

The public health nurse workforce in Minnesota

MAKING INFORMED DECISIONS ABOUT HIRING PUBLIC HEALTH NURSES AND OTHER PROFESSIONALS

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The public health nurse workforce in I	Minnesota: Making informed decisions about
hiring public health nurses and other	professionals

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Executive summary

Public health nurses are an integral part of governmental public health work in Minnesota. Hiring and retaining public health nurses, particularly in local health departments, is challenging for a number of reasons. This report seeks to distinguish positions that must be filled by a public health nurse from those that may be filled by other professionals like social workers, health educators, and community health workers.

Four sources of information informed this report's recommendations: 1) key informant surveys and interviews, 2) curriculum standards, 3) state and federal program requirements specific to public health nurses, and 4) focus groups. The Public Health Intervention Wheel from *Public health interventions:* Applications for nursing practice, 2nd ed. ¹ and a modified list of program areas from *Enumeration and characterization of the public health nurse workforce* ² were foundational in developing survey and interview questions.

Conclusions

- A variety of professionals, such as community health workers, social workers, registered nurses,*
 and health educators work in multiple public health program areas in local health departments.
- The Public Health Intervention Wheel³ contains interventions common to public health nurses and other public health professionals.
- Registered nurses that are not public health nurses work in half of the agencies that participated in the survey.
- Some public health programs or activities require a PHN (see <u>Table 2. Public health nursing staffing requirements in Minnesota</u>).
- Many public health programs and activities do not require a public health nurse.
- Other professionals may be able to perform work historically done by public health nurses.

^{*} Although public health nurses are also registered nurses, for the purpose of this report "registered nurse" refers to registered nurses that are **not** registered public health nurses.

Recommendations

To determine which public health professional is the right person for a position, program, or job assignment, consider the following:

- The first step in considering hiring a professional is clearly defining job responsibilities.
 - What is the primary intervention for this position? (see <u>Appendix A. Public health</u> interventions)
 - What other interventions might this position do now or in the future?
- Identify current program requirements related to staffing (see <u>Table 2. Public health nursing staffing</u> requirements in Minnesota).
- Is another professional is doing the work required by the program in other public health agencies (see Appendix B. Survey questions and results)?
- Could the position title limit who will apply for the job?
- Would the current position's professional requirements allow for a different professional that could perform the job duties?
- What resources are needed or are already in place? Would additional training for a non-PHN address the need?
- Explore curricula standards (see <u>Appendix D. Curriculum standards</u>).

Background

Minnesota public health nurses (PHNs) have been an integral part of governmental public health work for decades. Historically comparable pay scales with the private sector, a focus on prevention, and the added benefit of working Monday-Friday resulted in successful PHN recruitment and retention.

Over time, hospitals and clinics increased wages and flexible scheduling options for registered nurses. At the same time, governmental PHN salaries in local health departments did not increase at the same rate as nursing salaries in the private sector. These factors contribute to challenges hiring and retaining PHNs particularly in local health departments.

The study authors from the Minnesota Department of Health and members of the Minnesota Public Health Nursing Practice Council worked together to start discerning which local health department positions are critical to fill with a PHN, and which positions may be filled with another professional like a social worker, health educator, or community health worker. By comparing the position or program area or job requirements to the educational preparation and experiences of other non-PHN specialties, local health departments can make informed recruitment and hiring decisions.

While this report does not address when it is best to hire a PHN, exploring a variety of professionals may assist decision makers in determining when it is best to hire a PHN.

What is public health nursing?

