

Nebraska

State Oral Health **Surveillance System Report, 2011-2023**



NEBRASKA
Good Life. Great Mission.
DEPT. OF HEALTH AND HUMAN SERVICES

— 2024 —



Prepared by Solaiman Doza, PhD, MPH, BDS, Oral Health Epidemiologist

List of Abbreviations

ATS	Adult Tobacco Survey
ASTDD	Association of State and Territorial Dental Directors
BSS	Basic Screening Survey
BRFSS	Behavioral Risk Factor Surveillance System
CDC	Centers for Disease Control and Prevention
CHIP	Children's Health Insurance Program
CMS-416	Centers for Medicare and Medicaid Services
CSTE	Council of State and Territorial Epidemiologists
FQHCs	Federally Qualified Health Center
HCAN	Health Center Association of Nebraska
HDD	Hospital Discharge Data
HPTS	Health Professions Tracking Service
HRSA	Health Resources and Services Administration
ICD	ICD – 9-CM, ICD – 10-CM codes. International Classification of Diseases, Clinical Modification
LHD	Local Health Department
MCAH	Maternal Child Adolescent Health
NBDR	Nebraska Birth Defects Registry
NCR	Nebraska Cancer Registry
NDE	Nebraska Department of Education
NE	Nebraska
NE CCCP	Nebraska Comprehensive Cancer Control Program
NE MLTC	Nebraska Medicaid Long Term Care
NE-OHSS	Nebraska Oral Health Surveillance System
NHANES	National Health and Nutrition Examination Survey
NOHSS	National Oral Health Surveillance System
NOHWS	Nebraska Oral Health Workforce Surveys
NSCH	National Survey of Children's Health
OOHD	Office of Oral Health and Dentistry
PRAMS	Pregnancy Risk Assessment Monitoring System
TFN	Tobacco Free Nebraska
UDS	Uniform Data System
WFRS	Water Fluoridation Reporting System
YRBSS	Youth Risk Behavioral Surveillance Survey
YTS	Youth Tobacco Survey

Executive Summary

The key to reducing dental disease across the lifespan is through increased access to educational and preventive services. The 2024 Nebraska Oral Health Surveillance System report reflects some very positive trends. The recent establishment of oral health programs within 15 of the 19 local health departments and the utilization of the public health hygienist workforce, has resulted in increased access to dental disease prevention services, especially in rural locations. Third grade dental sealant applications are well above the national average. Third grade dental decay experience and untreated dental decay rates have both been reduced across the state. Some of this success can be attributed to the “Nebraska Teeth Forever” program that works closely with the local health departments to expand this public health care. With more effort in these areas, the dental disease rate for this age group can continue to fall.

2024 Nebraska Oral Health Surveillance System (NE-OHSS) Report Introduction

The Nebraska Office of Oral Health and Dentistry (OOHD) conducts dental public health activities that align with the 2025-2030 Nebraska State Health Improvement Plan’s main two priorities: to support the public health system infrastructure and to reduce health disparities. To adequately monitor dental disease within the state, the OOHD has outlined the framework needed in the Nebraska State Oral Health Surveillance Plan. State Oral Health Surveillance Reports are periodically released every 3-4 years. This 2024 report has selected 58 Oral Health Indicators that are prioritized into Tier 1, Tier 2, or Tier 3 categories and arranged by indicator group and the criteria below. The indicator language follows the State-Based Oral Health Surveillance Systems Conceptual Framework recommendations as set forth by the Council of State and Territorial Epidemiologists (CSTE) and the Association of State and Territorial Dental Directors (ASTDD). The Tier 1 indicators are prioritized first for essential data collection and analysis. Tier 2 and Tier 3 indicators are collected as OOHD resources allow. **Tier 1 (Priority in Red)** has 10 indicators which are selected based on the Healthy People 2030 (HP 2030) Oral Health Objectives, the National Oral Health Surveillance System (NOHSS) Indicators, and others related to the OOHD program priorities. **Tier 2 (Recommended in Blue)** has 26 indicators also based on HP 2030 and NOHSS guidance, that do not fit into Tier 1. **Tier 3 (Optional in Green)** has 22 remaining indicators that are identified as being important for surveillance but do not fit into Tier 1 or Tier 2.

