2015 Dental Hygienists

Overview
This dental hygienist census is part of the Vermont Department of Health’s healthcare provider data program, which is used to monitor and measure the supply of health care providers in our state over time. Vermont dental hygienists are relicensed every two years. Data for this report were obtained during the September 2015 relicensing period and represent a snapshot of the profession at that time.

Dental hygienists, working under the general supervision of a licensed dentist, provide screening procedures, teeth cleaning and other dental care, and oral health education to their patients.

Full Time Equivalents to 100,000 population ratio by county

In Brief

Workforce
Survey period – September 2015
Response Rate: 95.4%
Licenses Renewed: 669
Active in VT: 558
Full Time Equivalents: 398.2

Demographics
% Female: 99.5%
Median Age: 44
% 60 and over: 14.9%

Education and Training
% Associates degree: 85.1%
% Bachelor's degree or higher: 14.0%
% Educated in Northeast: 97.0%

Current Employment
% Working in a dental office: 88.7%
% Working full-time at one site: 6.5%
% Working at multiple sites: 17.4%
% Planning to reduce hours: 1.6%
% Planning to retire: 0.7%

Geographical Distribution
(Full time equivalents to 100,000 pop. ratio)
Highest: 99, Chittenden county
Lowest: 9, Grand Isle county
Workforce
- 669 dental hygienists renewed their licenses during the surveyed period and 638 completed the workforce survey for a response rate of 95.4%
- Out of the 638 respondents, 558 (87.5%) indicated that they were actively working as a dental hygienist in Vermont.
- Of the 80 respondents reporting a non-active status, 14 (17.5%) indicated they were planning to start working as a dental hygienist in Vermont within the next 12 months.
- The remainder of this report is based on the 558 hygienists who reported actively working as a dental hygienist professional in Vermont.

Demographics

Gender
- 99.5% of active hygienists were female.

Age
- Similar percentages of hygienists were under 35 (24.6%), 35-44 (25.7%), 45-54 (24.8%) and over 55 (25.0%).

![Graph showing hygienists by age](chart.png)
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Education and Training

- 85.1% of hygienists had an associate degree.
- 14.0% had a bachelor's or master's degree.
- 71.7% received their schooling in Vermont and 25.3% in other Northeast states.

Practice Characteristics

Number of practice sites

- 82.6% (461) worked at a single location.
- 14.5% (81) worked at 2 locations.
- 2.9% (16) worked at 3 or more locations.

Type of practice

- 88.7% (495) of hygienists' main practice setting were in dental practices.

<table>
<thead>
<tr>
<th>Main practice setting</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solo Practice</td>
<td>224</td>
<td>40.1%</td>
</tr>
<tr>
<td>Practice of 2 dentists</td>
<td>157</td>
<td>28.1%</td>
</tr>
<tr>
<td>Practice of 3 or more</td>
<td>114</td>
<td>20.4%</td>
</tr>
<tr>
<td>Community clinic</td>
<td>38</td>
<td>6.8%</td>
</tr>
<tr>
<td>School / Head Start</td>
<td>9</td>
<td>1.6%</td>
</tr>
<tr>
<td>Public health</td>
<td>7</td>
<td>1.3%</td>
</tr>
<tr>
<td>All other</td>
<td>9</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

- 87.6% (489) provided primary care (general or pediatric dentistry) at their main site.

<table>
<thead>
<tr>
<th>Main specialty</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>General practitioner</td>
<td>467</td>
<td>83.7%</td>
</tr>
<tr>
<td>Pediatric dentistry</td>
<td>22</td>
<td>3.9%</td>
</tr>
<tr>
<td>Orthodontics</td>
<td>8</td>
<td>1.4%</td>
</tr>
<tr>
<td>Periodontics</td>
<td>19</td>
<td>3.4%</td>
</tr>
<tr>
<td>Public health</td>
<td>25</td>
<td>4.5%</td>
</tr>
<tr>
<td>Other</td>
<td>17</td>
<td>3.1%</td>
</tr>
</tbody>
</table>

- 4.7% (26) provided part-time hygienist services to schools and preschools through the tooth tutor program.
2015 Dental Hygienists

Full Time Equivalents

- The 558 hygienists provided 398.2 full time equivalents (FTEs).
- The statewide population ratio was 62.1 hygienist FTEs per 100,000 population.
- Approximately one-third of hygienists work 30-34 hours per week.

When comparing the workforce by geographic area, FTEs are used instead of counts of hygienists to factor in the effects of those working part time.

Geographic Distribution

- The Health Care Areas in this report are those used by the Vermont Blueprint for Health, an initiative working to transform the way primary care and comprehensive health services are delivered and paid for (see http://blueprintforhealth.vermont.gov/).
- The area with the lowest ratio of hygienist FTEs to population was Upper Valley, with 33.4 hygienist FTEs per 100,000 population. The area with the highest ratio, 90.2 was Burlington.
- A census of Vermont dentists was taken at the same time as the hygienist census. Statewide, the average (mean) number of hygienist FTEs to dentist FTEs working in primary care (general or pediatric dentistry) was 1.45 hygienists per dentist. The area with the lowest ratio was Bennington, with .90 hygienist FTEs per dentist FTE. Newport had the highest ratio with at 2.05 hygienist FTEs per dentist FTE.
- Data are available for other regional definitions from the Division of Health Surveillance. See the contact information at the end of this report.
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Health Care Areas:
Full Time Equivalents

Dental Hygienist FTE ratio per 100,000 population

Primary Care Hygienist to Dentist Ratio

[Map showing distribution of dental hygienists across Vermont counties with FTE ratios and Primary Care Hygienist to Dentist Ratio]

- Lowest quartile: Less than 43 FTEs per 100,000 pop.
- Middle quartiles: 43 through 62 FTEs per 100,000 pop.
- Highest quartile: Greater than 62 FTEs per 100,000 pop.
- Least than 1.18 hygienists per dentist
- 1.18 through 1.68 hygienists per dentist
- Greater than 1.68 hygienists per dentist
2015 Dental Hygienists

Current Experience and Future Plans

- Median years hygienists were licensed in Vermont was 15 years.
- 28.5% (156) of hygienists had been licensed in Vermont for over 25 years.

