Surveys on Patient Safety Culture® (SOPS®) Workplace Safety Supplemental Items for Nursing Homes: 2025 Updated Results

Part I

Prepared for:

Agency for Healthcare Research and Quality U.S. Department of Health and Human Services 5600 Fishers Lane Rockville, MD 20857 www.ahrq.gov

Managed and Prepared by:

Emily Rose Tyler, M.S.
Olivia Yalden
Lei Fan, M.D., Ph.D.
Sherrie Ji
Jessica Kirchner, M.A.
Naomi Dyer Yount, Ph.D.
Joann Sorra, Ph.D.

Westat, Rockville, MD Contract No. GS-00F-009DA/75Q80123F80005

AHRQ Publication No. 25-0048 May 2025



Public Domain Notice. This product is in the public domain and may be used and reprinted without permission in the United States for noncommercial purposes, unless materials are clearly noted as copyrighted in the document. No one may reproduce copyrighted materials without the permission of the copyright holders. Users outside the United States must get permission from AHRQ to reprint or translate this product. Anyone wanting to reproduce this product for sale must contact AHRQ for permission.

Surveys on Patient Safety Culture[®] and SOPS[®] are registered trademarks of the U.S. Department of Health and Human Services (HHS). Unauthorized use of these marks is strictly prohibited.

Suggested Citation:

Tyler ER, Yalden O, Fan L, Ji S, Kirchner J, Yount ND, Sorra J. 2025. Surveys on Patient Safety Culture[®] (SOPS[®]) Workplace Safety Supplemental Items for Nursing Homes: 2025 Updated Results. (Prepared by Westat, Rockville, MD, under Contract No. GS-00F-009DA/75Q80123F80005). Rockville, MD: Agency for Healthcare Research and Quality; May 2025. AHRQ Publication No. 25-0048.

The authors of this report are responsible for its content. Statements in the report should not be construed as endorsement by the Agency for Healthcare Research and Quality or the U.S. Department of Health and Human Services.

No investigators have any affiliations or financial involvement (e.g., employment, consultancies, honoraria, stock options, expert testimony, grants or patents received or pending, or royalties) that conflict with material presented in this report.



Table of Contents

Chapter	Page
1 Highlights	
2 Overview	2
3 Survey Background	3
4 Survey Administration Statistics	4
5 Nursing Home Characteristics	5
6 Respondent Characteristics	6
7 Overall Results	8
8 Comparing Nursing Home Results	14
9 Explanation of Calculations	20



1 Highlights



Surveys on Patient Safety Culture®

Surveys on Patient Safety Culture® (SOPS®) Workplace Safety Supplemental Items for Nursing Homes: 2025 Updated Results

The Workplace Safety Supplemental Items for Nursing Homes assess the extent to which the organizational culture of a nursing home supports workplace safety for providers and staff. The 2025 updated results include data from:



72Participating Nursing Homes



3,683
Provider and Staff
Respondents



53% Average Nursing Home Response Rate

Highest Composite Measure: Moving, Transferring, or Lifting Residents



89% of respondents agreed that equipment or assistive devices are available, in good working condition, and staff use them when needed.

Lowest Composite Measure: Interactions Among Staff





57% of respondents agreed that staff are not rude to, or bully, other staff.

Overall Rating on Workplace Safety for Staff

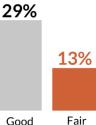
55%

of respondents rated workplace safety for staff as Excellent or Very Good.









6

3% Poor

Note: Percentages indicate the database average percent response for each response option. The percent positive displayed might not equal the sum of the separate response option percentages due to rounding. Percentages might not add to 100 due to rounding.

What's Next? Action planning for patient safety improvement

The Action Planning Tool for the AHRQ Surveys on Patient Safety Culture provides step-by-step guidance on how to develop an action plan to improve patient safety culture, available at www.ahrq.gov/sops/resources/planning-tool.

2 Overview

The AHRQ Surveys on Patient Safety Culture® (SOPS®) Workplace Safety Supplemental Items for Nursing Homes assess the extent to which the organizational culture in nursing homes supports workplace safety for staff. The supplemental items were designed to be administered toward the end of the SOPS Nursing Home Survey, just before the background questions.

This updated report presents statistics (averages, standard deviations, minimum and maximum scores, and percentiles) for 72 U.S. nursing homes and 3,683 respondents on the workplace safety composite measures and items. Of these 72 nursing homes, 45 are from the 2023 <u>Pilot Study Results From the AHRQ SOPS® Workplace Safety Supplemental Item Set for Nursing Homes</u>.