The Nebraska Oral Health Surveillance System (NE-OHSS) has expanded since 2018. The OOHD had data on 9 of the 17 HP 2020 objectives and can track 9 of the 15 2030 Objectives. These 9 HP 2030 objectives are identified in the Tier 1 and 2 tables below and align with multiple indicator measures. The number of oral health indicators being monitored in Nebraska has grown from 53 to 58. Accordingly, some of the tables and charts have changed from past reports. A new column, (Selection Criteria), was added to Tier 1 to better explain how indicators are chosen. Other minor changes in the tables and charts are noted with asterisks to further clarify their meaning. The comparison of Nebraska Tier 1 Priority Indicators to national averages and significant trends of other Indicators are found on pages 15 and 16. Recommendations for improved oral health outcomes is also on page 16.

Nebraska counties identified as Urban (metro areas) are selected using Office of Management and Budget designations: Cass, Dakota, Dixon, Douglas, Lancaster, Sarpy, Saunders, Seward, and Washington. This dental surveillance report contains no identifiable personal or individual site-location information.

...Dr. Charles F. Craft State Dental Health Director 30 December 2024

Table 1: Tier 1 (Priority) Nebraska Oral Health Indicators by Data Source Monitored by NE-OHSS

US HP2030 Objective*	Indicator Group	Indicator Topic	Indicator Measure	Data Source	Selection Criteria
OH-08	Access to Care	Dental Visit	Percentage of adults aged 18 and over who visited a dentist or dental clinic for any reason in past year	BRFSS	NOHSS indicators
OH-09		Preventive Services	Percentage of low-income children and youth under age 18 who received any preventive dental service during the past year through the Medicaid EPSDT benefit	CMS-416	OOHD priorities and recommended by CSTE
OH-05**	Oral Health Outcomes	Tooth Loss	Percentage of adults aged ≥ 45 years who have had all permanent teeth extracted due to tooth decay or gum disease	BRFSS	NOHSS indicators
OH-01		Dental Caries Experience	Percentage of 3 rd grade students with dental caries experience (treated or untreated)	BSS	NOHSS indicators
OH-01		Dental Caries Experience	Percentage of children aged 3-5 years attending Head Start with dental caries experience	BSS	NOHSS indicators
OH-02		Untreated Dental Decay	Percentage of 3 rd grade students with untreated tooth decay	BSS	NOHSS indicators
OH-02		Untreated Dental Decay	Percentage of children aged 3-5 years attending Head Start with untreated dental caries	BSS	NOHSS indicators
OH-10		Dental Sealants	Percentage of 3 rd grade students with dental sealants on at least one permanent tooth	BSS	NOHSS indicators
OH-09		Dental Visit	Percentage of 3 rd grade children with urgent dental treatment need	BSS	OOHD priorities
OH-11		Community Intervention	Fluoridation Status	Percentage of population served by community water systems with optimally fluoridated water	WFRS

* Previous NE-OHSS report included Healthy People 2020 objectives. The current report realigned the indicators with Healthy People 2030 objectives.

** OH-05 was previously OH-4.1 and OH-4.2 that focused on the age groups 45-64 and 65-74 years respectfully. This report has modified the tooth loss indicator to align with the new OH-05 that focuses on tooth loss among 45 years or older population.

Table 2: Tier 2 (Recommended) Oral Health Indicators by Data Sources Monitored by NE-OHSS

