

## Healthcare Associated Infection (HAI) Quarterly Report – July 2022

The following is a summary of the [ARHAIS \(Antimicrobial Resistance and Healthcare Associated Infection Scotland\) Quarterly Epidemiological Data Report \(January – March 2022\)](#) which was published on 5<sup>th</sup> July 2022.

### Executive Summary January – March 2022

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

- An overall decrease of healthcare associated cases in the past 12 months
- Total number of cases of CDIs in NHS Grampian: **15**
  - 8 healthcare associated cases
  - 7 community associated cases
  - A **decrease** of 2 compared to the previous quarter (17)
  - 6.5% of the total across Scotland (230)

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

- Total number of cases of ECBs in NHS Grampian: **75**
  - 41 healthcare associated cases
  - 34 community associated cases
  - A **decrease** of 14 compared to the previous quarter (89)
  - 7.7% of the total across Scotland (980)

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

- Total cases of SABs in NHS Grampian: **39**
  - 23 healthcare associated cases
  - 16 community associated cases
  - A **decrease** of 3 compared to the previous quarter (42)
  - 10.5% of the total across Scotland (371)

#### **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 January 2022 – March 2022.

## Executive Summary January – March 2022

### Above Target

- Cleaning compliance (**94%**)
  - This is the **same** as the previous quarter (94%)
- Estates monitoring compliance (**94%**)
  - This is the **same** as the previous quarter (94%)
- Hand hygiene compliance amongst Allied Health Professionals (**99%**)
  - This is the **same** as the previous quarter (99%)
- Hand hygiene compliance amongst ancillary staff (**97%**)
  - This is an **increase** compared to the previous quarter (96%)
- Hand hygiene compliance amongst medical staff (**97%**)
  - This is the **same** as the previous quarter (97%)
- Hand hygiene compliance amongst nursing staff (**99%**)
  - This is the **same** as the previous quarter (99%)

### Below Target

- Methicillin-Resistant *Staphylococcus Aureus* (MRSA) Clinical Risk Assessment (CRA) screening compliance (**72%**)
  - This is an **increase** compared to the previous quarter (67%)
- Carbapenemase Producing Enterobacteriaceae (CPE) Clinical Risk Assessment (CRA) screening compliance (**75%**)
  - This is a **decrease** compared to the previous quarter (78%)

### Additional Information

- Wards closed due to enteric illness: **4**
  - This is an **increase** compared to the previous quarter (0)
- Preliminary Assessment Group (PAG) meetings: **20**
  - This is an **increase** compared to the previous quarter (16)
- Incident Management Team (IMT) meetings: **30**
  - This is a **decrease** compared to the previous quarter (33)

## 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)	Jan-Mar 2022, HPS	12.6 <sup>^</sup>	6.3 <sup>^</sup>	Green
	Community Associated Infection	-		3.2 <sup>^^</sup>	4.8 <sup>^^</sup>	Amber
ECBs	Healthcare Associated Infection	Reduction of 25%** (set by SGHD)	Jan-Mar 2022, HPS	30.5 <sup>^</sup>	32.5 <sup>^</sup>	Amber
	Community Associated Infection	-		39.2 <sup>^^</sup>	23.5 <sup>^^</sup>	Green
SABs	Healthcare Associated Infection	Reduction of 10%* (set by SGHD)	Jan-Mar 2022, HPS	16.3 <sup>^</sup>	18.2 <sup>^</sup>	Amber
	Community Associated Infection	-		9.6 <sup>^^</sup>	11.1 <sup>^^</sup>	Amber
SSIs	Caesarean Section	-	Jan-Mar 2022, HPS	***	***	-
	Hip Arthroplasty	-	Jan-Mar 2022, HPS	***	***	-

\* Reduction of 10% from 2019 to 2022 (extended to 2023), with 2018/19 used as the baseline for reduction

\*\* An initial reduction of 25% by 2021/22 (extended to 2022/23), with 2018/19 used as the baseline for reduction. Reduction of 50% by 2023/24 (extension to be confirmed)

\*\*\* 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)	Jan-Mar 2022, HPS	81	72	Red
CPE (CRA) screening	-	90% (set by NHSG)	Jan-Mar 2022, HPS	80	75	Red
Cleaning	All clinical areas	90% (set by HFS)	Jan-Mar 2022, NHSG	-	94	Green
Estates		90% (set by HFS)	Jan-Mar 2022, NHSG	-	94	Green
Hand Hygiene	Allied Health Professionals	90% (set by SGHD)	Jan-Mar 2022, NHSG	-	99	Green
	Ancillary staff	90% (set by SGHD)	Jan-Mar 2022, NHSG	-	97	Green
	Medical staff	90% (set by SGHD)	Jan-Mar 2022, NHSG	-	97	Green
	Nursing staff	90% (set by SGHD)	Jan-Mar 2022, NHSG	-	99	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 January to March 2022 there were 8 healthcare associated cases of CDI in NHS Grampian, which was a rate of 6.3 cases per 100,000 total occupied bed days. In the previous quarter, NHS Grampian had 12 healthcare associated cases of CDI, which was a rate of 9.5 cases per 100,000 total occupied bed days.**

**Yearly trends (comparing year-ending March 2021 with year-ending March 2022) show that there was an overall decrease of healthcare associated cases of CDI in NHS Grampian (a rate of 14.4 cases per 100,00 total occupied bed days down to a rate of 9.2 cases per 100,000 occupied bed days). Scotland, as a whole, also saw an overall decrease of healthcare associated CDI cases.**

