

Parameters

- v per capita birth rate
- $\beta_{i,j}$ transmission coefficient (j to i)
- p_i per capita immunization* rate
- μ per capita background mortality rate
- α per capita disease-induced mortality rate

* Immunization = effective vaccination

NOTE: Subscripts i,j in {c,u} indicate confined (c) versus unconfined (u) dogs

Variables

- S_i Susceptible dog
- I_i Infectious (rabid) dog
- V_i Immunized dog

What level of vaccination would be necessary to eliminate domestic dog rabies in Tanzania?

