

# NHS Ayrshire & Arran



<b>Meeting:</b>	<b>Ayrshire and Arran NHS Board</b>
<b>Meeting Date:</b>	<b>Monday 8 June 2026</b>
<b>Title:</b>	<b>National Healthcare Associated Infection Standards</b>
<b>Responsible Director:</b>	<b>Jennifer Wilson, Executive Nurse Director</b>
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## 1. Purpose

This is presented to the Board for:

- Discussion

This paper relates to:

- Annual Operational Plan

This aligns to the following NHS Scotland quality ambition(s):

- Safe

This supports the following Corporate Objectives:

### **Better Health**

- Enabling individuals to live healthier lives
- Reducing health inequalities by supporting communities with the greatest need
- Strengthening prevention and early intervention approaches

### **Better Workplace**

- Fostering a safe, positive, supportive working environment
- Promoting a culture of continuous learning, improvement, and staff development

### **Better Care**

- Enhancing patient experience across care pathways
- Improving clinical outcomes through the delivery of safe, high-quality care

## 2. Report summary

### 2.1 Situation

This paper provides Board members with:

- The current position against the national Healthcare Associated Infection (HCAI) Standards for infection reductions in *Clostridioides difficile* infection (CDI), *Staphylococcus aureus* bacteraemia (SAB), and *Escherichia coli* bacteraemia (ECB).

- A summary of outbreaks and the key learning and improvement actions being taken in response to improving care for our patients.

## 2.2 Background

In line with the Healthcare Improvement Scotland (HIS) *Infection Prevention and Control Standards for Health and Adult Social Care Settings 2022*, the Healthcare Governance Committee (HGC) has a priority in 2025-26 to focus on receiving evidence of organisational learning and demonstrable improvement, and to ensure national improvement priorities and programmes are delivered locally. The detail in this paper supports assurance in relation to HCAI and infection prevention learning and improvement across the Health Board.

The Scottish Government has issued updated national healthcare associated (HCA) infection standards in DL (2025) 05. The agreed standard states there should be no increase in the incidence (number of cases) of *Clostridioides difficile* infection (CDI), *Escherichia coli* bacteraemia (ECB), and *Staphylococcus aureus* bacteraemia (SAB) in the period between April 2025 and March 2026, from the 2023/2024 case numbers baseline.

To meet this standard, by March 2026, NHSAA should have no more than:

- 70 cases of HCA *Clostridioides difficile* infection (CDI)
- 209 cases of HCA *Escherichia coli* bacteraemia (ECBs)
- 87 cases of HCA *Staphylococcus aureus* bacteraemia

## 2.3 Assessment

This paper examines the current rates of healthcare-associated and community-acquired infections within NHS Ayrshire & Arran (NHSAA), focusing on *Clostridioides difficile* infection, *Escherichia coli* bacteraemia, and *Staphylococcus aureus* bacteraemia. It compares local data against national benchmarks and aligns with **National IPC Standards (2022), Standard 4: Assurance and Monitoring Systems**, highlighting key approaches to infection monitoring, reporting, and management across care settings

### CDI Standard

#### Healthcare-associated Clostridioides Difficile Infection

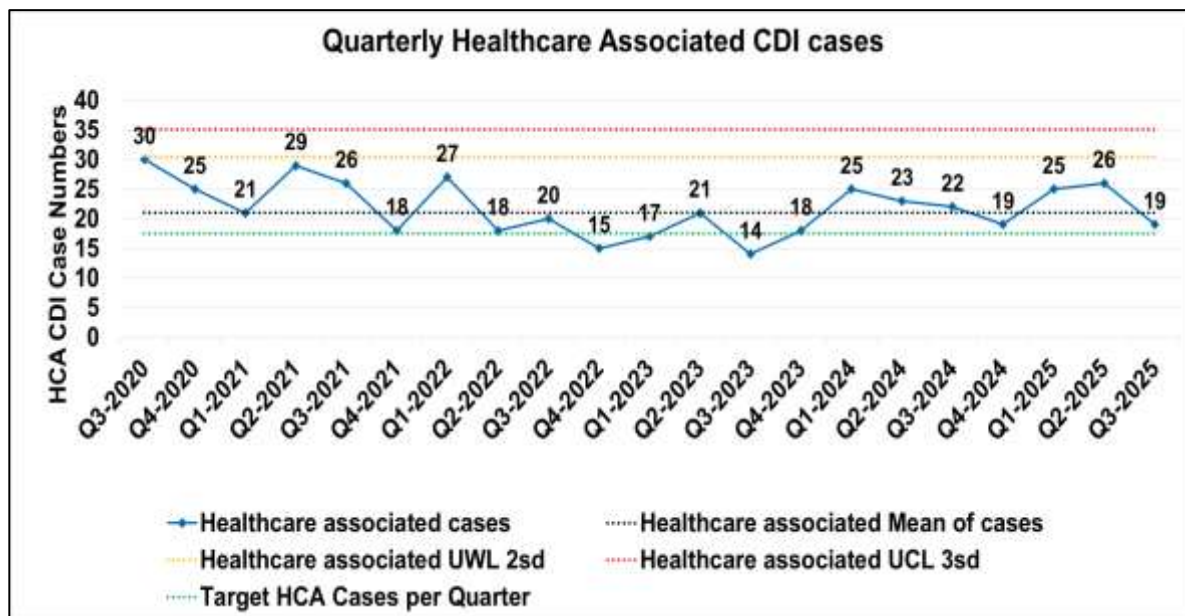
The 2025-26 performance target for NHSAA is to limit healthcare-associated *Clostridioides difficile* Infection (CDI) cases to no more than 70, using the 2023–24 incidence as the baseline.

NHSAA <i>Clostridioides difficile</i> Infection	Q4 2024-25 (Jan-Mar)	Q1 2025-26 (Apr-Jun)	Q2 2025-26 (Jul-Sep)	Q3 2025-26 (Oct-Dec)	Scottish incidence Q3 2025-26 (Oct-Dec)
No of Cases	19	25	26	19	218
Change from Previous Quarter	↓ 3	↑ 6	↑ 1	↓ 7	↓ 28
Incidence rate (per 100,000 TOBDs)	16.3	21.7	22.9	16.7	14.2
<b>2025-26 Target</b>	≤ 70 cases		<b>Recorded Cases vs Annual Target</b>		70/70 cases

Table 1: Healthcare-associated CDI Standard, Case Numbers and Rates

In Quarter 3 of 2025–26, 19 cases of CDI were reported, with an incidence rate of 16.7 per 100,000 TOBDs. Currently, 70 cases have been recorded against the annual target of 70, which constitutes 100% of the total. In comparison, Scotland recorded 218 cases during the same period, with a rate of 14.2 per 100,000 TOBDs (**Table 1**).

