

DATA SNAPSHOT: Diagnostic Related Technologists and Technicians

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*¹ (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 diagnostic related technologists and technicians.

Who are diagnostic related technologists and technicians (DRTTs)? This category of allied health occupations includes the following five detailed occupations: cardiovascular technologists/technicians, diagnostic medical sonographers, nuclear medicine technologists, radiologic technologists, and magnetic resonance imaging technologists. DRTTs perform a wide range of activities that involve conducting tests for diagnostic purposes, assisting in electrocardiograms, performing diagnostic imaging examinations on patients, among others. More than 50% of DRTTs work in hospital settings.²

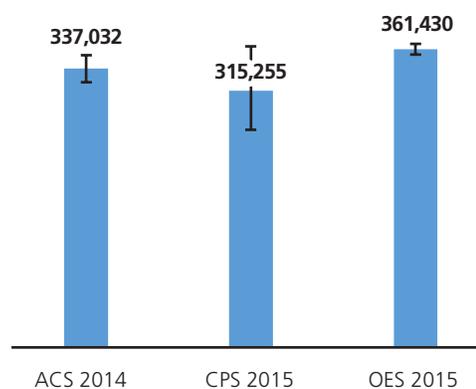
How are DRTTs identified across data sources? DRTTs, in the ACS and CPS datasets, are identified by the four-digit SOC code, 3320, and in the OES dataset by the occupation code 29-2030, or could be pulled directly from the OES website, data section. In the NPI Registry, there was no specific taxonomy code to identify DRTTs.

National estimates of DRTTs across data sources: Data to estimate the supply of DRTTs are available in the ACS, CPS, and OES, while the demography and socio-economic data were available only in the ACS and CPS. The NPI Registry has no information on the supply of DRTTs. As shown in the figure, the supply estimate of DRTTs from the OES was 361,430 ($\pm 4,999$), from the ACS was 337,031 ($\pm 13,420$), and from the CPS was 315,255 ($\pm 51,537$).

Demographic and socioeconomic characteristics: The table below provides information on the demographic and socioeconomic characteristics of DRTTs from the ACS, CPS and OES data sources. The mean age of DRTTs was 42 years in both the ACS and CPS. About three quarters of DRTTs were women, 71.7% in the ACS and 75.6% in the CPS. Approximately three quarters reported being White, not Hispanic (77.4% in both the ACS and CPS data), and between 9 and 10% reported being Hispanic. Figures on marital

Estimated national supply of diagnostic related technologists and technicians from the ACS, OES, and CPS data sources

Diagnostic Related Technologists and Technicians



Data sources: American Community Survey (ACS), Current Population Survey (CPS), Occupational Employment Statistics (OES), National Provider Identifier Registry (NPI)

status were also comparable between the two data sources that included that information, with just under two-thirds reporting being married (60.3% in the ACS and 65.7% in the CPS). Estimates from both data sources indicated that about two thirds of DRTTs had some college education but had not completed a bachelor's degree, while another quarter of the workforce had a bachelor's degree. The mean annual earnings of DRTTs, adjusted to 2015 U.S. dollars, was lowest as estimated from the CPS (\$49,889) and highest from the OES (\$62,080). The mean hours worked per week by DRTTs was about 38 hours as estimated from both the ACS and CPS. The majority of DRTTs were estimated to work full-time, 83.7% from the ACS data and 86.1% from the CPS.

REFERENCES:

1. 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*, Diagnostic Related Technologists and Technicians. <https://www.bls.gov/soc/2010/soc292030.htm> Accessed November 09, 2016.

Demographic and socioeconomic characteristics of DRTTs

	ACS 2014	CPS 2015	OES 2015
Age (mean years)	42.3	42.3	--
Female	71.7%	75.6%	--
Race/Ethnicity			
White, not Hispanic	77.4%	77.4%	--
Black, not Hispanic	6.5%	6.7%	--
Other, not Hispanic	6.9%	6.0%	--
Hispanic	9.3%	9.9%	--
Marital Status			
Married	60.3%	65.7%	--
Divorce/Separated/Widowed	15.9%	15.1%	--
Single	23.8%	19.2%	--
Educational Attainment			
High school or less	6.8%	5.4%	--
Some college	65.5%	63.8%	--
Bachelor's degree	23.0%	26.4%	--
Master's degree or more	4.7%	4.4%	--
Employment			
Annual earning (mean)*	\$52,480	\$49,889	\$62,080
Usual hours worked per week (mean)	38.0	37.7	--
Full-time workers**	83.7%	86.1%	--

* 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.

**Full-time indicates 32 or more weekly work hours.

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

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