



2022

INDIANA ORAL HEALTH WORKFORCE DATA REPORT



SCHOOL OF MEDICINE

BOWEN CENTER FOR HEALTH
WORKFORCE RESEARCH & POLICY

ACKNOWLEDGEMENTS

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TABLE OF CONTENTS

| | |
|---|-----------|
| EXECUTIVE SUMMARY | 6 |
| INTRODUCTION | 7 |
| BACKGROUND | 7 |
| METHODOLOGY | 7 |
| DATA COLLECTION..... | 7 |
| DATA MANAGEMENT PROCEDURES..... | 7 |
| Table 1. FTE conversion based for reported hours in direct patient care..... | 8 |
| LIMITATIONS..... | 8 |
| REPORT STRUCTURE..... | 8 |
| SECTION I: TOTAL LICENSES | 9 |
| 1.A. DENTISTS..... | 9 |
| TOTAL RENEWALS..... | 9 |
| EMPLOYMENT STATUS AND PRACTICE LOCATION..... | 9 |
| TOTAL RENEWALS..... | 10 |
| EMPLOYMENT STATUS AND PRACTICE LOCATION..... | 10 |
| SECTION II: DENTISTS ACTIVELY PRACTICING IN INDIANA..... | 11 |
| REPORTING SAMPLE | 11 |
| Figure 2.1 2022 Dentist reporting sample selection criteria | 11 |
| Table 2.1: Dentist Demographic Characteristics | 12 |
| EDUCATION | 13 |
| Table 2.2 Dentist Educational Characteristics..... | 13 |
| PRACTICE CHARACTERISTICS | 14 |
| PRACTICE SETTING AND HOURS IN PATIENT CARE | 14 |
| Table 2.3: Dental Practice Settings and Locations..... | 14 |
| PATIENT PANEL..... | 15 |
| Table 2.4 Indiana Dentist Patient Panel..... | 15 |
| EMPLOYMENT PLANS..... | 15 |
| Table 2.5 Dentists' Reported Employment Plans..... | 15 |
| SPECIALTY AND SERVICES | 16 |
| DENTAL PRACTICE TYPE AND ROLE | 16 |
| Table 2.6 Dentists' Reported Primary Role..... | 16 |
| TELEDENTISTRY | 16 |
| Table 2.7 Reported dental practice type | 16 |

| | |
|---|-----------|
| DENTAL SERVICES PROVIDED | 17 |
| Table 2.8 Services provided by dentists based on their dental practice type | 17 |
| SCREENING SERVICES PROVIDED | 18 |
| Table 2.9 Screening Services provided by dentists based on their dental practice type | 18 |
| PEDIATRIC POPULATIONS SERVED | 19 |
| Table 2.10 Pediatrics populations served by Indiana dentists. | 19 |
| ADULT AND SPECIAL POPULATIONS SERVED | 20 |
| Table 2.11 Adult and Special population served by Indiana dentists..... | 20 |
| Figure 2.3 Geographic distribution of Indiana dentists' county-level workforce capacity..... | 20 |
| SECTION III: DENTAL HYGIENISTS..... | 21 |
| REPORTING SAMPLE | 21 |
| Figure 3.1: 2022 Dental hygienist reporting sample selection criteria | 21 |
| DEMOGRAPHICS | 22 |
| Table 3.1: Dental Hygienist Demographic Characteristics | 22 |
| EDUCATION | 23 |
| Table 3.2: Dental Hygienist Education Characteristics | 23 |
| Table 3.3: Dental Hygienist Highest Education..... | 23 |
| EMPLOYMENT CHARACTERISTICS..... | 23 |
| Table 3.4: Dental Hygienist Employment Characteristics..... | 24 |
| Table 3.5: Dental Hygienist Employment Plans..... | 24 |
| PRACTICE CHARACTERISTICS | 25 |
| PRACTICE SETTING | 25 |
| Table 3.6: Dental Hygienist Practice Setting | 25 |
| HOURS IN PATIENT CARE | 26 |
| Table 3.7: Dental Hygienist Practice Hours..... | 26 |
| PREVENTATIVE SERVICES PROVIDED BY DENTAL HYGIENISTS | 27 |
| Table 3.8: Dental Hygienist Services - Preventative | 27 |
| Table 3.9: Dental Hygienist Services - Screenings | 28 |
| Table 3.10: Pediatric Populations Served, Dental Hygienists..... | 29 |
| ADULT AND SPECIAL POPULATIONS SERVED BY HYGIENISTS..... | 29 |
| Table 3.11: Adult and Special Populations Served, Dental Hygienists..... | 30 |
| SECTION IV: GEOGRAPHIC DISTRIBUTION | 31 |
| DISTRIBUTION OF INDIANA DENTISTS..... | 31 |
| Figure 4.1 Geographic distribution of dentists' county-level capacity | 34 |
| Figure 4.2 Dentists geographic capacity and practice locations | 35 |

| | |
|---|----|
| DISTRIBUTION OF INDIANA DENTAL HYGIENISTS..... | 36 |
| Figure 4.3 Geographic distribution of dental hygienists' county-level capacity | 37 |

EXECUTIVE SUMMARY

Oral healthcare is a vital component of primary health care and is often a reflection of an individual's overall health.¹ The 2022 Indiana Oral Health Workforce Data Report provides an overview of the supply and characteristics of dentists and dental hygienists licensed in the State of Indiana. These professionals support Indiana residents and communities through the provision of dental services focused on maintaining, restoring, or promoting oral health. This report identified several notable findings regarding oral health professional's demographic, education, and practice characteristics.

Demographically, Indiana dentists are predominantly male (67%) with little racial and ethnic diversity (17.1% non-white: 3.3% Hispanic or Latino). However, female dentists are significantly more racially diverse (26.8% non-white) than their male counterparts (12.2% non-white), and substantially younger (average age of 43 versus 51.8 for male dentists). Dental hygienists are overwhelmingly female (98.9%) and reported even less racial and ethnic diversity than dentists (5.2% non-white).

Indiana trained dentists and dental hygienists working in dental offices are the foundation of Indiana's oral health care system. Indiana's strength in retaining trainees is demonstrated in the fact that the majority of dentists and dental hygienists reported completing their respective education in Indiana (69.3% and 83%, respectively). Dental office is the most frequently reported practice setting majority of dentists and dental hygienists (84.4% and 88.8%, respectively). Interestingly but not surprising, although the provision of telehealth services have expanded significantly within other health workforce groups (physicians and registered nurses) over the last several years, few dentists and dental hygienists reported tele-dentistry (7.6% and 0.3%, respectively).

Dentists and dental hygienists are not evenly distributed across the Hoosier state. Based on self-reported practice locations, there are two counties where no dentist reports practicing (Crawford and Warren County) and one county where neither a dentist or dental hygienist report practicing (Union). Additionally, there are several counties with less than 5 dentists or dental hygienists throughout the state. As is the case with all Indiana health professions, there is a geographic maldistribution of dentists and dental hygienists favoring urban counties and leave rural counties with shortages to serve the population.

The descriptive information on Indiana's oral health workforce presented in this report may be helpful to inform related policy and planning initiatives. Demographic information contained herein are relevant for activities related to workforce diversity. Practice characteristics, including geographic distribution of the workforce, are directly relevant to access related discussions. Comments and questions regarding this report may be directed to Bowenctr@iu.edu.

¹ Mayo Clinic (2021). Oral health: A window to your overall health. Accessed at <https://www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/dental/art-20047475#:~:text=Normally%20the%20body's%20natural%20defenses,tooth%20decay%20and%20gum%20disease>.

INTRODUCTION

BACKGROUND

Health workforce data, such as demographics, practice characteristics, education characteristics, and setting are critical to informing policy and supporting the identification of workforce shortages. Over the last several years, significant strides have been made to collect comprehensive, accurate and timely, health workforce data in Indiana which are maintained for longitudinal workforce tracking. These efforts have contributed to collaborative dialogue regarding health workforce policy and planning.

As a research entity, the Bowen Center for Health Workforce Research and Policy (Bowen Center) has been committed to and engaged in supporting the State of Indiana with developing sustainable data management processes and publishing timely workforce information.

METHODOLOGY

DATA COLLECTION

The supplemental survey questions administered to dentists and dental hygienists during the 2022 license renewal cycle can be found on IUPUI ScholarWorks at <https://hdl.handle.net/1805/26908>. Supplemental survey data collected during the renewal period and basic licensure data (name, license number, etc.) were extracted and exported into separate text files by the Indiana Professional Licensing Agency (PLA) after the close of the license renewal period.

DATA MANAGEMENT PROCEDURES

Supplemental survey data were cleaned and coded per processes outlined in the Bowen Center data management procedures document (available at: <http://hdl.handle.net/1805/16704>). After completing these procedures, the survey data file is merged to the licensure data file by unique license number to create a 2022 Dentist Workforce Master File and a 2022 Dental Hygienists Workforce Master File. These Master Files are then uploaded to the Indiana Health Professions Database. Verification and geocoding of license address and self-reported practice address(es) are provided by Melissa Data, Inc.

Additional variables are generated through data management processes. A full-time equivalency (FTE) is generated based on self-reported hours in direct patient care, as outlined in Table 1. FTE assignment strategy is implemented for all reported practice locations. Address cleaning and geocoding procedures also resulted in additional variables related to geographic location and rurality based on criteria outlined by the United States Department of Agriculture (more information can be found here: <https://www.ers.usda.gov/data-products/rural-urban-commuting-area-codes/documentation/>).

Table 1. FTE conversion based for reported hours in direct patient care

| Reported hours in patient care | Conversion |
|--|------------|
| 0 hours in patient care/Not applicable | 0.0 FTE |
| 1 - 4 hours in patient care | 0.1 FTE |
| 5 - 8 hours in patient care | 0.2 FTE |
| 9 - 12 hours in patient care | 0.3 FTE |
| 13 - 16 hours in patient care | 0.4 FTE |
| 17 - 20 hours in patient care | 0.5 FTE |
| 21 - 24 hours in patient care | 0.6 FTE |
| 25 - 28 hours in patient care | 0.7 FTE |
| 29 - 32 hours in patient care | 0.8 FTE |
| 33 - 36 hours in patient care | 0.9 FTE |
| 37 - 40 hours in patient care | 1.0 FTE |
| 41 or more hours in patient care | 1.0 FTE |

LIMITATIONS

There are some limitations to this report that should be noted. First, the information presented in this report is largely based on self-reported data which introduces the potential for some level of response bias. This bias, however, is likely diminished through the statutory requirement for dentists to provide specified information during online renewal, and their attestation that all information provided is accurate. Additionally, changes to the survey tools over the last several biennial renewal cycles limit longitudinal analysis. Care is being taken to minimize the future changes to supplemental survey questions in order to ensure confidence in future longitudinal analyses.

REPORT STRUCTURE

This report includes four sections of summary data:

Section I: Overall License Renewals

Section II: Total Dentists Actively Practicing

Section III: Total Dental Hygienists Actively Practicing

Section IV: Geographic Distribution of Oral Health Workforce

The 2022 Oral Health Workforce Data Report provides key information on Indiana's Dentists and Dental Hygienists. Additional data can be viewed or requested online at [Bowen Health Workforce – Information Portal \(bowenportal.org\)](https://bowenportal.org).

SECTION I: TOTAL LICENSES

1.A. DENTISTS

TOTAL RENEWALS

Of the 4,054 dentists who renewed their license in 2022, 3,627 (89.5%) renewed their license electronically and responded to the supplemental survey questions. However, an additional 5 licensees did not complete their online license renewal which resulted in 5 non-respondents. Overall, 4,027 (99.3%) of all renewals had an active license, 421 of which were offline renewals and did not respond to the supplemental survey questions at all. Table 1.1 provides an in-depth look at dentist license status for 2022.

Table 1.1 License status of dentists licensed in Indiana, based on renewal status

| | Survey Respondents (Online Renewals) | | Non-Respondent (Online Renewals) | | Offline Renewals | | Total | |
|---|---|------|-------------------------------------|-------|------------------|------|-------|------|
| | N | % | N | % | N | % | N | % |
| Total | 3,627 | | 5 | | 422 | | 4,054 | |
| License Status | | | | | | | | |
| Active | 3,606 | 99.4 | 0 | 0.0 | 421 | 99.8 | 4,027 | 99.3 |
| Valid to Practice While Reviewed | 7 | 0.2 | 0 | 0.0 | 0 | 0.0 | 7 | 0.2 |
| Probation | 7 | 0.2 | 0 | 0.0 | 1 | 0.2 | 8 | 0.2 |
| Other Statuses Not Valid for Active Practice* | 7 | 0.2 | 5 | 100.0 | 0 | 0.0 | 12 | 0.3 |

* This group includes those whose license status is currently inactive, retired, expired, suspended or non-renewable.

EMPLOYMENT STATUS AND PRACTICE LOCATION

Among the 3,627 dentists that renewed their license online, 3,403 (93.8%) reported actively working in a position that requires a dental license. An additional 141 (3.9%) dentists reported being retired and 44 (1.2%) dentists reported that they were unemployed and seeking work in the field of dentistry. Table 1.2 provides a closer look at Indiana dentists employment status as of 2022.

