

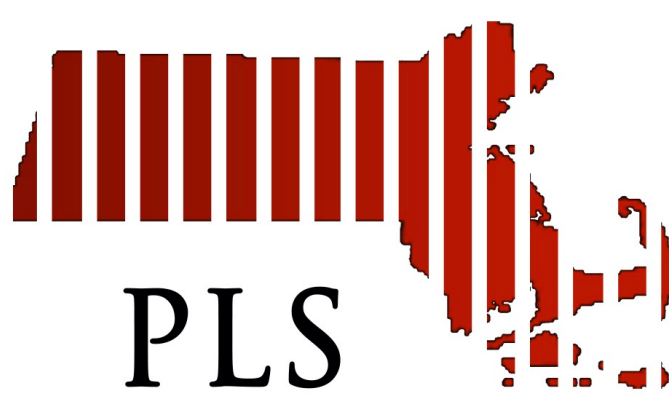
Is prison crowding associated with the risk of COVID-19 among incarcerated persons?

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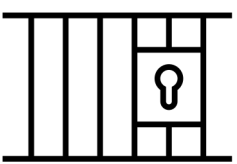
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Introduction

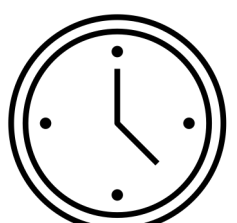
Starting in April 2020, Prisoners’ Legal Services of Massachusetts argued in court that the Dept. of Correction’s response to the COVID-19 pandemic was cruel & unusual punishment. PLS argued that decarceration was needed, but DOC responded that there was no research connecting crowding & infection levels.



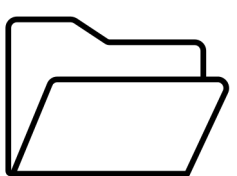
Methods



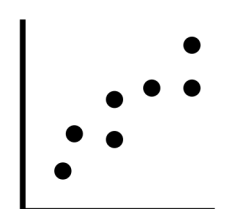
14 Massachusetts state prisons



April 21, 2020 – Jan. 11, 2021



5 publicly available data sources



Generalized estimating equation model

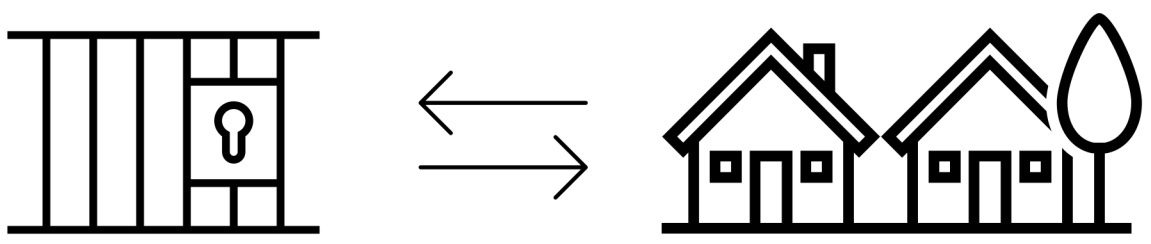
- **Outcome:** COVID-19 incidence rate
- **Explanatory:** Crowding level
 - **Definition #1:** The incarcerated population as a percent of the prison’s design capacity
 - **Definition #2:** The percent of incarcerated persons housed in single cells
- **Covariate:** COVID-19 incidence rate in the county where each prison is located

Finding #1: The rate of COVID-19 in MA prisons was 6.4x the rate in MA general population.



