

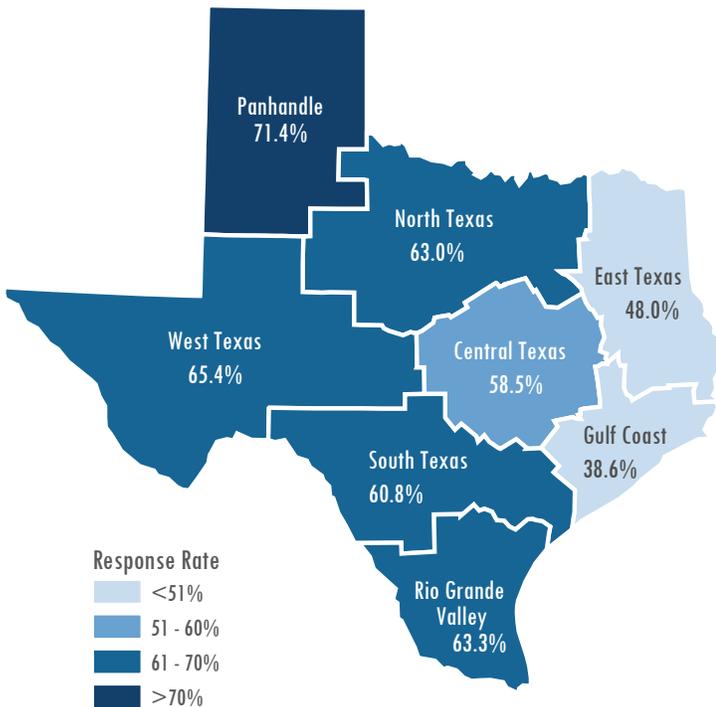


The Hospital Nurse Staffing Survey (HNSS) assesses the size and effects of the nursing shortage in hospitals, Texas' largest employer of nurses. During the summer of 2019, the Texas Center for Nursing Workforce Studies (TCNWS) administered the HNSS to the Chief Nursing Officers/Directors of Nursing of 715 Texas hospitals. These included for-profit, nonprofit, public, and Texas Department of State Health Services-operated hospitals, as well as hospitals linked to academic institutions; military hospitals were not surveyed. The facilities surveyed were general acute care, psychiatric, special, and rehabilitation hospitals; outpatient or community-based clinics were not included. Respondents provided data for 404 hospitals for a response rate of 56.5%.

The hospitals that completed the 2019 HNSS were representative of all Texas hospitals by geographic designation, but not by bed size or region. This report provides survey response rates by region, geographic designation, and bed size. It also includes relevant hospital characteristics such as the number and distribution of teaching, rural, Magnet, Pathway to Excellence, and trauma center designated hospitals in the 2019 HNSS sample.

### Geographic Characteristics of Hospitals

Figure 1. Response rate by region



- The Panhandle (71.4%) and West Texas (65.4%) had the highest response rates, while East Texas (48.0%) and the Gulf Coast (38.6%) had the lowest (Table 1).
- Analysis found that there was a significant difference between responding hospitals and non-responding hospitals by region.<sup>1</sup>

Table 1. 2017 HNSS response rate by region

Region	# of Respondents in Region	Total # of Hospitals in Region	Response Rate
Panhandle	30	42	71.4%
Rio Grande Valley	31	49	63.3%
North Texas	131	208	63.0%
East Texas	24	50	48.0%
Gulf Coast	61	158	38.6%
Central Texas	48	82	58.5%
South Texas	45	74	60.8%
West Texas	34	52	65.4%
Texas	404	715	56.5%

The overall response rate for 2019 was 56.5%, up from the 2017 response rate of 48.8%.

Table 2 shows the number of responding hospitals by geographic designation.<sup>2</sup>

- Non-metropolitan, border counties had the highest response rate (75.0%), while metropolitan, non-border counties had the lowest (52.9%).
- Analysis found that there was a significant difference between responding hospitals and non-responding hospitals by geographic designation.<sup>3</sup>

**Table 2. Response rate by geographic designation**

Geographic Designation	# of Respondents in Designation	Total # of Hospitals in Designation	Response Rate
Metro Border	29	47	61.7%
Metro Non-Border	277	524	52.9%
Non-Metro Border	9	12	75.0%
Non-Metro Non-Border	89	132	67.4%

Table 3 displays information on the proportion of hospitals responding to the survey by region and bed size categories.

- Hospitals with greater than 499 beds had the highest response rate (71.4%), while those with between 50 and 99 beds had the lowest (41.8%).
- Analysis found that there was a significant difference

between responding hospitals and non-responding hospitals by bed size categories.<sup>4</sup>

**Table 3. Number of responding hospitals over total number of hospitals by region and bed size**

Region	Bed Size					Total
	<50	50-99	100-299	300-499	>499	
Panhandle	22/28	2/6	3/4	3/4	0/0	30/42
Rio Grande Valley	9/16	6/12	11/15	2/4	2/2	30/49
North Texas	54/91	25/54	29/41	10/12	9/10	127/208
East Texas	9/20	4/14	6/10	4/5	0/1	23/50
Gulf Coast	22/61	12/36	16/36	6/16	4/9	60/158
Central Texas	20/35	9/20	15/22	1/3	1/2	46/82
South Texas	16/34	5/10	13/20	4/6	4/4	42/74
West Texas	18/29	3/6	6/11	5/6	0/0	32/52
Texas	170/314	66/158	99/159	35/56	20/28	390/715

