TABLE A21. GASTROINTESTINAL (GI) AND HIGHLY CREDIBLE GI (HCGI) SYMPTOM RATES FOR NEW YORK CITY TRIALS CLUSTERED BY FECAL COLIFORM DENSITIES

Year	Fecal Coliform Density/100 ml	N		Rate/GI Symptoms Per 1000 Persons			Rate/HCGI Symptoms Per 1000 Persons		
		Swim[1]	Nonswim[2]	Swim	Nonswim	▲[3]	Swim	Nonswim	▲
1973	21.6	484	197	81	46	35	30	15	15
	165	474	167	72	24	48*	46	18	28
1974	18.0	958	472	35	34	1	10.4	6.4	4.0
	39.0	1133	1246	48	43	5	10.7	6.4	4.3
	252	625	419	42	17	25*	16.0	2.4	13.6
	614	831	440	43	23	20	18.1	—	18.1*
	2449	236	184	72	49	23	21.2	5.4	15.8
1975	41.6	1131	472	69	57	12	16	23	−7.0
	169	1457	680	55	44	11	13	13	0
	324	724	223	54	27	27	22	4.5	17.5
	552	1123	333	62	48	14	24	6.0	18.0
	1312	292	96	72	31	41	34.5	—	34.5

[1] Swimmer.
[2] Nonswimmer.
[3] Swimming-Associated (swimmer-nonswimmer).
*$p < .05$; **$p < .01$.

TABLE A22. GASTROINTESTINAL (GI) AND HIGHLY CREDIBLE GI (HCGI) SYMPTOM RATES FOR NEW YORK CITY TRIALS CLUSTERED BY TOTAL COLIFORM DENSITIES

Year	Total Coliform Density/100 ml	N Swim[1]	N Nonswim[2]	Rate/GI Symptoms Swim (Per 1000 Persons)	Rate/GI Symptoms Nonswim (Per 1000 Persons)	Rate/GI Symptoms ▲[3]	Rate/HCGI Symptoms Swim (Per 1000 Persons)	Rate/HCGI Symptoms Nonswim (Per 1000 Persons)	Rate/HCGI Symptoms ▲
1973	39.8	487	197	81	46	35	30	15	15
	983	474	167	72	24	48*	46	18	28
1974	28.0	958	472	35	34	1	10.4	6.4	4.0
	62.7	1133	1246	48	43	5	10.6	6.4	4.2
	866	1086	719	44	22	22*	16.6	1.4	15.2**
	2380	606	324	51	31	20	19.8	3.1	16.7
1975	109	717	318	56	54	2	12.6	12.6	0.0
	212	1074	597	58	50	8	13.0	20.1	−7.1
	576	1618	478	62	34	28**	22.2	8.4	13.8
	1071	694	229	69	57	12	20.2	8.7	11.5
	2221	604	182	63	33	30	28.1	5.5	22.6

[1] Swimmer.
[2] Nonswimmer.
[3] Swimming-Associated (swimmer-nonswimmer).
*$p<.05$; **$p<.01$.

TABLE A23. GASTROINTESTINAL (GI) AND HIGHLY CREDIBLE GI (HCGI) SYMPTOM RATES FOR NEW YORK CITY TRIALS CLUSTERED BY *Klebsiella* DENSITIES

Year	*Klebsiella* Density/100 ml	N Swim[1]	N Nonswim[2]	Rate/GI Symptoms Swim (Per 1000 Persons)	Rate/GI Symptoms Nonswim (Per 1000 Persons)	Rate/GI Symptoms ▲[3]	Rate/HCGI Symptoms Swim (Per 1000 Persons)	Rate/HCGI Symptoms Nonswim (Per 1000 Persons)	Rate/HCGI Symptoms ▲
1973	13.7	484	197	81	46	35	30	15	15
	122	474	167	72	24	48	46	18	28
1974	3.7	2767	2156	39	35	4	11.9	11.6	0.3
	18.0	463	289	17	21	−4	2.2	3.4	−1.2
	45.0	825	541	53	26	27	20.5	—	20.5
	336	606	324	51	31	20	19.8	3.1	16.7
1975	22.0	1475	607	62	51	11	11.5	21.4	−9.9
	58.0	1182	668	55	49	6	16.9	12.0	4.9
	130	566	148	64	20	44	24.7	—	24.7
	203	633	136	65	44	21	30.0	22.1	7.9
	378	841	245	65	37	28	23.8	4.1	19.7

[1] Swimmer.
[2] Nonswimmer.
[3] Swimming-Associated (swimmer-nonswimmer).
*$p<.05$; **$p<.01$.

