## NATIONAL SUPPLY ESTIMATES OF SPECIFIC ALLIED HEALTH OCCUPATIONS USING DIFFERENT DATA SOURCES

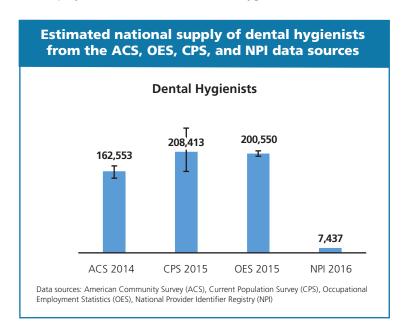


## **DATA SNAPSHOT: Dental Hygienists**

Identifying and analyzing available data resources is a crucial step in assessing the supply and distribution of allied health occupations, their demographic and socioeconomic characteristics, and the adequacy of the supply to meet industry and population needs. The report *Leveraging Data to Monitor the Allied Health Workforce: National Supply Estimates Using Different Data Sources*<sup>1</sup> (the background report for this Data Snapshot) compared national estimates of the supply and characteristics of nine allied health occupations using four national data sources: the American Community Survey (ACS) and the Current Population Survey (CPS), both data from the U.S. Census Bureau; the Occupational Employment Statistics (OES) from the U.S. Bureau of Labor Statistics, and the National Provider Identifier (NPI) Registry from the Centers for Medicare and Medicaid Services' National Plan and Provider Enumeration System. Using the most recent comparable data available from these sources, this Data Snapshot summarizes the national supply size and demographic, educational attainment, and employment information for dental hygienists.

Who are dental hygienists? Dental hygienists provide preventative dental care, clean teeth, educate patients about good oral health, and examine for signs of oral diseases. Dental hygienists usually work in dentists' office and in 2014, more than 50% worked only part-time. States require dental hygienists to be licensed to practice.<sup>2</sup>

How are dental hygienists identified across data sources? Dental hygienists, in the ACS and CPS datasets, are identified by the four-digit SOC code, 3310, and in the OES dataset by the occupation code 29-2021, or could be pulled directly from the OES website, data section. In the NPI Registry, dental hygienists are identified using the following taxonomy code: 124Q00000X.



**National estimates of dental hygienists across data sources:** Data to estimate the supply of dental hygienists were available in the ACS, CPS, OES and NPPES NPI Registry data sources. Demographic and socioeconomic data were available in the ACS and CPS data, and the OES provided salary information. The NPI Registry had information only on the sex of the providers. The figure shows the supply estimate of dental hygienists from the CPS was 208,413 (±41,774), from the OES was 200,550 (±4,755), from the ACS was 162,553 (±8,757), and from the NPI Registry, was only 7,437. Because the NPI Registry represents the entire population of providers in the Registry, margins of error are not relevant. As described in the background report, lower supply estimates from the NPI Registry are to be expected because they represent the providers who obtain NPIs for billing or information exchange purposes.

**Demographic and socioeconomic characteristics:** The table below provides information on the demographic and socioeconomic characteristics of dental hygienists from the ACS, CPS and OES data sources. The mean age of dental hygienists was in the range of 40.8 to 42.5 years, with a slightly younger dental hygienists reflected in the CPS data. A very high proportion of dental hygienists were women, between 94.9 to 96.9%. In terms of racial composition, most were White, not Hispanic (79.1 to 82.7%). Approximately 8% were identified as Hispanic in both the ACS and CPS data. About two thirds of dental hygienists were reported to be married in the ACS and CPS data (67.6 and 65.3%, respectively). Both ACS and CPS data sources indicated that most dental hygienists had some college (59.1 and 55.5%, respectively) or a bachelor's degree (30.8 and 33.7%, respectively). Dental hygienists'

mean annual earnings, adjusted to 2015 U.S. dollars, showed a wide range depending on the data source. It was lowest in the CPS (\$38,238), \$48,613 in the ACS, and much higher, \$72,720, as reported in the OES data. The mean hours worked per week was estimated at about 38 hours in both ACS and CPS. The percent of dental hygienists estimated to be working full-time in the ACS was 61.2%, and 63.9% in the CPS.

### **REFERENCES:**

- Skillman SM, Dahal A, Frogner BK, Stubbs BA. Leveraging Data to Monitor the Allied Health Workforce: National Supply Estimates Using Different Data Sources. Center for Health Workforce Studies, University of Washington, Dec 2016.
- 2. Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, Dental Hygienists. dental-hygienists.htm Accessed November 09, 2016.

# Demographic and socioeconomic characteristics of dental hygienists

	ACS 2014	CPS 2015	OES 2015
Age (mean years)	42.5	40.8	
Female	94.9%	96.9%	
Race/Ethnicity			
White, not Hispanic	82.7%	79.1%	
Black, not Hispanic	3.0%	3.8%	
Other, not Hispanic	6.4%	8.4%	
Hispanic	7.9%	8.0%	
Marital Status			
Married	67.6%	65.3%	
Divorce/Separated/Widowed	14.0%	12.6%	
Single	18.4%	22.1%	
Educational Attainment			
High school or less	3.9%	5.8%	
Some college	59.1%	55.5%	
Bachelor's degree	30.8%	33.7%	
Master's degree or more	6.2%	4.9%	
Employment			
Annual earning (mean)*	\$48,613	\$38,238	\$72,720
Usual hours worked per week (mean)	37.7	37.7	
Full-time workers**	61.2%	63.9%	

<sup>\*</sup> ACS 2014 earnings were adjusted to 2015 real dollar values based on the Consumer Price Index. ACS and CPS wage and salary earnings include reported income from all sources. OES wage earnings are annualized to represent a full-time average wage.

Data sources: American Community Survey (ACS), Current Population Survey (CPS), Occupational Employment Statistics (OES)

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### **SUGGESTED CITATION**

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<sup>\*\*</sup>Full-time indicates 32 or more weekly work hours.