

Policy Options to Improve Data Sharing Between State and Local Health Departments

Policy Analysis

This report explores organizational policies related to data sharing between state and local public health departments. ASTHO, in collaboration with the National Association of County and City Health Officials and the Network for Public Health Law developed the following report, which aims to serve as a guide for state and local public health leaders as they consider organizational policy options to improve state and local data-sharing efforts.

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Introduction

Timely and effective data sharing is critical for [data modernization efforts](#), and state and local health departments play an important role in facilitating data sharing for public health decision-making. Improving and modernizing public health infrastructure to support data sharing is not solely a matter of leveraging funds and new technologies; organizational policies, workforce composition, and data governance are critical considerations that shape how state and local public health departments exchange data. As state and local health departments engage with national data modernization efforts, it will be critical to address policy drivers for sharing data between all levels of government.¹

A complex landscape of statutes and regulations, along with organizational and departmental policies, can influence state and local health department data sharing.² This report focuses primarily on **organizational policy options**—such as data-sharing agreement approaches, departmental guidelines, and processes—that state and local health departments can pursue to improve internal strategies to advance data exchange at the state and local levels.

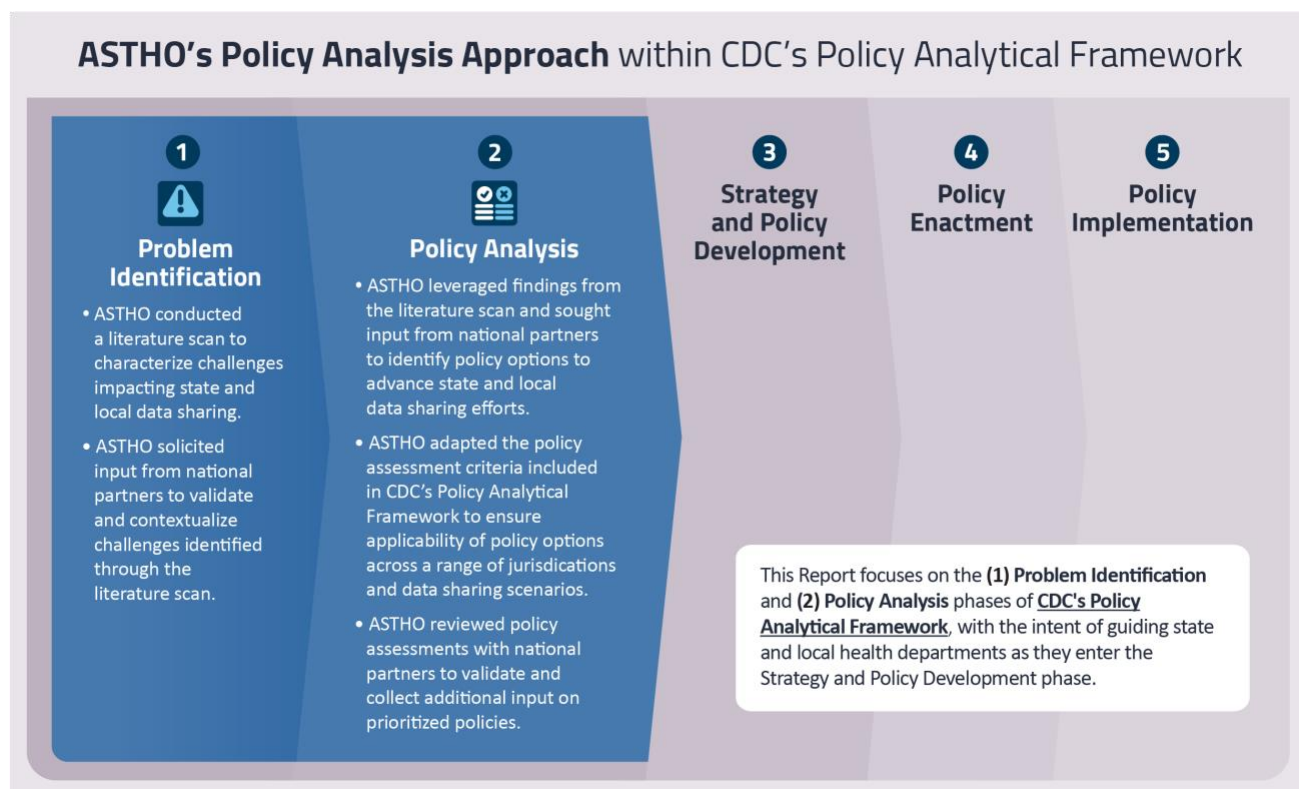
To identify and implement successful policies, health departments must each explore the issue areas impacting their work, assess the policy levers available to the health department to affect change, and consider the jurisdiction's readiness to advance and sustain policy changes.

