

# *Michigan Department of Community Health*

## *Survey of Dental Hygienists*

### **Survey Findings 2009**

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#### **INTRODUCTION**

In 2009, the Michigan Department of Community Health (MDCH) conducted the fourth 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 instrument 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, and 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.

As of January 2009, a total of 9,856 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 2009, about 3,500 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 3,316 dental hygienists renewed their license and 2,013 responded to the survey either online or by return mail, for a response rate of 61 percent and a margin of error of  $\pm 1.4$  percent with 95 percent confidence.<sup>1</sup> The 2,013 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 amount of missing data for that particular question.

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

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<sup>1</sup> 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 58.6 percent and 61.4 percent (i.e., the  $\pm 1.4$  percent margin of error).

## 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.*
  - Among active dental hygienists in Michigan, 44 percent are working 30 or more hours per week in dental hygiene or a related area; 48 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).
  - The percentage of active dental hygienists working 30 or more hours per week in dental hygiene is lower than it was in 2007 and 2008 (48 percent in each year). Conversely, the percentage who are working between 12 and 29 hours a week in dental hygiene is up from 2007 and 2008 (43 and 44 percent, respectively).
- About 12 percent of dental hygienists licensed in Michigan are working as a dental hygienist, but not in Michigan.
- Thirteen percent of licensed dental hygienists are not working as a hygienist.

### EXHIBIT 1

#### Employment Characteristics of Dental Hygienists, 2009

	Percentage of all hygienists	Percentage of active hygienists in Michigan
30 or more hours per week in dental hygiene or related area	39%	44%
12–29 hours per week in dental hygiene or related area	41	48
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	4	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 2009.

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

Among the 4 percent of hygienists who are not employed and are seeking employment in hygiene or a related area, most indicate that this is the result of having difficulty finding a hygienist position (86 percent).

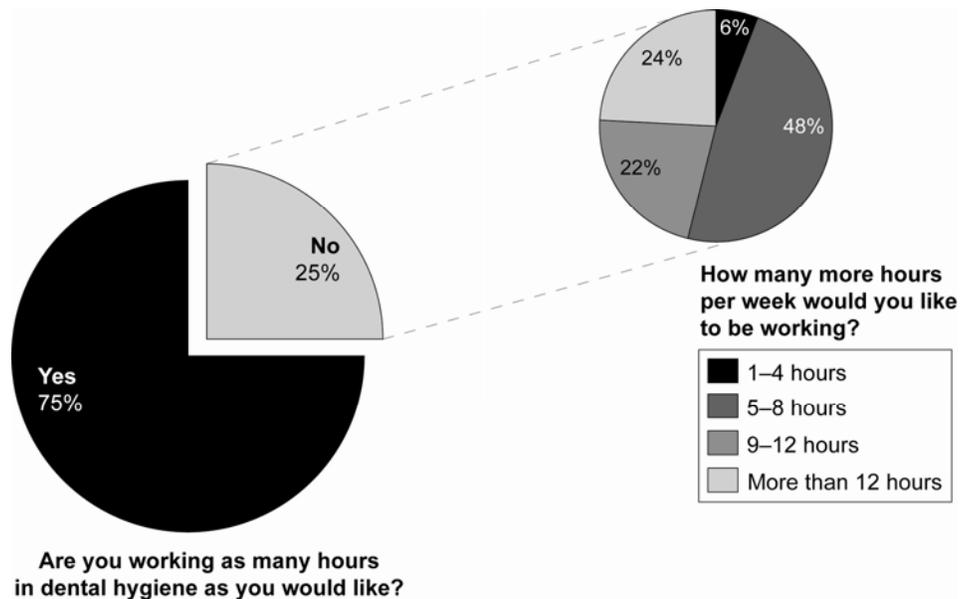
Among the 3 percent of hygienists who are either employed in a field other than hygiene or unemployed and seeking work outside of dental hygiene, 38 percent say this is because they find another position more professionally rewarding. This number has fluctuated since MDCH first began surveying licensed hygienists, decreasing from 69 percent in 2006 to 29 percent in 2008 but picking up again in 2009.

