

**Appendix B: NEEAR data used for comparison to EPA's epidemiological studies from the late 1970s and early 1980s**

**Table 1. Huntington Beach**

<b>Beach</b>	<b>Dates</b>	<b>Daily geometric mean enterococci density (cfu per /100 mL) <sup>1</sup></b>	<b>Total number interviewed<sup>2</sup></b>	<b>Number reporting no water contact</b>	<b>Number reporting immersion</b>	<b>Number reporting NGL, no contact</b>	<b>Number reporting NGL, immersion</b>	<b>Ill proportion ( per 1,000) among non-swimmers</b>	<b>Ill proportion ( per 1,000) among swimmers</b>	<b>Excess NGL, swimmers ( per 1,000), daily non-swimmer illness rate</b>	<b>Excess NGL, swimmers ( per 1,000), beach average non-swimmer illness rate</b>
<b>HB</b>	8/2/2003	28.9	188	77	76	12	8	155.84	105.26	-50.58	9.50
<b>HB</b>	8/3/2003	66.4	122	88	7	9	1	102.27	142.86	40.58	47.09
<b>HB</b>	8/9/2003	40.4	169	83	53	11	5	132.53	94.34	-38.19	-1.43
<b>HB</b>	8/10/2003	55.4	295	131	100	9	15	68.70	150.00	81.30	54.23
<b>HB</b>	8/16/2003	12.2	183	97	50	10	9	103.09	180.00	76.91	84.23
<b>HB</b>	8/23/2003	7.8	252	143	71	9	11	62.94	154.93	91.99	59.16
<b>HB</b>	8/24/2003	5.2	307	144	105	19	11	131.94	104.76	-27.18	9.00
<b>HB</b>	8/30/2003	290.7	264	165	36	17	7	103.03	194.44	91.41	98.68
<b>HB</b>	8/31/2003	9.6	293	170	80	12	14	70.59	175.00	104.41	79.23
<b>HB</b>	9/6/2003	4.0	158	105	23	7	1	66.67	43.48	-23.19	-52.29
<b>HB</b>	9/7/2003	4.9	266	177	58	17	6	96.05	103.45	7.40	7.68
<b>HB</b>	9/13/2003	11.0	155	77	41	9	5	116.88	121.95	5.07	26.19
<b>HB</b>	9/14/2003	10.3	188	78	57	6	8	76.92	140.35	63.43	44.59

<sup>1</sup>Typically based on 18-27 data points

<sup>2</sup>Total number interviewed = Number reporting no contact + number reporting immersion + number reporting wading (not shown)

