Washington's Rural Oral Health Workforce

August 2025

BACKGROUND

In Washington state, approximately 20% of the population (1.7 million people) lives in a rural county.

Access to oral health care in rural areas, however, is limited. Workforce and financial barriers, as well as disparities in oral health care access persist by rural and non-rural county.

A lower proportion of people in rural Washington counties reported having visited the dentist in the past year (Figure 1), and 17% fewer adults in rural areas had dental insurance to pay for oral health services, compared to adults in non-rural areas (Figure 2). The differences statewide were statistically significant (p<0.05). The Washington Oral Health Workforce Tracking Program (WOHW) previously published a brief that highlighted these and other access-related findings: <u>Dentist Distribution and Population Need</u>.





Fig 1 & 2 Source: Washington State Behavioral Risk Factor Surveillance System, 2022.

ORAL HEALTH WORKFORCE DEMAND IN WASHINGTON

As in previous years, respondents from dental offices and clinics to the Spring 2025 <u>Health</u> <u>Workforce Sentinel Network</u> reported exceptionally long vacancies for dental hygienists and dental assistants, as well as turnover and retention issues.

<u>Findings from Spring 2025</u> highlight the need for more dental hygienists, with many respondents from dental clinics and offices saying that there are not enough people graduating from dental hygiene programs to meet demand. For dental assistants, respondents cited wage competition and cost of living, transportation, and housing as reasons for retention and turnover issues. More details from respondents prior to 2025 may be found on the Sentinel Network dashboard at <u>wa.sentinelnetwork.org</u>.

Dental occupations employed at Federally Qualified Health Centers (FQHCs) and community health clinics (CHCs), primary care clinics, and public health organizations were also reported as having exceptionally long vacancies and turnover issues.





THE RURAL DISTRIBUTION OF WASHINGTON'S ORAL HEALTH WORKFORCE

Figures 3-5 show the count per county of credentialed dentists, dental hygienists, and dental assistants in Washington, based on license mailing address.

Figure 3. Distribution of Licensed Dentists in Washington by Credential Mailing Address and County Rural Classification, 2024



Figure 4. Distribution of Licensed Dental Hygienists in Washington by Credential Mailing Address and County Rural Classification. 2024



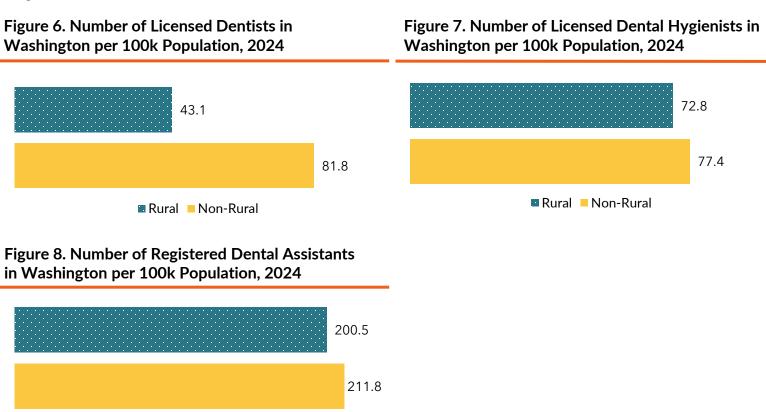
Figure 5. Distribution of Registered Dental Assistants in Washington by Credential Mailing Address and County Rural Classification, 2024



Figures 3-5 Source: Washington State Department of Health's health professional license records as of December 2024. Mailing addresses used for county-level analyses may not reflect practice status or practice location.

Rural Non-Rural

The number of dentists per 100,000 population was almost 2 times more in non-rural counties compared to rural counties (Figure 6). The gap between dentists per 100,000 population in rural and non-rural counties is large, about 40 dentists per 100,000 population. Dental hygienists and dental assistants are more evenly spread between rural and non-rural counties with a difference of about 5 dental hygienists per 100,000 population and 12 dental assistants per 100,000 population (Figures 7-8).



Figures 6-8 Source: Washington State Department of Health's health professional license records as of December 2024. Mailing addresses used for county-level analyses may not reflect practice status or practice location.

