



Trends in Deficiencies at Nursing Homes Show That Improvements Are Needed To Ensure the Health and Safety of Residents

Key Takeaways:

- The number of nursing home surveys and deficiencies slightly increased each year from 2013 through 2016, then slightly decreased in 2017.
- Ninety-four percent of deficiencies had “less serious” ratings, and 6 percent of deficiencies had “more serious” ratings.
- About 31 percent of nursing homes had a deficiency type that was cited at least five times during our review period.
- Ten States accounted for half of the deficiencies identified.
- The top 10 of 340 deficiency types accounted for more than 40 percent of deficiencies.
- The results of our analysis do not clearly indicate whether the quality of care and the safety of nursing home residents improved during our review period.

Purpose of This Data Brief

In this data brief, we analyze nursing home deficiencies that were identified by State survey agencies (State agencies) across the Nation for calendar years (CYs) 2013 through 2017 (review period). This data brief offers the Centers for Medicare & Medicaid Services (CMS) and other stakeholders (e.g., State agencies and nursing home management) insight into deficiency trends at nursing homes nation-wide. It also complements our previous report on State agencies’ verification of correction of nursing home deficiencies.¹

Our objective was to analyze trends in the deficiencies that State agencies identified in nursing home surveys across the Nation.

Background

The Medicare and Medicaid programs cover care in skilled nursing and nursing facilities, respectively, for eligible beneficiaries who need nursing services, specialized rehabilitation services, medically related social services, pharmaceutical services, and dietary services. (We refer to these facilities as “nursing homes.”) Under an agreement with CMS, State agencies perform surveys to determine whether nursing homes meet specified program requirements, known as Federal participation requirements, related to resident care and services or fire protection or both. Based on the results of these surveys, State agencies may certify nursing homes’ compliance with those requirements.²

¹ CMS Guidance to State Survey Agencies on Verifying Correction of Deficiencies Needs To Be Improved To Help Ensure the Health and Safety of Nursing Home Residents ([A-09-18-02000](#)), issued February 7, 2019.

² CMS is responsible for certifying compliance for State-operated facilities.

Generally, State agencies perform two types of surveys:

- **Standard survey:** a periodic nursing home inspection that focuses on a sample of residents to gather information about the quality of services furnished to Medicare or Medicaid beneficiaries in a nursing home.
- **Complaint survey:** an investigation of a complaint, which is an allegation of noncompliance with Federal participation requirements, such as a nursing home providing improper care or treatment to a beneficiary.³

In addition, CMS may perform other types of surveys, such as a Federal monitoring survey at a nursing home, to monitor a State agency’s performance in interpreting and applying Federal survey standards.

A nursing home’s failure to meet a Federal participation requirement is defined as a deficiency. Examples of deficiencies include a nursing home’s failure to adhere to proper infection control measures and to provide necessary care and services. Each deficiency is given a letter rating of *A* through *L* based on the State agency’s determination of the scope and severity of the deficiency. *A*-rated deficiencies are the least serious, and *L*-rated deficiencies are the most serious. In this data brief, we refer to deficiencies with (1) ratings of *D* or *E*, or *F* without substandard quality of care, as “less serious deficiencies” and (2) ratings of *G* through *L*, or *F* with substandard quality of care, as “more serious deficiencies.” Table 1 shows the letter ratings that can be assigned to a deficiency based on various scope and severity combinations, beginning with the ratings for the most serious deficiencies.

Table 1: Deficiency Letter Ratings Assigned for Scope and Severity

| SEVERITY | SCOPE | | |
|---|----------|---------|------------|
| | Isolated | Pattern | Widespread |
| Immediate jeopardy* to resident health or safety | J | K | L |
| Actual harm that is not immediate jeopardy | G | H | I |
| No actual harm with potential for more than minimal harm but not immediate jeopardy | D | E | F |
| No actual harm with potential for minimal harm† | A | B | C |

* Immediate jeopardy is a situation in which a nursing home’s noncompliance with one or more requirements has caused or is likely to cause serious injury, harm, impairment, or death to a resident.

† If a nursing home has deficiencies with ratings of only *A* through *C*, the nursing home is considered to be in substantial compliance with Federal participation requirements. If a nursing home has deficiencies with ratings of *D* or higher, a State agency is required to verify that the nursing home corrected the deficiency before certifying its substantial compliance with those requirements.

³ Such an allegation may come from a variety of sources, including beneficiaries, family members, and healthcare providers.

