



**Y PWYLLGOR ANSAWDD, DIOGELWCH A PHROFIAD
QUALITY, SAFETY AND EXPERIENCE COMMITTEE**

DYDDIAD Y CYFARFOD: DATE OF MEETING:	08 April 2025
TEITL YR ADRODDIAD: TITLE OF REPORT:	Community Infection Rates – Infection Prevention and Control in the Community
CYFARWYDDWR ARWEINIOL: LEAD DIRECTOR:	Dr Ardiana Gjini, Executive Director of Public Health
SWYDDOG ADRODD: REPORTING OFFICER:	Megan Harris, Consultant in Public Health

Pwrpas yr Adroddiad (dewiswch fel yn addas)

Purpose of the Report (select as appropriate)

Er Sicrwydd/For Assurance

ADRODDIAD SCAA

SBAR REPORT

Sefyllfa / Situation

Hywel Dda University Health Board (HDdUHB) has been reporting a higher rate of healthcare acquired infections compared to other Welsh Health Boards. This has been discussed previously by the Committee and the link to higher rates of community infection has been established. This paper seeks to provide information to the committee on the rates in the community in 2024 to provide understanding of the distribution of infection rates in Hywel Dda.

Cefndir / Background

Hywel Dda University Health Board has regularly had one of the higher levels of Healthcare Acquired Infection (HAI) rates in Wales. There has been different considerations and assessments on the reasons and background for these rates. This paper seeks to provide assurance on the work done to understand the community levels of infection.

The community rates of infections that cause key Hospital Acquired Infections (HAI) was examined last year in 2024 through the HDUHB Health Protection Oversight Group and whilst for some infections the rates for the HDUHB population were higher, on the whole rates of infections and the number of community incidents were not significantly higher than other Health Board. Similarly, the community infection rates was discussed at the Quality, Safety and Experience Committee (QSEC) in 2018 and in-depth data analysis was undertaken to investigate the link between the community and healthcare cases, including genomic surveillance. At that point it was reported to the QSEC that the levels of infection in the community, would be partly explained by and linked to the demographics of and partly the rural aspects.

This paper seeks to provide assurance to QSEC that we have examined the rates of infection in the community in relation to the HAI. Working partnership with Public Health Wales and our constituting Local Authorities, we review regularly data on community infections and ways to reduce spread within the community.

Asesiad / Assessment

The infographics papers attached to this SBAR show the numbers of cases of three main bacteraemia that form part of the routine HAI reporting to Welsh Government by Health Boards – C.Diff, E.coli, and S.Aureus. The data presented is from April 2024 to February 2025.

***Clostridium difficile* (C. diff):**

From April 2024 to February 2025, Hywel Dda had 173 cases of C.Diff diagnosed, with 101 being Community Onset (CO), and 72 Hospital Onset (HO). This a rate of 49.09 per 100,000 population (CO) is the third highest in Wales, and 3.33 per 1,000 admissions (HO) is the fourth highest in Wales. The spread of infection cases is similar in gender but higher in the white ethnic population (which is reflective of the ethnicity demographics in Hywel Dda), higher in over 65s and is not seen as linked to deprivation as the higher rates are in the 3rd and 4th deprivation quintiles (with 1 being most deprived and 5 being least deprived). From the data coding, cases of C.Diff linked to care homes shows 7 cases were community onset and 2 were hospital onset.

The distribution of C.Diff across Hywel Dda shows that Carmarthenshire has the highest case load, followed by Ceredigion and then Pembrokeshire. This is a different picture to the other bacteraemia in this report as the others follow the population size of the three local authority areas, Carmarthenshire, Pembrokeshire and then Ceredigion.

***Escherichia coli* (E.coli):**

E.coli cases from April 2024 to February 2025 had risen to 339 cases with 288 being community onset and 51 hospital onset. The cases were highest amongst the over 65s and in males. Again the link with deprivation is limited, as the higher cases were in deprivation quintiles 3 and 4. In cases from care homes 27 were community onset and 6 were hospital onset. The rates for E.coli were 118.48 per 100,000 population, the highest in Wales, and 7.5 per 1,000 admissions, highest in Wales.