US HP2030	Indicator group	Indicator topic	Indicator measure	Data Source
OH-08	Access to Care	Preventive Services	Percentage of preventive dental visit among children aged 1-17 years	NSCH
		Dental Visit	Percentage of dental visit among children aged 1-17 Years	NSCH
		Dental Visit	Percentage of adolescents in grades 9-13 making dental visits	YRBSS
		Preventive Services	Percentage of children aged 1-20 years enrolled in Medicaid or CHIP Medicaid Expansion with any dental service	CMS-416
N/A*		Dental Visit	Percentage of adults aged ≥18 years with diabetes making dental visit(s)	BRFSS
N/A*		Receipt of oral health services at health centers	Percentage of total patients who receive oral health services at Federally Qualified Health Centers each year	UDS/HCAN
OH-01	Oral Health Outcomes	Dental Caries Experience	Percentage of children attending Kindergarten with dental caries experience (No NE data available)	BSS
OH-02		Untreated Dental Decay	Percentage of children attending Kindergarten with untreated dental caries (No NE data available)	BSS
OH-03		Untreated Dental Decay	Percentage of adults aged ≥65 years residing in long-term care or skilled nursing facilities with untreated dental caries	BSS
		Dental Caries Experience	Percentage of adults aged ≥65 years attending congregate meal sites with untreated dental caries (No NE data available)	BSS
N/A*		Tooth Loss	Percentage of adults aged 45-64 years who have ever had a permanent tooth extracted due to tooth decay or gum disease	BRFSS
N/A*		Tooth Loss	Percentage of adults aged ≥65 years with six or more teeth lost	BRFSS

OH-09		Dental Visit	Percentage of children aged 3-5 years attending Head Start with urgent dental treatment need	BSS
OH-09		Dental Visit	Percentage of children attending Kindergarten with urgent dental treatment need (No NE data available)	BSS
N/A*		Dental Visit	Percentage of adults aged ≥65 years residing in long-term care or skilled nursing facilities with urgent dental treatment need	BSS
N/A*		Dental Visit	Percentage of adults aged ≥65 Years attending congregate meal sites with urgent dental treatment need (No NE data available)	BSS
OH-10		Dental Sealants	Percentage of 3 rd grade children who have received dental sealants on one or more of their permanent first molar teeth (No NE data available)	BSS
		Dental Sealants	Percentage of children aged 6-9 years enrolled in Medicaid or CHIP Medicaid Expansion using dental sealants	CMS-416
		Dental Sealants	Percentage of children aged 10-14 years enrolled in Medicaid or CHIP Medicaid expansion using dental sealant(s)	CMS-416
OH-07		Oral and Pharyngeal Cancers	Mortality from invasive cancer of the oral cavity or pharynx	NCR
		Oral and Pharyngeal Cancers	Incidence of invasive cancer of the oral cavity or pharynx	NCR
N/A*	Community Intervention	School-based centers with oral health component	Percentage of school-based health centers that provide dental sealants (No NE data available)	OOHD
N/A*		School-based centers with oral health component	Percentage of school-based health centers that provide dental care (No NE data available)	OOHD

N/A*		School-based centers with oral health component	Percentage of school-based health centers that provide topical fluoride (No NE data available)	OOHD
N/A*	Infrastructure	Oral Health Programs	Percentage of local health departments and Federally Qualified Health Centers that have an oral health program	HCAN and OOHD
N/A*		Oral Health Programs	Percentage of health agencies that have a dental public health program directed by a dental professional with public health training	OOHD; ASTDD Annual Synopsis

*These indicators do not have a corresponding US HP 2030 Objective.

Table 3: Tier 3 (Optional) Oral Health Indicators Monitored by Additional Data Sources

Indicator group	Indicator topic	Indicator measure	Data Source
Access to care	Teeth cleaning	Percentage of women who had their teeth cleaned before most recent pregnancy	PRAMS
	Teeth cleaning	Percentage of women who had their teeth cleaned during most recent pregnancy	PRAMS
	Teeth cleaning	Percentage of adult residents who had their teeth cleaned in the past year by a dentist/dental hygienist	BRFSS (State Added)
Oral Health Outcome	Dental Visit	Number of patients and visits to hospital-based emergency departments for dental conditions	HDD
	Dental Visit	Number of visits to the hospital-based emergency departments for non-traumatic dental conditions	HDD
	Dental Visit *	Visited Hospital ER for tooth pain or dental problem in past year (excluding injury or trauma)	BRFSS (State Added)
	Craniofacial Services	Number of infants born with cleft lip/cleft palate	NBDR
	Tobacco use	Percentage of youth have ever used chewing tobacco, snuff or dip	YTS
	Tobacco use	Percentage of youth have ever used chewing tobacco, snuff or dip in the past 30 days	YTS
	Tobacco use	Percentage of who have ever smoked cigarettes	YTS & YBRSS
	Tobacco use	Percentage of who have ever smoked cigarettes in the past 30 days	YTS
	Tobacco use *	Ever smoked a cigarette, even one or two puffs	Adult Tobacco Survey (State of Nebraska)
	Tobacco use *	Currently smoke cigarette	Adult Tobacco Survey (State of Nebraska)
Tobacco use *	Ever used smokeless tobacco	Adult Tobacco Survey (State of Nebraska)	