**Figure 1** illustrates the quarterly trend of healthcare-associated CDI cases from December 2020 to December 2025. The current data for October to December 2025 shows a decrease in CDI cases compared to the previous quarters, with the rate just below the long-term average, remaining within statistical warning and control limits.



**Figure 1: Quarterly HCA CDI cases**

**Figure 2** provides the Board’s position in comparison to the rest of Scotland. NHSAA’s rate of 16.7 (19 cases) is within the 95% confidence interval upper limit and is above the Scottish rate of 14.2 (218 cases) (per 100,000 TOBDs).

19 healthcare-associated CDI cases identified locally during Q3 (Oct - Dec 2025). Of these, 63% were hospital-acquired, 26% healthcare-associated, and 11% unknown. The hospital-acquired cases spanned nine wards, with two wards showing increased incidence. Investigations were conducted, and typing confirmed no outbreaks occurred during the quarter.

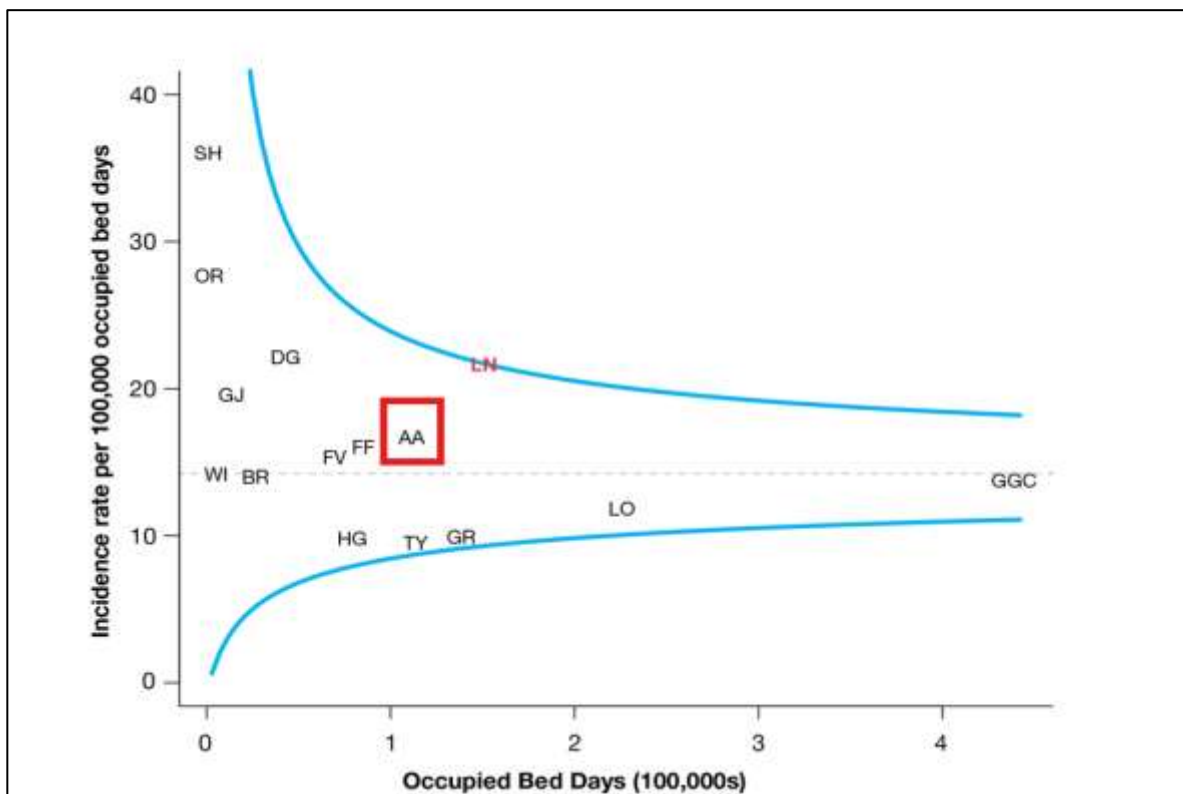


Figure 2: Funnel plot of HCA CDI incidence rates (per 100,000 TOBD) for all NHS boards in Scotland in Q3 2025 (Oct-Dec)

**Community Associated Clostridioides Difficile Infection (CA-CDI)**

During Q3 2025, 4 CDI cases were reported as community associated. This corresponds to an incidence rate of 4.3 cases per 100,000 population (Table 2). While there is no national target for community CDI, the Scottish incidence for the same period was higher, with 73 cases and a rate of 5.2 per 100,000 population.

NHSAA Clostridioides difficile Infection	Q4 2024-25 (Jan-Mar)	Q1 2025-26 (Apr-Jun)	Q2 2025-26 (Jul-Sep)	Q3 2025-26 (Oct-Dec)	Scottish incidence Q3 2025-26 (Oct-Dec)
No of Cases	5	9	8	4	73
Change from Previous Quarter	↓ 5	↑ 4	↓ 1	↓ 4	↓ 11
Incidence rate (per 100,000 TOBDs)	5.5	9.8	8.6	4.3	5.2
<b>2025-26 Target</b>	No National Target				

Table 2: Community Associated CDI Standard, Case Numbers and Rates

Figure 3 shows quarterly trends from December 2020 to December 2025, which remain broadly stable over the reporting period and all quarterly figures remain well below the upper control limit.

