

Michigan Department of Community Health

Survey of Dental Hygienists

Survey Findings 2010

INTRODUCTION

In 2010, the Michigan Department of Community Health (MDCH) conducted the fifth annual survey of licensed dental hygienists to gather information about their employment characteristics, education, and work environment. The MDCH contracted with Public Sector Consultants Inc. (PSC) for development, implementation, and analysis of the survey of dental hygienists. The survey was designed in collaboration with the Michigan Dental Hygienists Association.

The survey contained questions about employment status, education, location and setting of primary and secondary practice sites, whether requirements are met to administer local anesthesia and nitrous oxide, professional satisfaction, the length of time that the respondent intends to continue practicing, as well as a number of demographic questions (age, gender, race/ethnicity). In 2009, questions were added to assess whether dental hygienists are satisfied with the number of hours they work, and to identify their knowledge of and interest in collaborative practice as authorized by Public Act 161 of 2005. The survey questions and response frequencies are provided in the Appendix, along with comparison figures for the 2009, 2008, 2007, and 2006 surveys, where applicable.

As of January 2010, a total of 9,964 dental hygienists were licensed in Michigan. All hygienists are required to renew their license every three years from the first year of licensure, thus dividing the universe of hygienists into three cohorts of roughly equal size. The sample for this survey was drawn from the Michigan licensure files maintained by the MDCH. In 2010, 3,489 dental hygienists were eligible for renewal and received a copy of the survey instrument with their license renewal form. The survey was also available to hygienists completing their license renewal online.

A total of 3,251 dental hygienists renewed their license and 2,084 responded to the survey either online or by return mail, for a response rate of 64 percent and a margin of error of ± 1.9 percent with 95 percent confidence.¹ The 2,084 responses include fully and partially completed surveys (that is, those with information missing for one or more variables), meaning that sample size for individual variables will differ and the margin of error may change slightly depending upon the number of responses for that particular question.

While the results of the 2010 survey of hygienists are generally consistent with those of the 2009, 2008, 2007, and 2006 surveys, differences in the data that fall outside the margin of error are noted. Key survey findings are presented below.

EMPLOYMENT CHARACTERISTICS

- About 75 percent of dental hygienists licensed in Michigan are working either part- or full-time as a dental hygienist in Michigan. *Unless otherwise noted, data presented in this report are for **active**, licensed dental hygienists working in Michigan.*

¹ For example, if the answer to a survey question is 60 percent “Yes,” the margin of error and confidence level mean that if this question were asked 100 times, in 95 occurrences the answer of the entire universe of possible respondents would be between 58.1 percent and 61.9 percent (i.e., the ± 1.9 percent margin of error).

- Among active dental hygienists in Michigan, 45 percent are working 30 or more hours per week in dental hygiene or a related area; 46 percent are working between 12 and 29 hours; and 9 percent work fewer than 12 hours per week in dental hygiene or a related area (see Exhibit 1).
- 5 percent of dental hygienists licensed in Michigan are working as a dental hygienist, but not in Michigan.
- 15 percent of licensed dental hygienists are not working as a hygienist.

EXHIBIT 1
Employment Characteristics of Dental Hygienists, 2010

	Percentage of all hygienists	Percentage of active hygienists in Michigan
30 or more hours per week in dental hygiene or related area	39%	45%
12–29 hours per week in dental hygiene or related area	40	46
Less than 12 hours per week in dental hygiene or related area	8	9
Not employed and seeking employment in dental hygiene or related area	5	NA
Not employed and seeking employment outside of dental hygiene	1	NA
Temporarily not working and not looking for a job	4	NA
Retired, with no plans to return to work	2	NA
Employed in another field	3	NA
Licensed hygienists working in hygiene-related area in Michigan	75%	NA
Licensed hygienists working in hygiene-related area outside of Michigan	12	NA
Licensed hygienists not working in hygiene-related area	13	NA

SOURCE: Michigan Department of Community Health Survey of Dental Hygienists 2010.

