NHS
United Lincolnshire Hospitals
NHS Trust

Director of Infection Prevention and Control Annual Report 2020-2021

OUTSTANDING CARE *personally* DELIVERED

Version Control

Version	1
Type	Annual Report
Directorate	Corporate
Author	Mrs Lisa Carroll – Interim Deputy DIPC
Contributors	Dr Bethan Stoddart - Consultant Microbiologist and IPC Doctor Mrs Balwinder Bolla - Consultant Antimicrobial Pharmacist Mrs Natalie Vaughan – Deputy DIPC Mrs Vivien Duncanson – Senior IPC Nurse Mr Stephen Kelly – Head of Occupational Health and Wellbeing Mr Wayne Mckintosh – Estates and Facilities Engagement Lead Mr John Killeen – Associate Director of Estates and Facilities
Approving Person	Dr Karen Dunderdale Director of Nursing and DIPC
Approval Date	IPCG 19.05.21

Contents

1. Summary and Highlights

The Director of Infection Prevention and Control (DIPC) Annual Report details infection prevention and control performance activities within United Lincolnshire Hospitals Trust for the year 2020-2021.

The report outlines the Trust's zero tolerance approach to reducing the risk of avoidable Healthcare Associated Infections (HCAIs) for patients, the challenges and the steps taken to reduce risk. United Lincolnshire Hospitals Trust (ULHT) is committed to leading on and supporting initiatives to reduce HCAI.

Good Infection prevention and Control (IPC) practice is essential to ensure that people who use the Trust's services receive safe and effective care. Effective IPC practices require the hard work and diligence of all staff, clinical and non-clinical. Good practice must be applied consistently by everyone.

The publication of the Trust's annual report is a requirement to demonstrate good governance and public accountability. In addition, it highlights the role, function and reporting arrangements of the DIPC and the IPC team.

Throughout the reporting period the Trust has been responding to the global COVID-19 pandemic. COVID-19 has brought significant challenges to the healthcare system and the impact on patients and staff has been significant. This report will detail the Trusts response and plans going forward as the approach moves from managing a pandemic to COVID-19 becoming endemic in our population.

With the COVID-19 pandemic seeing the country in lock down for large portions of the year, there have been no outbreaks of diarrhoea and vomiting related illnesses or influenza reported and a significant reduction in other respiratory illnesses such as RSV.

The Trust has seen significant improvements in compliance with the Code of practice on the Prevention and Control of Infections and The Hygiene Code. The Trust is compliant with all except two criterions which relate to estates and policies. In these areas, which are partially compliant, a plan is in place to address this and mitigation is in place to reduce any risks.

	Compliance criterion What the registered provider will need to demonstrate	RAG rating
1	Systems to manage and monitor the prevention and control of infection. These systems use risk assessments and consider the susceptibility of service users and any risks that their environment and other users may pose to them.	
2	Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections.	
3	Ensure appropriate antimicrobial use to optimise patient outcomes and to reduce the risk of adverse events and antimicrobial resistance.	
4	Provide suitable accurate information on infections to service users, their visitors and any person concerned with providing further support or nursing/ medical care in a timely fashion.	
5	Ensure prompt identification of people who have or are at risk of developing an infection so that they receive timely and appropriate treatment to reduce the risk of transmitting infection to other people.	
6	Systems to ensure that all care workers (including contractors and volunteers) are aware of and discharge their responsibilities in the process of preventing and controlling infection.	
7	Provide or secure adequate isolation facilities.	
8	Secure adequate access to laboratory support as appropriate.	
9	Have and adhere to policies, designed for the individual's care and provider organisations that will help to prevent and control infections.	
10	Providers have a system in place to manage the occupational health needs and obligations of staff in relation to infection.	

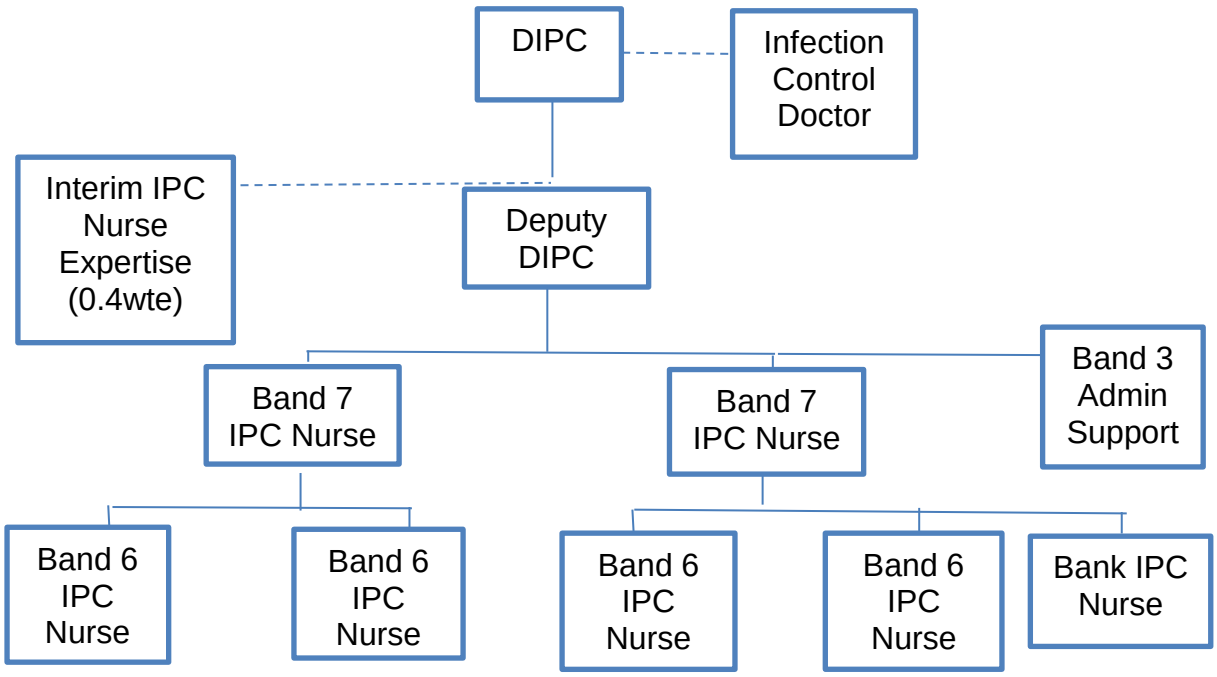
2. Infection Prevention and Control Arrangements

The IPC Team

The Director of Infection Prevention and Control holds board level responsibility for all matters relating to the safe delivery of IPC care and practice.

The Deputy DIPC provides operational leadership to the IPC Team which is predominantly site based. At the end of 2020 an interim Deputy DIPC came into post as the original post holder moved roles into the CCG.

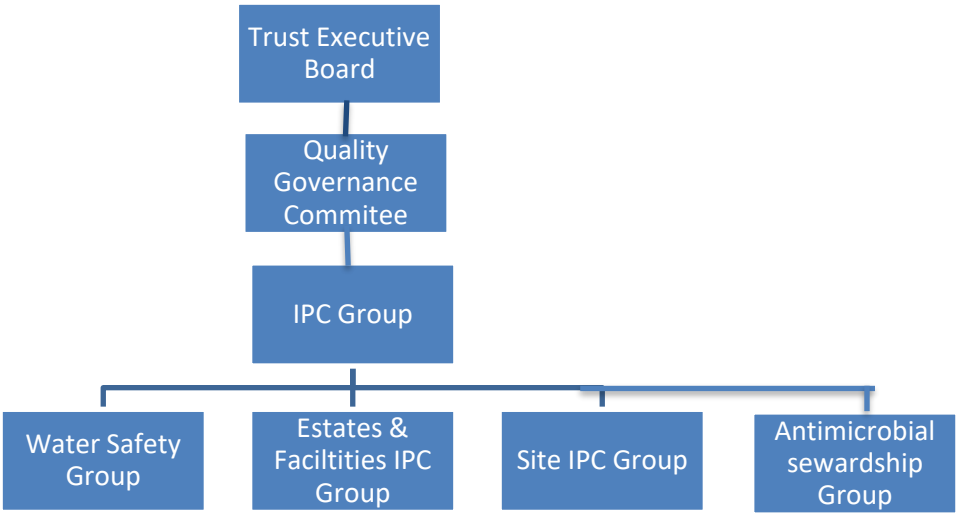
The current IPC structure is as follows:



IPC Governance, Assurance and reporting structure

The Trust Infection Prevention Control Group (IPCG) provides strategic direction for the prevention and control of Healthcare Associated Infections in United Lincolnshire Hospitals NHS Trust. It performance manages the organisation against the Trust's Infection Prevention and Control Strategy and ensures that there is a strategic response to new legislation and national guidelines. The group seeks assurance from the divisions and ensures compliance with the Health and Social Care Act (2008).

A number of sub-groups report into the IPCG and the IPCG provides upwards assurance to the Quality Governance Committee and Trust Executive Board.



COVID-19 Assurance

During the COVID-19 pandemic and this reporting period additional IPC meetings have been embedded in the IPC governance structure.

A daily IPC Cell meeting has provided assurance regarding the maintenance of staff and patient IPC safety and practice relating to the pandemic. It has overseen the development of IPC practice and guidelines in line with national guidance. Ward assurance logs were implemented early in the pandemic and assurance provided through the IPC cell.

A member of the IPC team has been an integral member of the daily COVID-19 GOLD meetings to ensure escalation of any areas of concern and provide assurance regarding actions being taken.

3. Healthcare Associated Infection Performance

3.1 Mandatory reporting

The Trust continues to report on the infections required by the mandatory surveillance programme facilitated by Public Health England:

- Clostridioides difficile infection (CDI)
- Meticillin-resistant Staphylococcus aureus (MRSA) blood stream infections (bacteraemia)
- Meticillin-sensitive Staphylococcus aureus (MSSA) bacteraemia
- Escherichia coli blood stream infection
- Klebsiella species blood stream infection
- Pseudomonas aeruginosa blood stream infection

National criteria are applied to establish whether cases of these infections are attributable to the Trust (hospital onset or healthcare associated).