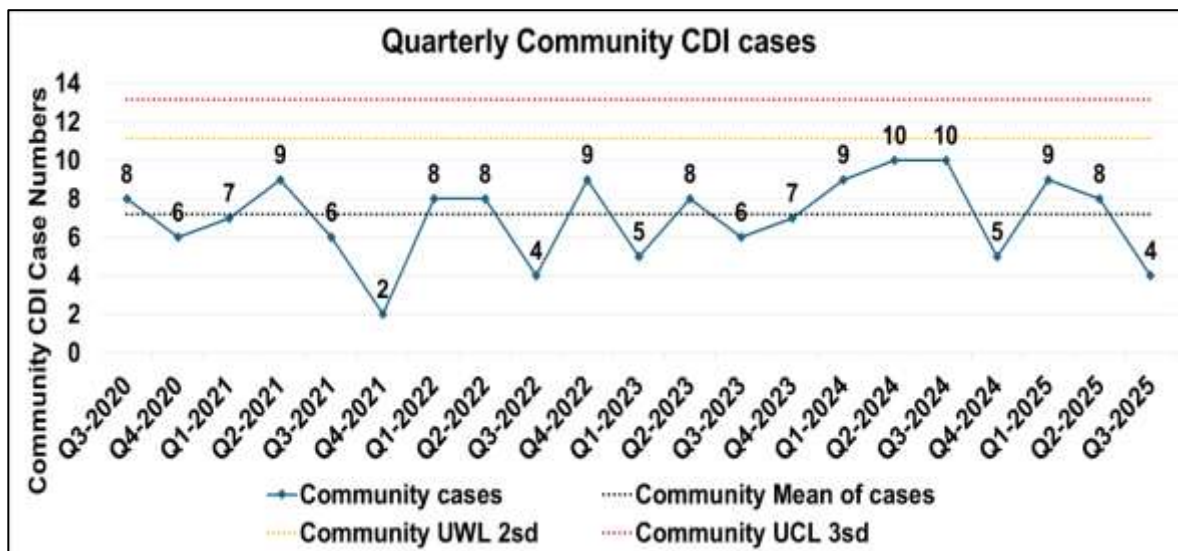


Figure 3: Quarterly Community CDI cases

Figure 4 provides the Board's position in comparison to the rest of Scotland for Community Associated CDI. NHS A&A's rate of 4.3 (4 cases) is within the 95% confidence interval upper limit and is below the Scottish rate of 5.2 (73 cases) (per 100,000 population).

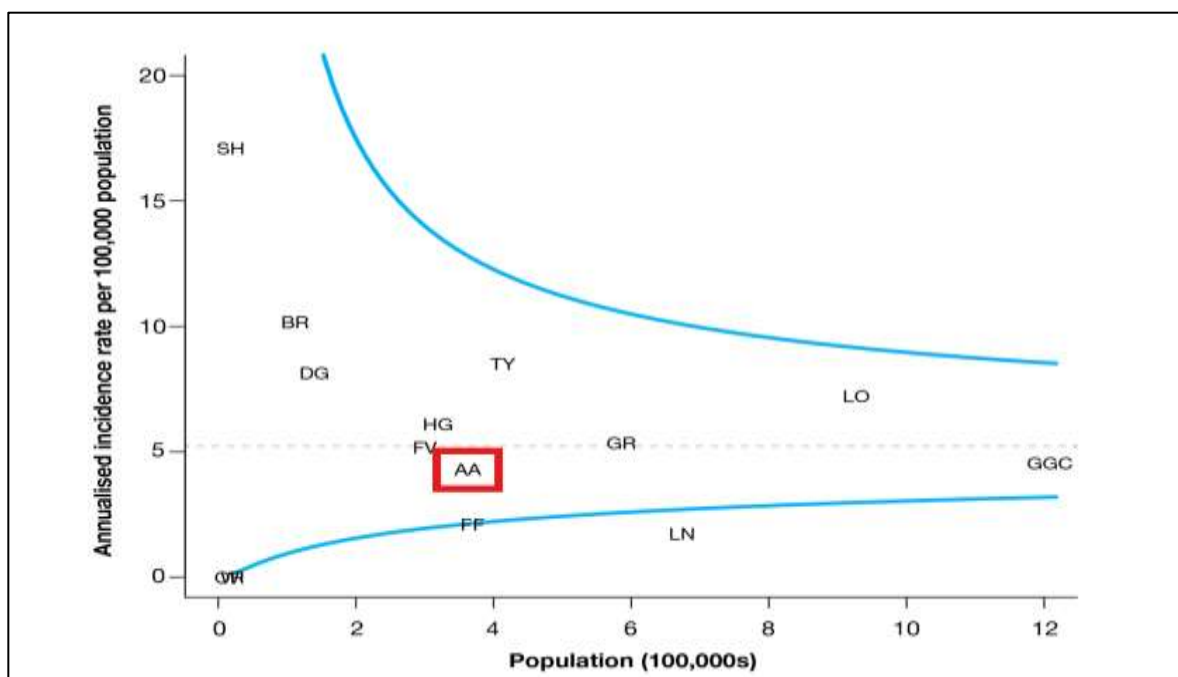


Figure 4: Funnel plot of community associated CDI incidence rates (per 100,000 population) for all NHS boards in Scotland in Q3 2025 (Oct – Dec).

### ECB Standard

#### Healthcare-associated E. coli bacteraemia (ECB)

The ECB standard for NHSAA for the year ending March 2026 sets a target of no more than 209 healthcare-associated E. coli bacteraemia (ECB) cases, aligning with the incidence recorded in 2023–24. In Quarter 3 (Oct–Dec 2025), NHSAA reported 50 cases, equating to a rate of 44.0 per 100,000 TOBDs. This marks a decrease from the previous quarter, with a decrease of 6 cases (from 56 to 50).

Currently, 153 cases have been recorded against the annual target of 209, which is approximately 73% of the total. In comparison, the Scottish Quarter 3 incidence was lower, with 625 cases and a rate of 40.7 per 100,000 TOBDs.

NHSAA E coli bacteraemia	Q4 2024-25 (Jan-Mar)	Q1 2025-26 (Apr-Jun)	Q2 2025-26 (Jul-Sep)	Q3 2025-26 (Oct-Dec)	Scottish incidence Q3 2025-26 (Oct-Dec)
No of Cases	49	47	56	50	625
Change from Previous Quarter	No Change	↓2	↑9	↓6	↓33
Incidence rate (per 100,000 TOBDs)	42.0	40.7	49.2	44.0	40.7
<b>2025-26 Target</b>	209 cases		<b>Recorded Cases vs Annual Target</b>		153/209 cases

Table 3: Healthcare-associated ECB Standard, Case Numbers and Rates

Figure 5 shows quarterly trends in Healthcare Associated ECB cases from October 2020 to December 2025. Case numbers remained stable, averaging around 50 per quarter and consistently stayed below established warning and control thresholds, indicating no significant deviations or outbreaks during the reporting period. This indicates sustained performance within expected limits, with no evidence of significant outbreaks during the reporting period.