Another 38 percent of the 3 percent of hygienists who are either employed in a field other than hygiene or unemployed and seeking work outside of dental hygiene 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 and 27 percent in 2007 and 2008), perhaps reflecting the current economic climate in Michigan.

In 2009, dental hygienists were asked for the first time if they are working as many hours as they would like in dental hygiene. One-fourth (25 percent) of active dental hygienists say they are not working as many hours in dental hygiene as they would like. Nearly half of these hygienists (48 percent) say they would like to be working 5 to 8 more hours per week. About a quarter (24 percent) would like to be working more than 12 additional hours each week (see Exhibit 2).

## EXHIBIT 2

### Interest in Working Additional Hours in Dental Hygiene among Active Dental Hygienists in Michigan, 2009



SOURCE: Michigan Department of Community Health Survey of Dental Hygienists 2009.

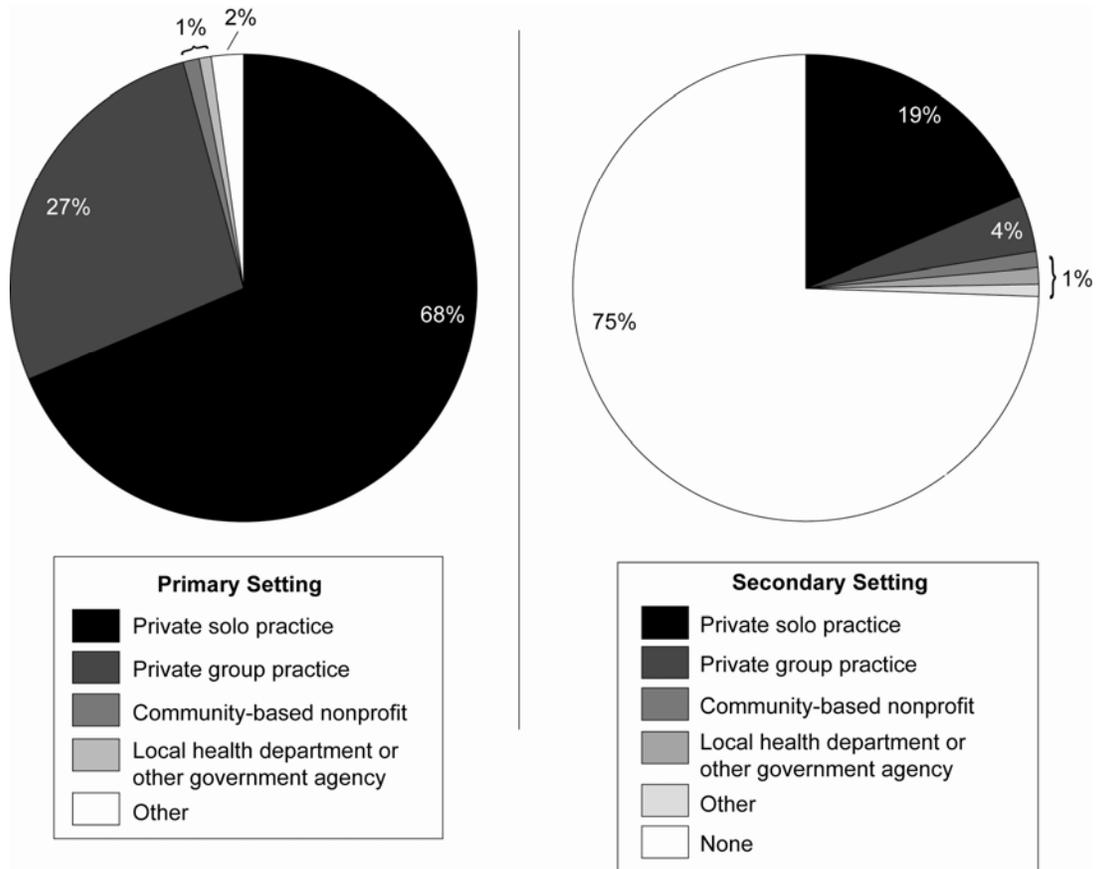
## PRACTICE SETTING CHARACTERISTICS

About 25 percent of active dental hygienists work at more than one site; 75 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 (27 percent) work primarily in a private *group* practice. About 1 percent of active

hygienists work primarily in a community-based nonprofit; another 1 percent work in a local health department or other government agency; and 2 percent work in another setting.