NOTE: Percentages may not equal 100 percent due to rounding. NA = Not applicable.

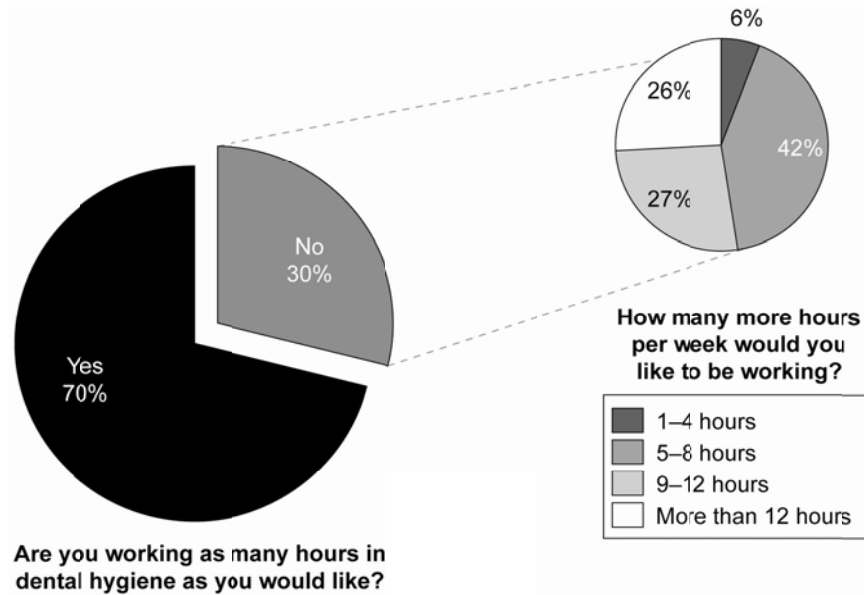
Among the 5 percent of hygienists who are not employed and are seeking employment in hygiene or a related area, 91 percent indicate that this is the result of having difficulty finding a hygienist position.

Among the 4 percent of hygienists who are either employed in a field other than hygiene or unemployed and seeking work outside of dental hygiene:

- Almost half (45 percent) indicate that it is difficult to find a hygienist position. This is higher than in any of the past survey years (12 percent in 2006, 27 percent in 2007 and 2008, and 38 percent in 2009), perhaps reflecting the current economic climate in Michigan.
- 16 percent say there is better salary in other types of work. This number has fluctuated since the MDCH first began surveying licensed hygienists, increasing from 25 percent in 2006 to 29 percent in 2007 but decreasing since 2008 (27 percent in 2008, 25 percent in 2009, and 16 percent in 2010).

In 2010, nearly one in three active dental hygienists (30 percent) say they are not working as many hours in dental hygiene as they would like. Forty-two percent of these hygienists say they would like to be working 5 to 8 more hours per week, compared to 48 percent in 2009. More than half (53 percent) would like to be working 9 or more additional hours each week (see Exhibit 2), compared to 46 percent in 2009.

EXHIBIT 2
Interest in Working Additional Hours in Dental Hygiene among
Active Dental Hygienists in Michigan, 2010



SOURCE: Michigan Department of Community Health Survey of Dental Hygienists 2010.
NOTE: Percentages may not equal 100 percent due to rounding.