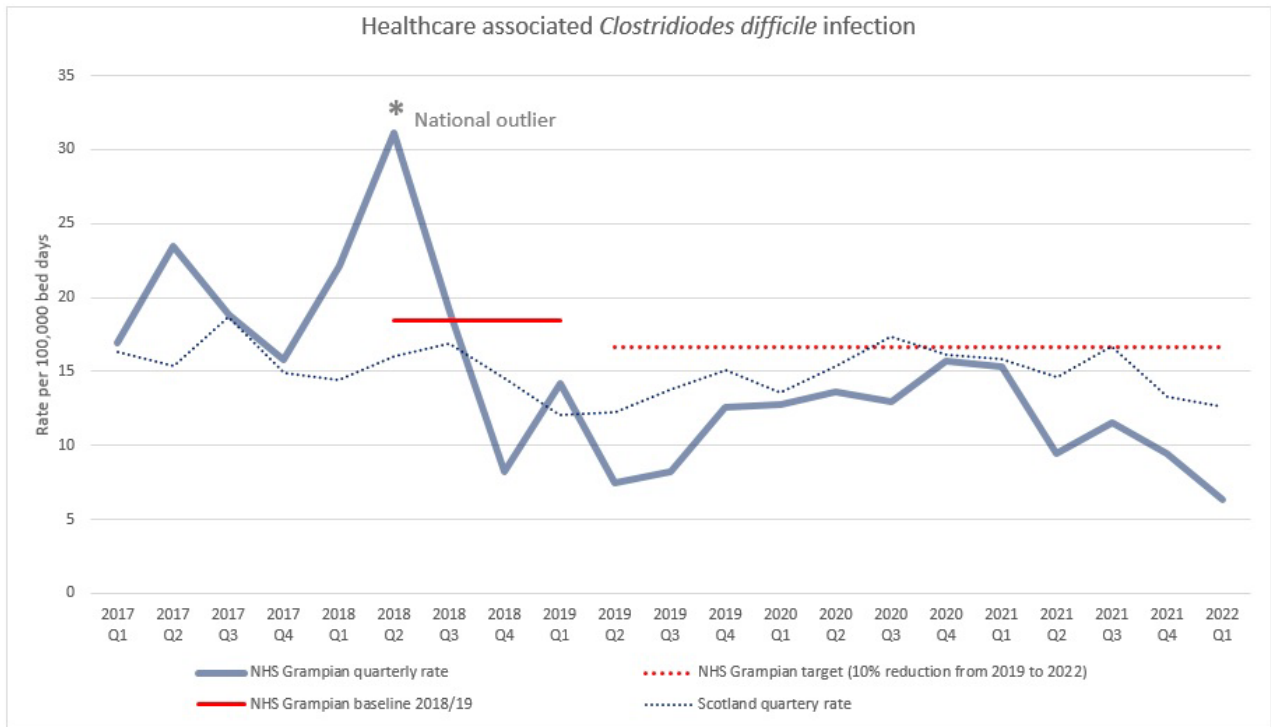


Figure (1a) shows trends in healthcare associated *C. difficile* infection in NHS Grampian (thick blue line) and Scotland (dotted blue line) over the last 5 years. In the latest quarterly data (2022 Q1) **NHS Grampian rates of healthcare associated *C. difficile* infection are stable** i.e. average / 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. Locally, NHS Grampian is forecast to meet the Scottish Government target for reducing *C. difficile* infection.

**For the period January to March 2022 there were 7 community associated cases of CDI in NHS Grampian, which was a rate of 4.8 cases per 100,000 population. In the previous quarter, NHS Grampian had 5 community associated cases of CDI, which was a rate of 3.4 cases per 100,000 population.**

