

How can I prove thesis is true/math checks out?

Calibration/Validation → write ODE, use math optimizer, use historical data like Toronto 2018 heat wave to match curve beta and gamma (to get my mode's curve to match the historical data).

Use a different heatwave like Toronto 2020, plug in Beta and gamma from 2018, let model run and if model predicts 2020 hospitalizations, I proved it to Epidemiologists.

Counterfactuals → simulation engine, which is what ODE's are