

October 31, 2022

Miriam Delphin-Rittmon, Ph.D.
Assistant Secretary for Mental Health and Substance Use
Substance Abuse and Mental Health Services Administration
5600 Fishers Lane
Rockville, MD 20857

RE: Request for Information: SAMHSA's Role in Possible Agency Actions Regarding Mental Health and Substance Use Wellbeing in the Context of Climate Change and Health Equity

Response submitted electronically via email.

Dear Dr. Delphin-Rittmon,

The National Rural Health Association (NRHA) is pleased to offer a response to the Substance Abuse and Mental Health Services Administration's (SAMHSA) Request for Information on the agency's possible role in mental health and substance use wellbeing in the context of climate change and health equity. NRHA believes that this is a critical issue facing both rural patients and providers.

NRHA is a non-profit membership organization with more than 21,000 members nationwide that provides leadership on rural health issues. Our membership includes nearly every component of rural America's health care, including rural community hospitals, critical access hospitals, rural health clinics, long-term care providers, doctors, nurses, and patients. We work to improve rural America's health needs through government advocacy, communications, education, and research.

A. What should SAMHSA's top priorities be with respect to climate change and behavioral health? What are current strengths or gaps in SAMHSA's work in this area?

SAMHSA must ensure that rural residents are guaranteed access to behavioral health services under the agency's jurisdiction amidst potentially traumatizing climate-related disasters.

Making certain that rural communities have adequate access to behavioral health services as climate change progresses is crucial. One major gap in SAMHSA's programs that affects rural more than other areas is the growth of the Certified Community Behavioral Health Center (CCBHC) model. Rural areas would benefit from the expansion of more CCBHCs considering that over 4,000, or almost 70%, of all mental health professional shortage areas (HPSAs) are rural or partially rural.¹ Additionally, because rural populations tend to be poorer or have lower socioeconomic status, they would benefit from CCBHCs requirement to serve anyone who requests mental health or substance abuse care, regardless of ability to pay.

Rural areas struggle to certify facilities as CCBHCs because of program requirements. The most difficult hurdle is the requirement to retain a psychiatrist as a Medical Director.² Behavioral health

¹ BUREAU OF HEALTH WORKFORCE, HEALTH RESOURCES AND SERVICES ADMINISTRATION, *Designated Health Professional Shortage Areas: Fourth Quarter of Fiscal Year 2022*, 3-4 (Sept. 30, 2022)

<https://data.hrsa.gov/Default/GenerateHPSAQuarterlyReport>.

² SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMINISTRATION, U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, *Criteria for the Demonstration Program to Improve Community Mental Health Centers and to Establish Certified*

professionals are difficult to recruit and retain in rural areas, especially psychiatrists. To illustrate, almost 5,000 practitioners are needed in order to remove the rural mental HPSA designations.³ For psychiatrists specifically, number per 100,000 residents in rural counties was about one fourth that of urban counties in 2019⁴ and almost three quarters of all rural counties lack a psychiatrist.⁵

NRHA appreciates that SAMHSA provides an exception to the psychiatrist requirement in its guidance on criteria for CCBHC certification.⁶ SAMHSA notes that if after reasonable and consistent efforts a CCBHC cannot hire or contract with a psychiatrist then a “medically trained behavioral health care provider [...] with prescriptive authority in psychopharmacology who can prescribe and manage medications” may serve as Medical Director.⁷ However, the guidance is unclear on what type of provider may fill this role. NRHA suggests SAMHSA broaden this waiver for CCBHCs in rural areas given the documented shortage of psychiatrists and the general ongoing health care workforce challenges. SAMHSA should clarify and expand the providers eligible to serve as Medical Directors in rural mental HPSAs. For example, psychiatric nurse practitioners may be an appropriate alternative for the role.

Another potential roadblock for expanding behavioral health access to rural areas is the take-home medication policy for opioid treatment programs (OTPs). During the Public Health Emergency (PHE) SAMHSA granted exemptions to OTPs for unsupervised, take-home medication regulations.⁸ This flexibility allowed patients considered “stable” to take home up to 28 days of doses and thus decrease the number of daily visits for patients. Patients considered less stable are still able to take home up to 14 days’ worth of medication. Rural patients benefited greatly from this flexibility as they generally drive longer distances to reach their OTP. SAMHSA should explore its authority to make this flexibility permanent and therefore make access to treatment more accessible for rural and underserved populations. In the context of climate change, a natural disaster may make it difficult for residents to reach their OTP for doses. Allowing certain qualified patients to take home more medication could help them continue with scheduled treatment even during an emergency.