Public health nursing is the practice of promoting and protecting the health of populations using knowledge from nursing, social, and public health sciences. Public health nursing is a specialty practice within nursing and public health. It focuses on improving population health by emphasizing prevention, and attending to multiple determinants of health. Often used interchangeably with community health nursing, this nursing practice includes advocacy, policy development, and planning, which addresses issues of social justice. With a multi-level view of health, public health nursing action occurs through community applications of theory, evidence, and a commitment to health equity. (American Public Health Association) ⁴

Statutory requirements for public health nurse registration in Minnesota

Minn. R. 6316 requires the following of applicants for certification as a PHN:

- A baccalaureate degree or higher, with a major in nursing
- Course work that includes theory and clinical practice in public health nursing. The theory portion of
 the public health nursing education must have been at least 30 hours in length. Public health nursing
 content in a hospital diploma or associate degree program does not qualify
- At a minimum, the public health nursing education must have prepared the nurse to:
 - identify the incidence, distribution, and control of disease in a population, as well as the risk factors and environmental factors related to communities;
 - identify populations at high risk of illness, disability, premature death, or poor recovery;
 - intervene within high-risk populations;
 - evaluate the effect of interventions on the health status of a population; and
 - use community services, institutional resources, and other health care providers.

The Minnesota Public Health Nursing Practice Council

The Minnesota Public Health Nursing Practice Council (MPHNPC) ⁶ is a collaborative effort between local public health nursing experts in Minnesota and public health nurse consultants from the Minnesota Department of Health (MDH). Members address public health nursing practice issues collectively and systematically to develop or recommend public health nursing practice guidelines and tools.

Methods

The study authors used the Public Health Intervention Wheel as a framework for defining a PHN's work, as one project goal was determining which local health department positions were critical to fill specifically with a PHN.

Four sources of information informed the recommendations of this report: 1) key informant surveys and interviews, 2) curriculum standards, 3) state and federal program requirements specific to PHNs, and 4) focus groups.

Key informant surveys and follow-up interviews

Survey development

The study authors developed three-part survey to explore who currently performs the work of local public health in Minnesota:

- Interventions: The first section of the survey is based on Public Health Interventions: Applications for Public Health Nursing Practice, ⁷ also known as the Public Health Intervention Wheel, which describes 17 public health nursing interventions and delineates between individual/family-, community-, and systems-level practice. The study authors modified original Public Health Intervention Wheel definitions to support a simpler survey (see <u>Appendix A. Public health interventions</u>).
- Program areas: The second section of the survey describes work done in local health departments by program area. The authors modified a list of program areas from Enumeration and Characterization of the Public Health Nurse Workforce 8 to reflect program areas found in Minnesota local health departments.
- Professional characteristics: The final section of the survey asks about public health staff characteristics. The Enumeration and Characterization ⁹ report contains PHN responses to the question "What distinguishes the roles of PHNs from the roles of other public health workers in your health department?" A similar list exists in *Public Health Nursing Activities: Visible or Invisible?* ¹⁰ The authors developed three questions for the survey based on these two lists (see Appendix B. Survey questions and results).

For survey questions and responses, see Appendix B. Survey questions and results.

Survey implementation

The study authors surveyed participants in two stages in 2017. Seven members of MPHNPC and 19 local health department supervisors completed the initial survey; these supervisors represented all regions of the state, a variety of jurisdiction sizes, and two supervisory categories:

Table 1. Participant distribution

Participant characteristic	Count	Percent [†]
Minnesota region [‡]		
Northwest	1	5%
Northeast	2	10%
Central	3	16%
West Central	2	10%
Metro	3	16%
Southeast	2	10%
South Central	1	5%
Southwest	2	10%
Tribal	3	16%
Jurisdiction size [§]		
Small	11	58%
Medium	3	16%
Large	5	26%
Role		
PHN or public health nursing supervisor	12	63%
Other professional/supervisor	6	32%
Registered nurse**	1	5%

Follow-up interviews

Surveys confirmed the following:

- Social workers, health educators, community health workers, and other non-PHN professionals are represented in Minnesota's public health workforce.
- Survey participants chose 'other' several times when asked, "Who does the following work in your agency?" to learn about work on public health interventions (section 1 of the survey).

To probe responses further, the study authors interviewed all survey participants.

[†] Percentages may not total 100 due to rounding.

[‡] For a list of community health boards in each region, see <u>Appendix C. Minnesota regions and jurisdiction sizes</u>.