**Table 2. West Beach**

<b>Beach</b>	<b>Dates</b>	<b>Daily geometric mean enterococci density (cfu per 100 mL)<sup>1</sup></b>	<b>Total number interviewed<sup>2</sup></b>	<b>Number reporting no water contact</b>	<b>Number reporting immersion</b>	<b>Number reporting NGL, no contact</b>	<b>Number reporting NGL, immersion</b>	<b>Ill proportion ( per 1,000) among non-swimmers</b>	<b>Ill proportion ( per 1,000) among swimmers</b>	<b>Excess NGL, swimmers ( per 1,000), daily non-swimmer illness rate</b>	<b>Excess NGL, swimmers ( per 1,000), beach average non-swimmer illness rate</b>
<b>WB</b>	6/1/2003	27.9	43	33	3	2	0	60.61	0.00	-60.61	-49.86
<b>WB</b>	6/7/2003	1.4	186	97	46	6	1	61.86	21.74	-40.12	-28.12
<b>WB</b>	6/8/2003	6.8	58	34	7	0	1	0.00	142.86	142.86	93.00
<b>WB</b>	6/14/2003	1.3	104	66	18	4	1	60.61	55.56	-5.05	5.69
<b>WB</b>	6/15/2003	2.3	172	91	58	4	5	43.96	86.21	42.25	36.35
<b>WB</b>	6/21/2003	0.8	85	37	30	2	7	54.05	233.33	179.28	183.47
<b>WB</b>	6/22/2003	1.0	148	19	112	1	9	52.63	80.36	27.73	30.50
<b>WB</b>	6/28/2003	10.6	66	31	23	0	1	0.00	43.48	43.48	-6.38
<b>WB</b>	6/29/2003	9.5	145	35	84	1	12	28.57	142.86	114.29	93.00
<b>WB</b>	7/4/2003	26.7	139	27	107	2	7	74.07	65.42	-8.65	15.56
<b>WB</b>	7/5/2003	13.6	160	20	114	0	6	0.00	52.63	52.63	2.77
<b>WB</b>	7/6/2003	3.0	134	11	96	0	13	0.00	135.42	135.42	85.56
<b>WB</b>	7/12/2003	1.6	201	25	134	3	19	120.00	141.79	21.79	91.93
<b>WB</b>	7/13/2003	5.6	123	9	99	0	2	0.00	20.20	20.20	-29.66
<b>WB</b>	7/19/2003	1042.1	226	47	135	3	12	63.83	88.89	25.06	39.03
<b>WB</b>	7/20/2003	21.1	281	41	189	4	21	97.56	111.11	13.55	61.25
<b>WB</b>	7/26/2003	37.5	243	27	179	1	28	37.04	156.42	119.39	106.56
<b>WB</b>	7/27/2003	34.5	84	43	30	1	2	23.26	66.67	43.41	16.81
<b>WB</b>	8/2/2003	11.7	174	15	141	1	17	66.67	120.57	53.90	70.71
<b>WB</b>	8/3/2003	3.2	92	14	62	1	5	71.43	80.65	9.22	30.78

**Table 3. Silver Beach**

Beach	Dates	Daily geometric mean enterococci density (cfu per 100 mL) <sup>1</sup>	Total number interviewed <sup>2</sup>	Number reporting no water contact	Number reporting immersion	Number reporting NGL, no contact	Number reporting NGL, immersion	Ill proportion ( per 1,000) among non-swimmers	Ill proportion ( per 1,000) among swimmers	Excess NGL, swimmers ( per 1,000), daily non-swimmer illness rate	Excess NGL, swimmers ( per 1,000), beach average non-swimmer illness rate
SB†	6/26/2004	5.7	409	162	156	10	10	61.73	64.10	2.37	8.38
SB	6/27/2004	11.1	466	115	281	5	18	43.48	64.06	20.58	8.34
SB	7/3/2004	17.3	622	91	402	7	32	76.92	79.60	2.68	23.88
SB	7/4/2004	185.6	325	252	30	5	5	19.84	166.67	146.83	110.95
SB	7/5/2004	14.0	599	296	222	16	17	54.05	76.58	22.52	20.86
SB	7/10/2004	8.5	455	58	334	6	27	103.45	80.84	-22.61	25.12
SB	7/11/2004	24.6	566	75	409	7	31	93.33	75.79	-17.54	20.07
SB	7/17/2004	29.5	618	234	279	14	31	59.83	111.11	51.28	55.39
SB	7/18/2004	50.0	603	204	327	12	22	58.82	67.28	8.45	11.56
SB	7/24/2004	59.5	554	220	190	13	12	59.09	63.16	4.07	7.44
SB	7/25/2004	80.4	474	194	156	10	12	51.55	76.92	25.38	21.20
SB	7/31/2004	104.3	128	104	7	7	0	67.31	0.00	-67.31	-55.72
SB	8/1/2004	47.2	483	76	345	2	35	26.32	101.45	75.13	45.73
SB	8/7/2004	20.8	729	252	359	15	18	59.52	50.14	-9.38	-5.58
SB	8/8/2004	17.9	516	101	310	8	22	79.21	70.97	-8.24	15.25
SB	8/14/2004	55.5	383	138	173	10	14	72.46	80.92	8.46	25.20
SB	8/15/2004	45.5	502	170	246	9	15	52.94	60.98	8.03	5.26
SB	8/21/2004	101.4	443	119	259	3	15	25.21	57.92	32.70	2.19
SB	8/22/2004	22.9	469	243	142	13	18	53.50	126.76	73.26	71.04
SB	9/3/2004	28.3	185	35	116	2	7	57.14	60.34	3.20	4.62
SB	9/4/2004	30.3	561	61	415	3	33	49.18	79.52	30.34	23.80
SB	9/5/2004	127.0	484	96	318	3	28	31.25	88.05	56.80	32.33
SB	9/6/2004	73.1	298	78	175	8	8	102.56	45.71	-56.85	-10.01