C. Which population(s) are most vulnerable to the behavioral health impact(s) of climate change? How can SAMHSA communicate with such population(s) and others to support their preparedness for the behavioral health impact(s) of climate change?

Rural populations are uniquely vulnerable to the impacts of climate change, and in particular the behavioral health impacts. Research is beginning to indicate that mental health effects related to climate change range from minimal stress symptoms to diagnoses of clinical disorders like anxiety

Community Behavioral Health Clinics, Criteria 1.A: 1.a.3 – General Staffing Requirements, https://www.samhsa.gov/sites/default/files/programs_campaigns/ccbhc-criteria.pdf.

³ Bureau of Health Workforce, *supra* note 1.

⁴ WWAMI Rural Health Research Center, University of Washington, *Data Brief: Changes in the Supply and Rural-Urban Distribution of Psychiatrists in the U.S., 1995-2019*, 1 (Oct. 2022)

https://familymedicine.uw.edu/rhrc/wp-content/uploads/sites/4/2022/10/RHRC_DBOCT2022_PSYCHIATRIST_Andrilla.pdf.

⁵ *Id.*

⁶ SAMHSA, *supra* note 2.

⁷ *Id.*

⁸ See 42 C.F.R. § 8.12(i).

or depression.⁹ NRHA would like to highlight the potential for these impacts to disproportionately hinder rural populations.

Extreme weather events that are increasing in frequency due to climate change pose a threat to rural communities. Homelessness and housing insecurity, food insecurity, and loss of productivity and income resulting from extreme weather events are huge sources of stress for any group that endures these experiences. These challenges are more acute for rural due to several compounding factors – generally lower socioeconomic status than their urban peers, less access to behavioral health services, an older and sicker population, and worse or out of date infrastructure.

Recently, heat waves and dangerously high temperatures have become more common. Research has begun to show the link between extreme heat and worse mental health outcomes.¹⁰ An analysis of literature on the issue showed that for every one degree increase in temperature (Celsius), there was a corresponding 2.2% increase in mental-health related mortality and a 0.9% increase in morbidity.¹¹ This is concerning for rural areas because resources like cooling centers are not accessible. A review of cooling center access in New York state indicated that of all heat vulnerable rural areas the average distance to a cooling center was over 18 miles with the furthest distance being almost 60 miles.¹² Essentially, driving is necessary for rural residents to reach cooling centers which are less accessible than in urban communities.¹³ Rural residents are also less likely to have air conditioning and are less likely to be able to afford installation of a new unit if needed.¹⁴ Additionally, a study of heat stress incidence in Florida indicated that rural residents were among the groups with the highest rates of heat-related illness, along with males and minority populations.¹⁵

Flooding is another major natural event that is growing increasingly common and affects regions outside of the coasts. In June, Yellowstone National Park saw historic flooding during a storm that led to record-breaking river levels.¹⁶ As a result, roads and infrastructure were washed away, meaning that access to the park was cut off and nearby residents were stranded.¹⁷ Flooding poses a risk to rural communities as homes and businesses are more dispersed across the land and residents typically travel longer distances on a day-to-day basis than residents in urban or suburban areas. Cutting off access to resources, services, and social supports that are already harder to reach isolates rural residents and raises concerns for behavioral health impacts. For rural areas that are more

⁹ Paolo Cianconi, et al., *The Impact of Climate Change on Mental Health: A Systematic Descriptive Review*, 11 FRONTIERS IN PSYCHIATRY 1, 5 (2020) <https://www.frontiersin.org/articles/10.3389/fpsy.2020.00074/full>.

¹⁰ See generally Jingwen Liu, et al., *Is there an association between hot weather and poor mental health outcomes? A systematic review and meta-analysis*, 153 ENV'T INT'L 1-18 (Mar. 2021) <https://www.sciencedirect.com/science/article/pii/S0160412021001586#s0130>.

¹¹ *Id.* at 14.

