Introduction

Rural public health in the United States is a patchwork of federal, state, and local agencies. Local health departments (LHDs), especially in rural America, often set local priorities, analyze data, and are self-governing. They vary widely in technical capacity and resources. Modernizing, standardizing, appropriately funding, and integrating rural public health capacity in the US will contribute to improved public health in rural America, and improved health and well-being of rural Americans.

Background on Rural Public Health

Rural Americans experience poorer health outcomes and premature deaths compared to their urban counterparts. This disparity is exacerbated when rurality intersects with racial, ethnic, and sexual minority groups. Poor outcomes can be attributed to the maldistribution of resources in rural communities, a lack of access to health care, one-size-fits-all approaches to health interventions, a waning workforce including a lack of diversity among medical and public health professionals, and socio-economic factors.

During the COVID-19 pandemic, rural LHDs have been a major contributor to the pandemic response. However, the public health emergency exposed structural and systematic issues within the rural public health system, including: a lack of coordination and communication among health departments with clinical and political entities; limited data collection and analysis capability; an overwhelmed health care system; racial and geographic health disparities; and an overworked and underpaid public health workforce. The sociopolitical climate around the pandemic was fraught with misinformation and disinformation presenting huge challenges for the public health sector to disseminate accurate health information to the public. Addressing all these features is at the center of improving public health in rural America.

Public health activities in rural America are influenced by several layers of government. Nationally, the United States Public Health Service in the Department of Health and Human Services, which includes the Centers for Disease Control and Prevention (CDC), National Institutes of Health, and the Food and Drug Administration, has responsibilities for federal oversight. At the state level, state departments of health help coordinate public health and provide some epidemiological services. The fundamental role of public health provision, especially in rural areas, often falls to LHDs which serve one or several rural counties overseen by a local board. The organization and oversight of these boards vary widely. According to the National Association of County Health Officials’ National Profile of Local Health Department Study, of the 2,459 LHDs included in the 2019 profile study population, 1,887 are locally governed, 404 are units of the state health agency, and 168 have shared governance. These governing structures result in a wide variety of skills, resources, and priorities to conduct public health functions. In many rural counties, the LHD may consist of as little as a one-half full-time employee.

The rural public health infrastructure in the U.S. is under resourced. Rural LHDs generally do not have the funding base of clinical fees and fines, nor the larger tax base that support urban public health departments. Instead, they rely on state and federal funding sources, as well as some reimbursement for...
the provision of direct clinical services. The COVID-19 pandemic raised the profile and potential funding streams for public health, including in the House Labor–HHS Appropriations bill containing $1 billion for public health infrastructure for FY2022 annual appropriations and the Build Back Better Act (Subtitle J–Public Health) which includes the availability of $7 billion until expended to support core public health infrastructure for the state, territorial, local, and tribal health departments. In addition, COVID-19 relief funding throughout the pandemic has been used for public health work. However, reliable funding streams outside of a pandemic remain elusive. Based on the current state of rural public health in the US, NRHA proposes policy recommendations in the areas of integration, infrastructure and funding, workforce, and equity.

Policy recommendations

The following policy recommendations outline actionable measures and policy positions that, if adopted, could positively impact rural public health outcomes.

Integration

Rural LHDs are essential for management and implementation of core public health activities, however, they struggle due to smaller size, budgets, and a lack of technical expertise. A patchwork of government agencies is involved, but an Office of Rural Health within the CDC could provide one location for specific support including data systems and tools, surveillance, and reporting.

- Pass the S.3149/H.R.5848 Rural Health Equity Act, a bill introduced in November 2021, to establish an Office of Rural Health in the CDC to support and focus on coordinated and streamlined rural public health activity, data collection, and reporting.

Infrastructure and funding

Inadequate funding, low technology, and limited physical and human infrastructure make it challenging for rural public health systems to respond to rural health disparities and emergencies. Rural public health needs access to modern surveillance and laboratory techniques, as well as access to advanced clinical and research personnelxvi.

- Modernize the broadband capability, advanced technology, and technical disease surveillance skills of local public health agencies. Promote and support academic affiliations with universities, cooperative state extension systems already in place, and expert sharing.
- Create ongoing reliable funding streams for rural public health activities by ensuring that a portion of public health funding is targeted to rural communities to improve the health status of rural residents and decrease rural health disparities. Predictable funding outside of a public health emergency will allow the development of long-term strategies to improve the health status of rural residents and strengthen resiliency for emergencies.

Workforce

Due to budgetary constraints, LHDs are often not able to provide competitive salaries to public health officials compared to urban areas or the private sector. To recruit, retain, and strengthen the public health workforce in rural areas, incentives such as loan repayments and/or tax incentives are imperative. It is vital for these incentive programs to actively engage with public health professionals from
underrepresented groups to recruit a diverse workforce reflective of the community. This workforce should be strengthened with ongoing professional training programs and linkages with other professionals.

- Provide grants, loan repayment, and tax incentives within state and federal programs to recruit skilled and diverse talent into the public health workforce in rural areas.
- Enhance state and federally-funded educational training programs and professional development opportunities for rural health professionals.
- Promote staff-sharing practices including with academic or clinical affiliates. Local health departments could have an academic affiliation with a university or college in their state. This affiliation could provide education for developing public health workers in rural areas.

Health Equity
Health disparities in rural areas result from many underlying social determinants of health. A focus on equity can help to leverage community assets and strengths to achieve health equity. Including diverse community representation in planning and implementation of public health initiatives as well as analyzing rural data through a lens of equity will help identify differences across subpopulations and allow stakeholders to appropriately design programs, policies, and interventions.

- Disaggregate health data to enable analysis by race, ethnicity, geography, gender, etc.
- Promote diverse rural public health workforce and initiatives which address social determinants of health.
- Support and train community health workers to support prevention and address community health needs in culturally-relevant ways.

Conclusion
Strengthening of the rural public health workforce and infrastructure has the potential to improve lives and health in rural America. However, without improved integration, access to data and surveillance tools, staff with strong skills, and a focus on improving rural health and health equity, these gains will not be achieved. The establishment of a focused Office of Rural Health in the CDC, as well as efforts to strengthen infrastructure, workforce, equity, and reliable funding can help to position rural public health to keep communities healthier.

---


