

# Rural Health Info Brief

OCTOBER 2020



## Keeping ahead of the HIV epidemic during an era of COVID-19

### INTRODUCTION

In 2019, when the U.S. Department of Health and Human Services (HHS) proposed Ending the HIV Epidemic: A Plan for America (EHE) initiative to end the HIV epidemic in the United States within 10 years —Oklahoma was identified as 1 of 7 rural HIV burdened states.<sup>2,3</sup> Just as attention was focused on HIV, the COVID-19 pandemic shifted state and federally funded resources away from HIV prevention programming in order to address the novel gaps in care concerning COVID-19.<sup>4</sup> While the COVID-19 pandemic has taken priority, and appropriately so, there remain more than 160,000 people with undiagnosed HIV in the United States.<sup>5</sup>

Current estimates indicate that under 30% of rural Oklahomans have been tested for HIV in their lifetime – and less than 6% have been tested in the past year, one of the lowest rates in the nation.<sup>3</sup> The COVID-19 pandemic has created additional barriers for individuals to access traditional HIV testing venues (e.g., county health departments, mobile testing sites, social service organizations), and the problem is even more acute in rural areas. Although the absolute number of HIV cases is higher in urban areas of Oklahoma, the per capita infection rate in rural areas is growing and may be under-reported due to limited access to HIV testing in these areas. Without robust screening programs, the ability of public health agencies to accurately survey the current HIV burden in rural areas is limited.

In Oklahoma, public health resources to combat the HIV burden (e.g., testing and linkage to care) such as contact tracers and Disease Intervention Specialists (DIS) have also been disrupted by the COVID-19 pandemic. This further diminishes the ability of public health agencies to assess the true prevalence of HIV within urban

### Numbers to Know <sup>1</sup>

**6,163**

Oklahomans living with HIV in 2017

**47%**

Had seen an HIV specialist in the past year

**49%**

Were virally suppressed

**84%**

Were linked to care



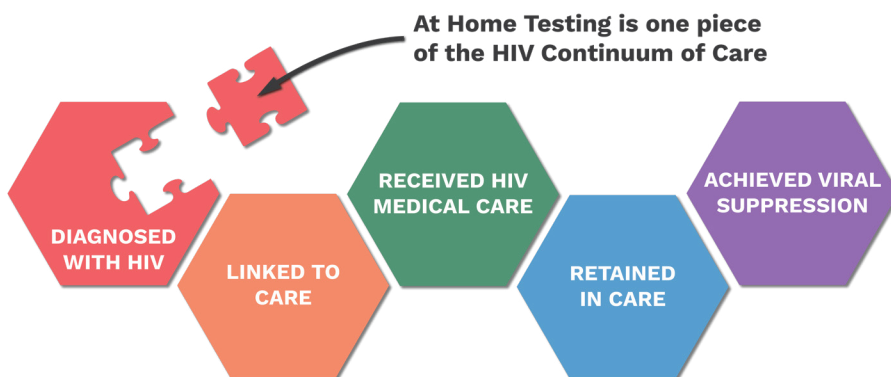
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and rural Oklahoma. This devalues the development of effective and efficient interventions in Oklahoma, as the data may not reflect those urban or rural populations. While this data gap existed prior to the onset of the COVID-19 pandemic, it has now been exacerbated by a strained public health system.

## **THE ONSET OF THE COVID-19 PANDEMIC HAS HIGHLIGHTED CURRENT GAPS WITHIN OUR HIV PREVENTION SYSTEMS WHILE PROVIDING NOVEL OPPORTUNITIES TO IMPLEMENT INNOVATIVE SOLUTIONS.**

With public health and health care resources diverted to COVID-19, it is imperative that measures be taken to mitigate other epidemics within our communities, including HIV. Several strategies have been tested to increase HIV screening, such as self-collected samples and at-home testing. By using online resources, an individual can request a testing kit by mail, which can be processed at-home or mailed to a lab. By utilizing this method of testing and integrating telemedicine or mobile health (mHealth) for follow-up care, systems can further advance the healthcare triple-aim of reduced cost, increased care quality, and improved population health. HIV testing and treatment access can be enhanced even in Oklahoma's most rural communities while lessening the workforce burden on local clinics. As it has been proven to be effective during the COVID-19 pandemic, leveraging technology to increase HIV testing within Oklahoma is financially sound policy which decreases future medical costs absorbed by individuals, health insurance programs, and the government. Specifically, at-home testing substantially decreases personnel associated with a traditional HIV testing appointment. The ability to request a testing kit and receive results online, to access affirming and competent providers utilizing telemedicine technology, and to receive prompt linkage to treatment can all be done at home—eliminating a number of known barriers (travel distance, broadband access, missed work for travel) and stigma.



