



Data Needs of Local and State Health Departments

Insights from public health leaders
Betty Bekemeier, Seungeun Park, Deborah Gardner, and Greg Whitman

Access to relevant data is critical for good public health decision making. But public health leaders often lack the data, information, and evidence they need to make decisions, due to barriers and limited resources. This brief describes when and for what purposes public health leaders need data for decisions; some challenges related to data access and use; and how health leaders access and use data to achieve goals. These insights are the result of the Public Health Activities and Services Tracking (PHAST) team's long-term practice-based research partnerships, including interviews with 14 local and state public health leaders in 2016.

Types of data and use for decision making

How and when public health leaders use data depends on their role and the decisions they make, as well as which services their agencies provide. Public health leaders describe using data mainly for evaluating their services and for setting priorities, often by comparing services they provide with agency performance. By looking through multiple data sources and types of data, public health leaders gain an understanding of which factors impact their community's health and what should influence their decision making. (Table 1)

Table 1. Data type, sources, use, and examples

Туре	Sources	Use	Examples
Internal	Collected within agencies and communities	Usually for program evaluations, quality improvement, program planning, etc.	Revenue and expenditure data, satisfaction surveys within agencies, local data collected by schools and communities under contract
External	Open public data from hospitals and state and federal datasets	Usually for defining public health problems and needs in their communities	American Community Survey (ACS), Community Health Assessments (CHA), Behavioral Risk Factor Surveillance System (BRFSS), County Health Rankings, Healthy People 2020, birth and death records

Common challenges related to data use and access

Comparing data across locations and time reveals critical information, but leaders seeking to do so describe common challenges:

- Data sources are often old, scattered, or not easily accessible
- Data are collected inconsistently and infrequently
- Measurements are not standard across counties, and many metrics are not part of required state reporting systems
- Some local and state health departments build and maintain their own reporting systems, which can be costly
- Many local health departments (LHDs) lack data-related expertise

PHAST Strategies for Action

To improve population health, public health leaders are calling for standardized and comparable data they can easily access and use to examine performance, monitor service delivery, demonstrate the value of prevention, and allocate resources efficiently. Effective responses to public health issues rely on accessible, relevant, accurate, and timely information about the types and extent of existing services. To make this information readily available, public health leaders developed **a set of standard measures of public health services** in three core areas: **chronic disease prevention**, **communicable disease control**, and **environmental health protection**.^{2,3} Using standard measures for the performance and cost of public health activities fills gaps in our understanding of public health needs and how we organize and invest in prevention.

Standardized measures and a data capture tool

To facilitate adoption and use of these measures, PHAST is creating a **data-capture tool** that makes it easy for health departments to input information and access timely data. Developing such a reporting and data-capture system will encourage regular data collection and reduce the workload of those who are entering and retrieving data. In addition, this system will improve data quality by immediately checking for errors and missing information. PHAST can then combine these public health practice data with relevant data from other sources for even more information.

A data visualization dashboard

By combining statistical analysis and data visualization, PHAST is developing a powerful tool for discovering local gaps in service and communicating priorities effectively with policy makers. PHAST's emerging dashboard and data capture tool provides a visual summary of collected data and analytics, combined with demographic information such as local population estimates, education levels, and poverty rates. The dashboard features a user-centered design, based on the needs PHAST hears from those in practice. Local health departments can use this tool to compare their own data with data of other similar counties or to look at trends in their own data over time. Public health leaders will also be able to match their own data with external data sources for population health measures to set and meet outcome targets on goals such as reducing local obesity prevalence or improving immunization rates.

It takes so much energy sometimes to collect and publish the activities and services data that the group that does that doesn't have time or energy to really push people to use it or give them great examples of how to use it.

That's one of the reasons I like your work so much, because it provides great examples of what you can do with the numbers and thinking about ways to get people to actually try that.

—Administrator of a local health department in Washington State

What's next

PHAST's strategy for making meaningful data accessible grew out of a long and unique history of collaboration, research, and partnerships. The resulting tools reflect strong relationships with state and local public health departments around the United States, a reputation of respect for and knowledge about data, and a deep understanding of public health services. PHAST is committed to ongoing, collaborative efforts with public health practice leaders and researchers to make data and evidence available and accessible, to highlight the value of our public health systems, and to build healthy communities.

References:

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- 2. Mays GP. Final set of public health delivery measures selected for the Multi-Network Practice and Outcome Variation Examination (MPROVE) study. 2012; http://works.bepress.com/glen_mays/82. Accessed December 28, 2016.
- 3. Public Health Activities & Services Tracking (PHAST). Measures 1.1. 2015; http://www.phastdata.org/measures.