* The period of analysis is 16 weeks. This is the length of a typical semester. We expect a full reset of conditions and the number of infected cadets after this period.
* The model starts with two randomly infected cadets.
* 100% testing of cadets occurs prior to the start of every semester (hence only two positive cadets as a starting condition).
* Infections last two weeks.
* Infected cadets (infectees) may infect up to 1 other cadet per week.
* Infection opportunities occur randomly based upon the distribution of time spent in each activity category.
  + 25% of cadet time spent in class
  + 38% of cadet time spent in room
  + 25% of time spent in company area
  + 22% of cadet time spent with team (if club or corps squad) or in company
* Immune cadets exist, either as a function of starting conditions or recovery from an infection.
* USMA knows immune cadets and does not test them (critical to reduce test costs).
* If an infection opportunity targets an immune cadet, the opportunity fails and does not persist.
* 70% of cadets are asymptomatic. Asymptomatic cadets spread the disease at the same rate as symptomatic cadets.
* Symptomatic cadets receive a PCR test.
* PCR sensitivity (true positive rate) is 95%.
* PCR specificity (true negative rate) is 99%.

https://www.youtube.com/watch?v=KAmZe5D3v5I