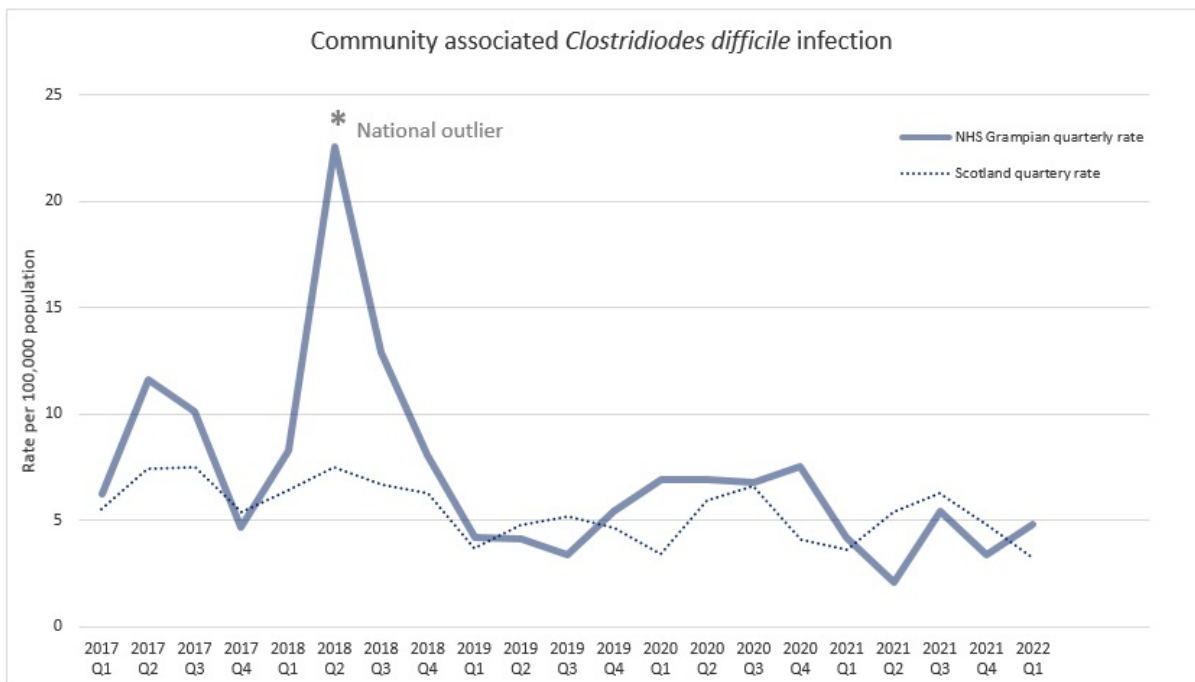


Figure (1b) shows trends in community associated *C. difficile* infection in NHS Grampian (thick blue line) and Scotland (dotted blue line) over the last 5 years. In the latest quarterly data (2022 Q1) **NHS Grampian rates of community associated *C. difficile* infection are stable** i.e. average / below 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 January and March 2022, which was a rate of 32.5 cases per 100,000 total occupied bed days. In the previous quarter there were 45 cases of healthcare associated ECB in NHS Grampian, which was a rate of 35.8 cases per 100,000 total occupied bed days.**

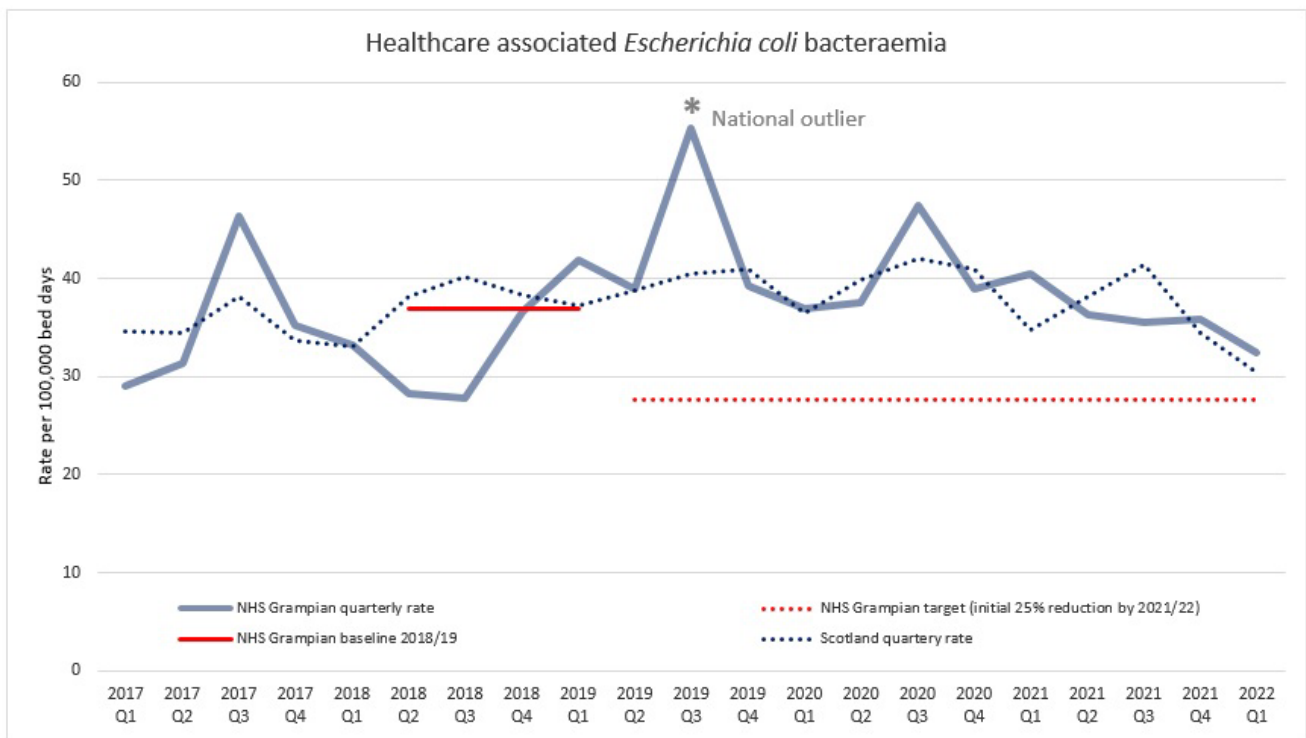


Figure (2a) shows trends in healthcare associated *E. coli* bacteraemia in NHS Grampian (thick blue line) and Scotland (dotted blue line) over the last 5 years. In the latest quarterly data (2022 Q1) **NHS Grampian rates of healthcare associated *E. coli* bacteraemia are stable** i.e. average / below 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. Locally, NHS Grampian like other Health Boards, is not on track to meet the Scottish Government target for reducing *E. coli* bacteraemia. The initial reduction has been deferred by 12 months i.e. 2022/23.



In NHS Grampian, there were 34 community associated cases of ECB between January and March 2022, which was a rate of 23.5 cases per 100,000 population. In the previous quarter there were 44 community associated cases of ECB in NHS Grampian, which was a rate of 29.8 per 100,000 population.