<u>Part II: Appendixes A and B</u> present data tables showing results by the following nursing home and respondent characteristics:

Appendix A: Results by Nursing Home Characteristics

- Bed size
- Ownership
- Geographic region

Appendix B: Results by Respondent Characteristics

- Job satisfaction
- Intent to leave
- Staff position
- Work unit
- Shift worked most often
- Tenure



3 Survey Background

The SOPS Workplace Safety Supplemental Items for Nursing Homes include 18 survey items grouped into six composite measures (a composite measure consists of 2 to 4 survey items that assess the same area of workplace safety culture), described in Table 3-1. The survey items use 5-point agreement scales ("Strongly Disagree" to "Strongly Agree") and 5-point frequency scales ("Never" to "Always") and include a "Does Not Apply or Don't Know" response option.

Table 3-1. SOPS Nursing Home Workplace Safety Composite Measures and Definitions

Workplace Safety Composite Measures	Definition: The extent to which	Number of Items
Protection From Workplace Hazards	Procedures are in place to protect staff from workplace hazards; staff are provided with appropriate personal protective equipment (PPE), use PPE appropriately, and clean their hands when helping residents with personal care.	4
Moving, Transferring, or Lifting Residents	Equipment or assistive devices are available, in good working condition, and staff use them when needed.	3
Addressing Inappropriate Resident Behavior Toward Staff	There are good procedures to keep staff safe from inappropriate resident behavior, staff are trained to identify triggers that could lead to inappropriate resident behavior, and staff are trained on how to de-escalate situations when residents are agitated.	3
Interactions Among Staff	Staff are rude to, or bully, other staff.	2
Supervisor Support for Workplace Safety	Supervisors encourage staff to report their concerns about workplace safety, listen to staff suggestions about workplace safety, and can be trusted to keep staff safe.	3
Management Support for Workplace Safety	Management shows that workplace safety is a top priority, provides adequate resources for staff safety, and takes action when staff report workplace safety concerns.	3

The survey also includes three single-item measures that ask respondents if they can report any workplace safety concerns without fear of negative consequences, the extent to which they are experiencing symptoms of burnout, and their overall rating on workplace safety for staff. There are also two background questions which ask respondents about their job satisfaction and intent to leave.



4 Survey Administration Statistics

This chapter presents descriptive information on the number of nursing homes and survey respondents, overall and average response rates, and modes of survey administration. Participating nursing homes administered the SOPS Workplace Safety Supplemental Items for Nursing Homes between July 2022 and November 2024.

 Table 4-1.
 Number of Participating Nursing Homes and Respondents

Overall Statistic	Retained From the 2023 Nursing Home Workplace Safety Pilot	Participants From 2025	Total
Number of nursing homes	45	27	72
Number of respondents	2,362	1,321	3,683

Table 4-2. Response Statistics

Overall Response Information	Statistic
Number of nursing homes	72
Number of respondents	3,683
Number of surveys distributed	8,429
Overall response rate	44%
Average Response Rate Information	Statistic
Average number of respondents per nursing home (range: 10 to 135)	51
Average number of surveys distributed per nursing home (range: 24 to 712)	117
Average nursing home response rate (range: 5% to 92%)	53%

Table 4-3. Survey Administration Mode Statistics

	Nursing	Homes	Respo	ndents	Average Response Rate
Survey Administration Mode	Number	Percent	Number	Percent	Percent
Paper only	50	69%	2,765	75%	57%
Web only	22	31%	918	25%	46%
Total	72	100%	3,683	100%	

Note: Percentages may not add to 100 due to rounding.



5 Nursing Home Characteristics

This chapter presents information about the characteristics of nursing homes that administered and submitted the Workplace Safety Supplemental Items data, including bed size, ownership, and geographic region.

Table 5-1. Nursing Home Characteristics

Nursing Home Characteristics	Nursing	ipating g Homes = 72)	Workplace Safety Respondents (N = 3,683)			
Bed Size	Number	Percent	Number	Percent		
1-49 beds	17	24%	573	16%		
50-99 beds	19	26%	902	24%		
100-199 beds	29	40%	1,582	43%		
200 or more beds	7	10%	626	17%		
Ownership	Number	Percent	Number	Percent		
For profit	24	33%	1,263	34%		
Nonprofit	41	57%	1,911	52%		
Government	7	10%	509	14%		
Geographic Region	Number	Percent	Number	Percent		
Northeast	23	32%	1,251	34%		
Midwest	26	36%	1,326	36%		
South	20	28%	981	27%		
West	3	4%	125	3%		

Note: Percentages may not add to 100 due to rounding. States are categorized into regions as follows:

- Northeast: CT, MA, ME, NH, NJ, NY, PA, RI, VT
- Midwest: IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI
- South: AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, PR, SC, TN, TX, VA, VI, WV
- West: AK, AS, AZ, CA, CO, GU, HI, ID, MH, MP, MT, NM, NV, OR, UT, WA, WY



6 Respondent Characteristics

This chapter describes the characteristics of the 3,683 respondents for the SOPS Nursing Home Workplace Safety Supplemental Items.

