



## **2013-2014 Workforce Survey of Dental Hygienists**

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March 2016

Rick Scott  
Governor

John H. Armstrong, MD, FACS  
Surgeon General and Secretary of Health

## **Acknowledgements**

The Florida Department of Health, Division of Community Health Promotion, would like to thank the Florida Department of Health, Division of Medical Quality Assurance, the Florida Dental Association, the Florida Dental Hygiene Association, Florida State University, and the dentists and dental hygienists who took time to participate in the survey for their efforts to help build a better understanding of the dental workforce in Florida.

Any questions regarding this report, please contact the Public Health Dental Program at: (850) 245-4333

**Division of Community Health Promotion  
Bureau of Family Health Services**

**Florida Department of Health**

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To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.

Vision:

To be the Healthiest State in the Nation

Values:

**INNOVATION**

We search for creative solutions and manage resources wisely.

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## Executive Summary

In day-to-day clinical practice, dentists typically work collaboratively with dental hygienists and dental assistants. Dental hygienists provide a number of services for patients, including assessing their oral health condition, taking and developing dental radiographs (x-rays), removing deposits from tooth surfaces, applying topical fluorides and dental sealants to the teeth, teaching patients proper oral hygiene techniques, and counseling patients about nutrition and its impact on oral health.

Similar to dentists, dental hygienists may work in private dental offices, clinics or in publicly supported health access settings. Florida statutes authorize licensed dental hygienists to provide educational, preventive and therapeutic dental services and related procedures. Some services may be provided without supervision of a dentist, while others require direct, indirect or general supervision. Legislation recently enacted in Florida (ss. 466.003, 466.023, 466.0235, and 466.024, F.S.) expands the scope and area of practice of dental hygienists by authorizing hygienists to provide certain specified services unsupervised in health access settings. A health access setting is defined as: "...a program or an institution of the Department of Children and Family Services, the Department of Health, the Department of Juvenile Justice, a nonprofit community health center, a Head Start center, a federally qualified health center or look-alike as defined by federal law, a school-based prevention program, a clinic operated by an accredited college of dentistry, or an accredited dental hygiene program in this state...."<sup>1</sup> A dental hygienist licensed in Florida may perform a number of remediable tasks in a health access setting without the physical presence, prior examination or authorization of a dentist. Such tasks include dental charting, recording of a patient's health history, application of topically-applied fluorides and dental sealants, and removal of calculus deposits, accretions and stains from tooth surfaces.<sup>2</sup>

Since 2009, the Florida Department of Health (Department) has developed a workforce survey for dental hygienists. The third administration of this survey coincided with the licensure renewal deadline of February 28, 2014. The survey is administered on a voluntary basis in conjunction with biennial renewal of dental licensures. All responses are self-reported. Over 78% of dental hygienists with an active Florida license responded to the 2013-2014 survey.

The importance of access to care and oral health as a Department priority area was first recognized as part of the state health assessment process in 2011. This process led to the Florida State Health Improvement Plan 2012-2015 (SHIP). It identified a strategy to assess current and future practitioner needs through relicensure surveys of dental hygienists under the area of "Access to Care".<sup>3</sup> A revision of the SHIP in March of 2014 identified as one of its objectives: *AC4.3.1: By December 31, 2015, ascertain the geographic distribution of practitioners and types of dental practices throughout Florida and provide an analysis of the relicensure survey to oral health partners and stakeholders.*<sup>4</sup>

The findings of this report will contribute to the planning efforts of a Workforce Advisory Committee (Committee) as it develops the next round of dental hygienist workforce surveys scheduled to take place during the next biennial licensure cycle (2015-2016). The Committee is composed of representatives from the Public Health Dental Program, the Florida Dental Association and the Florida Dental Hygiene Association. This report also will assist the Committee in its efforts to provide evidence based recommendations to the State Surgeon General and the Department on matters concerning dental workforce needs. The report identifies the supply of workforce professionals practicing in Florida and examines factors related to dental practice location and career plans. The report assists those in the oral health

career industry and other decision makers to better prepare strategic efforts for enhancing the oral health care delivery system in Florida.

Key findings from this report include the following:

- Of 14,901 dental hygienists who applied for licensure renewal, 14,108 (94.7%) dental hygienists were designated having “Active” license status.
- A total of 11,697 (78.5%) dental hygienists responded to the workforce survey.
- Of the state’s dental hygienists who practice in Florida, 8,677 (58.2%) responded to the survey.
- Of 8,676 respondents practicing in Florida who reported their gender, 8,396 dental hygienists are females (96.8%) and 280 (3.2%) are males.
- The mean age of dental hygienists actively practicing in Florida is 44.8 years for females and 43.1 years for males.
- The largest age group for female and male dental hygienists actively practicing in Florida is between 40 and 49 years of age, the percentages are 31.4% and 35.4%, respectively.
- The majority (72.0%) of dental hygienists with active licenses practicing in Florida are white.
- The majority of respondents (72.4%) with an active license practicing in Florida graduated from a Florida dental hygiene program.
- The dental hygiene programs in Florida graduating the largest number of dental hygienists at the time of the survey are Miami Dade College, St. Petersburg College and Palm Beach State College.
- The majority (91.6 %) of dental hygienists with active Florida licenses practicing in Florida who responded report working in a general practice.
- Of the dental hygienists who responded to the survey with active licenses practicing in Florida, 84.7% practice between 11 and 12 months of the year.
- Over half (51.1%) of respondents with active licenses practicing in Florida report working between 31-40 hours per week.
- The majority (73.0%) of dental hygienists with active licenses and practicing in Florida who responded report working for one employer or in one practice setting only.
- Almost two-thirds (66.0%) of dental hygienists working in Florida who responded report that they practice solely in the county in which they reside.
- The majority (86.9%) of respondents with active licenses practicing in Florida report that they were not seeking any additional employment at this time.
- Of those dental hygienists who reported seeking further employment, 38.2% are seeking an additional 5 to 8 hours a week; about 19.5% are seeking 17 or more additional work hours per week.
- The majority (59.0%) of dental hygienists practicing in Florida who responded report seeing an average of 26-50 patients per week.
- A total of 3,983 (57.7%) respondents with active licenses practicing in Florida report no difficulty in finding employment as a dental hygienist.
- A total of 1,141 (16.5%) dental hygienists with active licenses practicing in Florida who responded report that they are not able to obtain full-time employment.
- Overall, 620 respondents (7.2%) report that they plan to end their practice of dental hygiene in Florida within the next five years.
- Of dental hygienists practicing in Florida, 21.4% who report performing volunteer services, it is most frequently at a private office as part of an organized event or at school events.

- The percentage of respondents practicing in Florida who speak one or more languages other than English is higher among Hispanics/Latinos (95.8%) and Asian respondents (72.5%).
- Although the majority (75.8%) of survey respondents with active licenses practice in Florida, 24.2% do not practice in this state.
- Nearly 36.9% of dental hygienists with an active license not practicing in Florida report that they practice in another state, while 12.7% indicate that they are unemployed and seeking employment related to dentistry.
- Of dental hygienist respondents with an active license not practicing in Florida, 88.9% stated that they plan to relocate to Florida sometime in the future.

<sup>1</sup>Florida Statutes, Chapter 466.003, *Definitions*. Available at: [http://www.leg.state.fl.us/Statutes/index.cfm?App\\_mode=Display\\_Statute&Search\\_String=&URL=0400-0499/0466/Sections/0466.003.html](http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0400-0499/0466/Sections/0466.003.html). Accessed May 21, 2014.

<sup>2</sup>Florida Statutes, Chapter 466.023, *Dental hygienists; scope and area of practice*. Available at: [http://www.leg.state.fl.us/Statutes/index.cfm?App\\_mode=Display\\_Statute&Search\\_String=&URL=0400-0499/0466/Sections/0466.023.html](http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0400-0499/0466/Sections/0466.023.html). Accessed May 21, 2014.

<sup>3</sup>Florida Department of Health. Florida State Health Improvement Plan 2012-2015. Available at: <http://www.floridahealth.gov/about-the-department-of-health/documents/state-health-improvement-plan.pdf>. Accessed February 17, 2016.

<sup>4</sup>Florida Department of Health. 2012-2015 SHIP Revision. March 2014. Available at: <http://www.floridahealth.gov/about-the-department-of-health/about-us/state-and-community-health-assessment/documents/SHIP%20Revisions%20March%202014.pdf>. Accessed February 17, 2016.



## INTRODUCTION

Florida statute and administrative rules require renewal of dental licenses biennially by the end of February of even-numbered years. The most recent renewal period ended on February 28, 2014 (see Appendix A for the accompanying survey). The Florida Department of Health (Department) prepared and administered a workforce survey of dental hygienists to coincide with the license renewal process. As part of their online renewal, dental hygienists were asked to voluntarily complete the survey.

The Department prepared separate workforce surveys for dentists and dental hygienists to coincide with the license renewal process. The response rates overall were acceptable for the two surveys in 2009–2010 and 2011–2012, with at least 85.9% of practitioners renewing their professional dental licenses completing the questionnaire. The response rate for 2013-2014 dental hygienist survey was 78.5%, lower than in previous surveys. It should be noted, however, that the number of responses for individual questions varied since respondents may not have completed all of the questions.

This report presents data from the 2013-2014 workforce survey of dental hygienists. The survey was designed to obtain information concerning Florida's dental workforce that would better inform health care policymakers and shape oral healthcare policy development. Analysis of responses is guided by those objectives.

The survey consisted of questions soliciting responses regarding demographics, professional education, practice characteristics, productivity, and retention and attrition. The survey is designed to obtain an understanding of the changing landscape of the dental hygienist workforce. The survey is not designed to address population growth and maintenance of the current level of service and does not address portions of the population not currently served.

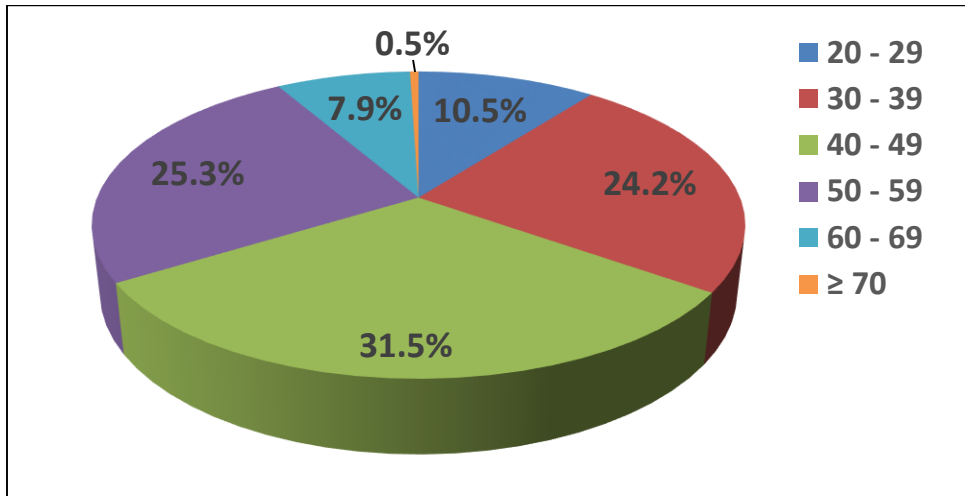
Licensure data, maintained by the Department's, Division of Medical Quality Assurance, provided the source material for the analysis. A more detailed statement of survey methods is included in Appendix B. Any changes in dental practice status occurring between survey completion and the report reference date are not reflected in the data. Therefore, counts or estimates of dental hygienists actively practicing or not practicing in Florida are approximate with respect to the report's reference date.