For bacteraemia cases when the sample is taken on the day of admission or the following day it is considered to be community onset but samples taken after that time are considered to be hospital onset.

For CDI the thresholds for attribution changed from 1 April 2019 meaning there are now four categories of infection:

- Hospital onset healthcare associated: cases that are detected in hospital three or more days after admission
- Community onset healthcare associated: cases that occur in the community (or within 2 days of admission) when the individual has been an in-patient in the Trust reporting the case in the previous 4 weeks.
- Community onset indeterminate association: cases that occur in the community (or within 2 days of admission) when the individual has been an in-patient in the Trust reporting the case in the previous 12 weeks but not in the most recent 4 weeks.
- Community onset community associated: cases that occur in the community (or within 2 days of admission) when the individual has not been an in-patient in the Trust reporting the case in the previous 12 weeks.

The first two categories count as attributed to the Trust reporting the case (healthcare associated).

For the reporting period of 2020-2021 the Trust had a target of 5% reduction in all Healthcare Associated Infection (except COVID-19).

3.2 MRSA Bacteraemia

Staphylococcus aureus is a bacterium commonly found on human skin which can cause infection if there is an opportunity for the bacteria to enter the body. In serious cases it can cause blood stream infection. MRSA is a strain of these bacteria that is resistant to many antibiotics, making it more difficult to treat.

Many patients carry MRSA on their skin and this is called colonisation. It is important that we screen some groups of high risk patients when they come into hospital so that we know if they are carrying MRSA. Screening involves a simple skin swab. If positive, we can provide special skin wash and nasal cream that helps to get rid of MRSA. This measure reduces the risk of an infection developing.

The Trust has reported four Trust acquired MRSA Bacteraemia during the year 2020-2021. Nationally there is a zero tolerance to MRSA Bacteraemia.

This is an increase of one from the reported cases in 2019-2020, where the Trust reported three Trust acquired MRSA Bacteraemia.

One case occurred at Pilgrim Hospital in May 2020; one case was identified in January 2021 at Lincoln Hospital and two cases, one at Lincoln and one at Pilgrim hospital were identified in February 2021.

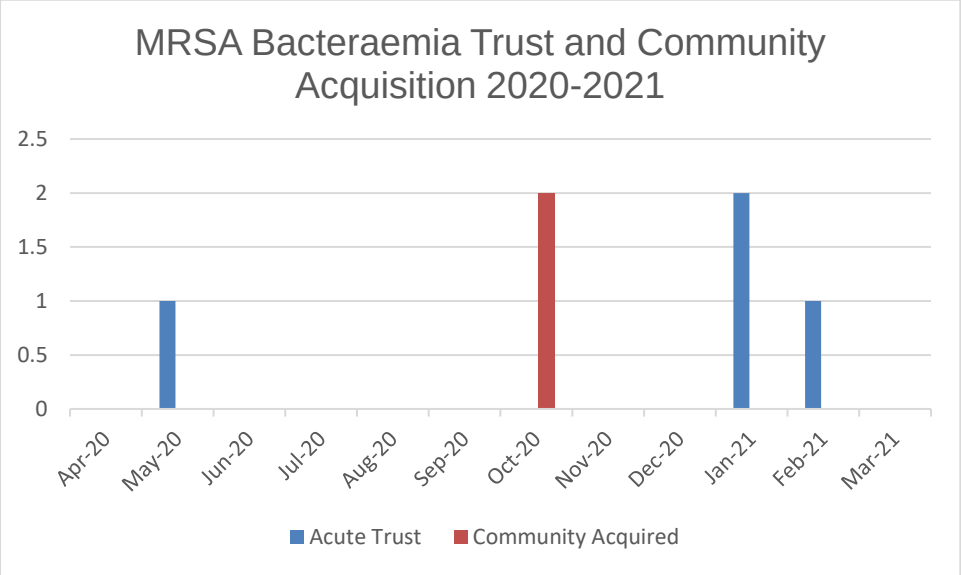
For each of the cases a root cause analysis (RCA) and either a Deputy DIPC or DIPC review has been undertaken with the relevant clinical teams to identify areas of concern, ensure actions are taken to prevent recurrence and the lessons are learnt and shared with the wider health care team.

Following the DDIPC/DIPC of three of the four cases, two were identified as being avoidable and one case was unavoidable.

The reviews identified a need to revise and update the documentation regarding the insertion of invasive lines and the taking of blood cultures. This has been undertaken and the policy and documentation amended accordingly. An invasive lines group has been established.

MRSA Bacteraemia per site 2020-2021

	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
Louth	0	0	0	0	0	0	0	0	0	0	0	0
Lincoln	0	0	0	0	0	0	0	0	0	1	1	0
Pilgrim	0	1	0	0	0	0	0	0	0	0	1	0
Grantham	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	0	0	0	0	0	1	2	0
Cumulative Total	0	1	1	1	1	1	1	1	1	2	4	4



3.3 MSSA Bacteraemia

MSSA is a strain of Staphylococcus aureus that can be effectively treated with many antibiotics. It can cause infection if there is an opportunity for the bacteria to enter the body and in serious cases it can cause blood stream infection.

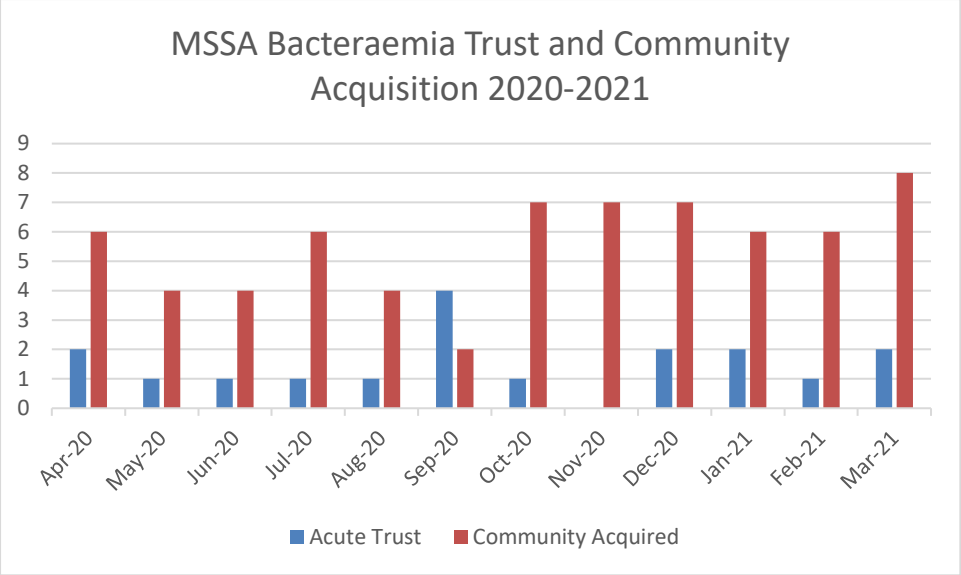
The Trust has reported nineteen Trust acquired MSSA Bacteraemia during the year 2020-2021.

Trust attributable MSSA Bacteraemia 2020-2021

	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
Louth	0	0	0	0	0	0	0	0	0	0	0	0
Lincoln	0	1	1	0	1	2	1	0	1	1	1	1
Pilgrim	2	0	0	1	0	3	0	0	1	1	0	1
Grantham	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	1	1	1	1	5	1	0	2	2	1	2
Cumulative Total	2	3	4	5	6	11	12	12	14	16	17	19

Community attributable MSSA Bacteraemia 2020-2021

Month	**Community attributed**	**Cumulative Total**
April 2020	6	6
May	4	10
June	4	14
July	6	20
August	4	24
September	2	26
October	7	33
November	7	40
December	7	47
January 2021	6	53
February	6	59
March	8	67



In 2019-2020 the Trust reported 18 Trust acquired MSSA Bacteraemia and 82 Community acquired. Trust acquired rates have remained unchanged from the previous year.

3.4 Clostridium difficile infection

Clostridioides *difficile* is a bacterium that is found in the gut of around 3% of healthy adults. It seldom causes a problem as it is kept under control by the normal bacteria of the intestine. However certain antibiotics can disturb the bacteria of the gut and Clostridium difficile can then multiply and produce toxins which cause symptoms such as diarrhoea.

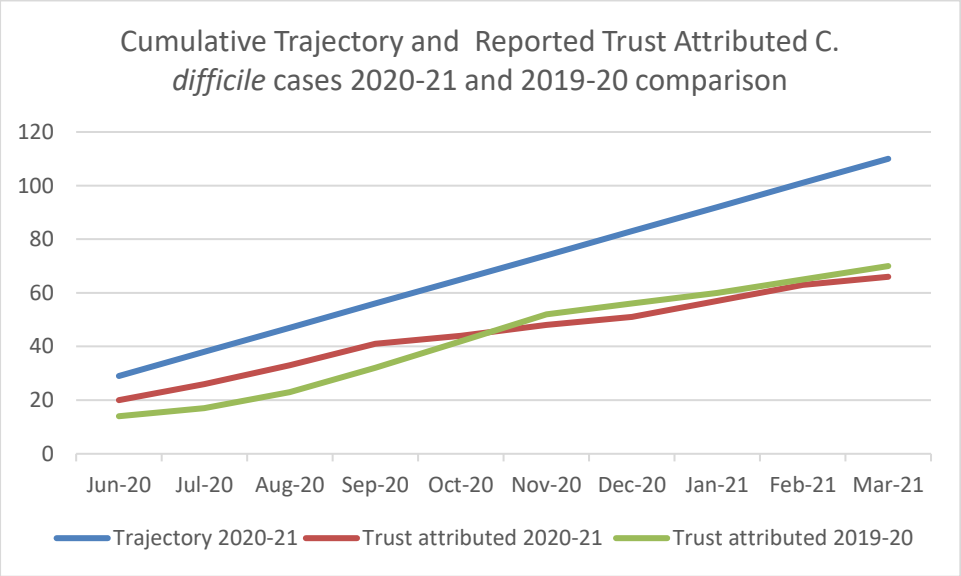
For 2020-2021 the Trusts target for C. difficile was set by NHSE at no more than 110 cases in the year. The Trust set an internal target of no more than 66 cases.

