



ARHAI Scotland 2024 Annual Report



**An official
statistics
publication
for Scotland**

About this release

This release is by Antimicrobial Resistance and Healthcare Associated Infection (ARHAI) team of NHS Scotland Assure, part of NHS National Services Scotland (NSS).

This report reflects some of the key work delivered by ARHAI Scotland to support infection prevention and control (IPC), healthcare associated infection (HCAI) prevention and tackling antimicrobial resistance (AMR) during 2024. Data are provided for key HCAs, infections which represent a threat to patient safety and can contribute to morbidity and mortality in an already vulnerable population. This report also highlights how ARHAI Scotland IPC experts have supported the vision of NHS Scotland Assure during 2024, strengthening workforce development, and IPC in the healthcare built environment.

Main points

Key improvements and achievements for 2024:

- Roll-out of a new dedicated respiratory reporting form for key respiratory pathogens and outbreak checklist to support ease of NHS Board reporting of incidents and outbreaks.
- Following the completion of two scientific literature reviews in 2024, the National Infection Prevention and Control Manual (NIPCM) was updated to reflect new recommendations for hand hygiene products, advising that both alcohol-based hand rub (ABHR) and non-ABHR can be used in health and care settings, providing specific standards are met. Our Transmission-Based Precautions literature review was published, outlining the need for updated transmission descriptors and the guidance for the NIPCM is under development.
- A new Care Home IPC Resource Toolkit was launched, providing a regularly updated compendium of national and international IPC guidance and tools to support the local adoption and implementation of IPC practice within care homes.
- A pilot of ARHAI Scotland's NIPCM Development Methodology was completed, designed to improve our transparency when developing guidance and demonstrate scientific rigour.
- Completion of a literature review for safe healthcare water systems utilising new NIPCM methodology, informed new content in Chapter 4 of the NIPCM aimed at supporting the prevention and management of water related infection incidents and outbreaks.
- Eight Key Stage Assurance reviews were completed, supporting the progression of healthcare design and construction projects across NHS Scotland. ARHAI Scotland IPC specialists continued to support these projects, as part of multidisciplinary teams, ensuring infection risks are considered throughout the building lifecycle.
- ARHAI Scotland supported post-graduate students undertaking the postgraduate module on IPC in a Global Context at Glasgow Caledonian University through the development of course materials and live question-and-answer panel sessions.
- NHS Education for Scotland (NES) and ARHAI Scotland worked collaboratively to deliver key training and education, including:
 - o Provided subject matter expertise to inform NES Scottish Infection Prevention and Control Education Pathway (SIPCEP) modules
 - o Supported the Scottish Health Protection Network in the delivery of two webinars to over 700 staff
 - o Delivered two one-day courses on foundational epidemiological & surveillance concepts, statistical methods and outbreak management skills to 62 IPC professionals in Scotland.
- To strengthen communications, new campaign web pages were launched on the NIPCM website to highlight key IPC messages and infographics, including winter preparedness and world hand hygiene day.
- NIPCM Appendix 13 NHS Scotland Minimum Alert Organism / Condition list was updated to strengthen surveillance for key pathogens.
- ARHAI Scotland continued to deliver robust surveillance and early warning systems to monitor and respond to AMR threats. This included early detection of unusual phenotypes as per NIPCM Appendix 13, antimicrobial use, including real-time tracking of commonly prescribed antibiotics for respiratory tract infections, monitoring of multi-drug resistant organism screening compliance and collaborative One Health surveillance.

In relation to surveillance of HCAI:

- The annual incidence rate of *Clostridioides difficile* infection (CDI) increased between 2023 and 2024. There has been an upward trend in the incidence rate of *Staphylococcus aureus* bacteraemia (SAB) over the last five years though this remained unchanged between 2023 and 2024. The annual incidence rate of *Escherichia coli* bacteraemia (ECB) remained unchanged between 2023 and 2024, and the rate has remained stable over the last five years.
- The annual incidence of healthcare associated CDI increased between 2023 and 2024. The annual incidence of both healthcare associated SAB and healthcare associated ECB remained unchanged between 2023 and 2024, and their rates have remained stable over the last five years.
- The annual incidence of hospital acquired CDI, SAB and ECB remained unchanged between 2023 and 2024 and has remained stable over the last five years.
- The annual incidence of community associated CDI increased between 2023 and 2024, whereas the annual incidence rate of community associated SAB and ECB remained unchanged between 2023 and 2024.
- In 2024, there were greater proportions of CDI, SAB and ECB infections amongst people living in the most deprived areas of Scotland and in people aged 65 and over.
- The annual incidence rate of carbapenemase-producing Enterobacterales (CPE) in 2024 was 3.7 per 100,000 (n=204) which was 51.1% higher compared to 2023.
- In 2024, 80.3% of patients audited underwent a clinical risk assessment (CRA) for methicillin-resistant *Staphylococcus aureus* (MRSA), and 81.1% underwent CRA for CPE. Uptake of MRSA screening increased by 2.3% between 2023 and 2024, however this remains below the 90% Key Performance Indicator target. Uptake of CPE screening increased by 3.6% between 2023 and 2024.
- In 2024, 173 healthcare incidents and outbreaks were reported (excluding incidents and outbreaks where COVID-19, respiratory syncytial virus, influenza or norovirus was the sole pathogen).

Background

The purpose of this report is to provide an overview of how ARHAI Scotland delivers expert intelligence, evidence-based guidance, clinical assurance and clinical leadership with the aim to reduce the burden of infection and antimicrobial resistance in health and care.

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Further Information

Find out more in the full report. Data and background information from this publication are available from our web page. The next release of this publication will be October 2026.

ARHAI Scotland and Official Statistics

ARHAI Scotland, a division of NHS National Services Scotland, works at the very heart of the health service across Scotland, delivering services critical to frontline patient care and supporting the efficient and effective operation of NHS Scotland. Our official statistics publications are produced to a high professional standard and comply with the Code of Practice for Statistics. Find out more about official statistics.