

NEBRASKA

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DEPT. OF HEALTH AND HUMAN SERVICES



Jim Pillen, Governor

September 15, 2024

Mr. Brandon Metzler
Clerk of the Legislature
P.O. Box 94604
Lincoln, NE 68509

Subject: Nebraska Public Health Authorization Dental Services and Evaluation Report

Dear Mr. Metzler:

Pursuant to Nebraska Revised Statute §38-1130(4), the Department of Health and Human Services is submitting an annual report evaluating dental hygiene services delivered by dental hygienists with public health authorization in the state. The evaluation highlights the function, activities, and locations served by this workforce.

Sincerely,

A handwritten signature in blue ink that reads "Charity Menefee".

Charity Menefee
Director, Division of Public Health

Attachment

Division of Public Health

Nebraska Public Health Authorization Dental Services and Evaluation Report

September 2024

Neb. Rev. Stat. § 38-1130

2023 Nebraska Public Health Authorization Dental Services Report

Evaluation Analysis

Background

Nebraska licensed dental hygienists have been able to obtain a public health authorization since 2007 and their numbers have steadily grown. The public health authorization (PHA) allows registered dental hygienists to provide certain preventive, educational, and referral services for children and adults in community settings. 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 are entered into a yearly Nebraska Public Health Authorization Dental Services Report reviewed by the DHHS Office of Oral Health and Dentistry (OOHD). The following is an evaluation of the public health registered dental hygienist (PHRDH) workforce and the services they reported in Nebraska for 2023. The data collected that informs this evaluation can be found in Appendix A.

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, school-age children, and older adult locations. Preventive care, such as dental screenings, teeth cleanings, topical fluoride applications, and protective sealants, are some of the most effective, low-cost, evidence-based approaches to reducing dental decay rates. In 2016, the OOHD started 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 about 14 LHDs. Many PHRDHs who reported providing services in 2023 work directly for these health departments and others for Federally Qualified Health Centers (FQHCs). 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 greatly reduced due to COVID-19 restrictions. This emergency health crisis resulted in a 53% decrease in reported services in 2020 with a partial rebound in 2021. In 2022, the total service numbers fully recovered and there was a 5% increase in 2023.

The 2021-22 Nebraska Oral Health Survey of Young Children found that 58% of third-grade children statewide have dental decay experience which is down from 64% in 2015-16 and below the national average of 60%. Untreated decay rates also went down from 32% to 24% and 51% of these students have dental sealants which is above the national average of 42%. These positive shifts were more profound in the rural areas of the state where decay experience rates have dropped from 81% to 66% and untreated decay rates from 53% to 25%, almost equal to the urban rate of 24%, and close to the U.S. average of 20%. Much of these accomplishments may be attributed to the efforts of the PHRDHs traveling throughout the state to provide this important care. Because of this expanded access to dental care that PHRDHs provide, we recommend that Nebraska community dental programs continue to expand and mobilize PHRDHs.

2023 Service Status

PHRDH dental services reported in 2023 were compared to 2022 service numbers and the significant positive or negative trends are described in the bullet points below. Substantial percent differences are noted in parenthesis:

Positive Trends:

- The total number of PHRDHs in Nebraska increased (23%) in 2023 from 176 to 217.
- The total number of PHRDHs providing services increased in 2023 from 40 to 53.
- The percentage of PHRDHs providing services increased in 2023 from 22% to 24%.
- The total service locations increased (11%) in 2023 from 81 to 90 sites.
- The number of NE counties served by PHRDHs is 78, representing 84% of the state.
- The total number of PHRDH services increased (5%) in 2023 from 116,415 to 122,159.
- The total patient oral hygiene education increased (9%) in 2023 from 29,020 to 31,611.
- The total oral hygiene education to caregivers increased in 2023 from 1,593 to 2,632.
- The total dental cleanings increased (27%) in 2023 from 4,757 to 6,027.
- The total topical fluoride applications increased (22%) in 2023 from 19,387 to 23,700.
- The total dental sealants increased (23%) in 2023 from 17,658 to 21,706.
- The total of Other Topical Agents (SDF) increased in 2023 from 959 to 1,133.
- The total of Interim Therapeutic Restorations increased (13%) in 2023 from 176 to 1,346.

Neutral Trends:

- The survey response rate was 61% in 2022 and 60% in 2023.
- The total number of Radiographs was 3,222 in 2022 and 3,307 in 2023.
- The total number of denture adjustments was 55 in 2022 and 60 in 2023.
- No Pulp Vitality Tests were performed by PHRDHs in 2022 or 2023.
- No Brush Biopsies were performed by PHRDHs in 2022 or 2023.

Negative Trends:

- The total dental screenings decreased (17%) in 2023 from 35,559 to 29,439.
- Tooth and Restoration polishing decreased from 3,388 in 2022 to 1,190 in 2023.
- Prescriptions for Rinses and Fluoride Products decreased from 240 in 2022 to 5 in 2023.
- Gingival Curettage services decreased from 380 in 2022 to 0 in 2023.

