



### HIGHLIGHTS

- Dental hygienists are unevenly distributed across the state.
- There is wide regional variation in the ratio of dental hygienists to dentists.
- The vast majority of dental hygienists in New York work in private dental offices and almost half work part time.
- Over 90% of the state's dental hygienists graduated from a New York dental hygiene school.
- The vast majority of New York's dental hygienists are female, older than dental hygienists nationwide, and not as diverse as the state's population.

### BACKGROUND

Uneven access to oral health services in the U.S. has resulted in oral health disparities. Groups at greatest risk for limited access to oral health services include the poor, children, racial/ethnic minorities, rural populations, and the elderly. Concerted efforts have been made to expand access to needed services. Examples of these efforts are the introduction of new oral health providers and the changing roles of existing providers in order to better provide the required services. Some of these efforts include using dental hygienists in different ways than they have been used in the past. Since dental hygienists are important providers of preventive and prophylactic oral health services, understanding the characteristics, distribution, and practice patterns of the dental hygienist workforce can help inform programs and policies designed to increase access to needed oral health services for vulnerable populations.

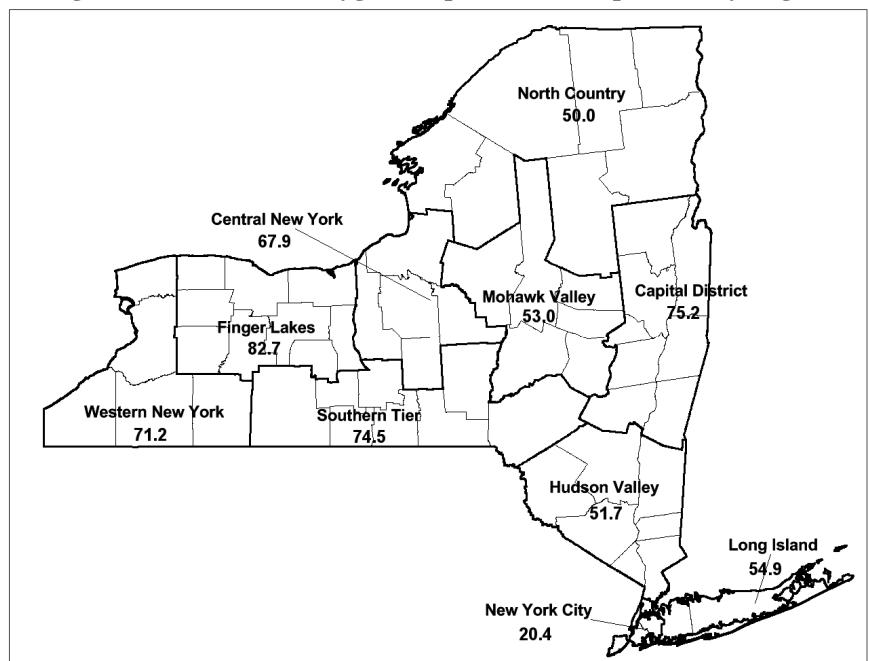
This research brief examines the demographic, educational, and practice characteristics of the state's active dental hygienists. Data for this brief were drawn from a re-registration survey of dental hygienists licensed in New York. In May 2013, there were 10,761 dental hygienists licensed to practice in the state. More than 96% of the survey respondents reported actively working in dental hygiene, while 4% reported being retired.

### KEY OBSERVATIONS

**Dental hygienists are unevenly distributed across the state.**

With an estimated 45.0 dental hygienists per 100,000 population statewide, New York had a higher rate than the nation at 41.0 dental hygienists per 100,000 population.<sup>1</sup> However, there was substantial regional variation in the distribution of dental hygienists across the state, ranging from 82.7 dental hygienists per 100,000 population in the Finger Lakes region to 20.4 per 100,000 in New York City.