Leveraging CDC's Policy Analytical Framework to Explore Policy Options to Advance State and Local Data Sharing

The [CDC Policy Process](#) includes domains on problem identification, policy analysis, strategy and policy development, policy enactment, and policy implementation. [CDC's Policy Analytical Framework](#) expands on the first three domains of the agency's Policy Process and offers a guide for identifying, assessing, and prioritizing policies to support improved health outcomes. Using this framework, ASTHO identified organizational policy options health departments can use to support the overall goal of improving data exchange between state and local health departments. ASTHO identified these policy options from public health associations; public health journals; academic literature; and federal, state, and local government resources. ASTHO assessed the impact, feasibility, and sustainability of each policy option, with the aim of ensuring that the identified policies would be relevant across various data-sharing scenarios.

To identify and prioritize policy options to advance state and local data sharing across a variety of jurisdictions, operating environments, and use cases, ASTHO adapted CDC's Policy Analytical Framework as described below (see Figure 1). As part of this policy analysis, ASTHO solicited input from CDC and project partners from NACCHO and the Network for Public Health Law. ASTHO also engaged subject matter experts from Big Cities Health Coalition, the Council of State and Territorial Epidemiologists, the Pew Research Center, and the Public Health Informatics Institute for review and input during the problem identification and policy analysis steps.

Figure 1. Adapting the [CDC's Policy Analytical Framework](#) to Explore Policy Options for State and Local Data Sharing.



When assessing the policy options within a specific jurisdiction, health agencies should consider the potential health equity impacts of policy implementation. Decision support tools are available for health departments to use when determining whether a proposed policy will promote health equity or risk further disparities within a jurisdiction.

Challenges Impacting State and Local Data Sharing

Real and perceived challenges can impact successful data sharing between state and local health departments. These challenges can include legal and regulatory factors, resource constraints, departmental alignment and communication, and leadership and governance factors (see Figure 2). More details on these challenges are included below, but the categories described below are not mutually exclusive, as some challenges may span multiple categories.

Legal and Regulatory Factors

A variety of state and federal laws impact public health data sharing, and the laws, regulations, and other considerations that govern public health-related data are complex.³ Varying interpretations and misconceptions about the legal frameworks for different types of public health data can also affect state and local data sharing. Reaching a shared understanding regarding the scope of permissible access and use of public health data can be time- and resource-intensive and can result in delays in data sharing.

Policies and practices that enable data exchange are often documented through data-sharing agreements. A lack of established processes for evaluating proposed data-sharing arrangements, agreements drafted in language that is difficult for public health staff to interpret, or agreements that are difficult to amend may also pose barriers to sharing data.⁴

Resource Constraints

Public health departments are often challenged with technical resource limitations, insufficient funding, prolonged procurement processes, and workforce capacity issues—all of which can impact successful data-sharing environments between state and local agencies. Legacy data systems or data infrastructure that does not allow a bidirectional flow of data across departments inhibits data exchange. Insufficient or short-term funding can further deter these efforts, as sustained funding is required to plan for, procure, and maintain state-of-the-art data infrastructure.⁵ State and local data-sharing efforts require enhanced inter and intradepartmental collaboration and recruiting staff with strong technical, communication, and interpersonal skills can be challenging. Additionally, workforce capacity can pose a challenge, as health department staff needed to support state and local data sharing may experience high turnover or burnout or require additional training to address knowledge gaps in a quickly evolving public health data landscape.⁶ If leadership does not prioritize advancing state and local data sharing, these resource challenges may be compounded.