The Trust has reported 66 Trust attributable cases of C. difficile in 2020-2021.

C. *difficile* data for 2020-2021

2020/21	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
Trajectory	10	10	9	9	9	9	9	9	9	9	9	9
Actual acute cases	10	4	6	6	7	8	3	4	3	6	6	3
+/- Trajectory	0	-6	-4	-3	-2	-1	-6	-5	-6	-4	-3	-6
Acute Cumulative actual	10	14	20	26	33	41	44	48	51	57	63	66
Community cases	4	2	2	4	2	5	1	3	3	2	0	1
Cumulative Total Across Lincolnshire Health economy	14	20	28	38	47	60	64	71	77	85	91	95

In 2019-2020 the Trust reported 70 Trust attributable cases of C. difficile. This represents a 5.7% reduction in cases from the previous year and a reported figure that is 40% below the expected trajectory of 110 for the year.



3.5 Escherichia coli blood stream infection

Often referred to as E. coli, this is part of the normal gut flora and can commonly cause urinary, biliary or gastrointestinal tract related infection leading to blood stream infection (E. coli blood stream infection).

Some E. coli are enzyme producers known as extended spectrum beta lactamase (ESBL) which increase the resistance to multiple antibiotics.

Attention to insertion and care of urinary catheters, audits, education and reporting of catheter associated urinary tract infection are directed to further reduce healthcare associated infection and E. coli blood stream infection.

There is no national threshold for E. Coli infection rates.

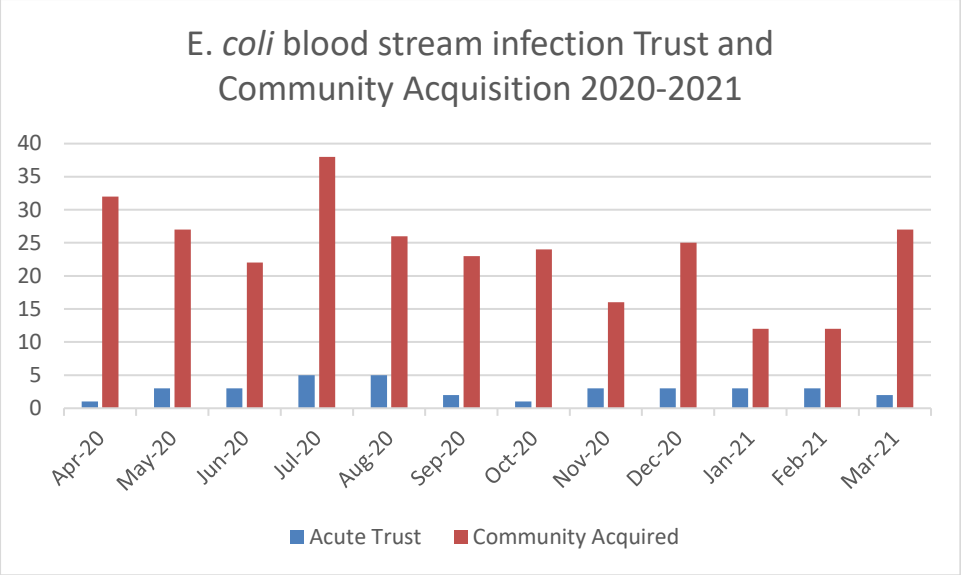
The Trust has reported thirty-four E Coli blood stream infections during the year 2020-2021. This is a 32% reduction on 2019-2020, when the Trust reported fifty-one E Coli blood stream infections.

Trust Attributable E. *Coli* blood stream infection 2020-2021

	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
Louth	0	0	0	0	0	0	0	0	0	0	0	0
Lincoln	1	2	3	4	4	1	1	1	2	0	3	1
Pilgrim	0	0	0	1	1	1	0	2	1	3	0	1
Grantham	0	1	0	0	0	0	0	0	0	0	0	0
Total	1	3	3	5	5	2	1	3	3	3	3	2
Cumulative Total	1	4	7	12	17	19	20	23	26	29	32	34

Community attributable E. *Coli* blood stream infection 2020-2021

Month	Community attributed	Cumulative Total
April 2020	32	32
May	27	59
June	22	81
July	38	119
August	26	145
September	23	168
October	24	192
November	16	208
December	25	233
January 2021	12	245
February	12	257
March	27	284



3.6 Klebsiella species blood stream infection

Klebsiella species belong to the family Enterobacteriaceae. Klebsiella species are commonly associated with a range of healthcare associated infections, including pneumonia, bloodstream infections, wound or surgical site infections and meningitis.

There is no national threshold for Klebsiella species infection rates.

The Trust has reported thirty-one Klebsiella species blood stream infections during the year 2020-2021

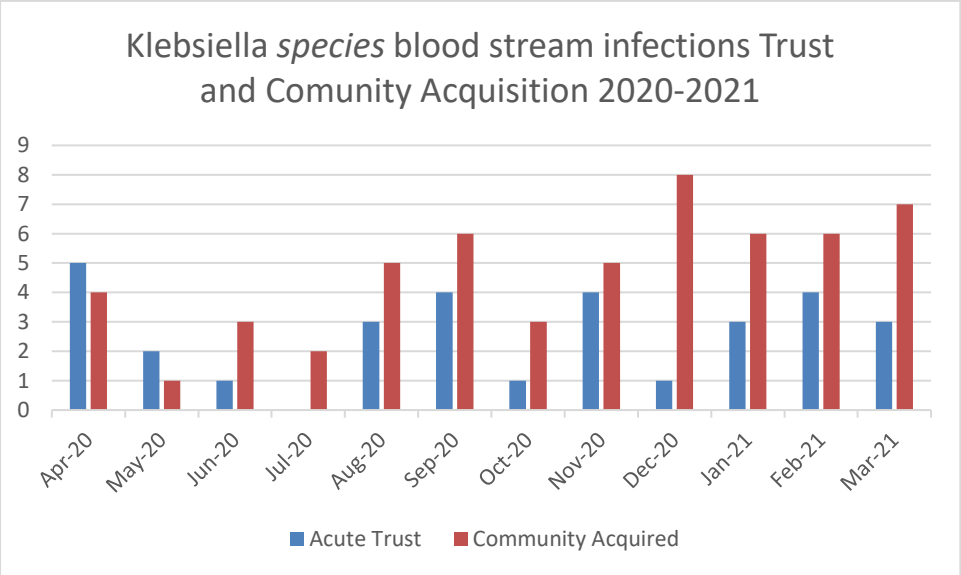
This is a 45% increase from 2019-2020 when the Trust reported seventeen Klebsiella species blood stream infections.

Trust Attributable Klebsiella species blood stream infection 2020-2021

	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
Louth	0	0	0	0	0	0	0	0	0	0	0	0
Lincoln	1	0	1	0	2	3	1	3	1	2	4	2
Pilgrim	4	2	0	0	1	1	0	1	0	1	0	1
Grantham	0	0	0	0	0	0	0	0	0	0	0	0
Total	5	2	1	0	3	4	1	4	1	3	4	2
Cumulative Total	5	7	8	8	11	15	16	20	21	24	28	31

Community attributable Klebsiella species blood stream infection 2020-2021

Month	Community attributed	Cumulative Total
April 2020	4	4
May	1	5
June	3	8
July	2	10
August	5	15
September	6	21
October	3	24
November	5	29
December	8	37
January 2021	6	43
February	6	49
March	7	56



3.7 Pseudomonas aeruginosa blood stream infection

Pseudomonas is a type of bacteria that is found commonly in the environment, including soil and in water. Of the many different types of Pseudomonas, the one that most often causes infections in humans is called Pseudomonas *aeruginosa*, which can cause infections in the blood, lungs (pneumonia), or other parts of the body after surgery.

There is no national threshold for Pseudomonas *aeruginosa* infection rates.

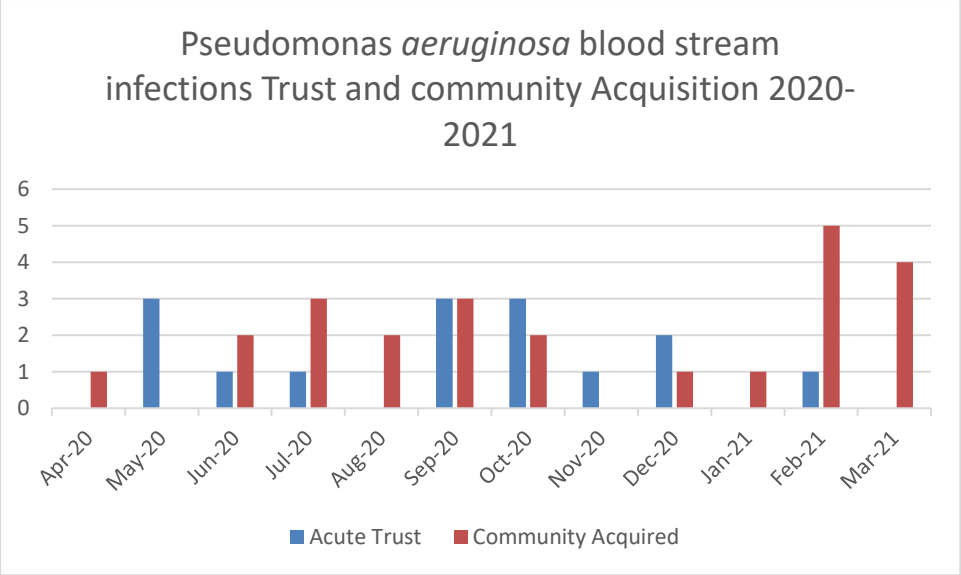
The Trust has reported fifteen Pseudomonas *aeruginosa* blood stream infections during the year 2020-2021. This is a 21% reduction on 2019-2020, when the Trust reported nineteen Pseudomonas aeruginosa blood stream infections.