The secondary practice setting of almost a fifth (19 percent) of active dental hygienists is a private solo practice and about 4 percent work secondarily in a private group practice. About 1 percent work secondarily in either a community-based nonprofit; a local health department or other government agency; or another setting (see Exhibit 3).

**EXHIBIT 3**  
Practice Settings of Active Dental Hygienists in Michigan, 2009



SOURCE: Michigan Department of Community Health Survey of Dental Hygienists 2009.  
NOTE: Percentages do not equal 100 percent due to rounding.

### ADMINISTERING LOCAL ANESTHESIA AND NITROUS OXIDE

About 43 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.

Approximately 34 percent of active hygienists report meeting the requirements to administer nitrous oxide. This proportion has also consistently increased since 2006, when 26 percent of active hygienists reported meeting these requirements. About 28 percent *do* administer nitrous oxide, which is also an increase from the levels reported in past surveys, when approximately 25 percent reported administering nitrous oxide.

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**EXHIBIT 4**  
Administration of Local Anesthesia and Nitrous Oxide by  
Active Dental Hygienists in Michigan, 2009

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Type of anesthesia	Meet requirements to administer	Administer
Local anesthesia	43%	37%
Nitrous oxide	34	28

SOURCE: Michigan Department of Community Health Survey of Dental Hygienists 2009.

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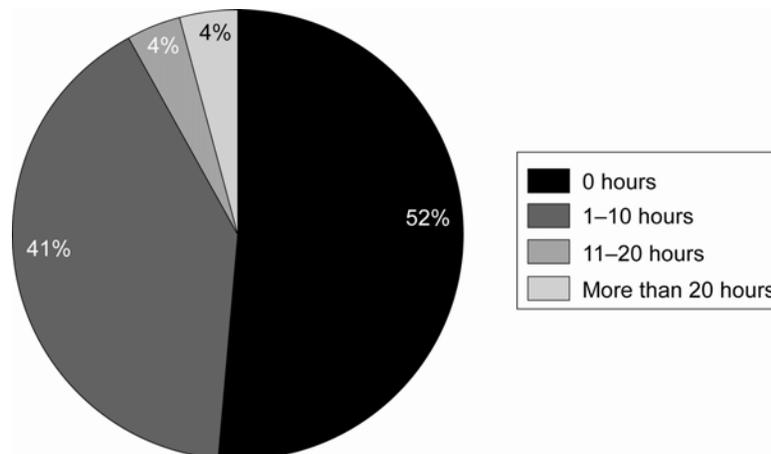
**VOLUNTEER WORK AND COLLABORATIVE PRACTICE**

Dental hygienists can assist in meeting the oral health needs of the underserved by volunteering their services outside of their regular practice. About two-fifths (41 percent) volunteer between 1 and 10 hours in a year; 8 percent volunteer more than 10 hours in a year (see Exhibit 5). More than half of active dental hygienists (52 percent) say they do not volunteer any time outside their practice in dental hygiene-related activities.

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**EXHIBIT 5**  
Volunteer Hours of Active Dental Hygienists in Michigan, 2009

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SOURCE: Michigan Department of Community Health Survey of Dental Hygienists 2009.