## FINDINGS

### Licensed Dental Hygienists Practicing in Florida - Demographics

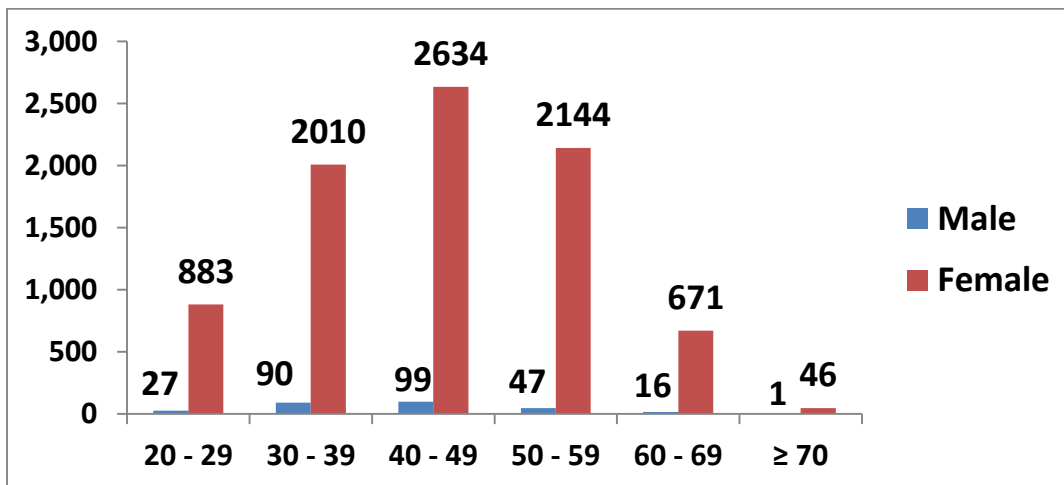
Of the 8,677 dental hygienists with active licenses practicing in Florida who responded to the 2013-2014 Florida Workforce Survey, the majority (56.8%) are 40-59 years of age and nearly 35% are 20-39 years of age (Figure 1).

**Figure 1. Age Distribution of Dental Hygienists Practicing in Florida (2013-2014)**



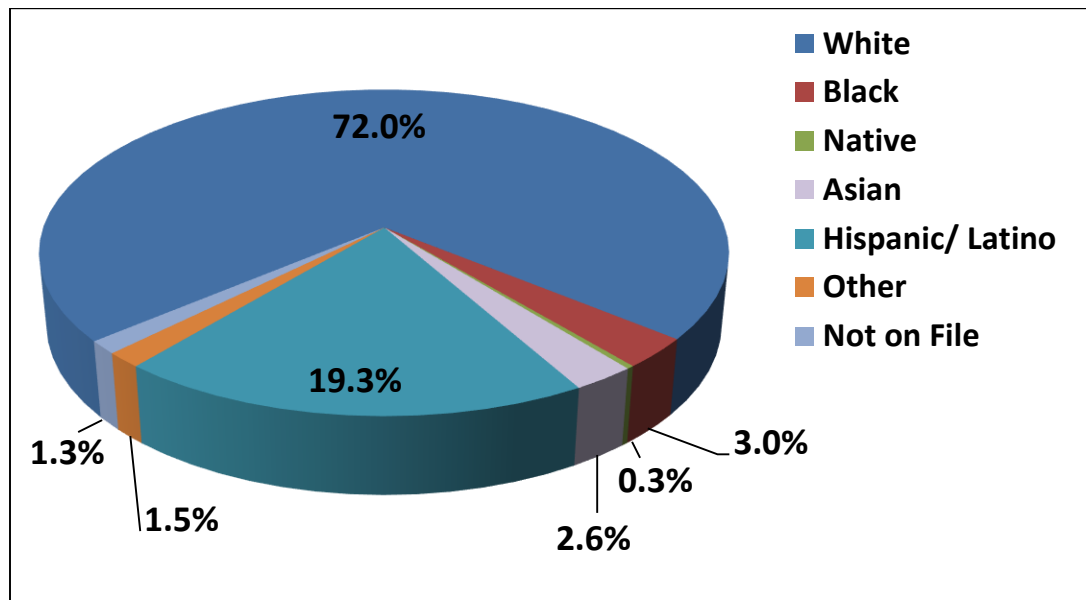
The mean ages for respondents practicing in Florida are 44.8 years for females and 43.1 years for males. Nearly 97% of respondents are females, and the remaining 3% are males. The gender distribution of respondents practicing in Florida does not vary substantially across age groups. Females constitute the majority of practicing dental hygienists for all age groups when compared to male hygienists (Figure 2). For both males and females, the contribution of older hygienists to the workforce declines after 49 years of age.

**Figure 2. Gender by Age Group for Dental Hygienists Practicing in Florida (2013-2014)**



Respondents practicing in Florida are predominantly white (72.0%) or Hispanic/Latino (19.3%). Black and Asian dental hygienists practicing in Florida comprise approximately 3.0% and 2.6%, respectively, of dental hygiene workforce respondents (Figure 3).

**Figure 3. Race/Ethnicity of Dental Hygienists Practicing in Florida (2013-2014)**



As shown in Figure 4, the percentage of respondents practicing in Florida who speak one or more languages other than English is highest among Hispanics/Latinos (95.8%). Foreign language proficiency also is high among Asian respondents (72.5%), but is relatively low among Native American (11.1%) and White (8.0%) respondents. Over one in five black respondents speak one or more second languages other than English.

**Figure 4. Percentage of Dental Hygienists with Non-English Language Speaking Ability By Race/Ethnicity (2013-2014)**

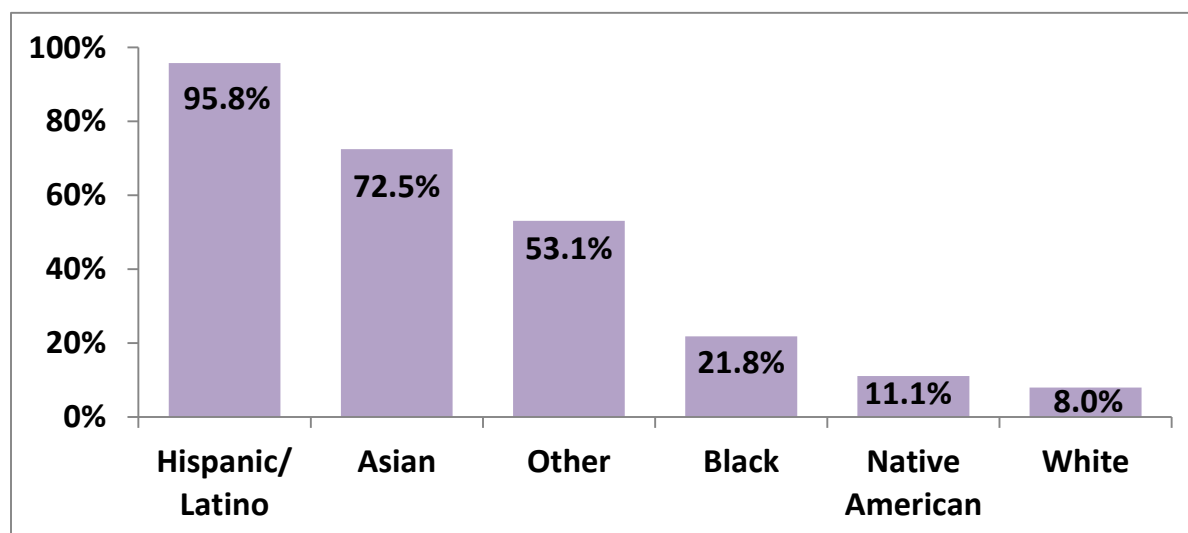


Table 1 identifies the foreign languages spoken by respondents with active licenses practicing in Florida who reported speaking a language in addition to English. The table provides the number and percentage of these respondents aggregated by language spoken and race/ethnicity. For each race/ethnicity group, the most frequently spoken language is highlighted in yellow, and the second most is highlighted in gray (except for “Native” which is all in yellow). Spanish is the most frequently spoken non-English language for all race/ethnicity groups except Asians and Blacks. Tagalog (Philippine language) and other Asian languages are the most frequently spoken non-English languages among Asian respondents; Creole and French are the most frequently non-English languages cited among Blacks.

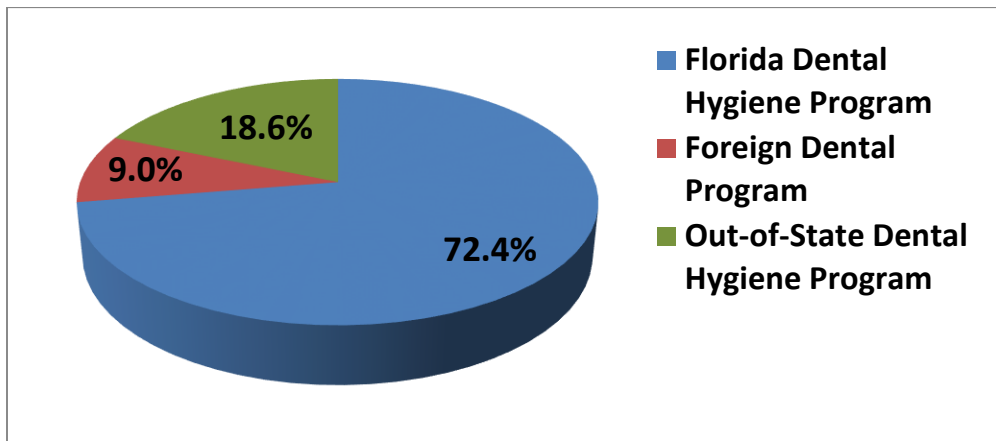
**Table 1. Selected Non-English Languages Spoken by Dental Hygienists Practicing in Florida by Race/Ethnicity (2013-2014)**

