The Texas Governmental Public Health Nurse Staffing Survey (TGPHNSS) assesses nurse staffing and related issues in Texas governmental public health agencies. During the summer of 2015, the Texas Center for Nursing Workforce Studies (TCNWS) administered the TGPHNSS to 83 public health agencies in Texas. This included local health departments, health service regions, and Department of State Health Services (DSHS) central offices in Austin. A total of 58 agencies participated for a final response rate of 69.9%.

This report provides data on agency types as well as the response rate by agency type, region, and geographic location. Also included in the report are agency characteristics such as administration of nursing services, nurses as board members, and program areas.
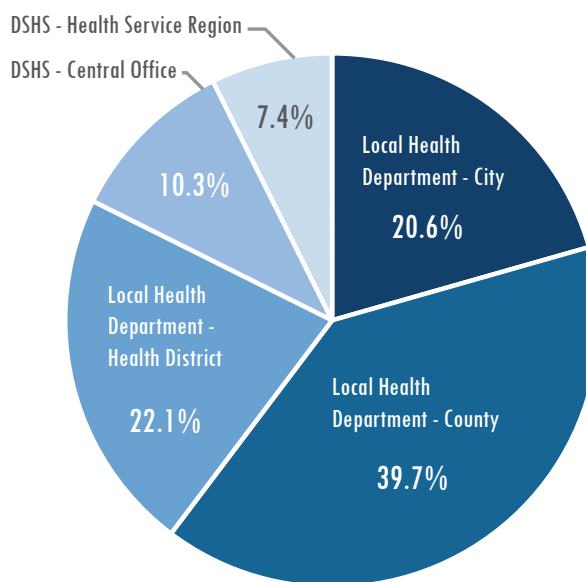
## Agency Type

Figure 1 displays the proportion of agency types reported by respondents. Agencies could select multiple types. 7 of the 58 agencies selected more than one type.

- Local health department – county represented the largest proportion of agency type (39.7%).
- 7.4% of respondents reported DSHS – health service region best characterized their agency, which was the lowest proportion.

### Representativeness

Chi-Square analyses found that the 58 respondents were not significantly different than the 25 non-responding facilities in regards to agency type ($X^2$ (df = 2, N = 58) = .43, p = 0.81), region ($X^2$ (df = 7, N = 58) = 1.66, p = 0.98), and county designation ($X^2$ (df = 2, N = 58) = .48, p = 0.79). As a result, data from the 2015 TGPPHNSS can be generalized by agency type, region, and county designation.

**Figure 1. Agency Types**



DSHS - Health Service Region
DSHS - Central Office
7.4%
Local Health Department - City — 20.6%
10.3%
Local Health Department - Health District — 22.1%
Local Health Department - County — 39.7%

## Response Rate

The final response rate, with 58 of the 83 public health agencies responding, was 69.9%, which was a decrease from 2013 (77.5%). There were 2 local health departments and 2 DSHS central offices included in the 2015 TGPHNSS that were not in the 2013 TGPHNSS.

Table 1 (page 2) displays the response rate by agency type.

- 7 of the 8 DSHS health service regions responded to the survey (87.5% response rate).
- Local health departments had a response rate of 68.7%, with 46 of 67 agencies responding to the survey.
- The response rate for DSHS central office divisions was 62.5%.

## Table 1. Response Rate by Agency Type

| Agency Type | # of Responding Agencies | # of Agencies in Population | Response Rate |
|---|---|---|---|
| Health Service Regions | 7 | 8 | 87.5% |
| Local Health Departments* | 46 | 67 | 68.7% |
| DSHS Central Office Division Sections | 5 | 8 | 62.5% |

*Local Health Departments include 64 full-service local health departments as well as the 3 non-participating local health departments that indicated they employed public health nurses.

## Response Rate by Region

Figure 2 and Table 2 show the response rate of public health agencies by region.

- North Texas and South Texas had the highest response rates, 78.6% and 77.8% respectively.
- The Rio Grande Valley and Panhandle regions both had a 50.0% response rate, which were the lowest in the state.

