

C. difficile surveillance

Quarterly report

January – March 2025

Key points

- CDI reports for hospital inpatients aged 2 years and over decreased by 29% (from 111 to 79 episodes) during January-March 2025 compared to October-December 2024.
- CDI rate per 100,000 bed days also decreased by 29% during January-March 2025 compared to October-December 2024.
- CDI reports for community patients aged 2 years and over decreased by 34% (from 111 to 79 episodes) during January-March 2025 compared to October-December 2024.
- During January-March 2025 the most prevalent CDI ribotypes are 002 (12%), 078-Like (11%), 014 (8%) and 015 (8%) (Table 3).
- Bed day data were not available for NHSCT hospitals and South Tyrone hospital (SHSCT) and provisional figures were used this quarter (figures taken from Jan-Mar 2024).
- For data from 1st April 2023 onwards, "Inpatient episodes" refers to all patients categorised as hospital inpatient <u>and</u> ED episodes where the patient tested positive >= 2 days after the decision to admit date.

For further information or clarification on HCAI definitions, please refer to previous reports or contact <u>hcaini@hscni.net</u>

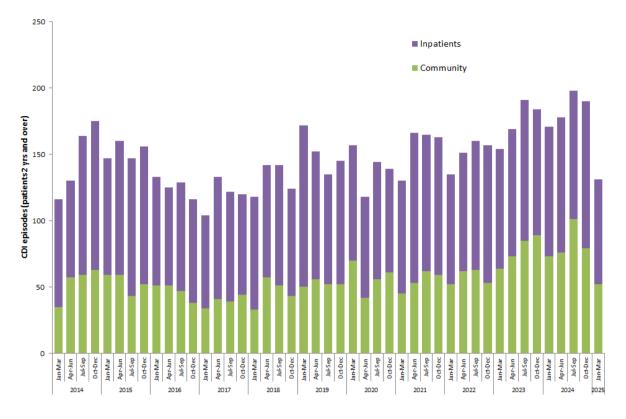


Figure 1: Total CDI episodes, <u>inpatient and community</u>, in Northern Ireland, by quarter (patients ≥ 2 years), between 2014 and 2025

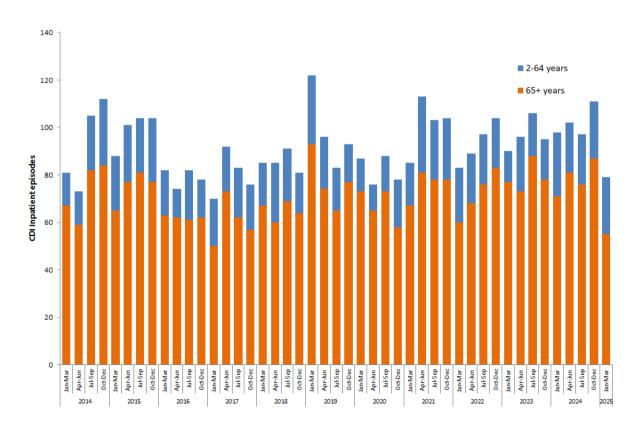


Figure 2a: Total CDI inpatient episodes, by age band, in Northern Ireland, by quarter, between 2014 and 2025

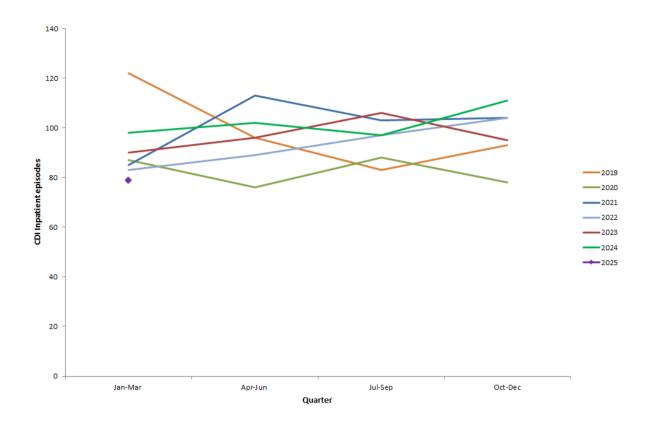


Figure 2b: Total CDI <u>inpatient</u> episodes in Northern Ireland, by quarter (patients ≥ 2 years), between 2018 and 2025