LANGUAGE	ASIAN		BLACK		HISPANIC / LATINO		NATIVE		OTHER		WHITE	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Arabic	0	0.0%	0	0.0%	1	0.1%	0	0.0%	6	8.8%	11	2.2%
Chinese (Mandarin or Cantonese)	10	6.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Creole	0	0.0%	23	41.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
French	0	0.0%	24	43.6%	1	0.1%	0	0.0%	5	7.4%	41	8.4%
German	1	0.6%	1	1.8%	2	0.1%	1	33.3%	1	1.5%	34	6.9%
Hebrew	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	6	1.2%
Italian	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	2.9%	16	3.3%
Japanese	5	3.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.2%
Korean	2	1.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.2%
Other African language	0	0.0%	1	1.8%	0	0.0%	0	0.0%	1	1.5%	3	0.6%
Other Asian language	41	25.8%	0	0.0%	0	0.0%	0	0.0%	7	10.3%	0	0.0%
Other European language	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	1.5%	42	8.6%
Other language (unspecified)	3	1.9%	3	5.5%	2	0.1%	0	0.0%	5	7.4%	33	6.7%
Other Middle Eastern language	1	0.6%	0	0.0%	0	0.0%	0	0.0%	6	8.8%	6	1.2%
Polish	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	21	4.3%
Portuguese	0	0.0%	1	1.8%	5	0.3%	1	33.3%	11	16.2%	17	3.5%
Russian	1	0.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	62	12.7%
Spanish	5	3.1%	2	3.6%	1573	99.2%	1	33.3%	22	32.4%	195	39.8%
Tagalog	72	45.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.2%
Vietnamese	18	11.3%	0	0.0%	0	0.0%	0	0.0%	1	1.5%	0	0.0%
<b>TOTAL</b>	159	100.0%	55	100.0%	1585	100.0%	3	100.0%	68	100.0%	490	100.0%
Yellow = Highest Gray = Second Highest												

## Licensed Dental Hygienists Practicing in Florida – Professional Education

Most practicing dental hygienists indicate that they have received their dental hygiene training in Florida. Figure 5 portrays the type of dental hygiene program among survey respondents who practice in Florida. Of those respondents, 72.4% trained at a Florida dental hygiene school, 18.6% trained at an out-of-state program and 9.0% trained at a foreign-trained dental program.

**Figure 5. Program of Graduation among Dental Hygienists Practicing in Florida (2013-2014)**



Graduates of Miami-Dade College, St. Petersburg College and Palm Beach State College constituted the highest percentages of survey respondents (Figure 6). Following in percentage of survey respondents were graduates from Santa Fe College and Florida State College at Jacksonville, both located in North Florida.

**Figure 6. Distribution of Dental Hygienists by Dental Hygiene School of Graduation in Florida (2013-2014)**

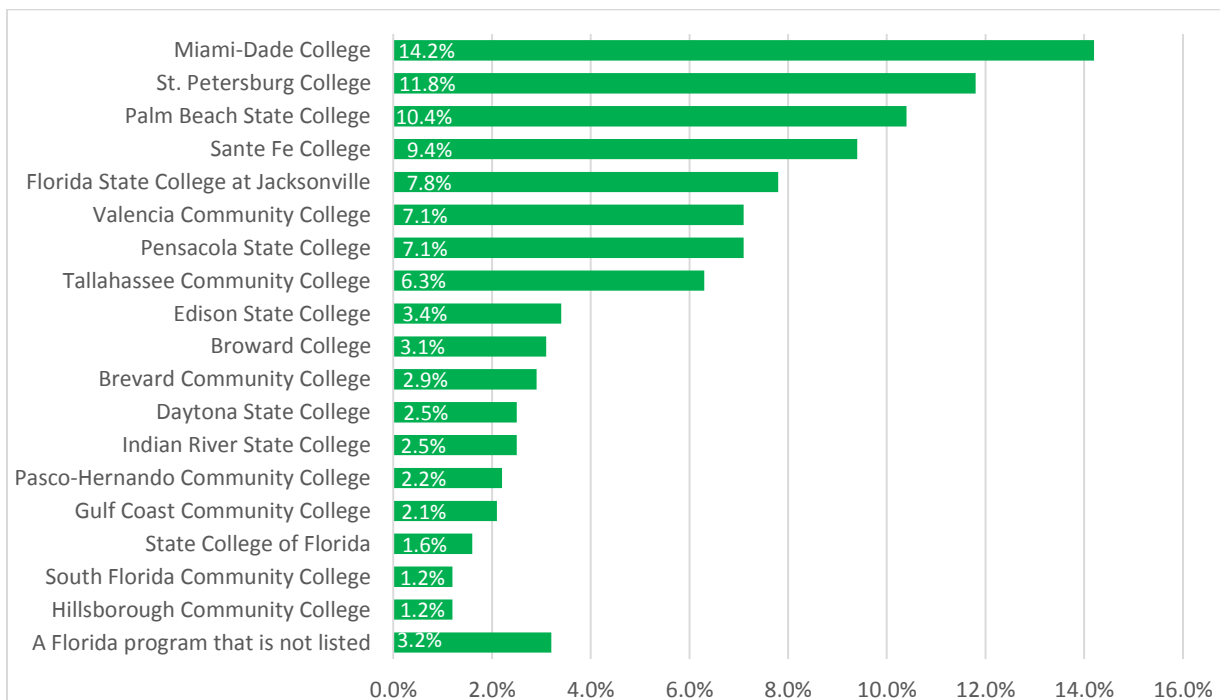
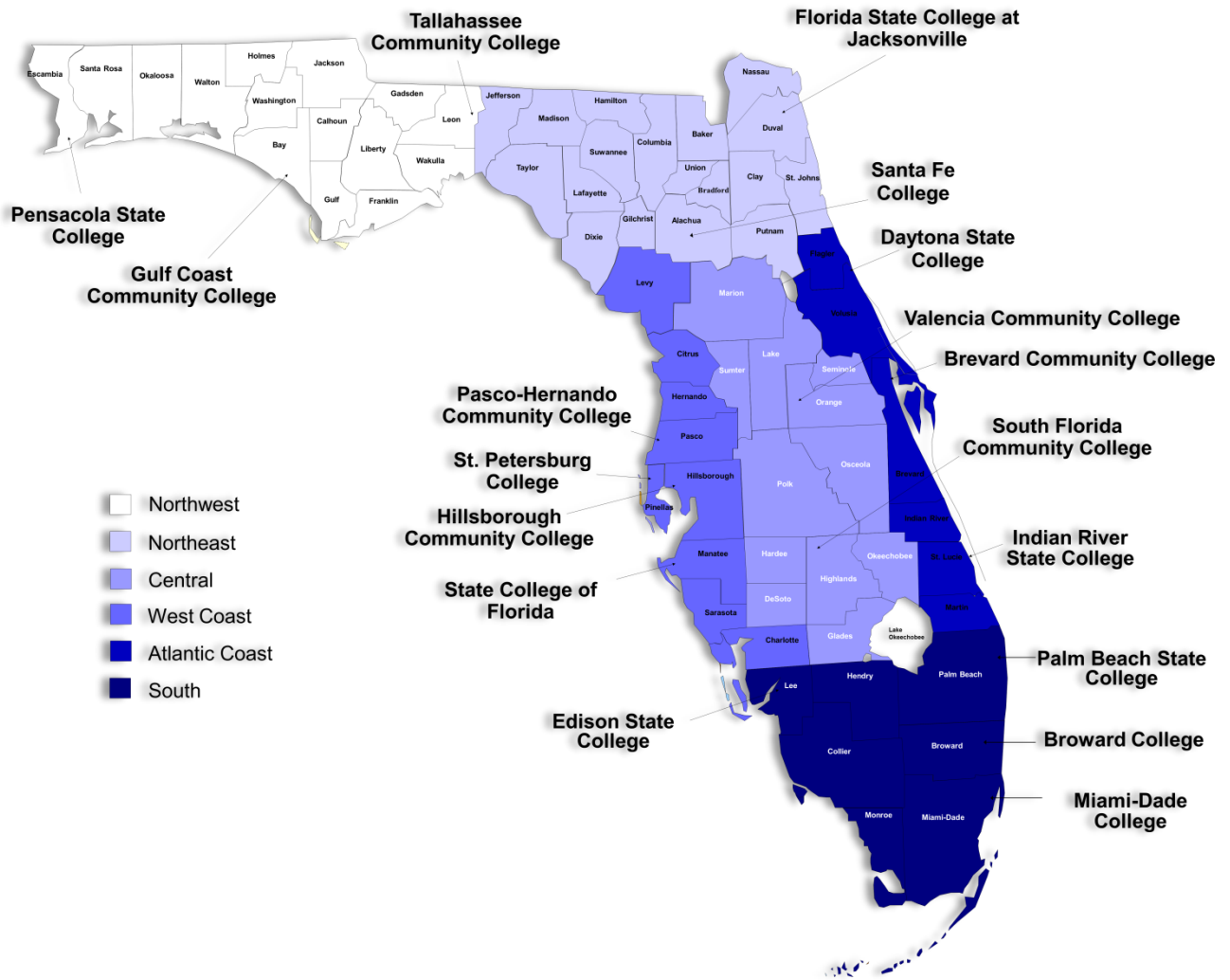


Figure 7 illustrates the regions of Florida and the location of the state's dental hygiene schools. As depicted, most of Florida's dental hygiene schools are located in the eastern and southern portions of the state; only three schools are located in the panhandle region. Dental hygiene schools and locations have remained constant or experienced little change since the initial 2009-2010 Dental Hygienist Workforce Survey,

