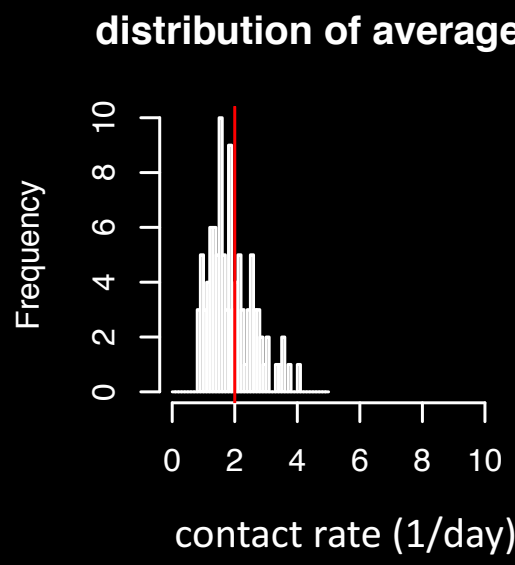
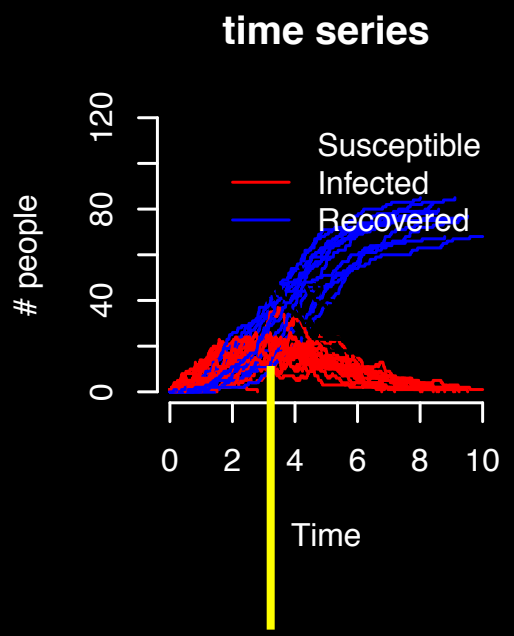
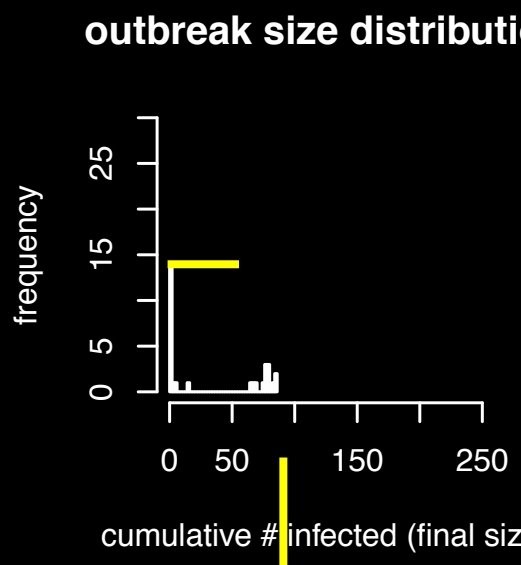
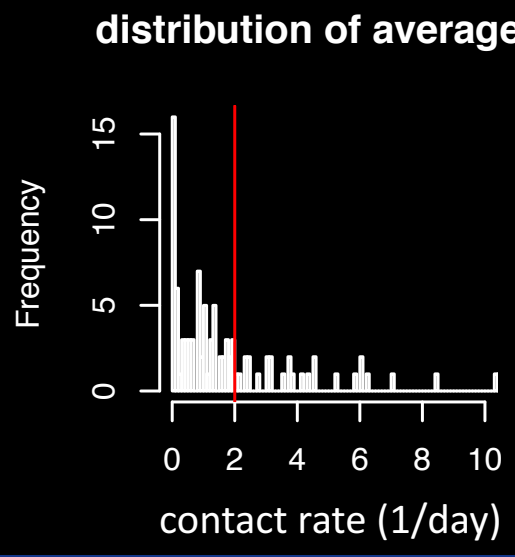
het.epidemic(beta.mean = 2, beta.var = .5, runs = 30, end.time = 10, pop.size = 100, gmma = 1)

