NCIOM

North Carolina Institute of Medicine

DECEMBER 2022

Foundations of Health and Opportunity:

INVESTING IN THE FUTURE OF LOCAL PUBLIC HEALTH IN NORTH CAROLINA

North Carolina Institute of Medicine

The North Carolina Institute of Medicine (NCIOM) is a nonpolitical source of analysis and advice on important health issues facing the state. The NCIOM convenes stakeholders and other interested people from across the state to study these complex issues and develop workable solutions to improve health care in North Carolina.

The full text of this report is available online at http://www.nciom.org/publications

North Carolina Institute of Medicine

Keystone Office Park
630 Davis Drive, Suite 100
Morrisville, NC 27560
919.445.6150

Suggested Citation:
North Carolina Institute of Medicine. Foundations of Health and Opportunity: Investing in the Future of Local Public Health in North Carolina. Morrisville, NC: North Carolina Institute of Medicine; 2022.

Funded by the Kate B. Reynolds Charitable Trust and the North Carolina Department of Health and Human Services Division of Public Health.

Any opinion, finding, conclusion, or recommendations expressed in this publication are those of the Task Force and do not necessarily reflect the views and policies of the Kate B. Reynolds Charitable Trust and the North Carolina Department of Health and Human Services Division of Public Health. The North Carolina Institute of Medicine recognizes the broad range of perspectives, priorities, and goals of the individuals and organizations who have contributed to the process and report of the Task Force; while we strive to reach and reflect consensus, participation in the Task Force does not indicate full endorsement of all final recommendations.

Credits:
Report design and layout: Kayleigh Creech, Laser Image Printing & Marketing

2 **ACKNOWLEDGMENTS**

3 **TASK FORCE MEMBERS**

5 **ACRONYMS**

7 **EXECUTIVE SUMMARY**

18 **CHAPTER 1**
What is Public Health?

23 **CHAPTER 2**
Where We Are

28 **CHAPTER 3**
Where We Want to Go

TABLE OF RESPONSIBLE PARTIES AND PARTNERS

34 **CHAPTER 4**
Collective Impact – Strengthening the Power of Public Health's Community Partnerships

RECOMMENDATION 1

40 **CHAPTER 5**
Modernizing Public Health Data Use and Systems

RECOMMENDATION 2

48 **CHAPTER 6**
Strengthening Local Public Health Communication

RECOMMENDATION 3

57 **CHAPTER 7**
Sustaining and Supporting the Current Local Public Health Workforce

RECOMMENDATION 4

68 **CHAPTER 8**
Building the Future Local Public Health Workforce

RECOMMENDATION 5

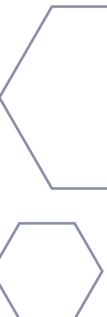
77 **CHAPTER 9**
Strengthening Structure and Innovation in Local Public Health

RECOMMENDATION 6

87 **CHAPTER 10**
Sustaining Local Public Health Through Adequate and Reliable Funding

RECOMMENDATION 7

101 **CHAPTER 11**
Call to Action



ACKNOWLEDGEMENTS

The North Carolina Institute of Medicine's (NCIOM) Task Force on the Future of Local Public Health was convened from August 2021 to May 2022. Funding for the Task Force was provided by the Kate B. Reynolds Charitable Trust and the North Carolina Department of Health and Human Services Division of Public Health.

The task force was co-chaired by Leah McCall Devlin, Professor, Gillings School of Global Public Health, University of North Carolina at Chapel Hill; Lisa Macon Harrison, Health Director, Granville-Vance Public Health; John Lumpkin, President, Blue Cross Blue Shield of North Carolina Foundation and Vice President, Drivers of Health Strategy for Blue Cross and Blue Shield of North Carolina; and Vicki Lee Parker-High, Executive Director, North Carolina Business Council. Their leadership and experience were important to the success of the task force's work.

The NCIOM also wants to thank the members of the Task Force and Steering Committee who gave freely of their time and expertise to address this important topic. The Steering Committee members provided expert guidance and content, helped develop meeting agendas, and identified expert speakers. For the complete list of Task Force and Steering Committee members, please see Page 3 and 4 of this report.

The Task Force on the Future of Local Public Health heard presentations from multiple experts through the course of the task force work. We would like to thank the following people for sharing their expertise and experiences with the task force (positions listed are as of the date of their presentation):

Erin Braasch, Executive Director, WNC Health Network; Jo Bradley, Data Manager and Improvement Specialist, WNC Health Network; Brian Castrucci, President & Chief Executive Officer, de Beaumont Foundation; Helen Chickering, All Things Considered Host, Reporter, Blue Ridge Public Radio, WCQS & BPR News; Joe Coletti, Oversight staff Director, House Majority, North Carolina General Assembly; Kathleen Colville, President & CEO, North Carolina Institute of Medicine; Sandy Cothern, Nutrition and WIC Director, Columbus County Health Department; Bonnie Coyle, Health Director, Cabarrus Health Alliance; Honey Estrada, Public Health Strategist, Catawba County Public Health; Kelly Garrison, President & CEO, Emtiro Health, Network Director, Northwest Community Care Network; Heather Gates, Owner & Consultant, Human-Centered Strategy, LLC; Julie Ghurtskaia, Vice President, Population Health, Carolina Complete Health; Jennifer Green, Health Director, Cumberland County; Jennifer Greene, Health Director & CEO, AppHealthCare – Appalachian District Health Department; Katye Griffin, Executive Director, The Public Health Associations of North Carolina; Kimberly Hardy, Director of Nursing, Pitt County Health Department; Rodney Jenkins, Health Director, Durham County Department of Public Health; Susan Kansagra, Senior Deputy Director, Division of Public Health, North Carolina Department of Health and Human Services; Genie Komives, Chief Medical Officer, WellCare of North Carolina; Rob Lamme, President, Rob Lamme and Associates; Jeffrey Levi, Professor of Health Policy and Management, Milken Institute School of Public Health at the George Washington University; Tom Linden, Glaxo Wellcome Distinguished Professor in Medical Journalism, Director, MA in Media and Communication, UNC Hussman School of Journalism and Media; Ulva Little-Bennet, Health Educator, Hoke County Health Department; Beth Lovette, Deputy Director, Division of Public Health, North Carolina Department of Health and Human Services; John Lumpkin, President, Blue Cross Blue Shield of North Carolina Foundation, Vice President, Drivers of Health Strategy, Blue Cross Blue Shield of North Carolina; Lisa Macon Harrison, Health Director, Granville Vance Public Health; Laura Marshall, Assistant Professor of Strategic Communication, High Point University Nido R. Quebin School of Communication; Jennifer McCracken, Health Director, Catawba County Public Health; Karen Minyard, CEO, Department of Public Management and Policy, Georgia Health Policy Institute; Jill Moore, Associate Professor of Public Law and Government, School of Government, University of North Carolina at Chapel Hill; Zo Mpofu, CHA/CHIP Program Manager, Buncombe County Department of Health and Human Services; Ashley Perkinson, Attorney, Perkinson Law Firm; Lauren Powell, Vice President, US Health Equity & Community Wellness, Takeda, President & CEO, The Equitist; Jeneen Preciose, Business Director, North Carolina Department of Health and Human Services; Stacie Saunders, Public Health Director, Buncombe County Health Department, President, North Carolina Association of Local Health Directors; Beverly Scurry, Manager of Health Equity Training and Education, UNC Health; Steve Simandle, Environmental Health Director, Surry County Health Department; Alecia Smith, Communications and Public Relations Manager, Durham County Department of Public Health; Ashley Stoop, Director of Policy, Planning, & Preparedness, HIPAA Privacy & Security Officer, Albemarle Regional Health Services; Amy Underhill, Public Information Officer, Healthy Communities Coordinator, and Public Health Education Supervisor; Iulia Vann, Public Health Director; Guilford County Public Health; John Wiesman, Professor, Gillings School of Global Public Health, University of North Carolina at Chapel Hill; Rachel Wilfert, Director, Workforce Training & Education, North Carolina Institute for Public Health, Adjunct Assistant Professor, Public Health Leadership Program, UNC Gillings School of Global Public Health.

In addition to the above individuals, the staff of the North Carolina Institute of Medicine contributed to the task force's study and the development of this report. Kathy Colville, President and CEO, and Michelle Ries, Associate Director, guided the work of the task force, meeting facilitation, and contributed to the writing of this report. Brieanne Lyda-McDonald, MSPH, Project Director, served as Project Director for the task force and was primary author of the final task force report. Emily Hooks, MEd served as a Research Assistant for the project. Kaitlin Phillips, MS, edited the final task force report and provided social media publicity for the task force. Alison Miller, MA, MPH, Project Director, assisted with meeting facilitation. Ivana Susic, Research Assistant, assisted with background research for the final report. Key staff support was also provided by Jacori Crudup, Administrative Assistant and Marsha Bailey, Director of Administrative Operations. Former staff, Michelle Pendergrass, BS, served as Administrative Assistant and James Coleman, MPH, Research Associate assisted with meeting facilitation.

CO-CHAIRS

Leah Devlin, DDS, MPH
Professor
Gillings School of Global Public Health
University of North Carolina – Chapel Hill

Lisa Macon Harrison, MPH
Health Director
Granville Vance Public Health

John Lumpkin, MD, MPH
President
Blue Cross Blue Shield of North Carolina Foundation
Vice President, Drivers of Health Strategy
Blue Cross and Blue Shield of North Carolina

Vicki Lee Parker-High, MBA
Executive Director
North Carolina Business Council

TASK FORCE MEMBERS

Stephanie Baker, PhD, MS, PT
Associate Professor of Public Health Studies
Elon University

Ronny Bell, PhD, MS
Director of the Office of Cancer Health Equity
Wake Forest Baptist Comprehensive Cancer Center

Amy Belflower Thomas, MHA, MSPH, CPH
Director, Community Assessment and Strategy
NC Local Health Department Accreditation
Administrator
NC Local Health Department Accreditation Program

Mark Benton
Assistant Secretary for Public Health
North Carolina Department of Health and Human Services

Kim Berry
School Nurse Supervisor
Henderson County Department of Public Health

Vickie Bradley, RN, MPH
Secretary, Public Health and Human Services
Eastern Band of Cherokee Indians

Margaret Brake, DHA, MHA
Health Director
Warren County Health Department

Jay Briley, MHA, FACHE
President
Vidant Community Hospitals

Will Broughton, MA, MPH, CPH
Program Director, Results NC
Foundation for Health Leadership and Innovation

Shelley Carraway, MPA
Health Director
Jackson County

Helen Chickering
Reporter and Host
Blue Ridge Public Radio

Joe Coletti, MA
Oversight Staff Director, House Majority
North Carolina General Assembly

Chris Collins, MSW
Associate Director of Health Care
The Duke Endowment

Sandy Cothern, MEd
Nutrition and WIC Director
Columbus County Health Department

Bonnie Coyle, MD
Health Director
Cabarrus Health Alliance

Sheila Davies, PhD
Health Director
Dare County

Shannon Dowler, MD
Chief Medical Officer
NC Medicaid

Honey Estrada, MPH, CHW
President
North Carolina Community Health Worker Association

Nora Ferrell
Director of Communications
Kate B. Reynolds Charitable Trust

Misty Fields
Community Advocate
Pitt County

Andrea R. Freeman, MPA
Administrative Officer III
NC Certified Local Government Finance Officer
HIPAA Privacy and Security Officer
MTW District Health Department/Roanoke Home Health

Mary Furtado, MPA
Deputy Manager
Catawba County

Julie Ghurtskaia, RN
Vice President of Population Health
Carolina Complete Health

Jennifer Green, PhD, MPH
Health Director
Cumberland County

Kimberly Hardy, DNP, MSN, APRN, FNP-BC, NEA-BC
Director of Nursing
Pitt County Health Department

Amber Harris, MPA
Director of Government Relations
Association of County Commissioners

Sarita Hiers
Community Advocate
Pitt County

Amanda Isac, PharmD, MPH
Pharmacist, Injury and Violence Prevention Branch, Division of Public Health
North Carolina Department of Health and Human Services

Rodney Jenkins, MHA
Health Director
Durham County Department of Public Health

Donald Jonas, PhD, MA
Assistant Vice President Social Strategy & Impact
Atrium Health

Eugenie Komives, MD
Chief Medical Officer
WellCare

Ulva Little-Bennet
Health Educator
Hoke County Health Department

TASK FORCE MEMBERS

Gabriela Livas Stein, PhD
Associate Professor of Clinical Psychology
University of North Carolina at Greensboro

Bronwyn Lucas, MPH
Senior Director of Leadership & Engagement
NC Rural Center

Susan Mims, MD, MPH
President & CEO
Dogwood Health Trust

Jill Moore, JD, MPH
Associate Professor of Public Law and Government, School of Government
University of Chapel Hill – North Carolina

Senator Natalie Murdock
District 20
North Carolina General Assembly

Eric Sede Nietcho, PharmD
Pharmacist-in-Charge/CEO
Global Bridge Pharmaceutical

Anthony Price
Chief Executive Officer
Moore Free & Charitable Clinic

Margarita Ramirez
Executive Director
Centro Unido Latino Americano

Dorothy Rawleigh
Health Promotion and Policy Director
Chatham County Health Department

Ryan Ray
President and CEO
Jobs for Life

Commissioner Althea Riddick, EdD
Chair, Commissioner
Gates County Board of Commissioners

Quinny Sanchez Lopez, MSW
Community Engagement Manager
Unite Us

Susanne Schmal, MPH
Healthy Schools Consultant
North Carolina Department of Public Instruction

Steve Simandle, PhD
Environmental Health Director
Surry County Health Department

Robert Spencer, MHA, FACHE
Chief Executive Officer
Kintegra Health

Ashley Stoop, MPH
Health Director
Albemarle Regional Health Services

Elizabeth Cuervo Tilson, MD, MPH
State Health Director, Chief Medical Officer
North Carolina Department of Health and Human Services

Amy Underhill
Public Information Officer, Healthy Communities Coordinator, and Public Health Education Supervisor
Albemarle Regional Health Services

John Wiesman, DrPH, MPH
Professor, Gillings School of Global Public Health
University of North Carolina at Chapel Hill

Jean Willoughby
Organizer and Trainer
Racial Equity Institute

STEERING COMMITTEE

Brian Alligood, MPA
County Manager
Beaufort County

Jason Baisden
Program Officer
Kate B. Reynolds Charitable Trust

Brian Castrucci, DrPH, MA
President & Chief Executive Officer
de Beaumont Foundation

Yazmin Garcia Rico, MSW
Director of Hispanic and Latinx Policy
North Carolina Department of Health and Human Services

Katye Griffin, JD
Former Executive Director
Public Health Associations of North Carolina

Tom Linden, MD
Glaxo Wellcome Distinguished Professor of Medical Journalism
University of North Carolina – Chapel Hill

Beth Lovette, MPH
Retired, Former Deputy Director, Section Chief for Administrative, Local, and Community Support
North Carolina Department of Health and Human Services

John Morrow, MD
Retired, Former Health Director
Pitt County

Stacie Saunders, MPH
Health Director
Buncombe County Health Department

Beverly Scurry, MBA, MHA
Health Equity Program Manager, Community
UNC Health

Doug Urland, MPA
Local Health Department Operations Liaison, Division of Public Health
North Carolina Department of Health and Human Services

ClarLynda Williams-DeVane, PhD
Senior Deputy Director, Division of Public Health Director, Center for State Health Statistics
North Carolina Department of Health and Human Services

ARPA – American Rescue Plan Act

CDC – Centers for Disease Control and Prevention

DPH – Division of Public Health

FELS – Forgivable Education Loans for Service

FPHS – Foundational Public Health Services

LHD – Local Health Department

NCACC – North Carolina Association of County Commissioners

NCALHD – North Carolina Association of Local Health Directors

NCDHHS – North Carolina Department of Health and Human Services

NCIOM – North Carolina Institute of Medicine

NCIPH – North Carolina Institute for Public Health

NCLHDA – North Carolina Local Health Department Accreditation

NCPHA – North Carolina Public Health Association

OSHR – Office of State Human Resources

PHAB – Public Health Accreditation Board

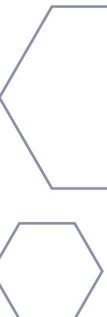
PHRASES – Public Heath Reaching Across Sectors

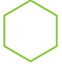
PH WINS – Public Health Workforce Interests and Needs Survey

RWJF – Robert Wood Johnson Foundation

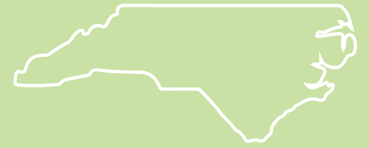
UNC – University of North Carolina

WNCHN – Western North Carolina Health Network





NCIOM
North Carolina Institute of Medicine



EXECUTIVE SUMMARY

What is Public Health?

While the field of public health has received much attention throughout the COVID-19 pandemic, the scope of public health's responsibilities and activities ranges far beyond the tasks that are most visible to the public. The accomplishments of public health, sometimes called "quiet miracles" or "silent victories" because public health is both hugely influential and easily taken for granted, add years to our lives, keep us safe, and enhance our well-being and enjoyment of life.[1,2] We are all beneficiaries of the work of public health every day, when we drink clean water or enjoy a meal in a hygienic restaurant; take actions to prevent serious injuries, like wearing a helmet or seat belt; breath pollution-free air; or take a pleasant stroll down a well-lit street on a sidewalk in our community.

While health care focuses on medical treatment for illness and the clinical aspects of health, particularly once we are sick, public health works to keep people and communities healthy by identifying and addressing problems in our environment, social dynamics, and economic systems that influence people's health and their health behaviors.

Local Public Health in North Carolina

North Carolina has a decentralized local governmental public health system with 86 local health departments serving 100 counties, each governed locally rather than at the state level. Each health department is served by a health director and their staff and is responsible for essential public health services codified in state statute (see Figure 1). The Eastern Band of Cherokee Indians has responsibility for public health services within the Qualla Boundary in Western North Carolina and works with health departments serving counties that border Tribal land. In addition, health departments often collaborate on regional initiatives to enhance and expand their reach, while also maximizing resources.

Figure 1. Essential Services that Local Public Health Must Ensure Under North Carolina State Law

1. Monitoring health status to identify community health problems.
2. Diagnosing and investigating health hazards in the community.
3. Informing, educating, and empowering people about health issues.
4. Mobilizing community partnerships to identify and solve health problems.
5. Developing policies and plans that support individual and community health efforts.
6. Enforcing laws and regulations that protect health and ensure safety.
7. Linking people to needed personal health care services and ensuring the provision of health care when otherwise unavailable.
8. Ensuring a competent public health workforce and personal health care workforce.
9. Evaluating effectiveness, accessibility, and quality of personal and population-based health services.
10. Conducting research.

Source: NC § 130A-1.1. Mission and essential services. https://www.ncleg.gov/EnactedLegislation/Statutes/PDF/BySection/Chapter_130A/GS_130A-1.1.pdf

Challenges Faced by Local Public Health

The local public health sector is at a crucial inflection point now. Funding cuts and staffing shortages seriously impact the ability of local governmental public health to accomplish its core responsibilities, let alone lead or participate in partnerships that can be effective in addressing many of the social needs that can impact community health. In 2021, state funding for public health in North Carolina was $76 per capita, placing our state 45th in the nation compared to the national average of $116 per capita.[A,3] County-level per capita spending on public health dropped 22% from 2010 to 2018 when adjusted for inflation.[4]

Data from a national survey of public health workers from late 2021 to early 2022 illustrate critical retention concerns for current employees:[5]

- 56% of public health workers report at least one symptom of post-traumatic stress disorder (PTSD).
- More than 1 in 5 public health workers rate their mental health as either "fair" or "poor."
- Nearly 1 in 3 public health workers say they are considering leaving their organization.

CNBC ranked North Carolina as the best state for business in 2022 and highlights per capita public health spending as a lagging area compared to other states.[6] With North Carolina ranking 32nd in health outcomes compared to other states in 2021, revitalizing local public health could be an important aspect of improving all of the factors that impact our health outcomes — social and economic, environmental, health behaviors, and clinical care — whether through direct services, policy change, or collective action with community partners.[7]

The COVID-19 Pandemic and Local Public Health

The COVID-19 pandemic has been difficult and exhausting on all levels of society, regardless of political perspective or work sector. It has meant massive disruptions in lives, businesses, and incomes. Federal, state, and local public health and health care responses were necessarily fast and often changing, which led to confusion, frustration, and subsequent distrust by many in the public. Yet, while the pandemic has brought extensive challenges and exposed serious societal issues, it now provides an opportunity to "recharge the system" — to inject new energy and new vision into sectors that have been taken for granted for so long. The opportunity is clear for local governmental public health to draw attention to the spectrum of roles it plays in helping create healthy communities and fully realize the value it holds in ensuring that all members of our communities have an opportunity to be healthy.

A Per-capita funding in 2020-2021 increased due to COVID-19 pandemic funds from the federal government.

Task Force on the Future of Local Public Health in North Carolina

The North Carolina Institute of Medicine (NCIOM) recognizes the importance of forging a strong future for local governmental public health to attain better health in our state's diverse communities. To develop a vision and path for achieving a strong future for local public health, the NCIOM, with funding from the Kate B. Reynolds Charitable Trust and the North Carolina Department of Health and Human Services, convened the Task Force on the Future of Local Public Health in North Carolina (the task force).

The task force was co-chaired by Leah McCall Devlin, Professor, Gillings School of Global Public Health, University of North Carolina at Chapel Hill; Lisa Macon Harrison, Health Director, Granville-Vance Public Health; John Lumpkin, President, Blue Cross Blue Shield of North Carolina Foundation and Vice President, Drivers of Health Strategy for Blue Cross and Blue Shield of North Carolina; and Vicki Lee Parker-High, Executive Director, North Carolina Business Council. They were joined by 65 other task force and steering committee members, including representatives from local public health, public health nonprofits, state and Tribal health and human services, state and local government, academia, health care, business, and other sectors. The task force met 11 times between August 2021 and May 2022. In addition, two work groups were convened for in-depth discussions on the topics of public health data and workforce. The task force made seven recommendations and detailed 26 action-oriented strategies for accomplishing them.

Although the work of public health encompasses a broad spectrum of sectors — including academia, non-governmental organizations, community-based organizations, philanthropy, health care, and state governmental public health — the scope of this task force was specifically focused on goals for the future of local governmental public health. The term "local public health" is used here in reference to local governmental public health and local health departments. Other sectors are called upon in connection with strategies related to their potential as partners, supporters, and promoters in the future vision for local public health in North Carolina.

THE NCIOM TASK FORCE ON THE FUTURE OF LOCAL PUBLIC HEALTH ENVISIONS A FUTURE WHERE:

All people in North Carolina will experience the benefits of living in communities served by well-supported and highly effective local public health agencies. They will live longer and healthier lives — no matter their location, income, race, ethnicity, or other characteristics — because of the prevention-focused and health-promoting programs and policies that skilled public health professionals support or bring to their communities. They will be protected from preventable disease by a strong environmental health program that ensures safe food, water, and air. They will have access to convenient health care services. Their communities will work together to maximize opportunities to attain safe and affordable housing, high-quality education, healthy food, strong economic opportunities, and other important drivers of health. They will have knowledge about, and trust in, the work of their local health department.

This future will be attained when local public health, along with community partners:

Promotes and participates in **strong partnerships** to improve health and well-being **with community organizations and members.**

Has trusted relationships and **shared power** with community members most impacted by public health programs and policies.

Collects, uses, and shares **data to drive improvements and address disparities** in health outcomes and health department services.

Has a variety of strong tools, skills, and relationships with community leaders to **effectively communicate** with community members and other partners.

Adapts quickly to serve urgent needs, including for emergency preparation and response.

Is staffed with a **skilled and respected workforce** that earns competitive compensation and reflects the diversity of the communities served.

Is **sought after and trusted** by local governments to develop programs and policies that promote health.

Receives **sufficient and reliable funding from local and state sources** and is **accountable** for program and service goals.

Has strong relationships with philanthropy to **promote innovation.**

RECOMMENDATIONS FROM THE TASK FORCE ON THE FUTURE OF LOCAL PUBLIC HEALTH

Partnering Through Collective Impact

Community partnerships are vital to the work of local public health. It is impossible for public health alone to address all issues that impact the health and well-being of a community, as influences on social and economic factors, the physical environment, health behaviors, and clinical care span a wide range of sectors. While the work of partnering to address these issues is vital to improving community health, funding is often inadequate for these efforts, with federal and state dollars typically designated for specific diseases or public health programs rather than cross-cutting community improvement projects.

In the role of "Chief Health Strategist," local public health is called on to engage in cross-sector partnerships to address the root causes of health outcomes. Despite limited resources, local health departments have worked in this role to foster partnerships across sectors that make important changes and improvements in the communities they serve to positively impact health. And yet, long-standing policy and system factors make it a continuing challenge to address unequal opportunities to live in healthy environments and make healthy choices. Evolving these partnerships through the collective impact framework can build a shared plan of action. This framework shifts the paradigm of partnership from working on the same issue to working ***toward the same outcome*** and shares power among all members of the partnership.[8] The collective impact framework involves a long-term investment of time and energy, calling on partners to:[9,10]

- Develop a common agenda for change.
- Measure the same things to understand results.
- Align activities to the common goal.
- Engage in open and continuous communications.
- Identify a coordinating organization(s).

"Improvements in our nation's health can be achieved only when we have the commitment to move even further upstream to change the community conditions that make people sick. The demand for social needs interventions won't stop until the true root causes are addressed."

Castrucci B, Auerbach J. Meeting individual social needs falls short of addressing social determinants of health. Health Affairs. January 16, 2019.

RECOMMENDATION 1

Evolve local public health's role as Chief Health Strategist by implementing a collective impact framework to address community health priorities

Strategy 1a. Growing Skills and Shared Vision for Collective Impact Local health departments should grow staff roles, skills, and knowledge of: the Collective Impact framework; group and partnership facilitations; and health equity, risk assessment, and strategic partnerships.

Strategy 1b. Partnership Learning Collaborative
The North Carolina Public Health Association and North Carolina Institute for Public Health should develop a learning collaborative, or support existing collaboratives, focused on opportunities for those in local public health to gain knowledge and share best practices for engaging in the activities listed in Strategy 1a.

Who is responsible?

- Local health departments
- North Carolina Public Health Association
- North Carolina Institute for Public Health

Modernizing Public Health Data Use and Systems

The collection, access, and use of public health data needs modernization and investment to enable improved health outcomes. Public health must thoughtfully address what information is collected; how it is collected, analyzed, interpreted, and shared; and develop the capacity for efficient data collection, analysis, and dissemination. To fully address the root causes of poor health outcomes, public health must integrate relevant datasets on topics such as housing, education, and transportation.

Within and interconnected with these topics are issues related to workforce capacity and competencies, using data to make decisions and talk about the issues affecting the health of communities, sharing data with communities, cross-agency data connectivity and partnerships, and developing necessary technology and tools for collecting and sharing data. The technology and methodologies to address these issues are available, but to achieve data modernization public health must enhance workforce and infrastructure capacity and build connectivity between data systems and across partners.

Streamlined and accessible public health data systems will allow users to share and access data more easily, reducing inefficiencies and redundancies in staff time and resources. A modernized public health data system will also enhance a health department's ability to concentrate on using data to track community health outcomes, monitor agency performance, identify emerging threats to health, and act quickly. Enhanced staff knowledge of data use and communication will increase their ability to:

- help community members understand the factors that can impact their health and empower them to engage in healthy behaviors,
- develop strategies to improve community health, and
- advocate for changes to policies.

There are also significant strengths to build upon in North Carolina. Data systems and infrastructure could be (and are being) leveraged to strengthen local public health capacity in data collection, analysis, and dissemination.

> "This nation has failed to invest in the core capabilities of public health data, data analytics, predictive data analysis. We really need to make that investment."
>
> *- Robert Redfield, former CDC Director (2018-2021)*
> *A Conversation with Robert Redfield. Council on Foreign Affairs.*

RECOMMENDATION 2

Transform local public health's capacity to collect, share, use, and communicate data to drive continuous improvement in programs, agencies, and whole communities

Strategy 2a. Drive Improvement and Strengthen Connectivity The North Carolina Department of Health and Human Services Division of Public Health should strengthen the public health data ecosystem in North Carolina by supporting and investing in the creation of a strong statewide structure to prioritize, advance, and create collective accountability for improvement opportunities, with a shared set of values, across public health and other relevant data partners.

Strategy 2b. Identify Funding Needs for Data Modernization The statewide structure recommended in Strategy 2a should identify funding needs and potential funding sources, and a plan to secure resources for continued public health data use and system modernization, that are outside of the capacity of the Division of Public Health to support.

Strategy 2c. Evolve Health Department Data Capabilities Local health departments should evolve internal and external capabilities in data collection, sharing, and use by pursuing trainings for staff, developing capabilities around data sharing with community partners, creating a culture of learning, and adopting a shared set of values around intentional data development, use, sharing, and communication.

Strategy 2d. Support for Data Capacity and Modernization North Carolina public health philanthropies and nonprofit organizations, as well as partners in academia, health care, and the private sector should support developing work in local public health data capabilities by collectively investing in or collaborating on prioritized improvements and innovations related to workforce capacity, skill development, technical assistance, system improvement, and filling gaps in available data.

Who is responsible?

- North Carolina Department of Health and Human Services Division of Public Health
- Statewide structure recommended in Strategy 2a
- Local health departments
- Public health philanthropies
- Public health non-profits

Strengthening Local Public Health Communication

Effective public health communications strategies often have one or more primary goals: to increase population awareness about specific health issues or solutions; to describe and encourage healthy behaviors (and/or discourage risky behaviors); and to shift social norms about health issues to encourage healthier behaviors or reduce stigma about health conditions.[11] Successful public health communications can improve the health of the whole population by achieving these goals.

Trust is key to effective public health communications, and yet a survey by the Robert Wood Johnson Foundation found that nearly a quarter of adults (23%) nationally think the information provided by their local health department about the health of people in their communities is unreliable.[12] Only 44% of adults said they have “a great deal” or “quite a lot” of trust in the recommendations made by local health departments to improve health.[12] To address concerns about community trust, public health communicators often partner with established and respected community members who can successfully convey key information about health behaviors, risk factors, and other public health messages in ways that demonstrate understanding of and experience with the many community- and individual-specific factors that impact health.

The development of these relationships is both an opportunity and a challenge for local health departments. To implement effective communications strategies, local health departments must have capacity to develop relationships with these trusted community messengers, work with them to craft compelling and effective messages, evaluate their impact, and maintain and evolve their relationships over time.[13] Yet, many local health departments have few staff with primary roles specific to communications. Due to resource constraints, staff with communications responsibilities often have varied amounts of training and skills in public health communications to implement strategies for both crisis communications and ongoing health promotion needs. Frequently, the primary roles of these staff members are not in communications positions.

> **“The ability to communicate clearly, concisely, and persuasively to the public is both a challenge and a fundamental responsibility of health departments.”**
>
> *– National Association of City and County Health Officials. Communication and Marketing: A Foundational Capability for Local Health Departments. November 2015.*

RECOMMENDATION 3

Strengthen capabilities and build trust to communicate effectively with diverse community members, media, and policymakers

Strategy 3a. Build a Community of Practice
Through the North Carolina Public Health Workforce Regional Hubs, the North Carolina Division of Public Health should work to build a Public Health Communication Community of Practice with representatives of local and Tribal health departments.

Strategy 3b. Create a Public Health Communication Certificate Program The North Carolina Public Health Association, Division of Public Health, and academic programs at the university and community college level should collaborate to create a training certificate program in governmental public health communications to build communication capabilities at the regional and/or local level and to promote best practices in communications across the state.

Strategy 3c. Raise Public Awareness and Knowledge of Public Health Issues, Services, and Strategies
North Carolina health- and public-health-related philanthropies should invest in the development of a robust strategic communications framework that clearly identifies messengers, messages, and strategies for increasing public and legislative knowledge of public health’s roles, and opportunities to champion development in local public health.

Who is responsible?

- North Carolina Department of Health and Human Services Division of Public Health
- North Carolina Public Health Association
- Public health academic programs at the university and community college level
- North Carolina health- and public-health-related philanthropies

Sustaining and Supporting the Local Public Health Workforce

Recruitment and retention of the current local public health workforce will be the most fundamental determining factor in achieving a strong future for local public health departments. While careers in public health offer meaning, purpose, and growth, a confluence of factors contributes to strain on the public health workforce, including the wide range of responsibilities and required expertise, the need for training and skills related to a broad variety of health issues, a competitive workforce environment, and ongoing mental health needs and burnout in local public health exacerbated by the COVID-19 pandemic. The pandemic has also contributed to increasing politicization of public health policies, polarization about the roles and responsibilities of public health, and mistrust in governmental authority, all of which have led to a particularly difficult environment for local public health workers.

Yet, even prior to the pandemic, public health was a sector with immense workforce challenges. Analysis by the de Beaumont Foundation and the Public Health National Center for Innovations found that the United States needs 80,000 more public health workers in state and local health departments just to fulfill minimum community services.[14] From 2009 to 2019, the public health workforce in North Carolina saw a decrease of 18% in the staffing-per-resident ratio.[15] Such a large shortfall makes the results of the 2021 Public Health Workforce Interests and Needs Survey (PH WINS) alarming. PH WINS found that 32% of state and local public health workers are considering leaving their jobs in the next year and 44% say they are planning to leave in the next five years. Those with intentions to leave cited inadequate pay (49%), work overload/burnout (41%), lack of opportunities for advancement (40%), stress (37%), and organizational climate/culture (37%) as their main reasons.[5]

The 2022 PH WINS found that more than half of US public health employees report at least one symptom of post-traumatic stress disorder, and one-quarter reported three or more symptoms. In addition, more than 40% of public health executives reported feeling “bullied, threatened, or harassed by individuals outside of the health department” during the pandemic. Nearly 60% of these executives reported feeling that their public health expertise had been undermined or challenged by people outside of the health department.[5]

The challenges of the pandemic, combined with the already existing challenges of low wages and worker responsibilities spread thin, have combined to create an urgent need for additional support of the local public health workforce.

> “The ability of a public health agency to possess infrastructure of ‘foundational capabilities’ and provide ‘essential services’ relies on the skill of the people who comprise the workforce.”
>
> *- North Carolina Department of Health and Human Services, NC Governmental Public Health: Workforce and Infrastructure Improvement in Action, May 2022.*

RECOMMENDATION 4

Bolster local public health’s capacity to promote community health and well-being by sustaining and supporting the current workforce

Strategy 4a. Develop Statewide Accountability for the Public Health Workforce The North Carolina Department of Health and Human Services, North Carolina Public Health Workforce Regional Hubs, and other relevant organizations should develop a permanent statewide organizational structure to be accountable to the needs and challenges of North Carolina’s governmental public health workforce.

Strategy 4b. Value the Public Health Workforce The North Carolina Association of County Commissioners, the North Carolina Association of County Managers, and the UNC School of Government should implement more comprehensive education for county commissioners and managers about the role of local public health and issues affecting burnout, retention, and recruitment for local governmental public health employees.

Strategy 4c. Support the Development of the Public Health Workforce Local health departments should pursue available staff trainings to develop competencies, develop opportunities to supplement tuition fees for professional development, and review staff development and hiring practices.

Strategy 4d. Support Updates to Job Classifications The North Carolina General Assembly should support the development of the local governmental public health workforce by increasing funding for the Office of State Human Resources to provide additional support and resources dedicated to the ongoing work to review and update job classification specifications and salary grades in public health.

Strategy 4e. Address Threats and Harassment The UNC School of Government, North Carolina Institute for Public Health, North Carolina Public Health Association, and North Carolina Association of Local Health Directors should work together to address threats and harassment of members of the local public health workforce by raising awareness of current laws that address threats and harassment and developing support tools.

Who is responsible?

- North Carolina Department of Health and Human Services Division of Public Health
- Association of County Commissioners
- Association of County Managers
- University of North Carolina at Chapel Hill School of Government
- Local health departments
- North Carolina General Assembly
- North Carolina Institute for Public Health
- North Carolina Public Health Association
- North Carolina Association of Local Health Directors

Building the Future Local Public Health Workforce

The pandemic has seen an increased interest in earning a degree in public health, with a 23% increase in applications from March 2019 to 2020, then another 40% increase from 2020 to 2021.[16] Capitalizing on this increased interest, and attracting new workers into local governmental public health, will require new efforts to create attractive opportunities for the future workforce.

While new public health graduates report interest in working in local public health and identify positive aspects of the sector, such as the opportunity to do fulfilling and meaningful work, they also report barriers to working in local public health. These barriers include perceptions of local public health departments as bureaucratic and lacking innovation, as well as a lack of resources that would impact employees' earning potential and career development.[17]

The task force identified the need for intentional and dedicated development of a diverse workforce within local public health. Public health departments that employ a racially, ethnically, and culturally diverse workforce can bring different perspectives and experiences to their work and are more likely to provide culturally relevant programs and services. Training in principles of health equity and the application of these principles to the practice of public health also enhances the health department's ability to identify and engage in policy and service development to improve health outcomes.[18]

> "Public health agencies that employ a diverse workforce are better positioned to implement targeted approaches in communities where they are needed, create systems to support those needs, and supply a greater variety of effective solutions to address health disparities."
>
> *Coronado, F, et. al. Understanding the Dynamics of Diversity in the Public Health Workforce. Journal of Public Health Management and Practice: July/August 2020 - Volume 26 - Issue 4 - p 389-392*

RECOMMENDATION 5

Build local public health's future capacity to serve the community by growing a diverse and skilled workforce

Strategy 5a. Develop A Network of Public Health Programs The Gillings School of Global Public Health at the University of North Carolina at Chapel Hill should convene a Network for North Carolina Programs of Public Health to: (1) support academic partnerships with local public health agencies; (2) identify opportunities for collaboration with other academic programs that train professionals in emerging fields relevant to local public health; and (3) advocate for tuition payment or loan forgiveness for those who commit to serving in local public health.

Strategy 5b. Funded Internship Opportunities North Carolina Public Health philanthropies, the North Carolina Association of Local Health Directors, the North Carolina Department of Health and Human Services, and other relevant stakeholders should work together to support sustainably funded internship opportunities to develop a public health workforce that: (1) is racially and ethnically representative of communities served; (2) serves rural communities; and (3) includes professions that are less represented in local public health (e.g., data science, communications).