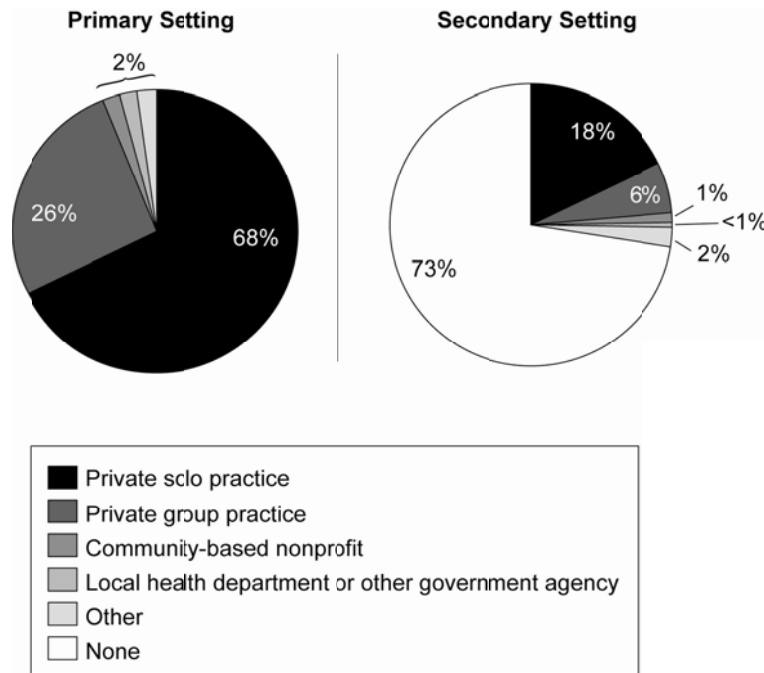
PRACTICE SETTING CHARACTERISTICS

Twenty-seven percent of active dental hygienists work at more than one site; 73 percent work at only one site as a dental hygienist. The primary practice setting of the majority (68 percent) of active dental hygienists is a private *solo* practice, while slightly more than a quarter (26 percent) work primarily in a private *group* practice. About 2 percent of active hygienists work primarily in a community-based nonprofit; another 2 percent work in a local health department or other government agency; and 2 percent work in another setting. These numbers have remained relatively unchanged since MDCH began surveying dental hygienists.

The secondary practice setting of 18 percent of active dental hygienists is a private *solo* practice and 6 percent work secondarily in a private *group* practice. Two percent work secondarily in another type of setting, while 1 percent work secondarily in a community-based nonprofit and less than 1 percent in a local health department or other government agency (see Exhibit 3).

EXHIBIT 3

Practice Settings of Active Dental Hygienists in Michigan, 2010



SOURCE: Michigan Department of Community Health Survey of Dental Hygienists 2010.
NOTE: Percentages may not equal 100 percent due to rounding.

ADMINISTERING LOCAL ANESTHESIA AND NITROUS OXIDE

Forty-six percent of active dental hygienists report that they have met the requirements to administer local anesthesia (see Exhibit 4). This percentage has increased steadily from 34 percent in 2006. About 37 percent of active hygienists *do* administer local anesthesia; this has also increased steadily from 2006, when 29 percent reported administering local anesthesia.

Thirty-eight percent of active hygienists report meeting the requirements to administer nitrous oxide. This proportion has also increased consistently since 2006, when 26 percent of active hygienists reported meeting these requirements. Approximately 29 percent *do* administer nitrous oxide.

EXHIBIT 4

Administration of Local Anesthesia and Nitrous Oxide by Active Dental Hygienists in Michigan, 2010

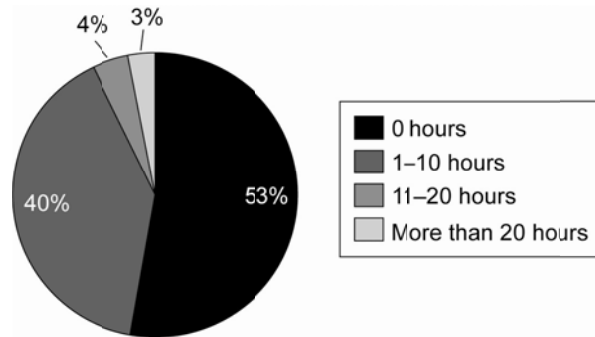
Type of anesthesia	Meet requirements to administer	Administer
Local anesthesia	46%	37%
Nitrous oxide	38	29

SOURCE: Michigan Department of Community Health Survey of Dental Hygienists 2010.