Table 6-1. Respondent Characteristics

Respondent Characteristics	Respo	ndents
Job Satisfaction (Workplace Safety Background Item)	Number	Percent
Very Dissatisfied	97	3%
Dissatisfied	209	6%
Neither Satisfied nor Dissatisfied	649	18%
Satisfied	1,764	49%
Very Satisfied	890	25%
Total	3,609	100%
Missing	74	
Overall Total	3,683	
Intent To Leave (Workplace Safety Background Item)	Number	Percent
No	2,597	73%
Yes, to retire	168	5%
Yes, to take another job in another nursing home	105	3%
Yes, to take another job within healthcare	264	7%
Yes, to take another job outside of healthcare	155	4%
Yes, for another reason	267	8%
Total	3,556	100%
Missing	127	

Note: Percentages may not add to 100 due to rounding.

 Table 6-1.
 Respondent Characteristics (continued)

Respondent Characteristics	Respo	ndents
Staff Position	Number	Percent
Administrator, Manager, or Director	401	12%
Administrative Support Staff	264	8%
Certified Nursing Assistant (CNA), Geriatric Nursing Assistant (GNA),		
Nursing Aide/Nursing Assistant	1,061	31%
Physician	15	<1%
Other Provider	5	<1%
Registered Nurse (RN), Licensed Vocational Nurse (LVN), Licensed Practical Nurse (LPN)	650	19%
Other Direct Care Staff	356	10%
Other Support Staff	601	17%
Other	107	3%
Total	3,460	100%
Missing	223	
Overall Total	3,683	
Work Unit	Number	Percent
Short-term care, Rehab unit	219	6%
Memory care, Alzheimer's/Dementia unit	205	6%
Long-term care unit (2.0 only)	487	14%
Skilled nursing unit (1.0 only)	356	11%
Multiple areas or no specific area	1,500	44%
Other unit or area	615	18%
Total	3,382	100%
Missing	301	
Overall Total	3,683	
Shift Worked Most Often	Number	Percent
Days	2,482	72%
Evenings	536	16%
Nights	425	12%
Total	3,443	100%
Missing	240	
Overall Total	3,683	
Tenure in Nursing Home	Number	Percent
Less than 1 year	730	21%
1 to 2 years	648	19%
3 to 5 years	671	19%
6 to 10 years	578	17%
11 years or more	860	25%
Total	3,487	100%
Missing	196	
Overall Total	3,683	

Note: Percentages may not add to 100 due to rounding. Also due to differences in background items from 1.0 and 2.0 surveys, some categories may be renamed, combined, or not displayed.





7 Overall Results

This chapter presents overall findings for the SOPS Workplace Safety Supplemental Items for Nursing Homes. We present the average percentage of positive responses for each of the survey's composite measures and items. Reporting the average for all nursing homes ensures each nursing home's scores receive equal weight, regardless of the nursing home's size. This reporting of the data at the nursing home level, rather than the respondent level, is important because culture is considered to be a group characteristic, not an individual characteristic.

Composite Measure and Item Charts

This chapter provides the overall composite measure and item results. The methods for calculating the percent positive scores at the composite measure and item levels are described in Chapter 9.

Composite Measure Results

Chart 7-1 shows the average percent positive response for each of the six SOPS workplace safety composite measures. The SOPS workplace safety composite measures are shown in order from the highest average percent positive response to the lowest.

Item Results

Chart 7-2 shows the average percent positive response for each of the 18 survey items. Items are listed in their respective workplace safety composite measure, grouped by positively and negatively worded items and then in the order in which they appear in the survey.

For more information on how the percent positive response is calculated for positively and negatively worded items, visit Chapter 9.

Workplace Safety Reporting

Charts 7-3 shows the average percent positive response for the survey item that asks if respondents can report any workplace safety concerns without fear of negative consequences.

Work Stress/Burnout

Chart 7-4 shows results for the extent to which respondents are experiencing symptoms of work stress/burnout.

Overall Rating on Workplace Safety for Staff

Chart 7-5 shows results for overall rating on workplace safety for staff.