**Figure 1: Active Dental Hygienists per 100,000 Population by Region**

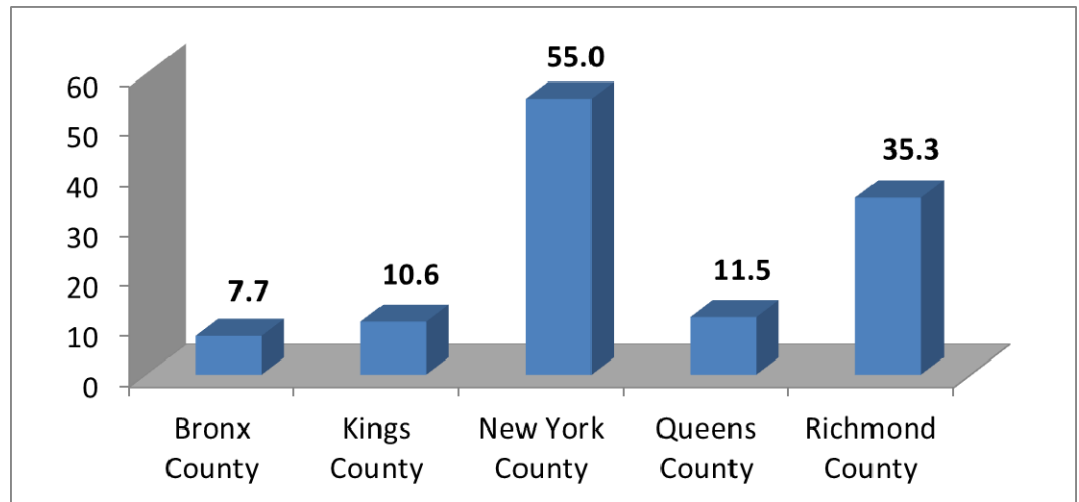


1. American Community Survey 2006-2010. Five year estimates. U.S. Census Bureau.

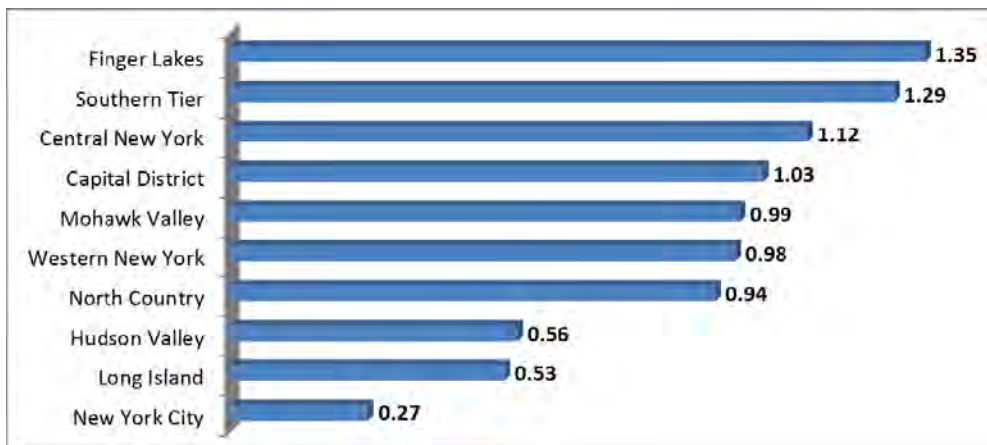
**There is a substantial maldistribution of dental hygienists in New York City.**

There were only 20.4 dental hygienists per 100,000 population in New York City, less than half of the statewide rate of 45.0 per 100,000 population. Within New York City, there was wide variation in the rate of dental hygienists per 100,000 population in each of the five boroughs. New York County had the highest rate, 55.0 dental hygienists per 100,000 population, followed by Richmond County with 35.3 dental hygienists per 100,000 population. However, the rates were much lower in Queens, Kings, and Bronx counties, each with fewer than 12 dental hygienists or less per 100,000 population.

