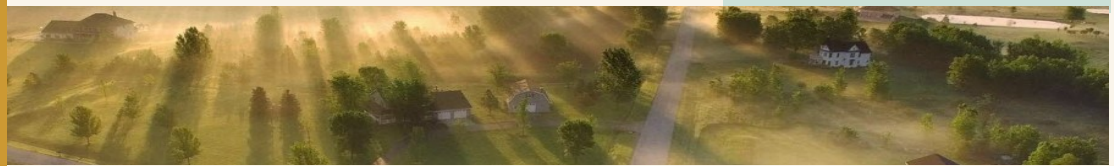


Summary

- ROTA grantees used innovative, research-informed programs to build community resilience.
- Context differed vastly across settings, and programs worked closely with communities to develop engaging, culturally responsive programs.
- Collaborative and nimble programs that worked to build long-term community capacity were successful in reaching desired goals.
- Reported outcomes were positive and reflected strong initiative on the part of ROTA grantees.

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2018-2021 Rural Opioid Technical Assistance (ROTA) Grant Overview

07 November, 2022

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Introduction

America's overdose crisis has been called "several micro-epidemics of different intensities."¹ While some populations are disproportionately impacted across settings, other disparities are regional. For example, while opioid mortality disproportionately affects Black communities in many states,² national news reports may overlook this fact.^{3,4} Further, the COVID-19 pandemic's

effect on opioid mortality varies by age, race, ethnicity, and sex, as illustrated in figure 1.⁵

As such, the literature recognizes the need to develop creative and nuanced solutions that work with impacted communities.⁶ The need for an innovative opioid response is particularly clear in rural areas, which face unique social, economic, and

infrastructural challenges.⁷ Some solutions offered by the evidence base include providing public overdose education, improving access to naloxone,⁸ and efforts to reduce opioid use disorder (OUD)-related stigma.⁹ In addition, interorganizational collaboration and collaboration-focused organizational policies are associated with greater access to OUD treatment, especially in rural areas.¹⁰

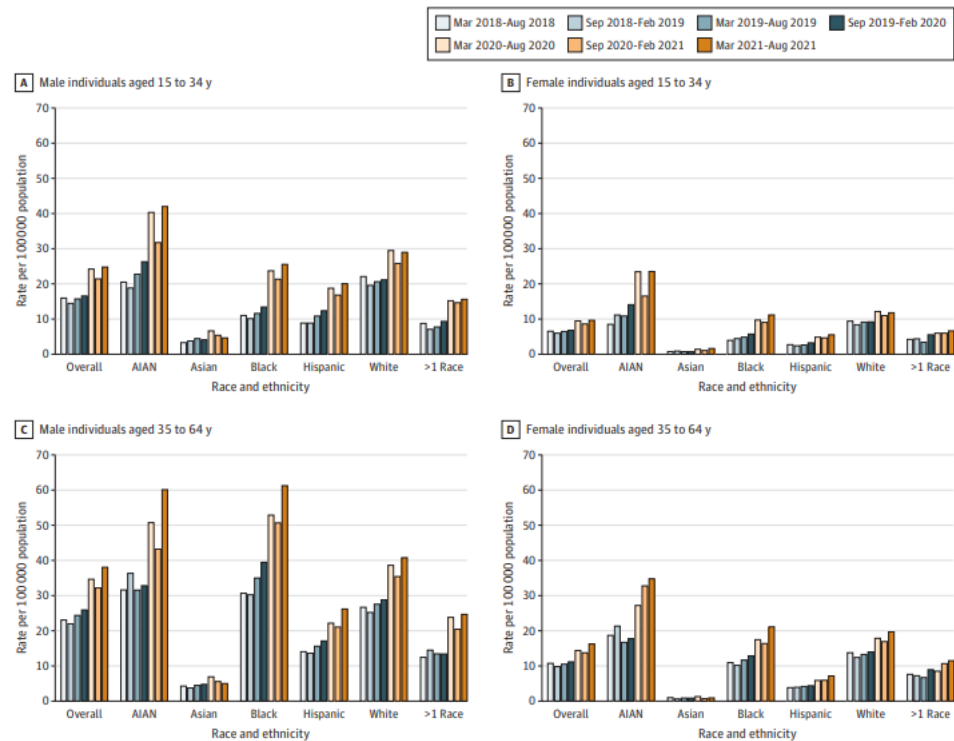


Figure 1. Age-Adjusted Drug Overdose Death Rates Among US Individuals by Age, Sex, and Race and Ethnicity Before and During the COVID-19 Pandemic. Beth Han, Emily B. Einstein, Christopher M. Jones, Jessica Cotto, Wilson M. Compton, and Nora D. Volkow. "Racial and ethnic disparities in drug overdose deaths in the US During the COVID-19 pandemic." *JAMA Network Open* 5, no. 9 (2022): e2232314-e2232314.

“Having a project coordinator in the area, connecting coalitions and community leaders, and offering the LST Parent Program creates situations where the grant touches the whole community, fostering creative synergies and solutions.”

- Community Religious Leader, of VT ROTA Program

Introduction (Cont.)

The USDA Extension program and SAMHSA have developed the ROTA program to address the opioid crisis in rural areas. ROTA grantees have experienced tremendous success, demonstrating agile and nuanced solutions for the unique needs of each region served.

Program Content

Improving Youth Outcomes

Many ROTA grantees focused on preventing substance misuse by building skills among youth and their families. Materials geared toward strengthening family relationships as a protective factor were implemented and well-received by community members. For example, Virginia Tech University (VT) received feedback from a community partner stating, “having a project coordinator in the area, connecting coalitions and community leaders, and offering the LST Parent Program creates situations where the grant touches the whole community, fostering creative synergies and solutions.” Further, North Caro-

lina State University (NCSU) provided Powerful Communities Caregiver trainings, and evaluations showed significant increases in parenting skills after the training.

Other frequently used youth-based programs were the Botvin LST Middle and High School curriculums, evidence-based interventions teaching drug resistance, self-management, and social skills that protect against substance use. In addition, the Strengthening Families Program (SFP) 10-14, an evidence-based training teaching familial bonding, boundary-setting, and monitoring skills to caregivers and youth, was used by many ROTA grantees. With guidance from a literature review and focus groups, Washington State University (WSU) adapted SFP 10-14 to target opioid use specifically.