***Staphylococcus aureus* (S.aureus):**

Hywel Dda had 124 cases of S.aureus from April 2024 to February 2025. 90 cases were community onset and 34 were from hospital onset. In terms of care homes, 8 were community onset and 4 hospital onset. The distribution of cases was greater in men, and again higher in deprivation quintiles 3 and 4. The distribution across ages is less distinct with 18-64 and 65-79 each having 27 cases, but the over 80s had the higher rate of 34 cases in this time-period. These numbers equal a population rate of 35.19 per 100,000 population, the second highest in Wales, and 1.6 cases per admission, the second highest in Wales.

The analysis shows that there is a bigger number of community onset than hospital onset cases of bacteremia. This is to be expected due to a much bigger denominator. Further work is required to understand this better in terms of age standardisation, as the data below clearly shows higher rates in the older population. Further data collection on these and other bacteraemia, including age standardised rates and genomic sequencing on some, across the full year (April to April) is taking place and will give a better understanding of the issues the epidemiology shows for our community infection rates.

Argymhelliad / Recommendation

- To receive assurance from the information above
- To agree to receive a longer and more detailed feedback with age standardised rates of community infection in August 2025

Amcanion: (rhaid cwblhau)
Objectives: (must be completed)

Committee ToR Reference: Cyfeirnod Cylch Gorchwyl y Pwyllgor:	2.1 Scrutinise, assess and seek assurance in relation to the patient impact, quality and health outcomes of the services provided by the Board.
Cyfeirnod Cofrestr Risg Datix a Sgôr Cyfredol: Datix Risk Register Reference and Score:	
Parthau Ansawdd: Domains of Quality Quality and Engagement Act (sharepoint.com)	1. Safe
Galluogwyr Ansawdd: Enablers of Quality: Quality and Engagement Act (sharepoint.com)	3. Data to knowledge
Amcanion Strategol y BIP: UHB Strategic Objectives:	4. The best health and wellbeing for our individuals, families and communities
Amcanion Cynllunio Planning Objectives	10 Population health
Amcanion Llesiant BIP: UHB Well-being Objectives: Hyperlink to HDdUHB Well-being Objectives Annual Report 2021-2022	4. Improve Population Health through prevention and early intervention, supporting people to live happy and healthy lives

Gwybodaeth Ychwanegol: Further Information:

Ar sail tystiolaeth: Evidence Base:	HCAI and Community Infection rates from Public Health Wales epidemiology
Rhestr Termiau: Glossary of Terms:	HAI or HCAI – Healthcare Acquired Infection C.Diff – Clostridioides Difficile E.coli – Escherichia coli S.Aureus – Staphylococcus Aureus
Partion / Pwyllgorau â ymgynhorwyd ymlaen llaw y Pwyllgor Ansawdd, Diogelwch a Phrofiod: Parties / Committees consulted prior to Quality, Safety and Experience Committee:	Infection , Prevention and Control Public Health Wales Epidemiology

Effaith: (rhaid cwblhau) Impact: (must be completed)

Ariannol / Gwerth am Arian: Financial / Service:	This work is being undertaken with PHW Epidemiology, a core role funded by PHW, and HDUHB Public Health team as part of core funding
-------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------

Ansawdd / Gofal Claf: Quality / Patient Care:	Work is to understand drivers for infection rates, but not a direct impact on patients
Gweithlu: Workforce:	N/A
Risg: Risk:	N/A
Cyfreithiol: Legal:	N/A
Enw Da: Reputational:	N/A
Gyfrinachedd: Privacy:	N/A
Cydraddoldeb: Equality:	This piece of work looks at community and healthcare acquired infection rates to understand the drivers of the increased infection rates in HDUHB. So it looks at the data in gender, age, deprivation and ethnicity to try to understand the drivers