**Figure 2: Dental Hygienists per 100,000 Population in New York City by County**



**Figure 3: Ratio of Dental Hygienists to Dentists by Region**



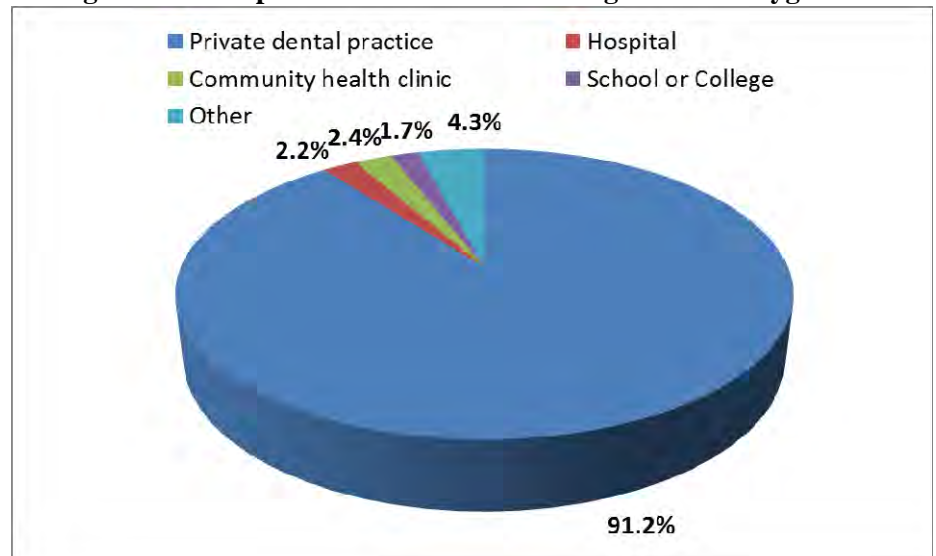
**There is wide regional variation in the ratio of dental hygienists to dentists in New York.**

The Finger Lakes region had the most dental hygienists per dentist with 1.35, followed by the Southern Tier region with 1.29 and the Central New York region with 1.12. The Capital District, North Country, Western New York, and Mohawk Valley regions had relatively similar ratios of about one dental hygienist per dentist. In the Long Island region, there were 0.53 dental hygienists for every dentist. New York City had the fewest with 0.27 dental hygienists per dentist.

**The vast majority of dental hygienists in the state work in private dental offices and almost half (46%) work part time.<sup>2</sup>**

Ninety-one percent of dental hygienists reported a private dental practice as their principal work setting, as did 89% of dental hygienists who reported a secondary practice location. The remainder reported working in hospitals community health clinics, schools or colleges, or other settings.

**Figure 4: Principal Practice Location Setting of Dental Hygienists**



2. Part time is defined here as fewer than 30 hours per week.

# Part-time Work Status Among Dental Hygienists

As stated previously, a large portion (46%) of active dental hygienists in New York work part time (i.e., fewer than 30 hours per week). This observation is consistent with the dental hygienist workforce at the national level.<sup>3</sup> The following explores part-time work status among dental hygienists in New York.

Active dental hygienists who work part time are older than their full-time counterparts (median age 51 compared to 49). Among the youngest group of active dental hygienists, less than one-quarter (24%) report part-time work status. In contrast, more than half (55%) of active dental hygienists age 60 and older work part time.

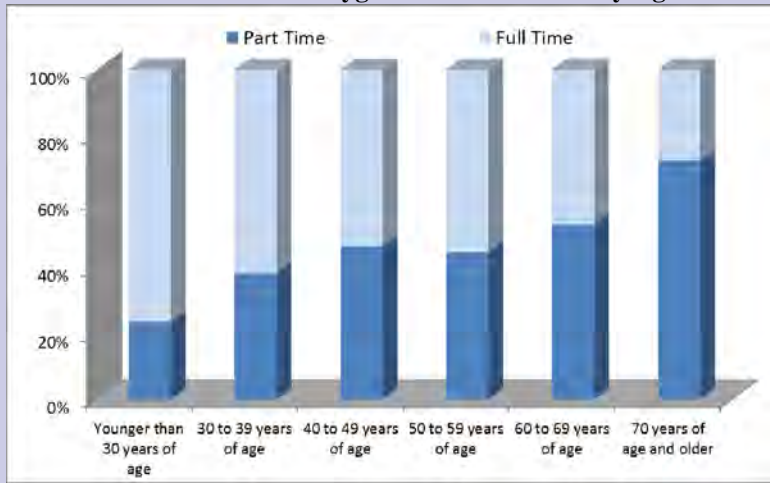
Active female dental hygienists are more likely to work part time than male dental hygienists (46% compared to 12%). Moreover, active White non-Hispanic dental hygienists are more likely to work part time than underrepresented minority (American Indian, Alaska Native, Black/African American, or Hispanic/Latino) dental hygienists (47% compared to 31%).