Another commonly implemented program was Youth Mental Health First Aid (MHFA), which teaches the signs and symptoms of mental health concerns and skills that can be used to connect youth to appropriate mental health resources. Many ROTA grantees also worked with community stakeholders to develop guidebooks, educational videos, tribal technical assistance (TTA) and training workshops, and other original content addressing youth and family outcomes.¹¹

Preventing Prescription Opioid Misuse

Most ROTA grantees distributed materials centered

on prescription opioid misuse education and prevention. An example was Ohio State University (OSU), which disseminated Generation Rx, an online toolkit that provides information on the harms associated with prescription medication misuse. The online toolkit was supplemented with trainings on prescription opioid use risks and safe disposal practices. Another example was Montana State University’s (MSU’s) Prescription Opioid Awareness and Education Five Module Toolkit, an education and awareness program which was later expanded with a version for tribal communities. A major aspect of Mississippi State University’s (MS State’s), Pennsylvania State University’s (PSU’s), Oklahoma State University’s (Oklahoma State’s), WSU’s, and MSU’s programs included distribution of medication disposal materials or medication take-back events. WSU piloted the Youth Participatory Action Research program, through which teens designed a medicine box display designed to promote awareness on the risks of prescription opioid misuse and share information about safe medication storage and disposal.

Stigma Reduction

Across cohorts, the majority of ROTA grantees reported implementing programs targeting stigma toward opioid misuse and intervention. For example, Utah State University (USU) provided public education addressing stigma toward OUD and harm reduction. The Univer-

Figure 2. A PSU drug take-back event held at Uniontown Hospital is pictured below. PSU’s ROTA program included these events to prevent prescription opioid misuse. Janet Welsh, *Growing Evidence Based Prevention in Pennsylvania to Address Opioid Misuse*, December 2021.



sity of Minnesota (UMN) also tailored much of its training material toward stigma reduction, medication assisted treatment (MAT), and harm reduction. Several workshops, guidebooks, and program materials distributed by MSU included information on the stigma toward MAT. University of Missouri (MU) shared stories from individuals with lived experience on their program website with the goal of reducing stigma and engaging the community. Some ROTA grantees reported that simply facilitating conversations about opioids and addiction mitigated stigma.

Harm Reduction

In some settings, harm reduction training and technical assistance, particularly pertaining to naloxone, were major facets of programming. In Minnesota, rising overdose rates and awareness of naloxone's effectiveness led to a strong community demand for naloxone, and numerous partners and tribal communities contacted program staff to request technical assistance with harm reduction. As such, UMN distributed naloxone, offering trainings both in-person and online through the lens of stigma reduction and partnering with the Rural AIDS Action Network to provide naloxone to online participants. UMN also distributed fentanyl testing strips at clinics and community-based organizations. Additionally, Oklahoma State provided naloxone training to rural volunteer fire departments across several counties. In partnership with IHS, USU delivered

naloxone training and kits that were tailored for tribal communities and designed to reduce stigma. Data demonstrated that USU's naloxone trainings significantly reduced stigma toward harm reduction.

Cultural Topics

Feedback elicited by MSU's TTA workshop staff revealed a desire for programs addressing cultural issues. MSU responded by developing several culturally responsive programs in partnership with tribal partners, including a culturally tailored version of the Prescription Opioid Awareness and Education Five Module Toolkit. Another strong example of community-driven and culturally responsive programs was UMN's American Indian Resource and Resilience Team (AIRRT), a group of tribal community members who led efforts to develop tailored educational content. One such program was called Traditional Native Games, which paired traditional Indigenous activities for youth with Question, Persuade, Refer (QPR) suicide prevention principles.

Building Community Capacity

In addition to individual-level intervention, several ROTA grantees made efforts to cultivate resilience at the community level. Some of the many strategies used by ROTA grantees to achieve this aim were providing trainings and technical assistance on fundraising and grant administration for community partners as well as train-the-trainer opportunities to help develop community champions. Improv-



ing workplace culture to address structural stigma and foster positive work experiences for those in recovery is another strong example of building community capacity to respond to the opioid epidemic. Specifically, MU worked with local businesses for its Recovery Friendly Workplaces (RFW) initiative, which aimed to educate employers on substance misuse to foster recovery and minimize stigma in the workplace.¹² In addition, University of New Hampshire (UNH) received feedback from 92.6% of survey respondents from Partnership for a Drug-Free NH that health communications training and/or technical assistance was needed for substance use prevention and communication efforts. As such, targeting public health professionals' capacity to engage in effective health messaging is a promising avenue to build community capacity. Several ROTA programs made robust efforts in this area, illustrating many concepts similar to those underlying the recovery capital framework guiding UMN's work,¹³ including social and cultural capital, as will be explored later in this report.

Social Determinants and Whole-Person Health

Another aspect of ROTA programs was that of whole-

Figure 3. MU's RFW initiative sought to foster workplace culture that supported recovery by combatting stigma and improving knowledge of OUD. <https://recoveryfriendlymo.com>

“Just seeing the strength [of] learning Pan-Indian cultural knowledge can be a bridge to you getting reconnected to your culture, ... it [Traditional Native Games] was the bridge to helping them get back to the culture. Culture is prevention.”

- Traditional Native Games, Tribal Community Facilitator, UMN ROTA Program



person health. Social determinants of health, including poverty, racism, and poor access to nutritious food, secure housing, quality education, and healthcare were identified as factors underlying the opioid crisis. These needs were addressed by providing food and essential items, financial literacy training, and nutrition and wellness kits. Financial education was also offered. For instance, the University of Kentucky (UK) provided a curriculum to teach strategies for overcoming fiscal challenges individuals in recovery may face. In Minnesota, trainings provided to DWI, Hybrid and Mental Health Courts participants on financial skills, parenting, domestic violence, and naloxone use were well-received, with over 80% of trainees reporting they found the material useful and planned to use it.

funding for distribution of financial assistance, food, and essential items to tribal community members. WSU, UK, MSU, and South Dakota State University (SDSU) also provided trainings on mindfulness through their ROTA programs. Recipients of this support expressed that it came just in time. USU and UMN developed Indigenous mindfulness programs, and feedback was overwhelmingly positive. Some participants reported that they were able to use the skills learned to cope with difficult emotions, and one stated that mindfulness classes she attended helped to cope with symptoms of anxiety and trauma.