¹² Seema G. Nayak, et al., *Accessibility of cooling centers to heat-vulnerable populations in New York State*, 14 J. OF TRANSPORT & HEALTH 1, 5, 7 (2019).

¹³ *Id.*

¹⁴ See Aaron Bolton, *Rural residents may not be ready for increasingly intense heat waves*, MONTANA PUBLIC RADIO (Aug. 19, 2022) <https://www.mtpr.org/montana-news/2022-08-19/rural-residents-may-not-be-ready-for-increasingly-intense-heat-waves>.

¹⁵ Laurel Hardaur Morano, et al., *A Comprehensive Evaluation of the Burden of Heat-Related Illness and Death within the Florida Population*, 13 INT'L. J. OF ENVTL. RES. AND PUB. HEALTH 551, 563 (2016).

¹⁶ Joe Hernandez, *Yellowstone National Park has reopened an entrance devastated by June floods*, NPR (Oct. 16, 2022) <https://www.npr.org/2022/10/16/1129361079/yellowstone-national-park-northeast-entrance-road-reopened>.

¹⁷ *Id.*

susceptible to hurricanes and flooding, disruption to health care systems and public health services leads to increased physical health issues and psychological stress.¹⁸

While all rural residents are impacted, farmers as a subset of residents are positioned to fare worse than their community members. Agriculture is a cornerstone of rural life for many communities. Of the 444 counties classified as farming-dependent – meaning that 25% or more of the average annual labor and earnings were derived from farming – 391 were nonmetro counties.¹⁹ This puts rural farmers in an important position in their communities and in the country that could ultimately have mental health consequences. As farmers' crop yields and jobs are put at risk because of climate change and related impacts, farmers experience stressors that affect mental health. For example, increasing temperatures and heat waves led to about \$27 billion in U.S. Crop Insurance payments to help insulate farmers from lower yields associated with extreme heat.²⁰ Low crop yield and associated economic impacts are financial stressors that have the potential to threaten farmer mental health.

Farmers are also poised to suffer worse from the mental health effects associated with drought. Rural areas in the western United States are facing water scarcity concerns because of ongoing drought. Droughts have historically lasted about a decade but as climate change progresses it is likely that they could last as long as three decades.²¹ Again, the economic consequences of drought on farmers' livelihood can worsen mental health through the stress related to their financial situation. Beyond farmers, rural areas usually depend upon well water which is being depleted. The more that communities rely upon well water, the more likely it is that it will become depleted quicker. This catch-22 is another ongoing stressor for rural communities. Given the nature of rural infrastructure, it is unlikely that rural communities could come to depend upon water from another source.

Physical impacts of climate change will also affect farmers. Heat stroke, dehydration, respiratory issues, and acute kidney disease may result from overexposure to extreme temperatures. The risk of heat-related mortality may actually be greater for all rural residents given the lack of access to nearby health care facilities, working outside, and higher rates of chronic disease.²² Even farmers that are physically far removed from natural disasters can feel the impacts. For example, smoke from wildfires travels and can cause exposure to those hundreds of miles away.²³ Again, loss of productivity because of the health impacts of climate change may distress farmers and give rise to mental health concerns.

Another specific rural population that is susceptible to the behavioral health impacts of climate change are those living in areas that are vulnerable to wildfires and megafires,²⁴ such as northern

¹⁸ Cianconi et al., *supra* note 9 at 6.

¹⁹ ECONOMIC RESEARCH SERVICE, U.S. DEPARTMENT OF AGRICULTURE, *County Typology Codes* (Oct. 23, 2019) <https://www.ers.usda.gov/data-products/county-typology-codes/descriptions-and-maps#farming>.

²⁰ Avery Ellfeldt, *Climate Change is Hitting Farmers Hard*, E&E NEWS (Aug. 6, 2021) <https://www.scientificamerican.com/article/climate-change-is-hitting-farmers-hard/>.

²¹ Cianconi et al., *supra* note 9 at 7.

²² Liz Carey, *Experts: Climate Change Will Affect Health of Farm Workers*, THE DAILY YONDER (Aug. 9, 2022) https://dailyyonder.com/experts-climate-change-will-impact-health-of-farm-workers/2022/08/09/?utm_medium=email&utm_source=Center+for+Rural+Strategies&utm_campaign=2e4ba20b63-EMAIL_CAMPAIGN_2022_08_10_02_10&utm_medium=email&utm_term=0_d1c8c07805-2e4ba20b63-101195000&mc_cid=2e4ba20b63&mc_eid=ad1165617b.

