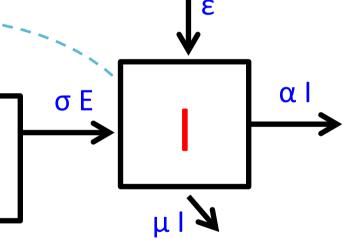
Parameters

- v (total) birth rate
- μ *per capita* background mortality rate
- v_t proportion successfully vaccinated
- **B** transmission coefficient
- o progression rate
- disease-induced mortality rate
- ε (total) case importation rate
- p_t proportion vaccinated
- f vaccine efficacy

What level of vaccination is needed to eliminate domestic dog rabies in Tanzania?

State Variables

- **S**usceptible
- E Exposed (infected)
- Infectious (symptomatic)
- V Vaccinated (immune)



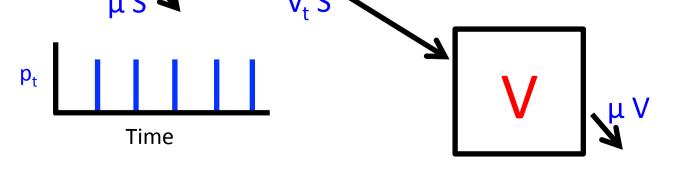
Derived quantities:

$$N = S + E + I + V$$

$$v_t = fp_t$$

Force of infection:

$$\lambda = \frac{\beta I}{N}$$



×λS