of ventilation systems is a specialist subject and is completed by AirisQ (Independent Air Quality Consultants) on behalf of the Estates Department.

Andrew Poplett is The Musgrove site appointed Authorising Engineer for Ventilation in accordance with HTM 03-01.

Due to the Revision of HTM 03-01 in 2021 the management of the ventilation systems of a healthcare provider should be overseen by a Ventilation Safety Group (VSG). The VSG should have clearly defined roles and responsibilities, be part of a healthcare organisation's governance structure and report to the designated person at Board level. It will be led and chaired by a person who has appropriate management responsibility, knowledge, competence and experience (for example the Designated Person).

There is not currently a VSG in place, but discussions are being held at senior level on how to proceed. There has previously been a 'Ventilation Working Group' in place for the Trust and it was established in October 2015 as a forum to review the annual test results of Specialist Ventilation systems and recommend actions. This group currently reports to the Infection Control Committee.

In absence of a formal VSG this is an assurance report conducted by the Ventilation AP supported by a Senior Mechanical Technician and covers the period April 2022- April 2023.

### **14.3 Recommendations**

Priority should be given to the formal setup of the VSG as it is to be agreed and completed. The continued successful management of the Ventilation systems heavily relies on this group. In particular with the up and coming project developments such as the new surgical build this group will play a very key integral aspect of the Trust management and assurance structure. The designated contractor and Trust Capital Projects Team have previously engaged with, and are continuing to engage with, the Trust AE, Vent AP and IP&C in the absence of the VSG.

## **15 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 respiratory viruses and 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, IPC 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. Progress against the plan will be monitored by the ICC and an annual report submitted to the Quality and Governance Committee.

## **16 ACKNOWLEDGEMENTS**

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- Mark Morley, Sterile Services Manager
- Neil Hughes, Head of Estates & Backlog
- Paul Luxton, Head of Acute Estates & Infrastructure

- David Frazer, Mechanical Estates Officer
- Bernie King, Senior Mechanical Technician
- Nicola Murphy, Administrator to the Infection Control Team