

# Decarceration: Impact on COVID-19 in Correctional Facilities and Community Needs after Release

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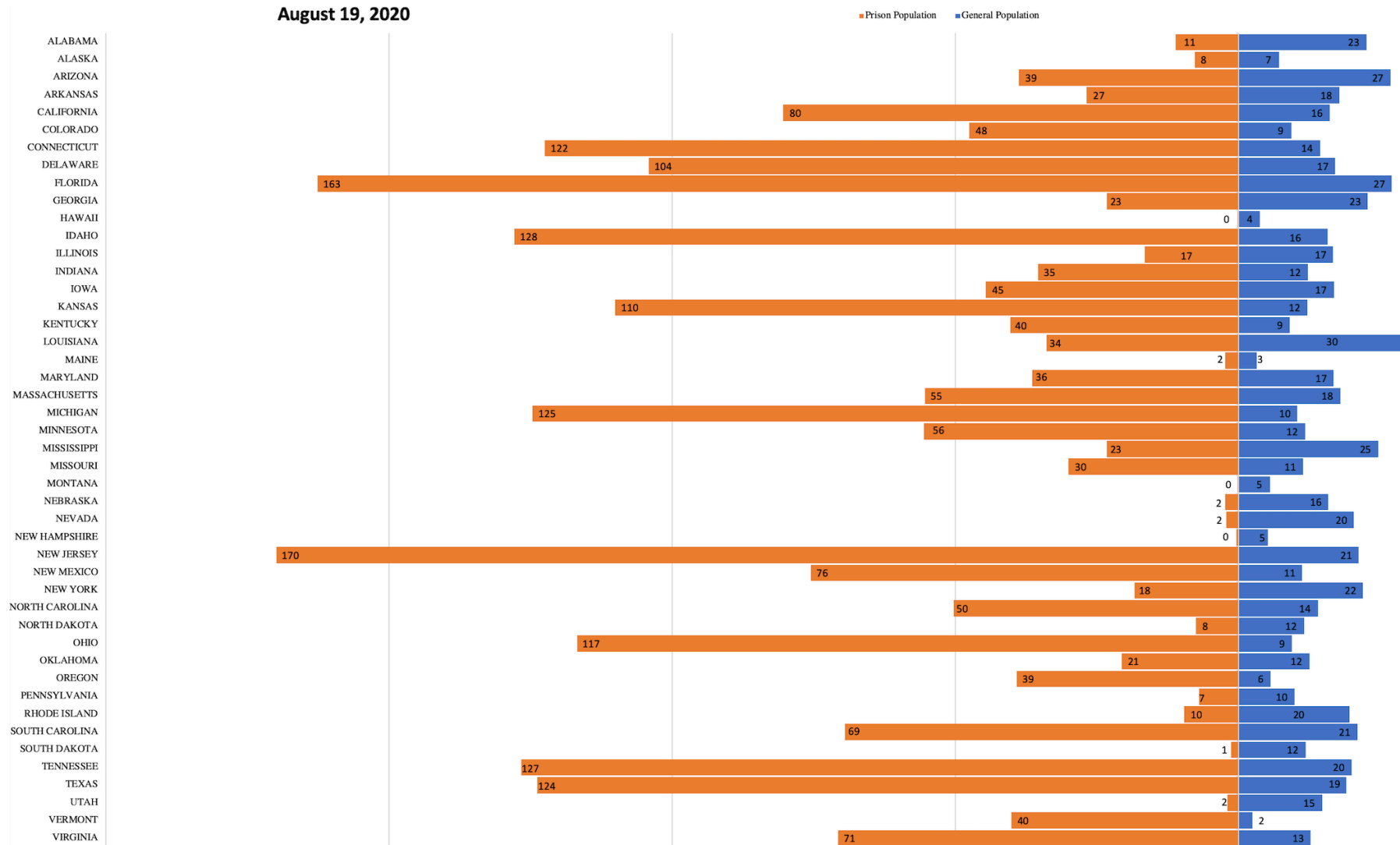


# COVID-19 CAN SPREAD QUICKLY IN CORRECTIONAL AND DETENTION FACILITIES

Strategies to stop the spread include:

- 1 Regular symptom screenings
- 2 Isolating people with symptoms
- 3 Physical distancing
- 4 Intensified cleaning
- 5 Infection control training
- 6 Disinfection of high-touch surfaces
- 7 Cloth face coverings

