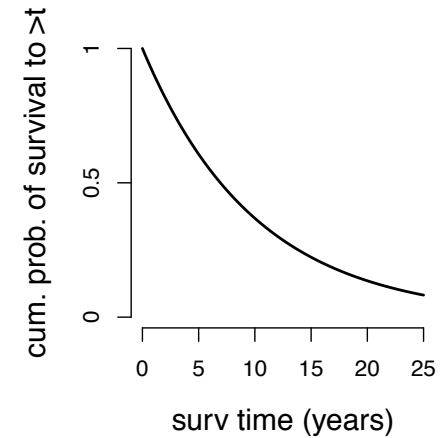
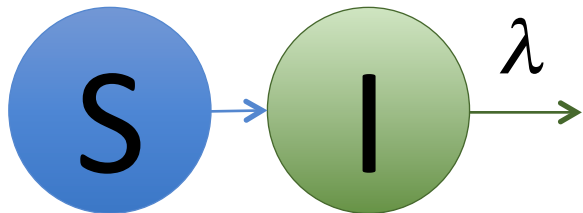


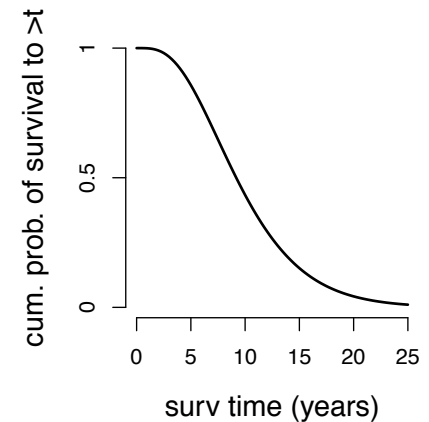
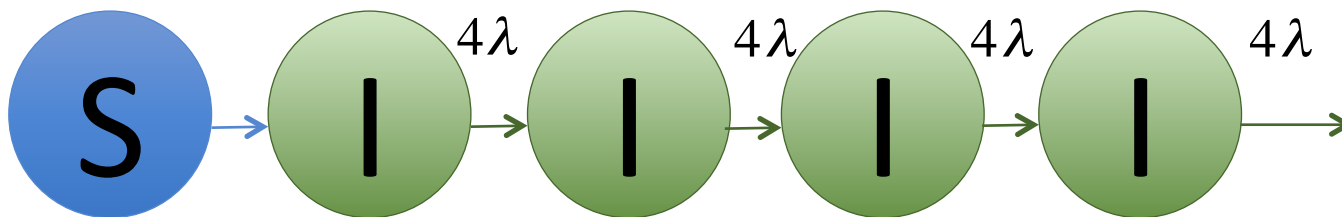
# Justification of the Distributed Delay (Boxcar Model)

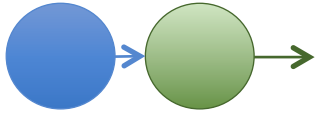
Exponential survival:



Gamma survival:

Average rate is the same, distribution is different!