Deficiencies are categorized by type; each type corresponds to a section in Federal regulations covering specific Federal participation requirements. For example, the requirements for infection control (such as having an infection control program, preventing spread of infection, and handling linens) are contained in 42 CFR § 483.80. If a State agency identifies that a nursing home did not meet one of these requirements, it reports (i.e., cites) the deficiency using a Federal tag number on Form CMS-2567, Statement of Deficiencies and Plan of Correction.⁴

Nursing homes must submit for approval correction plans to the State agency or CMS for all deficiencies except A-rated deficiencies. An acceptable correction plan must specify exactly how a nursing home will correct each deficiency, including which measures will be put into place or which systemic changes will be made to ensure that the deficient practice does not recur.

In this data brief, we refer to deficiencies with the same F-tag as a “deficiency type.”⁵ Further, we refer to a deficiency type that was cited during five or more separate surveys at a nursing home as a “repeat deficiency.”

Figure 1 shows an example of a nursing home in California that had a repeat deficiency for failure to ensure necessary care and services to attain or maintain the highest practicable physical, mental, and psychosocial well-being (F309). This nursing home was cited a total of 22 times for this deficiency type (F309) during our review

Figure 1: A Nursing Home in California Had a Repeat Deficiency Related to Medication

| | |
|---|-------------|
| 06/22/2015 | 2015 |
| Failed to follow up with pharmacy for 2 residents when medication was not available, resulting in 10 to 17 missed doses. | |
| 06/16/2016 | 2016 |
| Failed to assess effectiveness of pain medication. | |
| 06/29/2016 | |
| Failed to provide three doses of medication. | |
| 10/19/2016 | |
| Failed to administer two medications to a resident and assess the resident for refusal of medications, treatments, and meals. | |
| 05/11/2017 | 2017 |
| Failed to provide pain medication as ordered by physician. | |
| 06/05/2017 | |
| Failed to assess a resident after the resident consistently refused medication. | |

⁴ CMS and State agencies use Federal tag numbers to cite deficiencies related to resident care and services at nursing homes, with the letter *F* followed by a tag number (called an F-tag). For example, a State agency would use the F-tag F441 to cite the deficiency associated with 42 CFR § 483.80. In November 2016, CMS revised the Federal participation requirements for nursing homes and revised the F-tags, effective after November 28, 2017. These revisions did not materially affect the results of our data analysis. About 340 different F-tags were used for deficiencies identified during our review period.

⁵ Some deficiency types may cover a broader range of issues than other deficiency types. For example, F-tag F323 is used to cite a deficiency related to defective bed rails or the failure to prevent residents from leaving a nursing home without notice (two issues), whereas F-tag F279 is used to cite a deficiency related to failure to develop a resident’s comprehensive care plan appropriately (a single issue).

period. We included in the example descriptions of six less serious deficiencies related to only medication (with ratings of *D* or *E*).

For additional background on the process for correcting deficiencies and certifying substantial compliance with Federal participation requirements, see the “Background” section of the Office of Inspector General (OIG) report entitled *CMS Guidance to State Survey Agencies on Verifying Correction of Deficiencies Needs To Be Improved To Help Ensure the Health and Safety of Nursing Home Residents* ([A-09-18-02000](#)). For related OIG reports on the nursing home survey and certification process, see Appendix B.

Data Used

Our primary source of data for this data brief was nursing home survey and deficiency data obtained from CMS’s Certification and Survey Provider Enhanced Reporting (CASPER) system for CYs 2013 through 2017.⁶ We identified records for (1) nursing homes in all 50 States and the District of Columbia;⁷ (2) surveys related to resident care and services; and (3) deficiencies related to resident care and services with ratings of *D* or higher, indicating that a facility was not in substantial compliance with Federal participation requirements.

For our review period, the data showed that there were about 16,400 nursing homes nationwide, 346,000 surveys were performed related to resident care and services, and 571,100 deficiencies with ratings of *D* or higher were identified during those surveys. (We rounded the numbers to the nearest hundred throughout this data brief, as appropriate, except for the tables in Appendix C.)

We also used data from Minimum Data Set (MDS) reports⁸ obtained from the publicly available CMS website to determine the average number of nursing home residents nationwide and in each State. For our review period, these data showed that the average number of nursing home residents nationwide was 1.4 million per year.

We used these data to perform our analysis. However, our analysis had limitations. We did not independently verify the accuracy of the data that we obtained from CMS and the publicly available CMS website. In addition, our data analysis did not account for possible variations in how State agencies conducted surveys and identified noncompliance with Federal participation requirements. Finally, we did not address any underlying reasons for changes in the data, such

⁶ CMS extracted the data from CASPER on March 13, 2018. In November 2018, CMS told us that it was possible that deficiency and survey data had been added to CASPER; however, CMS stated that it was unlikely that the data would have resulted in a material change.