Rural counties with the highest number of dentists per 100,000 population were San Juan, Walla Walla, and Chelan counties, and counties with the lowest were Skamania, Ferry, and Garfield, with the average being 43 dentists per 100,000 population (Table 1).

The rural counties with the highest number of dental hygienists were Douglas, Chelan, and Lincoln, and the lowest ranking counties were Skamania, Ferry, and Columbia, with the average being 73 dental hygienists per 100,000 population.

The rural counties with the highest number of dental assistants were Skagit, Franklin, and Douglas, and the lowest ranking rural counties were Asotin, Skamania, and Garfield, with the average being 201 dental assistants per 100,000 population in rural counties.

In non-rural counties, the counties with the highest number of dentists per 100,000 population were King, Benton, Whatcom and Thurston (tied for third) counties, with the average being 82 dentists per 100,000 population.

27

25

22

22

14

8

8

0

Whitman

Klickitat

Skamania

Columbia

Rural County Average

73

Pacific

Ferry

Wahkiakum

Pend Oreille

Grays Harbor 47

22

23

24

25

26

27

28

30

Lincoln

Mason

Pacific

Ferry

Garfield

43

Skamania

Columbia

Wahkiakum

Pend Oreille

47

44

43

43

38

33

14

Pend Oreille

Wahkiakum

Ferry

Whitman

San Juan

Klickitat

Skamania

201

Garfield

Asotin

Benton, Spokane, Snohomish and Clark (tied for third) had the highest number of dental hygienists per 100,000 population among non-rural counties, with the average being 77.

Snohomish, Pierce, and Clark had the highest number of dental assistants per 100,000 population with the average being 212.

Table 1. Counties Ranked by Most to Least Dentists, Dental Hygienists, and Dental Assistants per 100k

Population by Rural and Non-Rural, 2024													
	Rural Counties in Washington					Non-rural Counties in Washington							
Rank	Dentists		Dental Hygie	enists	Dental Assist	tants	Rank	Dentist	:S	Dental Hygie	enists	Dental Assis	tants
1	San Juan	81	Douglas	109	Skagit	275	1	King	111	Benton	101	Snohomish	292
2	Walla Walla	80	Chelan	102	Franklin	264	2	Benton	75	Spokane	98	Pierce	227
3	Chelan	75	Lincoln	97	Douglas	255	3	Whatcom	72	Snohomish	92	Clark	220
4	Clallam	62	Walla Walla	93	Cowlitz	247	4	Thurston	72	Clark	92	Kitsap	219
5	Yakima	50	Clallam	90	Yakima	233	5	Spokane	71	Whatcom	81	Spokane	206
6	Skagit	48	Garfield	86	Clallam	224	6	Snohomish	64	Thurston	78	Whatcom	204
7	Klickitat	47	Franklin	84	Lewis	214	7	Clark	63	Pierce	72	Thurston	192
8	Island	45	Skagit	83	Adams	214	8	Kitsap	62	Kitsap	70	Benton	190
9	Jefferson	45	Kittitas	82	Grant	212	9	Pierce	55	King	64	King	181
10	Douglas	44	Yakima	81	Chelan	191	Non-rural County Average						
11	Asotin	44	Cowlitz	79	Grays Harbor	187		82		77		212	
12	Okanogan	44	Jefferson	74	Stevens	183							
13	Kittitas	41	Lewis	68	Jefferson	178							
14	Adams	37	Island	67	Columbia	176							
15	Stevens	36	Adams	65	Okanogan	171							
16	Franklin	33	San Juan	65	Kittitas	165							
17	Whitman	33	Stevens	61	Mason	160							
18	Grays Harbor	32	Grant	58	Island	159							
19	Grant	32	Asotin	57	Walla Walla	153							
20	Cowlitz	32	Okanogan	53	Lincoln	133							
21	Lewis	31	Mason	47	Pacific	125							
							1						

Source: Washington State Department of Health's health professional license records as of December 2024. Mailing addresses used for county-level analyses may not reflect practice location.