TABLE A24. GASTROINTESTINAL (GI) AND HIGHLY CREDIBLE GI (HCGI) SYMPTOM RATES FOR NEW YORK CITY TRIALS CLUSTERED BY *Enterobacter-Citrobacter* DENSITIES

Year	*Entero.-Citro.* Density/100 ml	N Swim[1]	N Nonswim[2]	Rate/GI Symptoms Swim (Per 1000 Persons)	Rate/GI Symptoms Nonswim (Per 1000 Persons)	Rate/GI Symptoms ▲[3]	Rate/HCGI Symptoms Swim (Per 1000 Persons)	Rate/HCGI Symptoms Nonswim (Per 1000 Persons)	Rate/HCGI Symptoms ▲
1973	11.1	484	197	81	46	35	30	15	15
	530	474	167	72	24	48**	46	18	28*
1974	2.0	958	472	35	34	1	10.4	6.4	4.0
	7.5	970	710	27	17	10	8.2	2.8	5.4
	20.0	596	775	54	53	1	8.4	7.7	0.7
	316	1086	719	44	22	22	16.6	1.4	15.2
	485	572	251	31	20	11	12.2	—	12.2
	935	236	184	72	45	27	21.2	5.4	15.8
1975	35.5	1136	560	59	48	11	14.1	16.1	−2.0
	224	1652	616	56	46	10	12.1	14.6	−2.5
	376	725	276	59	40	19	29.0	14.5	14.5
	606	590	170	80	59	21	27.1	5.9	21.2
	1269	604	182	63	33	30	28.1	5.5	22.6

[1] Swimmer.
[2] Nonswimmer.
[3] Swimming-Associated (swimmer-nonswimmer).
*$p < .05$; **$p < .01$.

TABLE A25. GASTROINTESTINAL (GI) AND HIGHLY CREDIBLE GI (HCGI) SYMPTOM RATES FOR NEW YORK CITY TRIALS CLUSTERED BY *P. aeruginosa* DENSITIES

Year	*P. aeruginosa* Density/100 ml	N Swim[1]	N Nonswim[2]	Rate/GI Symptoms Swim (Per 1000 Persons)	Rate/GI Symptoms Nonswim (Per 1000 Persons)	▲[3]	Rate/HCGI Symptoms Swim (Per 1000 Persons)	Rate/HCGI Symptoms Nonswim (Per 1000 Persons)	▲
1973	6.5	484	197	81	46	35	30	15	15
	30.4	474	167	72	24	48**	46	18	28
1974	2.0	1277	879	30	28	2	9.4	8.0	1.4
	6.0	873	730	37	29	8	10.4	4.1	6.3
	22.0	936	492	43	20	23	17.1	—	17.1
	60.0	261	178	15	11	4	3.8	5.6	−1.8
	377.0	461	300	48	30	18	17.4	—	17.4
1975	8.0	1097	480	58	60	−2	13.7	20.8	−7.1
	19.5	1111	448	43	38	5	18.9	11.1	7.8
	34.2	543	116	76	35	41	23.9	17.5	6.7
	60.7	389	182	72	55	17	20.6	5.5	15.5
	173	736	192	68	37	31	32.6	—	32.6

[1] Swimmer.
[2] Nonswimmer.
[3] Swimming-Associated (swimmer-nonswimmer).
*$p<.05$; **$p<.01$.

