

# Epidemiology of Cryptosporidiosis, New York City, New York, USA, 1995–2018

## Appendix

**Appendix Table 1.** Characteristics for patients who were interviewed and patients who were not interviewed regarding cryptosporidiosis, New York City, New York, USA, 1995–2018\*

Characteristic	Interviewed, no. (%)	Not interviewed, no. (%)	p value*
Total	3,295 (82.7)	689 (17.3)	
Age group, y			
<5	313 (9.5)	26 (3.8)	<0.001
5–9	172 (5.2)	11 (1.6)	
10–19	203 (6.2)	24 (3.5)	
20–44	1,806 (54.8)	434 (63.0)	
45–59	540 (16.4)	147 (21.3)	
>59	260 (7.9)	45 (6.5)	
Sex			
M	2,183 (66.3)	531 (77.1)	<0.001
F	1,112 (33.7)	157 (22.8)	
Sex and age group, y			
All <20	688 (20.9)	61 (8.9)	<0.001
Men 20–59	1,679 (51.0)	465 (67.5)	
Men >59	141 (4.3)	27 (3.9)	
Women >20	786 (23.9)	133 (19.3)	
Borough			
Bronx	591 (17.9)	121 (17.6)	0.52
Brooklyn	670 (20.3)	158 (22.9)	
Manhattan	1,572 (47.7)	322 (46.7)	
Queens	406 (12.3)	77 (11.2)	
Staten Island	51 (1.5)	8 (1.2)	
Race/ethnicity			
Hispanic	1,010 (30.7)	153 (22.2)	<0.001
Non-Hispanic white	1,234 (37.5)	143 (20.8)	
Non-Hispanic black/African American	737 (22.4)	240 (34.8)	
Other	200 (6.1)	38 (5.5)	
Immune status			
Non-HIV/AIDS	1,711 (51.9)	182 (26.4)	<0.001
HIV/AIDS	1,579 (47.9)	474 (68.8)	
Neighborhood poverty†			
Low	938 (28.5)	148 (21.5)	0.001
Medium	805 (24.4)	161 (23.4)	
High	593 (18.0)	144 (20.9)	
Very high	889 (27.0)	213 (30.9)	

\*By  $\chi^2$  test.

†Classified by percentage of census tract residents living below the federal poverty line (low, <10%; medium, 10%–<20%; high, 20%–<30%; very high,  $\geq$ 30%).

**Appendix Table 2.** Characteristics for cryptosporidiosis patients over time, by demographic characteristics, given a diagnosis during 2000–2018 and reported to the New York City Department of Health and Mental Hygiene\*

Characteristic	Year(s) of diagnosis, no. (%)				Total
	2000–2004	2005–2009	2010–2014	2015–2018	
No. cases	704	595	500	740	2,539
Age group, y					
<5	62 (8.8)	61 (10.3)	49 (9.8)	78 (10.5)	250 (9.8)
5–9	38 (5.4)	41 (6.9)	19 (3.8)	34 (4.6)	132 (5.2)
10–19	46 (6.5)	44 (7.4)	26 (5.2)	57 (7.7)	173 (6.8)
20–44	407 (57.8)	300 (50.4)	282 (56.4)	413 (55.8)	1,402 (55.2)
45–59	123 (17.5)	109 (18.3)	99 (19.8)	107 (14.5)	438 (17.3)
>59	28 (4.0)	40 (6.7)	25 (5.0)	51 (6.9)	144 (5.7)
Sex					
M	511 (72.6)	403 (67.7)	352 (70.4)	484 (65.4)	1,750 (68.9)
F	193 (27.4)	192 (32.3)	148 (29.6)	255 (34.5)	788 (31.0)
Sex and age group, y					
All <20	146 (20.7)	146 (24.5)	94 (18.8)	169 (22.8)	555 (21.9)
Men 20–59	418 (59.4)	302 (50.8)	284 (56.8)	355 (48.0)	1,359 (53.5)
Men >59	15 (2.1)	22 (3.7)	17 (3.4)	33 (4.5)	87 (3.4)
Women >20	125 (17.8)	125 (21.0)	105 (21.0)	182 (24.6)	537 (21.2)
Borough					
Bronx	121 (17.2)	135 (22.7)	98 (19.6)	129 (17.4)	483 (19.0)
Brooklyn	151 (21.4)	142 (23.9)	120 (24.0)	186 (25.1)	599 (23.6)
Manhattan	327 (46.4)	245 (41.2)	218 (43.6)	314 (42.4)	1,104 (43.5)
Queens	80 (11.4)	67 (11.3)	57 (11.4)	103 (13.9)	307 (12.1)
Staten Island	25 (3.6)	6 (1.0)	7 (1.4)	8 (1.1)	46 (1.8)
Race/ethnicity					
Hispanic	212 (30.1)	179 (30.1)	135 (27.0)	194 (26.2)	720 (28.4)
Non-Hispanic white	224 (31.8)	150 (25.2)	155 (31.0)	310 (41.9)	839 (33.0)
Non-Hispanic black/African American	206 (29.3)	195 (32.8)	132 (26.4)	122 (16.5)	655 (25.8)
Other/unknown	62 (8.8)	71 (11.9)	78 (15.6)	114 (15.4)	325 (12.8)
Immune status					
Non-HIV/AIDS	281 (39.9)	313 (52.6)	238 (47.6)	544 (73.5)	1,376 (54.2)
HIV/AIDS	420 (59.7)	276 (46.4)	254 (50.8)	190 (25.7)	1,140 (44.9)
Neighborhood poverty*					
Low	159 (22.6)	143 (24.0)	121 (24.2)	203 (27.4)	626 (24.7)
Medium	158 (22.4)	145 (24.4)	141 (28.2)	197 (26.6)	641 (25.2)
High	148 (21.0)	134 (22.5)	102 (20.4)	151 (20.4)	535 (21.1)
Very high	217 (30.8)	159 (26.7)	133 (26.6)	188 (25.4)	697 (27.5)