⁷ In this data brief, we refer to the 50 States and the District of Columbia as “States.”

⁸ MDS reports summarize information on residents in nursing homes from each resident’s most recent MDS assessment. This assessment, performed by the nursing home, is a standardized set of screening, clinical, and functional elements to help communicate resident problems and conditions.

as changes to the ease of filing complaints or improvements in CMS’s surveyor guidance. These factors could have affected the number of deficiencies identified in each State.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix A contains details of our audit scope and methodology.

To see an interactive map that displays information on deficiencies identified and surveys performed in each State, go to <https://oig.hhs.gov/oas/nursing-home-brief-map>.

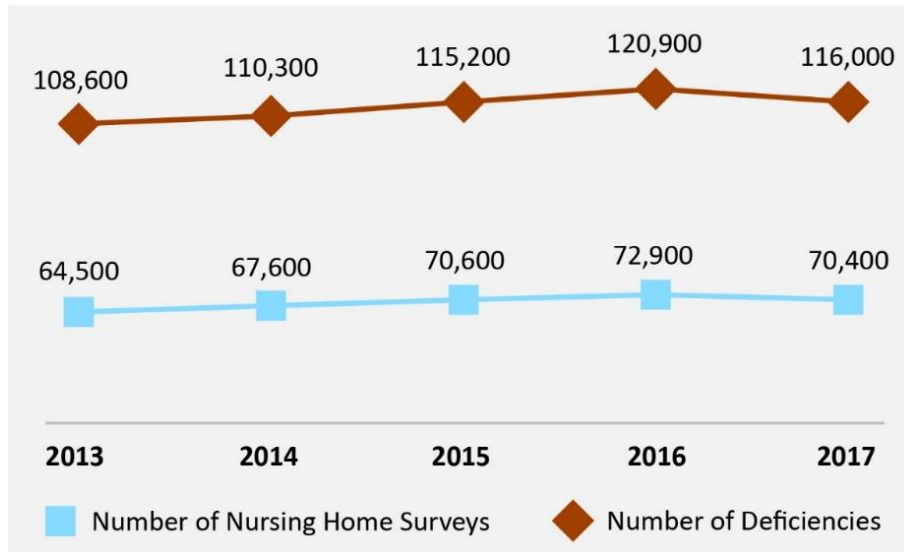
RESULTS OF DATA ANALYSIS

The findings from our previous report entitled *CMS Guidance to State Survey Agencies on Verifying Correction of Deficiencies Needs To Be Improved To Help Ensure the Health and Safety of Nursing Home Residents (A-09-18-02000)* suggest that nursing homes may not have been properly implementing systemic changes to ensure that deficiencies do not recur. Information in this data brief may help CMS and other stakeholders (e.g., State agencies and nursing home management) to identify areas for improvement in the nursing home survey and certification process, ensure that deficiencies recur less frequently at nursing homes, and improve the quality of care and the safety of residents. The following presents the results of our analysis of trends in the deficiencies that State agencies identified in nursing home surveys across the Nation.

The number of nursing home surveys and deficiencies slightly increased from 2013 to 2016, then slightly decreased in 2017.

During our review period, the number of nursing home surveys ranged from 64,500 to 72,900 each year, and the number of deficiencies identified ranged from 108,600 to 120,900 each year (Figure 2 on the following page).

Figure 2: The Number of Nursing Home Surveys and Deficiencies Slightly Increased From CYs 2013 Through 2016, Then Slightly Decreased in CY 2017



The number of deficiencies identified per survey ranged from 0 to 53 across all types of surveys (standard, complaint, and other surveys). In addition, the average number of deficiencies identified during a standard survey was approximately 5.5 deficiencies, during a complaint survey was 0.6 deficiencies, and during one of the other surveys was 1.9 deficiencies. Overall, the average number of deficiencies identified by standard and complaint surveys slightly increased from CYs 2013 through 2017, whereas the average number of deficiencies identified by other surveys decreased from CYs 2013 through 2017.