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

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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

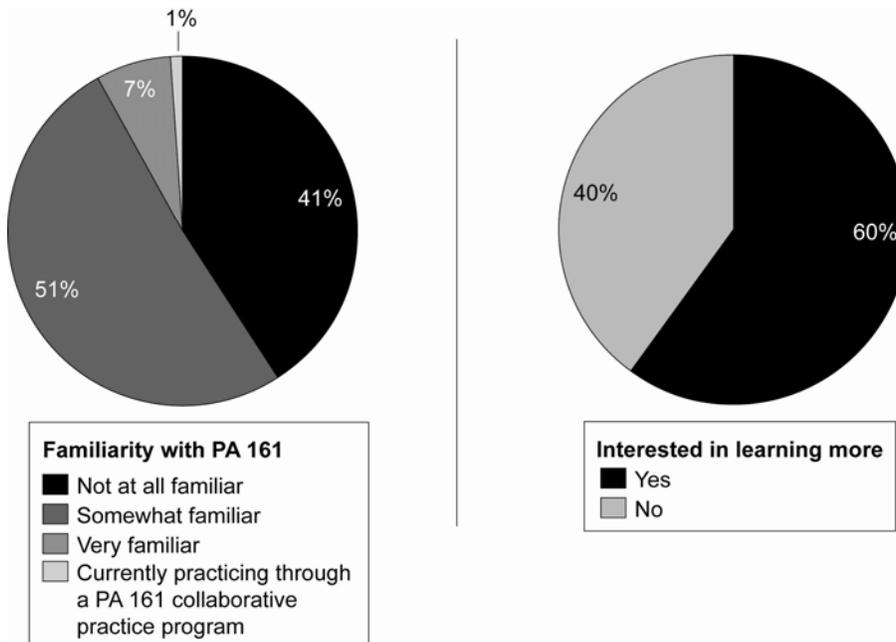
registered dental hygienists provide preventive oral health care to the underserved with supervision of a dentist.

About two-fifths of active dental hygienists are not at all familiar with PA 161, while more than half are either somewhat familiar (51 percent) or very familiar (7 percent) with the law. Only 1 percent are currently practicing through a PA 161 collaborative practice program. The majority of active dental hygienists (60 percent) are interested in learning more about PA 161 (see Exhibit 6).

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**EXHIBIT 6**  
Knowledge of and Interest in Public Act 161 among  
Active Dental Hygienists in Michigan, 2009

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SOURCE: Michigan Department of Community Health Survey of Dental Hygienists 2009.

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## PROFESSIONAL SATISFACTION

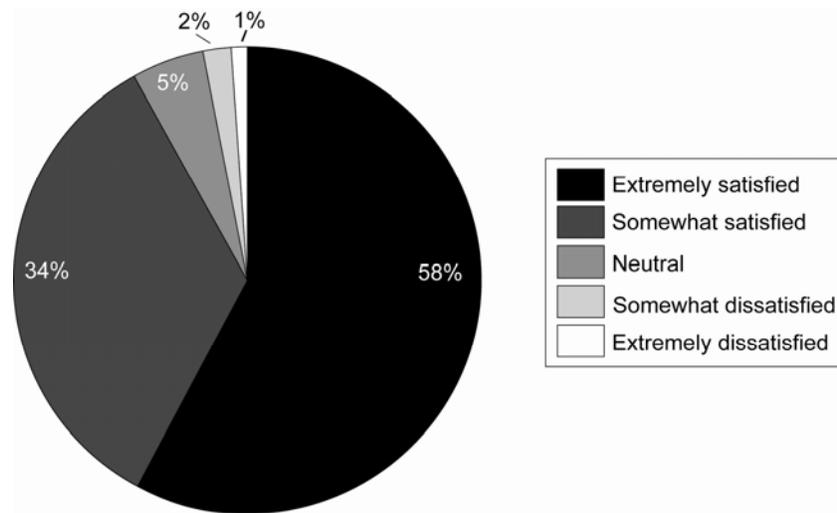
When asked to rate their overall professional satisfaction as a dental hygienist, 58 percent of dental hygienists report that they are extremely satisfied; another 34 percent are somewhat satisfied (see Exhibit 7).

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### EXHIBIT 7

#### Professional Satisfaction of Active Dental Hygienists in Michigan, 2009

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SOURCE: Michigan Department of Community Health Survey of Dental Hygienists 2009.