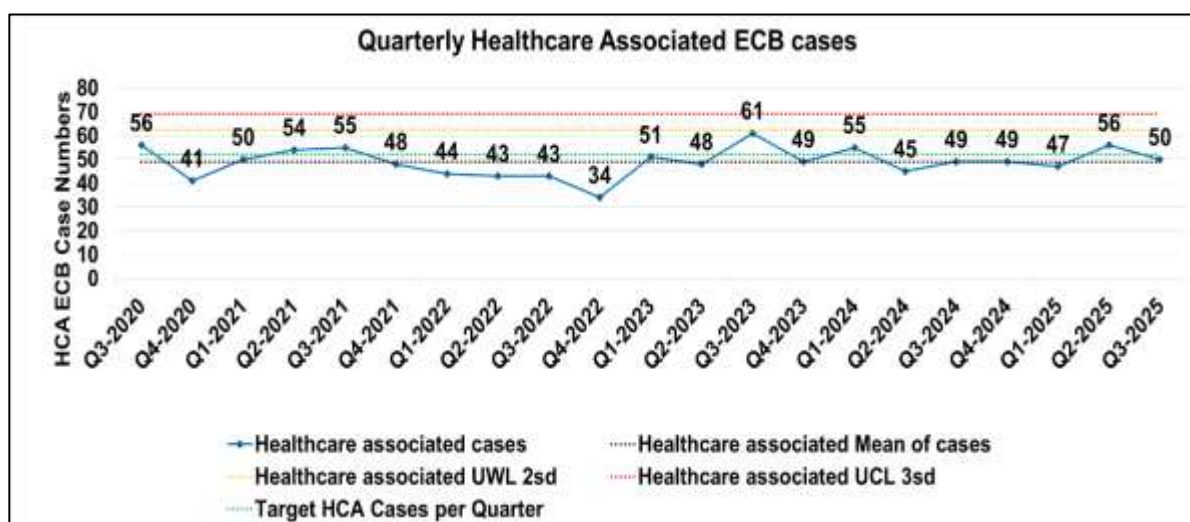


Figure 5: Quarterly Healthcare Associated ECB Cases

Figure 6 provides the Board's position in comparison to the rest of Scotland. NHS A&A's rate of 44.0 (50 Cases) is within the 95% confidence interval upper limit and above the Scottish national average rate of 40.7 (625 Cases) per 100,000 TOBDs.

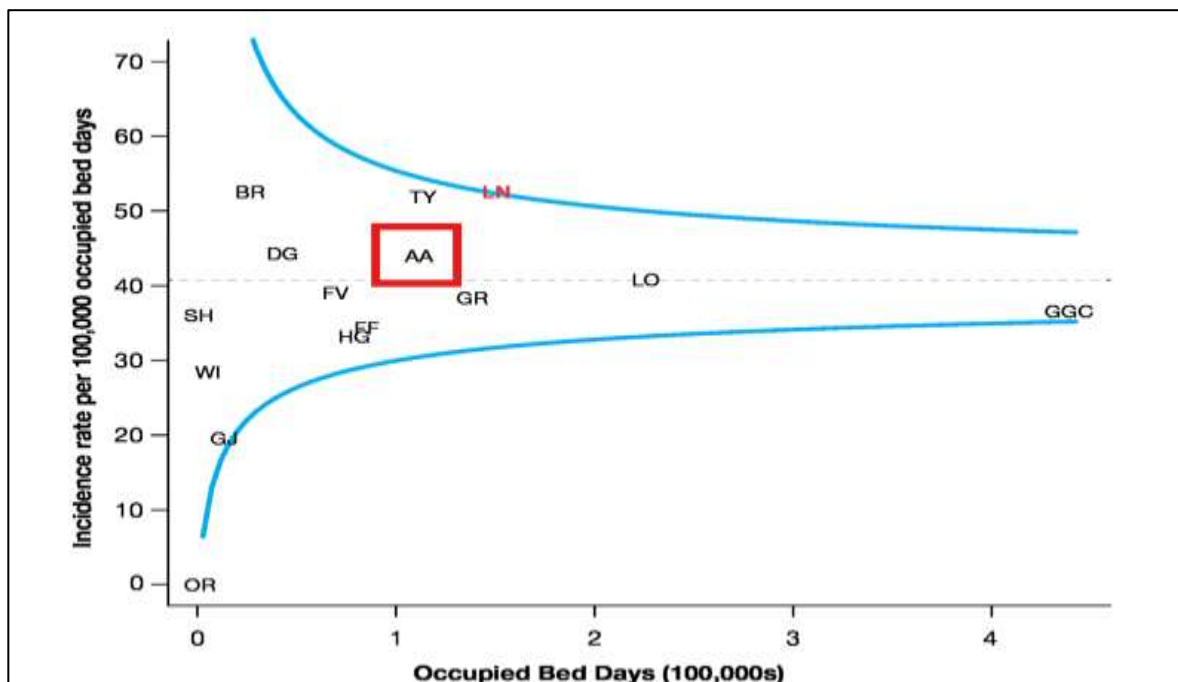


Figure 6: Funnel plot of HCA ECB incidence rates (per 100,000 TOBD) for all NHS Boards in Scotland in October – December 2025.

**Community Associated *E. coli* bacteraemia (ECB)**

During Q3 2025, 55 ECB cases were reported as community associated. This corresponds to an incidence rate of 59.3 cases per 100,000 population (Table 4). While there is no national target for community ECB, the Scottish incidence for the same period was notably lower, with 447 cases and a rate of 32.0 per 100,000 population.

NHSAA Community Associated ECB	Q4 2024-25 (Jan-Mar)	Q1 2025-26 (Apr-Jun)	Q2 2025-26 (Jul-Sep)	Q3 2025-26 (Oct-Dec)	Scottish incidence Q3 2025-26 (Oct-Dec)
No of Cases	54	56	65	55	447
Change from Previous Quarter	No Change	↑2	↑9	↓10	↓128
Incidence rate (per 100,000 TOBDs)	59.6	61.1	70.1	59.3	32.0
<b>2025-26 Target</b>	No National Target				

Table 4 : Community Associated ECB cases and Rates

Figure 7 shows quarterly trends from December 2020 to December 2025, with recent values marginally higher than earlier years but remaining comparable to historical performance and consistently within upper warning and control limits, indicating no evidence of abnormal or sustained increase.

