

~ Leadership for a Healthy Arizona ~



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**Arizona
Dental Workforce Survey**

2003-2004

Data Tables

June 2007

Arizona Dental Workforce Survey

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Arizona Dental Workforce Survey

About the Survey

Background

The Arizona Department of Health Services (ADHS), Bureau of Oral Health (BOH) collaborated with the Bureau of Health Systems Development (BHSD), the Arizona Board of Dental Examiners (BODEX), the Arizona Dental Association (AzDA), and the Arizona State Dental Hygienists' Association (ASDHA) to develop a dental workforce survey/questionnaire for all Arizona licensed dentists and dental hygienists. The questionnaire can be found in a separate file on the BOH web page. One-third of the licensed providers received the questionnaire in June 2003 and the remaining two-thirds received the questionnaire in June 2004.

The purpose of the survey was primarily to collect information federally required to complete applications for Health Professional Shortage Area (HPSA) designations, in a manner convenient to dentists. Other objectives were to:

- collect information on items of interest to collaborators.
- observe trends by incorporating questions from the Dental Hygiene Workforce Survey conducted in 1996.
- establish an ongoing method of tracking distribution and practice trends of the dental workforce in Arizona.

The following tables provide information on survey results. **Information was gathered from:**

- Questionnaires completed by dentists with an Arizona practice address as indicated by the Arizona Board of Dental Examiners database, 2003.
- Arizona State Board of Dental Examiners, Annual Report to the Governor, FY 2003-2004.

This information may be useful to:

- dental and dental hygiene school administrators taking a proactive approach to oral health work force planning.
- dental professionals considering locations in which to establish practices and/or look for work.
- policy-makers in addressing disparities in access to dental care.
- public health officials.
- grant writers.
- professional organizations who look at the State's dental workforce.
- individuals who are interested in the dental workforce in Arizona.

Important Notes on Interpretation of the Data

Please carefully consider the following in any interpretation of the information.

- Information was collected on *individuals* and on *practices*. *Individuals* may have reported on more than one *practice*.
- Some questions were deleted after the first year (2003) and one question was added after the first year. These specifics are noted in a table when applicable.
- “**Urban**” counties are designated as those with at least one community with a population of 500,000 or more.
“**Rural-Urban**” counties are designated as those with at least one community with a population of 50,000 or more.
“**Rural**” counties are designated as those with communities with populations of less than 50,000.
- Percentages may not total 100% due to rounding.

Survey results can also be found in the report, *Arizona Dental and Dental Hygiene Workforce Survey 2003-2004* at <http://www.azdhs.gov/cfhs/ooh/index.htm>. For a printed copy of the report, call Arizona Department of Health Services, Bureau of Oral Health at 602-542-1866.

Dentists Licensed in Arizona

Arizona Licensed Dentists		
	Number	Percent
Survey Respondents	2,380	66
BODEX Licensees*	3,595	100

*Arizona State Board of Dental Examiners, Annual Report to the Governor, FY 2003-2004

Survey Respondents		
	Number	Percent
Instate (Practicing Only)	2041	86
Instate (Not Practicing)	92	4
Out of State	247	10
Total	2380	100

Dentists Licensed and Practicing in Arizona

Gender	
	Percent
Male	86
Female	14
Total	100
Valid	97
Missing	4

Gender by Rural-Urban Designation			
	Male	Female	Row Percent
Rural	91	9	100
Rural-Urban	91	9	100
Urban	86	14	100
Unknown	75	25	100

Mean Age					
Observations	Total	Mean	Std Dev	Valid Percent*	Missing Percent
2,031	93,080	45.8	11.95	100	<1

*Total may not equal 100% due to rounding.

Age Groups	
	Percent*
Under 30	8
30 – 39	27
40 – 49	26
50 – 59	26
60 – 69	11
70+	3
Total	100
Valid	100
Missing	<1

*Total may not equal 100% due to rounding.

Age Groups by Rural-Urban Designation							
	Under 30	30 - 39	40 - 49	50 - 59	60 - 69	70+	Row Percent*
Rural	6	20	32	25	13	3	100
Urban/rural	2	26	27	35	10	0	100
Urban	8	28	25	25	11	3	100
Unknown	25	25	25	0	0	25	100

*Total may not equal 100% due to rounding.

