

2017 Nebraska Registered Dental Hygienist Survey Summary

DHHS Office of Oral Health and Dentistry
University of Nebraska Medical Center
College of Public Health, Health Services Research and Administration
Health Professions Tracking Service

Introduction

In 2017, the Nebraska Department of Health and Human Services' Office of Oral Health and Dentistry (OOHD) contracted with the University of Nebraska Medical Center's Health Professions Tracing Service (HPTS) to execute two surveys. The first survey included Nebraska Registered Dental Hygienists (RDH) and the second survey included Public Health RDHs (PHRDH) holding a Public Health Authorization (PHA) or Public Health Authorization for Treating Children (PHA-C). Some of the new information has been compared to the results of the 2010 RDH survey and the 2012 PHRDH survey.

SURVEY 1 – REGISTERED DENTAL HYGIENISTS

Using Nebraska DHHS licensure data dated July 17, 2017, HPTS identified 1,401 licensed RDHs. Of the 1,401 RDHs, surveys were sent to 1,368 RDHs identified with a Nebraska, Iowa, Missouri, Kansas, Colorado, Wyoming, or South Dakota address. HPTS received 750 responses, a 55% response rate.

RDH Licenses

In 2017, 6.2% of the 1,401 licensed RDHs held an active PHA or PHA-C compared to 3.4% of the 1,098 licensed RDHs in 2010. Additionally, 84% of the licensed RDHs held Local Anesthesia Certification compared to 75% in 2010. In 2017, there were 81 RDH licenses newly issued which was similar to the 79 newly issued RDH licenses in 2010.

Work Status in Nebraska

Of the 750 survey responses, 679 (91%) of RDHs indicate they practice in Nebraska. Nine percent (9%) indicated they do not practice in Nebraska. Eighty seven percent (87%) of RDHs responding to a 2010 survey indicated they practiced in Nebraska.

Fifty-three percent (53%) of the 679 RDHs practicing in Nebraska indicated they worked 32+ hours per week and 47% indicated they work less than 32 hours per week.

Age Groups

Fifty-four percent (54%) of RDHs licensed in Nebraska are age 40 or younger while 48% of RDHs identified as practicing in Nebraska are age 40 or younger. The medium age of practicing RDHs is 41 and the average age is 42.

The following chart identifies the age groups of licensed RDHs, RDHs reported practicing in Nebraska and a breakdown of the reported hours per week.

Age Group	Licensed	% of Total	Practicing in NE	% of Total	32+ hours per week	% of Total	< 32 hours per week	% of Total
	n=1401		n=679		n=363		n=316	
≤ Age 40	758	54.1	327	48.2	198	54.5	129	40.8
Age 41 - 60	530	37.8	281	41.4	135	37.2	146	46.2
Age 61+	100	7.1	61	9.0	26	7.2	35	11.1
Age Unknown	13	.9	10	1.5	4	1.1	6	1.9
Total	1401		679		363	53%	316	47%

Note: Percentages may not add to 100% due to rounding.

Practice Locations – Urban/Rural

Nebraska urban counties include Douglas, Lancaster and Sarpy. Fifty-three percent (53%) of RDHs report practicing in an urban setting, 41% report practicing in a rural setting, 2% report practicing in both urban and rural settings and 5% did not report a setting.

