

*Below are some of the many questions posted by viewers during the webinar. The questions listed were addressed by Professor Fefferman at the end of the webinar.*

How are Rates 1 and 2 estimated typically? Especially when we have a new disease outbreak, it could be hard to estimate those numbers from the real data.

The traditional dissemination system for new research (peer-review/publication) seems inadequately slow for the current situation. What are efficient ways to share very new results, potentially useful for the community (especially when the local administration may not believe in mathematical modeling)?

One of the big issues in our current situation is that we do not know the number of infected because of lack of testing. Could we form an enhanced model with # infected and # recorded infected with the number of test kits as a variable and then study how the # test kits impacts the outbreak?

The  $R_0$  computed for the Covid-19 is different from that of other similar coronaviruses - what causes these differences for similar viruses?

Once social distancing is "over", won't there be a peak again? Not as large but still a big peak nonetheless?

Is Rate1 always a constant?

With "zillions of factors" how do you measure and instill confidence that you haven't overlooked something significant from your model?

How complicated is the model the public health officials are using to predict how many days we are to practice social distancing? Do they use network model with ODEs or PDE? Do they have human behavior component?

At the beginning of the presentation, multiple types of modeling techniques (e.g., Agent-Based Modeling, Network Model, Statistical Models, etc.) have been introduced. Can you comment about the criteria for selecting the adequate modeling techniques?

When there are no susceptible people left, doesn't that just mean everyone is infected? Isn't that not good?

What models do you use for trying to get better  $R_0$  for the current outbreak?

With the current outbreak, what is your take about using face masks to decrease the rate of infection?