Monthly Infections Report

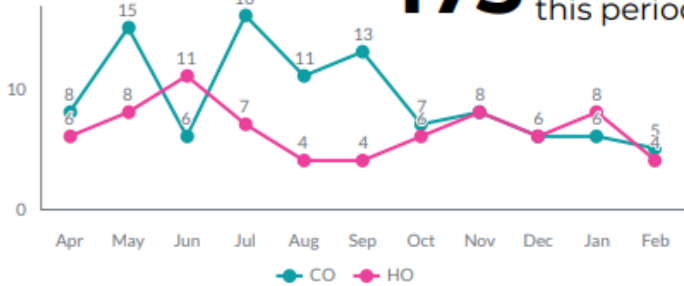
C. difficile - February 2025

Hywel Dda

Onset

173 patients diagnosed this period

For the period Apr 24' - Feb '25



101 Community Onset (CO)

54 COCA
14 COIA
33 COHA

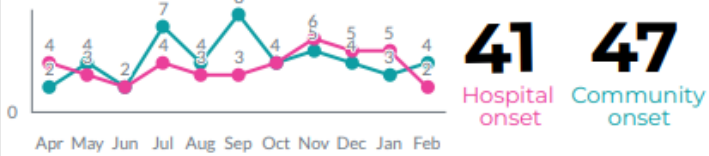


72 Hospital Onset (HO)

Hospital Onset (HO) - specimen taken more than 2 days into a hospital inpatient stay.
 Community Onset (CO) - specimen taken within 2 days of hospital admission or within a community location, and the patient had no inpatient stay in the 12 weeks prior to the positive specimen.
 Community Onset Community Acquired (COCA) - specimen taken within 2 days of hospital admission or within a community location, and the patient had an inpatient stay more than 4 weeks but less than 12 weeks prior to the positive specimen.
 Community Onset Indeterminate Acquisition (COIA) - specimen taken within 2 days of hospital admission or within a community location, and the patient had an inpatient stay more than 4 weeks but less than 12 weeks prior to the positive specimen.
 Community Onset Hospital Acquired (COHA) - specimen taken within 2 days of hospital admission or within a community location, and the patient had an inpatient stay within the 4 weeks prior to the positive specimen.

Carmarthenshire

Demographics by onset



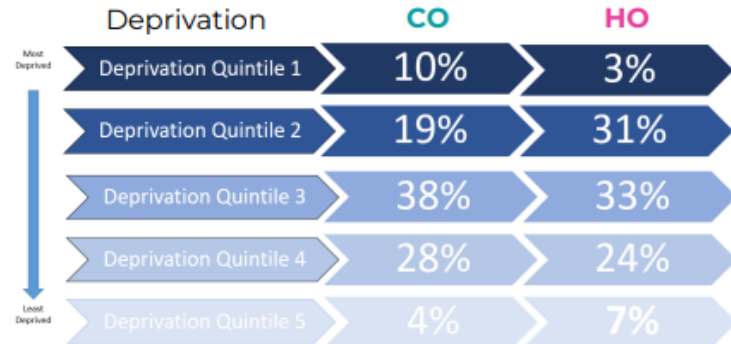
41 Hospital onset
47 Community onset

Care home status
(Based on post code algorithm)

