

## Healthcare Associated Infection (HAI) Quarterly Report – October 2023

The following is a summary of the [ARHAIS \(Antimicrobial Resistance and Healthcare Associated Infection Scotland\) Quarterly Epidemiological Data Report \(April 2023 – June 2023\)](#) which was published on 3<sup>rd</sup> October 2023.

### Executive Summary

April – June 2023

#### ***Clostridioides difficile* Infection (CDI)**

- Total number of cases of CDIs in NHS Grampian: **28**
  - 19 healthcare associated cases
  - 9 community associated cases
  - An **increase** of 11 compared to the previous quarter (17)
  - 8.9% of the total across Scotland (314)

#### ***Escherichia coli* bacteraemia (ECB)**

- Total number of cases of ECBs in NHS Grampian: **84**
  - 41 healthcare associated cases
  - 43 community associated cases
  - A **decrease** of 19 compared to the previous quarter (103)
  - 7.8% of the total across Scotland (1083)

#### ***Staphylococcus aureus* bacteraemia (SAB)**

- Total cases of SABs in NHS Grampian: **31**
  - 19 healthcare associated cases
  - 12 community associated cases
  - A **decrease** of 12 compared to the previous quarter (43)
  - 7.4% of the total across Scotland (423)

#### **Surgical Site Infection (SSI)**

- Surgical Site Infection (SSI) data is not included in this report, due to the pausing of surveillance to support the COVID-19 response.

The following is a summary of local data for the period April 2023 – June 2023.

## Executive Summary

April – June 2023

### Above Target

- Cleaning compliance (**93%**)
  - This is the **same** as the previous quarter (93%)
- Estates monitoring compliance (**93%**)
  - This is the **same** as the previous quarter (93%)
- Hand hygiene compliance amongst Allied Health Professionals (**98%**)
  - This is a **decrease** compared to the previous quarter (99%)
- Hand hygiene compliance amongst ancillary staff (**93%**)
  - This is a **decrease** compared to the previous quarter (96%)
- Hand hygiene compliance amongst medical staff (**94%**)
  - This is a **decrease** compared to the previous quarter (96%)
- Hand hygiene compliance amongst nursing staff (**98%**)
  - This is the **same** as the previous quarter (98%)

### Below Target

- Meticillin-Resistant *Staphylococcus Aureus* (MRSA) Clinical Risk Assessment (CRA) screening compliance (**65%**)
  - This is an **increase** compared to the previous quarter (59%)
- Carbapenemase Producing Enterobacteriaceae (CPE) Clinical Risk Assessment (CRA) screening compliance (**72%**)
  - This is an **increase** compared to the previous quarter (69%)

### Additional Information

- Wards closed due to enteric illness: **2**
  - This is an **increase** compared to the previous quarter (1)
- Preliminary Assessment Group (PAG) meetings: **12**
  - This is an **increase** compared to the previous quarter (11)
- Incident Management Team (IMT) meetings: **13**
  - This is a **decrease** compared to the previous quarter (16)

## 1. Actions Recommended

The Board is requested to note the content of this quarterly Healthcare Associated Infection (HAI) Report, as directed by the HAI Policy Unit, Scottish Government Health Directorates (SGHD).

## 2. Strategic Context

- Updated Healthcare Associated Infections (HCAI) Standards for Scotland
- Updated Antibiotic Use Indicators for Scotland
- National Key Performance Indicators for MRSA Clinical Risk Assessment (CRA) screening
- National Key Performance Indicators for CPE Clinical Risk Assessment (CRA) screening
- National Health Facilities Scotland (HFS) Environmental Cleaning Target
- National Health Facilities Scotland (HFS) Estates Monitoring Target
- National Hand Hygiene Compliance Target

## 3. Risk Mitigation

By noting the contents of this report, the Board will fulfil its requirement to seek assurance that appropriate surveillance of healthcare associated infection is taking place and that this surveillance is having a positive impact on reducing the risk of avoidable harm to the patients of NHS Grampian (NHSG).

## 4. Responsible Executive Director and contact for further information

If you require any further information in advance of the Board meeting please contact:

**Responsible Executive Director:**

June Brown  
Executive Nurse Director  
[june.brown@nhs.scot](mailto:june.brown@nhs.scot)

**Contact for further information:**

Grace Johnston  
Infection Prevention & Control Manager  
[grace.johnston@nhs.scot](mailto:grace.johnston@nhs.scot)

## Key matters relevant to recommendation

Issue	Group	Target	Period & source	Rate		RAG <sup>x</sup> Status
				NHS Scot	NHS G	
CDIs	Healthcare Associated Infection	Reduction of 10%* (set by SGHD)	Apr-Jun 2023, HPS	16.1 <sup>^</sup>	14.3 <sup>^</sup>	Green
	Community Associated Infection	-		4.8 <sup>^^</sup>	6.2 <sup>^^</sup>	Amber
ECBs	Healthcare Associated Infection	Reduction of 25%** (set by SGHD)	Apr-Jun 2023, HPS	37.6 <sup>^</sup>	30.8 <sup>^</sup>	Green
	Community Associated Infection	-		36.7 <sup>^^</sup>	29.4 <sup>^^</sup>	Green
SABs	Healthcare Associated Infection	Reduction of 10%* (set by SGHD)	Apr-Jun 2023, HPS	18.3 <sup>^</sup>	14.3 <sup>^</sup>	Green
	Community Associated Infection	-		10.2 <sup>^^</sup>	8.2 <sup>^^</sup>	Green
SSIs	Caesarean Section	-	Apr-Jun 2023, HPS	***	***	-
	Hip Arthroplasty	-	Apr-Jun 2023, HPS	***	***	-

\* Reduction of 10% from 2019 to 2022 (extended to 2024<sup>1</sup>), with 2018/19 used as the baseline for reduction

\*\* Reduction of 25% by 2021/22 (extended to 2024), with 2018/19 used as the baseline for reduction.

\*\*\* Surveillance paused to support the COVID-19 response

<sup>^</sup> Cases per 100,000 total occupied bed days

<sup>^^</sup> Cases per 100,000 population

<sup>x</sup> Red / Amber / Green Status:

National outlier, i.e. above 95% confidence level upper limit in ARHAIS report funnel plot analysis = **Red**

Within normal variation and above Scotland average = **Amber**

Within normal variation and below Scotland average = **Green**

## Key matters relevant to recommendation

Issue	Group	Target	Period & source	Rate		RAG <sup>x</sup> Status
				NHS Scot	NHS G	
MRSA (CRA) screening	-	90% (set by ARHAIS)	Apr-Jun 2023, HPS	81	65	Red
CPE (CRA) screening	-	90% (set by NHSG)	Apr-Jun 2023, HPS	80	72	Red
Cleaning	All clinical areas	90% (set by HFS)	Apr-Jun 2023, NHSG	-	93	Green
Estates		90% (set by HFS)	Apr-Jun 2023, NHSG	-	93	Green
Hand Hygiene	Allied Health Professionals	90% (set by SGHD)	Apr-Jun 2023, NHSG	-	98	Green
	Ancillary staff	90% (set by SGHD)	Apr-Jun 2023, NHSG	-	93	Green
	Medical staff	90% (set by SGHD)	Apr-Jun 2023, NHSG	-	94	Green
	Nursing staff	90% (set by SGHD)	Apr-Jun 2023, NHSG	-	98	Green

<sup>x</sup> Red / Amber / Green Status:

Below target and below Scotland average = **Red**

Below target but above Scotland average = **Amber**

Above target but below Scotland average = **Green**

Above target and above Scotland average = **Green**

## ***Clostridioides* (formerly *Clostridium*) *difficile* Infection (CDI) Surveillance**

*C. difficile* is a spore forming bacterium that may be found in the intestine as a harmless commensal with up to 5% of the population harbouring toxigenic strains. CDI is an important cause of infectious diarrhoea and often associated with antimicrobial therapy. Clinical disease comprises a range of toxin mediated signs and symptoms from mild diarrhoea to severe life threatening infections such as pseudomembranous colitis and toxic megacolon. In Scotland, mandatory surveillance commenced in October 2006, with enhanced surveillance commencing in 2009.