**Table 4. Washington Park Beach**

<b>Beach</b>	<b>Dates</b>	<b>Daily geometric mean enterococci density (cfu per 100 mL)<sup>1</sup></b>	<b>Total number interviewed<sup>2</sup></b>	<b>Number reporting no water contact</b>	<b>Number reporting immersion</b>	<b>Number reporting NGI, no contact</b>	<b>Number reporting NGI, immersion</b>	<b>Ill proportion ( per 1,000) among non-swimmers</b>	<b>Ill proportion ( per 1,000) among swimmers</b>	<b>Excess NGI, swimmers ( per 1,000), daily non-swimmer illness rate</b>	<b>Excess NGI, swimmers ( per 1,000), beach average non-swimmer illness rate</b>
WP	6/26/2004	8.36	235	98	93	6	4	61.22	43.01	-18.21	-19.84
WP	6/27/2004	9.18	251	72	124	7	15	97.22	120.97	23.75	58.12
WP	7/3/2004	17.9	188	49	104	4	11	81.63	105.77	24.14	42.92
WP	7/4/2004	15.4	187	52	105	3	7	57.69	66.67	8.97	3.82
WP	7/5/2004	95	371	148	167	8	13	54.05	77.84	23.79	15.00
WP	7/10/2004	37.5	215	39	144	3	18	76.92	125.00	48.08	62.15
WP	7/11/2004	27.6	184	48	110	5	10	104.17	90.91	-13.26	28.06
WP	7/17/2004	30.1	172	46	96	4	6	86.96	62.50	-24.46	-0.35
WP	7/18/2004	43.0	177	72	87	4	8	55.56	91.95	36.40	29.11
WP	7/24/2004	35.2	154	81	49	4	12	49.38	244.90	195.52	182.05
WP	7/25/2004	26.0	209	89	83	3	7	33.71	84.34	50.63	21.49
WP	8/1/2004	7.61	236	28	181	2	11	71.43	60.77	-10.66	-2.07
WP	8/7/2004	43.0	234	69	121	6	10	86.96	82.64	-4.31	19.80
WP	8/8/2004	28.8	276	40	181	3	14	75.00	77.35	2.35	14.50
WP	8/14/2004	39.9	78	42	10	1	0	23.81	0.00	-23.81	-62.85
WP	8/15/2004	37.4	236	73	132	5	10	68.49	75.76	7.26	12.91
WP	8/21/2004	24.9	169	65	84	1	7	15.38	83.33	67.95	20.49
WP	8/22/2004	22.2	176	33	104	1	9	30.30	86.54	56.24	23.69
WP	9/3/2004	25.7	14	4	8	1	0	250.00	0.00	-250.00	-62.85
WP	9/4/2004	14.4	238	37	175	2	18	54.05	102.86	48.80	40.01
WP	9/5/2004	28.4	266	53	165	3	11	56.60	66.67	10.06	3.82
WP	9/6/2004	32.8	78	19	37	3	5	157.89	135.14	-22.76	72.29