Active dental hygienists who work in private dental practices are more likely than dental hygienists who work in other settings (e.g., community health clinics, hospitals, schools, nursing homes, prisons, public health agencies) to report part-time work status (47% compared to 30%).

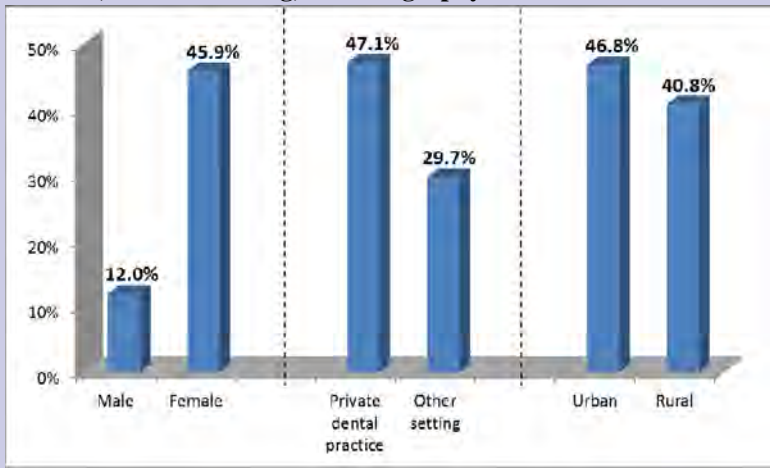
Active dental hygienists who work in urban areas are more likely than their counterparts in rural areas to work part time (47% compared to 41%). By far, clinically active dental hygienists working in the Long Island region are most likely to work part time (60%), followed by dental hygienists in the Hudson Valley (48%) and the Capital District (47%). The North Country and Mohawk Valley have the smallest percentages of clinically active dental hygienists working part time (32% and 36%, respectively).

Part-time work status may be the result of a number of factors, including personal work preferences, dentists' preferences for hiring part-time dental hygienists, the availability of full-time positions, and so forth. While the reasons for working part time are beyond the scope of the data collected on the dental hygienist survey, two important implications of the data described are as follows: 1) oral health workforce policies should take into account the varying propensity of dental hygienists to work part time in different kinds of practice settings and 2) part-time and full-time work status varies by geography, which suggests that characteristics of local markets affect dental hygienist work status.

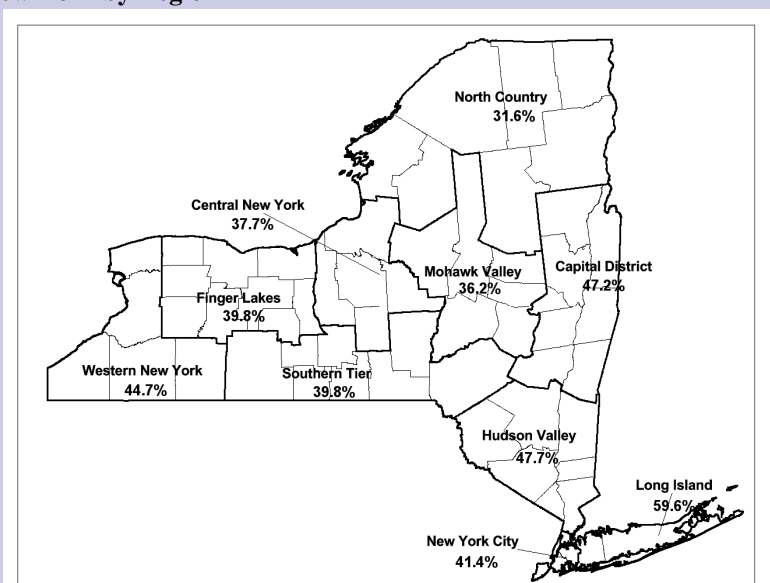
**Work Status of Active Dental Hygienists in New York by Age**