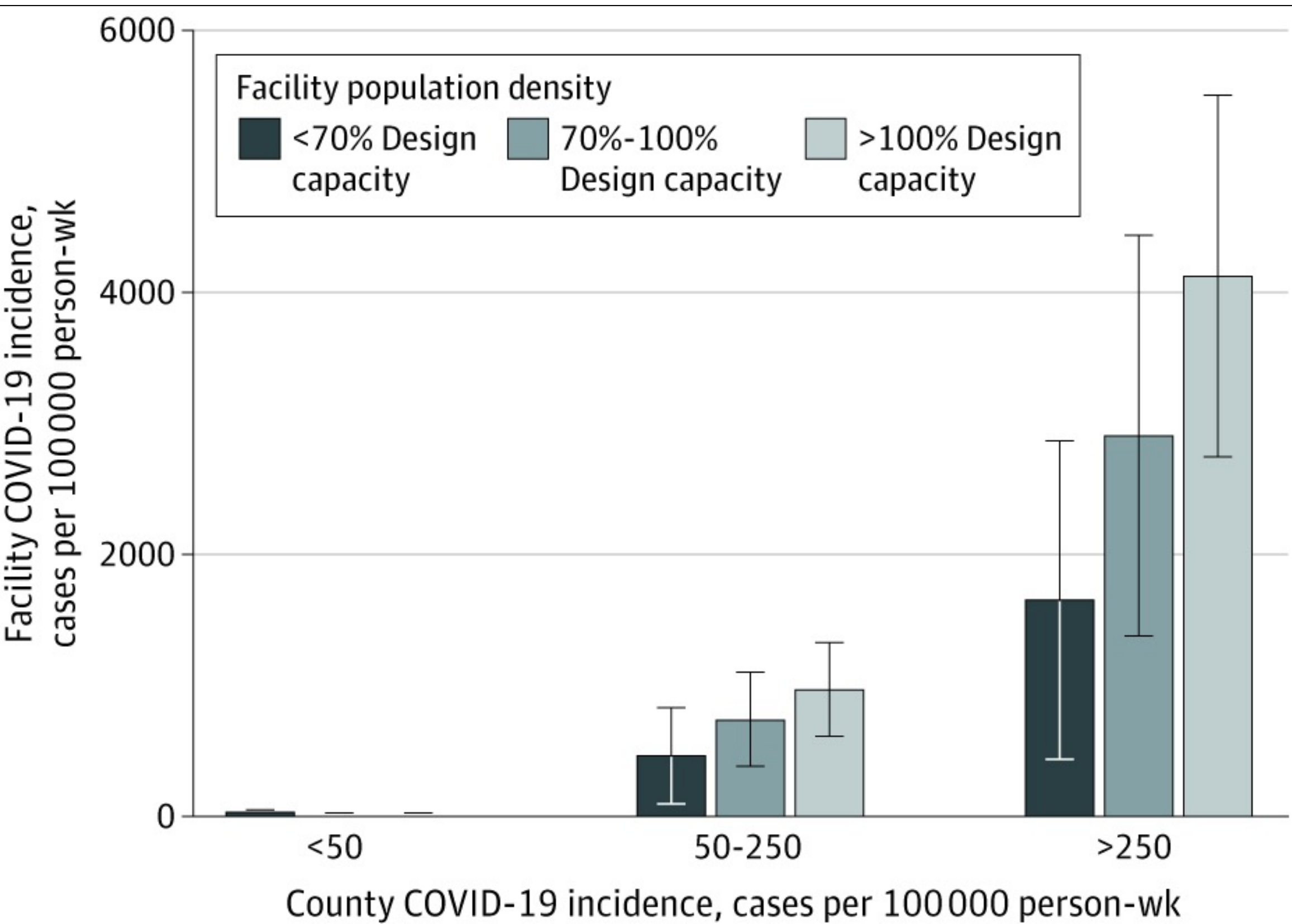
Finding #2: The rate of COVID-19 in prisons was strongly associated with COVID-19 in the local county.

- IRR for each increase of 10 cases per 100,000 person-weeks in the community: 1.06



Finding #3: COVID-19 incidence was higher in prisons where the incarcerated population was a larger percent of the prison’s design capacity.

- IRR for each 10-percentage-point increase in crowding: 1.14



Finding #4: COVID-19 incidence was lower in prisons where a higher proportion of incarcerated people were housed in single-cell units.

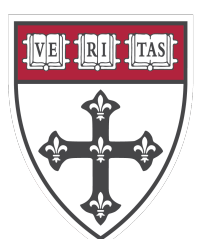
- IRR for each 10-percentage-point increase in single-cell units: 0.82

Conclusion

Decarceration must be explored as a way to reduce infection risk.



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