[§] For a list of community health boards by population, see Appendix C. Minnesota regions and jurisdiction sizes.

^{**} Although public health nurses are also registered nurses, for the purpose of this report "registered nurse" refers to registered nurses that are not registered public health nurses.

Curriculum standards

Throughout 2018, the study authors compared the curricula standards from the organizations listed below with interventions described in the Public Health Intervention Wheel (Appendix D. Curriculum standards):

- Public health nurse: American Association of Colleges of Nursing: The Essentials of Baccalaureate
 Education for Professional Nursing Practice
- Social worker: Council on Social Work Education: Educational Policy and Accreditation Standards (EPAS) for Baccalaureate and Master's Social Work Programs
- Community health worker: Minnesota Community Health Worker Alliance: Education
- Health educator: National Commission for Health Education Credentialing, Inc.: Responsibilities and Competencies for Health Education Professionals
- Associate degree RN: National League of Nursing: Outcomes and Competencies for Graduates of Practical/Vocational, Diploma, Associate Degree, Baccalaureate, Master's, Practice Doctorate, and Research Doctorate Programs in Nursing

State and federal program requirements specific to public health nurses

Local public health leaders struggling to recruit PHNs questioned whether statutes, rules, and/or regulations actually required a PHN to fill a given position. The study authors consulted with regional program consultants from the Minnesota Department of Health, the Minnesota Public Health Nursing Practice Council, and local public health leaders. The authors also reviewed federal grant guidance and Minnesota Department of Human Services web pages to answer this question (see Table 2. Public health nursing staffing requirements in Minnesota).

Focus groups

The study authors attended six regional Local Public Health Association (LPHA) meetings in 2019 to conduct informal focus groups. The purpose of the focus groups was to gather information from local public health leaders about the situations that might warrant the need to hire a PHN. Each attendee received a copy of the initial draft of the report prior to the meeting. The authors asked each group: "What things do you consider in your decision-making process when deciding whether or not to hire a PHN?"

Findings

Key informant surveys and follow-up interviews

Key informant surveys

Part 1 of the survey asked: "Who does the following work in your agency?" within the following interventions:

- Surveillance
- Disease/other health event investigation
- Outreach

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- Screening
- Case finding
- Referral and follow-up
- Case management
- Delegated functions
- Health teaching
- Counseling
- Consultation
- Collaboration
- Coalition-building
- Community organizing
- Advocacy
- Social marketing
- Policy development
- Policy enforcement

Responses indicated that both PHNs and other professionals perform all of these interventions (see Appendix B. Survey questions and results).

Part 2 of the survey asked, "Who works in the following programs in your agency?" within the following program areas:

- Chronic disease prevention
- Communicable disease
- Correctional health
- Emergency preparedness
- Environmental health
- Family planning services
- Home health care
- Immunization programs/services
- Inspections (daycare, nursing homes, etc.)
- Refugee health
- School health
- Substance abuse/tobacco
- Waiver programs
- WIC
- Evidence-based family home visiting
- TANF-funded family home visiting
- Follow-along programs
- All other family home visiting

Responses indicated that both PHNs and other professionals work in each of these program areas (see Appendix B. Survey questions and results).

Part 3 of the survey asked, "From your professional experience, which professions have the following characteristics?":

- Broad perspective on health across all age groups
- Work autonomously/build relationships
- Work in multiple program areas

All professionals, including 'other,' were identified as having at least one of the three characteristics by at least two agencies (see Appendix B. Survey questions and results).

Follow-up interviews

The following points emerged from the follow-up interviews:

- How agencies define surveillance and screening varies.
- Many different professionals perform surveillance.
- Many other professionals do the same work as PHNs.
- Staff with different titles and/or educational backgrounds are doing the same work at different agencies (e.g., referral & follow-up).
- Individuals in different local health departments may have the same title, but their educational background is not necessarily the same.
- Educational preparation and position title (e.g., health educators) may sound the same, but the work performed varies among agencies.
- Many of the professionals described as 'other' are registered nurses without public health nursing certification.
- The follow-up interviews identified multiple 'other' professionals (see <u>Appendix E. Additional</u> <u>professions listed as "other" in survey</u>).

