

Webinar Transcript: [Rural America at a Glance – 2020 Edition](#)

Good afternoon everyone. Welcome to our webinar: Rural America at a Glance – 2020 Edition. My name is Ashley Murdie and I'll be your host today. The webinar is being recorded and will be posted on the ERS website next week. At any time during the webinar you may enter a question into the chat feature at the bottom left corner of your screen and our speaker will answer questions at the end of the presentation. Our speaker today is Elizabeth Dobis. Elizabeth is a research agricultural economist with our Resource and Rural Economics Division. She joined USDA's Economic Research Service in March of 2020. Her research interests center on spatial economic analysis, particularly pertaining to health, demography and communities. Elizabeth holds a PHD and a master's degree in agricultural economics from Purdue University and bachelor's degrees in economics and geography, as well as a minor in mathematics from the University of Minnesota – Twin Cities. Thanks for joining us today Elizabeth. We're ready for you to begin.

Thanks Ashley. Just to reiterate, my name is Elizabeth Dobis and I am a research agricultural economist at the Rural Economy Branch at ERS focusing on rural health. I am also one of five authors who worked on this year's edition of Rural America at a Glance. So, let's get started talking about this year's edition.

Rural America at a Glance is an annual product ERS releases to give a snapshot of what has been happening in rural America. This year's edition was released yesterday, Thursday, December 17th. Content varies from year- to-year based on the opportunities and challenges that rural America is facing. And this year, we are focusing on the conditions related to the COVID-19 pandemic.

This year's topics include the spread and severity of COVID-19 across rural and urban areas; population vulnerability to severe illness due to COVID 19 and the health care resources available to treat patients; changes in non-metro unemployment rates in the wake of the pandemic and how that varies by a county's main industry; and the trends in COVID-19 cases among meat-packing dependent counties. In this presentation we will be discussing the findings associated with these topics in more detail. And just as a housekeeping note, in this publication we define rural to mean counties outside of metropolitan areas. So, throughout the presentation, I may you that use the terms rural and non-metro interchangeably, as well as urban and metro.

To help understand the impacts of COVID-19... of the COVID-19 pandemic on rural America, we'll first talk a little about how things looked prior to the pandemic. The population in rural counties was about 46.1 million in July 2019 and comprised about 14 percent of the adult population in the United States. Between 2018 and 2019, which was our most recent data at the time of assembling this report, rural America showed modest signs of a strengthening economy. Population grew 0.2 percent. Jobs grew 0.6 percent. And the poverty rate fell to 16.1 percent in non-metro counties in 2018 from 18.4 percent in 2013. However, despite these improvements, rural counties were not strengthening as quickly as their urban counterparts. Next, we'll be discussing the spread... the spread and severity of COVID-19 across rural and urban areas.

As of November 1st, 2020, there were over 9 million confirmed COVID-19 cases and 230,000 deaths. Rural America had about 14 percent of confirmed cases and 11 percent of deaths, which is on par for the share of the U.S. population living in rural areas. This chart shows the trends in new

COVID-19 cases per 100,000 adults by county urban rural category from March 22nd to November 1st, 2020, moved using a three-week moving average. We haven't discussed urban and rural categories beyond the differentiation between metro and non-metro counties. So, in this chart we break the counties into five groups: two urban and three rural. The first two groups on the legend are the urban categories: large metro areas with at least one million residents are shown in red, while small metro areas with between 50,000 and one million residents are shown in yellow. The last three groups on the legend are non-metro counties. These consist of metropolitan areas with an urban center that has between ten thousand and fifty thousand shown in gray; small town counties with an urban center that has between 2,500 and 10,000 residents shown in blue; and the most rural counties that consist mainly of villages and open country, which are shown in green. We see in this chart that there have been three surges in COVID-19 case rates. The first started in late March, peaking in late April and declining in May and June. This first surge mainly affected large metro areas, while cases were relatively stable in other county types. The second surge in July and August involved both rural and urban areas, but the decline was only partially observed in rural areas. The third surge started in late September. And during this surge, the highest incidence rates for new infections were in the most rural counties. The death rate from COVID-19 may provide a better gauge of the extent to which serious infections are affecting the population and possibly demand on rural healthcare resources. Next, we discuss the trends in the COVID-19 death rate.

