

# 13 Beaches Tables

Table 1: Population Attributable Risk Among Beachgoers Due to Body Immersion Swimming. Estimates from a pooled analysis of 13 prospective cohorts in the United States, 2003-2009.

			Predicted Incidence <sup>a</sup>		Population		Population	
			per 1000		Attributable Risk <sup>b</sup>		Attributable Fraction <sup>c</sup>	
	N	N	Observed	No Swim	(95% CI)		(95% CI)	
	Events	At Risk	Exposure	Exposure				
Diarrhea, episodes								
All Ages	3,409	82,463	41	33	8.6	(6.6, 10.6)	21%	(16%, 25%)
Age Stratified								
Ages 0 to 4	398	6,394	62	48	14.7	(3.8, 25.3)	23%	(6%, 40%)
Ages 5 to 10	393	10,633	37	20	16.9	(7.3, 26.1)	46%	(20%, 69%)
Ages >10	2,585	64,295	40	33	6.9	(4.8, 8.9)	17%	(12%, 22%)
Gastrointestinal illness <sup>d</sup> , episodes								
All Ages	5,024	82,463	61	52	9.2	(6.6, 11.8)	15%	(11%, 19%)
Age Stratified								
Ages 0 to 4	562	6,394	88	66	22.4	(9.9, 34.8)	25%	(12%, 40%)
Ages 5 to 10	697	10,633	66	54	11.8	(-2.6, 24.7)	18%	(-4%, 37%)
Ages >10	3,716	64,295	58	50	7.8	(5.4, 10.1)	14%	(9%, 17%)
Missed Daily Activities <sup>e</sup> , days								
All Ages	4,551	82,463	55	50	4.9	(0.4, 9.2)	9%	(1%, 17%)
Age Stratified								
Ages 0 to 4	445	6,394	70	43	27.1	(7.7, 44.5)	39%	(12%, 61%)
Ages 5 to 10	691	10,633	65	58	7.2	(-17.0, 29.6)	11%	(-26%, 45%)
Ages >10	3,377	64,295	53	48	4.3	(0.1, 8.9)	8%	(0%, 17%)
Missed Paid Work <sup>f</sup> , days								
All Ages <sup>h</sup>	1,051	82,463	13	13	-0.6	(-2.8, 1.3)	na	
Medical Visits <sup>g</sup> , events								
All Ages <sup>h</sup>	915	82,463	11	11	0.4	(-1.3, 2.1)	4%	(-12%, 18%)

a Predicted incidence per 1000 among all beachgoers under the empirical distribution of swim exposure (observed) and under a counterfactual scenario where nobody entered the water. Estimates are from a multivariable regression model adjusted for a range of potential confounders and beach level fixed-effects (see text for details).

b Population Attributable Risk is the number of events per 1000 beachgoers that would be prevented if swimming exposure were removed from the population. The proportion exposed to body immersion swimming was: all ages (56%), ages 0-4 (59%), ages 5-10 (81%), ages >10 (52%). Supplement File 1 Appendix 2 includes additional details.

c Population Attributable Fraction is the percentage of events among beachgoers attributable to body immersion swimming.

d Gastrointestinal illness was defined as (i) diarrhea or (ii) vomiting or (iii) stomach cramps and missed daily activities or (iv) nausea and missed daily activities.

e Includes days of school, work, or vacation missed because of gastrointestinal illness.

f Includes work days missed because of gastrointestinal illness.

g Includes phone consultations, outpatient visits, and emergency room visits due to gastrointestinal illness.

h Outcome incidence was too rare to calculate age-stratified estimates.