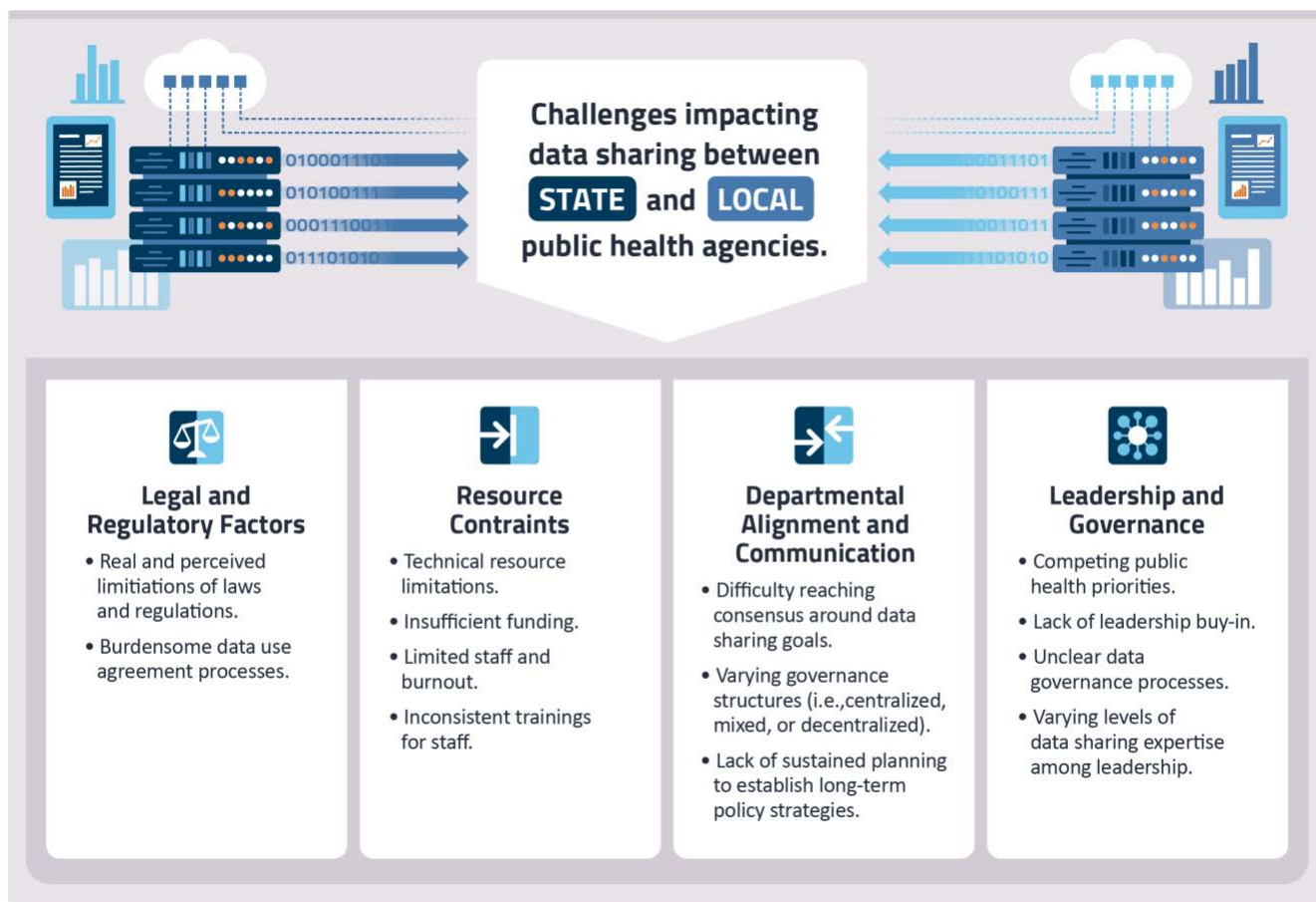
Departmental Alignment and Communication

