2024 NEBRASKA PUBLIC HEALTH HYGIENIST AUTHORIZATION DENTAL SERVICE & EVALUATION REPORT

Nebraska Office of Oral Health

Division of Public Health

Nebraska Department of Health and Human Services

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DEPT. OF HEALTH AND HUMAN SERVICES

2024 Nebraska Public Health Hygienist Authorization Dental Services Report

Background

Nebraska licensed dental hygienists have been able to obtain a public health authorization since 2007, and their numbers have generally grown. The public health authorization (PHA) allows registered dental hygienists (PHRDH) to provide certain educational, preventive and referral services for children and adults in community settings without the supervision of a dentist. PHA dental services are performed throughout the state and provided across the lifespan in various public health settings as defined in Neb. Rev. Stat. § 38-1130 including childcare centers, elementary schools, and older adult facilities. Preventive services, such as dental screenings, teeth cleanings, topical fluoride applications, protective sealants and silver diamine fluoride are the most effective, low-cost, evidence-based approaches to reducing dental decay rates. In 2016, the Office of Oral Health and Dentistry (OOHD) developed the "Nebraska Teeth Forever" program to establish dental disease prevention programs within local health departments (LHDs). This program greatly increases access to care, especially in rural areas, and has now expanded to 15 LHDs.

Many PHRDHs who provided services in 2024 work directly for these health departments and others for Federally Qualified Health Centers (FQHCs). The type and number of these services are annually collected through a survey conducted by the Health Professional Tracking Service (HPTS) at the University of Nebraska Medical Center, College of Public Health. Dental service and demographic information was entered a yearly Nebraska Public Health Authorization Dental Services Report reviewed by the OOHD. The following is an evaluation of the public health registered dental hygienist (PHRDH) workforce and the services they reported in Nebraska for 2024. The data collected that informs this evaluation can be found in Appendix A.

Evaluation

From 2017 to 2019, this unique workforce produced an average of nearly 100,000 services annually. During the pandemic of 2020-21, those services were reduced due to COVID-19 restrictions. This emergency crisis resulted in a 53% decrease in reported services in 2020 with a partial rebound in 2021. In 2022, the total service numbers recovered, and they continue to grow. With new dental disease prevention programs beginning in three local health departments, a total of 166,812 services were provided in 2024 (37% increase over 2023). This care has an estimated public health value of over \$3 million dollars, based upon the Medicaid fee schedule.

The overall impact of these increased dental services can be realized when looking at the findings of the 2021-22 five-year Nebraska Oral Health Survey of Young Children that showed a decline in state children's decay rates. https://dhhs.ne.gov/Pages/Dental-Reports.aspx That report indicated decay experience for third-grade children statewide went down from 64% in 2015-16 to 58% in 2021-22. Untreated decay also went down from 32% in 2015-16 to 24% in 2021-22. Those positive shifts were more profound in the rural areas of the state where 3rd Grade decay experience rates dropped from 81% to 66%, while urban rates remained constant at 54%. The majority of the Nebraska Public Health Hygiene services are provided in rural locations. The OOHD anticipates that the increased services provided by the PHRDHs in 2024 will likely lead to the same positive impact on decay rate trends that will be assessed in the next five-year Nebraska Oral Health Survey of Young Children.

Much of these accomplishments can be attributed to the efforts of the PHRDHs traveling throughout the state to provide this important care. Because this workforce has greatly expanded access to preventive services, especially in rural dental shortage areas, the OOHD recommends that these programs expand further and mobilize even more PHRDHS in the future to continue this decline in dental disease rates.

2024 Service Production Trends

PHRDH dental services reported in 2024 were compared to 2023 service numbers and the significant positive or negative trends are described in the tables below. The percent of change in services is also noted.

