



Age-specific parameters

- β - susceptibility
- λ, λ^V - forces of infection
- ν - hospitalization rate
- r - vaccination rate

Constant parameters

- $1/\alpha$ - latent period
- $1/\gamma$ - infectious period
- VE_S - vaccine efficacy in reducing susceptibility
- VE_I - vaccine efficacy in reducing infectivity (not shown)
- VE_H - vaccine efficacy in preventing hospitalization/death