Discussion

In 2023, the number of authorized PHRDHs increased from 176 to 217. The number of PHRDHs actively providing services also increased from 40 to 53. The number of service site locations increased from 81 to 90 and they were provided in 78 counties representing coverage of 84% of Nebraska. The total number of services went up from 116,415 in 2022 to 122,159 in 2023, an increase of 5%. These positive

results surpass pre-pandemic levels and demonstrate that services continue to increase post-pandemic. Especially effective are the topical fluoride services that reduce dental decay by 25-40%, and dental sealants that reduce dental decay by 60-80%. Silver Diamine Fluoride (SDF) applications are a new service that can arrest dental decay, especially useful for young children and older adults.

The 2016 Nebraska State Oral Health Assessment Report identified rural residents as the highest underserved dental population group in Nebraska. Rural regions also demonstrate higher rates of dental disease and less access to dental providers offering essential disease prevention services than urban areas. Starting in 2016, The “Nebraska Teeth Forever” (NTF) program increased the delivery of these valuable public health services. PHRDHs are an important component of that program because they can provide low-cost, direct services in community settings without the supervision of a dentist. The overall reduction in children’s dental diseases since 2016 was accomplished despite the challenges of the pandemic that increased dental disease rates across the U.S. This encouraging trend continues to have positive momentum in 2023. The OOHD would recommend the PHRDH workforce continue to expand to even more regions of the state.

Recommendations for 2024

1. Increase the number of PHRDHs utilizing their PHA authorization in more locations.
2. Increase the number of dental screenings across the lifespan.
3. Increase the number of Silver Diamine Fluoride services to arrest decay.
4. Increase the number of sites and services for the Older Adult population.
5. Utilize the RedCap electronic system more effectively to capture field dental data.
6. Increase the Public Health Authorization service annual survey response rate.

Conclusion

The two principal public health interventions that can reduce dental disease rates for children in the U.S. are education and prevention. The 2023 Nebraska Public Health Authorization Dental Services Report, combined with the Nebraska Oral Health Survey of Young Children 2021-2022 Report, identifies the potential impact of the Nebraska Public Health Hygienists. This very small workforce was first tracked in 2013 when there were only 16 active PHRDHs who provided a total of 16,425 services. It has now steadily grown to 53 providers providing 122,159 services. They can overcome many challenges while increasing access to a large quantity of effective services. The OOHD believes that increased access to this type of care has positively influenced the reduction in disease and an increase in positive child health outcomes. PHRDHs are still vastly under-utilized and there remains much opportunity for growth in this workforce across the state. Nebraska is one of the few states that authorizes this unique type of workforce, and they should receive even more support in the future. Increased utilization and employment opportunities would stimulate further usage of these energetic service providers.

Appendix A: 2023 Nebraska Public Health Authorization Dental Services Report

Two hundred and seventeen (217) registered dental hygienists (RDH) were mailed questionnaires regarding usage of the Public Health Authorization (PHA) during 2023. The 217 included RDHs who held a PHA during 2023. Twenty-nine (29) permits lapsed during 2023.

Of the 217 RDHs sent questionnaires, 130 responses were received, reflecting a 60% response.

Fifty-three (53) RDHs reported providing services in 2023, indicating that 24% of RDHs who held a PHA during 2023 utilized the permit. Services were provided in 78 of the 93 counties in Nebraska.

Services were provided in the following locations (number of RDHs reporting this location type):

- Nursing Facility (7)
- School-Based Preventative Health Program (35)
- Federal, State, or Local Public Health Department or Clinic (11)
- Community Health Center (6)
- Assisted Living (7)
- Tribal Clinic (1)
- Other –
 - Head Start (17)
 - WIC (2)
 - Preschool (1)
 - Other (3)

Provided services are broken down by age range as seen in the tables below.

2023 Preliminary Charting and Screening Breakdown by Age				
Total: 29439				
Age Range	0 to 5	6 to 18	19 to 64	65+
Total Service Provided	5669	20529	1711	1530

2023 Oral Health Education to Recipient Breakdown by Age				
Total: 31611				
Age Range	0 to 5	6 to 18	19 to 64	65+
Total Service Provided	6122	22035	1720	1734

2023 Oral Health Education to Caregiver Breakdown by Age				
Total: 2632				
Age Range	0 to 5	6 to 18	19 to 64	65+
Total Service Provided	490	1246	881	15

Oral Health Education provided in Group Settings: 315

Total workshops in 2023: 280

In-service trainings in 2023: 35

2023 Oral Prophylaxis Breakdown by Age				
Total: 6027				
Age Range	0 to 5	6 to 18	19 to 64	65+
Total Service Provided	824	2938	1151	1114

