

JOINT COMMISSION ON HEALTH CARE

LOCAL HEALTH DEPARTMENT STRUCTURE AND FINANCING TO THE GOVERNOR AND THE GENERAL ASSEMBLY OF VIRGINIA



COMMISSION DRAFT

COMMONWEALTH OF VIRGINIA
RICHMOND
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Code of Virginia § 30-168.

The Joint Commission on Health Care (the Commission) is established in the legislative branch of state government. The purpose of the Commission is to study, report and make recommendations on all areas of health care provision, regulation, insurance, liability, licensing, and delivery of services. In so doing, the Commission shall endeavor to ensure that the Commonwealth as provider, financier, and regulator adopts the most cost-effective and efficacious means of delivery of health care services so that the greatest number of Virginians receive quality health care. Further, the Commission shall encourage the development of uniform policies and services to ensure the availability of quality, affordable and accessible health services and provide a forum for continuing the review and study of programs and services.

The Commission may make recommendations and coordinate the proposals and recommendations of all commissions and agencies as to legislation affecting the provision and delivery of health care. For the purposes of this chapter, "health care" shall include behavioral health care.

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Local Health Department Structure and Financing

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Local Health Department Structure and Financing

POLICY OPTIONS IN BRIEF

There are 11 policy options in the report for Member consideration. Below are highlighted options.

Option: Amend Code of Virginia to include all core public health Program Areas.
(Option 1, page 12)

Option: Direct VDH to design a state performance management process for all local health departments.
(Option 2 page 21)

Option: Direct VDH to develop and submit a plan for a centralized LHD data infrastructure.
(Option 3, page 26)

Option: Fund and direct a loan repayment program as a retention incentive, and provide targeted salary increases to local health department staff.
(Options 4-5, page 33)

Option: Direct health districts to participate in regular community health assessments and determine funding necessary to ensure sufficient communications capacity at the local level.
(Options 7-8, pages 38-39)

FINDINGS IN BRIEF

State Code does not require all core, public health program areas and some are lacking at local health departments

Two of the five foundational public health Program Areas identified as national best practice are not required of local health departments in Virginia. These are the ability to ensure access to necessary services and link individuals to those services, and a focus on chronic disease and injury prevention. Neither of these areas are explicitly required in state Code, and only a few local health departments currently focus on them.

There are no systems for accountability or performance management across local health departments

Monitoring performance for local health departments is challenging, but improvements are needed to ensure VDH can assess effectiveness across the state. Current data focuses on process metrics, such as the number of health inspections or clinical encounters, with no data on quality of services or outcomes. Other states have implemented performance management models that could serve as a framework for Virginia.

Local health departments need additional support for information technology and workforce

The IT systems that local health departments use for their core functions are siloed and outdated. Additionally, recruiting and retaining qualified staff are persistent challenges, due primarily to low salaries. Improving both of these administrative capabilities will improve local health department performance.

Funding allocations do not account for true service costs or need

Local health department budgets are primarily based on historical funding levels. This results in drastic variation across localities and means that budgets are not accounting for changes in need over time. Without a better understanding of the cost of core services and local performance, it is not possible to determine whether major funding changes are necessary. However, targeted investments to address identified shortcomings are necessary.

Local Health Department Structure and Financing

The Virginia Department of Health (VDH) and its local health departments (LHDs) serve a wide range of functions, including providing immunizations, public health surveillance, communicable disease investigations, sexually transmitted infection management, and environmental health inspections to improve public health across Virginia. The COVID-19 pandemic highlighted challenges in Virginia's public health infrastructure, and in December of 2021, the Joint Commission on Health Care (JCHC) directed staff to assess whether the current structure and financing of Virginia's LHDs is effectively supporting them to carry out their responsibilities. (See Appendix 3 for JCHC study resolution.) Specifically, the study resolution directed staff to:

- Catalog and compare public health services provided by LHDs across the state;
- Identify standards used to evaluate the quality of LHDs and identify if LHDs across Virginia are meeting these standards;
- Compare Virginia's public health infrastructure and financing to other states to identify advantages and disadvantages; and
- Recommend any necessary changes to Virginia's current public health structure and financing to further the state's public health goals.

VDH is a state-level public health agency that supports local offices

Public health statutory authority in Virginia is vested in both the State Board of Health and the State Health Commissioner. The Board of Health is a policy-making board that promulgates public health regulations. The Commissioner of Health is appointed by the Governor and reports to the Secretary of Health and Human Resources. Whenever the Board is not meeting, the full authority of the Board is vested in the Commissioner of Health. The Commissioner leads the entirety of VDH, the state public health agency.

Under the Commissioner, VDH leadership is organized into six divisions:

- **Administration** – led by the Deputy Commissioner for Administration; oversees the Offices of Financial Management, Human Resources, Information Management, Procurement & General Services, and Vital Records
- **Community Health Services** – led by the Deputy Commissioner for Community Health Services; oversees the LHDs
- **Diversity, Equity & Inclusion** – led by the Chief Diversity, Equity, and Inclusion Officer; oversees Office of Health Equity

- **Epidemiology** – led by the State Epidemiologist; oversees Office of Epidemiology and Center for Community Health Improvement
- **Governmental and Regulatory Affairs** – led by the Deputy Commissioner for Governmental and Regulatory Affairs; oversees Office of Communications, Office of Licensure and Certification, and the Program of Public Health Planning & Evaluation
- **Public Health and Preparedness** – led by the Deputy Commissioner for Public Health and Preparedness; oversees the Offices of Drinking Water, Emergency Medical Services, Emergency Preparedness, Environmental Health Services, Family Health Services, Chief Medical Examiner, and Radiological Health

There are 118 local health departments in Virginia

Each of Virginia's 133 localities – 95 counties and 38 independent cities – receives services from an LHD. Some localities have chosen to combine their LHDs, leaving 118 LHDs across the state's 133 localities (see Appendix 2 for a full list of LHDs). Every LHD operates via a contract with the VDH central office called the Local Government Agreement (LGA). The LGA outlines which state-mandated and locally-required public health services the LHD is responsible for ensuring are available in their locality.

There are 6 districts that formally share leadership and management structures:

- Hampton & Peninsula
- Pittsylvania/Danville & Southside
- Richmond & Henrico
- Roanoke & Alleghany
- Cumberland Plateau & Lenowisco

There are 2 districts in which the health director is shared, but other management structures are not:

- Central Virginia & West Piedmont
- Mount Rogers & New River

While they may share health directors and/or managers, these partnered districts are not formally combined and still have separate district budgets, staff, and systems that they are responsible for maintaining.

The LHDs are organized into 35 health districts, each led by a health director. Eleven of these districts are single jurisdictions, with only one locality and LHD. In these single-jurisdiction districts, there is no distinction between LHD-level and district-level services, staff, and capacities except in the cases of shared leadership between two single-jurisdiction districts (see sidebar). The remaining 24 health districts are multi-jurisdictional, comprised of between two to ten LHDs. Each health director reports to the Deputy Commissioner of Community Health Services, who is part of the senior leadership team at the VDH central office.

Local health departments have similar staff but organizational structure varies

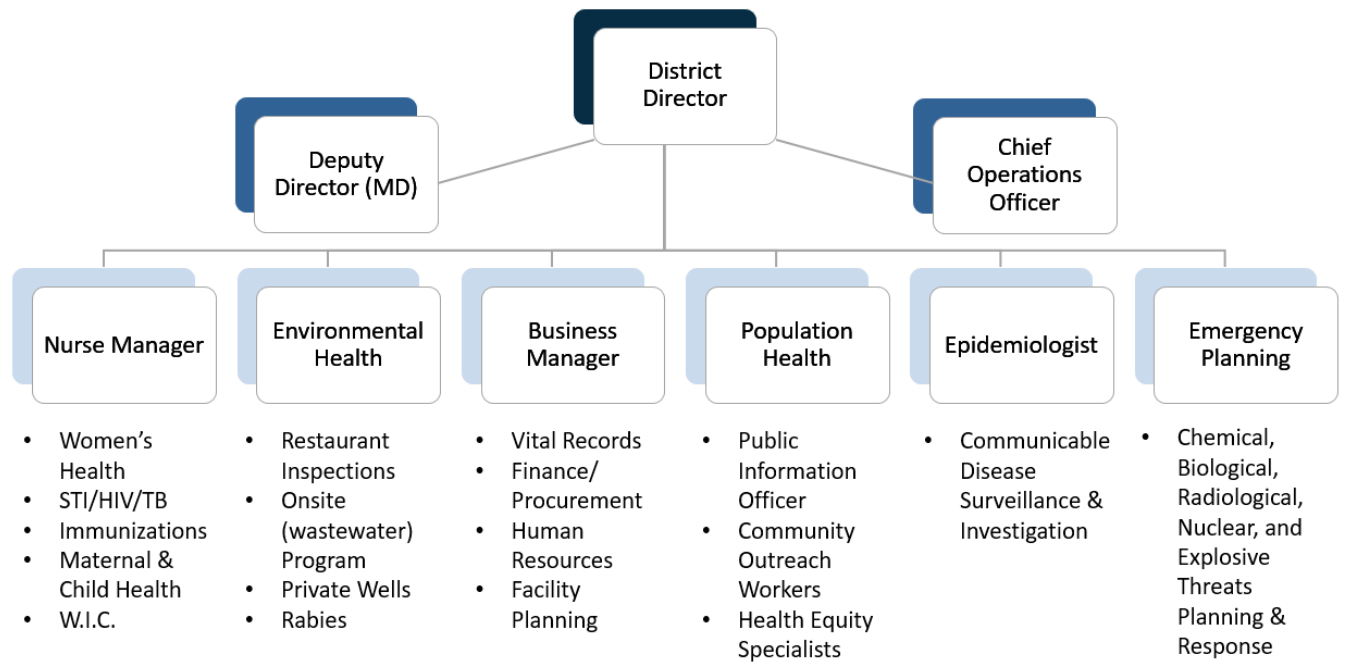
There are typically three types of core staff that can be found at every LHD – office services specialists, public health nurses, and environmental health specialists. In

multi-jurisdictional health districts, management and leadership are shared across multiple LHDs, with a health director, nurse manager, business manager, and environmental health manager that typically operate at the district level (FIGURE 1), though they may be located out of one LHD in particular or the district office. Epidemiologists, clinicians, and

emergency planners also operate at the district level. In single-jurisdiction districts, there is less distinction between LHD-level and district-level operations as there are not typically multiple offices to coordinate.

Some districts also have additional staff, although this varies depending on the district's needs, priorities, and budgets. As of May 2022, there were nine Chief Operations Officers for 13 districts – typically in districts that have shared management with another district. There were also three Deputy Medical Directors for seven districts, who can provide medical duties and support the health director for any responsibilities that require oversight from a physician. Most districts also have a population health manager, although they are usually shared with another district. Ten districts do not have a population health manager, but some of these districts have a population health coordinator instead.

FIGURE 1: District management is shared across LHDs within the district

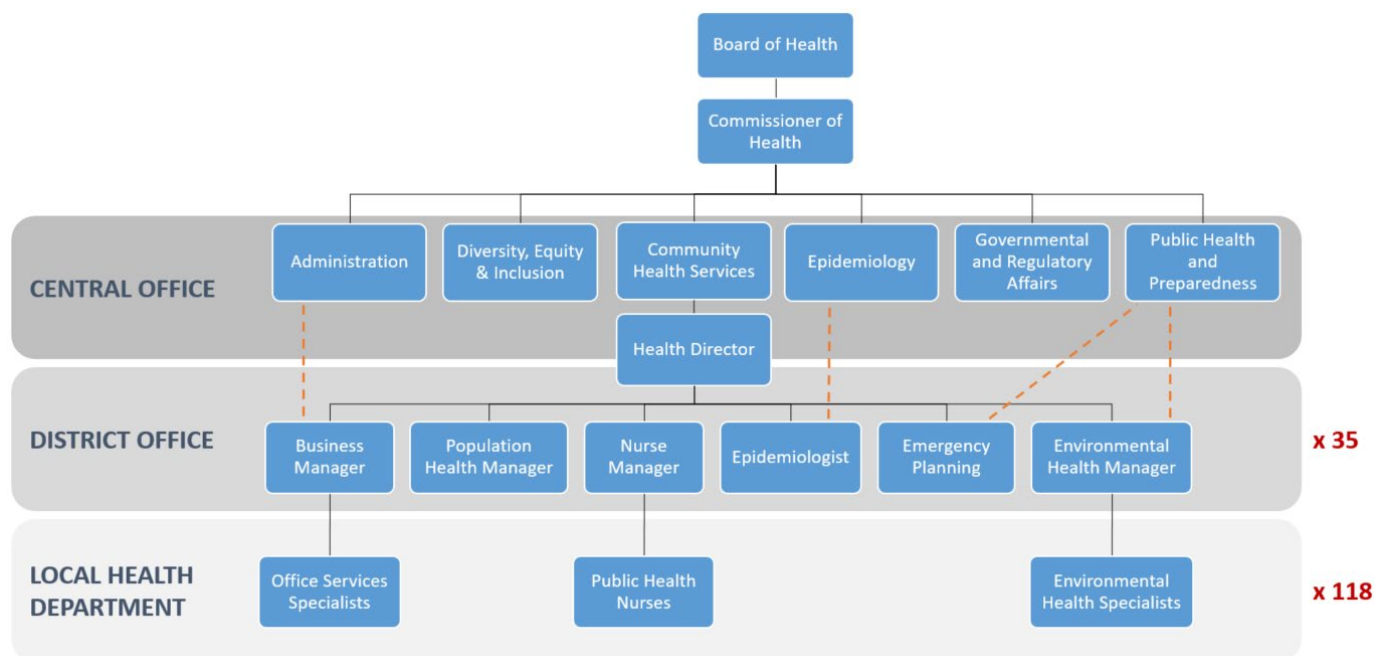


SOURCE: VDH visualization of district staffing, 2022.

Local health department staff report to the health director but also receive guidance from other program leads at the central office

Each health director reports to the Deputy Commissioner for Community Health Services, but LHDs also reach out to program leads and subject matter experts within the various program offices at the central office for guidance, support, and technical assistance. For example, environmental health specialists and managers communicate directly with the central Office of Environmental Health Services. So while LHD staff report to their health director, they also maintain relationships with central office staff (FIGURE 2). Program managers at the central office may monitor LHDs to track local activities, provide technical expertise, and assist with grant reporting.

FIGURE 2: LHD staff report to the health director but also receive guidance from other program leads at the central office



NOTE: Dotted lines indicate programmatic relationships that are separate from direct supervisory relationships.

States structure local health departments differently and there is no recognized best model

There are four main governance structures states can use to manage and administer public health programs and services – centralized, decentralized, shared, or mixed. The different models are distinguished by whether the state or local government has leadership over local departments, has authority over fiscal decisions, and/or may issue public health orders (TABLE 1).

- Leadership refers to whether a local health unit is led and managed by a state employee or a local government employee
- Public health orders refers to whether the state or local government may issue legal orders relevant to public health that can be enforced
- Fiscal authority refers to whether the state or local government retains authority over most budget-related decisions and can establish taxes for public health or establish fees for services

TABLE 1: States follow one of four public health governance structures

Structure	Leadership	Public Health Orders	Fiscal Authority	Applicable States
Decentralized	Primarily by local government employee	Primarily by local government	Local governments	26 states and the District of Columbia
Centralized	Primarily by state employee	Primarily by state	State	14 states (including Virginia)
Mixed	Some by state employee, some by local government employee	Sometimes issued by the state, sometimes issued by local government	State or local governments	6 states
Shared	State or local government employee	If led by state, local government can issue public health orders; if led by local government, state can issue public health orders	If led by state then local government has authority over budgetary decisions; if led by locality then state has budgetary authority	4 states

SOURCE: CDC, State and Local Health Department Governance Classification Map (September 2020), and ASTHO, Profile of State and Territorial Public Health, Volume Four (2017).

Virginia's public health system is mostly centralized

Virginia follows a largely centralized governance structure, with all but two LHDs currently led and managed by the state government. The state government has fiscal authority over all state-administered LHDs. The majority of Virginia's LHDs are state-administered, meaning they rely on the VDH central office for administration and hire employees through

the state system as classified state employees. LHDs have the option to be locally administered, as in the case of Fairfax and Arlington. In these cases, the LHDs are still part of the state public health system, but all administration, hiring, fiscal decisions, and management is handled by the locality. Employees are hired by the locality and are part of the city/county's system, rather than the state system. Locally-administered LHDs still operate via contract with VDH and receive state funding, but take on the additional costs of having their own separate systems rather than relying on the state infrastructure. Two other health districts, Prince William and Loudoun, have requested to transition their LHDs to becoming locally administered.

The most common governance structure for public health in the U.S. is decentralized, where local health units act independently from a state agency or structure. States in the regional South tend to be more centralized, having more state-managed LHDs than all other regions in the U.S. Larger states are significantly more likely to have more independent LHDs. In centralized states, including Virginia, LHDs are part of the state health department and essentially act as extensions of the state agency.

There is no consensus on the best model but there are advantages and disadvantages

There is limited research on how various public health governance structures correlate to performance and health outcomes. The existing literature is mixed, though there is some consensus that centralized systems employ more employees and provide more clinical services, while decentralized systems spend more on public health and are less vulnerable to spending cuts. There are advantages and disadvantages to both types of structures (TABLE 2). Centralized public health systems have the ability to use economies of scale for more efficient service delivery, and could coordinate and share resources across multiple jurisdictions more easily. Decentralized public health systems, on the other hand, are able to more easily generate local support from stakeholders and can be more responsive to community needs.