116

110

95

86

81

81

57

41

EDUCATION AND TRAINING

Several education programs in Washington work to address the shortage of dental providers in rural areas of the state, including:

- The University of Washington School of Dentistry Regional Initiatives in Dental Education (<u>RIDE</u>) trains dental students to work in rural and underserved areas.
- The Yakima Valley Farm Workers Clinic offers a one-year <u>Northwest Dental</u> <u>Residency Program</u> serving rural communities in eastern Washington.
- The new Pacific Northwest University <u>School of Dental Medicine</u> in Yakima focuses on educating dentists to serve in rural and underserved communities. The first cohort of students enters summer 2025.

Figure 9 shows the locations of oral health education and training programs with reported completions (dental schools, dental hygiene programs, and dental assistant programs) across the state. While the highest concentrations of education programs are in non-rural counties, there are a few notable exceptions of programs located in rural counties:

- Franklin County has a dental hygiene program located at <u>Columbia Basin College</u>.*
- Yakima County has both a <u>dental hygiene</u> and <u>dental assisting</u> program at Yakima Valley College.
- Skagit County has a dental assisting program at <u>Skagit Valley College</u>. Skagit Valley College has a new <u>dental therapy program</u> that graduated their first class in Spring 2025.

Figure 9. Dental and Oral Health Education and Training Program Locations and Completions in Washington by County Rural Classification, 2023



Figure 9 Source: The U.S. Department of Education's national database, Integrated Postsecondary Education Data System (IPEDS) and the Washington Workforce Training and Education Coordinating Board from the Web-based Data and Reporting System (WBDRS). The map does not include the two dental assistant apprenticeship programs or the six CTE programs in the state.

Program Completions over Time

Dental assisting program completions have fluctuated over the past 10 years of available data (2013-2023), with completions from private career schools eclipsing that of technical and community colleges in 2019 (Figure 10). Total completions have declined from a high of 1,290 in 2014 to a low of 874 in 2023.

There are multiple routes to become a dental assistant in Washington State, including: programs at technical and community colleges, private programs, apprenticeship programs, and career/technical education (CTE) programs. Data were not readily available on completions or demographics of the the state or on those who enter oral health occupations through on-the-job training.

Figure 10. Dental Assisting Program Completions in Washington, 2001-2023

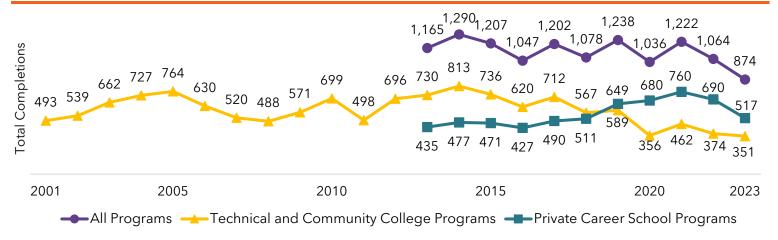


Figure 11. Dental Hygiene Program Completions in Washington, 2001-2023

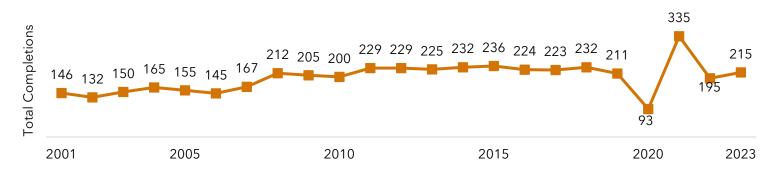
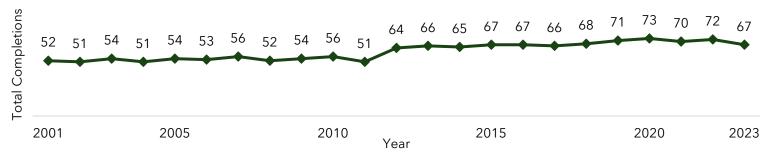


Figure 12. Dental Program Completions in Washington, 2001-2023



Figures 10-12 Source: The U.S. Department of Education's national database, Integrated Postsecondary Education Data System (IPEDS). IPEDS may not capture completions from programs that don't receive federal funding, or individuals who may have entered the profession through on-the-job training or apprenticeship arrangements. For dental assistants: completions from "Technical and Community College Programs" are from IPEDS. Completion and counts for "private career school programs" are from data compiled by the Washington Workforce Training and Education Coordinating Board from the Web-based Data and Reporting System (WBDRS), and only available for analysis beginning in 2013.

