

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 9th.

The current pandemic appears to 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

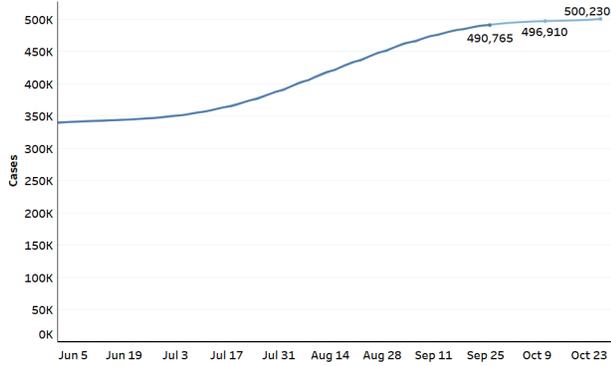
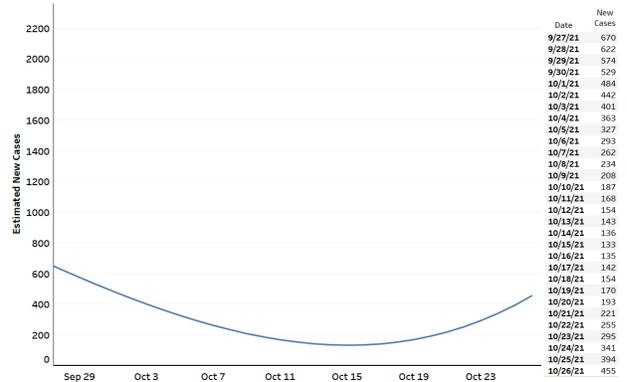
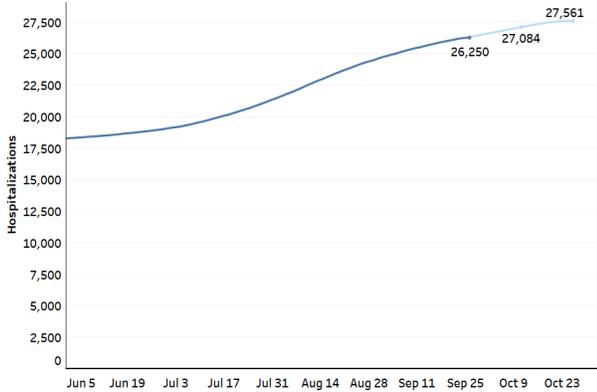


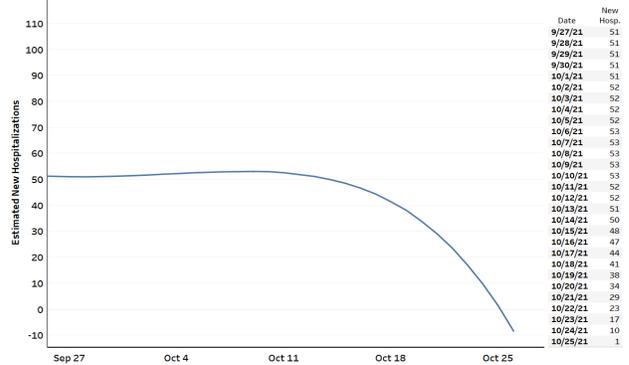
Figure 1b. Forecast daily COVID-19 cases



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

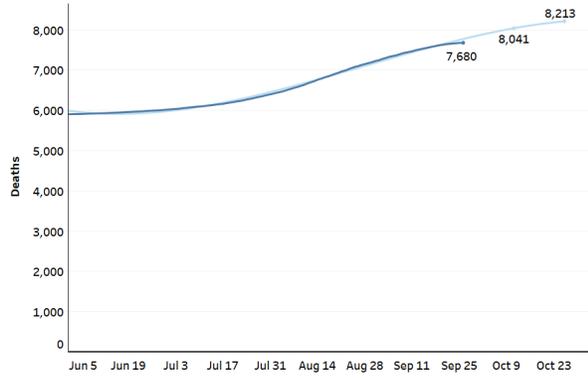


Figure 3b. Forecast daily COVID-19 deaths

