

## 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.<sup>1</sup> 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.<sup>2</sup> The number of undergraduate public health degrees increased by 750% during this same period.<sup>2</sup> In North Carolina, 19 colleges and universities now offer undergraduate degrees in public health or related fields.<sup>3</sup> 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.<sup>4</sup>

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.<sup>2</sup>

### 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.<sup>5</sup>

**“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](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.<sup>6</sup> Recruitment to these programs, developed to specifically address improving diversity in the workforce, often includes institutional linkages, collaborative partnerships, and interpersonal contacts.


<sup>4</sup> 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/preved/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) serving 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.<sup>7</sup> 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.”<sup>8</sup>
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.”<sup>9</sup>
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.”<sup>10</sup>

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.<sup>11</sup> 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.”<sup>12</sup> Qualified positions are designated by





the State Education Assistance Authority, which takes recommendations from the FELS Advisory Group.<sup>13</sup> 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.<sup>12,14</sup> 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.<sup>15</sup>

### **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.<sup>16</sup>

**“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.”<sup>17</sup>

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.<sup>18</sup> 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%).<sup>18</sup> 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.<sup>19</sup> 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.<sup>20</sup> 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.”<sup>21</sup>

#### **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.”<sup>22</sup> 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.

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

**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/>







### 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.thenation-shealth.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](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):445-505. 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](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/>