

# 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 COVID-19 forecasts and projects reported in the *UAMS COPH COVID-19 Reports*.

Data used to prepare this briefing are from the Arkansas Department of Health reported throughs September 27, 2021.

**Key Findings.** COVID-19 cases, hospitalizations, and deaths are growing at a slower rate than in July and August.

- The models are forecasting 6,145 new COVID-19 cases by Oct. 11 and 9,465 new cases by Oct. 26. New daily cases are expected to remain moderately high, averaging nearly 316 per day.
- The 7-day moving average of cases in Arkansas, as reported by USAFacts.org, is the same as it was on Dec. 31, 2020.
- We expect 834 new hospitalizations by Oct. 11 and 1,311 by Oct. 25. Daily hospitalizations are expected to average 45 per day.
- The average expected number of newly hospitalized individuals per day is 26. We estimate there will be a rapid decline in newly hospitalized individuals by the end of October. This is consistent with the trend that is beginning to emerge in the past week.
- The models are forecasting 361 new COVID-19 deaths by Oct. 11 and 533 new deaths in the next 30 days.
- We estimate 14 COVID-19 daily deaths per day across the next 30 days, decreasing by a third during that time.

As some will recall, we forecast Arkansas would cross the 7,000 COVID-19 deaths on Aug. 31. The actual number of deaths on that date was 6,934. The models are forecasting the state will cross the 8,000 deaths threshold around October 9<sup>th</sup>.

The current pandemic appears to be on the downside of an exponential growth curve, and will likely continue to decline until it finds a steady-state similar to April and May of 2021. The real question now is: will the pandemic behave in a wave fashion with repeated surges and declines, with each surge having a smaller crest or simply reach a low point and remain there.

Figure 1a. 15- and 30-day forecasts cumulative COVID-19 cases

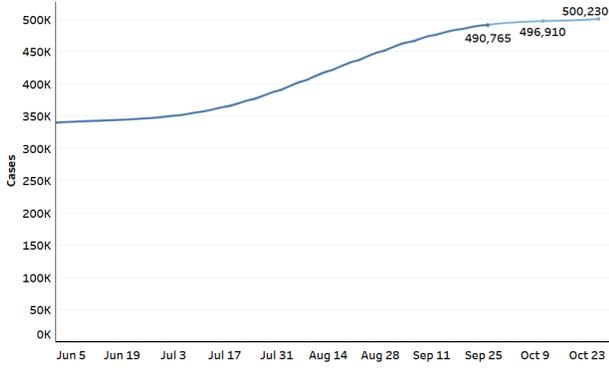
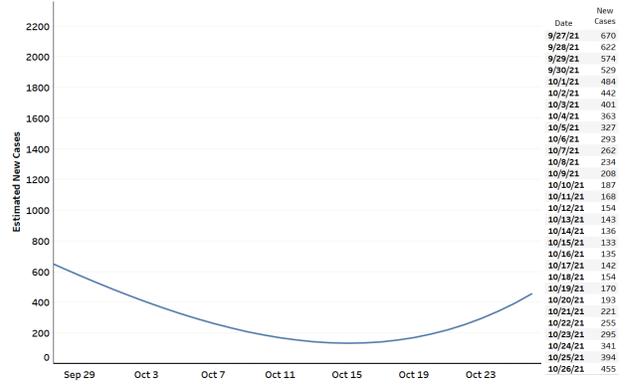
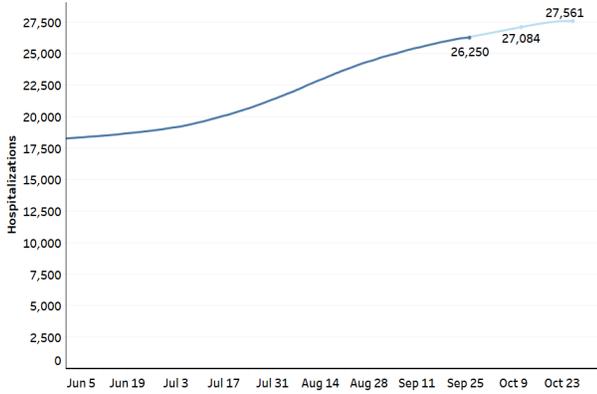


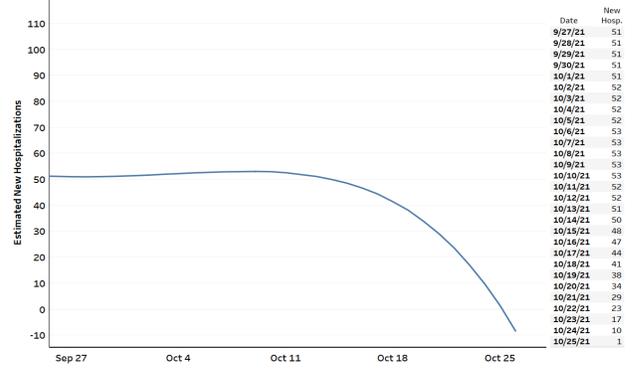
Figure 1b. Forecast daily COVID-19 cases



Figures 2a. 15- and 30-day forecasts of cumulative COVID-19 hospitalizations



Figures 2b. Forecast daily COVID-19 hospitalizations



Figures 3a. 15- and 30-day forecasts cumulative COVID-19 deaths

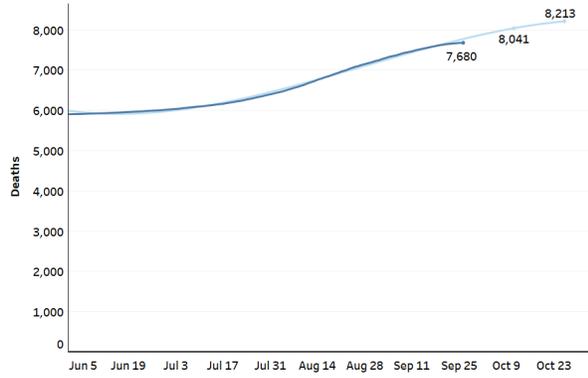


Figure 3b. Forecast daily COVID-19 deaths