Table 1.2 Employment Status of dentists who renewed their license online

| Employment Status | N | % |
|---|--------------|--------------|
| Actively working in a position that requires a dental license | 3,403 | 93.8 |
| Actively working in a field other than dentistry | 9 | 0.2 |
| Unemployed and seeking work in the field of dentistry | 44 | 1.2 |
| Unemployed and not seeking work in the field of dentistry | 30 | 0.8 |
| Retired | 141 | 3.9 |
| Total | 3,627 | 100.0 |

Source: Indiana Dentist License and Supplemental Survey Data, 2022

1.B. DENTAL HYGIENISTS

TOTAL RENEWALS

Of the 5,019 dental hygienists who renewed their license in 2022, 4,784 (99.7%) renewed their license electronically and responded to the supplemental survey questions, while 7 did not complete their online license renewal and had no survey response. Of the dental hygienists with an active license status, 4,766 (99.6%) renewed their license online and 228 renewed their license offline. Table 1.3 provides more information on dental hygienist's license status for 2022.

Table 1.3 License status of dental hygienists licensed in Indiana, based on renewal status

| | Survey Respondents (Online Renewals) | | Non-Respondent (Online Renewals) | | Offline Renewals | | Total | |
|---|---|------|-------------------------------------|-------|------------------|-------|-------|------|
| | N | % | N | % | N | % | N | % |
| Total | 4,784 | | 7 | | 228 | | 5,019 | |
| License Status | | | | | | | | |
| Active | 4,766 | 99.6 | 0 | 0.0 | 228 | 100.0 | 4,994 | 99.5 |
| Valid to Practice While Reviewed | 4 | 0.1 | 0 | 0.0 | 0 | 0.0 | 4 | 0.1 |
| Probation | 3 | 0.1 | 0 | 0.0 | 0 | 0.0 | 3 | 0.1 |
| Other Statuses Not Valid for Active Practice* | 11 | 0.2 | 7 | 100.0 | 0 | 0.0 | 18 | 0.4 |

* This group includes those whose license status is currently inactive, retired, expired, suspended or non-renewable.

EMPLOYMENT STATUS AND PRACTICE LOCATION

Among the 4,784 dental hygienists that renewed their license online, 4,259 (89%) reported actively working in a position that requires a dental hygiene license. An additional 117 (2.4%) of dental hygienists reported being on leave of absence or sabbatical, and another 112 (2.3%) reported actively working in a field that does not require a dental hygiene license. Table 1.4 provides a closer look at Indiana dental hygienists employment status as of 2022.

Table 1.4 Employment Status of dental hygienists who renewed their license online

| Employment Status | N | % |
|---|--------------|--------------|
| Actively working in a position that requires a dental hygiene license | 4,259 | 89.0 |
| Actively working in a dental hygiene related field that does not require a dental hygiene license | 59 | 1.2 |
| Actively working in a field that does not require a dental hygiene license | 112 | 2.3 |
| Not currently working, disabled | 18 | 0.4 |
| Not currently working, seeking work in a position that requires a dental hygiene license | 81 | 1.7 |
| Not currently working, seeking work in a position that does not require a dental hygiene license | 40 | 0.8 |
| Student | 10 | 0.2 |
| Leave of absence or Sabbatical | 117 | 2.4 |
| Retired | 88 | 1.8 |
| Total | 4,784 | 100.0 |

Source: Indiana Dental Hygiene License and Supplemental Survey Data, 2022

SECTION II: DENTISTS ACTIVELY PRACTICING IN INDIANA

REPORTING SAMPLE

In an effort to produce a reporting sample of dentists which accurately represents Indiana's dentist workforce, the following methods were used to determine the sample selection criteria. The 2022 dentist report sample includes dentists who 1) had an active license status, 2) renewed their license online, 3) reported actively practicing in dentistry, and 4) reported providing teledentistry to Indiana residents or having a practice address in Indiana. Of the 4,054 dentists who renewed their Indiana license in 2022, 2,920 (72.0%) met all criteria for inclusion in the reporting sample (see Figure 2.1).

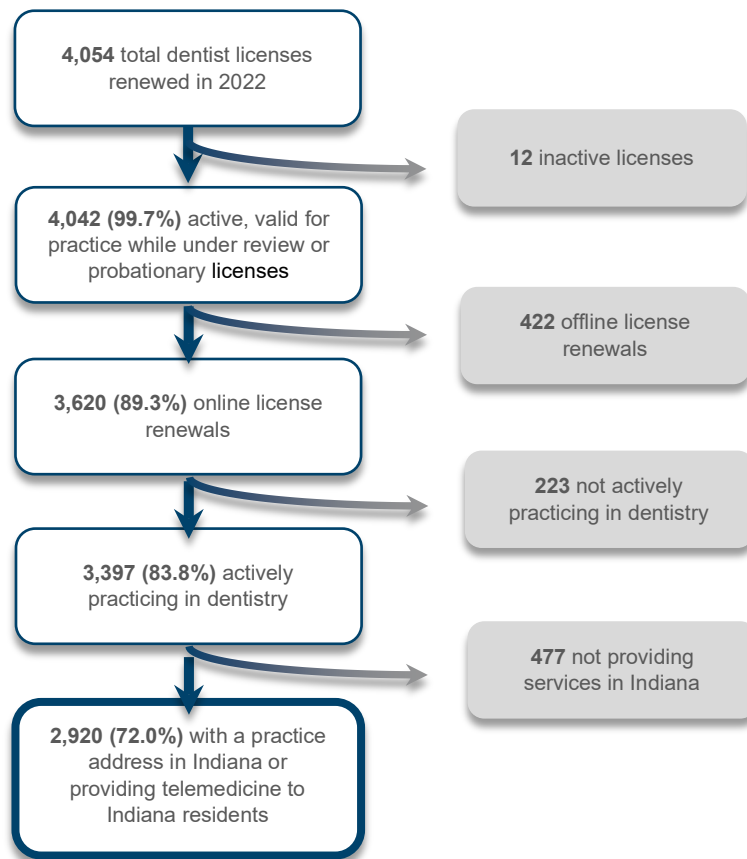


Figure 2.1 2022 Dentist reporting sample selection criteria

DEMOGRAPHICS

Table 2.1 displays the demographic characteristics of actively practicing dentists in Indiana. Dentists in Indiana were predominantly male (67%), White (82.9%), and non-Hispanic (3.3%), with an average age of 48.9. Female dentists were more racially diverse than their male counterparts, with 14.3% reporting Asian and 6.7% reporting Black or African American, as compared to male dentists with only 5.9% reporting Asian and 2.4% reporting Black or African American. Female dentists were comparatively younger, with an average age of 43 as compared to 51.8 for male dentists. Nearly two-thirds (62%) of female dentists are under the age of 44, whereas just over one-third (35.6%) of male dentists are under the age of 44.

Table 2.1: Dentist Demographic Characteristics

| | Female | | Male | | Total | |
|----------------------------------|--------|------|-------|------|-------|------|
| | N | % | N | % | N | % |
| Total | 970 | 33.2 | 1,950 | 67 | 2,920 | 100 |
| Mean Age | 43 | | 51.8 | | 48.9 | |
| Age Groups | | | | | | |
| Under 35 | 291 | 30.0 | 263 | 13.5 | 554 | 19.0 |
| 35-44 | 312 | 32.2 | 430 | 22.1 | 742 | 25.4 |
| 45-54 | 203 | 20.9 | 388 | 19.9 | 591 | 20.2 |
| 55-64 | 138 | 14.2 | 462 | 23.7 | 600 | 20.5 |
| 65 and Older | 25 | 2.6 | 398 | 20.4 | 423 | 14.5 |
| Non-Respondent | 1 | 0.1 | 9 | 0.5 | 10 | 0.3 |
| Ethnicity | | | | | | |
| Hispanic or Latino | 46 | 4.7 | 51 | 2.6 | 97 | 3.3 |
| Not Hispanic or Latino | 924 | 95.3 | 1899 | 97.4 | 2823 | 96.7 |
| Race | | | | | | |
| White | 710 | 73.2 | 1,712 | 87.8 | 2,422 | 82.9 |
| Asian | 139 | 14.3 | 115 | 5.9 | 254 | 8.7 |
| Black or African American | 65 | 6.7 | 47 | 2.4 | 112 | 3.8 |
| Native Hawaiian/Pacific Islander | 2 | 0.2 | 3 | 0.2 | 5 | 0.2 |
| American Indian or Alaska Native | 1 | 0.1 | 0 | 0.0 | 1 | 0.0 |
| Other | 29 | 3.0 | 44 | 2.3 | 73 | 2.5 |
| Two or more races | 24 | 2.5 | 29 | 1.5 | 53 | 1.8 |

Source: Indiana Dentist License and Supplemental Survey Data, 2022

Note: Age was calculated as the difference between the respondent's date of birth and the date of survey completion.

EDUCATION

Table 2.2 summarizes dentists' educational characteristics. The majority of dentists (69.3%) reported completing their education in Indiana while 17.9% reported completing their education in a contiguous state. Kentucky was the most commonly reported contiguous state where dentists reported completing their dental education (8.4%). An additional 12.3% reported completing their education in a non-contiguous state. With regards to completing a residency, most dentists reported that they did not complete a residency (68.4%). Of those that did complete a residency, general practice was most often reported (7.1%) followed by orthodontics and dentofacial orthopedics (5.3%).

Table 2.2 Dentist Educational Characteristics

| | N | % |
|---|-------|------|
| Total | 2,920 | |
| State Where Dental Degree was Completed | | |
| Indiana | 2,023 | 69.3 |
| Michigan | 55 | 1.9 |
| Illinois | 176 | 6.0 |
| Kentucky | 245 | 8.4 |
| Ohio | 47 | 1.6 |
| Another State (not listed) | 359 | 12.3 |
| Another Country (not U.S.) | 15 | 0.5 |
| Residency Completed | | |
| Dental School – No residency completed | 1,998 | 68.4 |
| Residency - Advanced Education in General Dentistry Programs (AEGD) | 77 | 2.6 |
| Residency – Advanced General Dentistry Education in Dental Anesthesiology | 6 | 0.2 |
| Residency – Advanced General Dentistry Education in Oral Medicine | 1 | 0.0 |
| Residency – Advanced General Dentistry Education in Orofacial Pain | 2 | 0.1 |
| Residency – Dental Public Health | 3 | 0.1 |
| Residency – Endodontics | 74 | 2.5 |
| Residency – General Practice Residency | 207 | 7.1 |
| Residency – Oral and Maxillofacial Pathology | 4 | 0.1 |
| Residency – Oral and Maxillofacial Radiology | 2 | 0.1 |
| Residency – Oral and Maxillofacial Surgery | 122 | 4.2 |
| Residency – Orthodontics and Dentofacial Orthopedics | 154 | 5.3 |
| Residency – Other | 16 | 0.5 |
| Residency – Pediatric Dentistry | 139 | 4.8 |
| Residency - Periodontics | 72 | 2.5 |
| Residency – Prosthodontics | 43 | 1.5 |

Source: Indiana Dentist License and Supplemental Survey Data, 2022

PRACTICE CHARACTERISTICS

PRACTICE SETTING AND HOURS IN PATIENT CARE

Dentists' reported practice characteristics can be found in Table 2.3. For both primary and secondary practice, the three most common practice settings were an Office or Clinic, with the most common being a Solo Practice for both primary (50.1%) and secondary practice (32.3%), followed by Partnership (21.6% Primary Practice, 30.6% Secondary Practice), and Group Practice (12.7% Primary Practice, 19% Secondary Practice). Additionally, 25.5% of dentists reported spending a total of 33-36 hours in patient care weekly at their primary practice. Of the dentists that reported a secondary practice, 27% spent about 5-8 hours per week in patient care.

Table 2.3: Dental Practice Settings and Locations

| Practice Setting Type | Primary Practice | | Secondary Practice | |
|---|------------------|------------|--------------------|------------|
| | N | % | N | % |
| Office/Clinic – Solo Practice | 1,452 | 50.1 | 195 | 32.3 |
| Office/Clinic – Partnership | 626 | 21.6 | 185 | 30.6 |
| Office/Clinic – Group Practice | 369 | 12.7 | 115 | 19.0 |
| Dental Service Organization (DSO)* | 265 | 9.1 | 49 | 8.1 |
| Hospital/Clinic | 48 | 1.7 | 8 | 1.3 |
| Health Center (CHC/FQHC/FQHC look-alike) | 45 | 1.6 | 11 | 1.8 |
| Other Setting | 24 | 0.8 | 19 | 3.1 |
| School Health Service | 21 | 0.7 | 4 | 0.7 |
| Correctional Facility | 14 | 0.5 | 3 | 0.5 |
| Federal Government Hospital/Clinic (includes military) | 14 | 0.5 | 6 | 1.0 |
| Other Public Health/Community Health Setting | 5 | 0.2 | 1 | 0.2 |
| Mobile Unit Dentistry | 6 | 0.2 | 5 | 0.8 |
| Long-term Care/Nursing Home/Extended Care Facility (non-hospital) | 4 | 0.1 | 2 | 0.3 |
| Local Health Department | 4 | 0.1 | 0 | 0.0 |
| Teledentistry | 2 | 0.1 | 0 | 0.0 |
| Indian Health Service | 1 | 0.0 | 0 | 0.0 |
| Staffing Organization | 1 | 0.0 | 1 | 0.2 |
| Headstart (including early Headstart) | 0 | 0.0 | 0 | 0.0 |
| Home Health Setting | 0 | 0.0 | 0 | 0.0 |
| Total | 2,901 | 100 | 604 | 100 |
| Hours per Week in Patient care | | | | |
| 0 hours per week | 11 | 0.4 | 53 | 9.1 |
| 1 - 4 hours per week | 34 | 1.2 | 68 | 11.7 |
| 5 - 8 hours per week | 74 | 2.6 | 157 | 27.0 |
| 9 - 12 hours per week | 69 | 2.4 | 77 | 13.2 |
| 13 - 16 hours per week | 124 | 4.3 | 97 | 16.7 |
| 17 - 20 hours per week | 160 | 5.6 | 70 | 12.0 |
| 21 - 24 hours per week | 222 | 7.7 | 23 | 4.0 |
| 25 - 28 hours per week | 264 | 9.2 | 5 | 0.9 |
| 29 - 32 hours per week | 702 | 24.4 | 12 | 2.1 |
| 33 - 36 hours per week | 734 | 25.5 | 6 | 1.0 |
| 37 - 40 hours per week | 395 | 13.7 | 9 | 1.5 |
| 41 or more hours per week | 86 | 3.0 | 5 | 0.9 |
| Total | 2,875 | 100 | 582 | 100 |

Source: Indiana Dentist License and Supplemental Survey Data, 2021

Note: Respondents who reported not applicable are not included in the table for reporting. *Dental Service Organization (DSO) was a new practice setting addition in the 2022 supplemental license renewal survey.