VOLUNTEER WORK AND COLLABORATIVE PRACTICE

Dental hygienists can assist in meeting the oral health needs of the underserved by volunteering their services outside of their regular practice. Two-fifths (40 percent) volunteer between 1 and 10 hours in a year; almost 7 percent volunteer more than 10 hours in a year (see Exhibit 5). More than half of active dental hygienists (53 percent) say they do not volunteer any time outside their practice in dental hygiene-related activities.

EXHIBIT 5
Volunteer Hours of Active Dental Hygienists in Michigan, 2010



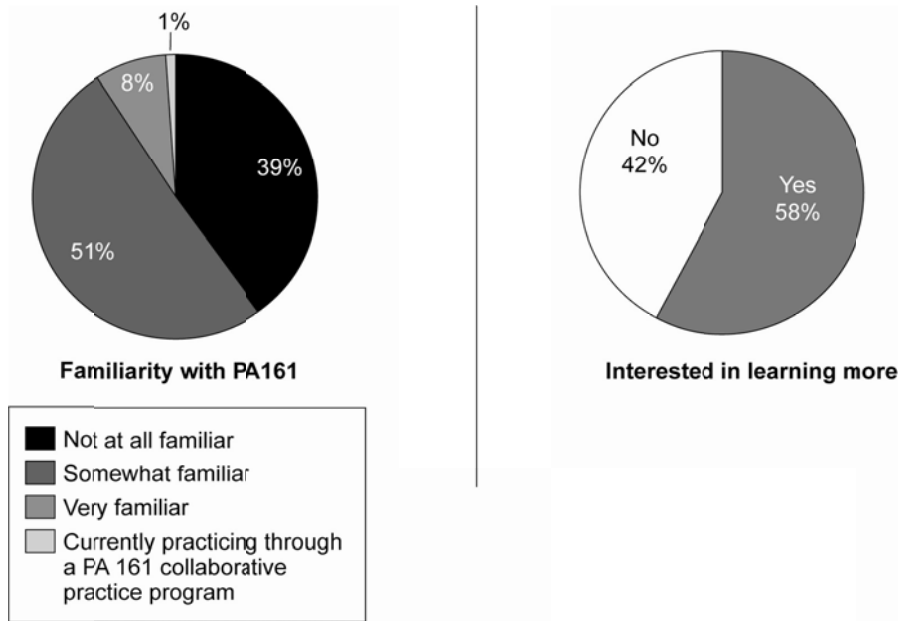
SOURCE: Michigan Department of Community Health Survey of Dental Hygienists 2010.

Dental hygienists also have the opportunity to reach underserved populations by engaging in a collaborative practice authorized by Public Act 161 of 2005, in which registered dental hygienists provide preventive oral health care to the underserved with supervision of a dentist.

About two-fifths (39 percent) of active dental hygienists surveyed in 2010 indicate that they are not at all familiar with PA 161, while more than half are either somewhat familiar (51 percent) or very familiar (8 percent) with the law. Only 1 percent of active hygienists are currently practicing through a PA 161 collaborative practice program. The majority of active dental hygienists (58 percent) are interested in learning more about PA 161 (see Exhibit 6).

EXHIBIT 6

Knowledge of and Interest in Public Act 161 among Active Dental Hygienists in Michigan, 2010



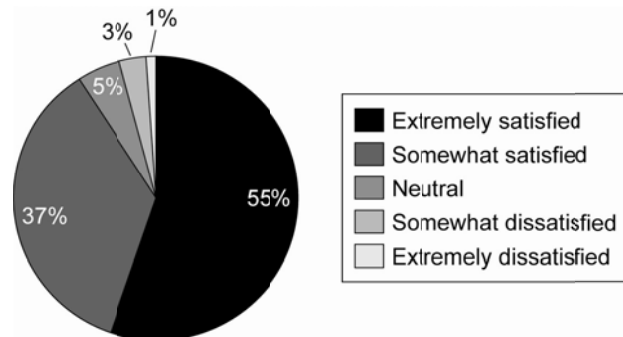
SOURCE: Michigan Department of Community Health Survey of Dental Hygienists 2010.
NOTE: Percentages may not equal 100 percent due to rounding.