**Table 5. Edgewater Beach**

Beach	Dates	Daily geometric mean enterococci density (cfu per 100 mL) <sup>1</sup>	Total number interviewed <sup>2</sup>	Number reporting no water contact	Number reporting immersion	Number reporting NGI, no contact	Number reporting NGI, immersion	Ill proportion ( per 1,000) among non-swimmers	Ill proportion ( per 1,000) among swimmers	Excess NGI, swimmers ( per 1,000), daily non-swimmer illness rate	Excess NGI, swimmers ( per 1,000), beach average non-swimmer illness rate
EB	6/4/2005	23.77	75	24	27	0	7	0.0	259.3	259.3	175.0
EB	6/5/2005	16.76	58	28	13	3	2	107.1	153.8	46.7	69.6
EB	6/18/2005	68.06	44	16	6	1	0	62.5	0.0	-62.5	-84.2
EB	6/19/2005	15.34	102	37	37	4	4	108.1	108.1	0.0	23.9
EB	6/25/2005	12.01	68	15	31	0	3	0.0	96.8	96.8	12.6
EB	6/26/2005	3.08	79	15	33	0	2	0.0	60.6	60.6	-23.6
EB	7/2/2005	22.66	67	23	22	2	4	87.0	181.8	94.9	97.6
EB	7/3/2005	7.77	105	28	24	5	5	178.6	208.3	29.8	124.1
EB	7/4/2005	17.09	92	32	27	4	1	125.0	37.0	-88.0	-47.2
EB	7/16/2005	88.75	64	11	34	1	5	90.9	147.1	56.1	62.8
EB	7/17/2005	3.86	40	17	6	1	0	58.8	0.0	-58.8	-84.2
EB	7/23/2005	10.78	66	23	22	2	2	87.0	90.9	4.0	6.7
EB	7/24/2005	3.91	52	17	20	1	0	58.8	0.0	-58.8	-84.2
EB	7/30/2005	0.66	98	21	34	1	2	47.6	58.8	11.2	-25.4
EB	7/31/2005	1.37	79	20	13	5	2	250.0	153.8	-96.2	69.6
EB	8/6/2005	19.36	47	8	13	0	1	0.0	76.9	76.9	-7.3
EB	8/7/2005	4.10	49	13	21	0	3	0.0	142.9	142.9	58.6
EB	8/13/2005	2.05	58	14	14	0	1	0.0	71.4	71.4	-12.8
EB	8/14/2005	2.50	38	8	11	1	3	125.0	272.7	147.7	188.5
EB	8/20/2005	1.20	28	9	9	0	0	0.0	0.0	0.0	-84.2
EB	8/21/2005	4.05	34	1	12	1	0	1,000.0	0.0	-1,000.0	-84.2

**Table 6. Fairhope Beach**

Beach	Dates	Daily geometric mean enterococci density (cfu per100)	Total number interviewed <sup>2</sup>	Number reporting no water contact	Number reporting immersion	Number reporting NGL, no contact	Number reporting NGL, immersion	Ill proportion ( per 1,000) among non-swimmers	Ill proportion ( per 1,000) among swimmers	Excess NGL, swimmers ( per 1,000), daily non-swimmer illness	Excess NGL, swimmers ( per 1,000), beach average non-swimmer illness
FB†	5/19/2007	15.07	154	85	33	8	1	94.12	30.30	-63.81	-56.45
FB	5/20/2007	2.69	183	98	44	12	3	122.45	68.18	-54.27	-18.57
FB	5/25/2007	6.71	81	47	11	4	0	85.11	0.00	-85.11	-86.75
FB	5/26/2007	8.43	145	64	50	3	2	46.88	40.00	-6.88	-46.75
FB	5/27/2007	13.80	126	28	54	2	5	71.43	92.59	21.16	5.84
FB	5/28/2007	13.76	100	35	30	6	2	171.43	66.67	-104.76	-20.09
FB	6/2/2007	230.10	106	48	37	4	3	83.33	81.08	-2.25	-5.67
FB	6/3/2007	27.05	73	26	16	2	2	76.92	125.00	48.08	38.25
FB	6/9/2007	25.41	64	28	17	1	2	35.71	117.65	81.93	30.89
FB	6/10/2007	18.88	99	28	43	1	1	35.71	23.26	-12.46	-63.50
FB	6/16/2007	78.55	110	46	44	3	8	65.22	181.82	116.60	95.07
FB	6/17/2007	143.73	104	57	24	4	0	70.18	0.00	-70.18	-86.75
FB	6/23/2007	23.00	66	22	27	1	3	45.45	111.11	65.66	24.36
FB	6/24/2007	76.43	57	22	19	5	5	227.27	263.16	35.89	176.41
FB	6/30/2007	27.44	49	22	11	0	3	0.00	272.73	272.73	185.97
FB	7/1/2007	10.02	71	22	34	2	7	90.91	205.88	114.97	119.13
FB	7/4/2007	45.61	97	39	37	4	4	102.56	108.11	5.54	21.36
FB	7/7/2007	10.45	43	12	16	0	2	0.00	125.00	125.00	38.25
FB	7/8/2007	48.85	78	28	34	1	0	35.71	0.00	-35.71	-86.75
FB	7/14/2007	70.22	50	19	22	1	1	52.63	45.45	-7.18	-41.30
FB	7/15/2007	59.71	27	7	8	1	1	142.86	125.00	-17.86	38.25
FB	7/21/2007	12.20	25	11	8	1	0	90.91	0.00	-90.91	-86.75
FB	7/22/2007	6.88	55	28	11	4	4	142.86	363.64	220.78	276.88
FB	7/28/2007	14.59	22	7	11	0	3	0.00	272.73	272.73	185.97
FB	7/29/2007	4.72	30	24	4	4	0	166.67	0.00	-166.67	-86.75