PATIENT PANEL

Table 2.4 provides a summary of patient panel characteristics. Regarding primary practice, 40.8% of Indiana dentists reported accepting patients covered by Medicaid while only 8.2% reported the same for their secondary practice. Additionally, 7.6% of Indiana dentists offer a sliding fee scale in their primary practice. Comparatively, 1.3% of Indiana dentists reported offering a sliding fee scale at their secondary practice.

Table 2.4 Indiana Dentist Patient Panel

| | Primary Practice | | Secondary Practice | |
|---|------------------|------|--------------------|------|
| | N | % | N | % |
| Total | 2,920 | | | |
| Percent of Patient Covered by Indiana Medicaid | | | | |
| Not Accepting Indiana Medicaid | 1,435 | 49.1 | 302 | 10.3 |
| Accepting Indiana Medicaid but no Medicaid patients at practice | 15 | 0.5 | 7 | 0.2 |
| >0% - 5% | 196 | 6.7 | 28 | 1.0 |
| 6% - 10% | 157 | 5.4 | 20 | 0.7 |
| 11% - 20% | 168 | 5.8 | 31 | 1.1 |
| 21% - 30% | 191 | 6.5 | 32 | 1.1 |
| 31% - 50% | 223 | 7.6 | 55 | 1.9 |
| Greater than 50% | 241 | 8.3 | 66 | 2.3 |
| Not Applicable | 294 | 10.1 | 2,379 | 81.5 |
| Percent of Patients on a Sliding Fee Scale | | | | |
| Not offering a sliding fee scale | 1,601 | 54.8 | 42 | 1.4 |
| Offering a sliding fee scale but no patient on payment schedule | 8 | 0.3 | 3 | 0.1 |
| >0% - 5% | 60 | 2.1 | 10 | 0.3 |
| 6% - 10% | 21 | 0.7 | 5 | 0.2 |
| 11% - 20% | 19 | 0.7 | 5 | 0.2 |
| 21% - 30% | 32 | 1.1 | 6 | 0.2 |
| 31% - 50% | 39 | 1.3 | 6 | 0.2 |
| Greater than 50% | 40 | 1.4 | 2 | 0.1 |
| Not Applicable | 1,100 | 37.7 | 2,525 | 86.5 |

Source: Indiana Dentist License and Supplemental Survey Data, 2022

Note: Accepting Medicaid and/or sliding fee scale may not be applicable to all dentists based on their practice setting.

EMPLOYMENT PLANS

Dentist employment plans for the next two years is depicted in Table 2.5. More than 80% of dentists reported plans to continue as they are in their current position. While 5.7% of dentists plan to increase hours and 5% plan to decrease hours. As for dentists with plans to retire, 3.9% reported projected retirement in the next two years.

Table 2.5 Dentists' Reported Employment Plans

| | N | % |
|-----------------------|--------------|------------|
| Continue as you are | 2,348 | 80.4 |
| Increase hours | 166 | 5.7 |
| Decrease hours | 145 | 5.0 |
| Seek non-clinical job | 8 | 0.3 |
| Retire | 114 | 3.9 |
| Unknown | 139 | 4.8 |
| Total | 2,920 | 100 |

Source: Indiana Dentist License and Supplemental Survey Data, 2021

SPECIALTY AND SERVICES

DENTAL PRACTICE TYPE AND ROLE

Table 2.6 provides an overview of dentists reported primary roles. Nearly all (96.6%) dentists reported their role as a “Practicing Dentist,” followed by 1.9% who reported “Dental Educator” and 0.5% who reported “Other – Dental Related” role.

Table 2.6 Dentists' Reported Primary Role

| Primary Role | N | % |
|--|--------------|------------|
| Practicing Dentist (General Dentist or Specialist) | 2,821 | 96.6 |
| Dental Educator (Academia) | 55 | 1.9 |
| Dental/Insurance Industry Consultant | 1 | 0.0 |
| Dental Researcher | 3 | 0.1 |
| Federal Services Professional | 9 | 0.3 |
| Other – Dental Related | 15 | 0.5 |
| Other – Non-Dental Related | 0 | 0.0 |
| Not Applicable | 16 | 0.5 |
| Total | 2,920 | 100 |

Source: Indiana Dentist License and Supplemental Survey Data, 2021

TELEDENTISTRY

Reported practice type and telehealth services are summarized in Table 2.7. The majority of dentists (77%) report their practice type as general dental practice followed by 5.2% who reported orthodontics and dentofacial orthopedics and 4.1% reported oral and maxillofacial radiology. Only 7.6% of dentists reported providing teledentistry services.

Table 2.7 Reported dental practice type

| Dental Practice Type | N | % |
|--|-------|------|
| General dental practice | 2,248 | 77.0 |
| Dental public health | 37 | 1.3 |
| Endodontics | 76 | 2.6 |
| Pediatric Dentistry | 145 | 0.9 |
| Periodontics | 69 | 5.0 |
| Prosthodontics | 36 | 2.4 |
| Orthodontics and dentofacial orthopedics | 152 | 5.2 |
| Oral and maxillofacial surgery | 121 | 0.1 |
| Oral and maxillofacial pathology | 4 | 0.1 |
| Oral and maxillofacial radiology | 2 | 4.1 |
| Other | 26 | 1.2 |
| Not Applicable | 4 | 0.1 |
| Teledentistry Services | | |
| Yes | 223 | 7.6 |
| No | 2,697 | 92.4 |

Source: Indiana Dentist License and Supplemental Survey Data, 2022

DENTAL SERVICES PROVIDED

Table 2.8 outlines services provided by dentists based on practice type. Overall, 2,249 dentists reported providing one of these services and many reported providing more than one service to patients. Of all the services included, dental sealants were the most common service reported (n=2,165), followed by tobacco cessation counseling (n=660). Very few dentists reported administration of immunizations (n=16).

Table 2.8 Services provided by dentists based on their dental practice type

| Dental Practice Type | Dental Sealants | | Tobacco Cessation Counseling | | Administration of Immunizations | | Active Practice Agreement with Dental Hygienist(s) | | Total Unique Dentists Providing Special Dental Services | |
|--|-----------------|--------------|------------------------------|--------------|---------------------------------|--------------|--|--------------|---|--------------|
| | N | % | N | % | N | % | N | % | N | % |
| General dental practice | 1962 | 90.6 | 590 | 89.4 | 13 | 81.3 | 87 | 89.7 | 2,007 | 89.2 |
| Dental public health | 33 | 1.5 | 16 | 2.4 | 1 | 6.3 | 3 | 3.1 | 33 | 1.5 |
| Endodontics | 0 | 0 | 1 | 0.2 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| Oral and maxillofacial surgery | 0 | 0 | 17 | 2.6 | 0 | 0.0 | 0 | 0.0 | 17 | 0.8 |
| Orthodontics and dentofacial orthopedics | 3 | 0.1 | 1 | 0.2 | 1 | 6.3 | 1 | 1.0 | 4 | 0.2 |
| Pediatric dentistry | 140 | 6.5 | 6 | 0.9 | 0 | 0.0 | 0 | 0.0 | 140 | 6.2 |
| Periodontics | 5 | 0.2 | 16 | 2.4 | 0 | 0.0 | 3 | 3.1 | 19 | 0.8 |
| Prosthodontics | 16 | 0.7 | 7 | 1.1 | 0 | 0.0 | 2 | 2.1 | 18 | 0.8 |
| Other | 6 | 0.3 | 5 | 0.8 | 0 | 0.0 | 0 | 0.0 | 8 | 0.4 |
| Not Applicable | 0 | 0 | 1 | 0.2 | 1 | 6.3 | 1 | 1.0 | 2 | 0.1 |
| Total | 2,165 | 100.0 | 660 | 100.0 | 16 | 100.0 | 97 | 100.0 | 2,249 | 100.0 |

Source: Indiana Dentist License and Supplemental Survey Data, 2021. Note: Dentist with a dental practice type who did not report providing any services were excluded from the table. This includes, Oral and maxillofacial radiology, Other - Non-Dental Related and Oral and maxillofacial pathology.

SCREENING SERVICES PROVIDED

Table 2.9 outlines screening services provided by dentists based on practice type. Overall, 2,437 dentists reported providing one or more of these services to patients. Nearly all dentists (83%) reported screening for oral cancer (n=2,404), followed by screening for hypertension (n=845) and screening for substance use disorder and addiction (n=227). Of those who reported screening for oral cancer, 85% reported general dental practice as their primary practice type.

Table 2.9 Screening Services provided by dentists based on their dental practice type

| Dental Practice Type | Diabetes Screening | | HIV Screening | | Hypertension Screening | | Oral Cancer Screening | | Substance Use Disorder/Addiction Screening | | Total Unique Dentists Providing Special Dental Services | |
|--|--------------------|--------------|---------------|--------------|------------------------|--------------|-----------------------|--------------|--|--------------|---|--------------|
| | N | % | N | % | N | % | N | % | N | % | N | % |
| General dental practice | 120 | 79.5 | 72 | 88.9 | 725 | 85.8 | 2,043 | 85 | 185 | 81.5 | 2,064 | 84.7 |
| Dental public health | 5 | 3.3 | 2 | 2.5 | 18 | 2.1 | 34 | 1.4 | 5 | 2.2 | 34 | 1.4 |
| Endodontics | 0 | 0 | 0 | 0 | 12 | 1.4 | 22 | 0.9 | 1 | 0.4 | 27 | 1.1 |
| Oral and maxillofacial pathology | 0 | 0 | 0 | 0 | 1 | 0.1 | 2 | 0.1 | 0 | 0 | 2 | 0.1 |
| Oral and maxillofacial surgery | 7 | 4.6 | 1 | 1.2 | 21 | 2.5 | 73 | 3 | 13 | 5.7 | 77 | 3.2 |
| Orthodontics and dentofacial orthopedics | 1 | 0.7 | 2 | 2.5 | 3 | 0.4 | 38 | 1.6 | 1 | 0.4 | 40 | 1.6 |
| Pediatric dentistry | 0 | 0 | 0 | 0 | 3 | 0.4 | 85 | 3.5 | 11 | 4.8 | 86 | 3.5 |
| Periodontics | 8 | 5.3 | 2 | 2.5 | 35 | 4.1 | 56 | 2.3 | 6 | 2.6 | 56 | 2.3 |
| Prosthodontics | 5 | 3.3 | 2 | 2.5 | 17 | 2 | 33 | 1.4 | 1 | 0.4 | 33 | 1.4 |
| Other | 4 | 2.6 | 0 | 0 | 8 | 0.9 | 16 | 0.7 | 4 | 1.8 | 16 | 0.7 |
| Not Applicable | 1 | 0.7 | 0 | 0 | 2 | 0.2 | 2 | 0.1 | 0 | 0 | 2 | 0.1 |
| Total | 151 | 100.0 | 81 | 100.0 | 845 | 100.0 | 2,404 | 100.0 | 227 | 100.0 | 2,437 | 100.0 |

Source: Indiana Dentist License and Supplemental Survey Data, 2021. Note: Dentist with a dental practice type who did not report providing any services were excluded from the table. This includes, Oral and maxillofacial radiology and Other - Non-Dental Related.

PEDIATRIC POPULATIONS SERVED

Table 2.10 shows the total number of dentists who reported serving pediatric populations at their practice. Out of the 2,920 dentists included in the report sample, 2,752 (94.2%) reported providing one or more services to pediatric populations. Almost all dentists reported providing services to Adolescents ages 11-19 (99.5%), followed by children ages 2-10 (91%). Only 621 dentists reported providing services to newborns.