TABLE A26. GASTROINTESTINAL (GI) AND HIGHLY CREDIBLE GI (HCGI) SYMPTOM RATES FOR NEW YORK CITY TRIALS CLUSTERED BY *A. hydrophila* DENSITIES

Year	*A. hydrophila* Density/100 ml	N Swim[1]	N Nonswim[2]	Rate/GI Symptoms Swim (Per 1000 Persons)	Rate/GI Symptoms Nonswim (Per 1000 Persons)	Rate/GI Symptoms ▲[3]	Rate/HCGI Symptoms Swim (Per 1000 Persons)	Rate/HCGI Symptoms Nonswim (Per 1000 Persons)	Rate/HCGI Symptoms ▲
1973	26.5	484	197	81	46	35	30	15	15
	25.3	474	167	72	24	48**	46	18	28*
1974	1.7	1085	1157	39	34	5	11.1	6.9	4.2
	5.0	827	530	36	21	15	12.1	1.9	10.2
	8.5	1083	513	42	31	11	12.9	3.9	9.0
	25.8	1423	911	40	36	4	10.5	2.2	8.3
1975	2.4	471	251	66	40	26	8.5	8.0	0.5
	40.9	1280	580	63	53	10	14.8	20.7	−5.9
	140	1076	365	69	38	31	21.4	13.7	7.7
	412	1210	403	53	52	1	21.5	7.4	14.1
	1182	322	109	71	28	43	34.2	—	34.2

[1] Swimmer.
[2] Nonswimmer.
[3] Swimming-Associated (swimmer-nonswimmer).
*$p < .05$; **$p < .01$.

TABLE A27. GASTROINTESTINAL (GI) AND HIGHLY CREDIBLE GI (HCGI) SYMPTOM RATES FOR NEW YORK CITY TRIALS CLUSTERED BY *C. perfringens* DENSITIES

Year	*C. perfringens* Density/100 ml	N Swim[1]	N Nonswim[2]	Rate/GI Symptoms Swim (Per 1000 Persons)	Rate/GI Symptoms Nonswim (Per 1000 Persons)	Rate/GI Symptoms ▲[3]	Rate/HCGI Symptoms Swim (Per 1000 Persons)	Rate/HCGI Symptoms Nonswim (Per 1000 Persons)	Rate/HCGI Symptoms ▲
1974	3.8	1767	1269	33	24	9	10.2	2.4	7.8
	10.3	1253	531	34	19	15	12.8	6.0	6.8
	32.7	778	779	46	36	10	15.4	6.4	9.0
	351.	384	348	57	66	−9	2.6	5.7	−3.1
1975	9.3	617	267	75	45	30	19.4	11.2	8.2
	18.2	699	312	64	67	−3	14.3	25.6	−11.3
	28.7	1178	713	48	41	7	17.8	11.2	6.6
	68.6	607	172	61	41	20	31.3	5.8	25.5

[1] Swimmer.
[2] Nonswimmer.
[3] Swimming-Associated (swimmer-nonswimmer).
*$p < .05$; **$p < .01$.

TABLE A28. GASTROINTESTINAL (GI) AND HIGHLY CREDIBLE GI (HCGI) SYMPTOM RATES FOR NEW YORK CITY TRIALS CLUSTERED BY *Staphylococcus* DENSITIES

Year	*Staphylococcus* Density/100 ml	N Swim[1]	N Nonswim[2]	Rate/GI Symptoms Swim (Per 1000 Persons)	Rate/GI Symptoms Nonswim (Per 1000 Persons)	▲[3]	Rate/HCGI Symptoms Swim (Per 1000 Persons)	Rate/HCGI Symptoms Nonswim (Per 1000 Persons)	▲
1974	32.0	433	239	9.2	—	9.2	2.3	—	2.3
	112	1060	508	43	39	4	12.3	5.9	6.4
	189	1081	785	33	43	−10	4.6	3.8	0.8
	344	946	808	49	30	19	20.1	6.2	13.9
	719	998	949	44	24	20	15.0	2.1	12.9
1975	11.7	631	251	76	52	24	17.4	19.9	−2.5
	76.9	1175	544	57	39	18	12.8	3.7	9.1
	197	947	399	66	65	1	23.2	30.1	−6.9
	655	660	224	58	31	27	16.7	4.5	12.2
	1572	946	290	58	41	17	25.4	6.9	18.5

[1] Swimmer.
[2] Nonswimmer.
[3] Swimming-Associated (swimmer-nonswimmer).
*$p < .05$, **$p < .01$.