Statistical process control (SPC) charts

• SPC charts allow a distinction to be made between natural variation and 'special cause variation', where something unusual may be occurring. Trends in CDI rates since Jan 2014 are shown for each HSCT in appendix B.

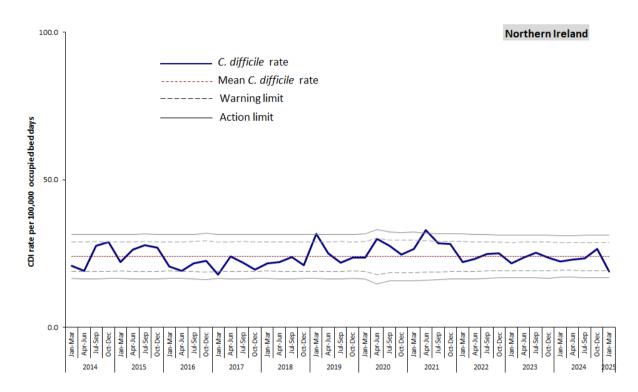


Figure 3: Statistical process control chart for quarterly *C. difficile* rates among <u>inpatients</u> in Northern Ireland aged 2 years and over (for HSCT level, see appendix B)

Results from the NI Ribotype Surveillance Programme

Table 1: A summary of *C. difficile* ribotypes in <u>Hospital Inpatients</u> aged 2 years and over, and thepercentage of each against the overall total, in Northern Ireland during routine surveillance,Apr 2024 – Mar 2025.

	Apr - Ju	n 2024	Jul - Se	p 2024	Oct - De	c 2024	Jan - Ma	ar 2025
Ribotype	Number	%	Number	%	Number	%	Number	%
001	2	2.0	3	3.1	4	3.6	0	0.0
002	6	5.9	10	10.3	7	6.3	8	10.1
005	10	9.8	5	5.2	7	6.3	4	5.1
011	7	6.9	2	2.1	4	3.6	3	3.8
014	12	11.8	6	6.2	13	11.7	4	5.1
015	8	7.8	5	5.2	8	7.2	8	10.1
018	0	0.0	1	1.0	1	0.9	3	3.8
020	8	7.8	10	10.3	8	7.2	5	6.3
023	8	7.8	12	12.4	12	10.8	4	5.1
078-like*	10	9.8	10	10.3	3	2.7	9	11.4
Other	26	25.5	23	23.7	32	28.8	21	26.6
Not groupable**	2	2.0	1	1.0	3	2.7	5	6.3
Not on ribotype list	3	2.9	9	9.3	9	8.1	5	6.3
Not isolated***	0	0.0	0	0.0	0	0.0	0	0.0
Total	102		97		111		79	

Table 2: A summary of *C. difficile* ribotypes in <u>Community Patients</u> aged 2 years and over, and thepercentage of each against the overall total, in Northern Ireland during routine surveillance,Apr 2024 – Mar 2025.