Strategy 5c. Raise Awareness of Public Health Careers The North Carolina Public Health Association should work with local health departments and community partners to identify opportunities to introduce careers in local public health to students at middle and high school levels to begin developing the workforce pipeline.

Strategy 5d. Support New to Public Health Training The Division of Public Health should support training for new public health professionals to improve understanding of roles, strengths, and challenges of local public health (e.g., New to Public Health Program through University of Wisconsin-Madison) and encourage local health departments to enroll staff new to public health for participation.

Who is responsible?

- University of North Carolina at Chapel Hill Gillings School of Global Public Health
- Academic degree and certificate programs in public health and related fields
- Public health philanthropies
- North Carolina Association of Local Health Directors
- North Carolina Department of Health and Human Services Division of Public Health
- North Carolina Public Health Association

Strengthening Structure and Innovation in Local Public Health

Local public health departments face constant change because they are rooted deeply in the communities they serve. They must adjust to demographic shifts in the local population, gains and losses in the local economy, changes in political power, and emerging research in public health that illuminates new paths forward. These realities demand that successful local health departments become adept at implementing innovative strategies to improve the health of our communities in collaboration with many other important partners. Several foundational elements of public health—accreditation standards, governance models, regional resource sharing, and funding mechanisms—are necessary structures to drive innovation and improve the health and well-being of entire populations. When these foundations are strong, health departments have the necessary structure, flexibility, resources, and resilience to develop new approaches to accomplishing their goals.

North Carolina was an early adopter of accreditation for local health departments and in 2005 became the first state in the nation to require accreditation at the local level.[19] Accreditation establishes uniform standards across all health departments and provides assurance to the public that a local agency meets baseline standards and competencies in service provision, oversight, and administrative processes. It also strengthens accountability and credibility and aims to promote quality improvement within local health departments.[20]

The leadership team at each local health department is responsible for achieving accreditation, and is accountable to a local governing board that sets local rules and agency policy, appoints the local health director (often in consultation with the County Board of Commissioners), and that serves as the adjudicatory body for public health in that community.[21] At their best, and no matter their form, the governing authority of a local health department provides the leadership team and staff with support, guidance, and accountability. Effective governance in local health departments is a key element of innovation, providing strategic direction and support to the agency as a whole and advocating for resources to address priority issues.

Lastly, public health focuses on population-level initiatives such as policy and system change, infrastructure improvements, and community education, while health care focuses on clinical services and individual health. However, in practice there are many public health departments that provide both population-level and individual health services. This stems in part from public health's obligation under North Carolina General Statute § 130A-1.1 to "link[] people to needed personal health care services and ensur[e] the provision of health care when otherwise unavailable."[22] Because of the need to fill in these health care service gaps, health departments —particularly in rural areas—face dilemmas and obstacles to focusing on the core mission of public health (i.e., to address the health and well-being of whole communities). In places where access to health care is limited, health departments serve as vital health care safety net providers, and the payments they receive for providing health care services are an essential resource for their limited budgets.

RECOMMENDATION 6

Pursue innovative strategies to address broader population health and meet the organizational, funding, and workforce challenges that local governmental public health currently faces

Strategy 6a. Support Accreditation Flexibility and Modernize Standards The North Carolina Local Health Department Accreditation (NCLHDA) Board should support health departments as they pursue best available options to modernize their workforce, data capabilities, partnership development, and activities to address broader population health in communities by (1) exploring options to incorporate reciprocity for accreditation through the Public Health Accreditation Board (PHAB) in lieu of accreditation through NCLHDA and (2) restructuring the rules for accreditation to ensure the process is reflective of evolving standards for the new 10 Essential Public Health Services and/or the Foundational Public Health Capabilities.

Strategy 6b. Evaluate Innovative Models and Best Practices The North Carolina Institute for Public Health should (1) collaborate with the UNC School of Government, and/or identify other organizations as needed, to analyze innovative models and best practices for local governmental public health governance structures and partnership models and provide recommendations to guide future discussions around improving population health of North Carolinians and (2) collaborate with the North Carolina Association of Local Health Directors, and/or other organizations as needed, to evaluate and provide a report on overarching themes and lessons learned from health departments that have partnered with health care entities in their communities to shift health service provision from health department responsibility.

Strategy 6c. Support Opportunities for Innovation The North Carolina General Assembly should support innovation and efforts to address population health in local public health by (1) allocating significant funds to sustain existing and developing regional local public health capabilities in workforce, data, and communications and incentivize additional regional collaboration to realize opportunities for efficiencies across local public health jurisdictions and (2) supporting the development of rural safety net providers by filling the Medicaid coverage gap.

Who is responsible?

- North Carolina Local Health Department Accreditation Board
- North Carolina Institute for Public Health
- North Carolina General Assembly

Sustaining Local Public Health Through Sufficient and Reliable Funding

Current funding for local public health is inadequate, unreliable, fragmented, decreasing, and marked by periodic injections of resources for emergency response that subsequently dissipate. Current funding is also heavily directed toward service provision rather than building strong and sustainable organizations, leading to chronic neglect of foundational capabilities, which are critically important to improving health.

For years, per capita funding — that is, dollars per person — for local public health has been decreasing at both the state and local levels as the population has increased.[B,4,15] During times of crisis, federal and state funds are temporarily injected into the system to fight a specific disease or challenge. Yet, the fundamental structures and capacity of local health departments have been neglected, making these funding increases during public health emergencies less effective than they could be. Even large amounts of "crisis funding" cannot mitigate these challenges as there is limited ability to stand up the technology and workforce to effectively handle the crisis.

To fulfill the task force's urgent and inspiring vision for the future of local public health, the strategies laid out in this report — building on partnerships, modernizing data capabilities, improving public health communications, retaining and building the workforce, and implementing innovative solutions with clear accountability — must be realized through strong leadership backed by sufficient and well-stewarded resources. Public health leaders commit the energy and passion to take these bold actions and work toward healthier communities for everyone; yet this work will take time and a significant increase in financial and human resources. To that end, local public health will require sustained funding and accountability for its vital role in improving the health of North Carolinians.

"We are so limited in what we can do and purchase [with grants] and none of it is sustainable. All of the [COVID-19] response money is structured this way and while it helps for maybe a fiscal year or two, there is nothing longer term that can truly help us solve any problems."

- Local Health Director in North Carolina

RECOMMENDATION 7

Ensure governmental local public health is sufficiently and consistently funded to carry out Foundational Public Health Services and meet the unique needs of communities across the state

Strategy 7a. Structure for Determining Funding Needs The North Carolina General Assembly, North Carolina public health philanthropies, and leaders from relevant sectors most affected by the success of local governmental public health should actively collaborate in the creation of a public-private commission to provide leadership in the development of a per capita and baseline cost to counties and federally recognized Tribes to carry out Foundational Public Health Services and other public health activities required in state statute in North Carolina. In the interim, the General Assembly should raise annual state appropriations for public health funding to a minimum of the national average of $116 per capita.

Strategy 7b. Predictable Funding for Local Public Health The North Carolina General Assembly should ensure predictable and recurring funding at the level recommended by the Commission named in Strategy 7a for local governmental public health to carry out Foundational Public Health Services and any other public health activities required in state statute on a per capita basis with an adequate baseline level for all counties and federally recognized Tribes.

Strategy 7c. Local Funding to Support Community-Specific Needs The North Carolina Association of County Commissioners should identify opportunities for technical assistance to county commissioners in maintaining ongoing funding of local public health beyond what is recommended for state-level funding of Foundational Public Health Services.

Strategy 7d. Collaborative Funding for Innovation North Carolina public health philanthropies—in partnership with state and local health departments, public health nonprofits, academia, health care systems, business leaders, and others—should develop a collaborative process and ensure a consistent statewide strategy that aligns with existing federal, state, Tribal, and local funding strategies and helps local public health test innovative programs, structures, and operations.

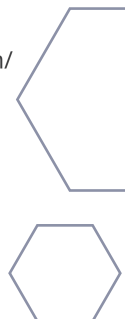
Who is responsible?

- North Carolina General Assembly
- North Carolina public health philanthropies
- North Carolina Association of County Commissioners
- Health philanthropies and innovation funders

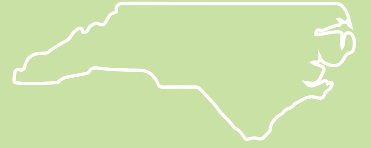
B Analysis by the News & Observer indicated that, in most counties, the change in public health spending decreased dramatically at the same time the county population increased.

References

1. Guilford County. April is Public Health Month (Health Information). Accessed August 24, 2022. https://www.guilfordcountync.gov/Home/Components/News/News/102/16?arch=1
2. Morse S. Silent Victories: The History and Practice of Public Health in Twentieth-Century America. *Emerg Infect Dis*. Published online January 1, 2007. Accessed August 24, 2022. https://www.academia.edu/50472549/Silent_Victories_The_History_and_Practice_of_Public_Health_in_Twentieth_Century_America
3. America's Health Rankings. Explore Public Health Funding in North Carolina - 2021 Annual Report. Published 2022. Accessed August 24, 2022. https://www.americashealthrankings.org/explore/annual/measure/PH_funding/state/NC?edition-year=2021
4. Crumpler R. Health spending shortage in NC affects coronavirus response. Raleigh News & Observer. Published January 22, 2021. Accessed August 24, 2022. https://www.newsobserver.com/article248029345.html
5. de Beaumont Foundation. Rising Stress and Burnout in Public Health. Published online March 2022. https://debeaumont.org/wp-content/uploads/dlm_uploads/2022/03/Stress-and-Burnout-Brief_final.pdf
6. Cohn S. North Carolina is No. 1 in America's Top States for Business 2022. CNBC. Published July 13, 2022. Accessed August 24, 2022. https://www.cnbc.com/2022/07/13/north-carolina-is-no-1-in-americas-top-states-for-business.html
7. America's Health Rankings. Explore Health Outcomes in North Carolina. 2021 Annual Report. Published 2022. Accessed August 24, 2022. https://www.americashealthrankings.org/explore/annual/measure/Outcomes/state/NC?edition-year=2021
8. Grazer T, Saunders S. Presentation - Collective Approach to Social Determinants of Health. Accessed August 24, 2022. https://www.dph.ncdhhs.gov/shd/presentations/2017/workshops/CollectiveApproachtoSocialDetofHealth2017-SHDConf.pdf
9. Collective Impact Forum. What Is Collective Impact. Accessed August 28, 2022. https://collectiveimpactforum.org/what-is-collective-impact/
10. National Council of Nonprofits. Collective Impact. Accessed August 28, 2022. https://www.councilofnonprofits.org/tools-resources/collective-impact
11. Tulane University School of Public Health and Tropical Medicine. *10 Strategies for Effective Health Communication*. September 25, 2020. Accessed August 29, 2022. https://publichealth.tulane.edu/blog/health-communication-effective-strategies/
12. Robert Wood Johnson Foundation. *The Public's Perspective on the United States Public Health System*. May 2021. Accessed August 29, 2022. https://www.rwjf.org/en/library/research/2021/05/the-publics-perspective-on-the-united-states-public-health-system.html
13. Overton D, SA Ramkeesoon, K Kirkpatrick, A Byron, ES Pak. *Lessons from the COVID-19 Crisis on Executing Communications and Engagement at the Community Level During a Health Crisis*. National Academies of Sciences, Engineering, and Medicine. December 2021. https://www.nationalacademies.org/news/2021/12/lessons-from-covid-19-on-executing-communications-and-engagement-at-the-community-level-during-a-health-crisis
14. de Beaumont Foundation. Staffing Up: Investing in the Public Health Workforce. Accessed August 29, 2022. https://debeaumont.org/staffing-up/
15. Weber L, Ungar L, Smith MR, Recht H, Barry-Jester AM. *Hollowed-Out Public Health System Faces More Cuts Amid Virus*. Kaiser Health News. July 1, 2020. https://khn.org/news/us-public-health-system-underfunded-under-threat-faces-more-cuts-amid-covid-pandemic/
16. Warnick A. *Interest in public health degrees jumps in wake of pandemic: Applications rise*. The Nation's Health. 2021;51(6):1-12. https://www.thenationshealth.org/content/51/6/1.2
17. Locke R, Mcginty M, Guerrero Ramirez G, Sellers K. Attracting new talent to the governmental public health workforce: Strategies for improved recruitment of public health graduates. *J Public Health Manag Pract*. 2022;28(1):E235-E243. doi:10.1097/PHH.0000000000001336
18. Coronado F, Beck AJ, Shah G, Young JL, Sellers K, Leider JP. Understanding the dynamics of diversity in the public health workforce. *J Public Health Manag Pract*. 2020;26(4):389-392. doi:10.1097/PHH.0000000000001075
19. North Carolina Local Health Department Accreditation Board. About the NCLHDA Program. Accessed August 28, 2022. https://nclhdaccreditation.unc.edu/about-nclhda/
20. North Carolina Local Health Department Accreditation. NCLHDA Accreditation Process – Operational Guidelines. Published online November 2021. https://nclhdaccreditation.unc.edu/wp-content/uploads/sites/733/2021/12/NCLHDA-Accreditation-Process-Operational-Guidelines_1.1.22.pdf
21. UNC School of Government. Key Players in NC Local Public Health: Local Boards of Health. Accessed August 28, 2022. https://www.sog.unc.edu/resources/faq-collections/key-players-nc-local-public-health-local-boards-health
22. North Carolina General Assembly. *§ 130A-1.1.* Mission and Essential Services. Accessed August 28, 2022. https://www.ncleg.gov/EnactedLegislation/Statutes/PDF/BySection/Chapter_130A/GS_130A-1.1.pdf



NCIOM
North Carolina Institute of Medicine



CHAPTER 1

WHAT IS PUBLIC HEALTH?

While the field of public health has received much attention throughout the COVID-19 pandemic, the scope of public health's responsibilities and activities ranges far beyond the tasks that are most visible to the public. The accomplishments of public health—sometimes called "quiet miracles" or "silent victories" because public health is both hugely influential and easily taken for granted—add years to our lives, keep us safe, and enhance our well-being and enjoyment of life.[1,2] We are all beneficiaries of the work of public health every day, when we drink clean water or enjoy a meal in a hygienic restaurant; take actions to prevent serious injuries, like wearing a helmet or seat belt; breathe pollution-free air; or take a pleasant stroll down a well-lit street on a sidewalk in our community.

While health *care* focuses on medical treatment for illness and the clinical aspects of health, particularly once we are sick, *public health* works to keep people and communities healthy by identifying and addressing problems in our environment, social dynamics, and economic systems that influence people's health and their health behaviors. Smoking, for example, is a health behavior with serious consequences. To address this, a health care provider would counsel a patient who uses tobacco on the dangers of smoking and provide support and education for quitting as well as medical care for lung damage or other harms caused by smoking. The work of public health is complementary to health care with a focus on healthful change in communities, infrastructures, regulations, and systems. For example, public health provides warnings on tobacco products and billboards educating the public about harm due to smoking; helps pass rules creating smoke-free environments and prohibiting children's access to tobacco; and staffs community "quit lines" available to the public.

Public health works in partnership with others on the federal, state, and local levels to ensure health and safety for everyone by:

- Informing policies that promote or impact health,
- Ensuring safe air, water, food, and sanitation,
- Identifying barriers to health that people may face due to where they live or aspects of their identity,
- Implementing programs to address health issues and non-medical social needs,
- Educating the public about issues that impact our health,
- Collecting and sharing important information and data about the health and well-being of populations,
- Assessing what health issues are affecting populations and developing plans to address them,
- Developing or participating in cross-sector partnerships to promote health and well-being, and
- Providing clinical health services to people who do not have access to those services elsewhere.

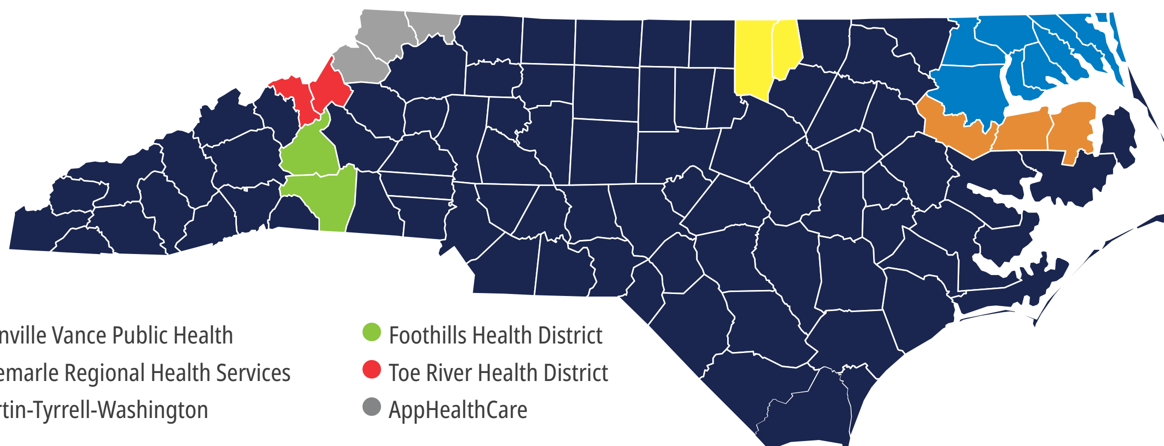
Every community in North Carolina is served by a local governmental health department or health district authority responsible for preventing the spread of disease, undertaking activities to improve health in their communities, and protecting the community from harm.[A] Some concrete examples of how local public health departments across the state achieve these goals include:

- Provision of free testing and treatment for sexually transmitted infections.[3,4]
- Inspection of restaurants, water sources, septic systems, and other locations to ensure they are safe and sanitary.[5]
- Collection of data every three to four years to learn about the most pressing health issues in the community and then development of a plan of action.[6]
- Partnerships with community-based organizations to address opioid use disorder through a variety of strategies.[7]
- Support for community residents, businesses, schools, and health care providers throughout the COVID-19 pandemic through expert advice, testing, and vaccination services.[8]

Local Public Health in North Carolina

North Carolina has a decentralized local governmental public health system with 86 local health departments serving 100 counties, each governed locally rather than at the state level. There are six district health departments throughout the state that serve two or more counties (**see Figure 1**). Each health department is served by a health director and their staff and is responsible for essential public health services codified in state statute (**see Figure 2**). The Eastern Band of Cherokee Indians has responsibility for public health services within the Qualla Boundary

Figure 1. District Health Departments in North Carolina



Source: UNC School of Government. Interactive Maps – Organization and Governance of NC Human Services Agencies. https://humanservices.sog.unc.edu/visualization-all/

[A] *While some counties may be served by a single county health department and others served by a multi-county district or authority, this report will refer to all as "health departments."*

Figure 2. Essential Services that Local Public Health Must Ensure Under North Carolina State Law

1. Monitoring health status to identify community health problems.
2. Diagnosing and investigating health hazards in the community.
3. Informing, educating, and empowering people about health issues.
4. Mobilizing community partnerships to identify and solve health problems.
5. Developing policies and plans that support individual and community health efforts.
6. Enforcing laws and regulations that protect health and ensure safety.
7. Linking people to needed personal health care services and ensuring the provision of health care when otherwise unavailable.
8. Ensuring a competent public health workforce and personal health care workforce.
9. Evaluating effectiveness, accessibility, and quality of personal and population-based health services.
10. Conducting research.

Source: NC § 130A-1.1. Mission and essential services. https://www.ncleg.gov/EnactedLegislation/Statutes/PDF/BySection/Chapter_130A/GS_130A-1.1.pdf

in Western North Carolina and works with health departments serving counties that border Tribal land. In addition, health departments often collaborate for regional initiatives to enhance and expand their reach, while also maximizing resources.

The state Division of Public Health within the North Carolina Department of Health and Human Services is the state-level health department; however, legal responsibility and authority for governance, budget, public health orders, and hiring local health officials lies with local health departments.[9] The Division of Public Health has several branches, sections, units, and programs that play a vital role in efforts to prevent disease and promote health by collaborating with local health departments, hospitals, community health centers, and community-based organizations. These include:[10,11]

- the North Carolina Vital Records Unit registers all births, deaths, marriages, and divorces in the state;
- the State Center for Health Statistics collects health-related data, conducts research, and produces reports;
- the Office of Minority Health and Health Disparities works to understand and remedy gaps in health outcomes between racial/ethnic minorities and the general population;
- the Chronic Disease and Injury Prevention Branch works with partners to decrease death and disability through provision of services, education, and policy change; and
- the Women's and Children's Health Section assures, promotes, and protects the health and development of families.

Local health departments fund their work from a variety of sources, such as federal, state, and local appropriations; health insurance payments for services provided; grants; fees; and donations. Of these sources, local health departments rely heavily on local, state, and federal funds, which vary widely across the state.

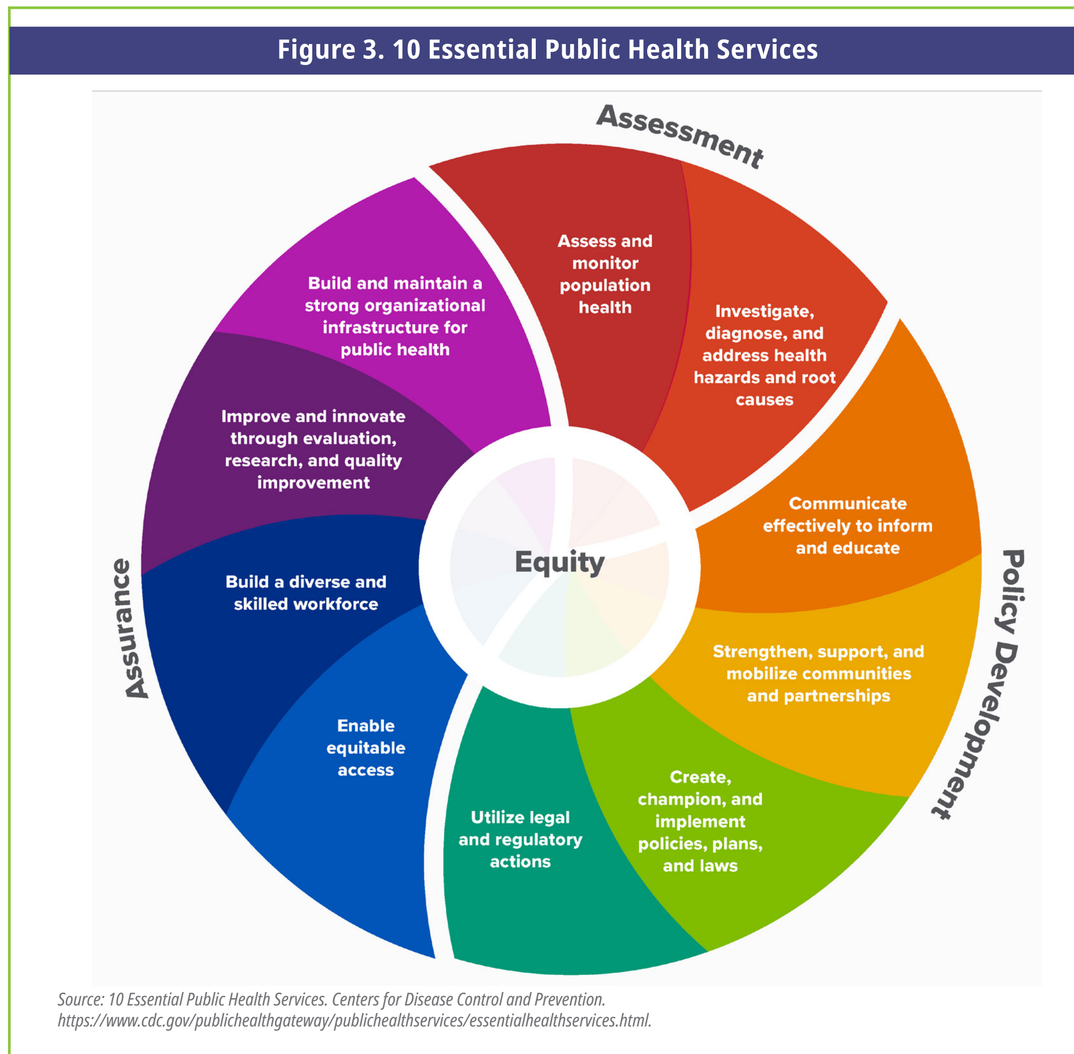
- Pre-pandemic FY2019 total expenditures for local health departments ranged from $839,000 (for a health department serving a population of around 20,000) to $76.8 million (for a health department serving a population of nearly 1.1 million).
- The percent of total expenditures for local public health services funded by county government FY2019 appropriations varies widely across the state, ranging from county appropriations constituting just 7% of a health department's total funding up to 71% of the total.
- In FY 2019-20, the North Carolina Division of Public Health had oversight of a total of $143.2 million in funds to local health departments—$93.3 million in federal funds and $49.9 million from state appropriations, most of which were earmarked for specific activities with time limits and strict parameters (e.g., prenatal care, HIV prevention).

Along with local and state health departments, public health in North Carolina is served by a variety of essential partners, such as other governmental agencies, non profits, community organizations, faith institutions, businesses, schools and academic institutions, and philanthropies. The focus of this report is on the future of local governmental public health and the strategies for reaching that future.

Public Health 3.0, 10 Essential Services, and Foundational Public Health Services

The work of local governmental public health has evolved over time. Starting in the late nineteenth century, public health focused on establishing institutions and infrastructure to improve sanitation, food and water safety, and how we understand disease.[12] This period, now nicknamed Public Health 1.0, was marked by the creation of health departments, public health statutes, sanitation systems and processes, and great improvements in life expectancy. The role of health departments in providing medical care to the uninsured also grew, to the point that a 1988 national Institute of Medicine report suggested that public health authorities were overburdened as safety-net clinical service providers, limiting their ability to focus on population-level issues and to effectively respond to increases in rates of chronic disease (such as diabetes) and new threats (such as HIV/AIDS). A stronger set of standards and professionalization of the field of public health emerged, known now as Public Health 2.0, and the first version of the 10 Essential Public Health Services was developed, adapted, and adopted widely (such as in North Carolina statute, **see Figure 2**).

Figure 3. 10 Essential Public Health Services

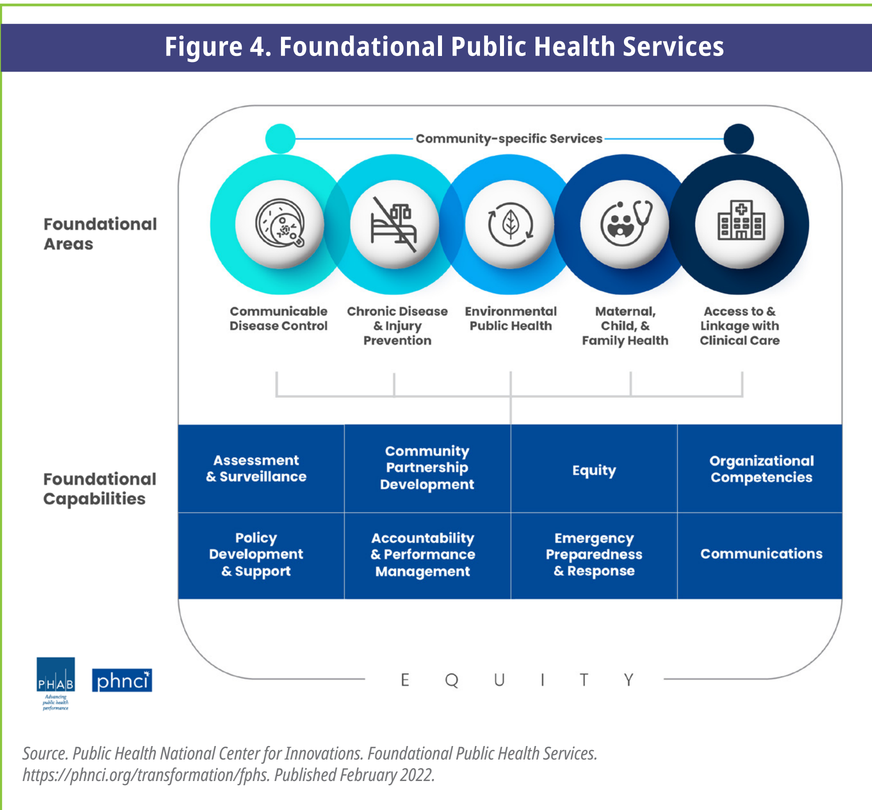


Source: 10 Essential Public Health Services. Centers for Disease Control and Prevention. https://www.cdc.gov/publichealthgateway/publichealthservices/essentialhealthservices.html.

Public Health 3.0, first proposed in 2016, emphasizes the integration of traditional public health services with initiatives to improve features of our communities and lives that drive health outcomes (i.e., social and economic factors, physical environment, and health behaviors). This model of public health calls on local public health to engage in cross-sector partnerships as a "Chief Health Strategist" to address these root causes of health outcomes. Subsequently, the 10 Essential Public Health Services framework was revised in 2020, to identify the activities all communities should engage in to carry out the mission of public health (**see Figure 3**).[13] The 2020 update to the framework places equity at the center of public health work to emphasize the responsibility of local public health to ensure all community members have the opportunity to live healthy lives and the role of these essential services in providing that opportunity.

The concept of Foundational Public Health Services (FPHS) is a recent framework that describes the capabilities that local public health departments need to possess to carry out the 10 Essential Services (**see Figure 4**). The FPHS identifies the "skills, programs, and activities that must be available in state and local health departments everywhere for the health system to work anywhere."[14] Like the 10 Essential Services, the FPHS framework was revised in 2022 with equity added as a foundational capability.

Rates of certain illnesses, vulnerability to health problems, and life expectancy are not equal across all areas of our state, nor across all incomes, ages, physical abilities, races, and ethnicities. These differences, sometimes called health disparities or health inequities, are affected by many aspects of our society and lives. Research estimates that social, economic, and environmental factors make up the largest proportion of modifiable health factors.[15] The addition of equity to the 10 Essential Public Health Services and FPHS model reflects an intentional focus on understanding the causes of these significant and persistent differences in health outcomes. Persistent issues with poor outcomes exist across a range of health issues for American Indian, Black, and Hispanic populations, people living in rural areas, people living in areas with limited resources and low economic stability, people with disabilities, and older adults. In serving the health of the entire population, public health recognizes its fundamental role in eliminating the causes of these disparities by gathering data, providing services where they are needed, creating action plans with community members and partners, and disseminating policies that address root causes of inequities.



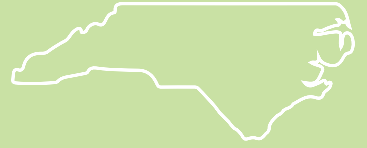
Source. Public Health National Center for Innovations. Foundational Public Health Services. https://phnci.org/transformation/fphs. Published February 2022.

The remainder of this report outlines the status and future vision for the workforce, structures, and funding supporting the work of local public health in North Carolina. The North Carolina Institute of Medicine Task Force on the Future of Local Public Health has diligently considered these topics and presents recommendations and strategies to modernize and transform the ability of local public health to ensure everyone has a chance to live a healthy life.

References

1. Guilford County. April is Public Health Month (Health Information). Accessed August 24, 2022. https://www.guilfordcountync.gov/Home/Components/News/News/102/16?arch=1
2. Morse S. Silent Victories: The History and Practice of Public Health in Twentieth-Century America. Emerg Infect Dis. Published online January 1, 2007. Accessed August 24, 2022. https://www.academia.edu/50472549/Silent_Victories_The_History_and_Practice_of_Public_Health_in_Twentieth_Century_America
3. Samoff E, Mobley V, Hudgins M, et al. HIV Outbreak Control With Effective Access to Care and Harm Reduction in North Carolina, 2017–2018. American Journal of Public Health. 2020;110(3):394. doi:10.2105/AJPH.2019.305490
4. G.S. 130A-144. Accessed August 24, 2022. https://www.ncleg.gov/EnactedLegislation/Statutes/HTML/BySection/Chapter_130a/GS_130a-144.html
5. Chapter 130A. Accessed September 1, 2022. https://www.ncleg.net/enactedlegislation/statutes/html/bychapter/chapter_130a.html
6. North Carolina State Center for Health Statistics. Local Data Analysis and Support - Community Health Assessment, CHIP, and SOTCH. Accessed August 25, 2022. https://schs.dph.ncdhhs.gov/units/ldas/cha.htm
7. North Carolina Department of Health and Human Services. North Carolina Essential Actions to Address the Opioid Epidemic: A Local Health Department's Guide.
8. Personal Communication with Ashley Stoop, Health Director, Albemarle Regional Health Services.
9. North Carolina Department of Health and Human Services D of PH. NC Governmental Public Health: Workforce and Infrastructure Improvement in Action.; 2022. Accessed August 24, 2022. https://www.ncdhhs.gov/media/15401/download?attachment
10. North Carolina Department of Health and Human Services D of PH. Mission and Core Functions. Accessed August 25, 2022. https://www.dph.ncdhhs.gov/mission.htm
11. North Carolina Department of Health and Human Services D of PH. About Us. Accessed August 25, 2022. https://www.dph.ncdhhs.gov/aboutus.htm
12. Office of the Assistant Secretary for Health, US Department of Health et al. Public Health 3.0: A Call to Action to Create a 21st Century Public Health Infrastructure.
13. Centers for Disease Control and Prevention. 10 Essential Public Health Services - CSTLTS. Accessed August 25, 2022. https://www.cdc.gov/publichealthgateway/publichealthservices/essentialhealthservices.html
14. PHNCI. Revising the Foundational Public Health Services in 2022. Accessed August 25, 2022. https://phnci.org/transformation/fphs
15. County Health Rankings & Roadmaps. County Health Rankings Model. Accessed August 25, 2022. https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model

NCIOM
North Carolina Institute of Medicine



CHAPTER 2

WHERE WE ARE

The COVID-19 pandemic has demonstrated the extraordinary commitment and innovation of local health departments and the threadbare nature and precarity of the systems—data, compensation, staffing levels, and training—that support them. The organizations responsible for the many vital activities that keep our communities safe, healthy, and functioning daily are working with outdated human resources systems, inefficient data infrastructure, and inadequate staffing. The COVID-19 pandemic highlighted these challenges, but these foundational concerns existed in every county long before the pandemic.

The local public health sector is at a crucial inflection point now, particularly regarding the public health workforce. On one hand, schools of public health around the country have reported steep increases in applications (an effect of increased attention on the sector during the pandemic), yet local public health departments are not yet benefitting from this attention and need intentional strategies for attracting motivated talent to their workforces. It is not only the talent pipeline that needs attention and investment;[1] data from a national survey of public health workers from late 2021 to early 2022 illustrate critical retention concerns for current employees:

These data reflect sentiments shared through a survey[A] of North Carolina health directors in Summer 2021 regarding workload, staffing, and recruitment:

- "We are so often 'drinking from the firehose,' it is difficult to focus on foundational capabilities."
- "Recruitment issues and obstacles of salary and competitive benefits make it extremely difficult to hire and retain staff."
- "My health department is very understaffed at present, with no hopes or indications of successful recruitment."
- "Local health departments have more to do, have more hoops to jump through, and fewer resources than ever, making it difficult to find time to 'do it all'."
- "Our funding is so low that we are a skeleton crew. With so few staff we only have time to do the basics. We can't do any extra."
- "Finding and maintaining a strong, educated, compassionate, professional workforce is such a challenge these days."
- "COVID made our shortcomings very clear. For the last year and a half, we've worked all of our staff to the bone to try to keep up with the COVID work. We have some staff who are currently experiencing extreme burnout, to the point of quitting public health. It's very sad and it's a huge loss to us."

To realize a brighter future, local governmental public health will need assistance to address its unstable foundation of inadequate and unreliable funding and its shrinking workforce.

- In 2021, state funding for public health in North Carolina was $76 per capita, placing our state 45th in the nation compared to the national average of $116 per capita.[B,2]
- Prior to the pandemic, the number of public health workers had decreased by 16% across the country since 2008.[2]
- Over one-third of the North Carolina public health workforce make less than $45,000 per year.[2]
- The average salary for registered nurses in North Carolina in 2022 was $89,555, but health departments are not able to offer competitive salaries, with an average public health nurse salary of $63,835.[3,4]
- County-level per capita spending on public health in North Carolina dropped 22% from 2010 to 2018 when adjusted for inflation.
- Communicable disease programs cost North Carolina local public health departments around $20 million, and less than 5% of the cost is provided by the state.[5]

> "We are continuing to... go from disaster to disaster without ever talking about the actual infrastructure."
>
> *- Brian Castrucci, de Beaumont Foundation, "Public Health Experts Worry About Boom-Bust Cycle of Support." Kaiser Health News.*
>
> *https://khn.org/news/article/public-health-experts-worry-about-boom-bust-cycle-of-support/*

[A] The North Carolina Institute of Medicine conducted an informal, voluntary survey of North Carolina health directors at the start of the Task Force on the Future of Local Public Health in North Carolina to understand current strengths, challenges, and needs related to the Foundational Public Health Capabilities which enable achievement of the 10 essential services each health department should provide.

[B] Per-capita funding in 2020-2021 increased due to COVID-19 pandemic funds from the federal government.

Figure 5. North Carolina Local Health Department Spending Compared to Population Change, 2010-2018.