Curriculum standards

The study authors compared the curriculum standards for social workers, health educators, ^{††} and community health workers to the curriculum standards for the Baccalaureate (BSN) Education for Nurses, the education standards for public health nursing practice in Minnesota. Some of the curriculum standards were similar to that found in the BSN standards. However, the standards related to screening and delegated functions are unique to the BSN standards (see Appendix D. Curriculum standards).

Program requirements related to public health nursing staffing

Upon review of the federal grant guidance and Minnesota Department of Human Services (DHS) web pages, the study authors found the following programs to contain PHN staffing requirements for identified activities or roles: Temporary Assistance for Needy Families (TANF), family home visiting, tuberculosis, Child and Teen Checkup (C&TC), and school nursing (see Table 2. Public health nursing staffing requirements in Minnesota). The person responsible for hiring may need to consult further with the regulatory authority for final program decisions.

^{††} An individual may identify as a health educator based on previous experience or their current work, however may not have completed an educational program that meets the health educator curriculum standards.

Table 2. Public health nursing staffing requirements in Minnesota

Program	Authority	Public health nursing staffing requirements in Minnesota
Temporary Assistance for Needy Families (TANF)	U.S. Department of Health and Human Services (DHHS)	The first home visit must include a PHN assessment.
Family home visiting	Minnesota Department of Human Services (DHS)	When billing Medical Assistance (MA) ^{‡‡} for a home visit, a PHN must "supervise" other professionals in order to bill for services.
Nurse-Family Partnership	Nurse-Family Partnership	A PHN home visitor is a required component of this evidence-based family home visiting model.
Tuberculosis	Minnesota Department of Human Services (DHS)	When billing MA for direct observation therapy, a PHN must "supervise" other professionals in order to bill for services.
Child and Teen Checkup (C&TC)	Minnesota Department of Human Services (DHS)	A C&TC coordinator should be a PHN if possible. Exceptions are made for workforce shortages.
School nursing	Minnesota Department of Education (MDE)	A licensed school nurse must be certified in Minnesota as a PHN.

Focus groups

Three themes emerged from the six LPHA focus groups.

- 1. **Billing**: Local public health agencies perform services that require a PHN either to perform the function or to supervise the function in order for the service to be reimbursed.
- 2. **Flexibility**: PHNs can do many jobs of public health organizations, and thus offer the agency some flexibility in staffing assignments.
- 3. **Solutions**: Respondents offered the following potential solutions when unable to recruit a PHN:
 - Post more than one job title or classification for positions (e.g., PHN, social worker, health educator), to attract a wider pool of qualified applicants
 - Provide opportunities for non-PHN nurses to obtain their PHN certificate; this could include assisting registered nurses to return to school for a BSN
 - Assure human resources and/or hiring practices allow provisions to comprehensively review all
 of the qualified applicants
 - Assure that the work PHNs are doing is the work that they are uniquely qualified to do

^{‡‡} Medical Assistance (MA) is Minnesota's Medicaid program for people with low income.

Conclusions

- A variety of professionals, like community health workers, social workers, registered nurses, and health educators, work in multiple public health program areas in local health departments.
- The Public Health Intervention Wheel contains interventions common to PHNs and other public health professionals.
- Registered nurses that are not PHNs work in 50 percent of agencies that participated in the survey.
- Some public health programs or activities require a PHN (see Table 2. Public health nursing staffing requirements in Minnesota).
- Many public health programs and activities do not require a PHN.
- Other professionals may be able to perform work historically done by PHNs.

Limitations

Using the Public Health Intervention Wheel biases this project toward the perspective of public health nursing. The goal of the study was to focus on challenges filling PHN positions and responsibilities, however having this bias may limit the findings related to other professionals.

While individuals surveyed represent a variety of health departments, only directors or supervisors were surveyed. Input from staff level positions were not included in this review, limiting understanding of what their work assignments entail from their perspective.

