Rethinking the future of public health

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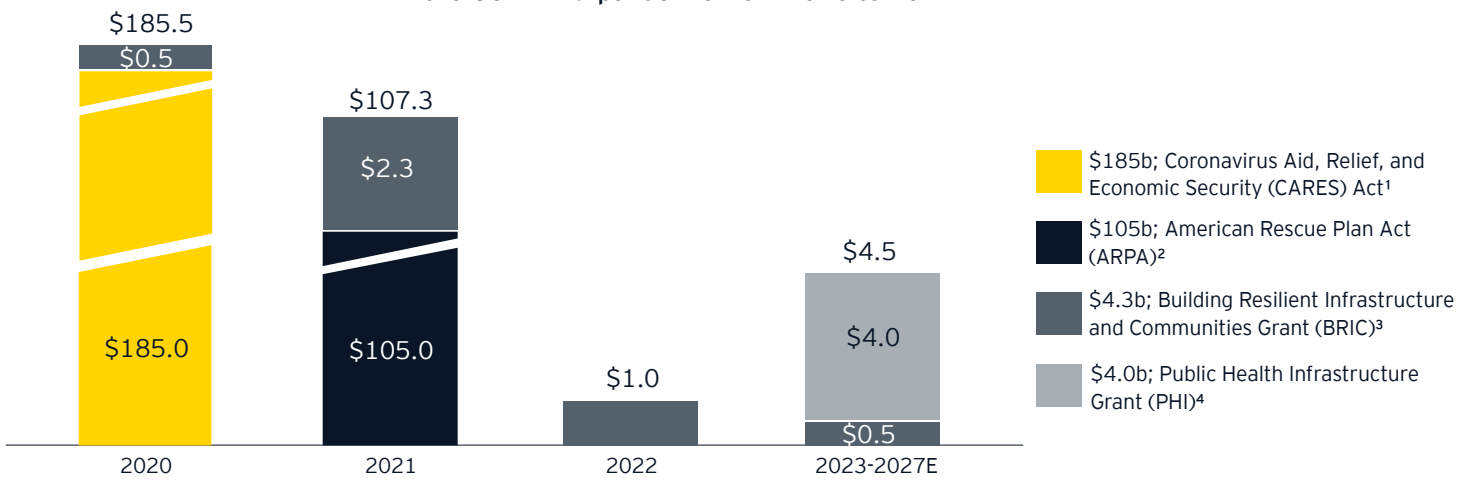
The COVID-19 pandemic and other recent public health emergencies exposed significant gaps in the US state and local public health infrastructure. Now is the time to rethink the future of public health.

Why now?

An operating model represents the organization's processes, technologies, capabilities and partnerships that translate its mission, vision and strategy into value for its constituents. The COVID-19 pandemic and other recent public health emergencies exposed significant gaps in US state and local public health operating models. As demand for public health services surged during the onset of the pandemic in 2020, most state public health agencies and local health departments were predictably overwhelmed. To address capacity and capability gaps, the federal government granted an unprecedented nearly $300 billion to public health from 2020 to 2027.[1] (See Figure 1.)

Figure 1

In total, $298b in federal funds were allocated to state and local public health during the COVID-19 pandemic from 2020 to 2027



1. CARES Act funds were used until 2022.
2. ARPA funds can be used until 2027.
3. BRIC funds may include non-health-related expenditures.
4. PHI grant allocations will be drawn down from 2023 to 2027, with potential carryover beyond 2027.

