

SEIR Model Assumptions

The assumptions are in its name It divides the population into four compartments

Susceptible compartment: For those who are at the risk of being infected. In that model, I assume the whole population is at risk, as we don't have any record of that data.

Exposed compartment: For those who are already infected but asymptomatic. Which means they are already exposed to that disease but not infecting other people.

Infected compartment: For those people who are infected and symptomatic. People are coming from the Exposed compartment to this. This compartment contains people that are infected and spreading the infection in the community.

Recovered component: It counts the number of recovered persons from the disease.

Additional assumption:

1. This model assumes the population is closed/fixed. Which means there is no birth and death! Though it doesn't affect the model if we relax this assumption.
2. Those who are recovered from the disease further not being infected.
3. I assume 75% of the cases being reported, that's why I choose the model as a best fit. But sometimes it looks like that model with 90% reporting suggests the best fit. But I think 90% reporting would be too much for our country perspective.