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Slides Handout

Color Scheme

- Orange: times

- Violet: before infection probabilities

- Blue: infection rates

- Purple: removal rates

Glossary

- N total individuals and n infected individuals

- r_j and i_j are removal and infection times for j

- β_{kj} is infection rate k applies to j

  - $B_j := \sum_{k=n+1}^{N} \beta_{jk}$ is sum of rates j applies to never-infecteds

- θ_j parameterizes infectious period $r_j - i_j \sim P_{\theta_j}$

  - $\theta_j = (m_j, \gamma_j)$ for Erlang periods
  - $\delta_j := \gamma_j + B_j$ is new rate after change of variable

- τ_{kj} is time k applies pressure to j

  - $\omega_{jk} = \tau_{jk} + \tau_{kj}$ is joint time
  - $W = \sum_{j=2}^{n} \sum_{k \neq j}^{n} \tau_{kj}$ is cumulative time infective pressure is exerted

- ψ_j is $P(j$ evades infection until time $i_j)$

  - ψ_{jk} is $P(j$ evades infection from k until time $i_j)$

- χ_j is infective pressure on j at i_j

- ϕ_j is $P(j$ fails to infect the $N - n$ never-infecteds)