TABLE 2: Research proposes advantages of centralized and decentralized public health systems

Centralized Public Health Systems	Decentralized Public Health Systems
<ul style="list-style-type: none"> • Ability to take advantage of economies of scale • Coordination and sharing of resources across multiple local jurisdictions 	<ul style="list-style-type: none"> • Ability to generate greater local public and political support for public health • Resource and program decisions more responsive to community needs

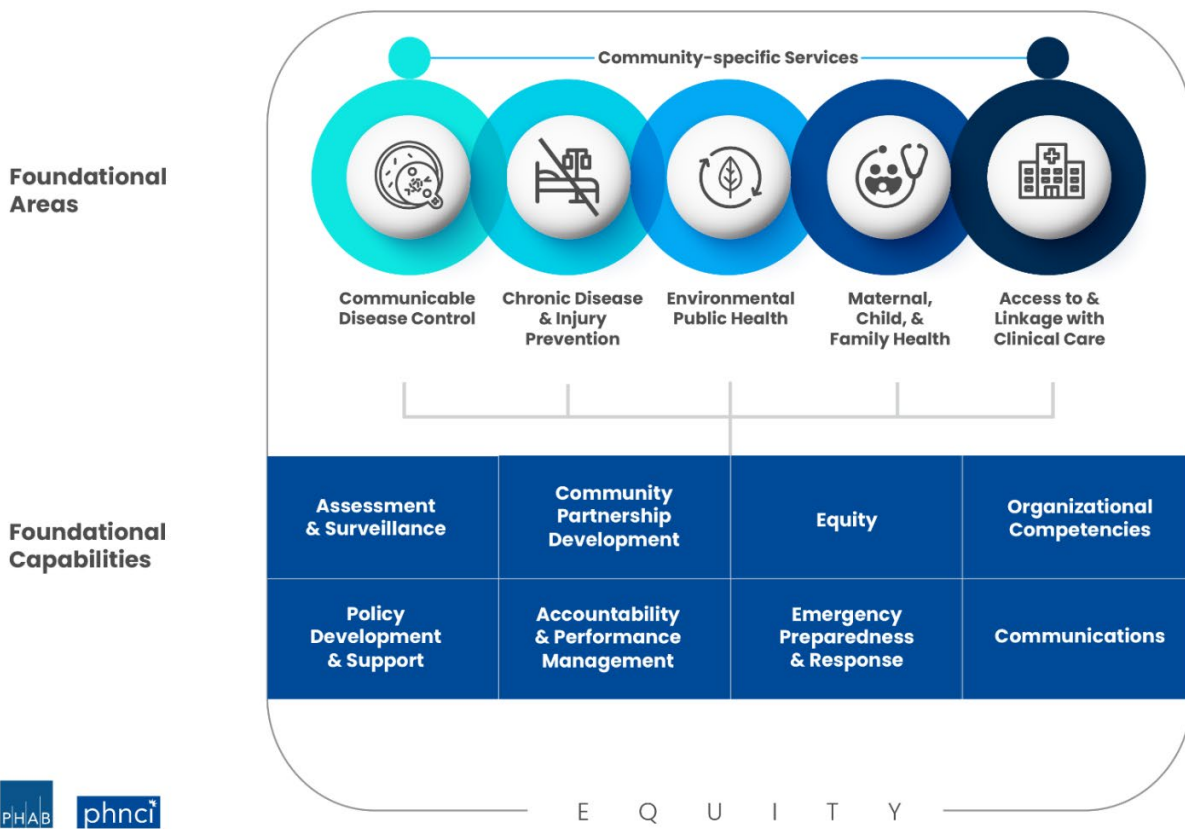
SOURCE: Mays, G. & Smith, S. Geographic Variation in Public Health Spending: Correlates and Consequences. Health Services Research (September 2009), Volume 44, Issue 5p2, pg.1796-1817.

Nationally supported best practices provide a framework for what local health departments should be doing, regardless of structure

While there is no right way to structure LHDs, there are nationally recognized standards for what LHDs should do. In 2012, the Institute of Medicine recommended defining a “minimum package of services” that should be available in all state and local health departments to support a functioning public health system. In response, the national Foundational Public Health Services (FPHS) model was created. The FPHS framework outlines foundational program areas and capabilities all governmental health departments should prioritize and ensure are available in every community (FIGURE 3).

- **Foundational Areas** (FPHS Program Areas) are the programmatic work LHDs should be doing – they are community-specific, minimum public health programs that should be available in all communities.
- **Foundational Capabilities** (FPHS Capabilities) are organizational skills and capacities every LHD should have in order to effectively provide public health programs and services.

FIGURE 3: The Foundational Public Health Services model outlines Foundational Capabilities and Foundational Areas all governmental public health departments should have



SOURCE: Public Health National Center for Innovations (PHNCI) at Public Health Accreditation Board (PHAB), Foundational Public Health Services, updated February 2022.

Local health departments are mostly fulfilling core Program Areas

FPHS Program Areas are community-specific, minimum public health programs that should be available in all communities. The Code of Virginia outlines governmental public health responsibilities.

§ 32.1-2. “the State Board of Health and the State Health Commissioner, assisted by the State Department of Health, shall administer and provide a comprehensive program of preventive, curative, restorative and environmental health services, educate the citizenry in health and environmental matters, develop and implement health resource plans, collect and preserve vital records and health statistics, assist in research, and abate hazards and nuisances to the health and to the environment, both emergency and otherwise, thereby improving the quality of life in the Commonwealth.

This comprehensive program of preventive, curative, restorative, and environmental health services shall include prevention and education activities focused on women's health, including, but not limited to, osteoporosis, breast cancer, and other conditions unique to or more prevalent among women.”

The current Code language is mostly in alignment with the recommended FPHS Program Areas of communicable disease control, environmental public health, and maternal, child, and family health. However, the current state Code does not specifically address linkages with clinical care, or chronic disease and injury prevention (TABLE 3). Though there is work happening at both the state and local level to address the chronic disease burden in Virginia, chronic disease is not explicitly acknowledged in the Code as a public health responsibility. The current Code language also centers the role of VDH in administering and providing services, without acknowledging the role of public health in facilitating access and linkages to clinical care.

TABLE 3: LHDs are not consistently doing work in all FPHS Program Areas

FPHS Program Area	In Code	In LGAs	Available in LHDs
1. Access to & Linkage with Clinical Care	No	Infrequent	Sometimes
2. Chronic Disease & Injury Prevention	No	Infrequent	Sometimes
3. Communicable Disease Control	Yes	Yes	Yes
4. Environmental Public Health	Yes	Yes	Yes
5. Maternal, Child, & Family Health	Yes	Yes	Yes

SOURCE: JCHC staff analysis of Virginia Code, FY20 Local Government Agreements, and JCHC staff interviews with local staff, 2022.

Access to and linkage with clinical care is not required or present in most local health departments

Definition: Access to & Linkage with Clinical Care

Provide timely, accurate information on access and linkage to clinical care in partnership with community stakeholders, including conducting inspection and licensure of health care facilities and providers, and increasing access to health homes and quality health care

Current Code language does not reflect the shifting role of public health

The Code of Virginia states that VDH is responsible for administering and providing preventive, curative, and restorative health services. This language was last amended in 1995, and does not take into consideration the way public health has changed in the last 20 years. Both in Virginia and nationally, LHDs have moved away from direct provision of clinical care services, and instead serve as cross-sector facilitators to ensure care is available in their communities. According to VDH, the shift in Virginia has been the result of factors such as the passage of the Affordable Care Act and adoption of Medicaid expansion, which both contributed to decreased need for LHDs to serve as safety net providers. As a result, LHDs now favor making referrals to other community providers, such as local health systems, federally qualified health centers (FQHCs), or free clinics. However, the Code of Virginia still reflects the perspective of LHDs as direct clinical care providers.

Local Government Agreements do not reflect access to and linkage with clinical care

The required services in the local government agreements (LGAs) reflect similar thinking as the Code language, with very little expectation for LHDs to participate in improving access and providing linkages to clinical care through partnerships. JCHC staff analysis of FY20 LGAs found that the closest service requirement is the Interagency Coordinating Council (ICC), which ensures infants and toddlers with developmental delays or disabilities receive necessary services and supports in a timely manner. While this activity is limited to that population, almost all localities (92%) require their LHDs to participate in the ICC. Some localities have adopted additional linkage work, with 11% of the LGAs including requirements for LHDs to provide hypertension screening, counseling, and referral. However, for the most part, the LGAs don't address this FPHS Program Area.

LHDs have been moving away from direct clinical care, toward ensuring access and linkages to other resources

Though the Code directs VDH to administer and provide clinical services, LHDs are not

Federally Qualified Health Centers (FQHCs) are federally-funded nonprofit outpatient clinics in medically underserved areas. They serve both insured and uninsured patients, and receive reimbursement from Medicaid, Medicare, and private insurers, or have sliding fee scales.

Free Clinics serve uninsured or underinsured patients, and generally provide services for free or with minimal fees. They are usually staffed by volunteers and funded primarily by private donations or grants.

explicitly required to be a provider of clinical services. Instead, the LGAs note that LHDs are responsible for ensuring specific programs or services are available in the locality, regardless of what entity actually provides the service. In response, LHDs have slowly moved away from providing clinical services, such as primary care, prenatal care, and dental care, in most health districts. There are a variety of reasons to explain the shift, including increasing pressure for public health to focus on population health and the social determinants of health. There is also increasing acknowledgment that there are other community providers, including FQHCs and free clinics, that are designed to provide health care and can take on those clinical responsibilities. Other times, reductions in funding may precipitate the decision to discontinue services. For example, due to reduced Title X federal family planning funding this year, the Central Shenandoah health district will

no longer be offering family planning services.

In order to shift responsibility for certain services to community providers, there are two factors LHDs must consider. First, there must be other providers in the area who are able to provide services. This is much more difficult in rural areas where there are health care provider shortages. Second, LHDs must ensure the receiving provider has the capacity and resources to handle both the patient volume and low reimbursements for largely Medicaid or uninsured patients. This is easier when there are other providers who serve a similar population, namely, FQHCs and free clinics. However, FQHCs may not provide some services, or free clinics may only serve specific populations, limiting the ability of LHDs to refer patients. There have also been instances where LHDs tried to transition services out of the LHD, and had to reassume responsibility when the community partner could not manage the demand. In Eastern Shore, the district tried to shift maternity care to other providers, but the geographic distance was a barrier for the closest health system, the local FQHC did not provide ob-gyn services, and there was only one local private provider who could not serve such a volume of patients.

Despite the pull to more of a population health role, LHDs are still the provider of last resort in their communities. This means they take on programs and services that residents could not otherwise access. In particular, LHDs are more likely to provide services where community resources are insufficient or alternative providers do not exist. LHDs in the Southwest region offer significantly more optional clinical services (especially child health services and maternal health services) than other regions in the state. Additionally, LHDs

provide clinical services that private providers often do not want to provide, typically because the reimbursements are too low. For example, childhood immunization reimbursements are not high enough for some physicians to keep vaccines in stock and provide shots, and tuberculosis case management is notoriously difficult and unprofitable.

Chronic disease and injury prevention are largely not addressed by local health departments

Definition: Chronic Disease & Injury Prevention

Provide timely, accurate information on chronic disease and injury prevention and control in partnership with community stakeholders, including reduction of tobacco use, healthy eating, and active living

Current Code language does not specifically address chronic diseases

The Code of Virginia states that VDH is responsible for abating hazards and nuisances to health, providing health education, and providing prevention and restorative programs. However, the Code does not specifically designate responsibility for managing or providing data, programs, or services for chronic disease and injury prevention. Instead, there are various specific directives related to chronic disease, such as the statewide asthma management plan, the youth suicide prevention program, the Youth Health Risk Behavior Survey administration, and the creation of the Virginia Foundation for Healthy Youth, which is focused on restricting the use of tobacco products by minors, obesity prevention efforts, and preventing and reducing substance use by youth. Additionally, the VDH central office collects and monitors hospital and emergency department data to understand why patients are admitted.

Local government agreements do not reflect chronic disease or injury prevention work

With no specific roles in the Code of Virginia for LHDs in these efforts, JCHC staff analysis of the FY20 LGAs found few requirements for chronic disease or injury prevention services. The VDH central office does state-level chronic disease work that LHDs are not usually involved in, providing services like chronic disease management training for school nurses, suicide prevention guidance and education, and the family violence and sexual assault hotline. These efforts are primarily managed and provided at the state level, rather than at the local level, although some LHDs offer services. For example, according to the VDH central office, most LHDs also provide child car seats and safety education.

Most local health departments do not provide chronic disease programs and services

A small number of localities do list optional services related to chronic disease management in their LGAs, such as a diabetes prevention program (available in four localities) and hypertension screening and counseling (in eight localities), and all provide

community education. Outside of the programs and services outlined in the LGAs, some districts have health educators or social epidemiologists focused on chronic disease and community education. They may monitor chronic disease burden in the community and facilitate community events for outreach and education. However, this work varies across the state and is ad hoc, rather than being required, systematic, and supported by agency infrastructure.

Local health departments should be a data source for community stakeholders

The FPHS framework outlines the expectation that public health should act as a resource for community stakeholders by providing timely, accurate data on chronic disease and injury prevention. At the state level, there is a wealth of chronic disease and injury data available to the public, including the Chronic Disease Burden by District, Sudden Death in the Young Case Registry, and the VDH Opioid Data dashboard. With better use and dissemination of these data, even without directly providing chronic disease and injury prevention programs and services, LHDs could play a valuable role in highlighting local trends and needs and designing interventions with partners to create conditions that will improve health outcomes. This could be achieved through improved data infrastructure, community partnership development, communications, and assessment and surveillance – all capabilities necessary to provide foundational public health services (see page 17). Further developing these programs at the local level, particularly for chronic disease and injury prevention, will require additional funding.

→ **OPTION 1:** The JCHC could introduce legislation to amend the Code of Virginia to require LHDs to ensure the availability of clinical services, either by the LHD or by other providers, facilitate access to and linkage with clinical care, as well as address chronic disease and injury prevention. The legislation should include an enactment clause directing VDH to update the Local Government Agreements to reflect these changes.

Communicable disease control is a required, central function of local health departments

Definition: Communicable Disease Control

Provide timely, accurate information on communicable disease and implement disease control plans with partners, including contact tracing and assuring treatment for individuals with reportable communicable diseases

Current Code language is sufficiently broad to include communicable disease control

The Code of Virginia explicitly states that VDH is responsible for a comprehensive program of preventive, curative, and restorative health services. VDH epidemiologists support health districts, with different work streams dedicated to:

- **Clinical Epidemiology** – prevention and control of tuberculosis and health care-associated infections; oversees the Newcomer Health program for refugees
- **Immunization** – prevention and control of vaccine preventable diseases; tracks immunization rates in districts
- **Disease Prevention** – surveillance, testing, investigation, prevention, and treatment of sexually transmitted infections
- **Disease Surveillance and Investigation** – surveillance of reportable conditions, emerging infectious diseases, and outbreaks; manages systems for syndromic surveillance (ESSENCE) and outbreak surveillance (VOSS)
- **Pharmacy Services** – vaccines and medication to support clinic operations
- **Informatics and Information Systems** – management of electronic disease reporting with external partners; manages the Virginia Electronic Disease Surveillance System (VEDSS) – the state system for tracking reportable conditions – and systems for case investigations and contact tracing

Local Government Agreements show all local health departments in Virginia provide or ensure communicable disease services

JCHC staff analysis of FY20 LGAs found that all LHDs in Virginia provide or ensure communicable disease services, including immunization, treatment and prevention of sexually transmitted infections, disease surveillance/investigation, HIV/AIDS therapies, and tuberculosis control. An additional 41% of localities provide foreign travel immunizations at the LHD. There are also a few other optional communicable disease services that are only available in localities in Southwest Virginia – specifically Hepatitis C treatment, PrEP (pre-exposure prophylaxis for HIV), Ryan White case management and telemedicine clinics, and regional jail screenings for communicable disease.

The **Ryan White HIV/AIDS Program** provides federal funding for HIV/AIDS treatment and services to uninsured and underinsured

Communicable disease control is a coordinated effort across multiple types of local health department staff

Communicable disease control is a multidisciplinary effort that requires coordination across multiple team members. Public health doctors and nurses at each LHD provide treatment and vaccinations to help manage and prevent communicable diseases. District-level epidemiologists and public health nurses work on contact tracing and case investigations for communicable diseases such as tuberculosis, STIs, HIV/AIDS, etc. The VDH central office works to make sure regional epidemiological surveillance is standardized, with regular checks to ensure staff are counting cases and applying criteria in a uniform manner.

Environmental public health is required by state Code, but additional authority could improve effectiveness

Definition: Environmental Public Health

Provide timely, accurate information on environmental public health threats in partnership with community stakeholders, including water testing, land use planning, and food and recreation site inspections

Current Code language specifies environmental health as a public health requirement

The Code of Virginia explicitly states that VDH is responsible for environmental health services (EHS), and all LHDs in Virginia provide or ensure EHS are available. Most members of the public think about EHS when they think of LHD responsibilities. Even through the COVID-19 pandemic, demand for EHS remained consistently high. As the enforcement arm of LHDs, EHS staff must enforce more than 20 state environmental health regulations. The central VDH Office of Environmental Health Services standardizes staff training on inspections (e.g., shellfish, milk plants) to ensure the greatest possible consistency in applying and enforcing regulations. In addition, there may be local ordinances that staff are responsible for enforcing.

Local Government Agreements cover a broad range of environmental health services

JCHC staff analysis of FY20 LGAs found that all or almost all LHDs provide EHS covering the investigation of sewage/septic systems, restaurants/eating establishments, hotels/motels, adult homes, juvenile justice institutions, jails, daycare centers, and radon levels. EHS in most localities also covers migrant labor camps, marinas, and milk plants.

A subset of localities also require LHDs to manage locality-specific EHS, the most common of which are inspection of swimming facilities (15% of localities), enforcement of smoking ordinances (10%), animals and rabies control (10%), and inspection of massage parlors (9%). Locality-specific EHS can be highly regional – for instance, only localities in Eastern Virginia require EHS to cover tattoo/body art parlors. Single-jurisdiction districts (which are often large cities) are somewhat more likely than multi-jurisdictional districts to include a high number of optional environmental health services (greater than five optional EHS), funded with 100% local dollars.

Local health departments' capacity and ability to enforce is limited by the current fee structure

While environmental health services are required by the state Code and in all LGAs, individual LHDs may have limited staff capacity, which hinders their ability to provide services. For example, the majority of respondents to a JCHC survey indicated they are behind on completing their inspections. Adjusting the current fee structure may help

provide additional resources to staff to support their efforts (see page 51 for a full discussion of this issue).