Across several settings, communities identified trauma as a critical area of need related to the opioid crisis. Addressing this need, OSU offered five events on trauma-informed care, and NCSU provided trainings teaching youth and parents to communicate based on trauma-informed research. Acknowledging a significant military veteran population in the state, Oklahoma State's Extension for Community Health Care Out-

comes (ECHO) program partnered with members of the Muskogee VA to lead lectures on moral injury and adverse childhood experiences (ACEs). Oklahoma State's team noted that "the success of these sessions was so immense that it enabled us to create a standalone ECHO line specific to veterans ..." UMN established programs tailored toward tribal communities designed to address historical, intergenerational, and personal trauma, including the Healing Through History training, trauma-sensitive yoga, Mending Broken Hearts workshop, the Understanding ACEs: Building Self-Healing Communities presentation, and Digital Storytelling program. Said AIRRT member and facilitator of the Mending Broken Hearts workshop, Brenda Michels, "... Until we get to the root cause of our pain, we won't ever figure out the opioid crisis..."¹⁴

Cultural Responsiveness & Health Equity

Culturally Tailored and Linguistically Appropriate Programs

Another strong effort taken

“...Until we get to the root cause of our pain, we won’t ever figure out the opioid crisis...”

***-Briana Michels,
Tribal Community
Facilitator,
AIRRT Member,
UMN ROTA
Program***

by ROTA grantees was expanding the scope of materials to address health in a culturally responsive way. For instance, the 2020 Intertribal Opioid Wellness Summit developed through USU focused on the tribal medicine wheel of Physical, Mental, Emotional, and Spiritual Health, offering breakout sessions focused on holistic health education. In a similar vein, Michigan State University (Michigan State), posted materials in Spanish to ensure accessibility for Spanish-speaking audiences. Colorado State University (CSU) expanded SFP 10-14 training efforts to include Familias Fuertes facilitator trainings geared toward reaching Hispanic families. Through programs like UMN's Traditional Native Games, purposed to lower the burden of drug misuse and suicide via cultural revitalization, the role of culturally responsive programs in advancing health equity was made clear.

Representation

Representation through diverse staff involvement in program development and implementation was critical to achieving cultural responsiveness. As described by an AIRRT leader working with the UMN program, “We’re Native people working with Native communities, we’re speaking the same language, on the same page. We have shared understandings of ourselves and our communities and we’re able to get to the heart of what the work is....” Participation by community members with diverse experiences was also critical to developing materials that were engaging. For example, rural and tribal community members were invited to participate in an advisory board to plan

USU’s Rural Utah Opioid Health & Wellness Summits and the Tribal Opioid Wellness Summit. Advisory board members reported that the planning process provided a sense of community, noting that tribal and rural participation in program content helped to foster a positive community presence throughout the summit. Several ROTA grantees were honored with awards for the diversity and inclusion incorporated into program efforts.

Program Promotion

Web-Based Marketing

To improve reach, ROTA grantees engaged in marketing, often through program websites and social media. Many ROTA grantees found that developing a website created a key platform for sharing resources and information, although experiences with online engagement tools varied. For example, while several ROTA grantees highlighted websites and online trainings as a tool for keeping communities connected to resources and information during the COVID-19 pandemic, others attributed poor community engagement to the shift toward online programming post-pandemic. Materials covering highly demanded topics tended to elicit especially high viewership. Further, MSU attributed an in-

crease in program activity enrollment to social media promotion. Social media was an important tool for improving program reach, and some ROTA grantees, such as Michigan State, designed social media content to be easily shared or printed. Content viewership was high across settings, with Michigan State’s six-month digital campaign gaining 803,603 impressions in total. In addition, MS State designed prevention messages for a campaign led by the state’s STR and SOR called Stand Up, Mississippi. Another platform ROTA grantees could use to disseminate information about resources and events were program newsletters, which many grantees, such as ISU and MSU, sent to community partners. UMN and Oregon State University (Oregon State) secured partnerships with well-respected community health providers to create podcasts focused on health and recovery. USU created a podcast called Debunked, focusing on fighting stigma. WSU made a listserv to which community members could subscribe to receive newsletters.

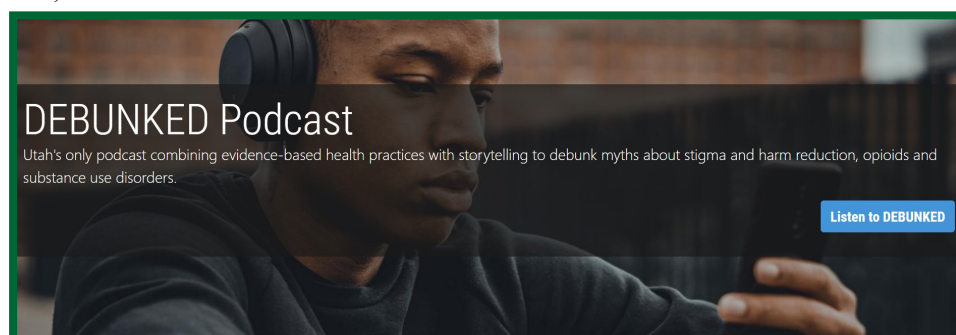
Dissemination through Partnerships

Across settings, partnerships also created opportunities to expand program reach. For example, VT reported that

“We’re Native people working with Native communities, we’re speaking the same language, on the same page. We have shared understandings of ourselves and our communities and we’re able to get to the heart of what the work is....”

- Extension Educator, Leader of AIRRT, UMN ROTA Program

Figure 5. USU continues to produce content for the DEBUNKED podcast to share evidence-based content about harm reduction, substance use disorders, and opioids while addressing stigma. <https://extension.usu.edu/healthwellness/healthequity/debunked>





Master Health Volunteer Program (MHVP)

Figure 6. USU's Master Health Volunteer Program continues to offer opportunities for individuals who wish to support health and resilience in their own communities. <https://extension.usu.edu/healthwellness/healthequity/master-health-volunteer>

“Individuals have the autonomy to be an architect and driver of change in their community, but only if they see themselves as leaders.”

-Lori Rothstein, Center for Community Vitality, Changemakers, UMN ROTA Program

“There are so many organizations with limited resources trying to do the same things, it's great to pull us all together...”