Yearly dental hygiene program completions increased from 146 in 2001 to 211 in 2019, fluctuated during the COVID-19 pandemic, and returned to pre-pandemic levels in 2023 (Figure 11).

Similarly, dental school program completions from the University of Washington have also been increasing over time from 51 completions in 2012 to 67 completions in 2023 (Figure 12). PNWU's dental school enrolled its first cohort in 2025.

WORKFORCE DEMOGRAPHICS

There is a higher percentage of dentists over age 65 in rural counties compared to non-rural Washington counties (17.8% to 11.1%, Figure 13). Rural counties tended to have smaller percentages of female dentists than non-rural counties (Table 2).

Dental hygienists tended to have slightly higher proportions of younger individuals in the profession in rural counties compared to non-rural counties (Figure 14). Dental hygienists were predominantly female in both rural (97.7%) and non-rural counties (95.5%, Table 2).

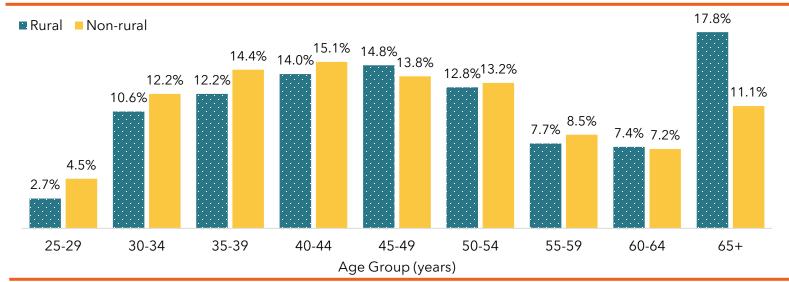
More than half of dental assistants in both rural and non-rural counties were age 34 or younger (Figure 15). Dental assistants were overwhelmingly female in both rural (96.3%) and non-rural counties (94.0%, Table 2).

Table 2. Percentage of Female Dentists, Dental Hygienists, and Dental Assistants in Washington by County Rural Classification, 2024

Occupation	% Female in Rural	% Female in Non-rural		
Dentists	23.0%	38.7%		
Dental Hygienists	97.7%	95.5%		
Dental Assistants	96.3%	94.0%		

Source: Washington State Department of Health's health professional license records as of December 2024. Mailing addresses used for county-level analyses may not reflect practice location. Calculations do not include missing, prefer not to answer or other: n=327 dentists; n=479 dental hygienists; n=5,124 dental assistants.

Figure 13. Percent of Dentists in Each Age Group by County Rural Classification, 2024



Source: Washington State Department of Health's health professional license records as of December 2024. Mailing addresses used for county-level analyses may not reflect practice status or practice location.

Figure 14. Percent of Dental Hygienists in Each Age Group by County Rural Classification, 2024

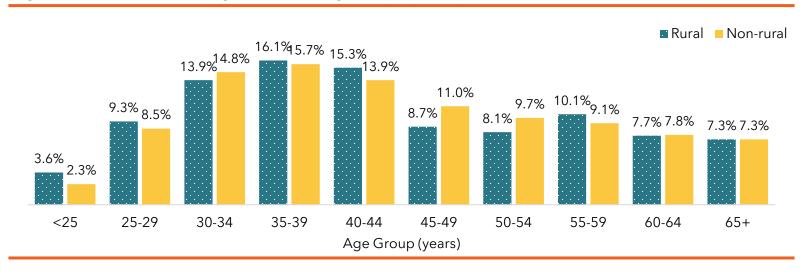
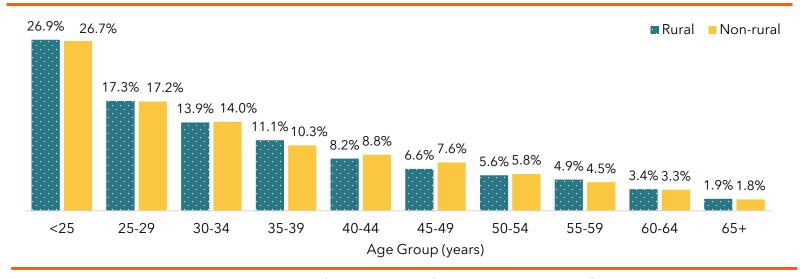


Figure 15. Percent of Dental Assistants in Each Age Group by County Rural Classification, 2024



Figures 14 & 15 Source: Washington State Department of Health's health professional license records as of December 2024. Mailing addresses used for county-level analyses may not reflect practice status or practice location.