Ribotype	Apr - Ju	n 2024	Jul - Se	p 2024	Oct - De	c 2024	Jan - Mar 2025	
	Number	%	Number	%	Number	%	Number	%
001	0	0.0	4	4.0	1	1.3	3	5.8
002	9	11.8	6	5.9	9	11.4	8	15.4
005	4	5.3	10	9.9	5	6.3	3	5.8
011	2	2.6	0	0.0	2	2.5	2	3.8
014	6	7.9	8	7.9	8	10.1	6	11.5
015	4	5.3	4	4.0	13	16.5	2	3.8
018	2	2.6	1	1.0	4	5.1	0	0.0
020	8	10.5	4	4.0	2	2.5	0	0.0
023	4	5.3	9	8.9	3	3.8	1	1.9
027	1	1.3	0	0.0	0	0.0	0	0.0
078-like*	8	10.5	15	14.9	4	5.1	6	11.5
Other	25	32.9	30	29.7	13	16.5	8	15.4
Not groupable**	1	1.3	3	3.0	4	5.1	4	7.7
Not on ribotype list	2	2.6	6	5.9	10	12.7	9	17.3
Not isolated***	0	0.0	1	1.0	1	1.3	0	0.0
Total	76		101		79		52	

* 078-Like means this isolate is PCR ribotype 078, or a very closely related (Clade 5) strain e.g. 126,193

** 'Not groupable' ribotypes do not match existing profiles

*** 'Not isolated' indicates isolates that have no ribotype information supplied, with at least six weeks since the date of the specimen. Table 3: Descriptive data for *C. difficile* ribotypes 002, 078-Like, 014 and 015 in Northern IrelandHospital Inpatients and Community Patients, January – March 2025.

	002 (n= 16)	078-Lik	e (n= 15)	014 (n = 10)	015 (n = 10)
Age								
range		7-92		1-91		5-84		2-87
median		81		76	-	77	-	73
Sex	n	%	n	%	n	%	n	%
Female	9	56.3	6	40.0	7	70.0	6	60.0
Male	7	43.8	9	60.0	3	30.0	4	40.0
Trust								
Belfast	0	0.0	2	13.3	3	30.0	2	20.0
Northern	1	6.3	2	13.3	0	0.0	3	30.0
South Eastern	10	62.5	3	20.0	0	0.0	1	10.0
Southern	4	25.0	4	26.7	6	60.0	3	30.0
Western	1	6.3	4	26.7	1	10.0	1	10.0
Source								
Inpatient	8	50.0	9	60.0	4	40.0	8	80.0
Community~	8	50.0	6	40.0	6	60.0	2	20.0

~ Community specimens include those taken from Accident and Emergency (<2days after admission date and not admitted), Outpatients, GPs, Hospice, Care Homes, Hospital Care at Home and Psychiatric facilities.

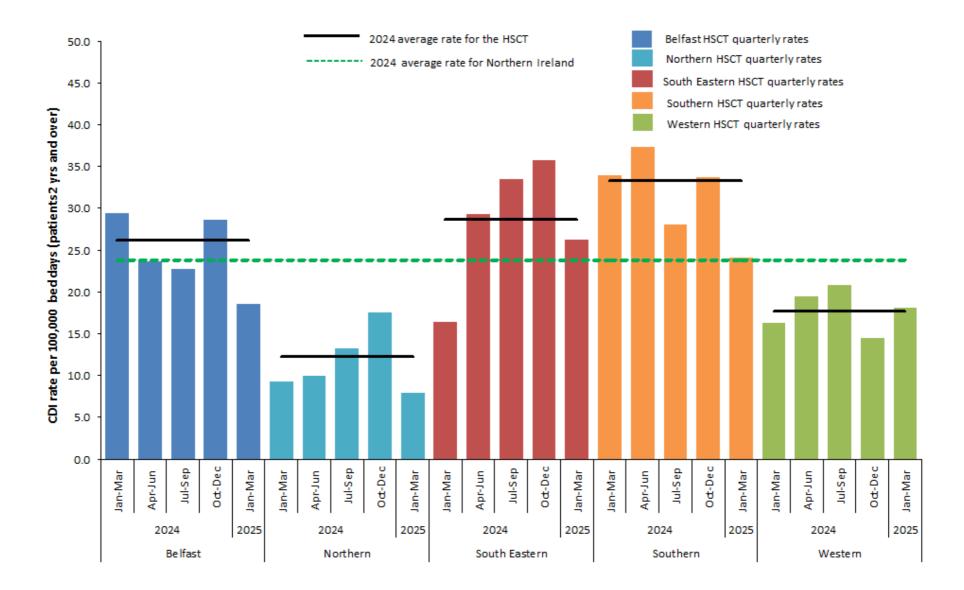


Figure 4: Quarterly rates of *C. difficile* among inpatients aged 2 years and over, by HSCT, January 2024 – March 2025, compared with annual Northern Ireland and HSCT rates for 2024