TABLE A29. GASTROINTESTINAL (GI) AND HIGHLY CREDIBLE GI (HCGI) SYMPTOM RATES FOR NEW YORK CITY TRIALS CLUSTERED BY *V. parahaemolyticus* DENSITIES

Year	*V. parahaemolyticus* Density/100 ml	N Swim[1]	N Nonswim[2]	Rate/GI Symptoms Swim Per 1000 Persons	Rate/GI Symptoms Nonswim Per 1000 Persons	▲[3]	Rate/HCGI Symptoms Swim Per 1000 Persons	Rate/HCGI Symptoms Nonswim Per 1000 Persons	▲
1974	8.4	998	771	44	27	17	15	2.6	12.4
	36.2	1589	800	33	24	9	11.3	5.0	6.3
	303	635	350	13	11	2	1.6	—	1.6
1975	3.8	1907	939	64	50	14	16.3	13.8	2.5
	35.5	1369	468	57	41	16	16.1	15.0	1.1
	121	674	169	65	47	18	31.2	12.5	18.7
	444	390	132	64	38	26	23.1	—	23.1

[1] Swimmer.
[2] Nonswimmer.
[3] Swimming-Associated (swimmer-nonswimmer).
*$p<.05$; **$p<.01$.

TABLE A30. MEAN AND RANGE OF INDICATOR DENSITIES FOR ALL TRIALS CONDUCTED DURING A GIVEN YEAR (SUMMER), NEW YORK CITY BEACHES

		Indicator Density Per 100 ml							
		Enterococci		*Escherichia coli*		Fecal Coliforms		Total Coliforms	
Year	Beach	Mean	Range	Mean	Range	Mean	Range	Mean	Range
1973	Rockaways	21.8	5-30	24.8	12-34	21.5	10-31	39.8	22-68
	Coney Island	91.2	23-186	174	40-709	165	49-431	983	256-5015
1974	Rockaways	3.5	2-7	2.4	1-9	28.4	17-50	43.2	26-80
	Coney Island	16.4	7-33	15.3	4-35	565	231-2449	1213	765-2938
1975[1]	Coney Island(C)	17.9	6-199	52.4	22-506	184	37-585	426	93-1920
	Coney Island(B)	27.7	6-298	98.6	60-659	359	68-1824	633	179-3450
	Coney Island(A)	6.7	2-88	61.3	23-318	130	28-478	844	141-1167
	Coney Island(D)	14.2	8-26	157	137-292	405	326-565	1050	765-1332

		Indicator Density Per 100 ml							
		Klebsiella sp.		*Enter.-Citro.*		*P. aeruginosa*		*A. hydrophila*	
		Mean	Range	Mean	Range	Mean	Range	Mean	Range
1973	Rockaways	13.7	1-15	11.1	1-24	6.5	1-11	26.5	2-39
	Coney Island	122	49-260	530	123-3612	30.4	8-45	25.3	1-244
1974	Rockaways	3.5	2-5	6.6	2-21	3.1	0-6	4.9	1-33
	Coney Island	59.2	11-473	434	93-281	45.8	16-377	9.6	5-27
1975[1]	Coney Island(C)	56.4	9-288	288	63-140	26.6	9-126	63.2	2-163
	Coney Island(B)	126	30-1780	348	89-197	47.7	10-661	124	3-899
	Coney Island(A)	75	16-288	204	60-377	16.7	5.4-66	216	18-1740
	Coney Island(D)	279	209-389	545	94-318	51.9	35-78	ND	ND

[1] Coney Island Beaches: (C) 2nd-4th Streets, Brighton; (B) 8th-10th Streets; (A) 18th-24th Streets; (D) 34th-38th Streets.