	Tobacco use *	Currently use smokeless tobacco	Adult Tobacco Survey (State of Nebraska)
Infrastructure	Dental Workforce	Percentage of practicing dentists who work part-time	NOHWS/HPTS
	Dental Workforce	Percentage of practicing dentists who plan to retire in one to five years	NOHWS/HPTS
	Dental Workforce	Practicing NE Dentists who filed at least one Medicaid Dental Claim	NE MLTC
	Dental Workforce	Number of full-time equivalent (FTE) licensed practicing dentists	NOHWS/DHHS Licensure
	Dental Workforce	Number of full-time equivalent (FTE) licensed practicing dental hygienists	NOHWS/DHHS Licensure
	Dental Workforce	Number of licensed practicing dental hygienists with Public Health Authorization	NOHWS/HPTS
	Dental Workforce	Number of full-time equivalent (FTE) certified dental assistants (No NE data available)	NOHWS/DHHS Licensure

* Tier 3 table now includes one state added BRFSS question about ER dental visits and four adult tobacco use indicators.


Surveillance Data Tables

The NE DHHS Office of Oral Health and Dentistry monitors 58 oral health indicators but currently can only access data sets representing 48 of the 58 indicators. The remaining 48 data sets have been recorded in this surveillance report and now can be studied for trend analysis. For ease of interpretation, the following indicator data tables have been further broken down into the following categories: Pregnant Women, Infants, School Children, Children & Adolescents, Adolescents, Adults, Oral Cancer, Medicaid, Workforce, Community Water Fluoridation, Infrastructure and Access. A total of fifty-seven data point elements are listed in the data tables that follow.

Nebraska Oral Health Surveillance System

 No survey conducted this year

 Question was not asked


 Data not yet available


Description of Indicator	Source (Frequency of Data Availability)	Tier	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Pregnant women																
Teeth Cleaning Among Women Before Pregnancy	PRAMS (Annual)*	3		62.2%	60.6%	62.0%	56.9%	45.7%	44.1%	44.3%	49.1%	46.6%	46.5%			
Teeth Cleaning Among Women During Pregnancy		3	52.0%	54.8%	55.5%	56.7%	54.4%	51.9%	52.6%	48.1%	55.2%	49.7%	49.8%			
Infants																
Infants born with cleft lip alone	Birth Defects Registry (Annual)**	3	9	13	10	16	17	19	19	27	23	13	28	18		
Infants born with cleft palate alone		3	7	12	13	14	18	29	20	39	30	31	31	19		
Infants born with Cleft lip and cleft palate		3	16	17	18	18	13	26	26	42	30	21	43	23		
School Children																
Dental Caries Experience Among 3rd Grade Children	Basic Screening Survey (every 5 years)	1					63.9%							58.1%		
<i>Dental Caries Experience Among 3rd Grade Rural Children</i>							81.4%							65.6%		
<i>Dental Caries Experience Among 3rd Grade Urban Children</i>							54.6%							54.1%		
Untreated Dental Caries Among 3rd Grade Children		1						32.0%							24.3%	
<i>Untreated Dental Caries Among 3rd Grade Rural Children</i>								53.3%							24.6%	
<i>Untreated Dental Caries Among 3rd Grade Urban Children</i>								20.7%							24.1%	
Dental Sealant Among Children 3rd Grade Children		1						56.2%							50.8%	
<i>Dental Sealant Among Children 3rd Grade Rural Children</i>								48.6%							54.6%	
<i>Dental Sealant Among Children 3rd Grade Urban Children</i>								60.3%							42.9%	

* The previous 2021 report incorrectly reported the prevalence of teeth cleaning in 2011-2015, which has since been updated.