Race/Ethnicity	
	Percent*
American Indian/Alaskan Native	1
Asian	9
Black	1
Hawaiian	<1
Hispanic	4
White	84
Other/Multi-racial	1
Total	100
Valid	61
Missing	39

*Total may not equal 100% due to rounding.

Location of High School by Division		
Division**		Percent*
New England	(CT, ME, MA, NH, RI, VT)	1
Mid Atlantic	(NJ, NY, PA)	9
E. North Central	(IL, IN, MI, OH, WI)	15
W. North Central	(IA, KS, MN, MO, NE, ND, SD)	7
S. Atlantic	(DL, DC, FL, GA, MD, NC, SC, VA, WV)	3
E. South Central	(AL, KY, MS, TN)	1
W. South Central	(AR, LA, OK, TX)	3
Mountain	(AZ, CO, ID, MT, NV, NM, UT, WY)	39
Pacific	(AK, CA, HI, OR, WA)	14
Foreign		7
Total		100
Valid		60
Missing		40

*Total may not equal 100% due to rounding.

**"Division" defined by U.S. Census Bureau.

Location of Dental School by Division		
Division**		Percent*
New England	(CT, ME, MA, NH, RI, VT)	2
Mid Atlantic	(NJ, NY, PA)	8
E. North Central	(IL, IN, MI, OH, WI)	25
W. North Central	(IA, KS, MN, MO, NE, ND, SD)	18
S. Atlantic	(DL, DC, FL, GA, MD, NC, SC, VA, WV)	6
E. South Central	(AL, KY, MS, TN)	3
W. South Central	(AR, LA, OK, TX)	7
Mountain	(AZ, CO, ID, MT, NV, NM, UT, WY)	2
Pacific	(AK, CA, HI, OR, WA)	26
Foreign		3
Total		100
Valid		61
Missing		39

*Total may not equal 100% due to rounding.

**"Division" defined by U.S. Census Bureau.

Practice County by High School County					
County	Number of dentists graduating from high school	Percent of dentists who returned to practice in same county as high school	Percent of dentists who practice in a different county than high school	Percent Unknown	Row Percent*
Apache	3	33	67	0	100
Cochise	13	31	62	8	100
Coconino	8	38	62	0	100
Gila	2	0	100	0	100
Graham	10	40	50	10	100
Greenlee	1	0	100	0	100
La Paz	0	0	0	0	100
Maricopa	216	83	13	4	100
Mohave	4	75	25	0	100
Navajo	6	33	50	17	100
Pima	62	69	26	5	100
Pinal	5	20	80	0	100
Santa Cruz	2	0	100	0	100
Yavapai	10	70	20	10	100
Yuma	4	50	50	0	100
Total	346	72	24	5	100

*Total may not equal 100% due to rounding.

High School/Practice County by Rural-Urban Designation					
	Number of dentists graduating from high school	Percent of dentists who returned to practice in same county as high school	Percent of dentists who practice in a different county than high school	Percent Unknown	Row Percent
Rural	56	39	54	7	100
Urban	278	80	16	4	100
Rural-urban	12	42	58	0	100
Total	346	72	24	4	100

Board-Certified Specialists*	
	Percent
Endodontics	<1
Oral Pathology	<1
Oral Surgery	2
Orthodontics	2
Pediatric Dentistry	<1
Periodontics	<1
Prosthodontics	1
Public Health	0
Radiology	<1
Total*	6

*131 dentists listed one specialty, one dentist listed two specialties, and one dentist listed three specialties.

Board Certified Specialists by Rural-Urban Designation	
	Percent
Rural	7
Rural-Urban	5
Urban	88
Total	100

Mean Number of Weeks Practicing Clinical Dentistry in Arizona*			
Observations	Total	Mean	Std Dev
1,200	54,698	45.58	9.22

**In the past 12 months"

Weeks Worked per Year by County			
County	Part-Time*	Full-Time*	Row Percent
Apache	40	60	100
Cochise	0	100	100
Coconino	9	91	100
Gila	25	75	100
Graham	0	100	100
La Paz	0	100	100
Maricopa	11	89	100
Mohave	17	83	100
Navajo	13	87	100
Pima	12	88	100
Pinal	19	81	100
Santa Cruz	0	100	100
Yavapai	5	95	100
Yuma	6	94	100
Another State	100	0	100

*Full time = ≥ 40 weeks/year. Part time = ≤ 39 weeks/year.

