

November 27, 2020

MEMO

TO: Steven Bailey

Chief, Bureau of Public Health Statistics

Arizona Department of Health Services

FROM: Members of the Covid-19 Modeling Team at the University of Arizona

RE: Covid-19 Hospital Crisis and Recommended Mitigation Interventions

Following Wednesday's UA / ASU / NAU / ADHS COVID-19 Modeling Consortium meeting, our team discussed current conditions and the short-term forecasts. No matter what actions are taken, Arizona will experience a hospital crisis in the coming weeks. However, if action is not immediately taken, then it risks a catastrophe on a scale of the worst natural disaster the state has ever experienced. It would be akin to facing a major forest fire without evacuation orders.

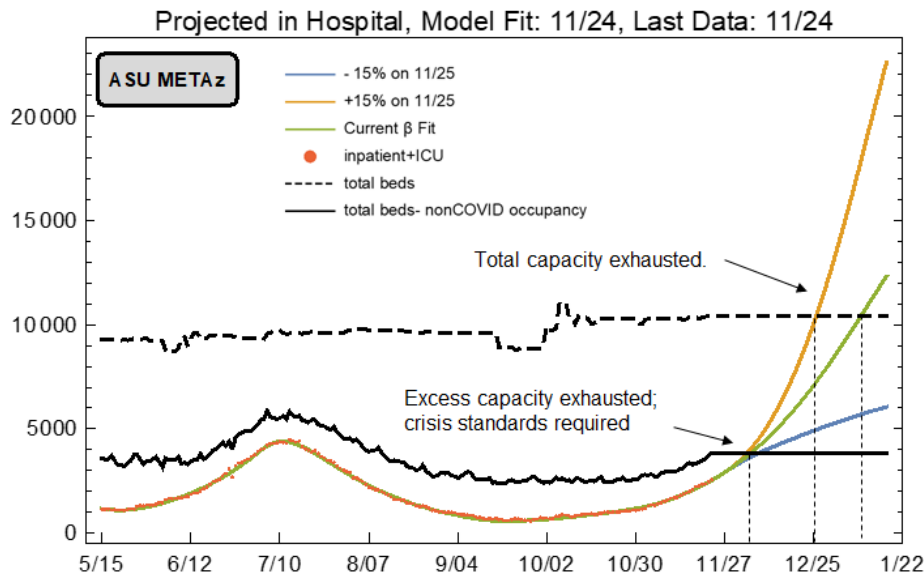
If nothing is done, hospitals will be forced to decide who gets care and who does not. Importantly, this will impact all Arizonans not just those with Covid-19 disease. Those with serious chronic medical conditions like heart disease, diabetes, stroke, and cancer will also have to forego or receive limited care. The COVID-19 surge means hospitals will lack the physical resources and personnel to provide timely care, and more Arizonans will die of heart attacks, strokes, and injuries from car accidents.

Any delay to reverse the current trajectory of Covid-19 viral transmission will cause more needless illness and deaths. Given the imminent availability of a vaccine, actions not taken will result in preventable tragedies - people who could have been saved by a vaccine in the near future will die or suffer long-term disability.

As you are aware, our ASU counterparts updated their most recent projections of cases, hospitalizations, and deaths based on another recent increase in transmission rates. Their updated model, without consideration of holiday travel, predicts that Covid-19 hospitalizations will:

--- exceed current ICU and general ward capacity by **early December**. This assumes current levels of transmission continue, non-COVID hospital utilization remains unchanged, and no additional public health measures are implemented.

--- will exceed Arizona's TOTAL hospital capacity by **late December**. There would be no additional availability to provide care for routine, urgent, or emergent non-Covid care.



We recommend the following:

--- Immediate implementation of a statewide mask mandate with provisions that allow local enforcement including fines on non-compliant businesses and individuals. While some municipalities have taken this action, a statewide mandate ensures consistency and strengthens compliance.

--- A state-wide shelter-in-place ordinance beginning Tuesday, December 1st extending through Tuesday, December 22nd. This order would include closures of indoor dining and bars. If a shelter-in-place order were put in place **today**, we could hold the limit of new cases below 6200 cases/day which is twice the current rate. Without it, cases will quickly surpass this amount and cause even more disruption.

---- To alleviate economic hardship imposed by the shelter-in-place order, the state should pass emergency COVID-19 relief measures for small businesses and families affected by closures. It should also undertake additional measures to alleviate food insecurity, to prevent evictions and foreclosures, and to protect access to health services.

--- If a state-wide mandate is not enacted, county and municipal leaders should be granted greater authority to enact their own shelter-in-place orders, business closures, and restrictions on public gatherings.