** The birth defects program switched from ICD 9 to ICD 10 in 2016, and no comparison can be made with the current data for cleft lip, cleft palate and both cleft lip and palate before 2016. Also, prior to 2016, if a cleft lip was associated with a syndrome (such as Downs) it was excluded.

Nebraska Oral Health Surveillance System


 No survey conducted this year

 Question was not asked


 Data not yet available

Description of Indicator	Source (Frequency of Data Availability)	Tier	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
School Children (continued)															
Urgent Dental Needs Among 3 rd Grade Children	Basic Screening Survey (every 5 years)	1					3.2%							3.5%	
Dental Caries Experience Among Children Aged 3-5 Years in Head Start		1					46.2%							48.6%	
Untreated Dental Caries Among Children Aged 3-5 Years in Head Start		1					29.5%							27.0%	
Urgent Dental Needs Among Children Aged 3-5 Years in Head Start		2					2.8%							4.3%	

Nebraska Oral Health Surveillance System

 No survey conducted this year

 Question was not asked

 Data not yet available

Description of Indicator	Source (Frequency of Data Availability)	Tier	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Children and Adolescents																
Preventive Dental Visit Among Children Aged 1-17 Years	NSCH (every year starting 2016) *	2	79.9%					81.3%	83.2%	74.0%	86.0%	79.3%	80.0%	80.0%		
Dental Visit Among Children Aged 1-17 Years		2	80.1%					83.2%	85.4%	76.4%	84.4%	82.0%	76.1%	75.6%		
Adolescents																
Youth have ever used chewing tobacco, snuff or dip	Youth Tobacco Survey (2-3 years) **	3			15.0%		13.0%		12.0%		7.3%			5.4%		
Youth have ever used chewing tobacco, snuff or dip in the past 30 days		3			7.0%		6.0%		5.0%		3.3%			3.0%		
Youth who have ever smoked cigarettes		3			35.0%		29.0%		24.0%		17.2%			18.3%		
Youth who have ever smoked cigarettes in the past 30 days		3			12.0%		9.0%		7.0%		6.1%			2.7%		
Dental Visit Among Adolescents in Grades 9-12	YRBSS (Odd years)	2	75.1%		74.8%		75.2%		79.2%		77.4%		70.5%		77.6%	
Adults																
Dental Visit Among Adults Aged ≥18 Years	BRFSS (Even years)	1		67.6%		66.4%		68.7%		67.7%		68.1%		66.2%		
All Teeth Lost Among Adults Aged ≥45 Years ***		1		13.4%		14.1%		13.2%		12.3%		10.6%		9.5%		
Dental Visit Among Adults Aged ≥18 Years with Diabetes		2		67.6%		62.6%		65.0%		64.1%		63.5%		63.1%		
Tooth Loss Among Adults Aged 45-64 Years		2		47.7%		45.9%		45.1%		44.8%		41.3%		45.0%		
Six or More Teeth Lost Among Adults Aged ≥65 Years		2		47.2%		47.5%		45.3%		44.3%		39.8%		38.7%		
Teeth Cleaning Among Adults in the past year by dentist/dental hygienist – State added		3						67.4%		65.8%						
Visited Hospital ER for tooth pain or dental problem in past year (excluding injury or trauma) – State added		3										53,658	31,433	43,782	36,694	49,641

* For the year 2020, NSCH provided 2020-2021 percentages regarding the indicator measures – preventive dental visit and dental visit. The previous 2021 report incorrectly reported the prevalence of preventive dental visits and dental visits among children aged 1-17 in 2011, 2016, and 2019, which has since been corrected.

** YTS data included in this current report now aligns with the data released from the Tobacco Free Nebraska Program.

*** OH-05 was previously OH-4.2 that focused on the age group 65-74 years. This report has modified the tooth loss indicator to align with the new OH-05 that focuses on tooth loss among 45 years or older population. In addition, due to this change there are now 11 tier one data points for the 10 tier one indicators.