Maternal, child, and family health is required by state Code

Definition: Maternal, Child, & Family Health

Provide timely, accurate information on maternal and child health trends in partnership with community stakeholders, promote evidence-based prenatal and early childhood interventions, assure newborn screenings, and coordinate maternal, child, and family health programs and services

Current Code language requires a focus on maternal health services

The Code of Virginia explicitly states that VDH is responsible for a comprehensive program of preventive, curative, and restorative health services, with additional emphasis on women's health. The VDH Office of Family Health Services is specifically focused on child and family health, with programs for newborn screening, healthy eating, pregnant and parenting teens, sex education, and youth development. LHDs do not provide all of these services, but do have specific programs for women and children.

All Local Government Agreements include maternal, child, and family health services

JCHC staff analysis of FY20 LGAs found that all LHDs in Virginia provide or ensure some form of maternal, family, and child health, mainly through federal funding. However, the extent of services is highly dependent on the locality and region. The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) program is available at 153 sites across the state through every LHD, and some additional WIC-only service sites. WIC services and staff are entirely federally funded, and while WIC staff are hired and managed by LHDs, all programmatic decisions are made at the federal level. Most LHDs also provide services for children with special health care needs (94% of localities), pre-school physicals (93%), child restraints in motor vehicles (93%), Children Specialty Services (92%), and the Baby Care program (92%). A little more than a quarter of localities (27%) provide children's disability waiver screenings.

The Baby Care Program is a home visitation program that provides behavioral risk screening, case management services, and expanded prenatal services (e.g., nutritional services, homemaker services, substance abuse treatment) for Medicaid-eligible pregnant women or new mothers.

Fewer local health departments are providing clinical maternal, child, and family health services

In recent years, VDH has been moving away from the direct provision of maternal, child, and family clinic services. LHDs no longer provide primary care, and most LHDs no longer

The **federal 340B program** enables eligible providers, who serve low-income and uninsured populations, to purchase prescription drugs at discounted prices.

provide prenatal care for pregnant mothers. As a 340B provider, LHDs can provide free birth control pills and LARCs (Long-Acting Reversible Contraception) to their patients, but reduced federal funding for family planning services has led many districts (including Prince William, Central Virginia, and Central Shenandoah) to reduce their family planning and birth control services. Instead, these LHDs refer patients to other providers.

Localities in Southwest are the only region in Virginia where LHDs still provide preventative dental services, case management for high-risk pregnant women, and vasectomies. This is in alignment with research that found rural LHDs and LHDs reporting no other service providers in the area were more likely to provide early periodic screening, diagnosis, and treatment services and prenatal care services.

LHDs do not have all of the necessary core Capabilities

FPHS Foundational Capabilities are organizational skills and capacities required to support basic public health Program Areas. All FPHS Capabilities are present at the state level, within the VDH central office. However, health districts and LHDs in Virginia often lack one or more of these core skills. Strengthening the Foundational Capabilities in LHDs is essential to enabling them to effectively provide programs and services in all FPHS Program Areas.

There is an immediate need for greater attention to administrative competencies, particularly for IT and workforce development, as well as LHD accountability and performance management. These are areas where lack of capacity significantly impacts LHD effectiveness. Secondly, facilities management, communications, community partnership development, and policy development capacities are sometimes present at the state or district level, but greater support and investment are needed to ensure there is sufficient local capacity (TABLE 4).

TABLE 4: LHDs are missing a few major FPHS capabilities

Foundational Capability	Status
1. Accountability & Performance Management	Needs attention
2. Organizational Administrative Competencies	
• Leadership & Governance	Meets expectations
• Information Technology Services, including Privacy & Security	Needs attention
• Workforce Development & Human Resources	Needs attention
• Financial Management, Contract, & Procurement Services, including Facilities and Operations	Needs support
• Legal Services & Analysis	Meets expectations
3. Communications	Needs support
4. Community Partnership Development	Needs support
5. Policy Development & Support	Needs support
6. Assessment & Surveillance	Meets expectations
7. Equity	Meets expectations
8. Emergency Preparedness & Response	Meets expectations

NOTE: Capabilities that need attention are issues that significantly impact LHD effectiveness; capabilities that need support are issues that would further enhance LHD work.

There is no system for local health department accountability and performance management

Definition: Accountability & Performance Management

Maintain a performance management system to monitor organizational activities, with a focus on quality improvement and accountability structures and metrics

Public health accountability can be difficult due to the multidisciplinary nature of the work, and the many different factors that contribute to population health outcomes. While in a typical accountability model, inputs should be linked with outputs, in public health it is difficult to attribute population health outcomes such as infection rates or prevalence of obesity to an LHD's work. Instead, systems for accountability can focus on measuring whether and how well LHDs are executing their mission. As a centralized public health system, LHDs are an extension of VDH, and the state should have an understanding of what is happening at the local level. It is important to know whether certain services are being provided and how well LHDs are functioning, particularly given the wide geographic and population diversity in Virginia.

The Local Government Agreement is not an effective accountability mechanism

All LHDs operate under contract with the state and sign an annual Local Government Agreement (LGA) that outlines the state- and locally-mandated services they will ensure in exchange for funding. Though the LGA could be a primary accountability mechanism for LHDs, they are treated more as a formality than as a tool. The VDH central office does not currently have a complete and updated repository of all prior and current, signed and complete LGAs, or an inventory of the various services required of each LHD. In interviews with district directors, some did not know what was specifically outlined in the LGA or noted it was standard paperwork that does not tend to change from year to year.

Current local health department performance data focuses on process metrics

While the VDH central office collects a significant amount of program data from LHDs, there is currently no system for assessing overall LHD performance. Instead, metrics are primarily tied to funding requirements or are administrative, such as tracking the number of clinic visits or site inspections. For example, as a federally-funded program, the WIC program is required to report on the number of partially and fully breastfed infants.

The VDH central office has been working to develop and implement performance metrics focused more on outcomes and quality. There are also standardization efforts led by the central office for both epidemiology and environmental health services to ensure staff are trained and performing consistently. However, there is little standardization of performance and accountability metrics in other departments or at the LHD level.

Some districts such as Fairfax and Arlington have their own performance plans with stated, desired outcomes and metrics for tracking progress towards their goals. However, this is not typical, and may be attributed to the fact that both districts are locally administered and have both more resources and different administrative expectations than state-operated LHDs. For example, Arlington's maternity clinic performance plan in the County budget outlines:

- Program purpose
- Program information
- Data on capacity and services
 - Staffing data – total FTEs for various positions
 - Customers and service data – total unique clients, new admissions, visits
- Data on quality
 - Maternity clients who receive all critical assessments and tests on time
 - Client satisfaction
- Data on outcomes
 - Deliveries resulting in low birthweight babies
 - Pre-term deliveries
 - Clients entering care in the first trimester

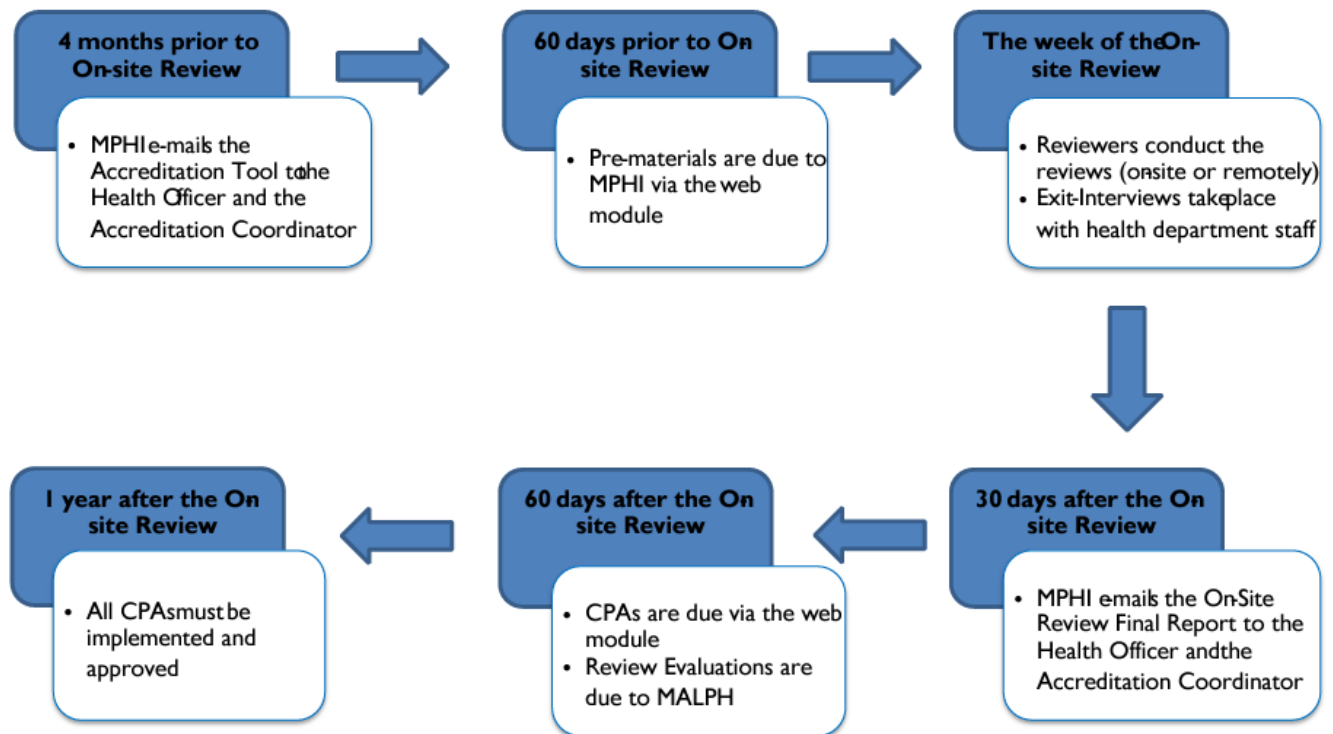
Other states have tried different approaches to ensure local health department performance

Given the wide scope of LHD responsibilities, and the ever-changing nature of public health, it is not unique for states to explore how best to measure LHD performance and identify effective accountability mechanisms. States have taken different approaches to addressing the issue in a way that is best suited to their unique populations and public health systems.

Ohio, which has a decentralized public health system, required all LHDs to apply for accreditation by 2018 to demonstrate their ability to provide core public health services as a condition of receiving funding from the state. They currently have 56 PHAB-accredited LHDs (out of 113 total LHDs). Each health district must also submit an online report which incorporates the PHAB standards every other year.

Other states such as **Iowa**, **North Carolina**, and **Michigan**, which are all decentralized public health systems, have established their own state accreditation programs for LHDs. The Michigan Local Public Health Accreditation Commission, which is maintained by the Michigan Public Health Institute, manages a state accreditation process to evaluate the capacity and performance of all LHDs every three years. The state health department establishes minimum standards for LHD scope, quality, administration, and delivery of required and allowable services. The process includes an LHD self-assessment, on-site review, and Corrective Plans of Action, after which LHDs are considered “Accredited”, “Accredited with Commendation”, or “Not Accredited” based on how well they meet the established minimum program requirements (FIGURE 4).

LHD Accreditation. Motivated LHDs with the time and resources may choose to undergo national accreditation with the Public Health Accreditation Board (PHAB). Currently, the VDH central office, Prince William health district, Fairfax County health department, Portsmouth health district, and Blue Ridge health district are voluntarily accredited. Nationally, there are 357 accredited LHDs that have been deemed as meeting the PHAB Standards & Measures, which follow the Foundational Public Health Services framework. Accreditation is an ongoing commitment of time and resources as reaccreditation requires re-evaluation every five years, and LHDs must pay an annual accreditation services fee that may range from \$5,600-\$22,400 depending on the size of the jurisdictional population served.

FIGURE 4: The Michigan Local Public Health Accreditation Process

MPHIE = Michigan Public Health Institute, CPA = corrective plan of action, MALPH = Michigan Association for Local Public Health

SOURCE: Michigan Local Public Health Accreditation Program Tool, Users' Guide (2017).

Washington, which also has a decentralized public health system, passed legislation in 2007 to codify “a limited statewide set of core public health services” that must be present in every community and to restructure funding for governmental public health to reinforce capacity and allow for system transformation. In 2016, the state Department of Health was tasked with working with stakeholders to assess LHD capacity and develop performance measures and a performance plan to ensure uniform, core public health functions across the state. The legislature provided funding to conduct a baseline assessment of state and local capacity to provide core public health services, to identify the funding gap, and to inform the level of investment needed. So far, subject matter expert workgroups have selected indicator metrics for assessment, communicable disease, and environmental public health. They will collect and review the data to evaluate whether increased funding is being used effectively, efficiently, and equitably to provide more foundational public health services and yield better population health status (FIGURE 5). The legislature receives an annual report with updates on the accountability metrics selected.

FIGURE 5: Washington State Accountability Process

	What is Measured	Data Source
Inputs	Spending – how much was spent on each FPHS	Annual Report
	Current Sharing – to what extent did the jurisdiction receive shared services from another public health agency	Annual Report
Outputs & Outcomes	Capacity – (staff & resources) – including services received from other public health agencies, rate capacity on a 5-point Likert scale.	Annual Report
	Expertise – (expertise & knowledge) – including services received from public health agencies, rate expertise on a 5-point Likert Scale.	Annual Report
	Indicator Metrics	Data Systems e.g. WIIS, WDRS, etc. Agencies providing shared service
Opportunities	Willingness to Receive – in the future, to what extent would you be willing to work with another public health agency that has capacity/expertise to deliver the services in your jurisdiction	Annual Report
	Willingness to Provide – in the future, to what extent would you be willing to work with another public health agency that has capacity/expertise to deliver the services in your jurisdiction	Annual Report

SOURCE: Washington Department of Health, FPHS 2021-2023 Accountability Overview (September 2021).

Ohio, Iowa, North Carolina, Michigan, and Washington all have decentralized public health systems and understandably have established mechanisms for tracking the performance of their independent, local health units across the state. Even though Virginia is centralized, the lack of appropriate data infrastructure and accountability metrics means that the state does not have a strong understanding of LHD performance. Additionally, the public does not have any insights into LHD performance due to lack of transparency.

→ **OPTION 2:** The JCHC could introduce a Section 1 bill directing VDH to design a state performance management process for each LHD, with the goals of assessing the ability of each LHD to meet minimum capacity requirements, assisting in continuous quality improvement, and providing a transparent accountability mechanism to ensure public health functions are being met.

Local health departments need improvement in information technology and workforce development

There are five organizational competencies outlined by the Foundational Public Health Services framework as administrative capacities LHDs need to support public health functions:

- Leadership & Governance
- Information Technology Services, including Privacy & Security
- Workforce Development & Human Resources
- Financial Management, Contract, & Procurement Services
- Legal Services & Analysis

LHDs in Virginia may manage these organizational capacities at the local level, at the state level, or both. While there is room for greater clarity and support in leadership and financial management, the lack of sufficient IT systems and infrastructure, as well as workforce and HR support, are primary barriers that keep LHDs from operating at their highest capacity.

Local health directors provide primary leadership and are challenging positions to fill

Definition: Leadership & Governance

Lead internal and external stakeholders to consensus and action, engaging in health policy development and defining a strategic direction for public health initiatives; serve as the face of governmental public health; engage with the appropriate governing entities about laws and policies

Given the centralized nature of Virginia's public health system, leadership and governance can be thought of at two levels – the state level and the local level. While the VDH central office provides guidance and support to the localities, and occasionally takes a leadership position by introducing new requirements or guidance, leadership at the local level relies heavily on the district health director.

Leadership from the health director is critical for a local health department's day-to-day operations

LHDs rely on their health directors to set district priorities, advocate for their needs with the central office, and engage with the appropriate local government and community stakeholders. In addition to managing LHDs within their district, health directors are often the only medical doctor on staff and so must also fulfill all of the responsibilities of a senior public health clinician. The programs and staffing decisions of LHDs are often dependent on

the health director's time, capacity, and strategic priorities. For example, not every district has a population health manager or a Chief Operations Officer. It is up to the director to identify the need for this position and advocate to the central office for the FTEs and funding to staff appropriately. Directors are also responsible for acting as the face of the LHD to the local community, and their level of engagement with other local activities and initiatives is again highly dependent on their time, capacity, and priorities.

The importance of strong health director leadership is evident when assessing the relationship between LHDs and community partners. JCHC staff surveyed local governments, and 25% of respondents (4 of 16 respondents) noted they either do not know who their health director is, or perceive the state's decisions around shared or temporary district leadership reflect a lack of support for their communities. One representative shared, "the lack of leadership continuity impacts communications between the locality and the LHD relative to development of a clear, consistent plan to meet the healthcare needs of our community." More than one-third of respondents (6 of 16 respondents) felt they had good working relationships and regular communication with their health district. As a shared effort between state and local government, it is important for LHDs to maintain close relationships with local government leadership. This not only ensures relevant policy development includes the public health perspective, but also is key to designing public health programming that is responsive to local needs.

Recruiting and retaining health directors is a persistent challenge

Similar to many LHD roles, finding qualified health directors has been a challenge in Virginia, and this impacts LHD effectiveness. Districts with long-term, experienced directors benefit from leadership stability, established community relationships, and institutional knowledge. Health director stability is also helpful for supporting existing and new staff. One health district JCHC staff visited noted the constant churn of health directors in recent years had created an environment where priorities and expectations changed like "flavors of the month". On the other hand, districts with chronically unfilled director positions, or districts that share a director with one or more other districts, do not always have the same consistent leadership support. As of Summer 2022, there were ten multi-jurisdictional health districts being managed by seven acting health directors. Within these districts, there are 35 LHDs (30% of all LHDs) with temporary leadership. This issue is particularly evident in Southwest Virginia, where one health director is covering four districts with 20 LHDs in total. Legislation in 2022 tried to address this issue by broadening the criteria to include additional qualified candidates outside of medical doctors (see sidebar).

Local Health Director Qualifications.

SB192 enacted in the 2022 General Session expands the qualifications of local health directors from physicians only to individuals with an advanced public health degree and relevant professional experience. Individuals deemed to be otherwise qualified for the position as by the Commissioner may also be considered. This came after many years of consistent vacant health director positions, and concerns that restricting the pool of applicants to physicians was hindering recruitment and health districts.