**Figure 7. Florida Regions and Dental Hygiene Schools**

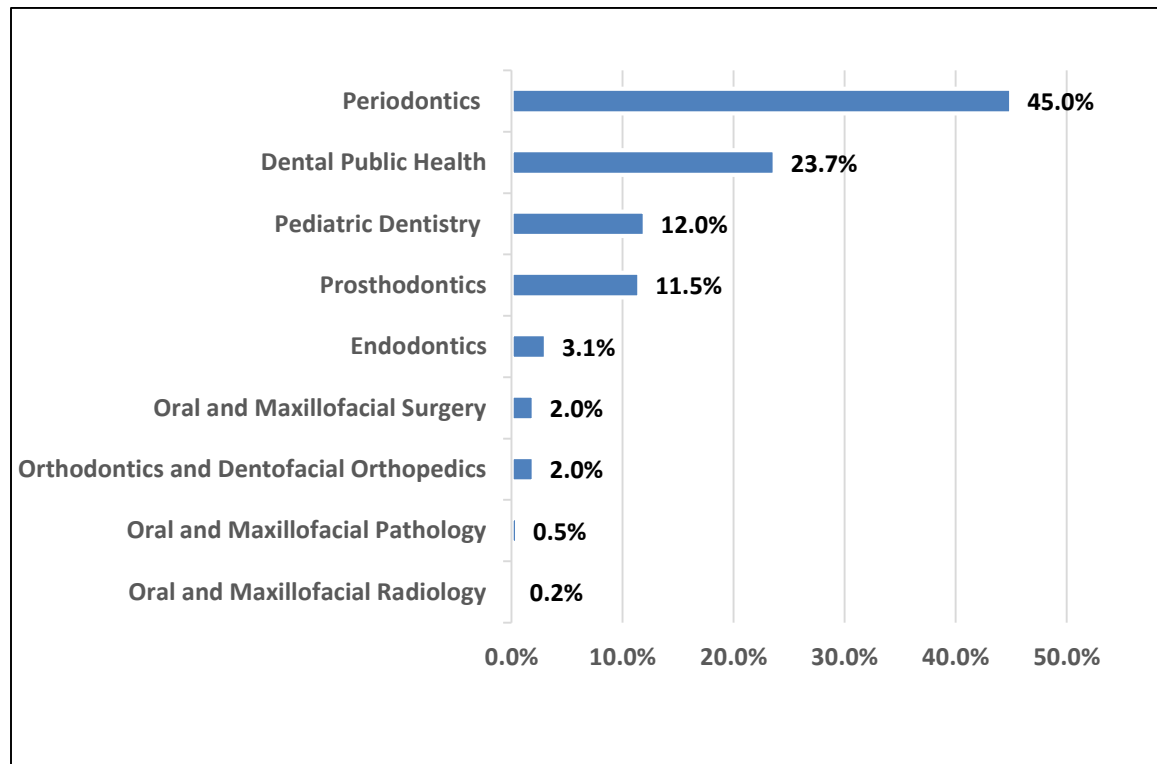


## Licensed Dental Hygienists Practicing in Florida – Practice Characteristics

A majority of respondents (94.1%) who reported practicing in Florida work in a private office setting which consists of solo practice, group practice as a single specialty, or group practice as a multi-specialty. Five practice settings — academic institutions, community health centers, county health departments, federally qualified health centers, and other state government clinical settings — constitute “safety-net” practices for individuals who might otherwise lack access to dental care (data not shown). 3.1% percent of dental hygienists who reported practicing in Florida work in “safety-net” practice settings. The remaining 2.8% represent facilities such as correctional facilities, VA clinics, Indian Health Service, and “Other”.

A large majority of respondents (91.6%) report their primary practice as general, while 8.4% report their practice type as specialty. Figure 8 portrays the distribution of dental hygiene practice specialties among survey respondents who practice in Florida. Specialties with the three highest number of hygienists are periodontics, dental public health, and pediatric dentistry.

**Figure 8. Dental Practice Specialties among Dental Hygienists Practicing in Florida (2013-2014)**



Almost 85% of the respondents who practice in Florida worked between 11 and 12 months in the year prior to completing the survey (Figure 9).

**Figure 9. Number of Practice Months in the Past Year among Dental Hygienists Practicing in Florida (2013-2014)**

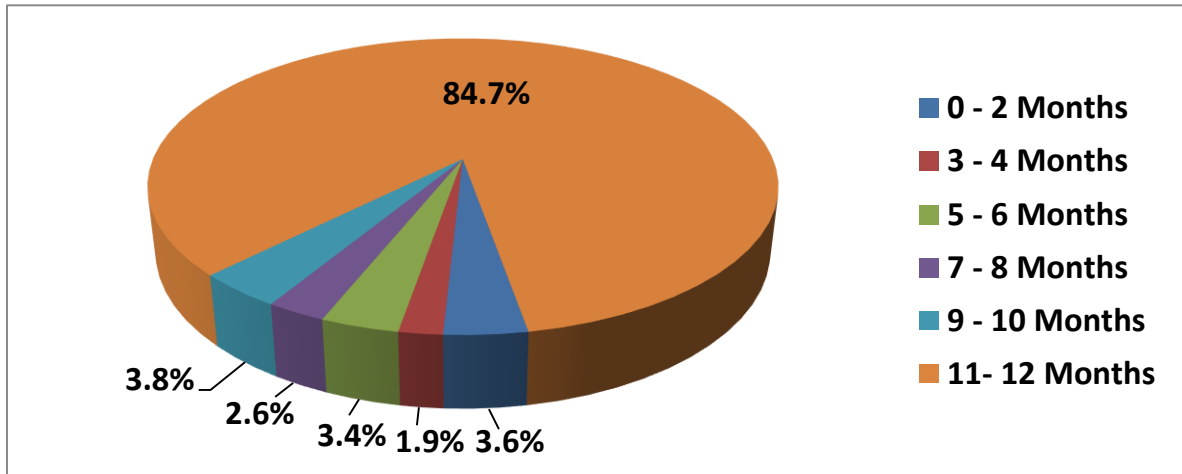
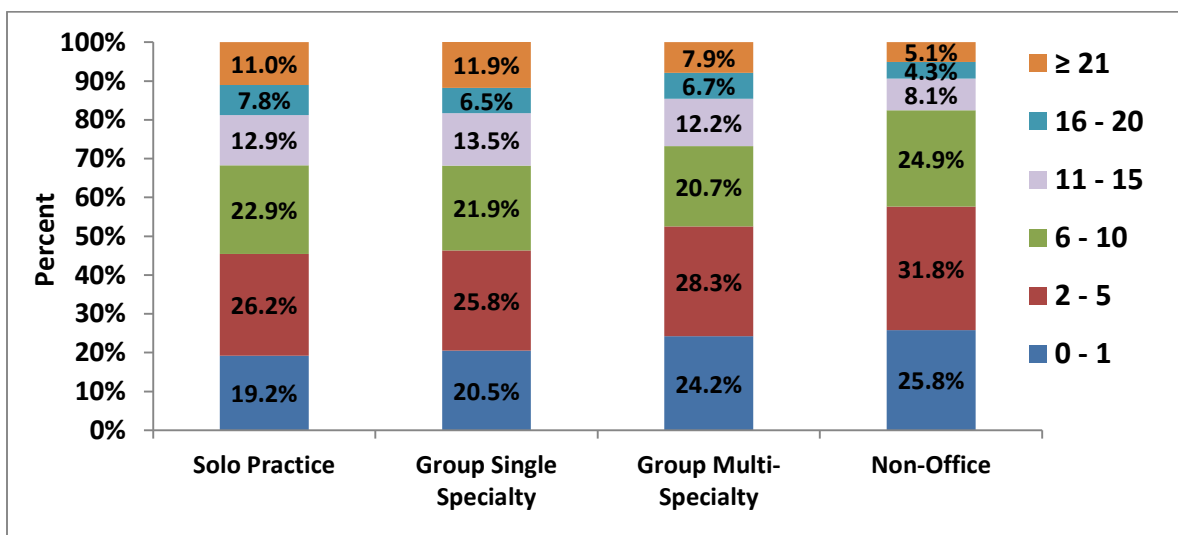


Figure 10 illustrates the number of years respondents practiced in their current practice arrangement by practice type. The percentage of survey respondents who report having between two and five years of experience is the largest group across all practice settings. Among those practicing in private office settings (solo, group single specialty, or group multi-specialty practice) the percentage of respondents who have worked six or more years is slightly higher for those who work in solo office practices and single specialty group office practices than for those who work in multi-specialty group office settings. For dental hygienists working six or more years, the percentage for those practicing in private office settings is higher than in the non-office group.

The majority of survey respondents (73.0%) work for one employer or in one practice setting; 27.0% work for more than one employer or in more than one practice settings.

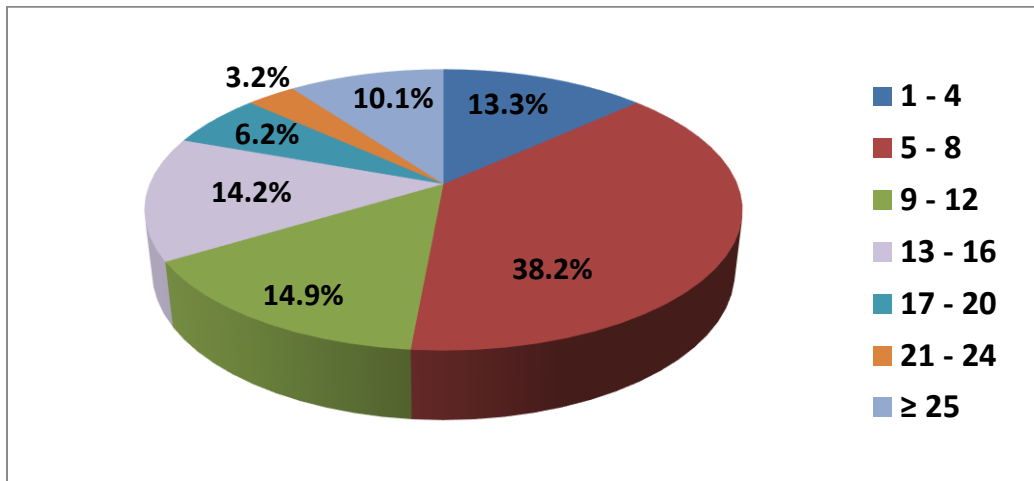
**Figure 10. Dental Hygienists' Years in Current Practice Arrangement by Practice Type (2013-2014)**





Of the percentage of survey respondents practicing in Florida 86.9% of respondents reported that they are not seeking additional employment, the remainder are seeking additional employment. Of the survey respondents practicing in Florida who indicate they are seeking additional work hours, 38.2% are seeking 5 to 8 additional hours per week; 14.9% are seeking 9 to 12 hours per week. Approximately 19.6% are seeking 17 or more additional work hours per week (Figure 11).

**Figure 11. Distribution of Additional Hours of Work per Week Sought by Dental Hygienists Practicing in Florida (2013-2014)**



As shown in Figure 12, dental hygienists who responded to this question and are working in a safety-net practice most typically perform volunteer work in outside events such as school events (20.9%) or health fairs (29.1%). Over sixteen percent of their volunteer work is still performed in safety-net clinics (16.5%). Similarly, dental hygienists who responded to the question and are employed in private practice settings report providing volunteer services most frequently at school events (19.4%); however, 22.3% of respondents working in private practice report performing volunteer work during an organized event in a private office setting.