Research has demonstrated that HIV testing is further hindered within rural communities by social factors, such as stigma.<sup>6,7</sup> Stigma has been found to disproportionately affect rural communities and marginalized populations. Stigma results in marginalized individuals expecting rejection from others, concealing their identity, internalizing homophobia, and experiencing discrimination—ultimately impeding individuals from accessing HIV prevention and testing services.<sup>8,9</sup> Leveraging at-home testing programs would allow individuals to circumvent stigmatizing environments which prohibit care access. In tandem, community-level stigma can be decreased through increased HIV knowledge and understanding in rural communities. However, increasing HIV testing uptake and decreasing disease spread will require alignment of fiscal and educational policies to address current public health needs. Overcoming these barriers will require the modification of existing public health policies and intervention strategies, grounded in research and theory.

## **RESEARCH AND INFRASTRUCTURE NEEDS AND ISSUES IN OKLAHOMA**

Oklahoma can increase HIV prevention infrastructure by directing programming and funding to support rural-based initiatives and HIV researchers who study rural populations. State partnerships with researchers can help ensure that the most cost-effective, evidence-based strategies are employed. Yet, there is a dearth of research in understanding community-level perceptions of HIV/AIDS in rural Oklahoma. While there has been some work on the perception of HIV/AIDS among rural MSM (gay, bisexual, and other men who have sex with men), it is important that researchers also examine the stigma of HIV/AIDS within the general population of Oklahoma's rural communities and its effects on primary (e.g. HIV education) and secondary (e.g. HIV testing) prevention. Further research is needed to assess HIV testing methods that are not at brick and mortar clinics—especially in rural areas. Through evaluation of these methods, nontraditional HIV testing can be expanded by leveraging the efficacy of at-home testing and the innovative logistics to enhance participation in the care continuum (e.g., mailing tests, receiving prescriptions, HIV specialist visits, etc.) Ultimately, this would lead to increased HIV testing, increased quality of life for persons with HIV and achievement of the CDC goal for all adults in Oklahoma to be tested for HIV at least once in their lifetime.

## CULTURAL COMPETENCE ISSUES IN HIV SCREENING AND TREATMENT

COVID-19 public health messaging has illuminated the fact that urban and rural communities have distinct messaging preferences and information needs.<sup>10</sup> There is an urgent need for research and public health initiatives that focus on the provision of culturally relevant HIV prevention services for Oklahomans, specifically those living in rural communities. Current rural-based programming has been tailored to communities within the Deep South and may not address the cultural context for which individuals residing in rural Oklahoma live their daily lives.

For example, American Indians represent about 9.3% of the Oklahoma population and have seen a substantial increase of new HIV infections within recent years. These community members may face unique culturally based stigma and confidentiality concerns that could limit willingness to engage in education and HIV testing. This may be exacerbated among those who live in rural communities or on reservations – as sometimes there is just a single health facility available to serve multiple towns.

Rural MSM are also heavily impacted by HIV nationally and within Oklahoma, and many lack culturally competent HIV prevention resources. Often isolated by chance, not choice, there is a need to leverage technological advances to link these populations to HIV programming through mobile health (mHealth) prevention initiatives in an effort to address confidentiality and privacy concerns.

## PARTICIPATION AND ENGAGEMENT IN LOCAL COMMUNITY-BASED ORGANIZATIONS

Community-based organizations in rural areas of Oklahoma can inform local policymakers and stakeholders about HIV and telehealth while continuing to deliver services to at-risk individuals who have limited interactions with the healthcare system.

Community and faith leaders of Oklahoma can speak boldly about the importance of HIV testing, prevention, and care —confronting the stigma that keeps many from seeking the services they need.

Individuals can encourage friends and family to get tested. Interpersonal relationships are important in reducing stigma surrounding HIV testing and treatment. Everyone in Oklahoma can take the steps necessary to protect their health. This includes supporting new, innovative testing modalities and care delivery systems, getting tested personally for HIV, and encouraging others in their network to do likewise.

## IN CONCLUSION

HIV is a multi-faceted health issue that requires solutions across multiple socio-ecological levels. Stigma, ineffective policy, the current public and healthcare infrastructure, and now, COVID-19, are just a few of the many current barriers to accessing HIV prevention and testing. In light of this, HIV prevention and innovations in care have greatly enhanced the quality of life for Persons with HIV. Self-testing kits, telemedicine, and new prevention strategies (e.g., PrEP), that reflect the needs of the community are all financially sound measures that will move Oklahoma towards Ending the HIV Epidemic.