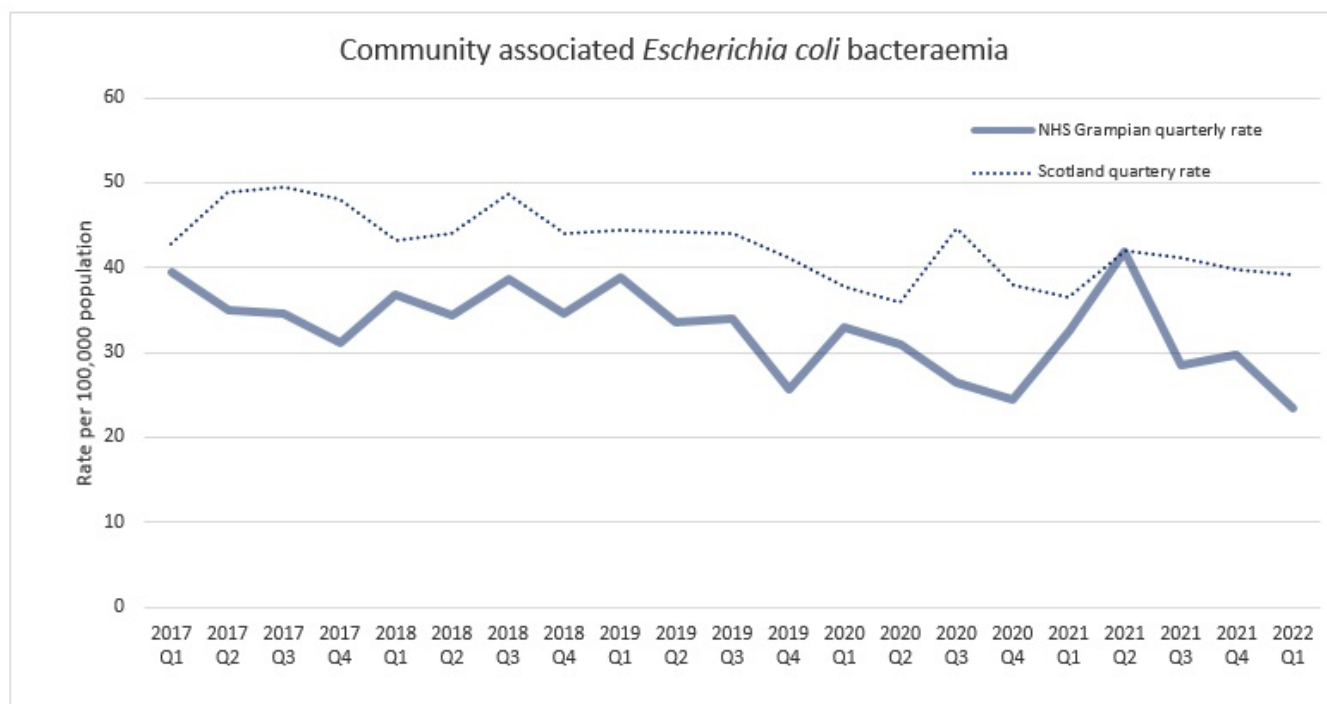


Figure (2b) shows trends in community associated *E. coli* bacteraemia in NHS Grampian (thick blue line) and Scotland (dotted blue line) over the past 5 years. In the latest quarterly data (2022 Q1) **NHS Grampian rates of community associated *E. coli* bacteraemia are stable** i.e. average / below average (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/web-resources-container/quarterly-epidemiological-commentary-for-the-surveillance-of-healthcare-associated-infections-in-scotland-methods-caveats/>

## 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 January and March 2022, there were 23 healthcare associated cases of SABs in NHS Grampian, which was a rate of 18.2 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 21.5 cases per 100,000 total occupied bed days.**

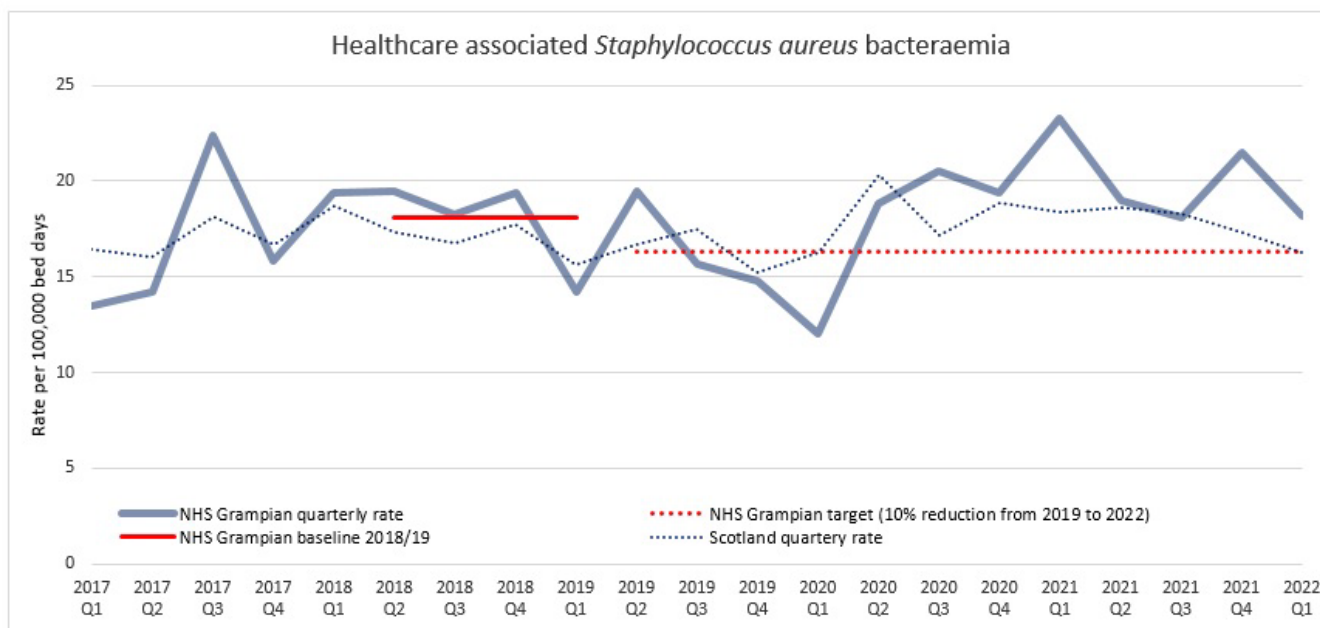


Figure (3a) shows trends in healthcare associated *S. aureus* bacteraemia in NHS Grampian (thick blue line) and Scotland (dotted blue line) over the last 5 years. In the latest quarterly data (2022 Q1) **NHS Grampian rates of healthcare associated *S. aureus* bacteraemia are stable** i.e. average / below 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. Locally, NHS Grampian is not on track to meet the Scottish Government target for reducing *S. aureus* bacteraemia. The initial reduction has been deferred by 12 months i.e. from 2019 to 2023.

