

04-11

STATEMENT OF POLICY

Local Epidemiology and Surveillance

Policy

Epidemiologic investigation and public health surveillance are core functions of local health departments. The National Association of County and City Health Officials (NACCHO) urges increased federal support for strengthening local health departments' epidemiology and surveillance capacities to promote and improve evidence-based public health practice at local health departments.

NACCHO strongly supports local health departments having dedicated resources for epidemiology staffing and the development of integrated surveillance systems and mechanisms to facilitate access, collection, analysis, and dissemination of accurate local health data. Similarly, NACCHO urges that local- and state-reported data in such systems be equally accessible to local, state, and federal jurisdictions and that local health departments have access to other relevant datasets developed within their locale (e.g., healthcare associated infections data available from the national healthcare safety network from hospitals in their jurisdictions; school performance and attendance databases; and, community health needs assessment data from local public hospitals or other organizations). While policies, strategies, and programs are often developed in partnership with a variety of public, private, and academic partners, government public health agencies have the responsibility to ensure that the public interest is served¹ and as such, NACCHO supports the maintenance of core epidemiological functions at the local level.

Justification

Epidemiology and surveillance capacities are essential to assure implementation of the three core functions of public health at the local level. Those core functions are assessment, policy development, and assurance and are referenced on the [Public Health Accreditation Board's \(PHAB\) website](#) with the latest guidance.

Epidemiology and surveillance capacities include having systems and sufficiently trained personnel to:

1. Rapidly recognize and effectively respond to [disease outbreaks](#),⁵ [chronic diseases](#),⁶ and other public health issues;
2. Monitor and analyze the incidence and prevalence of diseases, risk factors, and conditions of public health significance;
3. Provide local health departments and their constituents with accurate and timely data to ensure sufficient resource allocation to areas and populations of greatest need;
4. Design and implement public health programs; and
5. Evaluate the effectiveness of local programs, interventions, and policies.



Federal funding has a direct impact on local health department capacity in many states and enhanced funding at the national level for these activities has been available through grants such as the Public Health Emergency Preparedness (PHEP) and Epidemiology and Laboratory Capacity (ELC) cooperative agreements since 2001.

PHEP funding has decreased by 31% from a peak of \$940 million in 2002² with direct implications for local capacity. While the ELC grants have increased overall, these are primarily provided directly to states, with the amount reaching the local level highly variable and, in many cases, not reflective of the national increase. The number of epidemiologists in state health departments was 23% higher in 2021 as compared to 2017, primarily because of those supporting the COVID-19 response. A similar increase was also reflected within local health departments. However, the epidemiology workforce remains substantially understaffed, and core program areas have experienced staffing declines. Temporary federal funding has increased to support 85% of epidemiology activities and 83% of personnel, however overall capacity to deliver essential public health services (EPHS) has declined and is threatened by allocation of public health resources towards emerging and immediate public health threats at the expense of building sustainable capacity, and epidemiology workforce needs remain unmet. More epidemiologists and sustainable funding are needed to consistently and effectively deliver EPHS. Additional resources (e.g., funding for competitive compensation and pathways for career advancement) are essential for recruitment and retention of epidemiologists to support public health activities across all program areas.³

The strategic assignment of trained epidemiologists for technical assistance and support to local health departments will enable the development of appropriate population-based health metrics, ongoing improvement of public health response protocols and interventions, and improvement of community health outcomes. A comprehensive community health assessment should be conducted at least every 5 years per PHAB requirements or based on the State's requirements utilizing an epidemiological lens to inform and guide these recommendations and efforts in state and local jurisdiction health improvement plans and/or agency strategic plans.

Local health department involvement in processes to promote interoperability, integration, and innovation across health information systems will also be key and is addressed in NACCHO's policy statement on [Local Public Health Informatics](#). The increasing availability of electronic information is changing federal, state, and local public health epidemiology and surveillance. It is essential that local public health is included in the ongoing development of data requirements for electronic reporting especially from electronic health records. This will ensure that local public health has the necessary information to address issues of public health significance. In addition, data files of local public health significance that are traditionally stored at the state or federal government levels or by local or regional non-governmental organizations should be readily accessible (directly or through data sharing agreements) to the local health department and be designed for analysis by local staff to address local public health priorities. Data that can be disaggregated by census tract, zip code, county, city, and/or region are integral to developing and implementing evidence-based public health programs, interventions, and priorities.⁴

As experienced in the past several years, emerging diseases such as COVID-19, monkeypox, Ebola, and Zika viruses can quickly overwhelm local health department staff. Epidemiology staff

must receive sufficient training to prepare them for responding to emerging diseases and the number of staff maintained or increased should reflect the demand, as addressed in NACCHO's [policy statement on Workforce Development](#). Specific epidemiology focuses on building workforce capacity in applied epidemiology, nursing, and laboratory science is addressed in [CSTE's position statement on Workforce Capacity: Investing in the Next Generation of Public Health Applied Epidemiology and Laboratory Leaders](#). Data collection and surveillance databases must continually be developed and upgraded to meet the demands of epidemiology staff and expanded infrastructure support is necessary to manage data repositories and analysis.

References

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Record of Action

Proposed by NACCHO Infectious Disease Prevention and Control Workgroup

Adopted by NACCHO Board of Directors November 7, 2004

Updated July 2007

Updated October 2010

Updated May 2011

Updated June 2015

Updated May 2018

Updated August 2022