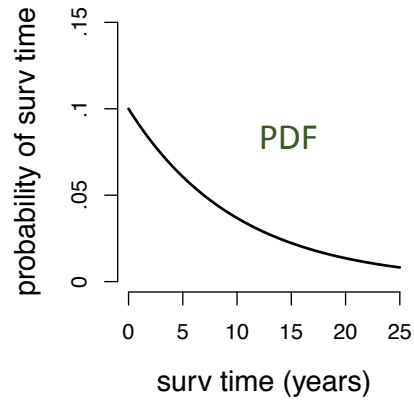




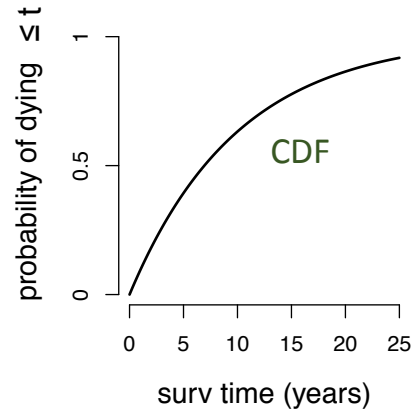
# Exponential Survival Times



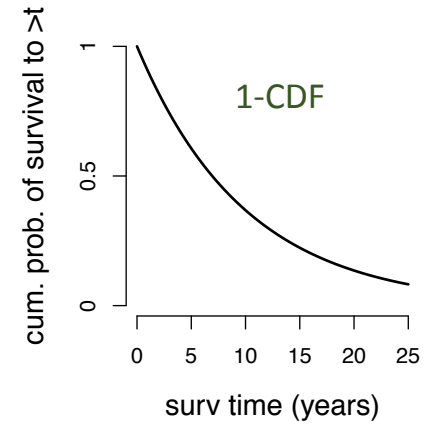
hazard of mortality:  
deaths / (person\*year)



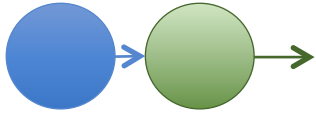
probability of  
dying **AT** year t



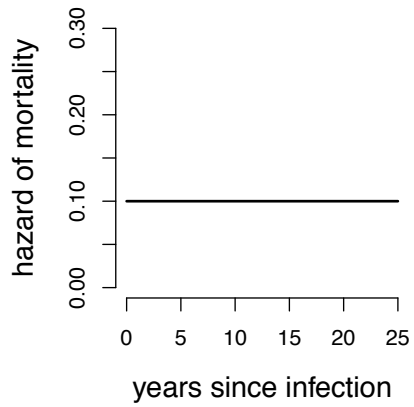
probability of  
dying **BY** year t



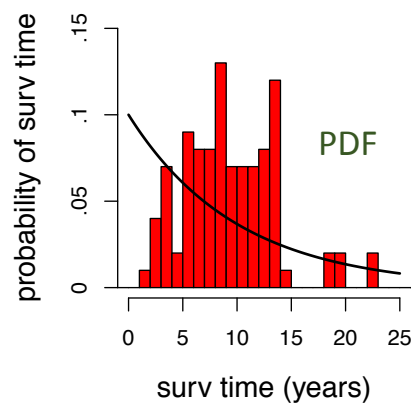
probability of  
surviving **PAST** year t



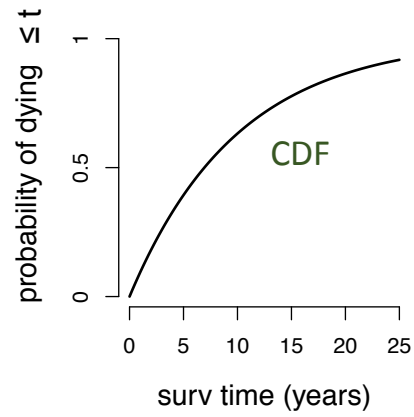
# Exponential Survival Times



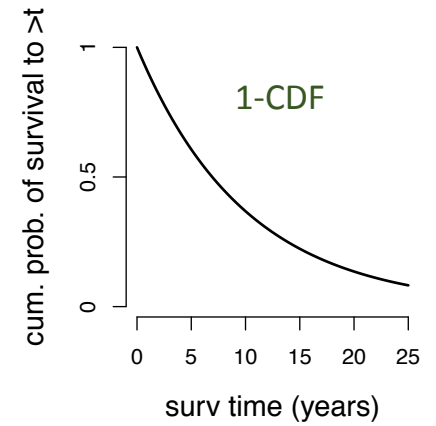
hazard of mortality:  
deaths / (person\*year)