In the next 12 months

- 86.3% planned to continue working as they had been.
- 6.5% planned to increase their hours.
- 4.0% planned to reduce their hours or stop working as a hygienist.
- 0.7% planned to retire.

<table>
<thead>
<tr>
<th>Years Licensed in Vermont</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 5 years</td>
<td>110</td>
<td>20.1%</td>
</tr>
<tr>
<td>6 to 10 years</td>
<td>93</td>
<td>17.0%</td>
</tr>
<tr>
<td>11 to 15 years</td>
<td>76</td>
<td>13.9%</td>
</tr>
<tr>
<td>16 to 20 years</td>
<td>53</td>
<td>9.7%</td>
</tr>
<tr>
<td>21 to 25 years</td>
<td>60</td>
<td>10.9%</td>
</tr>
<tr>
<td>Over 25 years</td>
<td>156</td>
<td>28.5%</td>
</tr>
</tbody>
</table>

Observations

- Hygienists were predominantly female and worked part time.
- Different geographic definitions highlighted different results.
  - Based on county areas, there was a 10-fold difference between the lowest (Grand Isle at 9) and highest (Chittenden County at 98) FTE to population ratio.
  - When Grand Isle was incorporated into the St. Albans and Burlington Health Care areas, this difference was vastly reduced.

Questions

For tables detailing these data or further information, contact:
Vermont Department of Health
Division of Health Surveillance – Workforce Census
108 Cherry Street, Drawer 41
PO Box 70
Burlington, VT 05402-0070
Tel. 802-863-7300
Email: AHS.VDHPhysicianCensus@vermont.gov
Appendix

Active Hygienist
A hygienist who reported working in Vermont as a hygienist (regardless of how many hours) is considered active.

Census
The census was taken during the biennial dental hygienist relicensing process which ended on September 30, 2105. The data include all licensed hygienists except for new licensees enrolled less than three months before the renewal date (July – September 2015), as their license was valid until the next renewal date of September 30, 2017. Census questions are available upon request.

Dentist Data

Full Time Equivalent (FTE)
Full time is defined as 40 or more working hours in Vermont per week, 48 weeks or more per year. A hygienist reporting more than 40 hours per week is defined as one FTE regardless of the number of hours over 40 per week worked.

Health Care Areas
The Health Care Areas in this report are those used by the Vermont Blueprint for Health, an initiative working to transform the way primary care and comprehensive health services are delivered and paid for. It disseminates information on healthcare expenditures, utilization, and care quality measures within these regions (see http://blueprintforhealth.vermont.gov/). Data are available for other regional definitions from the Division of Health Surveillance. See the contact information at the end of this report.

Main Practice, Site, Setting, and Specialty
The main practice, site, setting, or specialty refer to the practice in which the hygienist worked the greatest number of annual hours.

Map Quartiles
Map colors define quartiles. The lowest 25% of FTE equivalents to population ratio is displayed in the lightest color, the middle 50% in medium, and highest 25% in the darkest color.

Missing data
Unless otherwise noted, missing data are excluded from tables. Thus totals may vary from table to table.

Population Estimates
Population estimates are for July 2015 and were provided by the Department of Health.
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States

States were grouped into the following regions:

<table>
<thead>
<tr>
<th>Northeast</th>
<th>Midwest</th>
<th>South</th>
<th>West</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connecticut</td>
<td>Illinois</td>
<td>Alabama</td>
<td>North Carolina</td>
</tr>
<tr>
<td>Maine</td>
<td>Indiana</td>
<td>Arkansas</td>
<td>Oklahoma</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>Iowa</td>
<td>Delaware</td>
<td>South Carolina</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>Kansas</td>
<td>Florida</td>
<td>Tennessee</td>
</tr>
<tr>
<td>New Jersey</td>
<td>Michigan</td>
<td>Georgia</td>
<td>Texas</td>
</tr>
<tr>
<td>New York</td>
<td>Minnesota</td>
<td>Kentucky</td>
<td>Virginia</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>Missouri</td>
<td>Louisiana</td>
<td>Washington DC</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>Nebraska</td>
<td>Maryland</td>
<td>West Virginia</td>
</tr>
<tr>
<td>Vermont</td>
<td>North Dakota</td>
<td>Mississippi</td>
<td>New Mexico</td>
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<tr>
<td></td>
<td>Ohio</td>
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<td>Oregon</td>
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<tr>
<td></td>
<td>South Dakota</td>
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<td>Utah</td>
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<tr>
<td></td>
<td>Wisconsin</td>
<td></td>
<td>Washington</td>
</tr>
</tbody>
</table>

Weekly Hours

Average weekly hours is based on hours and weeks reported, adjusted to a full-time 48-week working year (hours * (weeks/48)). Thus, the average weekly hours for a hygienist working 40 hours a week for half the year (24 weeks), is 20.