Dentists Practicing in Arizona in the Past 12 Months and in Another State for One or More Weeks					
Percent	Observations	Minimum	Maximum	Mean	Std Dev
2	46	2	44	18	12.78

Main Reason for Working Less Than 40 Hours/ Week	
	Percent*
Preference/choice	39
Semi-retired	26
Leisure/lifestyle/time off	7
Raising children/family	7
Demands of dentistry/fatigue/stress	6
Is enough	6
Seeking a position	5
Lack of demand or small practice	3
Total	100

*Total may not equal 100% due to rounding

Most Important Factor Influencing Your Decision to Practice in Arizona*	
	Percent**
I am from Arizona	38
Climate/recreational	28
Income potential	12
Matched professional interests	6
Other	17
Total	100

Began practicing in Arizona in the last five years

**Total may not equal 100% due to rounding.

How Long it Took to Find Your Current Position* (n=118)	
	Percent
< 1 month	49
1-6 months	44
7-12 months	7
Total	100

*"If you began practicing in Arizona in the last 12 months"

Respondents Reporting One or More Health Problems/Physical Symptoms Related to Clinical Dentistry			
Percent	Number of Health Problems	Minimum	Mean
21	852	1	1.9

Health Problems/Physical Symptoms You Relate to Clinical Dentistry*	
	Percent of Respondents
Back Pain	67
Neck Pain	53
Shoulder Pain	39
Skin Allergies	13
Carpal Tunnel	12
Hearing	4
Arm/elbow Pain	2
Hand/Finger	1
Hepatitis	1
Stress	1
Eye Problems	1
Other	1

*Of those reporting at least one health problem

Year You Plan to Permanently Retire From All Practice of Dentistry	
	Percent
Reported Retirement Year	41
Unsure	59
Total	100

*Total may not equal 100% due to rounding.

Year You Plan to Permanently Retire From All Practice of Dentistry	
	Percent*
<2010	26
2011-2015	21
2016-2020	18
2021-2025	16
2026-2030	8
2031-2035	6
2035+	4
Total	100

*Total may not equal 100% due to rounding.

Plan for Practice Upon Retirement	
	Percent*
Take on an associate	62
Advertise to sell	27
Refer patients & close	3
Unsure	7
Other	2
Total	100
Valid	58
Missing	42

*Total may not equal 100% due to rounding.

Volunteerism for Oral Health Events Outside of Your Job	
	Percent
No	42
Yes	58
Total	100
Valid	59
Missing	41

Volunteerism by Age Group	
	Percent*
Less than 35	19
35 - 44	24
45 - 54	32
55 - 64	21
65+	5
Total	100

*Total may not equal 100% due to rounding.

Volunteerism by Rural-Urban Designation			
	Yes	No	Row Percent*
Rural	69	31	100
Rural-Urban	76	25	100
Urban	56	44	100
Unknown	47	53	100

*Total may not equal 100% due to rounding.

Mean Number of Hours Volunteered for Community Dental Efforts*						
Observations	Total	Mean	Std Dev	Range	Valid	Missing
760	17710	23.3026	51.2507	0-1000	59	41

**"Last 12 months"

Mean Number of Hours Volunteered for Community Dental Efforts,* by Rural-Urban Designation				
Category	Observations	Total	Mean	Std Dev
Rural	105	1830	17.43	28.15
Rural-Urban	36	1267	35.19	58.12
Urban	577	13134	22.76	50.80
Unknown	29	1045	36.03	93.25

**"Last 12 months"

Type of Volunteer Activities*	
	Percent
School-based	49
Health fair/ screening	48
Community clinics	25
“Give Kids a Smile” program	22
HeadStart	14
Hospital-based events	10
Special Olympics, Special Smiles program	7
Foreign country	5
Faith-based	2
Migrant worker programs	2
In-office care	1
Other	8

*Respondents may have given more than one response.

Local and Statewide Oral Health Needs Perceived As Unmet	
	Number (n=186)*
Access for indigent/working poor/low income persons	45
Preventive ed/awareness for population	30
Access issues by age group-children	26
Access issues by geography	17
Access issues by age group-seniors	10
Insurance coverage/issues	10
Lack of insurance	5
Migrant access	5
Adult need for dentistry	5
Fluoride	4
Special populations (persons w/special health care needs, etc)	4
Other	25

*Asked of one third of the dentists licensed in Arizona at the time of the survey.
Respondents may have given more than one response.

