

# Research Findings Brief

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## Nebraska's Local Health Department Workforce Capacity

### *Findings from a 2010 Survey of Local Health Department Directors*

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#### Research Highlights

- In 2010, about 582 persons were employed across 18 local health departments (LHDs) in Nebraska. The size of the LHDs' workforce ranged from 4.5 to 240 full-time equivalent (FTE) employees. The median number of FTEs increased from 8.0 FTEs per LHD in 2008 to 9.6 FTEs per LHD in 2010.
- The proportion of directors who indicated they did not have enough staff to handle the department's workload decreased from 25.0% in 2008 to 11.8% (n = 2) in 2010.
- Two-thirds of LHDs did not have staff dedicated to cover public health issues related to mental health. LHD directors reported that no more than a median of 0.20 FTE was associated with each of the public health issues related to sexually transmitted diseases, oral health, mental health, and occupational safety and injury.
- Over 60.0% of LHDs need additional staff to address public health issues related to chronic diseases, food safety and indoor air quality, environmental health issues, and health disparities. LHD directors reported that a median of 1.0 FTE is needed to address each of the public health issues related to communicable diseases, family health, risky substance use behaviors, primary and other direct health services, healthy lifestyles, broad community planning, and health disparities.
- At least 75.0% of LHD directors indicated that they were moderately to highly satisfied with their staff's level of formal training and education as well as competency and skills to address public health issues related to communicable diseases, family health, healthy lifestyles, and emergency response and biopreparedness. However, 50.0% of the directors indicated that they were moderately to highly dissatisfied with their staff's competency and skills to address public health issues related to mental health.

#### Introduction

In 2001, the Nebraska legislature passed the Nebraska Health Care Funding Act to build a public health infrastructure across the state. By 2004, every county in Nebraska was served by a local public health department, either a single-county department or a newly developed multi-county or regional department. In 2008, the Nebraska Center for Rural Health Research undertook a study that examined the context, structure, practice, and performance of Nebraska's local health departments (LHDs). In 2010, a follow-up study was conducted to better understand the workforce capacity and training of the LHDs and to explore the problems and strategies related to the public health workforce. This brief summarizes the findings regarding the workforce capacity of Nebraska's LHDs in 2010. Because a public health department is the backbone of any public health system, it is important to analyze the current workforce capacity of LHDs.

#### Methods

A mail survey was conducted and administered to LHD directors in Nebraska, from August 2010 to November 2010, by the research team at the Nebraska Center for Rural Health Research. The design of



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the survey instrument was guided by continuous input from key research investigators as well as a synthesis of the literature review. The questionnaire consisted of a 20-item survey that covered the domains of LHD workforce capacity, training, and barriers and strategies. Twenty-one LHDs (17 regional and 4 single-county) covering all 93 Nebraska counties were included in the survey. The survey was administered by the modified Dillman method.<sup>1</sup> A notification letter was mailed to LHD directors informing them of the survey and inviting them to participate. Following the notification letter, the survey questionnaire was e-mailed. A reminder postcard was then mailed to non-respondents, with a follow-up mailing of the survey. A total of 18 (85.7% of the sample) LHD directors completed and returned the survey.

## Results

### Local Health Department Workforce

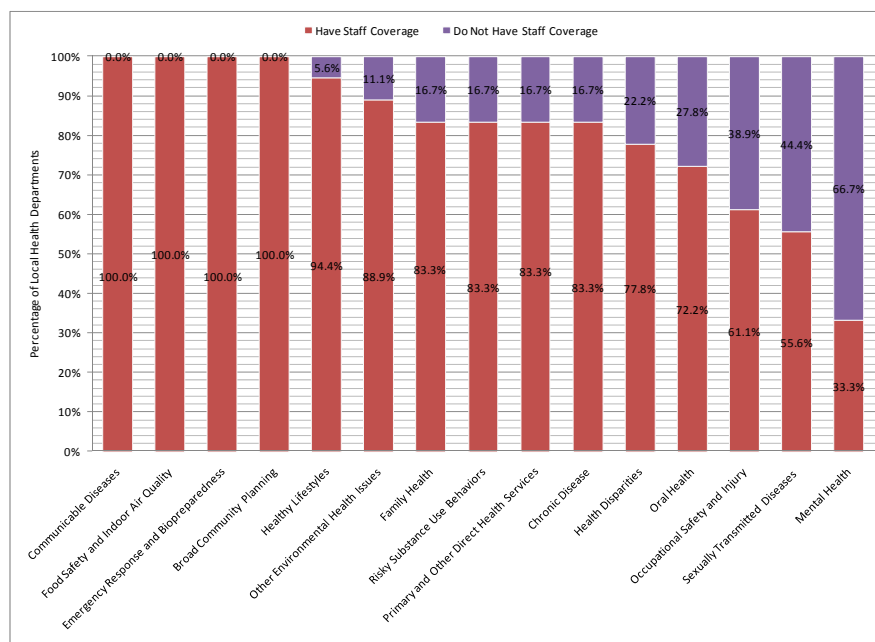
A total of about 582 persons were employed across 18 LHDs in Nebraska. Nine LHDs (50.0%) had more than 10 employees (including part- and full-time). The size of the LHDs' workforce ranged from 4.5 to 240 full-time equivalent (FTE) employees. The median number of FTEs increased from 8.0 FTEs per LHD in 2008<sup>2</sup> to 9.6 FTEs per LHD in 2010. Approximately 76.9% (n = 353) of all persons employed in 17 LHDs worked full-time, with a median of 70.0% per LHD. In 2008, 79.9% of all persons employed in the LHDs worked full-time, with a median of 75.0% per LHD.<sup>2</sup>

