

Supplement 1: Description of studies included in epidemiological analysis

Year	Location	Number of subjects	Study setting	Frequency of colonisation	Authors
Neonates < 1/12					
2012	France	76	Inpatients on NICU	42%	Ferraris et al ⁷³
2011	France	62	Healthy outpatients/hospitalised infants	26%	Rousseau et al ⁷⁴
2005	Netherlands	100	Healthy outpatients	22%	Penders et al ³⁴
2005	Japan	22	Healthy outpatients	18%	Tonooka et al ⁷⁵
2005	Japan	40	Post natal wards	2.5%	Matsuki et al ⁷⁶
1995	Poland	183	Post natal wards	17%	Martirosian et al ⁷⁷
1994	Japan	67	Inpatients on NICU	61%	Kato et al ²⁷
1989	Sweden	340	Post natal wards	22-28%	Tullus et al ⁹
1986	Sweden	164	Inpatients on NICU	4%	Bennet et al ³⁸
1986	Belgium	63	Hospitalised infants	8%	Merida et al ²⁸
1985	Nigeria	22	Inpatients on NICU	23%	Rotimi et al ⁷⁸
1984	UK	150	Post natal wards/healthy outpatients	31%	Bolton et al ⁷⁹
1984	UK	50	Post natal wards	62%	Tabaqchali et al ³⁶
1984	UK	92	Inpatients on NICU	71%	Al-Jumaili et al ⁸⁰
1983	Canada	30	Inpatients on NICU	47%	Han et al ³³
1983	UK	11	Inpatients on NICU	54.5%	Malamou-Ladas et al ⁸¹
1983	UK	40	Post natal wards	20%	Malamou-Ladas et al ⁸¹
1983	UK	59	Post natal wards	30%	Richardson et al ⁸²
1983	USA	36	Healthy outpatients	33%	Cooperstock et al ⁸
1982	UK	451	Post natal wards	2-52%	Larson et al ²⁵
1982	USA	51	Inpatients on NICU	55%	Donta ²⁹
1982	USA	105	Post natal wards	10.5%	Donta ²⁹
1982	Australia	28	Inpatients on NICU	25%	Blakey et al ³⁰
1981	USA	45	Healthy outpatients	29%	Viscidi et al ⁸³
1981	Sweden	49	Diarrhoeal inpatients/outpatients/Nursery attendees	4%	Holst et al ⁸⁴
Infants 1/12 – 1yr					
2011	France	189	Healthy outpatients/hospitalised infants	38%	Rousseau et al ⁷⁴
2009	Iraq	46	Nosocomial diarrhoea	17%	Alrifai et al ⁸⁵
2006	Netherlands	1032	Healthy outpatients	25%	Penders et al ³⁷
2005	Japan	12	Nursery attendees	100%	Matsuki et al ⁷⁶
2005	USA	104	Diarrhoeal outpatients	16%	Denno et al ⁸⁶
2005	Canada	841	Diarrhoeal inpatients	10%	Tang et al ⁸⁷
1997	Sweden/Estonia	56	Healthy outpatients	20%	Naaber et al ⁸⁸
1997	Sweden/Estonia	34	Hospitalised infants	21%	Naaber et al ⁸⁸
1989	Sweden	307-331	Healthy outpatients	10-28%	Tullus et al ⁹
1989	Korea	104	Healthy outpatients	7%	Kim et al ⁸⁹
1989	Korea	231	Diarrhoeal	16%	Kim et al ⁸⁹