Percent Change in County-Level Public Health Spending
Percent Change in County Population Growth

-60 -40 -20 0 20 40

Mecklenburg County Health Department
Johnston County Health Department
Public Health Authority of Cabarrus County
Orange County Health Department
Richmond County Health Department
Transylvania County Health Department
Cleveland County Health Department
Granville-Vance District Health Department
Stanly County Health Department
Dare County Health Department
Henderson County Health Department
Carteret County Health Department
Lee County Health Department
Lenoir County Health Department
Madison County Health Department
Jackson County Department of Public Health
Chatham County Public Health Department
Craven County Health Department
Forsyth County Department of Public Health
Iredell County Health Department
Rockingham County Health Department
Franklin County Health Department
Pitt County Public Health Center
Wayne County Health Department
Rowan County Health Department
Halifax County Department of Health
Greene County Health Department
Union County Health Department
Montgomery County Health Department
Brunswick County Health Department
Burke County Health Department
Swain County Health Department
Harnett County Health Department
Alexander County Health Department
Guilford County Department of Public Health
Person County Health Department
Lincoln County Health Department
Gaston County Health Department
Toe River District
Martin Tyrrell Washington District
Jones County Health Department
Moore County Health Department
Catawba County Health Department
Hyde County Health Department
Wake County Human Services
Yadkin County Health Department

Source: Crumpler R. Health spending shortage in NC affects coronavirus response. Raleigh News & Observer. Published January 22, 2021. Accessed August 24, 2022. https://www.newsobserver.com/article248029345.html

An analysis conducted by the *Raleigh News & Observer* reviewed changes in annual local public health expenditures compared to population change from 2010 to 2018 in 46 health departments representing 51 counties.[C,5] Results from the analysis are shown in **Figure 5** and indicate that, in most cases, the change in spending decreased dramatically at the same time county population increased.

The funding challenges for local public health are related to a "boom and bust" cycle of time-limited funding for public health emergencies (e.g., post-9/11, H1N1, Zika virus), as well as reductions in services due to competition or transfer of revenue-generating services to the private sector. When services are eliminated, staffing often decreases as well. Federal funding has also remained flat or has been allocated for other purposes. For example, the Affordable Care Act set up the Prevention and Public Health Fund. Over the years, this fund has been used for unintended purposes, such as payroll tax cut extensions, with local and state health departments losing some $12.4 billion in planned funding.[6,7] Disease-specific grant funding from the Centers for Disease Control and Prevention (CDC) has stayed nearly flat for a decade.[6]

> "[N]ow is the time to give this nation the core capabilities of public health, not only that it needs, that it deserves.... [P]ublic health is not some extra thing you do if you have a few bucks left over."
>
> *-Robert Redfield, former CDC Director (2018-2021) "A Conversation with Robert Redfield." Council on Foreign Affairs.*
>
> *https://www.cfr.org/event/conversation-robert-redfield*

Growing Challenges Impact Local Public Health's Ability to Promote Community Health and Economic Opportunity

Research has indicated that increased public health spending can have a positive effect on community health outcomes, with reductions in infant mortality, deaths from heart disease, spread of infectious disease, and years of potential life lost.[8,9]

Funding cuts and staffing shortages seriously impact the ability of local governmental public health to accomplish its core responsibilities, let alone lead or participate in partnerships to address root causes of community health challenges. North Carolina ranked 32nd in health outcomes compared to other states in America's Health Rankings in 2021 and while CNBC ranked North Carolina the best state for business in 2022, they highlight the issue of lagging per capita public health spending compared to other states.[10,11] Local governmental public health can play an important role in improving all the factors that impact our health outcomes—social and economic, environmental, health behaviors, and clinical care—whether through direct services, policy change, or collective action with community partners. Improving the health of community members directly affects the business economy and state health expenditures:

- Self-reported good health is associated with creation of businesses and increased labor force participation.[12]
- Over time, areas with high economic activity and poor population health[D] have lower economic growth compared to areas with good population health.[12]
- In 2021, 10.8% of adults in North Carolina had three or more chronic diseases.[13]
- Chronic diseases cost North Carolina $116.5 billion ($11,336 per capita) in 2016—$34 billion in health care costs and $82.4 billion in indirect costs of work absences, lost wages, and reduced economic productivity.[14]

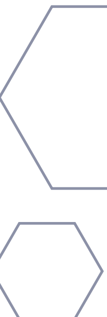
The COVID-19 Pandemic and Local Public Health

The COVID-19 pandemic has been difficult and exhausting on all levels of society, regardless of political perspective or work sector. It has meant massive disruptions in lives, businesses, and incomes. Federal, state, and local public health and health care responses were necessarily fast and often changing, which led to confusion, frustration, and subsequent distrust by many in the public. Yet, while the pandemic has brought extensive challenges and exposed serious societal issues, it now provides an opportunity to "recharge the system"—to inject new energy and new vision into sectors that have been taken for granted for so long. The opportunity is clear for local governmental public health to draw attention to the spectrum of roles it plays in helping create healthy communities and fully realize the value it holds in ensuring that all members of our communities have an opportunity to be healthy.

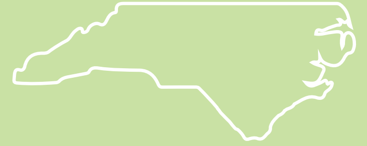
[C] There is no central reporting database for local health department spending in North Carolina or in many other states.
[D] Population health indicators in the referenced study included general health (self-rated), heart disease, high blood pressure, high cholesterol, obesity, diabetes, smoking, exercise, and mental health.

References

1. Maxouris C. Student interest in this field soared since the pandemic's start. Experts hope this is a turning point. CNN. May 9, 2021. https://www.cnn.com/2021/05/09/us/public-health-pandemic-student-applications/index.html
2. de Beaumont Foundation. Rising Stress and Burnout in Public Health. Published online March 2022. https://debeaumont.org/wp-content/uploads/dlm_uploads/2022/03/Stress-and-Burnout-Brief_final.pdf
3. Registered Nurse salary in North Carolina. Indeed.com. Accessed August 25, 2022. https://www.indeed.com/career/registered-nurse/salaries/NC?from=top_sb
4. Public Health Nurse salary in North Carolina. Indeed.com. Accessed August 25, 2022. https://www.indeed.com/career/public-health-nurse/salaries/NC?from=top_sb
5. Crumpler R. Health spending shortage in NC affects coronavirus response. Raleigh News & Observer. Published January 22, 2021. Accessed August 24, 2022. https://www.newsobserver.com/article248029345.html
6. Weber L, Ungar L, Smith MR, Recht H, Barry-Jester AM. Hollowed-Out Public Health System Faces More Cuts Amid Virus. Kaiser Health News. Published July 1, 2020. Accessed August 24, 2022. https://khn.org/news/us-public-health-system-underfunded-under-threat-faces-more-cuts-amid-covid-pandemic/
7. Smith MR, Weber L, Recht H. Public Health Experts Worry About Boom-Bust Cycle of Support. Kaiser Health News. Published April 19, 2021. Accessed August 25, 2022. https://khn.org/news/article/public-health-experts-worry-about-boom-bust-cycle-of-support/
8. Mays GP, Smith SA. Evidence Links Increases In Public Health Spending To Declines In Preventable Deaths. https://doi.org/101377/hlthaff20110196. 2017;30(8):1585-1593. doi:10.1377/HLTHAFF.2011.0196
9. Erwin PC, Mays GP, Riley WJ. Resources That May Matter: The Impact of Local Health Department Expenditures on Health Status. Public Health Reports. 2012;127(1):89. doi:10.1177/003335491212700110
10. Cohn S. North Carolina is No. 1 in America's Top States for Business 2022. CNBC. Published July 13, 2022. Accessed August 24, 2022. https://www.cnbc.com/2022/07/13/north-carolina-is-no-1-in-americas-top-states-for-business.html
11. America's Health Rankings. Explore Health Outcomes in North Carolina . 2021 Annual Report. Published 2022. Accessed August 24, 2022. https://www.americashealthrankings.org/explore/annual/measure/Outcomes/state/NC?edition-year=2021
12. Anton M, Williams M, Diaz J, Mattessich P, Rausch E, Connell E. Linking Health and Economic Prosperity: A Study of U.S. Metro Areas. Published December 2019. https://www.wilder.org/wilder-research/research-library/linking-health-and-economic-prosperity-study-us-metro-areas-0
13. America's Health Rankings. Explore Multiple Chronic Conditions in North Carolina, 2021 Annual Report. Published 2021. Accessed September 7, 2022. https://www.americashealthrankings.org/explore/annual/measure/CHC/state/NC
14. Waters H, Graf M. The Costs of Chronic Disease in the U.S. 2018. Milken Institute. Accessed September 7, 2022. https://milkeninstitute.org/sites/default/files/reports-pdf/ChronicDiseases-HighRes-FINAL.pdf



NCIOM
North Carolina Institute of Medicine



CHAPTER 3

WHERE WE WANT TO GO

Task Force on the Future of Local Public Health

The North Carolina Institute of Medicine (NCIOM) recognizes the importance of forging a strong future for local governmental public health so that North Carolinians may live long, healthy, and meaningful lives. Despite challenges, health departments across the state have persevered for decades to maximize available resources to improve the well-being of their communities through programs, services, and partnerships. The COVID-19 pandemic drew widespread attention to the work of local public health and the challenges it faces. While the pandemic was not the cause of these challenges, it provides an opportunity to examine and highlight the important and quality work of local public health, as well as the ongoing resource needs and opportunities for improvement. To develop a vision and path for achieving a strong future for local public health in North Carolina, the NCIOM, with funding from the Kate B. Reynolds Charitable Trust and the North Carolina Department of Health and Human Services, convened the Task Force on the Future of Local Public Health (the task force).

The task force was co-chaired by Leah McCall Devlin, Professor, Gillings School of Global Public Health, University of North Carolina at Chapel Hill; Lisa Macon Harrison, Health Director, Granville-Vance Public Health; John Lumpkin, President, Blue Cross Blue Shield of North Carolina Foundation and Vice President, Drivers of Health Strategy for Blue Cross and Blue Shield of North Carolina; and Vicki Lee Parker-High, Executive Director, North Carolina Business Council. They were joined by 65 other task force and steering committee members, including representatives from local public health, health nonprofits, state and Tribal health and human services, state and local government, academia, health care, business, and other sectors. The task force met 11 times between August 2021 and May 2022. In addition, two work groups were convened for in-depth discussions on the topics of public health data and workforce. Work group members included members of the task force as well as additional experts and interested persons. Work group discussions and ideas for recommendations were brought to the full task force for consideration. The task force made seven recommendations and detailed 25 action-oriented strategies for accomplishing them. See Pages 32-33 for a list of recommendations and strategies.

Although the work of public health encompasses a broad spectrum of sectors, including academia, non-governmental organizations, community-based organizations, philanthropy, health care, and state governmental public health, the scope of this task force was specifically focused on goals for the future of local governmental public health. The term "local public health" will be used throughout this report in reference to local governmental public health and local health departments. Other sectors are called upon in connection with strategies throughout this report related to their potential as partners, supporters, and promoters in the future vision for local public health in North Carolina.

Other State and National Action

The NCIOM Task Force on the Future of Local Public Health is one of many state and national conversations and action plans to strengthen the capacity of local public health and help ensure we all live in strong and healthy communities.

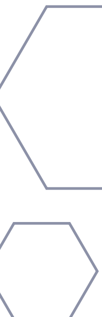
National initiatives include:[A]

- Institutions like **The Centers for Disease Control and Prevention** (Data Modernization Initiative and Strengthening US Public Health Infrastructure, Workforce, and Data Systems grant)[B,C] and the **Office of the U.S. Surgeon General** (Addressing Health Worker Burnout)[D]
- Organizations like the **Trust for America's Health** (The Impact of Chronic Underfunding on America's Public Health System),[E] **The Robert Wood Johnson Foundation** (Charting a Course for an Equity-Centered Data System),[F] the **Commonwealth Fund** (Meeting America's Public Health Challenge),[G] and the **Bipartisan Policy Center** and **de Beaumont Foundation** (Public Health Forward: Modernizing the U.S. Public Health System).[H]

North Carolina initiatives include:

- State agencies like the **North Carolina Department of Health and Human Services Division of Public Health** (NC Governmental Public Health: Workforce and Infrastructure Improvement in Action).[J]
- Public health trade organizations like the **North Carolina Association of Local Health Directors,** which is leading strategy and action planning to address priority improvements within the existing local public health system.
- Non-governmental public health non-profits like the **Western North Carolina Health Network** and **Foundation for Health Leadership and Innovation**, which have convened listening sessions with local public health agencies and participants in Community Health Assessment processes to understand challenges and needs.

In parallel with the Task Force on the Future of Local Public Health in North Carolina, the NCIOM and the South Carolina Institute of Medicine and Public Health convened the Carolinas Pandemic Preparedness Task Force from July 2021 to May 2022. While the scope of that task force extends beyond the actions of local public health, there are several shared or similar recommendations between the two task forces that will be noted throughout this report.



[A] *Recommendations from these initiatives will be referenced throughout this report where they are similar to recommendations from the task force.*
[B] *The Centers for Disease Control and Prevention. Data Modernization Initiative. https://www.cdc.gov/surveillance/data-modernization/index.html*
[C] *The Centers for Disease Control and Prevention. Strengthening US Public Health Infrastructure, Workforce, and Data Systems. Accessed June 28, 2022. https://www.cdc.gov/workforce/resources/infrastructuregrant/index.html*
[D] *U.S. Department of Health and Human Services – Office of the U.S. Surgeon General. Addressing Health Worker Burnout. https://www.hhs.gov/surgeongeneral/priorities/health-worker-burnout/index.html*
[E] *The Impact of Chronic Underfunding on America's Public Health System: Trends, Risks, and Recommendations, 2021. Trust for America's Health. May 7, 2021. https://www.tfah.org/report-details/pandemic-proved-underinvesting-in-public-health-lives-livelihoods-risk/*
[F] *The Robert Wood Johnson Foundation. Charting a Course for an Equity-Centered Data System: Recommendations from the National Commission to Transform Public Health Data Systems. October 2021. https://www.rwjf.org/en/library/research/2021/10/charting-a-course-for-an-equity-centered-data-system.html*
[G] *The Commonwealth Fund. Meeting America's Public Health Challenge. Recommendations for Building a National Public Health System That Addresses Ongoing and Future Health Crises, Advances Equity, and Earns Trust. June 2022. https://www.commonwealthfund.org/sites/default/files/2022-06/TCF-002%20National%20Public%20Heath%20System%20Report-r4-final.pdf*
[H] *Armooh T, et al. Public Health Forward: Modernizing the U.S. Public Health System. Bipartisan Policy Center. December 2, 2021https://bipartisanpolicy.org/report/public-health-forward/*
[I] *The work of these groups will be discussed as context for task force recommendations throughout this report.*
[J] *North Carolina Department of Health and Human Services. NC Governmental Public Health: Workforce and Infrastructure Improvement in Action. May 2022. https://www.ncdhhs.gov/media/15401/download?attachment*

A Vision for Local Public Health

The task force set out to identify opportunities for effective action, focusing on system changes that could have a noticeable impact across the state. The task force's vision for the future of local public health in North Carolina was developed over a series of facilitated discussion. The vision reflects the outcomes sought by the task force through the recommendations and strategies detailed in subsequent chapters of this report.

THE NCIOM TASK FORCE ON THE FUTURE OF LOCAL PUBLIC HEALTH ENVISIONS A FUTURE WHERE:

All people in North Carolina will experience the benefits of living in communities served by well-supported and highly effective local public health agencies. They will live longer and healthier lives—no matter their location, income, race, ethnicity, or other characteristics—because of the prevention-focused and health-promoting programs and policies that skilled public health professionals support or bring to their communities. They will be protected from preventable disease by a strong environmental health program that ensures safe food, water, and air. They will have access to convenient health care services. Their communities will work together to maximize opportunities to attain safe and affordable housing, high-quality education, healthy food, strong economic opportunities, and other important drivers of health. They will have knowledge about, and trust in, the work of their local health department.

THIS FUTURE WILL BE ATTAINED WHEN LOCAL PUBLIC HEALTH, ALONG WITH COMMUNITY PARTNERS:

- Promotes and participates in ***STRONG PARTNERSHIPS*** to improve health and well-being with community organizations and members.
- Has ***TRUSTED RELATIONSHIPS*** and ***SHARED POWER*** with community members most impacted by public health programs and policies.
- Collects, uses, and shares ***DATA TO DRIVE IMPROVEMENTS AND ADDRESS DISPARITIES*** in health outcomes and health department services.
- Has a variety of strong tools, skills, and relationships with community leaders to ***EFFECTIVELY COMMUNICATE*** with community members and other partners.
- ***ADAPTS QUICKLY*** to serve urgent needs, including for emergency preparation and response.
- Is staffed with a ***SKILLED AND RESPECTED WORKFORCE*** that earns competitive compensation and reflects the diversity
- Is ***SOUGHT AFTER AND TRUSTED*** by local governments to develop programs and policies that promote health.
- Receives ***SUFFICIENT AND RELIABLE FUNDING FROM LOCAL AND STATE SOURCES*** and is ***ACCOUNTABLE*** for program and service goals.
- Has strong relationships with philanthropy to ***PROMOTE INNOVATION.***

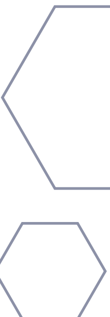
[K] Foundational capabilities are assessment, community partnership development, equity, organizational competencies, policy development and support, accountability and performance management, emergency preparedness and response, and communications; and the community-specific services foundational to local public health encompassing these capabilities are communicable disease control, chronic disease and injury prevention, environmental public health, maternal, child, and family health, and access to and linkage with clinical care. See Chapter 10 for more details.

Structure of this Report

The remainder of this report details the task force's seven overarching recommended actions and strategies for achieving desired outcomes.

- **Recommendation 1:** Enhance local public health's role as Chief Health Strategist by implementing a collective impact framework to address community health priorities
- **Recommendation 2:** Transform local public health's capacity to collect, share, use, integrate, and communicate data to drive continuous improvement in programs, agencies, and whole communities
- **Recommendation 3:** Strengthen capabilities and build trust to communicate effectively with diverse community members, media, and policy makers
- **Recommendation 4:** Bolster local public health's capacity to promote community health and well-being by sustaining and supporting the current workforce
- **Recommendation 5:** Build local public health's future capacity to serve the community by growing a diverse and skilled workforce
- **Recommendation 6:** Pursue innovative strategies to address broader population health and meet the organizational, funding, and workforce challenges that local governmental public health currently faces
- **Recommendation 7:** Ensure governmental local public health is sufficiently and consistently funded to carry out Foundational Public Health Services and meet the unique needs of communities across the state

The following pages contain a table of recommendations, strategies, and responsible parties whose participation is needed to achieve the vision. Each chapter of the report details a recommendation and its related strategies.



CHAPTER 3 – Where We Want to Go

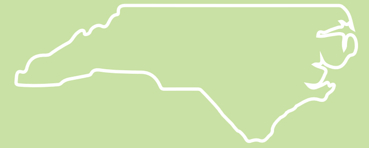
Table 1. Responsible Parties and Partners for Recommendations and Strategies of the NCIOM Task Force on the Future of Local Public Health

RECOMMENDATIONS AND STRATEGIES	PAGE #	LHDs	NCDHHS DPH	PH ASSOCS. & BOARDS	NCGA	NCIPH	ACADEMIA	PHILANTHROPY	TRIBAL PH	STATE DATA STRUCTURE	PH NON-PROFITS	HEALTH CARE PROVIDERS & PAYERS	REGIONAL HUBS	LOCAL GOVERNMENT ASSOCIATIONS	BUSINESS LEADERS
RECOMMENDATION 1: Evolve local public health's role as Chief Health Strategist by implementing a collective impact framework to address community health priorities															
Strategy 1a - Growing Skills and Shared Vision for Collective Impact	Page 37	X										O			O
Strategy 1b - Partnership Learning Collaborative	Page 39			X		X					O				
RECOMMENDATION 2: Transform local public health's capacity to collect, share, use, integrate, and communicate data to drive continuous improvement in programs, agencies, and whole communities															
Strategy 2a - Drive Improvement and Strengthen Connectivity	Page 43	O	X						O		O				
Strategy 2b - Identify Funding Needs for Data Modernization	Page 44				O			O		X					
Strategy 2c - Evolve Health Department Data Capabilities	Page 45	X		O			O				O		O		
Strategy 2d - Investment to Support Data Capacity and Modernization	Page 46						O	X			X	O			O
RECOMMENDATION 3: Strengthen capabilities and build trust to communicate effectively with diverse community members, media, and policymakers															
Strategy 3a - Build a Community of Practice	Page 51	O	X	O			O		O				O		
Strategy 3b - Create a Public Health Communication Certificate Program	Page 53	O	X	X		O	X		O						
Strategy 3c - Raise Public Awareness and Knowledge	Page 54	O	O					X	O						
RECOMMENDATION 4: Bolster local public health's capacity to promote community health and well-being by sustaining and supporting the current workforce															
Strategy 4a - Develop Statewide Accountability for the Public Health Workforce	Page 60	O	X	O		O			O				O		
Strategy 4b - Value the Public Health Workforce	Page 62						X							X	
Strategy 4c - Support the Development of the Local Public Health Workforce	Page 63	X									O				
Strategy 4d - Support Updates to Job Classifications	Page 65			O	X									O	
Strategy 4e - Address Threats and Harassment	Page 66			X		X	X								
RECOMMENDATION 5: Build local public health's future capacity to serve the community by growing a diverse and skilled workforce															
Strategy 5a – Network of Public Health Programs	Page 71	O					X								
Strategy 5b – Funded Internship Opportunities	Page 73	O	X	X			O	X							
Strategy 5c – Awareness of Public Health Careers	Page 74	O		X											
Strategy 5d – New to Public Health Training	Page 75	O	X												
RECOMMENDATION 6: Pursue innovative strategies to address broader population health and meet the organizational, funding, and workforce challenges that local governmental public health currently faces															
Strategy 6a – Support Accreditation Flexibility and Modernize Standards	Page 81			X											
Strategy 6b – Evaluate Innovative Models and Best Practices	Page 82			O		X	O								
Strategy 6c – Support Opportunities for Innovation	Page 84	O			X										
RECOMMENDATION 7: Ensure governmental local public health is sufficiently and consistently funded to carry out Foundational Public Health Services and meet the unique needs of communities across the state															
Strategy 7a – Structure for Determining Funding Needs	Page 94	O	O	O	X		O	X	O			O		O	O
Strategy 7b – Predictable Funding for Local Public Health	Page 96	O	O	O	X				O						
Strategy 7c – Local Funding to Support Community Specific Needs	Page 98	O												X	
Strategy 7d – Collaborative Funding for Innovation	Page 99	O	O				O	X			O	O			O

X = Responsible party; O = Partner

LHD = Local Health Department; NCDHHS DPH = North Carolina Department of Health and Human Services Division of Public Health; PH = Public Health; NCGA = North Carolina General Assembly; NCIPH = North Carolina Institute for Public Health

NCIOM
North Carolina Institute of Medicine



CHAPTER 4

COLLECTIVE IMPACT: STRENGTHENING THE POWER OF PUBLIC HEALTH'S COMMUNITY PARTNERSHIPS

RECOMMENDATION 1............................ 36

Community partnerships are vital to the work of local public health. It is impossible for public health alone to address all issues that impact the health and well-being of a community, as influences on social and economic factors, the physical environment, health behaviors, and clinical care span a wide range of sectors. While the work of partnering to address these issues is vital to improving community health, funding is often inadequate for these efforts, as federal and state dollars are typically earmarked for specific diseases or public health programs rather than cross-cutting community improvement projects. Health departments often need to prioritize staff time and responsibilities for funded services and programs. This can leave limited financial resources and staff capacity left over to dedicate to important partnership efforts.

> **"Improvements in our nation's health can be achieved only when we have the commitment to move even further upstream to change the community conditions that make people sick. The demand for social needs interventions won't stop until the true root causes are addressed."**
>
> *-Castrucci B, Auerbach J. Meeting individual social needs falls short of addressing social determinants of health. Health Affairs. January 16, 2019.*
>
> *https://www.healthaffairs.org/do/10.1377/forefront.20190115.234942/*

Even with adequate resources, public health could not single-handedly address all the factors at the root of community health challenges. Essential knowledge, expertise, and trusted voices in the community are vital to making an impact. Parents, educators, business leaders, health care providers, law enforcement, aging-services providers, community leaders, grass roots community organizers, and transportation professionals are just a few of the community groups with intimate knowledge of programs, policies, and systems that impact health.

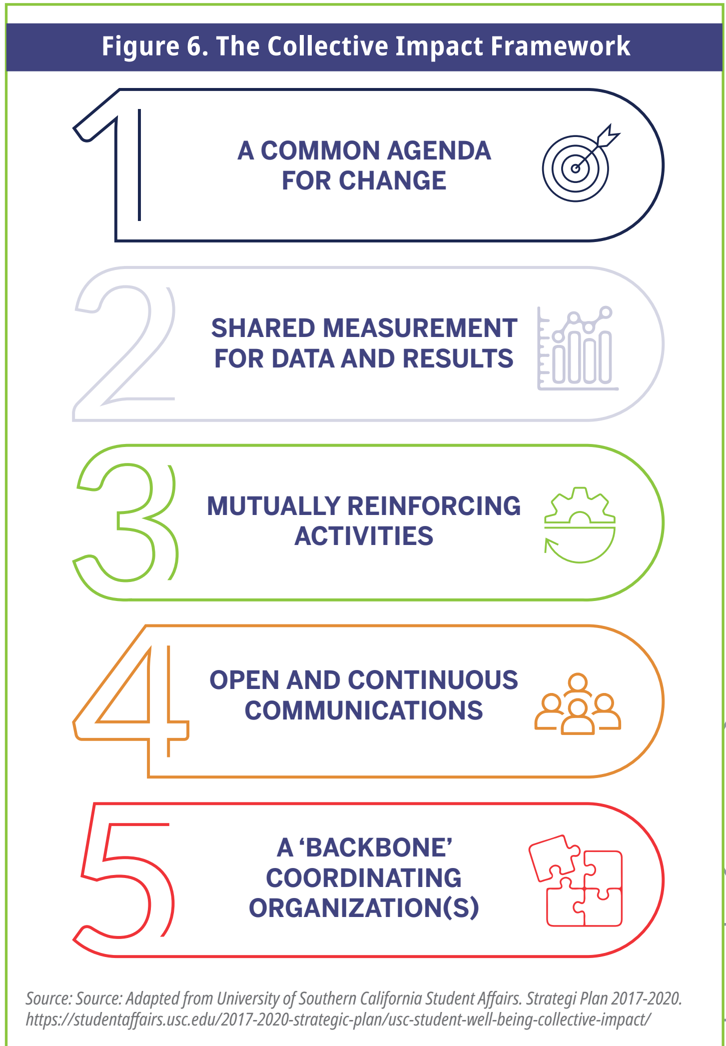
Despite limited resources, local health departments have worked in their role as "Chief Health Strategist"[A] to foster partnerships across sectors that make important changes and improvements in the communities they serve to positively impact health. And yet, long-standing policy and system factors make it a continuing challenge to address unequal opportunities to live in healthy environments and make healthy choices. Evolving these partnerships through the collective impact framework can build a shared plan of action to address root causes of community health outcomes. The collective impact framework (see Figure 6) involves a long-term investment of time and energy, calling on partners to:[1,2]

- Develop a common agenda for change
- Measure the same things to understand results
- Align activities to the common goal
- Engage in open and continuous communications
- Identify a coordinating organization(s)

The collective impact framework shifts the paradigm of partnership from working on the same issue to working ***toward the same outcome*** and shares power among all members of the partnership.[3]

> **"Collective impact" describes an intentional way of working together and sharing information for the purpose of solving a complex problem. Proponents of collective impact believe that the approach is more likely to solve complex problems than if a single nonprofit were to approach the same problem(s) on its own. While collective impact seems very similar to plain old "collaboration," there are certain characteristics that distinguish collective impact initiatives - and make them successful."**
>
> *-National Council of Nonprofits, Collective Impact*
>
> *https://www.councilofnonprofits.org/tools-resources/collective-impact*

Figure 6. The Collective Impact Framework



Source: Source: Adapted from University of Southern California Student Affairs. Strategi Plan 2017-2020. https://studentaffairs.usc.edu/2017-2020-strategic-plan/usc-student-well-being-collective-impact/

[A] *See Chapter 1. Public Health 3.0 calls on local public health to engage in cross-sector partnerships as a "Chief Health Strategist" to address root causes of health outcomes.*

In North Carolina, the collective impact framework is being used already in many communities. With support from The Duke Endowment and technical assistance from the North Carolina Healthcare Foundation and Population Health Improvement Partners, communities participating in Healthy People, Healthy Carolinas are engaging in cross-sector partnerships across the state:[4]

- **Chatham Health Alliance** – Nearly 100 member entities and organizations have come together "to work on issues affecting health in Chatham County, with a focus on the health priorities identified in the Community Health Assessment: Access to Comprehensive Health Services, Equity, Healthy Eating, Active Living, and Economic Stability & Resilience."[5]
- **Granville Working on Wellness (WOW!)** – This group is working on the "overarching goal of improving child health and wellbeing in Granville and Vance counties through health promotion efforts targeting nutrition and physical activity." Granville Vance Health Department serves as the convener with 14 participating organizations and 8 school partners.[6]
- **Brunswick Wellness Coalition** – This coalition of 37 partners is working together to "share resources and support to prevent disease and promote health."[7]
- **Pitt Partners for Health** – More than 30 community organizations are working together to "collaboratively respond to the compelling health needs of Pitt County residents through assessment, resource identification and development, citizen advocacy, comprehensive planning and coordination of health intervention and prevention strategies."[8]
- **Healthy Rowan** – This partnership of more than 30 organizations "seeks to utilize the collaborative strength of many community partners to identify and address health and quality of life issues in Rowan County."[9]

These types of multi-sector collaboratives have long been cultivated by local public health departments, but they are growing in size, complexity, and sophistication as communities recognize that their paths to prosperity and community well-being require addressing persistent challenges such as health inequities, economic instability, civic engagement, and inclusion. For example, many local public health departments have long worked with public housing departments, private property rental companies, and housing service providers to improve housing quality, health, and safety in order to prevent asthma attacks, falls, and other health issues. These types of collaborative approaches that integrate health care providers, the private sector, and human services have grown throughout the state, and have led to a $650 million initiative within North Carolina's Medicaid program. Three communities currently serve as regional sites for our state's Healthy Opportunities Pilots, "the nation's first comprehensive program to test and evaluate the impact of providing select evidence-based, non-medical interventions related to housing, food, transportation, and interpersonal safety and toxic stress to high-needs Medicaid enrollees."[10] Across North Carolina, communities are "going upstream" and working together to make fundamental improvements in community conditions to ensure everyone has the opportunity to live a healthy life. Local public health must be resourced and equipped for leadership roles in this essential work.

Given the importance of partnerships in the work of local public health, opportunities to further increase their effectiveness, and the value of enhancing community voices, the task force recommends the following:

RECOMMENDATION 1

Evolve local public health's role as Chief Health Strategist by implementing a collective impact framework to address community health priorities

Two strategies are recommended by the Task Force on the Future of Local Public Health to move to a future vision of effective partnerships that address systems-level issues impacting community health outcomes:

Strategy 1a. Growing Skills and Shared Vision for Collective Impact Local health departments should grow staff roles, skills, and knowledge of: the Collective Impact framework; group and partnership facilitations; and health equity, risk assessment, and strategic partnerships.

Strategy 1b. Partnership Learning Collaborative
The North Carolina Public Health Association and North Carolina Institute for Public Health should develop a learning collaborative, or support existing collaboratives, focused on opportunities for those in local public health to gain knowledge and share best practices for engaging in the activities listed in Strategy 1a.

[A] See Chapter 1. Public Health 3.0 calls on local public health to engage in cross-sector partnerships as a "Chief Health Strategist" to address root causes of health outcomes.

Strategy 1a – Growing Skills and Shared Vision for Collective Impact

Local health departments should enhance their role in pursuing programs and policies to advance population health by:

1. Participating in existing leadership training opportunities to enhance skills and knowledge in:
   a. The Collective Impact framework,
   b. Group and partnership facilitation, and
   c. Health equity, risk assessment, and strategic partnerships.
2. Incorporating relationship-building as a core function of staff positions that are reliably funded, with accountability to ensure staff can prioritize relationship/partnership-building among their other responsibilities.
3. Pursuing opportunities to implement the collective impact framework to address pressing community health issues with community members and stakeholders across sectors (e.g., education, child care, business, health care, transportation, and housing).
4. Developing strong and effective collaborations with health care systems, primary care providers, Medicaid Prepaid Health Plans, and other payers serving the community to align population health goals.
5. Establishing connections with local community development organizations, chambers of commerce, and private sector businesses to cultivate knowledge, support, and advocacy for the role of local public health in maintaining a healthy workforce and increasing economic development.

Desired Result

Health departments will have increased staff capacity and competency to lead effective partnerships using the collective impact framework to address root causes of community health issues.[B] Local health departments and their partners will share goals, align activities, and work together to create communities where everyone has the opportunity to be healthy.

Why does the task force recommend this strategy?

While partnerships are key to the success of local public health, the staff effort required to develop and lead or participate in partnerships is often unfunded. Implementing core responsibilities for staff specific to partnership development will highlight the importance of this work. Training is also needed to increase competencies to effectively lead partnerships and engage those outside public health as leaders. Potential partners have a spectrum of knowledge and interest in the work of public health. Health care systems and providers have an interest in the health of communities. Local health departments should work closely with them to develop a shared vision. In the broader community outside of health and health care, groups like business leaders do not necessarily have close involvement with public health but can still serve as advocates for the work of local public health to foster the well-being of the workforce and promote economic growth.

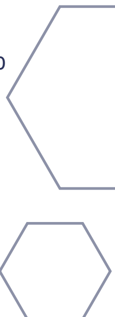
Additional Context

As Chief Health Strategist, local public health has an important role to play in partnerships to create healthier communities. The work of identifying potential partnerships, cultivating productive collaboration, and designing, executing, and evaluating a shared strategy requires significant skills, time, and attention. While these partnerships may be formed around public health goals, they may also have beneficial influence on economic stability, educational outcomes, community well-being, and other factors outside of traditional health concerns. However, limited budgets and strict requirements from many funding sources are barriers to the staff time and capacity needed to lead or participate in these partnerships. For local public health to play this essential community leadership role, an investment in capacity is necessary. Recommendations and strategies throughout this report are intended to build the staff capacity and funding needed to enhance the partnership capabilities of local public health. In particular, see:

- **Strategy 2a**, Page 43 – Drive improvement and strengthen connectivity [of public health data systems]
- **Strategy 2c**, Page 45 – Evolve health department data capabilities
- **Strategy 4a**, Page 60 – Develop statewide accountability for the public health workforce
- **Strategy 6b**, Page 82 – Evaluate innovative models and best practices
- **Strategy 6c**, Page 84 – Support opportunities for innovation
- **Strategy 7b**, Page 96 – Predictable funding for local public health
- **Strategy 7c**, Page 98 – Local funding to support community-specific needs
- **Strategy 7d**, Page 99 – Collaborative funding for innovation

Several training resources can aid in building community partnerships and promoting health equity. These include:

- The **North Carolina Institute for Public Health (NCIPH)** at the University of North Carolina – Chapel Hill Gillings School of Global Public Health – "Leading with Equity" training series
- **WNC Health Network** - Paid services are available to "design and lead effective meetings that move diverse stakeholders from talk to action."[11]
- The **North Carolina Public Health Training Center** at the University of North Carolina - Wilmington College of Health and Human Services – "Health Equity Leadership During and Beyond the COVID-19 Crisis"
- **Region IV Public Health Training Center** through the Public Health Learning Network – Many trainings on partnership, including "Becoming the Health Strategist: Putting Your Skills into Action;" "Cross-Sector Collaboration – Easy to Say, Challenging to Do: An Introduction to PHRASES;" and "Embracing Public Health 3.0 and Creating Cross-Sector Partnerships."[12]



[B] ""Collective impact" describes an intentional way of working together and sharing information for the purpose of solving a complex problem. Proponents of collective impact believe that the approach is more likely to solve complex problems than if a single nonprofit were to approach the same problem(s) on its own. While collective impact seems very similar to plain old "collaboration," there are certain characteristics that distinguish collective impact initiatives - and make them successful."
National Council of Nonprofits, Collective Impact, https://www.councilofnonprofits.org/tools-resources/collective-impact

How would this impact the health of communities?

Increased knowledge and opportunities for collective impact have the potential to bolster the effectiveness of community partnerships. Effective partnerships and engaged community members lead to programs and policies that can directly improve health and economic opportunity by addressing the root causes of poor health outcomes in our state's unique communities.

Who is responsible?

- Local health departments

Who are the partners?

- Community members and leaders
- Community based organizations
- Medicaid Prepaid Health Plans and other health care payers
- Health care systems
- Health care providers
- Local community development organizations
- Chambers of commerce
- Private sector businesses

Strategy 1b – Partnership Learning Collaborative

The North Carolina Public Health Association and North Carolina Institute for Public Health should develop a learning collaborative, or support existing collaboratives, focused on helping those in local public health gain knowledge and share best practices to engage in activities listed in Strategy 1a.

Desired Result

Local health departments will be engaged in shared learning to promote best practices and share successes in effective community partnership to improve health and well-being.

Why does the task force recommend this strategy?

Local public health departments engage in partnerships that are unique collaborations designed to address their communities' priorities. There is often great potential for lessons learned or opportunities to replicate similar efforts in other parts of the state. A learning collaborative creates a structure for sharing this information to learn from and encourage others, as well as creating a sense of accountability to the group to evolve and improve their leadership practices in community partnerships.

Additional Context

Two responsible organizations are identified for this strategy - **The North Carolina Public Health Association (NCPHA)** and the **North Carolina Institute for Public Health (NCIPH)**. NCPHA's mission is, in part, to improve public health through professional development and integrate research with the practice of public health, while NCIPH seeks to improve public health practice and build capacity.[13,14] These shared interests naturally lend themselves to development of learning opportunities to support stronger capacity and strategies for community partnership.

Other organizations in North Carolina are already convening regional collaboratives for these types of discussions and should be consulted to learn best practices. For example, **Western North Carolina Health Network (WNCHN)** convenes 16 local health departments, the Eastern Band of Cherokee Indians Department of Public Health and Human Services, and health care partners in the WNC Healthy Impact Network. Among a variety of activities, WNC Healthy Impact engages in peer learning through regular study halls and shared learning and support for meaningful community engagement.

Community experience and perspectives must be included in the development of, and dialogue about, the learning, tools, and best practices to be shared in a learning collaborative such as the one recommended in this strategy. As the intended purpose of such a collaborative is to promote effective community partnerships, community leaders outside of the local public health sector should be included in this ongoing dialogue. This could include leaders representing existing partnerships with public health or other sectors.