Chart 7-1. Composite Measure Results Average Percent Positive Response

Moving, Transferring, or Lifting Residents Protection From Workplace Hazards Supervisor Support for Workplace Safety Management Support for Workplace Safety Addressing Inappropriate Resident Behavior Toward Staff Interactions Among Staff Composite Measure Average Average % Positive Response 89 Average % Positive Response 87 87 Supervisor Support for Workplace Safety 71 Addressing Inappropriate Resident Behavior Toward Staff 57 Composite Measure Average

1. Moving, Transferring, or Lifting Residents

Equipment or assistive devices are available when needed to help move, transfer, or lift residents. (Item WPB1)

Equipment and assistive devices are in good working condition when needed to help move, transfer, or lift residents. (Item WPB2)
Staff use equipment or assistive devices when needed to help move, transfer, or lift residents. (Item WPB3)

2. Protection From Workplace Hazards

There are good procedures to protect staff from contagious diseases, body fluids, or hazardous materials. (Item WPA1)

Staff are provided with the appropriate personal protective equipment (PPE). (Item WPA2)

Staff use PPE appropriately. (Item WPA3)

Staff clean their hands before and after helping residents with personal care. (Item WPA4)

3. Supervisor Support for Workplace Safety

My supervisor encourages staff to report their concerns about workplace safety. (Item WPE1)

My supervisor listens to staff ideas and suggestions about workplace safety. (Item WPE2)

My supervisor can be trusted to do the right thing to keep staff safe. (Item WPE3)

Average % Positive Response









Note: The item's survey location is shown in parentheses after the item text. An asterisk (*) denotes a negatively worded item. For negatively worded items, the percent positive response is the percentage of respondents who answered Strongly Disagree/Disagree or Never/Rarely.

82

Chart 7-2. Item Results Average Percent Positive Response (continued)

4. Management Support for Workplace **Average % Positive Response** Safety 68 The actions of management show that the safety of staff is a top priority. (Item WPF1) Management provides adequate resources to ensure the safety of staff. (Item WPF2) Management takes action when staff report concerns about workplace safety. (Item WPF3) 5. Addressing Inappropriate Resident **Behavior Toward Staff** Staff are trained to identify triggers or situations that could lead to inappropriate resident behavior toward staff. (Item WPC1) Staff are trained on how to de-escalate or calm down situations when residents are agitated or upset. (Item WPC2) There are good procedures to keep staff safe from inappropriate resident behavior. (Item WPC3) 6. Interactions Among Staff Staff are rude to other staff in this nursing home. (Item WPD1*) Staff bully other staff in this nursing home. (Item 65 WPD2*)

Chart 7-3. Item Results Average Percent Positive Response for Workplace Safety Reporting

Workplace Safety Reporting

Staff can report their concerns about workplace safety without fear of negative consequences. (Item WPG1)

Average % Positive Response

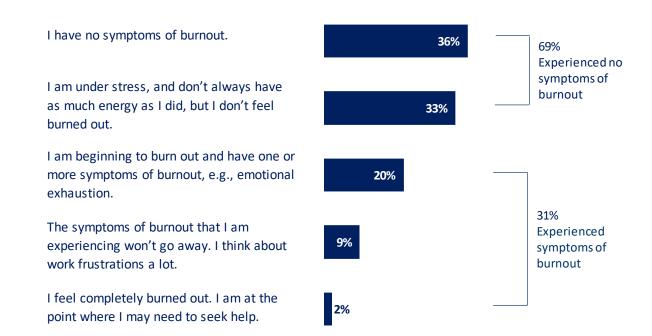


Note: The item's survey location is shown in parentheses after the item text. An asterisk (*) denotes a negatively worded item. For negatively worded items, the percent positive response is the percentage of respondents who answered Strongly Disagree/Disagree or Never/Rarely.

Chart 7-4. Item Results Average Percentage Response for Work Stress/Burnout

Work Stress/Burnout

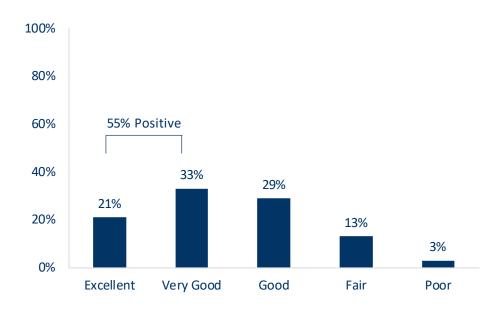
Using your own definition of "burnout," please select one of the answers below. (Item WPH1)



Note: The item's survey location is shown in parentheses after the item text. Percentages indicate the database average percent response for each response option. The percent positive displayed might not equal the sum of the separate response option percentages due to rounding. Percentages might not add to 100 due to rounding.