Table 2.10 Pediatrics populations served by Indiana dentists.

| | Newborn | | Children (ages 2 - 10) | | Adolescents (ages 11 - 19) | | Unique Number of Dentists Serving Pediatric Populations | |
|--|------------|--------------|---------------------------|--------------|-------------------------------|--------------|---|--------------|
| | N | % | N | % | N | % | N | % |
| General dental practice | 424 | 68.3 | 2,001 | 79.8 | 2,140 | 78.1 | 2,149 | 78.1 |
| Dental public health | 18 | 2.9 | 31 | 1.2 | 35 | 1.3 | 35 | 1.3 |
| Endodontics | 0 | 0 | 45 | 1.8 | 66 | 2.4 | 66 | 2.4 |
| Oral and maxillofacial pathology | 1 | 0.2 | 1 | 0 | 2 | 0.1 | 2 | 0.1 |
| Oral and maxillofacial radiology | 0 | 0 | 2 | 0.1 | 2 | 0.1 | 2 | 0.1 |
| Oral and maxillofacial surgery | 36 | 5.8 | 98 | 3.9 | 116 | 4.2 | 117 | 4.3 |
| Orthodontics and dentofacial orthopedics | 2 | 0.3 | 139 | 5.5 | 149 | 5.4 | 149 | 5.4 |
| Pediatric dentistry | 132 | 21.3 | 143 | 5.7 | 141 | 5.1 | 143 | 5.2 |
| Periodontics | 3 | 0.5 | 21 | 0.8 | 50 | 1.8 | 50 | 1.8 |
| Prosthodontics | 1 | 0.2 | 11 | 0.4 | 24 | 0.9 | 24 | 0.9 |
| Other | 4 | 0.6 | 13 | 0.5 | 14 | 0.5 | 14 | 0.5 |
| Not Applicable | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| Total | 621 | 100.0 | 2,506 | 100.0 | 2,740 | 100.0 | 2,752 | 100.0 |

Source: Indiana Dentist License and Supplemental Survey Data, 2021

ADULT AND SPECIAL POPULATIONS SERVED

Table 2.11 displays the total number of dentists who reported serving adult and special populations at their practice. Out of the 2,920 dentists included in the report sample, 2,827 (96.8%) reported providing one or more services to adults or special populations. The most commonly reported population served by dentists was adults (n=2,737), followed by geriatric patients (n=2,587) and pregnant women (n=2,427). The least common population was inmates (n=465).

Table 2.11 Adult and Special population served by Indiana dentists.

| Dental Practice Type | Adults | | Geriatric | | Pregnant Women | | Inmates | | Disabled Persons | | Individuals in Recovery | | Unique Number of Dentists Serving Adult and Special Populations | |
|--|--------------|--------------|--------------|--------------|----------------|--------------|------------|--------------|------------------|--------------|-------------------------|--------------|---|--------------|
| | N | % | N | % | N | % | N | % | N | % | N | % | N | % |
| General dental practice | 2,207 | 80.6 | 2143 | 82.8 | 2,054 | 84.6 | 346 | 74.4 | 1786 | 80.6 | 1,102 | 81.4 | 2,227 | 78.8 |
| Dental public health | 37 | 1.4 | 36 | 1.4 | 33 | 1.4 | 13 | 2.8 | 30 | 1.4 | 26 | 1.9 | 37 | 1.3 |
| Endodontics | 74 | 2.7 | 66 | 2.6 | 57 | 2.3 | 10 | 2.2 | 55 | 2.5 | 40 | 3.0 | 74 | 2.6 |
| Oral and maxillofacial pathology | 3 | 0.1 | 2 | 0.1 | 2 | 0.1 | 2 | 0.4 | 2 | 0.1 | 2 | 0.1 | 3 | 0.1 |
| Oral and maxillofacial radiology | 2 | 0.1 | 2 | 0.1 | 1 | 0 | 1 | 0.2 | 1 | 0 | 1 | 0.1 | 2 | 0.1 |
| Oral and maxillofacial surgery | 118 | 4.3 | 118 | 4.6 | 108 | 4.4 | 69 | 14.8 | 102 | 4.6 | 90 | 6.7 | 119 | 4.2 |
| Orthodontics and dentofacial orthopedics | 143 | 5.2 | 101 | 3.9 | 88 | 3.6 | 12 | 2.6 | 86 | 3.9 | 27 | 2.0 | 144 | 5.1 |
| Other | 20 | 0.7 | 18 | 0.7 | 13 | 0.5 | 3 | 0.6 | 16 | 0.7 | 10 | 0.7 | 21 | 0.7 |
| Pediatric dentistry | 26 | 0.9 | 6 | 0.2 | 10 | 0.4 | 2 | 0.4 | 84 | 3.8 | 4 | 0.3 | 92 | 3.3 |
| Periodontics | 68 | 2.5 | 57 | 2.2 | 41 | 1.7 | 4 | 0.9 | 32 | 1.4 | 40 | 3.0 | 69 | 2.4 |
| Prosthodontics | 35 | 1.3 | 34 | 1.3 | 20 | 0.8 | 2 | 0.4 | 18 | 0.8 | 8 | 0.6 | 35 | 1.2 |
| Not Applicable | 4 | 0.1 | 4 | 0.2 | 0 | 0 | 1 | 0.2 | 3 | 0.1 | 3 | 0.2 | 4 | 0.1 |
| Total | 2,737 | 100.0 | 2,587 | 100.0 | 2,427 | 100.0 | 465 | 100.0 | 2,215 | 100.0 | 1,353 | 100.0 | 2,827 | 100.0 |

Source: Indiana Dentist License and Supplemental Survey Data, 2021

SECTION III: DENTAL HYGIENISTS

REPORTING SAMPLE

The 2022 Oral Health Data Report sample includes dental hygienists who 1) had an active license status, 2) renewed their license online, 3) reported actively practicing in dental hygiene, and 4) reported having a practice in Indiana or providing teledentistry to Indiana residents. Of the 5,019 dental hygienists who renewed their Indiana license in 2022, 3,875 (77.2%) met all criteria for inclusion in the reporting sample (see Figure 3.1).

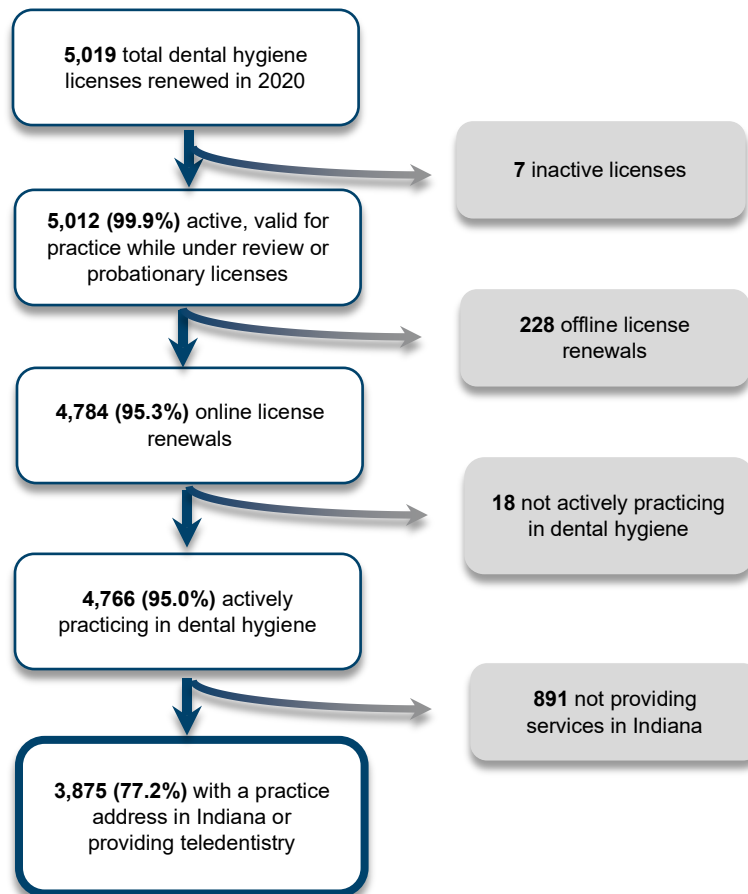


Figure 3.1: 2022 Dental hygienist reporting sample selection criteria

DEMOGRAPHICS

Table 3.1 displays demographic characteristics of actively practicing dental hygienists in Indiana. The dental hygienist workforce is predominantly female (99.0%) with an average age of 43. Female dental hygienists are predominantly white (95.1%) and non-Hispanic (96.5%). Males represent only 1% of the dental hygienist workforce (n=39), and are younger than their female counterparts with an average of 38.9 years. Male dental hygienists are also more racially and ethnically diverse, with 33.3% reporting a race other than white and 15.4% reporting Hispanic or Latino.

Table 3.1: Dental Hygienist Demographic Characteristics

| | Female | | Male | | Total | |
|----------------------------------|--------|------|------|------|-------|------|
| | N | % | N | % | N | % |
| Total (Row %) | 3,836 | 99.0 | 39 | 1.0 | 3,875 | 100 |
| Mean Age | 43.0 | | 38.9 | | 43.0 | |
| Age Groups | | | | | | |
| Under 35 | 1,127 | 29.4 | 16 | 41 | 1,143 | 29.5 |
| 35-44 | 1,106 | 28.8 | 12 | 30.8 | 1,118 | 28.9 |
| 45-54 | 900 | 23.5 | 8 | 20.5 | 908 | 23.4 |
| 55-64 | 555 | 14.5 | 2 | 5.1 | 557 | 14.4 |
| 65 and Older | 137 | 3.6 | 1 | 2.6 | 138 | 3.6 |
| Age Unavailable | 11 | 0.3 | 0 | 0 | 11 | 0.3 |
| Ethnicity | | | | | | |
| Hispanic or Latino | 134 | 3.5 | 6 | 15.4 | 140 | 3.6 |
| Not Hispanic or Latino | 3,702 | 96.5 | 33 | 84.6 | 3,735 | 96.4 |
| Race | | | | | | |
| White | 3,647 | 95.1 | 26 | 66.7 | 3,673 | 94.8 |
| Asian | 27 | 0.7 | 4 | 10.3 | 31 | 0.8 |
| Black or African American | 59 | 1.5 | 5 | 12.8 | 64 | 1.7 |
| Native Hawaiian/Pacific Islander | 1 | 0 | 0 | 0 | 1 | 0 |
| American Indian or Alaska Native | 4 | 0.1 | 0 | 0 | 4 | 0.1 |
| Some Other Race | 52 | 1.4 | 2 | 5.1 | 54 | 1.4 |
| Multiracial | 46 | 1.2 | 2 | 5.1 | 48 | 1.2 |

Source: 2022 Indiana Dental Hygienist License and Supplemental Survey Data

EDUCATION

Educational characteristics are presented in Table 3.2 and Table 3.3. The majority of dental hygienists (77.5%) reported qualifying for their dental hygiene license with an associate degree in dental hygiene, followed by 21.2% who reported qualifying with a baccalaureate degree in dental hygiene. Nearly all dental hygienists reported receiving their degree in Indiana (83%) or a contiguous state (13.2%).

Just under two thirds (61.7%) of dental hygienists reported an associate degree in dental hygiene as their highest level of training, followed by 24.7% who reported a baccalaureate degree in dental hygiene as their highest level of training.

Table 3.2: Dental Hygienist Education Characteristics

| Qualifying Education | Indiana | | Contiguous States | | Other States | | Other Country (not US) | | Total | |
|---|---------|------|-------------------|------|--------------|------|------------------------|-----|-------|------|
| | N | % | N | % | N | % | N | % | N | % |
| Vocational/Practical certificate - dental hygiene | 4 | 0.1 | 2 | 0.4 | 3 | 2 | 0 | 0 | 9 | 0.2 |
| Diploma - dental hygiene | 14 | 0.4 | 2 | 0.4 | 5 | 3.4 | 1 | 100 | 22 | 0.6 |
| Associate degree - dental hygiene | 2,511 | 78.1 | 392 | 77 | 102 | 68.9 | 0 | 0 | 3,005 | 77.5 |
| Baccalaureate degree - dental hygiene | 683 | 21.2 | 113 | 22.2 | 38 | 25.7 | 0 | 0 | 834 | 21.5 |
| Master's degree - dental hygiene | 5 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0.1 |
| Doctoral degree - dental hygiene | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 3,217 | 100 | 509 | 100 | 148 | 100 | 1 | 100 | 3,875 | 100 |

Source: 2022 Indiana Dental Hygienist License and Supplemental Survey Data

Table 3.3: Dental Hygienist Highest Education

| Highest Level of Training | N | % |
|---|-------|------|
| Associate degree - dental hygiene | 2,391 | 61.7 |
| Baccalaureate degree - dental hygiene | 959 | 24.7 |
| Baccalaureate degree - other field | 408 | 10.5 |
| Master's degree - other field | 57 | 1.5 |
| Associate degree - other field | 24 | 0.6 |
| Diploma - dental hygiene | 18 | 0.5 |
| Master's degree - dental hygiene | 9 | 0.2 |
| Doctoral degree - other field | 5 | 0.1 |
| Vocational/Practical certificate - dental hygiene | 3 | 0.1 |
| Doctoral degree - dental hygiene | 1 | 0 |
| Total | 3,905 | 100 |

Source: 2022 Indiana Dental Hygienist License and Supplemental Survey Data

Notes: Contiguous States include Michigan, Ohio, Kentucky and Illinois

EMPLOYMENT CHARACTERISTICS

Employment characteristics are depicted in Table 3.4. When asked about total months worked in the past year, the majority of dental hygienists reported working more than 9 months (92.5%). A vast majority (96.7%) also reported working in direct patient care in dental hygiene. On the other hand, 99.7% of dental hygienists reported not providing telehealth services in 2022.

Table 3.5 provides further details on dental hygienists' employment plans. Almost all (97.2%) of dental hygienists reported working the desired number of hours per week, and 84.7% reported plans to continue working as they are currently. Only 5.6% reported a desire to increase hours in patient care and 5.5% wanting to decrease hours in patient care.