Between January and March 2022, there were 16 community associated cases of SABs in NHS Grampian, which was a rate of 11.1 cases per 100,000 population. In the previous quarter, NHS Grampian had 15 healthcare associated cases of SABs, which was a rate of 10.2 cases per 100,000 population.

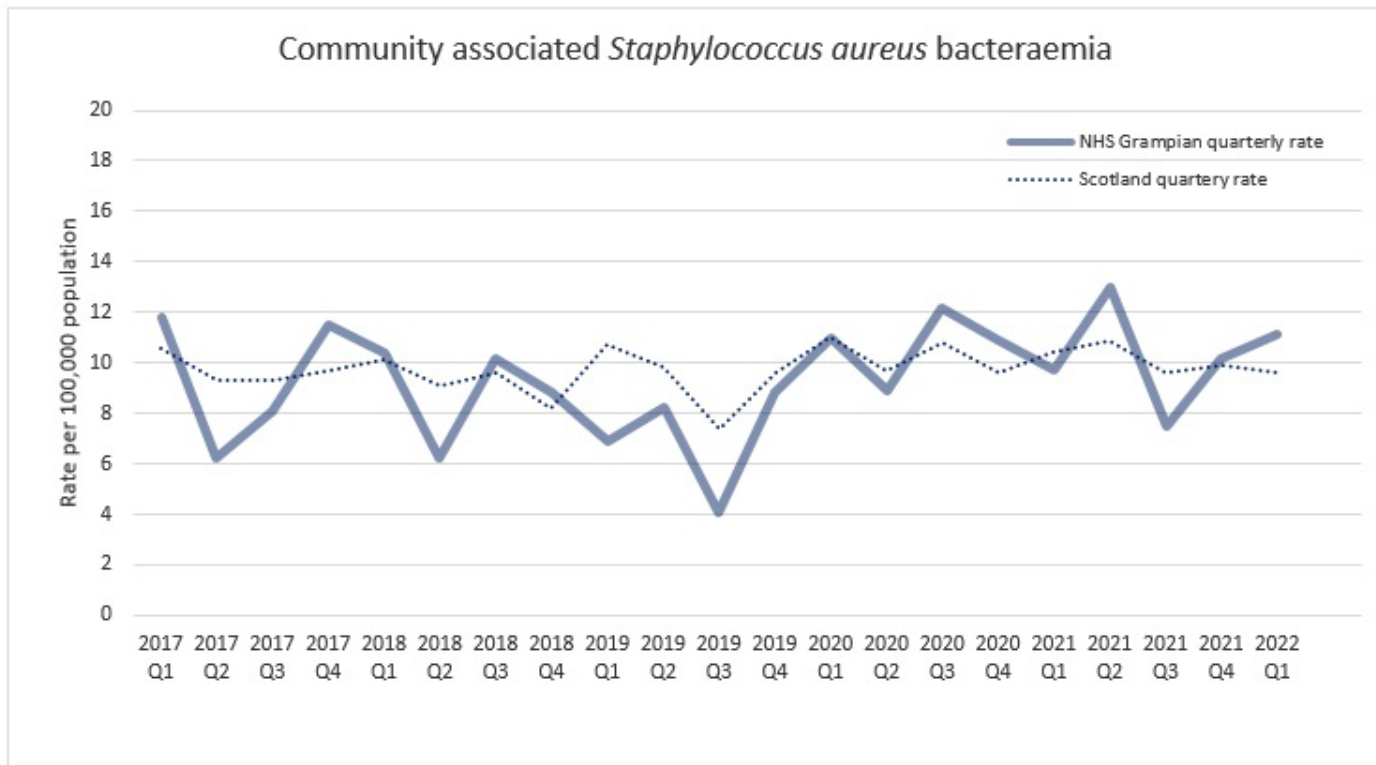


Figure (3b) shows trends in community associated *S. aureus* bacteraemia in NHS Grampian (thick blue line) and Scotland (dotted blue line) over the last 5 years. In the latest quarterly data (2022 Q1) **NHS Grampian rates of community associated *S. aureus* bacteraemia are stable** i.e. average / below 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/web-resources-container/surgical-site-infection-surveillance-protocol-and-resource-pack-edition-71/>

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

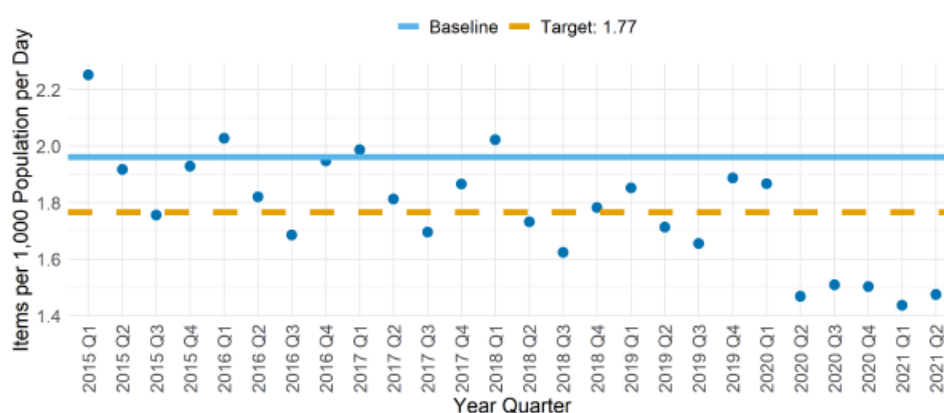
## Antibiotic Use Indicators for Scotland