Nineteen health departments were represented. This represents 27 percent of community health boards and 27 percent of tribal health departments. These results are not intended to be interpreted statistically, but rather from a qualitative perspective.

National curriculum standards, the gold standard, were used during the review. As a result, the curricula review did not include those professions employed in local health departments that do not follow a national standard.

Certain activities occur across program boundaries and this may have impacted responses. For example, when asked, "What specific activities were you considering under surveillance?" one person mentioned TB surveillance, another person mentioned the Community Health Assessment and another mentioned the Statewide Health Improvement Partnership (SHIP).

Recommendations

- The first step in considering hiring a public health professional is clearly defining job responsibilities.
 - What is the primary intervention for this position? (see <u>Appendix A. Public health</u> interventions)
 - What other interventions might this position do now or in the future?
- Identify current program requirements related to staffing (see <u>Table 2. Public health nursing staffing</u> requirements in Minnesota).
- Consider whether another professional is doing the work in other public health agencies (see <u>Appendix B. Survey questions and results</u>).
- Consider that the position title might limit who will apply for the job.
- Consider that the professional requirements of the current position might not allow for a different professional that could perform the job duties.

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- Determine what resources are needed or are already in place. Would additional training for a non-PHN address the need?
- Explore curricula standards (see <u>Appendix D. Curriculum standards</u>).

Appendix A. Public health interventions

The study authors adapted interventions from *Public Health Interventions: Applications for Public Health Nursing Practice* (A, below)¹¹ and *Enumeration and Characterization of the Public Health Nurse Workforce* (B).¹² The authors modified definitions for brevity and clarity.

- **Surveillance**: Ongoing and systematic collection, analysis, and interpretation of health data to plan, implement and evaluate public health interventions. ¹³
- **Disease and other health event investigation**: Systematically gather and analyze data regarding threats to the health of populations, ascertain the source of the threat, identify cases and others at risk and determine control measures. (A)
- Outreach: Locate specific populations and provide information about relevant health issues and what can be done about it including related services. (A)
- **Screening**: Identify individuals with unrecognized health risk factors or asymptomatic disease conditions in populations. (A)
- Case-finding: Locate individuals and families with identified risk factors and connect them with resources. (A)
- **Referral and follow-up**: Assist individuals, families, groups, organizations, and/or communities to identify and access necessary resources to prevent or resolve problems or concerns. (A)
- Case management: Optimize capabilities of individuals and families and the capacity of systems and communities to coordinate and provide services. (A)
- Delegated functions: Direct care tasks a registered professional nurse carries out under the
 authority of a health care practitioner as allowed by law. Delegated functions also include any direct
 care tasks a registered professional nurse entrusts to other appropriate personnel to perform. (A)
- **Health teaching**: Communicates facts, ideas and skills that change knowledge, attitudes, values, beliefs, behaviors, and practices of individuals, families, systems, and/or communities. (A)
- **Counseling**: Establish an interpersonal relationship with a community, a system, family or individual intended to increase or enhance their capacity for self-care and coping. (A)
- Consultation: Seek information and generate optional solutions to perceived problems or issues through interactive problem solving with a community, system, family or individual. (A)
- Collaboration: Commit two or more persons or organizations to achieve a common goal to promote and protect health. 14
- Coalition-building: Promote and develop alliances among organizations or constituencies for a common purpose. (A)
- Community organizing: Help community groups to identify common problems or goals, mobilize resources, and develop and implement strategies for reaching the goals. ¹⁵
- Advocacy: Speak in support of an individual or group cause or act on someone's behalf, with a focus
 on developing the community, system, individual or family's capacity to speak in support of their
 own cause or act on their own behalf. (A)
- **Social marketing**: Utilize commercial marketing principles and technologies to influence the knowledge, attitudes, values, beliefs, behaviors, and practices of the population-of-interest. (A)
- **Policy development**: Policy development results in laws, rules and regulation, ordinances, and policies related to health issues. (A)
- Policy enforcement: Compel others to comply with the laws, rules, regulations, ordinances and policies created in conjunction with policy development. (A)

Appendix B. Survey questions and results§§

Who does the following work in your agency?