²³ *Id.*

²⁴ A megafire is defined by the U.S. Interagency Fire Center as a fire that burns more than 100,000 acres of land.

California. Wildfires cause an array of physical and mental damage on residents. Even before fires start, there is anxiety and tension throughout wildfire season which constitutes about half of the year. The potential for a wildfire, or for a wildfire to turn into a megafire and threaten a whole community, is a source of ongoing stress for everyone in fire prone areas. Anxiety about fires is a behavioral health concern for the entire population in these regions.

During fires, residents that evacuate experience anxiety over whether their homes and communities are safe. Those in surrounding areas that have not evacuated must live on edge and prepare for potential evacuation and destruction. When the fires are over, the long-term anxiety and stress may lead to post-traumatic stress disorder (PTSD) for those affected. Affected groups are not just those who evacuated or lost their homes, but also those who have consoled their friends and family and rural health and emergency providers involved in the fire response. Each time there is a new threat of a wildfire, residents who have experienced the trauma and loss are triggered because of past events.

Behavioral health providers in these areas face two layers of stress. They are concerned about their own wellbeing and safety during fires but also have to support those who are suffering mentally as a part of their jobs. Staff must deal with their own personal trauma from wildfires on top of a large workload due to workforce shortages. Workforce fatigue is a problem and many behavioral health providers in fire-stricken areas retire or leave their jobs. Accessible facilities like community health centers struggle to replace these employees because it is hard to recruit new employees to areas where wildfires pose a real threat.

The physical health damage from wildfires is also a behavioral health concern. Worsening health conditions from continually breathing in smoke is another source of stress. Smoke inhalation may lead to certain cancers or exacerbate existing conditions like asthma. Communities vulnerable to wildfires likely feel heightened health anxiety from smoke inhalation. Rural communities often lack the means for the filtration systems and other resources that could mitigate against smoke inhalation. Public facilities and private homes, where residents often have to take shelter from the heavy smoke, may not be as safe as possible or necessary because of the inadequate infrastructure. Relatedly, behavioral health concerns associated with taking shelter indoors for extended periods of time, like depression, are heightened during wildfires.

Rural populations tend to be older, sicker, and poorer than their urban counterparts. Therefore, the elderly and/or disabled populations in rural areas are another subset of rural communities that SAMHSA should consider in its work. These groups will face more challenges in the event of an evacuation due to a natural disaster because they are less able to move themselves without help. Heat waves and extreme temperatures are troubling for the elderly specifically because their bodies may be less able to respond to high temperatures.²⁵ Persons with disabilities or chronic illnesses may also struggle with their bodies' response to extreme heat. This adds another layer to the stressors of living with a disability.

Elderly individuals with cognitive challenges like dementia may be less able to respond and show resilience to traumatic events like extreme weather.²⁶ Losing personal belongings in a natural

²⁵ U.S. Environmental Protection Agency, *Climate Change and the Health of Older Adults* (Aug. 19, 2022) <https://www.epa.gov/climate-change/climate-change-and-health-older-adults#:~:text=Many%20older%20adults%20have%20limited,after%20an%20extreme%20weather%20event.&text=Aging%20and%20some%20medications%20can,death%20as%20the%20climate%20warms.>

²⁶ *Id.*

disaster like a flood is also distressing for the elderly because of the memories and nostalgia associated with certain memorabilia.²⁷ These items give comfort to seniors during difficult end stages of life and losing them could worsen already deteriorating mental health.

Climate change is projected to be a factor in aiding the spread of infectious diseases in the future. The COVID-19 pandemic has shown the widespread effects that infectious diseases can have on society, including on mental health. Rural health care providers were overwhelmed at the height of the pandemic and rural communities proved less adaptable to a largescale shock like COVID-19 because of resource limitations. Overall, rural mental health worsened as a result of COVID-19. One survey indicated that 66% of farmworkers felt that the pandemic impacted their mental health in some way.²⁸ The potential for another epidemic- or pandemic-level infectious disease to devastate rural mental health is a cause for concern. There is little data on exactly how much COVID-19 adversely affected rural mental health which is also troubling because this data could inform how to address this challenge if it reappears in the future.