\*Classified by percentage of census tract residents living below the federal poverty line (low, <10%; medium, 10%–<20%; high, 20%–<30%; very high, ≥30%).

**Appendix Table 3.** Comparison of incidence of cryptosporidiosis by demographic groups between 2000–2014 and 2015–2018, New York City, New York, USA\*

Characteristic	2000–2014		2015–2018		Between year groups
	No.	Median annual incidence/100,000 persons	No.	Median annual incidence/100,000 persons	IRR (95% CI)
No. cases	3,244	1.46	740	2.07	1.49 (1.17–1.91)
Age group, y†					
<5	261	2.30	78	3.10	1.65 (1.16–2.35)
5–9	149	1.26	34	1.74	1.31 (0.79–2.17)
10–19	170	0.75	57	1.40	2.07 (1.35–3.19)
20–44	1,827	2.17	413	3.05	1.56 (1.21–2.03)
45–59	580	1.41	107	1.68	1.16 (0.86–1.56)
>59	254	0.39	51	0.68	1.67 (1.04–2.68)
Sex					
M	2,230	2.00	484	2.66	1.42 (1.07–1.89)
F	1,014	0.80	255	1.57	1.63 (1.31–2.02)
Sex and age group, y†					
All <20	580	1.26	169	2.17	1.73 (1.27–2.36)
Men 20–59	1789	2.96	355	3.47	1.29 (0.97–1.73)
Men >59	135	0.60	33	1.05	1.82 (1.18–2.80)
Women >20	737	0.74	182	1.40	1.82 (1.30–2.56)
Borough of residence					
Bronx	583	1.59	129	2.04	1.24 (0.98–1.58)
Brooklyn	642	1.11	186	1.46	1.55 (1.15–2.09)
Manhattan	1,580	3.18	314	4.81	1.31 (1.01–1.70)
Queens	380	0.60	103	1.02	1.64 (1.29–2.08)
Staten Island	51	0.46	8	0.42	0.71 (0.31–1.60)
Race/ethnicity‡					
Hispanic	969	1.45	194	1.91	1.26 (1.04–1.52)
Non-Hispanic white	1,067	1.17	310	2.44	1.91 (1.46–2.50)
Non-Hispanic black/African American	855	1.77	122	1.51	0.87 (0.60–1.24)
Other	161	0.67	77	1.34	1.76 (1.32–2.35)
Immune status†‡					
Non-HIV/AIDS	1,349	0.65	544	1.53	2.37 (1.75–3.22)
HIV/AIDS	1,863	55.6	190	39.04	0.62 (0.43–0.91)
Neighborhood poverty†§					
Low	883	1.18	203	2.18	1.65 (1.25–2.18)
Medium	769	1.56	197	1.96	1.36 (1.06–1.76)
High	583	1.46	151	2.14	1.32 (1.02–1.70)
Very high	917	1.87	188	2.17	1.40 (1.09–1.80)

\*ACS, American Community Survey; IRR, incidence rate ratio.

†Incidence and IRR not age-adjusted.

‡All categories had <10 missing values with the exception of race/ethnicity during 2000–2014 (n = 192) and 2015–2018 (n = 37), immune status during 2000–2014 (n = 32), and poverty during 2000–2014 (n = 92).

§Classified by percentage of census tract residents living below the federal poverty line (low, <10%; medium, 10%–<20%; high, 20%–<30%; very high, >30%); population denominator data were as follows for each listed year: 2000–2004 (2000 US Census); 2005–2009 (ACS 2007–2011); 2010 (2010 Census); 2011 (ACS 2009–2013); 2012 (ACS 2010–2014); 2013 (ACS 2011–2015); 2014–2018 (ACS 2012–2016).