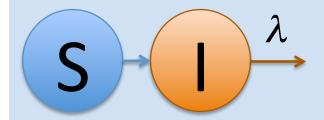
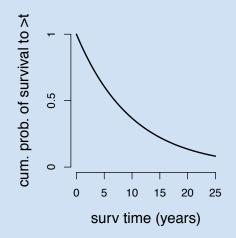
## Justification of the Distributed Delay (Boxcar Model)

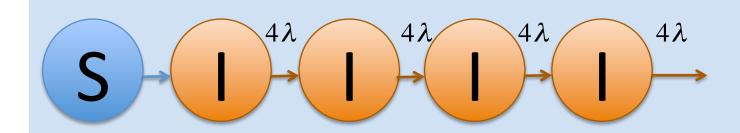
## **Exponential survival:**

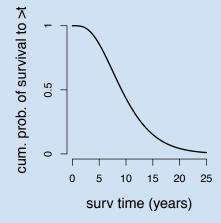




#### Gamma survival:

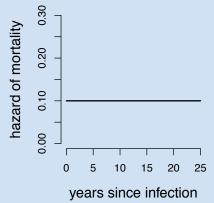
Average rate is the same, distribution is different!

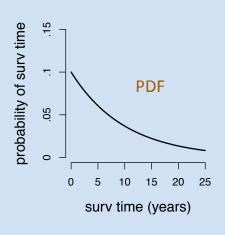


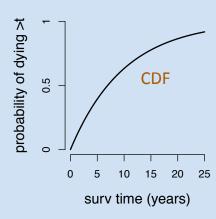


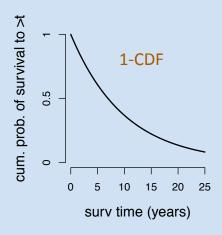


### **Exponential Survival Times**









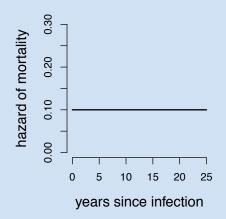
hazard of mortality: deaths / (person\*year) probability of dying AT year t

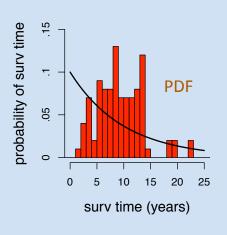
probability of dying BY year t

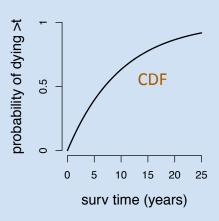
probability of surviving PAST year t

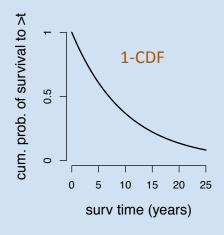


# **Exponential Survival Times**









hazard of mortality: deaths / (person\*year)

probability of dying AT year t

probability of dying BY year t

probability of surviving PAST year t

