

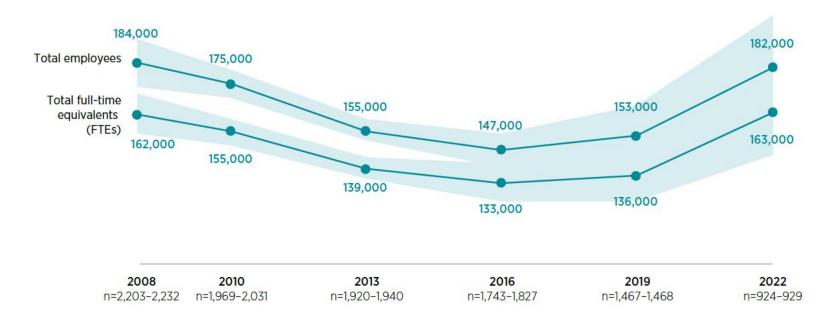
Measuring the PHN Workforce

Paula Kett, PhD, MPH, RN
Betty Bekemeier, PhD, MPH, RN, FAAN

June 18, 2025

Local Health Department (LHD) Workforce Changes

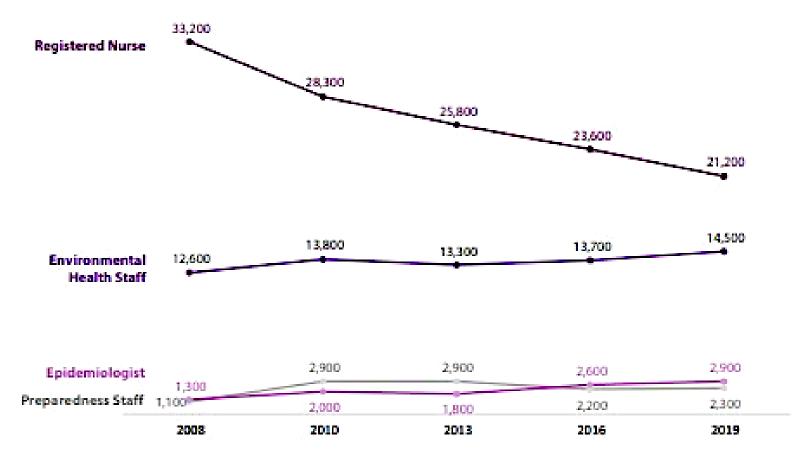
Estimated size of LHD workforce, over time



(NACCHO Profile of Local Health Departments, (2022) NACCHO_2022_Profile_final.pdf)

LHD Workforce Changes by Occupation

Figure 2. Estimated size of select occupations over time



(NACCHO Profile of Local Health Departments, (2019) NACCHO_2019_Profile_final.pdf)

Who are they? Where are they?



Why do they matter?



What do THEY need?

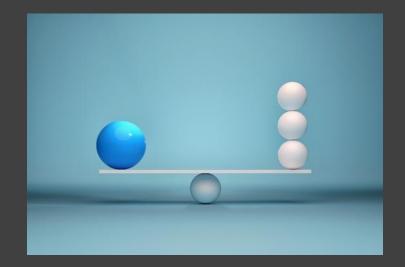


What do they do?





How many do we need?



Who/Where are PHNs?

Size

 ~3.7% of the overall RN workforce – including those in public health, school health, corrections⁴

Demographics

- Largely female, White⁴
- Aging over 1/3rd above 51yo^{1,4}; 15% 60+³
- Most with Bachelors as highest education⁴

Where are they?

- ~ 1/4 in rural areas⁵
- North Dakota, Minnesota, Alaska highest % of PHNs of all the states⁴

What do PHNs do?

Roles--varied

• LHD directors, nursing directors, frontline PHNs, consultants, researchers, educators, advance practice nurses. 1,5

Functions--broad focus, leadership

- Care coordination, population health strategies, health promotion and prevention.^{5,6}
- Leadership roles: setting strategic direction and vision, partnershipbuilding, relationships in the community⁷

Specialization:

- In **PH** surveys, most working in MCH, communicable disease, clinical services, and school health.⁸
- In nursing surveys, most specializing in school health, PH or corrections.4