Two Most Significant Challenges for Dentistry in Arizona in the Next Five Years	
	Number (n=406)*
Insurance issues	72
Dental needs/access of population	69
Gov/board/bureaucratic interference/regulations/HIPAA	43
Availability of skilled staff	40
Dental office costs	22
Ethical/professional issues with dentists	22
Amalgam Issues	21
New dental school/foreign dentists/reciprocity/licensing	18
Too many dentists	15
Shortage of dentists	11
Immigration/growing population	8
Other	65

*Asked of one third of the dentists licensed in Arizona at the time of the survey.

Earliest Age that You Routinely Begin to Treat Children (n=789)*	
Age	Percent
0	2
1	5
2	12
3	39
4	16
5	7
6	6
7	4
8	3
9	1
10	2
11+	3
Total	100

*Asked of two thirds of the dentists licensed in Arizona at the time of the survey.

If a disaster preparedness plan for Arizona included dental offices, would you be willing to participate within your community?	
	Percent
No	6
Yes	66
Maybe	28
Total	100
Valid	59
Missing	41

Dentists – Arizona Practice Locations

Number of Practices Reported		
	Number	Percent
Primary practices	1252	85
Second practices	201	14
Third practices	21	1
Total practices	1474	100
Primary valid	1252	61
Primary missing	789	39

Practices Indicating 50% or More Time Spent in A Specialty	
	Percent*
General	70
Endodontics	4
Orthodontics	8
Pathology	<1
Pediatric dentistry	5
Periodontics	3
Public health	<1
Prosthodontics	5
Radiology	<1
Oral surgery	4
Total	100
Valid	93
Missing	7

*Total may not equal 100% due to rounding.

Practice Days	
	Percent
Monday	83
Tuesday	88
Wednesday	86
Thursday	87
Friday	55
Saturday	7
Sunday	0
Valid	97
Missing	3

Saturday Hours by Rural-Urban Designation			
	Yes	No	Row Percent
Rural	2	98	100
Rural-Urban	2	98	100
Urban	8	92	100
Unknown	8	92	100
Total	7	93	100

Practice Setting	
	Percent*
Private practice	92
Hospital	<1
Non-profit	2
Group	2
State prison	1
College	<1
Other	1
Federal prison (s) in Arizona	<1
Military	<1
VA	<1
IHS	1
Other federal	<1
Total	100
Valid	97
Missing	3

*Total may not equal 100% due to rounding.

Hours/ Week* Spent in "Patient Care", "Administration", "Other"					
Frequency	Total Hours	Mean	Std Dev	Valid Percent	Missing Percent
1,095	38,673	35.32	10.07	74	26

*Limited to those reporting \leq 50 hours/week

Board-Certified Specialists Employing One or More Auxiliaries	
	Percent
Dental Hygienists	45
Dental Assistants	98

Mean Number of Dental Hygienists Per Site					
Frequency	Total	Mean	Std Dev	Valid Percent	Missing Percent
1,120	1,822	1.6	2.1	76	24

Number of Dental Hygienists Per Practice Location	
	Percent of Practice Locations
0	20
1	34
2	29
3	11
4+	6
Total	100
Valid	76
Missing	24

If your office does not currently employ a dental hygienist, why? (Check all that apply)	
	Number
Prefer to do hygiene myself	113
Salary too high	72
Patient load too low	70
Have not been able to find	37
Benefits too high	34
Other	31

Employment of Dental Hygienists by Rural-Urban Designation						
	Prefer to do hygiene myself	Salary too high	Patient load too low	Have not been able to find	Benefits too high	Other
Rural	16	8	8	15	5	5
Rural-Urban	4	2	0	2	1	0
Urban	87	56	58	14	27	23
Unknown	6	6	4	6	1	3
Total Number	113	72	70	37	34	31

Mean Number of Dental Assistants Per Site					
Frequency	Total	Mean	Std Dev	Valid Percent	Missing Percent
1,245	3,851	3.1	3.0	84	16

Number of Dental Assistants Per Practice Location	
	Percent of Practice Locations
0	1
1	21
2	38
3	16
4+	24
Total	100
Valid	84
Missing	16