This table shows four main sources... Excuse me, I skipped a slide. This chart shows the trends in deaths per 100,000 adults attributed to COVID-19 from March 29th to November 1st, 2020, by rural urban category. Again, these are smoothed over three weeks. We see a similar pattern of roughly three surges and deaths. The first surge is quite pronounced in large metro areas. From the peak in late April, we see declining death rates as the healthcare system learned more about the virus, how to treat it, and how to prevent its spread. The second surge again involves both urban and rural areas, but the spike in depths is much smaller than that of cases likely due to more widespread testing, a younger and less vulnerable population being infected, and more effective treatments. The third surge is still ongoing and is more focused in rural areas than urban ones with higher mortality rates per 100,000 people in rural areas than at any other time during the pandemic. Several factors help explain the recent higher COVID-19 death rates in rural areas. These factors are tied to the characteristics that make individuals more vulnerable to severe illness due to COVID-19 and the healthcare resources available to treat patients.

This table shows four main sources of population vulnerability associated with COVID-19. It shows the share of non-metro and metro populations in high vulnerability counties. High vulnerability counties are those with a population that is more vulnerable to severe illness or death from COVID-19. We consider counties to be high vulnerability if the proportion of residents with a vulnerable characteristic is in the top 20 percent of all counties. This is calculated separately for each characteristic. The first two vulnerability sources are personal characteristics that the CDC has identified as leading to higher vulnerability for severe illness or death from COVID-19. They are old age and underlying health conditions. The last two vulnerability sources are associated with accessing healthcare...excuse me, with accessing healthcare; being uninsured; and living far from a hospital with an intensive care unit or ICU. From the table we see that of the four vulnerability

sources we are analyzing, the most non-metro residents – nearly a quarter – live in counties that are high vulnerability due to rates of underlying health conditions. This is about eight times the share of metro residents living in similar counties. The vulnerability source with the smallest difference between the share of non-metro and metro residents living in high vulnerability counties is lack of health insurance. Still, the non-metro share is a fifth of the non-metro population and is twice as large as the urban share. The last vulnerability source I want to discuss is the distance from an ICU. These high vulnerability counties have the lowest share of the non-metro population, which is still about a sixth of non-metro residents. However, this share is 35 times the share of the metro population living in similar counties. These statistics indicate that rural residents needing medical attention may have much more difficulty receiving care.

So, to understand the geographic considerations associated with receiving care, we mapped the vulnerability source that focuses on distance to medical care. This map highlights non-metro counties that are high vulnerability due to distance from a hospital with an ICU. Residents in these counties lived on average at least 32 miles from such a hospital in 2017. And only 60 percent of counties with general hospitals also have an ICU. While these high distance counties are present throughout the country, the majority are clustered in the Great Plains and the Mountain West, however accessing medical care for critical conditions is not the only challenge facing rural residents.

In 2016 and 2017, 116 counties or about four percent of American counties were without...without a facility to provide basic medical care. These facilities can range from a clinic to a health maintenance organization medical center or a general hospital. Eighty-three percent of these counties were non-metro, and most are without a town or city larger than 2500 residents. People living in these counties with poor access to medical care due to distance, particularly the elderly and those with underlying health conditions, may have worse outcomes for severe cases of COVID-19 because of the difficulty of receiving treatment quickly. While the first things that come to mind when thinking about rural well-being and COVID-19 are the prevalence of the disease and treatment for the ill, the rural economy is affected as well. Next, we'll be focusing on the economy in the wake and the of the pandemic.

This chart shows monthly unemployment rates in metro and non-metro areas from January 2007 to September 2020. Prior to the peak the...excuse me. Prior to the COVID-19 outbreak, rural employment rates had been steadily declining from a peak of 11.5 percent in January 2010 following the Great Recession to 3.3 percent in September 2019. After the pandemic started, non-metro unemployment rates peaked at 13.6 percent in mid-April – only one percentage point behind the metro peak. This dramatic increase in unemployment resulted from government restrictions on non-essential economic activity; social distancing requirements; voluntary decisions by consumers to limit travel; and other measures used to help limit the spread of the virus. By September, the unemployment rate had fallen to six percent in rural areas. Whereas the rate in urban areas was nearly two percentage points higher. The measures implemented to help limit the spread of the virus did not impact all industries equally as job requirements vary widely across the economy. Next, we will be discussing the connection between unemployment rates and a county's main industry.