**Figure 12. Settings for the Provision of Volunteer Services by Practice Type (2013-2014)**

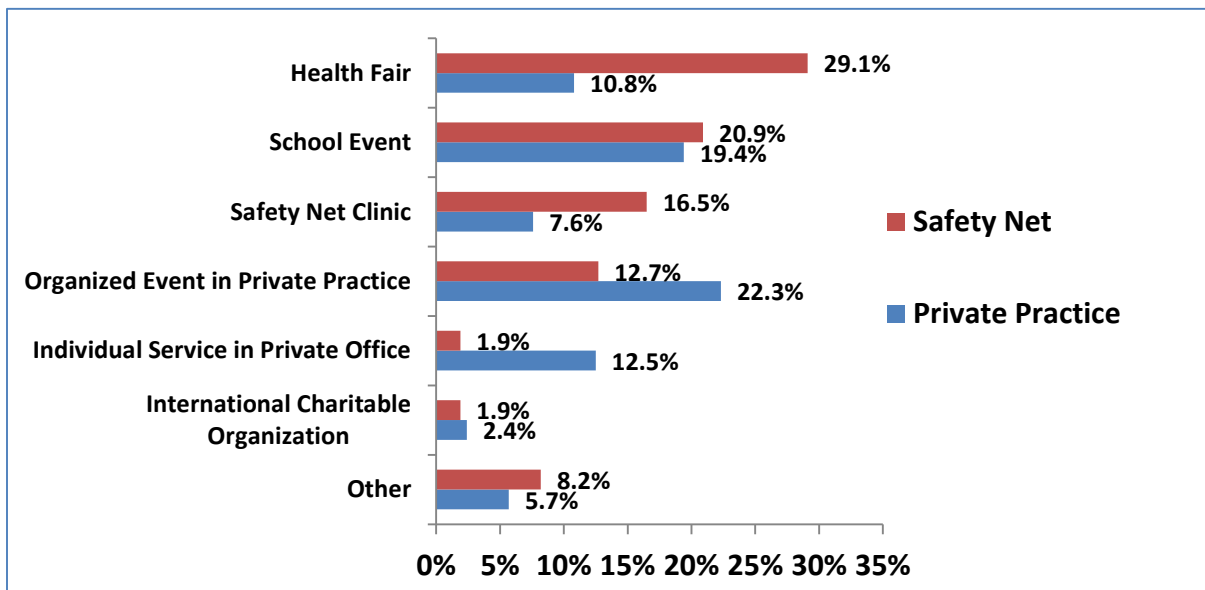
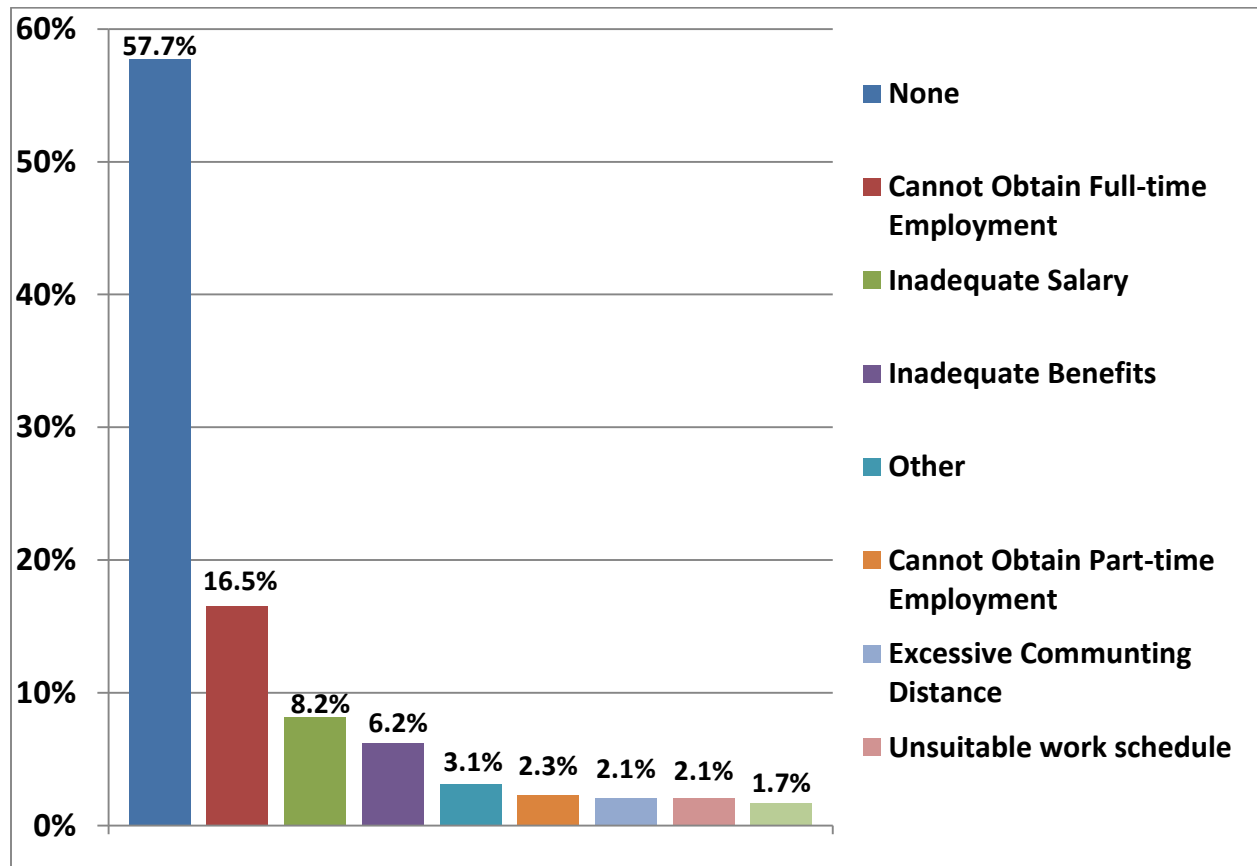


Figure 13 displays the difficulties respondents experience when searching for a dental hygienist position. Although 57.7% of respondents report experiencing no difficulty in finding a position as a dental hygienist, 16.5% indicate that they cannot obtain full-time work (undefined) in the field. Only 2.3% of dental hygienists report they are unable to obtain part-time employment in their profession. Other difficulties dental hygienists experience include inadequate benefits (6.2%) and salary (8.2%), unsatisfactory work environment (1.7%) and an unsuitable work schedule (2.1%).

**Figure 13. Difficulties Dental Hygienists Practicing in Florida Experience in Finding a Position as a Dental Hygienist (2013-2014)**

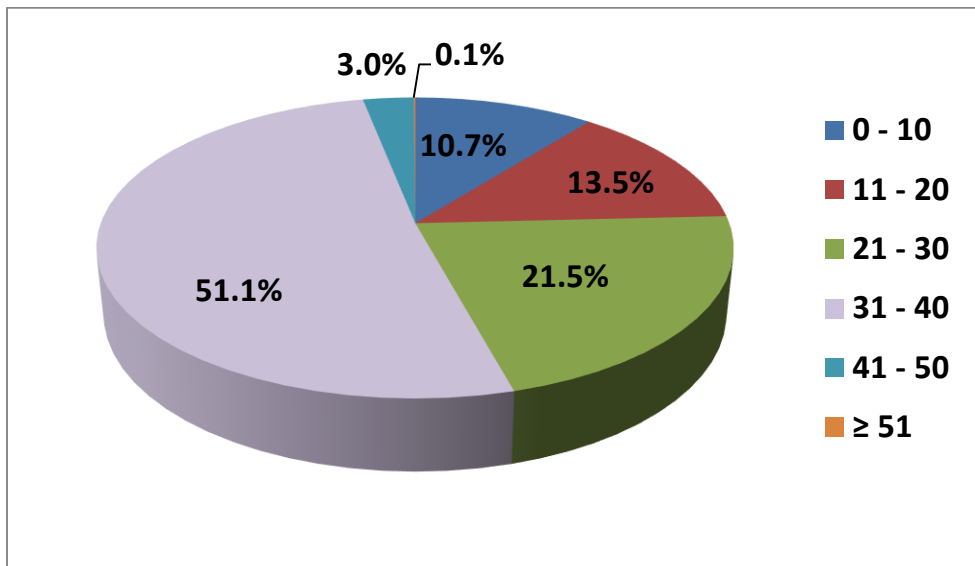


About two-thirds (66.0%) of respondents with an active license working in Florida report practicing in the county in which they reside. Approximately 18% of respondents report that they do not practice dental hygiene in their county of residence; 15.5% indicate that they occasionally practice in their county of residence.

### Licensed Dental Hygienists Practicing in Florida – Productivity

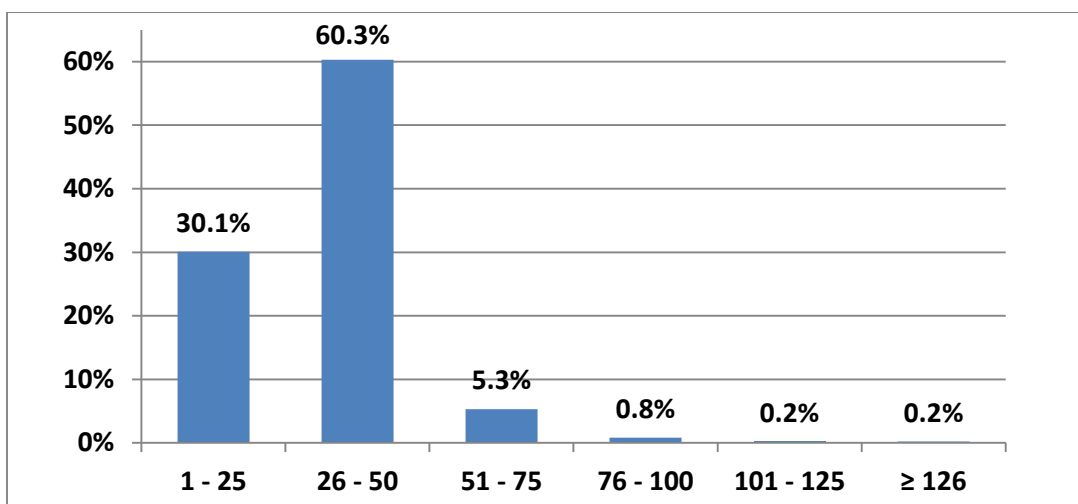
Figure 14 displays the distribution of respondents who practice in Florida by the number of hours they worked in a given week. Approximately 51.1% of respondents work 31-40 hours weekly, while only 3.0% work between 41 and 50 hours. Approximately 45.7% practiced dental hygiene part-time (less than 31 hours per week), including 24.2% who worked 20 hours per week or less.

**Figure 14. Distribution of Dental Hygienists Practicing in Florida by Hours of Practice per Week (2013-2014)**



Less than a third (30.1%) of dental hygienist respondents had under 26 encounters per week. The majority of respondents indicate that on average they have 26 or more patient encounters per week: 60.3% reported seeing an average of 26-50 patients per week, 5.3% reported seeing an average of 51-75 patients per week and 1.2% reported seeing 76 or more patients per week (Figure 15).