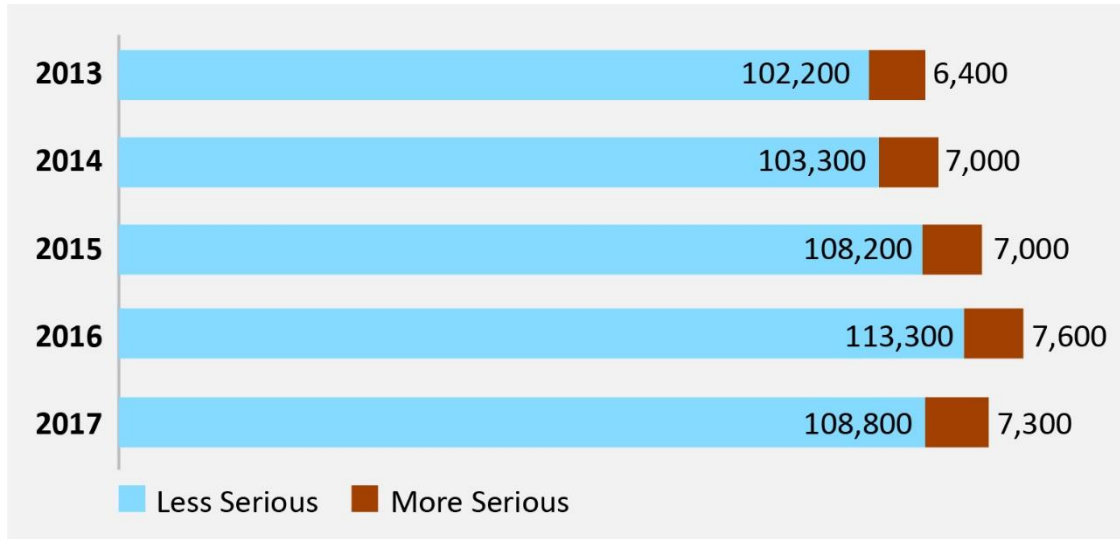
Table 2 in Appendix C shows the average number of deficiencies identified by each type of survey per year. Further, Table 3 in Appendix C shows, for each State, the number of surveys and deficiencies identified for our review period.

Ninety-four percent of deficiencies had less serious ratings, and 6 percent of deficiencies had more serious ratings.

Of the deficiencies identified per year, 94 percent had less serious ratings (*D* or *E*, or *F* without substandard quality of care), whereas 6 percent of the deficiencies had more serious ratings (*G* through *L*, or *F* with substandard quality of care). Over 100,000 less serious deficiencies were identified each year, whereas the more serious deficiencies accounted for an average of 7,100 each year.⁹ Figure 3 on the following page shows the number of less serious and more serious deficiencies per year.

⁹ Our previous report that summarized our work at nine selected State agencies (see footnote 1) identified that six State agencies had a routine practice of accepting correction plans for less serious deficiencies without obtaining evidence of deficiency correction, and four State agencies did not document or could not provide support that they had verified the correction of the deficiencies during followup surveys.

Figure 3: Most Deficiencies Had Less Serious Ratings



More than half (59 percent) of the more serious deficiencies were identified through complaint surveys.¹⁰ Table 5 in Appendix C shows the number of more serious deficiencies identified by survey type and year for our review period.

About 31 percent of nursing homes had a repeat deficiency.

About 5,200 nursing homes nation-wide (31 percent) had at least 1 repeat deficiency for our review period, ranging from 1 percent in Rhode Island to 89 percent in the District of Columbia. Figure 4 on the following page shows a map indicating the five States with the highest percentages and the five States with the lowest percentages of nursing homes that had at least one repeat deficiency.

¹⁰ About 78 percent of the surveys for our review period were complaint surveys performed by State agencies. Table 4 in Appendix C shows the number of surveys per year by survey type for our review period.

Figure 4: Five States With the Highest Percentages and Five States With the Lowest Percentages of Nursing Homes With at Least One Repeat Deficiency