This chart shows unemployment rates in August 2020 by county economic types such as farming dependent or manufacturing dependent as well as metro areas. We see that the changes in rural unemployment during the recession associated with the pandemic are not spread evenly throughout rural America. They are partially tied to the dominant economic sector of the local economies. Though not all unemployment that we are seeing during this recession is related to COVID-19. In August non-metro unemployment was highest in mining dependent counties and lowest in farming dependent counties. Higher COVID-19 infection rates may also be associated with difference in economic activities, particularly those that did not show jobs such as meat packing.

This chart shows the trends in COVID-19 cases per 100,000 residents in meatpacking dependent counties from March 1st to November 1st, 2020. It is smoothed using a two-week moving average. A county is considered meatpacking dependent if at least 20 percent of workers are employed in meatpacking, making them a significant share of the local labor market. There are 56 meatpacking dependent counties, most of which are rural. Beginning in April, new COVID-19 cases in meatpacking dependent, non-metro counties began outpacing those in other non-metro counties across the country, reaching a peak that was about 10 times the rate in other counties by the end of the month. Infection rates started to decline in May with a sharper decrease in rates in June, coinciding with partial plant closures and increased social distancing protocols. In July, new COVID-19 infections in meat packing dependent counties leveled off and have remained on par with other counties.

So, to summarize rural America experienced COVID-19 very different than....very differently than urban areas. The findings presented in Rural America at a Glance include non-metro COVID-19 case rates rose sharply during the summer of 2020, eventually surpassing metro rates and death rates surpassed metro rates starting in mid-August. A larger share of non-metro residents live in counties where the population is highly vulnerable to severe illness or death from COVID-19. ICU facilities are harder to reach for residents in the Great Plains and Mountain West. Unemployment in 2020 surged well above the peak following the Great Recession, peaking in mid-April. Non-metro unemployment was highest in mining counties and lowest in farming counties in August. And finally, COVID-19 case rates were much higher in meatpacking dependent counties than other non-metro counties mid-May to mid-July. And this concludes the presentation portion of our webinar. To access Rural America at a Glance – 2020 Edition or other ERS products, please visit our website: ERS.usda.gov. And for questions about the report or other rural data and research, please contact John Cromartie at his email listed on the slide. We'll now move on to the Q&A portion of our webinar.

Thank you, Elizabeth. Uh, we do have some questions from the audience. Before we begin, I'd like to introduce three colleagues of ours who will be supporting Elizabeth with today's questions. We have Senior Economist John Pender, Geographer John Cromartie and Research Agricultural Economist Thomas Krumel, all of which are co-authors of Rural America at a Glance – 2020 Edition. Thank you all for joining us today. Now, for our first question. Could you please clarify what makes a county high vulnerability?

That's a great question. That concept can be a little bit difficult, so to explain what I'm... what we mean by a high vulnerability county, the easiest way to do this is using an example. So, let's go

ahead and pick let's say underlying health conditions as our example. So underlying health conditions are calculated using age standardized natural cause mortality...uh, the mortality rate. And what this is, is deaths from causes other than accidents homicides or suicide. We're trying to get at the medical conditions in the population as a whole. So, what we do is we rank each county from lowest to highest according to this value, and then we start using the rankings in order. We split the groups into five...split the counties into five groups. So, each group represents 20 percent of the counties in the United States and then we find the group that has the highest values for this age standardized natural cause mortality rate. And those are the counties that we consider to be high vulnerability counties due to underlying medical conditions. So that's the process that we used for that particular one, but we used a very similar process, that same method, to get the uh high vulnerability counties for the old age score, for the lack of um health insurance, and for the distance to a hospital with an ICU. And those are each calculated separately.

Alright, uh here's another question. Why did ERS choose natural cause mortality, old age, lack of health insurance, and distance to an ICU as the four vulnerability sources?

Yeah, that is a great question because that you can think of a lot of things that might be related to uh severe illness or death from uh COVID-19. Uh, so where we started was with the CDC. Uh, the CDC specified that there were two population groups that were at increased risk for severe illness from COVID-19. And those are older adults and people with medical conditions. So those are our first two...the underlying health conditions and the old age measures. Our other two choices were based on possible barriers that people with severe illness would have to have to receiving their...uh, the medical care that they need to treat their illness. So, we chose health insurance and distance from a hospital with an ICU as our two major measures because they're consistent through time. Other possible measures related to staffing and medical resources can change throughout the pandemic. These are pretty consistent for most people. So, these four measures give us a good base for thinking about which counties have populations that may be more vulnerable to severe illness or death from COVID-19.

Okay, and for our next question: Is non-metro employment still below where it was before the 2007 recession?

