

Analysis

From old mathematical branch of *Epidemiology* [Bailey 75]

- Population of $(n+1)$ individuals mixing homogeneously
- Contact rate between any individual pair is β
- At any time, each individual is either uninfected (numbering x) or infected (numbering y)
- Then, $x_0 = n, y_0 = 1$
and at all times $x + y = n + 1$
- Infected–uninfected contact turns latter infected, and it stays infected