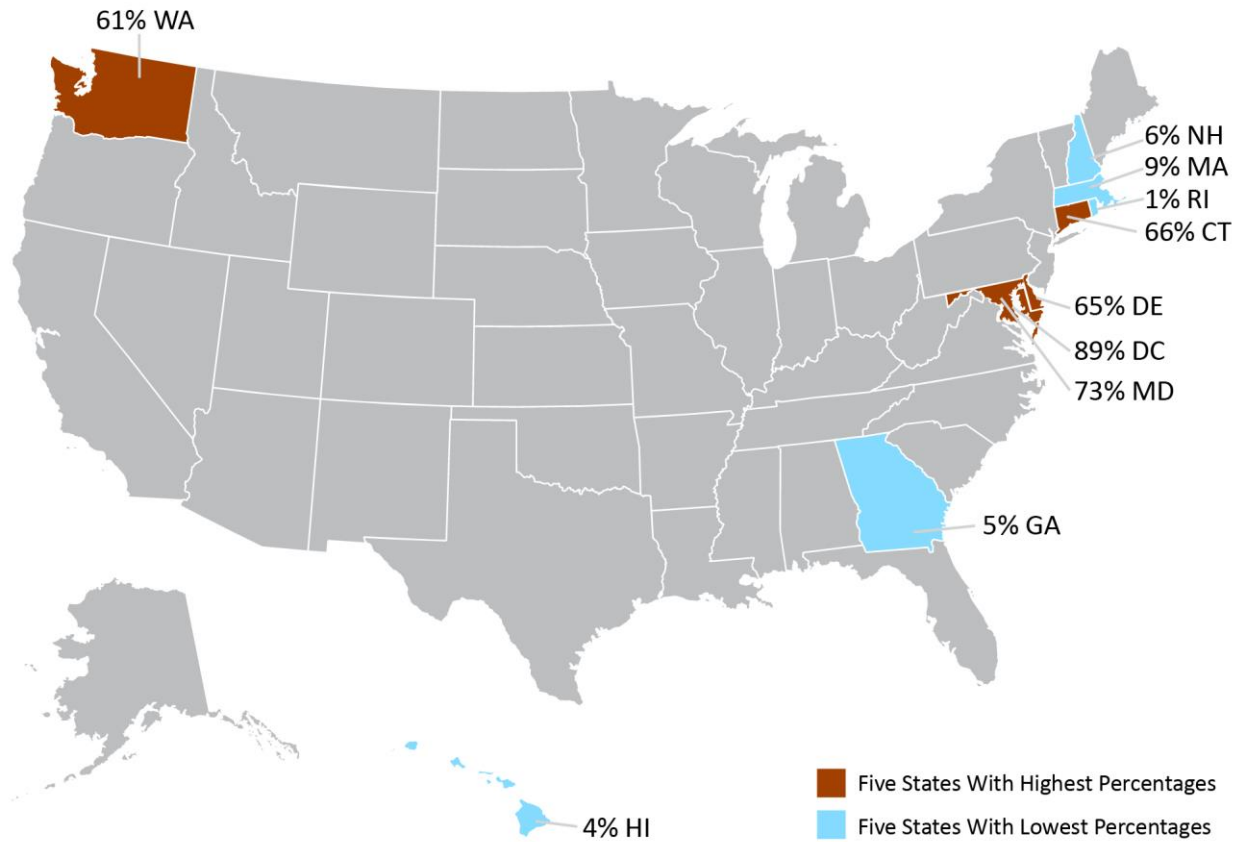


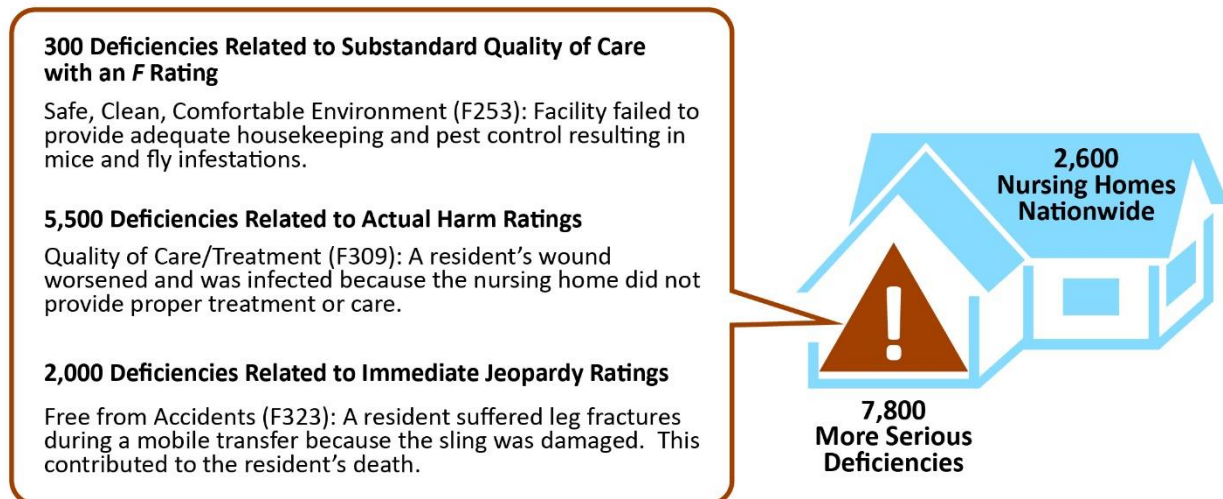
Table 6 in Appendix C shows, for each State, the average number of nursing home residents per year. It also shows the total number of nursing homes that were surveyed and the repeat deficiency data for our review period.