How would this impact the health of communities?

Successes in one area of the state can be tailored to address similar health needs in another area of the state. Shared learning about successes and partnership facilitation can directly benefit communities that are working to address their specific needs and might be in different stages of partnership development and program or policy implementation.

Who is responsible?

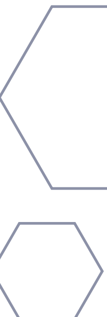
- North Carolina Public Health Association
- North Carolina Institute for Public Health

Who are the partners?

- Other non-governmental public health organizations
- Community members and leaders
- Community based organizations

References

1. Collective Impact Forum. What Is Collective Impact. Accessed August 28, 2022. https://collectiveimpactforum.org/what-is-collective-impact/
2. National Council of Nonprofits. Collective Impact. Accessed August 28, 2022. https://www.councilofnonprofits.org/tools-resources/collective-impact
3. Grazer T, Saunders S. Presentation - Collective Approach to Social Determinants of Health. Accessed August 24, 2022. https://www.dph.ncdhhs.gov/shd/presentations/2017/workshops/CollectiveApproachtoSocialDetofHealth2017-SHDConf.pdf
4. North Carolina Healthcare Association. Healthy People, Healthy Carolinas. Accessed August 28, 2022. https://www.ncha.org/healthy-people-healthy-carolinas/
5. Chatham Health Alliance. Home. Accessed August 28, 2022. https://www.chathamhealthalliancenc.org/
6. Granville Vance Public Health. Working on Wellness (WOW!). Accessed August 28, 2022. https://www.gvph.org/partnerships-initiatives/working-on-wellness-wow/
7. Brunswick Wellness Coalition. Home. Accessed August 28, 2022. https://brunswickwellness.org/
8. Pitt Partners for Health. Home. Accessed August 28, 2022. https://pittpartnersforhealth.org/
9. Healthy Rowan. Home. Accessed August 28, 2022. https://healthyrowan.org/
10. North Carolina Department of Health and Human Services. Healthy Opportunities Pilots. doi:10.1377/HLTHAFF.2019.01583
11. WNC Health Network. What We Do. Accessed August 25, 2022. https://www.wnchn.org/what-we-do/services-that-can-support-your-work/
12. Region IV Public Health Training Center. Trainings. Accessed August 24, 2022. http://r4phtc.org/trainings-results/?_sft_competency_strategic_skill=community-and-partner-engagement
13. National Network of Public Health Institutes. North Carolina Institute for Public Health. Accessed August 25, 2022. https://nnphi.org/member/north-carolina-institute-for-public-health/
14. North Carolina Public Health Association. About Us. Accessed August 25, 2022. https://ncpha.memberclicks.net/about-us



NCIOM
North Carolina Institute of Medicine

CHAPTER 5

MODERNIZING PUBLIC HEALTH DATA USE AND SYSTEMS

RECOMMENDATION 2............................ 42

The collection, access, and use of public health data needs modernization and investment in order to improve health outcomes. Public health must thoughtfully address what information is collected; how it is collected, analyzed, interpreted, and shared; and develop the capacity for efficient data collection, analysis, and dissemination. To fully address the root causes of poor health outcomes, public health must integrate relevant datasets on topics such as housing, education, and transportation. In partnership with the North Carolina Association of Local Health Directors (NCALHD),[A] the NCIOM Task Force on the Future of Local Public Health convened a work group to discuss topics related to data in local public health and to identify opportunities for improvement. The work group engaged in four conversations to address these topics:

1. Community and population data (e.g., health factors and status for whole populations)
2. Epidemiological, preparedness, and surveillance data systems (e.g., disease surveillance and emergency response)
3. Local public health service system (e.g., services, staffing, funding)
4. Agency and program performance data (e.g., quality and outcomes of public health programs)

Within and interconnected with these topics are issues related to:

- workforce capacity and competencies,
- using data to make decisions and talk about the issues affecting the health of communities,
- sharing data with communities,
- cross-agency data connectivity and partnerships, and
- developing necessary technology and tools for collecting and sharing data.

The technology and methodologies to address these issues are available, but to achieve data modernization public health must enhance workforce and infrastructure capacity and build connectivity between data systems and across partners. Addressing these challenges would help local public health develop compelling stories that demonstrate the impact that modern and strong public health infrastructure can make in communities across the state.

> **"This nation has failed to invest in the core capabilities of public health data, data analytics, predictive data analysis. We really need to make that investment."**
>
> *A Conversation with Robert Redfield. Council on Foreign Affairs.*
> *https://www.cfr.org/event/conversation-robert-redfield*

National organizations and groups, such as the Centers for Disease Control and Prevention (CDC) and the Robert Wood Johnson Foundation (RWJF), have identified the changes needed to streamline data systems and ensure equitable collection and use of information. The problems they identified include siloed information, outdated skills, heavy burdens for public health workers, older technologies, and lack of connections with the health care data ecosystem. The **CDC Data Modernization Initiative** lays out "priorities and objectives that will lead to specific desired outcomes, including response-ready systems, a common operating picture that brings data together to inform action across public health, a highly skilled workforce, strong partnerships, and effective governance."[1] The **National Commission to Transform Public Health Data Systems**, convened by the RWJF, developed recommendations to support "reimagining how data are collected, shared, and used, and identifying the public- and private-sector investments needed to modernize our public health data infrastructure and improve health equity."[2] Their recommendations cover a broad spectrum of responsible parties, including state and federal government, business, health care systems, and local public health. Along with these strategic planning efforts, the federal government has dedicated funding for data modernization through the Coronavirus Aid, Relief, and Economic Security (CARES) Act and American Rescue Plan Act (ARPA).

There are many different data systems that North Carolina local health departments are required or recommended to use (see Figure 7). Most of these systems do not directly communicate with each other, leading to redundant data entry and a burden on staff time. In addition, health departments are required to report data to the North Carolina Department of Health and Human Services (NCDHHS) Division of Public Health (DPH) related to funding agreements for programs and services, known as Agreement Addenda (AA).

Figure 7. North Carolina Data Systems Health Departments are Required or Recommended to Use

- LHD-Health Services Analysis
- Environmental Health Inspection Data Systems (EHIDS)
- Aid-to-Counties System
- NC Health Alert Network (HAN)
- Electronic Birth Registration System (EBRS)
- NC Database Application for Vital Events (NC DAVE)
- Environmental Health Inspection Data System (EHIDS)
- Clear Impact Scorecard
- Controlled Substance Registry System
- NC Health Information Exchange (NC HealthConnex)
- NC Electronic Disease Surveillance System (NCEDSS)
- NC COVID
- COVID-19 Community Team Outreach (CCTO)
- Crossroads
- Smart Sheet
- NC Immunization Registry (NCIR)
- COVID-19 Vaccine Management System
- NCCARE360
- NC Disease Event Tracking and Epidemiologic Collection Tool (NCDETECT)
- VMSG Dashboard Public Health Performance Management System

Source: Lovette, B. Presentation to the NCIOM Task Force on the Future of Local Public Health: Brief Overview of Current Data Flow: DPH/LHD Perspective. November 8, 2021. https://nciom.org/wp-content/uploads/2021/07/Lovette_DHHS_DPH_LHD-Data-slides-for-NCIOM_FLPH-Task-Force-meeting-Nov-8-final.pdf

[A] *NCALHD work associated with this task force is also supported by funding from the Kate B. Reynolds Charitable Trust.*

Streamlined and accessible public health data systems will allow users to share and access data more easily, reducing inefficiencies and redundancies in staff time and resources. A modernized public health data system will also enhance a health department's ability to concentrate on using data to track community health outcomes, monitor agency performance, identify emerging threats to health, and act quickly. Enhanced staff knowledge of data use and communication will increase their ability to:

- help community members understand the factors that can impact their health and empower them to engage in healthy behaviors,
- develop strategies to improve community health, and
- advocate for changes to policies.

There are also significant strengths to build upon in North Carolina. Data systems and infrastructure could be (and are being) leveraged to strengthen local public health capacity in data collection, analysis, and dissemination. For these reasons, the task force recommends the following:

RECOMMENDATION 2

Transform local public health's capacity to collect, share, use, and communicate data to drive continuous improvement in programs, agencies, and whole communities

Four strategies are recommended by the Task Force on the Future of Local Public Health to move to a future vision of effective data collection, sharing, use, integration, and communication:

Strategy 2a. Drive Improvement and Strengthen Connectivity The North Carolina Department of Health and Human Services Division of Public Health should strengthen the public health data ecosystem in North Carolina by supporting and investing in the creation of a strong statewide structure to prioritize, advance, and create collective accountability for improvement opportunities, with a shared set of values, across public health and other relevant data partners.

Strategy 2b. Identify Funding Needs for Data Modernization The statewide structure recommended in Strategy 2a should identify funding needs and potential funding sources, and a plan to secure resources for continued public health data use and system modernization, that are outside of the capacity of the Division of Public Health to support.

Strategy 2c. Evolve Health Department Data Capabilities Local health departments should evolve internal and external capabilities in data collection, sharing, and use by pursuing trainings for staff, developing capabilities around data sharing with community partners, creating a culture of learning, and adopting a shared set of values around intentional data development, use, sharing, and communication.

Strategy 2d. Support for Data Capacity and Modernization North Carolina public health philanthropies and nonprofit organizations, as well as partners in academia, health care, and the private sector should support developing work in local public health data capabilities by collectively investing in or collaborating on prioritized improvements and innovations related to workforce capacity, skill development, technical assistance, system improvement, and filling gaps in available data.

The strategies related to Recommendation 2 were also supported by the Carolinas Pandemic Preparedness Task Force. Please see the final report from the Carolinas Pandemic Preparedness Task Force for additional details and information at https://nciom.org/carolinas-pandemic-preparedness-task-force/.

Strategy 2a – Drive Improvement and Strengthen Connectivity

The North Carolina Department of Health and Human Services Division of Public Health should streamline data collection, improve data access, and strengthen alignment and connectivity across relevant data partners and data systems for local health departments by:

1. Supporting and investing in the creation of a strong statewide structure that includes state, local, and Tribal public health, public health non-profits, and other public health leadership, to:
   a. Prioritize improvement opportunities,
   b. Develop a shared set of values around intentional data development, use, sharing, and communication, and
   c. Promote alignment of data systems across public health data partners.
2. Including representatives from local and Tribal public health and other public health data partners in discussions and planning for use of available federal funds to build infrastructure, clarity, and connectivity in local public health data systems and operations.

Desired Result

A statewide group will closely monitor, and have accountability for, ongoing needs for improvement and investment in public health data modernization. This group will help advance priority improvements, remove barriers to change, leverage and secure assets, reduce duplication, elevate knowledge and skills, fuel momentum, assure that data is available to address the needs of vulnerable populations, and ignite interest in the field.

Why does the task force recommend this strategy?

With a decentralized local public health system in North Carolina, there are a variety of data reporting requirements and multiple data reporting systems used for various purposes. According to reports from data work group members, as well as participants in listening sessions conducted by other entities throughout the state, the staff time needed to complete often duplicative data reporting is burdensome. Requirements for access to the various data systems are also a challenge to manage. These and other issues connected to public health data modernization suggest that a statewide structure to align priorities, goals, and activities with relevant public health data partners would ensure that this important aspect of the public health system gets the attention needed to make necessary improvements.

Additional Context

The North Carolina Department of Health and Human Services Division of Public Health (DPH) and the North Carolina Association of Local Health Directors have already begun to work toward solutions in several areas to streamline data reporting and connectivity, including:[3]

- Initiation of the Agreement Addenda (AA) Alignment Project,
- Review of funding allocation methodologies,
- Development of a health equity data initiative and data consortium with Historically Black Colleges and Universities (HBCUs) in the state,
- Building customizable data dashboards, and
- Modernizing vital records for more efficient data access.

[B] Agreement Addendum are contracts between a local health department and the North Carolina Department of Health and Human Services Division of Public Health related to funding for certain programs and services.

[C] These actions are a summary of the data work group input developed by the group facilitator, Heather Gates of Human-Centered Strategies, LLC.

The DPH AA Alignment Project is a "quality Improvement initiative to streamline the operational process around AA reporting[B] and to evaluate AA content to maximize activity impact for improving public health."[3] DPH is also working with the NCALHD to "review funding allocation methodologies for equity and impact and jurisdictional collaboration, review performance metrics, and improve workflows."[3] Meanwhile, an NCALHD work group on Local Health Department (LHD) Performance Measures & State Reporting Metrics is "develop[ing] a common set of LHD performance measures to tell the local public health story [and] explore the need for new data systems."[4]

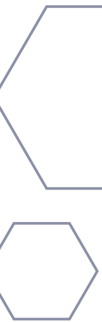
Discussions with the task force data work group led to the development of a comprehensive list of activities that could be considered by a statewide structure to collaborate for public health data modernization.[C] These activities include:

- Creating a strategy to better connect current and potential data partners and collaborators,
- Enhancing opportunities for peer learning (e.g., WNC Health Network and Health ENC),
- Exploring public-private partnerships to support data infrastructure and access to new workforce skills,
- Enhancing academic/research partnerships and student training, and
- Addressing data gaps and identifying disparities in health outcomes between different groups (e.g., WNC Health Network).

One topic that data work group members discussed is the need for more local-level data and data that is disaggregated by demographics to understand the disparities in health and health outcomes across North Carolina. This is an area in which a statewide structure dedicated to public health data modernization can develop a shared set of values for future improvement, and aligns with a recommendation of the **National Commission to Transform Public Health Data Systems**, convened by the Robert Wood Johnson Foundation. The commission recommended that, "As part of public health data system redesign, collect self-reported data by race, ethnicity, income, education, gender identity, sexual orientation, disability, and social position (i.e., how people are placed in a hierarchy of value by society, as perceived by the individual and by others). The data could be used to identify areas of disadvantage where investment and action are needed."[2]

How would this impact the health of communities?

Access to timely and accurate data is vital to understanding the needs of the community and acting accordingly to protect everyone's health. Increased access to data on the local level that provides granularity by geography and group demographics will help to identify successes and challenges in health outcomes. In addition, local public health staff time and funding are limited. Eliminating duplication in data reporting and streamlining access would free staff time to engage in other important elements of addressing population health.



Who is responsible?

- North Carolina Department of Health and Human Services Division of Public Health

Who are the partners?

- Local health departments
- Tribal public health
- Public health non-profits
- Other public health leadership
- North Carolina Department of Health and Human Services Information Technology Division

Strategy 2b – Identify Funding Needs for Data Modernization

The statewide structure recommended in Strategy 2a.1 should identify funding needs and potential funding sources and develop the implementation plan to secure these resources for continued public health data integration and modernization that are outside of the capacity of the Division of Public Health to support.

Desired Result

The statewide public health data structure will evaluate the funds required to make needed improvements to modernize public health data systems and determine sources for continued support.

Why does the task force recommend this strategy?

The work needed to modernize public health data use and systems will require resources and efforts across state, local, and Tribal public health, as well as relevant public health organizations and nonprofits, and with that, funding to support the work. While there will undoubtedly be a need for additional funding, it is not clear yet which parties will be responsible for carrying out the work and the cost to do so. The statewide structure proposed in Strategy 2a should be responsible for developing action plans and budget forecasts for coming years of data modernization efforts. That planning process should also include representatives of potential funding sources, including the North Carolina General Assembly, local governments, and public health philanthropies, as well as a proposal for securing those funds in a realistic and timely manner.

> **"Establish and implement a coordinated federal, state, and local investment strategy that includes regular fiscal support of state infrastructure coupled with intermediate and long-term system development and data collection."**
>
> *-Recommendation 2b from the National Commission to Transform Public Health Data Systems.*
>
> *https://www.rwjf.org/en/library/research/2021/10/charting-a-course-for-an-equity-centered-data-system.html*

Additional Context

The North Carolina Department of Health and Human Services Division of Public Health (DPH) is planning to use funds from the American Rescue Plan Act to assist in some of the work needed to modernize public health data reporting systems. To address data literacy and capacity issues affecting local health departments across the state, DPH will provide both funding and technical expertise related to data access, reporting, and sharing. This support will include training for health department leadership and staff in data modernization tools and resources. DPH will also provide support for internal and public facing dashboards that help to streamline processes and enhance public access to public health information and data resources.

One of the ongoing needs to address public health data modernization is developing new job classifications and descriptions and increasing salaries to enhance recruitment and retention at the state, regional, and local levels for data-related professionals (see Chapter 7 – Sustaining and Supporting the Local Public Health Workforce).

How would this impact the health of communities?

Funding to support activities to modernize public health data will help provide the changes needed to allow for rapid response to public health issues, identification of successes and challenges in population health, and continuous adjustments to public health programs and partnerships to appropriately address ongoing needs and developing crises. These data improvements will help local public health be more proactive, rather than reactive, to community health issues and will provide greater transparency in service provision and need.

Who is responsible?

- Statewide structure recommended in Strategy 2a.1

Who are the partners?

- North Carolina General Assembly
- County Commissioners
- Public health philanthropies

Strategy 2c – Evolve Health Department Data Capabilities

Local health departments should grow internal and external capabilities in data collection, sharing, and use by:

1. Providing access to existing trainings for staff to develop competencies in quantitative and qualitative data collection and analysis with framing in health equity from regional and statewide public health nonprofits and academic institutions.
2. Developing capabilities around data sharing with community partners.
3. Creating a culture of learning to promote continuous improvement for the meaningful collection and use of agency and program performance data.

Desired Result

Local health departments will have a culture and practice of meaningful data collection, sharing, and continuous improvement, both within the health department related to agency, program and service performance, and externally related to community health data collection and sharing. This includes a local public health workforce that is knowledgeable about, and competent in, equitable data collection and sharing. Also see Strategy 6c for discussion of opportunities to support innovation, including regional data capabilities.

Why does the task force recommend this strategy?

Local health department workforce knowledge and capabilities related to public health data vary across North Carolina, often due to resource availability. Once given adequate access to resources, modernizing and transforming public health's data capabilities requires that local health departments develop a culture of data development, use, sharing, and communication if they have not already had resources to do so. This begins with a workforce that is trained to understand, analyze, and make informed decisions using quantitative and qualitative data. Internally, this is important for purposes of examining health department programs and services to evaluate performance and potential areas for improvement. On the community level, it is important for understanding the collection and use of data that represents various demographic groups and how to use that data to communicate about health issues and support improvements in population health.

Additional Context

The North Carolina Association of Local Health Directors performance data work group is collaborating with the North Carolina Department of Health and Human Services Division of Public Health to identify priority performance measures and a collective strategy that will support health departments locally in prioritizing, using, and communicating data to drive improvements.

[D] *Results-Based Accountability™ ("RBA") is a disciplined way of thinking and taking action used by communities to improve the lives of children, families and the community as a whole. RBA is also used by agencies to improve the performance of their programs. https://1r65612jvqxn8fcup46pve6b-wpengine.netdna-ssl.com/wp-content/uploads/2016/07/RBA_Guide_Clear_Impact-1.pdf*

Several training resources are available to begin the process of growing skills and competencies in data collection, analysis, and communication. These include:

- The **North Carolina Institute for Public Health (NCIPH)** at the University of North Carolina – Chapel Hill Gillings School of Global Public Health – "Healthy Places NC Data Foundations Training Series"
- **WNC Health Network** - Paid services are available related to Results Based Accountability (RBA)[D], "tailored analysis of our regional health data set," "collect[ion of] additional local data and stories," and "strategic support for your health communications efforts."[5]
- The North Carolina Division of Public Health (DPH), the Foundation for Health Leadership & Innovation, and North Carolina Area Health Education Centers are collaborating to train DPH staff and the broader community in Results Based Accountability.[3]
- The **North Carolina Public Health Training Center** at the University of North Carolina - Wilmington College of Health and Human Services – "Data Analytics and Visualization for Public Health Practitioners"[6]
- **Region IV Public Health Training Center** through the Public Health Learning Network – Many trainings on data, including "Data Quality and Evidence-based Decision Making in Public Health;" "Data Analytics for Public Health;" and "Practical Evaluation Skills for Public Health Practitioners."[7]

There have been previous efforts in North Carolina to support continuous quality improvement in the public health system. The North Carolina Public Health Quality Program "provid[ed] training in quality improvement (QI) methods and tools and develop[ed], l[ed], and support[ed] strategic QI initiatives for the Division of Public Health and local public health agencies" in the state with funding from several public health philanthropies and the Centers for Disease Control and Prevention.[8] The program successfully trained public health professionals in QI and led initiatives for several years, but is no longer active due to challenges with funding sustainability.

How would this impact the health of communities?

A local health department with staff competent in data use and sharing, access to data analytics professionals, and an intentional culture of equitable data collection, use, and subsequent quality improvement will be able to effectively identify health department and community health successes and challenges. With that information, health departments will be able to effectively address community need and share data with community partners who can use that information to enhance their own work.

Who is responsible?

- Local health departments

Who are the partners?

- Community partners (i.e., organizations that can use and contribute to public health data)
- North Carolina Association of Local Health Directors
- Public health non-profits that offer training on data topics
- Public health academic partners
- ARPA Regional Workforce Hubs

Strategy 2d – Support for Data Capacity and Modernization

North Carolina public health philanthropies and nonprofit organizations, as well as partners in academia, health care, and the business sector should support developing work in local public health data capabilities by collectively investing in or collaborating on prioritized improvements and innovations related to workforce capacity, skill development, technical assistance, system improvement, and filling gaps in available data.

Desired Result

Local health departments will have a robust set of assets and resources, supported by partners and funders, to facilitate data capabilities, maintain data-related workforce competencies, and optimize data development for the improvement of community health.

Why does the task force recommend this strategy?

The expertise of partners in public health nonprofit organizations, academia, health care, and the private sector related to public health data collection and analysis is a vital resource to achieve a comprehensive modernization of the public health data landscape. These partners hold knowledge about aspects of community health, as well as capabilities in using and communicating that data. In addition, public health philanthropies have an interest in building an effective and sustainable public health data system supported by a knowledgeable workforce.

Additional Context

Local health departments are often incredibly resourceful in participating in, or developing, partnerships to solve community health or workforce capacity challenges. An example of a partnership that has contributed to the capacity to collect or share public health data is the BUILD Health Challenge partnership in Greensboro. Focused on housing and health, in this partnership between Guilford Public Health, Greensboro Housing Coalition, and Cone Health, Cone Health analytics provided data on diagnoses that could have environmental influences to evaluate the impact of renovations on an apartment complex.[9]

Guilford County has also partnered with SAS for Public Health Modernization to improve its public health data capabilities.[10] Initial work will integrate epidemiology dashboards, with future options for further integration with other data sources. The project also includes the creation of analytic tools and visualizations that will help public health professionals explore trends and emerging public health threats.

The WNC Health Network in Western North Carolina is a successful example of strong regional partnership between health departments, hospitals, and other community partners to "improve efficiency, quality, and standardization of community health assessment data collection and reporting of data and plans," among other goals.[11] WNC Health Network helps these local partners with "standardizing and conducting data collection" and "creating reporting and communication templates and tools."

Another opportunity to enhance the modernization of the public health data landscape lies with the workforce of the future. In academic settings for public health workforce training such as community colleges and universities, competencies in data collection and analysis could be developed through inclusion of coursework and certifications on these topics. This would help to prepare the future public health workforce and could have the potential for cross-training those in data science fields who may be interested in serving in local public health.

How would this impact the health of communities?

Effective partnerships to fund or assist with data collection, analysis, or training would enhance local public health's ability to identify community health needs and efficiently address them.

Who is responsible?

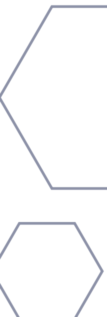
- Public health philanthropies
- Public health nonprofits

Who are the partners?

- Academia
- Health care systems
- Business leaders with relevant knowledge and resources to contribute to public health data innovation

References

1. Centers for Disease Control and Prevention. *Data Modernization Initiative Strategic Implementation Plan*. Published December 22, 2021. https://www.cdc.gov/surveillance/pdfs/FINAL-DMI-Implementation-Strategic-Plan-12-22-21.pdf.
2. Robert Wood Johnson Foundation. Charting a Course for an Equity-Centered Data System - Recommendations from the National Commission to Transform Public Health Data Systems. Published October 1, 2021. https://www.rwjf.org/en/library/research/2021/10/charting-a-course-for-an-equity-centered-data-system.html.
3. North Carolina Department of Health and Human Services Division of Public Health. *NC Governmental Public Health: Workforce and Infrastructure Improvement in Action*. Published May 2022. https://www.ncdhhs.gov/media/15401/download?attachment.
4. North Carolina Association of County Commissioners. NCACC Strategic Member Services. Accessed August 28, 2022. https://www.ncacc.org/services-for-counties/ncacc-strategic-member-services/.
5. WNC Health Network. What We Do - Paid Services. Accessed August 28, 2022. https://www.wnchn.org/what-we-do/services-that-can-support-your-work/.
6. University of North Carolina Wilmington. North Carolina Public Health Trainings. Accessed August 28, 2022. https://uncw.edu/chhs/community/cwd/ncphtc/ncphtrainings.html.
7. Region IV Public Health Training Center. Trainings. Accessed August 24, 2022. http://r4phtc.org/trainings-results/?_sft_competency_strategic_skill=community-and-partner-engagement.
8. NC Public Health Quality Program. Accessed September 11, 2022. https://www.centerforpublichealthquality.org/index.php/nc-public-health-quality-program/.
9. BUILD Health Challenge. Collaborative Cottage Grove - About. Accessed August 29, 2022. https://buildhealthchallenge.org/communities/2-collaborative-cottage-grove/.
10. Personal communication with Iulia Vann, Health Director, Guilford County Public Health. August 30, 2022.
11. WNC Healthy Impact. About. Accessed August 29, 2022. https://www.wnchn.org/wnc-healthy-impact/about/.



NCIOM
North Carolina Institute of Medicine

CHAPTER 6

STRENGTHENING LOCAL PUBLIC HEALTH COMMUNICATION

RECOMMENDATION 3............................ 50

Effective and meaningful communication with community members, policymakers, media, and other partners is an integral part of local governmental public health. During a public health emergency, as well as during non-emergency times, local public health departments must communicate trusted, accurate, culturally appropriate, and accessible messages through different forms of media in order to carry out a wide variety of programs and policies. Despite the importance of strong communications capabilities to the success of local public health initiatives, very few local health departments have dedicated communications personnel, nor adequate training and infrastructure to support robust communications. Expanding this capacity is vital to achieving the task force's vision for the future of local public health. The Task Force on the Future of Local Public Health identified three key areas of communication for local public health:

1. Communication with community members about ongoing specific health issues or concerns, such as risk and protective factors for chronic diseases and corresponding health behaviors
2. Communication with community members about emergency/ urgent health issues (such as information about emerging infectious diseases and other crises)
3. Communication about the role of public health in ensuring community health and the valuable contributions that local health departments make to daily life, public safety, economic vitality, and the health of communities

> **"The ability to communicate clearly, concisely, and persuasively to the public is both a challenge and a fundamental responsibility of health departments."**
>
> *National Association of City and County Health Officials. Communication and Marketing: A Foundational Capability for Local Health Departments. November 2015.*
>
> *https://www.naccho.org/uploads/downloadable-resources/Resources/Communications-Foundational-Capabilities.pdf*

Public Health Communication and Community Health

Public health practitioners and partners recognize the many ways that people's health is impacted by where they live, and by other factors such as education, employment, and housing. Effective public health communication makes considerations for these factors that impact our health, including social media directed at both the individual and group levels, advocacy to policymakers, and broad media campaigns to reach larger populations.[1]

Effective public health communications strategies often have one or more primary goals: to increase population awareness about specific health issues or solutions; to describe and encourage healthy behaviors (and/ or discourage risky behaviors); and to shift social norms about health issues to encourage healthier behaviors or reduce stigma about health conditions.[2] Successful public health communications can improve the health of the whole population by achieving these goals.

To maintain the capacity for effectively addressing these communication responsibilities, the task force highlighted the need for community collaboration and trust when developing strategies to improve public health communications, as well as the need for a communications skillset among the workforce in local public health. Trust is key to effective public health communications, and yet a survey by the Robert Wood Johnson Foundation found that nearly a quarter of adults (23%) nationally think the information provided by their local health department about the health of people in their communities is unreliable.[3] Only 44% of adults said they have "a great deal" or "quite a lot" of trust in the recommendations made by local health departments to improve health.[3]

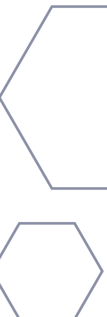
Lessons Learned from Pandemic Communications

In December 2021, the National Academies of Sciences, Engineering, and Medicine released an examination of lessons learned about effective communications and community engagement during the COVID-19 pandemic.[4] Specific challenges in crisis communications included the broad scope of the problem; the speed at which the pandemic evolved; and the need to counter misinformation distributed from various sources, including mainstream media and social media. Other challenges identified in the report included coordination and collaboration, particularly across federal, state, local, and Tribal governments and within changing federal administrations during vaccine distribution. Effective and accurate communication also proved challenging as local public health tried to address the different ways communities were being impacted and tailor messages to acknowledge the impact of systemic racism on community experiences with COVID-19.[4]

The report's insights for future public health crisis communications include grounding communications in reliable data; including communities that are most impacted in the development of bidirectional communications; developing messages that are "tailored, culturally congruent, and delivered by trusted messengers;" and countering misinformation and disinformation quickly. The report concludes that adequately implementing these strategies will require additional funding support, and a convening and coordinating structure to ensure local public health's capacity to fill these communications roles.

Challenges and Opportunities for Local Public Health Communication

Like so much in public health, funding and personnel remain challenging as health departments seek to implement effective public health communications strategies. The task force identified an ongoing challenge of many local health departments having few staff with primary roles specific to communications. Due to resource constraints, staff with communications responsibilities often have varied amounts of training and skills in public health communications to implement strategies for both crisis communications and ongoing health promotion needs. Frequently, the primary roles of these staff members are not in communications positions.



To address concerns about community trust, public health communicators often partner with established and respected community members who can successfully convey key information about health behaviors, risk factors, and other public health messages in ways that demonstrate understanding of and experience with the many community- and individual-specific factors that impact health. The development of these relationships is both an opportunity and a challenge for local health departments. To implement effective communication strategies, local health departments must have capacity to develop relationships with these trusted community messengers, work with them to craft compelling and effective messages, evaluate their impact, and maintain and evolve their relationships over time.[4]

With these needs and challenges in mind, the task force recommends the following:

RECOMMENDATION 3

Strengthen capabilities and build trust to communicate effectively with diverse community members, media, and policymakers

Three strategies are recommended by the Task Force on the Future of Local Public Health to move to a future vision of effective communication:

Strategy 3a. Build a Community of Practice
Through the North Carolina Public Health Workforce Regional Hubs, the North Carolina Division of Public Health should work to build a Public Health Communication Community of Practice with representatives of local and Tribal health departments.

Strategy 3b. Create a Public Health Communication Certificate Program The North Carolina Public Health Association, Division of Public Health, and academic programs at the university and community college level should collaborate to create a training certificate program in governmental public health communications to build communication capabilities at the regional and/or local level and to promote best practices in communications across the state.

Strategy 3c. Raise Public Awareness and Knowledge of Public Health Issues, Services, and Strategies
North Carolina health- and public-health-related philanthropies should invest in the development of a robust strategic communications framework that clearly identifies messengers, messages, and strategies for increasing public and legislative knowledge of public health's roles, and opportunities to champion development in local public health.

Similar recommendations (6.2 and 6.3) were supported by the Carolinas Pandemic Preparedness Task Force. Please see the final report from the Carolinas Pandemic Preparedness Task Force for additional details and information at https://nciom.org/carolinas-pandemic-preparedness-task-force/.

Strategy 3a – Build a Community of Practice

Through the North Carolina Public Health Workforce Regional Hubs, the North Carolina Department of Health and Human Services Division of Public Health should develop a Public Health Communication Community of Practice (COP) with representatives of local and Tribal health departments to continue fostering collaboration, increase communication skills, ensure consistent messaging, and advance the general knowledge of public health communication. The Public Health Communication COP should:

i. Work with the University of North Carolina Hussman School of Journalism and Media, North Carolina university departments and programs of communications and public health, and regional and statewide partners to support relationship building between local and Tribal public health and local and state health reporters.
ii. Develop or support trainings on best practices for sharing public health data and messages, communicating with reporters, and storytelling.
iii. Be leveraged by the North Carolina Association of Local Health Directors and the North Carolina Division of Public Health, with input from representatives of local and Tribal health departments, to develop a plan for all local health departments to have access to a regional- or local-level communications staff member.

Desired Result

Local health departments will have opportunities to develop staff skills to support public health communications and will gain necessary staff capacity to fulfill communication goals.

Why does the task force recommend this strategy?

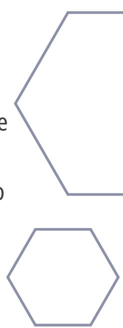
The task force recognized the need for increased staff training and capacity in public health communications and for local public health communicators to develop or deepen relationships with local and state news reporters and develop skills and best practices in public health communications. Relationships with news reporters can lay the groundwork for rapid and accurate communication during crises, understanding of reporting priorities, and can increase opportunities for local public health activities to be covered in the news. A Community of Practice (COP) concept would encourage cross-sector relationship building between local public health and local and state news media, as well as support the skill development of those working in local public health and enhance consistent health messaging across health departments. The COP could also serve as a vital advocate for local health departments across the state that do not have financial and staff capacity to effectively achieve communications goals and that could benefit from cross-department or regional collaboration to ensure communications staffing.

Additional Context

The North Carolina Public Health Workforce Regional Hubs, developed by the North Carolina Department of Health and Human Services Division of Public Health with funding from the American Rescue Plan Act, have allowed the 10 public health regions in the state to pursue projects and activities that they have prioritized for their workforce.[A] This collaboration has led to the launch of a Data and Communications Fellowship and a Rapid Needs Assessment to identify staffing and training needs.[B,5] With the successful development of the Regional Hubs and the subsequent work of several regions in the area of public health communications, the task force identified that collaboration as a prime venue in which to establish a Public Health Communication Community of Practice.

In addition to this more recent work through the Regional Hubs, some health departments with more financial resources have been able to dedicate staff specifically to communications roles and implement effective communications plans. For example, the Durham Public Health Department has a Communications and Public Relations Manager as a permanent staff role. Having a dedicated staff member in this role has helped to ensure that community members get the information they need about access to care and community resources and has meant that policymakers turn to local public health for health data and information about barriers to care. In addition, Durham Public Health has sustained strong relationships with local news media, helping to get news to the community about actionable topics like vaccine clinics.

Many local health departments do not currently have the funding or staff to support a dedicated communications position, making cross-department or regional sharing a helpful support structure for ensuring this expertise is available at the local level (see also Strategy 6c). Regional collaborations, such as WNC Health Network, have been important in ensuring effective public health communications for some smaller health departments. In 2019, WNC Health Network organized the WNC Health Communicators Collaborative, a group of public health and hospital communications professionals. As the pandemic began, this new collaborative created a pilot project to adapt information from the Centers for Disease Control and Prevention (CDC) and the North Carolina Department of Health and Human Services for a Western North Carolina audience, particularly rural communities.[6] After the pilot, participation in the collaborative's vaccination campaign grew to include all "18 catchment area counties, the Eastern Band of the Cherokee Indians, and several local community-based organizations that closely work with African American and Hispanic/Latinx populations in the WNC region."[6] Evaluations of the WNC Health Communicators Collaborative's work showed success in using this model to communicate COVID-19 information in the region. Of respondents who saw the campaign's ads, 53% said they sought more COVID-19 information after seeing them, 25% said the ads impacted their COVID-19 prevention behaviors, and 30% said seeing the ads led to vaccination or vaccine consideration.[6]



[A] *Learn more about the North Carolina Public Health Workforce Regional Hubs in Chapter 7.*
[B] *The needs assessment process is scheduled to be completed by Spring of 2023.*

How would this impact the health of communities?

Close relationships between local public health and local news media would help to ensure accurate and timely reporting of important health-related topics for the community. Increasing local public health workforce knowledge and access to expertise in public health communications will allow for locally tailored health messages that can have a greater impact on community health by speaking more directly to community values and experiences.

Who is responsible?

- North Carolina Department of Health and Human Services Division of Public Health

Who are the partners?

- North Carolina Public Health Workforce Regional Hubs
- Local health departments
- Tribal public health
- University of North Carolina Hussman School of Journalism and Media
- North Carolina university departments of communications
- Local and state health reporters

Strategy 3b – Create a Public Health Communication Certificate Program

The North Carolina Public Health Association, North Carolina Department of Health and Human Services Division of Public Health, and public health academic programs at the university and community college level should collaborate to create a training certificate program in governmental public health communications to build communication capabilities at the regional and/or local level, and to promote best practices in communications across the state. The certificate program should:

i. Help staff in different local public health roles understand how their role fits into communications activities and needs of the agency and how to identify misinformation and appropriate strategies for countering it.

ii. Ensure that staff who communicate with the community using health data are trained on effective ways to do so.

iii. Emphasize tools and resources to evaluate the cultural responsiveness of health messages, how the community relates to health messages, and how the community wants to receive communications.

iv. Identify ways to collaborate with local and regional partners to foster effective strategies for sharing public health messages with the community.

Desired Result

Local public health staff tasked with communications roles will have expertise in public health communications.

Why does the task force recommend this strategy?

Public health practitioners are used to wearing many hats and developing needed skills while on the job, but the task force recognized the need for dedicated staff, training, and, ideally, certification in public health communications. Without a specific educational background in public health communications or public relations, staff tasked with communications duties may not have the tools and knowledge to be most effective in their role. A certificate program would provide an opportunity to grow these skills through professional development.

Additional Context

The COVID-19 pandemic emphasized the importance of communication, whether it is countering misinformation or tailoring messages to meet community needs. As mentioned on Page 49, the National Academies of Sciences, Engineering, and Medicine identified lessons learned from the pandemic about effective communications and community engagement.[4] Major insights for public health crisis communications were to:

- Ground communications in reliable data;
- Include communities that are most impacted in the development of bidirectional communications;
- Develop tailored messages that can be delivered by trusted messengers; and
- Counter misinformation and disinformation quickly.