NRHA believes that SAMHSA must consider the rural lens in its future climate change work. Rural populations, and subsets of rural populations, must be at the forefront of SAMHSA programs and grants. SAMHSA could explore its authority to expand its programs to include farmers or initiate new programs.

E. What peer-reviewed articles, papers, toolkits, listservs or other resources related to climate change should SAMHSA highlight in its work with states, local, tribal and territorial health authorities, behavioral health providers, grant recipients, national and local stakeholder organizations, and the general public?

NRHA suggests that SAMHSA consult and highlight the Fourth National Climate Assessment conducted by the U.S. Global Change Research Program, specifically Chapter 10 which focuses on agriculture and rural communities.²⁹ While not focused on behavioral health specifically, this resource outlines the impact of climate change on rural populations.

The Rural Health Research Gateway, funded by the Federal Office of Rural Health Policy, is a good place to access rural health services research and findings (ruralhealthresearch.org). NRHA also suggests peer reviewed resources that focus specifically on rural mental health, listed in this footnote.³⁰

²⁷ Robin Cooper, *Climate Change and Older Adults: Planning Ahead to Protect Your Health*, NATIONAL COUNCIL ON AGING (Apr. 21, 2022) <https://www.ncoa.org/article/climate-change-and-older-adults-planning-ahead-to-protect-your-health>.

²⁸ American Farm Bureau Federation, *Impact of COVID-19 on Rural Mental Health*, 2 (Dec. 2020) https://www.fb.org/files/Impacts_of_COVID-19_on_Rural_Mental_Health_1.6.21.pdf.

²⁹ U.S. Global Change Research Program, *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II*, Chapter 10: Agriculture and Rural Communities (2018) <https://nca2018.globalchange.gov/chapter/10/>.

³⁰ Paolo Cianconi, et al., *The Impact of Climate Change on Mental Health: A Systematic Descriptive Review*, 11 FRONTIERS IN PSYCHIATRY 1, 5 (2020) <https://www.frontiersin.org/articles/10.3389/fpsy.2020.00074/full>; Helen L. Barry, et al., *Climate Change and Farmers' Mental Health: Risks and Responses*, 23 ASIA-PACIFIC J. OF PUB. HEALTH 120S (2011); Candice P. Boyd & Hester Parr, *Climate Change and Rural Mental Health: A Social Geographic Perspective*, 20 RURAL AND REMOTE HEALTH 6337 (2011).

L. What research should be prioritized to build the evidence base on how climate change affects mental health and substance use disorder outcomes?

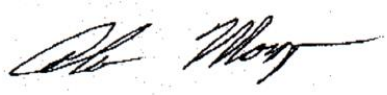
NRHA has heard from members that there is a need for research generally on how climate change affects mental health. Rural providers have anecdotal evidence that there has been an increase in mental health services and visits that correlates with increasing severe weather events and other climate change-related effects. Providers suspect that climate change is harming patient mental health but there is no clear link without further research. Providers and other stakeholders need data to support these anecdotes and confirm the relationship between the two. For those involved in policy and advocacy on behalf of health care providers and patients it is difficult to make the link between climate change and behavioral health without data. Data is needed to provide support for smart policy solutions.

A focus on how rural mental health is uniquely affected by climate change should also be a priority because not all populations are impacted by these changes in the same way, as discussed throughout this comment. Academia has begun this research, but there is not a strong focus on the United States. For example, some peer-reviewed resources listed in footnote 30 are specific to Australia.

Stratifying between urban and rural populations would be valuable to show what types of mental health services and resources are needed in rural communities. NRHA believes that mental health and substance use solutions are not one size fits all, and what works in urban areas may not be applicable to rural areas. Research on the differences between these populations is crucial for understanding how climate change touches communities differently and what is needed to mitigate against the negative impacts.

Thank you for the chance to offer a response on this growing issue facing rural communities and for your consideration of our comments. We very much look forward to continuing our work together to ensure our mutual goal of ensuring mental health wellness in rural communities across America. If you would like additional information, please contact Alexa McKinley at amckinley@ruralhealth.us or 202-639-0550.

Sincerely,



Alan Morgan
Chief Executive Officer
National Rural Health Association