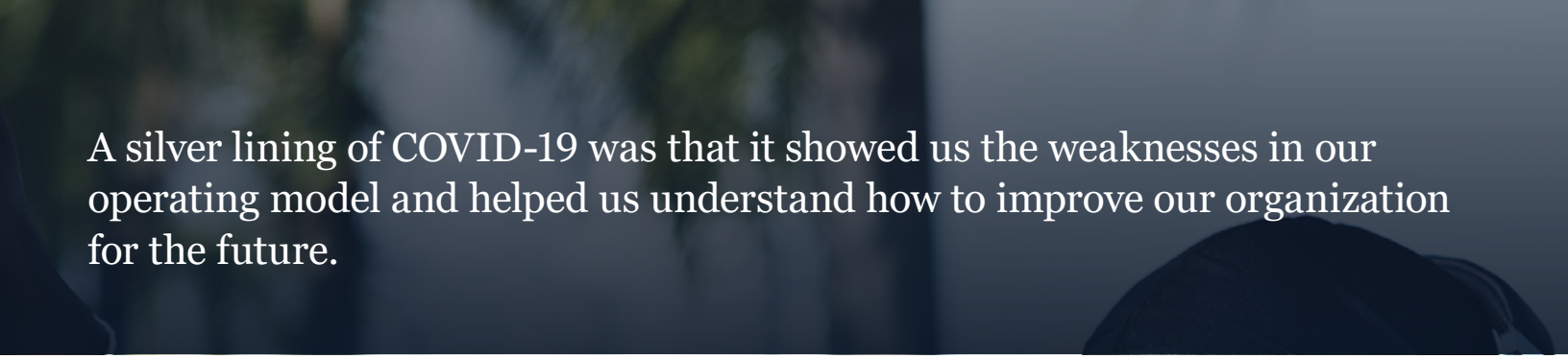
Source: **CARES** – Committee for a Responsible Federal Budget – A Visualization of the CARES Act (March 2020); **ARPA** – National Conference of State Legislatures, ARPA State Fiscal Recovery Fund Allocations Database (February 2023); **BRIC** – Congressional Research Service, FEMA Pre-Disaster Mitigation (January 2023); **PHI** – Centers for Disease Control and Prevention (January 2023).

The result was a massive scale-up of public health operations and mobilization of public-private partnerships that catalyzed innovation, built new capabilities, and temporarily expanded capacity. We learned about the resilience and fortitude of public health professionals and community health workers. We also learned about the underlying challenges embedded in public health operating models and organization structures.

In 2017, the Centers for Disease Control and Prevention (CDC) outlined a vision for Public Heath 3.0, a more collaborative, technology-enabled, data-driven vision for the future of public health to address social, environmental, and economic conditions that affect health and health equity.[2]

During the pandemic, this federal funding allowed state and local public health departments to move toward this future vision by designing new processes, adopting new technologies, developing new analytics capabilities, and implementing new organization structures to enable better coordination and collaboration across their operating models.

Going forward, state and local public health departments have the unique opportunity to assess the lessons learned and capabilities built during the COVID-19 pandemic to improve their go-forward operating models. This article outlines specific actions public health leaders can take to rethink the future of public health.



A silver lining of COVID-19 was that it showed us the weaknesses in our operating model and helped us understand how to improve our organization for the future.

The opportunity

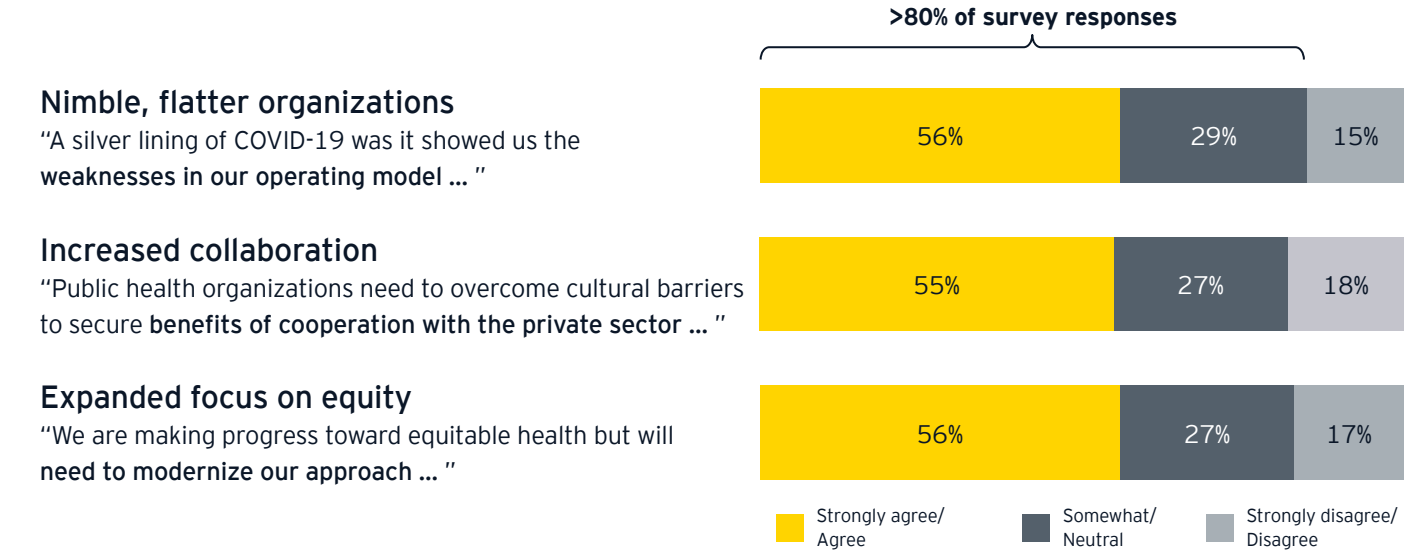
Public health officials agree on the need to rethink the future of public health operating models

