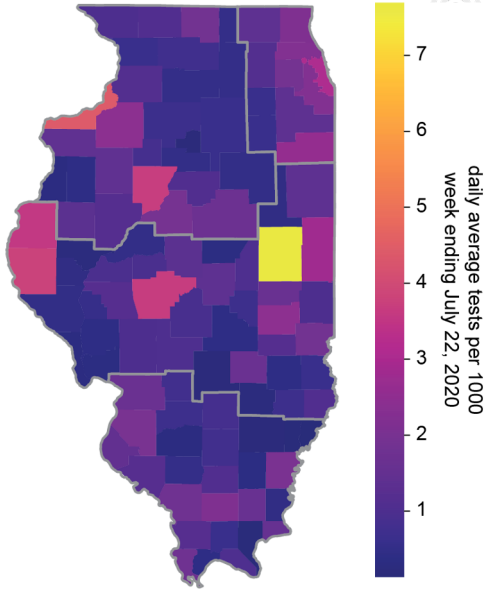
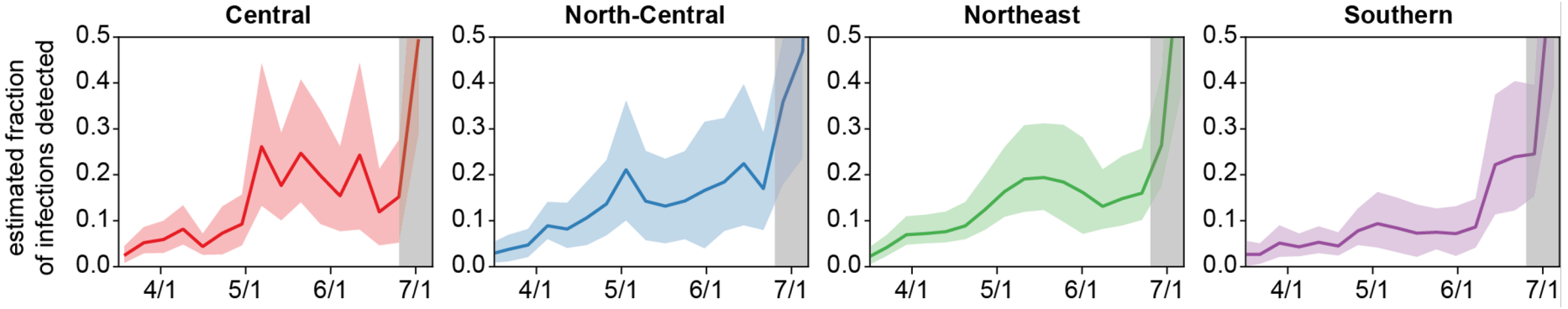
- Sustained increases in hospitalization in the Central, Southern, and North-Central regions are troubling. We predict that R(t) currently exceeds 1 in these regions and that, if action is not taken, ICUs will reach capacity in the Central region by September 15.
- Near real-time estimates of R(t) supplied by sentinel surveillance (i.e., trends in newly symptomatic outpatient cases) provide the best basis for nimble policy. When R(t) is well below 1, it is safe to relax mitigation. When it exceeds 1, more interventions are needed. Other measures are lagged or less reliable.

Northwestern University

- Hospital census in North-Central, Central, and Southern Regions all continuing to show increase, indicating $R_t > 1$
- While testing has increased, we're still grossly underdetecting the true burden of infection, especially in the south (bottom)
- Intensity of testing is very heterogeneous. Champaign County is probably throwing off test positivity rate estimates in Covid Region 6 (right), underscoring why TPR is not a good indicator





gray bar: overestimation due to lagged reporting of deaths

July 25, 2020

Argonne NATIONAL LABORATORY

- The median of the simulation generated R_t for the Chicago region is now > 1, indicating that there is the potential for an increase in infections based on the simulation trajectories most closely tracking the hospitalization and death trends observed.
    - We continue to note the need for increased messaging on the importance of protective behaviors, especially given this trend.
- In addition to targeting geographic regions of increased infection activity, it may be helpful to consider region-specific messaging in order to account for the heterogeneity of the reasons behind the lack of adherence to protective behaviors across the state.

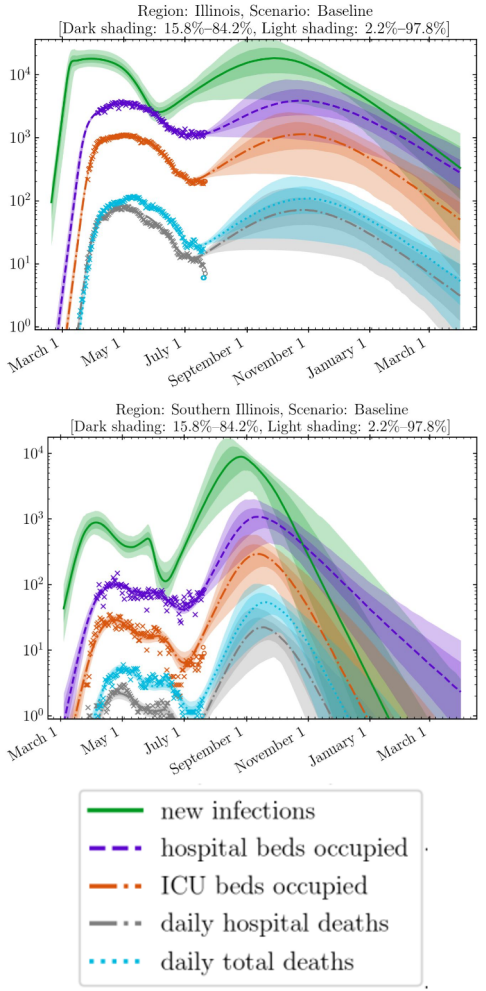
ILLINOIS

R > 1 across the State and hospital data show an increasing trend with a predicted second wave

- Hospitalizations and ICU are trending up sharply in Southern, Central, North-Central regions.
  - North-eastern and Chicago are flattening but not yet actually rising.

- Overall State is showing a flattening trend that is predicted to lead to a second wave peaking in Oct/Nov 2020

- Southern region is predicted to show a second wave that is higher than the very low first wave experienced in May 2020



July 25, 2020