Trust Attributable Pseudomonas aeruginosa Bacteraemia 2020-2021

	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
Louth	0	0	0	0	0	0	0	0	0	0	0	0
Lincoln	0	1	1	1	0	3	2	0	1	0	0	0
Pilgrim	0	2	0	0	0	0	1	1	1	0	1	0
Grantham	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	1	1	0	3	3	1	2	0	1	0
Cumulative Total	0	3	4	5	5	8	11	12	14	14	15	15

Community attributable Pseudomonas aeruginosa blood stream infection 2020-2021

Month	**Community attributed**	**Cumulative Total**
April 2020	1	1
May	0	1
June	2	3
July	3	6
August	2	8
September	3	11
October	2	13
November	0	13
December	1	14
January 2021	1	15
February	5	20
March	4	24



3.9 Surgical Site Infection (SSI) Surveillance

Due to the COVID-19 pandemic elective activity has been greatly reduced during the reporting period. This has resulted in no meaningful data being reported, published or analysed by the Trust during the 2020-2021 period.

The Trust re-convened the Surgical Site Surveillance group in March 2021 to ensure as elective activity returns to the Trust SSI data is collected, reported nationally and data utilised to improve patient care.

3.10 COVID-19

On the 12th March 2020 the World Health Organisation declared a global pandemic and the Trust received their first COVID-19 positive patient on the 17th March 2020. The United Lincolnshire Hospitals Trust has throughout the period 2020-2021 covered by this report responded to this pandemic.

On 5th March 2020, in response to the Covid-19 pandemic, the Trust enacted the Pandemic Flu plan and elements of the Major Incident Plan and put in place Command and Control systems. The infection prevention and control governance structure was adjusted to support the Trust and staff to safely manage the IPC requirements. Daily IPC Cells were established, chaired by the DIPC or Deputy DIPC to provide support, guidance, implementation of IPC policy and practice relating to COVID-19, manage outbreaks and provide assurance to the Trust board.

Panel meetings with NHSE/I were established to provide assurance and to share and learn lessons from other Trusts.

Throughout the pandemic the Trust has followed national guidance for all matters relating to infection, prevention and control.

During the pandemic the IPC Team moved to seven day working to ensure appropriate support was available every day to the Trust.

In June 2020 Grantham District General Hospital was established as a green site. This enabled urgent elective work and services such as chemotherapy to continue. All other services were either ceased or re-located to other sites in line with national guidance.

Patients admitted to Grantham Hospital are required to have a swab for COVID-19 72 hours prior to surgery and to self-isolate prior to admission.

Staff either only work on the Grantham site or if they are required to work on other sites, do not do so on the same day as working at Grantham.

All elective care activity other than urgent treatment as defined by national guidelines was stopped.

Lincoln and Pilgrim Hospitals implemented green and blue pathways in March 2020. Green pathways accept patients who have no known contact or symptoms of COVID-19 and test negative and blue pathways admit those with known contact or symptoms of COVID-19 and those who have tested positive. Dedicated COVID-9 wards for the care of patients admitted with COVID-19 either as their primary reason for admission or because they have tested positive on admission to hospital were quickly established early in the pandemic.

Emergency Departments implemented streaming at the front door and patients are triaged to either the green or blue areas on arrival at the departments.

Testing for COVID-19

All non-elective admissions to Lincoln and Pilgrim Hospitals are swabbed for COVID-19 on admission, at day 3 and days 5-7 of admission, in line with national guidance.

In December 2020 the Trust introduced lateral flow testing for all patients requiring admission in the Emergency Departments and have subsequently introduced other rapid tests such as SAMBA and LumiraDX. This reduces the time patients are required to spend in the emergency Departments and provides a reliable mechanism for ruling out COVID-19 and ensuring those who test positive are isolated promptly.

Twice weekly lateral flow testing of patient facing staff was introduced in December 2020. To the 31st March 2021 71027 lateral flow tests have been completed.

COVID-19 related admissions

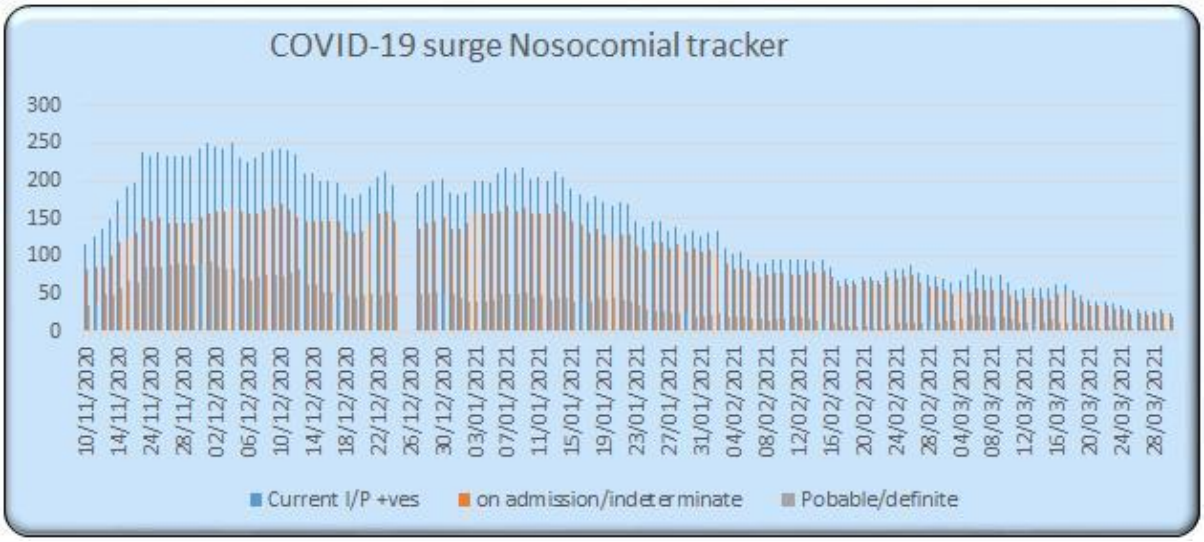
In November 2020, wave 2 of the pandemic, the number of patients in beds within the Trust with COVID-19 surpassed the previous peak in wave 1. Wave 2 saw more than 250% of the number of patients admitted during wave 1.

In total, up to the 31st March 2021, the Trust has cared for 3019 COVID-19 positive patients.

Sadly, during the pandemic, to the 31st March 2021, 826 patients have died as a result of COVID-19 within the Trust.

Nosocomial spread

The Trust has monitored closely nosocomial rates and put measures in place to reduce the spread of COVID-19 within the Trust.



Daily audits are undertaken in all wards and departments to ensure compliance with PPE, social distancing, environmental cleaning, hand hygiene, ventilation and the wearing of masks by patients. As new guidance has been published the ward assurance logs have been updated to reflect this.

Spot checks and audits are undertaken by the Quality Matrons and Divisional Nurses and the Infection Prevention and Control Team.

Posters are in place throughout the Trust with the key messages of hands, face, space. All main entrances are manned by Trust staff to greet visitors, ensure they use the hand gel and provide them with an appropriate face mask to wear.

Visiting has been restricted through the pandemic in order to reduce transmission with visiting only taking place on compassionate grounds and in line with national guidance.

The cleaning teams have expanded to provide support 24 hours per day with increased cleaning of all touch points and enhanced cleaning in areas caring for COVID-19 positive patients or where patients have been in contact with a COVID-19 positive individual.

In December 2020 the Trust introduced ‘Ring the bell for Clinell’. Four times per day all wards and departments pause when a bell is rung and clean the area around them. All members of the team, clinical and non-clinical, take part.

The Trust has a COVID-19 action plan which is overseen and assurance gained through the IPC Group. Each division takes responsibility for ensuring the actions identified through audits and review of guidance as it is published or updated, are implemented and embedded in practice.

The national Board Assurance Framework published by NHSE in May 2020 and updated in December has been completed and is updated on a monthly basis. The Trust is compliant or has actions in place to ensure full compliance with all elements of the framework. An assurance report is provided to the Trust Board each month.

Project Salus

In January 2021 the Trust launched Project Salus. The aim of the project is to safely restore speciality based wards and a resumption of business as usual as move from managing COVID-19 during a pandemic to living with it being endemic in our population.

The trust is aligning with the national guidance of triaging and caring for patients in the categories of high, medium or low risk within their required speciality. This revised way of working will be rolled out during the financial year 2021-2022

3.11 Outbreaks

Panton Valentine Leukocidin (PVL) MRSA

In March 2020 two babies tested positive on the neonatal unit at Pilgrim Hospital for PVL MRSA. A third case was identified in May 2020 and an outbreak was declared. An outbreak meeting was held and immediate control measures put in place. The

control measures included screening of all babies and staff on the Pilgrim site. This outbreak was reported externally to the CCG and CQC.

An external review was requested and a plan was put in place for clinicians from the University Hospitals of Coventry and Warwick to undertake this. Due to the pandemic the clinicians have been unable to undertake this visit. The Trust has recently appointed a new Deputy DIPC from another organisation and they will be undertaking a review of the service in April 2021.

In February 2021 two patients on the Intensive Care Unit (ICU) at Pilgrim Hospital developed a PVL MRSA of the same type. An outbreak meeting was held to review the cases and identify any lessons learnt.