Every single NHS Grampian laboratory confirmed *C. difficile* toxin positive result is investigated by the Infection Prevention & Control Team to determine if it fulfils the national CDI case definition (see below). CDI cases reported to ARHAIS exclude asymptomatic individuals and those experiencing diarrhoea due to another cause. Investigation of each case in NHS Grampian enables monitoring of inappropriate samples and antibiotic treatments and the identification of possible severe cases together with referral of samples for additional testing e.g. typing. Real time surveillance of the areas where healthcare associated infections occur allows potential outbreaks to be promptly identified and control measures reducing transmission to be initiated.

Each CDI case in patients aged 15 years and over is defined as either healthcare associated or community associated and the surveillance fed back to the organisation in an effort to improve patient safety and outcomes.

**ARHAIS case definition of CDI infection:** *“a case of CDI is someone in whose stool *C. difficile* toxin has been identified at the same time as they have experienced diarrhoea not attributable to any other cause or from whose stool *C. difficile* has been cultured at the same time as they have been diagnosed with pseudomembranous colitis”.*

Further information on CDI surveillance can be found at:

<https://www.hps.scot.nhs.uk/web-resources-container/protocol-for-the-scottish-surveillance-programme-for-clostridium-difficile-infection-user-manual/>

**For the period April to June 2023 there were 19 healthcare associated cases of CDI in NHS Grampian, which was a rate of 14.3 cases per 100,000 total occupied bed days. In the previous quarter, NHS Grampian had 14 healthcare associated cases of CDI, which was a rate of 10.4 cases per 100,000 total occupied bed days.**

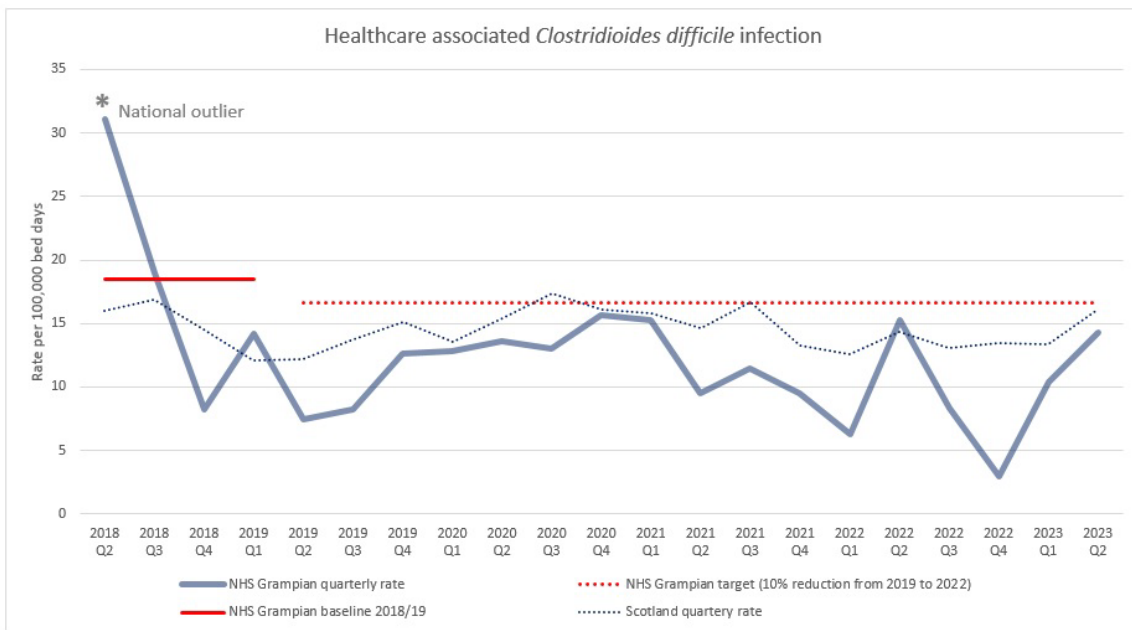


Figure 1(a) shows trends in healthcare associated *C. difficile* infection in NHS Grampian (thick blue line) and Scotland (dotted blue line) over the last 5 years. In the latest quarterly data (2023 Q2) **NHS Grampian rates of healthcare associated *C. difficile* infection are stable** i.e. average / below average (within the statistical limits of variation) compared to the rest of Scotland.

The COVID-19 pandemic has impacted other areas of healthcare and caution is advised interpreting data from 2020 Q2 onwards. NHS Grampian is forecast to meet the Scottish Government target for reducing *C. difficile* infection (thick blue line is below the straight dotted red line).

**For the period April to June 2023 there were 9 community associated cases of CDI in NHS Grampian, which was a rate of 6.2 cases per 100,000 population. In the previous quarter, NHS Grampian had 3 community associated cases of CDI, which was a rate of 2.1 cases per 100,000 population.**

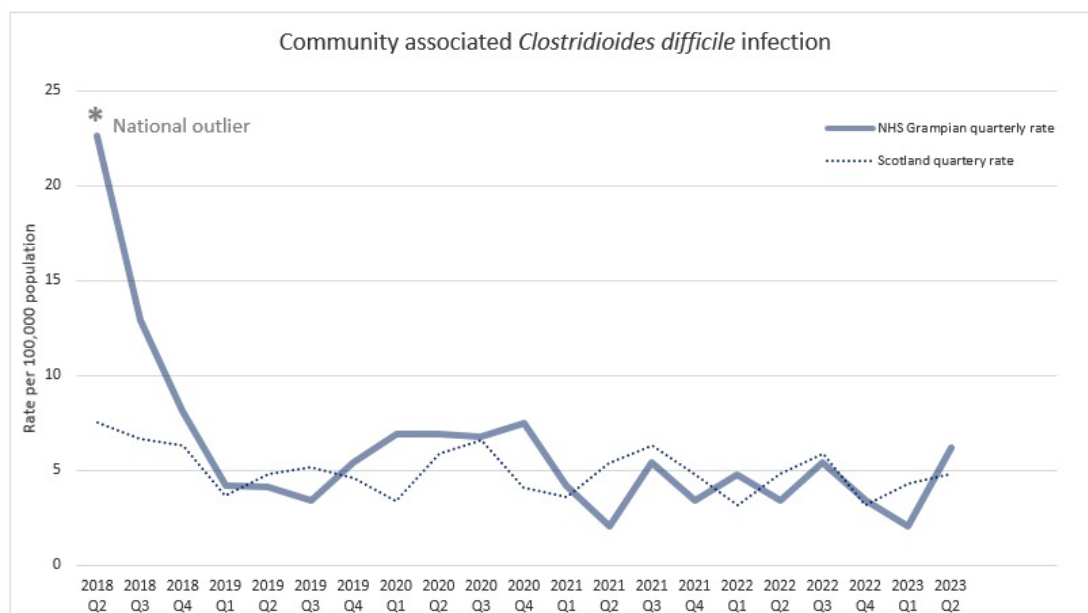


Figure 1(b) shows trends in community associated *C. difficile* infection in NHS Grampian (thick blue line) and Scotland (dotted blue line) over the last 5 years. In the latest quarterly data (2023 Q2) **NHS Grampian rates of community associated *C. difficile* infection are stable** i.e. average / below average (within the statistical limits of variation) compared to the rest of Scotland.