**Table 7. Goddard Beach**

Beach	Dates	Daily geometric mean enterococci density (cfu per 100 mL) <sup>1</sup>	Total number interviewed <sup>2</sup>	Number reporting no water contact	Number reporting immersion	Number reporting NGI, no contact	Number reporting NGI, immersion	Ill proportion (per 1,000) among non-swimmers	Ill proportion (per 1,000) among swimmers	Excess NGI, swimmers (per 1,000), daily non-swimmer illness rate	Excess NGI, swimmers (per 1,000), beach average non-swimmer illness rate
GB	6/23/2007	3.26	160	98	21	4	0	40.82	0.00	-40.82	-46.09
GB	6/24/2007	1.03	170	105	28	4	3	38.10	107.14	69.05	61.06
GB	6/30/2007	1.29	119	64	25	5	2	78.13	80.00	1.88	33.91
GB	7/1/2007	6.29	156	108	19	3	2	27.78	105.26	77.49	59.18
GB	7/4/2007	4.90	200	118	54	5	1	42.37	18.52	-23.85	-27.57
GB	7/7/2007	4.29	135	63	31	0	0	0.00	0.00	0.00	-46.09
GB	7/8/2007	0.71	184	58	95	1	3	17.24	31.58	14.34	-14.51
GB	7/14/2007	1.95	151	65	48	0	4	0.00	83.33	83.33	37.25
GB	7/15/2007	0.61	162	64	61	5	7	78.13	114.75	36.63	68.67
GB	7/21/2007	4.89	74	49	9	2	0	40.82	0.00	-40.82	-46.09
GB	7/22/2007	2.32	146	83	38	5	4	60.24	105.26	45.02	59.18
GB	7/28/2007	4.83	90	35	40	0	1	0.00	25.00	25.00	-21.09
GB	7/29/2007	2.94	63	31	12	1	0	32.26	0.00	-32.26	-46.09
GB	8/4/2007	10.23	144	34	79	0	8	0.00	101.27	101.27	55.18
GB	8/5/2007	22.95	156	72	53	5	4	69.44	75.47	6.03	29.39
GB	8/11/2007	2.88	81	42	16	4	0	95.24	0.00	-95.24	-46.09
GB	8/12/2007	2.26	101	36	33	3	3	83.33	90.91	7.58	44.82
GB	8/18/2007	2.91	87	64	8	1	0	15.63	0.00	-15.63	-46.09
GB	8/19/2007	3.05	77	67	3	5	0	74.63	0.00	-74.63	-46.09
GB	8/25/2007	3.28	73	21	27	1	0	47.62	0.00	-47.62	-46.09
GB	8/26/2007	1.78	103	71	23	4	2	56.34	86.96	30.62	40.87
GB	9/1/2007	38.72	65	57	3	3	0	52.63	0.00	-52.63	-46.09
GB	9/2/2007	6.32	101	80	5	5	1	62.50	200.00	137.50	153.91
GB	9/3/2007	13.66	170	99	48	7	3	70.71	62.50	-8.21	16.41