Lessons learnt and actions identified during the outbreak meeting were shared with the ICU team and with the wider Trust at the IPC Group meeting, to ensure wider Trust learning.

4. Policies and Guidelines

During 2020-2021 the IPC Team have produced Guidance at a Glance documents for key IPC practice. The fourteen one page documents provide staff with a quick reference guide relating to specific IPC policies.

A project has been established during the year to review and update all IPC policies and resource has been sourced to focus on this.

Nineteen IPC policies have been updated during 2020-2021.

In addition to the updating of policies and provision of guidance at a glance, posters have been developed and made available in all clinical areas detailing IPC messages. These have been further supported by publication of a daily IPC bulletin for all staff.

5. Audit Programme

In August 2020 the Trust introduced a Front Line Ownership (FLO) audit programme as the standardised IPC audit tool for all wards and departments. The audit programme was rolled out to all wards and departments in a staged approach from August 2020.

The FLO audits focus on ten key areas of practice: hand hygiene, general environment, patients immediate bed space, isolation of infected patients, dirty utility

/ linen and waste disposal, ward kitchen, sharps safety, storage areas, clean utility and treatment room, patient equipment, clinical practice.

The audits are undertaken on a monthly basis and results, themes and actions reported to the IPC Group for assurance.

FLO Audit Results – average total percentage per division per site

(≤ 84% = red; 85-90% = amber; 91–100% = green)

Site	Division												
		Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Pilgrim	CSS					94.50%	93%	94%	93.50%	96.40%	98.70%	96%	96.70%
Lincoln	CSS					91%	89.50%	89.50%	94.20%	95.80%	95.50%	97%	97.60%
Grantham	CSS					96.50%	96%	98.30%	98.50%	95.50%	98.30%	98.50%	99.70%
Louth	CSS					96.50%	96%	98.30%	98.50%	95.50%	98.30%	98.50%	100%
Pilgrim	Family Health					94.70%	93.80%	95.60%	96.20%	97.10%	98.30%	97.40%	97.80%
Lincoln	Family Health					90.70%	92.40%	94.90%	93.80%	92.60%	94.20%	93.70%	93%
Grantham	Family Health					closed	closed	closed	closed	closed	closed	closed	closed
Louth	Family Health					NA	NA	NA	NA	NA	NA	NA	NA
Pilgrim	Medicine					86.50%	89.60%	91.60%	91%	89.10%	88.60%	93.60%	94.80%
Lincoln	Medicine					89.30%	91.30%	90.20%	91.10%	93.90%	93.80%	92.50%	93.20%
Grantham	Medicine					NA	NA	NA	NA	NA	NA	NA	NA
Louth	Medicine					NA	NA	NA	NA	NA	NA	NA	NA
Pilgrim	Surgery					86%	87%	83%	91%	93.80%	92.20%	94%	94.00%
Lincoln	Surgery					89.20%	91%	86.80%	81.20%	85%	93%	93.40%	92.20%
Grantham	Surgery					98%		96%	89%	97%			97%
Louth	Surgery											100%	100.00%

Hand Hygiene Audit Results – average total percentage per division per site:

Site	Division												
		Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Pilgrim	CSS						98.1%	98.3%	98.80%	99.50%	99.50%	95.7%	98.60%
Lincoln	CSS						80.00%	97.30%	99.40%	99.60%	100.00%	100%	100%
Grantham	CSS						100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100%
Louth	CSS							100.00%	100.00%	100.00%	100.00%	100.00%	100%
Pilgrim	Family Health						98.60%	98.60%	98.40%	97.80%	99.00%	98.80%	96.40%
Lincoln	Family Health						100.00%	98.70%	99.50%	100.00%	100.00%	100.00%	100%
Grantham	Family Health						closed	closed	closed	closed	closed	closed	closed
Louth	Family Health						NA	NA	NA	NA	NA	NA	NA
Pilgrim	Medicine						83.10%	90.00%	91.5%	91.40%	93.40%	94.80%	95.60%
Lincoln	Medicine						95.70%	97.40%	95.20%	99.00%	97.60%	98.10%	95.30%
Grantham	Medicine						NA	NA	NA	NA	NA	NA	NA
Louth	Medicine						NA	NA	NA	NA	NA	NA	NA
Pilgrim	Surgery						95%	96.7%	95%	96.70%	100.00%	98.2%	100%
Lincoln	Surgery						95.8%	95.50%	100.00%	100%	98.8%	100.00%	96.30%
Grantham	Surgery						87%	97%	97%	97%	93%		100%
Louth	Surgery						NA	NA	NA	NA	NA	NA	100%

Site	Division												
		Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Pilgrim	CSS						98.1%	98.3%	98.80%	99.50%	99.50%	95.7%	
Lincoln	CSS						80.00%	97.30%	99.40%	99.60%	100.00%	100%	
Grantham	CSS						100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
Louth	CSS							100.00%	100.00%	100.00%	100.00%	100.00%	
Pilgrim	Family Health						98.60%	98.60%	98.40%	97.80%	99.00%	98.80%	
Lincoln	Family Health						100.00%	98.70%	99.50%	100.00%	100.00%	100.00%	
Grantham	Family Health						closed	closed	closed	closed	closed	closed	closed
Louth	Family Health						NA	NA	NA	NA	NA	NA	NA
Pilgrim	Medicine						83.10%	90.00%	91.5%	91.40%	93.40%	94.80%	
Lincoln	Medicine						95.70%	97.40%	95.20%	99.00%	97.60%	98.10%	
Grantham	Medicine						NA	NA	NA	NA	NA	NA	NA
Louth	Medicine						NA	NA	NA	NA	NA	NA	NA
Pilgrim	Surgery						95%	96.7%	95%	96.70%	100.00%	98.2%	
Lincoln	Surgery						95.8%	95.50%	100.00%	100%	98.8%	100.00%	
Grantham	Surgery						87%	97%	97%	97%	93%		
Louth	Surgery						NA	NA	NA	NA	NA	NA	NA

6. Antimicrobial Stewardship (AMS)

The Trust Antimicrobial Stewardship Strategy Group (ASSG) meets every month to track progress and actions against the ULHT Antimicrobial Stewardship strategy. The forum allows dialogue with IPC Team, clinicians, Path Links, sepsis leads, acute care practitioners, and primary care around antimicrobials specifically. Despite the challenges of COVID-19, attendance and engagement via MS Teams has enabled continuation of Trust wide engagement with Antimicrobial Stewardship over the pandemic.

AMS Lincolnshire has been recognised and recommended by NHSI Antimicrobial Resistance leads for UK as a great model for other local health economies to develop the same, and collaboration through this group enabled procurement and establishment of the Antimicrobial App, Microguide®, which allows quicker access to guidelines and correct prescribing recommendations at the patient bedside. In addition to the Trust Antimicrobial Guidelines devised by Path Links and the various local guidance on managing specific infections, there is a Trust Antimicrobial Prescribing Policy which is also accessible through Microguide.

ULHT has 5 Key Performance Indicators used as antimicrobial prescribing standards applied in the Trust for AMS, as part of our work to tackle AMR.

Restricted antimicrobials are managed by simple but effective means, with support from the pharmacy department and numerous prescriber quality improvement projects under Antimicrobial Consultant supervision. ‘Pink slip supplies’ of sepsis antibiotics are available on each low risk ward, whereas high risk wards keep those antibiotic wards as stock. This is to provide a suitable compromise and working solution to ensuring correct antimicrobials are available for immediate use, versus the AMR challenges of not being able to track how ward stock is used. An audit

undertaken of all ‘Pink slip supplies’ in 2020, suggests that this scheme is working very well, and no changes are recommended.

The antimicrobial pharmacy team remain a very well utilised as a service from various staff groups. Having various means of contacting the team has enabled an ongoing influence in maintaining a basic level of antimicrobial stewardship on ward and clinical areas. This has been greatly facilitated by the pharmacy staff, where ward pharmacists and technicians signpost inappropriate or questionable prescribing, unusual or suspicious requests for antimicrobials, dosing queries, allergy queries, etc., and staff in the department have worked with us to co-ordinate ward stock and pink slip supplies, especially in light of the rapid ward changes and designation of COVID / non-COVD wards. The Post Graduate Medical Education Centre have been extremely supportive in sharing key educational messages with all prescribers and recruiting several junior doctors to antimicrobial prescribing audits in problem areas to facilitate a ward based approach. All in all, this pandemic has brought out a strengthened collaborative approach to ensuring antimicrobial stewardship and improving patient outcomes.