The COVID-19 pandemic has impacted other areas of healthcare and caution is advised interpreting data from 2020 Q2 onwards.

## National *Escherichia coli* Bacteraemia Surveillance Programme

*Escherichia coli* (*E.coli*) is a Gram Negative bacterium that forms part of the normal flora in the human gastrointestinal tract and is a common cause of urinary tract infections. Serious disease including septic shock may occur if *E. coli* breaches the body's defence mechanisms and enters the bloodstream (bacteraemia). *E.coli* bacteraemia (ECB) usually develops as a complication of other infections (including urinary tract infection and hepatobiliary infection), surgery, and use of medical devices e.g. urinary catheters.

*E. coli* is the most frequent cause of Gram Negative bacteraemia in Scotland and an important cause of infection worldwide.

In Scotland, mandatory surveillance for ECB commenced in 2016. The origin of each positive blood culture is classified as either Healthcare associated or Community associated according to ARHAIS protocols.

**In NHS Grampian, there were 41 healthcare associated cases of ECB between April and June 2023, which was a rate of 30.8 cases per 100,000 total occupied bed days. In the previous quarter there were 63 cases of healthcare associated ECB in NHS Grampian, which was a rate of 46.8 cases per 100,000 total occupied bed days.**

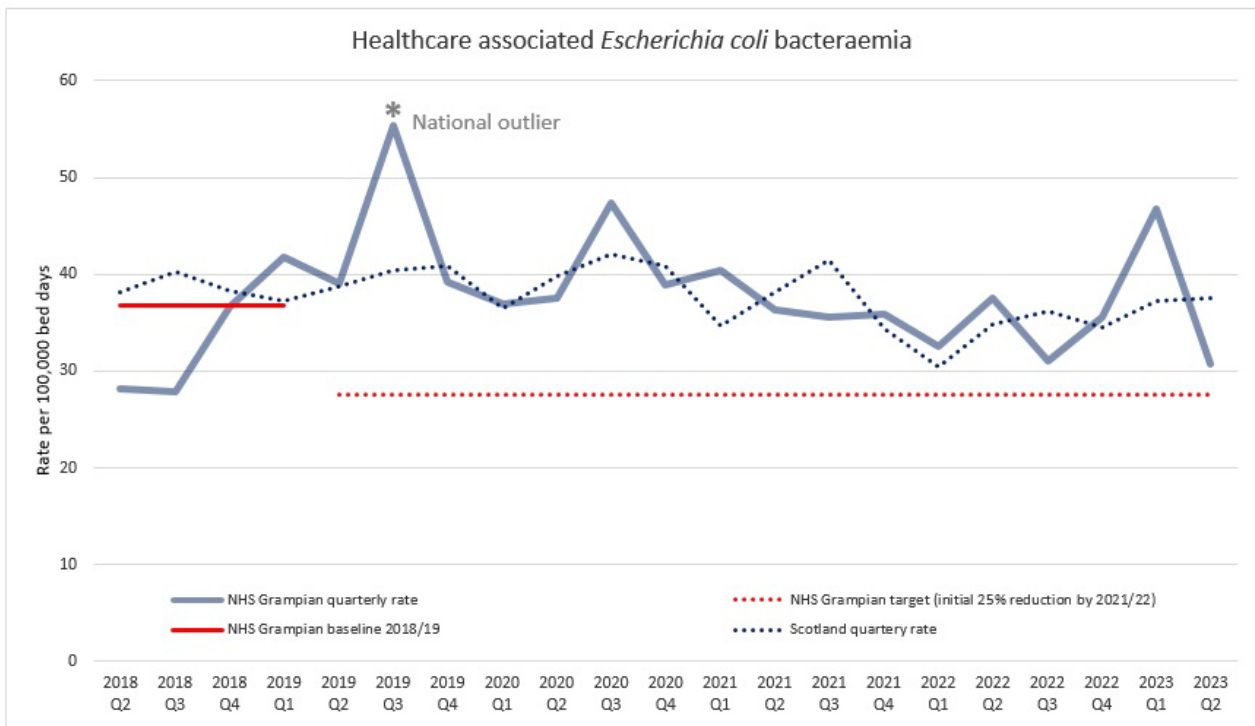


Figure (2a) shows trends in healthcare associated *E. coli* bacteraemia in NHS Grampian (thick blue line) and Scotland (dotted blue line) over the last 5 years. In the latest quarterly data (2023 Q2) **NHS Grampian rates of healthcare associated *E. coli* bacteraemia are stable** i.e. average / below average (within the statistical limits of variation) compared to the rest of Scotland.

The COVID-19 pandemic has impacted other areas of healthcare and caution is advised interpreting data from 2020 Q2 onwards. NHS Grampian like other Health Boards, is not forecast to meet the Scottish Government target for reducing *E. coli* bacteraemia (thick blue line is above dotted red line). The initial reduction has now been deferred to 2023/24 and acknowledged to be unachievable.



In NHS Grampian, there were 43 community associated cases of ECB between April and June 2023, which was a rate of 29.4 cases per 100,000 population. In the previous quarter there were 40 community associated cases of ECB in NHS Grampian, which was a rate of 27.7 per 100,000 population.