Even before the pandemic, local public health workers in North Carolina emphasized the importance of effective public health communication. A July 2019 public health workforce survey found that persuasive communication[c] was the top strategic skill that staff at all levels identified as important to their day-to-day work.[7]

A successful public health communication strategy needs to incorporate an understanding of who the audience is, how they consume information, when they need to receive the information, who their trusted messengers are, and how the communication efforts will be evaluated.[4] The Centers for Disease Control and Prevention (CDC) has established Guiding Principles for Inclusive Communication that are "intended to help public health professionals, particularly health communicators, within and outside of CDC ensure their communication products and strategies adapt to the specific cultural, linguistic, environmental, and historical situation of each population or audience of focus."[8] See Figure 8 for these principles.

Figure 8. CDC's Health Equity Guiding Principles for Inclusive Communication

1. **USING A HEALTH EQUITY LENS when framing information about health disparities.**
2. **Considering the KEY PRINCIPLES, such as using person-first language and avoiding unintentional blaming.**
3. **Using PREFERRED TERMS for select population groups while recognizing that there isn't always agreement on these terms.**
4. **Considering HOW COMMUNICATIONS ARE DEVELOPED and looking for ways to develop more inclusive health communications products.**
5. **Exploring OTHER RESOURCES AND REFERENCES related to health equity communications.**

Source: Centers for Disease Control and Prevention. Health Equity Guiding Principles for Inclusive Communication. https://www.cdc.gov/healthcommunication/Health_Equity.html

The effectiveness of public health communications in achieving health behavior goals, shifting social norms, or impacting health outcomes is often not evaluated, due in part to the broader challenges of funding and personnel. While those resource challenges are real, it is important to understand whether communications are reaching their intended audiences and achieving their desired purpose.

How would this impact the health of communities?

Knowledgeable and skilled public health communicators can use data and health messages tailored to community values and needs. This culturally responsive health information will help community members understand how health behaviors, diseases, and other factors can impact their health and what steps they can take to keep themselves healthy.

Who is responsible?

- North Carolina Public Health Association
- North Carolina Department of Health and Human Services Division of Public Health
- Public health academic programs at the university and community college level

Who are the partners?

- Local health departments
- Tribal public health
- North Carolina Institute for Public Health

Strategy 3c – Raise Awareness and Knowledge of Public Health Issues, Services, and Strategies

North Carolina health philanthropies should invest in the development of a robust strategic communications framework that clearly identifies messengers, messages, and strategies for increasing public and legislative knowledge of public health's roles and opportunities to champion development in local public health.

Desired Result

Community members will have a better understanding of the role and importance of local public health in the health of their communities and will support the allocation of adequate resources for the work of local public health.

Why does the task force recommend this strategy?

Many people understand the role of local public health in addressing infectious diseases, particularly after the experience of the COVID-19 pandemic. However, the vast scope of local public health—from restaurant and water inspections to community collaborations—is much less well known. Local public health does not often publicize its work and achievements, leaving the sector vulnerable to being overlooked for the important public services it provides. Lack of awareness by both community members and policymakers has led to less priority being placed on providing adequate resources for local public health to effectively achieve its goals of improving community health, public safety, economic prosperity, and well-being. This need for increased knowledge of local public health—and subsequent support for ensuring adequate resources—provides an opportunity for health- and public-health-related philanthropies in the state to invest in activities that increase public awareness.

Additional Context

A 2021 survey by the Robert Wood Johnson Foundation found that one-third of adults (33%) report being unfamiliar with the activities of their local health department, and there is no data to indicate what those claiming to be familiar with activities actually know about local public health's roles in the community.[3] This survey also found challenges related to public trust:[3]

- Nearly a quarter of adults (23%) nationally think the information provided by their local health department about the health of people in their communities is unreliable.
- Only 44% of adults have "a great deal" or "quite a lot" of trust in the recommendations made by local health departments to improve health.

A lack of trust for some is paired with frustration and anger about the actions taken by public health officials during the course of the COVID-19 pandemic. This combination of negative perspectives about public health officials subsequently led to over 100 new laws across the country to limit the authority of state and local health officials.[9] Public health officials are concerned about the potential for additional limitations to their roles and responsibilities and how that would impact their ability to respond in future public health emergencies or natural disasters.[10] Improving the public's and policymakers' understanding of the work of public health on the local and state level could help to increase trust and support for the role of public health in our daily lives and in emergencies.

Recognizing the importance of bridging the communication gap about public health's role, Public Health Reaching Across Sectors (PHRASES) is a national initiative to "improve the ability of public health professionals to communicate the impact and value of the public health field to other sectors in language that resonates and fosters cross-sector partnerships and alliances." PHRASES is a partnership between the de Beaumont Foundation and the Aspen Institute's Health, Medicine and Society Program and offers resources and trainings to public health professionals. Research from the PHRASES initiative shows that leaders in sectors such as housing, education, business, and health care have very different views and understanding of what the concept of public health is, let alone how the work of local public health can impact communities (see text box on following page). Crossing that knowledge and communication gap will be essential in developing truly effective and lasting cross-sector parterneships (see also, Chapter 4 – Partnerships).

How would this impact the health of communities?

Improved awareness and knowledge of local public health's role could lead to increased allocation of resources for the work to improve community health and well-being. An increase in resources would allow for more effective activities to promote policies that can improve health and programs to address community health needs.

> **"33% of adults report being unfamiliar with the activities of their local health department."**
>
> *- Harvard T.H. Chan School of Public Health, The Public's Perspective on the United States Public Health System. Robert Wood Johnson Foundation. May 2021.*
>
> *https://www.rwjf.org/en/library/research/2021/05/the-publics-perspective-on-the-united-states-public-health-system.html*

Perspectives on Public Health

Interviews with housing, business, education, and health sector leaders were conducted with funding from the de Beaumont Foundation and the Aspen Institute's Health, Medicine and Society Program as part of the **Public Health Reaching Across Sectors (PHRASES)** initiative. Some key perpsectives gained from that work are shared below (emphasis added) and highlight the gap in understanding of the purpose and role of public health in communities.

*"Leaders in the Housing and Education sectors, as well as leaders and professionals in the Business sector had a dominant tendency to **associate health with medical care.** They understood health deeply and implicitly as a medical issue, which placed the health care system and health insurance at the forefront of their thinking. While Health Systems leaders consistently recognized that access to care shapes people's health in significant ways, they tended to focus less on health care than Housing, Education, and Business participants did."*

*"When asked to define the term 'public health,' some sector leaders, as well as the Business professionals, were initially surprised and stumped. **They had a hard time defining the concept and the field**, and needed time to access what they knew about public health."*

*"Leaders in Housing and Education sometimes talked about the role of public health in providing preventive and curative health care to communities and, specifically, to underserved individuals. In those instances, **they typically thought about public health as a function—caring for the health of the public**— rather than as an organized field of practice, and **they assumed that this function was performed by the health care sector**. Business participants often associated the phrase 'public health' not simply with the function of caring for the health of the public but with the concept of a 'government-run health care system.'"*

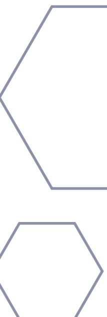
FrameWorks Institute. Public Health Reaching Across Sectors - Mapping the Gaps between How Public Health Experts and Leaders in Other Sectors View Public Health and Cross-Sector Collaboration. February 2019. https://www.phrases.org/wp-content/uploads/2020/07/Aspen-PHRASES-MTG-Report-2019.pdf

Who is responsible?

- Public health philanthropies

Who are the partners?

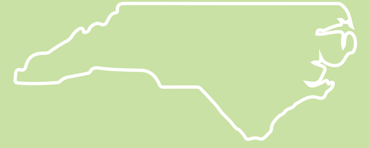
- North Carolina Department of Health and Human Services Division of Public Health
- North Carolina Public Health Association
- Local health departments
- Tribal public health



References

1. Bernhardt JM. Communication at the Core of Effective Public Health. Am J Public Health. 2004;94(12):2051. doi:10.2105/AJPH.94.12.2051
2. Tulane University School of Public Health and Tropical Medicine. *10 Strategies for Effective Health Communication*. September 25, 2020. Accessed August 29, 2022. https://publichealth.tulane.edu/blog/health-communication-effective-strategies/
3. Robert Wood Johnson Foundation. *The Public's Perspective on the United States Public Health System*. May 2021. Accessed August 29, 2022. https://www.rwjf.org/en/library/research/2021/05/the-publics-perspective-on-the-united-states-public-health-system.html
4. Overton D, SA Ramkeesoon, K Kirkpatrick, A Byron, ES Pak. *Lessons from the COVID-19 Crisis on Executing Communications and Engagement at the Community Level During a Health Crisis*. National Academies of Sciences, Engineering, and Medicine. December 2021. https://www.nationalacademies.org/news/2021/12/lessons-from-covid-19-on-executing-communications-and-engagement-at-the-community-level-during-a-health-crisis
5. North Carolina Department of Health and Human Services Division of Public Health. *NC Governmental Public Health: Workforce and Infrastructure Improvement in Action*. May 2022. https://www.ncdhhs.gov/media/15401/download?attachment
6. Centers for Disease Control and Prevention. *"My Reason WNC" Regional COVID-19 Communications*. Accessed August 29, 2022. https://www.cdc.gov/vaccines/covid-19/health-departments/features/campaign-western-north-carolina.html
7. North Carolina Institute for Public Health. *Driving the Future: Assessment of the North Carolina Local Public Health Workforce*. July 2019. https://sph.unc.edu/wp-content/uploads/sites/112/2019/07/LHD_Survey_FINAL.pdf
8. Centers for Disease Control and Prevention. Health Equity Guiding Principles for Inclusive Communication. Accessed August 29, 2022. https://www.cdc.gov/healthcommunication/Health_Equity.html
9. Baker M, Ivory D. Why Public Health Is in Crisis: Threats, Departures, New Laws. *The New York Times*. October 20, 2021. Accessed October 18, 2022. https://www.nytimes.com/2021/10/18/us/coronavirus-public-health.html
10. The Network for Public Health Law and the National Association of County & City Health Officials. Proposed Limits on Public Health Authority: Dangerous for Public Health. May 2021. Accessed October 18, 2022. https://www.networkforphl.org/wp-content/uploads/2021/05/Proposed-Limits-on-Public-Health-Authority-Dangerous-for-Public-Health-FINAL.pdf

NCIOM
North Carolina Institute of Medicine



CHAPTER 7

SUSTAINING AND SUPPORTING THE CURRENT LOCAL PUBLIC HEALTH WORKFORCE

RECOMMENDATION 4 59

Recruitment and retention of the current local public health workforce will be the most fundamental determining factor in achieving a strong future for local public health departments. While careers in public health offer meaning, purpose, and growth, a confluence of factors contributes to strain on the public health workforce, including the wide range of responsibilities and required expertise, the need for training and skills related to a broad variety of health issues, a competitive workforce environment, and ongoing mental health needs and burnout in local public health exacerbated by the COVID-19 pandemic. The pandemic has also contributed to increasing politicization of public health policies, polarization about the roles and responsibilities of public health, and mistrust in governmental authority, all of which have led to a particularly difficult environment for local public health workers.

Yet, even prior to the pandemic, public health was a sector with immense workforce challenges. Analysis by the de Beaumont Foundation and the Public Health National Center for Innovations found that the US needs 80,000 more public health workers in state and local health departments just to fulfill minimum community services.[1] From 2009 to 2019, the public health workforce in North Carolina saw a decrease of 18% in the staffing-per-resident ratio.[2] Such a large shortfall makes the results of the 2021 Public Health Workforce Interests and Needs Survey (PH WINS) alarming. Conducted by the de Beaumont Foundation, PH WINS found that 32% of state and local public health workers are considering leaving their jobs in the next year and 44% say they are planning to leave in the next five years. Those with intentions to leave cited inadequate pay (49%), work overload/burnout (41%), lack of opportunities for advancement (40%), stress (37%), and organizational climate/culture (37%) as their main reasons.[3]

> **"Already, Americans are feeling the impact of staffing shortages across the health system in hospitals, primary care clinics, and public health departments... If we fail to act, we will place our nation's health at increasing risk"**
>
> *- US Department of Health & Human Services. New Surgeon General Advisory Sounds Alarm on Health Worker Burnout and Resignation. May 23, 2022.*
>
> *https://www.hhs.gov/about/news/2022/05/23/new-surgeon-general-advisory-sounds-alarm-on-health-worker-burnout-and-resignation.html*

The task force convened a work group to discuss topics related to workforce and to identify strategies to retain experienced workers already serving in public health. The work group engaged in three conversations to address crosscutting competencies, recruitment and retention, and future workforce.

A Workforce to Support Local Public Health Responsibilities

The Foundational Public Health Services (FPHS) framework (see Pages 21-22 for more information), developed by the Public Health National Center for Innovations, includes the community-specific responsibilities of governmental public health, and identifies capabilities that must be in place in order to effectively carry out these responsibilities.[4] These capabilities include:

- Health Equity
- Assessment and Surveillance
- Community Partnership Development
- Organizational Competencies
- Policy Development and Support
- Accountability and Performance Management
- Emergency Preparedness and Response
- Communication

The 10 Essential Public Health Services Framework outlines specific responsibilities central to effective public health and prioritizes the role of public health in ensuring health for all members of a community.

> **"The ability of a public health agency to possess infrastructure of 'foundational capabilities' and provide 'essential services' relies on the skill of the people who comprise the workforce"**
>
> *- North Carolina Department of Health and Human Services, NC Governmental Public Health: Workforce and Infrastructure Improvement in Action, May 2022.*
>
> *https://www.ncdhhs.gov/media/15401/download?attachment*

Considering these frameworks, the task force discussed how the local public health workforce could be sustained and supported to effectively fulfill these responsibilities. As the North Carolina Department of Health and Human Services stated in its recent report, *NC Governmental Public Health: Workforce and Infrastructure Improvement in Action*, "The ability of a public health agency to possess infrastructure of 'foundational capabilities' and provide 'essential services' relies on the skill of the people who comprise the workforce."[4]

The State of the Public Health Workforce During COVID-19 - Burnout, Morale, Competition, and Wages

The COVID-19 pandemic has been a time of incredible stress on the local public health workforce. Faced with a pandemic that put all communities at risk, local public health was tasked with the enormous challenge of infectious disease control (including testing, contact tracing, and vaccine distribution), as well as the responsibility for communicating with the public about emerging and developing information on the virus, benefits of risk mitigation strategies, safety and efficacy of vaccines and

treatments, and many other related issues. The broad impact of the virus, as well as the length of time engaged in pandemic response, has led to struggles with morale, mental health, and job satisfaction for local public health workers.

The 2022 PH WINS found that more than half of US public health employees report at least one symptom of post-traumatic stress disorder, and one-quarter reported three or more symptoms. In addition, more than 40% of public health executives reported feeling "bullied, threatened, or harassed by individuals outside of the health department" during the pandemic. Nearly 60% of these executives reported feeling that their public health expertise had been undermined or challenged by people outside of the health department.[3]

In addition, public health workers often experience low wages compared to others with similar levels of education and experience. Among the employees who reported that they are considering leaving their organization, nearly half listed pay as the top reason for leaving. In North Carolina, the average wage for a worker in public health is $55,494, placing North Carolina 46th in the nation for public health wages.[A,5] The challenges of the pandemic, combined with the already existing challenges of low wages and worker responsibilities spread thin, have combined to create an urgent need for additional support of the local public health workforce.

Recognizing the importance of a strong public health workforce, the White House announced that the Centers for Disease Control and Prevention will be awarded $3 billion in 2022 for a "first of its kind American Rescue Plan-funded grant program to strengthen the future public health workforce, including offering community health workers and others hired for COVID-19 response support in continuing their careers as public health professionals beyond the pandemic."[6] While funding is essential and will help to address some challenges, there are other important strategies to support the existing public health workforce. With these needs and challenges in mind, the task force recommends the following:

RECOMMENDATION 4

Bolster local public health's capacity to promote community health and well-being by sustaining and supporting the current workforce

Five strategies are recommended by the Task Force on the Future of Local Public Health to move to a future vision of a sustained and supported local public health workforce:

Strategy 4a. Develop Statewide Accountability for the Public Health Workforce The North Carolina Department of Health and Human Services, North Carolina Public Health Workforce Regional Hubs, and other relevant organizations should develop a permanent statewide organizational structure to be accountable to the needs and challenges of North Carolina's governmental public health workforce.

Strategy 4b. Value the Public Health Workforce
The North Carolina Association of County Commissioners, the North Carolina Association of County Managers, and the UNC School of Government should implement more comprehensive education for county commissioners and managers about the role of local public health and issues affecting burnout, retention, and recruitment for local governmental public health employees.

Strategy 4c. Support the Development of the Public Health Workforce Local health departments should pursue available staff trainings to develop competencies, develop opportunities to supplement tuition fees for professional development, and review staff development and hiring practices.

Strategy 4d. Support Updates to Job Classifications
The North Carolina General Assembly should support the development of the local governmental public health workforce by increasing funding for the Office of State Human Resources to provide additional support and resources dedicated to the ongoing work to review and update job classification specifications and salary grades in public health.

Strategy 4e. Address Threats and Harassment
The UNC School of Government, North Carolina Institute for Public Health, North Carolina Public Health Association, and North Carolina Association of Local Health Directors should work together to address threats and harassment of members of the local public health workforce by raising awareness of current laws that address threats and harassment and developing support tools.

[A] *Average wage for public health workers includes those in roles outside of local public health, including the state health department.*

Strategy 4a – Develop Statewide Accountability for the Public Health Workforce

The North Carolina Department of Health and Human Services, North Carolina Public Health Workforce Regional Hubs, and other relevant organizations (e.g., the North Carolina Association of Local Health Directors, North Carolina Alliance of Public Health Agencies, and North Carolina Institute for Public Health) should develop a permanent statewide organizational structure to be attentive to the needs and challenges of North Carolina's governmental public health workforce. This structure should sustain, or evolve from, the North Carolina Public Health Workforce Regional Hubs and continue to pursue needs and opportunities for shared regional services and staff.

i. To inform the permanent statewide structure, the North Carolina Department of Health and Human Services Division of Public Health should prepare an interim and final report on the outcomes of the Public Health Workforce Projects conducted through the North Carolina Public Health Workforce Regional Hubs.

Desired Result

A statewide organizational structure will oversee the workforce needs of local governmental public health, including identifying trends in open positions, competitive salaries and benefits, competencies, and burnout. This organizational body will evaluate and analyze ongoing needs and identify and implement effective strategies for addressing them.

Why does the task force recommend this strategy?

As a de-centralized public health system with local governance, there is currently no group in North Carolina that is monitoring the current and future workforce needs for local public health as a whole and there is no state-level entity with data on the current workforce statistics in North Carolina local health departments, including demographics and salary. The North Carolina Department of Health and Human Services and the Division of Public Health do not have responsibility or oversight requirements for the local public health workforce in the state. Therefore, a collaborative body is needed for ongoing data collection, convening, and strategic discussions about the current and future local public health workforce in the state. The North Carolina Public Health Workforce Regional Hubs, funded through the American Rescue Plan Act (ARPA), provide a natural basis from which to develop a permanent structure for this purpose.

Additional Context

The **North Carolina Public Health Workforce Regional Hubs** were developed by the North Carolina Division of Public Health (DPH) with over $20 million from the ARPA. The Regional Hubs are housed across the 10 public health regions in the state to pursue projects and activities that they have prioritized for their workforce.[4] Projects include:[7]

- Planning communication, resilience, leadership, and other trainings;
- Recruiting post-doctoral fellows related to epidemiology and/or communications;
- Developing and hiring a support team that will work to tie together services across the region, including epidemiology and communications;
- Developing a recruitment campaign for environmental health workers; and
- Implementing HIV Navigators to support multiple counties within one region.

The ARPA funds for the Regional Hubs are a short-term funding allocation. Long-term funding will be required to sustain and build the workforce development collaboration into the future.

DPH and health departments have also collaborated on a Rapid Needs Assessment in late 2021 to identify immediate staffing and training needs.[4] Results of a deeper gap analysis and a Regional Workforce Development Plan are expected in Spring 2023.[4]

The North Carolina Association of Local Health Directors Workforce Work Group is working closely with the North Carolina Office of State Human Resources, the North Carolina Association of Public Health Nurse Administrator Governing Board, and other relevant parties to update job classifications that are relevant for local health departments. They have also been engaged with DPH to champion plans to field the Public Health Workforce Interests and Needs Survey (PH WINS) to gather data from all health departments to inform local and regional workforce initiatives.[8]

The **NC Alliance of Public Health Agencies** is a 501(c)(3) nonprofit that provides services to local health departments and state partners, including financial consulting and staffing.[B] The Alliance posts job openings on its website and assists local health departments with other methods of filling open positions.

One of the **North Carolina Institute for Public Health's missions** is to provide education, training, and professional development services and programs for the state's public health workforce. Related to this mission is their publication of the **North Carolina Public Health Workforce Assessment**, "a statewide training needs assessment of the local-level public health workforce, to help identify current and future critical training needs for professionals across North Carolina local health departments."[9] The last assessment was conducted in 2019, prior to the COVID-19 pandemic, and the upcoming statewide PH WINS survey will provide an updated and detailed workforce assessment.[C]

[B] *"In an effort to support public health in a more general way, the Alliance entered into an agreement with the NC Association of Local Health Directors and the NC Public Health Association in 2007. Under this agreement the Alliance provides the staff and general operating funds to operate all three organizations." - http://www.ncapha.org/about_us*

[C] *The de Beaumont Foundation conducts the Public Health Workforce Interests and Needs Survey nationally, however few North Carolina health departments are included in the data collection. https://sph.unc.edu/wp-content/uploads/sites/112/2019/07/LHD_Survey_FINAL.pdf*

Strategy 4a aligns with the initial action recommendations from **The Future of Public Health: Lights, Camera, Action** series that was a collaboration between the CDC Foundation, the National Association of County and City Health Officials, the Association of State and Territorial Health Officials, and Big Cities Health Coalition (see Figure 9).[10]

Figure 9. Excerpt of Initial Actions Informed by the National Summit on Workforce

- Identify opportunities for creation of commissions or task forces.
- Create strategic workforce development plans that include hiring practice and salary incentive needs and enhancements.
- Identify the supports needed for optimal mental health of public health staff.
- Share successes in workforce development from planning, partnerships, and pipelines.
- Report to their communities about efforts to diversify the workforce and what diversity, equity, and inclusion looks like to the health department.

Source. https://futureofpublichealth.org/wp-content/uploads/2022/05/December-2021-Lights-Camera-Action-Summit-1-Accelerating-Action-Report.pdf

How would this impact the health of communities?

The availability of a strong local public health workforce has a direct impact on health department ability to serve the needs of the community. An active statewide structure that is attentive to public health workforce issues in North Carolina will help to proactively address current needs and future challenges and ensure adequate capacity to fulfill local public health's roles and responsibilities.

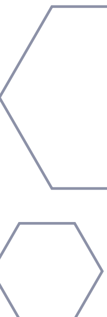
Who is responsible?

- North Carolina Department of Health and Human Services Division of Public Health

Who are the partners?

- North Carolina Public Health Workforce Regional Hubs
- North Carolina Association of Local Health Directors
- North Carolina Alliance of Public Health Agencies
- North Carolina Institute for Public Health
- Local health departments
- Tribal public health

This recommendation is related to Recommendation 5.1 supported by the Carolinas Pandemic Preparedness Task Force. Please see the final report from the Carolinas Pandemic Preparedness Task Force for additional details and information at https://nciom.org/carolinas-pandemic-preparedness-task-force/.



Strategy 4b - Value the Public Health Workforce

The North Carolina Association of County Commissioners, the North Carolina Association of County Managers, and the University of North Carolina at Chapel Hill School of Government should implement more comprehensive education for County Commissioners and Managers about the role of local public health and issues affecting burnout, retention, and recruitment for local governmental public health employees. This education should focus on issues including:

i. Roles and responsibilities of local public health workforce,
ii. Threats and harassment experienced by local public health workers,
iii. Competitive compensation,
iv. Acknowledgement of efforts during the pandemic,
v. Retention incentives,
vi. Professional development, and
vii. Flexible workplace policies.

Desired Result

Local government officials will develop a nuanced understanding of the roles and responsibilities of local public health and will allocate adequate resources and support updated policies to maintain the necessary local public health workforce.

Why does the task force recommend this strategy?

Local government officials have an important role in overseeing the staffing policies and budgets of local health departments. As such, it is essential that they have a comprehensive knowledge of the roles and responsibilities of local public health and an understanding of the staffing needs and challenges that may impact the ability to effectively carry out those duties. Task force and workforce work group participants identified several ways that compensation and workplace policies could improve retention of the current local public health workforce.

Additional Context

Public health is facing extensive challenges to retaining the current workers who have experienced poor mental health, threats, harassment, and undermining of their authority over the years of the COVID-19 pandemic. The task force and workforce work group member discussions identified an opportunity for local government officials to address some of the issues the workforce is experiencing. These challenges exist within a broader ecosystem of workforce challenges experienced in other sectors, such as health care and education, where burnout and retention issues were a struggle prior to the pandemic and are now exacerbated.

The University of North Carolina at Chapel Hill School of Government conducts trainings for various city and county officials to educate them on their roles and responsibilities and the operations of city and county government. The School's existing trainings can be built upon, or new trainings potentially could be developed, to address the workforce-related issues that are relevant to local public health as well as other local government human services workers.

How would this impact the health of communities?

Well-informed elected officials with the power to address some of the workforce challenges facing local public health could help to retain more current workers in their positions. The institutional knowledge and experience of current public health workers is an important resource for the efforts needed to improve the health and well-being of communities through public health programs and services.

Who is responsible?

- North Carolina Association of County Commissioners
- North Carolina Association of County Managers
- University of North Carolina at Chapel Hill School of Government

Who are the partners?

- County commissioners
- County managers

PUBLIC HEALTH WORKERS ARE STRUGGLING:

22% report their mental health is "fair" or "poor"

56% report at least one symptom of post-traumatic stress disorder, **25%** report three or more symptoms

41% say they have felt "bullied, threatened, or harassed by individuals outside of the health department"

59% of public health executives say they have had their public health expertise "undermined or challenged by individuals outside of the health department"

32% of state and local public health workers are considering leaving their jobs in the next year, **44%** say they are planning to leave in the next five years

Source: de Beaumont Foundation, 2021 Public Health Workforce Interests and Needs Survey (PH WINS), https://debeaumont.org/wp-content/uploads/dlm_uploads/2022/03/Stress-and-Burnout-Brief_final.pdf

Strategy 4c – Support the Development of the Local Public Health Workforce

Local health departments should sustain and support the current workforce by encouraging engagement in competency-building and professional development activities. To accomplish this, health departments should:

i. Pursue available trainings for current staff to enhance or develop competencies in health equity, data collection and analysis, and communications relevant to staff roles.

ii. Develop opportunities to supplement tuition and fees for professional development.

iii. Review staff development and hiring practices to support and grow leadership representative of the community from within the organization and externally.

Desired Result

A diverse and competent local public health workforce will have opportunities for professional development and leadership roles within health departments and will be reflective of the communities they serve.

Why does the task force recommend this strategy?

Experienced health department employees are an asset to effectively fulfilling the roles and responsibilities of local public health. Hiring new workers takes time, resources, and energy and the loss of current staff means the loss of institutional knowledge and experience. Task force and workforce work group participants shared experiences that highlight the need for more career development opportunities, including trainings to enhance public health competencies and opportunities for furthering education. Funds for tuition reimbursement or other incentives to seek additional degrees or certifications are very limited, leading some to find employment elsewhere. Other members noted challenges experienced by people of color in some health departments where they experienced fewer opportunities for mentorship by leaders or were passed over for positions with increased responsibility.

Additional Context

Responses to the 2019 **Driving the Future**[D] survey "suggest that the North Carolina public health workforce is predominantly white (80%)... and female (90%), with more than 60% of the workforce over age 45."[11] This indicates much room for improvement in the diversity of the workforce and leadership of North Carolina's health departments (see also, Chapter 8 – Workforce for the Future). A more diverse public health workforce is essential to reflect the background and experiences of the communities being served. Program and policy development impacts people with a variety of identities and should therefore be informed by individuals of diverse races, ethnicities, linguistic backgrounds, genders, and abilities. Similarly, in the delivery of public health services, "A diverse workforce is essential for the adequate provision of culturally competent services because it can more easily address cultural and linguistic barriers. For example, health departments with a diverse workforce are more likely to employ strategies to serve culturally and linguistically diverse clients (e.g., using interpreter services and having materials translated into languages other than English)."[12]

The Driving the Future survey also identified the top areas of interest for training needs as data analytics, policy engagement, change management, resource management, and diversity and inclusion. See Figure 10 for the top-rated skill gaps identified across the strategic domains. While this data is useful for indicating self-reported skill gaps, it is notable that this survey was fielded prior to the COVID-19 pandemic, and it is possible that the experience of the pandemic and other cultural events may lead future respondents to place priority on other skills. For example, the need for competencies around advancing health equity has received more attention due to health disparities highlighted by the pandemic and national movements to address systemic racism in recent years. A survey of North Carolina local health directors in summer 2021 indicated that there are varying levels of understanding of local public health's role in addressing health equity and consensus that additional knowledge and tools are needed.[E] This survey also indicated that 61% of health directors felt that health department communications was an area of challenge or area of opportunity for growth for their health department, indicating a possible knowledge or capacity gap that was not identified in the Driving the Future survey (see also, Chapter 6 – Communications).

Figure 10. Top 10 Skill Gaps Across Strategic Domains Identified in the Assessment of North Carolina Local Public Health Workforce

1. Use economic evaluation methods to identify, measure, and value costs, quality, and outcomes of public health interventions and programs
2. Familiarity with and use of problem-solving models such as design thinking
3. Assess the external drivers in your environment (e.g., physical, political, social, fiscal, etc.) that may influence public health programs and services
4. Address legal, policy, fiscal and other barriers to collaboration
5. Understand and address barriers to implementation of new programs and services
6. Monitor and evaluate results of new and ongoing interventions and strategies
7. Access public health data systems
8. Document processes for making decisions and taking collective action
9. Identify gaps in data
10. Find supportive professional and personal networks

Source. North Carolina Institute for Public Health. Driving the Future: Assessment of the North Carolina Local Public Health Workforce. July 2019. https://sph.unc.edu/wp-content/uploads/sites/112/2019/07/LHD_Survey_FINAL.pdf

[D] *The North Carolina Institute for Public Health published Driving the Future: Assessment of the North Carolina Public Health Workforce in 2019. It is "a statewide training needs assessment of the local-level public health workforce, to help identify current and future critical training needs for professionals across North Carolina local health departments." https://sph.unc.edu/wp-content/uploads/sites/112/2019/07/LHD_Survey_FINAL.pdf*

[E] *The North Carolina Institute of Medicine conducted an informal, voluntary survey of North Carolina health directors at the start of the Task Force on the Future of Local Public Health in North Carolina to understand current strengths, challenges, and needs related to the Foundational Public Health Capabilities, which enable achievement of the 10 essential services each health department should provide.*

The Public Health Workforce Interests and Needs Survey, which found that 27% of public health workers are considering leaving their organization in the next year and 41% are considering leaving in the next five years, cites some of the top reasons as lack of opportunities for advancement (40%) and organizational climate/culture (37%).[3] These reasons indicate a desire for career advancement opportunities and improvements in workplace culture that could be addressed through Strategy 4c.

The Bipartisan Policy Center's **Public Health Forward: Modernizing the US Public Health System** report also recommends actions along these lines to improve knowledge development and workplace culture, including:

- 'Assess[ing] organizational culture and mak[ing] changes as needed to ensure the workplace is culturally competent and supportive of all staff.
- Provid[ing] professional development opportunities, giving public health workers the skills and knowledge needed to meet modern public health challenges (e.g., change management, data science skills, and cultural and linguistic competencies).'[13]

How would this impact the health of communities?

A public health workforce that represents the racial and ethnic diversity of communities and that has strong knowledge and tenure at the health department will be an asset to ensuring effective public health programs and services. A representative workforce will be best equipped to understand the health issues of the community and work with community partners toward solutions.

Who is responsible?

- Local health departments

Who are the partners?

- Public health nonprofits that offer training topics of health equity, data collection and analysis, and communications

Strategy 4d – Support Updates to Job Classifications

The North Carolina General Assembly should support the development of the local governmental public health workforce by increasing funding for the Office of State Human Resources to provide additional staffing support and resources dedicated to the ongoing work to review and update the local government classification system to include job classification and salary expectations.

Desired Result

Job classification and salary grades for the local public health workforce will be modernized and flexible to allow for timely hiring and onboarding of new staff.

Why does the task force recommend this strategy?

Task force and work group members consistently highlighted outdated job classifications as a challenge for recruitment and retention as many do not reflect the modern needs of local health departments. Some of the most vital roles in local public health 3.0, including data analytics, multi-sector community health strategic leadership, and public health communications are not adequately reflected in existing job descriptions, which were developed decades ago and represent an earlier state of local public health practice. The North Carolina Office of State Human Resources (OSHR) local government program has been working with relevant parties to update some of these classifications, however with a small staff and limited resources this work has moved slowly. Additional resources for OSHR would enhance its ability to update and add necessary job classifications.

Additional Context

Agencies that receive funding from the federal government must have a personnel system that uses merit principles. To ensure compliance with this rule, in the 1970s the North Carolina General Assembly placed local health departments and social services under the State Human Resources Act.[14] Today, any local health department or region that is not part of a consolidated health and human services department is subject to limited authority from the OSHR. In this capacity, OSHR assures that health department employees meet minimum education and experience standards of the state classification system, provides consultative services related to employee relations, and has authority over job classification of all posted health department positions.[14] This authority can often become a challenge for health departments to post new positions in a timely manner and with position descriptions that meet modern needs due to OSHR's limited staff and the state's outdated position descriptions and job specifications.[14] Some position descriptions in the state classification system are over 40 years old and do not meet modern needs of local health departments.

The local government support team within OSHR has worked closely with representatives from the North Carolina Association of Local Health Directors (NCALHD) Workforce Work Group to prioritize positions for updated job classification based on challenges in recruitment. The NCALHD work group surveyed health directors and found that nurses, environmental health specialists, public health educators, and preparedness coordinators have been most difficult to recruit.[8] OSHR worked with work group members and representatives from the North Carolina Department of Health and Human Services Division of Public Health to adjust public health nurse classifications and will continue to make additional updates as capacity allows.

In August 2022, NCALHD membership voted to request that OSHR commit additional staff and resources to the local government program that works with local health departments to support personnel issues and continuing education. In a formal memo to the OSHR Director, NCALHD leadership praised current program staff and requested additional support to alleviate delays in position approvals, position reallocations, and job candidate verifications.[15] Additional staff capacity at OSHR with direct knowledge of local government operations would help begin to address some of the challenges that local health departments face in recruiting new employees. Their work must also include a thorough review and revision of local government job classifications to meet modern needs.

How would this impact the health of communities?

Timely recruitment of new staff and retention of existing staff is important to serve the needs of community health, particularly during public health emergencies. Updating job classifications and salaries for local public health workers will improve the ability of health departments to fulfill their roles and responsibilities for community health.

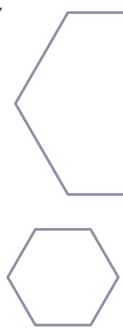
Who is responsible?

- North Carolina General Assembly

Who are the partners?

- Office of State Human Resources
- North Carolina Association of Local Health Directors
- North Carolina Association of County Commissioners

This strategy is related to Recommendation 5.2 supported by the Carolinas Pandemic Preparedness Task Force. Please see the final report from the Carolinas Pandemic Preparedness Task Force for additional details and information at https://nciom.org/carolinas-pandemic-preparedness-task-force/.



Strategy 4e – Address Threats and Harassment

The University of North Carolina at Chapel Hill School of Government, North Carolina Institute for Public Health, North Carolina Public Health Association, and North Carolina Association of Local Health Directors should work together to address threats and harassment of the local public health workforce by:

i. Raising awareness among local public health workers, county managers, commissioners, county attorneys, and boards of health of current laws to address threats and harassment and appropriate times to bring actions against perpetrators.

ii. Developing support tools or technical assistance for local health directors to understand rights and laws related to threats, harassment, public records requests, and access to health department property.

Desired Result

Local public health workers will be equipped with knowledge and tools to support them in addressing threats or harassment they receive from members of the public.

Why does the task force recommend this strategy?

The task force and workforce work group identified threats and harassment as among the biggest challenges to retention of the local public health workforce. Existing laws could be used to address certain threats and harassment, and awareness is needed regarding appropriate times to do so. Health directors and other health department employees would benefit from resources and tools to help them understand their options for addressing these issues.

Additional Context

The 2021 Public Health Workforce Interests and Needs Survey found that 41% of public health workers have felt "bullied, threatened, or harassed by individuals outside of the health department."[3] Threats and harassment of public health workers began during the COVID-19 pandemic as members of the public became frustrated by pandemic lockdown and quarantine measures. Indeed, a survey of US adults found that 25% feel that harassment of public health officials related to pandemic business closures was justified, while 21% feel that threats to public health officials were justified.[16] Among many examples, public health workers have experienced members of the public shouting at them during public meetings, threats to call law enforcement while conducting environmental health inspections, and direct threats of violence against them and their family members.[F,G]

[F] These examples were shared anonymously by task force members and are similar to experiences of many public health workers throughout the country. https://khn.org/news/public-health-officials-face-wave-of-threats-pressure-amid-coronavirus-response/

[G] Public health authority has also been called into question by members of the public and elected officials. Negative feelings about measures taken during the pandemic, such as lockdown and quarantine requirements, led some state legislatures to change long-standing laws around public health authorities. See Chapter 6, Page 55 for more details.

> **"25% of US adults feel that harassment of public health officials related to pandemic business closures was justified, while 21% feel that threats to public health officials were justified."**
>
> *- Topazian, RJ, et. al. US Adults' Beliefs About Harassing or Threatening Public Health Officials During the COVID-19 Pandemic. JAMA Network. July 29, 2022.*
>
> *https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2794789*

While there are no specific legal protections for public health workers in North Carolina law, there are other state criminal laws that could be used to prosecute individuals who threaten or assault public health officials or employees.[17] One of the options that is already available to North Carolina's public health workforce is to press charges under one of those existing laws when the facts of a situation support the charge. See Figure 11 for current laws that could be applicable in certain situations of threats or harassment of public health workers.