The 5,200 nursing homes with repeat deficiencies (i.e., a deficiency type that was cited at least 5 times in separate surveys) had 12,700 repeat deficiencies in total.¹¹ Of these nursing homes, 2,600 (50 percent) had repeat deficiencies that included 7,800 more serious deficiencies that were identified for our review period. Most of these 7,800 deficiencies (71 percent) were related to the Federal participation requirements for (1) ensuring that nursing homes are free of accident hazards, provide adequate supervision of residents, and provide adequate assistance devices for residents (F323) and (2) providing care and services for the highest well-being of residents (F309).

¹¹ The 12,700 repeat deficiencies represented a total of 75,900 deficiencies that were identified for our review period.

Figure 5 shows the breakdown of the 7,800 more serious deficiencies cited at the 2,600 nursing homes and an example of a deficiency for each deficiency rating: substandard quality of care with a rating of *F*, actual harm (ratings of *G* through *I*), and immediate jeopardy (ratings of *J* through *L*).

Figure 5: The Number of More Serious Deficiencies by Deficiency Rating and an Example for Each Rating



Ten States accounted for half of the deficiencies identified.

Ten States accounted for 293,300 deficiencies identified during surveys for our review period (50 percent of the total deficiencies nation-wide). These 10 States had 7,700 nursing homes with deficiencies. Table 7 in Appendix C lists the 10 States and the related deficiency data.

Figure 6 on the following page shows the 10 States with the highest number of deficiencies and how they ranked in comparison to other States on the number of surveys performed. The States with the highest number of deficiencies were not always the States that performed the most surveys. In addition, the average number of deficiencies identified per survey was not always higher for States that performed more surveys or identified more deficiencies. For example, Kansas ranked 9th in the number of deficiencies identified and 20th in the number of surveys performed. In addition, Kansas ranked 14th in the average number of deficiencies per survey, while California, the State that identified the most deficiencies and performed the most surveys, ranked 44th in the average number of deficiencies per survey.

Figure 6: The Top 10 States With the Highest Number of Deficiencies Were Not Always Those With the Highest Number of Surveys

| State | State Ranking for Most Deficiencies | State Ranking for Most Surveys | State Ranking for Average No. of Deficiencies per Survey | Average No. of Deficiencies per Survey |
|--------------|-------------------------------------|--------------------------------|--|--|
| California | 1 | 1 | 44 | 1.18 |
| Texas | 2 | 2 | 47 | 0.98 |
| Illinois | 3 | 3 | 43 | 1.35 |
| Pennsylvania | 4 | 7 | 31 | 1.89 |
| Ohio | 5 | 4 | 41 | 1.38 |
| Michigan | 6 | 8 | 35 | 1.67 |
| Indiana | 7 | 11 | 28 | 2.08 |
| Florida | 8 | 10 | 37 | 1.60 |
| Kansas | 9 | 20 | 14 | 3.87 |
| New York | 10 | 5 | 48 | 0.97 |

Kansas identified approximately three times as many deficiencies per survey as California

None of the 10 States that accounted for the highest number of deficiencies were among the States with the highest average number of deficiencies per survey. Figure 7 shows the 10 States with the highest average number of deficiencies per survey and how they ranked in comparison to other States on the number of deficiencies identified and the number of surveys performed.

Figure 7: The Top 10 States With the Highest Average Number of Deficiencies Were Not Those With the Most Deficiencies Identified or Surveys Performed

| State | State Ranking for Average No. of Deficiencies per Survey | Average No. of Deficiencies per Survey | State Ranking for Most Deficiencies | State Ranking for Most Surveys |
|---------------|--|--|-------------------------------------|--------------------------------|
| Alaska | 1 | 6.98 | 49 | 51 |
| Idaho | 2 | 6.36 | 37 | 45 |
| Delaware | 3 | 6.13 | 43 | 48 |
| Hawaii | 4 | 5.81 | 47 | 50 |
| Virginia | 5 | 5.36 | 15 | 28 |
| North Dakota | 6 | 4.87 | 42 | 46 |
| Montana | 7 | 4.86 | 38 | 43 |
| Utah | 8 | 4.69 | 36 | 38 |
| Wyoming | 9 | 4.60 | 45 | 47 |
| West Virginia | 10 | 4.57 | 33 | 37 |

The top 10 deficiency types accounted for more than 40 percent of deficiencies.

Of the approximately 340 deficiency types identified nation-wide for our review period, the top 10 deficiency types accounted for more than 40 percent of all deficiencies (less serious and more serious deficiencies) identified during surveys. The most prevalent deficiency type was for the Federal participation requirement related to ensuring that nursing homes are free of accident hazards, provide adequate supervision of residents, and provide adequate assistance devices for residents (F323).¹²

Figure 8 on the following page shows the top 10 deficiency types, with the highest number of deficiencies identified. Figure 9 on page 13 shows examples of actual deficiencies cited at nursing homes, and Appendix D provides detailed descriptions of these deficiencies.