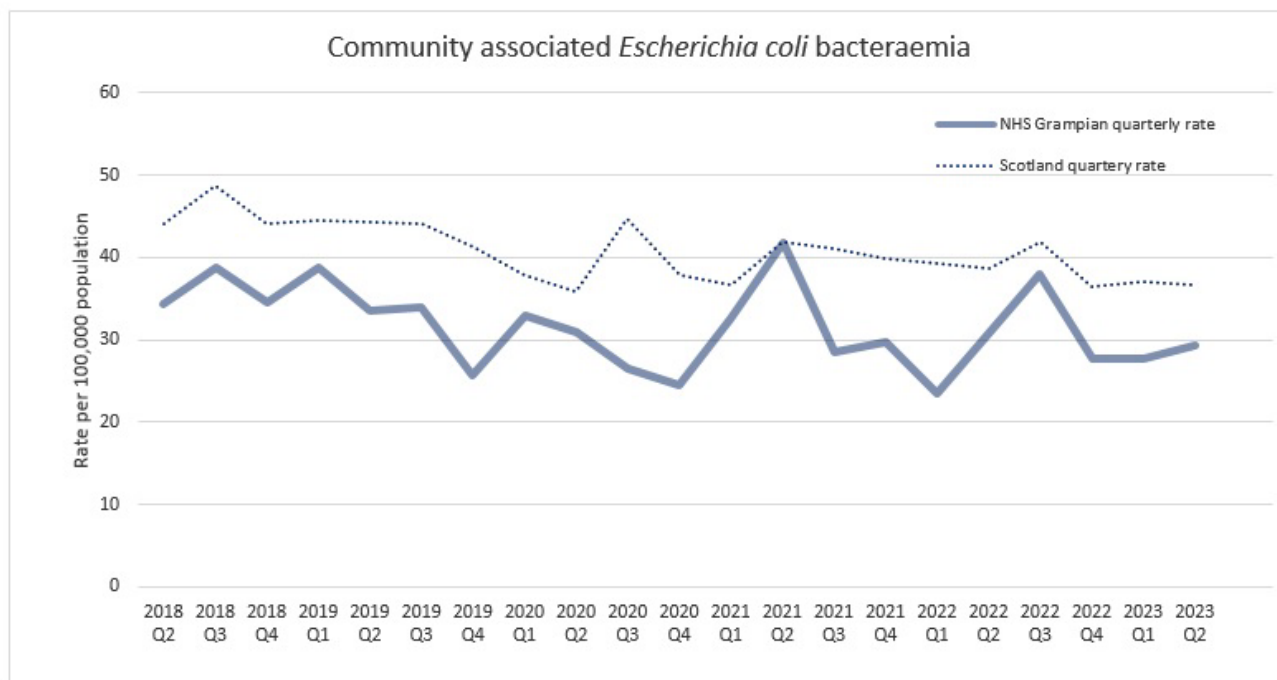


Figure (2b) shows trends in community associated *E. coli* bacteraemia in NHS Grampian (thick blue line) and Scotland (dotted blue line) over the past 5 years. In the latest quarterly data (2023 Q2) **NHS Grampian rates of community associated *E. coli* bacteraemia are stable** i.e. average / below average (within the statistical limits of variation) compared to the rest of Scotland.

The COVID-19 pandemic has impacted other areas of healthcare and caution is advised interpreting data from 2020 Q2 onwards.

Information on the national surveillance programme for *Escherichia coli* infection can be found at:

<https://www.hps.scot.nhs.uk/a-to-z-of-topics/escherichia-coli-bacteraemia-surveillance/#>

## Enhanced *Staphylococcus aureus* Bacteraemia (SAB) Surveillance

*Staphylococcus aureus* (*S. aureus*) is a Gram-positive bacterium that colonises inside the nasal cavity and/or groin in up to a third of the population. Although colonisation is harmless, *S. aureus* is also an important cause of a wide variety of clinical diseases such as skin and soft tissue infections. Serious infection occurs if *S. aureus* breaches the body's defence systems and enters the bloodstream causing a bacteraemia and potentially disseminating to other body sites e.g. causing infections in the bone (osteomyelitis) or heart valves (infective endocarditis).

In Scotland mandatory enhanced surveillance for *Staphylococcus aureus* bacteraemia (SABs) commenced in 2014. The origin of each positive blood culture is classified as either Healthcare associated or Community associated according to ARHAIS protocols.

Enhanced SAB surveillance is carried out in all Health Boards using protocols from ARHAIS. Each new case is discussed at a weekly multidisciplinary team meeting involving Infection Prevention and Control Doctors, Infection Prevention and Control Nurses, Surveillance Nurses and an Infection Unit Nurse. The offer of attendance at speciality case review meetings from the Infection Prevention and Control Team is extended should further discussion be required. Note, enhanced SAB surveillance is currently paused during the Covid-19 pandemic.

**Between April and June 2023, there were 19 healthcare associated cases of SABs in NHS Grampian, which was a rate of 14.3 cases per 100,000 total occupied bed days. In the previous quarter, NHS Grampian had 27 healthcare associated cases of SABs, which was a rate of 20.1 cases per 100,000 total occupied bed days.**

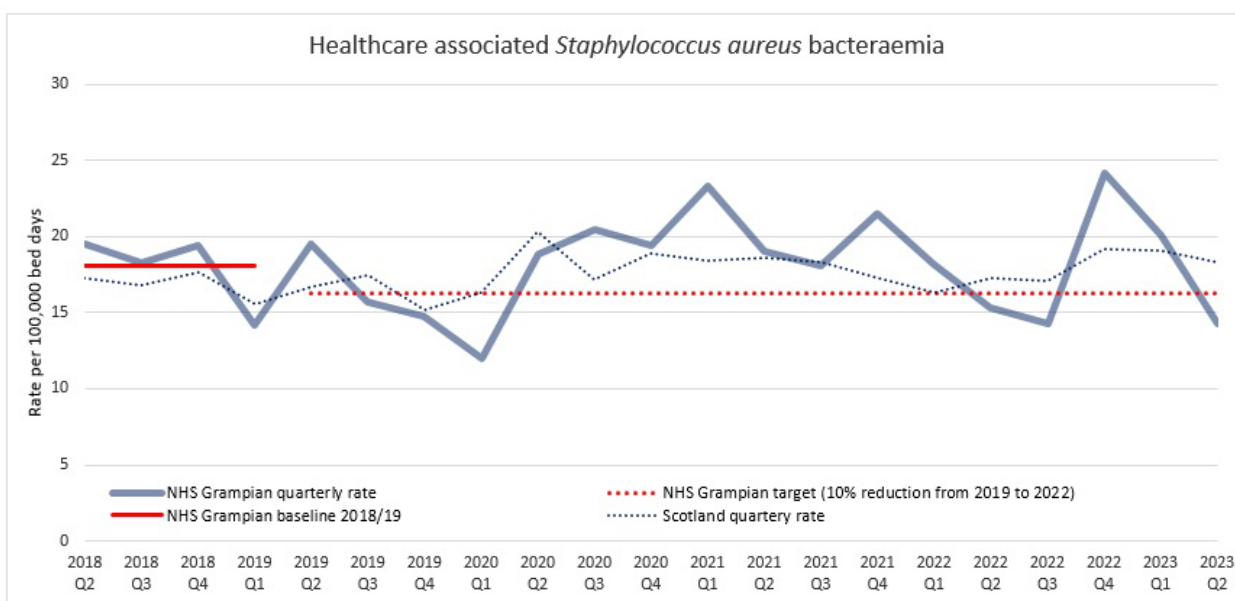


Figure (3a) shows trends in healthcare associated *S. aureus* bacteraemia in NHS Grampian (thick blue line) and Scotland (dotted blue line) over the last 5 years. In the latest quarterly data (2023 Q2) **NHS Grampian rates of healthcare associated *S. aureus* bacteraemia are stable** i.e. average / below average (within the statistical limits of variation) compared to the rest of Scotland.

The COVID-19 pandemic has impacted other areas of healthcare and caution is advised interpreting data from 2020 Q2 onwards. Although NHS Grampian is not forecast to meet the Scottish Government target for reducing *S. aureus* bacteraemia (thick blue line is above the dotted red line), in this quarter (2023 Q2) the target was achieved. The initial reduction has been deferred from 2019 to 2024.

Between April and June 2023, there were 12 community associated cases of SABs in NHS Grampian, which was a rate of 8.2 cases per 100,000 population. In the previous quarter, NHS Grampian had 16 healthcare associated cases of SABs, which was a rate of 11.1 cases per 100,000 population.