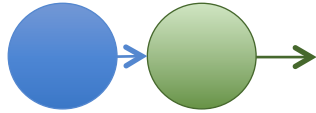
probability of  
dying AT year t



probability of  
dying BY year t



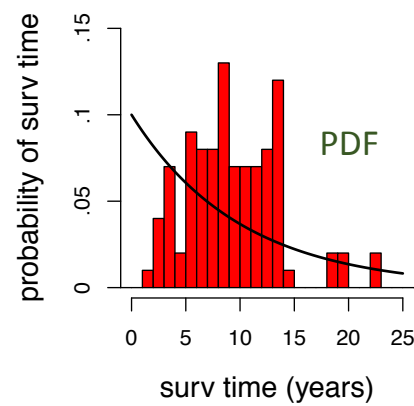
probability of  
surviving PAST year t



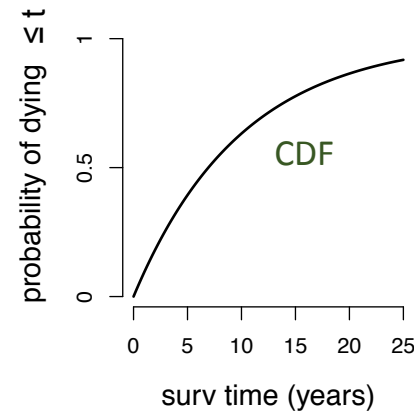
## Exponential Survival Times



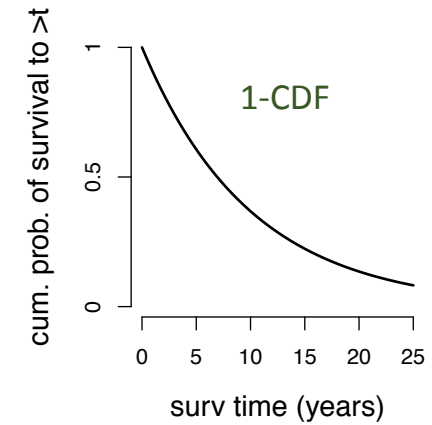
hazard of mortality:  
deaths / (person\*year)



probability of  
dying **AT** year t



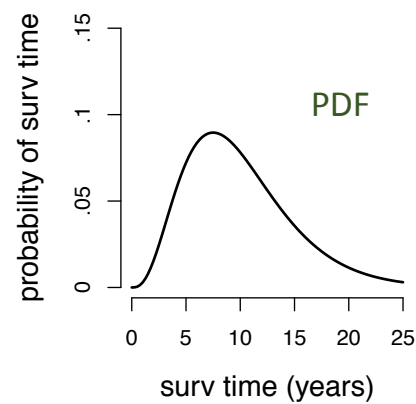
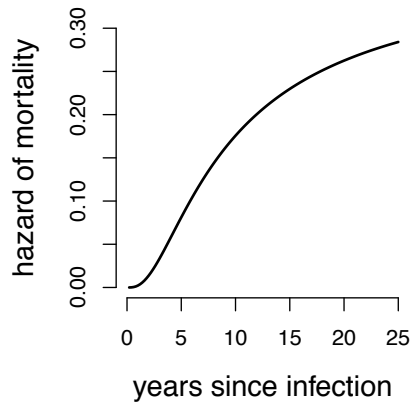
probability of  
dying **BY** year t