PROFESSIONAL SATISFACTION

When asked to rate their overall professional satisfaction as a dental hygienist, 92 percent of active dental hygienists report being either extremely satisfied (55 percent) or somewhat satisfied (37 percent) (see Exhibit 7).

EXHIBIT 7

Professional Satisfaction of Active Dental Hygienists in Michigan, 2010



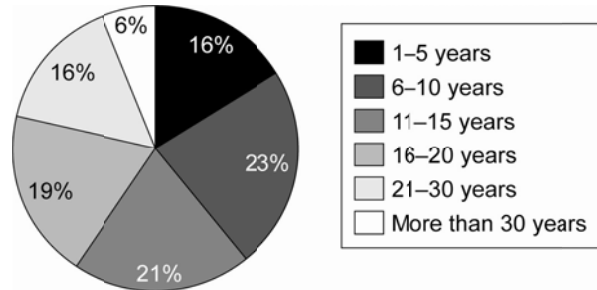
SOURCE: Michigan Department of Community Health Survey of Dental Hygienists 2010.
NOTE: Percentages may not equal 100 percent due to rounding.

PLANS TO CONTINUE PRACTICE

Approximately 40 percent of active hygienists report that they plan to work as a dental hygienist for one to ten more years (see Exhibit 8). This number has remained relatively unchanged since the MDCH began surveying dental hygienists. Of the 16 percent who intend to practice for *one to five more years*, 26 percent indicate this is due to age, 7 percent indicate lifestyle changes as a factor, and 4 percent or fewer say the decision is influenced by other factors (see Exhibit 9).

EXHIBIT 8

Plans of Active Dental Hygienists in Michigan to Continue Practicing, 2010



SOURCE: Michigan Department of Community Health Survey of Dental Hygienists 2010.

NOTE: Percentages may not equal 100 percent due to rounding.

EXHIBIT 9

Factors Influencing Plans to Practice for One to Five More Years among Active Dental Hygienists in Michigan, 2010

Factor	Percentage
Age	26%
Lifestyle changes	7
Personal or family health concerns	4
General lack of job satisfaction	3
Limits on career advancement	3
Childbearing/childrearing	3
Inadequate payment for services	2
Moved to non-patient care field or position	1
Employer/employee conflict	1
Increasing administrative/regulatory burden	<1
Malpractice insurance cost	<1

SOURCE: Michigan Department of Community Health Survey of Dental Hygienists 2010.

NOTE: Percentages do not equal 100 percent because respondents were asked to "mark all that apply."

EDUCATION

Survey respondents were asked to indicate all of the degrees they have earned. Eighty-two percent of active hygienists have an associate's degree in hygiene. Sixteen percent of active hygienists have a bachelor's degree in hygiene. Twelve percent have a non-hygiene-related associate's degree and about 9 percent have a bachelor's degree in a non-hygiene-related area. Two percent hold a master's degree and less than 1 percent hold a doctoral degree (see Exhibit 10).

EXHIBIT 10 Degrees Held by Dental Hygienists, 2010

Degree achieved	Percentage of active hygienists in Michigan
Associate's: Hygiene	82%
Bachelor's: Hygiene	16
Associate's: Non-hygiene	12
Bachelor's: Non-hygiene	9
Master's	2
Doctorate	<1

SOURCE: Michigan Department of Community Health Survey of Dental Hygienists 2010.