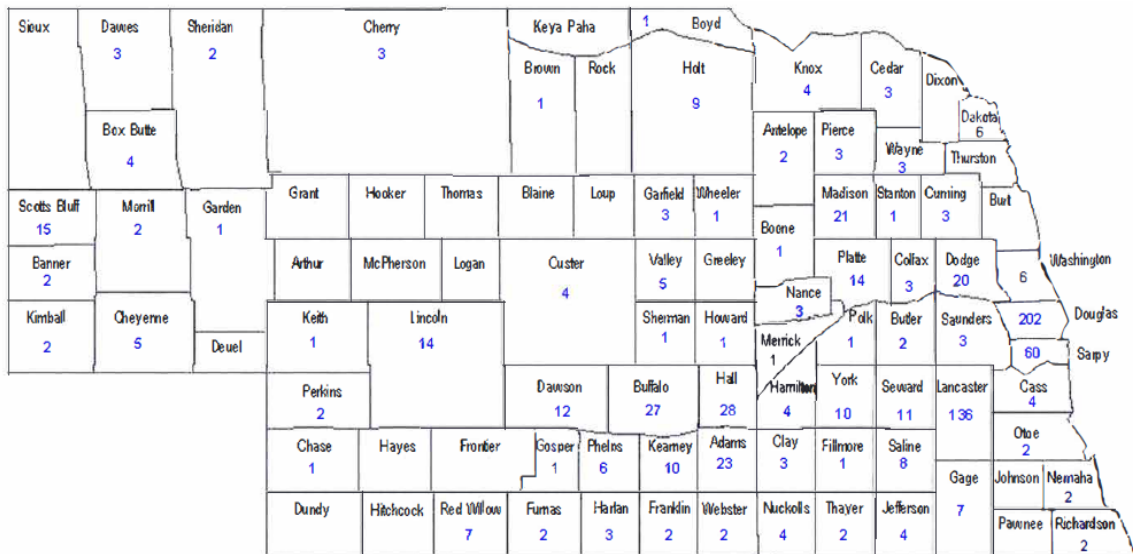
Forty-six percent (46%) of RDHs practicing in an urban setting are age 40 or younger. Fifty-three percent (53%) of RDHs practicing in a rural setting are age 40 or younger.

Age Group	Urban	% of Urban	Rural	% of Rural	Urban/Rural	% of Urban/Rural	Unknown	% of Unknown
		(n=359)		(n=275)		(n=14)		(n=31)
≤ Age 40	164	45.7	146	53.1	9	64.3	8	25.8
Age 41 - 60	155	43.2	104	37.8	3	21.4	19	61.3
Age 61+	36	10.0	19	6.9	2	14.3	4	12.9
Age Unknown	4	1.1	6	2.2				
Total	359		275		14		31	
% of Practicing in NE (n = 679)		52.9		40.5		2.1		4.6

Note: Percentages may not add to 100% due to rounding.

RDHs report practicing in 71 of 93 (76%) Nebraska counties. Eleven percent (11%) of Nebraska RDHs reported practicing in more than one county. 22 counties have no practicing RDHs.

The following map documents the count of RDHs who reported practicing in Nebraska by county.



Practice counties identified by 645 Registered Dental Hygienists responding the 2017 survey

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Practice Settings

Of the 679 RDHs reporting a practice location in Nebraska, 75% reported working at one facility, 18% reported practicing at two or three facilities and 4% reported practicing at four or more facilities. Thirteen RDHs reported practicing at 10 or more facilities.

The RDHs were provided a list of nine different types of practice settings and asked to identify the setting(s) that best describe their practice location(s). Of the 679 RDHs practicing in Nebraska, 641 identify one practice setting, 28 reported two practice settings, seven reported three practice settings, three reported four practice settings and three did not identify their practice setting. The breakdown of practice settings types reported is as follows:

Setting Type	Total Settings Reported	% of Practicing RDHs <i>(n=679)</i>	% of Total Settings <i>(n=730)</i>
Private Practice	633	93.2	86.7
Corrections	1	.1	.1
Federal	5	.7	.7
Hospital			
Nursing Home/ Assisted Living	9	1.3	1.2
Preschool	7	1.0	1.0
Student Health	13	1.9	1.8
State/Local Government	27	4.0	3.7
Dental School	35	5.2	4.8
Total Locations	730		

Note: Percentages may not add to 100% due to rounding.

Percent of Practicing RDHs total is greater than 100% due to 679 RDHs reporting 730 settings.

Of the 679 RDHs, ninety-three percent (93%), reported working in private practice. Of the 730 different practice locations reported, the most common was private practice with eighty-seven percent (87%). Five percent (5%) work in a dental school setting and four percent (4%) in state or local government. Fifty-nine percent (59%) of the private practice settings reported are in an urban location.