-Local Prevention Agency Member, of ISU ROTA Program

an Extension Project Coordinator who was active in community coalitions was asked to extend project resources across partnering agencies. Providing valuable resources was another tool for expanding ROTA program impact. For instance, through a partnership between Minnesota and South Dakota funded by the USDA, SDSU provided care packages to rural residents that also contained information about available resources. In partnership with Oklahoma State's Extension Services and 4-H, Oklahoma State's ROTA program staffed an educational booth at the state School Board Annual Leadership Conference, which provided access to a large audience and school leadership. Leveraging strong partnerships, MSU attended community meetings, technical assistance trainings, college events, summer youth programs, and community events, such as an IRS VISTA tax preparation event, reaching over 1,160 people.

Mobilizing Communities

Leveraging ROTA Funding Providing tangible resources through funding was a key tool for fostering community engagement with programs. Several ROTA grantees shared quotes from commu-

nity members and program administrators that highlighted the role tangible resources played in strengthening community engagement. For example, a regional coordinator working with VT stated, “ROTA funding allows us to represent Virginia Cooperative Extension by taking a seat at many tables agents may not typically occupy...”

Community Participation

Robust community engagement was the strategy most often credited for program success. Many ROTA grantees demonstrated that acknowledgement of and collaboration with existing community organizations and structures fostered a strong and coordinated opioid response. A prevention agency in Iowa expressed “there are so many organizations with limited resources trying to do the same things, it's great to pull us all together...” Another strategy to elicit community participation was USU's Master Health Volunteer program, which provided training for individuals interested in joining Extension efforts. Altogether, 11,000 hours of volunteer service were provided through the program. University of Rhode Island (URI) also reported volunteer participation, noting that the university's Cooperative Extension affiliated with 1,300 volunteers. Several ROTA grantees, including WSU, UM, UNH, and Oregon State conducted needs assessments or broad surveys to determine target areas for programming, providing an opportunity for community input to steer program design. Also fostering community-driven work, UMN's Changemaker lead-

ership development retreats were offered to individuals interested in leading recovery programs in their own neighborhoods. Said one of the project's partners, “individuals have the autonomy to be an architect and driver of change in their community, but only if they see themselves as leaders.”

Strengthening Community Capital

Social Capital

Enhancing social capital was another essential aspect of community mobilization and engagement. Feedback elicited from three ROTA grantees highlighted the isolating effect of the COVID-19 pandemic and demand for programs that addressed this isolation and its behavioral health impact. To this end, some programs built a sense of shared experience that participants found valuable. Utah's 2020 Intertribal Opioid Wellness Summit fostered supportive personal connections, and 20% of attendees said they had come hoping to find a space online to gather with community members. Spaces that offered an opportunity to share lived experience were also impactful. One participant noted that the opportunity to share their recovery journey with others was an important part of their healing process. Also highlighting a need to build social capital, demand to address stigma arose often across settings, and various community members expressed a need for training on responding to peer pressure. Feedback on content centered around family relationships and parenting

skills were overwhelmingly positive.

Cultural Capital

Another important part of these efforts involved fostering cultural capital. For example, the AIRRT leveraged cultural knowledge and strong networks to build upon community strengths in a culturally responsive way, noting that having a fully tribal team erased critical barriers. A Tribal Community Facilitator who led Traditional Native Games, highlighted the importance of cultural capital, saying, “just seeing the strength [of] learning Pan-Indian cultural knowledge can be a bridge to you getting reconnected to your culture, and that a lot of kids that were suicidal, or... using drugs had a disconnection, and that it [Traditional Native Games] was the bridge to helping them get back to the culture. Culture is prevention.”

Financial Capital

Building community financial capital was an important aspect of mobilizing an effective and sustainable rural opioid response. In Montana, community partners identified training and technical assistance on sustainable fundraising and grant administration as a significant need, which the ROTA program responded to by offering technical assistance on grant writing and administration. Similarly, State Opioid Response and Tribal Opioid Response partners discussed approaches to streamlining federal grant application process for tribal partners in Oregon to build further capital. As another way in which financial capi-

tal was connected to resilience, poverty was consistently associated with risk of opioid misuse among TTA workshop participants in Montana. As previously explored, some grantees addressed this need by providing financial skill-building.

Program Building

Leadership

The need for dedicated leadership was indicated as a critical element of ROTA programming success. Said a Regional Extension Coordinator in Virginia, “The ROTA program, in my opinion, operates more efficiently than other programs of this nature due to having an individual whose career purpose is to offer prevention programming, decrease stigma, and connect the community.” As such, developing strong leadership was necessary to building a successful and sustainable program. An exemplar of leadership development was the Change-maker program offered by UMN. Train-the-trainer events were another tool for building community leadership capable of disseminating information, which University of Maryland Extension (UME) used to train 44 MHFA instructors. Florida Agricultural and Mechanical University (FAMU) advertised instructor trainings through local radio stations to maximize the reach of program content. Diverse leadership was also necessary for developing program materials that were culturally responsive. For example, the 2020 Opioid Harm Reduction Summit was developed by an Indigenous



chairperson for an Indigenous audience.

Program Planning and Development

All ROTA grantees reported using evidence-based programs, although program adaptations, especially in the context of the COVID-19 pandemic, were common, and virtually all ROTA grantees adapted programs to online platforms post-pandemic. Some teams also created original materials during the grant period, such as a culturally sensitive harm reduction training developed by USU. Although a small number of original programs were not completed within the planned timeframe, a greater proportion finished on-time were developed through collaboration with partner entities than those that were delayed.

Partnership Building

Given the critical nature of partnerships, building collaborative relationships was an important aspect of planning programs and building capacity to deliver them. As explored earlier, offering highly demanded resources and offering tangible support were channels through which community partnerships were built. The types of partnerships established were vast, including advocacy organizations, health departments, educational institutions, healthcare organiza-

Figure 7. 20% of 2020 Intertribal Opioid Wellness Summit attendees reported coming in hopes of finding an online space to gather with community members. <https://www.sanpasqualbandofmissionindians.org/news-and-events/events/2020-intertribal-opioid-wellness-summit>

“The ROTA program, in my opinion, operates more efficiently than other programs of this nature due to having an individual whose career purpose is to offer prevention programming, decrease stigma, and connect the community.”

-Regional Extension Coordinator, VT ROTA Program



Figure 8. Example of an on-demand training offered by Purdue University. Easily accessible digital content creation and regular online communication was critical to maintaining engagement throughout the COVID-19 pandemic. <https://extension.purdue.edu/opioids/>

“The work we are doing under SAMHSA is collective and collaborative in nature, forming relationships and partnerships and engaging everyone...”
-Erin Meltz, Aitkin County Public Health, of the UMN ROTA Program

tions, recovery centers, agricultural institutions, pharmacies, police departments, public libraries, community health workers, faith-based organizations, local businesses, and State Opioid Response and Tribal Opioid Response programs, among others. As reported by a local public health official partnering with UMN, the ROTA program inherently fostered collaboration, stating, “the work we are doing under SAMHSA is collective and collaborative in nature, forming relationships and partnerships and engaging everyone...”