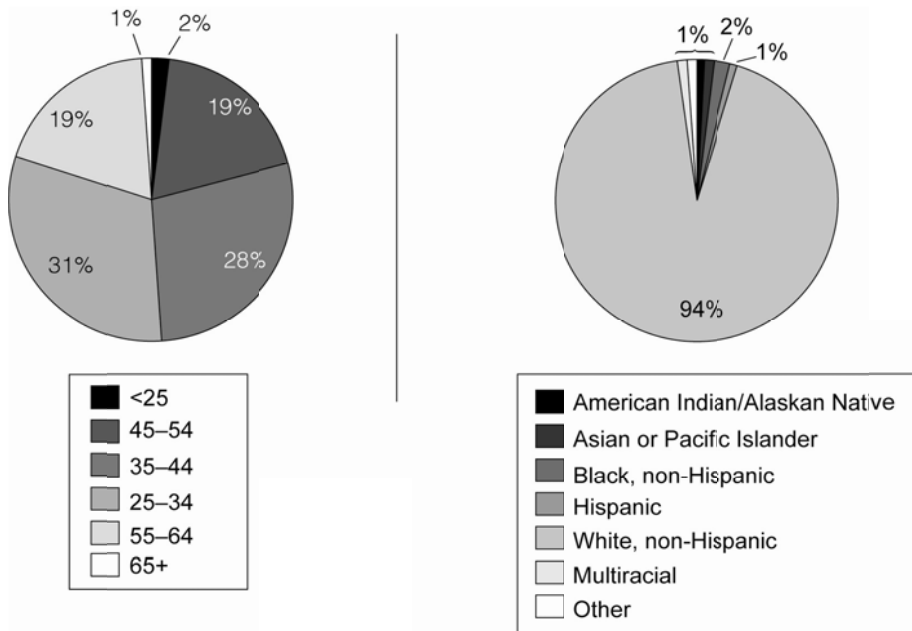
NOTE: Percentages do not equal 100 percent because respondents were asked to indicate all of the degrees they have completed.

GENDER, AGE, RACE/ETHNICITY

- Ninety-nine percent of active hygienists are female; 1 percent of them are male.
- Almost half of active hygienists (49 percent) are aged 44 or younger. Twenty percent of active hygienists are aged 55 or older.
- Ninety-four percent of active hygienists are white; 2 percent are Black; and 1 percent each are non-Hispanic, American Indian/Alaskan Native, Asian or Pacific Islander, Hispanic, or multi-racial (see Exhibit 11).

EXHIBIT 11

Age and Race/Ethnicity of Active Dental Hygienists in Michigan, 2010



SOURCE: Michigan Department of Community Health Survey of Dental Hygienists 2010.
NOTE: Percentages may not equal 100 percent due to rounding.

Appendix

Survey Instrument and Response Frequencies * (N=2,084)

1. In what year were you born?

Age	Percentage of active hygienists				
	2006	2007	2008	2009	2010
<25	3.0%	3.6%	3.5%	2.5%	2.4%
25–34	20.8	20.1	20.2	18.9	19.2
35–44	28.1	29.7	28.7	25.8	27.6
45–54	34.5	32.7	31.3	32.8	30.5
55–64	12.4	12.6	14.8	18.1	19.0
65+	1.1	1.4	1.4	2.1	1.3

2. What is your current employment status? (Mark **one**.)

	Percentage of all hygienists					Percentage of active hygienists in Michigan				
	2006	2007	2008	2009	2010	2006	2007	2008	2009	2010
a. 30 or more hours per week in dental hygiene or related area	41.2%	43.4%	42.9%	39.3%	39.0%	45.1%	48.1%	48.1%	43.5%	45.3%
b. 12–29 hours per week in dental hygiene or related area	39.7	37.5	39.2	41.0	39.8	46.0	43.0	43.9	47.7	45.8
c. Less than 12 hours per week in dental hygiene or related area	7.6	7.7	7.1	8.3	8.4	8.8	8.9	8.0	8.8	8.9
d. Not employed and seeking employment in dental hygiene or related area	3.2	2.9	3.2	3.6	4.8	NA	NA	NA	NA	NA
e. Not employed and seeking employment outside of dental hygiene	0.3	0.4	0.4	0.2	0.5	NA	NA	NA	NA	NA
f. Temporarily not working and not looking for a job	3.5	4.5	3.8	3.6	3.6	NA	NA	NA	NA	NA
g. Retired, with no plans to return to work	1.5	1.6	1.5	1.5	1.5	NA	NA	NA	NA	NA
h. Employed in another field	3.0	1.9	1.9	2.5	2.5	NA	NA	NA	NA	NA

*Unless otherwise noted, all frequencies are for the dental hygienists who indicated they are working as a hygienist in Michigan. Percentages may not equal 100 percent due to rounding. NA = Not applicable.