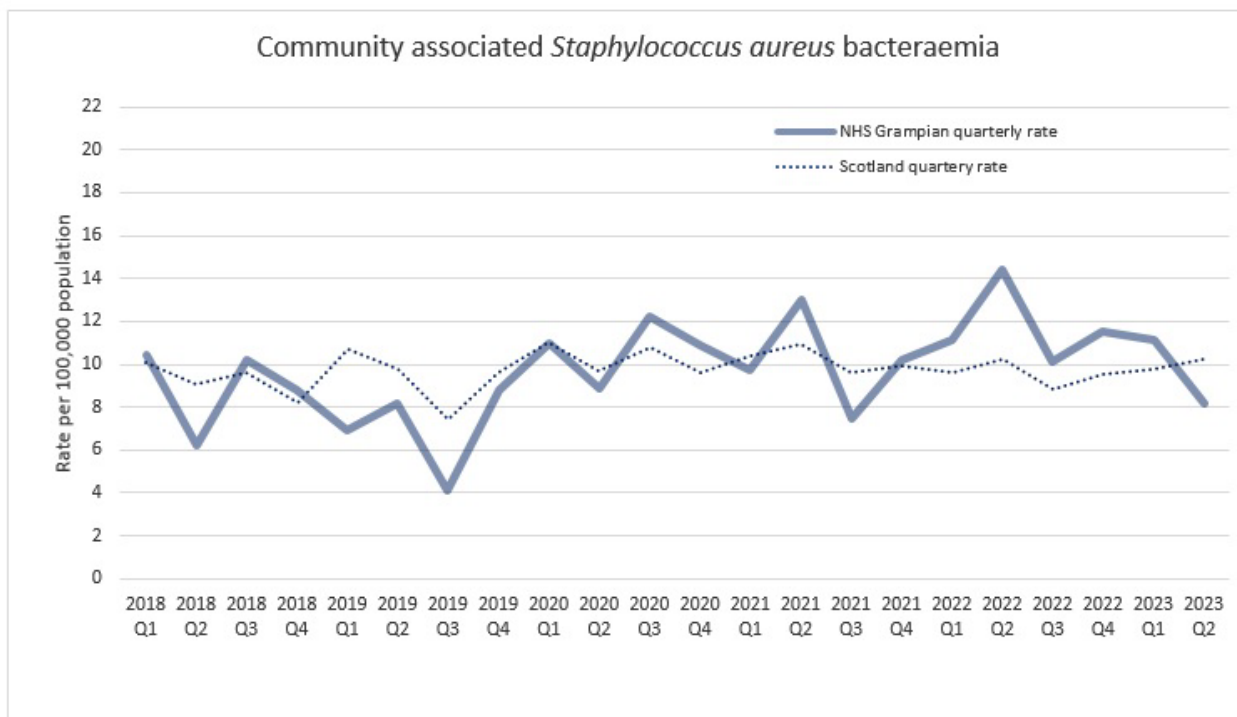


Figure (3b) shows trends in community associated *S. aureus* bacteraemia in NHS Grampian (thick blue line) and Scotland (dotted blue line) over the last 5 years. In the latest quarterly data (2023 Q2) **NHS Grampian rates of community associated *S. aureus* bacteraemia are stable** i.e. average / below average (within the statistical limits of variation) compared to the rest of Scotland.

The COVID-19 pandemic has impacted other areas of healthcare and caution is advised interpreting data from 2020 Q2 onwards.

More information on the national surveillance programme for *Staphylococcus aureus* bacteraemias can be found at:

[https://hpspubsrepo.blob.core.windows.net/hps-website/nss/2931/documents/1\\_protocol-national-enhanced-surveillance-bacteraemia.pdf](https://hpspubsrepo.blob.core.windows.net/hps-website/nss/2931/documents/1_protocol-national-enhanced-surveillance-bacteraemia.pdf)

## Surgical Site Infection (SSI) Surveillance \*

A Surgical Site Infection (SSI) is an infection that occurs after surgery in the part of the body where the surgery took place. SSI may be superficial infections involving the skin only while other SSI is more serious and can involve tissues under the skin, organs or implanted material. SSI is one of the most common types of HAI in Scotland.

In Scotland the mandatory Surgical Site Infection (SSI) surveillance programme commenced in 2002. All NHS boards are required to undertake surveillance for hip arthroplasty (includes hemiarthroplasty) and caesarean section procedures as per the mandatory requirements of HDL (2006) 38 and CEL (11) 2009.

Post-operative surveillance is carried out as follows:

- Caesarean section surveillance is carried out during admission, post discharge up to 10 days and readmission up to 30 days
- Hip arthroplasty (includes hemiarthroplasty) surveillance is carried out during admission, readmission up to 30 days and readmission up to 90 days if there is an implant

Information on the national surveillance programme for Surgical Site Infection can be found at:

<https://www.hps.scot.nhs.uk/a-to-z-of-topics/surgical-site-infection/>

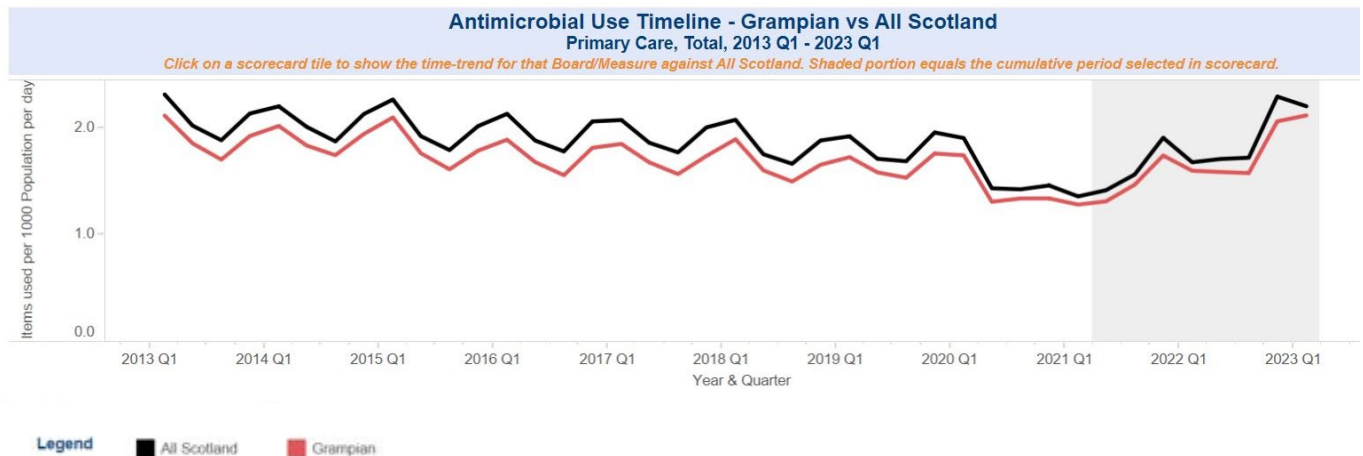
*\* Surveillance paused to support the COVID-19 response and not yet resumed*

## Antibiotic Use Indicators for Scotland

The 3 national indicators, agreed by the Scottish Antimicrobial Prescribing Group (SAPG), and approved by the Scottish Government in October 2019 are detailed below. **(The indicators have been extended until March 2024.)**

### 1. A 10% reduction of antibiotic use in Primary Care (excluding dental) by 2022, using 2015 / 2016 data as a baseline (items/1000/day)

