

# Supplemental Material: Development of Toxicological Risk Assessment Models for Acute and Chronic Exposure to Pollutants

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**Table S1.** Probability of ingesting a given volume of water during swimming and “non-immersive” water sports, such as boating (adapted from [37]) calculated by using the cumulative distribution function of a gamma distribution [45].

Volume (mL)	Swimming Probability	Boating Probability
0	1	1
2	0.99999	0.99971
4	0.99971	0.99335
6	0.9981	0.96639
8	0.99335	0.90771
10	0.98337	0.81762
12	0.96639	0.70574
14	0.94127	0.58525
16	0.90771	0.46805
18	0.86614	0.36246
20	0.81762	0.27282
22	0.7636	0.20027
24	0.70574	0.1438
26	0.64576	0.10126
28	0.58525	0.07007
30	0.52562	0.04774
32	0.46805	0.03207
34	0.41344	0.02128
36	0.36246	0.01396
38	0.31551	0.00906
40	0.27282	0.00583
42	0.23444	0.00372
44	0.20027	0.00235
46	0.17015	0.00148
48	0.1438	0.00092
50	0.12095	0.00057
52	0.10126	0.00035
54	0.0844	0.00022
56	0.07007	0.00013
58	0.05794	0.00008
60	0.04774	0.00005
62	0.03919	0.00003
64	0.03207	0.00002
66	0.02616	0.00001
68	0.02128	0.00001
70	0.01726	0
72	0.01396	-
74	0.01126	-
76	0.00906	-
78	0.00728	-

Table 1. Cont.

Volume (mL)	Swimming Probability	Boating Probability
80	0.00583	-
82	0.00466	-
84	0.00372	-
86	0.00296	-
88	0.00235	-
90	0.00186	-
92	0.00148	-
94	0.00117	-
96	0.00092	-
98	0.00073	-
100	0.00057	-
102	0.00045	-
104	0.00035	-
106	0.00028	-
108	0.00022	-
110	0.00017	-
112	0.00013	-
114	0.0001	-
116	0.00008	-
118	0.00006	-
120	0.00005	-
122	0.00004	-
124	0.00003	-
126	0.00002	-
128	0.00002	-
130	0.00001	-
132	0.00001	-
134	0.00001	-
136	0.00001	-

**Table S2.** Microcystin concentration ( $\mu\text{g}\cdot\text{MC}\cdot\text{L}^{-1}$ ) in five urban lakes (from [13]).

<b>Date</b>	<b>Lake 1</b>	<b>Lake 2</b>	<b>Lake 3</b>	<b>Lake 4</b>	<b>Lake 5</b>
3 November 2008	10.16	-	-	-	-
10 November 2008	-	0.14	3.51	13.58	5.07
17 November 2008	-	-	-	5.72	-
1 December 2008	-	-	-	12.48	2.15
8 December 2008	8.82	0.2	0.05	16.13	7.59
12 January 2009	-	0.46	0.14	25.63	6.49
19 January 2009	3.69	-	7.14	1.14	12.96
26 January 2009	3.1	-	11.27	1.77	2.88
2 February 2009	-	-	2.84	1.05	2.61
9 February 2009	0.92	13.42	8.55	7.43	2.97
16 February 2009	-	122.08	-	3.74	-
23 February 2009	1.08	122.34	-	23.63	-
9 March 2009	1.82	83.2	-	3.94	-
16 March 2009	-	21.11	2.7	-	0.46
23 March 2009	8.98	36.98	-	5.39	-
6 April 2009	2.23	7.23	-	3.06	-
13 April 2009	2.04	-	-	17.32	-
27 April 2009	3.51	-	-	6.15	-
18 May 2009	6.25	-	-	118.16	-
25 May 2009	-	-	-	86.07	-
1 June 2009	3.33	-	-	13.07	-
22 June 2009	1.95	-	-	4.48	-
6 July 2009	3.52	-	-	3.52	-
20 July 2009	3.4	-	-	1.54	-
Number of sampling dates	16	10	8	22	9
Number of weeks	37	21	18	36	18