Nebraska Oral Health Surveillance System


 No survey conducted this year


 Question was not asked


 Data not yet available

Description of Indicator	Source (Frequency of Data Availability)	Tier	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Adults (continued)																
Untreated Dental Caries Among Adults Aged ≥65 Years Residing in Long-Term Care or Skilled Nursing Facilities	Basic Screening Survey (every 5 years)	2									46.6%					
Urgent Dental Needs Among Adults Aged ≥65 Years Residing in Long-Term Care or Skilled Nursing Facilities		2									9.3%					
Ever smoked a cigarette, even one or two puffs	Adult Tobacco Survey (State of Nebraska)	3									66.3%	63.0%	62.1%	62.1%		
Currently smoke cigarette		3						16.5%	15.0%	13.3%	13.6%	12.0%	11.9%	11.7%		
Ever used smokeless tobacco		3							29.1%	29.3%	29.0%	28.5%	26.6%	24.3%	23.0%	
Currently use smokeless tobacco		3							5.7%	4.6%	6.6%	3.9%	4.3%	3.9%	1.9%	
Oral Cancer																
Incidence of Invasive Cancer of the Oral Cavity or Pharynx (rate per 100,000)	Nebraska Cancer Registry (Annual)	2	250	208	251	254	270	280	309	301	276	306	325	285		
Mortality from Invasive Cancer of the Oral Cavity or Pharynx (rate per 100,000)		2	61	47	29	50	59	55	57	66	51	85	69	55		
Medicaid																
Preventive Dental Service for Children Aged 1-18 Years Enrolled in Medicaid or CHIP Medicaid Expansion	CMS-416 (Annual)	1	45.3%	46.5%	50.4%	50.1%	51.2%	51.9%	51.9%	51.3%	48.5%	40.9%	40.6%	47.6%	47.0%	
Any Dental Service for Children Aged 1-20 Years Enrolled in Medicaid or CHIP Medicaid Expansion		2	47.8%	48.7%	52.5%	52.2%	53.3%	53.9%	54.1%	53.2%	50.7%	42.5%	41.2%	46.9%	46.6%	
Dental Sealant Use Among Children Aged 6-9 Years Enrolled in Medicaid or CHIP Medicaid Expansion		2	20.5%	20.7%	22.1%	22.2%	22.6%	23.8%	23.8%	22.1%	22.5%	15.3%	15.7%	17.4%	16.9%	
Dental Sealant Use Among Children Aged 10-14 Years Enrolled in Medicaid or CHIP Medicaid Expansion		2	17.9%	17.9%	19.3%	20.2%	21.4%	22.0%	22.0%	18.0%	17.7%	12.3%	11.6%	13.4%	13.3%	

Nebraska Oral Health Surveillance System

 No survey conducted this year

 Question was not asked


 Data not yet available

Description of Indicator	Source (Frequency of Data Availability)	Tier	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Workforce															
Practicing NE Dentists Who Filed At Least One Medicaid Dental Claim*	NE MLTC (Annual)	3		1,089	1,076	1,056	1,060	1,073	1,113	1,023	998	926	924	884	844
Practicing Dentists Who Work Part-Time in NE As Primary Practice Location (<40 Hours)	HPTS (Annual)	3	532	545	560	553	540	551	555	542	516	504	480	471	453
Practicing Dentists Who Plan to Retire in One to Five Years		3							11.8%	11.5%	11.1%	10.7%	9.9%	10.1%	9.4%
Full-Time Equivalent (FTE) Licensed Practicing Dentists**		3	498	489	490	509	521	530	515	533	545	552	557	547	536
Full-Time Equivalent (FTE) Licensed Practicing Dental Hygienists		3	1,186	1,263	1,271	1,359	1,355	1,448	1,423	1,509	1,492	1,567	1,518	1,591	1,540
Practicing Dental Hygienists with Public Health Authorization	OOHD (Annual)	3	60	72	77	86	108	134	117	110	123	128	161	176	217


* The Medicaid dentist counts in this report have now been updated to align with corrections in the NE MLTC logic reporting.