Developing Program Resilience

COVID-19

Several ROTA grantees responded to emerging challenges by creating new materials or adapting existing resources, demonstrating responsiveness to context through flexible programming. No circumstances elicited a greater need for adaptive programming than the COVID-19 pandemic. Perhaps the greatest barrier caused by the pandemic was a rupture in community engagement as activities shifted online, as many individuals and families lacked interest or participation in virtual trainings and programs due to “Zoom fatigue”, as expressed by one PSU trainer. Another challenge, reported by ISU, was the reality that COVID-19 had become a competing priority with the opioid epidemic, splitting

community resources between two national crises.

Adaptations to address challenges presented by COVID-19 demonstrated ingenuity and agility on the part of ROTA grantees, who developed engaging and feasible ways to improve content reach. For example, some ROTA grantees who originally planned to use SFP trainings switched to other family-based programs due to constraints introduced by the pandemic. As explored previously, engaging social media and website content helped maintain community attention in a virtual setting. As PSU reported, keeping a virtual line of communication open post-pandemic was key to maintaining engagement.

In addition, some grantees found innovative ways to strengthen community engagement offline. For example, after finding that a cohort of families could not access online training materials, NCSU project leadership downloaded the content onto thumb drives and delivered them. Oklahoma State highlighted an initiative led by its National Center for Wellness & Recovery, a broad coalition comprising of various community leaders, in which “drive thru” events were held, offering a chance to distribute naloxone and medicine lockboxes throughout the COVID-19 pandemic. Thanks to an anonymous van donation, URI staffed outdoor booths at rural farmer’s markets, retail parking lots, and other locations to boost public interaction in a pandemic context.

Turnover and Workforce Shortages

In addition to the COVID-19

pandemic, workforce instability impacted ROTA grantee efforts, particularly when turnover affected core staff positions, as was frequently reported. Communication and collaboration with partner organizations was at times difficult due to high turnover within these entities. Given the frequency of turnover, especially in the post-pandemic context, backup contingencies may be built into project and partnership plans, especially regarding key positions and regions with especially extensive workforce shortages.

Logistical Barriers

Logistical barriers were commonly experienced across settings, ranging from school policies which did not allow third party partners on campus for in-school trainings, university policies requiring extensive processing for contractor and vendor onboarding, and encounters of similar, competing programs. Nimble programs allowing for flexible scheduling that could be presented in various settings were an answer to many of these challenges. For example, NCSU found that the Botvin LST program, which did not require parents and children to attend trainings at the same time and could be flexibly administered, solved many logistical challenges. Further, ROTA grantees who worked with organizations doing similar work to coordinate a non-duplicative effort successfully navigated concerns about competing efforts.

Program Expansion

After program maintenance had been established, a few

ROTA grantees went on to expand the reach and scope of their delivery and the capacity of program teams to implement them. For example, several ROTA grantees “scaled up” programs through providing community and technical assistance that could strengthen capacity to disseminate information. For example, Colorado State University (CSU) partnered with the Colorado Consortium for Prescription Drug Abuse Prevention, Rise Above Colorado, CSU Extension, and the CSU Prevention Research Center to develop a readiness survey to assess county capacity to implement SFP-10-14 through the PROMoting School-community-university Partnerships to Enhance Resilience (PROSPER) delivery system, resulting in trainings for SFP 10-14 facilitators. Similarly, MU worked with the university’s Center for Applied Research and Engagement Systems (CARES) and ISU’s Partnerships in Prevention Science Institute to develop a readiness assessment tool in anticipation of reaching new regions. MSU partnered with tribal Extension agents in Fort Belknap, Fort Peck, and Northern Cheyenne to expand the reach of programs, and USU conducted outreach and provided naloxone trainings for the Ute Tribe, Paiute Tribe, and Goshute Tribes. In some instances, the content or nature of programs were expanded in response to emerging information. For example, PSU piloted an improved drug take-back box design which allowed for more precise measurement of its use within the community. Michigan State adjusted its community presentation format in re-

sponse to emerging market- ing needs. Further, as the need for harm reduction education and training became apparent, USU developed a brief naloxone course.

Program Sustainability

In addition to adapting to context, ROTA grantees and the communities they served demonstrated initiative in proactively anticipating the need for resources to support program maintenance through acquiring local sources of funding. One way in which program sustainability was supported was through training partners in grant writing and administration. Further, regional project extension coordinators working with VT’s ROTA programming were active in community coalitions, providing administrative guidance and fundraising support to recovery facilities in the area. In addition, ISU developed a reporting system documenting ongoing resources generated, finding that \$28,798 of personnel and non-personnel time and \$10,247 in monetary donations had been accrued throughout the course of the event. This and the Master Health Volunteer Program were examples of strong community initiative and illustrations of the community capital necessary to ensure program sustainability.

Data Collection

While two cohorts of TTA workshop participants identified data collection as an important opioid prevention strategy, some community feedback suggested that data



collection was not well-received or perceived as burdensome. However, use of incentives for survey completion led to high response rates among participants, as demonstrated by Michigan State’s ROTA program. Some feedback suggested that surveys be re-examined to avoid duplication of items and, as a tribal community facilitator working with UMN highlighted, there is some value in providing evidence-based services without asking for payment or data collection as part of the process.