Table 3.4: Dental Hygienist Employment Characteristics

| | N | % |
|---|-------|------|
| Total | 3,875 | 100 |
| Total Months Worked in Past Year | | |
| Did not work in dental hygiene in the past year | 11 | 0.3 |
| Less than 3 months | 67 | 1.7 |
| 3 months - 5 months | 78 | 2 |
| 6 months - 8 months | 135 | 3.5 |
| More than 9 months | 3,584 | 92.5 |
| Primary Field | | |
| Direct Patient Care – Dental Hygiene | 3,748 | 96.7 |
| Direct Patient Care – Other | 29 | 0.7 |
| Education – Dental Hygiene | 40 | 1 |
| Education – Other | 1 | 0 |
| Administration – Dental Hygiene | 25 | 0.6 |
| Administration – Other | 8 | 0.2 |
| Research – Dental Hygiene | 3 | 0.1 |
| Research – Other | 0 | 0 |
| Other | 7 | 0.2 |
| Not applicable | 14 | 0.4 |
| Telehealth Services | | |
| Yes | 10 | 0.3 |
| No | 3,865 | 99.7 |

Source: Indiana Dental Hygienist License and Supplemental Survey Data, 2022

Table 3.5: Dental Hygienist Employment Plans

| | N | % |
|--|-------|------|
| Total | 3,875 | 100 |
| Working Desired Hours | | |
| Yes | 3,766 | 97.2 |
| No | 109 | 2.8 |
| More Hours per Week Desiring to Work | | |
| Less than 8 additional hours per week | 62 | 1.6 |
| 9 - 16 additional hours per week | 40 | 1 |
| 17 - 24 additional hours per week | 18 | 0.5 |
| 25 - 32 additional hours per week | 30 | 0.8 |
| 33 - 40 additional hours per week | 35 | 0.9 |
| More than 40 additional hours per week | 7 | 0.2 |
| Not Applicable | 3,683 | 95 |
| Employment Plans | | |
| Continue as you are | 3,281 | 84.7 |
| Increase hours in patient care | 217 | 5.6 |
| Decrease hours in patient care | 215 | 5.5 |
| Seek employment in a field outside of patient care | 24 | 0.6 |
| Leave direct patient care to complete further training | 3 | 0.1 |
| Leave direct patient care for family reasons/commitments | 8 | 0.2 |
| Leave direct patient care due to physical demands | 10 | 0.3 |
| Leave direct patient care due to stress/burnout | 11 | 0.3 |
| Retire | 17 | 0.4 |
| Unknown | 89 | 2.3 |

Source: 2022 Indiana Dental Hygienist License and Supplemental Survey Data

PRACTICE CHARACTERISTICS

PRACTICE SETTING

Table 3.6 summarizes the reported practice settings of dental hygienists in Indiana in 2022. Overall, 59.3% of dental hygienists reported a solo practice as their primary practice setting and 10.8% reported the same for their secondary practice. The second most commonly reported primary practice type reported by dental hygienists were, partnership (25.7%) and dental service organization (4.5%). For secondary practice the second most reported practice settings were, partnership (3.6%) and specialty practice (0.6%).

Table 3.6: Dental Hygienist Practice Setting

| Practice Setting | Primary Practice | | Secondary Practice | |
|---|------------------|------|--------------------|------|
| | N | % | N | % |
| Total | 3,875 | | 3,875 | |
| Dental office practice – Solo practice | 2,296 | 59.3 | 417 | 10.8 |
| Dental office practice – Partnership | 994 | 25.7 | 140 | 3.6 |
| Dental Service Organization (DSO)* | 174 | 4.5 | 14 | 0.4 |
| Dental office practice – Group practice | 146 | 3.8 | 19 | 0.5 |
| Specialty Practice | 106 | 2.7 | 23 | 0.6 |
| Health Center (CHC/FQHC/FQHC look-alike) | 51 | 1.3 | 3 | 0.1 |
| Not applicable | 32 | 0.8 | 3,223 | 83.2 |
| Other setting | 23 | 0.6 | 14 | 0.4 |
| Other Public Health/Community Health Setting | 12 | 0.3 | 1 | 0 |
| School health service | 9 | 0.2 | 12 | 0.3 |
| Federal Government Hospital/Clinic (includes Military) | 8 | 0.2 | 0 | 0.0 |
| Hospital/Clinic | 6 | 0.2 | 3 | 0.1 |
| Long Term Care/Nursing Home/Extended Care Facility (non hospital) | 6 | 0.2 | 0 | 0.0 |
| Mobile Unit Dentistry | 6 | 0.2 | 2 | 0.1 |
| Local health department | 4 | 0.1 | 0 | 0.0 |
| Staffing Organization | 2 | 0.1 | 2 | 0.1 |
| Home health setting | 0 | 0.0 | 0 | 0.0 |
| Correctional Facility | 0 | 0.0 | 0 | 0.0 |
| Indian Health Service | 0 | 0.0 | 0 | 0.0 |
| Headstart (including early Headstart) | 0 | 0.0 | 0 | 0.0 |
| Teledentistry | 0 | 0.0 | 2 | 0.1 |

Source: 2022 Indiana Dental Hygienist License and Supplemental Survey Data.

Note: Dental hygienists who selected 'Not applicable' are not included in the counts for this table. *Dental Service Organization (DSO) was a new practice setting addition in the 2022 supplemental license renewal survey.

HOURS IN PATIENT CARE

Table 3.7 displays dental hygienists' reported practice hours for their primary or secondary practice setting. For primary practice setting, about a quarter of dental hygienists reported spending 29-32 hours per week in patient care and another quarter reported spending 33-36 hours per week in patient care. As for those who reported a secondary practice setting, about 40% reported spending 5-8 hours per week in patient care.

Table 3.7: Dental Hygienist Practice Hours

| Practice Setting | Primary Practice | | Secondary Practice | |
|---------------------------|------------------|------|--------------------|------|
| | N | % | N | % |
| Total | 3,813 | | 653 | |
| 0 hours per week | 13 | 0.3 | 116 | 17.8 |
| 1 - 4 hours per week | 66 | 1.7 | 90 | 13.8 |
| 5 - 8 hours per week | 154 | 4 | 258 | 39.5 |
| 9 - 12 hours per week | 98 | 2.6 | 69 | 10.6 |
| 13 - 16 hours per week | 258 | 6.8 | 55 | 8.4 |
| 17 - 20 hours per week | 290 | 7.6 | 20 | 3.1 |
| 21 - 24 hours per week | 422 | 11.1 | 11 | 1.7 |
| 25 - 28 hours per week | 391 | 10.3 | 2 | 0.3 |
| 29 - 32 hours per week | 875 | 22.9 | 12 | 1.8 |
| 33 - 36 hours per week | 872 | 22.9 | 12 | 1.8 |
| 37 - 40 hours per week | 353 | 9.3 | 8 | 1.2 |
| 41 or more hours per week | 21 | 0.6 | 0 | 0.0 |

Source: Indiana Dental Hygienist License and Supplemental Survey Data, 2022

Note: Dentists who selected 'Not applicable' were not included in the counts for this table.

PREVENTATIVE SERVICES PROVIDED BY DENTAL HYGIENISTS

Table 3.8 displays various preventative services provided by dental hygienists within a dental practice setting. The majority (n=3,418, 88.5%) of dental hygienists reported providing at least one or more preventative service. The greatest proportion of dental hygienists reported preventive dental hygiene services under an access practice agreement (72%), followed by, dental sealants (60.7%). The majority of dental hygienists reported providing preventative services in a solo practice (58.9%), partnership (26.2%), and group practice (4%) setting.

Table 3.8: Dental Hygienist Services - Preventative

| | Administration of local dental anesthetics | | Dental Sealants | | Work under an access practice agreement to provide preventive dental hygiene services | | Tobacco Cessation Counseling | | Unique Count of Dental Hygiene Providing Services | |
|---|--|--------------|-----------------|--------------|---|--------------|------------------------------|--------------|---|--------------|
| Primary Practice Setting | N | % | N | % | N | % | N | % | N | % |
| Dental office practice – Solo practice | 941 | 55.7 | 1,162 | 56.0 | 1,458 | 59.3 | 768 | 57.9 | 2,012 | 58.9 |
| Dental office practice – Partnership | 436 | 25.8 | 555 | 26.7 | 674 | 27.4 | 346 | 26.1 | 896 | 26.2 |
| Dental office practice – Group practice | 89 | 5.3 | 100 | 4.8 | 94 | 3.8 | 64 | 4.8 | 137 | 4.0 |
| Specialty Practice | 38 | 2.3 | 42 | 2.0 | 58 | 2.4 | 16 | 1.2 | 86 | 2.5 |
| Hospital/Clinic | 3 | 0.2 | 4 | 0.2 | 2 | 0.1 | 3 | 0.2 | 5 | 0.1 |
| Federal Government Hospital/Clinic (includes Military) | 1 | 0.1 | 1 | 0.0 | 4 | 0.2 | 4 | 0.3 | 7 | 0.2 |
| Health Center (CHC/FQHC/FQHC look-alike) | 37 | 2.2 | 41 | 2.0 | 28 | 1.1 | 25 | 1.9 | 51 | 1.5 |
| Long Term Care/Nursing Home/Extended Care Facility (non hospital) | 0 | 0.0 | 0 | 0.0 | 3 | 0.1 | 1 | 0.1 | 3 | 0.1 |
| Local health department | 1 | 0.1 | 3 | 0.1 | 3 | 0.1 | 1 | 0.1 | 3 | 0.1 |
| School health service | 4 | 0.2 | 4 | 0.2 | 2 | 0.1 | 4 | 0.3 | 6 | 0.2 |
| Mobile Unit Dentistry | 0 | 0.0 | 5 | 0.2 | 3 | 0.1 | 1 | 0.1 | 5 | 0.1 |
| Staffing Organization | 1 | 0.1 | 1 | 0.0 | 1 | 0.0 | 1 | 0.1 | 2 | 0.1 |
| Dental Service Organization (DSO) | 114 | 6.8 | 127 | 6.1 | 105 | 4.3 | 66 | 5.0 | 161 | 4.7 |
| Other Public Health/Community Health Setting | 4 | 0.2 | 8 | 0.4 | 5 | 0.2 | 7 | 0.5 | 10 | 0.3 |
| Other setting | 10 | 0.6 | 11 | 0.5 | 5 | 0.2 | 9 | 0.7 | 14 | 0.4 |
| Not applicable | 9 | 0.5 | 11 | 0.5 | 15 | 0.6 | 11 | 0.8 | 20 | 0.6 |
| Total | 1,688 | 100.0 | 2,075 | 100.0 | 2,460 | 100.0 | 1,327 | 100.0 | 3,418 | 100.0 |

Source: 2022 Indiana Dental Hygienist License and Supplemental Survey Data. **Note:** Dental hygienists in a dental practice setting who did not report providing any services were excluded from the table. This includes, home health setting, correctional facility, Indiana health service, headstart and teledentistry.

SCREENING SERVICES PROVIDED BY DENTAL HYGIENISTS

Table 3.9 displays the various screenings provided by dental hygienists within a dental practice setting. Overall, 2,970 dental hygienists reported providing one of these services and many reported providing more than one service to patients. Of all the services included, screening for oral cancer was the most

commonly reported service provided (n=2,910), followed by hypertension screening (n=1,227). The majority of screenings were provided in a solo dental office practice setting (58.2%).

Table 3.9: Dental Hygienist Services - Screenings

| | Diabetes Screening | | HIV Screening | | Hypertension Screening | | Screening for Oral Cancer | | Screening for Substance Use Disorder/Addiction | | Unique Count of Dental Hygiene Providing Services | |
|---|--------------------|--------------|---------------|--------------|------------------------|--------------|---------------------------|--------------|--|--------------|---|--------------|
| Primary Practice Setting | N | % | N | % | N | % | N | % | N | % | N | % |
| Dental office practice – Solo practice | 256 | 54.9 | 133 | 55.4 | 664 | 54.1 | 1,700 | 58.4 | 268 | 59.7 | 1,729 | 58.2 |
| Dental office practice – Partnership | 120 | 25.8 | 63 | 26.3 | 325 | 26.5 | 767 | 26.4 | 111 | 24.7 | 785 | 26.4 |
| Dental office practice – Group practice | 28 | 6.0 | 17 | 7.1 | 58 | 4.7 | 124 | 4.3 | 24 | 5.3 | 126 | 4.2 |
| Specialty Practice | 7 | 1.5 | 2 | 0.8 | 24 | 2.0 | 55 | 1.9 | 6 | 1.3 | 58 | 2.0 |
| Hospital/Clinic | 0 | 0.0 | 0 | 0.0 | 2 | 0.2 | 4 | 0.1 | 0 | 0.0 | 4 | 0.1 |
| Federal Government Hospital/Clinic (includes Military) | 2 | 0.4 | 0 | 0.0 | 2 | 0.2 | 3 | 0.1 | 1 | 0.2 | 4 | 0.1 |
| Health Center (CHC/FQHC/FQHC look-alike) | 11 | 2.4 | 6 | 2.5 | 36 | 2.9 | 40 | 1.4 | 4 | 0.9 | 44 | 1.5 |
| Long Term Care/Nursing Home/Extended Care Facility (non hospital) | 1 | 0.2 | 1 | 0.4 | 1 | 0.1 | 2 | 0.1 | 0 | 0.0 | 2 | 0.1 |
| Local health department | 1 | 0.2 | 1 | 0.4 | 1 | 0.1 | 2 | 0.1 | 1 | 0.2 | 2 | 0.1 |
| School health service | 1 | 0.2 | 1 | 0.4 | 6 | 0.5 | 7 | 0.2 | 3 | 0.7 | 8 | 0.3 |
| Mobile Unit Dentistry | 0 | 0.0 | 0 | 0.0 | 1 | 0.1 | 3 | 0.1 | 0 | 0.0 | 3 | 0.1 |
| Staffing Organization | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.1 | 0 | 0.0 | 2 | 0.1 |
| Dental Service Organization (DSO) | 25 | 5.4 | 10 | 4.2 | 81 | 6.6 | 158 | 5.4 | 20 | 4.5 | 159 | 5.4 |
| Other Public Health/Community Health Setting | 3 | 0.6 | 0 | 0.0 | 6 | 0.5 | 11 | 0.4 | 1 | 0.2 | 11 | 0.4 |
| Other setting | 6 | 1.3 | 4 | 1.7 | 12 | 1.0 | 15 | 0.5 | 4 | 0.9 | 16 | 0.5 |
| Not applicable | 5 | 1.1 | 2 | 0.8 | 8 | 0.7 | 17 | 0.6 | 6 | 1.3 | 17 | 0.6 |
| Total | 466 | 100.0 | 240 | 100.0 | 1,227 | 100.0 | 2,910 | 100.0 | 449 | 100.0 | 2,970 | 100.0 |

Source: 2022 Indiana Dental Hygienist License and Supplemental Survey Data. **Note:** Dental hygienists in a dental practice setting who did not report providing any services were excluded from the table. This includes (home health setting, correctional facility, Indiana health service, headstart and teledentistry).