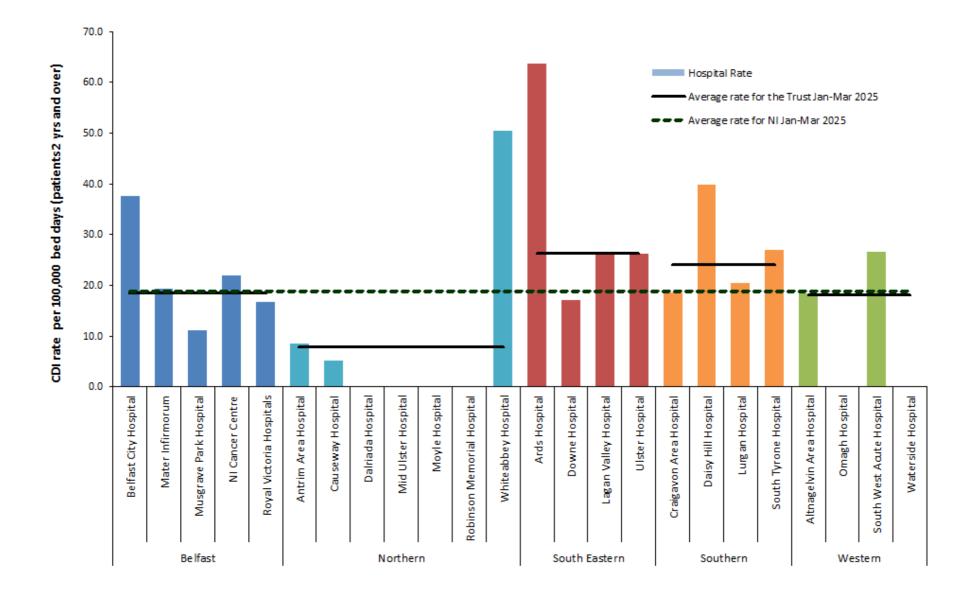


Figure 5: *C. difficile* rates during January-March 2025 Inpatients aged 2 years and over, by hospital, including HSCT rates and average rate for Northern Ireland (see appendix A, Table 4)

Appendix A

Table 4: Quarterly rates* of <i>C. difficile</i> reports in patients aged 2 years and over, by hospital,
Apr 2024 – Mar 2025.