2023 Polish Exposed Tooth Surfaces and Restorations Breakdown by Age				
Total: 1190				
Age Range	0 to 5	6 to 18	19 to 64	65+
Total Service Provided	106	746	53	285

2023 Brush Biopsies Breakdown by Age				
Total: 0				
Age Range	0 to 5	6 to 18	19 to 64	65+
Total Service Provided	0	0	0	0

2023 Pulp Vitality Testing Breakdown by Age				
Total: 0				
Age Range	0 to 5	6 to 18	19 to 64	65+
Total Service Provided	0	0	0	0

2023 Gingival Curettage Breakdown by Age				
Total: 0				
Age Range	0 to 5	6 to 18	19 to 64	65+
Total Service Provided	0	0	0	0

2023 Removal of Sutures Breakdown by Age				
Total: 3				
Age Range	0 to 5	6 to 18	19 to 64	65+
Total Service Provided	0	0	3	0

2023 Topical Fluorides Breakdown by Age				
Total: 23700				
Age Range	0 to 5	6 to 18	19 to 64	65+
Total Service Provided	5016	16267	1050	1367

2023 Dental Sealants Breakdown by Age				
Total: 21706				
Age Range	0 to 5	6 to 18	19 to 64	65+
Total Service Provided	4566	17077	63	0

2023 Other Topical Agents Breakdown by Age				
Total: 1133				
Age Range	0 to 5	6 to 18	19 to 64	65+
Total Service Provided	696	271	42	124

2023 Impressions for Study Casts Breakdown by Age				
Total: 5				
Age Range	0 to 5	6 to 18	19 to 64	65+
Total Service Provided	0	0	0	5

2023 Radiographic Exposures Breakdown by Age				
Total: 3307				
Age Range	0 to 5	6 to 18	19 to 64	65+
Total Service Provided	218	1553	1199	337

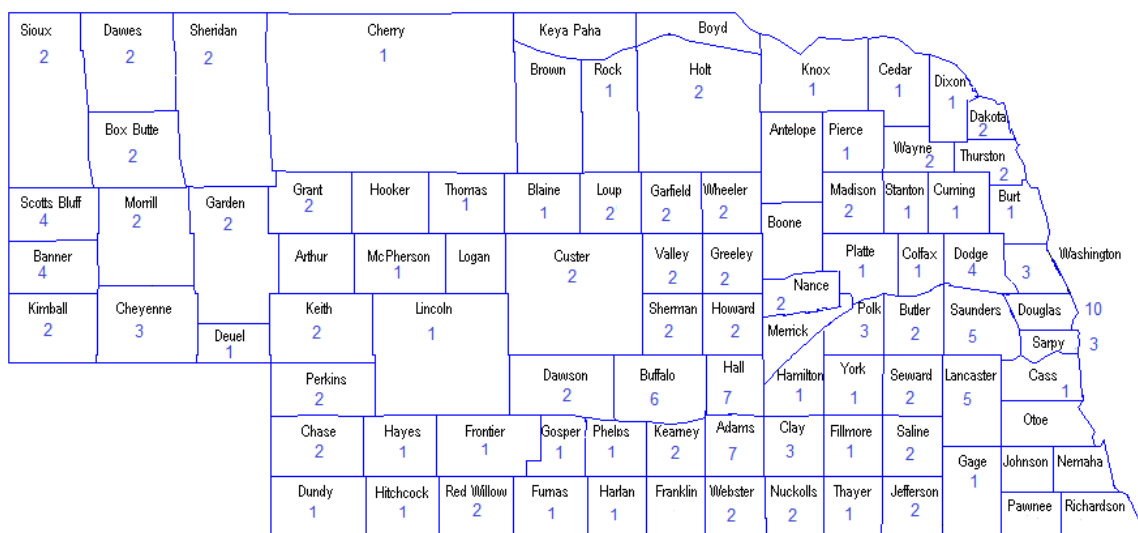
2023 Interim Therapeutic Restoration Breakdown by Age				
Total: 1346				
Age Range	0 to 5	6 to 18	19 to 64	65+
Total Service Provided	373	805	135	33

2023 Prescriptions for Mouth Rinses and Fluoride Products Breakdown by Age				
Total: 5				
Age Range	0 to 5	6 to 18	19 to 64	65+
Total Service Provided	0	3	2	0

2023 Minor Denture Adjustments Breakdown by Age				
Total: 55				
Age Range	0 to 5	6 to 18	19 to 64	65+
Total Service Provided	0	0	20	35

2023 Advised Patient - Breakdown by Age				
Total: 29030				
Age Range	0 to 5	6 to 18	19 to 64	65+
Total Service Provided	5387	21465	704	1474

Public Health Authorization



End of Year 2023

Counties supported – 53 Dental Hygienists holding a Public Health Authorization identified using the permits in 78 Nebraska counties
This represents 84% of Nebraska counties served by Public Health Hygienists

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University of Nebraska Medical Center
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