Improving the speed and quality of data flowing between state and local health departments relies on strategic communication and alignment. It can be organizationally challenging to clearly define roles, reach consensus around data-sharing needs and goals, and forge connections between state and local public health staff.^{7, 8} Varying health department governance structures (i.e., centralized, mixed, or decentralized) can impact decision-making around procurement and common data-sharing standards. Establishing long-term policy strategies and collaboration requires sustained planning, proactive staff engagement, and leveraging financial resources, both within and between state and local health departments.⁹ Staff turnover and changes in strategic priorities dictated by short-term funding can also impact state and local coordination efforts. All of these challenges can hinder the collaboration necessary to advance an interoperable data infrastructure that supports state and local data sharing.

Leadership and Governance

Common barriers impacting data sharing at the leadership level include competing public health priorities, unclear data governance processes, and varying levels of data-sharing expertise amongst leadership. In an environment where resources are scarce and public health priorities are continuously evolving, securing the necessary support for data sharing can be challenging.¹⁰ Competing priorities, apprehensions about data privacy or concerns about data authority and how data will be used can impact leadership support and buy-in for state and local data sharing initiatives. This can especially be true when sharing data for the first time or sharing a new type of data.¹¹

Figure 2. Challenges Impacting State and Local Data Sharing



Policy Approaches for Improving State and Local Data Sharing

The policy options identified as part of this analysis include actions state and local health departments can take to improve organizational strategies and processes to advance data sharing.

Policy Options to Address Legal and Regulatory Factors

- **Determine, with the assistance of legal counsel, the extent to which laws or regulations might be barriers to a proposed data-sharing relationship.**

Real and perceived legal and regulatory barriers can limit data exchange. Dedicating departmental resources to understanding the laws and regulations that govern the privacy, security, and use of public health data can support improved data-sharing relationships while protecting sensitive information and mitigating risk. Working with legal counsel to clearly articulate the department’s legal position can also facilitate better coordination between state and local health departments when proposing new data-sharing arrangements.

- ***Develop standardized data-sharing agreements, including those with modules or appendices that might increase flexibility or efficiency.***

Because state and local health departments have varying degrees of legal capacity, standardizing or consolidating agreements can facilitate data sharing in an efficient and compliant manner.¹² Template agreement language that can be modified or coupled with addenda or appendices to address unique circumstances can reduce staff time spent on drafting agreements while accommodating a wide variety of data sets and parties involved in the arrangement. Efforts to consolidate data-sharing agreements may also relieve the burden associated with negotiating multiple program-specific agreements between state and local health departments.

Policy Options to Address Resource Constraints

- ***Plan strategically for dedicated resources to support improved state and local data sharing, including the pursuit of sustainable and diverse funding options.***

Building a funding strategy to support sustained state and local data sharing is an important planning consideration. As part of this work, health departments can inventory funding streams, identify shared resources such as IT systems, and build strategic relationships that may help them procure diverse funding. As part of broader data modernization plans, state health agencies and local health departments can collaboratively develop strategic plans that account for the cost, staffing requirements, and technology needs to support state and local data sharing.¹³

- ***Build workforce capacity to support data sharing. This may include educating the public health workforce about relevant laws and legal concepts and working with legal staff to increase their awareness of public health data-sharing objectives. It may also be beneficial to fill technical knowledge gaps within the public health workforce.***

State and local public health is an increasingly transdisciplinary field, and two top knowledge gaps amongst health department staff include understanding how to (1) influence law and policy development and (2) contextualize law and policy's effects on public health.¹⁴ Creating shared understanding between legal and public health program staff can generate a greater awareness of the legal and regulatory considerations relevant to data-sharing arrangements, support relationships, and improve communication and relationship-building between these two groups. Formal trainings and regular meetings to provide updates and context around data-sharing objectives can support shared understanding regarding the legal and technical aspects of data sharing and can also enable staff to quickly resolve data governance issues.