VDH central office provides strong program expertise but limited administrative support to LHDs

LHD staff report that for technical guidance and subject matter expertise, the VDH central office staff are a great and helpful resource. This is particularly true for epidemiology, environmental health services, clinic services, and programmatic work. However, while VDH sets agency priorities and a structure for the state regarding administrative supports (e.g., human resources, technology), staff on the ground primarily seek leadership in those areas in their localities and their director. As state agency priorities change, central office leadership, processes, and departments can be shuffled, leading to confusion at the local level about where priorities lie and where to turn for guidance. The VDH central office can seem like a distant entity, although increased efforts at intra-agency communication have begun to narrow that gap.

Siloed and outdated local health department information technology systems hinder effective service delivery

Definition: Information Technology Services, including Privacy & Security

Procure and maintain appropriate hardware and software to access electronic health information and support operations; utilize communication technologies to interact with the community

Decisions about information technology that affect the LHDs are all made at the state level. LHDs rely on the Virginia Information Technologies Agency (VITA) for their hardware and the VDH Office of Information Management for their data needs. At the local level, LHD staff must call VITA for assistance and implement new software as provided by the state office. The only exceptions are a small number of districts that have their own IT capacity on site, and locally-administered districts may choose to implement their own IT solutions.

While the VDH central office has been working rapidly in recent years to improve the state's public health data systems, LHDs are operating without the appropriate technology and data supports to function at their highest level. Current systems are siloed, non-existent, or in a period of transition with recent investments in new software.

Medical records are still on paper at local health departments

None of the state-administered LHDs currently have an electronic health record (EHR) system. Instead, staff rely on paper charts, which may need to be physically driven between offices if patients are going to be seen in a different location. Without an EHR, sharing patients' medical records between LHDs and local health systems is difficult or non-existent, and all billing is done manually, creating additional barriers to receiving appropriate reimbursements from insurance.

The VDH central office has long-recognized the need for an EHR system but has struggled to secure and utilize stable funding for the investment (see sidebar). With federal American Rescue Plan Act (ARPA) funding, they are currently fully funded for adoption and implementation of an EHR system. VDH is finalizing a request for proposals from EHR vendors and hopes to have a contract underway by January 2024. As part of receiving ARPA funding, the agency is required to submit quarterly reports to the General Assembly on EHR progress.

Environmental health data systems are improving

Environmental health staff transitioned to a new database in 2019, which allows for data entry in the field and better data sharing than the previous system. However, because LHDs and districts are not able to see or share data with other LHDs in the state, the data siloes create a lack of transparency and access to information that could be useful. Specifically, inability to share data with other LHDs is a constraint for districts that share staff. For example, because Hampton and Peninsula health districts are combined but are still considered separate districts, staff must receive separate system access to both the Hampton and the Peninsula databases.

Additionally, despite the updated environmental health data system, many districts are still managing paper records. This may be because certain services, such as locality-specific activities, milk plant inspections, and bedding and upholstery inspections, still use paper forms. Secondly, because digitizing paper records has not been standardized or funded, it is the responsibility of each locality to convert their paper records whenever they can. This means there is a substantial backlog of paper-based data that is not in the system. One district shared that they are behind on their efforts to input all of their paper records, and that the EHS system data is only as accurate as what has been entered so far.

VDH Progress Towards EHR Adoption. There have been multiple previous attempts to implement an EHR at VDH, which have been delayed or discontinued for various reasons in the past. Previous attempts have included plans to use the EHR system being adopted by the Department of Behavioral Health and Developmental Services state hospitals, and plans to use the EHR system currently in use by the Fairfax health district.

Most recently, VDH has received \$30M in American Rescue Plan Act (ARPA) funding dedicated to adoption and implementation of an EHR. All ARPA funds must be spent by FY26. In order to meet this deadline, the agency's timeline is as follows:

- **FY22:** Programmatic needs assessment (\$10M)
- **FY23:** RFP development (\$3.5M)
- **FY24-SFY26:** Implementation (\$26.4M)
- **FY26 and beyond:** Ongoing operations & maintenance

VDH plans to select a vendor and begin implementation by January 2024, in order to complete all implementation by June 2026. All ongoing operations and maintenance costs will require additional general funds.

Internet access is still a barrier in some rural localities

Some rural localities struggle with limited broadband. Internet access in the office can be unreliable, hindering staff's ability to work. For example, there is no wireless internet in the Charlottesville district office with the exception of two rooms. Some LHDs utilize office "hotspots" to work around the issue. One employee at the Nelson County LHD shared an example of a time they had to drive five miles from the office with the hotspot to find a stable internet connection and finish clinic paperwork in their car. Broadband access is a fundamental issue that must be addressed before LHDs will be able to effectively use updated or new IT solutions like an EHR.

The VDH central office cannot easily access centralized data from all localities

The VDH central office does not easily have access to centralized data from all LHDs. While various program areas do collect statewide data, there is currently no central repository to access reports from across departments. And though there is a VDH data warehouse, it does not regularly pull data from across different departments, such as disease surveillance or finance and administration. Additionally, locally-administered LHDs may use different software, so any data they want to share with the state must be manually transmitted to the VDH data warehouse or otherwise are not included. There is no centralized system for looking across all of the various program areas and work streams LHDs and districts are responsible for to assess performance and identify needs. Additionally, lack of a central data system means while VDH collects and manages a wealth of data, it is not easily shared within the agency or with external partners to inform public health policy, programs, and decision-making.

The VDH central office manages a data portal on the agency website to provide convenient, public-facing dashboards and reports of health data for the state. The portal has data for epidemiology, environmental health, social determinants of health, and other health indicators. This is an effective external tool for reporting health statistics for the state, but there is a need within the agency for greater data availability and accessibility. In FY21, VDH created the Center for Public Health Informatics to develop innovative ways to use, understand, and share their data to inform public health. They will work with the Office of Information Management to develop a roadmap for data modernization within the agency, which should include the LHDs.

→ **OPTION 3:** The JCHC could introduce a Section 1 bill directing VDH to develop and submit a plan by November 1, 2023 for the development of a centralized data system that will enable VDH to access necessary data from all LHDs across departments to support LHD assessment and performance management, as well as enable greater data sharing with stakeholders and the public.

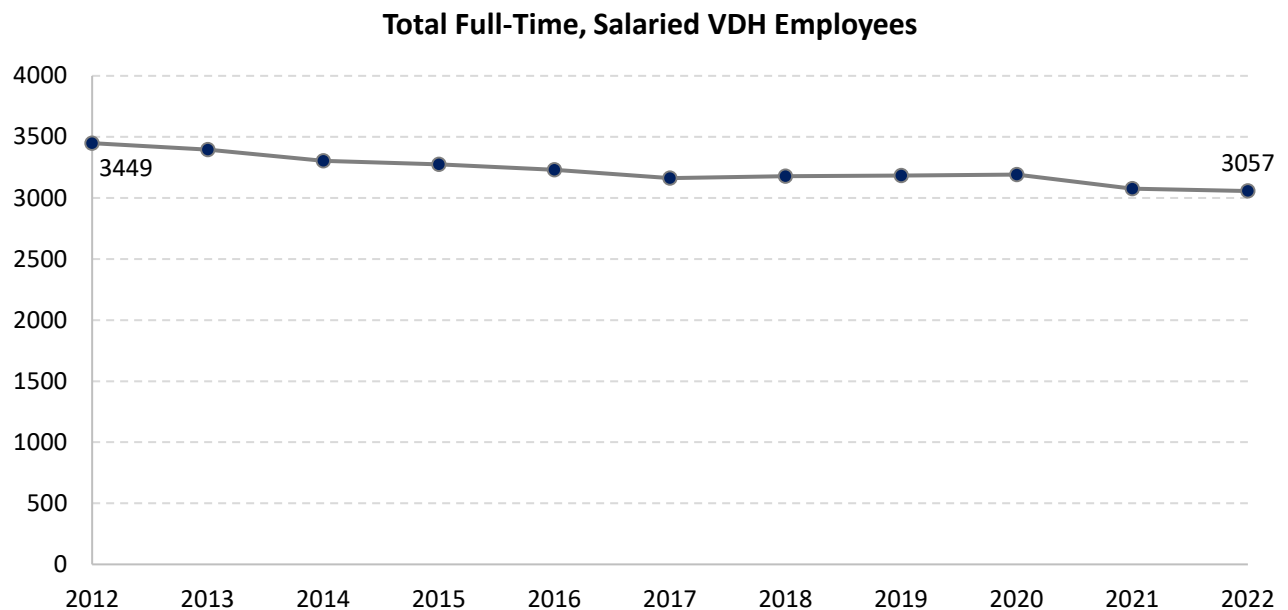
Recruiting and retaining a sufficient workforce is a significant challenge for local health departments

Definition: Workforce Development & Human Resources

Develop and maintain a diverse and inclusive workforce with the appropriate skills and competencies required to implement FPHS; manage human resources functions including recruitment, retention, and performance review processes

National LHD staffing declined dramatically across-the-board following the Great Recession, and total staff numbers employed in LHDs nationally today is still 16% lower than in 2008. Following this trend, the number of full-time central office and LHD employees in Virginia has steadily been dropping in the last decade, with another sharp decline with the onset of the COVID-19 pandemic (FIGURE 6). This is in contrast to national trends, which have shown steady growth in public health employees since 2016.

FIGURE 6: There has been a steady decline in VDH central office and LHD employees in the last decade



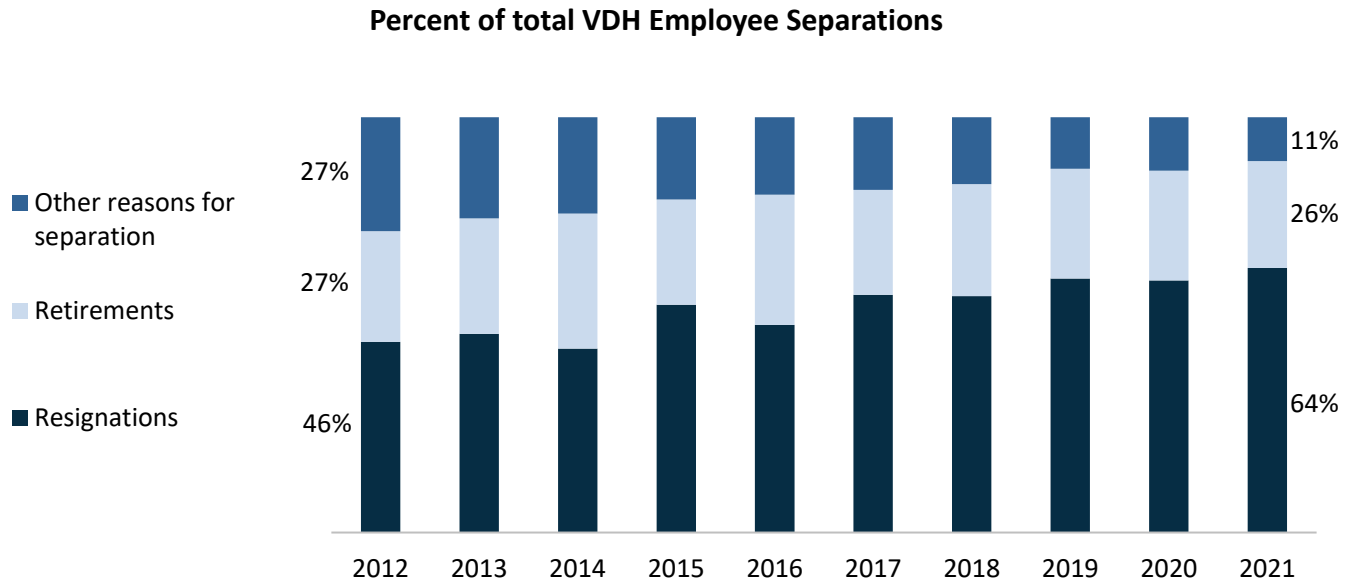
SOURCE: Department of Human Resource Management, VDH Population data, 2012-20122.

NOTE: The chart numbers do not include contract or part-time employees.

Exit data for VDH central office and LHD employees show that rates of voluntary resignations have been increasing in the last decade. Voluntary resignations are attributed to dissatisfaction, ill health, home responsibilities, a better job, and school enrollment. As a

result, average years of service of the workforce are decreasing, even as retirement rates are holding fairly steady (FIGURE 7).

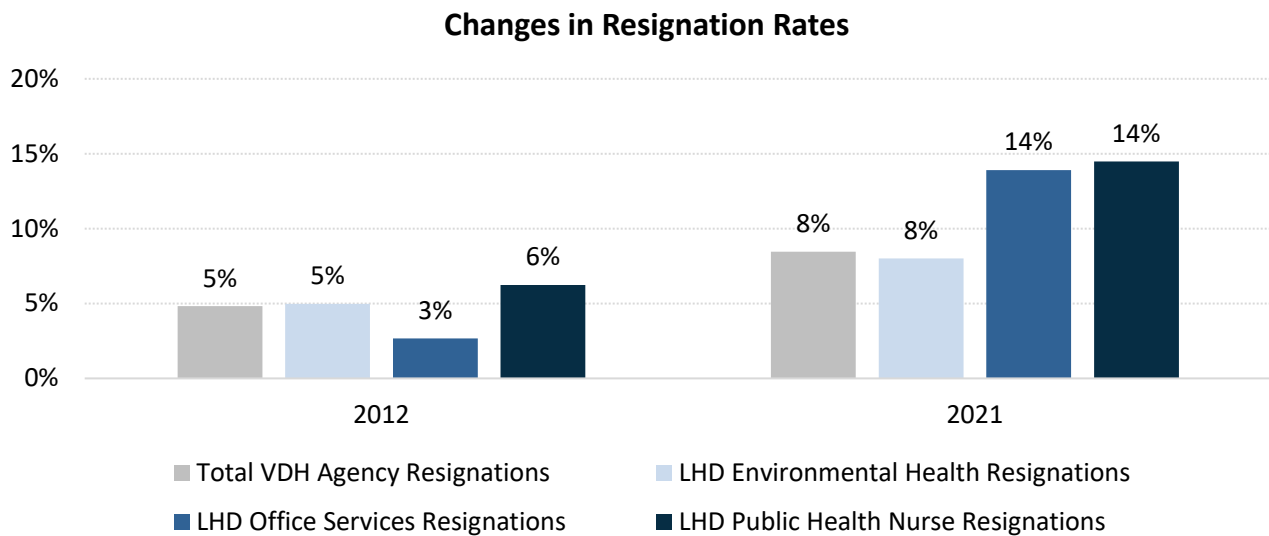
FIGURE 7: Resignation rates by VDH central office and local health department employees has been increasing.



SOURCE: Virginia Department of Human Resource Management, VDH Transaction data, 2012-2021.

Virginia's LHDs have reported increased difficulty hiring since the onset of the COVID-19 pandemic, exacerbating the turnover challenges and resulting in high vacancy rates. In FY20, district vacancy rates averaged 14%, ranging from 4.6% in Piedmont to 35.2% in Southside health district. Statewide, there were on average 353 unfilled FTEs for the year. Across the VDH central office and all LHDs, at the beginning of 2022, there were 701 vacant positions, representing 18.6% of all positions.

At the local level, office services, public health nursing, and environmental health staff make up roughly 40% of VDH's workforce. Resignation rates have consistently been highest for public health nurses in the last decade, followed closely by office services staff (FIGURE 8). According to the Department of Human Resource Management (DHRM), turnover has been highest in entry-level, lower-paid positions, while employee turnover tends to be more stable for more senior positions.

FIGURE 8: Resignation rates are highest for public health nurses and office services specialists

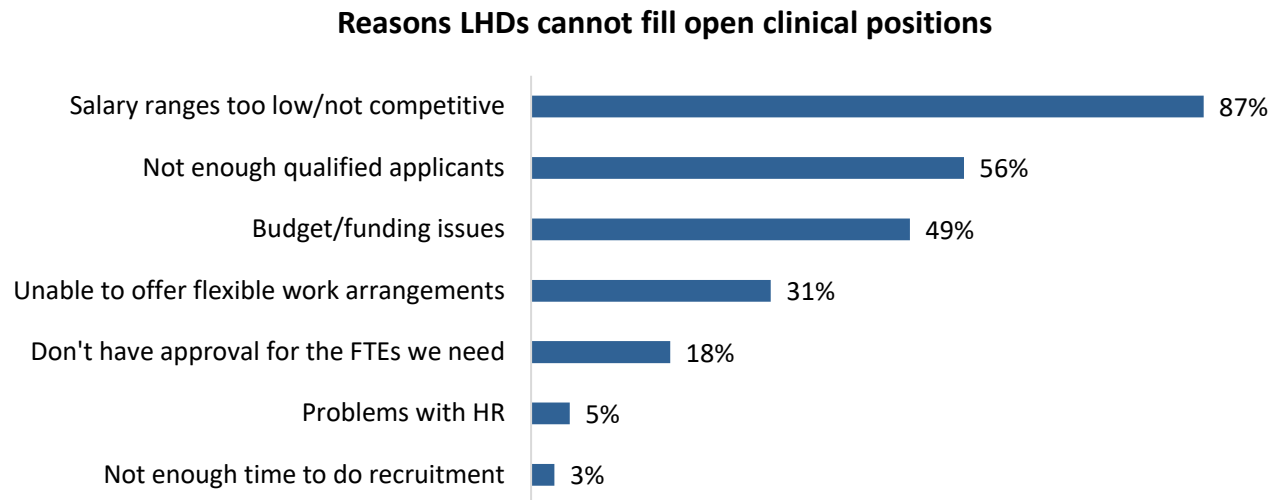
SOURCE: Department of Human Resource Management, VDH Population and Transaction data, 2012-2021.

LHDs have difficulty competing with other health care providers for nurses

Public health nurses are necessary for running clinics, providing health education, conducting home visits and nursing home screenings, and assisting with disease surveillance and containment. Without sufficient public health nurses, LHDs are unable to expand their clinic offerings as needed or return to accepting as many walk-in patients as they could in the past. Remaining public health nurses are almost all traveling to rotate across multiple LHDs if they are located in a multi-jurisdictional health district, or clients are being asked to travel longer distances to go to the closest LHD with a nurse. Nursing vacancies are felt more acutely in smaller or more rural jurisdictions, where staff are more likely to have to juggle multiple responsibilities and residents are less likely to have alternative sources for health care.