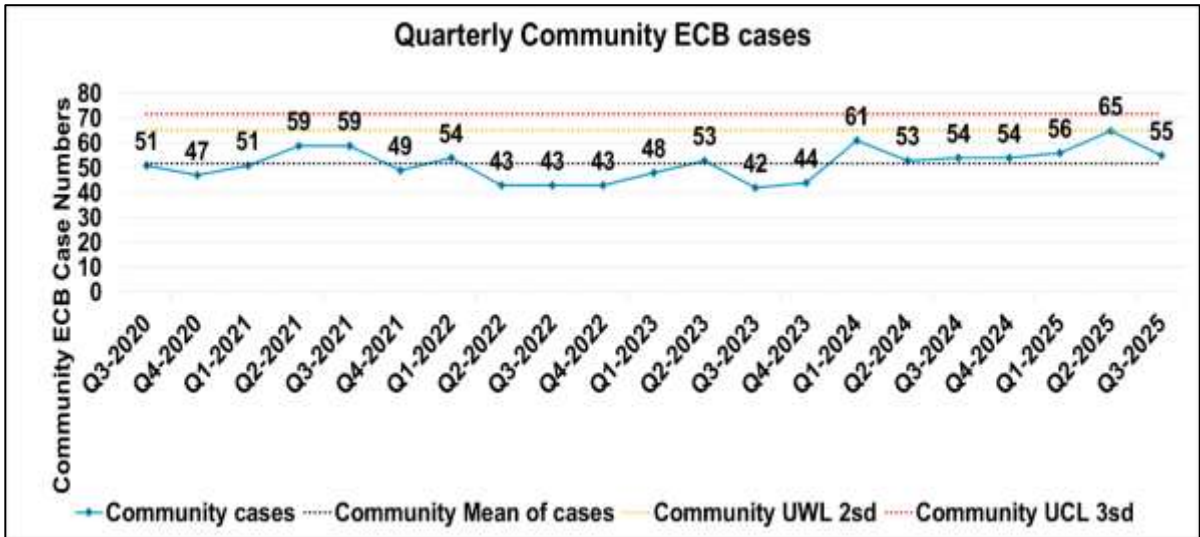


Figure 7: Quarterly Community Associated ECB Cases

Figure 8 provides the Board's position in comparison to the rest of Scotland. NHSAA's rate of 59.3 (55 Cases) is above the 95% confidence interval upper limit and the Scottish rate of 32 (447 Cases).

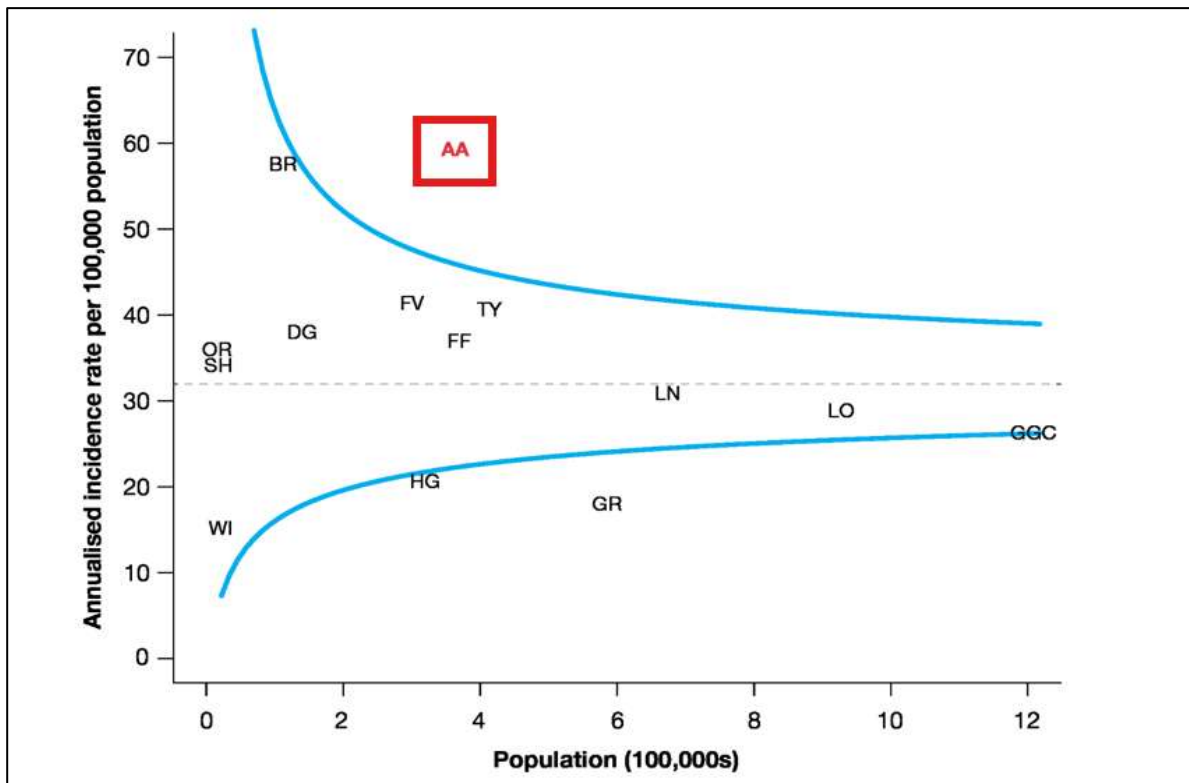


Figure 8: Funnel plot of community associated ECB incidence rates (per 100,000 TOBD) for all NHS boards in Scotland in October - December 2025.

NHSAA continues to report a significantly high rate of community-associated ECB compared to other NHS Boards in Scotland. Although the overall number of ECB cases has remained stable, reductions in Community Associated ECB rates across larger NHS Boards have resulted in NHSAA rate appearing disproportionately elevated.

In 2025 Q3 (October – December), NHS AA has been highlighted as an exception in the quarterly funnel plot analysis by ARHAI Scotland. This marks the seventh

consecutive exception for community-associated ECB, following similar findings in 2024 Q1, Q2, Q3, Q4 and Q1 and Q2 of 2025.

Following the third consecutive exception, the Chief Nursing Officer (CNO) evoked the national support framework. NHSAA responded proactively by engaging ARHAI Scotland for support.

NHSAA established a multi-disciplinary and multi-agency Community ECB Improvement Short-Life Working Group to address this challenge. This group has incorporated the findings shared by ARHAI into its strategic planning. The group continues to engage stakeholders across Public Health, Community Nursing, and Pharmacy, and has developed and completed the Community Acquired Infection (CAI) Learning Review Tool to support deeper case-level analysis and learning.

The tool was developed to support community nursing teams to undertake structured, case-based demographic reviews and enable reflective learning to inform improvement planning. The review tool has strengthened the ability of community nursing teams to undertake structured, multidisciplinary case reviews and support reflective learning that informs targeted improvement actions across health and social care interfaces. Its application to 32 CA-ECB cases across NHSAA has provided valuable insight into key influencing factors, particularly in community prescribing and patient behaviours, highlighting clear opportunities for system-wide improvement.

The findings demonstrate scope to enhance medicines optimisation, particularly through more consistent review of proton pump inhibitor use, alongside further strengthening antimicrobial stewardship in primary care. Opportunities were also identified to support earlier healthcare-seeking behaviours within the ageing population. Overall, these findings highlight the important role of IPC in providing surveillance, assurance, and guidance, while recognising that key opportunities to further reduce CA-ECB risk lie in strengthened collaboration with community prescribers, public health, and wider community care services, particularly in relation to medication review, antimicrobial stewardship, and patient engagement.

## **SAB Standard**

### **Healthcare-associated Staphylococcus aureus bacteraemia**

NHSAA performance objective for 2025–26 is to limit healthcare-associated Staphylococcus aureus bacteraemia (SAB) cases to no more than 87, using the 2023–24 incidence as the baseline (**Table 5**).