Overall Rating on Workplace Safety for Staff

How would you rate your nursing home on workplace safety for staff? (Item WPI1)



Note: The item's survey location is shown in parentheses after the item text. Percentages indicate the database average percent response for each response option. The percent positive displayed might not equal the sum of the separate response option percentages due to rounding. Percentages might not add to 100 due to rounding.

8 Comparing Nursing Home Results

The data in this report can be used to supplement a nursing home's efforts to identify areas of strength and areas to focus on to improve workplace safety culture.

To compare a nursing home's survey results, calculate the nursing home's percent positive response on the survey's six composite measures and survey items. The Explanation of Calculations, in Chapter 9,describes how to calculate percent positive scores. Individual nursing home results can then be compared with the report averages and the percentile scores for all nursing homes in the report.

When comparing your nursing home's results with the report results, note that the results only provide *relative* comparisons. Although your nursing home's survey results might have higher percent positive results than the report statistics, there may still be room for improvement in a particular area within your nursing home in an *absolute* sense.

Composite Measure and Item Tables

Table 8-1 presents statistics (average percent positive, standard deviation [s.d.], minimum and maximum scores, and percentiles) for each of the six composite measures.

Table 8-2 presents statistics for each of the 18 survey items in the composite measures. Items are listed in their respective composite measure, with positively worded items listed before negatively worded items.

Table 8-3 presents statistics for the survey item that asks if respondents can report any workplace safety concerns without fear of negative consequences

Table 8-4 presents statistics for respondents' level of work stress/burnout. Results for "Experienced no symptoms of burnout" in the table represent the average percent of respondents who answered, "I have no symptoms of burnout" or "I am under stress, and don't always have as much energy as I did, but I don't feel burned out."

Table 8-5 presents statistics for respondents' overall rating on workplace safety for staff. Results in the table represent average percent positive scores for respondents who answered "Excellent" or "Very Good."

Table 8-1. Composite Measure Results — 2025 SOPS Nursing Home Workplace Safety Supplemental Items

				Composite Measure % Positive Response						
Wo	orkplace Safety Composite Measures	Average % Positive	s.d.	Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
1.	Moving, Transferring, or Lifting Residents	89%	8.97%	50%	78%	85%	92%	95%	97%	100%
2.	Protection from Workplace Hazards	87%	8.00%	63%	74%	83%	88%	92%	95%	100%
3.	Supervisor Support for Workplace Safety	80%	10.64%	39%	68%	74%	81%	89%	93%	98%
4.	Management Support for Workplace Safety	71%	13.59%	34%	51%	62%	74%	80%	87%	98%
5.	Addressing Inappropriate Resident Behavior Toward Staff	70%	11.96%	45%	54%	62%	71%	79%	86%	98%
6.	Interactions Among Staff	57%	16.18%	23%	34%	45%	59%	68%	77%	94%
	Composite Measure Average	76%	9.77%	54%	61%	70%	77%	83%	87%	94%

Note: (1) Each composite measure is the average of the unrounded composite measure scores of nursing homes that submitted data for the Workplace Safety Supplemental Items; (2) the Composite Measure Average is the average of the six unrounded composite measure scores of each nursing home that submitted data.



Table 8-2. Item Results — 2025 SOPS Nursing Home Workplace Safety Supplemental Items (Page 1 of 3)

			Survey Item % Positive Response						
Survey Items by Workplace Safety Composite Measure	Average % Positive	s.d.	Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
1. Moving, Transferring, or Lifting Residents					% Alway	ys/Most of the	e time		
Equipment or assistive devices are available when needed to help move, transfer, or lift residents. (Item WPB1)	88%	11.09%	38%	73%	83%	92%	96%	100%	100%
Equipment and assistive devices are in good working condition when needed to help move, transfer, or lift residents. (Item WPB2)	85%	12.18%	38%	69%	78%	88%	93%	96%	100%
Staff use equipment or assistive devices when needed to help move, transfer, or lift residents. (Item WPB3)	93%	5.65%	73%	86%	90%	94%	97%	100%	100%
2. Protection From Workplace Hazards					% Stro	ongly Agree/A	gree		
There are good procedures to protect staff from contagious diseases, body fluids, or hazardous materials. (Item WPA1)	90%	8.01%	67%	79%	85%	93%	96%	100%	100%
Staff are provided with the appropriate personal protective equipment (PPE). (Item WPA2)	93%	6.20%	76%	85%	90%	95%	99%	100%	100%
Staff use PPE appropriately. (Item WPA3)	78%	13.29%	43%	58%	71%	82%	88%	93%	100%
Staff clean their hands before and after helping residents with personal care. (Item WPA4)	84%	10.78%	44%	70%	81%	86%	92%	95%	100%