**Part-time Work Status Among Active Dental Hygienists in New York by Gender, Practice Setting, and Geography**



**Percentage of Active Dental Hygienists with Part-time Work Status in New York by Region**



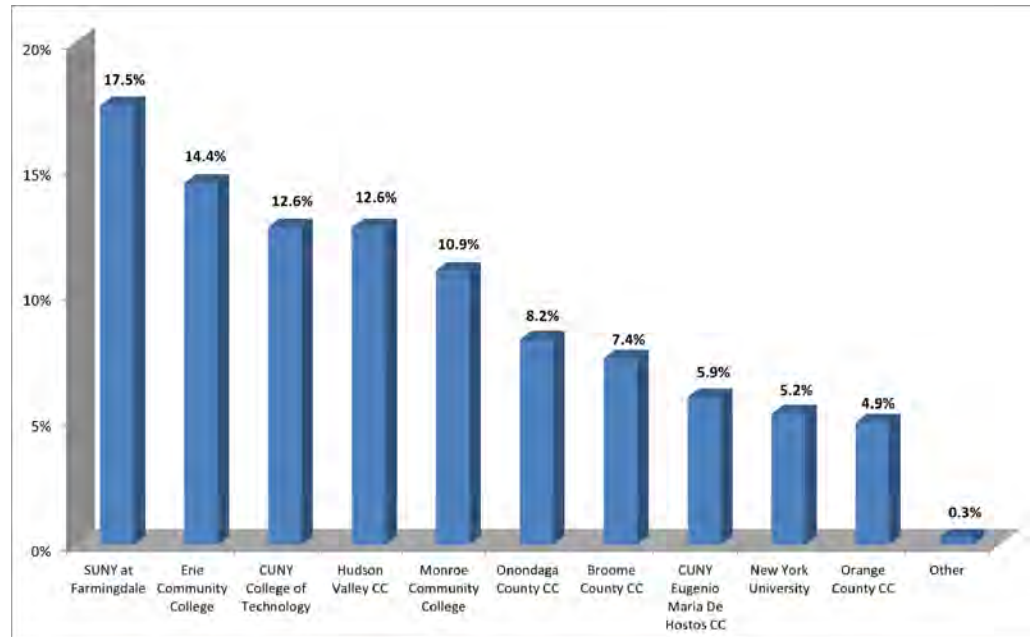
3. Survey of Dental Hygienists in the United States, 2007. Center for Health Workforce Studies.

**More than 90% of active dental hygienists graduated from a dental hygiene program in New York.**

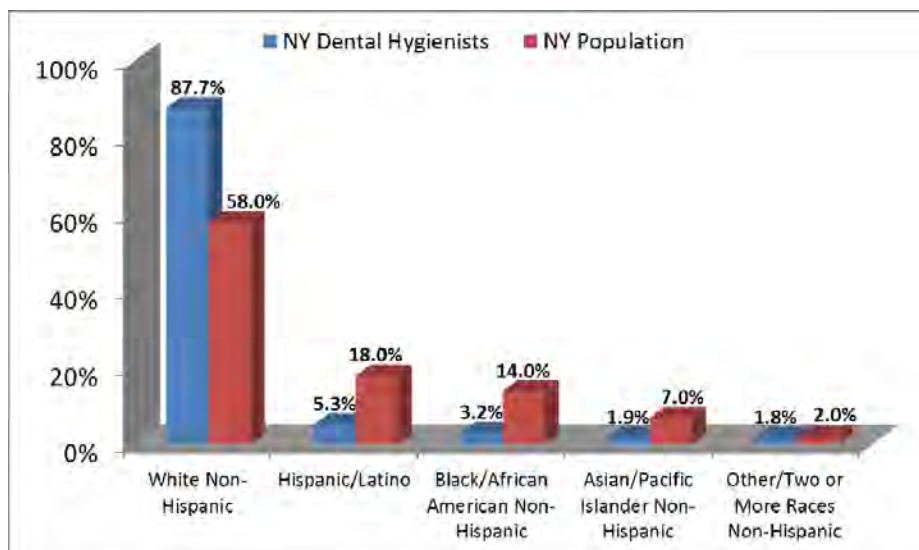
Among dental hygienists who reported attending a New York dental hygiene program, well over half graduated from SUNY Farmingdale (18%), Erie County Community College (14%), CUNY College of Technology (13%), and Hudson Valley Community College (13%). About 86% of New York's dental hygienists reported graduating from a high school in the state.