7 CO
(3 COCA)
2 HO



Deprivation

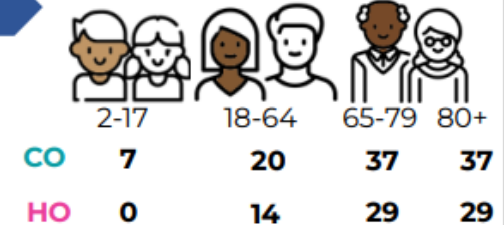


Ethnicity

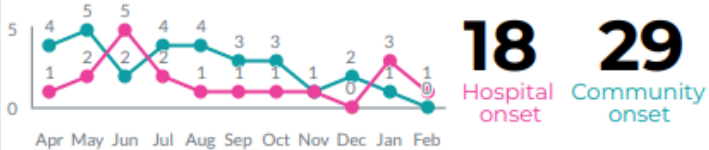


Age group

	Female	Male
CO	59	42
HO	33	39

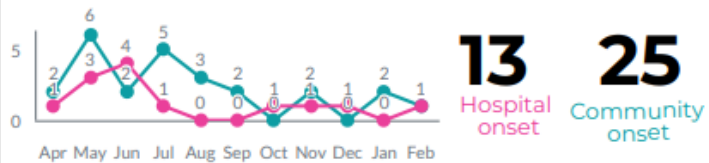


Ceredigion



18 Hospital onset
29 Community onset

Pembrokeshire



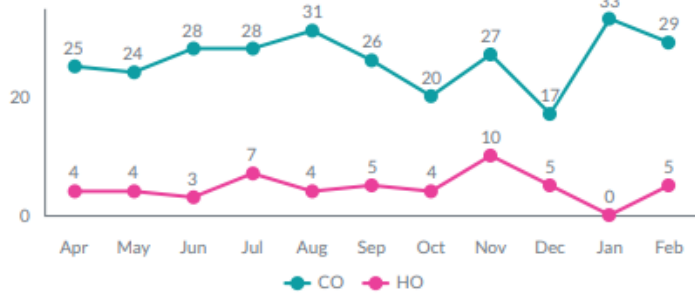
13 Hospital onset
25 Community onset

Monthly Infections Report

E. coli bacteraemia- February 2025

Hywel Dda

339 patients diagnosed this period



Onset

For the period Apr 24' - Feb '25



288 Community Onset (CO)

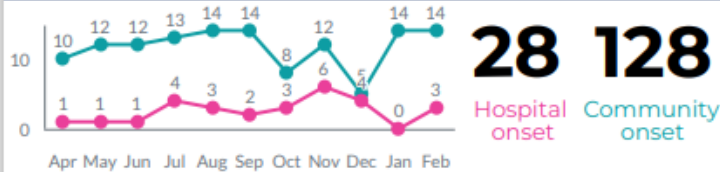
255 COCA
33 COHA



51 Hospital Onset (HO)

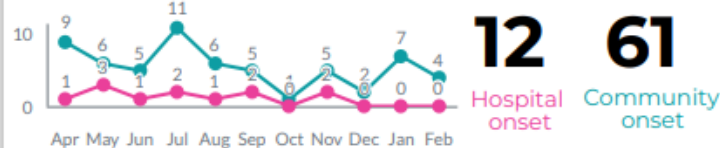
Hospital onset (HO) - specimen taken more than 2 days into a hospital inpatient stay.
Community onset (CO) - specimen taken within 2 days of hospital admission or within a community location.
Community onset Community Acquired (COCA) - specimen taken within 2 days of hospital admission or within a community location, and the patient had no inpatient stay in the 4 weeks prior to the positive specimen.
Community onset Hospital Acquired (COHA) - specimen taken within 2 days of hospital admission or within a community location, and the patient had an inpatient stay within the 4 weeks prior to the positive specimen.

Carmarthenshire



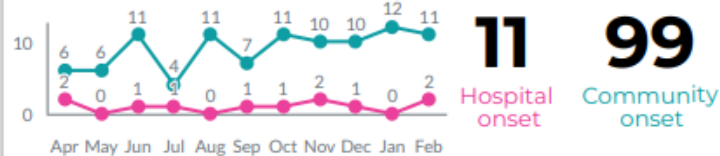
28 Hospital onset
128 Community onset

Ceredigion



12 Hospital onset
61 Community onset

Pembrokeshire



11 Hospital onset
99 Community onset

Primary source



Demographics by onset

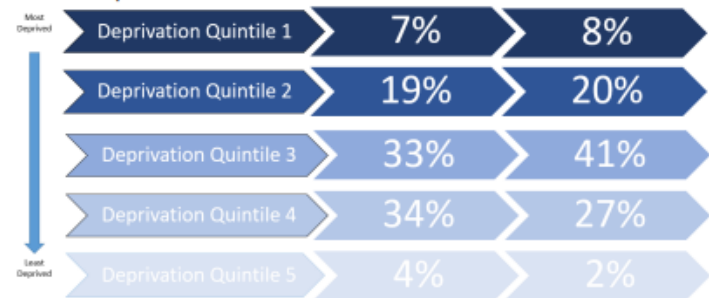
Care home status
(Based on post code algorithm)