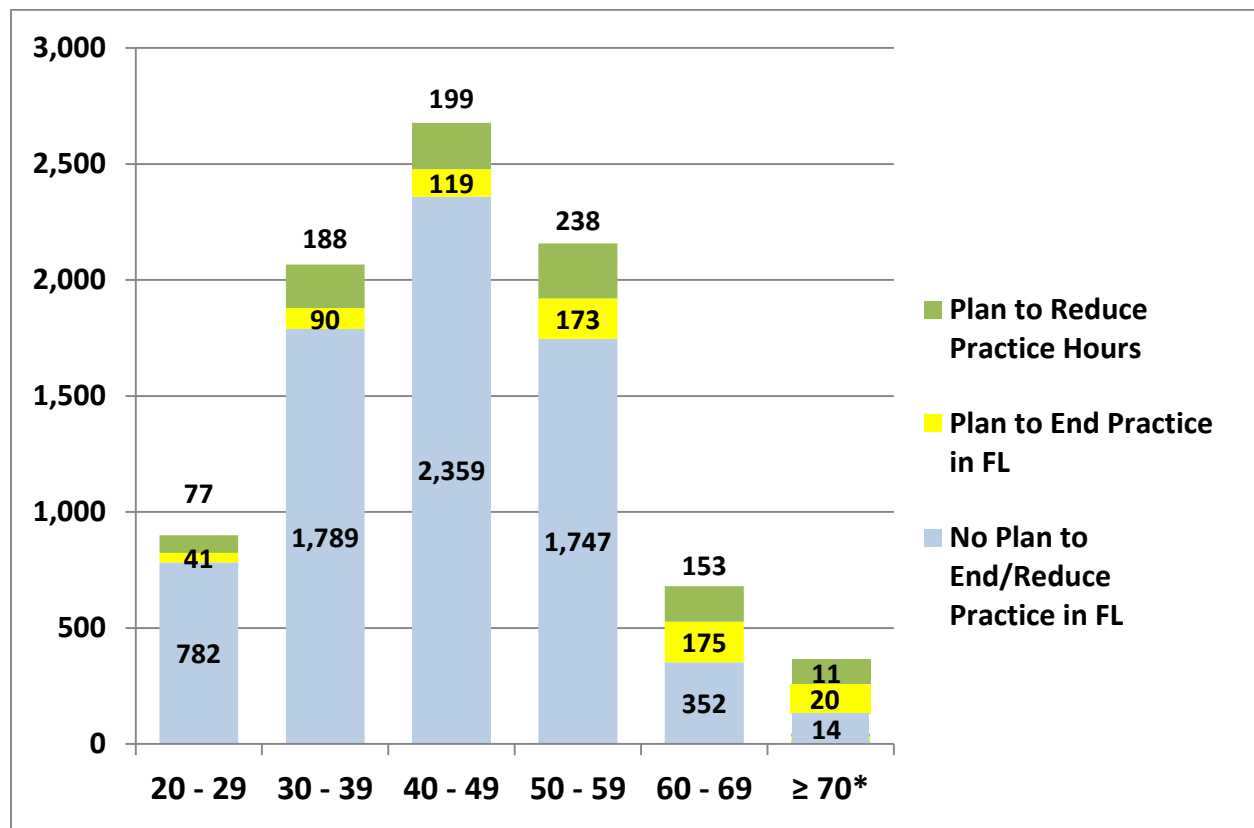
**Figure 15. Average Number of Patient Encounters per Week among Dental Hygienists Practicing in Florida (2013-2014)**



## Licensed Dental Hygienists Practicing in Florida -Retention and Attrition

Figure 16 shows career plans of respondents practicing in Florida over the next five years by age group. Overall, 620 respondents (7.2%) report that they plan to end their practice of dental hygiene in Florida within the next five years. Across all age groups, a larger number of respondents do not plan to end or reduce their practice in Florida over the next five years, as compared with those who report that they plan to end their practice in the state during the same time period. The age groups with the largest number of respondents who report that they are planning to end their dental practice in Florida within five years are 50–59 years (n=173) and 60–69 years (n=175). Thirty-one respondents 70 years of age or older (of 45 total) indicate that they either plan to end their practice in Florida or plan to reduce their practice hours within the next five years.

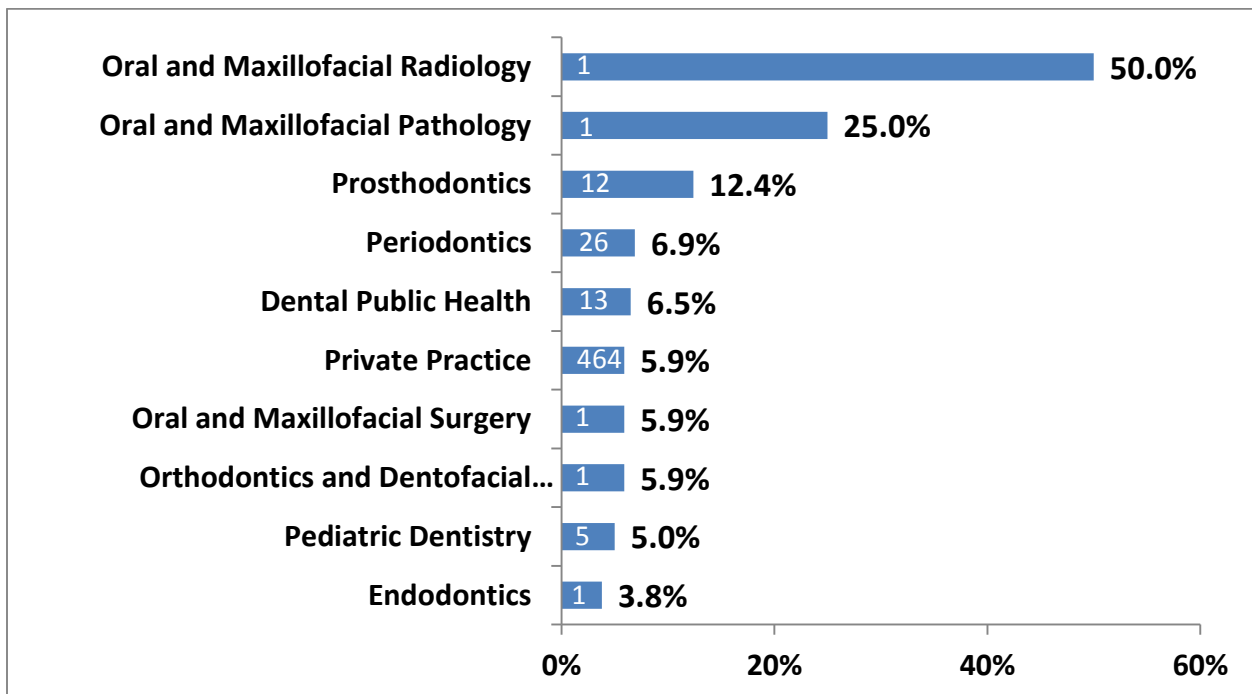
**Figure 16. Career Plans of Dental Hygienists Practicing in Florida over the Next Five Years by Age Group (2013-2014)**



\*Colored segments of the bar for age group  $\geq 70$  years are not drawn to scale because the counts are small.

Figure 17 shows the number and percentage of respondents in Florida by dental practice type who report that they plan to retire within the next five years. For all practice types, a large majority of practicing dental hygienists indicate that they plan to continue practicing their profession. The practice types with the highest percentages of respondents planning to retire within five years are oral and maxillofacial radiology (50.0%) and oral and maxillofacial pathology (25.0%). The two highest are elevated primarily due to the low total number of hygienists in these particular specialties. The next two highest groups are prosthodontics (12.4%) and periodontics (6.9%).

**Figure 17. Number and Percentage of Dental Hygienists Practicing in Florida Who Plan to Retire within the Next Five Years by Dental Practice Type (2013-2014)**



## Licensed Dental Hygienists Not Practicing in Florida

Percentages of respondents with an active Florida license who reported practicing in Florida or out-of-state indicate that; although the majority (75.8%) of survey respondents with active licenses do practice in Florida, 24.2% do not practice in this state.

Differences between respondents who practice in Florida and those who do not are presented in Table 2. Fifty-four percent of respondents who do not practice in Florida reside in another state compared to 0.8% of respondents who practice in Florida. Slightly less than half (48.9%) of respondents who do not practice in Florida report holding an out-of-state license compared to 13.1% of respondents who practice in Florida. Nearly three-quarters of respondents (72.4%) who received their dental hygiene degree from a Florida school practice in the state, as compared with 52.4% who report that they practice outside of Florida. As compared with respondents who practice in Florida, a lower percentage of respondents not practicing in Florida identify themselves as Hispanic (12.2% vs 19.3%).

**Table 2. Profile of Dental Hygienists with an Active Florida License by Practice Status (2013-2014)**

<b>CHARACTERISTIC</b>	<b>PRACTICE IN FLORIDA</b>	<b>DOES NOT PRACTICE IN FLORIDA</b>
<b>Average Age</b>	44.7	47.3
<b>% White</b>	72.0	77.6
<b>% Hispanic</b>	19.3	12.2
<b>% Currently resides out of state</b>	0.8	54.0
<b>% Licensed in another state</b>	13.1	48.9
<b>% Received dental hygiene degree from Florida school</b>	72.4	52.4

Figure 18 presents the primary reasons for not practicing in Florida as reported by survey respondents with an active Florida license. Each respondent was asked to choose her/his main reason for not practicing in the state. The most frequently cited reason is that they practice in another state (38.4%), followed by the response “Other” (21.7%). Over 13% of respondents indicated they are unemployed and seeking employment in dental hygiene. The next two most common reasons were employed/self-employed in Florida in a job unrelated to dental hygiene (8.2%) and that they were retired (6.5%).