CAREER PATHWAYS

Surveys of credentialed dental assistants and licensed dental hygienists conducted by WOHW in 2023 and 2024 asked about educational background, career paths, and future career plans. The following are recent findings about educational and career pathways for dental assistants and dental hygienists in Washington. Findings are presented overall and not presented by county rural classification.

For dental assistants, 35.3% attended a public community college or technical school dental assisting program longer than nine months, 21.4% received only on-the-job training, and 18.2% attended a private college or technical school program longer than nine months (Table 3).

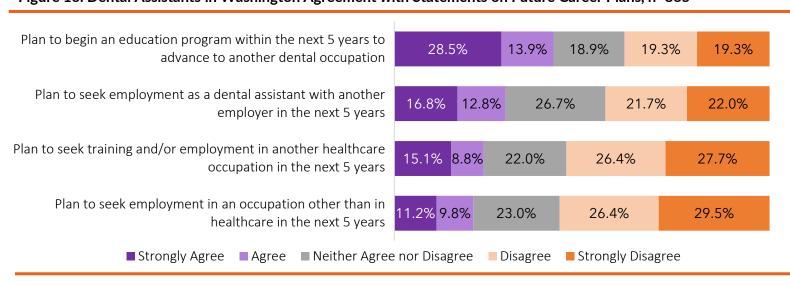
Table 3. Educational Background of Dental Assistant Survey Respondents Currently Working in Washington, n=865

Type of dental assisting education/training programs completed	Dental Assistants in WA
Public community college or technical school dental assisting program (9+ months)	35.3%
On the job - no additional training	21.4%
Private college or technical school dental assisting program (9+ months)	18.2%
Private training dental assisting program (12 weeks or fewer)	14.2%
High school occupational skills center program	3.7%
Paid apprenticeship program	2.7%
Online dental assistant education program	1.5%
Dentist training, including outside the US	1.1%
Military training or experience	0.5%
Other	1.5%

Source: Pollack SW, Guenther GA, Stubbs BA, Patterson DG, Frogner BK, Skillman SM. Characteristics of the Current Dental Assistant and Expanded Function Dental Auxiliary Workforces in Washington State. Center for Health Workforce Studies, University of Washington, May 2024. https://familymedicine.uw.edu/chws/wp-content/uploads/sites/5/2024/05/CHWS-FR-WOHW-2024-FINAL.pdf

Among dental assistant respondents, 42.4% indicated that they planned to begin an education program within the next 5 years to advance in the dental field; 23.9% of respondents indicated that they planned to seek other healthcare-related education; and 21.0% intended to exit the dental field (Figure 16).

Figure 16. Dental Assistants in Washington Agreement with Statements on Future Career Plans, n=865



Missing data: 16.0-19.5% of respondents were missing responses to these questions. 'Don't Know' and 'Not Applicable' responses are not included in percent calculations.

Source: Pollack SW, Guenther GA, Stubbs BA, Patterson DG, Frogner BK, Skillman SM. Characteristics of the Current Dental Assistant and Expanded Function Dental Auxiliary Workforces in Washington State. Center for Health Workforce Studies, University of Washington, May 2024. https://familymedicine.uw.edu/chws/wp-content/uploads/sites/5/2024/05/CHWS-FR-WOHW-2024-FINAL.pdf

Of licensed dental hygienists that responded to our 2024 survey, about half had an associate degree (49.9%) and slightly less had a bachelor's degree (45.4%) in dental hygiene (Table 4).