### Figure 2. Response rate by region
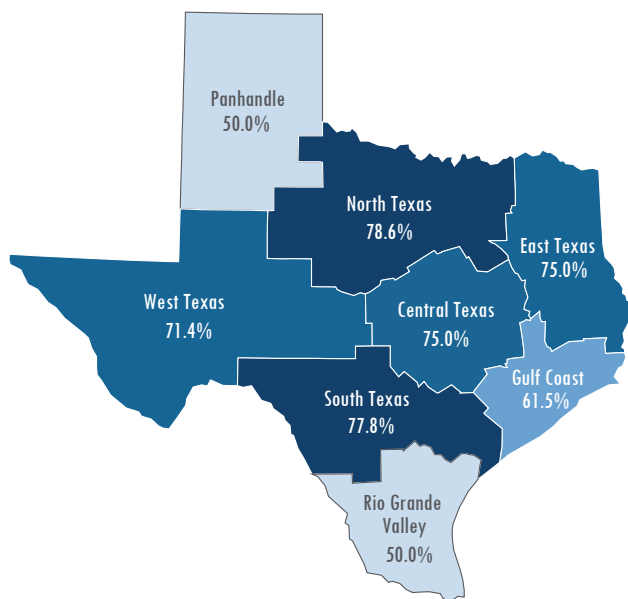


## Table 2. Response Rate by Region

| Region | # of Respondents in Region | Total # of Public Health Agencies in Region | Response Rate |
|---|---|---|---|
| North Texas | 11 | 14 | 78.6% |
| South Texas | 7 | 9 | 77.8% |
| East Texas | 9 | 12 | 75.0% |
| Central Texas | 12 | 16 | 75.0% |
| West Texas | 5 | 7 | 71.4% |
| Gulf Coast | 8 | 13 | 61.5% |
| Rio Grande Valley | 4 | 8 | 50.0% |
| Panhandle | 2 | 4 | 50.0% |
| Texas | 58 | 83 | 69.9% |

## Response Rate by Geographic Designation

Table 3 displays the response rate by metropolitan and border status (geographic designation). Please see Appendix D for the lists of all Texas counties by metropolitan and border status.

- Agencies in metropolitan counties had the highest response rate (73.8%).
- Agencies in non-metropolitan counties had a response rate of 55.6%, which represented the lowest rate among all geographic designations.
- Agencies in non-border counties had a final response rate of 71.1%, while border counties had a response rate of 57.1%

## Table 3. Response Rate by Geographic Location

| Geographic Designation | # of Respondents in Designation | Total # of Agencies in Designation | Response Rate |
|---|---|---|---|
| Metro | 48 | 65 | 73.8% |
| Non-Metro | 10 | 18 | 55.6% |
| Non-Border | 22 | 83 | 71.1% |
| Border | 4 | 7 | 57.1% |

# Administration of Nursing Services

Agencies were asked if they had a position designated with overall administrative responsibility for nursing services. Those agencies that did have a position designated were then asked if the position was filled by an RN. As seen in Figure 3:

- Overall, 72.4% of the agencies reported having a position designated with overall administrative responsibility for nursing services.

### Figure 3. Administration of Nursing Services

Does your agency have a position designated with overall administrative responsibility for nursing services?

| NO 27.6% | YES 72.4% |

**85.7%** of these positions are held by RNs
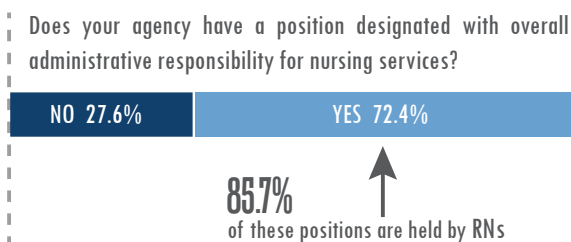
- Among respondents who did have a person with administrative responsibility for nursing services, 85.7% reported that the person was a RN.

## Nurses on Boards

The Institute of Medicine has recommended preparing and enabling nurses to lead change to advance health, which includes having representation on boards and other key leadership positions.[1] 2015 marked the first year that the TGPHNSS tracked this indicator by asking if the respondent's organizational board had any RN members. The question did not ask for any specific type of board and the broadness of the question was a limitation of the study. Agencies also did not have an option to report that they did not have a board.

Figure 4 displays the percentage of public health agencies with an RN on the agency's board.

- 26.3% of the agencies that participated in the survey reported having an RN on their board.

- 100% of respondents who did have RN board members reported the RNs had voting privileges.

