

COVID-19 BRIEF

Changes in COVID-19 Cases,
Hospitalizations, and
Death Projections

UAMS

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The College of Public Health (COPH) publishes periodic briefings designed to update the 15- and 30-day COVID-19 projections between monthly *UAMS COPH COVID-19 Reports*. Briefings will also be published when cases, hospitalizations, or deaths are changing rapidly in times between the monthly reports.

Data used to prepare this briefing are from the Arkansas Department of Health on Oct. 24, 2021.

Key Findings. COVID-19 cases, hospitalizations, and deaths are growing at a slower rate than in late July and early August. The pandemic appears to have entered a steady state, albeit at relatively high levels, and is no longer declining in Arkansas. Figures illustrating projections are shown on the next page.

In summary:

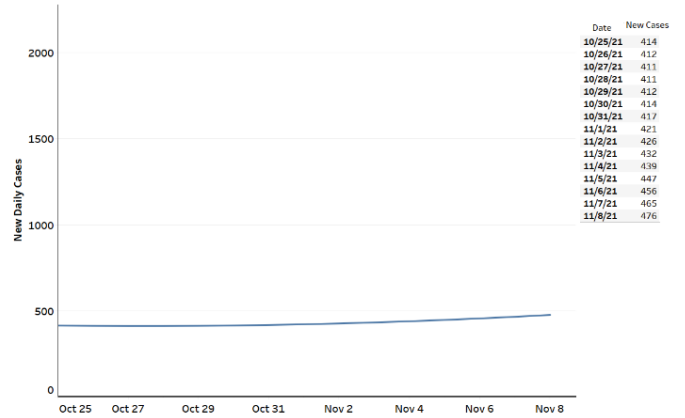
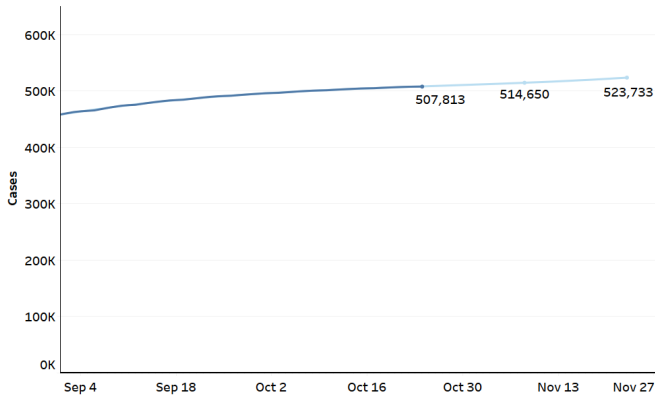
- The 15-day model of COVID-19 cases shows a flat projection, much different than the sharply declining projection of two weeks ago.
- The models are forecasting 6,837 new COVID-19 cases by Nov. 8 and 15,920 new cases by Nov. 23. New daily cases are expected to average around 500 per day.
- The 7-day moving average of cases is similar to what was reported in July, or around 500 new cases per day.
- The projection is showing a slightly increasing trend in hospitalizations. Again, this is different than the declining trend projected two weeks ago.
- The models show about 321 individuals will be newly hospitalized by Nov. 8 and 970 by Nov. 23. Daily hospitalizations will average around 30 per day.
- The 15-day model is showing an increasing trend in COVID-19 deaths over the next two weeks.
- The models are forecasting 108 new COVID-19 deaths by Nov. 8, or around seven deaths per day.

When reviewing the projections of cases, hospitalizations, and deaths, it is important to keep in mind that projections are indications of trends. Exact numbers shown by the projections should not be expected on a given day.

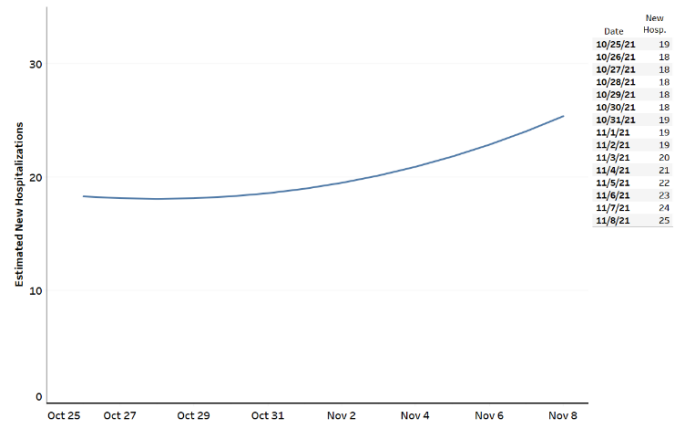
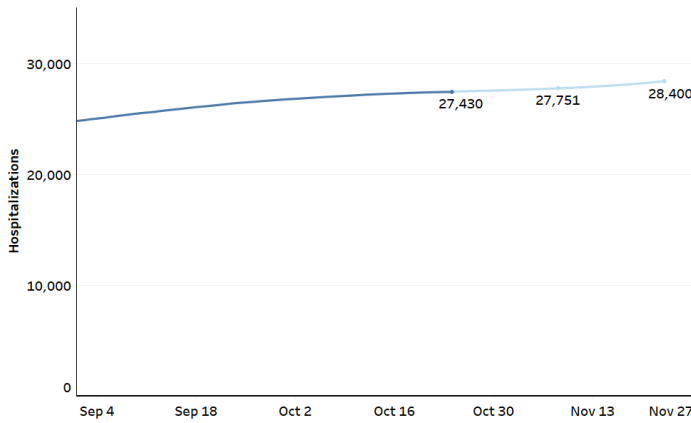
The COVID-19 projections reported here are very indicative of a wave model of disease transmission. The current pandemic would seem to be in the trough of a wave, with the trend in cases being almost flat with slight daily fluctuations. Despite being in a trough, the state will have around 500 new COVID-19 cases per day. This is a fairly high level, which could become a problem. The Delta-plus variant of the virus has been shown to be more transmissible than Delta and is known to be circulating in the United States and possibly Arkansas. If Delta-plus becomes the dominant COVID-19 variant in Arkansas, then a high rate of daily transmission could become the springboard for the next COVID-19 surge.

The increasing number of new COVID-19 hospitalizations and deaths, although not high when compared to the August/September surge, is most likely indicative of the extremely virulent character of the Delta variant. A larger proportion of those infected with Delta are likely to be hospitalized or die from the virus than those infected with Alpha. These trends, however, are recent and will need to be watched to determine their significance.

Figures 1a & 1b. 30- and 15-day forecasts and daily changes for COVID-19 Cases



Figures 2a & 2b. 30- and 15-day forecasts and daily changes for COVID-19 Hospitalizations



Figures 3a & 3b. 30- and 15-day forecasts and daily changes for COVID-19 Deaths