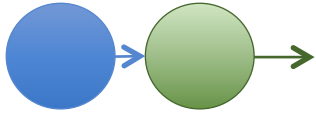


probability of  
surviving **PAST** year t



## Gamma Survival Times

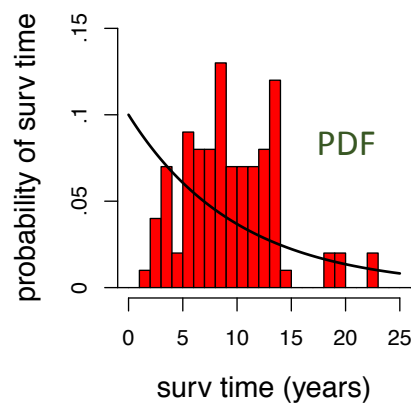




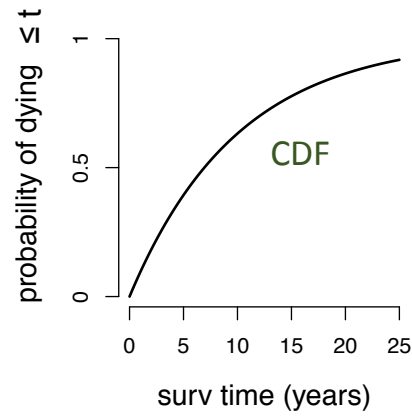
## Exponential Survival Times



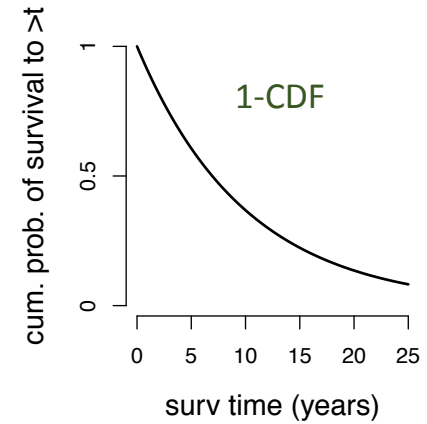
hazard of mortality:  
deaths / (person\*year)



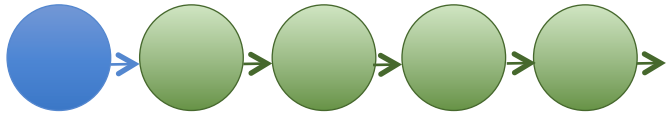
probability of  
dying **AT** year t



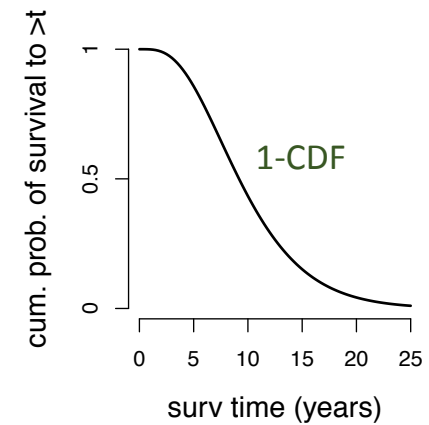
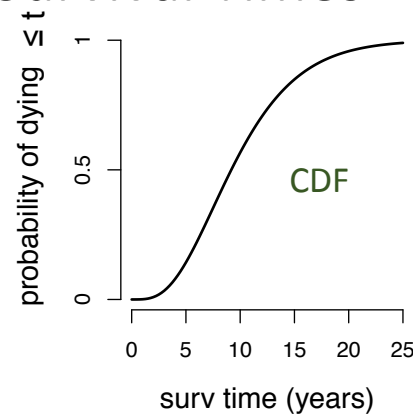
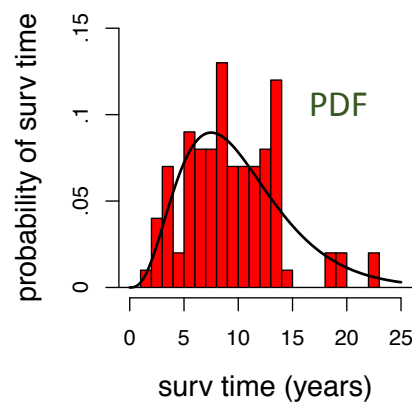
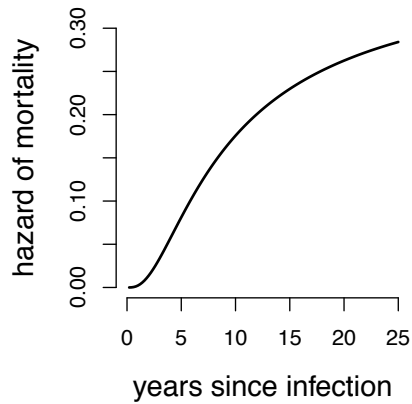
probability of  
dying **BY** year t



probability of  
surviving **PAST** year t



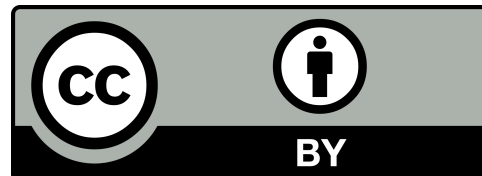
## Gamma Survival Times





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