So, the section on non-metro employment was done by my colleague John Pender. So, John, would you please go ahead and address this question?

Um sure, I... the short answer is uh...I don't know. We, um in the past, uh editions of Rural American at a Glance, we trace employment levels over a long time period, but for this issue we were focusing on the more recent uh time period, so we didn't compare to uh the pre-recession in terms of employment levels. We did look at the longer term in terms of unemployment rates, but uh that doesn't tell us uh where the employment uh level is compared to uh the uh pre-Great Recession at the end of 2007.

Okay. And for our next question: Was there any data regarding VA hospitals in these rural counties and how they helped rural Americans during the pandemic?

So, the information that we used on hospitals was from the health resource administration. Um, the health file that they provide...provide the county health file that they provide. Um, in that file they do differentiate between VA's and non-VA's, but we didn't specifically focus on the effect of VA's. We were mainly concerned about whether there was a hospital... hospital nearby to treat somebody who had severe... had severe illness from COVID-19.

Okay, and then another question: Why did ERS focus on COVID case rates and meat packing dependent counties, rather than other... rather than another industry?

Great, so meat packing is an Ag related topic that has unique location characteristics, and it's been a topic of great interest in the public and in the media earlier in the pandemic. And we actually have uh somebody who's been doing a lot of work with meat packing on the team. So uh, Thomas Krumel, would you please go ahead and expand on this question if you have anything to add?

Yeah, thanks Liz. Uh, if you look back at the chart, specifically on meat packing. Another reason uh why we chose to focus on meatpacking dependent counties is up until the point of uh mid to late June, all other rural counties were maintaining approximately five cases per hundred thousand, whereas meat packing had a fluctuation uh during the initial outbreaks and then the receding number of cases uh as the uh social distance and increased workplace um characteristics were enacted in specific meat packing plants. So, meat packing had a very...meatpacking dependent rural counties had a very different experience from other rural counties during the initial uh spread of the COVID case. And that uh different story was an important story to tell.

Okay, and for the next question: What is the end date of this data collection?

So, thinking back...let's see, we have the end date for the COVID-19 cases and deaths was November 1st and thinking back for the other ones, I believe everybody used November 1st as the end date for the data collection. Some of the data um related to the underlying health conditions and the distance to hospitals, we used information that was uh collected on an annual basis and the most recent data from that was from 2018 or a little bit earlier 2016-2017. So, for those particular measures we've used the most recent data, but that was actually a little bit earlier than the COVID data and the unemployment data and the data on meat packing.

Alright, and next question: It looked as though, sorry just a moment. This question is...it looked as though unemployment effects were lower in rural areas than in urban areas. Why is that?

Sorry, I had an issue with the mute button there. So, this is another question having to do with the unemployment. So, I'm going to ask John Pender if you would go ahead and respond to that question.

So, we haven't specifically tried to understand the underlying causes of variations in unemployment rate in this analysis. It's more of a descriptive analysis, but you could hypothesize that, you know, rural areas have had less of the initial outbreak break, which was affecting largely very urban areas. And then you had, you know, a lot of the restrictions that were in place in the more urban. and some of the more urban areas initially. It took some time before some of those restrictions expanded to other areas, but that's only a speculation. We don't know exactly why unemployment would be less in rural areas than in urban areas.

Alright, and here's another question similar to the meat packing. There were also very high COVID infection rates on some native American lands and in the rural southeast, notably African American communities. What COVID information do you have about these rural communities as well?

So, in this report we don't have any information uh pertaining to counties that may have larger proportions of Black Americans or Native Americans. Um, that public that information would be publicly available. Um, and so, you would be able to, you know, if you had the time uh and wanted to do the research, you could definitely go out there and take a look at the relationship between the proportion of those uh races and ethnicities and COVID cases and deaths. Um, but that's not something that we covered in this particular product.

Alright, I think that's all the questions we have for the day. Um, I'd like to thank Elizabeth, Thomas, John Pender and John Cromartie for their support as well as everyone on the line who submitted questions. We appreciate you all being here today. As a reminder, the full Rural America at a Glance – 2020 Edition can be found on our website at ERS.usda.gov. A recording and transcript of today's webinar will also be posted to the webpage next week. For more topics covered by ERS COVID-19 related research, you can also visit our COVID webpage at ERS.usda.gov/COVID-19. That's ERS.usda.gov/COVID-19. And now, this concludes our webinar. I hope you all have a great rest of the day. Thank you.