**Figure 4. Nurses on Board**



% Respondents with RN on the Board*

| NO 73.7% | YES 26.3% |

100% of these RNs have voting privileges
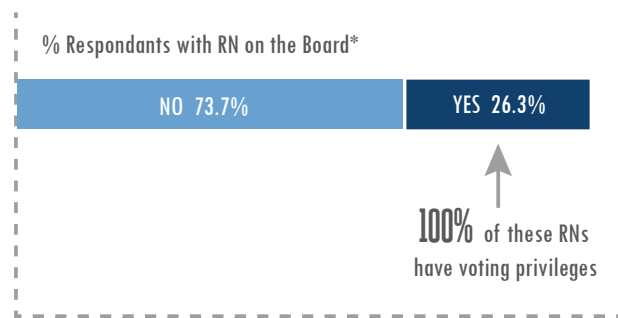
[1]Institute of Medicine, Committee on the Robert Wood Johnson Foundation Initiative on the Future of Nursing. (2011). Front matter. *The future of nursing: Leading change, advancing health*.

## Program Areas

Agencies were asked to select the program areas administered by their agency and whether the program was staffed by nurses or not. Respondents could select either LVNs, RNs, APRNs, or a combination of the three nurse types. Responding agencies were all agencies who selected employing at least one nurse type in one of the program areas (57 of the 58 agencies). The 2015 TGPHNSS did not ask for the number of nurse FTEs for each program area, which is a limitation of the study.

Most of the governmental public health agencies that responded served a variety of functions and provided a range of programs to the public. Figure 5 displays the percentage of responding agencies employing LVNs by program area. For all program areas please see Appendix E and for operational definitions please see Appendix C.

- 68.4% of responding agencies selected staffing immunization programs/services with LVNs, which was the most frequently selected program area that employed LVNs.

- Tuberculosis Control was the second most selected program area that employed LVNs (49.1%).

**Figure 5. Percentage of Responding Agencies Employing LVNs, by Program Area**



Percentage Employing Nurse Type

- 68.4%
- 49.1%
- 40.4%
- 24.6%
- 22.8%

■ Immunization Programs/Services
■ Tuberculosis Control
■ Women, Infant, Children Supplemental Nutrition Program (WIC)
□ Chronic Disease Services/Prevention
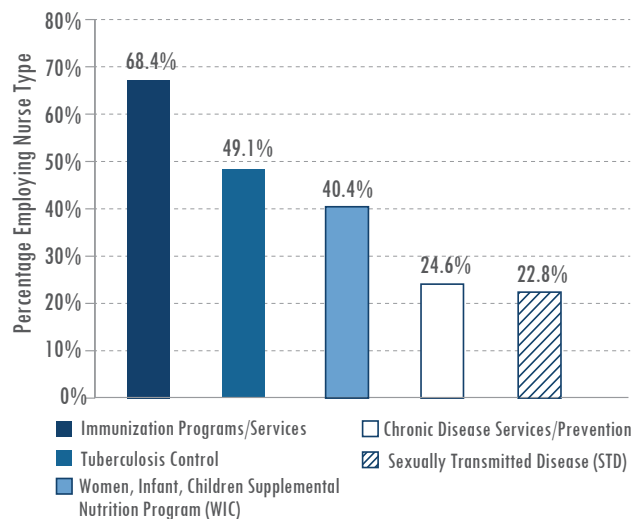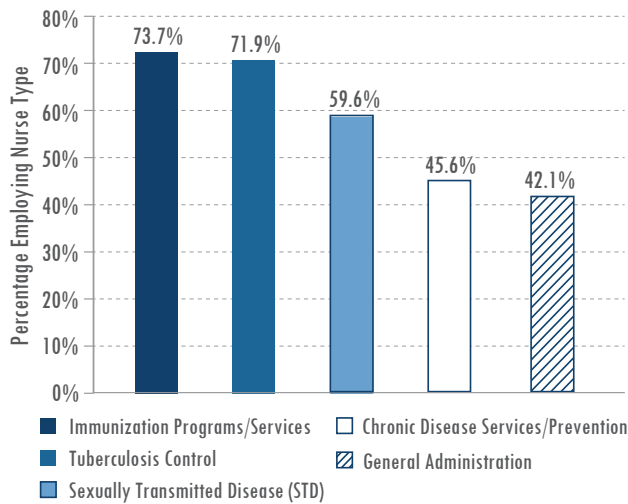▨ Sexually Transmitted Disease (STD)

Figure 6 (page 4) shows the percentage of responding agencies employing RNs by program area.