Data Evaluation

Data collected despite these hurdles provided invaluable insight. Among the most frequently evaluated outcomes was participant satisfaction with program events, with the total proportion reporting being either “very satisfied” or “satisfied” with overall quality and/or experience of an event ranging from a low of 71% to a high of 100%, which was reported by Oklahoma State of a webinar presented by Officer Jarmaine Golloway. Of note, 134 respondents reported a 97.8% rate of feeling “satisfied” or “very satisfied” in response to WSU’s ROTA programming overall. Among those who differentiated satisfaction levels between training and technical assistance events, satisfaction regarding technical assistance events tend-

Figure 9. Several ROTA grantees responded to community needs by developing content on harm reduction, including USU. <https://extension.usu.edu/healthwellness/healthequity/harm-reduction-training/index>

Adaptations to address challenges presented by COVID-19 demonstrated ingenuity and agility on the part of ROTA grantees, who developed engaging and feasible ways to improve content reach.

ed to be substantially higher. Intentions to use information gained from program events was also quite high and most participants reported that they either “agree” or “strongly agree” that they expect to use information gained from events, with a low of 72% and a high of 95%, which was reported by participants of URI’s Community First Responder Program events. More specific outcomes related to individual attitudes and behavior were also reported:

- 83% of 2019 USU’s Rural Opioid Summit participants agreed or strongly agreed that they were more likely to use naloxone in their communities if needed after attending the event.
- 75% of youth and 96% of caregivers felt that they were better able to discuss difficult situations with one another as the result of NCSU’s Powerful Communities Program.
- 88.9% of participants in UME’s This is Not About Drugs (TINAD) sessions reported being more willing to talk to someone if concerned about themselves or others and 83.3% reported that they were less likely to misuse prescription drugs.
- After attending a presentation by Jermaine Galloway hosted by Oklahoma State, the percentage of respondents who knew of pain management alternatives to opioids more than doubled from 45% to 91%.

These outcomes highlight the success of the ROTA program as well as the resilience and innovation demonstrated by its grantees. SAMHSA’s ROTA-R program will build upon these efforts by extending an opportunity for universities not currently enrolled in the USDA Extension program to engage in opioid prevention and intervention in rural settings.

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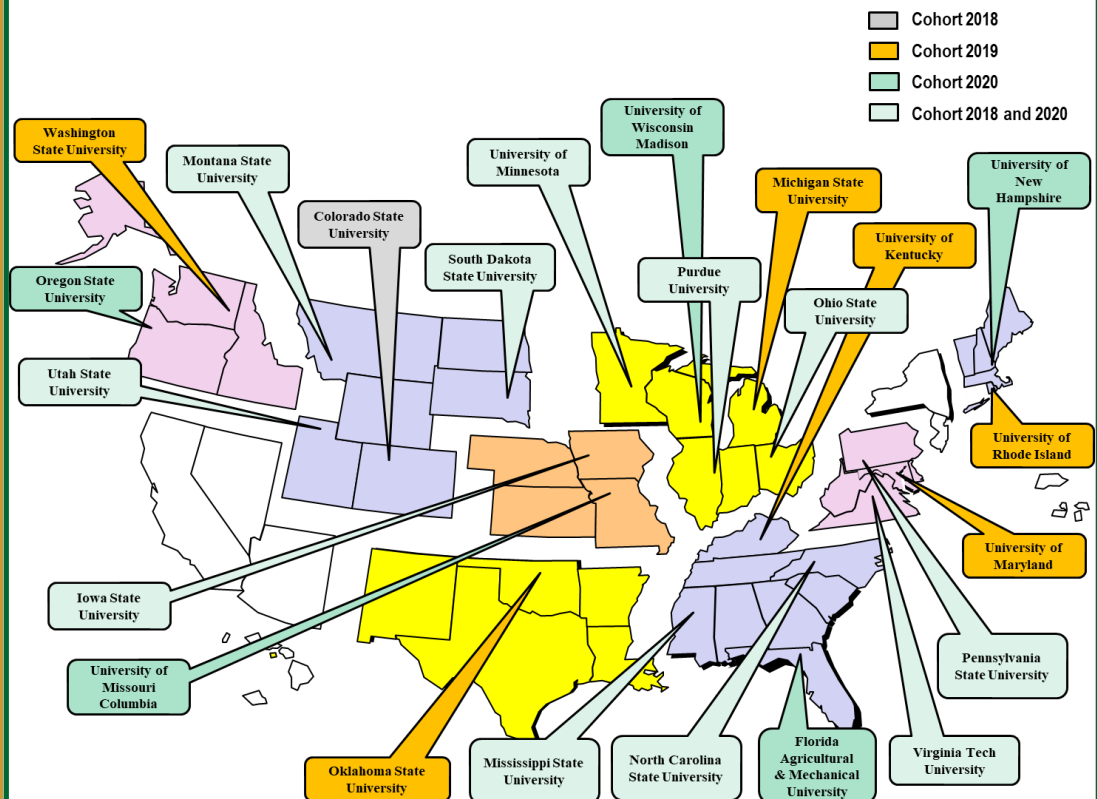


Figure 10. A map of the 23 ROTA grantees and their respective regions of grant implementation. Humberto Carvalho, personal communication, 2022.

