Review of: "A Multi-factor Model of COVID-19 Epidemic in California"

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Potential competing interests: No potential competing interests to declare.

A good preprint on modeling COVID spread using various factors instead of the usual compartment models. Using correlation coefficients as weights is good.

The results look decent for estimating total cases and duration, but infection rate still seems random.

The paper reads okay - clear structure and explanations. Figures help show the main points.

Some ways to improve:

- More details on the COVID data - source, timeframe?

- Talk more about limitations - what's missing vs just using population factors? Individual behaviors? Policies?

- Compare to compartment models - how's the accuracy stack up?

- Next steps for adding factors and improving the model?

Overall, good start for researching multi-factor disease models further. The results lay the groundwork to keep exploring these ideas.