**“After a decades-long struggle, the path to eliminate America’s HIV epidemic is clear...expanding efforts across the country will close gaps, overcome threats, and turn around troublesome trends.”**

Eugene McCray, M.D.  
CDC Division of HIV/AIDS Prevention

**“Now is the time for our Nation to take bold action. We strongly support President Trump’s plan to end the HIV epidemic in America.”**

Robert R. Redfield, M.D.  
Director CDC

**“We have an historic opportunity to improve the precision of prevention... This infusion of resources will finally relegate America’s HIV epidemic to the pages of history.”**

Jonathan Mermin, M.D., M.P.H.  
CDC National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention

## WORKS CITED

- 1 Oklahoma State Department of Health. (2018). Oklahoma HIV/AIDS Summary Statistics: Persons Living with HIV/AIDS in Oklahoma in 2017. Retrieved from [https://www.ok.gov/health/Prevention\\_and\\_Preparedness/HIV\\_STD\\_Service/Fact\\_Sheets\\_-\\_OK\\_Data/index.html](https://www.ok.gov/health/Prevention_and_Preparedness/HIV_STD_Service/Fact_Sheets_-_OK_Data/index.html)
- 2 Fauci, A. S., Redfield, R. R., Sigounas, G., Weahkee, M. D., & Giroir, B. P. (2019). Ending the HIV epidemic: a plan for the United States. *JAMA*, 321(9), 844-845. doi: [10.1001/jama.2019.1343](https://doi.org/10.1001/jama.2019.1343)
- 3 Pitasi, M. A., Delaney, K. P., Brooks, J. T., DiNenno, E. A., Johnson, S. D., & Prejean, J. (2019). HIV testing in 50 local jurisdictions accounting for the majority of new HIV diagnoses and seven states with disproportionate occurrence of HIV in rural areas, 2016–2017. *Morbidity and Mortality Weekly Report*, 68(25), 561. doi: [dx.doi.org/10.15585/mmwr.mm6825a2](https://dx.doi.org/10.15585/mmwr.mm6825a2)
- 4 Pinto, R. M., & Park, S. (2020). COVID-19 Pandemic Disrupts HIV Continuum of Care and Prevention: Implications for Research and Practice Concerning Community-Based Organizations and Frontline Providers. *AIDS and Behavior*, 1. doi: [doi.org/10.1007/s10461-020-02893-3](https://doi.org/10.1007/s10461-020-02893-3)
- 5 Centers for Disease Control and Prevention. (2020). Estimate HIV incidence and prevalence in the United States, 2014–2018. HIV Surveillance Supplemental Report 2020;25(No. 1). Retrieved from <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>
- 6 Hubach, R. D., Currin, J. M., Giano, Z., Meyers, H. J., DeBoy, K. R., Wheeler, D. L., & Croff, J. M. (2019). Experiences of stigma by gay and bisexual men in rural Oklahoma. *Health equity*, 3(1), 231–237. doi: [doi.org/10.1089/heq.2018.0095](https://doi.org/10.1089/heq.2018.0095)
- 7 Sullivan, M. C., Rosen, A. O., Allen, A., Benbella, D., Camacho, G., Cortopassi, A. C., ... & Kalichman, S. C. (2020). Falling Short of the First 90: HIV Stigma and HIV Testing Research in the 90–90–90 Era. *AIDS and Behavior*, 24, 357–362. doi: [10.1007/s10461-019-02771-7](https://doi.org/10.1007/s10461-019-02771-7)
- 8 Currin, J. M., & Hubach, R. D. (2017). Predicting disclosure of MSM status to providers in a primarily socially conservative state. *Journal of Gay & Lesbian Social Services*, 29(4), 445–452. doi: [doi.org/10.1080/10538720.2018.1378145](https://doi.org/10.1080/10538720.2018.1378145)
- 9 Hubach, R. D., Currin, J. M., Sanders, C. A., Durham, A. R., Kavanaugh, K. E., Wheeler, D. L., & Croff, J. M. (2017). Barriers to access and adoption of pre-exposure prophylaxis for the prevention of HIV among men who have sex with men (MSM) in a relatively rural state. *AIDS Education and Prevention*, 29(4), 315–329. doi: [10.1521/aeap.2017.29.4.315](https://doi.org/10.1521/aeap.2017.29.4.315)
- 10 Pro, G., Hubach, R., Wheeler, D., Camplain, R., Haberstroh, S., Giano, Z., ... & Baldwin, J. A. (2020). Differences in US COVID-19 case rates and case fatality rates across the urban-rural continuum. *Rural and remote health*, 20(3), 6074. doi: [10.22605/RRH6074](https://doi.org/10.22605/RRH6074)

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## ABOUT

OSU Center for Rural Health at the Oklahoma State University Center for Health Sciences houses the Oklahoma State Office of Rural Health, Oklahoma Rural Health Policy and Research Center, OSU Area Health Education Center (AHEC), and OSU TeleHealth. The Center is actively participating in Oklahoma State University Tier One research that aims to solve rural Oklahoma's most pressing challenges through timely, impactful, community-participative and action-oriented research. The Center is a member of the Institute of Healthcare Improvement (IHI) Leadership Alliance, and is engaged in grant activities with the Health Resources and Service Administration (HRSA), the National Institute on Minority Health and Health Disparities (NIHMH), and other health equity research efforts.

## MISSION

OSU Center for Rural Health's mission is to enhance the quality of life for rural and underserved Oklahoma communities through the development of the medical and public health workforce, research, policy, and community engagement.

**RESEARCH // RESULTS // SHARE // SERVE**

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