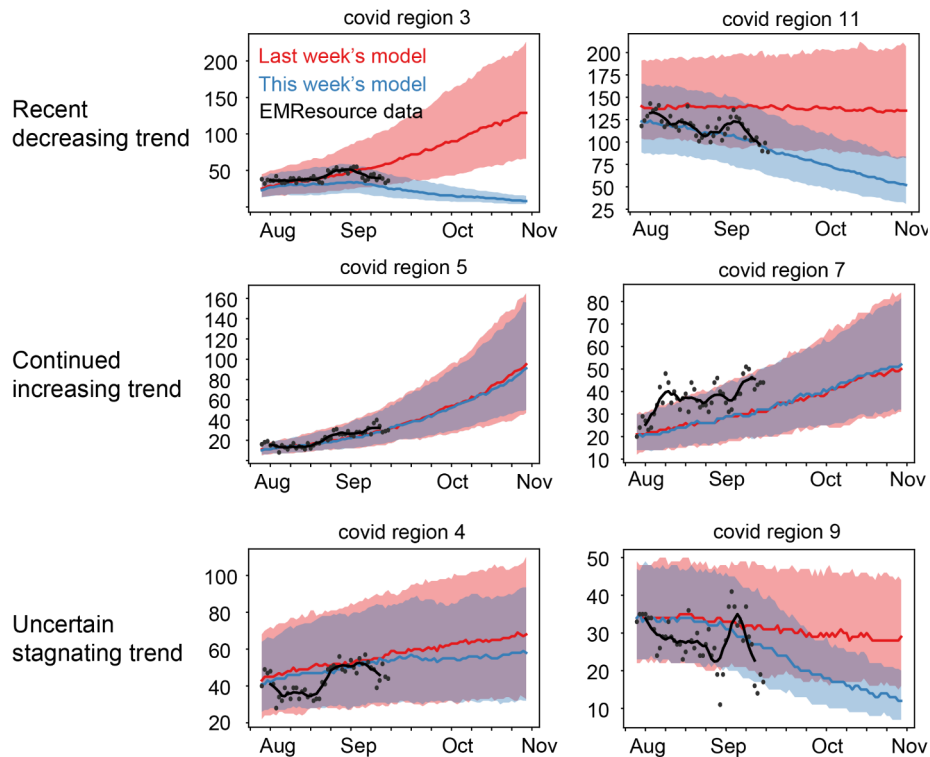


- **COVID regions 4 and 5 remain concerning.** We estimate that R_{eff} remains at or above 1 in these regions, indicating that the epidemic continues to grow.
- **Sentinel outpatient surveillance would provide the clearest and earliest signal of changes in transmission rates (R_{eff}), especially when transmission is focused in younger age groups.** Recent spikes in cases caused by backlogs in processing as well as uneven sampling across the population make it difficult to infer underlying trends in transmission from standard case data. We have not estimated R_{eff} using the most robust methods this week due to uncertainty in interpreting case data. Sentinel surveillance at outpatient sites would allow us to provide a clearer picture of how transmission is changing across the state.
- **Representative serological surveys** to estimate the past infection in different populations (stratified by age, race/ethnicity, location, etc.) could improve forecasts, evaluate the success of testing and interventions in different groups, and help plan efficient and equitable vaccine allocation.

Northwestern University

- Recent trend in non-ICU census data **suggest that R_t dropped below 1 in region 3, 9, and 11**, if decrease in non-ICU census reflects at least some decrease in transmission
- In all other regions R_t remains ≥ 1** , especially worrying are region 5 and 7 which show continued increase in non-ICU data.
- In region 4 the recent trend suggest mitigation measures might have reduced transmission, however it is too early to make conclusions about the impact.
- These trends are **highly uncertain** because they depend on noisy hospital data.
- Despite the heterogeneous trends across the state, **mitigation measures need to be at least maintained** to ensure continued downward trend, and intensified to turn around increasing trends.

Predicted non-ICU census in selected regions



HOSPITALIZATIONS

- We ran **scenarios** to understand the interactions between school reopening levels (Rows 1-3) and behavior relaxation (Columns A-C) in the 18-40 age group on hospitalizations
- We tried to capture the uncertainty in how people will behave, particularly as activities move indoors as colder weather arrives
- What we observe is that, if the 18-40 year old age group maintains self protective behaviors, there are negligible effects on hospitalizations across school reopening levels (Column A, Rows 1-3)
- However, as these behaviors are relaxed (Columns B, C), downward trajectories (Cell C1) can flatten (Cell C3) as reopening levels increase
- Due to the sensitivity of the outcomes on unknown future behavior trends, **these results suggest it may be necessary to maintain low levels of school age interactions throughout the Fall**

School Reopening Levels



1 (15%)

2 (30%)

3 (45%)