** The number of full-time equivalent (FTE) licensed practicing dentists included dental residents until 2017, but the data from 2018 and onwards do not include dental residents.

Nebraska Oral Health Surveillance System

 No survey conducted this year

 Question was not asked

 Data not yet available

Description of Indicator	Source (Frequency of Data Availability)	Tier	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Community Water Fluoridation	NE WFRS														
Population Served by Community Water Fluoridation		1	71.8%	71.6%	71.5%	71.5%	71.5%	72.8%	73.4%	73.3%	72.6%	73.0%	72.7%	73.4%	74.2%
Infrastructure and Access															
Population Receiving Oral Health Services at Federally Qualified Health Centers	HCAN	2	30.3%	32.1%	28.7%	27.8%	27.2%	28.3%	28.9%	28.7%	25.6%	20.3%	22.5%	21.5%	21.6%
Federally Qualified Health Centers that have an oral health program		2	85.7%	85.7%	85.7%	85.7%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Local health departments that have an oral health program	OOHD	2		52.8%			36.8%	36.8%	63.2%	63.2%	73.7%	68.4%	68.4%	73.7%	78.9%
Health agencies that have a dental public health program directed by a dental professional with public health training	OOHD, ASTDD Annual Synopsis	2	2	1	1	1	0	1	2	2	2	2			
Number of Nebraskans visiting the hospital-based emergency departments for non-traumatic dental conditions	HDD (Includes ICD - 10-CM codes)	3	4,747	5,055	5,263	4,983	4,275	4,198	4,550	4,511	4,197	4,228	5,573	6,217	
Number of visits to the hospital-based emergency departments for non-traumatic dental conditions	HDD (Includes ICD - 10-CM codes)	3	8,420	8,205	8,687	8,751	8,213	7,290	7,934	7,671	7,152	7,305	9,999	11,029	

*For HDD, prior to 2016, ICD 9-CM codes were used and post 2016, ICD 10-CM codes were used. SAS codes were also modified based on the ICD codes to capture all the records of emergency department visits with non-traumatic dental conditions.

Nebraska Oral Health Surveillance Findings:

Results of Nebraska Oral Health Objectives (Tier 1) Compared to latest National Estimates:

- **OH-08:** In 2022, 66.2% of Nebraskans aged 18 years or older had an annual dental visit. This is close to the 2022 national average of 65.9%. Data source: CDC-BRFSS.
- **OH-09:** In 2023, 47.0% of Nebraska low-income children aged 1-18 received a preventive dental service through the Medicaid or CHIP Expansion program. This is slightly below the 2020 national average of 48.6% for children aged 1-20. Data source: Medicaid.Gov.
- **OH-05:** In 2022, 9.5% of Nebraska Adults aged ≥ 45 years had lost all-natural teeth due to tooth decay or gum disease. This is lower than the 2012 national rate of 13.4%. Data source: BRFSS
- **OH-01:** The prevalence of dental caries experience among Nebraska third grade children statewide has gone down from 63.9% in 2015-2016 to 58.1% in 2021-2022. It is marginally higher than the 2017-2020 national rate of 55.4%. Data source: NHANES. Notably, rates were greater for third grade children in NE rural areas (65.6%) than for those in urban areas (54.1%).
- **OH-01:** The dental caries experience rate among Nebraska children aged 3-5 years in Head Start was 48.6% in 2021-2022 compared to 46.2% in 2015-16. This is greater than the national rate of 28% from 2013 to 2016. Data source: NHANES. Results may partially be because of COVID effects.
- **OH-02:** In 2021-2022, 24.3% of Nebraska statewide 3rd grade children had untreated dental caries, as determined by the Basic Screening Survey of Young Children, (age 6-9). This is lower than the 32% reported in 2015-2016 but higher than the 2017-2020 national rate of 18.0%. Data source: NHANES. NE rural and urban children had similar rates (24.6% to 24.1%).
- **OH-02:** In 2021-2022, prevalence of untreated dental caries among the Nebraska children aged 3-5 years in Head Start was 27% compared to the national rate of 19% in 2011-2016. Data source: NHANES.
- **OH-10:** In 2021-2022, 50.8% of Nebraska statewide 3rd grade children had dental sealants on permanent molars, as determined by the Basic Screening Survey of Young Children (ages 6-9). This is higher than the 2017-2020 national average of 32.2%. Data source: NHANES. NE rural children have higher rates than urban children (54.6% to 42.9%).
- **OH-09:** In 2021-2022, about 4.3% of Nebraska third grade children need urgent dental care which has increased from 2.8% in 2015-2016. There is no national estimate available for comparison.
- **OH-11:** In 2023, 74.2% of NE population was served by community water systems with optimally fluoridated drinking water. This is slightly above the 2020 national average of 72.7%. Data source: WFRS.