Public health nurses are often making less than they could at a health system or another employer. In addition, many are feeling overwhelmed and overworked after two years of pandemic response. These findings are aligned with national trends, which show that public health nurse staffing levels have decreased nationally by approximately 36% between 2008 (estimated 33,200 registered nurses) and 2019 (estimated 21,200 registered nurses).

More than one-third of LHD respondents (36%) noted in a JCHC staff survey that they do not currently have enough clinical staff to handle the workload. Another one-third (29%) said they have almost enough staff. The number one reason LHDs said they cannot fill clinical staff vacancies is because salary ranges are too low/not competitive (87% of respondents), followed by not enough qualified applicants (56%), and budget/funding issues (49%) (FIGURE 9).

FIGURE 9: LHDs cite salary as the primary reason they cannot fill open clinical positions

SOURCE: JCHC survey of LHDs, 2022.

Environmental health specialists require specialized training, making high turnover a significant challenge

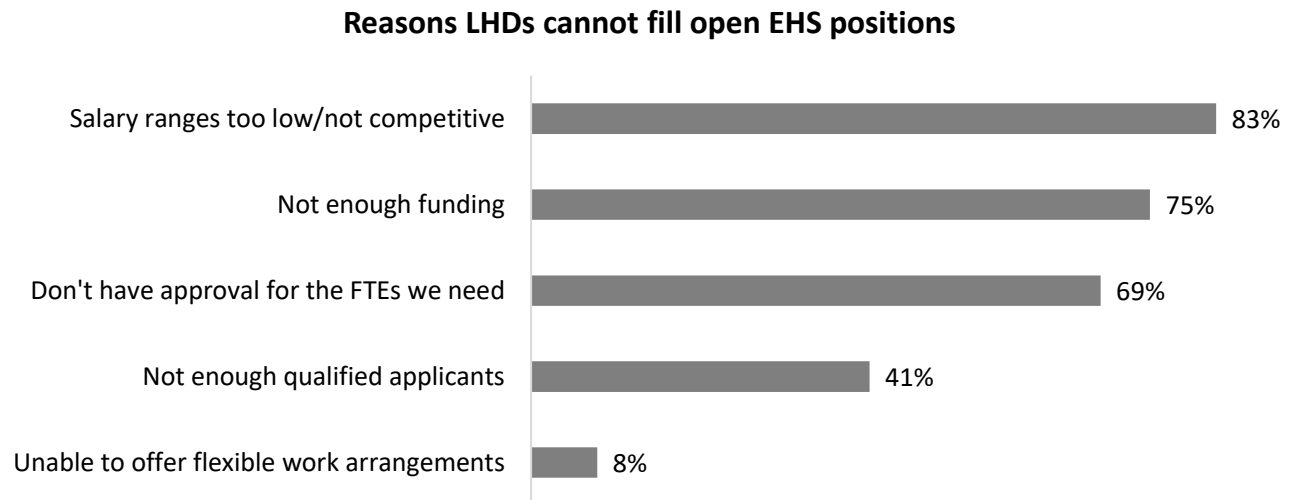
Environmental health staff tend to have the most interactions with residents in the community, as they conduct restaurant and site inspections, and ensure state and locality regulations are being met. They spend a significant amount of time in the field, both conducting regularly scheduled inspections, as well as responding to resident requests and complaints.

Given the breadth of knowledge they need to have, environmental health staff require a year or more on the job to be trained and certified before they are able to work independently and fulfill all expected responsibilities. In addition to their technical skills and knowledge, environmental health staff must also learn to effectively engage with residents and businesses, provide education, and enforce regulations. Many LHDs report losing staff after this training period, and subsequently must spend more time and resources recruiting and then onboarding again. EHS staff have the qualifications to work for other state or government agencies doing environmental work (e.g., United States Department of Agriculture, Food and Drug Administration, Virginia Department of Environmental Quality, Virginia Department of Agriculture and Consumer Services).

Insufficient staffing leads to backlogs in the work. A JCHC survey found that only 7% of LHD respondents always completed inspections by their deadline, with most reporting they almost always (51%) or sometimes (42%) did. Less than a quarter of the LHDs that responded to a JCHC staff survey about staffing reported sufficient staff to handle the workload. More than one-third (38% of respondents) said they do not have enough staff, and another 40% said they have almost enough staff. The primary barrier indicated by

LHDs to filling vacancies is salary ranges are too low/not competitive (83% of respondents), followed by not enough funding (75%), and not having approval for the FTEs needed (69%) (FIGURE 10).

FIGURE 10: LHDs cite salary as the primary reason they cannot fill open EHS positions



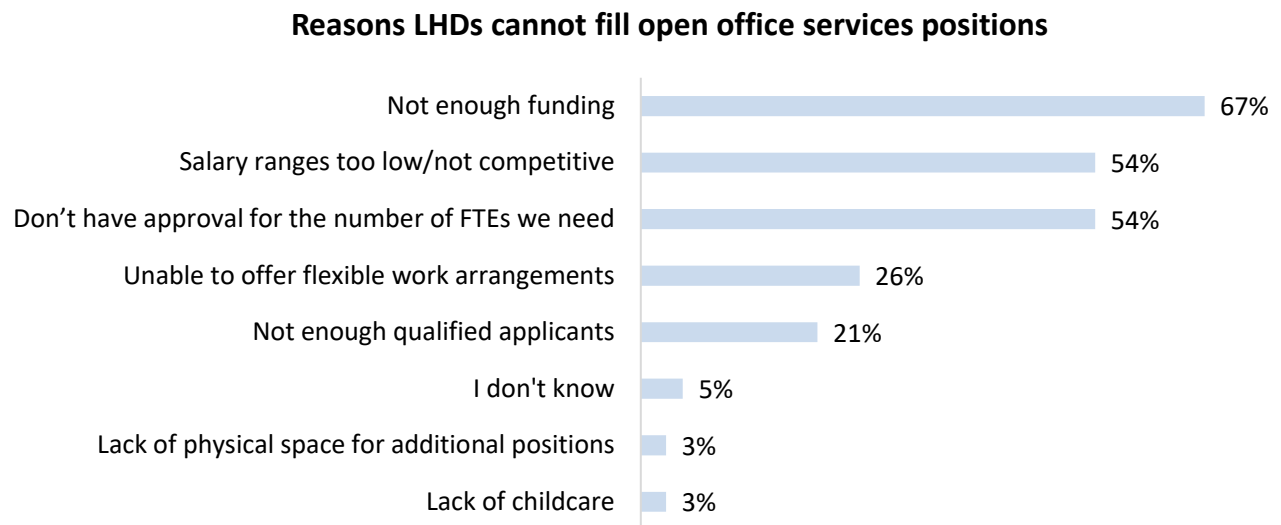
SOURCE: JCHC survey of LHDs, 2022.

Office services staff are responsible for multiple administrative responsibilities

Office services staff are the face of the LHD, managing consumer inquiries and processing vital records requests, while also supporting environmental health, clinical services, and billing. They must have expertise in multiple systems and program areas, and may also be expected to drive between LHDs in their district to help cover administrative vacancies. Insufficient office services staff are a barrier to LHD revenues, as staff have limited bandwidth to dedicate the needed time and attention to pursuing insurance reimbursements for client services, checking patient eligibility, and collecting co-payments.

Despite the multitude of responsibilities they must juggle, office services specialists are the lowest paid of all LHD staff with a median state salary of \$34,700. In comparison, retail and other customer service positions now often pay hourly wages of at least \$15/hour, or about \$31,200 annually, and do not require as much technical expertise. Comparatively, medical records specialists make a median annual wage of \$46,660, and billing and posting clerks make an average wage of \$42,750 annually, per the Bureau of Labor Statistics.

In a JCHC staff survey of LHDs, 42% noted they do not have enough administrative staff. Respondents said they are not able to fill open positions because there is not enough funding (67% of respondents), salary ranges are too low/not competitive (54%), and they do not have approval for the number of FTEs needed (54%)(FIGURE 11).

FIGURE 11: LHDs cite lack of funding as the primary reason they cannot fill open office services positions

SOURCE: JCHC survey of LHDs, 2022.

Recruitment and retention challenges put pressure on remaining staff

The workforce challenges outlined previously also adversely impact remaining staff. Given how thinly staffed LHDs are and the high number of vacancies across the state, the majority of LHDs must temporarily or permanently share staff with another LHD or ask existing staff to take on additional responsibilities. Without sufficient staff, or the approval to hire additional staff as back-up for staffing vacancies, remaining staff are not in a position to use vacation time or accrued compensatory time. At the health director level, without a deputy director or medical director position to act as back-up, directors from a neighboring district are usually required to cover vacancies in their region.

A 2021 CDC survey of public health workers found that 72% felt overwhelmed by their workload or family/work balance. Those who reported being unable to take time off from work were more likely to report adverse mental health symptoms. During one site visit, an Office Services Specialist indicated that while they loved the job and being with the LHD, the amount of travel to cover staff vacancies at other LHDs in the district were a strain, and they had recently accepted a different position that would not require so much travel.

Local health departments are struggling to meet staff salary expectations

Leadership and staff cite low pay as the primary barrier to recruitment and retention for two of three critical LHD positions. A 2018 JLARC compensation study found that state salaries lag about 10 percent behind private sector pay (TABLE 5), but the addition of benefits makes total compensation, on average, nearly equivalent in value to that of other

public and private sector employers. The specific barriers for recruitment and retention differ for each position type, but ultimately come back to compensation.

TABLE 5: Current LHD staff salaries lag industry averages

Position	Median State Salary	Industry Salary Ranges
Office services assistants, specialists, and supervisors	\$34,700	\$49,133-\$61,725
Environmental health specialists, supervisors, and Managers	\$53,180	Not available
Public health nurses, supervisors, and managers	\$65,296	\$66,277-\$83,000

SOURCE: Department of Human Resource Management (DHRM), VDH Population data as of January 2022, and Mercer Healthcare industry data from DHRM.

NOTE: Average annual rates are from the Mercer Healthcare survey. Ranges show differences in average salary based on position level/experience. Mercer data did not have comparable industry salaries for EHS staff.

Virginia participates in multiple loan repayment and scholarship programs, particularly to incentivize health care professionals to work in underserved areas (e.g., federal programs to attract providers to designated Health Professional Shortage Areas, state programs to incentivize nurses to work in long-term care facilities). Research of physician retention programs found that service completion rates and retention rates are higher for loan repayment and direct incentive programs than for scholarship programs. To attract LHD applicants and improve total compensation, VDH could offer loan repayment to public health employees who agree to work full-time at an LHD for a specific contract period. For example, each employee could receive \$5,000 in loan repayment for every year they sign with the LHD, for a maximum of \$20,000 over four years.

→ **OPTION 4:** The JCHC could introduce a budget amendment to provide additional funding to VDH for loan repayment programs for LHD staff.

Additionally, a targeted salary increase for LHD employees would assist with both recruitment and retention. This would not only improve satisfaction for tenured employees who are frustrated by their stagnant wages, but also improve the salary range LHDs can offer to candidates during the hiring process. While doing so might not allow LHDs to match or beat industry salary rates, it would make their offers more competitive, in addition to state benefits.

→ **OPTION 5:** The JCHC could introduce a budget amendment to fund targeted increases for LHD staff base salaries to align with current industry salary benchmarks.

LHDs need greater support for facilities and operations

Definition: Financial Management, Contract, & Procurement Services, including Facilities and Operations

Establish a financial system in compliance with federal, state, and local standards and policies; procure and leverage funding and demonstrate compliance; manage and maintain safe facilities and efficient operations

Local health department facilities vary drastically and some are substandard

As a shared endeavor between the state and localities, LHDs are usually made up of state employees occupying a facility owned by the locality. This can lead to confusion or delays when any facility issues arise, due to disagreement between the VDH central office and the locality about which entity is responsible for addressing the issue. LHDs don't receive a capital projects budget and must wait for additional funds from either the locality or the state to address facility issues. While an alternate facility space may be provided by a locality, LHDs must still work with the state to make sure the facility is appropriate and meets state standards.

LHD facilities vary drastically across the state, and staff may be working in environments that range from custom-built, multi-story buildings to connected trailers. Requests for renovations or repairs are often slow to be addressed, which means staff can be working in spaces with active mold contamination or rodents. One LHD in the Blue Ridge health district waited five years for the addition of a second check-in window for their waiting area to help with better patient flow during registration. In the Hampton health district, a rotting ceiling collapsed on staff. There is not one person or office LHD staff know they can turn to for facilities issues or for guidance. They can ask the VDH central office for assistance, but are also bound by the requirements laid out by the Department of General Services. Additionally, a couple of LHD directors JCHC staff spoke with expressed frustration that conversations about facility changes or rent negotiation frequently happen without their involvement. In districts with a Chief Operating Officer (COO), there was a greater awareness of facility needs and operating costs.

Providing support within VDH to help LHD leadership navigate the multiple agencies and organizations involved with facilities would improve LHDs' ability to address issues with their facilities. Staff could be regional, so that they can build relationships with the necessary local government staff and be familiar with the facility situations of the LHDs within their region, while also being able to work with the Department of General Services and the VDH central office. As regional positions, these staff could be fully state-supported, rather than requiring a local match.

→ **OPTION 6:** The JCHC could introduce a budget amendment directing VDH to create regional operations and facilities management positions to assist LHDs, and providing funding for these staff.

Health districts are not consistent in how they distribute funding across LHDs

Business managers and COOs work closely with the VDH central office to manage LHD finances and operations. LHDs also follow VDH central office policies and use state systems related to contracting and procurement. While districts are responsible for balancing their budgets, the VDH central office can act as an advisor or safety net when unforeseen budget issues arise or districts have budget overages.

Every LHD has a budget that must be managed, and in multi-jurisdictional districts, business managers are managing anywhere from two to ten LHD budgets with varying locality contributions. This can become complicated when LHDs in a district work collaboratively or share resources. Currently, there is not a standardized process for handling LHD and district budgets. Some districts treat their LHD funds as pooled dollars, sending staff and resources to various LHDs within the district as needed, regardless of which localities contributed more or less. Some business managers are stricter about allocating percentages of staff time or resources to their respective LHD budgets. For example if an employee is being shared between two LHDs, allocating 30% of their salary from one LHD and 70% of their salary from the other.

Districts are often caught between meeting the community's service needs and being responsive to both LHD staff and local government expectations. Resource or service allocation can look different if localities have put in additional 100% local-only dollars that they want to see put to use in their specific LHD. As a result, in some districts, a service that is available in one LHD may not be available in another due to funding differences, while in other districts, service availability is equal across the district.

LHDs did not raise issues with their capacity for legal services and analysis

Definition: Legal Services & Analysis

Access and appropriate use of legal services in planning, implementing, and enforcing, public health initiatives, including relevant administrative rules and due process.

LHDs do not have legal services staff or expertise on site but can rely on guidance and legal support from the VDH central office or the Office of the Attorney General. All relevant administrative rulemaking and due process for changing state policies are managed at the state-level, and then communicated to the local level to implement changes on the ground. Given the centralized nature of Virginia's public health system, this top-down process for legal services is appropriate.

Health districts and local health departments need dedicated support for community engagement and communications

All LHDs do not currently have the infrastructure or staff to support community engagement or communications on a consistent basis. Existing work is ad hoc, driven primarily by district priorities or funded through temporary grant funding.

Community partnerships across local health departments are variable and dependent on individual staff

Definition: Community Partnership Development

Develop and maintain strategic relationships with community partners, convene stakeholders, and coordinate efforts

Public health programs and services should be community-specific to ensure they are aligned with local needs and culture, increase effectiveness, and avoid duplicative efforts. According to the Institute of Medicine, with increased understanding of the importance of engaging the community, LHDs have the opportunity to become facilitators of multidisciplinary community efforts that are “informed by community voices, responsive to community needs, and linked to community assets.” A growing body of research shows that public health partnerships with outside agencies is associated with improved planning and delivery of public health services and performance. Capacity for effective community partnership development is foundational for enabling LHDs to facilitate access to and linkages with clinical care (FPHS Program Area #1).

There are currently no systematic, formal processes focused on building public health community partnerships in Virginia. Instead, health directors are primarily responsible for engaging with community partners, maintaining relationships with stakeholders, and bringing the public health perspective to multi-sector convenings. This is in addition to their other responsibilities. Community partnership development typically happens at the local level via individual relationships LHD staff have with community stakeholders, or through health district-led activities. The strength of community partnerships is highly dependent on district leadership, and the amount of time and energy staff and managers are able to commit to building these relationships.

Tenured staff also develop close relationships with their counterparts in local government, community-based organizations, and the health system. One public health nurse JCHC staff spoke with described how she will often call the local school nurse to check on any emerging children’s health trends. Though effective, the highly individual and personalized nature of this kind of relationship means that when staff leave the LHD, community relationships can also be lost.

There is a process for community health assessment, but local health departments are not required to participate

The Community Health Assessment (CHA) process and subsequent Community Health Improvement Plan (CHIP), or CHA/CHIP, are a primary public health tool for community partnership development. While highly recommended for all LHDs by the central office, there are no requirements or defined parameters to inform how to conduct a CHA/CHIP, and localities do not receive funding to support the process even if they are interested. As of September 2022, only three health districts (covering eight localities) had reported completing a CHA/CHIP process; another nine were more than 80% complete.

The central office is currently working on developing a dashboard to track district progress. However, because each district is on a different CHA/CHIP schedule, the completion rate is not indicative of how slowly or quickly they are working in comparison to other districts. The LHDs that do participate are usually part of a larger district-driven process and/or have received separate funding to support their effort. LHDs may also be participants in another community stakeholder's process, even if they are not conducting their own CHA/CHIP. For example, an LHD may be interviewed or involved in meetings for a local health system's required Community Health Needs Assessment.

Community Health Assessment (CHA) is a systematic process to identify key health needs, issues, and assets using comprehensive data collection, data analysis, community engagement, and collaborative participation.

Community Health Improvement Plan (CHIP) is typically a 3-to-5 year systematic, collaborative effort to address public health problems identified by the CHA.

Community Health Needs Assessment (CHNA) is a requirement of the Affordable Care Act (2010) for tax-exempt hospitals to conduct a hospital community health needs assessment every three years and develop a plan to meet those needs. Hospitals must get input from at least one public health department and from medically underserved populations in their community.