PEDIATRIC POPULATIONS SERVED BY DENTAL HYGIENISTS

Table 3.10 shows the total number of dental hygienists who reported serving pediatric populations at their practice setting. Out of the 3,861 dental hygienists included in the report sample, 3,681 (95.3%) reported providing one or more services to pediatric populations. Almost all dental hygienists reported providing services to Adolescents ages 11-19 (99.5%), followed by Children ages 2-10 (96.9%). Only 288 dental hygienists reported providing services to newborns.

Table 3.10: Pediatric Populations Served, Dental Hygienists

| Dental Practice Type | Newborn | | Children (2 - 10) | | Adolescents (11 - 19) | | Unique Count of Dentists | |
|--|------------|--------------|----------------------|--------------|--------------------------|--------------|-----------------------------|--------------|
| | N | % | N | % | N | % | N | % |
| Dental office practice – Solo practice | 157 | 54.5 | 2,148 | 60.2 | 2,205 | 60.2 | 2,214 | 60.1 |
| Dental office practice – Partnership | 50 | 17.4 | 934 | 26.2 | 955 | 26.1 | 958 | 26.0 |
| Dental office practice – Group practice | 15 | 5.2 | 133 | 3.7 | 139 | 3.8 | 140 | 3.8 |
| Specialty Practice | 34 | 11.8 | 78 | 2.2 | 82 | 2.2 | 83 | 2.3 |
| Hospital/Clinic | 1 | 0.3 | 5 | 0.1 | 5 | 0.1 | 5 | 0.1 |
| Federal Government Hospital/Clinic (includes Military) | 1 | 0.3 | 2 | 0.1 | 2 | 0.1 | 2 | 0.1 |
| Health Center (CHC/FQHC/FQHC look-alike) | 9 | 3.1 | 47 | 1.3 | 48 | 1.3 | 48 | 1.3 |
| Local health department | 2 | 0.7 | 4 | 0.1 | 4 | 0.1 | 4 | 0.1 |
| School health service | 0 | 0.0 | 6 | 0.2 | 7 | 0.2 | 7 | 0.2 |
| Mobile Unit Dentistry | 3 | 1.0 | 6 | 0.2 | 5 | 0.1 | 6 | 0.2 |
| Staffing Organization | 0 | 0.0 | 1 | 0.0 | 1 | 0.0 | 1 | 0.0 |
| Dental Service Organization (DSO) | 13 | 4.5 | 157 | 4.4 | 167 | 4.6 | 167 | 4.5 |
| Other Public Health/Community Health Setting | 1 | 0.3 | 7 | 0.2 | 6 | 0.2 | 7 | 0.2 |
| Other setting | 1 | 0.3 | 18 | 0.5 | 18 | 0.5 | 18 | 0.5 |
| Not applicable | 1 | 0.3 | 20 | 0.6 | 20 | 0.5 | 21 | 0.6 |
| Total | 288 | 100.0 | 3,566 | 100.0 | 3,664 | 100.0 | 3,681 | 100.0 |

Source: 2022 Indiana Dental Hygienist License and Supplemental Survey Data. **Note:** Dental hygienists in a dental practice setting who did not report providing any services were excluded from the table. This includes (long term care/nursing home, home health setting, correctional facility, Indiana health service, headstart and teledentistry).

ADULT AND SPECIAL POPULATIONS SERVED BY HYGIENISTS

Table 3.11 displays the total number of dental hygienists who reported serving adult and special populations at their practice. Out of the 3,861 dental hygienists included in the report sample, 3,771 reported providing one or more services to adults or special populations. The most common reported population was adults (n=3,728), followed by geriatric patients (n=3,523) and pregnant women (n=3,312). The least common reported population was inmates (n=154).

Table 3.11: Adult and Special Populations Served, Dental Hygienists

| Dental Practice Type | Adults | | Geriatric | | Pregnant Women | | Inmates | | Disabled Persons | | Individuals in Recovery | | Unique Count of Dentists | |
|---|--------------|--------------|--------------|--------------|----------------|--------------|------------|--------------|------------------|--------------|-------------------------|--------------|--------------------------|--------------|
| | N | % | N | % | N | % | N | % | N | % | N | % | N | % |
| Dental office practice – Solo practice | 2,235 | 60.0 | 2,116 | 60.1 | 1,998 | 60.3 | 87 | 56.5 | 1,619 | 59.4 | 487 | 55.3 | 2,252 | 59.7 |
| Dental office practice – Partnership | 972 | 26.1 | 928 | 26.3 | 890 | 26.9 | 41 | 26.6 | 738 | 27.1 | 248 | 28.1 | 979 | 26.0 |
| Dental office practice – Group practice | 142 | 3.8 | 133 | 3.8 | 129 | 3.9 | 10 | 6.5 | 94 | 3.4 | 45 | 5.1 | 142 | 3.8 |
| Specialty Practice | 74 | 2.0 | 55 | 1.6 | 32 | 1.0 | 1 | 0.6 | 52 | 1.9 | 6 | 0.7 | 89 | 2.4 |
| Hospital/Clinic | 6 | 0.2 | 6 | 0.2 | 6 | 0.2 | 1 | 0.6 | 5 | 0.2 | 3 | 0.3 | 6 | 0.2 |
| Federal Government Hospital/Clinic (includes Military) | 8 | 0.2 | 6 | 0.2 | 2 | 0.1 | 1 | 0.6 | 3 | 0.1 | 1 | 0.1 | 8 | 0.2 |
| Health Center (CHC/FQHC/FQHC look-alike) | 51 | 1.4 | 49 | 1.4 | 48 | 1.4 | 6 | 3.9 | 39 | 1.4 | 30 | 3.4 | 51 | 1.4 |
| Long Term Care/Nursing Home/Extended Care Facility (non hospital) | 3 | 0.1 | 6 | 0.2 | 0 | 0.0 | 0 | 0.0 | 3 | 0.1 | 1 | 0.1 | 6 | 0.2 |
| Local health department | 2 | 0.1 | 2 | 0.1 | 2 | 0.1 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 2 | 0.1 |
| School health service | 9 | 0.2 | 8 | 0.2 | 7 | 0.2 | 0 | 0.0 | 5 | 0.2 | 3 | 0.3 | 9 | 0.2 |
| Mobile Unit Dentistry | 1 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| Staffing Organization | 2 | 0.1 | 2 | 0.1 | 1 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 2 | 0.1 |
| Dental Service Organization (DSO) | 170 | 4.6 | 165 | 4.7 | 154 | 4.6 | 3 | 1.9 | 129 | 4.7 | 48 | 5.4 | 171 | 4.5 |
| Other Public Health/Community Health Setting | 12 | 0.3 | 10 | 0.3 | 8 | 0.2 | 3 | 1.9 | 10 | 0.4 | 5 | 0.6 | 12 | 0.3 |
| Other setting | 19 | 0.5 | 19 | 0.5 | 17 | 0.5 | 1 | 0.6 | 14 | 0.5 | 1 | 0.1 | 19 | 0.5 |
| Not applicable | 22 | 0.6 | 18 | 0.5 | 17 | 0.5 | 0 | 0.0 | 13 | 0.5 | 3 | 0.3 | 22 | 0.6 |
| Total | 3,728 | 100.0 | 3,523 | 100.0 | 3,312 | 100.0 | 154 | 100.0 | 2,727 | 100.0 | 881 | 100.0 | 3,771 | 100.0 |

Source: 2022 Indiana Dental Hygienist License and Supplemental Survey Data. **Note:** Dental hygienists in a dental practice setting who did not report providing any services were excluded from the table. This includes, home health setting, correctional facility, Indiana health service, headstart and teledentistry.

SECTION IV: GEOGRAPHIC DISTRIBUTION

DISTRIBUTION OF INDIANA DENTISTS

Table 4.1 provides a summary of the geographic distribution and capacity of dentists located within Indiana. There are three counties with no reported practicing dentists (Crawford, Union, and Warren Counties). The highest number of dentists were found in densely populated counties, including Marion (n=599), Lake (n=301), Hamilton (n=264), and Allen (n=220). Regarding population to provider ratios, 61 counties had PPRs that were less than 5,000:1; the threshold for sufficient capacity as defined by the Health Resources and Services Administration². However, Brown and Fountain counties reported the highest population to dentist FTE ratio, indicating potentially insufficient capacity (21,561.43 and 20,570.0, respectively).

Indiana dentists were able to report up to two practice addresses. In some instances, dentists reported a practice address in two different counties. Therefore, total counts of dentists practicing in a county may equate to a number greater than the number of actively practicing dentists. Figure 4.1 depicts a geographic representation of PPRs FTE ratios for each county in Indiana, while Figure 4.2 depicts the geographic representation of dentists reported primary and secondary locations.

Table 4.1 Geographic Distribution of Dentists Capacity

| County | Rurality | Population | Total Dentists | Total Dentists FTE | Population to Dentist FTE |
|-------------|----------|------------|----------------|--------------------|---------------------------|
| Adams | Rural | 35,544 | 12 | 8.1 | 4,388.15 |
| Allen | Urban | 375,520 | 220 | 153 | 2,454.38 |
| Bartholomew | Urban | 83,280 | 51 | 36.5 | 2,281.64 |
| Benton | Urban | 8,695 | 3 | 2 | 4,347.50 |
| Blackford | Rural | 11,926 | 3 | 2.7 | 4,417.04 |
| Boone | Urban | 66,875 | 48 | 29.7 | 2,251.68 |
| Brown | Urban | 15,093 | 1 | 0.7 | 21,561.43 |
| Carroll | Urban | 20,137 | 4 | 3.5 | 5,753.43 |
| Cass | Rural | 37,727 | 13 | 7.9 | 4,775.57 |
| Clark | Urban | 117,410 | 59 | 39.3 | 2,987.53 |
| Clay | Urban | 26,231 | 6 | 3.6 | 7,286.39 |
| Clinton | Rural | 32,186 | 9 | 6.8 | 4,733.24 |
| Crawford | Rural | 10,582 | 0 | 0.0 | - |
| Daviess | Rural | 33,277 | 7 | 5.4 | 6,162.41 |
| Dearborn | Urban | 49,612 | 10 | 7.1 | 6,987.61 |
| Decatur | Rural | 26,587 | 10 | 6.9 | 3,853.19 |
| DeKalb | Rural | 43,193 | 14 | 8.7 | 4,964.71 |
| Delaware | Urban | 114,461 | 52 | 40.1 | 2,854.39 |
| Dubois | Rural | 42,534 | 32 | 23.5 | 1,809.96 |
| Elkhart | Urban | 205,184 | 75 | 51.1 | 4,015.34 |
| Fayette | Rural | 23,068 | 5 | 3.8 | 6,070.53 |
| Floyd | Urban | 77,879 | 67 | 46 | 1,693.02 |
| Fountain | Rural | 16,456 | 1 | 0.8 | 20,570.00 |

² Sec. 215 of the Public Health Service Act, 58 Stat. 690 (42 U.S.C. 216); sec. 332 of the Public Health Service Act, 90 Stat. 2270-2272 (42 U.S.C. 254e).

