

Supplementary Materials

Table S1: Input data for Dose-response model

Dose/Mouse	Positive	Negative	Total	Strain
70	6	14	20	S-L ₉₈ .2.1.f17
370	17	3	20	S-L ₉₈ .2.1.f17
550	14	6	20	D ₉₈ .2.1.h10
1930	9	1	10	S-L ₉₈ .2.1.f17
3400	20	0	20	S-L ₉₈ .2.1.f17
4570	20	0	20	D ₉₈ .2.1.h10
13,300	10	0	10	D ₉₈ .2.1.h10
47,600	20	0	20	D ₉₈ .2.1.h10

Table S2: Best fit parameters for the beta-Poisson model for *N. fowleri*, from 10,000 bootstrap iterations

Parameter	MLE	Percentiles					
		0.5%	2.5%	5%	95%	97.5%	99.5%
Alpha	2.90	4.63×10^{-1}	6.66×10^{-1}	8.38×10^{-1}	1.90×10^4	1.17×10^7	2.94×10^9
N ₅₀	1.13×10^5	1.41×10^4	2.57×10^4	3.30×10^4	3.45×10^5	4.16×10^5	5.93×10^5

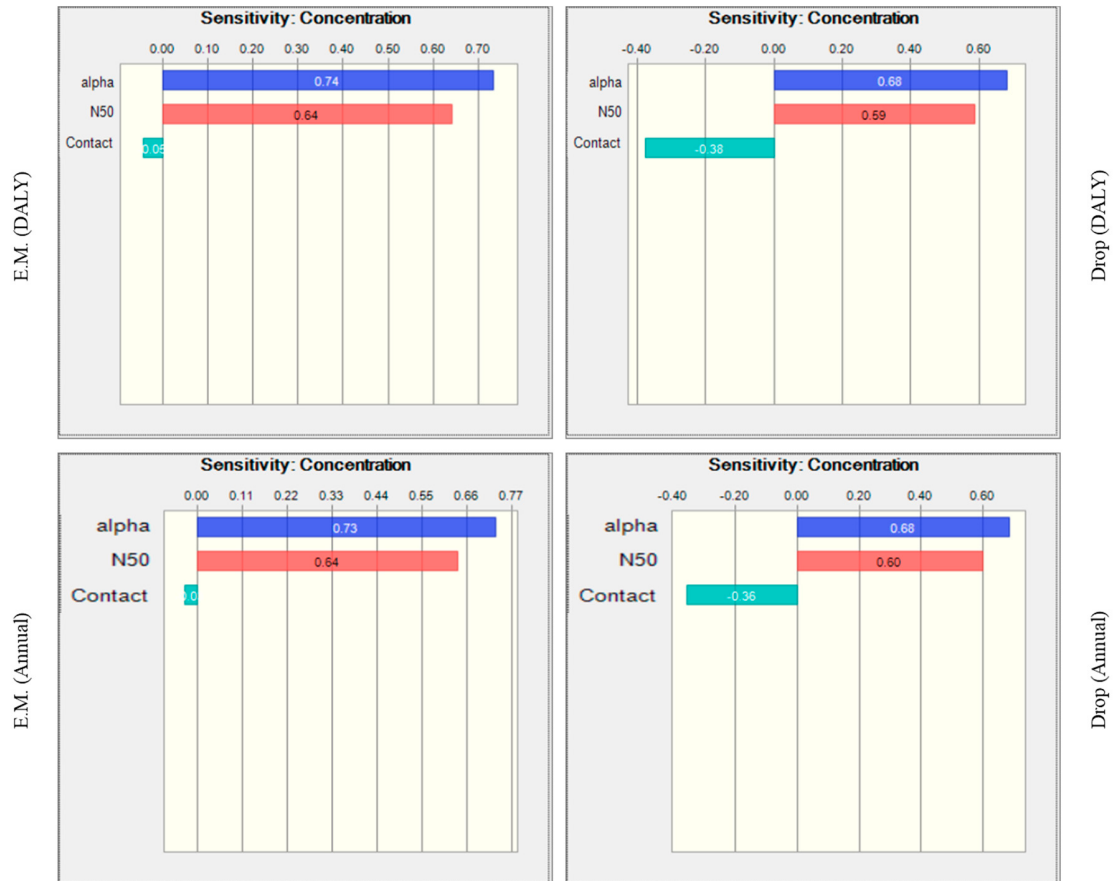


Figure S1: Sensitivity analysis for *P. aeruginosa*



Figure S2: Sensitivity analysis for *N. fowleri*.