In Quarter 3 (October - December 2025), NHSAA reported 26 SAB cases. This equates to a rate of 22.9 per 100,000 total occupied bed days (TOBDs), reflecting an increase from 24 cases in the previous quarter.

Currently, 78 cases have been recorded against the newly set annual target of 87, which constitutes approximately 90% of the target. In comparison, the Scottish Quarter 3 incidence was lower, with 282 cases and a rate of 18.4 per 100,000 TOBDs.

NHSAA Staphylococcus aureus bacteraemia	Q4 2024-25 (Jan-Mar)	Q1 2025-26 (Apr-Jun)	Q2 2025-26 (Jul-Sep)	Q3 2025-26 (Oct-Dec)	Scottish incidence Q3 2025-26 (Oct-Dec)
No of Cases	32	28	24	26	282
Change from Previous Quarter	↑1	↓4	↓4	↑2	↓14
Incidence rate (per 100,000 TOBDs)	27.4	24.3	21.1	22.9	18.4
2025-26 Target	87 cases		Recorded Cases vs Annual Target		78/87 cases

Table 5: Healthcare-associated SAB Standard, Case Numbers and Rates

Figure 9 presents quarterly healthcare-associated SAB cases from December 2020 to December 2025. The latest data point (Q3 2025) indicates an increase in cases compared to the previous quarter.

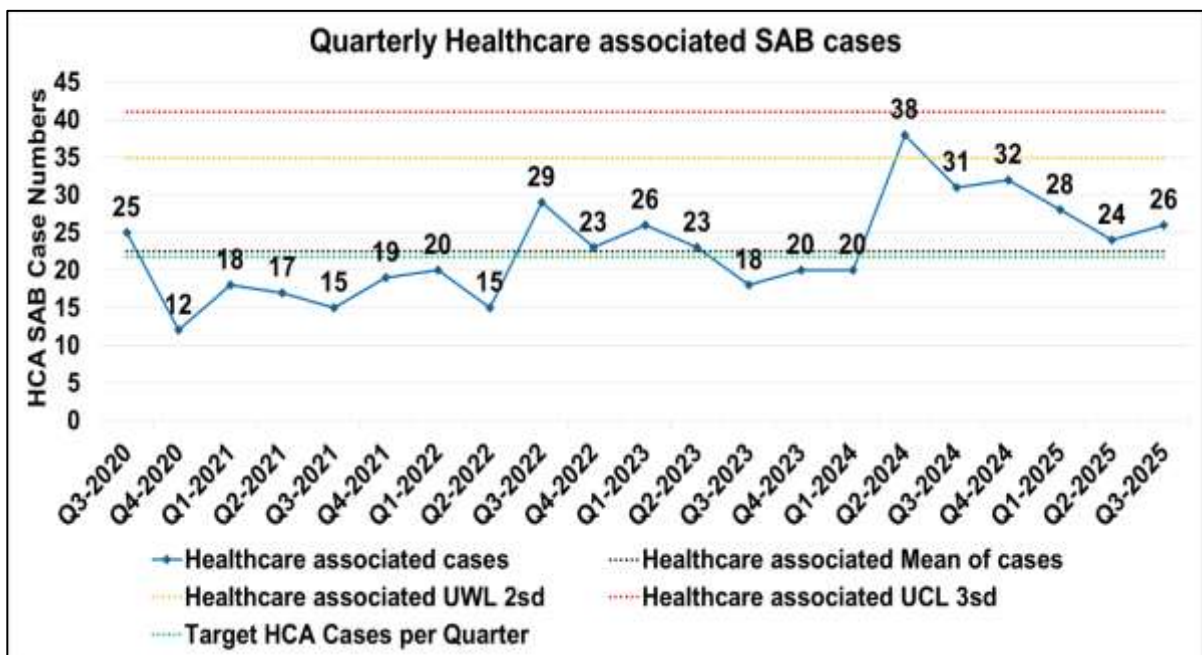


Figure 9: Quarterly HCA SAB Cases

Although the current rate exceeds the Scottish average of 18.4 per 100,000 TOBDs, it remains within control limits, suggesting no special cause variation. The reduction in the previous quarters reflects the impact of sustained quality improvement efforts and enhanced patient safety.

Figure 10 provides the Board’s position in comparison to the rest of Scotland. NHS AA’s rate of 22.9 per 100,000 TOBDs (26 Cases) was within the 95% confidence interval upper limit and above the Scottish rate of 18.4 per 100,000 TOBDs (282 Cases).

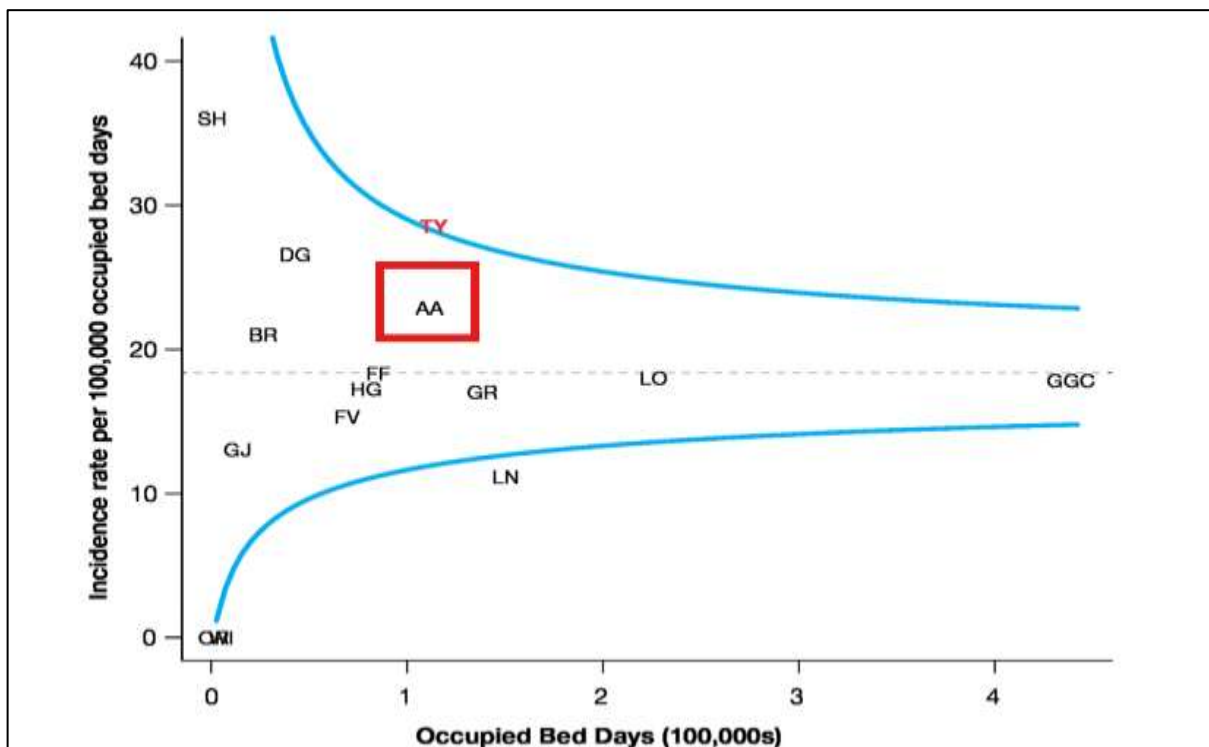


Figure 9: Funnel plot of HCA SAB incidence rates (per 100,000 TOBD) for all NHS boards in Scotland in October – December 2025

