

Parameter	Usage	Description	Range	Type
κ	network construction	scaling of spatial connection	[20,30]	discrete
τ	network construction	proportion of far roaming dogs	[0.5, 1]	continuous
λ	network construction	mean number of peers of far roaming dogs	[20,30]	discrete
δ	transmission model	infectious period	[1,7]	discrete
σ	transmission model	incubation period	[7, 730]	discrete
β	transmission model	transmission rate	[0.015, 0.02]	continuous