3. Are you working as many hours in dental hygiene as you would like?

	2009	2010
a. Yes	75.3%	70.0%
b. No	24.7	30.0

4. If NO, about how many more hours per week would you like to be working?

	2009	2010
a. 1–4 hours	5.9%	5.7%
b. 5–8 hours	48.1	41.7
c. 9–12 hours	21.9	27.0
d. More than 12 hours	24.1	25.7

5. If you are not working as a hygienist or you are unemployed and seeking work as a hygienist, why is this the case? (Mark **all** that apply.)

	Percentage of hygienists seeking employment in hygiene					Percentage of hygienists employed or seeking employment in another field				
	2006	2007	2008	2009	2010	2006	2007	2008	2009	2010
a. Difficult to find hygienist position	83.1%	86.9%	83.8%	86.1%	90.8%	11.9%	26.5%	27.1%	37.7%	45.2%
b. Better salary in other type of work	4.6	3.3	4.4	2.8	1.0	25.4	28.6	27.1	24.5	16.1
c. Work environment prevents me from practicing effectively	6.2	6.6	11.8	5.6	5.1	14.9	12.2	0.0	9.4	8.1
d. Other position more rewarding professionally	3.1	3.3	4.4	0.0	1.0	68.7	42.9	29.2	37.7	38.7
e. Disability/physical demands of the job	4.6	1.6	7.4	1.4	3.1	22.4	20.4	20.8	17.0	12.9
f. Taking care of home/ family	33.8	26.2	26.5	18.1	22.4	11.9	14.3	14.6	9.4	16.1

6. Please indicate all education degrees completed.

Degree	2006	2007	2008	2009	2010
a. Associate's: Hygiene	81.5%	81.9%	78.2%	82.0%	81.8%
b. Associate's: Non-hygiene	9.8	11.2	9.3	9.2	11.7
c. Bachelor's: Hygiene	17.0	17.0	17.0	15.6	15.9
d. Bachelor's: Non-hygiene	9.0	7.4	7.5	9.2	8.5
e. Master's	2.1	2.6	2.1	1.7	2.4
f. Doctorate	0.1	0.4	0.3	0.1	0.3

7. Do you work as a dental hygienist at more than one site?

	2006	2007	2008	2009	2010
a. Yes	28.4%	30.2%	30.5%	25.4%	26.8%
b. No	71.6	69.8	69.5	74.6	73.2

8. What is the setting of your primary practice?

	2006	2007	2008	2009	2010
a. Private solo practice	67.4%	66.9%	64.6%	68.2%	68.1%
b. Private group practice	27.2	27.1	29.1	27.1	26.0
c. Community-based nonprofit	1.5	1.9	1.5	1.3	1.9
d. Local health department or other government agency	1.6	1.4	1.4	1.2	1.6
e. Other	2.3	2.7	3.3	2.3	2.4

9. What is the setting of your secondary practice?

	2006	2007	2008	2009	2010
a. Private solo practice	19.1%	20.4%	19.4%	18.8%	17.6%
b. Private group practice	6.1	6.4	7.1	4.4	6.1
c. Community-based nonprofit	0.7	0.8	0.4	0.8	0.8
d. Local health department or other government agency	0.5	0.4	0.3	0.6	0.4
e. Other	1.3	2.0	1.7	0.9	2.1
f. None	72.3	70.0	71.1	74.5	73.0

10. A. What is the ZIP Code of your primary place of employment? _____

B. What is the ZIP Code of your secondary place of employment? _____

11. How many hours per year do you volunteer outside your practice in dental hygiene-related activities?

	2009	2010
a. 0 hours	52.2%	53.3%
b. 1–10 hours	40.7	40.2
c. 11–20 hours	3.5	3.5
d. More than 20 hours	3.5	3.0

12. How familiar are you with Public Act 161, a law passed in 2005 that authorizes a collaborative practice in which registered dental hygienists provide preventive oral health care to underserved populations with supervision of a dentist?