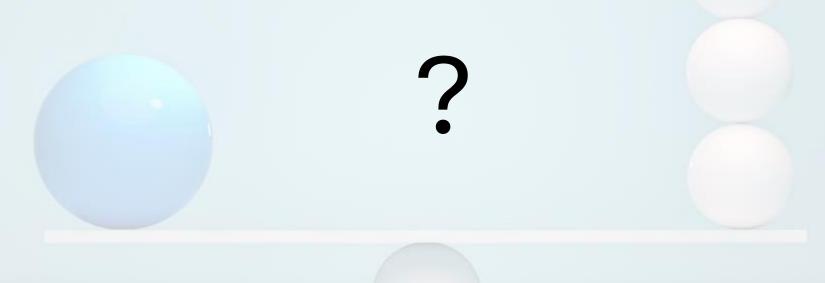
Why do PHNs matter?

- Distinct skills
 - Broad knowledge base of populations, communities¹¹
 - Nurses in PH leadership Emphasizing SDOH in policies¹²
 - Systems perspective; "managing up"; strategic in their approach to leadership⁷
 - Skills important for emergency preparedness and response⁸
 - Climate justice work¹⁴
- Support a competent PH workforce^{7,8}
- Health outcomes better in counties where nurses hold PH leadership positions¹³

What do PHNs need?

- Stronger training and education^{1,8}
- Access to professional development^{5,14}
- Training for using data to inform practice; policy development⁸
- Education of PH leadership about the PHN role⁵
- Opportunities to practice to top of scope⁵

How many PHNs do we need?



Background

- Difficulties in assessing PHN numbers, distribution
 - Variable measurements underway of PHNs
 - Public health surveys limit PHNs to state/local health departments
 - PHNs typically identified by 'setting' alone
- Studies rarely include PHNs in federal agencies
- Over 1200 PHS nurse officers in the USPHS Commissioned Corps

Aims

- Describe the PHS nurse officers in the USPHS Commissioned Corps
- 2. Test PHN function and activity questions

Measure PHNs regarding WHAT THEY DO, rather than WHERE they practice

Methods

Survey development

- Adapted national nursing survey questions
- Engaged past and current PHS Chief Nurse Officers
- 4 main sections including Job Roles and Functions
- Developed function and activity questions PHN Scope and Standards, experts in the field, PH taxonomy