More than 82% of dental hygienists in New York reported an associate degree as their highest degree, compared to 65% of dental hygienists nationwide. Active dental hygienists in New York were about half as likely to report a bachelor's degree or higher (17%) as their highest degree compared to dental hygienists in the U.S. overall (35%).<sup>4</sup>

**Figure 5: Dental Hygiene Program Attended by New York Graduates**



**Figure 6: Race/Ethnicity of New York Dental Hygienists Compared to New York's Population**



New York's clinically active dental hygienists were comparable in racial/ethnic composition to active dental hygienists in the U.S. (Non-Hispanic White 87%, Hispanic/Latino 6%, Asian 4%, Black/African American 3%, Two or More Races/Other 1%).<sup>8</sup>

**The vast majority of New York's dental hygienists are women, older than dental hygienists nationwide, and not as culturally diverse as the state's population.**

Most dental hygienists in the state were female (99%). This was somewhat higher than the percent nationally (96%).<sup>5</sup> The median age of dental hygienists in New York (50 years) was older than the median age of dental hygienists in the U.S. (41 years).<sup>6</sup>

Non-Hispanic Whites were overrepresented among dental hygienists in New York relative to the state's population (88% compared to 58%).<sup>7</sup> Hispanics/Latinos were underrepresented among dental hygienists in New York relative to the state's population (5% compared to 18%), as were Blacks/African Americans (3% compared to 14%) and Asians (2% compared to 7%).

4-6. American Community Survey 2006-2010. Five-year estimates. U.S. Census Bureau.

7. U.S. Census Bureau. 2010 Decennial Census.

8. American Community Survey 2006-2010. Five-year estimates. U.S. Census Bureau.

## METHODS

Data for this research brief were drawn from an ongoing survey of New York's licensed dental hygienists conducted by the Center for Health Workforce Studies. Since September 2007, more than 5,700 dental hygienists have completed the survey, representing 53% of licensed dental hygienists in New York.

A respondent was determined to be an active dental hygienist if the individual reported hours in clinical practice or in direct patient care. Dental hygienists who did not report hours in one of these two activities or who reported being retired were excluded from the analysis. The region in which a dental hygienist practiced was based on the principal practice zip code reported on the survey. If the principal practice zip code was missing or located outside of New York, the secondary practice location zip code was used for determining a practice location in New York. To estimate total dental hygienists, responses were weighted by the reciprocal of the response rate ( $1/5,705/10,761 = 1.88657082748948$ ).

With a response rate of 53%, results should be interpreted cautiously. However, as the number of survey responses increases, this limitation will be greatly reduced and a more detailed profile of dental hygienists practicing in New York will be developed, including analysis at county and subcounty levels.

## CONCLUSION

New York's clinically active dental hygienists, on average, are older than dental hygienists nationally and much less diverse than the state's population, with many fewer Black/African American, Asian, and Hispanic/Latino dental hygienists relative to the general population. The majority of dental hygienists in the state graduated from a New York dental hygiene education program and a greater percentage have an associate degree as their highest level of education, compared to dental hygienists nationally.

New York's dental hygienists are unevenly distributed across the state, with many fewer per 100,000 population in New York City compared to other regions around the state. Further, there is substantial maldistribution of the limited supply of clinically active dental hygienists in New York City, with more in New York County and fewer in Bronx, Kings, and Queens counties. Policy makers, state and local planners, and other key stakeholders should carefully consider the implications of this maldistribution on access to preventive and prophylactic oral health services, particularly for underserved populations.

Moreover, exploration of part-time work among clinically active dental hygienists reveals geographic and practice characteristic patterns that should be taken into account by policy makers and planners. It is unclear whether dental hygienists are seeking part-time work or the job market is only producing part-time employment positions for dental hygienists. While additional research is needed on the motivations of dental hygienists to engage in part-time work and the factors associated with it, policies intended to expand the role of dental hygienists in the provision of oral health services should be aware of the large number of part-time dental hygienists and the variation regionally as well as within certain types of practice settings.

Findings from this analysis of the dental hygienist re-registration survey make a vital contribution to the general understanding of the oral health workforce in New York. The survey is an important tool in the continued monitoring the state's oral health workforce and helps to inform programs and policies designed to increase access to and the efficiency of the delivery of oral health services.

## Center for Health Workforce Studies

This brief was prepared by the Center for Health Workforce Studies at the School of Public Health, University at Albany, State University of New York. Center staff who worked on the report include Gaetano J. Forte and Jean Moore. Support for this analysis was provided by the New York State Department of Health and the New York State Education Department.  
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