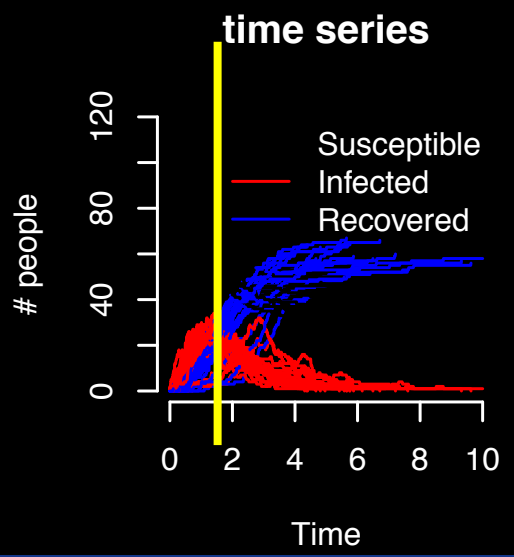
het.epidemic(beta.mean = 2, beta.var = 8, runs = 30, end.time = 10, pop.size = 100, gmma = 1)

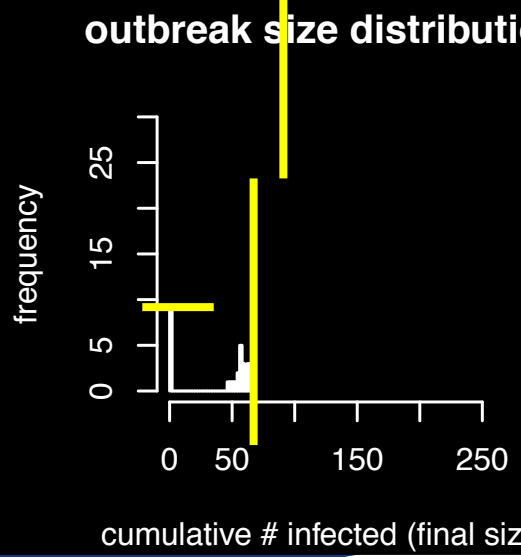






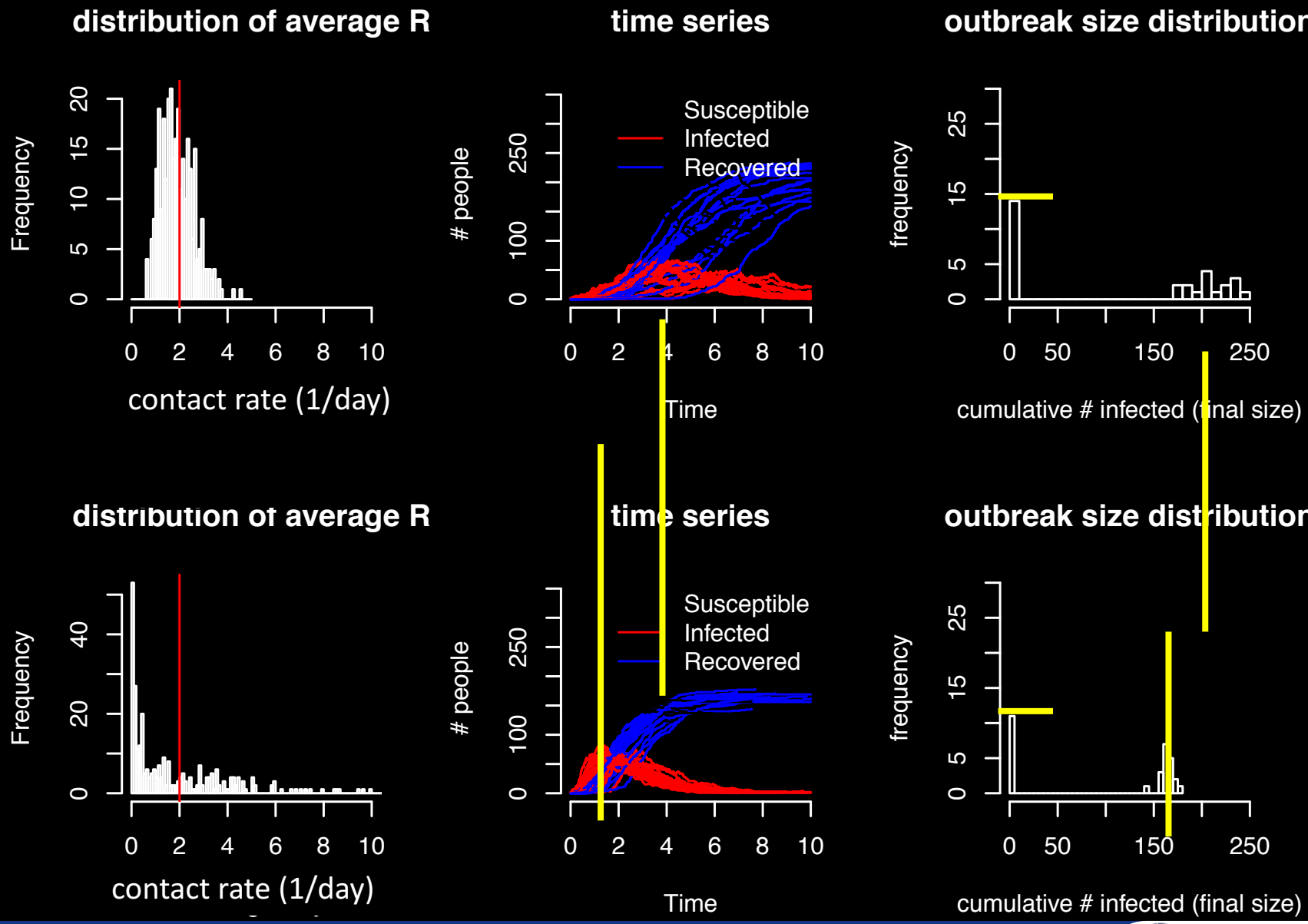






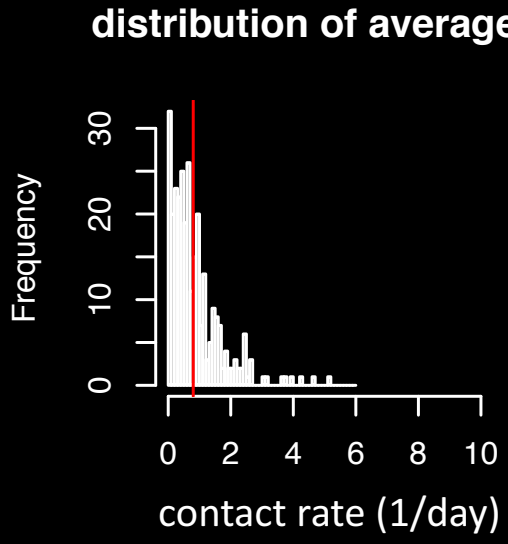
het.epidemic(beta.mean = 2, beta.var = .5, runs = 30, end.time = 10, pop.size = 300, gmma = 1)

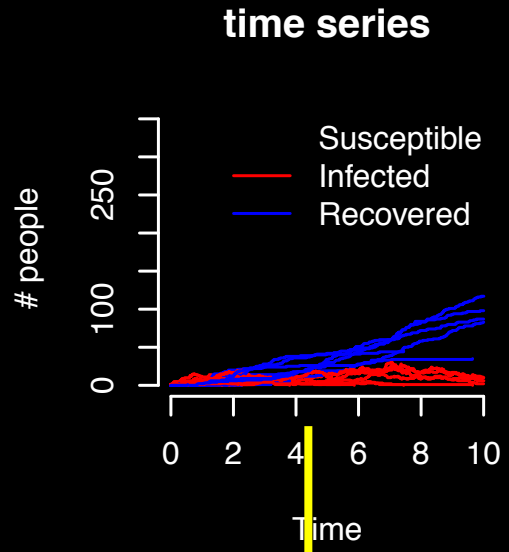
het.epidemic(beta.mean = 2, beta.var = 8, runs = 30, end.time = 10, pop.size = 300, gmma = 1)