Local governments reported varying relationships with their health district and local health department

The lack of structured community partnership development and inconsistency of CHA/CHIP participation means that levels of community engagement by LHDs vary significantly across the state. In a JCHC survey of 31 members of the Local Association of Human Services Officials, which is comprised of city and county government deputies and administrators who work with the LHDs, almost a quarter of respondents (23%) said they don't know if their LHD is meeting the health needs of their community. Most respondents said they occasionally or rarely meet with health district or LHD staff or leadership, and when asked about their involvement in the local CHA/CHIP, more than half said they were not really involved (29%), not at all involved (19%), or don't know what the CHA/CHIP process is (13%).

Additionally, in open-ended survey responses about their relationship with the LHD, while the majority of respondents said their LHD was probably or definitely meeting the health needs of their community, and cited good working relationships and regular communications with their LHD, a few cited concerns about their lack of relationship with their health director and expressed a desire for more communication, meetings, and engagement. There were a couple LHDs and health districts for which two different local government officials responded, but provided different responses. For example, for the same LHD, one respondent said the LHD was probably not meeting the health needs of their community while another respondent said probably yes. The differences in respondents' answers for the same LHD or health district speaks to how much individual relationships can influence the sense of partner engagement.

There is an opportunity for the state to provide greater support to LHDs to build their capacity for partnership development to better serve their communities and inform their work. VDH could require LHD participation in the CHA/CHIP process, in coordination with local partners and health systems. This would require administrative resources, the extent of which would be detailed when developing a fiscal impact statement.

→ **OPTION 7:** The JCHC could introduce a Section 1 bill directing VDH to require all health districts to participate in the CHA/CHIP process, in coordination with the state health assessment process and local health system Community Health Needs Assessments. The legislation should include an enactment clause directing VDH to update the Local Government Agreements to reflect these changes.

Local health departments do not usually have dedicated communications capacity

Definition: Communications

Manage relations with local and state media, as well as electronic communication tools and social media, to tailor messaging to community members

The need for strategic, timely, and effective communication is most evident during public health emergencies but is also required for ongoing prevention and education efforts. While the importance of health communications has been firmly established, LHDs have been slow to incorporate this skillset into their existing work. While all districts have designated public information officers, most districts and LHDs do not have communications professionals in these roles. These duties are instead taken on by staff who are available or have capacity, whether that is the epidemiologist, population health manager, or health educator. This limits their ability to effectively manage public health messaging and respond to community inquiries. Local staff can turn to the VDH central Office of Communications for messaging support, or a regional public information officer for additional expertise as needed.

The bulk of an LHD's public health communication happens on an individual level, through one-on-one interactions between public health nurses, epidemiologists, or environmental health specialists and residents. While effective, this is not an efficient communications vehicle during large-scale events, such as a pandemic, and can lead to inconsistent messaging. There is also limited and inconsistent information available on the VDH website outlining services available at LHDs. Staff shared concerns that residents and stakeholders are not aware of the variety of programs LHDs provide. With the onset of the COVID-19 pandemic, LHDs have been able to use pandemic funding to hire contract communications staff who can support requests for information and better utilize social media for disseminating updates. However, as with other COVID-19 contract positions, these staff are temporary. As federal funding expires, most districts and LHDs will be left without even these supports.

Communications capabilities and trainings should be present at the district level even outside of pandemics and public health emergencies. As the primary public health actors in their localities, LHDs are responsible for providing health education, making sure residents receive needed services, and sharing data with stakeholders and the public. There is an opportunity for the state to provide greater support for LHDs to build their communications capacity to ensure public health messaging is timely and effective in support of prevention and education efforts.

→ **OPTION 8:** The JCHC could introduce a Section 1 bill directing VDH to determine the funding necessary to provide sufficient communications capacity across all health districts. VDH should submit the funding estimate to the Chairs of the House Appropriations Committee and Senate Finance and Appropriations Committee by August 1, 2023.

Local health departments are not always sure whether they will receive communications guidance from VDH when needed

The VDH central Office of Communications has been able to provide communications support to LHDs in the form of graphics, media packages, and messaging guidance, particularly since the onset of the COVID-19 pandemic. However, LHDs shared there is still a lack of clarity regarding whether to expect guidance from VDH about emerging issues (e.g., a pandemic) and if so, when it might be available from the central office. Particularly during public health emergencies, residents benefit from timely and predictable communications from the LHDs.

This issue was highlighted during the COVID-19 pandemic. Specifically, LHDs do not know when they are expected to develop their own messaging and when they are expected to wait for guidance. And if they are waiting for guidance, LHDs do not know how long they will have to wait before the central office will respond. This is in alignment with one study that found, during the COVID-19 pandemic response, that states with centralized public health governance structures, like Virginia, enacted social distancing four days after decentralized states. LHDs reported similar confusion as monkeypox spread, with a lack of

clarity about whether or not they should craft their own messaging or wait for guidance from the central office. When there are delays or inconsistencies in how districts communicate different rules, processes, and guidance, it can be confusing for community partners who may be working with multiple districts. For example, one FQHC partner that worked with two different districts to administer COVID-19 vaccinations said it was difficult to reconcile and manage two different messaging campaigns and reporting processes.

Local health departments need greater support for some capabilities that are currently managed primarily by the state

There are four Foundational Capabilities that are primarily managed and coordinated by the state central office – policy development, assessment and surveillance, equity, and emergency preparedness. Activities and capacity for these four capabilities are available to some extent at the local and district level, though LHDs do not usually have dedicated staff for these functions. The evidence does not support the need for greater capacity at the local level beyond the current infrastructure, though there are opportunities to bolster each of these capabilities.

Local health departments are not often involved in policy development

Definition: Policy Development & Support

Develop and establish evidence-based public health policy recommendations; advocate for policies that address health disparities and the social determinants of health; promote or enforce compliance with public health regulations

The Institute of Medicine outlined policy development as a core function of public health, and health departments have a role in shaping both state and local public health policies. This includes acting as an expert resource, informing and influencing policies that affect health conditions and outcomes, and working in partnership with governmental and non-governmental stakeholders across sectors. Policy development and support is closely tied to community partnership development with local government, in particular. Doing so ensures that policies from other sectors, such as housing or transportation, take into consideration the potential impact on public health.

Public health policy development happens primarily at the state level

LHDs currently have no formal policy development role. Instead, the VDH central office develops public health guidance that districts and LHDs implement at the local level. The Code of Virginia outlines health policy responsibilities for the Board of Health and VDH, which include “making recommendations concerning health care policy to the Governor, the General Assembly, and the Secretary of Health and Human Resources.” VDH has also

created a Policy Analysis Roundtable, comprised of policy analysts from health districts and the central office, as well as local health directors, to meet and develop recommendations for the Commissioner on specific policy problems. However, most districts do not have staff dedicated to policy.

State and local policies may not always be aligned

The VDH central office develops policies and guidance for the entire state, which makes it difficult to ensure alignment with every community's local needs or expectations. Particularly for environmental health services, LHD staff must navigate a multitude of requirements that may be mandated by the state or by local ordinance. For example, the VDH central office may say it is not necessary for LHD environmental health staff to inspect pools, but a locality may require it. This can get particularly complex for multi-jurisdictional districts in which neighboring localities have different expectations and there are multiple, different local ordinances that affect LHD staff responsibilities. In a scenario such as this, it would be beneficial to ensure there is periodic realignment of expectations set by state regulations and local ordinances. Without dedicated policy capacity, it is often up to the Environmental Health Manager to facilitate these efforts in their limited time.

VDH opportunities for improvement

→ VDH should develop a process for central office and local staff to regularly reconcile differences in policy and expectations as outlined by state and local policy.

The VDH central office manages assessment and surveillance data collected by the districts

Definition: Assessment & Surveillance

Collect, use, and share timely and sufficient foundational data to guide public health planning and decision-making

Public health needs regular assessment and surveillance of community data to inform programs and decision making. This includes analyzing data to identify emerging needs and issues, such as tracking the spread of monkeypox or trends in car crash fatalities; tracking disparities in health outcomes or social risk factors that contribute to poorer health; and sharing relevant data with stakeholders. Currently, these capabilities are present at the VDH central office but not at the local level.

VDH has a data portal on its website to publicize public health data

The VDH data portal is a comprehensive resource with a multitude of dashboards, reports, and metrics related to communicable disease, health behaviors, maternal and child health,

environmental health permits, cancer, and social determinants of health. These data come from a variety of sources, including:

- External sources – American Community Survey, Behavioral Risk Factor Surveillance Survey, Environmental Protection Agency
- VDH databases – Syndromic surveillance system (ESSENCE) database for emergency department and urgent care data, Virginia Electronic Disease Surveillance System (VEDSS), inspection data from the Office of Environmental Health Services

State epidemiologists use data from local epidemiology teams to conduct disease surveillance

VDH epidemiologists play a primary role in surveillance by collecting and analyzing disease data to monitor outbreaks and disease clusters. Most LHDs do not have their own epidemiologist and instead share a district epidemiologist. There are also regional epidemiologists who may specialize in certain disease areas and act as subject matter experts to provide support to the districts. Their work and data flow up to the central office for statewide surveillance. Current data updates are not in real-time, as providers who identify and report a disease case to VDH must still complete a paper form, submit that form via fax, and staff at the LHD or central office must manually input data from the form into the database. This will become easier with better data infrastructure to enable electronic case reporting.

VDH manages a state health assessment and planning process every five years

The VDH central office regularly undertakes a State Health Assessment process to inform the State Health Improvement Plan (also known as the Virginia Plan for Well Being), which is currently being updated. This is a statewide process that takes into account regional health needs and differences. However, this has not historically involved local staff or incorporated data from the district CHA/CHIP processes. The central office is currently building a workflow to ensure local assessment data is rolled into the state health plan in the future.

VDH opportunities for improvement

- Regularly update the VDH web portal to ensure data are up to date, external links are still working, and websites are functioning properly so the public can access the information.
- Incorporate district CHA/CHIP data whenever available into the state plan to ensure local needs and perspectives are included.

Equity is a state-level priority but lacks a formal place in local health department work

Definition: Equity

Systematic integration of equity into programs and services, and strategically address social and structural factors that influence health

Growing research has shown that social factors, more than medical care, are overwhelmingly responsible for preventable mortality and health outcomes. This research shows that differences in health outcomes between populations are often associated with the physical, social, financial, and policy environments in which people live. Efforts to address these disparities are often focused on these social determinants of health, in particular the racial/ethnic and socioeconomic factors that put people at increased risk of poor health outcomes. This requires addressing how resources, policies, and programs are designed and distributed, not just in health care but in other sectors. A survey of LHDs nationally found that addressing the social determinants of health was the optimal way to address health equity.

VDH has equity-focused staff at the central office but not at the local level

At the state level, the VDH Office of Health Equity (OHE) is dedicated to identifying health inequities and their root causes and promoting equitable access and opportunity through agency programs and policies. Within OHE, different divisions are focused on multicultural health and community engagement, primary care and rural health, and data/social epidemiology. Social epidemiologists are focused on the way social structures and social factors affect the distribution of disease. VDH social epidemiologists work separately from the state epidemiologists that are tracking infectious and communicable disease in the Office of Epidemiology.

While there are dedicated staff focused on equity at the central office, there are no comparable structures or roles at the district or LHD level. Some districts have received temporary federal grant funding to hire health equity specialists and community health epidemiologists. These positions will focus on chronic diseases, in addition to helping with community engagement and CHA/CHIP work to identify disparities in health outcomes and barriers local residents face. These positions are neither permanent nor consistent throughout the state. Other districts have permanent population health managers to do similar work, but not all districts have a population health manager.

There is no process for evaluating potential equity impacts of changes to local health department services

In addition to the lack of a sustained infrastructure focused on prioritizing health equity, there is currently no oversight process for considering how decisions or changes at the LHD

or district level may alleviate or exacerbate health disparities. For example, changes in specific service delivery such as dental care, or the reallocation of staff to a different LHD in the district can impact residents and the care they can access. Without the capacity and a process to assess the potential equity impacts of these kinds of decisions, there may be unintended consequences disproportionately impacting disadvantaged residents.

VDH opportunities for improvement

- Ensure future LHD accountability metrics incorporate an equity lens.
- Ensure sufficient capacity for districts to understand their residents' socioeconomic status and social risk factors, and put systems in place to evaluate the equity impact of changes to LHD services, staffing, or policies.

Virginia has a strong emergency preparedness & response infrastructure

Definition: Emergency Preparedness & Response

Develop and maintain preparedness and response strategies and plans, including the ability to lead Emergency Support functions, activate response personnel and communications systems, and coordinate with other partners as necessary

The work LHDs do is often in the spotlight during public health emergencies, like pandemics, as they take the lead in conducting surveillance, monitoring outbreaks, sharing information and best practices, securing medications and supplies, and coordinating response efforts to events. The VDH Office of Emergency Preparedness plans and prepares for rapid responses and interventions by collaborating and planning with private and public sector partners, such as hospitals and health systems, and the Virginia Department of Emergency Management.

VDH emergency planners work across LHDs within their district. LHDs participate in annual exercises that are coordinated at the state level and managed by the district. These include mass vaccination, hurricane response, and power outage exercises. District emergency planners are also responsible for managing their Medical Reserve Corps (MRC) volunteers, of which there are 25 units across the state (of 748 units nationally), and almost 30,000 volunteers (of more than 200,000 volunteers nationally). MRC volunteers participate in regular education and training exercises to prepare for response needs, as well as assist with other public health activities such as supporting prevention efforts. They provide important surge capacity to LHD staff and other frontline responders during public health emergencies.

Virginia consistently receives high ratings for its emergency preparedness infrastructure

Since 2018, Trust for America's Health has rated Virginia as a High Tier state based on ten priority indicators of state readiness for public health emergencies. Virginia is also

accredited by the Emergency Management Accreditation Program, which helps ensure applicants meet national standards for emergency response capabilities. All health districts in Virginia have also been recognized by the Project Public Health Ready program, which assesses LHD capacity to plan, respond, and recover from public health emergencies.

The Robert Wood Johnson Foundation National Health Security Preparedness Index measures capabilities for protecting people from large-scale hazardous events based on 64 national data sources. Virginia received an Index score of 7.4/10 in 2020, significantly above the national average of 6.8, and tying for first with Massachusetts, Maryland, and Nebraska. Virginia scored lowest in the community planning and engagement coordination domain, which measures the state's capacity to build and maintain supportive relationships among key stakeholders and develop shared response plans. This is in alignment with JCHC staff findings that community partnership development capacity in LHDs is low.

Virginia utilizes federal funding to support its emergency preparedness work

Virginia does not currently put any general funds towards emergency preparedness and instead relies on federal funds and grants, which are more responsive to national events than state or local needs. While emergency preparedness funding for LHDs comes from federal dollars that fluctuate in response to national events (e.g., Ebola, Zika, bioterrorism), LHDs are also continuously responding to and managing smaller, local outbreaks and events. A 2019 survey of LHDs nationally found that in the previous year, 67% had responded to at least one event. Of these, the most common events were infectious disease outbreaks (41%), natural disasters (35%), and foodborne outbreaks (32%).

Currently federal grants pay for all Emergency Preparedness functions in Virginia, including the emergency coordinator in each health district, as well as most district and regional epidemiologists. This can be a barrier during recruitment, when potential applicants see that these positions are grant-restricted, which may be perceived as less stable than a regular, salaried state job.

It is difficult to estimate how much funding is needed to build foundational capabilities and program areas

LHDs must have the core organizational capacities and competencies to support their program work, and program work should be tailored to meet the community's needs. It is difficult to estimate exactly how much funding is necessary to ensure LHDs have both Foundational Capabilities and Program Areas, and whether or not Virginia's current funding levels are falling short of need. This is a challenge because:

1. LHDs do not systematically track community needs.
2. Needs vary by locality, both due to differences in population characteristics, as well as variability in the number of other community organizations and safety net providers who are able to serve residents.

3. Public health needs are difficult to quantify. For example, estimating the cost of baseline community outreach capacity is a challenge.

Providing targeted investments and ensuring continuous data collection and evaluation can be a first step to better understanding how much funding is needed to ensure LHDs can serve their residents effectively. The policy options presented in this report are the greatest needs identified through the staff research, and therefore the highest priorities for targeted investment.

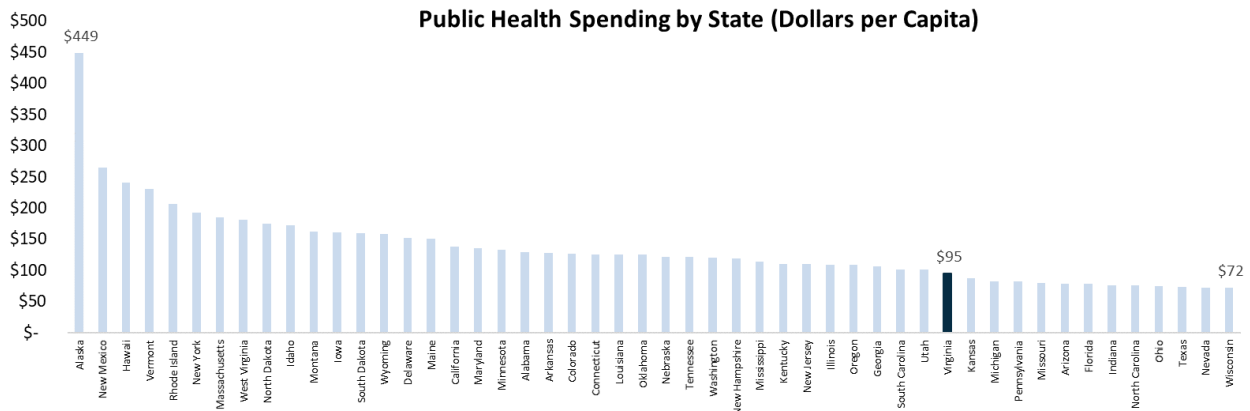
Local health department funding is from many different sources and varies significantly across the state

It can be difficult to understand how much public health truly costs because as a multi-disciplinary practice that touches many different sectors, definitions of public health vary. This makes it difficult to determine what a state or LHD should be spending and estimate any potential funding gaps. Calculating, understanding, and projecting costs requires agreement on what minimum services and at what levels public health should be operating. Research shows most health and health care spending in the United States is on clinical care, not on population health interventions. Less than 3% of health spending goes toward government public health activities.