27 CO
(21 COCA)

6 HO



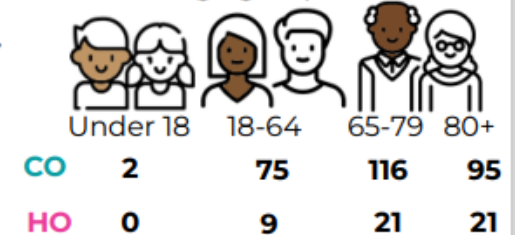
Deprivation



Ethnicity



Age group

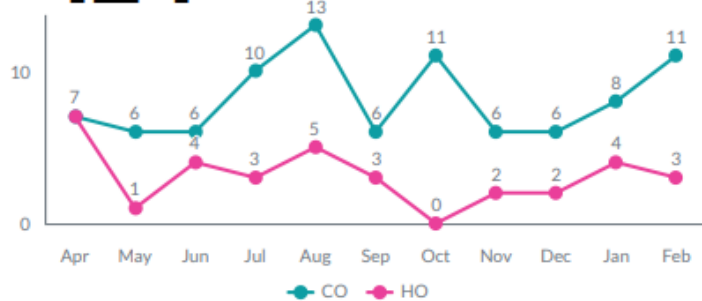


Monthly Infections Report

S. aureus bacteraemia - February 2025

Hywel Dda

124 patients diagnosed this period



Onset

For the period Apr '24 - Feb '25



90 Community Onset (CO)

77 COCA
13 COHA



34 Hospital Onset (HO)

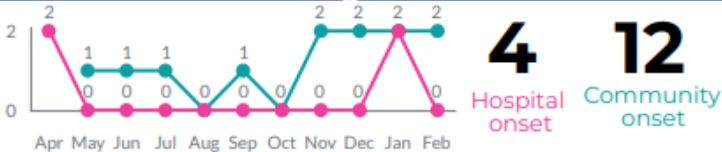
Hospital onset (HO) - specimen taken more than 2 days into a hospital inpatient stay.
Community onset (CO) - specimen taken within 2 days of hospital admission or within a community location.
Community onset Community Acquired (COCA) - specimen taken within 2 days of hospital admission or within a community location, and the patient had no inpatient stay in the 4 weeks prior to the positive specimen.
Community onset Hospital Acquired (COHA) - specimen taken within 2 days of hospital admission or within a community location, and the patient had an inpatient stay within the 4 weeks prior to the positive specimen.

Carmarthenshire



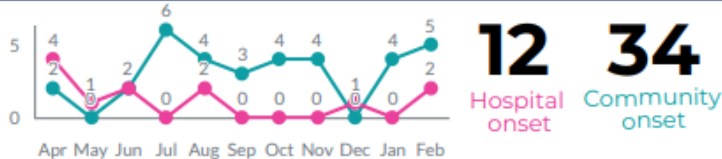
18 Hospital onset
44 Community onset

Ceredigion



4 Hospital onset
12 Community onset

Pembrokeshire



12 Hospital onset
34 Community onset

Primary source



Demographics by onset

Care home status (Based on post code algorithm)

8 CO
(8 COCA)

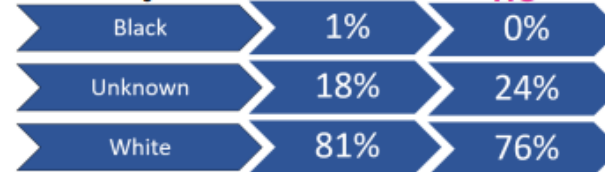
4 HO



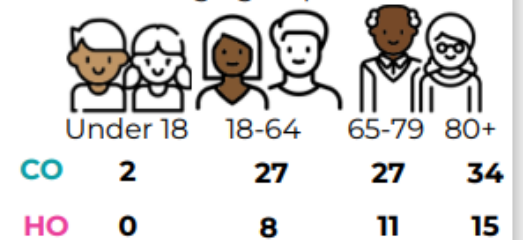
Deprivation



Ethnicity



Age group



Female: CO 31, HO 12
Male: CO 59, HO 22