The national indicators, agreed by the Scottish Antimicrobial Prescribing Group (SAPG), and approved by the Scottish Government in October 2019 are detailed below:

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

#### NHS Grampian Report (24 November 2021)

Indicator 1: A 10% reduction of antibiotic use in Primary Care (excluding dental) by 2022, using 2015 data as the baseline  
NHS Grampian



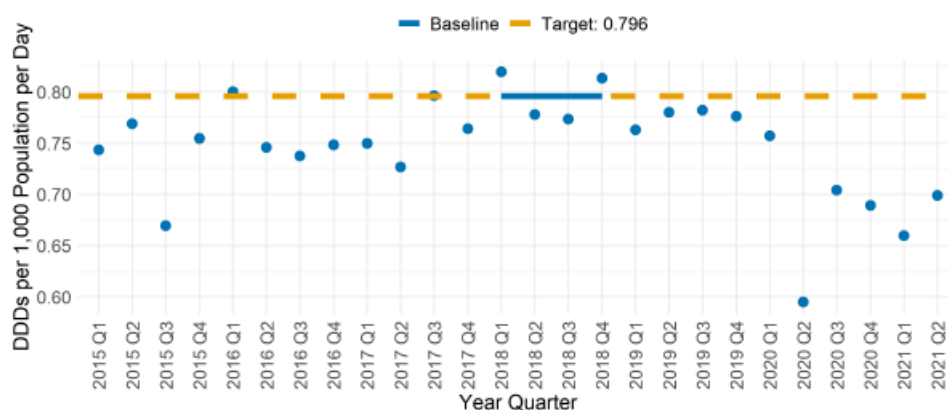
	Items/1,000/Day	Target	Percentage Difference Baseline	Percentage Difference Target
Previous 4 Quarters	1.481	1.766	-24.51%	-16.13%
2016	1.870	1.766	-4.68%	5.91%
2017	1.840	1.766	-6.24%	4.18%
2018	1.789	1.766	-8.83%	1.30%
2019	1.777	1.766	-9.44%	0.62%
2020	1.586	1.766	-19.14%	-10.16%

Source: Prescribing Information System, NHS National Services Scotland and Public Health Scotland

The data above, taken from a report supplied by Public Health Scotland, demonstrates a year on year reduction in antibiotic use in primary care within NHS Grampian. Fluctuations are expected due to seasonal variation in prescribing but these figures demonstrate a continued overall reduction. Prescribing after Quarter 2 in 2020 demonstrated a large reduction in antibiotic use since the start of the COVID-19 pandemic. Although this did rise again in 2021 NHS Grampian (at the current time) are meeting the 10% reduction target. Prescribing at the time of the above report was 24.51% below the baseline. The most recent data point on NSS Discovery for 2022 Q1 is 1.6, which remains lower than the corresponding data points for Q1 in 2019 and 2020 (1.73 and 1.74 respectively).

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

**Indicator 2: Use of intravenous antibiotics in secondary care will be no higher in 2022 than it was in 2018**  
NHS Grampian



	DDD's/1,000/Day	Target	Percentage Difference
Previous 4 Quarters	0.688	0.796	-13.55%

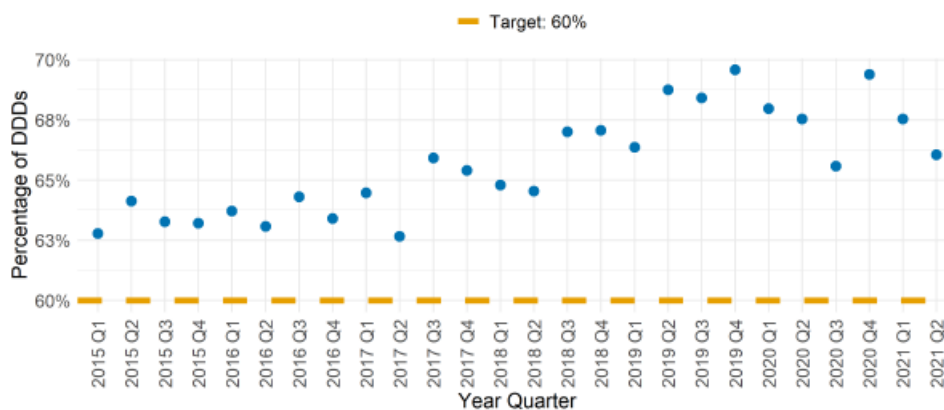
	DDD's/1,000/Day	Target	Percentage Difference
2019	0.775	0.796	-2.60%
2020	0.686	0.796	-13.78%

Source: Hospital Medicines Utilisation Database, NHS National Services Scotland and Public Health Scotland

The data above, taken from a report supplied by Public Health Scotland, 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 points on NSS Discovery for quarters 3 and 4 of 2021 are 0.73 and 0.75 respectively (0.78 for corresponding quarters in 2019), demonstrating that although intravenous antibiotic use rose in 2021 from the low levels of 2020 NHS Grampian continues to meet the target. To maintain and improve work on this target, the AMT launched an updated IV to oral switch (IVOST) guideline during antibiotic awareness week in November 2020. Implementation of the Hospital Antibiotic Review Programme (HARP) resource from SAPG will be taken forward when capacity within the AMT allows.