Figure 11. North Carolina General Statutes Related to Threats and Harassment

Specific to government officers/employees:

- **G.S. 14-34.2** – Assaulting a state or local government officer or employee with a firearm or other deadly weapon while the officer/employee is performing official duties (felony)

Applicable regardless of occupation:

- **G.S. 14-277.1** – Communicating threats (class 1 misdemeanor)
- **G.S. 14-196** – Making harassing telephone calls, using threatening language on the telephone, repeated telephone calls to harass (class 2 misdemeanor)
- **G.S. 14-196.3** – Cyberstalking; includes using e-mail or other electronic communication to threaten bodily harm or physical injury; repeated use of e-mail/other electronic communication to harass (class 2 misdemeanor)
- **G.S. 14-277.3A** – Stalking (class A1 misdemeanor) and repeat stalking (felony)

Source: Personal communication with Jill Moore, Associate Professor of Public Law and Government, University of North Carolina at Chapel Hill School of Government. January 13, 2022

The University of North Carolina (UNC) at Chapel Hill School of Government, North Carolina Institute for Public Health, North Carolina Public Health Association, and North Carolina Association of Local Health Directors each have a role to play in providing education about best practices, rights, and responsibilities related to threats and harassment of public health workers as these organizations are sources of trainings for the public health workforce, county boards of health, and elected officials. The UNC School of Government began this work at the Legal Pre-Conference of the North Carolina Public Health Association Conference in April 2022, which featured presentations titled "You Want What? Extensive Public Records Requests" and "Harassment of Public Health Officials: Emerging Legal Issues." Additional trainings, resources, and tools would help public health workers in the state understand their rights and address threats or harassment they face in the future.

How would this impact the health of communities?

Maintaining a strong and resilient workforce is essential to providing effective public health programs and services. Trainings, resources, and tools related to threats and harassment will help public health workers feel supported if they experience these issues in the future.

Who is responsible?

- University of North Carolina at Chapel Hill School of Government
- North Carolina Institute for Public Health
- North Carolina Public Health Association
- North Carolina Association of Local Health Directors

Who are the partners?

- Local health department employees

This strategy is related to Recommendation 5.2 supported by the Carolinas Pandemic Preparedness Task Force. Please see the final report from the Carolinas Pandemic Preparedness Task Force for additional details and information at https://nciom.org/carolinas-pandemic-preparedness-task-force/.

References

1. de Beaumont Foundation. Staffing Up: Investing in the Public Health Workforce. Accessed August 29, 2022. https://debeaumont.org/staffing-up/
2. Weber L, Ungar L, Smith MR, Recht H, Barry-Jester AM. *Hollowed-Out Public Health System Faces More Cuts Amid Virus*. Kaiser Health News. July 1, 2020. https://khn.org/news/us-public-health-system-underfunded-under-threat-faces-more-cuts-amid-covid-pandemic/
3. de Beaumont Foundation. *Rising Stress and Burnout in Public Health*. March 2022. https://debeaumont.org/wp-content/uploads/dlm_uploads/2022/03/Stress-and-Burnout-Brief_final.pdf
4. North Carolina Department of Health and Human Services Division of Public Health. *NC Governmental Public Health: Workforce and Infrastructure Improvement in Action*. May 2022. https://www.ncdhhs.gov/media/15401/download?attachment
5. ZipRecruiter. Public Health Annual Salary in North Carolina. Accessed August 29, 2022. https://www.ziprecruiter.com/Salaries/Public-Health-Salary--in-North-Carolina
6. The White House. Fact Sheet: White House Announces over $40 Billion in American Rescue Plan Investments in Our Workforce – With More Coming. July 12, 2022. https://www.whitehouse.gov/briefing-room/statements-releases/2022/07/12/fact-sheet-white-house-announces-over-40-billion-in-american-rescue-plan-investments-in-our-workforce-with-more-coming/
7. Personal communication with Doug Urland, LHD Operations Liaison, North Carolina Department of Health and Human Services Division of Public Health. August 1, 2022.
8. Personal communication with Janet Clayton, Health Director, Person County, North Carolina. August 5, 2022.
9. UNC Gillings School of Global Public Health. NC Public Health Workforce Assessment. Accessed August 1, 2022. https://sph.unc.edu/nciph/assessment-of-the-local-public-health-workforce/
10. Illinois Public Health Institute. Achieving a Diverse and Effective Public Health Workforce Summit 1 Summary Report. December 6, 2021. https://futureofpublichealth.org/wp-content/uploads/2022/02/LCA-Summit-1_Workforce_-Summary-Report_02.07.2022.pdf
11. North Carolina Institute for Public Health. *Driving the Future: Assessment of the North Carolina Local Public Health Workforce*. July 2019. https://sph.unc.edu/wp-content/uploads/sites/112/2019/07/LHD_Survey_FINAL.pdf
12. Coronado F, Beck AJ, Shah G, Young JL, Sellers K, Leider JP. *Understanding the Dynamics of Diversity in the Public Health Workforce*. J Public Health Manag Pract. 2020;26(4):389. doi:10.1097/PHH.0000000000001075
13. Bipartisan Policy Center. *Public Health Forward: Modernizing the U.S. Public Health System*. December 2021. https://bipartisanpolicy.org/report/public-health-forward/
14. Personal communication with Drake Maynard, Chief Consultant, Drake Maynard HR Consulting Services. September 21, 2022.
15. Memo from Scott Harrelson, President, North Carolina Association of Local Health Directors to Barbara Gibson, Director, North Carolina Office of State Human Resources. August 29, 2022.
16. Topazian RJ, McGinty EE, Han H, et al. *US Adults' Beliefs About Harassing or Threatening Public Health Officials During the COVID-19 Pandemic*. JAMA Netw Open. 2022;5(7):e2223491-e2223491. doi:10.1001/JAMANETWORKOPEN.2022.23491
17. Torton B. 50 State Survey: Legal Protections for Public Health Officials. The Network for Public Health Law. November 2020. https://www.networkforphl.org/resources/legal-protections-for-public-health-officials/

NCIOM
North Carolina Institute of Medicine

CHAPTER 8

BUILDING THE FUTURE LOCAL PUBLIC HEALTH WORKFORCE

RECOMMENDATION 5 70

The COVID-19 pandemic has led to an increased interest in earning a degree in public health, with a 23% increase in applications from March 2019 to 2020, then another 40% increase from 2020 to 2021.[1] Capitalizing on this increased interest, and attracting new workers into local governmental public health, will require new efforts to create attractive opportunities for the future workforce.

Recruiting the Local Public Health Workforce

As discussed in Chapter 7, issues such as low wages, low morale, burnout, and additional stress during the pandemic have contributed to difficulties in retaining the local public health workforce. The NCIOM Task Force on the Future of Local Public Health and its workforce work group also discussed the ways in which these and other factors influence the recruitment of new workers into local governmental public health.

In recent decades, there has been enormous growth in the number of public health programs at the university level. Between 1996 and 2016, the number of graduate degrees conferred in public health increased more than 300% nationally, and the number of schools awarding these degrees quadrupled.[2] The number of undergraduate public health degrees increased by 750% during this same period.[2] In North Carolina, 19 colleges and universities now offer undergraduate degrees in public health or related fields.[3] However, most of these new graduates do not receive training in governmental public health through their degree programs and do not go on to work in local health departments.[A,4]

While new public health graduates report interest in working in local public health and identify positive aspects of the sector, such as the opportunity to do fulfilling and meaningful work, they also report barriers to working in local public health. These barriers include perceptions of local public health departments as bureaucratic and lacking innovation, as well as a lack of resources that would impact employees' earning potential and career development.[2]

Development of New Roles in Local Public Health

As noted throughout this report, a workforce skilled in public health communications, health equity strategies, and data analytics is critical to achieving the task force's vision for the future of local public health. The task force seeks to raise awareness of the need for these roles and the ongoing challenge that many local health departments have no or few staff with primary responsibilities specific to these areas of expertise. Due to resource constraints, health department staff have varied amounts of training and skills and typically take on multiple roles. The need for development of local health department capacity and workforce competencies around data, equity, and communications was a priority shared by the task force, data work group, and workforce work group members, as well as others who have participated in regional listening sessions.

In addition, the task force identified opportunities to integrate other workforce roles into local public health. For example, community health workers have the potential to serve an important role in local public health as eyes and ears in the community, understanding the root causes of issues affecting health in the community, sharing health information with community members, and amplifying community voice to local policy makers to affect change. Equity officers, whose responsibilities would include strengthening the way equity is embedded in programs, services, and policy development activities, could also be a defined role in local health departments or regionally to serve as a dedicated source of expertise and strategy building to address community health disparities. Over the last decade, and increasingly over the past few years, health care organizations, local governments, and other organizations have defined and established new positions in diversity, inclusion, and health equity, but local health departments have been slower to establish these roles, likely due to the challenges related to staffing that were discussed in Chapter 7.

Building a Diverse Workforce

The task force also identified the need for intentional and dedicated development of a diverse workforce within local public health. Public health departments that employ a racially, ethnically, and culturally diverse workforce can bring different perspectives and experiences to their work and are more likely to provide culturally relevant programs and services. Training in principles of health equity and the application of these principles to the practice of public health also enhances the health department's ability to identify and engage in policy and service development to improve health outcomes.[5]

> **"Public health agencies that employ a diverse workforce are better positioned to implement targeted approaches in communities where they are needed, create systems to support those needs, and supply a greater variety of effective solutions to address health disparities."**
>
> *- Fatima Coronado et al. in the Journal of Public Health Management and Practice..*
>
> *https://journals.lww.com/jphmp/Citation/2020/07000/Understanding_the_Dynamics_of_Diversity_in_the.19.aspx*

Within public health, workforce development programs aim to reach students and early-career professionals with training and information about professional opportunities. Many programs begin at the undergraduate level and focus on providing elements such as mentorship, professional development, writing and skills workshops, and field-based placements.[6] Recruitment to these programs, developed to specifically address improving diversity in the workforce, often includes institutional linkages, collaborative partnerships, and interpersonal contacts.

[A] Some health professional education programs have implemented health department rotations or practicum opportunities into the learning experience. For example, the University of North Carolina at Chapel Hill Preventive Medicine Residency Program includes a requirement of an eight-week rotation in a local, state, or federal public health agency. https://www.med.unc.edu/fammed/education/prevmed/overview2/

With the goal of ensuring a strong local public health workforce for the future, the task force recommends the following:

RECOMMENDATION 5

Build local public health's future capacity to serve the community by growing a diverse and skilled workforce

Four strategies are recommended by the Task Force on the Future of Local Public Health to move to a future vision of a strong and representative local public health workforce:

Strategy 5a. Develop A Network of Public Health Programs The Gillings School of Global Public Health at the University of North Carolina at Chapel Hill should convene a Network for North Carolina Programs of Public Health to: (1) support academic partnerships with local public health agencies; (2) identify opportunities for collaboration with other academic programs that train professionals in emerging fields relevant to local public health; and (3) advocate for tuition payment or loan forgiveness for those who commit to serving in local public health.

Strategy 5b. Funded Internship Opportunities North Carolina Public Health philanthropies, the North Carolina Association of Local Health Directors, the North Carolina Department of Health and Human Services, and other relevant stakeholders should work together to support sustainably funded internship opportunities to develop a public health workforce that: (1) is racially and ethnically representative of communities served; (2) serves rural communities; and (3) includes professions that are less represented in local public health (e.g., data science, communications).

Strategy 5c. Raise Awareness of Public Health Careers The North Carolina Public Health Association should work with local health departments and community partners to identify opportunities to introduce careers in local public health to students at middle and high school levels to begin developing the workforce pipeline.

Strategy 5d. Support New to Public Health Training The Division of Public Health should support training for new public health professionals to improve understanding of roles, strengths, and challenges of local public health (e.g., New to Public Health Program through University of Wisconsin-Madison) and encourage local health departments to enroll staff new to public health for participation.

Strategy 5a – Develop a Network of Public Health Programs

The Gillings School of Global Public Health at the University of North Carolina at Chapel Hill should convene an ongoing Network for North Carolina Programs of Public Health to:

i. Support statewide academic partnerships with local public health agencies.

ii. Identify opportunities for collaboration with other academic programs at universities and community colleges that train professionals in fields relevant to local public health to support the workforce pipeline (e.g., community health workers, communications, data science).

iii. Advocate for tuition payment or loan forgiveness programs for those who commit to serving in local public health in North Carolina.

Desired Result

North Carolina programs that train public health professionals will collaborate to provide support to local health departments, grow connections with emerging fields for the public health workforce, and increase opportunities for those committing to work in local public health to have their educational loans reduced or eliminated.

Why does the task force recommend this strategy?

There is great opportunity in connecting leaders of public health educational programs in the state. These leaders and institutions represent a wealth of knowledge and capacity to share with local health departments, as well as power to shape the future public health workforce. The Gillings School of Global Public Health at the University of North Carolina at Chapel Hill is the only school of public health in North Carolina, and therefore could be a natural convener of other programs of public health throughout the state.

Additional Context

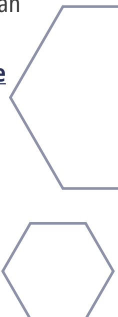
North Carolina has a strong background in public health academia, with the University of North Carolina (UNC) at Chapel Hill's Gillings School of Global Public Health (Gillings) servings as the state's only school of public health and other UNC system universities offering degrees in public health. These institutions include East Carolina University, Appalachian State University, UNC- Greensboro, and UNC-Wilmington. Private universities including Duke University, Wake Forest University, and Elon University also offer public health degrees.[7] These academic institutions can provide a wealth of knowledge and opportunities for collaboration with local health departments and can benefit from hands-on training opportunities for their students.

An academic health department is a partnership between a local health department and an academic institution to "strengthen the links between public health practice and academia and to lessen the separation between the education of public health professionals and the practice of public health." These partnerships can benefit both the health department and the workforce in training. There are three such partnerships in North Carolina already:

1. **Granville Vance Rural Academic Health Department, a partnership between Granville Vance Health District, UNC-Chapel Hill Gillings School of Global Public Health, and Duke University's School of Nursing** – This partnership "provides a real-world laboratory, real-community relationships, and real-time testing for researchers' interests in generating rural public health practice-based evidence. It also connects local public health practitioners to real-time expertise in grant writing and management, evaluation, epidemiology, and health equity research."[8]
2. **Academy of Public Health Innovation (APHI),** a partnership between **Mecklenburg County Health Department** and the **UNC-Charlotte College of Health and Human Services** – APHI develops solutions to important community health challenges in the Charlotte area by "supporting innovation and implementation of evidence-based community health practices, coordinating training programs and professional education, securing external funding for research, and expanding MCPH's ability to systematically collect, analyze, and interpret health-related data needed for the implementation and evaluation of public health practice."[9]
3. **Academic partnership between New Hanover County Health Department and University of North Carolina Wilmington School of Nursing** – This partnership "facilitate[s] co-learning, team research, and inform[s] professional practice and create[s] opportunities for undergraduate and graduate students, faculty, and practice partners. These partnerships allow students and faculty to work together with local communities who have limited access to health care resources."[10]

Public health academic and training programs have also begun to discuss innovative solutions to some of the workforce challenges facing local public health. For example, a shortage of environmental health specialists prompted the President of the North Carolina Association of Local Health Directors to connect with the state's three accredited environmental health programs to begin plans to integrate the lengthy state environmental health certification training into their academic programs.[11] This would allow new graduates to join the workforce in local public health more quickly.

There are currently loan forgiveness programs for clinical health care providers working in local health departments. These programs are not robust enough to support all public health clinicians, and there are no loan forgiveness options for non-clinical public health workers. One program that could potentially be a resource for these opportunities is **Forgivable Education Loans for Service (FELS)**. The FELS program was established by the North Carolina General Assembly in 2011 and provides "financial assistance to qualified students enrolled in an approved education program and committed to working in critical employment shortage professions in North Carolina."[12] Qualified positions are designated by



the State Education Assistance Authority, which takes recommendations from the FELS Advisory Group.[13] FELS-eligible professions are reviewed by the FELS Advisory Committee each academic year. The program currently awards up to $7,000 for certificate, associate, and bachelor's degrees and up to $14,000 for master's & doctoral degrees for certain professionals working in education, allied health, nursing, and medicine.[12,14] In July 2022, the North Carolina Department of Health and Human Services submitted an application for three professions serving in local health departments to be considered for the FELS program: 1) Registered Environmental Health Specialists, 2) Health Educators, and 3) Health Department Leaders and Administrators, as well as those who have earned a bachelor's degree in public health who are working in local governmental public health.[15]

How would this impact the health of communities?

Public health academic programs can offer additional capacity and expertise to local public health departments. This added capacity, in areas such as data analytics, could allow health department staff to focus on important roles in community partnerships, public health services, and policy development. Leadership and advocacy from public health academic programs will help to ensure that local health departments will be staffed adequately with a knowledgeable workforce that works to improve community health.

Who is responsible?

- University of North Carolina at Chapel Hill Gillings School of Global Public Health
- Academic degree and certificate programs in public health and related fields

Who are the partners?

- Local health departments
- Academic programs that train professionals in other relevant fields (e.g., community health workers, communications, data science)

Strategy 5b – Funded Internship Opportunities

North Carolina Public Health philanthropies, the North Carolina Association of Local Health Directors, the North Carolina Department of Health and Human Services, and other relevant parties should work together to support sustainably funded internship opportunities to develop a public health workforce that:

i. Is racially and ethnically representative of communities served,

ii. Serves rural communities, and

iii. Includes professions that are less represented in local public health (e.g., data science, communications).

Desired Result

Enriching and paid internship opportunities will encourage students to pursue careers in local public health and build a public health workforce that represents the communities being served.

Why does the task force recommend this strategy?

The task force values the goal of developing a strong public health workforce for the future. The strength of this workforce is dependent on the ability of local public health to recruit people who represent the communities of North Carolina. Internship programs are a key tool for introducing students to the field of local governmental public health and these programs must be accessible to anyone, regardless of economic background.

Additional Context

An internship can often be a public health student's first exposure to local governmental public health and, therefore, a vital source for building student knowledge and interest in a career serving in a local health department. With limited budgets and staff responsibilities already stretched, these internships may be unpaid or paid at low wages, making it challenging for students from low-income families to participate. This potentially limits the pool of future local public health workers, particularly those who represent rural and low-income communities.

In June 2022, the North Carolina Department of Health and Human Services (NCDHHS) launched a new internship program for students from seven historically Black colleges and universities (HBCUs) and minority-serving institutions (MSI) in the state. The first cohort of 22 interns will participate in a paid internship program, working in the NCDHHS Division of Public Health and the Office of the Secretary. The intern cohort will be paired with teams in the Division of Public Health based on experience and interests, and each intern will also be paired with a mentor with HBCU experience.[16]

> "A mentor with similar experiences can make the difference in career choices and the vision of what's possible."
>
> *– Angela Bryant, NCDHHS Assistant Secretary for Equity and Inclusion*
>
> *https://www.ncdhhs.gov/news/press-releases/2022/06/06/ncdhhs-division-public-health-launches-inaugural-hbcu-and-msi-internship-program*

The Bipartisan Policy Center (BPC) addresses the need for increased attention to training opportunities in its report "Public Health Forward: Modernizing the US Public Health System." To develop the public health workforce, one of the BPC's recommendations is that public health departments "Work with partners to expand internships, fellowships, workforce pipeline, loan-repayment, and other career on-ramp programs [by providing] tailored opportunities to individuals in under-represented populations."[17]

Likewise, the **Lights, Camera, Action Summit - Accelerating Action Report** on workforce recommended that academia "Provide scholarships and paid internships with diversity, equity and inclusion as priorities."

How would this impact the health of communities?

Effective internship programs will help develop a workforce that is passionate about serving its community through local public health. This diverse public health workforce will be best equipped to understand the health issues communities face and the potential solutions that will create opportunities for everyone to be healthy.

Who is responsible?

- Public health philanthropies
- North Carolina Association of Local Health Directors
- North Carolina Department of Health and Human Services

Who are the partners?

- Local health departments
- Academic degree and certificate programs in public health and related fields

Strategy 5c – Raise Awareness of Public Health Careers

The North Carolina Public Health Association should work with local health departments and community partners to identify opportunities to introduce careers in local public health to students at middle and high school levels to begin developing the workforce pipeline.

Desired Result

Middle- and high-school-aged children will be aware of public health generally, and local public health specifically, as a potential career choice.

Why does the task force recommend this strategy?

Because those who work in local public health tend to work quietly in their roles and responsibilities to ensure community health, their work is often unnoticed. This can be especially true for younger populations, who are likely very familiar with health care as a career field aimed at addressing health issues, but unfamiliar with public health's goal of creating healthy communities for all. To grow a strong future public health workforce, the task force recommends engagement with students in the community to introduce them to this field as a career option.

Additional Context

Almost all public health awareness and workforce pipeline programs are geared toward undergraduate college students who are interested in health services careers. Although little data is available about middle and high school student knowledge about public health as a field or as a career option, a 2022 survey of high school and undergraduate students identified the number one intended career path as medicine or health-related fields.[18] The survey also noted that students are interested in having an impact on human rights (35%), social justice (34%), and health care and health-related issues (32%).[18] Further, a report summarizing data on student aptitude and interest in different career fields found that students have almost two times the aptitude for health sciences careers than interest in them.[19] These data reflect a huge opportunity to engage students whose skills and interests may be well-aligned with the goals of public health.

One potential partner in engaging younger students in awareness of public health is the North Carolina chapter of HOSA-Future Health Professionals, a student-led organization providing classroom experiences and opportunities in the health professions, along with enhanced leadership development.[20] The Public Health Foundation reports that "90% of HOSA students continue to pursue a career in the health professions" after high school and that "HOSA students may encounter public health throughout their educational and professional careers. Therefore, it is important to introduce, at a pre-professional stage, HOSA students to public health issues and the potential career paths of a public health professional."[21]

How would this impact the health of communities?

Growing the interest of young adults in serving their communities through work in local public health would help to ensure a sustainable workforce for the future. Increased awareness and interest by younger populations—particularly in rural, low-income, and/or racially diverse communities—would help to provide a representative workforce for future efforts to address community health.

Who is responsible?

- North Carolina Public Health Association

Who are the partners?

- Local health departments
- Public health community partners
- Middle and high schools
- North Carolina chapter of HOSA-Future Health Professionals

Strategy 5d – Support New to Public Health Training

The North Carolina Department of Health and Human Services Division of Public Health should support training for new public health professionals to improve understanding of roles, strengths, and challenges of local public health (e.g., New to Public Health Program through University of Wisconsin-Madison) and encourage local health departments to enroll staff new to public health for participation.

Desired Result

New public health employees in local health departments will be oriented to be successful in their careers.

Why does the task force recommend this strategy?

With retention of the current and future workforce in mind, an orientation for those new to local governmental public health work is one way to help these professionals begin their roles feeling prepared. The goals and complexities of work in local public health are not regularly taught in preparatory degree programs. In fast-paced and tightly staffed health departments, the learning curve can be steep. Even with learning over time, depending on someone's role, the full spectrum of roles and responsibilities of local public health may not be clear.

Additional Context

The **New to Public Health (N2PH) Program**, developed out of the University of Wisconsin-Madison provides an in-depth orientation to governmental public health, with the intention of enhancing career satisfaction and improving retention rates. The 12-month online "professional development program [is] designed to support new public health professionals transitioning into... a local, regional, tribal, state, or federal public health organization."[22] Over the course of the program, participants complete asynchronous content sessions, live discussion sessions, and mentorship sessions. Program coordinators can also create state-based cohorts.

Figure 12. Skills Gained Through the New to Public Health Program

By the end of the residency program, the new public health professional will:

1. Apply learned concepts from the Foundational Public Health Services model to their public health professional practice.
2. Increase knowledge, skills, and confidence for competent public health practice.
3. Access tools and resources applicable to public health practice.
4. Apply health equity and social justice concepts to public health practice.
5. Demonstrate enhanced cultural humility, knowledge, and skills in their individual practice.
6. Research, plan, and present an evidence-based practice project within their local health department or community.

Source: New to Public Health Residency Program. Curriculum Overview. https://new2publichealth.wisc.edu/overview/curriculum-overview/

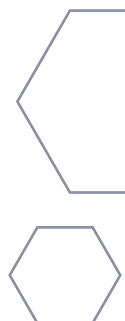
Ensuring that new local public health employees understand the purpose, roles and responsibilities, and goals of the health department's work will improve their success in addressing community health programs and policies in the roles in which they serve. Increased retention of a well-prepared workforce will also ensure that health departments remain adequately staffed to fulfill their mission.

Who is responsible?

- North Carolina Department of Health and Human Services Division of Public Health

Who are the partners?

- Local health departments



References

1. Warnick A. *Interest in public health degrees jumps in wake of pandemic: Applications rise*. The Nation's Health. 2021;51(6):1-12. https://www.thenationshealth.org/content/51/6/1.2

2. Locke R, Mcginty M, Guerrero Ramirez G, Sellers K. Attracting new talent to the governmental public health workforce: Strategies for improved recruitment of public health graduates. *J Public Health Manag Pract*. 2022;28(1):E235-E243. doi:10.1097/PHH.0000000000001336

3. U.S. News Rankings. 2022-2023 Best Colleges in North Carolina. Accessed October 9, 2022. https://www.usnews.com/best-colleges/nc?major=Public+Health&_sort=rank&_sortDirection=asc

4. de Beaumont. *Public Health Workforce Interests and Needs Survey - 2017 National Findings*. 2017. Accessed August 29, 2022. https://debeaumont.org/wp-content/uploads/2019/04/PH-WINS-infographic.pdf

5. Coronado F, Beck AJ, Shah G, Young JL, Sellers K, Leider JP. Understanding the dynamics of diversity in the public health workforce. *J Public Health Manag Pract*. 2020;26(4):389-392. doi:10.1097/PHH.0000000000001075

6. Joyner DM, Faris E, Hernández D, et al. A Pipeline to Increase Public Health Diversity: Describing the Academic Enrichment Components of the Summer Public Health Scholars Program. *Pedagogy in Health Promotion*. 2021;7(1_suppl):44S-50S. doi:10.1177/23733799211046973

7. College Factual. 2022 Best Public Health Schools in North Carolina. Accessed August 29, 2022. https://www.collegefactual.com/majors/health-care-professions/public-health/rankings/top-ranked/southeast/north-carolina/

8. Granville Vance Public Health. Rural Academic Health Department. Accessed August 29, 2022. https://www.gvph.org/about/ahd/

9. The Academy for Population Health Innovation. Home. Accessed August 29, 2022. https://www.aphinnovation.org/

10. University of North Carolina Wilmington School of Nursing. Engaging with our Community. Accessed August 29, 2022. https://uncw.edu/chhs/son/engage.html

11. Personal Communication with Janet Clayton, Health Director, Person County, NC. August 5, 2022.

12. College Foundation of North Carolina. Forgivable Education Loans for Service. Accessed August 29, 2022. https://www.cfnc.org/pay-for-college/apply-for-financial-aid/forgivable-education-loans-for-service/

13. Personal communication with Stephen Bailey, Fiscal Analyst, Education Team, Fiscal Research Division, North Carolina General Assembly. March 31, 2022.

14. North Carolina State Education Assistance Authority. Forgivable Education Loans for Service (FELS) Approved Education Programs 2022-2023. https://www.cfnc.org/pay-for-college/apply-for-financial-aid/forgivable-education-loans-for-service/

15. Personal communication with Patrick Brown, Supervisor – ARPA Public Health Workforce Initiative North Carolina Department of Health and Human Services Division of Public Health. August 1, 2022.

16. North Carolina Department of Health and Human Services. *NCDHHS Division of Public Health Launches Inaugural HBCU and MSI Internship Program*. Published June 6, 2022. https://www.ncdhhs.gov/news/press-releases/2022/06/06/ncdhhs-division-public-health-launches-inaugural-hbcu-and-msi-internship-program

17. Armooh T, Barton T, Castillo G, Cinnick S, Clark S, et. al. *Public Health Forward: Modernizing the U.S. Public Health System*. Bipartisan Policy Center. December 2021. https://bipartisanpolicy.org/report/public-health-forward/

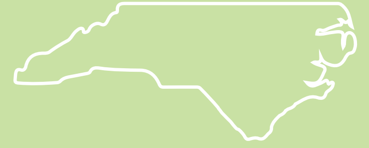
18. National Society of High School Scholars. 2022 Career Interest Survey. 2022. https://www.nshss.org/media/35707/nshss018-report-final-v2.pdf

19. You Science. Student Ability Report. 2022. https://www.youscience.com/student-ability-report-shows-exposure-gap/

20. HOSA Future Health Professionals. HOSA is for Future Health Professionals. Accessed August 29, 2022. https://hosa.org/what-is-hosa/.

21. Public Health Foundation. HOSA – Future Health Professionals. Accessed August 29, 2022. http://www.phf.org/programs/HOSA/Pages/HOSA_Future_Health_Professionals.aspx

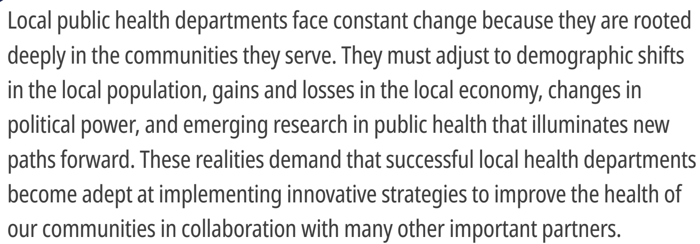
22. New to Public Health – University of Wisconsin-Madison. About Us. Accessed August 29, 2022. https://new2publichealth.wisc.edu/about/about-us/



CHAPTER 9

STRENGTHENING STRUCTURE AND INNOVATION IN LOCAL PUBLIC HEALTH

RECOMMENDATION 6.......................... 80



Local public health departments face constant change because they are rooted deeply in the communities they serve. They must adjust to demographic shifts in the local population, gains and losses in the local economy, changes in political power, and emerging research in public health that illuminates new paths forward. These realities demand that successful local health departments become adept at implementing innovative strategies to improve the health of our communities in collaboration with many other important partners.

Across North Carolina, local health departments are forging new partnerships, learning new skills, and modernizing public health services. For example, during the COVID-19 pandemic, the Guilford County Health Department partnered with local "influencers" on social media to promote understanding and uptake of vaccines and boosters. The influencers were able to reach new groups of people, hear their questions and concerns, and provide science-based information to facilitate informed decision-making about vaccines.[1] In Cabarrus County, a coalition including Cabarrus Health Alliance, EMS, law enforcement, county government, and local service providers and nonprofits work together to provide a coordinated system of overdose response, prevention, harm reduction, and treatment services to people who are using opioids.[2]

There is a vast body of organizational research on the necessary and enabling elements of innovation in organizations. Much of this research has a "Goldilocks" quality—you need adequate resources for efficiency and experimentation, with clear lines of accountability; you need rules but not rigidity; you need sufficient time for reflection but deadlines to provide focus.[3] In this chapter, we focus on foundational elements of public health—accreditation standards, governance models, regional resource sharing, and funding mechanisms—as necessary structures to drive innovation and improve the health and well-being of entire populations. When these foundations are strong, health departments have the necessary structure, flexibility, resources, and resilience to develop new approaches to accomplish their goals.

Accreditation as a Foundation for Innovation

Local health department accreditation represents one important aspect of the strong foundation needed by public health organizations. North Carolina was an early adopter of accreditation for local health departments and in 2005 became the first state in the nation to require accreditation at the local level.[4] Accreditation establishes uniform standards across all health departments and provides assurance to the public that a local agency meets baseline standards and competencies in service provision, oversight, and administrative processes. It also strengthens accountability and credibility and aims to promote quality improvement within local health departments.[5] Accreditation benchmarks and activities help to define the industry standard and foster innovation by providing a common baseline understanding of the rules, emphases, and core issues that lie at the heart of solid local public health practice, spurring creative solutions to new and persistent health challenges.

Effective Governance Can Guide Innovation

The leadership team at each local health department is responsible for achieving accreditation, and is accountable to a local governing board that sets local rules and agency policy, appoints the local health director (often in consultation with the County Board of Commissioners), and that serves as the adjudicatory body for public health in that community.[6] This governing board can take one of several forms, such as a county or district Board of Health, or a local Consolidated Human Services board in counties with a merged public health and social services agency. Legislation enacted in 2012 also gave all counties in North Carolina the option to abolish the Board of Health; in these counties, the Board of Commissioners serves in this role and appoints an advisory committee.[6] Given this level of oversight, local public health is highly accountable to elected and appointed leaders that live in that community and therefore are close to the issues the local health department is tackling.

At their best, and no matter their form, the governing authority of a local health department provides the leadership team and staff with support, guidance, and accountability. These authorities speak with one voice to their communities, especially in controversial situations, providing elected officials and the public with science-based explanations for public health rules and actions. They may also consult with elected officials in cities and counties to provide guidance on policies and planning approaches that will promote and protect health. Effective governance in local health departments is a key element of innovation, providing strategic direction and support to the agency as a whole and advocating for resources to address priority issues.

Regional Collaboration as Innovation

Boards of Health may set fees for health department services, but they do not make local funding decisions. It is the responsibility of county commissioners to decide on the levels of funding provided by local revenue to public health departments. Some counties have decided that their public health resources are most efficiently stewarded through multi-county districts or through regional collaboration. All local health departments collaborate with counterparts in other counties to some degree; there is a wide range of levels of collaboration, from informal information sharing all the way up to the formal creation of multi-county health departments or authorities. The decision to collaborate has many underlying reasons, relating often to performance and effectiveness goals as well as financial stewardship.

Public health leaders, especially in smaller health departments, are famous for "wearing many hats." It is common to find that one person will be tasked with multiple, disparate responsibilities; for example, someone may serve simultaneously as a nursing supervisor, communicable disease coordinator, emergency preparedness planner, and public information officer. Other health departments could have a full-time person in each of these roles. Counties may pool resources for shared personnel if their funding does not stretch to fill all these roles. They may also find that it is advantageous to work together to develop new programs, such as collaborative efforts between counties to address health issues that affect many communities (e.g., chronic disease and opioid misuse). Figure 13 illustrates the range of collaborative options available.

Figure 13. Spectrum of Sharing Arrangements

Looser Integration ← → Tighter Integration

As-Needed Assistance	Service-Related Arrangements	Shared Programs or Functions	Regionalization/ Consolidation
■ Information sharing (e.g., infectious disease testing protocols, health education messaging) ■ Equipment sharing ■ Assistance for surge capacity (e.g., assisting with food delivery during a crisis, providing temporary contact tracing capacity) ■ Assisting with enrolling in public benefit programs	■ Service provision agreements (e.g., contract to provide immunization services, providing grants to community members to implement population health strategies) ■ Purchase of staff time (e.g., environmental health specialist)	■ Joint programs and services (e.g., shared HIV program, shared data platform) ■ Joint shared capacity (e.g., epidemiology, communications) ■ Group purchasing/ procurement processes ■ Joint management and governance of grants	■ New entity formed by merging existing local public health agencies ■ Consolidation of one or more local public health agencies into an existing local public health agency ■ Consolidating health and human services into one agency ■ Consolidating public health and behavioral health services into one agency

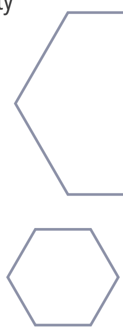
Source: The Center for Sharing Public Health Services at the Public Health Accreditation Board. https://phaboard.org/initiatives/centerforsharing/

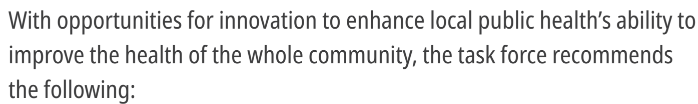
The Health Department and Clinical Health Services

Sufficient and appropriate financial resources are also critically important for local health departments to effectively provide core services and to fund innovative improvement efforts. Please see Chapter 10 for a detailed discussion of local public health funding; we address a more specific issue of public health funding here. In Chapter 1 of this report, we distinguished public health from health care by emphasizing that public health focuses on population-level initiatives such as policy and system change, infrastructure improvements, and community education, while health care focuses on clinical services and individual health. However, in practice there are many public health departments that provide both population-level and individual services. This stems in part from public health's obligation under North Carolina General Statute § 130A-1.1 to "link[] people to needed personal health care services and ensur[e] the provision of health care when otherwise unavailable."[7]

In addition, across North Carolina, thousands of individuals utilize the health department to receive health care services, such as prenatal medical care, dental care, treatment for sexually transmitted infections, counseling and medications for substance use disorders, access to family planning services, and many other health care services. Sometimes people turn to the health department for their care because those services simply aren't provided elsewhere in their communities, and sometimes they do so because these services exist but are difficult to access without health insurance and on limited incomes. It is also important to note that health departments are not simply providers of last resort for people without economic advantages; in many communities, the staff and agencies of the local public health department are trusted for the quality and competence of the care they provide. These services can also help to cross-subsidize other health department services.

Because of the need to fill in these health care service gaps, health departments —particularly in rural areas—face dilemmas and obstacles to focusing on the core mission of public health (i.e., to address the health and well-being of whole communities). In places where access to health care is limited, health departments serve as vital health care safety net providers, and the payments they receive for providing health care services are an essential resource for their limited budgets. Many health departments rely on clinical revenues to support their core mission to provide population health services.





With opportunities for innovation to enhance local public health's ability to improve the health of the whole community, the task force recommends the following:

RECOMMENDATION 6

Pursue innovative strategies to address broader population health and meet the organizational, funding, and workforce challenges that local governmental public health currently faces

Three strategies are recommended by the Task Force on the Future of Local Public Health to move to a future vision of a strengthened structures for innovation:

Strategy 6a. Support Accreditation Flexibility and Modernize Standards The North Carolina Local Health Department Accreditation (NCLHDA) Board should support health departments as they pursue best available options to modernize their workforce, data capabilities, partnership development, and activities to address broader population health in communities by (1) exploring options to incorporate reciprocity for accreditation through the Public Health Accreditation Board (PHAB) in lieu of accreditation through NCLHDA and (2) restructuring the rules for accreditation to ensure the process is reflective of evolving standards for the new 10 Essential Public Health Services and/or the Foundational Public Health Capabilities.