**Figure 18. Reasons Dental Hygienists with an Active Florida License Do Not Practice in the State (2013-2014)**

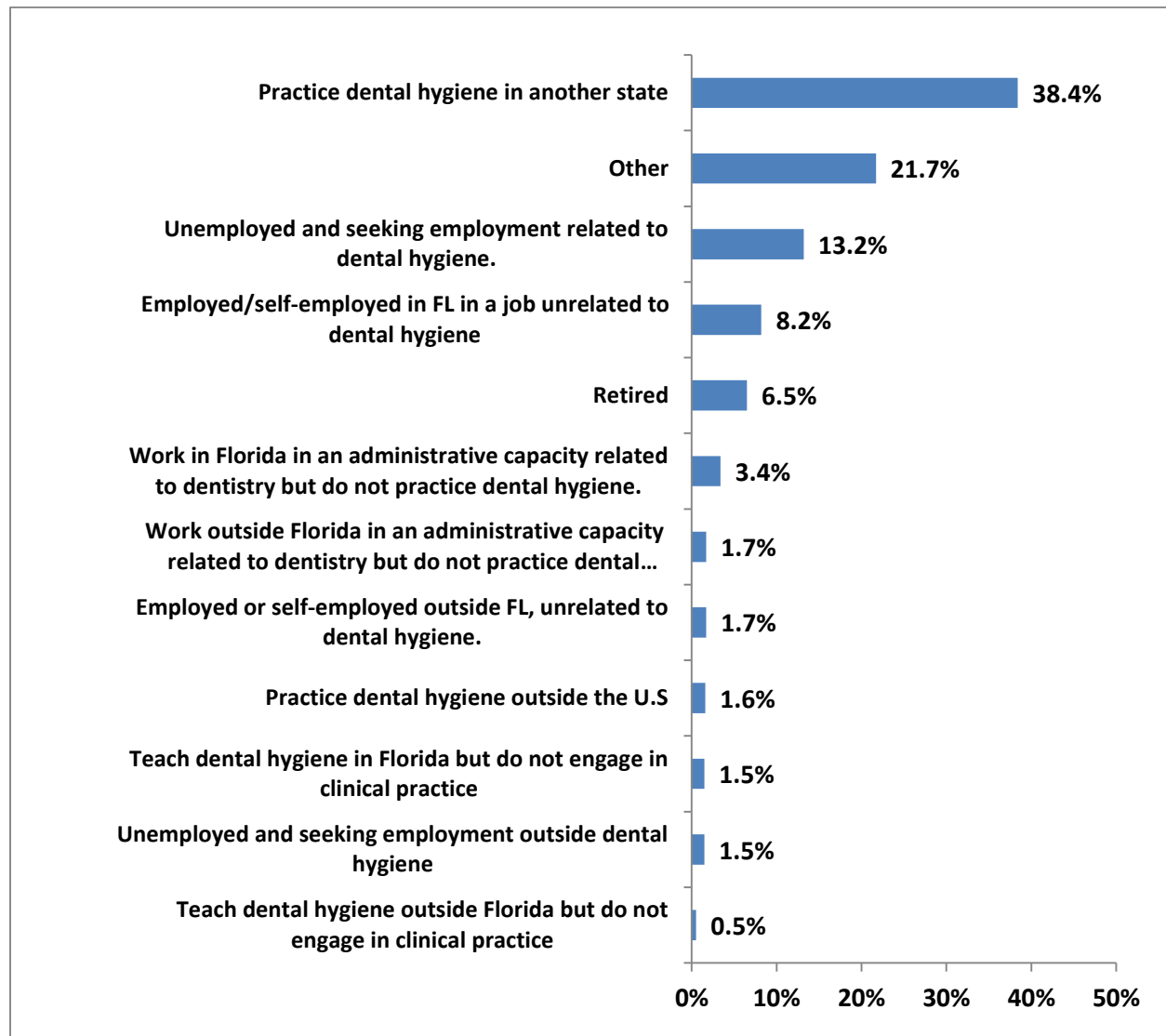
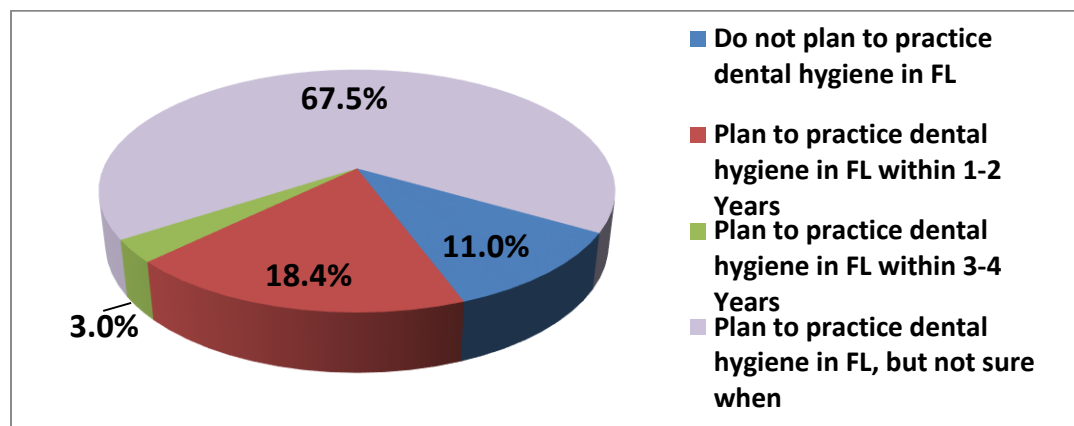


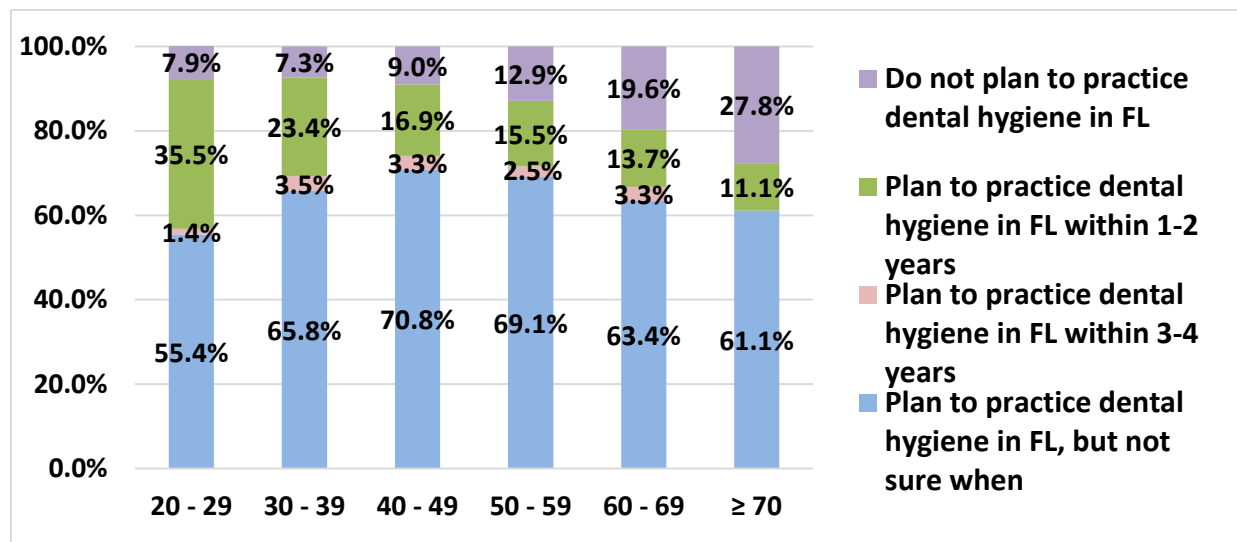
Figure 19 depicts future plans to practice in Florida among dental hygienists not currently practicing in the state. Nearly 88.9% of respondents with an active Florida license who do not currently practice in the state report that they intend to practice here at some time in the future. Among those with reported plans for future practice in Florida, 18.4% plan to practice in one to two years and 3.0% plan to practice in three to four years. 11.0% of survey respondents indicate no future plans to practice dental hygiene in Florida.

**Figure 19. Future Plans to Practice in Florida among Dental Hygienists Not Currently Working in the State (2013-2014)**



Age is closely related to plans for future practice in Florida (Figure 20). Among respondents having an active Florida dental hygiene license but not currently practicing in Florida, more than 55% in all age groups report that they plan to practice in Florida at some undetermined time in the future. Approximately 29% of respondents aged 20-39 years and about 15.4% of respondents aged 40-69 years indicate that they plan to practice dental hygiene in Florida within 1-2 years. The percentage of respondents reporting that they do not plan to practice dental hygiene within Florida in the future rises from age 30 across increasing age groups, from 7.3% for 30-39 year-olds to 27.8% for 70 and over year olds.

**Figure 20. Future Plans to Practice in Florida among Respondents Having an Active Florida License, but Not Currently Working in the State, by Age Group (2013-2014)**





## **Conclusions**

The Florida Department of Health is constantly committed to the measure, review, and evaluation of dental workforce attributes and needs in Florida. The Department makes every effort to collaborate with all state and national oral health partners to ensure the recruitment and retention of highly trained and diverse dental hygiene workforce professionals in underserved communities.

The successful implementation of workforce survey assessments has the potential to provide policymakers with information regarding the clinical practice, geographic location, and scope of practice for Florida dentists. Continued refinement, evaluation, and reporting of this data will assist in the state's efforts to meet current and future dental hygiene workforce needs. The Department continues to work with all professional health organizations to develop innovative, patient-centered, oral healthcare delivery systems.

## Appendix A: Dental Workforce Survey for Dental Hygienists (2013-2014)

Governor Rick Scott, State Surgeon General Dr. John Armstrong, and the Florida Legislature recognize the importance of assessing Florida's current and future dental workforce. Your responses, which constitute a public record, will be instrumental in shaping Florida's healthcare policies. We appreciate your time and effort in completing the questions below.

License Number \_\_\_\_\_

1. Do you hold an active dental hygiene license in any state or states **other than Florida**?

- Yes.
- No.

1.a. If Yes, please specify all applicable states: (drop-down list) \_\_\_\_\_

- Alabama
- Alaska
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Delaware
- District of Columbia
- Florida
- Georgia
- Hawaii
- Idaho
- Illinois
- Indiana
- Iowa
- Kansas
- Kentucky
- Louisiana
- Maine
- Maryland
- Massachusetts
- Michigan
- Minnesota
- Mississippi
- Missouri
- Montana
- Nebraska
- Nevada
- New Hampshire
- New Jersey
- New Mexico
- New York
- North Carolina
- North Dakota
- Ohio
- Oklahoma
- Oregon

- Pennsylvania
- Rhode Island
- South Carolina
- South Dakota
- Tennessee
- Texas
- Utah
- Vermont
- Virginia
- Washington
- West Virginia
- Wisconsin
- Wyoming
- Out Of Country
- Puerto Rico

2. Please indicate the type of program qualifying you for a Florida dental hygiene license.

- Florida dental hygiene program. (Please answer 2a.)
- Out-of-state dental hygiene program. (Please answer 2b.)
- Foreign dental program. (Please answer 2c and 2d.)

2a. Please indicate the school(s) or program(s) from which you received your dental hygiene degree(s).

- Brevard Community College
- Broward College (Broward Community College)
- Daytona State College
- Edison State College
- Florida State College at Jacksonville (Florida Community College at Jacksonville)
- Gulf Coast Community College
- Hillsborough Community College
- Indian River State College
- State College of Florida (Manatee Community College)
- Miami Dade College (Miami Dade Junior College)
- Palm Beach State College (Palm Beach Junior College)
- Pasco-Hernando Community College
- Pensacola State College (Pensacola Junior College)
- Santa Fe College (Santa Fe Community College)
- South Florida Community College
- St. Petersburg College
- Tallahassee Community College
- Valencia Community College
- A Florida program that is not listed

2b. If your training was in another state, please indicate the state(s) where you received your dental hygiene education. (Check all that apply.)

\_\_\_\_\_ (drop-down list)

- Alabama
- Alaska
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Delaware
- District of Columbia
- Florida
- Georgia
- Hawaii
- Idaho
- Illinois
- Indiana
- Iowa
- Kansas
- Kentucky
- Louisiana
- Maine
- Maryland
- Massachusetts
- Michigan
- Minnesota
- Mississippi
- Missouri
- Montana
- Nebraska
- Nevada
- New Hampshire
- New Jersey
- New Mexico
- New York
- North Carolina
- North Dakota
- Ohio
- Oklahoma
- Oregon
- Pennsylvania
- Rhode Island
- South Carolina
- South Dakota
- Tennessee
- Texas
- Utah
- Vermont
- Virginia
- Washington
- West Virginia
- Wisconsin
- Wyoming
- Out Of Country
- Puerto Rico

2c. If you are a foreign-trained dental provider, please check the box which best describes your highest foreign degree.