Descriptive analysis

Compared "primarily clinical" and "primarily non-clinical" groups

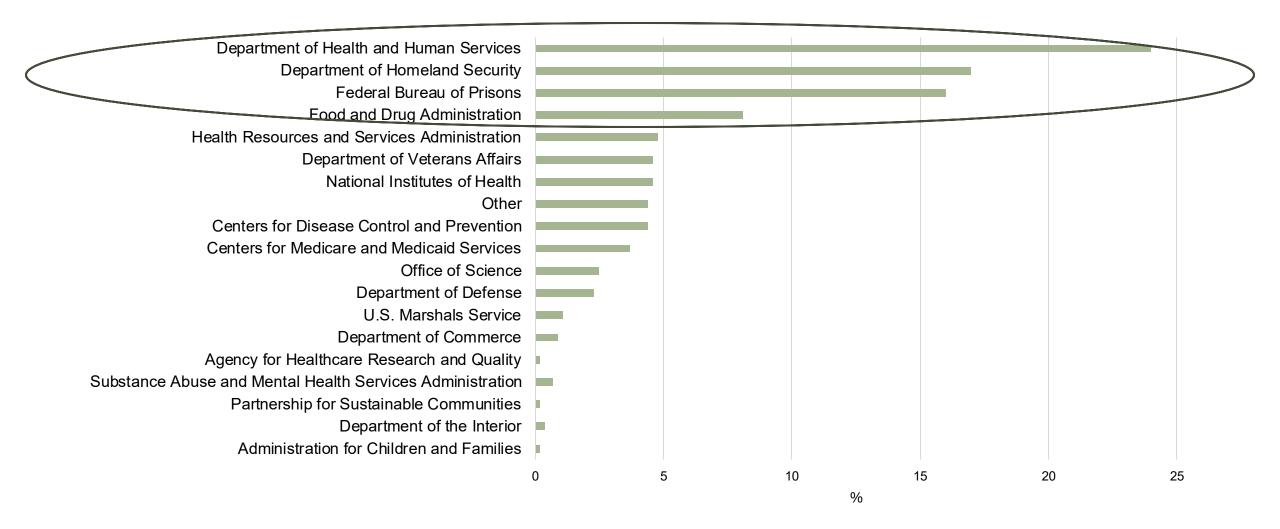
Findings

47% response rate

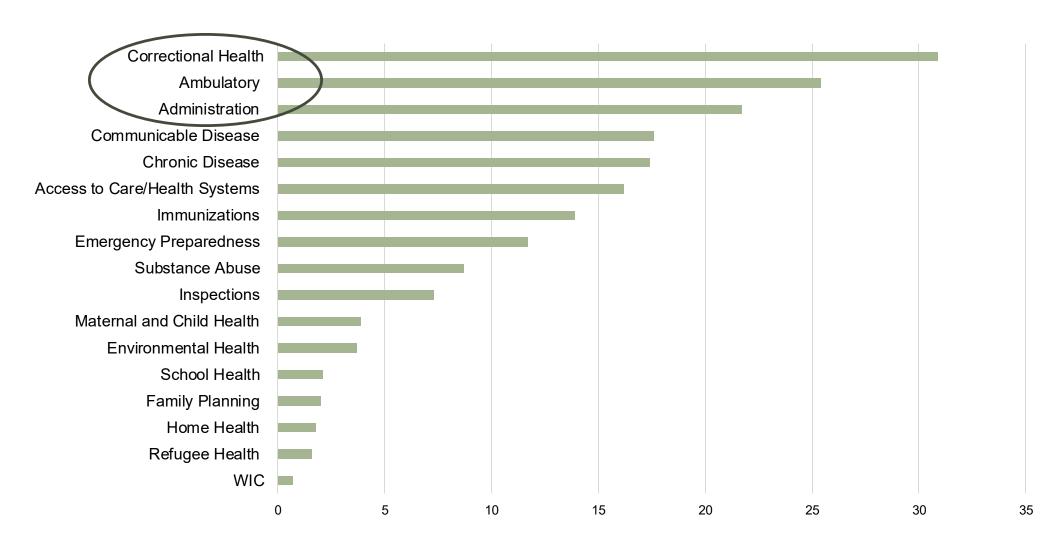
Sample Description

- Majority female identifying (70%) and >40y old (76%)
- Racial identity
 - 45% identified as white
 - 29% as African American or Black
 - 14% as American Indian or Alaska Native
- Highest nursing degree
 - 47% Master's in Nursing, 11.9% PhD or DNP

Findings – Agency



Findings – Program Area



Findings

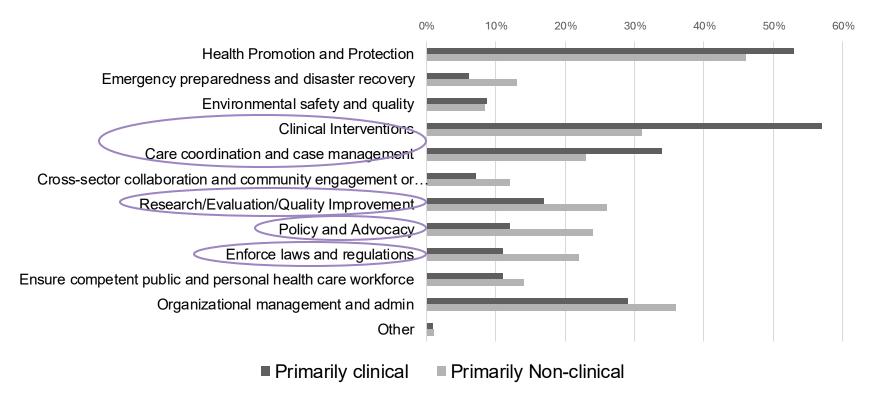
Majority reported functions in the following areas:

- Health Promotion and Protection (49%)
- Clinical Interventions (40%)
- Care Coordination and Case Management (27%)
- Policy and Advocacy (20%)
- Research/Evaluation/Quality Improvement (22%)

A majority of respondents (88%) agreed that the **function and activity questions accurately described their work.**

Findings

PHS nurse officers in primarily non-clinical settings – significantly higher % reported policy, enforcement, and research functions



Conclusions and Implications

PHS nurse officers – **more diverse, more educated** than general nursing population

Overall, proposed function and activity questions **accurately captured the responsibilities** of PHS nurse officers

Testing of these questions also identified **areas of needed clarification or expansion**

Recommendations

Use questions piloted in this study for future assessments of the PHN workforce in conjunction with surveys assessing the larger public health workforce.

