



# The Chartis Center for Rural Health

*Research Update: COVID-19 and the Growing Threat to the Stability of the Rural Health Safety Net*



In the study, "[The Rural Health Safety Net Under Pressure: Understanding the Impact of COVID-19](#)," The Chartis Center for Rural Health expanded its research into the factors creating downward pressure on rural hospitals to include the COVID-19 pandemic. Rural communities across America are older, less healthy and less affluent than their urban counterparts, and face limited – and in some cases declining – access to care. Burdened by the rural hospital closure crisis in which more than 130 rural hospitals have ceased operation since 2010, the emergence of COVID-19 threatens to further erode the rural health safety net.

According to The Chartis Center for Rural Health, there are less than 6,400 ICU beds in rural communities, which means there is one ICU bed for every 9,500 Americans who live in a rural community. Nationally, 63 percent of rural hospitals *are without any ICU beds*. Outpatient services, widely suspended during the initial stages of the pandemic and under pressure once again as infection rates skyrocket, are a significant source of revenue for rural hospitals. As a percentage of total revenue, the study revealed that the national median for outpatient revenue among rural hospitals *is 76 percent*.

Over the course of the last several weeks, the pandemic has surged across the United States. On December 8, more than 220,000 new cases of COVID-19 were reported along with more than 2,500 deaths. This represents a 14-day increase of 18 percent and 39 percent respectively<sup>1</sup>. In rural communities, residents account for approximately 14 percent of all COVID-19-related deaths and 15.6 percent of all infections in the U.S.<sup>2</sup>.

***Between August and November, the percentage of COVID-related adult hospitalizations at rural hospitals jumped from 28 percent to 40 percent.***

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<sup>1</sup> *The New York Times*, Coronavirus in the U.S.: Latest Case Count and Map, December 9, 2020.

<sup>2</sup> *The Daily Yonder*, Rural Counties Face 5<sup>th</sup> Straight Week of Record Number of COVID-19 Deaths, December 8, 2020.

As The Chartis Center for Rural Health continues to monitor and assess the impact of COVID-19, a new analysis of data released by the Department of Health and Human Services<sup>3</sup> indicates that the surge of infections and hospitalizations has *disproportionately* pushed the rural health safety net to capacity and threatens to undermine the ability of these facilities to deliver care to disadvantaged communities. With significant ICU bed *deserts* across the rural landscape, severely ill patients with Covid-19 will be transferred to urban facilities further straining their overburdened capacity.

### Key Findings

- **At the national median, 40 percent of adult hospitalizations at rural hospitals are COVID-related.**

Analysis of adult hospitalizations from August to December shows that rural hospitals experienced a higher percentage of adult hospitalizations from COVID – both suspected and confirmed – than non-rural hospitals. During this period, COVID-related adult hospitalizations at rural hospitals rose from a median of 28 percent of all adult hospitalizations in August to 40 percent in November. Among non-rural hospitals, the median percentage of adult hospitalizations due to COVID increased from 14 percent to 23 percent during the same time period (Figure 1).

