

COVID-19 and poverty in rural areas: the experience of the United States

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Abstract: This paper presents new social scientific research on the Covid-19 pandemic in the rural United States (U.S.), with a focus on how such research might inform recovery policy for poverty-alleviation in rural communities. Home to tens of millions of people, rural areas of the U.S. tend to have higher poverty levels and are impacted by the pandemic in unique ways. Our paper has three parts: (1) A brief introduction to rural areas and poverty in the U.S., (2) Presentation of research findings on the impacts of the pandemic in the rural U.S., (3) Evidence-based suggestions for rural recovery policy and discussion of potential barriers to recovery implementation.

Key words: Poverty, COVID-19, Rural America, United States, Recovery

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I. Rural Poverty in the United States

Rural poverty has historically been higher than urban poverty, and this disparity, although shrinking, has persisted into 2021.¹ Beyond a higher absolute level of poverty, rural poverty is far more persistent than urban poverty in the United States. Of the 353 counties with persistent poverty in the United States—greater than 20% of the population in poverty for more than thirty years—85% are non-metropolitan (i.e. rural) counties (ERS, 2021). In addition to the persistence of rural poverty, poverty in rural America has also become increasingly concentrated in the past 20 years, with the share of rural people living in high-poverty contexts increasing. This increased concentration is reflected in the rates of working poverty, wherein the share of the labor force actively working, but still experiencing poverty has remained stable, and higher in rural areas than urban areas since 2000, and increased since the Great Recession (Thiede et al. 2018).

These higher levels of poverty in rural America stem from a number of factors which vary based on region, labor market, and population demographics. Rural areas have faced significant economic restructuring due to the globalization of manufacturing and other sectors, have populations that are older than urban populations and more likely to be on fixed retirement incomes (Brown & Schafft 2019), face labor markets often over-specialized in single sectors such as natural resource extraction or tourism (Mueller 2021; Thiede & Slack 2017), have heightened levels of labor market discrimination along the lines of race, class, and gender (Duncan 2014; Farrell 2020; Harvey 2017; Lichter et al. 2016; Sherman 2009; 2021), have had heightened levels of income inequality for decades (Thiede et al. 2020), and have experienced prolonged outmigration of young adults due to diminishing opportunities (Carr & Kefalas 2009). These factors, among others, left rural America in a uniquely vulnerable economic position when the pandemic began in early 2020.

II. Impacts of the Covid-19 Pandemic in Rural Areas

New Rural Survey on the Impacts of the Covid-19 Pandemic

Understanding the macro-level impacts of the pandemic, as facilitated by publicly available secondary data from organization like the U.S. Census Bureau, is critical. However, available secondary data lacks the precision needed to understand specific forms of impacts and how these impacts vary, or do not vary, along known social determinants of well-being *within* the rural context. Without this information, research may obscure nuances in economic impacts and how these impacts of the pandemic are distributed unevenly throughout rural America, leading to the creation of ill-informed recovery policies. These issues are compounded by the fact that there is a general shortage of fine-grained data collection and primary research in rural areas (Bennett 2013; Brooks & Voltaire 2020; Lobao 2004; Puma et al. 2017; Tickamyer 1996).

¹ It should be noted that the higher level of poverty relative to urban America varies depending on the measure of poverty used. Using the official poverty measure of the United States, rural poverty is higher, but this flips when using the Supplemental Poverty Measure which accounts for cost of living variation. That said, the supplemental measure's approach to cost of living variation remains open to critique (Jensen & Ely 2017; Pacas 2021).

In response to this lack of available data, we launched an original data collection effort to field a primary survey in the rural reaches of the western U.S., a vast, diverse, and geographically disparate region that is especially suitable for assessing the impacts of the pandemic.² The survey includes two waves (Figure 1), and the samples in each wave are representative³ of this rural region, and measure pandemic impacts along multiple dimensions.