Virginia ranks 38th nationally in public health spending per capita

National comparisons of public health spending rank Virginia in the bottom third of states (38th) in terms of public health spending per capita, based on combined federal and state funding (FIGURE 12). Data collected by Trust for America's Health to track and monitor public health funding across the country found that Virginia was one of seven states that decreased total public health funding in FY20 (the calculation does not include federal funds, but does include all health spending with the exception of Medicaid, CHIP, and other comparable coverage programs for low-income individuals). Measuring public health spending across states is not precise but can provide a barometer for Virginia's performance.

FIGURE 12: Virginia ranks 38th nationally in public health spending per capita

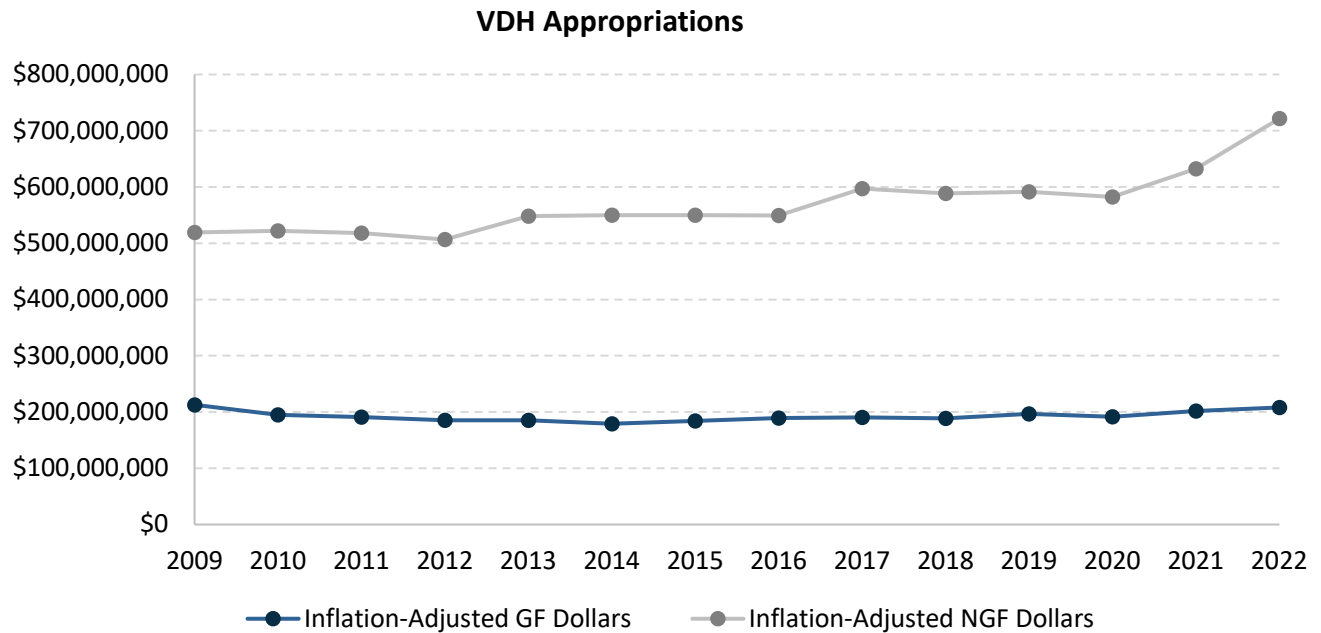


SOURCE: America's Health Rankings, Public Health Funding by State (2021). Data from CDC, HRSA, and Trust for America's Health.

Federal funding increasingly makes up the majority of public health funding, while general fund spending has been flat

Virginia's state general funds have been decreasing as a proportion of overall public health funding, as federal funds tied to various priority program areas increasingly make up a larger share of the total VDH budget. Federal funding is primarily categorical and restricted, which means LHDs have limited capacity to use these funds for addressing local health needs specific to their communities.

When adjusted for inflation, general fund appropriations have stayed relatively flat, with minimal variation of between one and three percent most years (FIGURE 13). VDH received an infusion of nongeneral funds in FY21 due to federal COVID-19 pandemic funding.

FIGURE 13: General funds for public health in Virginia have stayed relatively flat

SOURCE: Virginia Department of Planning and Budget, Budget Appropriations Database.

Current local health department funding allocations do not account for true service costs or community needs

VDH and LHDs develop a cooperative budget (also called the “co-op budget”) each year that is intended to cover the cost of providing core services at each LHD. The cooperative budget

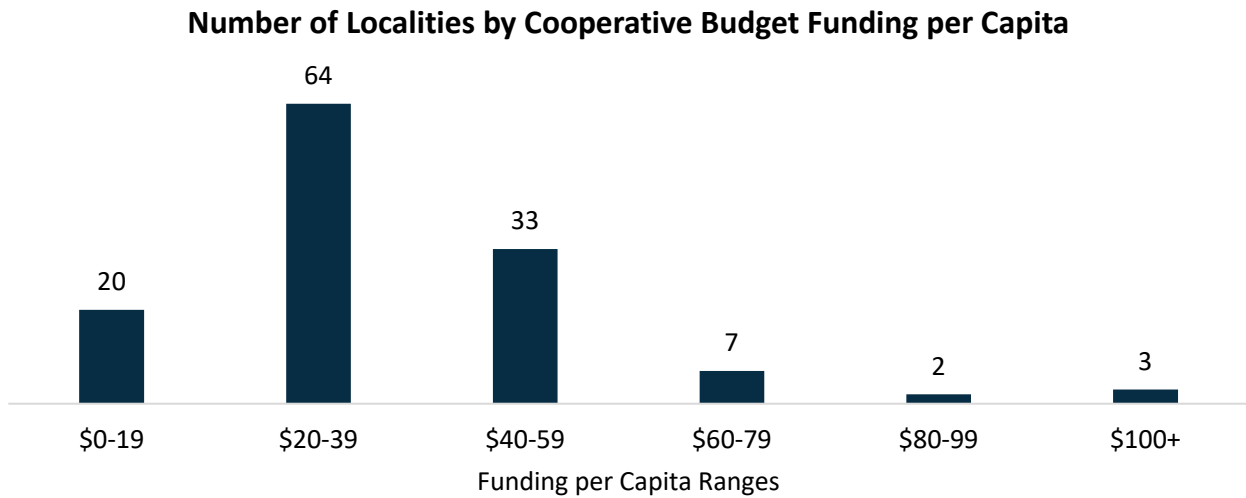
Revenue Generation Capacity Factor is determined by a formula that (i) determines a county's or city's revenue capacity relative to the state revenue capacity, (ii) determines a county's or city's median household income relative to the statewide median household income, and (iii) adjusts the amount determined in clause (i) by the amount determined in clause (ii).

is comprised of state general funds, required local matching funds, and projected revenue generated from LHD services. The amount of required local matching funds is determined by a formula that accounts for each locality's revenue generation capacity (see sidebar).

The amount of funding for each LHD through these three core funding sources, which comprise the cooperative budget, varies widely. The median funding per capita was \$34.88 in FY20. There is however a wide range of funding levels, with a low of less than \$10.00 per capita in Manassas Park, Loudoun, and Stafford. In contrast, Galax (\$116.47), Highland (\$124.97), and Northampton (\$140.06) counties receive well over \$100.00 per capita (FIGURE 14). Almost all regions of the state have similar median funding

per capita, between \$30.62 and \$37.62 per capita, but significant variation exists within each region.

FIGURE 14: Funding per capita varies widely across local health departments



SOURCE: JCHC analysis of VDH FY20 Budget and Year Ending Data, and population estimates from U.S. Census Bureau, 2019 American Community Survey (ACS).

NOTE: Chart outlines per capita funding for 129 localities. Data were not available for Fairfax and Arlington counties, which have locally-administered LHDs.

It is not exactly clear why such variation exists, but it is likely due in part to a few key factors:

- **Differences in the size of localities.** Smaller, rural localities tend to have higher per capita funding levels, which could indicate that some core functions and necessary administrative capacities are largely fixed costs, regardless of the population that an LHD serves.
- **Localities' ability to provide local matching funds.** LHD budgets are highly influenced by their locality's financial capacity. Because the cooperative budget requires a state and local match, if a locality is unable to provide enough funding to make up their portion of the state match, their allocated state funding is reduced until the appropriate state and local match can be applied. And while localities with strong tax bases are often able to contribute significant amounts of 100% local dollars above and beyond their local match, for most smaller or rural localities, the local match is the only local government funding available.
- **Community needs and availability of other providers.** Rural areas rely more heavily on their LHDs to provide services that are not available elsewhere in the community. If there are limited alternatives or safety net providers, LHDs are more likely to fill the gap by providing revenue-generating environmental and clinical health services.

In addition to this variation, LHD budgets are largely based on historical funding levels and are developed without much input from residents and frontline staff. This has been a longstanding problem in public health funding and was identified in a 1988 JLARC study of the cooperative budget. Budgeting based on what is historically appropriated by the state and granted by the locality means that LHD budgets are not accounting for changes in need over time.

Data on the effectiveness of LHDs does not currently exist, and so it is difficult to determine what impact this variation in funding is having on LHD capacity and performance. Funding per capita is an imprecise metric, and there are many factors that determine per capita funding numbers, including population size in rural or urban areas, availability of other service providers, and a locality's ability to provide funding. Additionally, there is no standard per capita funding target, as needs vary by locality and can be hard to quantify.

However, monitoring this variation in relation to the needs of each locality is important to understanding whether funding disparities need to be addressed. Consistent information on each LHD's needs would be obtained through the CHA/CHIP process (see Option 7). Additionally, once an improved performance management system is in place to assess how well LHDs are meeting those identified needs, VDH can assess whether funding disparities are a driver of LHDs' ability to meet community needs.

→ **OPTION 9:** The JCHC could introduce a Section 1 bill directing that VDH track cooperative budget funding per capita, compare that funding to the identified needs of each LHD, and make appropriate adjustments as additional funding is made available.

There are opportunities to generate additional revenue to support local health department operations

Every year, LHDs estimate how much revenue they will generate from service provision. This amount is factored into their cooperative budget. LHD revenues come from:

- **Vital records requests from residents.** LHDs primarily process requests for death certificates, working with local funeral homes.
- **Long-Term Services and Supports (LTSS) screenings paid by Medicaid.** Screenings are conducted jointly with LHD public health nurses and local social services social workers.
- **Fees and permits.** Fees are collected from regulated industries, such as for licensure of medical facilities or for health inspections at restaurants.
- **Insurance reimbursement from Medicaid and commercial insurance for clinical services.** LHDs can bill private insurance plans or Medicaid for some oral medications (e.g., Tylenol, penicillin), low-level office visits and some vaccinations. Reimbursement rates vary, as some clinical services are free, while others have sliding scale fees or depend on the patient's coverage status.

In FY20, LHDs generated \$28.5 million in revenues from fees and services, falling short of their total projected revenue by \$1.1 million. The VDH central office indicated that the shortfall is based on a few LHDs that are understaffed. LHDs collected a median of \$5.40 per capita, although the range varied from \$0.03 per capita in Manassas Park to \$43.70 per capita in Galax. LHDs in Southwest had the highest per capita revenue generation at \$8.88, while LHDs in the Central Virginia region had the lowest per capita revenue generation at \$5.83 (this excludes Northern Virginia because data was not available for Fairfax and Arlington). The range in per capita revenue may be due to the fact that LHDs in the Southwest serve smaller populations while providing more revenue-generating services due to lack of other community providers.

Fees collected from regulated industries do not always cover the actual cost of providing services

The most reliable revenue sources for LHDs are vital records requests and the LTSS screening reimbursements. While it is possible to request vital records online via the VDH website, there are still residents and particularly funeral homes that will request records directly from their LHD. The standard fee for vital records requests is \$12 and in FY20, revenue from vital records requests totaled \$5.2M across all LHDs. LHDs also receive \$250 from DMAS for every LTSS screening and are reimbursed for any additional costs incurred as part of the screening, and in FY20, revenues totaled \$5.1M across all LHDs. All LHDs that JCHC staff spoke with agreed the revenues from vital records and LTSS screenings cover the cost of providing these services.

In contrast, all EHS employees and VDH leadership that JCHC staff spoke with agreed that the current fees for EHS inspections are not sufficient to cover the cost of providing the service. A restaurant/food establishment permit costs \$40 for one year, regardless of how many follow-up visits are required or how large the facility is. For example, this is the same fee for hotel permits, temporary food event permits, and summer camp/campground plan reviews, even though the scale of these operations vary drastically and the level of work to ensure compliance are very different.

In 2010, the General Assembly increased restaurant fees from \$100 to \$285 in an attempt to better match true inspection costs. In response to strong pushback from food establishments, this decision was reversed the following year and the fee dropped to \$40, where it has stayed since 2011. Some states have a fee schedule based on establishment type and size. For example, Vermont restaurant license fees are scaled by seating capacity – restaurants with greater seating capacity pay higher fees. VDH could establish a fee scale that would vary by type of establishment and come closer to covering the cost of inspections. The projected increase in revenue should not be used to decrease general funds to the LHDs, as this would negatively impact the stability of LHD budgets and staff capacity.

→ **OPTION 10:** The JCHC could introduce a Section 1 bill directing VDH to update state regulations for environmental health services to increase inspection fees and adjust them based on the type of establishment being inspected, to account for the typical time it takes to conduct the inspection.

Additional enforcement authority may improve capacity of environmental health services

EHS staff currently have limited options for enforcement when they identify regulatory violations. For example, if an EHS specialist conducts a restaurant inspection and identifies a violation, their only enforcement options are to suspend restaurant operations or revoke the establishment's permit. Given how extreme these actions are, usually a specialist will notify the restaurant of the violations, provide corrective education, and conduct as many follow-up inspections as needed to ensure the violation has been corrected. Because a restaurant/food establishment permit is a \$40 flat fee, whether a specialist has to make two or eight visits to the same facility, the LHD only receives \$40. LHD staff reported being behind on their regularly-scheduled restaurant inspections due to the high workload and limited staff capacity, and so additional follow-up inspections create additional burden.

Some states have authorized intermediate actions EHS staff can take to enforce public health regulations. For instance, in Massachusetts, facilities may be fined \$100 for a first offense, \$250 for a second offense, and \$500 for subsequent offenses. New York City has defined penalties ranging from \$100-\$1,000 depending on the violation. Oregon imposes a civil penalty of \$250-\$1,000 only after giving restaurants 60 days to correct the violation. Giving Virginia LHDs the authority to impose civil penalties for certain environmental health violations may help cover the cost of inspections and follow-up visits, as well as act as a disincentive for facilities that may be slow to correct violations. Qualifying conditions, exemptions, and specific amounts may be defined by the agency following the regulatory process. The projected increase in revenue should not be used to decrease general funds to the LHDs, as this would negatively impact the stability of LHD budgets and staff capacity.

→ **OPTION 11:** The JCHC could introduce a Section 1 bill directing VDH to adopt regulations to implement a system of civil monetary penalties on facilities in violation of state environmental health regulations.

Local health departments are not collecting full reimbursement for clinic services

LHDs do not charge very much, if anything, for clinic services, but staff are responsible for pursuing third-party reimbursements when available. While LHDs can bill insurance for some clinical services they provide to patients who have coverage, the population using LHD services is primarily uninsured or has Medicaid coverage. Medicaid billing has dropped 90% from \$500,000 in FY17 across all LHDs in the state to just \$50,000 in FY21. While some of the decline may be due to limited service availability during the COVID-19

pandemic, according to the Department of Medical Assistance Services (DMAS) and VDH, the trend is likely a result of LHDs shifting health care services over to private entities and discontinuing clinical services on site. As they move away from providing direct care and more community providers accept Medicaid, LHDs are generating less revenue from clinic services.

The complexity of program eligibility rules and grant restrictions also means that depending on the service provided, the LHD may not be allowed to collect third-party reimbursement. For example, certain grant-funded clinic services prohibit LHDs from seeking reimbursement as a condition of receiving funding. Other services are required to be provided at no charge by the state. The many different rules and exceptions complicate an already burdensome process of pursuing reimbursement using paper medical records.

Processes for collecting clinical service revenues are not standardized and office support specialists have many different roles in addition to filing claims

While the structures are in place to bill and collect payment, LHDs are not always able to collect full reimbursement for eligible visits. One business manager JCHC staff spoke with noted they are very diligent about following up with insurance providers to ensure they are reimbursed, while at another district, another employee mentioned their surprise at the large stack of clinic write-offs staff were accustomed to having approved. Though office support staff are trained on coding patient services, billing, and filing for reimbursement, and staff check whether a patient is Medicaid-eligible when they can, there is currently no standardized process across LHDs to ensure this can happen.

Some districts are more successful than others in submitting for reimbursement and collecting payment, and this may be for a multitude of reasons. LHD staff may not have the appropriate training resources available to code services correctly. Due to the variety of restrictions that govern when and how much LHDs can bill for specific services, clinical staff and office staff can easily be confused about which code is most appropriate for each patient. This can lead to rejected claims or under-reimbursed services.

Office staff have multiple responsibilities and often provide coverage in multiple LHDs. When providing temporary coverage in another office or juggling multiple, pressing responsibilities, office staff may not have the time to contact insurance representatives, call back about a claim, or check a patient's eligibility before they arrive for their appointment.

While the VDH central office provides support and monitors reimbursements for each LHD, there are no accountability mechanisms to ensure staff are billing correctly. Unlike a doctor's office or hospital system, an LHD's ability to pay staff and provide basic services does not depend on their ability to collect payment for clinical services. Therefore, busy staff may be inclined to let a procedure go as a write-off, rather than continue to chase reimbursement.

LHD staff and the VDH central office anticipate billing for clinical services will become much easier with an EHR system, which will allow staff to digitize a lot of work that is currently manual.

VDH Opportunities for improvement

- Monitor reimbursements for clinic services after implementation of the EHR and assess whether additional focus is necessary to maximize third-party reimbursement for clinic services.
- Add expectation for managing billing to office services staff Employee Work Profiles (EWP).
- Expand expertise and capacity at the VDH central office to further support LHD reimbursement processes, and develop and distribute training resources.