Positive Trends:

Service	2023	2024	Changes
Survey response rate	60%	68%	Increased 13%
Number of mobilized PHRDHs providing services	53	57	Increased 8%
Percentage of PHRDHs providing services	24%	28%	Increased 17%
Number of service locations	90	124	Increased 37%
Number of counties served by PHRDHs	78	79	Increased to 85% of the state covered
Number of total PHRDH services	122,159	166,812	Increased 37%
Number of dental screenings	29,439	47,272	Increased 60%
Total of patient oral hygiene education	31,611	42,265	Increased 34%
Total of dental education given to caregivers	2,632	4,545	Increased 73%
Number of dental cleanings	6,027	6,665	Increased 11%
Number of tooth and restoration polishings	1,190	2,222	Increased 87%
Number of fluoride applications	23,700	31,860	Increased 34%
Number of other topical agents (SDF)	1,133	5,216	Increased 360%
Number of radiographic exposures	3,307	5,281	Increased 60%
Number of prescriptions for rinses and fluoride	5	200	Increased substantially
Number of denture adjustments	55	915	Increased substantially
Number of gingival curettage services	0	129	Increased substantially

Neutral Trends:

Service	2023	2024	Changes
Number of Study Cast Impressions	5	20	Minimal numbers
Number of suture removals	3	14	Minimal numbers
Pulp Vitality Tests	0	0	No change
Brush Biopsies	0	0	No change

Negative Trends:

Service	2023	2024	Changes
Total number of NE PHRDHs with the authorization	217	201	Decreased 7%
Total number dental sealants	21,706	19,312	Decreased 11%
Total number of ITR Restorations	1346	986	Decreased 27%

Results and Discussions

In 2024, The survey response rate went up to 68%. Sixteen PHRDH authorizations lapsed, leaving a total workforce of 201. Despite this, the percentage of PHRDHs actively providing services increased to 28%. The number of service site locations expanded from 90 to 124, covering 79 counties and representing 85% of Nebraska. The total number of services delivered grew from 122,159 in 2023 to 166,812 in 2024, an increase of 37%.

Dental screenings, cleanings, topical fluoride, dental sealants and silver diamine fluoride (SDF) application services are now being delivered at a high volume. These are the most effective intervention services that can reduce dental disease rates. Topical Fluoride can reduce decay by 25-40% and dental sealants can reduce cavities by 60-80%. SDF treatment is particularly important to arrest decay in younger children with rampant caries and older adults with untreated cavities. Dental screenings are critical for identifying dental conditions requiring referrals to dental offices for further treatment.

The 2016 Nebraska State Oral Health Assessment Report identified rural residents as the largest underserved dental population in Nebraska. Rural regions not only had higher rates of dental disease but also less access to dental providers offering essential disease prevention services compared to urban regions. Starting in 2017, The Nebraska Teeth Forever (NTF) program significantly increased delivery of these valuable public health services. PHRDHs are the critical element of that program as they can provide low-cost direct services in community settings without the supervision of a dentist. The effect of this expanded access was evident in the Nebraska Oral Health Survey of Young Children 2021-2022 Report, which showed a statewide decline in children's dental disease rates and a substantial reduction in urban—rural disparities. The NTF program, supported by the PHRDH workforce, has driven a remarkable improvement in rural dental health outcomes and continues to demonstrate positive momentum in 2024.

Recommendations for 2025

- Expand the number of PHRDHs actively utilizing their authorization in more locations.
- Increase the number of sites and services targeting the Older Adult population.
- Enhance the number of dental screenings across all age groups.
- Increase the frequency and number of topical fluoride applications.
- Expand the number of dental sealants placed on children ages 6-18.
- Increase the provision of Silver Diamine Fluoride with focus on older adults.

Summary

The two principal public health interventions that can reduce dental disease rates for children in the U.S. are education and prevention...there is no vaccine! The 2024 Nebraska Public Health Authorization Dental Services Report, combined with the Nebraska Oral Health Survey of Young Children 2021-2022 Report (https://dhhs.ne.gov/Pages/Dental-Reports.aspx), highlights the major impact of the Nebraska Public Health Hygienists.

This very small workforce, first tracked in 2013 with only 16 active PHRDHs who provided a total of 16,425 services, has now steadily grown to 57 active providers delivering 166,812 services in 2024. Using portable equipment, PHRDHs have successfully overcome geographic barriers to expand access to preventive dental care, resulting in measurable reductions in dental disease and improved health outcomes for children.

Despite these achievements, PHRDHs remain under-utilized. Expanding their presence in additional communities and increasing their scope of services would amplify their impact. Nebraska is one of the few states that authorizes this unique workforce, underscoring the need for greater investment. Increased funding and employment opportunities would enable PHRDHs to reach more children and families.