Sixty-seven percent (67%) of the nursing homes/assisted living settings, seventy-one percent (71%) of the preschool settings and sixty-two percent 62% of the student health settings are in rural locations.

Demographics

Ninety-nine percent (99%) of RDH practicing in Nebraska are female and one percent (1%) are male.

Ninety-seven percent (97%) are white, fewer than two percent (2%) reported race as American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and Other. One percent (1%) did not respond.

Education

According to survey responses, fifty-one percent (51%) of RDHs hold an associates' degree and forty-seven percent (47%) hold a bachelor's degree. One percent (1%) hold masters or doctorate degrees.

Of RDHs practicing in Urban Nebraska, 45% hold an associate's degree, 53% hold a bachelor's degree and 1% hold a master's level degree. Of RDHs practicing in Rural Nebraska, 60% hold an associate's degree, 38% hold a bachelor's degree and 1% hold master's or doctorate level degrees.

Services for Children Ages 0 to 5

Eighty-six percent (86%) of RDHs practicing in Nebraska routinely see children age 0-5, ninety-two percent (92%) apply fluoride varnish, seventy-nine percent (79%) place dental sealants, seventy-three percent (73%) perform risk assessments, and seven percent (7%) apply silver diamine fluoride.

Eleven percent (11%) of RDHs reported they do not see children under the age of five. Of the 11%, 62% reported they would be willing to if continuing education were available.

RDHs were questioned regarding the routine services provided to children age 0 to 5:

Do you routinely:	% of RDHs Practicing in NE <i>(n=679)</i>	% of Urban <i>(n=359)</i>	% of Rural <i>(n=275)</i>	% of Urban/Rural <i>(n=14)</i>	% of No Location Reported <i>(n=31)</i>
Perform risk assessments	72.5	72.4	73.1	78.6	64.5
Apply fluoride varnish	91.5	89.7	94.5	100	80.6
Apply dental sealants	78.5	76.0	82.5	71.4	74.2
Apply silver diamine fluoride?	6.9	5.8	8.4	7.1	6.5

Note: Percentages may not add to 100% due to rounding.

Services for Adults Age 65+

Ninety-five percent (95%) of RDHs practicing in Nebraska routinely see adults age 65+, seventy-eight (78%) perform risk assessments, fifty-three percent (53%) apply fluoride varnish, and five percent (05%) apply silver diamine fluoride.

Three percent (3%) of RDHs reported they do not see adults age 65+. Of the 3%, 12% report they would be willing to if continued education were available.

RDHs were questioned regarding routine services provided to Adults Age 65+:

Do you routinely:	% of RDHs Practicing in NE <i>(n=679)</i>	% of Urban <i>(n=359)</i>	% of Rural <i>(n=275)</i>	% of Urban/Rural <i>(n=14)</i>	% of No Location Reported <i>(n=31)</i>
Perform risk assessments	77.6	79.1	74.9	85.7	80.6
Apply fluoride varnish	52.9	51.5	56.0	42.9	45.2
Apply silver diamine fluoride?	5.0	4.2	6.2	7.1	3.2

Patient Characteristics

The RDHs were questioned regarding patient characteristics, and the data reflects that RDHs see a wide variety of vulnerable patients. However, there was no survey data to indicate how many of these types of patients are seen routinely and the results should not be compared to the two previous questions.

Patient Characteristics	% of RDHs Practicing in NE <i>(n=679)</i>	% of Urban <i>(n=359)</i>	% of Rural <i>(n=275)</i>	% of Urban/Rural <i>(n=14)</i>	% of No Location Reported <i>(n=31)</i>
Low Income	90.4	88.3	93.8	100	80.6
Medicaid Recipients	69.2	59.3	81.1	100	64.5
Minority Population	90.4	90.8	90.5	100	80.6
People with special healthcare needs or disabilities	94.3	93.3	95.3	100	93.5
Refugees/new immigrants	50.2	55.4	43.6	57.1	45.2
US Military Veterans	88.5	87.5	90.2	100	80.6

Interest in Public Health

Forty-six percent (46%) of RDHs (44% of urban, 50% of rural) indicated an interest in using the Public Health Authorization (adult/child) to provide preventive care in a community setting. Forty-seven percent (47%) indicated they did not have an interest.