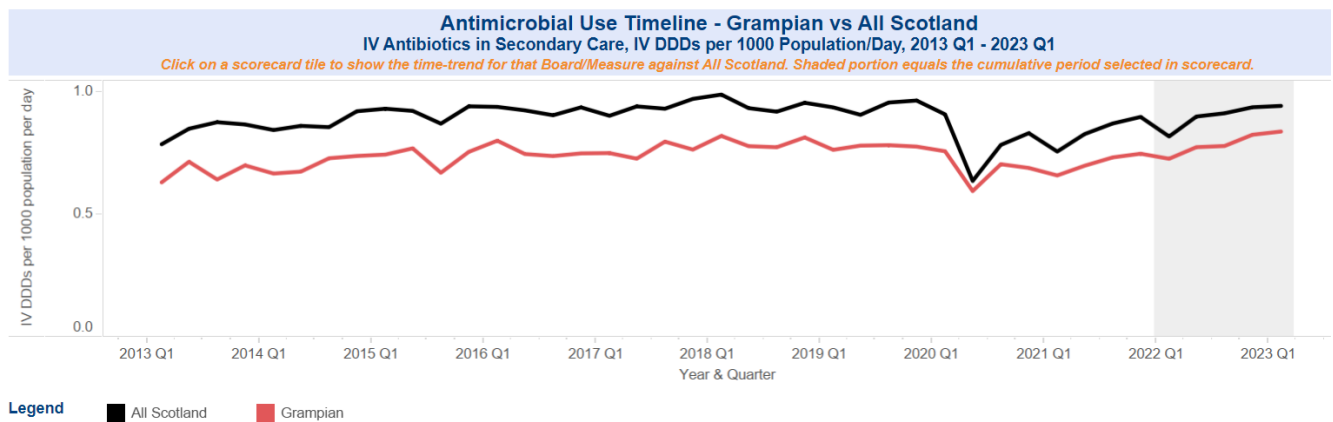
**Target: 1.77**



The data above, taken from NSS Discovery, demonstrates a year on year reduction in antibiotic use in primary care within NHS Grampian from 2015 to 2020 (fluctuations are expected due to seasonal variation in prescribing). Prescribing from Quarter 2 in 2020 demonstrated a large reduction in antibiotic use at start of the COVID-19 pandemic. The most recent data point on NSS Discovery for 2023 Quarter 1 (Jan-Mar) is 2.11 which is well above the target. This sharp increase in prescribing was due to increased Group A Streptococcal infections which became a concern in December 2022 and resulted in a national change in prescribing guidance with a lower threshold for prescribing in children. This increase in prescribing was seen on a national level. The change in prescribing guidance was withdrawn in February 2023. The peak of Group A Streptococcal infections was later in NHS Grampian than other parts of the country. Until Quarter 2 in 2022 NHS Grampian was meeting the 10% reduction target. There is currently a prolonged delay in the availability of primary care prescribing data and the Antimicrobial Management Team (AMT) will assess more recent data as soon as it is available. The AMT have been in contact with the Primary Care Prescribing Group with regards to the prescribing levels and will continue to liaise with them in regards to any necessary actions.

## 2. Use of intravenous antibiotics in secondary care defined as DDD\* / 1000 population / Day will be no higher in 2022 than it was in 2018

Target = 0.796

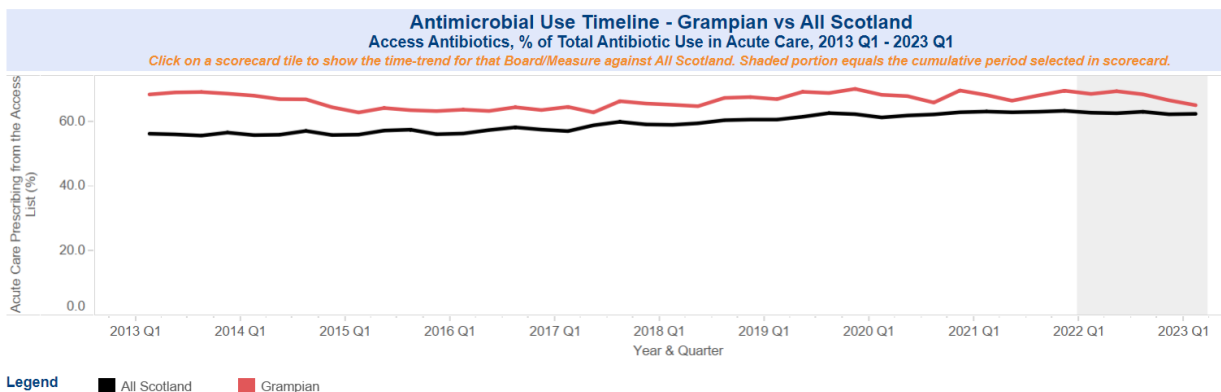


The data above, taken from NSS Discovery, demonstrates that NHS Grampian were below the target throughout 2019 and 2020. Data for 2020 and 2021 were impacted by the change of hospital activity during the COVID-19 pandemic. The most recent data point on NSS Discovery for Quarter 1 in 2023 is 0.84 (0.76 for corresponding quarter in 2019 and 2020, 0.82 for corresponding quarter in 2018). The average over the last 4 quarters for NHS Grampian was 0.8 which is slightly higher than the target (0.796). The AMT will continue to monitor the data and plan necessary actions should the current upward trajectory continue.

\* *Defined Daily Dose*. Further information can be found at:

[WHOCC - Definition and general considerations](#)

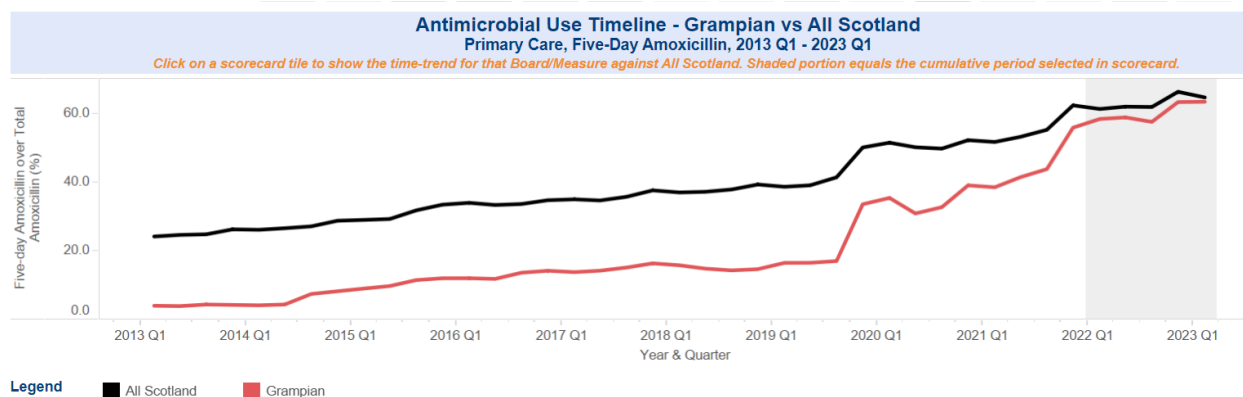
### 3. Use of WHO Access antibiotics (NHSE list) ≥60% of total antibiotic use in acute hospitals by 2022



The data above, taken from NSS Discovery, demonstrates that NHS Grampian is consistently meeting this target. The most recent data point on NSS discovery is 65.3% for Quarter 1 of 2023, with an average of 67.6% over the last 4 quarters.

Primary Care data on Discovery demonstrates that use of Access Antibiotics in NHS Grampian is around 82% which is just above the national average. There is not currently a national target set for Primary Care.

### Amoxicillin course length in Primary Care



The above data taken from NSS Discovery documents the percentage of prescriptions for oral amoxicillin in primary care that are for a five day duration. Five day courses are now recommended for a number of indications and our primary care guidelines were updated in November 2019. The data shows that the percentage is consistently increasing and is now approaching the national level. There is currently no national target for this parameter.