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### PLANS TO CONTINUE PRACTICE

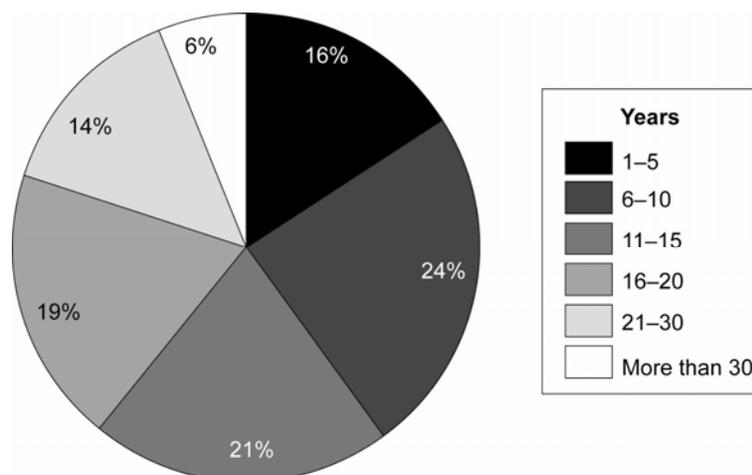
Forty percent of active hygienists report that they plan to work as a dental hygienist for one to ten more years (see Exhibit 8). Of the 16 percent who intend to practice for *one to five more years*, 26 percent indicate this is due to age, 8 percent indicate lifestyle changes as a factor, and 4 percent or fewer say the decision is influenced by other factors (see Exhibit 9).

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### EXHIBIT 8

#### Plans of Active Dental Hygienists in Michigan to Continue Practicing, 2009

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SOURCE: Michigan Department of Community Health Survey of Dental Hygienists 2009.

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### EXHIBIT 9

#### Factors Influencing Plans to Practice for One to Five More Years among Active Dental Hygienists in Michigan, 2009

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Factor	Percentage of active hygienists in Michigan who plan to practice 1–5 more years
Age	26%
Lifestyle changes	8
Personal or family health concerns	4
General lack of job satisfaction	3
Childbearing/childrearing	3
Inadequate payment for services	3
Limits on career advancement	3
Increasing administrative/regulatory burden	1
Employer/employee conflict	1
Malpractice insurance cost	<1
Moved to non-patient care field or position	<1

SOURCE: Michigan Department of Community Health Survey of Dental Hygienists 2009.

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

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### EDUCATION

Survey respondents were asked to indicate all of the degrees they have earned. Approximately 82 percent of active hygienists have an associate’s degree in hygiene. About 16 percent of active hygienists have a bachelor’s degree in hygiene. About 9 percent have a non-hygiene associate’s degree and 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).

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### EXHIBIT 10

#### Degrees Held by Dental Hygienists, 2009

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

SOURCE: Michigan Department of Community Health Survey of Dental Hygienists 2009.