Overall, thirty-eight percent (38%) of RDHs (35% of urban, 45% of rural) identified an interest in using the Public Health Authorization for Treating Children to provide preventive care in a community setting. Fifty percent (50%) indicated they did not have an interest.

Fifty-four percent (54%) of RDHs (54% of urban, 58% of rural) indicated they would be interested in volunteering to provide preventive care in a community setting. Thirty-eight percent (38%) indicated they did not have an interest.

SURVEY 2 – PUBLIC HEALTH AUTHORIZATION AND PUBLIC HEALTH AUTHORIZATION- CHILD

Questionnaires were mailed to 117 Public Health Registered Dental Hygienists (PHRDH) regarding use of the Public Health Authorization (PHA) or Public Health Authorization-Child (PHA-C) during 2017. The 117 included PHRDHs who either held an active PHA or PHA-C permit at the end of 2017 (87) or whose permit expired during 2017 (30).

PHRDH Authorizations

Of the 117 RDH sent questionnaires, 100 held a PHA and 17 held PHA-C. Eighty-nine (89) responses were received, 80 PHA and 9 PHA-C, reflecting a 76% response rate.

PHRDH Work Status in Nebraska

Forty-five (45) PHRDHs provided services in 2017, indicating that 38.5% of PHRDHs holding a PHA or PHA-C during 2017 utilized the permit. Of the 45 PHRDHs providing services, 84% reported providing public health services fewer than 32 hours per week and 16% reported providing public health services 32 or more hours per week.

PHRDH Services

The 45 PHRDHs reported providing 45,915 services in 2017, including oral prophylaxis, pulp vitality testing, topical fluorides, dental sealants and other topical agents. In addition, 26,825 oral screenings/preliminary chartings were performed and 22,161 educational sessions were provided. The most common preventive services provided by PHRDHs are topical fluorides (48%) and dental sealants (43%) The percentage of services provided to recipients in age groups were 0 to 5 (35%), 6 to 18 (54%) 19 -64 (4%) and 65+ (7%).

Of the 44 PHRDHs who reported they did not provide services in 2017, the most common reasons include:

Unable to make the time commitment	70%
Lack of interest, information or supplies	16%
Limited opportunity in their area	16%
Lack of Medicaid providers for referrals	07%
Lack of local knowledge about PH services	07%

PHRDH – Workshops, Training & Education

Eighteen (18) PHRDHs reported providing a total of 233 group-setting workshops during 2017.

Thirteen (13) PHRDHs reported providing a total of 62 group setting in-service trainings during 2017.

PHRDHs provided oral health education (individual setting) to 22,161 recipients and caregivers.

Twenty-seven percent (27%) of the PHRDHs reported providing services to between 51 and 100 recipients and caregivers.

PHRDH Practice Locations

Nebraska PHRDHs report providing preventive services in 60 of 93 counties (65%). Thirty three (33) counties are without the services of a PHRDH. Of the 45 respondents, 31 (69%) reported working in rural counties, 10 (22%) reported working in urban counties and 4 (9%) reported working in both urban and rural counties. In 2012 PHRDHs reported working in 16 rural counties (17%).