<sup>1</sup> ( $\chi^2(7, N = 715) = 32.7, p < 0.001$ )

<sup>2</sup> For county designation definitions visit [dshs.texas.gov/chs/hprc/counties.shtm](https://dshs.texas.gov/chs/hprc/counties.shtm)

<sup>3</sup> ( $\chi^2(3, N = 715) = 11.4, p = 0.010$ )

<sup>4</sup> ( $\chi^2(4, N = 715) = 23.1, p < 0.001$ )

## Hospital Designations

Hospitals were asked to indicate applicable hospital designations from the following choices: teaching hospital, Magnet hospital, Pathway to Excellence hospital, trauma hospital, and rural hospital. For hospital designation definitions, please see the 2019 HNSS Appendices.

Table 4 shows the percentage of responding hospitals in each class of hospital designation by region.

- Half of responding teaching hospitals were located in North Texas and the Gulf Coast.
- 71.1% of Magnet hospitals and 80.0% of Pathway to Excellence hospitals in Texas responded to the survey. The majority of responding Magnet and Pathway hospitals were in North Texas.
- The Rio Grande Valley had the greatest percentage of responding rural hospitals (63.3% of responding hospitals in the Panhandle were rural), while the Gulf Coast had the lowest percentage (8.2% of responding hospitals in the Gulf Coast were rural).

## Trauma Centers

Trauma facilities are hospitals that are designated by the Texas Department of State Health Services to provide emergency and specialized intensive care to critically ill and injured patients. They range from Level 1, which is a comprehensive trauma facility that manages major and severe trauma patients, to Level 4, a basic trauma facility that transfers major and severe trauma patients to a higher-level trauma facility. There are a total of 284 trauma centers (TCs) in Texas as of September 11, 2019.

- Of 17 level 1 TCs, 11 responded.
- Of 24 level 2 TCs, 18 responded.
- Of 55 level 3 TCs, 39 responded.
- Of 188 level 4 TCs, 133 responded.

Table 5 shows the percentage of responding hospitals in each region that were designated to be certain trauma center levels.

**Table 4. Number and percentage of responding hospitals in each hospital designation by region**

		Region								
		Panhandle	Rio Grande Valley	North Texas	East Texas	Gulf Coast	Central Texas	South Texas	West Texas	Texas
Teaching	n	3	4	16	5	9	3	7	3	50
	%	75.0%	66.7%	80.0%	83.3%	50.0%	50.0%	77.8%	75.0%	68.5%
Magnet	n	1	0	19	1	7	1	3	0	32
	%	100%	-	82.6%	100%	46.7%	50.0%	100%	-	71.1%
Pathway to Excellence	n	1	0	17	0	6	9	2	1	36
	%	100%	-	94.4%	-	54.5%	81.8%	66.7%	100%	80.0%
Trauma Center	n	20	19	56	15	18	28	26	19	201
	%	76.9%	82.6%	81.2%	51.7%	51.4%	70.0%	74.3%	70.4%	70.8%
Rural	n	19	5	22	5	5	10	8	11	85
	%	82.6%	83.3%	71.0%	38.5%	50.0%	62.5%	61.5%	55.0%	64.4%

Note: n=number of responding hospitals in Texas that reported having a hospital designation

**Table 5. Level of responding trauma centers by region**

Trauma Center Level		Region								Texas
		Panhandle	Rio Grande Valley	North Texas	East Texas	Gulf Coast	Central Texas	South Texas	West Texas	
1	n	1	0	6	1	4	3	1	1	17
	%	3.3%	0.0%	4.6%	4.2%	6.6%	6.3%	2.2%	2.9%	4.2%
2	n	2	3	8	1	3	6	0	1	24
	%	6.7%	9.7%	6.1%	4.2%	4.9%	12.5%	0.0%	2.9%	5.9%
3	n	1	8	12	8	11	3	5	7	55
	%	3.3%	25.8%	9.2%	33.3%	18.0%	6.3%	11.1%	20.6%	13.6%
4	n	22	12	43	19	17	28	29	18	188
	%	73.3%	38.7%	32.8%	79.2%	27.9%	58.3%	64.4%	52.9%	46.5%
Non-Trauma Centers	n	4	8	62	5	26	8	10	7	120
	%	13.3%	25.8%	47.3%	20.8%	42.6%	16.7%	22.2%	20.6%	29.7%

Note: n=number of hospitals in Texas that reported having a trauma designation



## 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.<sup>4</sup>

- 178 out of 333 (53.5%) respondents reported having RNs on their boards, an increase from 49.3% in 2017.

- 100 out of 178 (56.2%) respondents that did have RN board members reported that RNs had voting privileges, a decrease from 65.9% in 2017.

<sup>4</sup> 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.*

## Conclusion

In 2019, the HNSS response rate was 56.5%. The Panhandle (71.4%) and West Texas (65.4%) had the highest response rates, while East Texas (48.0%) and the Gulf Coast (38.6%) had the lowest. Response rates were also higher in non-metropolitan counties. Responding agencies were representative of all Texas hospitals by geographic designation, but not by bed size or region.

Over half of responding hospitals were designated trauma centers (70.3%), most of which were level 4 trauma centers. 53.5% of responding facilities reported having RNs on their boards, and 56.2% of these RNs had voting privileges.