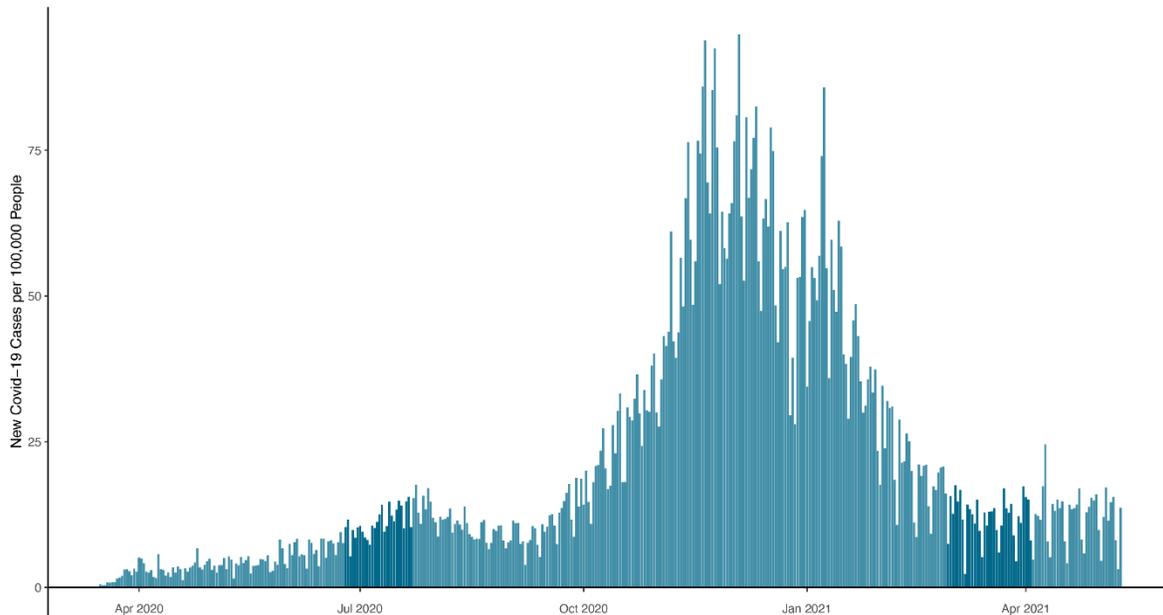


Figure 1: Illustrating (in darker shade) when each wave of our rural survey was in the field (Wave 1= June/July 2020, Wave 2= March/April 2021) within the context of the prevalence of new Covid-19 cases across the entire rural county sample.

Population-level Impacts

Overall, we find that the COVID-19 pandemic had far-reaching impacts in three notable areas. First, there is evidence to suggest that **experience with the virus** may have been higher in our rural sample than the general U.S. population. Whereas the CDC estimates roughly 9.2% of the U.S. population had contracted COVID-19, the second wave of our rural survey suggests that about 14.9% had contracted the virus. This difference is notable, but may be due to our question asking about confirmed *or* suspected cases.

Second, our findings suggest that rural areas experienced greater economic disruption than non-rural areas. Earlier in the pandemic (wave 1) we found that about 20% of rural people who were **employed full-time** before the pandemic became unemployed at the time of our survey. Impacts on unemployment were doubly severe (41%) for those with **part-time jobs**. Importantly,

² See Mueller et al. 2021 and McConnell (*in review*) for details on survey methodology.

³ Due to the hard-to-reach nature of rural surveys, we implemented soft-quotas for sex, age, Latino/a, Native American, and state. We generate weights via raking to the 2010 U.S. Census to bring our data in-line with most recent population estimates. The sample size for the first wave was 1,009 and for wave two was 1,203. The two waves collect surveys from different sets of respondents.

our more recent wave 2 survey shows that a total of 13.4% of the labor force in our sample reported that they were temporarily unemployed in the month prior to the survey, which is more than double the national average (6.0%, reported by the Bureau of Labor Statistics). Relatedly, more than a third of our sample (35.3%) in wave 2 had **lost income** in 2020 due to the pandemic.

We also examined **unemployment benefits**, which are another good indicator of top-line impacts on economic well-being. In wave 1 we witnessed a fourfold increase in the use of unemployment benefits, which appears to generally mirror national rates (Federal Reserve Bank of St. Louis 2020). Finally, we assess **confidence and optimism about local economic health**, a measure that may impact consumers' participation in future economic recovery (Fuhrer 1993). Our wave 1 results revealed a significant shock to confidence in local economic health in the short-term, but overall optimism about long-term recovery. That said, as of wave 2, economic confidence remained low.

Third, we assess the impact of the pandemic on rural peoples' mental well-being. Notably, we found widespread **mental distress**, especially when compared to pre-pandemic levels, and compared to the general U.S. population. While only 3-5% of Americans reported severe self-rated mental distress pre-pandemic (Tomitaka et al. 2019), we found that nearly 14.8% of our rural sample reported severe mental distress. Further, nearly 50% reported at least mild/moderate mental distress. This is a dramatic increase, the majority of which is likely attributable to the pandemic.