**Community Associated *Staphylococcus aureus* bacteraemia**

NHSAA Community Associated SAB	Q4 2024-25 (Jan-Mar)	Q1 2025-26 (Apr-Jun)	Q2 2025-26 (Jul-Sep)	Q3 2025-26 (Oct-Dec)	Scottish incidence Q3 2025-26 (Oct-Dec)
No of Cases	10	8	14	15	132
Change from Previous Quarter	↑1	↓2	↑6	↑1	↑6
Incidence rate (per 100,000 TOBDs)	11.0	8.7	15.1	16.2	9.4
2025-26 Target	No National Target				

Table 6: Number of Community Associated SAB per quarter for the years 2023/24 and 2024/25

Figure 11 illustrates the quarterly trend in community associated SAB cases from December 2020 to December 2025. While the Scottish Government has not issued specific targets for community associated infections, the data shows a slight increase in NHSAA’s annual community SAB rate; from 12.5 per 100,000 population in the year ending December 2024 to 12.8 in the year ending December 2025.

The graph presents quarterly fluctuations in case numbers. Despite variability, the overall trend suggests a positive shift in reducing community SAB incidence.

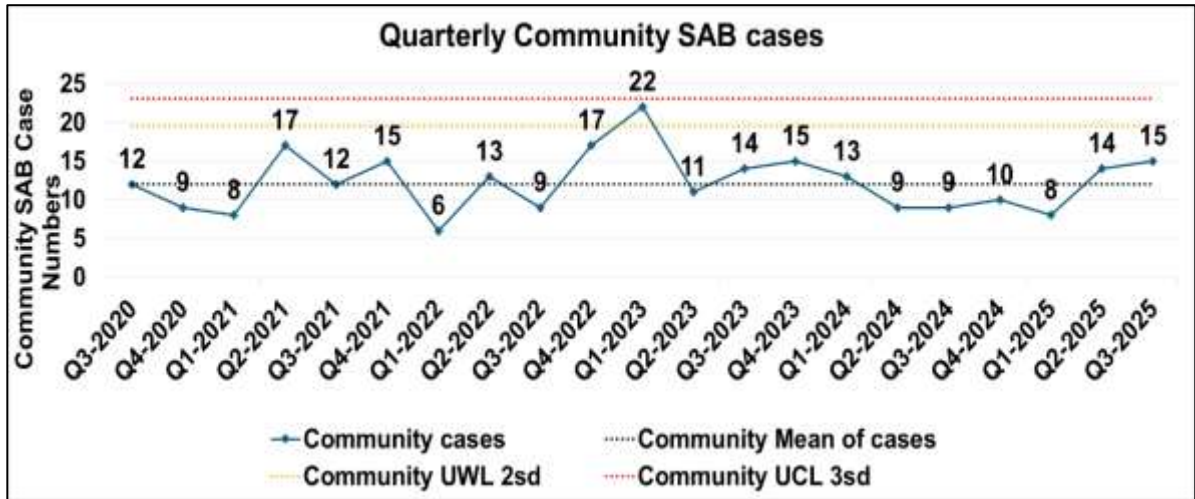


Figure 10: Quarterly Community acquired SAB Cases

Figure 12 provides the Board's position in comparison to the rest of Scotland for Community Associated SAB. NHSAA's rate of 16.2 (15 cases) is within the 95% confidence interval upper limit and is above the Scottish rate of 9.4 (132 cases) (per 100,000 TOBDs).

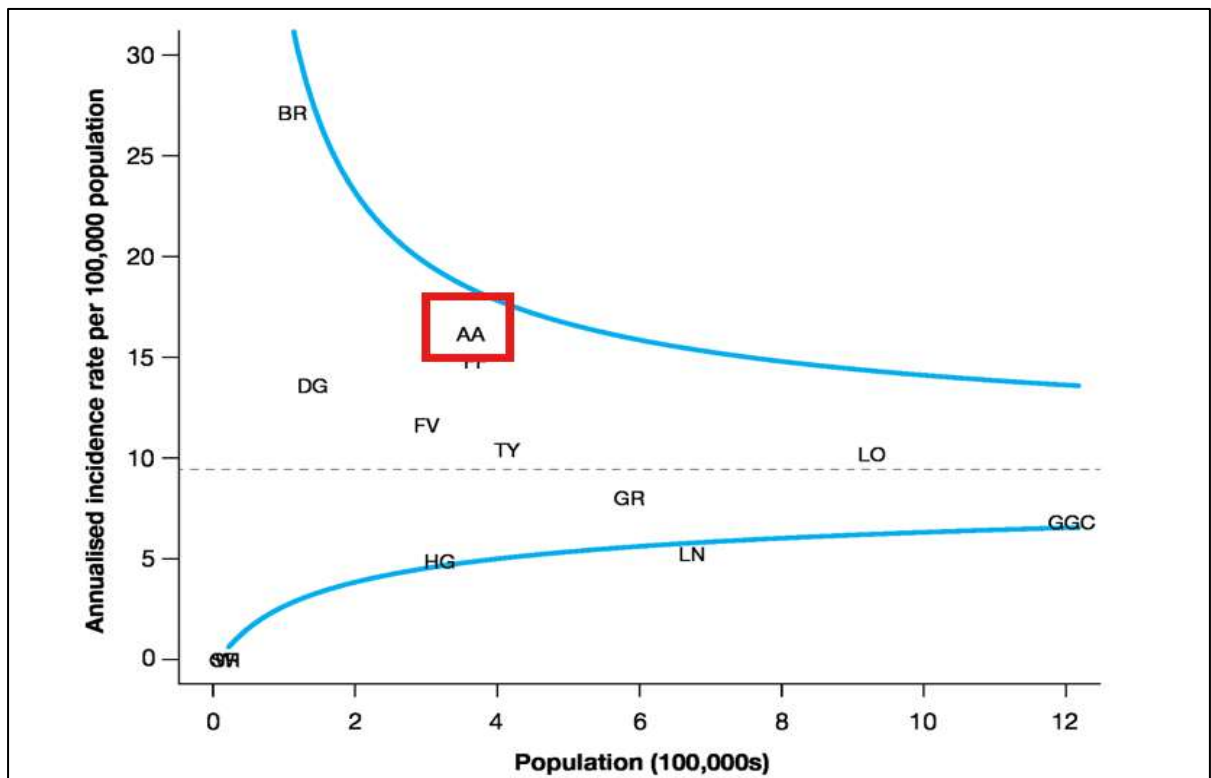


Figure 11: Funnel plot of community associated SAB incidence rates (per 100,000 TOBD) for all NHS boards in Scotland in Q3 2025-26 (October – December) 2025