Mean Number of Patients Per Year by Type of Setting			
	Observations	Mean	Std. Dev.
Private practice	909	2,531	3040.89
Hospital	3	1,293	220.30
Non-profit clinic	15	3,960	4451.29
Group/HMO	17	3,997	8757.99
State prison	13	2,064	906.54
Other	15	4,360	10664.52
Federal prison in Arizona	2	6,000	4242.64
Military	2	2,100	141.42
IHS	8	3,337	4853.10
Other federal	1	1,200	0.00
All Practice Settings	1018	2,555	3490
Valid Percent	NA	70	
Missing Percent	NA	30	

Mean Number of Patients Per Year by Practice Specialty			
	Observations	Mean	Std Dev
General	683	2,733	3559.633
Endodontics	43	1,275	1143.713
Oral surgery	48	1,844	1549.55
Orthodontics	83	1,311	2828.794
Pathology	1	4,000	0
Pediatric dentistry	56	5,259	5620.34
Periodontics	26	2,672	2686.812
Prosthodontics	48	1,703	1771.915
Public health	1	2,000	0
Radiology	1	500	0
Valid Percent	70		
Missing Percent			

Are you currently accepting new patients?	
	Percent
Yes	97
No	3
Total	100
Valid	88
Missing	12

Accepting New Patients, by County			
	Yes	No	Row Percent
Apache	100	0	100
Cochise	82	18	100
Coconino	100	0	100
Gila	100	0	100
Graham	90	10	100
La Paz	100	0	100
Maricopa	98	2	100
Mohave	100	0	100
Navajo	100	0	100
Pima	98	2	100
Pinal	95	5	100
Santa Cruz	100	0	100
Yavapai	96	4	100
Yuma	100	0	100
Total	97	3	100

Are you currently accepting new AHCCCS* patients?	
	Percent
Yes	24
No	76
Total	100
Valid	90
Missing	10

*Arizona Health Care Cost Containment System (Medicaid)

Accepting New AHCCCS Patients, by County			
	Yes	No	Row Percent*
Apache	83	17	100
Cochise	24	77	100
Coconino	27	73	100
Gila	27	73	100
Graham	30	70	100
La Paz	100	0	100
Maricopa	22	78	100
Mohave	22	78	100
Navajo	36	64	100
Pima	24	77	100
Pinal	55	45	100
Santa Cruz	75	25	100
Yavapai	22	78	100
Yuma	31	69	100
Unknown	21	79	100

*Total may not equal 100% due to rounding.

Percent of Current Patients Covered by AHCCCS*						
Frequency	Total	Mean	Variance	Std Dev	Valid Percent	Missing Percent
883	9,985	11.31	574.06	23.96	60	40

*Arizona Health Care Cost Containment System (Medicaid)

Percent of Current Patients on Sliding Fee Scale, Ability to Pay, or Free-of-Charge Basis						
Frequency	Total	Mean	Variance	Std Dev	Valid Percent	Missing Percent
907	5,186	5.72	268.42	16.38	62	38

Is Sliding Fee Scale Posted?	
	Percent*
Yes	5
No	95
Total	100
Valid	56
Missing	43

*Total may not equal 100% due to rounding.

Do you see as patients: migrant farm workers?	
	Percent
Yes	13
No	87
Total	100
Valid	78
Missing	22

Percent of Current Patients Who are Migrant Farm Workers						
Frequency	Total	Mean	Variance	Std Dev	Valid Percent	Missing Percent
123	429	3.49	25.74	5.07	8	92

Language Interpretation Offered	
	Percent
Yes	62
No	38
Total	100
Valid	82
Missing	18

Language for Which Interpretation is Offered*	
	Percent of Practices
Spanish	74
European Language	10
Asian	6
American Indian/American Native	4
Arabic	4
Other	2
Total	100

*Of those offices who offer language interpretation

Mean Number of Days to Get a Appointment						
Appointment Type	Frequency	Total	Mean	Std Dev	Valid Percent	Missing Percent
New Patient Appointment	1247	1139 6	9.14	12.64	85	15
Established Patient	1180	1666 7	14.13	32.87	80	20
Emergency Care	1233	1536	1.25	5.12	84	16
Treatment	1184	9673	8.17	10.42	80	20