Group-level Impacts

We examined the ways that the three areas above (1. Experience with the virus, 2. Economic Disruption, 3. Mental well-being) may vary along axes related to demographics, identity, and other common differences pertaining to social stratification and social determinants of health in the U.S. Surprisingly, our main finding is that there are more similarities, rather than differences, across groups. In other words, the impacts of the pandemic appear to be generally shared across the population.

There are, however, a few notable exceptions. For example, while unemployment spiked for all people in our wave 1 sample, it was **women and Latino/a residents** who saw the largest increases in unemployment – although this difference was not statistically significant, likely due to a lack of power. **Latino/a residents** also reported receiving fewer unemployment benefits despite higher unemployment levels. Similarly, in wave 2 we hypothesized that **members of the labor force** may also be disproportionately affected by the pandemic given their exposure to economic disruption. Indeed, we found that they were more likely to have contracted COVID-19, reported slightly elevated levels of mental distress, and experiencing more pandemic-induced migration (i.e. either moving out of a home or having people move in) than the overall adult population.

III. Rural Recovery Policy and Known Barriers

How they've gotten by (and not gotten by)

In our summer 2020 wave of data collection, we aimed to understand the types of resources that rural residents were relying on to weather shocks caused by the pandemic. To do so, we compared utilization of three distinct forms of safety nets: (1) formal government programs,⁴ (2) informal social support,⁵ and (3) support from civil society organizations.⁶ We found that over half of all rural Westerners participated in some form of informal social support, representing a much higher rate than utilization of formal government programs or assistance from civil society organizations. This finding speaks to the flexibility with which social networks could quickly provide disaster support, in contrast to institutionalized safety net programs which retained specific eligibility requirements and were initially overwhelmed by huge spikes in need (Bitler et al. 2020a). However, respondents who reported high levels of negative pandemic impacts—especially on their household finances—utilized government safety net programs and civil society resources at significantly higher rates than residents who reported no impacts or positive impacts from the pandemic. This suggests that, despite lower levels of use, civil society organizations and especially formal government programs have a key role to play in pandemic response and recovery. Further, when examining attitudes towards spending, we find that rural Westerners actively supported more government spending across a wide range of areas.

A key form of informal social support—sharing a household with relatives or non-family members—was practiced by a notable portion of rural westerners during the summer of 2020 (19%) and spring of 2021 (16%). Also known as “doubling up,” shared housing is a well-documented strategy used by households to weather financial hardships, as it allows for significant savings through reduced housing costs (Pilkauskas et al. 2014). Yet, doubling up can also have negative health impacts on children living in the household (Harvey 2020), so should not be considered a uniformly positive adaptive response. Nearly one in five respondents had a friend or family member move into their household since the pandemic began, with respondents who identified as female or mixed race reporting significantly higher levels of shared housing.

In the United States, rural communities are popularly imagined as self-reliant and opposed to government involvement in daily life. Certainly, our results do indicate that rural households informally provided more support for each other than government safety net programs did during the initial period of the pandemic. Yet, as the pandemic continues on into its second year, dependence on social networks for financial support may place an increasing burden on rural families. Our research suggests that households who experienced the most severe pandemic impacts were simultaneously giving more financial assistance to friends and family members. This can be considered a secondary burden of households not only needing to address impacts

⁴ Government programs including: Unemployment Insurance, Section 8 Housing Vouchers, Supplemental Nutrition Assistance Program, Social Security, and Medicaid.

⁵ Informal social support including: receiving financial support from friends or family, giving financial support to friends or family, having a friend or family member move into the household.

⁶ Non-profit support including: financial support from a community-based or faith-based organization or supplies from a food bank.

to their own financial situation, but to those of their social ties as well. Policymakers cannot expect that household-to-household informal support can indefinitely meet the needs of rural residents through pandemic response and recovery.

What they want (and what we think they need)

During both the summer of 2020 and the spring of 2021, our research indicates that rural residents preferred an expansion of government relief spending in areas that would directly benefit rural households and their employers. In our most recent survey wave, we found that support was highest for increasing government relief spending towards small businesses (74%) and farmers (66%), followed by healthcare (61%), childcare (58%), infrastructure (54%), and housing relief (54%).⁷ Slightly over half of respondents preferred greater government spending that would go directly to individuals (52%) or to American Indian Tribes (52%).

In contrast, support was far lower for government relief spending to subnational governments, for example, to state governments (30%) or local (38%) governments. Support was likewise lower for expanding assistance to energy businesses, including both clean energy companies (38%) and oil or gas companies (18%). Across all spending areas, support was lowest for increasing government spending to large businesses (8%). These findings challenge dominant rhetoric presuming rural Westerners want to see heightened investment in resource extraction, while also showing that although rural household have been relying on one another due whether economic disruption, they would like the government to be more involved.