PHRDH Practice Settings

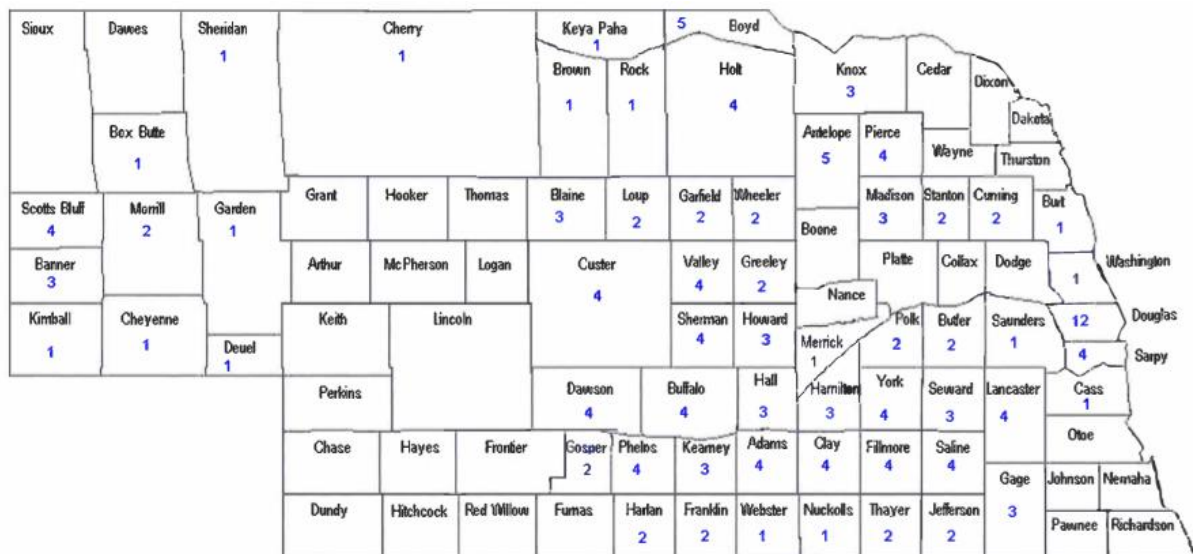
Overall, the 45 PHRDHs reported 119 practice locations with 30% being school based, 19% Head Start, 10% WIC, 10% Assisted Living and 7% State/Local Government.

Coordination of PHA or PHA-C Services

PHRDHs indicated they coordinate services through local health departments (49%), Federally Qualified Health Centers (FQHCs) (24%), independently/private practice (17%) and through other sources (22%).

Counties Identified Supported by PHRDH Services

The following map documents the count of PHRDHs who report practicing in Nebraska by county.



Counties supported - 45 Registered Dental Hygienists holding a Public Health Authorization or a Public Health Authorization - Child identified using the permits in 60 counties

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Future Interest in Working in Public Health

Eighty-one percent (81%) of 89 PHRDHs responding to the survey reported they are interested in working in a public health setting in the future. Of the PHRDHs responding yes, the following percentages responded that they would be interested in working in public health:

- more than one day per week 28%
- one day per week 19%
- once or twice a month 35%
- once or twice a year 18%

Eighty-nine percent (89%) of the PHRDHs who responded indicated they would recommend other RDHs obtain and utilize the PHA or PHA-C.

Caries Risk Assessment

Sixty-two percent (62%) of the PHRDHs providing services responded that they routinely perform caries risk assessments. Thirty-one percent (31%) responded they do not routinely perform caries risk assessments. A common reason stated for not doing risk assessments was a lack of enough time.

Challenges to PHRDHs to Utilize Authorizations

PHRDHs were asked to describe any challenges encountered utilizing or reasons they may have limited use of the PHA or PHA-C. The top six of 129 responses include:

- Lack of public interest/knowledge 13%
- Time constraints/unable to make time commitment 12.5%
- Difficulty receiving reimbursement 12%
- Medicaid payments 12%
- Difficulty obtaining consent forms 11%
- Lack of funding 11%

This survey was conducted by Marlene Deras through the University of Nebraska Medical Center, College of Public Health, Health Services Research and Administration, Health Professional Tracking Service (HPTS) in 2017. Additional data analysis was performed by the OOHD and Rajvi J. Wani, MS, PhD.

The data used for this summary is based on a self-reported survey and hence, this report has several limitations. 'Acquiescence Response' is a standard limitation of self-reporting, occurring when respondents have a tendency to provide affirmative answers regardless of the nature of the question. Also, some respondents may have provided socially desirable responses which can limit the reliability and validity of the data.

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