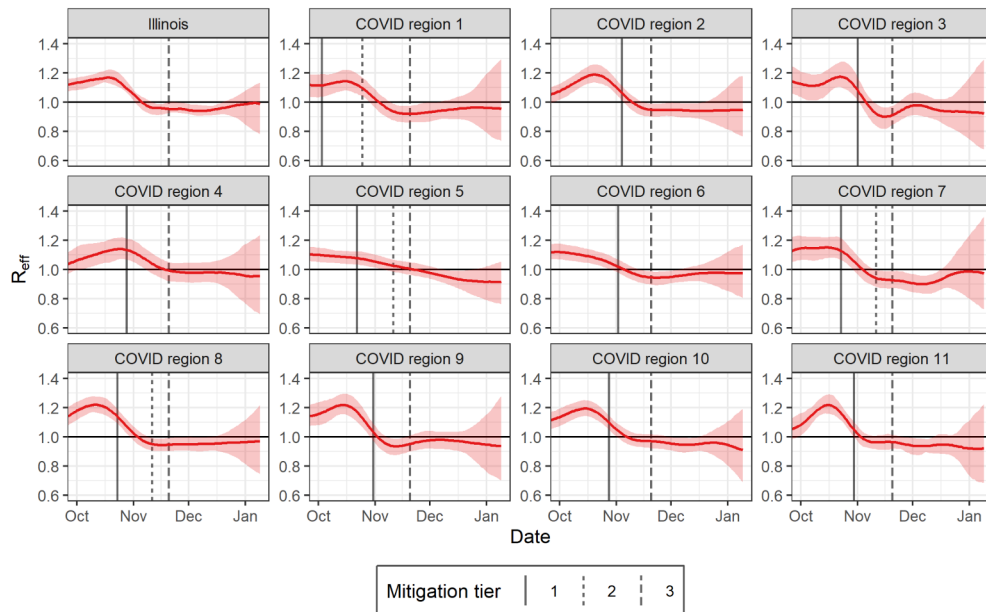
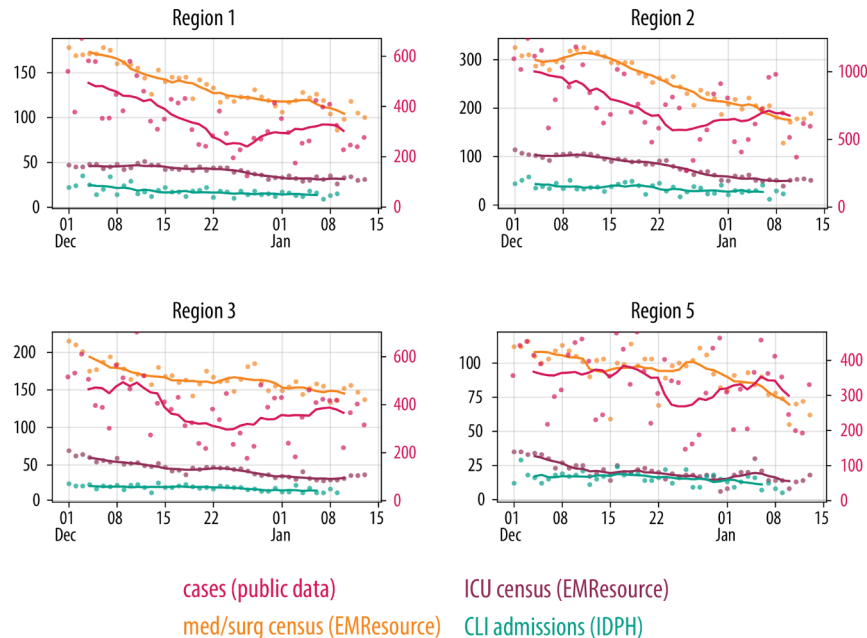


- In all regions,  $R_{\text{eff}}$  was at or below 1 as of January 9, indicating that **transmission was steady or declining**. However, the ICU census in regions 3, 4, and 7 suggest recent upticks in transmission.
- **We anticipate large increases in transmission in the near future**, partly due to the spread of new variants, such as B.1.1.7
- **Rapid distribution of first vaccine doses to older age groups is critical** to reduce mortality and mitigate future spread. Even with imperfect efficacy, primary doses reduce disease severity and probably reduce transmission.