Table 8-2. Item Results — 2025 SOPS Nursing Home Workplace Safety Supplemental Items (Page 2 of 3)

			Survey Item % Positive Response						
Survey Items by Workplace Safety Composite Measure	Average % Positive	s.d.	Min	10 th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
3. Supervisor Support for Workplace Safety					% Str	ongly Agree/	Agree		
My supervisor encourages staff to report their concerns about workplace safety. (Item WPE1)	83%	9.57%	47%	71%	76%	82%	89%	95%	100%
My supervisor listens to staff ideas and suggestions about workplace safety. (Item WPE2)	77%	12.15%	32%	64%	70%	78%	86%	91%	97%
My supervisor can be trusted to do the right thing to keep staff safe. (Item WPE3)	82%	11.50%	37%	68%	75%	83%	90%	95%	100%
4. Management Support for Workplace Safety					% Str	ongly Agree/	Agree		
The actions of management show that the safety of staff is a top priority. (Item WPF1)	68%	14.29%	32%	48%	60%	69%	77%	84%	99%
Management provides adequate resources to ensure the safety of staff. (Item WPF2)	72%	13.58%	40%	54%	62%	76%	81%	87%	99%
Management takes action when staff report concerns about workplace safety. (Item WPF3)	72%	14.16%	29%	51%	64%	76%	81%	87%	97%



Table 8-2. Item Results — 2025 SOPS Nursing Home Workplace Safety Supplemental Items (Page 3 of 3)

		,	Survey Item % Positive Response						
Survey Items by Workplace Safety Composite Measure	Average % Positive	s.d.	Min	10 th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
5. Addressing Inappropriate Resident Behavior Toward Staff					% Stro	ongly Agree/A	Agree		
Staff are trained to identify triggers or situations that could lead to inappropriate resident behavior toward staff. (Item WPC1)	73%	12.38%	43%	54%	64%	73%	83%	89%	99%
Staff are trained on how to de-escalate or calm down situations when residents are agitated or upset. (Item WPC2)	71%	13.26%	31%	53%	62%	72%	81%	88%	97%
There are good procedures to keep staff safe from inappropriate resident behavior. (Item WPC3)	67%	12.98%	42%	49%	60%	67%	75%	85%	97%
6. Interactions Among Staff					%	Never/Rarely	/		
Staff are rude to other staff in this nursing home. (Item WPD1*)	48%	17.37%	15%	27%	34%	50%	60%	71%	93%
Staff bully other staff in this nursing home. (Item WPD2*)	65%	16.34%	22%	42%	54%	68%	77%	86%	96%



Table 8-3. Item Results for Workplace Safety Reporting — 2025 SOPS Nursing Home Workplace Safety Supplemental Items

		,	Survey Item % Positive Response						
Workplace Safety Reporting	Average % Positive	s.d.	Min	10 th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
Workplace Safety Reporting	% Strongly Agree/Agree								
Staff can report their concerns about workplace safety without fear of negative consequences. (Item WPG1)	73%	12.64%	44%	55%	64%	75%	81%	88%	97%

Table 8-4. Item Results for Work Stress/Burnout and Overall Rating on Workplace Safety for Staff — 2025 SOPS Nursing Home Workplace Safety Supplemental Items

	Survey Item % Response								
Work Stress/Burnout	Average % Positive	s.d.	Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
Using your own definition of "burnout," please select one of the answers below: (Item WPH1, Experienced no symptoms of burnout)	69%	12.16%	35%	52%	61%	69%	78%	84%	96%
Overall Rating on Workplace Safety for Staff									
How would you rate your nursing home on workplace safety for staff? (Item WPI1, Excellent or Very Good)	55%	16.91%	20%	33%	40%	56%	66%	78%	87%

Note: The item's survey location is shown in parentheses after the item text. For the results for all response options, see Charts 7-4 and 7-5.





9 Explanation of Calculations

This chapter provides additional detail regarding how various statistics presented in this report were calculated.

Calculation of Percent Positive Scores

Most of the survey items in the SOPS Workplace Safety Supplemental Items for Nursing Homes ask respondents to answer using 5-point response options in terms of agreement (Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, Strongly Disagree) or frequency (Always, Most of the time, Sometimes, Rarely, Never). The survey items also contain a "Does Not Apply or Don't Know" response option that is not included in the calculation of percent positive scores.

