

Table 4. Other parameters of the model

Parameter	Definition	Value and units			Source
		Cameroon	Guatemala	Venezuela	
σ_L	Per capita mortality rate of L3 larvae		104 yr ⁻¹		1, 2
μ_V	Per capita mortality rate of uninfected vectors		52 yr ⁻¹		1, 2
α_V	Excess vector mortality rate induced per microfilariae (mf)	0.60 yr ⁻¹	0.43 yr ⁻¹	0.60 yr ⁻¹	2
ϕ	Adult worm mating probability		1		1, 3
F	Per capita fecundity rate of female adult worm scaled per mg of skin		0.67 yr ⁻¹		1, 4
δ_{H_0}	Maximum establishment probability of an L3 larva within a human (as transmission rate tends to zero)		8.54×10^{-2}		*
δ_{H_∞}	Minimum establishment probability of an L3 larva within a human (as transmission rate becomes infinitely large)		2.99×10^{-2}		2
c_H	Severity of transmission rate-dependent constraints upon larval establishment within humans		5.86×10^{-3} yr		2
δ_{V_0}	Probability that a mf becomes an L3 larva within the vector (in the absence of density dependence)	0.0050	0.0005	0.0015	†
a_H	Probability that an L3 larva is shed during a blood meal		0.5		5, 6

*In line with the value of 7.12×10^{-2} (3.82×10^{-2} , 14.91×10^{-2}) estimated in ref. 2.

†The difference with respect to values previously estimated (2) compensates for the lack of density-dependent larval establishment within the vector in this model and is consistent with the relative competence of the various vector species.

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