Table 4.1 Geographic Distribution of Dentists Capacity

| County | Rurality | Population | Total Dentists | Total Dentists FTE | Population to Dentist FTE |
|------------|----------|------------|----------------|--------------------|---------------------------|
| Franklin | Rural | 22,750 | 6 | 4.5 | 5,055.56 |
| Fulton | Rural | 20,069 | 6 | 5.4 | 3,716.48 |
| Gibson | Rural | 33,711 | 14 | 10.9 | 3,092.75 |
| Grant | Rural | 66,055 | 26 | 18.4 | 3,589.95 |
| Greene | Rural | 32,174 | 14 | 9.1 | 3,535.60 |
| Hamilton | Urban | 330,455 | 264 | 183.2 | 1,803.79 |
| Hancock | Urban | 76,614 | 36 | 23.3 | 3,288.15 |
| Harrison | Urban | 40,164 | 17 | 10.9 | 3,684.77 |
| Hendricks | Urban | 166,806 | 93 | 61.9 | 2,694.77 |
| Henry | Rural | 48,158 | 18 | 11.9 | 4,046.89 |
| Howard | Urban | 82,486 | 62 | 41.6 | 1,982.84 |
| Huntington | Rural | 36,351 | 12 | 7.8 | 4,660.38 |
| Jackson | Rural | 44,077 | 19 | 13.2 | 3,339.17 |
| Jasper | Urban | 33,433 | 12 | 9.7 | 3,446.70 |
| Jay | Rural | 20,697 | 5 | 3.2 | 6,467.81 |
| Jefferson | Rural | 32,167 | 16 | 11.1 | 2,897.93 |
| Jennings | Rural | 27,639 | 6 | 4.4 | 6,281.59 |
| Johnson | Urban | 156,148 | 86 | 62 | 2,518.52 |
| Knox | Rural | 36,833 | 18 | 11.5 | 3,202.87 |
| Kosciusko | Rural | 79,156 | 28 | 19.7 | 4,018.07 |
| LaGrange | Rural | 39,537 | 4 | 2.5 | 15,814.80 |
| Lake | Urban | 485,983 | 301 | 201.4 | 2,413.02 |
| LaPorte | Urban | 110,026 | 48 | 31.9 | 3,449.09 |
| Lawrence | Rural | 45,552 | 18 | 11.6 | 3,926.90 |
| Madison | Urban | 129,486 | 58 | 40.8 | 3,173.68 |
| Marion | Urban | 957,337 | 599 | 414 | 2,312.41 |
| Marshall | Rural | 46,336 | 16 | 11.7 | 3,960.34 |
| Martin | Rural | 10,169 | 1 | 0.9 | 11,298.89 |
| Miami | Rural | 35,684 | 11 | 8 | 4,460.50 |
| Monroe | Urban | 147,318 | 58 | 42.7 | 3,450.07 |
| Montgomery | Rural | 38,295 | 21 | 14.4 | 2,659.38 |
| Morgan | Urban | 70,141 | 22 | 15.4 | 4,554.61 |
| Newton | Urban | 13,981 | 4 | 0.8 | 17,476.25 |
| Noble | Rural | 47,640 | 16 | 11.1 | 4,291.89 |
| Ohio | Urban | 5,890 | 2 | 0.9 | 6,544.44 |
| Orange | Rural | 19,552 | 5 | 2.9 | 6,742.07 |
| Owen | Urban | 20,854 | 5 | 3 | 6,951.33 |
| Parke | Rural | 16,912 | 4 | 2.4 | 7,046.67 |
| Perry | Rural | 19,091 | 6 | 3.6 | 5,303.06 |
| Pike | Rural | 12,364 | 2 | 1.4 | 8,831.43 |
| Porter | Urban | 169,482 | 100 | 69.2 | 2,449.16 |
| Posey | Urban | 25,480 | 3 | 2.6 | 9,800.00 |
| Pulaski | Rural | 12,482 | 1 | 0.7 | 17,831.43 |
| Putnam | Urban | 37,419 | 12 | 9.5 | 3,938.84 |
| Randolph | Rural | 24,694 | 2 | 1.8 | 13,718.89 |
| Ripley | Rural | 28,457 | 6 | 4.2 | 6,775.48 |
| Rush | Rural | 16,632 | 4 | 3.3 | 5,040.00 |
| Scott | Urban | 23,784 | 7 | 5.4 | 4,404.44 |
| Shelby | Urban | 44,559 | 19 | 13.2 | 3,375.68 |

Table 4.1 Geographic Distribution of Dentists Capacity

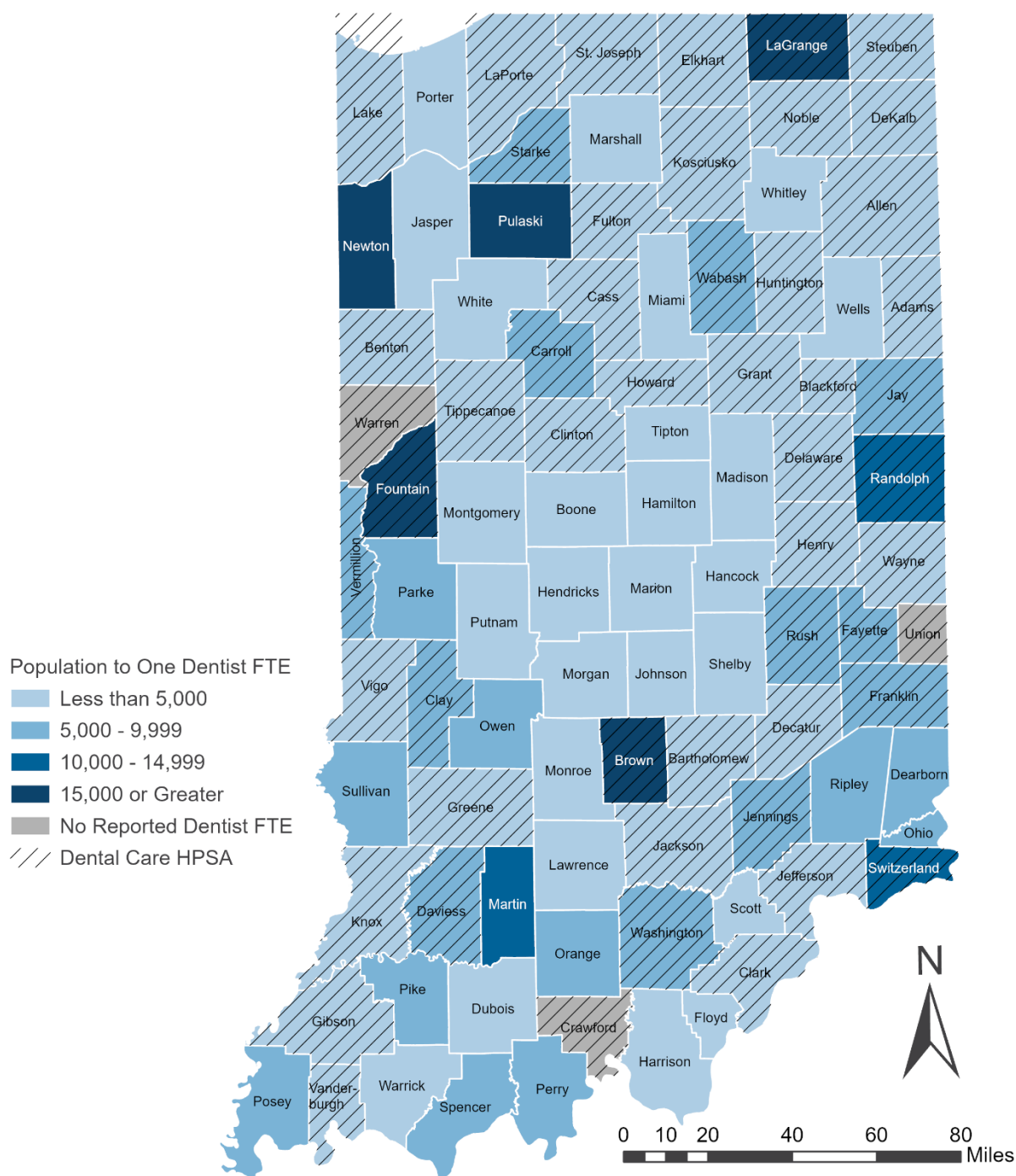
| County | Rurality | Population | Total Dentists | Total Dentists FTE | Population to Dentist FTE |
|-------------|----------|------------|----------------|--------------------|---------------------------|
| Spencer | Rural | 20,364 | 5 | 3.5 | 5,818.29 |
| St. Joseph | Urban | 270,882 | 127 | 91.2 | 2,970.20 |
| Starke | Rural | 22,996 | 5 | 2.6 | 8,844.62 |
| Steuben | Rural | 34,591 | 12 | 8.2 | 4,218.41 |
| Sullivan | Urban | 20,647 | 4 | 3.5 | 5,899.14 |
| Switzerland | Rural | 10,727 | 1 | 0.9 | 11,918.89 |
| Tippecanoe | Urban | 193,302 | 73 | 56.6 | 3,415.23 |
| Tipton | Rural | 15,154 | 10 | 4.4 | 3,444.09 |
| Union | Urban | 7,140 | 0 | 0.0 | - |
| Vanderburgh | Urban | 181,548 | 87 | 65.7 | 2,763.29 |
| Vermillion | Urban | 15,485 | 3 | 2.4 | 6,452.08 |
| Vigo | Urban | 107,305 | 47 | 36.4 | 2,947.94 |
| Wabash | Rural | 31,198 | 8 | 6 | 5,199.67 |
| Warren | Rural | 8,219 | 0 | 0.0 | - |
| Warrick | Urban | 62,608 | 21 | 17.1 | 3,661.29 |
| Washington | Urban | 27,942 | 5 | 4.3 | 6,498.14 |
| Wayne | Rural | 66,176 | 31 | 19.1 | 3,464.71 |
| Wells | Urban | 28,010 | 7 | 5.9 | 4,747.46 |
| White | Rural | 24,163 | 7 | 6.1 | 3,961.15 |
| Whitley | Urban | 33,899 | 13 | 7.9 | 4,291.01 |

Indiana Dentist Re-Licensure Survey, 2022; U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates; 2013 Rural-urban Continuum Codes

Note: Population-to-provider FTE ratios cannot be calculated for counties with no reported dentist FTE.

Indiana Dentists

Capacity and Geographic Distribution

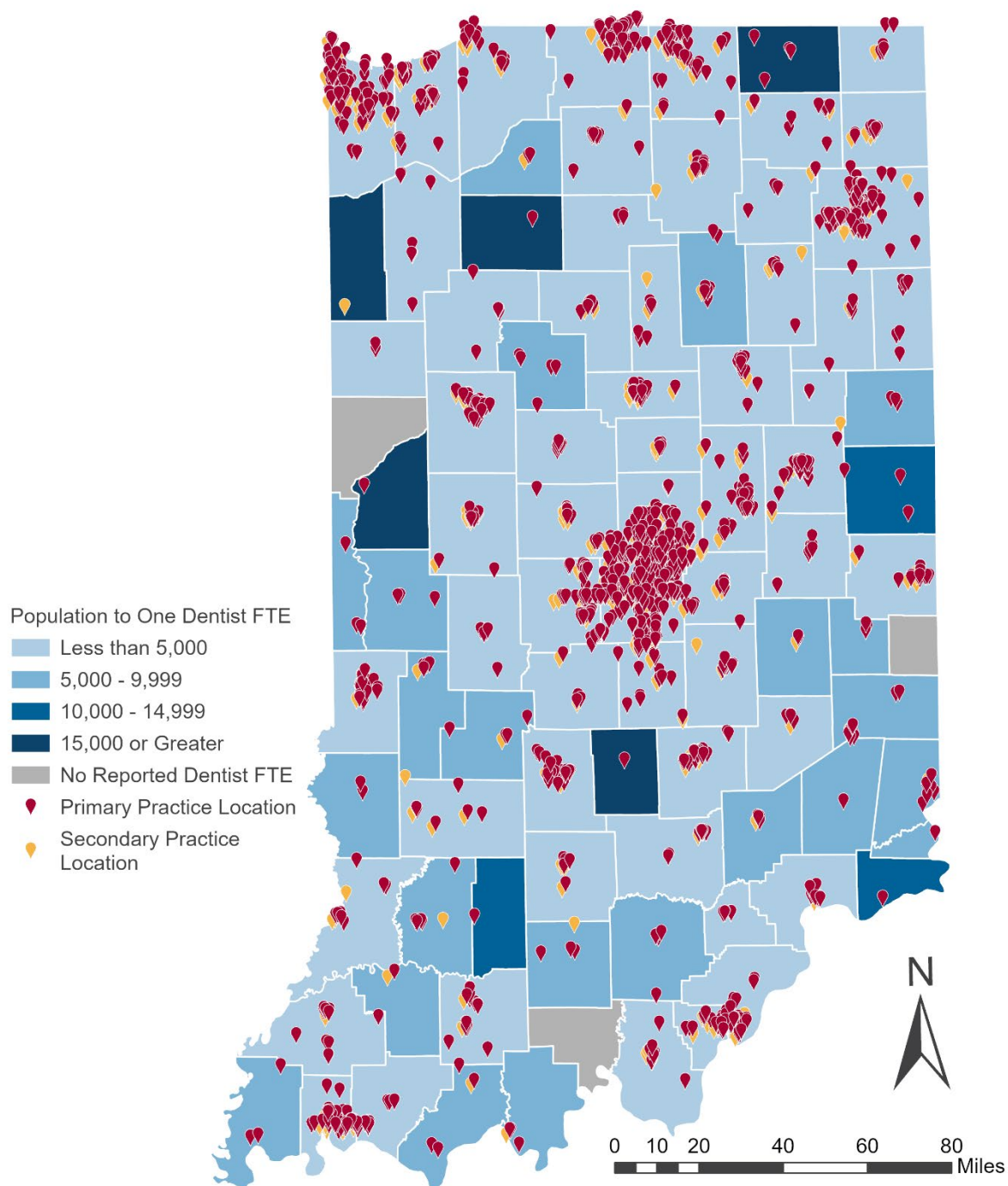


Source: 2022 Indiana Dentist License and Supplemental Survey Data; U.S. Census Bureau, 2021 5-Year Estimates.
 Note: Population-to-provider FTE ratios cannot be calculated with no reported dentist FTE.

Figure 4.1 Geographic distribution of dentists' county-level capacity

Indiana Dentists

Reported Practice Locations



Source: 2022 Indiana Dentist License and Supplemental Survey Data; U.S. Census Bureau, 2021 5-Year-Estimates.
 Note: Population-to-provider FTE ratios cannot be calculated with no reported dentist FTE. Secondary practice location was offset for viewing purposes.

Figure 4.2 Dentists geographic capacity and practice locations

DISTRIBUTION OF INDIANA DENTAL HYGIENISTS

Table 4.1 provides a summary of the geographic distribution and capacity of dental hygienists located within Indiana. Union county was the only county with no reported dental hygienists. Similar to Indiana dentists, dental hygienists were more likely to report a primary or secondary practice address in a metropolitan county, such as Marion (n=518), Lake (n=337), Hamilton (n=357), and Allen (n=310).