Item Percent Positive Response

The survey items include both positively worded items (e.g., "The actions of management show that the safety of staff is a top priority.") and negatively worded items (e.g., "Staff are rude to other staff in this nursing home."). Calculating the percent positive response for positively worded items is different from calculating the percent positive response for negatively worded items:

- For positively worded items, percent positive response is the combined percentage of respondents within a nursing home who answered "Strongly Agree" or "Agree," or "Always" or "Most of the time," depending on the response options used for the item.
 - For example, for the item "The actions of management show that the safety of staff is a top priority," if 50 percent of respondents within a nursing home responded "Strongly Agree" and 25 percent responded "Agree," the item percent positive response for that nursing home would be 50% + 25% = 75% positive.
- **For negatively worded items,** percent positive response is the combined percentage of respondents within a nursing home who answered "Strongly Disagree" or "Disagree," depending on the response options used for the item. Keep in mind that a *negative* answer to a negatively worded item indicates a *positive* response.

For example, for the item "Staff are rude to other staff in this nursing home," if 40 percent of respondents within a nursing home responded "Strongly Disagree" and 20 percent responded "Disagree," the item percent positive response for that nursing home would be 40% + 20% = 60% positive (i.e., 60 percent of respondents *do not* believe there is a problem with physical aggression from patients or visitors toward staff).



Work Stress/Burnout and Overall Rating on Workplace Safety for Staff Positive Response

- For Work Stress/Burnout, the percent positive response, or "Experienced no symptoms of burnout," is the combined percentage of respondents who answered: "I have no symptoms of burnout" or "I am under stress, and don't always have as much energy as I did, but I don't feel burned out."
- For Overall Rating on Workplace Safety for Staff, the percent positive response is the combined percentage of respondents who answered: "Excellent" or "Very Good."

Composite Measure Percent Positive Response

The six SOPS Workplace Safety Supplemental Items for Nursing Homes composite measures are each composed of two to four survey items. We calculated composite measure scores for each nursing home by averaging the unrounded percent positive response on the items within a composite measure.

If a nursing home had item data for at least 50 percent of the items within a composite measure, the site would still receive a composite measure score. For example, for a two-item composite measure, the number of item scores needed to calculate the composite measure score is one item. For a three-item composite measure, the number of item scores needed to calculate the composite measure score is two items. For a four-item composite measure, the number of item scores needed to calculate the composite measure score is two items. For an item score to be calculated, there must be at least three respondents for the item.

The *Composite Measure Average* is calculated by averaging the average percent positive response of all six composite measures.

Table 9-1 shows an example of computing a composite measure score for *Supervisor Support* for *Workplace Safety* for a single nursing home. This composite measure has three positively worded items.

Table 9-1. Example of Computing Item and Composite Measure Percent Positive Scores

	Calculation of Percent Positive						
Three Items Measuring "Supervisor Support for Workplace Safety"	# of "Strongly Agree" or "Agree" Responses	Total # of Responses to the Item (Excluding "Does Not Apply or Don't Know" and Missing Responses)	Item Percent Positive Response				
"My supervisor encourages staff to report their concerns about workplace safety." (Item WPE1)	110	240	110/240= 45.8 %				
"My supervisor listens to staff ideas and suggestions about workplace safety." (Item WPE2)	142	250	142/250= 56.8%				
"My supervisor can be trusted to do the right thing to keep staff safe." (Item WPE3)	125	260	125/260= 48.1 %				
Composite Measure Percent Positive	e Score = (45.8% + 56.8%	5 + 48.1%) / 3 = 50.2%					

Standard Deviation

The standard deviation (s.d.) is a measure of the spread or variability of nursing home scores around the average. The standard deviations presented in this chapter show the extent to which nursing home scores differ from the average:

- If scores from all nursing homes were exactly the same, then the average would represent all their scores perfectly and the standard deviation would be zero.
- If scores from all nursing homes were very close to the average, then the standard deviation would be small and close to zero.
- If scores from many nursing homes were very different from the average, then the standard deviation would be a large number.

When the distribution of nursing home scores follows a normal bell-shaped curve (where most of the scores fall in the middle of the distribution, with fewer scores at the lower and higher ends of the distribution), the average, plus or minus the standard deviation, will include about 68 percent of all nursing home scores. For example, if an average percent positive score across the database nursing homes was 70 percent with a standard deviation of 10 percent (and scores were normally distributed), then about 68 percent of all the database nursing homes would have scores between 60 percent and 80 percent positive.