	2009	2010
a. Not at all familiar	40.6%	39.2%
b. Somewhat familiar	50.7	51.4
c. Very familiar	7.3	8.4
d. Currently practicing through a PA 161 collaborative practice program	1.3	1.0

13. Are you interested in learning more about PA 161?

	2009	2010
a. Yes	60.1%	58.1%
b. No	39.9	41.9

14. Have you met the requirements that allow a dental hygienist to administer...

	2006	2007	2008	2009	2010
a. local anesthesia?	33.8%	36.9%	41.2%	42.8%	46.0%
b. nitrous oxide?	26.0	28.3	30.1	33.7	38.0

15. In your practice, do you administer...

	2006	2007	2008	2009	2010
a. local anesthesia?	28.9%	30.0%	34.5%	36.7%	37.2%
b. nitrous oxide?	24.8	22.9	24.3	27.6	28.7

16. For how many years do you plan to continue to work in dental hygiene?

	2006	2007	2008	2009	2010
a. 1–5 years	14.3%	13.8%	15.1%	15.8%	15.9%
b. 6–10 years	23.8	24.6	23.8	24.0	22.9
c. 11–15 years	23.7	20.0	19.2	21.0	20.7
d. 16–20 years	18.2	20.0	19.5	19.3	19.3
e. 21–30 years	14.6	14.8	15.8	13.8	15.5
f. More than 30 years	5.5	6.8	6.7	6.1	5.7

17. If you plan to work in dental hygiene for *one to five more years*, what are the factors that led to this decision? (Mark **all** that apply.)

	2009	2010
a. Age	26.3%	25.5%
b. General lack of job satisfaction	3.0	3.2
c. Childbearing/childrearing	2.7	2.6
d. Lifestyle changes	8.1	7.2
e. Malpractice insurance cost	0.2	0.1
f. Personal or family health concerns	4.3	3.7
g. Increasing administrative/regulatory burden	0.9	0.4
h. Employer/employee conflict	1.4	0.6
i. Inadequate payment for services	2.6	1.9
j. Moved to non-patient care field or position	0.3	0.6
k. Limits on career advancement	3.2	3.2

18. Overall, how would you rate your professional satisfaction as a dental hygienist?

	2006	2007	2008	2009	2010
a. Extremely satisfied	46.9%	49.9%	50.8%	57.5%	54.8%
b. Somewhat satisfied	40.6	38.6	39.5	34.3	37.0
c. Neutral	6.6	7.4	6.3	5.3	4.9
d. Somewhat dissatisfied	5.0	2.9	2.8	2.4	2.8
e. Extremely dissatisfied	0.9	1.2	0.5	0.5	0.6

19. Do you speak another language in addition to English?

	2006	2007	2008	2009	2010
a. Yes	8.2%	7.3%	7.9%	7.5%	6.5%
b. No	91.8	92.7	92.1	92.5	93.5

20. What is your race/ethnicity? (Mark **one**.)

	2006	2007	2008	2009	2010
a. American Indian/Alaskan Native	1.1%	0.7%	0.8%	0.9%	0.7%
b. Asian or Pacific Islander	0.5	0.9	0.7	0.7	1.0
c. Black, non-Hispanic	1.6	2.2	1.0	1.3	1.5
d. Hispanic	0.6	0.8	1.0	0.8	1.0
e. White, non-Hispanic	95.0	94.1	95.3	94.1	93.9
f. Multiracial	0.4	0.6	0.5	0.5	0.7
g. Other	0.7	0.7	0.7	1.7	1.2

21. What is your gender?

	2006	2007	2008	2009	2010
a. Male	0.4%	0.5%	0.7%	0.4%	0.7%
b. Female	99.6	99.5	99.3	99.6	99.3