Hospital	Apr-Jun 2024	Jul-Sep 2024	Oct-Dec 2024	Jan-Mar 2025
Belfast City Hospital	23.13	30.68	31.00	37.52
Mater Infirmorum	30.35	19.59	38.28	19.28
Musgrave Park Hospital	23.69	17.76	22.15	11.14
NICCO	23.01	65.10	108.04	22.01
Royal Group of Hospitals	22.31	20.56	23.13	16.67
Belfast Health & Social Care Trust	23.60	22.71	28.66	18.55
Antrim Area Hospital	10.93	18.71	12.88	8.45
Causeway Hospital	12.10	5.20	30.92	5.17
Dalriada Hospital	0.00	0.00	0.00	0.00
Mid Ulster Hospital	0.00	0.00	0.00	0.00
Moyle Hospital	0.00	0.00	0.00	0.00
Robinson Memorial Hospital	0.00	0.00	58.28	0.00
Whiteabbey Hospital	0.00	0.00	0.00	50.40
Northern Health & Social Care Trust	10.01	13.20	17.51	7.94
Ards Hospital	0.00	0.00	0.00	63.69
Downe Hospital	22.78	112.06	87.80	17.06
Lagan Valley Hospital	26.31	38.67	25.64	25.93
Ulster Hospital	31.03	27.74	32.90	26.26
South Eastern Health & Social Care Trust	29.26	33.49	35.79	26.29
Craigavon Area Hospital	42.00	31.60	39.16	18.59
Daisy Hill Hospital	36.67	25.60	23.29	39.89
Lurgan Hospital	20.52	0.00	0.00	20.37
South Tyrone Hospital	0.00	28.63	58.79	26.90
Southern Health & Social Care Trust	37.32	28.00	33.77	24.13
Altnagelvin Area Hospital	23.32	21.31	15.62	18.31
Omagh Hospital	0.00	29.48	0.00	0.00
South West Acute Hospital	21.91	26.92	21.14	26.51
Waterside Hospital	0.00	0.00	0.00	0.00
Western Health & Social Care Trust	19.44	20.83	14.54	18.05
NI TOTAL	23.06	23.44	26.50	18.89

Table 5: Quarterly *C. difficile* reports in patients aged 2 years and over, by HSCT, Apr 2024 – Mar 2025.

Trust	Apr-Jun 2024 Episodes	Jul-Sep 2024 Episodes	Oct-Dec 2024 Episodes	Jan-Mar 2025 Episodes
Belfast Health & Social Care Trust	31	29	37	24
Northern Health & Social Care Trust	10	10	13	6
South Eastern Health & Social Care Trust	21	24	26	19
Southern Health & Social Care Trust	27	20	25	18
Western Health & Social Care Trust	13	14	10	12
NI TOTAL NI community TOTAL	102 76	97 101	111 79	79 52

*Note: Rates displayed are per 100,000 occupied bed days. Previous reports presented rates per 1,000 occupied bed days.

Bed day data were not available for NHSCT and South Tyrone hospital (SHSCT) - provisional figures were used this quarter (figures taken from Jan-Mar 2024).

Appendix A

Table 6: Quarterly rates* of *C. difficile* reports in patients aged 65 years and over, by hospital, Apr 2024 – Mar 2025.

Hospital	Apr-Jun 2024	Jul-Sep 2024	Oct-Dec 2024	Jan-Mar 2025
Belfast City Hospital	51.61	50.91	16.50	35.20
Mater Infirmorum	40.10	16.27	38.22	25.28
Musgrave Park Hospital	26.49	28.43	26.80	8.71
NICCO	53.71	46.36	180.34	0.00
Royal Group of Hospitals	26.53	20.93	30.06	14.67
Belfast Health & Social Care Trust	31.54	24.60	34.30	16.64
Antrim Area Hospital	20.07	24.91	16.29	14.22
Causeway Hospital	24.15	7.86	24.59	0.00
Dalriada Hospital	0.00	0.00	0.00	0.00
Mid Ulster Hospital	0.00	0.00	0.00	0.00
Moyle Hospital	0.00	0.00	0.00	0.00
Robinson Memorial Hospital	0.00	0.00	69.40	0.00
Whiteabbey Hospital	0.00	0.00	0.00	69.11
Northern Health & Social Care Trust	18.01	17.38	18.09	10.71
Ards Hospital	0.00	0.00	0.00	63.69
Downe Hospital	24.61	120.34	123.58	26.10
Lagan Valley Hospital	29.88	43.57	28.70	30.92
Ulster Hospital	46.38	39.02	49.67	33.71
South Eastern Health & Social Care Trust	40.66	45.18	51.39	33.71
	51 05		50.00	47.70
Craigavon Area Hospital	61.95	39.90	53.80	17.73
Daisy Hill Hospital	20.71	20.01	27.59	44.53
Lurgan Hospital	23.43	0.00	0.00	21.62
South Tyrone Hospital	0.00	28.63	63.29	28.28
Southern Health & Social Care Trust	44.59	30.88	43.13	25.22
Altnagelvin Area Hospital	26.28	34.99	16.88	25.07
Omagh Hospital	0.00	29.90	0.00	0.00
South West Acute Hospital	21.39	35.60	21.67	25.45
Waterside Hospital	0.00	0.00	0.00	0.00
Western Health & Social Care Trust	20.44	31.50	15.61	21.34
NI TOTAL	31.04	29.30	32.78	21.10
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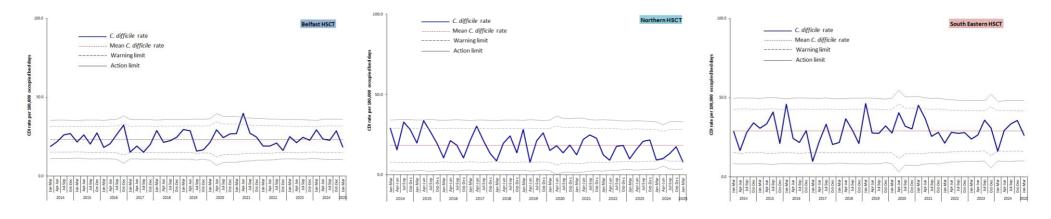
Table 7: Quarterly *C. difficile* reports in patients aged 65 years and over, by HSCT, Apr 2024 – Mar 2025.