- Dentist
- Medical Doctor
- Nurse
- Dental Hygienist
- Dental Technician
- Other

2d. If you are a foreign-trained provider, please indicate the country or countries where you received your dental hygiene education. (Check all that apply.)  
(drop-down list)

- Argentina
- Australia
- Brazil
- Canada
- China
- Colombia
- Cuba
- Egypt
- England
- France
- Germany
- Haiti
- India
- Ireland
- Israel
- Italy
- Japan
- Korea
- Mexico
- Nigeria
- Philippines
- Poland
- Portugal
- Russia
- Saudi Arabia
- Scotland
- South Africa
- Spain
- Ukraine
- Venezuela
- Vietnam
- Other Central or South American country
- Other African country
- Other Asian country
- Other European country
- Other Middle Eastern country
- Other country (unspecified)
- Bahamas

3. Please indicate your highest level of dental hygiene education

- a. Certificate in Dental Hygiene
- b. Associate degree
- c. Baccalaureate degree
- d. Master's degree
- e. Other

4. Please indicate your highest degree or level of education

- a. Associate degree or equivalent
- b. Baccalaureate
- c. Masters
- d. Doctoral
- e. Other

5. How many years of active dental hygiene practice do you have?

\_\_\_\_\_ (Drop-down list of individual hours 1 through 20, "more than 20," and "not applicable.")

6. At present, do you practice dental hygiene in Florida or have you accepted employment for practicing dental hygiene in Florida?

- Yes. (If yes, proceed to question 7.)
- No. (If no, please answer 6a, 6b, and 6c.)

6a. The main reason you are not using your Florida license to practice dental hygiene in Florida is: (Choose only one.)

- I currently practice dental hygiene in another state.
- I currently practice dental hygiene outside the U.S.
- I teach dental hygiene in Florida but do not engage in clinical practice.
- I teach dental hygiene outside Florida but do not engage in clinical practice.
- I work in Florida in an administrative capacity related to dentistry but do not practice dental hygiene.
- I work outside Florida in an administrative capacity related to dentistry but do not practice dental hygiene.
- I am employed or self-employed in FL, unrelated to the practice, teaching, or administration of dental hygiene.
- I am employed or self-employed outside FL, unrelated to the practice, teaching, or administration of dental hygiene.
- I am currently unemployed and seeking employment related to dental hygiene.
- I am currently unemployed and seeking employment outside dental hygiene.
- I am currently retired.
- Other

6b. Do you currently reside in Florida?

- Yes.
- No.

6c. If you do not currently practice in Florida, do you plan to practice dental hygiene in Florida in the future?

- Yes, in 1-2 years
- Yes, in 3-4 years
- Yes, but I am not sure when.
- I do not plan to practice dental hygiene in Florida.

If you DO NOT practice dental hygiene in Florida and HAVE NOT accepted employment for practicing in the state, you are now finished with the survey. Thank you for your participation.

If you currently practice dental hygiene in Florida, please continue with the survey.

7. How many months did you practice dental hygiene in Florida in the last 12 months?

- 0-2 Months.
- 3-4 Months.
- 5-6 Months.
- 7-8 Months.
- 9-10 Months.
- 11-12 Months

8. Approximately how many hours do you practice in a typical week? If you are employed to practice but have not yet started, select "Not applicable."

\_\_\_\_\_ (Drop-down list of individual hours 1 through 60, "more than 60," and "not applicable.")

8a. If you routinely practice fewer than 35 hours per week, please select the reason or reasons from the list below. Choose all that apply.

Do not answer this question if you practice 35 or more hours per week.

- Limited work hours are my personal preference.
- Limited work hours allow time for volunteer (uncompensated) work.
- Limited hours allow time for other compensated work.
- Health-related issues limit my work hours.
- I am phasing in retirement.
- I adjust my hours to fit the patient workload.
- My position is part-time.
- Other

9. On average, how many patient encounters do you have in a typical work week? If you have accepted employment to practice but have not yet begun, select "not applicable."

- 1 – 25
- 26 – 50
- 51 – 75
- 76 – 100
- 101 - 125
- More than 125
- Not applicable

10. Please indicate the primary type of practice where you are employed.

- General practice.
- Specialty practice. (Please answer 10a.)

10a. If you work in a specialty practice, please select the specialty type(s). (Check all that apply.)

- Dental Public Health
- Endodontics
- Oral and Maxillofacial Pathology
- Oral and Maxillofacial Radiology
- Oral and Maxillofacial Surgery
- Orthodontics and Dentofacial Orthopedics
- Pediatric Dentistry
- Periodontics
- Prosthodontics

11. Which of the following best describes your primary practice setting? (Choose only one.)

- Office Practice-Solo Practice.
- Office Practice-Group Practice-Single Specialty.
- Office Practice-Group Practice-Multi Specialty.
- County Health Department.
- Community Health Center.
- Federally Qualified Health Center.
- State or Federal Correctional Facility Clinic.
- Other State Government Clinical Setting.
- Military Facility Clinic.
- VA clinic.
- Academic Institution.
- Indian Health Service
- Other

12. How many years have you been in your current primary practice setting and/or position?

- 0 – 1
- 2 – 5
- 6 – 10
- 11 – 15
- 16 – 20
- More than 20

13. Do you work for more than one employer or in more than one practice setting?

- Yes.
- No.

14. Are you currently seeking additional dental hygiene employment?

- Yes. (If yes, please answer 14a.)
- No.

14a. How many additional hours a week are you seeking?

- 1 – 4
- 5 - 8
- 9 - 12



- 13 - 16
- 17 - 20
- 21 - 24
- 25 or more

15. What kind(s) of difficulty (if any) have you experienced in finding a position as a dental hygienist? (Check all that apply)

- None
- Cannot obtain full-time employment
- Cannot obtain part-time employment
- Unsuitable work schedule
- Inadequate salary
- Inadequate benefits
- Unsatisfactory work environment
- Excessive commuting distance
- Other

16. Do you practice in the county where you reside?

- Yes, some of the time
- Yes, all of the time
- No

17. In what Florida county or counties do you practice dental hygiene? (You may select up to five counties.) Please indicate the number of hours typically dedicated to each location.

County \_\_\_\_\_ Hours \_\_\_\_\_ (0-10 Hrs Per Week, 11-20 Hrs Per Week, 21-30 Hrs Per Week, 31-40 Hrs Per Week, 41-50 Hrs Per Week, More than 50 Hrs Per Week)

18. How many hours of volunteer dental hygiene service did you provide in the last 24 months?

- None. (Proceed to question 19.)
- 1-8 hours
- 9-16 hours
- 17-24 hours
- 25-30 hours
- 31-60 hours
- 61-120 hours
- More than 120 hours

18a. Where did you provide volunteer dental hygiene services in the past 24 months? (Choose all that apply).

- I did not provide any volunteer dental hygiene services
- In private office, on my own
- In private office, as part of an organized event (e.g. Give Kids a Smile Day, etc.)
- At a safety net clinic (e.g. County Health Department, Community Health Center, FQHC, etc.)
- As part of a health fair
- As part of a school event
- International charitable organization
- Other

19. Regarding your practice of dental hygiene in Florida in the next five years, which of the following apply? (Choose only one.)

- I plan to end my practice in Florida. (Please answer 19a.)
- I plan to reduce my practice hours but continue practicing in Florida.
- I have no plans to end or reduce my Florida practice within the next five years.

19a. If you plan to end your Florida practice in the next five years, what is your main reason? (Check only one):

- Retirement
- Non-hygienist employment in Florida
- Employment as a hygienist in another state or country
- Non-hygienist employment in another state or country
- Other

20. Do you speak any language other than English?

- Yes. If yes, please answer 20a.
- No.

20a. What foreign language(s) do you speak? (Select all that apply.)

- Spanish
- Portuguese
- French
- German
- Italian
- Russian
- Polish
- Creole
- Chinese (Mandarin or Cantonese)
- Japanese
- Korean
- Vietnamese
- Tagalog
- Arabic
- Hebrew
- Other Asian language
- Other European language
- Other African language
- Other Middle Eastern language
- Other language (unspecified)

Thank you for completing this survey.

## APPENDIX B: METHODOLOGY

Florida statute and administrative rules require renewal of dental licenses biennially by the end of February of even-numbered years. The most recent renewal period ended on February 28, 2014. The Florida Department of Health (Department) prepared and administered a workforce survey of dental hygienists to coincide with the license renewal process. As part of their on-line renewal, dental hygienists were asked to voluntarily complete the survey.

The survey was designed to serve as a survey of Florida's dental workforce to better inform and shape public healthcare policy and plan for future workforce needs. To supplement information obtained from the survey, additional information from the Florida Legislature's Office of Economic and Demographic Research and the Department's Division of Medical Quality Assurance, was incorporated into the analysis. Licensure status is relative to the date the survey was closed. In contrast to licensure information, practice status as summarized in this report is not linked to a single, specific reference date. Information concerning practice status was obtained from the workforce survey. Changes in practice status occurring between survey completion and the report reference date are not reflected in the data. Thus, counts or estimates of dental hygienists actively practicing or not practicing in Florida are approximate with respect to the report's completion date.

Given that practicing dental hygienists are a subset of dental hygienists with active licenses, licensure information maintained by Department helps to screen respondents by identifying dental hygienists who are ineligible to practice. Only three categories represent individuals who responded to the survey and were eligible for active practice in Florida: Clear, Delinquent and Obligations. At the time of this survey there were 8,674 dental hygienists with Clear Active Status, zero with Delinquent Active Status and one with Obligations Active status. The remainder are dental hygienists with a license status that has changed since the survey (e.g., because of death) or those with renewal of non-active licenses (e.g., inactive licenses, which also are subject to renewal requirements). For purposes of analysis, respondents with non-active licenses are of limited interest and are excluded from the analysis. The survey respondents with active licenses represent approximately 82% of all Florida dental hygienists with active licenses as of the time of this report.

Survey respondents with an active Florida license constitute a large representation of the population of Florida dental hygienists. The survey's overall response rate (78.5%) for active licensed Florida practitioners does not imply a high completion rate. The response rate for this cycle's survey was lower than in previous surveys. Variations in the response rate can be due to the actual number of required questions by respondent based on answers to specific prior questions. The reason why a respondent may choose not to respond to a specific question or questions varies greatly. This is not uncommon for many state and national surveys whether voluntary or required. The information gathered provides insight into the practice characteristics of the profession and serves to better address the oral health needs of Florida's residents.

While the survey focused on all dental hygienists with a Florida license, the analysis centered on Florida active licensees practicing in the state. Non-response items are excluded from the analysis because all items were not completed by or applicable to all survey takers. The survey consisted of 20 items regarding the education and practice characteristics of respondents. Additional demographic information was obtained from the Department's Division of Medical Quality Assurance. Descriptive statistical techniques were used to provide the characteristic profiles of respondents using SPSS Statistics 17.0. Marginal tabulations are reported for the summary descriptions and relationships presented throughout the report.