## Meticillin-Resistant *Staphylococcus Aureus* (MRSA) Screening

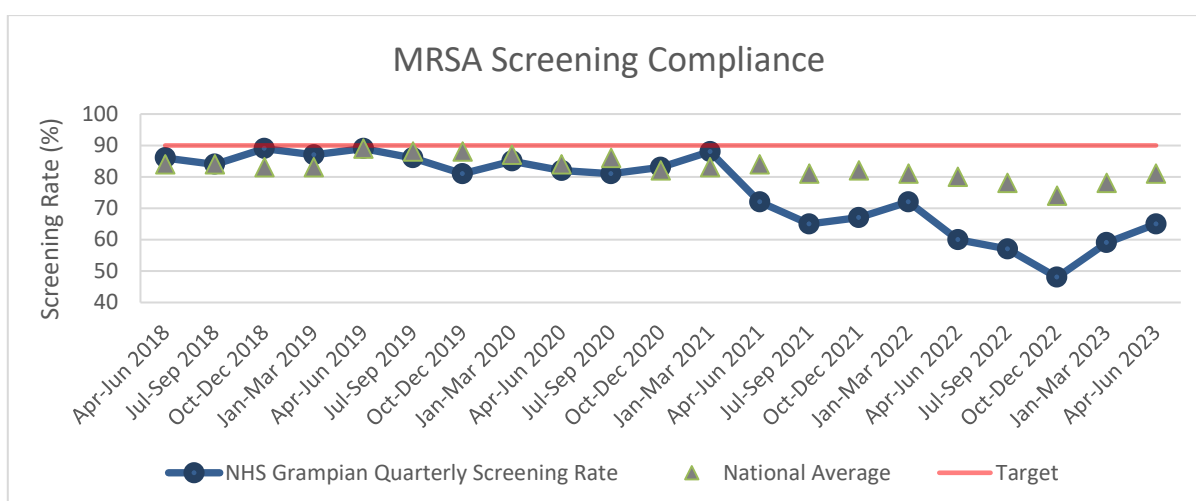
MRSA is a *Staphylococcus aureus* (*S. aureus*) that is resistant to commonly used antibiotics e.g. flucloxacillin. This makes MRSA infections more difficult and costly to treat, hence every effort must be made to prevent spread<sup>2</sup>. Both MRSA and *S. aureus* are transmitted in the same way and cause the same range of infections. The majority of MRSA positive individuals are colonised. This occurs when an organism lives harmlessly on the body, e.g. skin, with no signs or symptoms of infection. Infection is characterised by inflammation including redness, heat, swelling, pain, loss of function and/or if the organism gains entry or penetrates tissue or sterile sites and causes further disease processes.

Early detection of high-risk patients – using a clinical risk assessment (CRA) based approach – allows early isolation while microbiological samples are tested. This reduces the opportunity for transmission if a patient is colonised or infected. To ensure that CRA based-screening is as effective as universal screening, a minimum of 90% compliance with application of the CRA is required for MRSA Screening<sup>3</sup>.

**NHS Grampian’s MRSA CRA screening compliance for April to June 2023 was 65%. This is an increase from the previous quarter (59%), but below the target of 90% and below the national average (81%).**

The MRSA CRA screening figures are tabled at the NHS Grampian Acute HAI Group meetings, for awareness and so that actions can be taken, where necessary, to improve compliance. The poor compliance for MRSA CRA screening in NHS Grampian has also been raised at recent NHS Grampian governance meetings, and education for staff is being prepared by the NHS Grampian Infection Prevention & Control Team.

	Apr – Jun 2022	Jul – Sep 2022	Oct – Dec 2022	Jan – Mar 2023	Apr – Jun 2023
Grampian	60%	57%	48%	59%	<b>65%</b>
Scotland	80%	78%	74%	78%	81%



More information on the national surveillance programme for MRSA screening can be found at:

<https://www.hps.scot.nhs.uk/web-resources-container/protocol-for-cra-mrsa-screening-national-rollout-in-scotland/>



## Carbapenemase Producing Enterobacteriaceae (CPE) Screening

CPEs are highly resistant bacteria with very few (if any) antimicrobial treatment options. The number of CPE cases in Scotland remains low, however, there has been a 50% increase in cases between 2016 (73) and 2017 (108). The majority of cases were acquired abroad and consequently reduced during the Covid-19 pandemic.

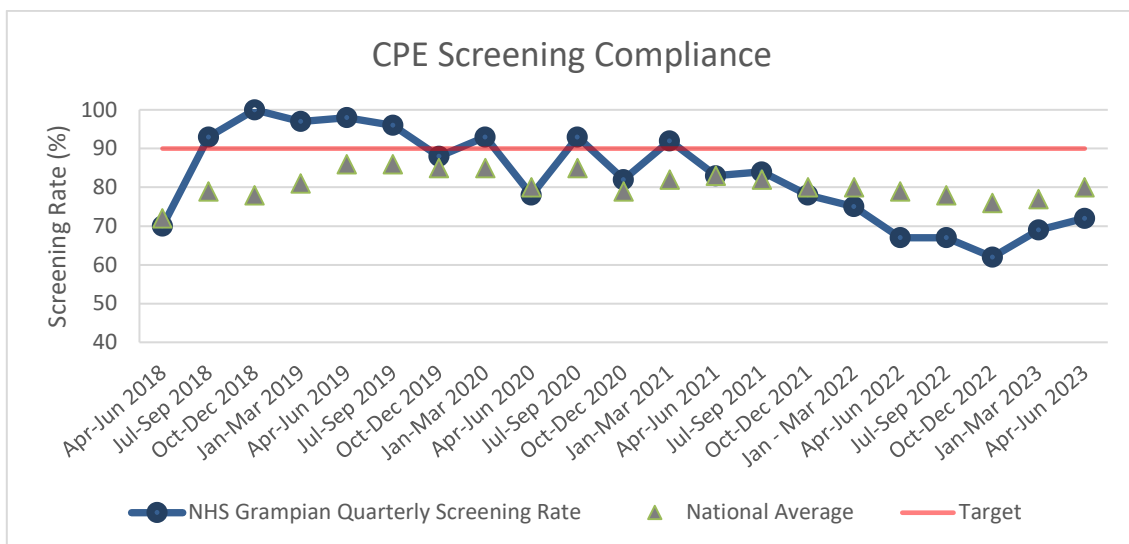
Individuals may be colonised e.g. in the gut requiring no treatment. On the other hand, CPE may cause a range of clinical infections associated with high rates of morbidity and mortality.

CPE screening and data collection commenced on 1<sup>st</sup> April 2018 at the request of the Scottish Government. All NHS Boards are required to undertake CRA based-screening as per the mandatory requirements of DL (2017) 2<sup>4</sup>.

**NHS Grampian’s CPE Clinical Risk Assessment (CRA) screening compliance for April to June 2023 was 72%. This is an increase from the previous month’s compliance (69%), but below the national average (80%) and below NHS Grampian’s target of 90%.**

The CPE CRA screening figures are tabled at the Acute HAI Group meetings, for awareness and so that actions can be taken, where necessary, to improve compliance. The recent decline in compliance for CPE CRA screening in NHS Grampian has also been raised at recent NHS Grampian governance meetings, and education for staff is being prepared by the NHS Grampian Infection Prevention & Control Team.