			outpatients		
1989	USA	30 [∞]	Nosocomial diarrhoea	13%	Brady et al ⁹⁰
1986	Belgium	91	Hospitalised infants	46%	Merida et al ²⁸
1984	Mexico	100	Hospitalised infants	19%	Torres et al ⁹¹
1984	Mexico	22	Nursery attendees	27%	Torres et al ⁹¹
1984	UK	390*	Diarrhoeal inpatients	49%	Ellis et al ⁹²
1984	UK	118*	Non-diarrhoeal inpatients	33%	Ellis et al ⁹²
1983	USA	71	Healthy outpatients	44%	Cooperstock et al ⁸
1982	Australia	13	Healthy outpatients	54%	Stark et al ⁹³
1982	UK	116 [§]	Diarrhoeal inpatients/ outpatients	36%	Nash et al ⁹⁴
1982	Sweden	100 [^]	Healthy outpatients	17%	Svedhem et al ⁹⁵
1981	Sweden	81	Diarrhoeal inpatients/ outpatients/ Nursery attendees	48%	Holst et al ⁸⁴
Children > 1yr					
2013	USA	51	Patients with non-inflammatory bowel conditions	12%	Lamouse-Smith et al ⁹⁶
2013	USA	145	Patients with IBD	15%	Lamouse-Smith et al ⁹⁶
2011	France	43	Healthy outpatients/ hospitalised infants	28%	Rousseau et al ⁷⁴
2010	Poland	58	Patients with IBD	69%	Banaszkiewicz et al ⁹⁷
2009	Iraq	35	Nosocomial diarrhoea	26%	Alrifai et al ⁸⁵
2009	Italy	141	Oncology inpatients	6%	Castagnola et al ⁹⁸
2008	Germany	411	Oncology inpatients	6%	Simon et al ⁹⁹
2006	USA	688	Diarrhoeal outpatients	7%	Klein et al ⁵⁴
2006	USA	604	Healthy outpatients	3.5%	Vernachio et al ¹⁰⁰
2005	India	250	Nosocomial diarrhoea	19%	Gogate et al ¹⁰¹
2005	Japan	86	Nursery attendees	41%	Matsuki et al ⁷⁶
2005	USA	104	Diarrhoeal outpatients	5%	Denno et al ⁸⁶
2004	Egypt	104	Oncology inpatients	14%	El-Mahallawy et al ⁵¹
2003	Brazil	91	Healthy outpatients	0%	Ferreira et al ¹⁰²
2003	Brazil	90	Diarrhoeal outpatients	6%	Ferreira et al ¹⁰²
2003	Brazil	63	Healthy outpatients	3%	Pinto et al ¹⁰³
2003	Brazil	51	Diarrhoeal outpatients	12%	Pinto et al ¹⁰³
2003	Brazil	30	Diarrhoeal inpatients	7%	Pinto et al ¹⁰³
2003	Brazil	66	Inpatients on antibiotics/ neutropaenic	6%	Pinto et al ¹⁰³
2002	Canada	217	Nosocomial diarrhoea	18%	Langley et al ¹⁰⁴
2001	Turkey	100	Nosocomial diarrhoea	16%	Oguz et al ¹⁰⁵
1998	USA	267	Diarrhoeal inpatients	13%	Shastri et al ¹⁰⁶
1997	Italy	193	Diarrhoeal inpatients (with IBD)	15.5%	Pascarella et al ⁵²
1997	Australia	60	Diarrhoeal oncology inpatients	9%	Burgner et al ¹⁰⁷

1997	Australia	44	Non-diarrhoeal oncology inpatients	19%	Burgner et al ¹⁰⁷
1995	UK	214	Diarrhoeal oncology inpatients	13%	Schuller et al ¹⁰⁸
1989	USA	24	Nosocomial diarrhoea	21%	Brady et al ⁹⁰
1989	Sweden	304	Healthy outpatients	3%	Tullus et al ⁹
1986	Belgium	25	Hospitalised children	4%	Merida et al ²⁸
1986	Sweden	200	Healthy outpatients	15%	Uhnoo et al ¹⁰⁹
1986	Sweden	416	Diarrhoeal inpatients/ outpatients	14%	Uhnoo et al ¹⁰⁹
1982	Australia	47	Healthy outpatients	8.5%	Stark et al ⁹³
1981	Sweden	88	Diarrhoeal inpatients/ outpatients/Nursery attendees	2%	Holst et al ⁸⁴

[^]Some participants 1 week-1 month but number not specified

[∞]Some participants 1-2 years but number not specified

^{*}Some participants > 1 year but number not specified

[§]Some participants 1-2 years but number not specified

Supplement to:

The role of *Clostridium difficile* in the paediatric and neonatal gut – a narrative review

Lees EA¹, Miyajima F¹, Pirmohamed M¹, Carrol ED²

Affiliations:

¹University of Liverpool Institute of Translational Medicine, Wolfson Centre, Block A: Waterhouse Building, 1-5 Brownlow Street, Liverpool L69 3GL, United Kingdom

²Department of Clinical Infection, Microbiology and Immunology, Institute of Infection and Global Health, Ronald Ross Building, West Derby Street, Liverpool L69 7BE, United Kingdom

Contact details for corresponding author: emilylees@doctors.org.uk

Submitted to: EJCMIID