- ***Formally include data-related governance activities, partner communication, and collaboration in health department job descriptions or responsibilities.***

Consider developing job descriptions that set specific expectations for minimum experience and/or discrete responsibilities related to managing public health data, developing and implementing data governance policies, and facilitating multi-partner data-sharing activities. Establishing staff roles with clear expectations for communicating and collaborating with key data-sharing partners may help health departments embed state and local data-sharing activities within their efforts and help maintain relationships longer term. Such expectations can help build and expand a culture of collaboration across state and local health departments to advance data-sharing goals.

Policy Options to Address Departmental Alignment and Communication

- ***Engage state or local health department counterparts when updating or procuring data systems to ensure any technical modifications do not inadvertently create data-sharing challenges.***

Interoperability is essential for timely and efficient data sharing between state and local health departments. Consulting with state and local health department counterparts early in the design phase of modifying or adopting a data system can help avoid creating data-sharing challenges. Levels of interoperability to consider during these discussions include *technical interoperability* (the ability of two systems to exchange data), *semantic interoperability* (the ability to consistently interpret and use data among organizations or systems), and *process interoperability* (aligning work processes and safety and privacy rules).¹⁵ Assessing process interoperability can also help state and local health departments identify key staff who may need permissions established to access applicable data systems.

- ***Include strategies to advance state and local data sharing in data modernization plans.***

A comprehensive data modernization plan can serve as an effective tool for planning and communicating, internally and externally, with key partners.^{16, 17} Including strategies that are specific to state and local data-sharing relationships provides an opportunity to clearly articulate the goals of data-sharing efforts, partner roles and responsibilities, and required data elements. Aligning existing state and local IT systems, and developing shared informatics workforce objectives and data governance standards are some examples of strategies to include in data modernization planning. [CDC's Public Health Infrastructure Grant guidance](#) encourages state health departments to include local health department representation on their data modernization advisory committees to support improved state and local alignment in data modernization efforts.

Policy Options to Address Leadership and Governance Challenges

- ***Obtain commitment from health department leadership for state and local data sharing by clearly articulating the data sharing governance processes, goals, and rationale.***

It is important to build a strategy to engage leadership on the value and need for bidirectional data sharing across state and local health departments. The strategy should clearly articulate the public health goals for data sharing and should account for the specific factors (e.g., legal, financial, technical, and security-related) that may influence the feasibility and acceptability of the proposed data-sharing arrangement. This type of planning can support leadership buy-in and help health departments develop inclusive governance policies that define common norms, behaviors, and accountability for data sharing.

Communicating the benefit of data sharing—for state or local health departments *and* the populations they serve—can help build critical leadership support and ultimately inform conversations with all involved partners.¹⁸ State and local health department leaders can make more informed decisions for resource allocation and building strategic partnerships if they understand the value of timely and effective data exchange.

➤ ***Align state and local data-sharing efforts with broader state and federal initiatives for data modernization efforts.***

Incorporating state and local data-sharing objectives into state-level data modernization plans can help health departments prioritize data-sharing efforts in the longer term. Similarly, aligning state and local data-sharing activities with broader federal data modernization and data standards initiatives can foster continued support for state and local data-sharing activities. For example, adopting policies that leverage data-sharing standards such as the [HL7® FHIR®](#) can make data exchange between state and local health departments more flexible and effective.¹⁹

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