Area	Public health nurse	Social worker	Community health worker	Health educator	Other	Not applicable
Surveillance	15	2	0	9	11	0
Disease/other health event investigation	15	1	0	1	10	0
Outreach	18	5	5	13	10	0
Screening	16	0	1	1	7	2
Case-finding	16	5	3	2	6	2
Referral and follow-up	18	9	4	7	8	0
Case management	18	7	4	0	3	0
Delegated functions	17	1	3	0	7	1
Health teaching	18	5	5	11	12	0
Counseling	17	5	4	6	9	1
Consultation	18	8	4	8	11	0
Collaboration	18	9	4	13	11	0
Coalition-building	17	5	1	13	9	0
Community organizing	15	3	4	14	7	0
Advocacy	18	7	5	10	11	0
Social marketing	12	0	1	13	13	1
Policy development	15	0	0	10	15	0
Policy enforcement	12	1	0	9	15	0

^{§§} For all "Other," see list of 'other' staff in Appendix E: Additional professions listed as "other" in survey.

Who works in the following programs in your agency?

Area	Public health nurse	Social worker	Community health worker	Health educator	Other	Not applicable
Chronic disease prevention	15	1	1	8	7	1
Communicable Disease	18	0	2	0	9	1
Correctional health	6	0	1	1	4	12
Emergency preparedness	17	1	1	9	12	0
Environmental health	7	0	1	1	13	2
Family planning services	11	1	1	1	6	6
Home health care	7	0	0	0	5	11
Immunization programs/services	18	2	3	1	7	0
Inspections (day care, nursing homes, etc.)	2	0	0	0	5	12
Refugee health	11	1	1	0	3	8
School health	13	0	0	4	3	5
Substance abuse/tobacco	11	0	0	14	5	0
Waiver programs	16	7	0	0	5	3
WIC	14	1	1	2	12	3
Evidence-based family home visiting	18	2	2	0	6	0
TANF-funded family home visiting	17	1	1	0	7	1
Follow-along programs	17	0	2	0	8	1
All other family home visiting	10	0	2	0	5	6

From your professional experience, which professions have the following characteristics? Check all that apply.

Area	Public health nurse	Social worker	Community health worker	Health educator	Other
Broad perspective on health across all age groups	17	3	2	11	9
Work autonomously/build relationships	18	8	6	15	10
Work in multiple program areas	18	6	4	12	7

Appendix C. Minnesota regions and jurisdiction sizes

Local Public Health Association of Minnesota (LPHA) and State Community Health Services Advisory Committee (SCHSAC) regions

Northwest

Beltrami, North Country (Clearwater, Hubbard, and Lake of the Woods counties), Polk-Norman-Mahnomen, Quin County (Kittson, Marshall, Pennington, Red Lake, and Roseau counties)

Central

Benton, Cass, Chisago, Crow Wing, Isanti, Kanabec, Mille Lacs, Morrison-Todd-Wadena, Pine, Sherburne, Stearns, Wright

Metro

Anoka, Bloomington, Carver, Dakota, Edina, Hennepin, Minneapolis, Richfield, Scott, St. Paul-Ramsey, Washington

Northeast

Aitkin-Itasca-Koochiching, Carlton-Cook-Lake-St. Louis

West Central

Horizon (Douglas, Grant, Pope, Stevens, and Traverse counties), Partnership4Health (Becker, Clay, Otter Tail, and Wilkin counties)

Southwest

Countryside (Big Stone, Chippewa, Lac qui Parle, Swift, and Yellow Medicine counties), Des Moines Valley (Cottonwood and Jackson counties), Kandiyohi-Renville, Nobles, SWHHS (Lincoln, Lyon, Murray, Pipestone, Rock, and Redwood counties)

South Central

Blue Earth, Brown-Nicollet, Faribault-Martin, Le Sueur-Waseca, Meeker-McLeod-Sibley, Watonwan