Minimum and Maximum Scores

The minimum (lowest) and maximum (highest) percent positive scores are presented for each composite measure and item. These scores provide information about the range of percent positive scores obtained by database nursing homes and are actual scores from the lowest and highest scoring nursing homes.

When comparing your data with the minimum and maximum scores, keep in mind that these scores may represent nursing homes that are extreme outliers (indicated by large differences between the minimum score and the 10th percentile score, or between the 90th percentile score and the maximum score).

Percentiles

Percentiles provide information about the distribution of nursing home scores. A specific percentile score shows the percentage of nursing homes that scored at or below a particular score.

Percentiles were computed using the SAS® software default method. The first step in this procedure is to rank the percent positive scores from all the participating nursing homes from lowest to highest. The next step is to multiply the number of nursing homes (n) by the percentile of interest (p), which in our case would be the 10th, 25th, 50th, 75th, or 90th percentiles.

The following examples show how the 10th and 50th percentiles would be computed using a sample of percent positive scores from 12 nursing homes (using fake data shown in Table 9-2). First, the percent positive scores for composite measure "A" are sorted from low to high.

Table 9-2. Data Table for Example of How To Compute Percentiles

Nursing Home	Composite Measure "A" % Positive Score	
1	33%	
2	48%	←10 th percentile score = 48%
3	52%	
4	60%	
5	63%	
6	64%	←50 th percentile score = 65%
7	66%	2 30 percentile score = 03/0
8	70%	
9	72%	
10	75%	
11	75%	
12	78%	

10th percentile

- 1. For the 10th percentile, we would first multiply the number of nursing homes (n) by 0.10 (p): $(n \times p = 12 \times 0.10 = 1.2)$.
- 2. The product of n x p = 1.2, where "j" = 1 (the integer) and "g" = 2 (the decimal). Because "g" is not equal to 0, the 10th percentile score is equal to the percent positive value of the nursing home in the jth +1 position:
 - 1. "j" equals 1.
 - 2. The 10th percentile equals the value for the nursing home in the 2nd position = 48%.

50th percentile

- 1. For the 50th percentile, we would first multiply the number of nursing homes by 0.50: $(n \times p = 12 \times .50 = 6.0)$.
- 2. The product of n x p = 6.0, where "j" = 6 and "g" = 0. Because "g" = 0, the 50th percentile score is equal to the percent positive value of the nursing home in the jth position plus the percent positive value of the nursing home in the jth +1 position, divided by 2:
 - 1. "j" equals 6.
 - 2. The 50th percentile equals the average of the nursing homes in the 6th and 7th positions (64%+66%)/2 = 65%.

When the distribution of nursing home scores follows a normal bell-shaped curve (where most of the scores fall in the middle of the distribution with fewer scores at the lower and higher ends of the distribution), the 50th percentile, or median, will be very similar to the average score. Interpret the percentile scores as shown in Table 9-3.

Table 9-3. Interpretation of Percentile Scores

Percentile Score	Interpretation
10 th percentile	10% of the nursing homes scored the same or lower.
Represents the lowest scoring nursing homes.	90% of the nursing homes scored higher.
25 th percentile	25% of the nursing homes scored the same or lower.
Represents lower scoring nursing homes.	75% of the nursing homes scored higher.
50 th percentile (or median)	50% of the nursing homes scored the same or lower.
Represents the middle of the distribution of nursing	50% of the nursing homes scored higher.
homes.	
75 th percentile	75% of the nursing homes scored the same or lower.
Represents higher scoring nursing homes.	25% of the nursing homes scored higher.
90 th percentile	90% of the nursing homes scored the same or lower.
Represents the highest scoring nursing homes.	10% of the nursing homes scored higher.

To compare with the database percentiles, compare your nursing home's percent positive scores with the percentile scores for each composite measure and item. See examples below in Table 9-4.

 Table 9-4.
 Sample Percentile Statistics

			Survey Item % Positive Response							
Survey Item			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max	
Item 1	36%	12.26	8%	10%	25%	35%	49%	62%	96%	

If your nursing home's score is 55%, your score falls here:

If your nursing home's score is 65%, your score falls here:

If your nursing home's score is 55 percent positive, it falls above the 75th percentile (but below the 90th), meaning that your nursing home scored higher than at least 75 percent of the nursing homes in the database.

If your nursing home's score is 65 percent positive, it falls above the 90th percentile, meaning your nursing home scored higher than at least 90 percent of the nursing homes in the database.

Data Limitations

When comparing your nursing home's results with the results in this document, keep in mind that these results are from a small number of nursing homes that were not derived from a statistically representative sample of U.S. nursing homes.