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

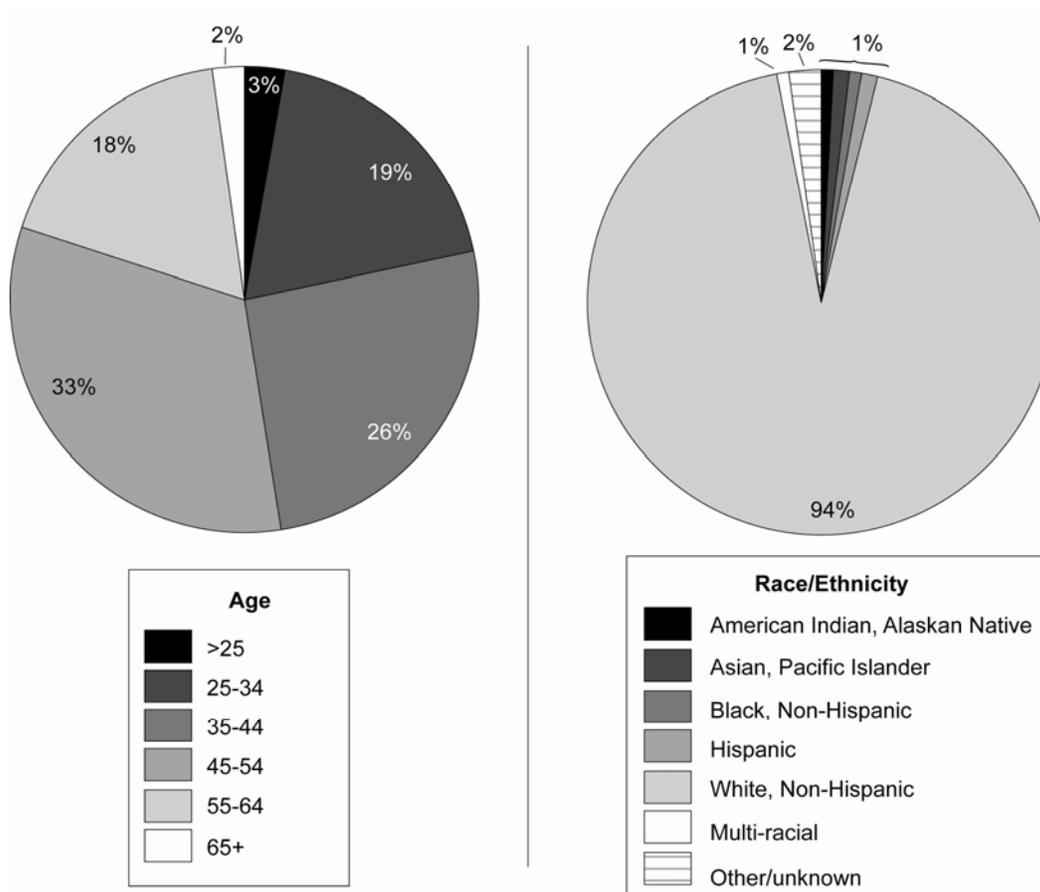
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## GENDER, AGE, RACE, AND ETHNICITY

- Nearly 100 percent of active hygienists are female; less than 1 percent of them are male.
- About half (48 percent) of active hygienists are aged 44 or younger. About 20 percent of active hygienists are aged 55 or older.
- Ninety-four percent of active hygienists are white; 1 percent each are African American, American Indian/Alaskan Native, Asian or Pacific Islander, Hispanic, or multi-racial (see Exhibit 11).

### EXHIBIT 11

#### Age, Race, and Ethnicity of Active Dental Hygienists in Michigan, 2009



SOURCE: Michigan Department of Community Health Survey of Dental Hygienists 2009.

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



## Appendix

### *Survey Instrument and Response Frequencies* \* (N=2,013)

1. In what year were you born?

Age	2006	2007	2008	2009
<25	3%	4%	3%	3%
25-34	21	20	19	19
35-44	28	30	29	26
45-54	35	33	31	33
55-64	12	13	16	18
65+	1	1	2	2

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

	Percentage of all hygienists				Percentage of active hygienists in Michigan			
	2006	2007	2008	2009	2006	2007	2008	2009
a. 30 or more hours per week in dental hygiene or related area	41%	43%	43%	39%	45%	48%	48%	44%
b. 12-29 hours per week in dental hygiene or related area	40	38	39	41	46	43	44	48
c. Less than 12 hours per week in dental hygiene or related area	8	8	7	8	9	9	8	9
d. Not employed and seeking employment in dental hygiene or related area	3	3	3	4	NA	NA	NA	NA
e. Not employed and seeking employment outside of dental hygiene	<1	<1	<1	<1	NA	NA	NA	NA
f. Temporarily not working and not looking for a job	4	5	4	4	NA	NA	NA	NA
g. Retired, with no plans to return to work	2	2	2	2	NA	NA	NA	NA
h. Employed in another field	3	2	2	3	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
a. Yes	75%
b. No	25