Modify or add questions specific to respondents work functions when measuring the broader nursing workforce to better understand the role of nurses and better capture smaller specialties.

Thank you!

- Thank you to our team and our USPHS colleagues and the nurse officers who contributed!
- Read the paper which provides more detail on this study, published in Nursing Outlook:

Kett P.M., Whitman G. Edmonds J.K., Moon J.R., Brooks A.K., Strong M., & Bekemeier B. The Demographics, Training, and Job Functions of the United States Public Health Service Commissioned Corps Nursing Workforce. Nursing Outlook. 2025;73(3):102385. doi:/10.1016/j.outlook.2025.102385



Contact information:

Paula Kett, pmk@uw.edu
Betty Bekemier, bettybek@uw.edu

References

- 1. Beck AJ, Boulton ML. The public health nurse workforce in U.S. state and local health departments, 2012. Public Health Rep. 2016;131(1):145-152. doi:10.1177/003335491613100121.
- 2. Pittman PPF, Park JP. Rebuilding Community-Based and Public Health Nursing in the Wake of COVID-19. Online J Issues Nurs. May 2021;26(2):1-10. doi: 10.3912/OJIN.Vol26No02Man07
- 3. Leider JP, Balio CP, Hogg-Graham R, et al. Enumeration 2024: What We Know and What We Wish We Knew About the Governmental Public Health Workforce in a COVID-19 Recovery Landscape. Am J Public Health. 2025;0(0):e1-e9. doi:10.2105/ajph.2024.307960
- 4. Bekemeier B, Kett PM, Whitman G, Chadwick K, Edmonds JK. Distribution and Specialties of Broadly Versus Narrowly Defined Public Health Nurses Working in Government Settings in the United States, 2022. Am J Public Health. 2025;115(4):536-545. doi:10.2105/ajph.2024.307950
- 5. Kett PM, Whitman G, Edmonds JK, et al. The demographics, training, and job functions of the United States Public Health Service Commissioned Corps nursing workforce. Nurs Outlook. 2025/05/01/2025;73(3):102385. doi:/10.1016/j.outlook.2025.102385
- 6. Edmonds JK, Campbell LA, Gilder RE. Public health nursing practice in the Affordable Care Act era: A national survey. Public Health Nurs. Jan 2017;34(1):50-58. doi:10.1111/phn.12286
- 7. Kett PM, Bekemeier B, Altman MR, Herting JR. "Not everybody approaches it that way": Nurse-trained health department directors' leadership strategies and skills in public health. Nurs Inq. 2022:e12487. doi:https://doi.org/10.1111/nin.12487
- 8. Kett PM, Shahrir S, Bekemeier B. Public Health Nurses' Proficiencies and Training Needs in an Emergency Response: A Cross-Sectional Observational Study. J Public Health Manag Pract. 2024;30(3):354-366. doi:10.1097/phh.00000000001888
- 9. Beck AM, Piontek AJ, Wiedenman EM, Gilbert A. Perceptions of COVID-19 mitigation strategies between rural and non-rural adults in the US: How public health nurses can fill the gap. Nursing Reports. 2022;12(1):188-197. doi:10.3390/nursrep12010019
- 10. Martsolf GR, Sloan J, Villarruel A, Mason D, Sullivan C. Promoting a culture of health through cross-sector collaborations. Health Promotion Practice. 2018;19(5):784-791. doi:10.1177/1524839918772284
- 11. Swider SM, Levin PF, Reising V. Evidence of public health nursing effectiveness: A realist review. Public Health Nurs. 2017;34(4):324-334. doi:10.1111/phn.12320
- 12. Kett PM, Bekemeier B, Herting JR, Altman MR. Advancing health equity: Organizational characteristics emphasized by health department nurse lead executives. Public Health Nurs. 2022;39:1308-1317. doi: https://doi.org/10.1111/phn.13109
- 13. Kett PM, Bekemeier B, Herting JR, Altman MR. Addressing health disparities: The health department nurse lead executive's relationship to improved community health. J Public Health Manag Pract. 2022;28(2):E566-E576. doi:10.1097/phh.0000000001425
- 14. Leclair J, Dudek A, Zahner S. Climate Justice Strategies Implemented by Public Health Nurses and Their Community Partners. J Adv Nurs. 2024;doi:10.1111/jan.16598