Significant Trends of Other NE-OHSS Indicators:

- The teeth cleaning percentage among women prior their pregnancy has decreased in recent years. In 2021 46.5% of women had their teeth cleaned compared to 62.2% in 2012.
- The percent of adults 65+ with six or more teeth lost has decreased from 47.2% in 2012 to 38.7% in 2022.
- The percent of youth, who have ever smoked has decreased from 35% in 2013 to 18% in 2022.
- The percent of youth, who have used chewing tobacco, snuff or dip has decreased form 15% in 2013 to 5.4% in 2022. This reduction may be partially explained by a recent increase in the use of electronic cigarettes and vaping.
- Reported oral cancer is rising, possibly due to a larger older adult population and increased cancer screenings by dentists.
- Dental Sealant use among Medicaid/CHIP children aged 6-9 slightly increased from 15.3% in 2020 to 16.9% in 2023. It also grew marginally in children aged 10 to 14, from 12.3% in 2020 to 13.3% in 2023 as most health-care systems recovered from the effects of COVID on dental access.
- The number of practicing dentists who accepted Medicaid patients has dropped from #1,089 in 2012 to #844 in 2023. This number needs to increase if Nebraska hopes to improve access to care for underserved low-income populations.

- The number of FTE licensed NE dentists has slowly increased from #498 in 2011 to #536 in 2023. The number of FTE NE dental hygienists has increased from #1,186 in 2011 to #1,540 in 2023.
- The number of Dental Hygienists with a Public Health Authorization has increased from #60 in 2011 to #217 in 2023.
- Percent of NE LHDs with oral health programs increased from 52.8% in 2012 to 78.9% (15/19) in 2023.
- The number of non-traumatic dental visits to Hospital Emergency Rooms increased from #8,420 in 2011 to #11,029 in 2022.

Recommendations for Improved Oral Health Outcomes:

Head Start children have decay experience and untreated decay rates above the national average. Topical fluoride applications should be provided twice a year at more children's centers in the future. Additionally, increasing education to parents with newborns about proper daily oral hygiene habits should continue. The OOHD's "Nebraska Early Dental Health Starter Kit" program distributes about #25,000 kits throughout the state each year. There is also a Starter Kit educational video shown to mothers at birthing hospitals by the Nebraska Hospital Association. With more effort in these areas, the dental disease rates for this age group should improve in the future.

Older adults are a growing population group that is underserved and has little access to direct care services. Nebraska adults aged 65+ have less tooth loss than the national average but overarching policy changes and the dental profession must find new innovative ways to make the geriatric delivery system more effective to order to see improvements in decay experience and untreated decay rates. The OOHD will conduct a new five-year basic screening survey of older adults in 2025-2026 to monitor this situation.

Less than half of the children annually eligible for Medicaid dental disease prevention services receive them. The number of Dentists who accept Medicaid patients has been greatly reduced over the past decade. The BRFSS survey reports that 66% of Nebraskans aged 18+ visit their dentist each year, but CDC reports the national average is only 45%. Finally, the number of dental patient visits to Hospital Emergency Departments continues to be very high. Endeavors must be made to ensure that people of all ages and backgrounds properly utilize the existing dental health care system to gain benefits that improve overall health outcomes.