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

	2009
a. 1–4 hours	6%
b. 5–8 hours	48
c. 9–12 hours	22
d. More than 12 hours	24

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	2006	2007	2008	2009
a. Difficult to find hygienist position	83%	87%	84%	86%	12%	27%	27%	38%
b. Better salary in other type of work	5	3	4	3	25	29	27	25
c. Work environment prevents me from practicing effectively	6	7	12	6	15	12	0	9
d. Other position more rewarding professionally	3	3	4	0	69	43	29	38
e. Disability/physical demands of the job	5	2	7	1	22	20	21	17
f. Taking care of home/family	34	26	27	18	12	14	15	9

6. Please indicate all education degrees completed.

Degree	2006	2007	2008	2009
a. Associate's: Hygiene	82%	82%	78%	82%
b. Associate's: Non-hygiene	10	11	9	9
c. Bachelor's: Hygiene	17	17	17	16
d. Bachelor's: Non-hygiene	9	7	8	9
e. Master's	2	3	2	2
f. Doctorate	<1	<1	<1	<1

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

	2006	2007	2008	2009
a. Yes	28%	30%	31%	25%
b. No	72	70	70	75

8. What is the setting of your primary practice?

	2006	2007	2008	2009
a. Private solo practice	67%	67%	65%	68%
b. Private group practice	27	27	29	27
c. Community-based nonprofit	2	2	2	1
d. Local health department or other government agency	2	1	1	1
e. Other	2	3	3	2

9. What is the setting of your secondary practice?

	2006	2007	2008	2009
a. Private solo practice	19%	20%	19%	19%
b. Private group practice	6	6	7	4
c. Community-based nonprofit	1	1	<1	1
d. Local health department or other government agency	1	<1	<1	1
e. Other	1	2	2	1
f. None	70	70	70	75

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
a. 0 hours	52%
b. 1–10 hours	41
c. 11–20 hours	4
d. More than 20 hours	4

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
a. Not at all familiar	41%
b. Somewhat familiar	51
c. Very familiar	7
d. Currently practicing through a PA 161 collaborative practice program	1

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

	2009
a. Yes	60%
b. No	40

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

	2006	2007	2008	2009
a. local anesthesia?	34%	37%	41%	43%
b. nitrous oxide?	26	28	30	34

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

	2006	2007	2008	2009
a. local anesthesia?	29%	30%	35%	37%
b. nitrous oxide?	25	23	24	28

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

	2006	2007	2008	2009
a. 1–5 years	14%	14%	15%	16%
b. 6–10 years	24	25	24	24
c. 11–15 years	24	20	19	21
d. 16–20 years	18	20	20	19
e. 21–30 years	15	15	16	14
f. More than 30 years	6	7	7	6

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
a. Age	26%
b. General lack of job satisfaction	3
c. Childbearing/childrearing	3
d. Lifestyle changes	8
e. Malpractice insurance cost	<1
f. Personal or family health concerns	4
g. Increasing administrative/regulatory burden	1
h. Employer/employee conflict	1
i. Inadequate payment for services	3
j. Moved to non-patient care field or position	<1
k. Limits on career advancement	3

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

	2006	2007	2008	2009
a. Extremely satisfied	47%	50%	51%	58%
b. Somewhat satisfied	41	39	40	34
c. Neutral	7	7	6	5
d. Somewhat dissatisfied	5	3	3	2
e. Extremely dissatisfied	1	1	1	1

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

	2006	2007	2008	2009
a. Yes	8%	7%	8%	8%
b. No	92	93	92	93

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

	2006	2007	2008	2009
a. American Indian/Alaskan Native	1%	1%	1%	1%
b. Asian or Pacific Islander	1	1	1	1
c. Black, non-Hispanic	2	2	1	1
d. Hispanic	1	1	1	1
e. White, non-Hispanic	95	94	95	94
f. Multiracial	<1	1	1	1
g. Other	1	1	1	2

21. What is your gender?

	2006	2007	2008	2009
a. Female	100%	100%	99%	100%
b. Male	<1	<1	1	<1