About two-thirds (64.7%) of directors indicated that their LHD had enough staff to handle the department's workload (n = 11). Additionally, the proportion of directors who indicated they did not have enough staff to handle the department's workload decreased from 25.0% in 2008<sup>2</sup> to 11.8% (n = 2) in 2010.

### Local Health Department Workforce Capacity

Figure 1 reports the proportion of LHDs that had staff to cover each public health issue. All 18 responding LHDs had staff dedicated to the following public health issues or activities: communicable diseases, emergency response and biopreparedness, food safety and indoor air quality, and broad community planning. Over 80.0% of LHDs have staff dedicated to the following public health issues: healthy lifestyles, environmental health issues, family health, risky substance use behaviors, primary and other direct health services, and chronic diseases. However, two-thirds of LHDs did not have staff dedicated to cover public health issues related to mental health.

**Figure 1. Local Health Department Staff Coverage of Public Health Issues and Activities, Nebraska 2010 (N = 18)**



<sup>1</sup> Dillman, D. A. (2007). *Mail and Internet Surveys: The Tailored Design Method*, 2<sup>nd</sup> edition. New York: Wiley.

<sup>2</sup> Chen, L. W., Roberts, S., Lampman, M., Xu, L., Jacobson, J., Palm, D. (2010). *Nebraska's Local Health Department Workforce: Findings from a 2008 Survey of Local Health Department Directors* (No. PR 2010-1). Omaha, NE: Nebraska Center for Rural Health Research.

Table 1 reports the median FTE associated with each public health area. LHD directors reported that a median of at least 1.0 FTE is associated with each of the following areas: primary and other direct health services, healthy lifestyles, and emergency response and biopreparedness. Furthermore, LHD directors reported that no more than a median of 0.20 FTE is associated with each of the public health issues related to sexually transmitted diseases, oral health, mental health, and occupational safety and injury.

**Table 1. Estimated Amount of Current Median FTE and Needed Median FTE by Public Health Area (N: the number of responding LHDs)**

Public Health Area	FTE Associated With		FTE Needed	
	N	Median	N	Median
Sexually Transmitted Diseases	8	0.18	8	0.50
Communicable Diseases	14	0.50	8	1.00
Family Health	12	0.63	7	1.00
Mental Health	6	0.20	6	0.80
Oral Health	10	0.13	7	0.50
Risky Substance Use Behaviors	12	0.50	8	1.00
Primary and Other Direct Health Services	11	1.25	9	1.00
Occupational Safety and Injury	10	0.20	8	0.50
Chronic Diseases	12	0.65	11	0.50
Healthy Lifestyles	13	1.00	7	1.00
Emergency Response and Biopreparedness	14	1.38	4	0.88
Food Safety and Indoor Air Quality	14	0.40	11	0.50
Environmental Health Issues	12	0.23	10	0.88
Broad Community Planning	13	0.50	9	1.00
Health Disparities	9	0.60	11	1.00

Figure 2 reports the proportion of LHDs that need additional staff to address public health issues in their jurisdiction. More than 60.0% of LHDs need additional staff to address public health issues related to chronic diseases, food safety and indoor air quality, environmental health issues, and health disparities. Less than 40.0% of LHDs need additional staff to address public health issues related to emergency response and biopreparedness, mental health, family health, and risky substance use behaviors.