To better understand the need to rethink the future of public health, Ernst & Young LLP (EY US) conducted a survey of 301 public health officials across the United States. The survey found more than 80% highlighted their public health operating model as a weakness during the COVID-19 pandemic.[3] Further, these public health leaders emphasized the critical need for increased public-private collaboration and modernized approaches to improving health equity. (See Figure 2.)

During the pandemic surge, we worked with several state and local public health departments to address operating model gaps and operationalize public-private partnerships for equitable access to vaccinations, testing and treatments. This trend toward increased collaboration has accelerated as many public health departments are more actively collaborating with health systems, managed care organizations (MCOs), and community-based organizations (CBOs) to address health equity gaps and social determinants of health (SDOH) for the populations and communities they mutually serve.[4]

Taken together, the findings from the EY US public health survey and insights from recent market trends highlight the imperative for state and local public health leaders to rethink the future of their operating models and organization structures.

Figure 2



Source: EY survey of 301 public health officials across the United States, including commissioners, C-suite executives, directors, department leads, or senior managers across various functions ranging from epidemiology and laboratory to communications and health promotion, published July 2022.

Where we have been: lessons learned from COVID-19

When COVID-19 was declared a public health emergency in early 2020, state and local public health departments moved quickly to stand up an incident command structure to coordinate response activities and accelerate decision-making. As the pandemic persisted, however, many public health organizations found it increasingly difficult to manage and maintain routine public health operations alongside the pandemic response.[5]

New processes were designed, new technology capabilities were deployed, and new communication protocols were implemented in response to COVID-19. The traditional day-to-day operations and organizational role clarity of state and local public health departments became increasingly fragmented, siloed and inefficient.

However, in working with state and local public health departments over the past several years, it became clear that the lack of workforce capacity and organizational capabilities were symptoms of a much larger problem with public health operating models and organization structures.

Public health operating structures are intentionally designed around core principles, including health protection, promotion and prevention. Over time, federal government grant funding to support state and local public health agencies has resulted in organizational silos focused on managing and reporting on grant requirements.[6] While state and local public health agencies have flexibility in their workplans submitted to the CDC, this grant funding model often reinforces siloed behavior and creates organizational complexities that can diminish cross-agency collaboration and common purpose.

Equally challenging, many existing public health processes, technologies and data strategies have not kept pace with the evolving needs and expectations of the constituents they serve. Instead, these processes and technologies reflect the manual, phone, fax and paper-based activities on which they were originally built.[7] Further, these operational processes are often not well-documented and not managed based on key performance indicators (KPIs) to drive continuous improvement. To date, there has been minimal investment in digital innovation, process automation and public-private partnerships that would improve the efficiency, effectiveness and outcomes of public health.