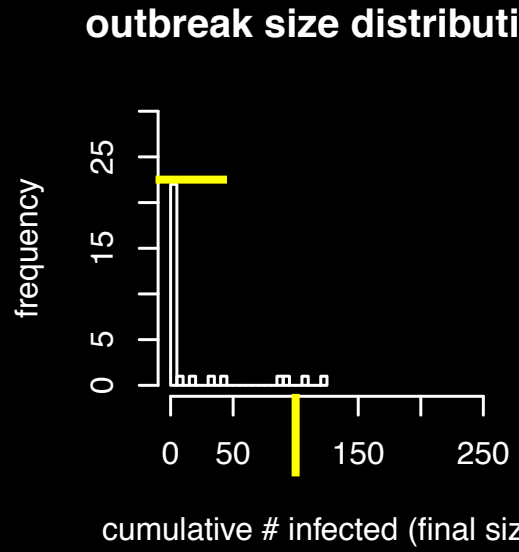


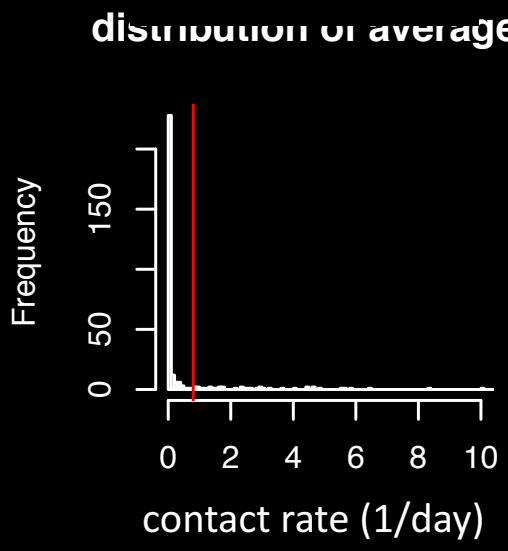
het.epidemic(beta.mean = .8, beta.var = .5, runs = 30, end.time = 10, pop.size = 300, gmma = 1)

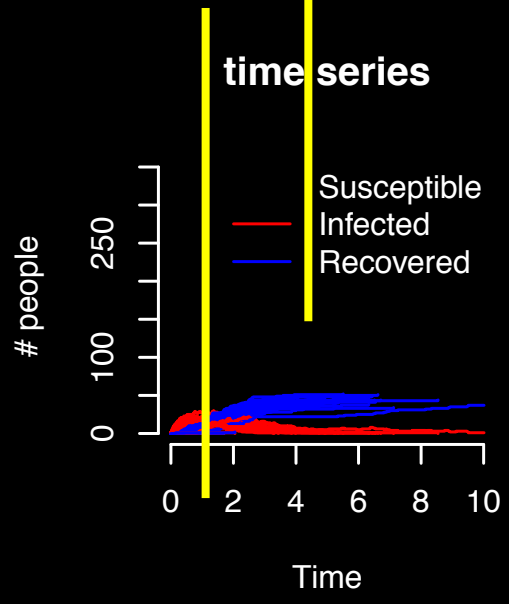
het.epidemic(beta.mean = .8, beta.var = 8, runs = 30, end.time = 10, pop.size = 300, gmma = 1)

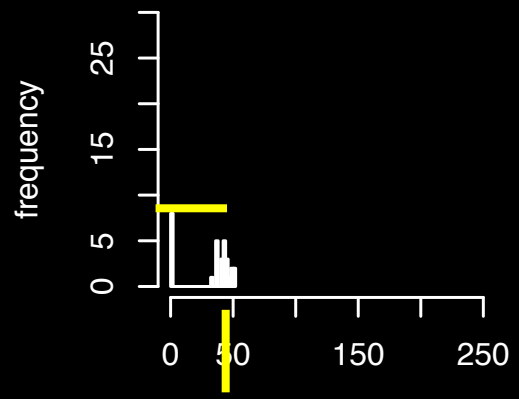












Summary

- Heterogeneity makes pathogens
  - more likely to invade (higher R0)
  - smaller epidemics for a given R0
  - faster epidemics
  - faster initial rate of increase