Regarding population to provider ratios, 19 counties had PPRs that were greater than 5,000:1; the threshold for sufficient capacity as defined by the Health Resources and Services Administration³. Switzerland and Brown have the highest Population to Provider FTE ratios (26,817.5 and 18,866.25, respectively). Figure 4.3 depicts a geographic representation of PPRs FTE ratios for each county in Indiana.

Table 4.2 Geographic distribution of dental hygienist capacity

| County | Rurality | Population | Total Dental Hygienists | Total Dental Hygiene FTE | Population to Dental Hygienist FTE |
|-------------|----------|------------|-------------------------|--------------------------|------------------------------------|
| Adams | Rural | 35,544 | 27 | 14.1 | 2,520.85 |
| Allen | Urban | 375,520 | 310 | 208.0 | 1,805.38 |
| Bartholomew | Urban | 83,280 | 54 | 39.1 | 2,129.92 |
| Benton | Urban | 8,695 | 4 | 3.6 | 2,415.28 |
| Blackford | Rural | 11,926 | 5 | 3.7 | 3,223.24 |
| Boone | Urban | 66,875 | 50 | 32.3 | 2,070.43 |
| Brown | Urban | 15,093 | 1 | 0.8 | 18,866.25 |
| Carroll | Urban | 20,137 | 9 | 5.3 | 3,799.43 |
| Cass | Rural | 37,727 | 17 | 9.9 | 3,810.81 |
| Clark | Urban | 117,410 | 64 | 44.6 | 2,632.51 |
| Clay | Urban | 26,231 | 7 | 5.1 | 5,143.33 |
| Clinton | Rural | 32,186 | 11 | 7.1 | 4,533.24 |
| Crawford | Rural | 10,582 | 1 | 0.8 | 13,227.50 |
| Daviess | Rural | 33,277 | 11 | 8.2 | 4,058.17 |
| Dearborn | Urban | 49,612 | 13 | 9.7 | 5,114.64 |
| Decatur | Rural | 26,587 | 17 | 12.1 | 2,197.27 |
| DeKalb | Rural | 43,193 | 24 | 14.8 | 2,918.45 |
| Delaware | Urban | 114,461 | 68 | 50.3 | 2,275.57 |
| Dubois | Rural | 42,534 | 42 | 30.8 | 1,380.97 |
| Elkhart | Urban | 205,184 | 139 | 86.9 | 2,361.15 |
| Fayette | Rural | 23,068 | 4 | 3.0 | 7,689.33 |
| Floyd | Urban | 77,879 | 80 | 53.7 | 1,450.26 |
| Fountain | Rural | 16,456 | 6 | 4.3 | 3,826.98 |
| Franklin | Rural | 22,750 | 9 | 5.7 | 3,991.23 |
| Fulton | Rural | 20,069 | 12 | 7.2 | 2,787.36 |
| Gibson | Rural | 33,711 | 27 | 14.5 | 2,324.90 |
| Grant | Rural | 66,055 | 24 | 18.8 | 3,513.56 |
| Greene | Rural | 32,174 | 26 | 14.8 | 2,173.92 |
| Hamilton | Urban | 330,455 | 357 | 227.6 | 1,451.91 |
| Hancock | Urban | 76,614 | 39 | 25.4 | 3,016.30 |
| Harrison | Urban | 40,164 | 17 | 10.4 | 3,861.92 |

³ Sec. 215 of the Public Health Service Act, 58 Stat. 690 (42 U.S.C. 216); sec. 332 of the Public Health Service Act, 90 Stat. 2270-2272 (42 U.S.C. 254e).

Table 4.2 Geographic distribution of dental hygienist capacity

| County | Rurality | Population | Total Dental Hygienists | Total Dental Hygiene FTE | Population to Dental Hygienist FTE |
|-------------|----------|------------|-------------------------|--------------------------|------------------------------------|
| Hendricks | Urban | 166,806 | 122 | 82.1 | 2,031.74 |
| Henry | Rural | 48,158 | 20 | 12.7 | 3,791.97 |
| Howard | Urban | 82,486 | 58 | 41.1 | 2,006.96 |
| Huntington | Rural | 36,351 | 23 | 13.6 | 2,672.87 |
| Jackson | Rural | 44,077 | 21 | 14.3 | 3,082.31 |
| Jasper | Urban | 33,433 | 20 | 14.3 | 2,337.97 |
| Jay | Rural | 20,697 | 8 | 5.9 | 3,507.97 |
| Jefferson | Rural | 32,167 | 19 | 9.2 | 3,496.41 |
| Jennings | Rural | 27,639 | 7 | 5.9 | 4,684.58 |
| Johnson | Urban | 156,148 | 117 | 80.7 | 1,934.92 |
| Knox | Rural | 36,833 | 24 | 16.9 | 2,179.47 |
| Kosciusko | Rural | 79,156 | 44 | 30.4 | 2,603.82 |
| LaGrange | Rural | 39,537 | 16 | 9.7 | 4,075.98 |
| Lake | Urban | 485,983 | 337 | 206.1 | 2,358.00 |
| LaPorte | Urban | 110,026 | 58 | 35.9 | 3,064.79 |
| Lawrence | Rural | 45,552 | 22 | 12.1 | 3,764.63 |
| Madison | Urban | 129,486 | 69 | 40.4 | 3,205.10 |
| Marion | Urban | 957,337 | 518 | 337.9 | 2,833.20 |
| Marshall | Rural | 46,336 | 28 | 17.3 | 2,678.38 |
| Martin | Rural | 10,169 | 2 | 1.8 | 5,649.44 |
| Miami | Rural | 35,684 | 9 | 7.1 | 5,025.92 |
| Monroe | Urban | 147,318 | 90 | 64.6 | 2,280.46 |
| Montgomery | Rural | 38,295 | 17 | 12.2 | 3,138.93 |
| Morgan | Urban | 70,141 | 34 | 20.5 | 3,421.51 |
| Newton | Urban | 13,981 | 3 | 1.7 | 8,224.12 |
| Noble | Rural | 47,640 | 21 | 13.0 | 3,664.62 |
| Ohio | Urban | 5,890 | 2 | 1.3 | 4,530.77 |
| Orange | Rural | 19,552 | 10 | 5.4 | 3,620.74 |
| Owen | Urban | 20,854 | 4 | 3.3 | 6,319.39 |
| Parke | Rural | 16,912 | 6 | 4.0 | 4,228.00 |
| Perry | Rural | 19,091 | 5 | 3.7 | 5,159.73 |
| Pike | Rural | 12,364 | 3 | 1.0 | 12,364.00 |
| Porter | Urban | 169,482 | 131 | 79.8 | 2,123.83 |
| Posey | Urban | 25,480 | 9 | 5.6 | 4,550.00 |
| Pulaski | Rural | 12,482 | 1 | 0.7 | 17,831.43 |
| Putnam | Urban | 37,419 | 15 | 10.6 | 3,530.09 |
| Randolph | Rural | 24,694 | 8 | 5.5 | 4,489.82 |
| Ripley | Rural | 28,457 | 3 | 2.1 | 13,550.95 |
| Rush | Rural | 16,632 | 6 | 2.8 | 5,940.00 |
| Scott | Urban | 23,784 | 4 | 3.2 | 7,432.50 |
| Shelby | Urban | 44,559 | 20 | 12.9 | 3,454.19 |
| Spencer | Rural | 20,364 | 6 | 4.4 | 4,628.18 |
| St. Joseph | Urban | 270,882 | 254 | 170.2 | 1,591.55 |
| Starke | Rural | 22,996 | 9 | 5.3 | 4,338.87 |
| Steuben | Rural | 34,591 | 20 | 13.6 | 2,543.46 |
| Sullivan | Urban | 20,647 | 5 | 2.4 | 8,602.92 |
| Switzerland | Rural | 10,727 | 2 | 0.4 | 26,817.50 |
| Tippecanoe | Urban | 193,302 | 99 | 68.1 | 2,838.50 |
| Tipton | Rural | 15,154 | 11 | 6.8 | 2,228.53 |

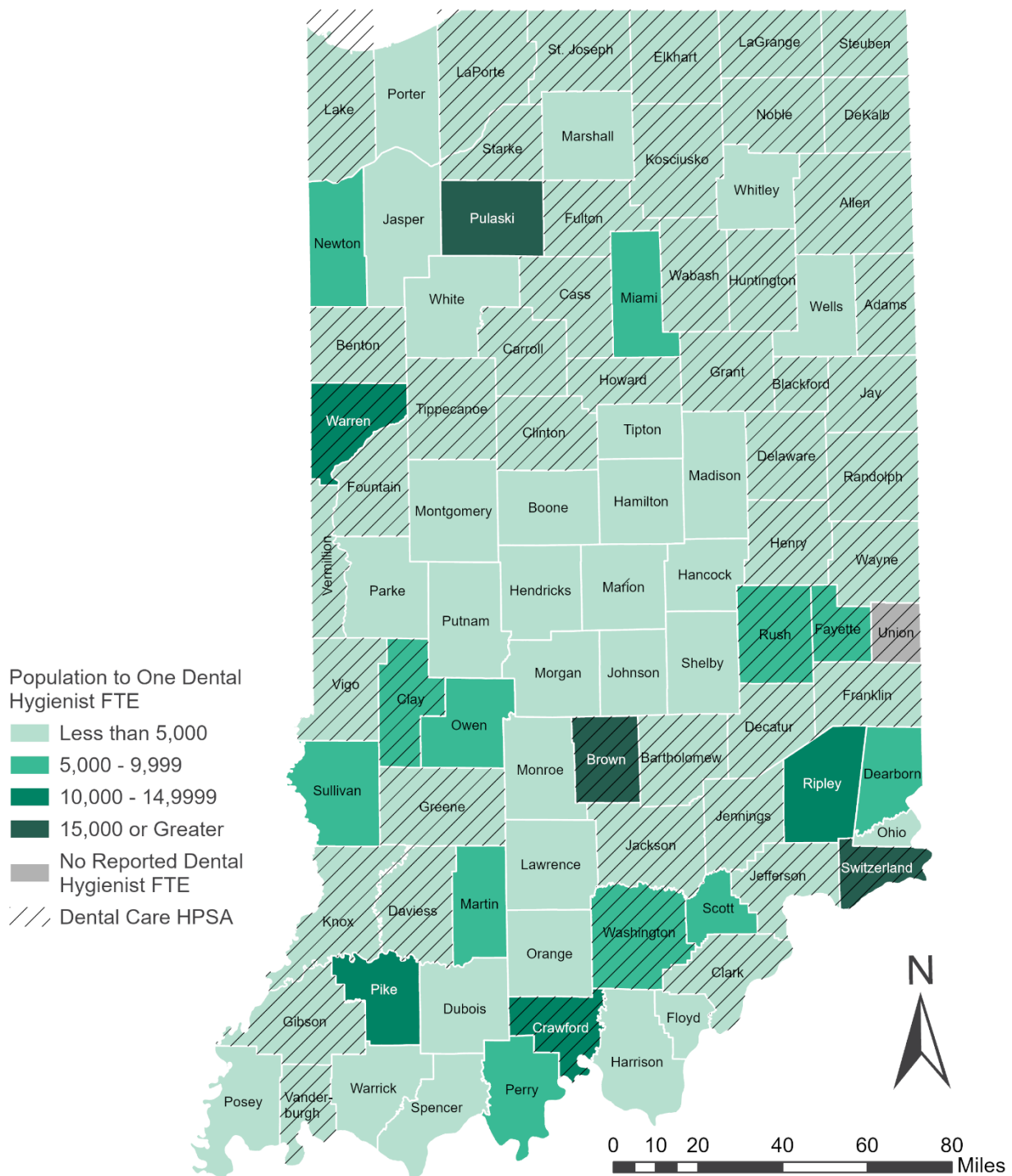
Table 4.2 Geographic distribution of dental hygienist capacity

| County | Rurality | Population | Total Dental Hygienists | Total Dental Hygiene FTE | Population to Dental Hygienist FTE |
|-------------|----------|------------|-------------------------|--------------------------|------------------------------------|
| Union | Urban | 7,140 | 0 | 0.0 | - |
| Vanderburgh | Urban | 181,548 | 143 | 92.5 | 1,962.68 |
| Vermillion | Urban | 15,485 | 6 | 4.4 | 3,519.32 |
| Vigo | Urban | 107,305 | 61 | 41.7 | 2,573.26 |
| Wabash | Rural | 31,198 | 15 | 10.0 | 3,119.80 |
| Warren | Rural | 8,219 | 2 | 0.8 | 10,273.75 |
| Warrick | Urban | 62,608 | 37 | 24.6 | 2,545.04 |
| Washington | Urban | 27,942 | 8 | 5.5 | 5,080.36 |
| Wayne | Rural | 66,176 | 29 | 20.6 | 3,212.43 |
| Wells | Urban | 28,010 | 17 | 10.7 | 2,617.76 |
| White | Rural | 24,163 | 12 | 6.9 | 3,501.88 |
| Whitley | Urban | 33,899 | 24 | 15.3 | 2,215.62 |

Indiana Dental Hygienist Re-Licensure Survey, 2022; U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates; 2013 Rural-urban Continuum Codes

Note: Population-to-provider FTE ratios cannot be calculated for counties with no reported dental hygienist FTE.

Indiana Dental Hygienists Capacity and Geographic Distribution



Source: 2022 Indiana Dental Hygienist License and Supplemental Survey Data; U.S. Census Bureau, 2021 5-Year Estimates.
Note: Population-to-provider FTE ratios cannot be calculated with no reported dental hygienist FTE.

Figure 4.3 Geographic distribution of dental hygienists' county-level capacity

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