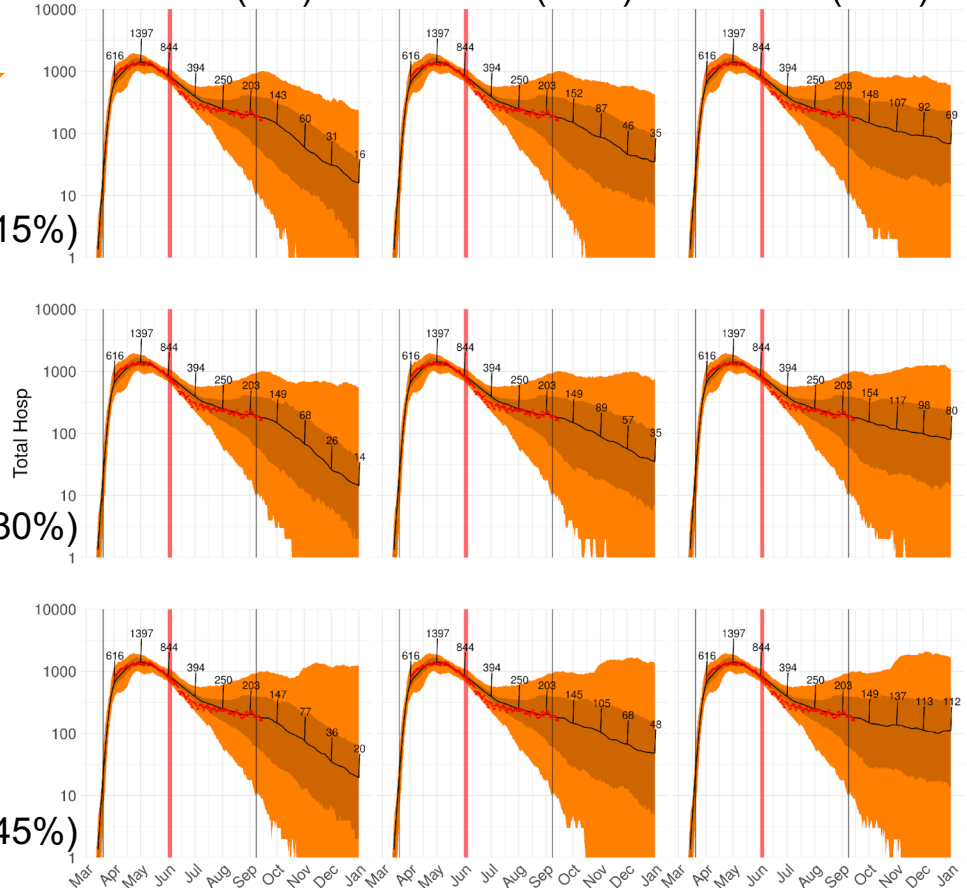
Levels of behavior relaxation for 18-40 year olds starting Sept 18



A (0%)

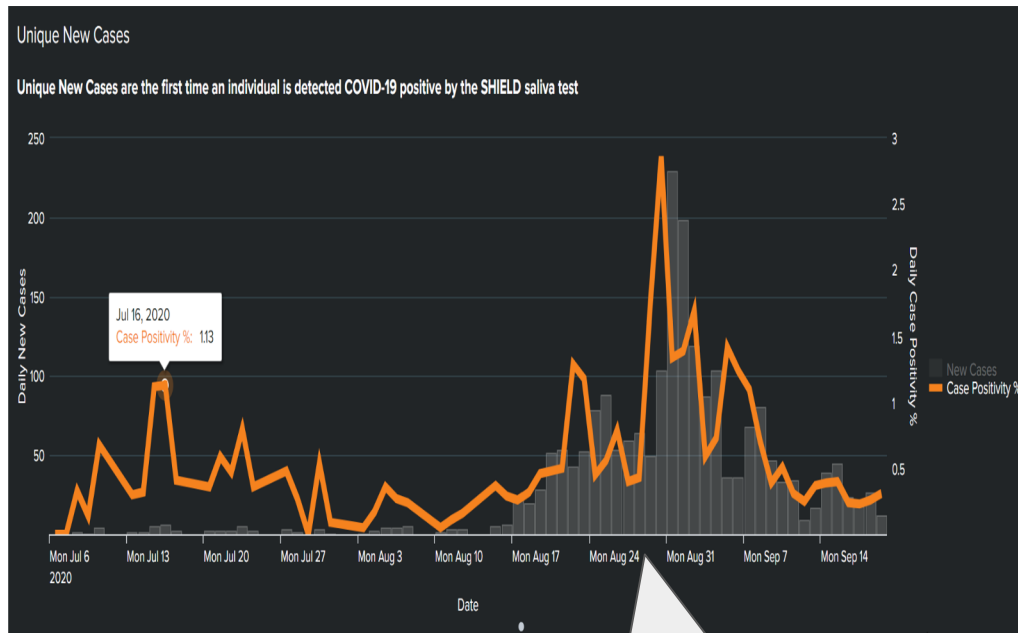
B (25%)

C (50%)



ILLINOIS

- Currently, no risk of exceeding hospital/ICU capacity in the next 4 weeks
- The spike in positivity to 2.8% at UIUC (see right plot) arose from non-compliance with public health district. It was brought under control mainly by a two-week-long ban on parties & increased enforcement.
- At its peak the spike was still a factor of ten smaller than at other institutions, and was detected by our high-throughput deep screening.
- The UIUC outbreak resulted in no hospitalizations and did not spill over to IDPH COVID region 6



After a peak of 2.8% the test positivity at UIUC is hovering around 0.3% during the past week