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

**Indicator 3: Use of WHO Access antibiotics greater or equal to 60% of total antibiotic use in Acute by 2022**  
**NHS Grampian**



	Access Percentage	Target	Percentage Difference
Previous 4 Quarters	67.12%	60%	11.87%

	Access Percentage	Target	Percentage Difference
2015	63.34%	60%	5.56%
2016	63.62%	60%	6.04%
2017	64.63%	60%	7.72%
2018	65.84%	60%	9.74%
2019	68.32%	60%	13.86%
2020	67.65%	60%	12.74%

Source: Hospital Medicines Utilisation Database, NHS National Services Scotland and Public Health Scotland

The data above, taken from a report supplied by Public Health Scotland, demonstrates that NHS Grampian is consistently meeting this target. The most recent data point on NSS discovery is 69.8% for quarter 4 of 2021, with an average of 68.2% from quarter 2 2020 to quarter 4 2021.

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

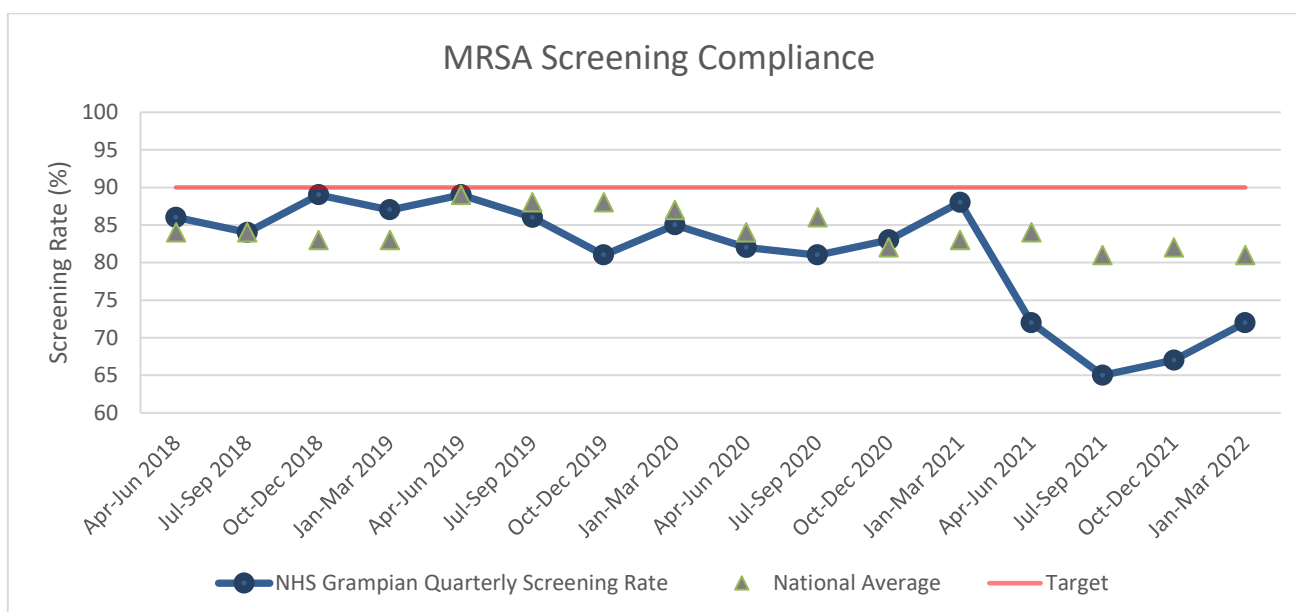
MRSA is a *Staphylococcus aureus* (*S. aureus*) that is resistant to commonly used antibiotics e.g. flucloxacillin. This makes MRSA infections more difficult and costly to treat, hence every effort must be made to prevent spread<sup>1</sup>. Both MRSA and *S. aureus* are transmitted in the same way and 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>2</sup>, as per the mandatory requirements of DL (2019) 23<sup>3</sup>.

**NHS Grampian’s MRSA CRA screening compliance for January to March 2022 was 72%. Although an increase from the previous quarter (67%), this is still 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.

	Jan – Mar 2021	Apr – Jun 2021	Jul – Sep 2021	Oct – Dec 2021	Jan – Mar 2022
Grampian	88%	72%	65%	67%	<b>72%</b>
Scotland	83%	84%	81%	82%	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.

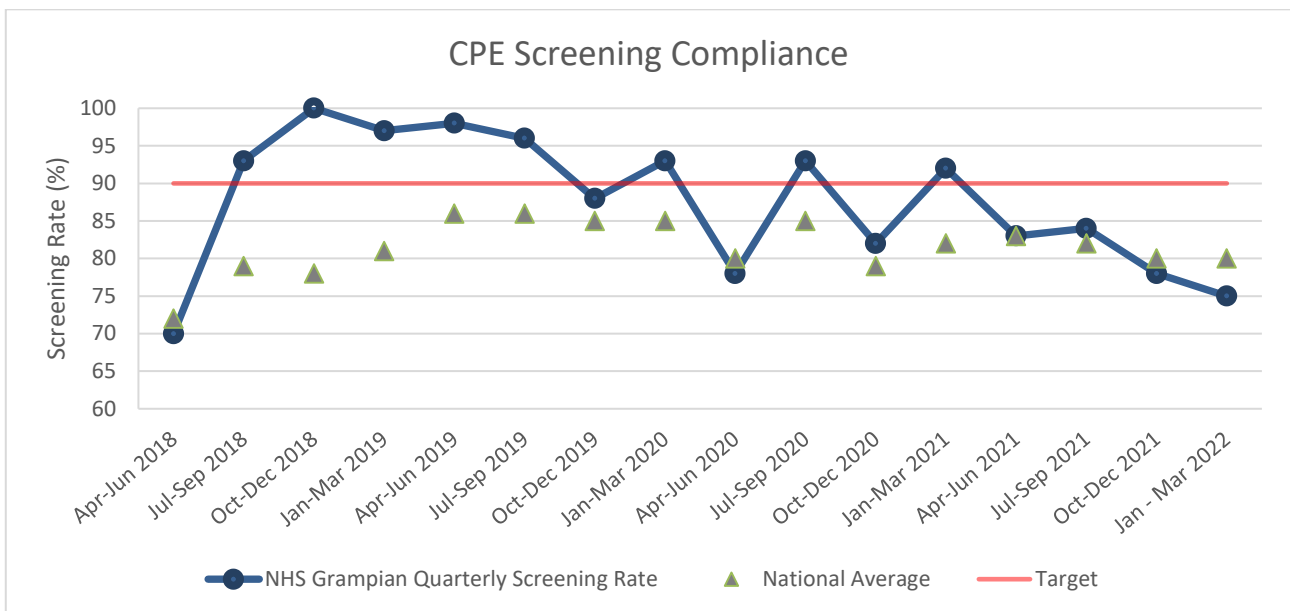
Individuals may be colonised e.g. in the gut requiring no treatment. On the other hand, CPE may cause a range of clinical infections associated with high rates of morbidity and mortality.