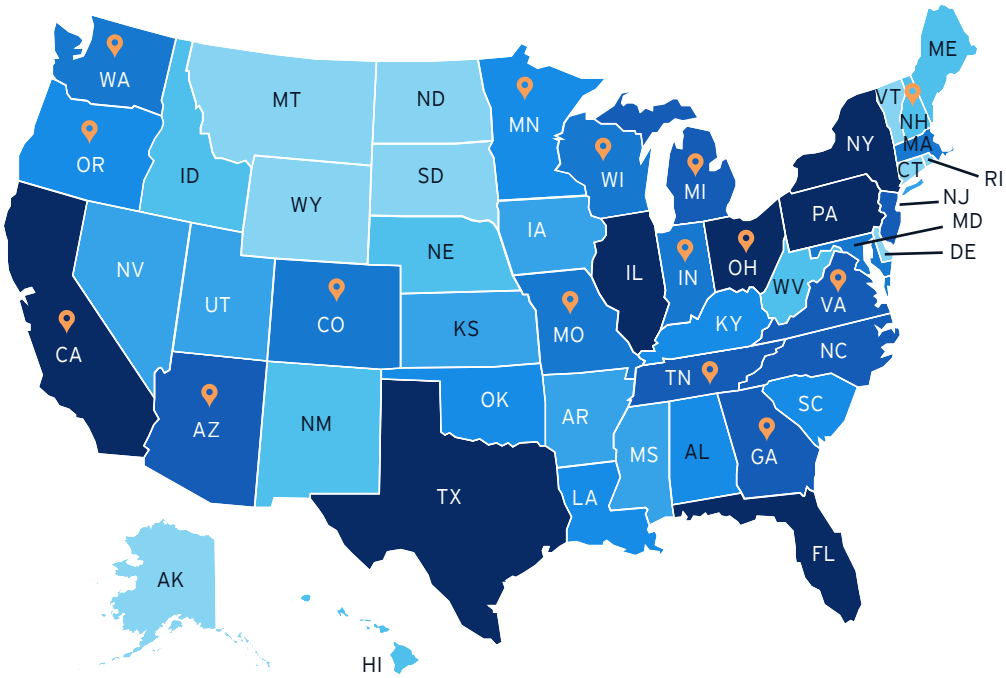
These challenges can be solved by taking the time to rethink and redesign future public health operating models and organization structures.

Where we are going: maximizing the impact of future public health funding

Over the next five years, the CDC will award an additional $4b to state and local public health departments through the Strengthening U.S. Public Health Infrastructure, Workforce, and Data Systems grant.

The CDC has designated at least 40% of the funding provided to state health departments to be distributed to local health departments that did not receive direct funding. Further, the CDC has allocated over 75% of this funding to enhance public health workforce capabilities, beginning with a systematic assessment of operating model and future workforce capability requirements to identify priorities for recruiting and hiring new public health staff.[8]

Figure 3



Indicates states that identified the need to rethink the future of their operating model and organization structures based on analysis of publicly available state COVID-19 After Action Reviews (AAR) and state budgets.

Funding allocation as of Nov 2022

- $100m – $350m
- $65m – $100m
- $50m – $65m
- $35m – $50m
- $25m – $35m
- $12m – $25m
- $5m – $12m

Note: >75% of CDC-allocated PHI grant funding is focused on addressing challenges in public health operating structures, workforce and foundational capabilities;At least 40% of the funding provided to state health departments should be distributed to local health departments that did not receive direct funding.

CDC website, accessed February 2023 (https://www.cdc.gov/infrastructure/pdfs/508-OE22-2203-5-Year-Funding-Table.pdf)
EY analysis on COVID-19 After Action Reviews (AARs) of 16 US states and proposed health spending budget on public health infrastructure of 11 states.

Several state and local public health departments have indicated they recognize the critical need to rethink the future of public health operating structures. EY US recently completed an analysis of state budgets and after-action reviews (AARs) following COVID-19 and found that over 50% of the states analyzed have identified the need for a more unified and coordinated operating structure for the future.[9] (See Figure 3.)

In fact, nearly 60% of states that received the top three highest levels of funding allocations through the PHI grant have identified operating model redesign as a priority improvement area. This PHI grant funding anticipates that state and local public health departments will assess operating model needs before using this funding to fill workforce gaps.

Public health leaders have the opportunity to capitalize on the funding made available by the US Congress to invest in building new workforce capabilities, operational processes, technologies and data modernization initiatives. With this funding, there is an opportunity to rethink the future of public health.

A call to action for public health leaders

To get started, state and local leaders should consider four guiding principles to rethink the future of public health operating models. We have found these same four principles to be relevant at the state, county and local health department level as they redesign their processes, technologies, organizational capabilities and ecosystem of public-private partnerships. These guiding principles are foundational to encouraging new ways of thinking and sparking a culture change across public health organizations.

1 Adopt a 'future-back' mindset

Align leadership and the broader organization on an aspirational future purpose statement and work backward to identify the capabilities, initiatives and investments required to get there. A clear, compelling purpose statement helps translate the organization's existing mission, vision and values into a more actionable future strategic intent that reflects customer benefits delivered and value created in the service of others. A purpose reflects an organization's "why" – its reason for being.

2 Embed customer focus

Understand the unmet and unarticulated needs of public health customers and constituents to systematically isolate and identify operating model challenges that drive inefficiency and ineffectiveness of the organization. Designing an end-to-end, cross-constituent experience map helps capture critical public health interaction points with key stakeholders to better understand each constituent's needs and "jobs to be done" to help focus and prioritize public health improvement opportunities.