⁷ Respondents were asked to rate how they would like to see government spending change on each of these areas from 1 – Much less spending, to 7 – Much more spending.

Rural barriers to recovery

Recovery from the pandemic, and the subsequent reduction of poverty in rural America will require special care and targeted policy. In many ways, the problems of rural America are more similar to urban American than often appreciated. For example, rural and urban inequality (Thiede et al. 2020), family structure (Brown & Schafft 2019), working poverty (Thiede et al. 2018), and aggregate poverty rates (ERS 2021a) have converged over the past twenty years. That said, there remain unique barriers to a rural recovery worth discussing.

To begin, the policy environment and forms of impacts from the pandemic in rural America have varied from urban contexts. For example, recent work from Brooks et al. (Forthcoming) finds a rural *advantage* in specific labor market impacts; likely stemming from the lack of prolonged business and school closures in rural areas. This lack of closures has also corresponded with high rates of infection in rural areas (ERS 2021b), which will undoubtedly lead to an elevated burden of health care costs. When this is considered alongside the much older population of rural America and the persistent outmigration of young people, it is possible any current advantage in labor market impacts will be erased in the future without policy focused on rural American health care expenses and needs.

A second barrier unique to rural America is a persistent lack of real economic opportunity for young people in rural communities. Many rural counties are dominated by a single industry and rural areas face high levels of labor market concentration. This not only makes it difficult for young people to find a future in the places they were raised, but it also leaves the labor market vulnerable to any shock faced by the dominant industry. Importantly, this isn't an issue just for historic industries like natural resource extraction, but also exists in the case of rural areas dominated by natural amenity development in the form of tourism and outdoor recreation. Recovery from the pandemic in rural America, and any true poverty alleviation long-term, will need to focus on supporting broad-based and diverse economic development in rural regions.

Third, the unique political environment in rural America can also present obstacles to a path to recovery. The rural West, in particular, tends to hold libertarian political views, and has long been considered a bellwether for America's anti-government sentiment. For example, on average, 65% of the vote share went to Donald Trump among rural West counties in the 2020 election. This cultural and political gap between rural people and their metropolitan counterparts has widened in recent years as the nation as a whole experiences deeper affective political polarization (Iyengar et al. 2019). As such, pandemic recovery has been politicized—for example, new reports suggest that about 30% of rural Americans are reluctant or will “definitely not” get a vaccine (KFF 2021), meaning they are the most vaccine-hesitant group in the U.S. This is one example of the difficult policy environment in which recovery is taking place. Thus, strategies to overcome cultural and ideological opposition to recovery policy efforts should avoid shame tactics that will further entrench rural feelings of anti-elitism and defiant individualism, and should rely on trusted rural surrogates (e.g. NGOs, interest-groups, local doctors) to address the roots of rural fears about elites and government imposition. We recognize that this is a tall task in today's politicized media environment.

A number of obstacles also challenge the ability of relief and recovery resources to fully meet the needs of rural residents. Many existing government safety net programs were not designed to rapidly adapt to system-wide shocks and initially struggled to meet the surge in new demand (Bitler 2020a, 2020b). Further, program eligibility requirements limit access to relief programs, resulting in certain populations lacking access to critical resources. For example, undocumented immigrants were not eligible to receive aid from the first major federal relief bills passed in the United States (Clark et al. 2020). Beyond government program design, the geographic dispersion of rural populations across large land areas can make bringing physical resources—such as vaccines and food—to those in need difficult. Further, lower rates of high-speed internet connectivity can make shifting day-to-day activities such as telehealth and remote education or work challenging as well. In our spring of 2020 survey, we found that 15% of rural residents lacked an internet connection that could reliably host calls or stream video. Rural pandemic recovery infrastructure should aim to address these barriers to access and ensure that eligibility requirements do not exclude populations in need.

Finally, infrastructure in rural America, an important precondition for economic development (Flora et al. 2018), remains inconsistent, failing, and underfunded. Rural Americans are far more likely to lack complete plumbing (Mueller & Gasteyer Forthcoming) and high-speed internet, and rural roads and bridges remain in dire need of investment (ASCE 2021). This lack of infrastructure makes rural areas undesirable for companies looking to expand production, and hinders the efficacy of economic development policies. Significant investment in rural infrastructure, such as that currently proposed in the American Jobs Plan, would not only give rural areas much needed fixed capital for recovery, but would also provide jobs in economically depressed regions.

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