Notes

1. Andrés Hernández, Minxuan Lan, Neil J. MacKinnon, Adam J. Branscum, and Diego F. Cuadros, “‘Know Your Epidemic, Know Your Response’: Epidemiological Assessment of the Substance Use Disorder Crisis in the United States,” *PLOS ONE* 16, no. 5 (2021): 1, doi:<https://doi.org/10.1371/journal.pone.0251502>
2. Stacy A. Grundy, Sasha R. Mozelewski, Eric Adjei Boakye, Minjee Lee, and Bruce L. Levin, “Faith Leaders’ Perceptions of Needle Exchange Programs in the Rural Illinois Delta Region: Religion as a Social Determinant of Health,” *The American Journal on Addictions* 30, no. 6 (2021): 562, doi:[10.1111/ajad.13213](https://doi.org/10.1111/ajad.13213)
3. Jessica Jay, Amy Chan, George Gayed, and Julie Patterson, “Coverage of the Opioid Crisis in National Network Television News from 2000–2020: A Content Analysis,” *Substance Abuse* 43, no. 1 (2022): 1322, doi:[10.1080/08897077.2022.2074594](https://doi.org/10.1080/08897077.2022.2074594)
4. Hillary V Kunins, “Structural Racism and the Opioid Overdose Epidemic: The Need for Antiracist Public Health Practice,” *Journal of Public Health Management and Practice* 26, no. 3 (2020): 201–5, doi:[10.1097/phh.0000000000001168](https://doi.org/10.1097/phh.0000000000001168)
5. Beth Han, Emily B. Einstein, Christopher M. Jones, Jessica Cotto, Wilson M. Compton, and Nora D. Volkow, “Racial and Ethnic Disparities in Drug Overdose Deaths in the US During the COVID-19 Pandemic,” *JAMA Network Open* 5, no. 9 (September 20, 2022): e2232314, doi:[10.1001/jamanetworkopen.2022.32314](https://doi.org/10.1001/jamanetworkopen.2022.32314)
6. Nabila El-Bassel, Rebecca D Jackson, Jeffrey Samet, and Sharon L Walsh, “Introduction to the Special Issue on the HEALing Communities Study,” *Drug and Alcohol Dependence*, (December 1, 2020): 1, <https://doi.org/10.1016/j.drugalcdep.2020.108327>.
7. Shannon Monnat and Khary Rigg, “The Opioid Crisis in Rural and Small Town America,” *University of New Hampshire Carsey School of Public Policy*, (2018): 3, doi:[10.34051/p/2020.332](https://doi.org/10.34051/p/2020.332)
8. Joan Stephenson, “Commission Outlines New Strategies to Combat Opioid Crisis,” *JAMA Health Forum* 3, no. 2 (2022): e220382, doi:[10.1001/jamahealthforum.2022.0382](https://doi.org/10.1001/jamahealthforum.2022.0382)
9. Bernard Showers, Danielle Dicken, Jennifer S. Smith, and Aaron Hemlepp, “Medication for Opioid Use Disorder in Rural America: A Review of the Literature,” *Journal of Rural Mental Health* 45, no. 3 (2021): 184, doi:[10.1037/rmh0000187](https://doi.org/10.1037/rmh0000187)
10. William L. Swann, Michael DiNardi, and Terri L Schreiber, “Association Between Interorganizational Collaboration in Opioid Response and Treatment Capacity for Opioid Use Disorder in Counties of Five States: A Cross-Sectional Study,” *SAGE Journals*, (2022): 1, <https://doi.org/10.1177/11782218221111949>
11. “Local Teens Provide Resources to People Struggling with Opioid Addiction,” KHQ, June 2021, https://www.khq.com/news/local-teens-provide-resources-to-people-struggling-with-opioid-addiction/article_78588694-c723-11eb-88fb-97491ef07af6.html
12. “The Recovery Friendly Initiative,” Recovery Friendly Missouri, n.d., <https://recoveryfriendlymo.com/about/>
13. “Recovery Capitals,” Recovery Capitals | Community-Based Opioid Prevention and Education (C.O.P.E.), n.d., <https://opioid.umn.edu/recovery-capitals>
14. “Mending Broken Hearts: On Healing and Disrupting the Cycles of Intergenerational and Communal Trauma,” UMN Extension, September 13, 2021, <https://extension.umn.edu/family-news/mending-broken-hearts>.

List of Acronyms and Other Terms

- ACEs: Adverse Childhood Experiences
- AIRRT: American Indian Resource and Resilience Team
- CARES: University of Missouri Center for Applied Research and Engagement Systems
- CSU: Colorado State University
- ECHO: Extension for Community Health Care Outcomes
- FAMU: Florida Agricultural and Mechanical University
- IHS: Indian Health Services
- LST: Life Skills Training
- MAT: Medication Assisted Treatment
- MHFA: Mental Health First Aid
- Michigan State: Michigan State University
- MS State: Mississippi State University
- MSU: Montana State University
- MU: University of Missouri
- NCSU: North Carolina State University
- Oklahoma State: Oklahoma State University
- Oregon State: Oregon State University
- OSU: Ohio State University
- OUD: Opioid Use Disorder
- PROSPER: PROMoting School-community-university Partnerships to Enhance Resilience
- PSU: Pennsylvania State University
- QPR: Question, Persuade, Refer
- RFW: Recovery Friendly Workplaces
- ROTA: Rural Opioid Technical Assistance
- SAMHSA: Substance Abuse and Mental Health Services Administration
- SDSU: South Dakota State University
- SFP: Strengthening Families Program
- SOR: State Opioid Response
- STR: State Tribal Relations
- TTA: Tribal technical assistance
- UK: University of Kentucky
- UME: University of Maryland Extension
- UMN: University of Minnesota
- UNH: University of New Hampshire
- URI: University of Rhode Island
- USDA: U.S. Department of Agriculture
- USU: Utah State University
- VT: Virginia Tech University
- WSU: Washington State University