Table 4. Educational Background of Dental Hygienists Survey Respondents Currently Working in Washington, n=839

Type of dental hygiene educational/training programs completed	Dental Hygienists in WA
Associate degree	49.9%
Bachelor's degree	45.4%
Post-baccalaureate/graduate (master's or doctoral) degree	3.5%
Other	0.5%

Note: Other includes dental assisting programs of unspecified training types, and additional programs of unspecified degree types. Source: Guenther GA, Pollack SW, Stubbs BA, Frogner BK, Skillman SM. Characteristics of the Current Dental Hygienist Workforce in Washington State. Center for Health Workforce Studies, University of Washington, August 2024. https://familymedicine.uw.edu/chws/wp-content/uploads/sites/5/2024/08/CHWS-FR-WOHW-2024-DH.pdf

Prior to becoming a dental hygienist, half of survey respondents reported working in another dental position; 42.1% of survey respondents indicated that they had previously worked as a dental assistant (Table 5).

Table 5. Work History of Dental Hygienist (DH) Survey Respondents Currently Working in Washington (WA), n=839

Previous dental position held among dental hygienists prior to becoming a dental hygienist	Dental Hygienists in WA
Dental assistant	42.1%
Expanded function dental auxiliary	2.6%
Administration (e.g., front office, billing)	12.9%
Sterilization	3.8%
Dental lab technician	0.4%
Other	1.4%
No prior dental position held	49.4%

Note: Participants could select more than one option. Missing data: n=26.

Source: Guenther GA, Pollack SW, Stubbs BA, Frogner BK, Skillman SM. Characteristics of the Current Dental Hygienist Workforce in Washington State. Center for Health Workforce Studies, University of Washington, August 2024.

https://familymedicine.uw.edu/chws/wp-content/uploads/sites/5/2024/08/CHWS-FR-WOHW-2024-DH.pdf

METHODS & DATA SOURCES

Much of the data included in this brief is drawn from existing analyses conducted by the <u>Washington Oral Health Workforce (WOHW) Tracking Program</u> of the <u>Center for Health Workforce Studies at the University of Washington</u>. To learn more about the demographics and distribution of oral health workforce professionals, education and training pathways, employer demand, among other topics visit: https://familymedicine.uw.edu/chws/resources/wohw/.

Specific data sources in this brief include:

- **Demand**: Once a year, oral health providers in Washington share information about their workforce needs with <u>Washington's Health Workforce Sentinel Network</u>. Educators and policy makers can use this information to understand challenges related to recruitment, retention, and the employee skills that are in highest demand. The Sentinel Network links the healthcare sector with policymakers, workforce planners and educators to identify and respond to changing demand for healthcare workers, with a focus on identifying newly emerging skills and roles required by employers. The Sentinel Network is an initiative of Washington's Health Workforce Council, conducted collaboratively by Washington's Workforce Board and the University of Washington's Center for Health Workforce Studies. Funding to initiate the Sentinel Network came from the Healthier Washington initiative, with ongoing support from the Washington State Legislature.
- **Population need:** The Washington State Department of Health partners with the Center for Disease Control and Prevention (CDC) to conduct the Washington State Behavioral Risk Factor Surveillance System (BRFSS) survey yearly for adults aged 18 years or older. BRFSS data are collected via a voluntary telephone survey and participation may not be representative of the entire population. BRFSS data does not indicate why people have not visited the dentist in the past or why they lack dental insurance. We also cannot determine if individuals are going to the dentist in the same county as where they live. Limitations of the data can be found here: https://doh.wa.gov/data-and-statistical-reports/data-systems/behavioral-riskfactor-surveillance-system-brfss/brfss-collecting-data
- **Supply**: Using mailing addresses provided in Washington State Department of Health licensure data, we analyzed dentist, dental hygienist, and dental assistant licenses from 2024. As this data is based on address provided in the dentist license, there is no indication of whether the dentist is actively practicing or practicing in the ZIP code/county of the license address.
- State definition of rural county: The Washington State Office of Financial Management (OFM), citing RCW 82.14.370, defines a rural county based on population density. In this legislation, "rural county" was defined as "... a county with a population density less than 100 persons per square mile" or "...smaller than 225 square miles." For the analyses presented here, we defined rurality dichotomously as rural or non-rural at the county level based on the OFM definition.

The Washington Oral Health Workforce (WOHW) Tracking Program, is supported by Delta Dental of Washington and the Washington State Legislature. WOHW provides critical data to improve workforce development in oral health and guide practice and policy to help ensure the state's population has access to needed oral health care. More information can be found at: https://familymedicine.uw.edu/chws/resources/wohw/.

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