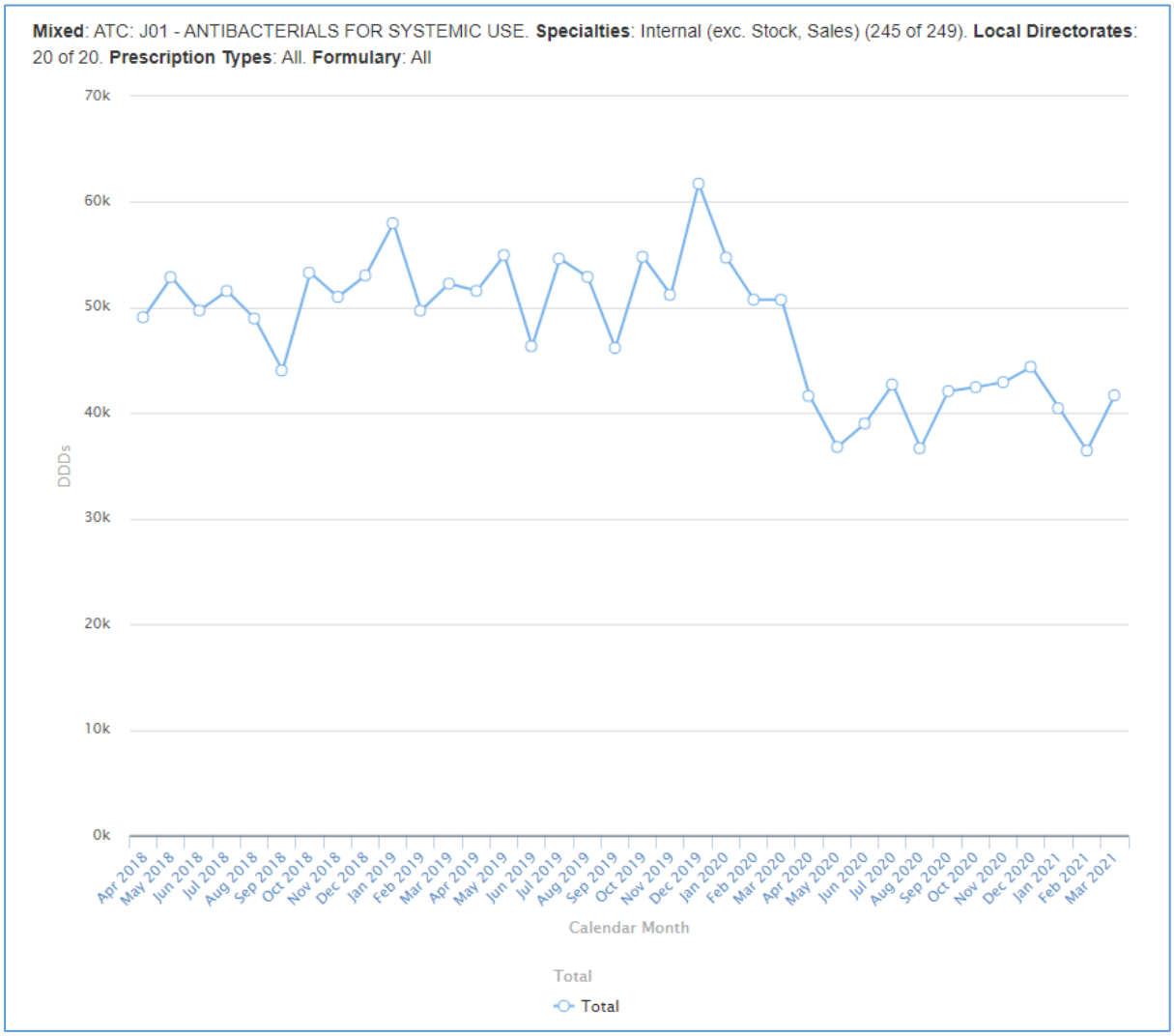
Communications and surveillance of COVID trials and treatments has also been part of the response to the pandemic, with rapid messages shared through the Trust SBAR where appropriate, including creation of specific antimicrobial guidelines for managing Pneumonia secondary to COVID19 infection. Surveillance on the use of Antimicrobials, and COVID treatments is shared at ASSG and reports are available from the Antimicrobial Team. These are generally consumption reports for the Trust as ULHT has limitations of not having electronic prescribing in place yet, but some reports, such as the surveillance on Remdesivir is more detailed.

Training and education on AMS for various staff groups were revised to create video teaching, to allow for a more socially distanced and virtual form of teaching programme, in light of COVID. This also helped ensure that staff who were off sick were able to access the sessions at a later date and complete this part of the curriculum.

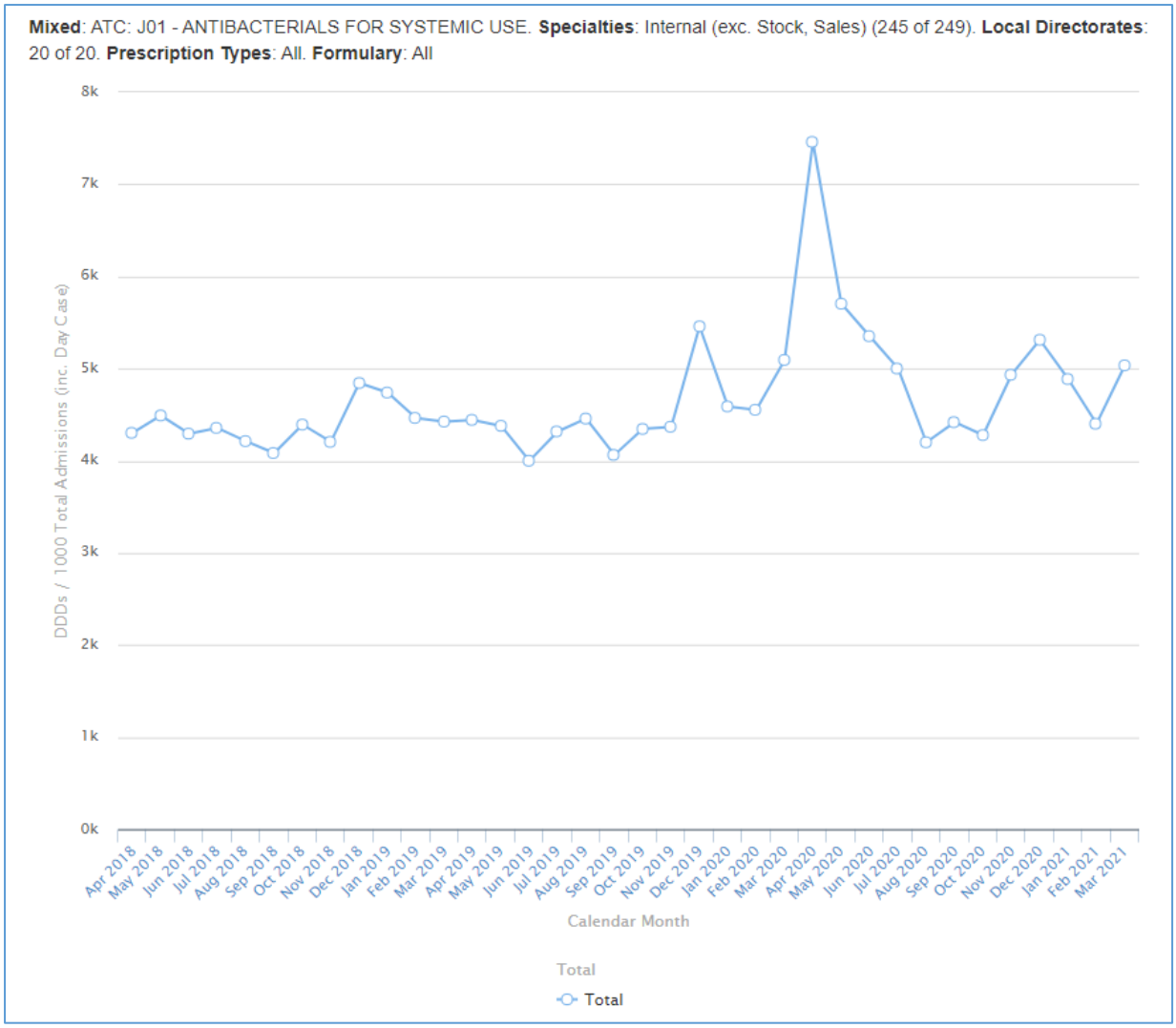
The Chief Operating Officer requested maximum capacity functioning of the OPAT service as a bed enabler during the COVID-19 Pandemic, as a means of keeping patients safe, and has appreciation of the role this could play in the restore and recover plan for ULHT. Whilst there have been some issues with staffing and home nursing capacity, significant efforts to increase patient uptake have still resulted in exceeding the trajectory of service activity by 28% over 2020/21.

The first graph below gives oversight of raw value of antimicrobials used over this period. The significant drop in antimicrobial use during the first wave of COVID-19, mirrors the fall in Trust bed numbers that was rapidly implemented. The second

graph highlights there was actually a significant increase in antimicrobial use during that time. It is clear that more patients were on antimicrobials than usual. This will reflect the reduction in elective admissions that do not require urgent antimicrobial treatment and the steep increase in non-elective emergency admissions that do. This correlates with an increase in activity and demand in the antimicrobial team with a significant increase in calls for antimicrobial advice, for COVID and non-COVID patients.



Consumption trend for systemic antibacterial use, corrected against Trust wide activity, over April 2018 to March 2021 (please note there is a 3-month time lag on verification of Trust activity, so Jan-Mar 21 is conditional data).