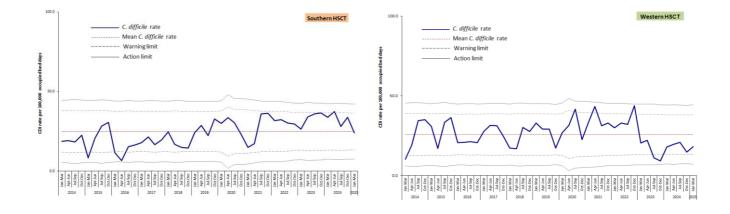
Trust	Apr-Jun 2024 Episodes	Jul-Sep 2024 Episodes	Oct-Dec 2024 Episodes	Jan-Mar 2025 Episodes
Belfast Health & Social Care Trust	23	17	26	12
Northern Health & Social Care Trust	9	9	9	5
South Eastern Health & Social Care Trust	20	22	25	16
Southern Health & Social Care Trust	20	14	20	12
Western Health & Social Care Trust	9	14	7	10
NI TOTAL NI community TOTAL	81 69	76 84	87 64	55 47

*Note: Rates displayed are per 100,000 occupied bed days. Previous reports presented rates per 1,000 occupied bed days.

Appendix B

Trends in C. difficile rates in inpatients aged 2 years and over, by HSCT and quarter, 2014 – 2025





Appendix C

HSCT	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24*	2024/25*
Belfast	132	106	101	128	107	136	121
Northern	57	47	34	52	37	49	39
South Eastern	82	72	76	69	75	72	90
Southern	43	71	50	74	80	99	90
Western	65	63	66	80	81	39	49
Northern Ireland	379	359	327	403	380	395	389

Table 8: C. difficile reports among inpatients* in Northern Ireland aged 2 years and over, by financial year and HSCT

Table 9: C. difficile reports among inpatients* in Northern Ireland aged 65 years and over, by financial year and HSCT

HSCT	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24*	2024/25*
Belfast	98	80	80	84	78	96	78
Northern	48	39	27	39	31	43	32
South Eastern	67	68	68	60	66	63	83
Southern	32	57	37	56	63	78	66
Western	41	45	51	58	66	30	40
Northern Ireland	286	289	263	297	304	310	299

*"Inpatient episodes" for 2023/24 and 2024/25 include all patients categorised as hospital in-patient and ED patients with a positive specimen taken >= 2 days after the decision to admit date. Previous years include inpatients only.