# Measuring COVID-19 Infection Rate in Prisons



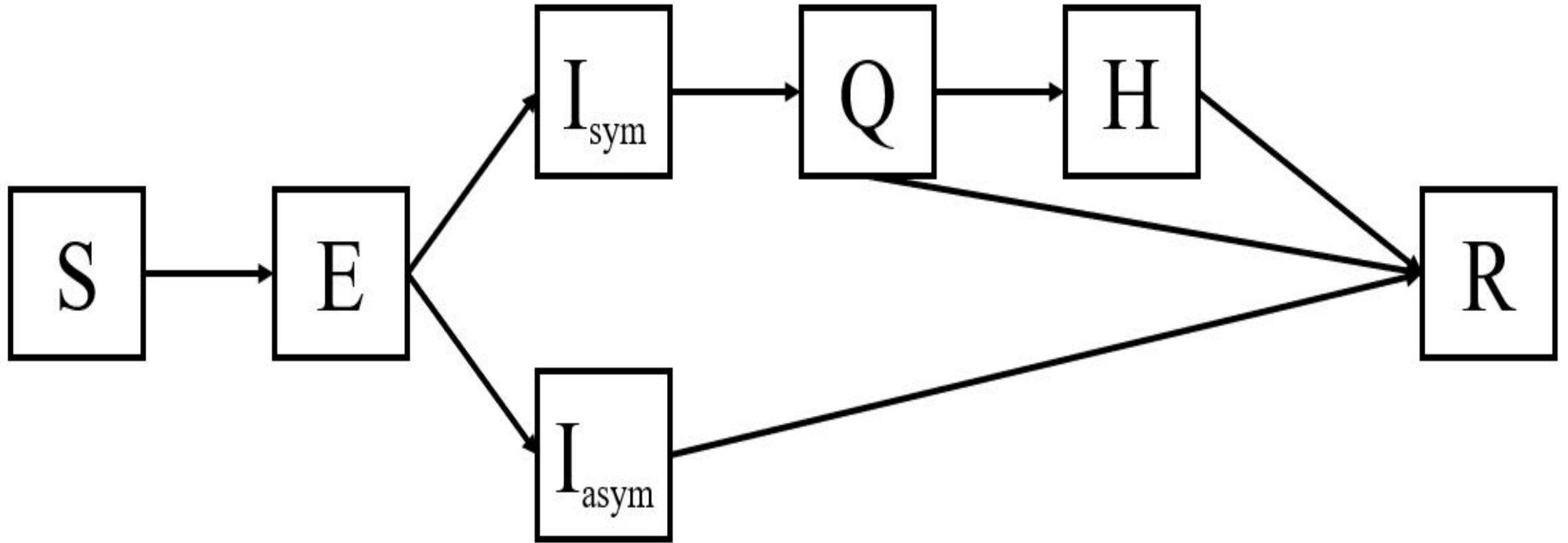


Figure 1. Structure of the disease transmission model. These disease states included susceptible ( $S$ ), exposed ( $E$ ), infected symptomatic ( $I_{sym}$ ), infected asymptomatic ( $I_{asym}$ ), quarantined ( $Q$ ), hospitalized ( $H$ ), and recovered ( $R$ ) individuals.

|                                    | Time Range in Days | $\beta$<br>(95% CrI)  | $R_0$<br>(95% CrI)     | Marginal Reduction in $\beta$ and $R_0$ | Expected Total Symptomatic Cases, Day 83*<br>(95% CrI) | Expected Total Hospitalizations, Day 83*<br>(95% CrI) | Expected Total Deaths, Day 83*<br>(95% CrI) | Expected Total Cases, Day 200*<br>(95% CrI) |
|------------------------------------|--------------------|-----------------------|------------------------|---|--|---|---|---|
| <b>1: Initial outbreak</b>         | 1 – 11             | 1.89<br>(1.44 - 2.44) | 8.25<br>(5.01 - 12.90) |   | 3,867<br>(2,742 - 5,044)                               | 541<br>(384 - 706)                                    | 38<br>(29 - 47)                             | 6,372<br>(6,318 - 6,437)                    |
| <b>2: Depopulation</b>             | 12 – 17            | 0.83<br>(0.66 - 1.06) | 3.58<br>(2.46 - 5.08)  | 56%                                     | 2,520<br>(1,940 - 3,088)                               | 353<br>(272 - 432)                                    | 24<br>(20 - 28)                             | 4,055<br>(3,666 - 4,294)                    |
| <b>3: Increased single celling</b> | 18 – 36            | 0.41<br>(0.30 - 0.56) | 1.72<br>(1.41 - 2.12)  | 51%                                     | 1,447<br>(1,224 - 1,654)                               | 203<br>(171 - 232)                                    | 12<br>(11 - 13)                             | 2,950<br>(2,331 - 3,521)                    |
| <b>4: Asymptomatic Testing</b>     | 37 – 83            | 0.11<br>(0.06 - 0.20) | 0.45<br>(0.32 - 0.59)  | 73%                                     | 642<br>(592 - 692)                                     | 90<br>(83 - 97)                                       | 3.9<br>(3.6 - 4.1)                          | 1,121<br>(904 - 1,433)                      |

**Intervention Effects: Estimated Transmission Rates ( $\beta$ ), Effective Reproduction Ratios ( $R_0$ ), and Disease Cases for each Outbreak Phase**

\* Assuming the value of  $\beta$  estimated for this intervention phase occurs during all subsequent days.



#### KEY CHALLENGES:

- Huge system of prisons and jails that operate differently
- Little funding to offer the necessary discharge planning and testing
- Community health system unprepared to offer needed services
- No uniform reporting requirement

#### KEY OPPORTUNITIES:

- Consensus around the health risks of incarceration
- More intentional relationships b/w health departments and correctional facilities
- Community health and correctional relationships
- Centering the voice of incarcerated people and family
- Studying equity impact of policy decisions