Discussion 1:

The impacts of β and γ are that higher transmission rates (β) lead to faster disease spread while higher recovery rates (γ) reduce the max levels of infection and lead to a quicker end to the outbreak.

Seasonal Influenza has a moderate β of 0.3 and moderate γ of 0.1, so the infection spreads gradually, with a moderate peak.

COVID-19 has a higher β of 1 with still moderate γ of 0.1, so there’s a faster spread and larger peak in infections and slower recovery rate, relatively speaking.

Measles has a very high β of 2 and somewhat higher γ of 0.2, so there’s an even faster spread but now with a somewhat faster resolution.