3 Challenge conventional wisdom

Assess the organization's capabilities, processes and technologies against industry trends and leading practices to identify and prioritize infrastructure gaps and workforce capability requirements. Develop a capability matrix that maps "jobs to be done" with existing functions, roles and activities to inventory current state capabilities and highlight future capability gaps. Through the development of a capability matrix, organizations can challenge the status quo by identifying potential process and structure improvements and implementing modern ways of working across their operating model.

4 Increase collaboration

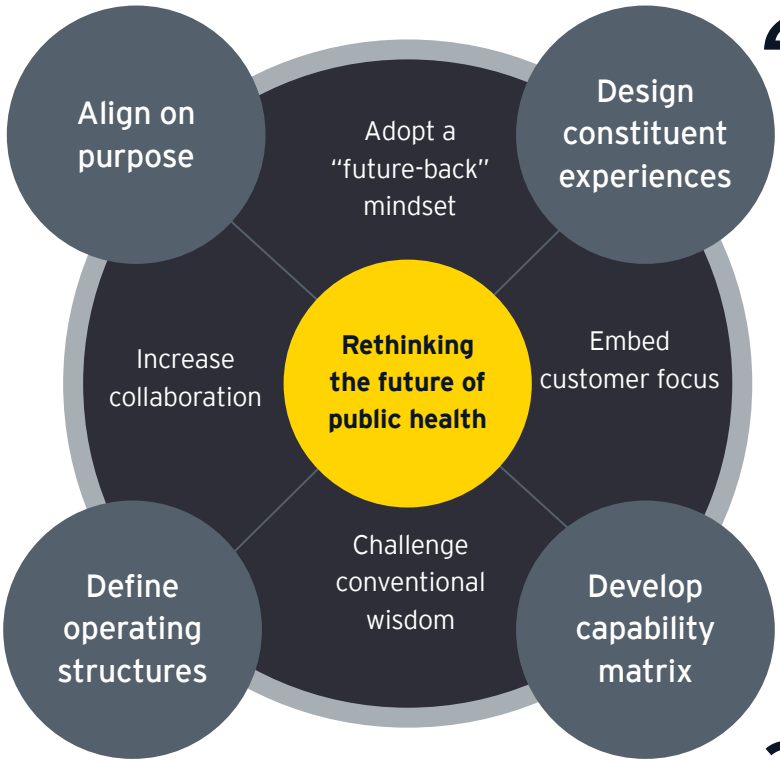
Establish new ways of working and design new operating structures to encourage internal, cross-agency collaboration and to enable external public-private partnerships. Defining more logical groupings of organizational functions helps to mitigate the risk of overlapping roles and potentially redundant, misaligned activities. Designing new organization structures, governance models, roles and responsibilities enables more efficient communication and effective collaboration. In many cases, public health organizations may find it is more efficient and effective to close gaps in public health infrastructure and workforce capabilities through more targeted external collaborations and public-private partnerships.

Taken together, these four guiding principles suggest a structured framework for state and local health department leaders to rethink the future of public health. (See Figure 4.) The critical next steps involve aligning the organization on purpose, designing end-to-end constituent experiences, developing a workforce capability matrix to assess gaps and defining future operating structures to improve the efficiency, effectiveness and impact of public health organizations. This simple, four-step approach provides a blueprint for public health leaders to define an actionable strategic roadmap of initiatives and investments required to build the future of public health infrastructure and workforce capabilities.

Figure 4

1 Align on an aspirational purpose to translate existing vision, mission and values into action.

2 Design constituent experiences to identify unmet needs and "jobs to be done."



4 Define operating model and organizational structures to achieve future purpose.

3 Develop capability matrix to highlight infrastructure gaps and workforce capability requirements.

Now is the time to rethink the future of public health. We encourage state and local public health leaders to ask themselves a series of questions:

- Is my organization aligned around a common purpose and strategic direction across divisions, offices, units, branches and functions?
- Does my organization deeply understand the end-to-end constituent experience, unmet needs and improvement opportunities?
- Has my organization identified capability gaps across processes, technologies, workforce and organizational structures?
- Is my organization designed to enable internal collaboration and external partnerships to improve efficiency, effectiveness and impact of public health investments?

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Sources

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[9] EY analysis of publicly available COVID-19 After Action Reviews and proposed health budgets across 27 US states, including 16 state AARs and 11 state budgets.

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