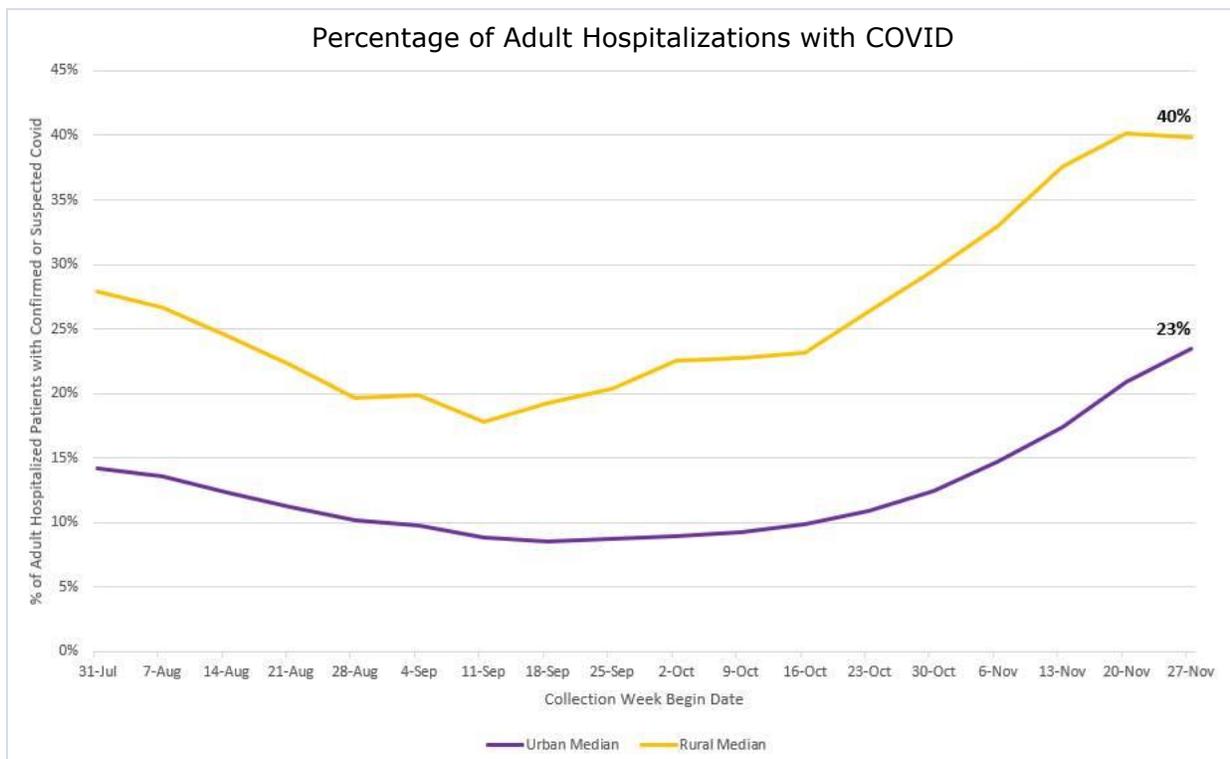


Figure 1 – Percentage of Adult Hospitalizations with COVID

<sup>3</sup> Department of Health and Human Services, [COVID-19 Reported Patient Impact and Hospital Capacity by Facility](#), Released December 7, 2020.

States with the highest median percentage of adult hospitalizations due to COVID-19 at rural hospitals are Colorado (49 percent), North Dakota (49 percent), New Mexico (44 percent), South Dakota (43 percent), Wisconsin (41 percent) and Idaho (41 percent).

- **At the national median, 82 percent of rural intensive care unit beds are occupied.**

According to the analysis, both rural and non-rural hospitals experienced an overall - and similar - increase in median occupied ICU beds from August to November. In August, a median of 73 percent of staffed adult ICU beds in rural hospitals were occupied. By November, the percentage had risen to 82 percent. Keep in mind that 63 percent of the nation's rural hospitals already are without ICU beds. At non-rural hospitals, the median percentage of occupied ICU beds increased from 74 percent in August to 83 percent by the end of November. States with the highest median percentage of occupied rural hospital ICU beds are Arizona (95 percent), Oklahoma (94 percent), Florida (92 percent), Tennessee (91 percent) and Louisiana (90 percent)<sup>4</sup> (Figure 2).

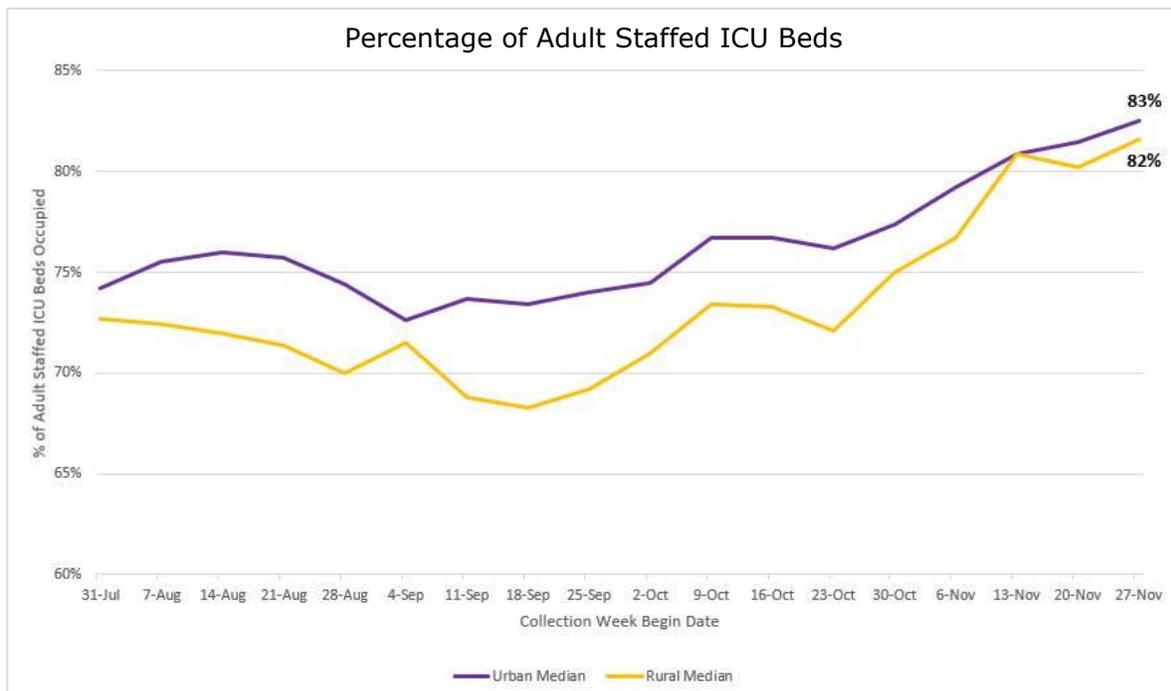


Figure 2 – Percentage of Adult Staffed ICU Beds Occupied

Since the beginning of January, 17 rural hospitals have closed<sup>5</sup> – the second highest single year figure since 2010. Our assessment of key factors associated with COVID-19 earlier this year hinted at the potential negative pressure the pandemic would have on rural hospital operations. This analysis of the Department of Health and Human Services data provides a clearer lens into the impact of COVID-19 on rural hospitals and their communities.

<sup>4</sup> State-level analysis based on states with at least three rural hospitals in the data set.

<sup>5</sup> The Cecil G. Sheps Center for Health Services Research, the University of North Carolina, December 10, 2020.

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