Table 1 also reports the median FTE needed to address each public health area. LHD directors reported that a median of 1.0 FTE is needed to address each of the public health issues related to communicable diseases, family health, risky substance use behaviors, primary and other direct health services, healthy lifestyles, broad community planning, and health disparities.

### **Local Health Department Workforce Training and Competencies**

At least 75.0% of LHD directors indicated that they were moderately to highly satisfied with their staff's level of formal training and education as well as competency and skills to address public health issues related to communicable diseases, family health, healthy lifestyles, and emergency response and biopreparedness. However, 50.0% of the directors indicated that they were moderately to highly dissatisfied with their staff's competency and skills to address public health issues related to mental health.

Table 2 reports the directors' median rating of their staff's level of formal training. Overall, the LHD directors were more than moderately satisfied (median rating of 4.0) with their staff's level of formal training and education in the public health areas related to communicable diseases, family health, primary and other direct health services, chronic diseases, healthy lifestyles, emergency response and biopreparedness, and food safety and indoor air quality. LHD directors indicated slight dissatisfaction (median rating of 2.5) with their staff's level of formal training and education in the public health area related to mental health.

**Figure 2. Local Health Department Need for Additional Staff to Address Public Health Issues, Nebraska 2010 (N = 18)**

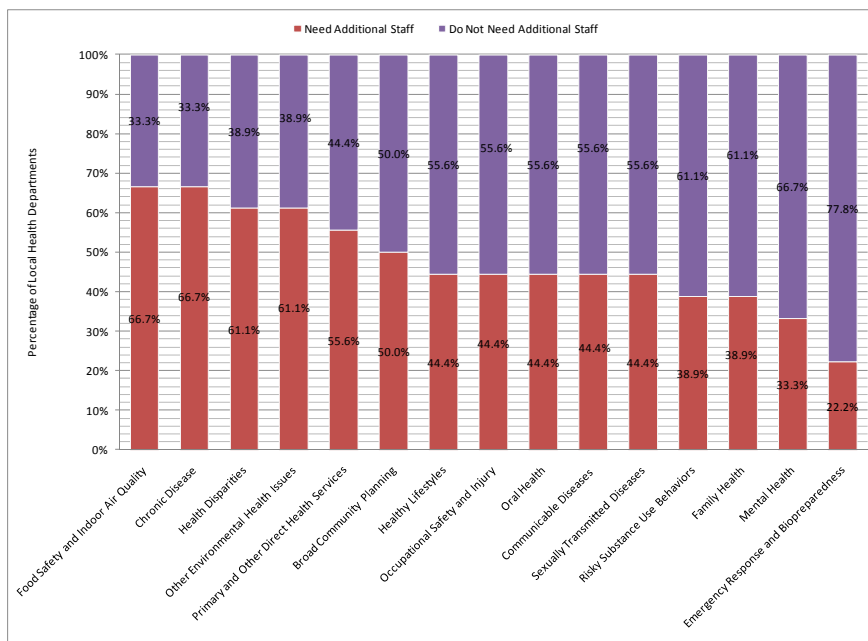


Table 2 also reports the directors’ median rating of their staff’s level of competency and skills within each public health issue. Overall, the LHDs directors were close to highly satisfied (median rating of 4.5) with their staff’s level of competency and skills in public health areas related to healthy lifestyles as well as emergency response and biopreparedness. The LHD directors were more than moderately satisfied (median rating of 4.0) with their staff’s level of competency and skills in public health areas related to sexually transmitted diseases, communicable diseases, family health, primary and other direct health services, chronic diseases, food safety and indoor air quality, and broad community planning.

**Table 2. Local Health Department Directors’ Median Rating of Staff’s Level of Formal Training/Education and Competency and Skills\* (N: the number of responding LHDs)**

Public Health Area	Formal Training & Education		Competency Skills	
	N	Median	N	Median
Sexually Transmitted Diseases	17	3	16	4
Communicable Diseases	18	4	18	4
Family Health	17	4	17	4
Mental Health	14	2.5	14	3
Oral Health	15	3	15	3
Risky Substance Use Behaviors	18	3	18	3.5
Primary and Other Direct Health Services	17	4	17	4
Occupational Safety and Injury	16	3	16	3
Chronic Diseases	16	4	16	4
Healthy Lifestyles	18	4	18	4.5
Emergency Response and Biopreparedness	18	4	18	4.5
Food Safety and Indoor Air Quality	18	4	18	4
Environmental Health Issues	18	3	18	3.5
Broad Community Planning	18	3	18	4
Health Disparities	16	3	16	3

\* Rating scale: 1 (low) to 5 (high)

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