- 73.7% of responding agencies selected employing RNs in immunization/services. This was the most selected program area that employed RNs.

**Figure 6. Percentage of Responding Agencies Employing RNs, by Program Area**



- The second most selected program area that employed RNs was tuberculosis control (71.9%).

- 59.6% and 45.6% of responding agencies reported employing RNs in sexually transmitted disease and chronic disease services/prevention program areas, respectively.

Figure 7 reports the percentage of agencies employing APRNs by program areas.

- Sexually transmitted disease program area was the most frequently select program area that employed APRNs. (33.3%).

- 21.1% of responding agencies reported employing APRNs in HIV prevention, which was the second most frequently selected program area to employ APRNs.

- 19.3% of responding agencies selected employing APRNs in chronic disease, Family planning, and men's health program areas.

**Figure 7. Percentage of Responding Agencies Employing APRNs, by Program Area**
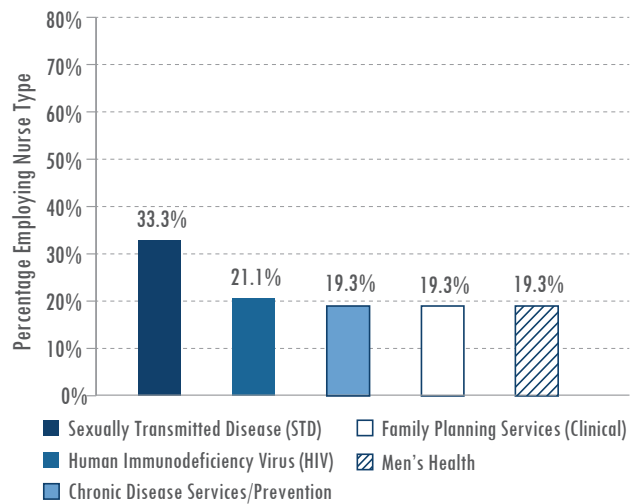


## Conclusion and Recommendations

### Conclusion

The final response rate, with 58 of the 83 public health agencies responding, was 69.9%, which was a decrease from 2013 (77.5%). Health Service regions had the highest response rate (87.5%) among agency types. The North (78.6%) and South Texas (77.8) regions had the highest response rates, and the Panhandle and Rio Grande Valley had the lowest response rates (both 50.0%).

72.4% of responding agencies reported having a position designated with overall administrative responsibility, and among those that had such a position 85.7% staffed the position with an RN. This is in line with the IOM recommendation that public health implement formal career ladders and collaborative governance structures that provide public health nurses with greater autonomy, responsibility, and opportunities to serve in leadership roles. The 2015 TGPHNSS also tracked nurses on boards and 26.3% of responding agencies had RN board members with voting privileges. Public health agencies should recognize the value and input of nurses by increasing the use of RNs on committees, boards, etc, which is another IOM recommendation.

Finally, 68.4% of agencies selected employing LVNs in immunization programs/services and 73.7% reported employing the same program area with RNs, which was the highest percentage among both nurse types. Tuberculosis control was the second most frequently selected program area that employed RNs (71.9%) and LVNs (49.1%). 33.3% of agencies selected employing APRNs in STD program areas, which was the most frequently selected program area for APRNs.

## TCNWS Advisory Committee Recommendations

- The Texas Department of State Health Services (DSHS) should sustain the Director of Nursing (DON) position within the Texas Department of State Health Services (DSHS) to further state led efforts to promote the health of communities through public health nursing.

- Stakeholders should develop and implement solutions to ensure the advancement of RNs, specifically:

  - Public health agencies should implement formal career ladders and collaborative governance structures that provide experienced public health nurses with greater autonomy and responsibility and opportunities to serve in leadership roles. This is inline with IOM recommendation 7: Prepare and enable nurses to lead change to advance health.

  - In conjunction with formal career ladders, DSHS should include nurse leaders on executive level management teams and in other key leadership positions, both centrally and regionally. This is inline with IOM recommendation 7: Prepare and enable nurses to lead change to advance health.

  - Public health agencies should establish consistent organizational support for nurses in leadership roles by ensuring effective nurse management structures are in place.

  - Public health agencies should recognize the value of nursing input in all program areas and promote the use of RNs on committees, boards, etc. This is inline with IOM recommendation 7: Prepare and enable nurses to lead change to advance health.