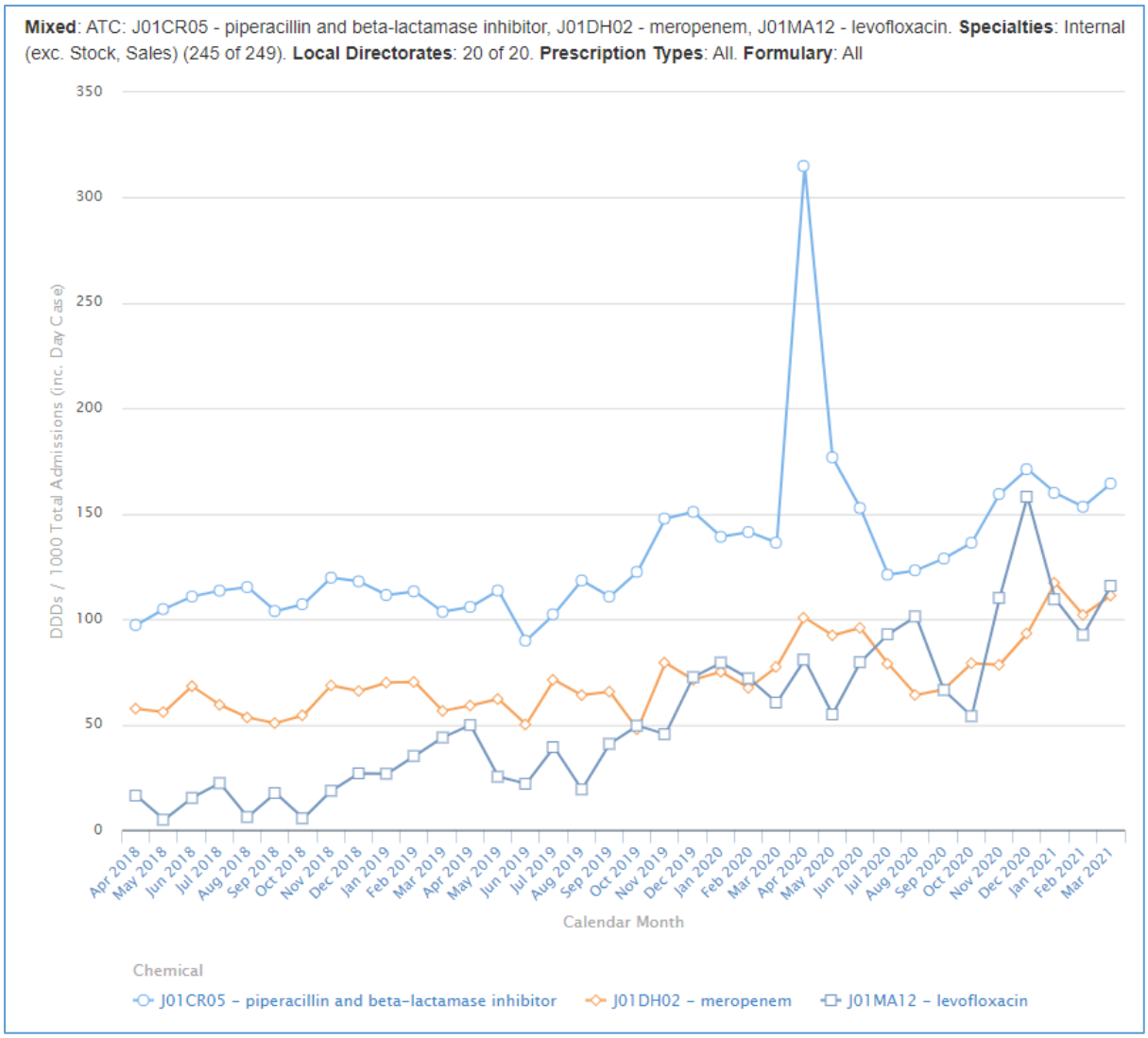
Antibacterial use accounts for most of the antimicrobial agents used in terms of quantity. There is always an increase in use over the winter pressures period due to the nature of patient presentations with chest infections in particular over this period. A second peak is seen in March 2020, coinciding with COVID-19. Benchmarking our consumption over the course of the year, it is noted that the trend is in keeping with other Trusts across the East Midlands region, and nationally.

Surveillance on consumption of Piperacillin-tazobactam, meropenem, and levofloxacin is shown in the graph below.

A peak in piperacillin tazobactam use is seen around the time of the first surge, where serious case presentations were not responding to co-amoxiclav and standards of care with dexamethasone in such cases was not yet established. Levofloxacin use has increased steadily since January 2019 as expected following increased recommendation in the antimicrobial guidelines for Adults. Over the summer months, when cases of COVID-19 were lower, there is a dip in consumption of all three agents, rising again with the second surge, albeit not as steeply, as the

management of COVID-19 patients now had more robust national guidance, prescriber confidence in understanding the course of illness and more awareness of the local COVID-19 antimicrobial guidelines. Surveillance of other antimicrobials recommended in the guidelines for pneumonia secondary to COVID-19, for less severe cases, or as step down options, reveal a similar trend.

Consumption trend for piperacillin-tazobactam, meropenem and levofloxacin, corrected against Trust wide activity, over April 2018 to March 2021 (please note there is a 3-month time lag on verification of Trust activity, so Jan-Mar 21 is conditional data).



Every year, doctors, junior pharmacists and any interested staff are encouraged to join audits on antimicrobial stewardship.

Examples of antimicrobial audits conducted over this year

5KPIs on MEAU at LCH Understanding prescribing issues in real terms on acute medicines unit. Identified meaningful ways of supporting antimicrobial prescribing by prescribers, to see quality improvement.

5KPIs on AMSS at PHB Antimicrobial Prescribing a recurring issue as identified by repeat and prolonged PII audits this year. Aim of audit was to understanding prescribing issues in real terms on acute medicines unit.

Penicillin allergy snapshot audit to ascertain completeness and accuracy of penicillin allergy documentation on ULHT prescription charts.

Penicillin allergy incidents audit looked into the frequency of DATIX incidents filed over the year 2020/21, and investigated the patient cases to understand if the patient came to harm, whether correct actions were taken, and also whether allergy status was amended where patients had received doses in error and not had an adverse reaction.

Sepsis 72-hour review audit (rolling monthly) following on from the Sepsis AMR CQUIN over 2017-19, we have kept this work going as a good checkpoint of practice and to target areas for improvement. Standard is 90% for all relevant factors to be considered and actioned.

Pink slip supply audit

Remdesivir audit to track use of Remdesivir for COVID19 treatment and patient outcomes.

The progress made this year is reassuring for further development post pandemic. The antimicrobial pharmacy team is anticipating further support to allow expansion of OPAT and assist STP wide antimicrobial stewardship. The exciting development of having effective technology to guide prescribing, and reflections from the COVID-19 pandemic offer good hope and promise of strengthened partnerships, communication and collaboration.

7. Laboratory Service

Unsurprisingly, the COVID-19 pandemic has shaped the laboratory year.

During the year 2020-2021, Path Links laboratories built the SARS-CoV-2 testing service up to being capable of processing approx. 1000 tests per day, and since testing started has processed just under a quarter of a million COVID-19 swabs as at the end of March 2021. This service has been provided as part of the Midlands and East 2 pathology network, and during the pandemic there has been close working to provide a sustainable Pillar 1 SARS-CoV-2 testing service across the East Midlands. The bulk of the tests have been undertaken using PCR batch analysers, principally the Abbott M2000, and latterly the Abbott AlinityM. A rapid molecular testing capability has also been developed employing the Cepheid GeneXpert and the Cambridge university developed SAMBA test. This capability will be further

developed in 2021-22. Antibody testing has been undertaken by the blood sciences department of Path Links, and has supported diagnostics and the surveillance undertaken within the SIREN study.

Just as many other health services have had to change their way of working as a consequence of COVID-19, so has the microbiology laboratory. These have been because of the need to prioritise COVID-19 testing, and because of the health and safety impact on the laboratory.

In March 2020, the recommendations of the IBMS and RCPath on demand management in the microbiology laboratory were locally adapted. These were widely communicated, and allowed for prioritisation of SARS-CoV-2 testing by the laboratory during the pandemic peaks.

Health and safety of staff working within the laboratory has been a priority, and many interventions have been undertaken including facilitation of social distancing, installation of microbiology safety cabinets, air-handling and ventilation, and new primary tube testing for urine microscopy which minimises aerosol production. These have enabled the laboratory to return to an almost complete repertoire of tests, with volume of testing being driven by demand rather than restricted by capacity. The extra demands relating to COVID-19 have placed the microbiology directorate under considerable staffing pressures as no extra staff have been allocated to cover the ongoing increase.

The clinical microbiologists have worked closely with the IPC and operational teams to minimise risk and disruption relating to COVID-19 and other pathogens.

Despite the challenges of COVID-19, the laboratory successfully underwent UKAS surveillance inspections, and has retained accreditation under ISO15189. The laboratory staff undertook a huge amount of work to enable this positive outcome. There is a comprehensive laboratory handbook, and laboratory SOPs based on national standard methods which are available on request. WebV, the laboratory reporting IT system, has been updated this year, offering enhanced audit trails, more intuitive formats and new modules available. There is ongoing monitoring of KPIs for turnaround times of key sample types, including MRSA screens and C difficile tests, and there are no significant concerns.

Overall this has been a challenging year, but the laboratory service has risen to those challenges and continues to provide high quality services with a low cost per test.

8. Estates and Facilities

The Estates and Facilities team have adapted and changed working patterns and processes to respond to the COVID-19 pandemic and have been an integral part of the Trusts response.

During 2020 an Estates, Facilities and IPC Group was formed which reports into the Trusts IPC Group. This group has provided focus on achieving compliance with the Hygiene Code.

A programme of ward enhancements has been undertaken during the year. This has seen vital work undertaken to improve the environment for patients and staff, including the fitting of doors on bays to ensure a COVID secure environment and improve privacy and dignity for patients.

In December 2020 the Trust purchased Derby doors to reduce the risk of COVID-19 transmission in areas where bay doors were not already in place.

The deep cleaning team has been expanded in response to COVID-19 and provides cover 24 hours per day. A business case has been prepared to ensure this continues as we move from COVID-19 being managed as a pandemic to being endemic in our population.

The Housekeeping team have completed training in Cleaning for Confidence to ensure all staff understand the importance of the use of correct cleaning techniques and safe working practices. This will continue to be rolled out to all clinical staff groups across the Trust during 2021-2022.

Cleanliness audits are undertaken by Facilities with Matrons/Sisters in line with the National Standards of Cleanliness using the Credits for Cleaning Micad audit tool (MiC4C). During the pandemic the frequency of audits has been increased in areas where there have been declared outbreaks of COVID-19. MiC4C audit data is reviewed and assurance regarding cleanliness gained through monthly reporting to the IPC Group.

Average MiC4C Audit Scores (%) by site 2020-2021:

	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sept 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021	Mar 2021
Grantham	95.42	94.83	92.91	83.63	80.71	89.28	93.87	93.69	93.59	94.08	93.20	94.16
Lincoln	86.55	87.52	87.64	88.27	87.39	88.50	85.08	85.60	87.66	88.41	89.98	90.49
Pilgrim	92.52	88.43	89.83	88.55	85.93	86.60	89.09	90.96	94.30	94.02	90.42	92.07

9. Water Safety

During 2020-2021 the Trust has undertaken a review of water systems management. The Water Safety Policy, Water Safety Plan and Written Scheme Plan have been reviewed in line with the Authorising Engineers assessment. The internal audit programme has been revised and the audit programme implemented.