**Infection Outbreaks and Incidents**

Outbreaks of infection, and infection-related incidents, occur in all healthcare settings. When outbreaks or incidents are detected the Infection Prevention & Control Team (IPCT) provide advice, and work in collaboration with clinical and management teams to support work to reduce the risk of further infection transmission, identify areas for improvement, and put in place actions to reduce risks to patients, staff and visitors.

<b>Aligns to National IPC Standards (2022)</b>	
Standard 2	Education and training
Standard 4	Assurance and monitoring systems
Standard 6	Infection prevention and control policies, procedures, and guidance
Standard 7	Clean and safe care equipment

**Table 7 : National IPC Standards (2022)**

Outbreaks of COVID continue to occur across Scotland, and within NHSAA. Each has been dealt with in line with guidance and reported as required to ARHAI via the national outbreak reporting tool.

Quarter 4 has seen a reduction in respiratory outbreaks, with 17 outbreaks recorded compared to 29 in Quarter 3. All outbreaks have been managed in line with the National Infection Prevention and Control Manual and reported to ARHAI via the national outbreak reporting tool.

The following non-respiratory outbreaks and incidents have occurred or continued during Quarter 4 2025/26, and a summary is reported below:

<b>Name of the outbreak or incident</b>	<b>Current Status open/close</b>	<b>HIIAT Status</b>	<b>Areas of Improvement</b>
Norovirus	Closed	Green	Strengthen weekend escalation processes and improve compliance with PPE, hand hygiene, and documentation standards.
Aspergillus (ongoing since 2024)	Open	Amber	Strengthen environmental risk management through sustained surveillance and targeted infrastructure remediation.
Stenotrophomonas maltophilia	Closed	Green	Strengthen water safety and environmental controls in high-risk settings through enhanced monitoring and preventive measures.
Norovirus	Closed	Green	Strengthen processes to ensure accurate case classification, timely escalation, and consistent sampling standards.
Clostridioides difficile	Closed	Red	Strengthen IPC and PPE compliance and improve consistency of severity score reporting.
TB Exposure Incident	Open	Green	A multi-area exposure incident required coordinated response, with ongoing follow-up for affected patients, staff, and community contacts.  It has highlighted system improvement needs, and

Name of the outbreak or incident	Current Status open/close	HIIAT Status	Areas of Improvement
			actions are underway to strengthen assurance, tracking, and coordinated incident management.

**Table 8: Non-Respiratory Outbreaks and Incidents**

All outbreaks have been managed via Multi-disciplinary Problem Assessment Groups (PAGs) and Incident Management Teams (IMTs) in line with national requirements. External experts have attended when required, such as the Authorising Engineer (Water) and experts from ARHAI, to provide external support, advice, and scrutiny.

All meetings have action trackers in place in addition to meeting notes, with action updates regularly requested, and actions tracked to completion.

### **Healthcare Infection Incident Assessment Tool (HIIAT)**

The ARHAI Healthcare Infection Incident Assessment Tool (HIIAT) supports the assessment of the impact an outbreak or incident has on patients, services, and public health. The HIIAT is a risk assessment supporting Boards to rate each outbreak/incident as **RED**, **AMBER**, or **GREEN**.

The highest HIIAT for all outbreaks within NHSAA in Q3 is available in **Table 9**.

<b>Highest assessed HIIAT</b>		
<b>HIIAT RED</b>	<b>HIIAT AMBER</b>	<b>HIIAT GREEN</b>
1	2	16

**Table 9: Number of incidents reported to ARHAI (including COVID19) January - March 2026**

In the event of an outbreak or incident, a Problem Assessment Group (PAG) or Incident Management Team (IMT) meeting is convened and chaired by the Director of Infection Prevention and Control (DIPC) with staff from the area concerned, and actions are implemented to control further transmission of infection.

All outbreaks/incidents are reported to ARHAI who onward report to the Scottish Government Health and Social Care Directorate (SGHSCD) as required.

#### **2.3.1 Quality/patient care**

Attainment of the national HCAI standards will result in fewer infections in patients and improve patient outcomes and experience.

#### **2.3.2 Workforce**

Reductions in HCAI will reduce the exposure risk to staff from harmful infections.

#### **2.3.3 Financial**

Reductions in HCAI will lead to reduced inpatient lengths of stay and associated treatment costs.

#### **2.3.4 Risk assessment/management**

The IPCT provide clinical teams and managers with risk assessed advice and guidance based on national policy and best practice.

### **2.3.5 Equality and diversity, including health inequalities**

An impact assessment has not been completed because this is an update report to Committee members.

### **2.3.6 Best value**

This paper support Best Value across the following themes.

- Effective Partnerships - Collaboration with Health Protection Scotland and estates teams strengthens system-wide responses.
- Governance and accountability - Transparent reporting to ARHAI and Scottish Government ensures compliance with national standards.
- Performance management - Continuous monitoring and feedback loops drive improvement and assurance.

### **2.3.7 Other Impacts**

- Actions align with NHS Scotland's ambitions for safe, effective, and person-centred care.

### **2.3.8 Communication, involvement, engagement, and consultation**

This is standing report to this committee.

### **2.3.9 Route to the meeting**

This has been previously considered by the following groups as part of its development. The groups have either supported the content, or their feedback has informed the development of the content presented in this report.

- Prevention and Control of Infection Committee, 21 April 2026
- Healthcare Governance Committee, 12 May 2026

## **2.4 Recommendation**

For Discussion. Members are asked to:

- Note the Board's current performance against the national HCAI standards and the anticipated level of challenge in achieving them.
- Note the high outlier position in relation to Community associated ECB for this quarter
- The incidents and outbreaks dealt with during the quarter, and the summary of key learning and actions which confirms NHSAA is proactively learning from and improving because of these infection issues.
- Noting that some of these remain as active outbreaks, with management and learning continuing.