dSdt = -beta \* S \* I / N

dEdt = beta \* S \* I / N - k \* E

dIdt = k \* E - delta \* I - alfa \* I

dRdt = delta \* I

dDdt = alfa \* I

N = 10000000 *# population*

n = 3.05 *# days in infectious state*

r = 3 *# reproduction number*

beta = r/n *# Rate from infectious state*

k=1/20 *# Exposed to Infected*

delta = 1/10 *# Rate from I to R*

alfa = 9000/N *# dead per capita*