Current requirements for pursuing and managing grant funding limit local health department opportunities

In FY20, LHDs received \$54M in grant funding across the state. The majority were from federal sources for services such as WIC and maternal/child health, but they also received grants from health systems, other state agencies like the Department of Behavioral Health and Developmental Services, and private foundations. All grants LHDs would like to apply for require approval from the Secretary of Health & Human Resources and the Governor to ensure the grant program activities and requirements match the agency's strategic goals and do not require any additional state dollars. This is a slow process and can mean that sometimes LHDs are not able to apply for or receive grants because they do not have sufficient time to seek approval from leadership. In previous years, grants from certain organizations (e.g., the Centers for Disease Control and Prevention, Substance Abuse and Mental Health Services Administration) were exempt from this requirement which helped streamline approvals. This is no longer the case and means LHDs may miss funding opportunities.

Additionally, given the multitude of grants LHDs are managing, there are often multiple departments and VDH central office staff weighing in on how funds can and should be used. The central office has a dedicated federal grants manager, grant analysts, grant accountants, and grants compliance specialists. Due to the siloed nature of some of the VDH central office's departments, LHDs can receive conflicting information about how grant funds may be used. For example, LHDs may be told they can and should use grant funding to purchase tablets to do data collection in the community, only to learn later that this would not align with state procurement rules or work with the current data infrastructure. This leads to delays and wasted resources.

VDH Opportunities for improvement

→ Strengthen grants management at the central office to help LHDs expedite grant approvals, secure grant funding, and understand how they might best effectively utilize grant dollars within the parameters of state procurement and IT restrictions.

Funding models will need to evolve as local health departments continue shifting towards community health activities

While there are opportunities to generate additional revenue and ensure LHDs are collecting full reimbursements for services, a large range of programs and services LHDs provide do not generate revenue. Activities such as community health education, making referrals to community providers, collecting health data to identify needs and track trends – all of which are core to public health functions – are not revenue-generating activities. As a provider of last resort, LHDs are more likely to generate service revenue in areas where there are fewer community providers and no other safety net, such as in Southwest Virginia. As LHDs shift away from providing direct services and collaborating more with community partners and providers, there will be decreasing opportunities to support their operations through self-generated revenue.

When revenues are smaller, LHDs are increasingly reliant on state and local funds, as well as grant funding to support their work. Currently, as districts struggle with limited staff, LHDs must decide how to balance unprofitable community health activities with revenue-generating services. As LHD responsibilities continue to shift, Virginia's public health funding model will need to evolve in order to support their changing work.

Appendix 1: Sources and Methods

JCHC staff conducted this study by surveying LHD staff, analyzing administrative data from various VDH program teams, interviewing staff at the state and local levels, and conducting site visits to LHDs.

Interviews and site visits

JCHC staff spoke with national public health subject matter experts, including the National Association of County and City Health Officials (NACCHO) and the Public Health National Center for Innovations' Public Health Accreditation Board (PHAB). These interviews helped inform study design and identify potential national datasets that could be used. JCHC staff also had informational meetings with various state and local stakeholders, including the Virginia Public Health Association, the Department of Medical Assistance Services (DMAS), the Department of Human Resource Management (DHRM), the Virginia Municipal League, the Virginia Association of Counties, the UVA State and Local Government Policy Clinic, a local Federally Qualified Health Center that partners with health districts, and the Virginia Association of Free & Charitable Clinics.

JCHC staff also had informational meetings with VDH leadership and staff at the central office to better understand LHD programs, services, and public health functions at the state and local level. VDH program leads provided overviews of their work and the role of LHDs.

JCHC staff visited 12 health districts across the state, totaling 18 LHDs. Some of those visits were to jointly managed districts, so in total JCHC staff spoke with local staff on site representing 17 districts and 24 LHDs. Staff also interviewed two additional health directors in lieu of conducting site visits. In total, JCHC staff met with LHD representatives in all five health regions covering:

- **Central:** 3 districts, 4 LHDs
- **Eastern:** 2 districts, 2 LHDs
- **Northern:** 3 districts, 3 LHDs
- **Northwest:** 3 districts, 6 LHDs
- **Southwest:** 6 districts, 9 LHDs

Survey methodology, sampling, and response rate

JCHC staff distributed four surveys to understand local staff capacity and workloads. All LHD survey questions were reviewed by VDH leadership and program managers to ensure they were accurate, relevant, and answerable. Surveys were targeted to:

- Administrative support – JCHC staff distributed the survey to 118 LHDs and received 83 responses, representing 80 LHDs (68% of LHDs) and 27 districts (77% of districts).

- Clinical services – JCHC staff distributed the survey to 118 LHDs and received 96 responses, representing 89 LHDs (75% of LHDs) and 27 districts (77% of districts).
- Environmental health services – JCHC staff distributed the survey to 118 LHDs and received 85 responses, representing 84 LHDs (71% of LHDs) and 25 districts (71% of districts).
- Epidemiology – JCHC staff distributed the survey to all 35 districts and received 26 responses, representing 25 districts (71% of districts).

JCHC staff also distributed a survey to capture local government perspectives. Questions asked about their relationship with their health district and LHD, their level of involvement in the CHA/CHIP process, input to LHD programs and services, and opportunities to better support the public health system. With the help of the Virginia Association of Counties and the Virginia Municipal League, JCHC staff distributed the survey to the Local Association of Human Services Officials, which is comprised of city and county government deputies and administrators who work with the LHDs, and received 31 responses. Respondents represented 20 districts and 29 LHDs.

Administrative data analysis

JCHC staff collected and analyzed programmatic data from multiple different agencies, though the majority of the data and documents were provided by VDH. The data was used to analyze LHD services, staffing, workload, and finances (Table 6).

TABLE 6: Data sources for staff analysis

Category	Data Type	Agency	Source
Services	Services ensured by each LHD	VDH	FY20 Local Government Agreements
Staffing	VDH staffing trends	DHRM	VDH position data VDH population data VDH transaction data
Workload	Clinical encounters	VDH	WebVISION patient encounters
Workload	Epidemiology caseload	VDH	Office of Epidemiology program data
Workload	EHS inspections and site visits	VDH	Office of Environmental Health services program data
Workload	WIC caseload	VDH	WIC program data
Workload	Emergency preparedness and planning exercises	VDH	Office of Emergency Preparedness
Finances	VDH funding trends	DPB	Budget appropriations database

Local Health Department Structure and Financing

Category	Data Type	Agency	Source
Finances	LHD budgets	VDH	FY20 budgets and end-of-year settlement Self-generated revenue totals
Finances	Grant funding	VDH	Office of Administration

Appendix 2: Virginia's local health departments

TABLE 7: List of Virginia localities and their local health departments

City/County	Local Health Department	Health District	Health Planning Region
Accomack	Accomack County Health Department	Eastern Shore	Eastern
Albemarle	Albemarle/Charlottesville Health Department	Blue Ridge	Northwest
Alexandria	Alexandria City Health Department	Alexandria	Northern
Alleghany	Clifton Forge Health Department	Alleghany	Southwest
Amelia	Amelia County Health Department	Piedmont	Central
Amherst	Amherst County Health Department	Central Virginia	Southwest
Appomattox	Appomattox County Health Department	Central Virginia	Southwest
Arlington	Arlington Health Department	Arlington	Northern
Augusta	Augusta/Staunton Health Department	Central Shenandoah	Northwest
Bath	Bath County Health Department	Central Shenandoah	Northwest
Bedford	Bedford County Health Department	Central Virginia	Southwest
Bland	Bland County Health Department	Mount Rogers	Southwest
Botetourt	Botetourt County Health Department	Alleghany	Southwest
Bristol	Bristol City Health Department	Mount Rogers	Southwest
Brunswick	Brunswick County Health Department	Southside	Central
Buchanan	Buchanan County Health Department	Cumberland Plateau	Southwest
Buckingham	Buckingham County Health Department	Piedmont	Central
Buena Vista City	Buena Vista City Health Department	Central Shenandoah	Northwest
Campbell	Campbell County Health Department	Central Virginia	Southwest
Caroline	Caroline County Health Department	Rappahannock	Northwest
Carroll	Carroll County Health Department	Mount Rogers	Southwest
Charles City	Charles City County Health Department	Chickahominy	Central

Local Health Department Structure and Financing

City/County	Local Health Department	Health District	Health Planning Region
Charlotte	Charlotte County Health Department	Piedmont	Central
Charlottesville	Albemarle/Charlottesville Health Department	Blue Ridge	Northwest
Chesapeake	Chesapeake Health Department	Chesapeake	Eastern
Chesterfield	Chesterfield County Health Department	Chesterfield	Central
Clarke	Clarke County Health Department	Lord Fairfax	Northwest
Colonial Heights	Colonial Heights City Health Department	Chesterfield	Central
Covington	Covington Health Department	Alleghany	Southwest
Craig	Craig County Health Department	Alleghany	Southwest
Culpeper	Culpeper County Health Department	Rappahannock Rapidan	Northwest
Cumberland	Cumberland County Health Department	Piedmont	Central
Danville	Danville City Health Department	Pittsylvania- Danville	Southwest
Dickenson	Dickenson County Health Department	Cumberland Plateau	Southwest
Dinwiddie	Dinwiddie County Health Department	Crater	Central
Emporia	Greensville/Emporia Health Department	Crater	Central
Essex	Essex County Health Department	Three Rivers	Eastern
Fairfax	Fairfax Health Department	Fairfax	Northern
Fairfax City	Fairfax Health Department	Fairfax	Northern
Falls Church	Fairfax Health Department	Fairfax	Northern
Fauquier	Fauquier County Health Department	Rappahannock Rapidan	Northwest
Floyd	Floyd County Health Department	New River	Southwest
Fluvanna	Fluvanna County Health Department	Blue Ridge	Northwest
Franklin City	Franklin City Health Department	Western Tidewater	Eastern
Franklin County	Franklin County Health Department	West Piedmont	Southwest
Frederick	Frederick County/Winchester Health Department	Lord Fairfax	Northwest

Local Health Department Structure and Financing

City/County	Local Health Department	Health District	Health Planning Region
Fredericksburg	Fredericksburg City Health Department	Rappahannock	Northwest
Galax	Galax City Health Department	Mount Rogers	Southwest
Giles	Giles County Health Department	New River	Southwest
Gloucester	Gloucester County Health Department	Three Rivers	Eastern
Goochland	Goochland County Health Department	Chickahominy	Central
Grayson	Grayson County Health Department	Mount Rogers	Southwest
Greene	Greene County Health Department	Blue Ridge	Northwest
Greensville	Greensville/Emporia Health Department	Crater	Central
Halifax	Halifax County Health Department	Southside	Central
Hampton	Hampton Health Department	Hampton	Eastern
Hanover	Hanover County Health Department	Chickahominy	Central
Harrisonburg	Rockingham/Harrisonburg Health Department	Central Shenandoah	Northwest
Henrico	Henrico Health Department	Henrico	Central
Henry	Henry/Martinsville Health Department	West Piedmont	Southwest
Highland	Highland County Health Department	Central Shenandoah	Northwest
Hopewell	Hopewell City Health Department	Crater	Central
Isle of Wight	Isle of Wight County Health Department	Western Tidewater	Eastern
James City	Williamsburg/James City County Health Department	Peninsula	Eastern
King and Queen	King and Queen County Health Department	Three Rivers	Eastern
King George	King George County Health Department	Rappahannock	Northwest
King William	King William County Health Department	Three Rivers	Eastern
Lancaster	Lancaster County Health Department	Three Rivers	Eastern
Lee	Lee County Health Department	Lenowisco	Southwest
Lexington	Rockbridge/Lexington Health Department	Central Shenandoah	Northwest

Local Health Department Structure and Financing

City/County	Local Health Department	Health District	Health Planning Region
Loudoun	Loudoun Health Department	Loudoun	Northern
Louisa	Louisa County Health Department	Blue Ridge	Northwest
Lunenburg	Lunenburg County Health Department	Piedmont	Central
Lynchburg	Lynchburg City Health Department	Central Virginia	Southwest
Madison	Madison County Health Department	Rappahannock Rapidan	Northwest
Manassas City	Prince William Health Department	Prince William	Northern
Manassas Park	Prince William Health Department	Prince William	Northern
Martinsville	Henry/Martinsville Health Department	West Piedmont	Southwest
Mathews	Mathews County Health Department	Three Rivers	Eastern
Mecklenburg	Mecklenburg County Health Department	Southside	Central
Middlesex	Middlesex County Health Department	Three Rivers	Eastern
Montgomery	Montgomery County Health Department	New River	Southwest
Nelson	Nelson County Health Department	Blue Ridge	Northwest
New Kent	New Kent County Health Department	Chickahominy	Central
Newport News	Peninsula Health Department	Peninsula	Eastern
Norfolk	Norfolk Department of Public Health	Norfolk	Eastern
Northampton	Northampton County Health Department	Eastern Shore	Eastern
Northumberland	Northumberland County Health Department	Three Rivers	Eastern
Norton	Wise/Norton Health Department	Lenowisco	Southwest
Nottoway	Nottoway County Health Department	Piedmont	Central
Orange	Orange County Health Department	Rappahannock Rapidan	Northwest
Page	Page County Health Department	Lord Fairfax	Northwest
Patrick	Patrick County Health Department	West Piedmont	Southwest
Petersburg	Petersburg City Health Department	Crater	Central
Pittsylvania	Pittsylvania County Health Department	Pittsylvania- Danville	Southwest

Local Health Department Structure and Financing

City/County	Local Health Department	Health District	Health Planning Region
Poquoson	Williamsburg/James City County Health Department	Peninsula	Eastern
Portsmouth	Portsmouth Health Department	Portsmouth	Eastern
Powhatan	Powhatan County Health Department	Chesterfield	Central
Prince Edward	Prince Edward County Health Department	Piedmont	Central
Prince George	Prince George County Health Department	Crater	Central
Prince William	Prince William Health Department	Prince William	Northern
Pulaski	Pulaski County Health Department	New River	Southwest
Radford	Radford City Health Department	New River	Southwest
Rappahannock	Rappahannock County Health Department	Rappahannock Rapidan	Northwest
Richmond City	Richmond City Health Department	Richmond	Central
Richmond County	Richmond County Health Department	Three Rivers	Eastern
Roanoke City	Roanoke City Health Department	Roanoke	Southwest
Roanoke County	Vinton Health Department	Alleghany	Southwest
Rockbridge	Rockbridge/Lexington Health Department	Central Shenandoah	Northwest
Rockingham	Rockingham/Harrisonburg Health Department	Central Shenandoah	Northwest
Russell	Russell County Health Department	Cumberland Plateau	Southwest
Salem	Salem Health Department	Alleghany	Southwest
Scott	Scott County Health Department	Lenowisco	Southwest
Shenandoah	Shenandoah County Health Department	Lord Fairfax	Northwest
Smyth	Smyth County Health Department	Mount Rogers	Southwest
Southampton	Southampton County Health Department	Western Tidewater	Eastern
Spotsylvania	Spotsylvania County Health Department	Rappahannock	Northwest
Stafford	Stafford County Health Department	Rappahannock	Northwest

Local Health Department Structure and Financing

City/County	Local Health Department	Health District	Health Planning Region
Staunton	Augusta/Staunton Health Department	Central Shenandoah	Northwest
Suffolk	Suffolk City Health Department	Western Tidewater	Eastern
Surry	Surry County Health Department	Crater	Central
Sussex	Sussex County Health Department	Crater	Central
Tazewell	Tazewell County Health Department	Cumberland Plateau	Southwest
Virginia Beach	Virginia Beach Department of Public Health	Virginia Beach	Eastern
Warren	Warren County Health Department	Lord Fairfax	Northwest
Washington	Washington County Health Department	Mount Rogers	Southwest
Waynesboro	Waynesboro City Health Department	Central Shenandoah	Northwest
Westmoreland	Westmoreland County Health Department	Three Rivers	Eastern
Williamsburg	Williamsburg/James City County Health Department	Peninsula	Eastern
Winchester	Frederick County/Winchester Health Department	Lord Fairfax	Northwest
Wise	Wise/Norton Health Department	Lenowisco	Southwest
Wythe	Wythe County Health Department	Mount Rogers	Southwest
York	Williamsburg/James City County Health Department	Peninsula	Eastern

Appendix 3: Study Mandate

Effectiveness of Local Health Department Structure and Financing

Authorized by the Joint Commission on Healthcare on December 7, 2021

WHEREAS, Virginia's goal is to protect the health and promote the well-being of all people in Virginia; and

WHEREAS, the Virginia Department of Health and local health departments are part of the primary care safety net for all Virginians providing immunization, testing, public health surveillance and interventions to improve health care outcomes; and

WHEREAS, the local health departments play other critical, public health roles such as ensuring water quality, conducting restaurant health and safety inspections, and helping determine eligibility for Medicaid-funded long-term care services; and

WHEREAS, standards for other health entities such as hospitals, clinics, and nursing homes are reviewed periodically to ensure they are meeting minimum requirements to ensure standardization across agencies; and

WHEREAS, health departments across the country have pursued accreditation to help them improve quality, accountability, transparency, and capacity to provide high quality programs and services; and

WHEREAS, the COVID-19 pandemic has highlighted challenges in Virginia's public health infrastructure and financing for local health departments, now, therefore be it

RESOLVED, by the Joint Commission on Health Care that staff be directed to study the effectiveness of local health department infrastructure. The study shall (i) catalog and compare public health services provided by local health districts across the state, (ii) identify standards used to evaluate the quality of local health departments and identify if local health departments across Virginia are meeting these standards, (iii) compare Virginia's public health infrastructure and financing to other states to identify advantages and disadvantages, and (iv) recommend any necessary changes to Virginia's current public health structure and financing to further the state's public health goals.

The Joint Commission on Health Care shall make recommendations as necessary and review other related issues as warranted.

In accordance with § 30-169.1 of the Code of Virginia, all agencies of the Commonwealth, including the Virginia Department of Health, Virginia Department of Social Services, and the Virginia Department of Behavioral Health and Developmental Services shall provide assistance, information, and data to the JCHC for this study upon request.



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