Strategy 6b. Evaluate Innovative Models and Best Practices The North Carolina Institute for Public Health should (1) collaborate with the UNC School of Government, and/or identify other organizations as needed, to analyze innovative models and best practices for local governmental public health governance structures and partnership models and provide recommendations to guide future discussions around improving population health of North Carolinians and (2) collaborate with the North Carolina Association of Local Health Directors, and/or other organizations as needed, to evaluate and provide a report on overarching themes and lessons learned from health departments that have partnered with health care entities in their communities to shift health service provision from health department responsibility.

Strategy 6c. Support Opportunities for Innovation The North Carolina General Assembly should support innovation and efforts to address population health in local public health by (1) allocating significant funds to sustain existing and developing regional local public health capabilities in workforce, data, and communications and incentivize additional regional collaboration to realize opportunities for efficiencies across local public health jurisdictions and (2) supporting the development of rural safety net providers by filling the Medicaid coverage gap.

Strategy 6a – Support Accreditation Flexibility and Modernize Standards

Building on North Carolina's critical legislation requiring accreditation for local health departments, the North Carolina Local Health Department Accreditation (NCLHDA) Board should support health departments as they pursue best available options to modernize their workforce, data capabilities, partnership development, and activities to address broader population health in communities by:

i. Explore options to incorporate reciprocity for accreditation through the Public Health Accreditation Board (PHAB) in lieu of accreditation through NCLHDA with the ability to address topics not covered by PHAB accreditation through separate NCLHDA modules, as well as continuing discussions with PHAB regarding reciprocity for NCLHDA Board accreditation.

ii. Restructuring the rules for accreditation to ensure the process is reflective of evolving standards for the new 10 Essential Public Health Services and/or the Foundational Public Health Capabilities.

Desired Result

Local health departments will have fully modernized standards for accreditation and be positioned favorably with future Public Health Accreditation Board requirements.

Why does the task force recommend this strategy?

As an early adopter of mandatory health department accreditation, North Carolina has been a leader in standards-based accountability for local public health across the United States. In recent years, more health departments across the country have begun pursuing accreditation through the national Public Health Accreditation Board (PHAB) and some grant funders at the national level are most familiar with that form of accreditation. The task force wants to explore options for North Carolina health departments that prefer to seek accreditation through PHAB to have that flexibility, yet also wants to ensure all North Carolina-based standards are met. At the same time, North Carolina's standards should reflect any revision of the 10 Essential Public Health Services and the Foundational Public Health Capabilities.

Additional Context

Accreditation of health departments in the state is a multi-phase process overseen by the **North Carolina Local Health Department Accreditation (NCLHDA) Program**, and agencies must seek renewal of their accreditation status every four years to maintain eligibility for state and federal funding.[A] Health departments in North Carolina are required to provide documentation of their performance in three domains, called standards (Agency Core Functions and Essential Services, Agency Facilities and Administrative Services, and Board of Health/Governance), organized into 41 benchmarks and 147 activities to meet those benchmarks.[5] Because North Carolina established its accreditation program so early, the standards and process are specific to North Carolina, though aligned with national frameworks,[B] and the NCLHDA has served as a model for national accreditation programs administered through PHAB.[8]

PHAB reports that its accreditation covers 90% of the United States population, with 40 state, 305 local, and five Tribal health departments receiving PHAB accreditation.[C,9] Although most local health departments across the country are not required to seek this form of accreditation, many do for a variety of reasons, with 47% of health departments that applied for PHAB accreditation reporting that they did so for greater competitiveness for funding opportunities.[10] In North Carolina, health departments are required to be accredited through NCLHDA and may also seek PHAB accreditation separately. Burke County Health Department and Cabarrus Health Alliance/Public Health Authority are the only two local health departments in the state that have received PHAB accreditation, as has Fort Bragg Department of Public Health.[D,9]

North Carolina's accreditation standards are based on the 10 Essential Public Health Services ("10 Essential Services," See Figure 3, Page 21). The 10 Essential Services identify the activities all communities should engage in to carry out the mission of public health, and the original framework maps to the essential services mandated in North Carolina state law.[E] An update to the framework in 2020 placed equity at the center to emphasize the responsibility of local public health to ensure all community members have the opportunity to live healthy lives through implementation of the essential services. North Carolina law and accreditation standards have not yet been updated to reflect this change.

How would this impact the health of communities?

Fully accredited health departments are held accountable for maintaining standards and are incentivized to focus on quality improvement. This helps to ensure that local public health is fulfilling its roles and responsibilities to promote health for the communities served in a consistent manor across all counties irrespective of size, resources, or other demographics.

Who is responsible?

- North Carolina Local Health Department Accreditation Board

Who are the partners?

- North Carolina Institute for Public Health
- Public Health Accreditation Board (national)

[A] N.C. GEN. STAT. ANN. § 130A-34.4(a)(1)

[B] Such as the National Association of City and County Health Official's (NACCHO) "Operational Definition of a Functional Local Health Department." https://www.naccho.org/uploads/downloadable-resources/Operational-Definition-of-a-Functional-Local-Health-Department.pdf

[C] While the population served by PHAB-accredited health departments is large, only 305 of the nearly 3,000 local health departments nationwide are PHAB-accredited. This amounts to 10% of local health departments nationwide, whereas 100% of North Carolina local health departments are accredited within the state accreditation system.

[D] Fort Bragg is an Army installation in Cumberland and Hoke Counties in North Carolina.

[E] NC § 130A-1.1. Mission and essential services; see also G.S. 130A-34.1. Accreditation of local health departments; board established.

Strategy 6b – Evaluate Innovative Models and Best Practices

The North Carolina Institute for Public Health should:

i. Collaborate with the University of North Carolina School of Government, and/or other organizations as needed, to analyze innovative models and best practices for local governmental public health governance structures and partnership models and provide recommendations to guide future discussions around improving population health of North Carolinians.

ii. Collaborate with the North Carolina Association of Local Health Directors, and/or other organizations as needed, to evaluate and provide a report on overarching themes and lessons learned from health departments that have partnered with health care entities in their communities to shift health service provision from health department responsibility.

Desired Result

Best practices for local public health governance, partnerships, and services will inform future innovations to best serve community needs.

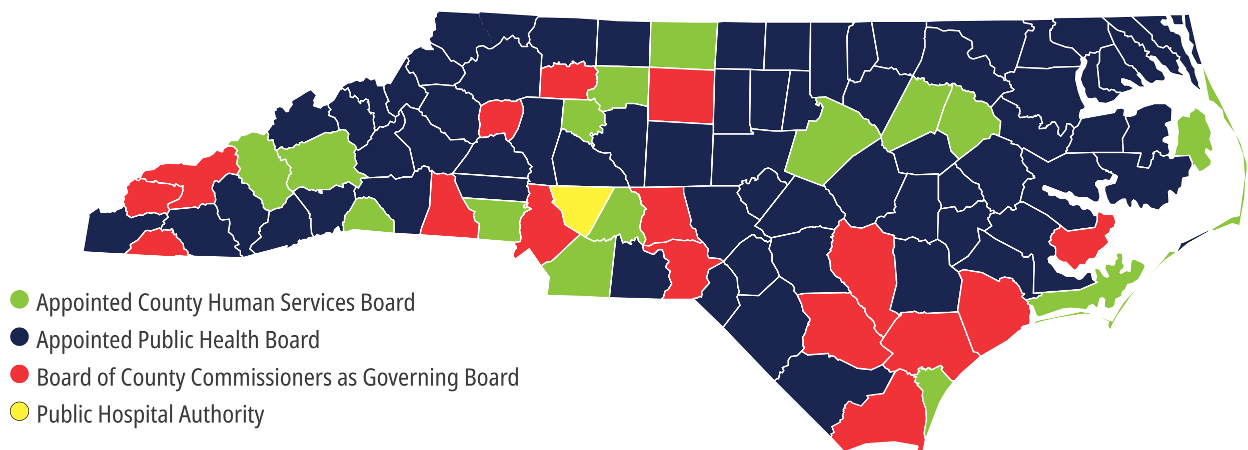
Why does the task force recommend this strategy?

The task force learned about and discussed examples of different governance structures, regional collaborations, and health services partnerships. Yet, objective evidence is not readily available to support our understanding of how these local or regional innovations have impacted health outcomes, or to identify specific facilitators and barriers to success. It is challenging to tease out the independent effects of one specific factor, such as the health department's governance structure, on a community's health outcomes or a local health department's performance. Therefore, analysis is needed to identify what is working and why.

Additional Context

Local health departments are governed by a board whose membership is dependent on the governance structure determined by each county. The North Carolina General Assembly passed S.L. 2012-126 in 2012 to give counties new options for how to organize and govern their human services functions. Specifically, this law "(1) allowed any Board of County Commissioners ("BOCC") in a county with a county manager to combine two or more human services functions into a single consolidated human services agency ("CHSA"); and (2) allowed any BOCC to directly assume the powers and duties of one or more of the governing boards responsible for overseeing a local human services agency (i.e., local board of health and/or county board of social services), including the board of a CHSA."[11] Therefore, across the state there are appointed Consolidated Human Services Boards, appointed Public Health Boards, and Boards of County Commissioners serving as Boards of Health (see Figure 15).[F] Depending on the type of board, some positions are required to be filled by people with specific credentials, training, or expertise. Boards are comprised of local leaders who have experience in sectors such as health care, dentistry, veterinary medicine, pharmacy, nursing, engineering, and other areas of expertise that align with public health responsibilities.[G] To date, there has not been an analysis of the operational effectiveness or health outcomes related to different forms of public health governance in North Carolina. This information could also be used to identify opportunities for increased flexibility in the membership composition for Boards of Health, a topic both the task force and other groups across the state have interest in addressing. Increased flexibility could allow for more diverse backgrounds and career experiences—particularly individuals with experience in and knowledge of addressing population and community health issues—to represent the unique needs of communities across the state.[H,I]

Figure 15. Local Public Health Agency Governance Structure



Source: UNC School of Government. Interactive Maps – Organization and Governance of NC Human Services Agencies. https://humanservices.sog.unc.edu/visualization-all/

[F] *Cabarrus County is unique in North Carolina as the only county that provides public health services through a Public Hospital Authority with an appointed Board of Commissioners, pursuant to uncodified legislation allowing it to do so, S.L. 1997-502, sec. 12.*

[G] *More information on the differences between types of boards, their authorities and their membership is available through the UNC School of Government at https://www.sog.unc.edu/resources/faq-collections/key-players-nc-local-public-health-local-boards-health.*

[H] *Perspective shared during Foundation for Health Leadership and Innovation listening sessions with local public health agencies and participants in Community Health Assessment processes to understand challenges and needs.*

[I] *Flexibility in Board of Health member composition would require changes to North Carolina public health statute.*

Similar to the variance in governance structures, health departments have a variety of approaches to fulfilling their responsibility under state statute to ensure health services are available for community members.[J] Some larger health departments have partnered with health care providers in the community to shift some of these services out of the health department itself. For example, Catawba County Public Health shifted child health, prenatal care, and child dental services to community partners as the pool of providers became more competitive and the health department saw that patients could be served reliably through other providers that wanted to serve patients enrolled in Medicaid.[12] Although these services are now managed by community partners, some are still provided within the physical health department building with the partners as contractors. While this partnership had a unique trajectory specific to the partners and geography involved, there are learning opportunities here for health departments that desire to assure that high-quality clinical services are accessible in their communities without serving as direct service providers themselves.

How would this impact the health of communities?

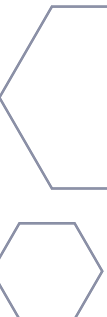
Determining best practices for governance, partnerships, and health services will allow health departments across the state to identify innovative solutions that may work for their communities and ensure that community members are served by an efficient and effective local public health agency.

Who is responsible?

- North Carolina Institute for Public Health

Who are the partners?

- UNC School of Government
- North Carolina Association of Local Health Directors



[J] *North Carolina General Statute § 130A-1.1*

Strategy 6c – Support Opportunities for Innovation

The North Carolina General Assembly should support innovation and efforts to address population health in local public health by:

i. Allocating funds to sustain existing and developing regional local public health capabilities in workforce, data, and communications and incentivize additional regional collaboration to realize opportunities for efficiencies across local public health jurisdictions.

ii. Supporting the development of rural safety net providers by filling the Medicaid coverage gap.

Desired Result

Health departments will have flexibility and funding to explore innovative partnerships, such as regional collaborations for shared services or partnerships to provide health services to community members.

Why does the task force recommend this strategy?

Cross-jurisdiction and regional collaborations can be effective ways to maximize resources and ensure access to specialized skills. Many small and mid-sized local health departments lack sufficient funding to support full-time positions that promote community health improvement, such as public health data analysts and public health communications specialists. Sharing personnel could help to ensure these capabilities are available to serve all residents of the state. The task force encourages financial support and technical assistance for these collaborations, which need time and coordination to develop.

On the local level, public health's capacity to serve the community as a whole could be enhanced through partnerships with local health care service providers, including independent medical, dental, and behavioral health practices, as well as health systems and hospitals. These partnerships could facilitate the transition from direct service provision to a role of assuring access is available through aligned partnerships for health departments that want to make this shift. This transition is possible for health departments when two conditions have been satisfied. First, health care providers must be willing and able to care for patients who have traditionally been served by the health department. The task force encourages the North Carolina General Assembly to fill gaps in Medicaid eligibility to help expand access to health care services across the state so that community health care providers, particularly in rural areas, will have a financially feasible path to providing care to lower income residents. Second, local public health initiatives to improve community health must be reliably funded and not dependent on cross-subsidization from clinical services revenue. The task force encourages the North Carolina General Assembly to increase funding levels to local health departments to support the fundamental roles and responsibilities of local public health (see Chapter 10, Strategies 7a and 7b).

Additional Context

The **Center for Sharing Public Health Services** has worked around the country with health departments of many shapes and sizes, and has identified some of the factors that result in successful shared services relationships, such as goal clarity, trust and relationships, senior-level support, and project management and communications skills.[13] When these elements are in place, health departments around the country have developed innovative new models of effective service delivery in such areas as immunizations, epidemiology, and environmental health.[14] There are several efforts underway nationally to better understand effective ways for health departments to cooperate across jurisdictions. The state of Washington conducted an extensive study of service delivery options for Foundational Public Health Services, seeking to identify "best fit" options that fall outside the traditional binary of either single-county responsibility or state responsibility. Washington State has categorized several forms of collaboration, including the "hub-and-spoke model" (locating specialized expertise and resources in several health departments throughout the state with formal agreements to support surrounding counties) and the "center of excellence model" (centralized expertise based in a local health department provides consultation across the state). A pilot project demonstrated that the center of excellence model proved to be a good fit for foundational public health services like control of tuberculosis, which is rare but serious and requires considerable expertise to provide up-to-date medical management.[15]

Sharing services across jurisdictions is also well underway across North Carolina. For example, the WNC Health Network in Western North Carolina and Health ENC in the Eastern part of the state provide support for multiple health departments to collaborate on a core public health function, the community health assessment. Participating counties pool resources for data collection and analysis, while local staff produce a county-specific report and work locally to foster multisector collaboration to address the priorities identified in the assessment.

The North Carolina law[K] that gave counties flexibility for the organization and governance of their human services functions (see Strategy 6a) also sought to establish a Public Health Improvement Incentive Program. The program was meant to "provide monetary incentives for the creation and expansion of multicounty local health departments serving a population of not less than 75,000."[16] However, no funds were allocated to the North Carolina Department of Health and Human Services to implement the program, and it was never established. Many county health departments participate in or express renewed interest in cross-jurisdictional resource sharing and other partnerships to improve capacity and effectiveness. This provides an opportunity for the General Assembly to encourage these partnerships and shared services across public health departments to streamline operations and serve as responsible stewards of public funding.

[K] *S. L. 2012-126*

To further improve local public health's ability to address issues affecting community health at the population level, health department capacity and resources dedicated to provision of individual health care services will need to be shifted over time. In larger communities, these health care services may be widely accessible to all members of the public through free and charitable clinics, federally qualified health centers (FQHCs), or hospital- and health-system-based clinics. However, task force members representing mid-sized and smaller communities often reported that their communities lack many health care services, and this reality remains a driving reason for health departments to provide clinical care themselves.

Task force members reported that reimbursement for clinical services, primarily from the Medicaid program, has historically provided a predictable and stable source of revenue for health departments. In many cases, revenue from clinical services is used to subsidize other functions of the health department and provides necessary baseline funds for community health education and other population-level projects. Recently, with the implementation of Medicaid managed care, there have been some disruptions in the reliability of this funding source. Preliminary estimates from the North Carolina Local Health Director's Association indicate that many health departments are dedicating additional staff to navigate billing settlements and are currently receiving a smaller percentage of funds from claims than they did prior to the implementation of managed care.[L] The NC Medicaid team, leaders from the prepaid health plans, and local public health leaders are working together to resolve these challenges.

The task force emphasizes that health departments in North Carolina must provide population-level public health services and must develop new significant, sustainable, and predictable revenue streams to fund productive community partnerships, data systems, and communications to promote health for all and eliminate inequities. The task force also recognizes that, in our current reality, some health departments must also provide clinical services in order for their residents to have equitable access to health care. However, health departments need stable sources of revenue that pay for the full cost of effective population-level programs without cross-subsidization from clinical services revenue, and North Carolina residents should ideally have access to multiple care options in their communities from a range of providers that they trust.

Filling the Medicaid coverage gap by increasing eligibility to 138% of the federal poverty level would have the short-term benefit to health departments of improving reimbursement for care provided to uninsured patients. In the long term, increased Medicaid coverage, particularly in rural areas, would encourage additional providers to establish care sites, potentially allowing health departments to transition away from health care service provision.[M] Increased Medicaid eligibility could help provide coverage to as many as 626,000 uninsured people, many of whom live in rural areas, with 20 of the 22 counties with the highest percentage of uninsured North Carolinians being rural.[17,18]

How would this impact the health of communities?

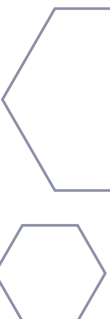
Collaboration between local public health agencies can enhance the quality of services and programs and improve the capacity of the local public health workforce to engage in additional activities geared toward improving the health of the community. Increased health insurance coverage through Medicaid would directly benefit community members who could then more easily access health care services, and also benefit the short-and long-term operations and mission of local health departments.

Who is responsible?

- North Carolina General Assembly

Who are the partners?

- Local health departments



[L] *Personal communication with Scott Harrelson, President of the North Carolina Local Health Directors Association and Health Director of the Craven County Health Department.*

[M] *Additional funding sources will be necessary to address the gaps in funding that would be created with decreased health care service provision. See Chapter 10 for additional discussion on funding sources for local public health.*

References

1. Pasquini N. NC social media stars encourage vaccines for young people. *Raleigh News & Observer*. August 12, 2021. https://www.newsobserver.com/news/coronavirus/article253397320.html
2. Cabarrus Network of Care. *Cabarrus County Crisis Support*. Accessed August 28, 2022. https://www.cabarrushealth.org/DocumentCenter/View/2039/CrisisSupport-Pamphlet-REV05
3. Acar OA, Tarakci M, van Knippenberg D. Why Constraints are Good for Innovation. *Harv Bus Rev*. November 22, 2019. doi:10.1177/0149206318805832
4. North Carolina Local Health Department Accreditation Board. About the NCLHDA Program. Accessed August 28, 2022. https://nclhdaccreditation.unc.edu/about-nclhda/
5. North Carolina Local Health Department Accreditation. NCLHDA Accreditation Process – Operational Guidelines. Published online November 2021. https://nclhdaccreditation.unc.edu/wp-content/uploads/sites/733/2021/12/NCLHDA-Accreditation-Process-Operational-Guidelines_1.1.22.pdf
6. UNC School of Government. Key Players in NC Local Public Health: Local Boards of Health. Accessed August 28, 2022. https://www.sog.unc.edu/resources/faq-collections/key-players-nc-local-public-health-local-boards-health
7. North Carolina General Assembly. *§ 130A-1.1.* Mission and Essential Services. Accessed August 28, 2022. https://www.ncleg.gov/EnactedLegislation/Statutes/PDF/BySection/Chapter_130A/GS_130A-1.1.pdf
8. Thielen L. *Exploring Public Health Experience with Standards and Accreditation*. Robert Wood Johnson Foundation. October 2004. https://phaboard.org/wp-content/uploads/2019/01/ExploringPublicHealthExperiencewithStandardsandAccreditation.pdf
9. Public Health Accreditation Board. Accreditation Activity. Accessed August 28, 2022. https://phaboard.org/accreditation-recognition/accreditation-activity/
10. NORC. *Assessing Accreditation Outcomes: Year 4 Accreditation Survey Findings*. February 2020. https://www.norc.org/PDFs/Outcomes%20from%20Public%20Health%20Accreditation/NORC_Accreditation_Y4Outcomes_2020.pdf
11. UNC School of Government. Interactive Maps - Organization and Governance of NC Human Services Agencies. Accessed August 28, 2022. https://humanservices.sog.unc.edu/visualization-all/
12. McCracken J. Presentation to the Task Force on the Future of Local Public Health. January 21, 2022.
13. Center for Sharing Public Health Services. Factors that Contribute to a Successful Sharing Arrangement. Accessed August 28, 2022. https://phsharing.org/success-factors/
14. Center for Sharing Public Health Services. CJS in Action. Accessed August 28, 2022. https://phsharing.org/cjs-in-action/
15. BERK Consulting. *2019 FPHS Shared Services Demonstration Projects Year 1 Evaluation*. Published January 2019. https://wsalpho.app.box.com/s/wpii4rn5ojfd76lsknmoevix16kfg4o3
16. North Carolina General Assembly. General Assembly of North Carolina Session 2011 Session Law 2012-126 House Bill 438. https://www.ncleg.net/EnactedLegislation/SessionLaws/PDF/2011-2012/SL2012-126.pdf
17. Hoban R. Lawmakers hear unvarnished support for Medicaid expansion. *NC Health News*. March 11, 2022. https://www.northcarolinahealthnews.org/2022/03/11/lawmakers-hear-unvarnished-support-for-medicaid-expansion/
18. healthinsurance.org. ACA Medicaid expansion in North Carolina [Updated 2022 Guide]. Accessed August 28, 2022. https://www.healthinsurance.org/medicaid/north-carolina/

NCIOM
North Carolina Institute of Medicine

CHAPTER 10

SUSTAINING LOCAL PUBLIC HEALTH THROUGH SUFFICIENT AND RELIABLE FUNDING

RECOMMENDATION 7............................ 93

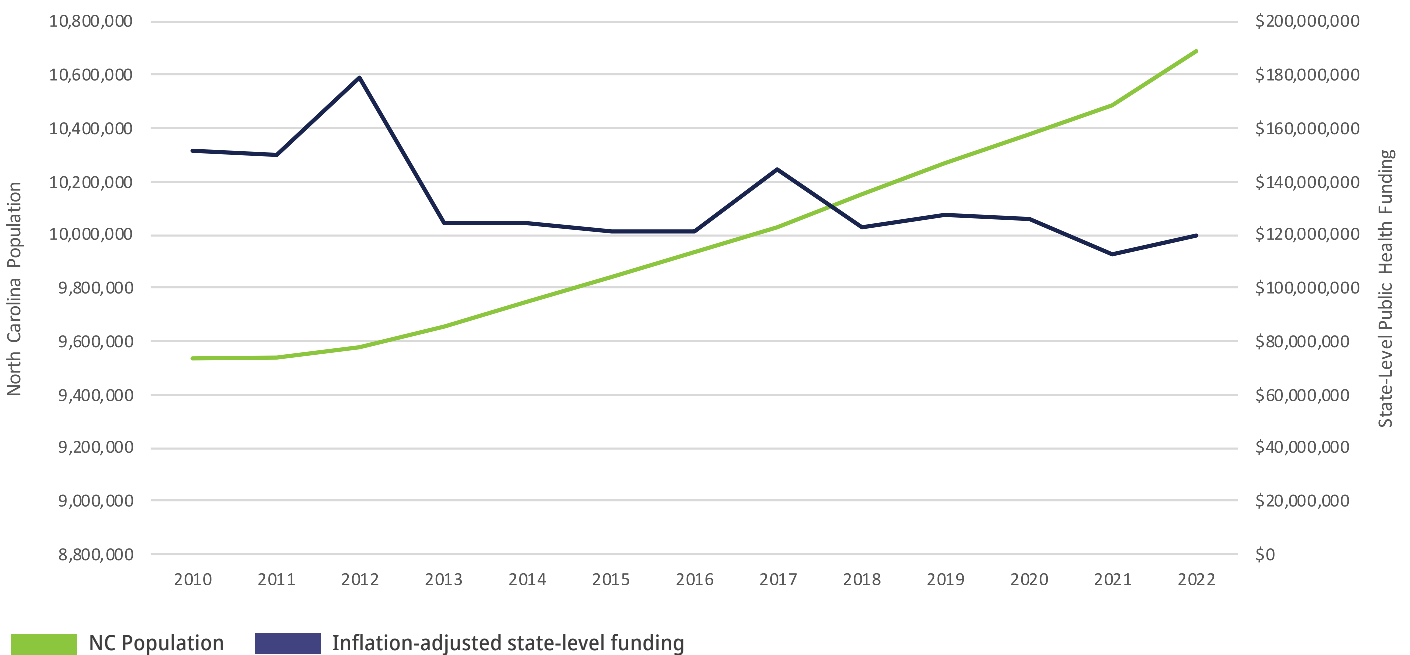
Current funding for local public health is inadequate, unreliable, fragmented, decreasing, and marked by periodic injections of resources for emergency response that subsequently dissipate. Current funding is also heavily directed towards service provision rather than building strong and sustainable organizations, leading to chronic neglect of foundational capabilities which are critically important to improving health.

For years, per capita funding - that is, dollars per person - for local public health has been decreasing at both the state and local levels as the population has increased.[A,1,2] Figure 16 shows that the total inflation-adjusted state-level spending on public health in North Carolina has decreased at the same time the population has increased over the last decade. During times of crisis, federal and state funds are temporarily injected into the system to fight a specific disease or challenge. Yet, the fundamental structures and capacity of local health departments have been neglected, making these funding increases during public health emergencies less effective than they could be. Even large amounts of "crisis funding" cannot mitigate these challenges as there is limited ability to stand up the technology and workforce to effectively handle the crisis.

There is growing momentum around maximizing the potential of local public health to create communities that give everyone an equal opportunity to live a healthy life. As Chief Health Strategist,[B] local public health can do this by engaging in collective impact through partnership development, ensuring community members' needs are understood and respected, and ensuring services and policies work well for everyone. Preventing disease and injury and improving well-being will make our communities more vibrant places where people want to live, work, do business, and raise families. Investments in local public health create a stronger foundation for entrepreneurship and growth and improving the health of our communities ultimately improves the bottom line for the economy and for the state budget.

> **"We are continuing to ... go from disaster to disaster without ever talking about the actual infrastructure."**
>
> *- Brian Castrucci, de Beaumont Foundation Public Health Experts Worry About Boom-Bust Cycle of Support. Kaiser Health News. https://khn.org/news/article/public-health-experts-worry-about-boom-bust-cycle-of-support/*
>
> **"We are so limited in what we can do and purchase [with grants] and none of it is sustainable. All of the [COVID-19] response money is structured this way and while it helps for maybe a fiscal year or two, there is nothing longer term that can truly help us solve any problems."**
>
> *- Local Health Director in North Carolina*

Figure 16. Comparison of Inflation-Adjusted State-Level Public Health Spending and Population Growth in North Carolina



Source: North Carolina Department of Health and Human Services Division of Public Health analysis of historical state public health spending data.

[A] *Analysis by the News & Observer indicated that, in most counties, the change in public health spending decreased dramatically at the same time the county population increased.*

Health of Communities, the Economy, & Health Care Spending

- Communities with healthier populations are good for business—self-reported good health is associated with creation of businesses and increased labor force participation.[a]
- Over time, areas with high economic activity and poor population health* have lower economic growth compared to areas with good population health.[a]
- CNBC ranks North Carolina as the best state for business and highlights per capita public health spending as a lagging area compared to other states.
- National health expenditures for preventable health conditions in 2016 were $730.4 billion, accounting for 27% of all health care spending.[c]
- In 2021, 10.8% of adults in North Carolina had three or more chronic diseases.[d]
- Chronic diseases cost North Carolina $116.5 billion ($11,336 per capita) in 2016—$34 billion in health care costs and $82.4 billion in indirect costs of work absences, lost wages, and reduced economic productivity.[e]
- The COVID-19 pandemic had severe impacts on many businesses - nearly all North Carolina small businesses surveyed in September 2020 said they had experienced revenue losses since March 2020, with 1 in 5 saying they had lost over 75% of their revenues.[f]

** Population health indicators were general health (self-rated), heart disease, high blood pressure, high cholesterol, obesity, diabetes, smoking, exercise, and mental health.*

[a] https://www.wilder.org/sites/default/files/imports/RobertWoodJohnson_LinkingHealthAndEconomicProsperity_Report_12-19.pdf
[b] https://www.cnbc.com/2022/07/13/north-carolina-is-no-1-in-americas-top-states-for-business.html
[c] https://www.thelancet.com/pdfs/journals/lanpub/PIIS2468-2667(20)30203-6.pdf
[d] https://www.americashealthrankings.org/explore/annual/measure/CHC/state/NC
[e] https://milkeninstitute.org/sites/default/files/reports-pdf/ChronicDiseases-HighRes-FINAL.pdf
[f] https://theinstitutenc.org/wp-content/uploads/2020/10/Impact-of-COVID-19-on-NC-Small-Businesses_3rd-Ed.pdf

To fulfill the task force's urgent and inspiring vision for the future of local public health, the strategies laid out in this report—building on partnerships, modernizing data capabilities, improving public health communications, retaining and building the workforce, and implementing innovative solutions with clear accountability—must be realized through strong leadership backed by sufficient and well-stewarded resources. Public health leaders commit the energy and passion to take these bold actions and work toward healthier communities for everyone; yet this work will take time and a significant increase in financial and human resources. To that end, local public health will require sustained funding and accountability for its vital role in improving the health of North Carolinians.

Current Funding for Local Public Health in North Carolina is Inadequate

In 2021, state and federal funding for all public health in North Carolina was $76 per capita, placing North Carolina 45th in the nation compared to the national average of $116 per capita, and second lowest in the South behind Texas ($74 per capita).[3] Local health departments in the state are funded through a combination of federal, state, and local government appropriations, with the remaining portion of budgets covered through grants and fees for health care services.

The Centers for Disease Control and Prevention (CDC) is the primary source of federal funding to local public health, typically for specific disease-related programming. CDC funds are given to states to distribute to local health departments, along with additional state funds provided through Agreement Addenda and General Aid to Counties. In FY 2019–2020 the North Carolina Division of Public Health oversaw a total of **$143.2 million in funds to local health departments**—$93.3 million in federal funds and $49.9 million from state appropriations, most of which were for specific activities with time limits and strict parameters (e.g., prenatal care, HIV prevention, etc.) as required by the funder.[4] Only **$11.3 million per year in state funds were allocated for General Aid to Counties,** which can be used for local public health operations related to the 10 essential public health services.[C,4]

State Funding Falls Short of Covering Mandated Services

Case Study from Granville Vance Public Health (2020-2021)

COMMUNICABLE DISEASE:

State Annual Funding* = **$4,147**

Actual Annual Cost* = **$378,563**

ENVIRONMENTAL HEALTH:

State Annual Funding = **$15,893**

Actual Annual Cost = **$748,000**

VITAL RECORDS:

State Funding = **$0**

Actual Annual Cost = **$24,017**

**Communicable disease funding presented here is pre-pandemic to indicate non-crisis funding. Communicable disease funding increases during the pandemic were intended for use only on activities related to addressing COVID-19.*

[B] 'Chief Health Strategist' refers to local public health's leadership role in improving community health by engaging with community members and partners as a convener or participant in collective action to address the root causes of health challenges.

[C] "This funding is the only unrestricted funding for local health departments that they may use for locally determined needs or purposes. The General Aid-to-Counties Activity was begun in the early 1970s with a fiscal year allocation of slightly less than $5 million.... The allocation for Fiscal Year 2020 is slightly more than $11.4 million. The funding provided by this Activity is to support delivery of the 10 Essential Public Health Services, the core functions of public health, and the specific health needs or health status indicators selected by each local health department." - As outlined in Agreement Addendum 110 between the North Carolina Department of Health and Human Services Division of Public Health and each health department in North Carolina.

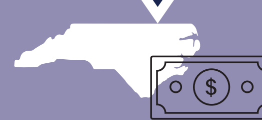
State-level per capita funding for public health dropped by 30% from 2010 to 2022 when adjusted for inflation.[1] Local public health and state Division of Public Health funding account for 3% of the state-funded portion of the North Carolina Department of Health and Human Services 2022 budget, and just 0.7% of total state appropriations.[5]

On average, 22% of North Carolina local health department funding comes from a combination of state and federal funds.[6] Another 50% (average, range for counties was between 7% and 71% in FY 2019) comes from local government.[D,2] County-level spending is an important part of most local health department budgets, yet per capita county spending on public health dropped 22% from 2010 to 2018 when adjusted for inflation. Fees and grants must account for the remaining budget needs.

PUBLIC HEALTH FUNDING BENCHMARKS

National average funding* for state and local public health = **$116 per capita**

(lowest states - $72 per capita, highest state $449 per capita)



North Carolina public health funding = **$76 per capita**

(North Carolina is 45th in the nation for per capita public health funding, second lowest in the South behind Texas ($74 per capita))

An increase of funding to the national average of **$116 per capita** would mean **$1.23 BILLION FOR PUBLIC HEALTH IN NORTH CAROLINA** per year (state and local funding combined) compared to $805.7 million – **a difference of $424.3 million.***

Current State Funding for North Carolina Local Public Health

$143.2 MILLION IN FY 2019–2020

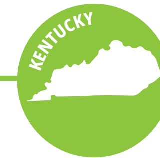
- **$93.3 MILLION** in federal funds
- **$49.9 MILLION** in state appropriations

Most state appropriations for local public health are designated for specific activities with time limits and strict parameters.

Only $11.3 million per year in state funds were allocated for General Aid to Counties to address the 10 essential services and foundational capacities of prevention.

Some states have recently developed estimates of state level funding needs for local public health to effectively carry out its responsibilities, including:

Washington State, where they have undertaken a multi-year process to identify the gap in state funding, with a baseline of **$225 million additional funds needed** on top of the $368 million in estimated current annual spending.[15] Washington's public health funding in 2021 was $121 per capita.



Kentucky, where the Kentucky Health Departments Association worked for several years to develop a cost estimate for mandated public health services and advocate for additional funding. Estimated cost of mandated services was **$116.5 million per year.**[16] Kentucky's public health funding in 2021 was $110 per capita

**Funding from federal and state sources. Estimates and calculations of per capita and total funding based on 2021 data from America's Health Rankings - https://www.americashealthrankings.org/explore/annual/state/NC*

[a] Public Health National Center for Innovations. Foundational Public Health Services (FPHS) and Public Health Modernization Background Report. Published online November 30, 2021.

[b] Oregon Health Authority Public Health Division. Public Health Modernization Manual Foundational Capabilities and Programs for Public Health in Oregon.; 2017.

[c] Staffing Up: Investing in the Public Health Workforce - de Beaumont Foundation. Accessed August 28, 2022. https://debeaumont.org/staffing-up/

[D] Data collected March 2021 by the NC Association of Local Health Directors and shared with the North Carolina Department of Health and Human Services Division of Public Health.

Why has per capita funding for public health decreased?

While per capita funding for public health has been decreasing for years, the reasons are difficult to pinpoint. A steady increase in the state's population, political priorities to avoid tax increases, and numerous budget pressures mean that policymakers face a difficult task in determining funding priorities for government services.

As a prevention-focused field, public health works behind the scenes to ensure that our communities are places where residents can be healthy. Policymakers may place lower priority on activities that are intended to avoid future problems or crises when they are faced with a multitude of immediate challenges, and public health activities often have a return on investment that is most effectively measured in the long term. It is also clear that many outside of the health care and public health fields tend to focus on health care services and health insurance—not prevention strategies of public health—when considering individual health status and outcomes. It can be challenging to prioritize prevention that will benefit unknown individuals in the future – a quality of public health - compared to immediate benefits to groups of people today – a quality of health care.

Yet, when people are reminded that 70% of our health outcomes are tied to social and environmental factors, most agree on where funds should be spent to keep people healthy. In a survey of North Carolina voters, respondents across demographic groups reported that if they oversaw funds to support health, they would spend 67%–74% on services outside of health care (e.g., food banks, affordable housing). The conclusion was that, "while health care may be a politically divisive issue, health can be a unifying one, with voters agreeing on what they need to be healthy."

To help create healthy communities, local public health addresses many of the social and environmental factors that impact our health and can also go farther upstream to identify the policies that may be preventing people from being able to make healthy choices.

As policymakers consider how to effectively prioritize a limited state budget to promote health for the people of North Carolina, turning greater attention—and resources—to the work of local public health could offer an opportunity to improve health and decrease health care spending in the long term.

FrameWorks Institute. Public Health Reaching Across Sectors - Mapping the Gaps between How Public Health Experts and Leaders in Other Sectors View Public Health and Cross-Sector Collaboration. February 2019. https://www.phrases.org/wp-content/uploads/2020/07/Aspen-PHRASES-MTG-Report-2019.pdf
Farley TA. When is it ethical to withhold prevention? NEJM. 2016;3674(14):1303-1306. DOI:10.1056/NEJMp1516534
Lumpkin JR, Perla R, Onie R, Seligson R. What We Need To Be Healthy—And How To Talk About It. Health Affairs. May 3, 2021. https://www.healthaffairs.org/do/10.1377/forefront.20210429.335599/

What is Sufficient Funding for Local Public Health and What are the Costs of Not Providing It?