Southeast

Dodge-Steele, Fillmore-Houston, Freeborn, Goodhue, Mower, Olmsted, Rice, Wabasha, Winona

Minnesota community health boards by jurisdiction size

Small (population less than 50,000)

Beltrami, Benton, Cass, Countryside (Big Stone, Chippewa, Lac qui Parle, Swift, and Yellow Medicine counties), Des Moines Valley (Cottonwood and Jackson counties), Faribault-Martin, Fillmore-Houston, Freeborn, Goodhue, Isanti, Kanabec, Le Sueur-Waseca, Mille Lacs, Mower, Nobles, North Country (Clearwater, Hubbard, and Lake of the Woods counties), Pine, Polk-Norman-Mahnomen, Quin County (Kittson, Marshall, Pennington, Red Lake, and Roseau counties), Richfield, Wabasha, Watonwan

Medium (population between 50,000 and 99,999)

Aitkin-Itasca-Koochiching, Bloomington, Blue Earth, Brown-Nicollet, Chisago, Crow Wing, Dodge-Steele, Edina, Horizon (Douglas, Grant, Pope, Stevens, and Traverse counties), Kandiyohi-Renville, Meeker-McLeod-Sibley, Morrison-Todd-Wadena, Rice, Sherburne, SWHHS (Lincoln, Lyon, Murray, Pipestone, Rock, and Redwood counties), Winona

Large (population 100,000 or more)

Anoka, Carlton-Cook-Lake-St. Louis, Carver, Dakota, Hennepin, Minneapolis, Olmsted, Partnership4Health (Becker, Clay, Otter Tail, and Wilkin counties), Scott, St. Paul-Ramsey, Stearns, Washington, Wright

Appendix D. Curriculum standards

The study authors from the Minnesota Department of Health reviewed curricula standards looking for standards that match the Public Health Interventions. It can be expected that an individual graduating from a school that uses the standards has received the related educational experience. It is important to note that while an individual may not have received formal education in a particular Public Health Intervention the individual may have developed the skills to implement them.

Public health intervention	Public health nurse	Social worker	Community health worker	Health educator	Associate degree RN
Surveillance	Yes	No	No	Yes	No
Disease and other health event investigation	Yes	No	No	No	No
Outreach	Yes	No	Yes	Yes	No
Screening	Yes	No	No	No	No
Case-finding	Yes	Yes	Yes	No	No
Referral and follow-up	Yes	Yes	Yes	No	No
Case management	Yes	Yes	Yes	No	No
Delegated functions	Yes	No	No	No	Yes
Health teaching	Yes	Yes	Yes	Yes	No
Counseling	Yes	Yes	Yes	Yes	Yes
Consultation	Yes	Yes	Yes	Yes	No
Collaboration	Yes	Yes	No	Yes	Yes
Coalition-building	No	No	No	Yes	No
Community organizing	Yes	No	No	Yes	No
Advocacy	Yes	Yes	No	Yes	Yes
Social marketing	No	No	No	Yes	No
Policy development	No	No	No	Yes	No
Policy enforcement	No	Yes	No	No	No
Review date	October 2017	July 2017	October 2017	August 2017	May 2019
Review source	The Essentials of Baccalaureate Education for Nurses ¹⁶	Standards for Baccalaureate and Master's SW Programs ¹⁷	Minnesota CHW Curriculum ¹⁸	Health Education Credentialing ¹⁹	Outcomes and Competencies of Programs in Nursing ²⁰

Appendix E. Additional professions listed as "other" in survey

In addition to community health worker, social worker, and health educator listed in the survey.

- RN without PHN certification
- Case aide
- Nurse practitioner
- Epidemiologist
- Nutritionist
- Dietician
- Community health services administrator
- Environmental health professional
- Parent educator
- Family support worker
- Public health planner
- Data planner
- Community health professional
- Health promotion coordinator
- Public health program specialist
- Community integration specialist
- Health promotion specialist
- Program coordinator

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