Bibliography

- “2020 Intertribal Opioid Wellness Summit.” San Pasqual Band of Mission Indians, n.d. <https://www.sanpasqualbandofmissionindians.org/news-and-events/events/2020-intertribal-opioid-wellness-summit>.
- Bonar, Erin E., Lara Coughlin, Jessica S. Roche, Meredith L. Philyaw-Kotov, Emily A. Bixler, Sergey Sinelnikov, Alaina Kolosh, Morgan J. Cihak, Rebecca M. Cunningham, and Maureen A. Walton. “Prescription Opioid Misuse among Adolescents and Emerging Adults in the United States: A Scoping Review.” *Preventive Medicine* 132 (2020): 105972. doi:10.1016/j.ypmed.2019.105972.
- “Building a Stronger Workforce in Missouri.” *Recovery Friendly Missouri*, n.d. <https://recoveryfriendlymo.com/>.
- Carvalho, Humberto. *ROTA Program Map*, personal communication, October 28, 2022.
- Chang, Ji Eun, Berkeley Franz, Cory E. Cronin, Zoe Lindenfeld, Alden Yuanhong Lai, and José A. Pagán. “Racial/Ethnic Disparities in the Availability of Hospital Based Opioid Use Disorder Treatment.” *Journal of Substance Abuse Treatment* 138 (2022): 108719. doi:10.1016/j.jsat.2022.108719.
- Chowdhury, Dalia. “Developing a Trauma-Informed Workforce for the Opioid Crisis in a Rural Community in the United States: A Case Study.” *The Journal of Mental Health Training, Education and Practice* 17, no. 1 (2021): 12–26. doi:10.1108/jmhtep-06-2021-0070.
- “Current Project.” *Tribal N.E.A.R. Science & Community Wisdom Project*, March 28, 2022. <https://rememberingresilience.home.blog/about-us/>.
- “Debunked Podcast: Office of Health Equity and Community Engagement: Extension Health and Wellness.” *Utah State University*, n.d. <https://extension.usu.edu/healthwellness/healthequity/debunked>.
- Drake, Jasmine, Creaque Charles, Jennifer W Bourgeois, Elycia S Daniel, and Melissa Kwende. “Exploring the Impact of the Opioid Epidemic in Black and Hispanic Communities in the United States.” *Drug Science, Policy and Law* 6 (2020): 205032452094042. doi:10.1177/2050324520940428.
- El-Bassel, Nabila, Rebecca D Jackson, Jeffrey Samet, and Sharon L Walsh. “Introduction to the Special Issue on the HEALing Communities Study.” *Drug and Alcohol Dependence*, (December 1, 2020). <https://doi.org/10.1016/j.drugalcdep.2020.108327>.
- Grundy, Stacy A., Sasha R. Mozelewski, Eric Adjei Boakye, Minjee Lee, and Bruce L. Levin. “Faith Leaders’ Perceptions of Needle Exchange Programs in the Rural Illinois Delta Region: Religion as a Social Determinant of Health.” *The American Journal on Addictions* 30, no. 6 (2021): 560–67. doi:10.1111/ajad.13213.
- Han, Beth, Emily B. Einstein, Christopher M. Jones, Jessica Cotto, Wilson M. Compton, and Nora D. Volkow. “Racial and Ethnic Disparities in Drug Overdose Deaths in the US During the COVID-19 Pandemic.” *JAMA Network Open* 5, no. 9 (September 20, 2022): e2232314–e2232314. doi:10.1001/jamanetworkopen.2022.32314.
- “Harm Reduction Training.” *Utah State University*, n.d. <https://extension.usu.edu/healthwellness/healthequity/harm-reduction-training/index>.
- Hernández, Andrés, Minxuan Lan, Neil J. MacKinnon, Adam J. Branscum, and Diego F. Cuadros. “‘Know Your Epidemic, Know Your Response’: Epidemiological Assessment of the Substance Use Disorder Crisis in the United States.” *PLOS ONE* 16, no. 5 (2021): e0251502. doi:10.1371/journal.pone.0251502.
- Higgins, Stephen T. “Behavior Change, Health, and Health Disparities 2021: Rural Addiction and Health.” *Preventive Medicine* 152 (2021): 106834. doi:10.1016/j.ypmed.2021.106834.
- Jay, Jessica, Amy Chan, George Gayed, and Julie Patterson. “Coverage of the Opioid Crisis in National Network Television News from 2000–2020: A Content Analysis.” *Substance Abuse* 43, no. 1 (2022): 1322–32. doi:10.1080/08897077.2022.2074594.
- Jenkins, Richard A. “The fourth wave of the US Opioid Epidemic and Its Implications for the Rural US: A Federal Perspective.” *Preventive Medicine* 152 (2021): 106541. doi:10.1016/j.ypmed.2021.106541.
- Kunins, Hillary V. “Structural Racism and the Opioid Overdose Epidemic: The Need for Antiracist Public Health Practice.” *Journal of Public Health Management and Practice* 26, no. 3 (2020): 201–5. doi:10.1097/phh.0000000000001168.
- Langabeer, James R., Kimberly A. Chambers, Marylou Cardenas-Turanzas, and Tiffany Champagne-Langabeer.

Appendix B (Cont.)

To learn more, visit the
following link.

- “County-Level Factors Underlying Opioid Mortality in the United States.” *Substance Abuse* 43, no. 1 (2020): 76–82. doi:10.1080/08897077.2020.1740379.
- “Local Teens Provide Resources to People Struggling with Opioid Addiction.” *KHQ*, June 2021. https://www.khq.com/news/local-teens-provide-resources-to-people-struggling-with-opioid-addiction/article_78588694-c723-11eb-88fb-97491ef07af6.html.
- “Master Health Volunteer Program: Office of Health Equity and Community Engagement: Extension Health and Wellness.” *Utah State University*, n.d. <https://extension.usu.edu/healthwellness/healthequity/master-health-volunteer>.
- “Mending Broken Hearts: On Healing and Disrupting the Cycles of Intergenerational and Communal Trauma.” *UMN Extension*, September 13, 2021. <https://extension.umn.edu/family-news/mending-broken-hearts>.
- Monnat, Shannon, and Khary Rigg. “The Opioid Crisis in Rural and Small Town America.” *University of New Hampshire Carsey School of Public Policy*, 2018. doi:10.34051/p/2020.332.
- “Purdue Extension Addresses Indiana’s Opioid Crisis by Providing Community-Based Prevention Education.” *Purdue Extension Opioids*, n.d. <https://extension.purdue.edu/opioids/>.
- “Recovery Capitals.” Recovery Capitals | Community-Based Opioid Prevention and Education (C.O.P.E.), n.d. <https://opioid.umn.edu/recovery-capitals>.
- Showers, Bernard, Danielle Dicken, Jennifer S. Smith, and Aaron Hemlepp. “Medication for Opioid Use Disorder in Rural America: A Review of the Literature.” *Journal of Rural Mental Health* 45, no. 3 (2021): 184–97. doi:10.1037/rmh0000187.
- Stanley, Linda R., Meghan A. Crabtree, and Randall C. Swaim. “Opioid Misuse Among American Indian Adolescents.” *American Journal of Public Health* 111, no. 3 (2021): 471–74. doi:10.2105/ajph.2020.306039.
- Stephenson, Joan. “Commission Outlines New Strategies to Combat Opioid Crisis.” *JAMA Health Forum* 3, no. 2 (2022): e220382–e220382. doi:10.1001/jamahealthforum.2022.0382.
- Swann, William L, Michael DiNardi, and Terri L Schreiber. “ Association Between Interorganizational Collaboration in Opioid Response and Treatment Capacity for Opioid Use Disorder in Counties of Five States: A Cross-Sectional Study.” *SAGE Journals*, 2022. <https://doi.org/10.1177/11782218221111949>.
- “The Recovery Friendly Initiative.” Recovery Friendly Missouri, n.d. <https://recoveryfriendlymo.com/about/>.
- Volkow, Nora D., and Carlos Blanco. “The Changing Opioid Crisis: Development, Challenges and Opportunities.” *Molecular Psychiatry* 26, no. 1 (2020): 218–33. doi:10.1038/s41380-020-0661-4.
- Weller, Bridget E., Jennifer Harrison, and Carla Adkison-Johnson. “Training a Diverse Workforce to Address the Opioid Crisis.” *Social Work in Mental Health* 19, no. 6 (2021): 568–82. doi:10.1080/15332985.2021.1975014.
- Welsh, Janet. *Growing Evidence Based Prevention in Pennsylvania to Address Opioid Misuse*, December 2021.
- Ziller, Erika, and Carly Milkowski. “A Century Later: Rural Public Health’s Enduring Challenges and Opportunities.” *American Journal of Public Health* 110, no. 11 (2020): 1678–86. doi:10.2105/ajph.2020.305868.