While many would agree that local public health departments are understaffed and underfunded to provide foundational services to support community health, it can be difficult to determine the level of funding needed to support modernized, well-equipped, accountable local health departments with highly qualified employees. However, national benchmarks and examples from other states provide guidelines for the investments necessary to achieve a sustainable future.

Our state's national rank of 45th in per-capita public health funding should also be viewed in context of the variety of structures and operations of health departments across the country. North Carolina's $76 per capita includes funds from ***both*** federal and state government for public health functions at the state (Division of Public Health) and local (local health department) levels. North Carolina's decentralized system has 86 locally governed health departments. Among many differences in roles and responsibilities we have with other states, health departments in North Carolina typically provide more clinical health care services (See Figure 17). Some environmental health services are also more frequently provided in our health departments compared to the national average. While these services have been a vital way to serve the health of our communities, this variance from the national average highlights the challenge many health departments face with spreading financial and staff resources across other public health functions, like communicable disease control and chronic disease and injury prevention.

Kentucky, Oregon, and Washington are a few of the states that have begun to take on the funding needs for modernized public health (See Strategy 7a for more details). Their efforts have involved objectively determining funding needs for local public health by using the framework of the Foundational Public Health Services (FPHS, see Figure 4) to estimate necessary funding needed to conduct these services. FPHS describes the capabilities that local public health departments need to possess in order to carry out the 10 Essential Services, which are also the services required by North Carolina statute. The **foundational capabilities** are:[7]

- **Assessment** (including surveillance, epidemiology, and laboratory capacity)
- **Community partnership development**
- **Equity** (including strategically addressing social and structural determinants of health through policy, programs, and services)
- **Organizational competencies** (including leadership and governance)
- **Policy development and support**
- **Accountability and performance management** (including quality improvement, information technology, human resources, financial management, and law)
- **Emergency preparedness and response**
- **Communications**

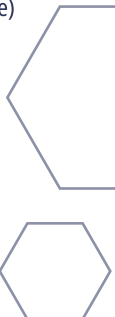
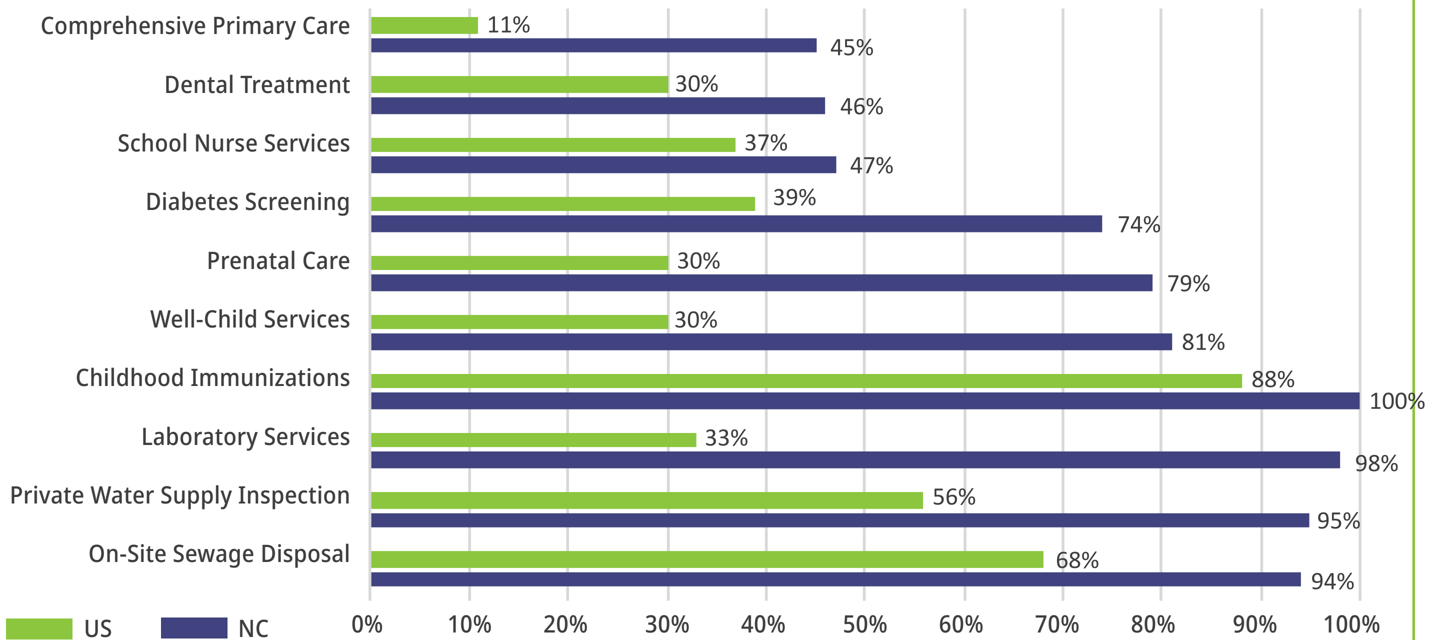


Figure 17. Percent of Health Departments Providing Select Clinical and Other Services, US vs. North Carolina, 2017



Source: North Carolina Department of Health and Human Services Division of Public Health, State Center for Health Statistics. Local Health Department Staffing and Services Summary. November 2017. https://schs.dph.ncdhhs.gov/schs/pdf/LHD_2017_FIN_20171120.pdf

The **community-specific services** encompassing these capabilities that are foundational to local public health are:

- **Communicable disease control**
- **Chronic disease and injury prevention**
- **Environmental public health**
- **Maternal, child, and family health**
- **Access to and linkage with clinical care**

> "A national study found that every $1 spent on evidence-based disease prevention programs saved an average of $6.20 in health care costs over 10 to 20 years.[8]"

Consequences of Limited Investment

The costs of not providing local public health services in a community vary from decreased life expectancy to lower levels of economic activity and business investment. Sick children miss or are delayed in school performance and unwell workers are not on the job. Lack of investment in prevention activities and community infrastructure for health also results in higher health care costs for businesses, hospitals, and government programs. A national study found that every $1 spent on evidence-based disease prevention programs saved an average of $6.20 in health care costs over 10 to 20 years.[8] Another national study found that a $10 per capita increase in local public health expenditures led to a 7% decrease in new infectious disease cases.[9] Other research has shown that self-reported good health is associated with creation of businesses and increased labor force participation, and that, over time, areas with high economic activity and poor population health have lower economic growth compared to areas with good population health.[E,10]

Moving Toward Sustainability of Local Public Health Funding

The COVID-19 pandemic brought additional funds to local health departments for the necessary work of contact tracing, vaccinations, and other infection-control operations. Yet these funds should not be regarded as a significant improvement to local public health budgets as they are primarily time-limited and specific to pandemic-related activities. Other resources, such as American Rescue Plan Act (ARPA) funds to states, have helped to begin the work of addressing major infrastructure challenges, such as workforce and data needs.

While ARPA funds will be used to take steps toward the future vision for local public health, they are also time-limited and ongoing reliable funding is needed to develop the necessary infrastructure for operational effectiveness.

[E] *Population health indicators were: general health (self-rated), heart disease, high blood pressure, high cholesterol, obesity, diabetes, smoking, exercise, and mental health.*

Many national organizations consistently recommend increasing funding for the work of public health:

- **Bipartisan Policy Center, Public Health Forward: Modernizing the U.S. Public Health System** – "Provide flexible funding and maximize existing assets to support public health services and capabilities, including those needed to address health inequities."[11]
- **Trust for America's Health, The Impact of Chronic Underfunding on America's Public Health System: Trends, Risks, and Recommendations, 2022** – "Substantially Increase Core Funding to Strengthen the Public Health Infrastructure and Workforce"[12]
- **Commonwealth Fund, Meeting America's Public Health Challenge** – "Government funding for core public health functions is grossly insufficient."[7]
- **National Network of Public Health Institutes, The Future of Public Health: A Synthesis Report for the Field** – "Put mechanisms in place to ensure that core funding is available to local health departments in amounts sufficient to ensure local capacity, including investments in data infrastructure modernization and professional development training."[13]

With the desire to achieve the bold vision described throughout this report for the future of local public health, the task force recommends the following:

RECOMMENDATION 7

Ensure governmental local public health is sufficiently and consistently funded to carry out Foundational Public Health Services and meet the unique needs of communities across the state

The Task Force on the Future of Local Public Health recommends four strategies to move to a future of adequate and reliable funding:

Strategy 7a. Structure for Determining Funding Needs The North Carolina General Assembly, North Carolina public health philanthropies, and leaders from relevant sectors most affected by the success of local governmental public health should actively collaborate in the creation of a public-private commission to provide leadership in the development of a per capita and baseline cost to counties and federally recognized Tribes to carry out Foundational Public Health Services and other public health activities required in state statute in North Carolina. In the interim, the General Assembly should raise annual state appropriations for public health funding to a minimum of the national average of $116 per capita.

Strategy 7b. Predictable Funding for Local Public Health The North Carolina General Assembly should ensure predictable and recurring funding at the level recommended by the Commission named in Strategy 7a for local governmental public health to carry out Foundational Public Health Services and any other public health activities required in state statute on a per capita basis with an adequate baseline level for all counties and federally recognized Tribes.

Strategy 7c. Local Funding to Support Community-Specific Needs The North Carolina Association of County Commissioners should identify opportunities for technical assistance to county commissioners in maintaining ongoing funding of local public health beyond what is recommended for state-level funding of Foundational Public Health Services.

Strategy 7d. Collaborative Funding for Innovation North Carolina public health philanthropies—in partnership with state and local health departments, public health nonprofits, academia, health care systems, business leaders, and others—should develop a collaborative process and ensure a consistent statewide strategy that aligns with existing federal, state, Tribal, and local funding strategies and helps local public health test innovative programs, structures, and operations.

Strategy 7a – Structure for Determining Funding Needs

Funding for local public health in North Carolina should be significantly increased to ensure the capacity to achieve effective programs and services that help make our communities healthy places for everyone to live. The North Carolina General Assembly, North Carolina public health philanthropies, and leaders from relevant sectors most affected by the success of local governmental public health should actively collaborate in the creation of a public-private commission to provide leadership in the development of a per capita and baseline cost to counties and federally recognized Tribes to carry out Foundational Public Health Services and other public health activities required in state statute in North Carolina.

i. The North Carolina General Assembly should:
   1. In the interim, raise annual state appropriations for public health funding to a minimum of the national average of $116 per capita,
   2. Identify and appoint key legislative leaders to serve on the commission,
   3. Guide the commission on legislative needs for analysis and information in the creation of budgets and legislation to promote local public health,
   4. Provide financial support, and
   5. Disseminate activities and findings of the commission among General Assembly membership.

ii. North Carolina public health philanthropies should:
   1. Provide financial support for staff and other expenses of the commission, and
   2. Identify leaders from relevant sectors for membership on the commission.

iii. Leaders from relevant sectors (e.g., representatives from local health departments; the North Carolina Department of Health and Human Services, including the Division of Public Health, Division of Child and Family Wellbeing, and Division of Health Benefits; Tribal public health; the North Carolina Association of County Commissioners; community representatives; business leaders; health care systems; and health care payers) should:
   1. Be active participants in the commission, and
   2. Share data and expertise relevant to the commission's work.

iv. Under the direction of an executive committee, the commission should:
   1. Identify and appoint appropriate stakeholders for membership,
   2. Determine metrics for success,
   3. Establish a timeline for reporting findings,
   4. Conduct an evaluation of per capita costs to counties and develop a recommendation for an initial baseline per capita amount that will support the delivery of Foundational Public Health Services,
   5. Develop an implementation strategy to fully fund the recommended baseline per capita spending amount, and
   6. Work with the North Carolina Public Health Association, North Carolina Association of Local Health Directors, and North Carolina Department of Health and Human Services Division of Public Health to monitor progress on task force recommendations.

Desired Result

The commission will develop a clear understanding of the financial needs of local health departments in North Carolina to successfully carry out the Foundational Public Health Services and an associated request for ongoing per capita and baseline funding to be appropriated by the North Carolina General Assembly.

Why does the task force recommend this strategy?

The task force agrees with other state and national entities that funding for local public health is inadequate to cover all the tasks it has undertaken. The North Carolina General Assembly should increase state appropriations for local health departments while a public-private commission considers the appropriate roles and funding levels for local public health. While the task force recommends an initial step of increasing funding to bring North Carolina to the national average—$116 per capita—more information and analysis is needed to understand the full financial needs and methods for local health departments to carry out the Foundational Public Health Services (FPHS, see Page 21 for details). The task force believes that the creation of a public-private commission to study these funding needs, develop an implementation strategy, and gather support from state policymakers will ensure evidence-based actions and accountability for public funds. This commission must consist of a wide range of representatives from entities that are both closely involved in the day-to-day work of local public health and those outside of the public health sector to ensure collective understanding and support for adequate and sustainable funding.

The task force recommends an interim step of increasing funding to bring North Carolina to the national average—$116 per capita – which includes both state and federal funding. More information and analysis is needed to understand the full financial needs of local health departments to carry out the Foundational Public Health Services.

An increase of funding to the national average of $116 per capita would mean $1.23 billion for public health in North Carolina per year (state and local combined) compared to $805.7 million - a difference of $424.3 MILLION.*

**Estimates and calculations of per capita and total funding based on 2020 data from America's Health Rankings - https://www.americashealthrankings.org/explore/annual/state/NC*

Additional Context

Funding local public health has a direct impact on health and the economy. For example, a national study found that a $10 per capita increase in local public health expenditures led to a 7% decrease in new infectious disease cases.[9] A study of local public health funding in California estimated that every $1 invested in public health resulted in $67 to $88 in societal benefits, such as improved general health status and decreased mortality. Another national study looked specifically at health care cost savings and found that 10- to 20-year savings of $6.20 for every $1 spent on proven community-based disease prevention programs.[14] Prior chapters in this report have detailed how enhancements to the structure, capacity, and function of local public health can improve the health of the whole community through programs, partnerships, and policy development.

In recent years, several states have worked with policymakers to determine appropriate levels of funding for FPHS and have seen success in increasing state appropriations. Washington State has undertaken a multi-year process to identify the gap in state funding, with a baseline of $225 million additional funds needed on top of the $368 million in estimated current annual spending.[15] The Washington legislature invested an additional $15 million in the 2018–2019 biennium budget and $28 million in the 2020–2021 biennium.[15] The funding gap analysis, conducted with the aid of multiple health departments in the state, also identified potential areas of support for shared services to achieve efficiencies in funding and capacity. As a result of these initial steps to increase funding, 57% of local public health agencies reported maintaining or increasing staffing, 46% reported improved disease response, and 23% reported improved communications.[15]

The Kentucky Health Departments Association worked for several years to develop a cost estimate for mandated public health services and advocate for additional funding. The association estimated that those mandated services—including population health, enforcement of regulations, emergency preparedness and response, communicable disease control, and organizational infrastructure—cost $116.5 million per year.[16] The multi-year effort resulted in the March 2020 enactment of Kentucky law 211.186, which covers funding for foundational public health programs through the calculation of base funding levels for each public health service provider and the state as a whole. The 2023–2024 biennium budget request for the Kentucky Public Health Departments General Fund totals nearly $144.5 million, although this request has not yet been fulfilled.[16]

Oregon codified the Foundational Public Health Services as the framework for governmental public health in state statute in 2015 and 2017.[8] This was a result of the state's own Task Force on the Future of Public Health Services, which also recommended "significant and sustained state funding be allocated to support implementation of the foundational capabilities and programs."[17] The Oregon legislature approved $60 million in the current biennium budget for investment toward these modernization efforts.[8]

Two activities already in progress can contribute to the work of the commission recommended in this strategy, particularly related to workforce needs. The Public Health Workforce Calculator has been developed through a partnership between the de Beaumont Foundation, the Public Health National Center for Innovations, University of Minnesota School of Public Health Center for Public Health Systems, and the Center for State, Tribal, Local and Territorial Support at the Centers for Disease Control and Prevention. This new tool can help state public health leaders estimate the number and type of staff needed for providing public health services using nationally recognized and validated benchmarks.[18] On the state level, the North Carolina Department of Health and Human Services Division of Public Health is using funds from the American Rescue Plan Act to conduct a gap analysis and a Regional Workforce Development Plan, with results expected in Spring 2023.[19]

How would this impact the health of communities?

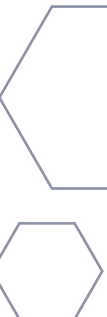
Adequate and reliable funding would help local public health to maintain and grow the workforce and technical capabilities needed to enhance partnerships, identify community health assets and needs, act quickly in emergencies, and engage in policy development to improve the health of whole populations.

Who is responsible?

- North Carolina General Assembly
- North Carolina public health philanthropies

Who are the partners?

- Local health departments
- North Carolina Public Health Association
- North Carolina Association of Local Health Directors
- North Carolina Department of Health and Human Services
- Tribal public health
- North Carolina Association of County Commissioners
- Community representatives
- Business leaders
- Health care systems
- Health care payers
- Rural health advocates (e.g., The Rural Center)



Strategy 7b – Predictable Funding for Local Public Health

The North Carolina General Assembly should ensure predictable, flexible, and recurring funding at the level recommended by the Commission named in Strategy 7a for local governmental public health to carry out Foundational Public Health Services and any other public health activities required in state statute on a per capita basis with an adequate baseline level for all counties and federally recognized Tribes.

Desired Result

The North Carolina General Assembly will implement an adequate per capita and baseline funding allocation for North Carolina local health departments to successfully carry out the Foundational Public Health Services.

Why does the task force recommend this strategy?

The task force agrees there is great potential for local public health to play a key role in improving the health and well-being of North Carolinians. Fulfillment of this role will help ensure our state is a place where everyone has an opportunity to live a healthy life, regardless of where they live or what they earn. Local public health requires ongoing additional funds to sustain this work, to counteract deferred operational progress due to per capita funding decreases over the past decade, and to rebuild a workforce whose members have been deeply taxed by their role at the center of a sustained and challenging pandemic response. The task force supports an initial step of increasing funding to bring North Carolina to the national average of $116 per capita for local public health spending. This step would be followed by an evidence-based estimate of funding requirements to carry out the Foundational Public Health Services (FPHS, see Page 21 for details) as recommended in Strategy 7a.

Additional Context

North Carolina currently ranks 45th in the nation for per capita public health spending with $76 per capita compared to the national average of $116 per capita (see Figure 18).[3] Local public health and state Division of Public Health funding account for just 3% of the North Carolina Department of Health and Human Services budget, and just 0.7% of the total state budget.[5]

CNBC ranked North Carolina as the best state for business in 2022, highlighting the ability of policymakers to overcome political differences to boost the economy and business. The state economy (ranked 1st in the nation), technology and innovation (ranked 5th), and workforce (ranked 12th) contributed to this success.[20] However, North Carolina's lowest ranking (28th) was in the factors of life, health, and inclusion. In particular, CNBC called out per capita public health spending and hospital resources as "among the many areas where North Carolina's explosive growth is straining resources."[20]

CNBC ranked North Carolina as the best state for business in 2022 and called out per capita public health spending and hospital resources as "among the many areas where North Carolina's explosive growth is straining resources.[20]

State health rankings reflect these challenges with health-related resources, as well as disparities in health outcomes seen for groups based on race and ethnicity, income, and geographic location, among other factors. For example, North Carolina ranks:[21]

- **40th** in number of babies born at low weight
- **39th** in overall physical health
- **37th** in number of adults with diabetes
- **35th** in number of adults with three or more chronic conditions
- **33rd** in number of adults with heart disease
- **27th** in drug-related deaths

These health outcomes can be attributed to factors that local public health can work to address in communities across North Carolina. These factors include the following areas where North Carolina struggles:[21]

- **7%** of adults engage in risky behaviors for sexually transmitted diseases (ranked 49th)
- **12%** of households are food insecure (ranked 40th)
- **78%** of adults do not get recommended levels of exercise (ranked 34th)
- **17%** of adults smoke (ranked 31st)
- **21%** of adults suffer from depression (ranked 30th)

How would this impact the health of communities?

Adequate and reliable funding would help local public health to maintain and grow the workforce and technical capabilities needed to enhance partnerships, identify community health assets and needs, act quickly in emergencies, and engage in policy development to improve the health of whole populations.

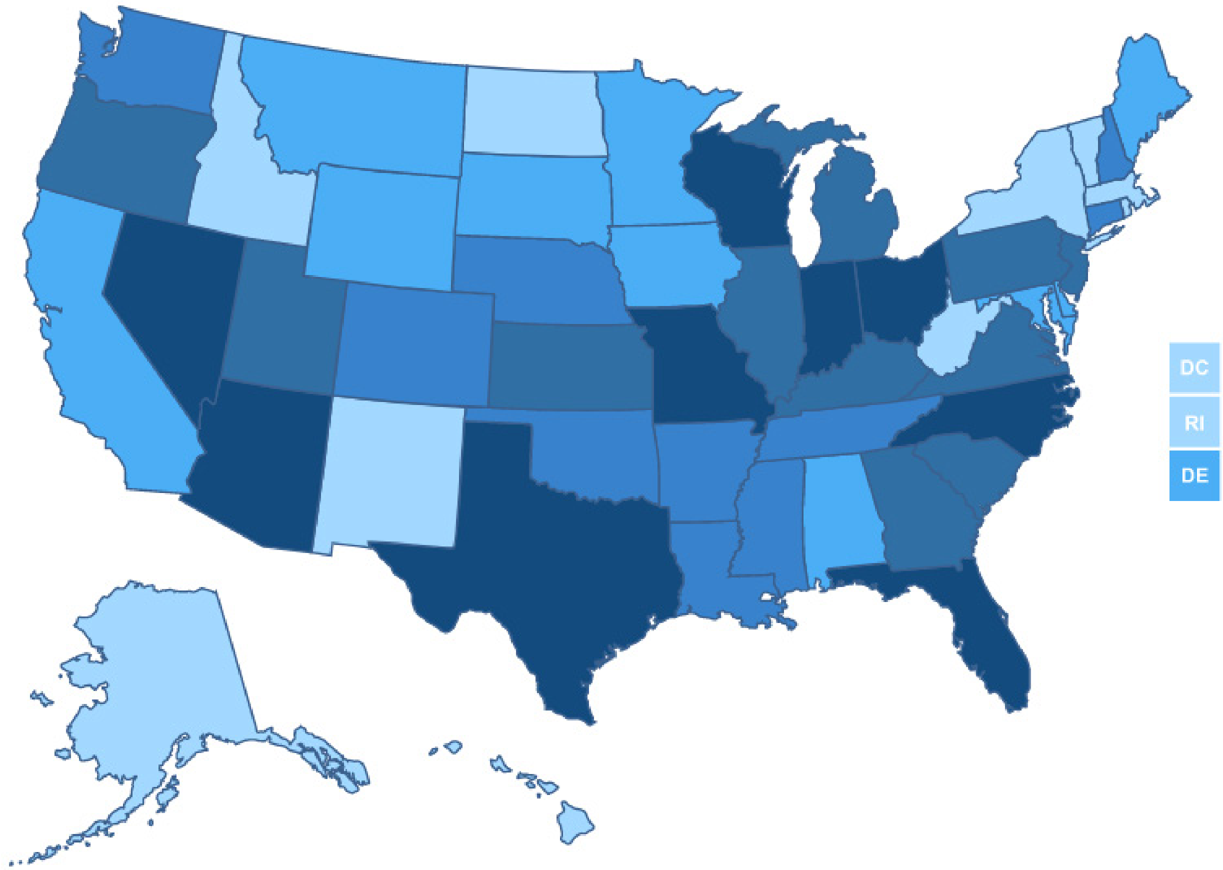
Who is responsible?

- North Carolina General Assembly

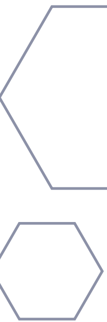
Who are the partners?

- Local health departments
- North Carolina Department of Health and Human Services
- Tribal public health
- North Carolina Association of Local Health Directors

Figure 18. Combined State and Federal Funding for Public Health, Per Capita, 2021



Source: CDC, HRSA and Trust for America's Health, accessed via America's Health Rankings. August 15, 2022. https://www.americashealthrankings.org/explore/annual/measure/PH_funding/state/NC?edition-year=2021



Strategy 7c – Local Funding to Support Community Specific Needs

The North Carolina Association of County Commissioners should identify opportunities for technical assistance to county commissioners in maintaining ongoing funding of local public health beyond what is recommended for state-level funding of Foundational Public Health Services.

Desired Result

Local health departments will continue to receive local or county appropriations at rates at or above current funding levels. Local appropriations will not be replaced by any additional funding that may be secured through new state appropriations.

Why does the task force recommend this strategy?

County governments across the state have played a significant role in supporting the work of local public health, funding an average of 50% (range between 7% and 71% in FY 2019) of total budgets. The task force recognizes this support and seeks to ensure that local budgets continue to be supported at current levels, even as additional funds are allocated by state government. In this way, current local appropriations will not be replaced by state sources, but supplemented to enhance local public health capacity and capabilities.

Additional Context

Local property taxes provide the funding to support local public health budgets. This can be a strain in areas of the state with lower incomes and property values, accounting in part for the large variation in the portion of local public health budgets funded by the county—from 7% to 71% in 2019.[F]

In 2012, the North Carolina General Assembly required that "in order to remain eligible for state and federal funding, a county must maintain its appropriation to its local public health agency from ad valorem tax receipts at a level equal to the amount appropriated in fiscal year 2010-2011."[22,23]

This strategy is closely related to Strategy 4b—Value the Public Health Workforce (Chapter 7). Strategy 4b calls for deeper learning about the roles and responsibilities of local public health to better understand the issues affecting burnout, retention, and recruitment for local governmental public health employees. Greater understanding and appreciation of local public health's roles, responsibilities, and contributions to community economic and social well-being can motivate commitment to maintaining or growing local funding.

Provision of the Foundational Public Health Services (see Page 21 for details) will look different across the state based on community needs. It may include offering health services at the health department when there are no other health care providers for lower-income and uninsured populations. It also includes the work of local public health to address the social needs of a community that impact health, such as affordable and safe housing and access to healthy foods.

The North Carolina Association of County Commissioners (NCACC) offers several training opportunities for county commissioners, some in partnership with the University of North Carolina – Chapel Hill School of Government (see Chapter 7). In Addition, NCACC launched a Strategic Member Services program this year to assist counties in planning and use of funds from the federal American Rescue Plan Act, which NCACC says "offer enormous opportunity for county leaders to address challenges unique to their communities and potentially undertake significant capital projects."[24] This new service could also provide an opportunity for learning and planning to bolster county public health operations.

How would this impact the health of communities?

County support of local public health budgets helps to ensure engagement of local government in the health and well-being of the communities served. Oversight and financial support ensure there is local governmental accountability for improving the health of people across the state.

Who is responsible?

- North Carolina Association of County Commissioners

Who are the partners?

- County commissioners
- Local health departments

[F] *Data collected March 2021 by the North Carolina Association of Local Health Directors and shared with the North Carolina Department of Health and Human Services Division of Public Health.*

Strategy 7d – Collaborative Funding for Innovation

North Carolina public health philanthropies - in partnership with state and local health departments, public health nonprofits, academia, health care systems, business leaders, and others - should develop a collaborative process and ensure a consistent statewide strategy that aligns with existing federal, state, Tribal, and local funding strategies and helps local public health test innovative programs, structures, and operations.

Desired Result

Public health philanthropies will support innovative programs, structures, and operational enhancements for local health departments to develop and test promising emerging strategies to improve community health.

Why does the task force recommend this strategy?

Philanthropic and other non-public support is a critically important source of flexible funds that catalyze innovation. Most revenue sources for local public health are categorical funding for existing program activities (such as immunizations and family planning services), with few resources to invest in new initiatives based on unique local needs and assets. There are many philanthropic and other non-public funding and capacity partnerships in North Carolina, and many of these share the goals of promoting health equity, community well-being, and opportunities for economic stability and healthy lives with local public health. The task force sees an opportunity to develop a collaborative process between public health funders and other public health partners to identify shared priorities for pilot projects and initiatives to disseminate promising practices.

Additional Context

North Carolina has a wealth of entities engaged in partnerships with local public health. Key among these partners in terms of financing innovation are public health philanthropies, including The Duke Endowment, the Kate B. Reynolds Charitable Trust, and the Blue Cross Blue Shield Foundation of North Carolina (all of whom work across the state), as well as many county-specific or regional health philanthropies born out of hospital mergers or conversions, such as Dogwood Health Trust. Other organizations from the state's many academic institutions, large health systems, and visionary businesses are important partners in providing capacity to health departments in areas such as data analytics and research.

Federal and state funds are typically allocated for specific disease-related programming. Thus, philanthropic funds serve an important role in supporting the resources necessary for programs and capacity-building that may be unique to local needs.

How would this impact the health of communities?

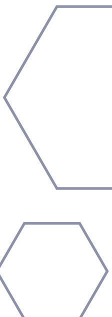
Economic, demographic, and social change occur steadily across our state, and this brings changes in people's lifestyles, habits, and preferences. To continue to meet public health goals, health departments must develop the capacity to respond to changes in their communities by enhancing the types of services provided and modifying their methods of service provision. Additional funding and capacity help ensure that local public health has the resources to implement best practices and innovative solutions for addressing unique community health needs. A streamlined approach to this funding and capacity-building helps to ensure efficient use of health department staff and resources for local needs.

Who is responsible?

- Health philanthropies and innovation funders

Who are the partners?

- North Carolina Department of Health and Human Services Division of Public Health
- Local health departments
- Public health nonprofits
- Public health academia
- Health care systems
- Business leaders



[6] *The Kate B. Reynolds Charitable Trust is a funder of the NCIOM Task Force on the Future of Local Public Health, along with the North Carolina Department of Health and Human Services.*

References

1. Weber L, Ungar L, Smith MR, Recht H, Barry-Jester AM. Hollowed-Out Public Health System Faces More Cuts Amid Virus. *Kaiser Health News*. July 1, 2020. https://khn.org/news/us-public-health-system-underfunded-under-threat-faces-more-cuts-amid-covid-pandemic/
2. Crumpler R. Health spending shortage in NC affects coronavirus response. *Raleigh News & Observer*. January 22, 2021. https://www.newsobserver.com/article248029345.html.
3. America's Health Rankings. Explore Public Health Funding in North Carolina - 2021 Annual Report. 2022. Accessed August 24, 2022. https://www.americashealthrankings.org/explore/annual/measure/PH_funding/state/NC?edition-year=2021
4. Meed J. DHHS Division of Public Health Budget Overview. Presentation to Joint House and Senate Appropriations Committees on Health and Human Services. March 10, 2021. https://webservices.ncleg.gov/ViewDocSiteFile/50281
5. NC.gov. NC Budget and Spending. https://ncreports.ondemand.sas.com/SASVisualAnalytics/?reportUri=/reports/reports/b00debfc-51e7-45a6-92d4-3efaf33a3daa§ionIndex=0&sso_guest=true&reportViewOnly=true&sas-welcome=false
6. Harrison LM. Local Public Health Funding Current Context for Systems Change-Rural Perspective. *Presentation to the NCIOM Task Force on the Future of Local Public Health*. September 9, 2021.
7. The Commonwealth Fund. Meeting America's Public Health Challenge - Recommendations for Building a National Public Health System That Addresses Ongoing and Future Health Crises, Advances Equity, and Earns Trust. *Commission on a National Public Health System*. June 21, 2022. https://www.commonwealthfund.org/publications/fund-reports/2022/jun/meeting-americas-public-health-challenge
8. Public Health National Center for Innovations. Foundational Public Health Services (FPHS) and Public Health Modernization Background Report. November 30, 2021. https://phnci.org/uploads/resource-files/FPHS-Background-Paper-2021.pdf
9. Erwin PC, Mays GP, Riley WJ. Resources That May Matter: The Impact of Local Health Department Expenditures on Health Status. *Public Health Reports*. 2012;127(1):89. doi:10.1177/003335491212700110
10. Mattessich PE, Rausch E, Connell MPP, Mark A, Williams MEM, Diaz MPPJ. Linking Health and Economic Prosperity: A Study of U.S. Metro Areas. *Amherst Wilder Foundation*. December 2019. https://www.wilder.org/wilder-research/research-library/linking-health-and-economic-prosperity-study-us-metro-areas-0
11. Bipartisan Policy Center. Public Health Forward: Modernizing the U.S. Public Health System. December 2, 2021. https://bipartisanpolicy.org/report/public-health-forward/
12. Trust for America's Health. The Impact of Chronis Underfunding on America's Public Health System: Trends, Risks, and Recommendations. July 2022. https://www.tfah.org/report-details/funding-report-2022/
13. National Network of Public Health Institutes. The Future of Public Health: A Synthesis Report for the Field - NNPHI. December 2021. https://nnphi.org/resource/the-future-of-public-health-a-synthesis-report-for-the-field/?parent_id=94
14. Trust for America's Health. Prevention for a Healthier America: Investments in Disease Prevention Yield Significant Savings, Stronger Communities. February 2009. https://www.tfah.org/report-details/prevention-for-a-healthier-america/
15. Washington State Department of Health. 2021 FPHS 19-21 Investment Report - SFY20. April 2021. https://wsalpho.app.box.com/s/psd3iyhu06n5zxuqrjkwawy7k8la04r5
16. Heise G. Presentation to the Task Force on the Future of Local Public Health. March 10, 2022.
17. Oregon Health Authority Public Health Division. Public Health Modernization Manual Foundational Capabilities and Programs for Public Health in Oregon. September 2017. https://www.oregon.gov/oha/ph/About/TaskForce/Documents/public_health_modernization_manual.pdf
18. PHNCI. Workforce Calculator. Accessed October 31, 2022. https://phnci.org/transformation/workforce-calculator
19. North Carolina Department of Health and Human Services Division of Public Health. NC Governmental Public Health: Workforce and Infrastructure Improvement in Action. May 2022. https://www.ncdhhs.gov/media/15401/download?attachment
20. Cohn S. North Carolina is No. 1 in America's Top States for Business 2022. *CNBC*. August 28, 2022. https://www.cnbc.com/2022/07/13/north-carolina-is-no-1-in-americas-top-states-for-business.html
21. America's Health Rankings. Explore Health Outcomes in North Carolina - 2021 Annual Report. Accessed August 24, 2022. https://www.americashealthrankings.org/explore/annual/measure/Outcomes/state/NC?edition-year=2021
22. UNC School of Government. How are local public health services financed? Accessed August 28, 2022. https://www.sog.unc.edu/resources/faqs/how-are-local-public-health-services-financed
23. *G.S. 130A-144*. Accessed August 24, 2022. https://www.ncleg.gov/EnactedLegislation/Statutes/HTML/BySection/Chapter_130a/GS_130a-144.html
24. North Carolina Association of County Commissioners. NCACC Strategic Member Services. Accessed August 28, 2022. https://www.ncacc.org/services-for-counties/ncacc-strategic-member-services/

NCIOM
North Carolina Institute of Medicine

CHAPTER 11

CALL TO ACTION

Local governmental public health has a vital role in improving the health of every person in communities across North Carolina. For decades, health departments in our state have been working hard to make sure that our water is safe to drink, restaurants are clean, vaccines are readily available, children are born healthy-ready to learn and be successful in school, people have access to necessary health services, disease outbreaks are managed effectively, and the unique issues affecting the health of community members are identified and addressed. This is why public health is called "the quiet miracle"

Yet, local health departments struggle to provide these basic health protections and are seriously underfunded to achieve the full potential of improved health for the public.

We are at a time of great challenge and great opportunity for the future of local public health. The COVID-19 pandemic put a spotlight on public health's strengths and challenges, revealing the extraordinary commitment of its dedicated employees and the deep need for investment in stronger systems to support them: modernized data infrastructure, greater capacity to communicate with the communities being served, funding for foundational capabilities and strong community partnerships for population health, and urgent efforts to sustain and grow the public health workforce.

The recommendations and strategies outlined in this report are key to moving North Carolina's local public health infrastructure toward this future. They will require the efforts of those within and outside the public health sector to make necessary changes. The NCIOM Task Force on the Future of Local Public Health calls on the following entities to implement these recommendations:

- **Local Health Departments** should pursue opportunities to increase staff competencies in health equity, data analysis, communications, and partnerships; and continue to develop effective policies, programs, and services with increased accountability. However, these agencies can only accomplish this work if those at NCDHHS, County Commissioners, and General Assembly members provide adequate funding for this work;

- **North Carolina Department of Health and Human Services Division of Public Health** should coordinate with local public health representatives to develop statewide structures attentive to data, communications, and workforce development that support local health departments and their partners;

- **North Carolina General Assembly** should provide adequate, sustainable, predictable, and flexible funding to enable local health departments to fulfill their fundamental roles and responsibilities to the communities they serve and provide incentives for innovative solutions to promote efficiency;

- **Local Government Officials**—County Commissioners and County Managers—should continue to support local public health financially and grow understanding of the needs of the local public health workforce;

- **Local Public Health Partners** should continue to work in partnership with local health departments to improve community health in North Carolina;

- **Public Health Nonprofits and Trade Organizations** should develop additional workforce training opportunities and participate in the development of statewide structures to address data, communication, and workforce development;

- **Public Health Philanthropies** should assist in the growth of public knowledge and awareness of the roles of local public health and continue to provide opportunities for innovation to meet community health needs;

- **Public Health Academic Programs** should share expertise and capacity with local health departments and collaborate to develop a workforce that is prepared and interested in working in local public health;

- **Health Systems and Payers** should continue to partner with local health departments to share capacity and develop a shared vision for population health; and

- **Business Leaders** should engage with public health to create healthier communities that allow the economy to grow, and to advocate for additional resources for local public health to be successful.

North Carolina Institute of Medicine. Foundations of Health and Opportunity: Investing in the Future of Local Public Health in North Carolina. Morrisville, NC: North Carolina Institute of Medicine; 2022.

Funded by the Kate B. Reynolds Charitable Trust and the North Carolina Department of Health and Human Services Division of Public Health.

Any opinion, finding, conclusion, or recommendations expressed in this publication are those of the Task Force and do not necessarily reflect the views and policies of the Kate B. Reynolds Charitable Trust and the North Carolina Department of Health and Human Services Division of Public Health.

Keystone Office Park
630 Davis Drive, Suite 100
Morrisville, NC 27560
(919) 445-6500
www.nciom.org

@NCIOM