

ARHAI Scotland 2023 Annual Report

An official statistics publication for Scotland

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About this release

This release is by Antimicrobial Resistance and Healthcare Associated Infection (ARHAI) Scotland, 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 2023. Data are provided for key HCAIs, 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 NHSScotland Assure during 2023, strengthening IPC in the healthcare built environment.

Main Points

During 2023:

- Following removal of the dedicated COVID-19 pandemic content within the NIPCM, ARHAI Scotland refocused efforts on creating, strengthening and maintaining national evidence-based guidance for Scotland that is user friendly and meets accessibility standards.
- A new pilot methodology was developed for literature reviews using a considered judgement form (CJF) to increase transparency and improve rigour of development of the NIPCM.
- The transmission-based precautions (TBPs) definitions literature review made significant progress with the analysis of available evidence to inform re-classification of transmission routes.
- Progression of the water services literature review to inform associated NIPCM content for Chapter 4, aimed at reducing risk in the healthcare built environment.
- Commencement of the ventilation literature review for inclusion within Chapter 4 of the NIPCM.
- The Care Home Infection Prevention and Control Manual (CH IPCM) content remains aligned with the evidence based NIPCM and the IPC Respiratory and Gastrointestinal support resources for Care Homes were refreshed.
- A new respiratory short form within the Outbreak Reporting Tool (ORT) was introduced to ease the reporting burden of key respiratory pathogens.

- ARHAI Scotland provided IPC support as part of the NHSScotland Assure Assurance service. Eleven Key Stage Assurance Reviews (KSARs) were completed in 2023, enabling progression of design and construction of the healthcare built environment estate across NHSScotland. In addition, support was provided for two NHS boards' project teams through the commission of National Treatment Centres which opened in 2023.
- ARHAI Scotland provided IPC support for commissioned work that included:
 - the development of a cataract IPC care pathway community IPC chapter for inclusion in the 'Health protection in children and young people settings including education' guidance
 - the National Childsmile Executive Standards for Nursery and School Toothbrushing Programme content
 - the Care Inspectorate publication entitled 'Space to Grow'.

In relation to surveillance of HCAI:

- The annual incidence of healthcare associated *Clostridioides difficile* infection (CDI) and *Escherichia coli* bacteraemia (ECB) increased between 2022 and 2023. There has been an upward trend in the rate of healthcare associated *Staphylococcus aureus* bacteraemia (SAB) over the last five years though this was stable between 2022 and 2023.
- The annual incidence of hospital acquired CDI increased between 2022 and 2023, whereas the rate of hospital acquired ECB and SAB remained stable between 2022 and 2023.
- The annual incidence of community associated CDI has increased between 2022 and 2023, whereas the rate of community associated SAB and ECB remained stable between 2022 and 2023.
- The annual incidence rate of carbapenemase-producing Enterobacterales (CPE) in 2023 was 32.4% higher compared to 2022.
- In 2023, 78.5% of patients audited underwent a clinical risk assessment (CRA) for methicillin-resistant *Staphylococcus aureus* (MRSA), and 78.3% underwent CRA for CPE. Uptake of CRA for both MRSA and CPE has decreased over the last five years though remained stable between 2022 and 2023.
- In 2023, 181 healthcare incidents and outbreaks were reported (excluding incidents and outbreaks where COVID-19 or norovirus was the sole pathogen).
- ARHAI Scotland published in November 2023 the Scottish One Health Antimicrobial Use and Antimicrobial Resistance (SONAAR) report containing epidemiological information on trends in antibiotic use and resistance in humans and animals (data from 2022). The data for 2023 will be published in November 2024.

- NHS Education for Scotland (NES) and ARHAI Scotland worked collaboratively to deliver key training and education on:
 - winter preparedness messages delivered via the use of infographics
 - the adoption and implementation of the CHI IPCM using a series of themed national webinars entitled ‘Clean Care Homes’
 - a suite of educational resources and animations including the improper use of clinical hand wash basins
 - facilitating discussion groups with key stakeholders on antimicrobial stewardship
 - developing foundational epidemiological, surveillance and outbreak management skills.

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 September 2025.



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 NHSScotland. 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.](#)