The Surgeon General has emphasized that good oral health is essential to achieving overall health. Nebraska PHRDHs are making a major contribution toward this goal, and with stronger support, their impact could be even greater.

2024 Nebraska Public Health Authorization Dental Services Survey Report

Two hundred and one (201) registered dental hygienists (RDH) were mailed questionnaires regarding usage of the Public Health Authorization (PHA) during 2024. The 201 included RDHs who held a PHA during 2024. Of the 201 RDHs questionnaires sent, 136 responses were received, reflecting a 68% response.

Fifty-seven (57) RDHs reported providing services in 2024, indicating that 28% of RDHs who held a PHA during 2024 utilized the permit. Services were provided in 79 of the 93 counties in Nebraska, representing 85% of Nebraska counties.

Service Locations Reported by Public Health Registered Dental Hygienists (PHRDHs) – 2024

The table below summarizes the number (N) and percentage (%) of Public Health Registered Dental Hygienists (PHRDHs) who reported providing services in each location type in 2024. Percentages are based on a total of 57 respondents. Note that some PHRDHs reported multiple service locations, so the sum of frequencies exceeds 57.

Location Type	Number	Percentage
School-Based Preventive Health Program	38	66.7%
Federal, State, or Local Public Health Dept/Clinic	17	29.8%
Nursing Facility	11	19.3%
Assisted Living Facility	11	19.3%
Community Health Center	10	17.5%
Tribal Clinic	1	1.8%
Other		
Head Start (Other)	23	40.4%
Other (Unspecified)	10	17.5%
WIC (Other)	2	3.5%
Preschool (Other)	1	1.8%
Total Respondents	57	100%

166,812 dental services were provided to NE residents by age group as seen in the tables below:

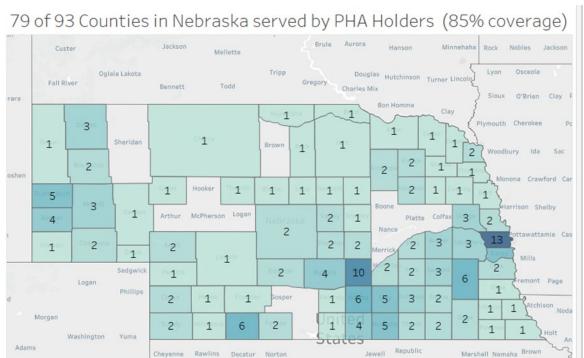
Dental Service by Age Range	0 to 5	6 to 18	19 to 64	65+	Total
Preliminary Charting and Screening	9,496	33,431	2,830	1,515	47,272
Oral Health Education to Recipient	9,636	28,301	2,705	1,623	42,265
Oral Health Education to Caregiver	972	1,876	1,441	256	4,545
Oral Prophylaxis	1,315	3,117	1,330	903	6,665
Polish Exposed Tooth Surfaces and Restorations	304	1,012	432	474	2,222
Brush Biopsies	0	0	0	0	0
Pulp Vitality Testing	0	0	0	0	0
Gingival Curettage	0	14	55	60	129
Removal of Sutures	0	*	11	*	14
Topical Fluorides	6,687	21,380	2,146	1,647	31,860
Dental Sealants	4,967	14,145	200	0	19,312
Other Topical Agents (SDF)	2,017	2,563	428	208	5,216
Impressions for Study Casts	0	0	10	10	20
Radiographic Exposures	330	2,628	1,781	542	5,281
Interim Therapeutic Restoration	170	504	158	64	896
Prescriptions for Mouth Rinses and Fluorite Products	0	88	60	52	200
Minor Denture Adjustments	0	0	396	519	915
Advised Patient these services do not replace a comprehensive dental exam	7,140	25,549	1,293	1,179	35,161

^{*}Count in the range 1 to 5 is redacted for privacy protection.

Oral Health Education provided in Group Settings: 541 presentations total.

The total number of workshops provided in 2024 was 374. Age information was not included.

The total number of in-service trainings provide in 2024 was 167. Age information was not included.



End of year 2024

Counties supported-57 dental hygienists holding a PHA identified using their permits in 79 NE counties.

This represents 85 % of Nebraska counties served by public health hygienists