	Apr – Jun 2022	Jul – Sep 2022	Oct – Dec 2022	Jan – Mar 2023	Apr – Jun 2023
Grampian	67%	67%	62%	69%	<b>72%</b>
Scotland	79%	78%	76%	77%	80%



More information on CPE screening can be found at:

<https://www.hps.scot.nhs.uk/resourcedocument.aspx?id=6990>

## Enteric Incidents and Outbreaks

Any ward and bay closures in NHS Grampian due to enteric illness (including confirmed or suspected Norovirus) are included in daily outbreak reports sent to ARHAIS.

The online dashboard, which previously detailed national ward closures due to confirmed or suspected Norovirus and which was used for the assessment of risk and Norovirus outbreak preparedness, is currently unavailable; ARHAIS are updating their reporting methods. In the meantime, ARHAIS are providing figures by email request.

The following table provides information for complete and partial ward closures in NHS Grampian due to enteric outbreaks:

	Jul 2022	Aug 2022	Sep 2022	Oct 2022	Nov 2022	Dec 2022	Jan 2023	Feb 2023	Mar 2023	Apr 2023	May 2023	Jun 2023
Ward Closures	0	0	0	0	0	0	1	0	0	1	1	0
Bay Closures	0	0	0	0	0	0	0	0	0	0	0	0

**For the period April to June 2023 there were 2 ward closure and 0 bay closures in NHS Grampian due to enteric illness (including confirmed or suspected Norovirus). This is an increase from the previous quarter during which there was only 1 ward closure (and 0 bay closures).**

## Preliminary Assessment Group (PAG) and Incident Management Team (IMT) Meetings

In NHS Grampian the Infection Prevention and Control Team (IPCT) are continually alert for an actual or potential healthcare incident, infection and outbreak or data exceedance. We apply Chapter 3 of the National Infection Prevention and Control Manual<sup>5</sup>. The Healthcare Infection Incident Assessment Tool (HIIAT)<sup>6</sup> guides assessment, communication and escalation of risk within the Health Board, ARHAIS and Scottish Government. Multi-disciplinary meetings to address the infection risk are called Preliminary\* Assessment Group (PAG) and Incident Management Team (IMT) meetings.

A PAG may be convened to assess and determine if an IMT is required or whether there has been a greater than expected data exceedance, such as non-compliant hand hygiene audits.

An IMT is defined as a multi-disciplinary, multi-agency group with responsibility for investigating and managing an incident<sup>7</sup>.

PAG and IMT meetings establish and monitor risk control measures for patient and staff safety, and can be supported by NHS Grampian's Health Protection Team (HPT) and ARHAIS.

**In NHS Grampian, between April and June 2023, the IPCT chaired a total of 12 PAG meetings and 13 IMT meetings. This is a higher amount of PAG meetings but a lower amount of IMT meetings compared to the previous quarter (between January and March 2022, the total number of PAG meetings was 11 and the total number of IMT meetings was 16).**

PAG meetings April – June 2023	
Reason for PAG meeting	Number of PAG meetings
Hand Hygiene	7
Water Ingress	2
Enterobacter Cloacae ESBL	1
Parainfluenza	1
<i>Staphylococcus aureus</i> Bacteraemias (SABs)	1

IMT meetings April – June 2023	
Reason for IMT meeting	Number of IMT meetings
Legionella	7
Klebsiella pneumoniae ESBL	3
Atypical Fungi	1
Enterobacter Cloacae ESBL	1
Water Ingress	1

## Cleaning and the Healthcare Environment

Information on how hospitals carry out the cleaning and estates audits can be found at:

[National Facilities Monitoring Framework Manual \(SHFN 01-01\) | National Services Scotland](#)

Between April and June 2023, NHS Grampian was, overall, compliant with the required cleanliness standards, as monitored by the Facilities Monitoring Tool.

	Apr 2023 Domestic	Apr 2023 Estates	May 2023 Domestic	May 2023 Estates	Jun 2023 Domestic	Jun 2023 Estates	Apr-Jun 2023 Domestic	Apr-Jun 2023 Estates
<b>NHS Grampian Overall</b>	<b>93.25</b>	<b>92.55</b>	<b>93.35</b>	<b>92.95</b>	<b>92.95</b>	<b>93.30</b>	<b>93.08</b>	<b>92.90</b>
Aberdeen Maternity Hospital, RACH & Outlying Areas	93.60	92.80	94.10	92.75	94.20	94.90	93.96	93.48
Aberdeen Royal Infirmary	93.15	93.60	94.60	94.75	93.55	94.15	93.76	94.16
Aberdeenshire North & Moray Community	93.80	90.05	94.10	91.95	94.85	91.75	94.25	91.25
Aberdeenshire South & Aberdeen City	93.10	<b>88.45</b>	93.35	91.70	90.10	92.60	92.18	90.91
Dr Gray's Hospital	93.95	91.85	93.55	93.15	94.10	92.15	93.86	92.38
Royal Cornhill Hospital	91.70	93.50	91.85	93.90	<b>89.40</b>	95.25	90.98	94.21
Woodend Hospital	92.45	92.90	92.50	92.75	91.30	92.45	92.08	92.70

## References

- 1: Director's letter from the Scottish Government regarding Healthcare Associated Infection (HCAI) and Indicators on Antibiotic Use. Available at: [https://www.sehd.scot.nhs.uk/dl/DL\(2023\)06.pdf](https://www.sehd.scot.nhs.uk/dl/DL(2023)06.pdf)
- 2: NHS Grampian Staff Protocol for the Screening and Placement of Patients with Meticillin-Resistant Staphylococcus aureus (MRSA) within NHS Healthcare Settings (Excluding Care Homes) – Version 5, September 2022. Available at: <http://nhsgintranet.grampian.scot.nhs.uk/depts/InfectionPreventionAndControlManual/Documents/NHSG%20Staff%20Protocol%20for%20the%20Screening%20and%20Placement%20of%20Patients%20with%20MRSA%20within%20NHS%20Healthcare%20Settings%20September%202022.pdf>
- 3: ARHAIS Data & Intelligence for Multi-drug resistant organism admission screening (2021). Available at: <https://www.nss.nhs.scot/antimicrobial-resistance-and-healthcare-associated-infection/data-and-intelligence/multi-drug-resistant-organism-admission-screening/>
- 4: Director's letter from the Scottish Government regarding policy requirement for Carbapenemase Producing Enterobacteriaceae (CPE) Screening in NHS Boards (2017). Available at: [https://www.sehd.scot.nhs.uk/dl/DL\(2017\)02.pdf](https://www.sehd.scot.nhs.uk/dl/DL(2017)02.pdf)
- 5: Health Protection Scotland (2019) National Infection prevention and Control Manual – Chapter 3. Available at: <http://www.nipcm.hps.scot.nhs.uk/chapter-3-healthcare-infection-incidents-outbreaks-and-data-exceedance/>
- 6: Health Protection Scotland (2022) Healthcare Infection Incident Assessment Tool. Available at: <http://www.nipcm.hps.scot.nhs.uk/appendices/appendix-14-mandatory-nipcm-healthcare-infection-incident-assessment-tool-hiiat/>
- 7: Management of Public Health Incidents: Guidance on the Role and Responsibilities of NHS Led Incident Management Teams. Available at: [https://hpspubsrepo.blob.core.windows.net/hps-website/nss/1673/documents/1\\_shpn-12-mphi-21062017.pdf](https://hpspubsrepo.blob.core.windows.net/hps-website/nss/1673/documents/1_shpn-12-mphi-21062017.pdf)