A Water Safety Group is in place and reports into the IPC Group. A senior member of the Estates and Facilities team is a core member of the IPC Group and a monthly report is submitted to the group for assurance.

An Estates Matron has provided a link between the wards and departments and the estates and facilities team to ensure that the requirements for water flushing are in place and staff understand the potential risks and the requirements to minimise the risk of water borne pathogens posing a healthcare risk.

Water sampling is undertaken across all sites. Where samples identify water borne pathogens remedial actions to ensure decontamination are undertaken and Point of Use filters are installed.

Water systems audit compliance data:

			Inspections	%	Remedials	%
ULHT	Number of applicable Items		85	37.65	80	38.75
	Compliant		24	28.24	21	26.25
	Non-Compliant		8	9.41	10	12.50

DISCIPLINE	Item Ref.	ITEM	FREQUENCY	Last Year	REMEDIAL WORKS STATUS BY MONTH (HOMERTON HOSPITAL) - 2021-2022																								Inspections Compliant (Y/N)	Remedials Compliant (Y/N)
					APR		MAY		JUN		JUL		AUG		SEP		OCT		NOV		DEC		JAN		FEB		MAR			
				I	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R		
Water Systems	1	Monthly Monitoring of Sentinel & Representative Outlets Including HWS, CWS, Shower, Mixer & Tanks	Monthly																										Y	
	2	Monthly Water Temperature Monitoring & Servicing of Medical Baths	Monthly																										Y	Y
	3	Weekly Water Quality sampling (pseudomonas) in augmented care & Visual Inspection of Hot & Cold Outlets	Weekly																										Y	Y
	4	Weekly / Monthly Alternate Standby/Duty Booster & Circulation Pumps & Verification of Auto Changeover Frequencies	Weekly																										N	N
	5	Monthly Sentinel & Representative Outlet Chlorine Dioxide Dosing Concentration Check	Monthly																										Y	Y
	6	Quarterly Servicing of Chlorine Dioxide Dosing System Equipment	3 monthly																										Y	Y
	7	Quarterly Shower Head and Hose Replacement Programme	3 monthly																										Y	Y
	8	Annual Test and Service of Anti Scalding Devices - TMV's & Blending Valves Including Cleaning/Replacing Strainers & Fail Safe Test	Annual																										N	Y
	9	Annual Inspection of Water Calorifiers and Plate Heat Exchangers	Annual																										Y	Y
	10	Monthly Inspection & Temperature Check of Calorifiers	Monthly																										Y	Y

A centralised tracker of Legionella Risk assessments has been completed in 2020-2021 to support the capital works programme, ensure compliance, and manage the estates risk management of buildings.

Water Hygiene (Legionella Awareness) courses have run via Teams across all sites during 2020-2021. Training was open to all staff and has been well attended supporting the cascade of water hygiene awareness and roles and duties of all employees.

The Trust intends to implement L8Guard during 2021-2022 as the system for providing oversight and assurance on water flushing in all areas. The focus on infrastructure maintenance such as tank cleaning, drop test for storage awareness and temperature control monitoring will continue into the next financial year.

10. Occupational Health

Seasonal Influenza

The influenza vaccine is offered annually to all Trust employees during the National Flu

Campaign season (Sept – Feb).

In 2020/2021, 89.9% of frontline staff received a flu vaccine.

Support was provided by ‘peer vaccinators’ and clinics occurred regularly to support all shift patterns and weekends.

Hepatitis B, Measles and Chickenpox (Varicella Zoster - VZ) Vaccination

The Occupational Health Department has an established vaccination programme, offering vaccination against Hepatitis B, Measles and Chickenpox for all HealthCare Workers who have patient contact or undertake exposure prone procedures

A process is in place to ensure compliance with Trust policy and escalation where staff do not attend for vaccination or complete a course.

Sharps Injuries & Accidents involving Exposure to Blood & Body Fluids

For the year 2020/2021 there were 197 inoculation injuries reported.

Site	Number of inoculation injuries reported
Lincoln	104
Pilgrim	66
Grantham	27
Total for ULHT	197

The high risk areas are theatres and the Emergency Departments with injuries to nurses, Doctors and Healthcare Support Workers being reported during the year.

The reasons given for the injuries occurring were due to the incorrect disposal of sharps and an injury occurring during or immediately after performing a procedure.

During the year 2020/2021 two members of staff required commencement of post

exposure prophylaxis (PEP) following inoculation injuries that were deemed to be from a high risk patient/incident. Both were able to discontinue PEP following conformation on the source that no blood borne viruses were detected.

As highlighted in this report, the incorrect disposal of sharps is the main reason for inoculation injuries at ULHT. The Occupational Health Department will be undertaking an audit early in the year 2021/2022 pertaining to the disposal of sharps and take any required actions to assure the Trust of safe sharps management.

Covid-19 Vaccinations

The Trust was one of the original 50 hub sites to receive the first doses of the Pfizer vaccine. In line with national guidance the vaccination programme has been rolled out and over 8000 Trust staff have been vaccinated as of the end of March 2021.

By the end of March 2021 700 staff were identified as the Trust having no record of them receiving a vaccine. 465 of these have been contacted. Following this contact only 57 staff did not want to receive the vaccine. The remaining staff had either already received one dose of the vaccine from an alternative source, agreed to be vaccinated, wanted more information prior to accepting the vaccine or in the case of a very small number of staff, had a medical condition that had resulted in a Consultant advising them they should not receive it.

11. Training

During the period 2020-2021 there has remained a focus on training in all aspects of Infection Prevention and Control which has included specific COVID-19 related training.

The Trust has supported the introduction of the NHSE Cleaning for Confidence. In order to ensure the training was accessible to all those who do not have ease of access to IT, workbooks were produced replicating all aspects of the online training. Training started with the Housekeeping teams and will continue to be rolled out cross the Trust to all clinical staff during 2021-2022.

In order to support the completion of IPC Mandatory training the IPC team developed work books covering all aspects of the mandatory training requirements. This has enabled staff to complete the training in a timely fashion whilst working under the pressures of a pandemic.

To support clinical staff in understanding the requirements for the decontamination of equipment, an A to Z guide has been developed and is available on the intranet and in clinical areas for staff to refer to.

In October 2020 the IPC team led a week of focus on fundamentals, with learning opportunities for all staff throughout the week. This included ‘Cee the difference’, a novel training tool developed by the IPC team whereby staff are asked to identify IPC breaches from a picture scenario and an opportunity for staff to join educational events hosted by the Infection Prevention Society.

The IPC team have through the year supported training related to COVID-19. This has included training in the selection and donning and doffing of appropriate Personal Protective Equipment, managing outbreaks and educating staff on the changes to practice as a result of the pandemic.

All staff are required to complete IPC Mandatory Training. Trust compliance data can be found in the table below.

Division Figures 2020-2021	IPC Mandatory Training Compliance
Clinical Support Services	88.66%
Corporate	87.29%
Corporate Finance	28.57%
Director of Estates & Facilities	80.06%
Family Health	88.30%
Medicine	81.62%
Surgery	86.26%
Overall Trust compliance	85.33%

12. Forward Plan 2021– 2022

- During 2021 -2022 the Infection Prevention and Control team will expand as a business case to increase the size of the team to provide longer days and sustained weekend cover, was approved in March 2021.
- An Estates, Facilities and Decontamination Lead Nurse post was advertised in March 2021 and will be appointed to in early 2021-2022.
- A new WebV IPC module will be implemented by May2021 to support the IPC team in reporting and managing all infections.

From a laboratory services perspective, we will continue to aim to fill the two vacant Consultant posts, whilst continuing 24/7 availability of clinical microbiology advice.

The laboratory plans to Introduce MALDI-ToF bacterial identification and will continue to develop the molecular testing service. Business cases for automated sensitivity testing and development of the molecular testing repertoire including joint cases with IPC for C difficile PCR testing will be developed.

- The IPC Trust wide audit programme for 2021-2022 was ratified at the IPC Group in March 2021 and the programme of audit for the year will commence in April 2021, reporting to the IPC Group.
- The Trust IPC Objectives for the next financial year have been agreed and the programme will be led by the Deputy DIPC and IPC Team with assurance to IPC Group.
- The IPC objectives for 2021-2022 are detailed below and provide a clear focus for the year ahead.

Number	Objective
1	Develop infection prevention and control organisational and Divisional Governance arrangements
2	Continue to progress assessment and gap analysis of The Health and Social Care Act 2008. Code of Practice on the prevention and control of infection
3	Further development of surveillance of healthcare associated infections and performance
4	Investigate and manage the risks posed by novel infectious diseases (specifically COVID-19) to promote patient safety and prevent and reduce the risk of cross transmission
5	Investigate and manage the risks posed by the emergence of multi-drug resistant organisms to promote patient safety and prevent and reduce the risk of cross transmission
6	Development of governance arrangements for appropriate antimicrobial use to optimise patient outcomes and to reduce the risk of adverse events and antimicrobial resistance
7	Establish and sustain (new and improved) standards of cleanliness in line with National Standards of Healthcare Cleanliness. Development and implementation of hydrogen peroxide total room decontamination
8	Progress decontamination, water safety and ventilation requirements as sub-groups of the Infection Prevention and Control Group to ensure patient safety requirements

13. Conclusion

2020-2021 has been an unprecedented year with IPC being at the forefront of the COIVD-19 pandemic response.

We will continue to reflect and ensure we learn any lessons from managing the pandemic, prepare for any further surges and continue to play our part as we move to COVID-19 being endemic in our population.

Despite the challenges of COVID-19, systems and process for the management of all infections have been reviewed and updated, new audit processes and tools implemented and governance arrangements and assurance strengthened.

We look forward to growing the IPC team and further developing IPC systems, process and practice across the Trust over the next year.