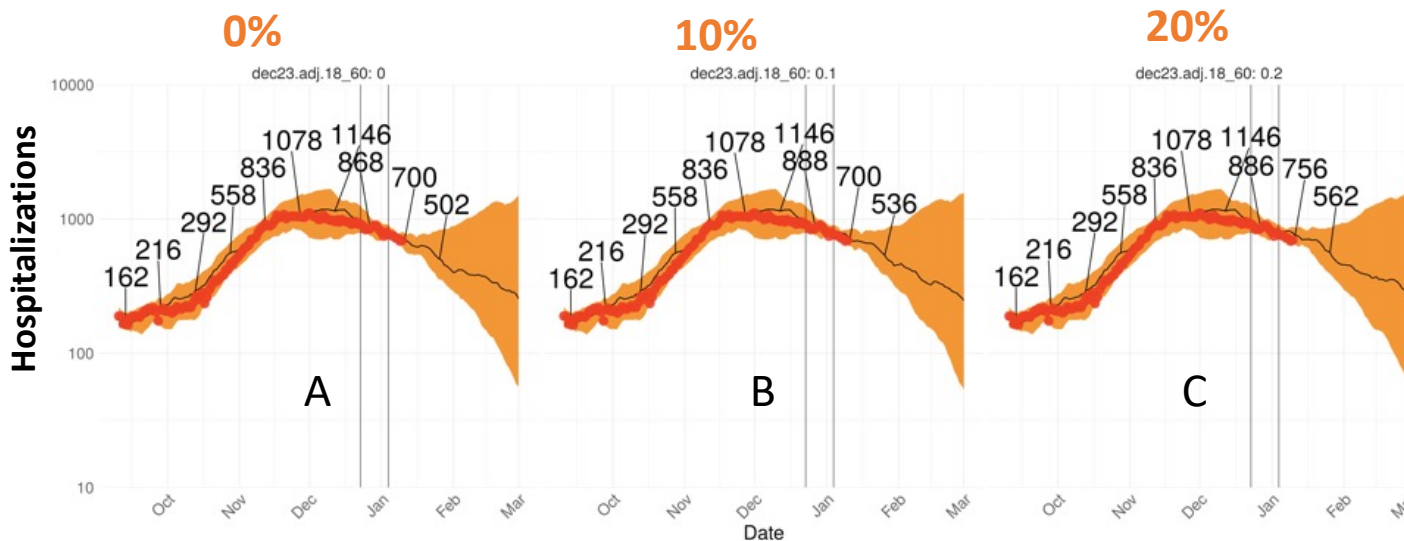
- Vaccine rollout must be urgently expanded to give as many first doses as possible into our older population (65+) as quickly as possible.
- Our mitigation measures may not be able to contain the new B.1.1.7 variant, and vaccination may be the only way to prevent a huge death toll.
- The decline in test positivity rate over the last week reflects testing rates bouncing back after a lull over the holidays, including routine testing picking back up again.
- Testing is still lower than November levels, so we expect trends in test positivity to continue to not necessarily reflect true trends in transmission.
- Hospital occupancy still has a long way to go before getting down to summer levels.
- **Quality surveillance with minimal lagging is critical to quickly identify areas with increasing transmission.**

## Cases and hospital trends in regions eligible for relaxing mitigations on Jan 15



# What might a Holiday Effect Look Like? Updated 01/15/20

## Varying Holiday Effect: Decline in Protective Behavior



## Current Trends and Holiday Gatherings

- We studied the effect of the expected decline in protective behaviors around the Christmas holiday, calibration based on updated data as of January 10.
- We ran three scenarios: A: no decline, and B and C with temporary 10% and 20% declines in protective behaviors for Dec 23-Jan 4, resulting in increased transmission for individual contacts.
- Median hospitalizations continue to decline from the peak of 1,146 in mid-December to under 600 by Feb 1.
- As observed in prior investigations, temporary declines in protective behaviors do not tend to modify the overall hospitalization trajectory.

Vertical lines are dates **12/23** and **01/04**, the relaxation period. Results are for Chicago, Region 11. Note, results are on logarithmic scale.