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 January to March 2022 was 75%. This is a decrease from the previous month’s compliance (78%), 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.

	Jan – Mar 2021	Apr – Jun 2021	Jul – Sep 2021	Oct – Dec 2021	Jan – Mar 2022
Grampian	92%	83%	84%	78%	<b>75%</b>
Scotland	82%	83%	82%	80%	80%



More information on CPE screening can be found at:

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

## Enteric Incidents and Outbreaks

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

	Apr 2021	May 2021	Jun 2021	Jul 2021	Aug 2021	Sep 2021	Oct 2021	Nov 2021	Dec 2021	Jan 2022	Feb 2022	Mar 2022
Ward Closures	0	0	0	0	0	0	0	0	0	0	0	4
Bay Closures	0	0	0	0	0	0	0	0	0	0	0	0

**For the period January to March 2022 there were 4 ward closures in NHS Grampian due to enteric illness (including confirmed or suspected Norovirus).**

Monday Point Prevalence Surveillance figures are reported to ARHAIS. These capture the significant outbreaks of Norovirus in NHS Grampian and the prevalence of Norovirus activity in close to real time. They are not and should not be interpreted as data for benchmarking or comparison. The data can be used for the assessment of risk and Norovirus outbreak preparedness only.

Data on the numbers of wards closed across NHS Scotland due to confirmed or suspected Norovirus are available from ARHAIS at:

<https://www.hps.scot.nhs.uk/a-to-z-of-topics/norovirus/#data>

(Do not use Internet Explorer to open this hyperlink; use Google Chrome instead)

## 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 January and March 2022, the IPCT chaired a total of 20 PAG meetings and 30 IMT meetings. Compared to the previous quarter (October – December 2021), the total number of PAG meetings increased (from 16 to 20) and the total number of IMT meetings decreased (from 33 to 30).**

PAG meetings January – March 2022	
Reason for PAG meeting	Number of PAG meetings
COVID-19	18
Water Safety	1
Enteric	1

IMT meetings January – March 2022	
Reason for IMT meeting	Number of IMT meetings
COVID-19	27
Water Safety	2
Legionella	1

## Cleaning and the Healthcare Environment

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

<http://www.hfs.scot.nhs.uk/publications-/guidance-publications/?keywords=monitoring+framework&section=&category=&month=&year=&show=10>

Between January and March 2022, NHS Grampian was, overall, compliant with the required cleanliness standards, as monitored by the Facilities Monitoring Tool.

	Jan 2022 Domestic	Jan 2022 Estates	Feb 2022 Domestic	Feb 2022 Estates	Mar 2022 Domestic	Mar 2022 Estates	Jan-Mar 2022 Domestic	Jan-Mar 2022 Estates
<b>NHS Grampian Overall</b>	93.80	94.05	94.10	94.20	93.50	93.05	<b>93.80</b>	<b>93.76</b>
Aberdeen Maternity Hospital, RACH & Outlying Areas	94.60	95.00	93.60	94.85	93.33	94.25	94.70	94.70
Aberdeen Royal Infirmary	93.30	94.70	94.00	95.85	93.65	95.95	93.65	95.50
Aberdeenshire North & Moray Community	94.50	93.25	94.45	<b>89.85</b>	94.15	90.00	94.36	91.03
Aberdeenshire South & Aberdeen City	93.70	90.35	94.40	90.25	93.10	<b>89.40</b>	93.73	90.00
Dr Gray's Hospital	94.70	94.75	94.25	92.65	92.40	90.60	93.78	92.66
Royal Cornhill Hospital	94.80	91.95	94.40	97.20	94.15	91.85	94.45	93.63
Woodend Hospital	91.30	94.75	93.25	94.45	94.10	96.80	92.88	95.33

## References

- 1: NHS Grampian Staff Protocol for the Screening and Management of Patients with Methicillin-Resistant Staphylococcus aureus (MRSA) within NHS Healthcare Settings (Excluding Care Homes) – Version 4, March 2017. Available at: <http://nhsgintranet.grampian.scot.nhs.uk/depts/InfectionPreventionAndControlManual/Documents/NHSG%20Staff%20Protocol%20for%20the%20Treatment%20of%20Patients%20with%20MRSA%20in%20Healthcare%20Settings%20March%202017.pdf>
- 2: 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/>
- 3: Department letter from the Scottish Government regarding Healthcare Associated Infection (HCAI) and Antimicrobial Resistance (AMR) Policy Requirements (2019). Available at: [https://www.sehd.scot.nhs.uk/dl/DL\(2019\)23.pdf](https://www.sehd.scot.nhs.uk/dl/DL(2019)23.pdf)
- 4: Department 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 (2019) Healthcare Infection Incident Assessment Tool. Available at: <http://www.nipcm.hps.scot.nhs.uk/appendices/appendix-14-mandatory-nipcm-healthcare-infection-incident-assessment-tool-hiat/>
- 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)