¹² According to CMS, deficiency types that were broader in scope were cited more frequently, and as a result, they appear in the top 10 deficiency types.

Figure 8: Top 10 Deficiency Types

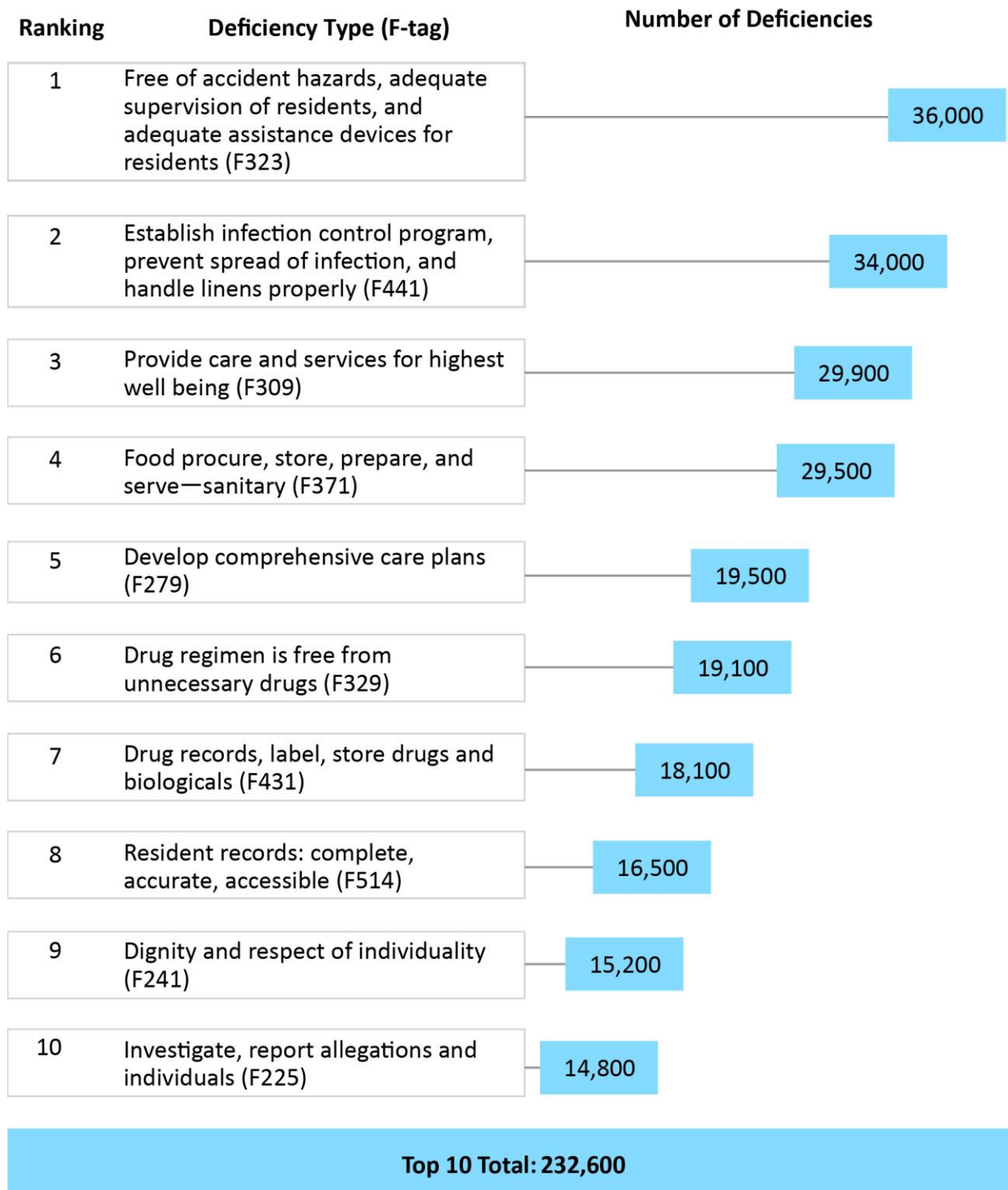
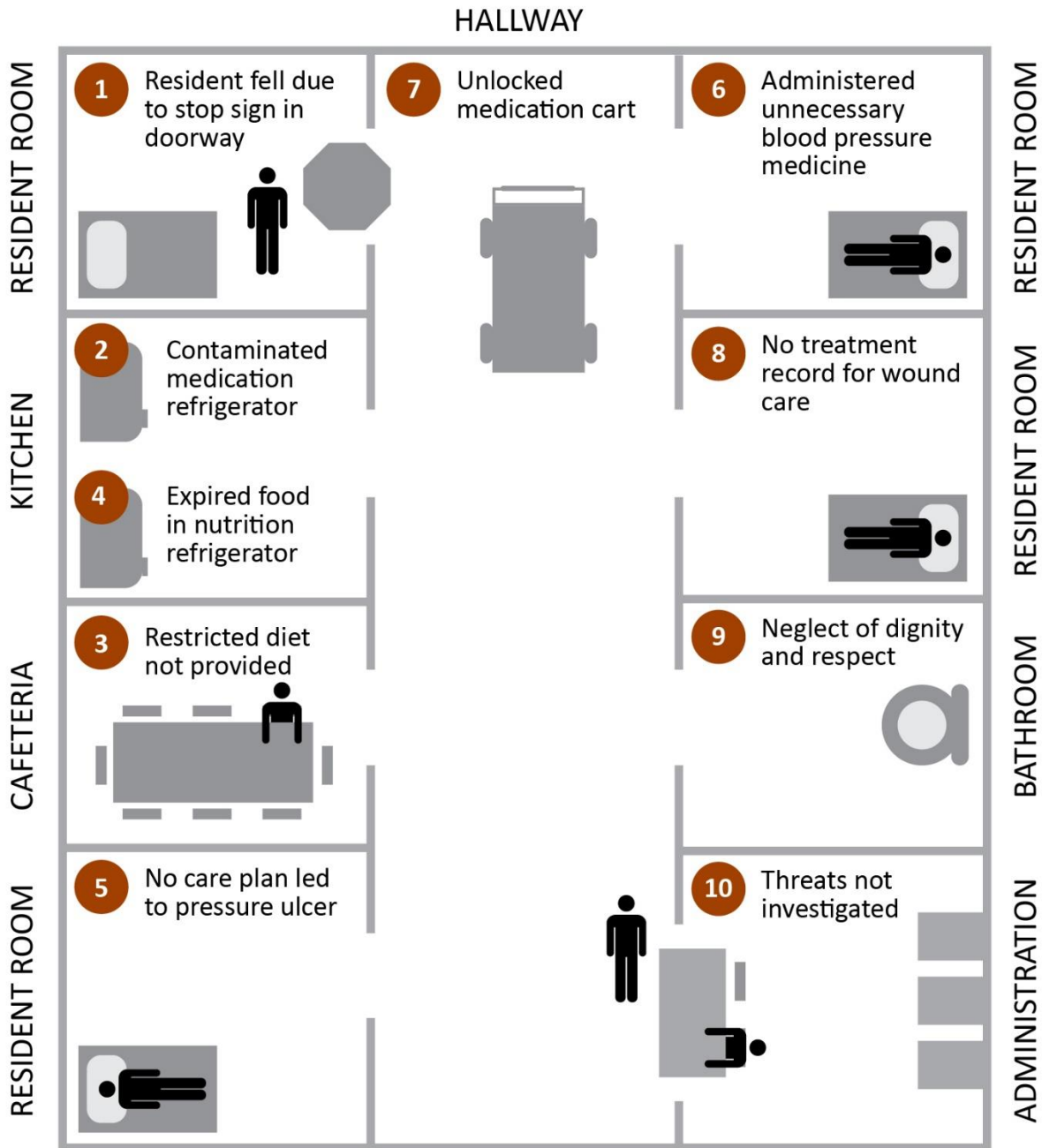


Figure 9: Examples of Deficiencies for the Top 10 Deficiency Types^{13, 14}



¹³ The numbers 1 through 10 correspond to the ranking numbers 1 through 10 in Figure 8.

¹⁴ Appendix D provides detailed descriptions of these deficiencies.

CONCLUSION

Overall, the number of deficiencies slightly increased from CYs 2013 through 2016, then slightly decreased in CY 2017. Also, the overall average number of deficiencies identified by standard and complaint surveys slightly increased from CYs 2013 through 2017, which would suggest that State agencies identified more deficiencies per survey in CY 2017 than they did in CY 2013. However, approximately 31 percent of nursing homes had a repeat deficiency, i.e., a deficiency type that was cited at least five times in separate surveys. Further, at least half of these nursing homes experienced an incident of a more serious deficiency, including incidents of substandard quality of care, actual harm, and immediate jeopardy to residents. The results of our data analysis do not clearly indicate whether the quality of care and services provided to nursing home residents improved during our review period.

Nursing homes are required to submit a plan of correction to address deficiencies, and the plan should include which measures the nursing home will put into place or which systemic changes will be made to ensure that the deficient practice will not recur. Our previous report entitled *CMS Guidance to State Survey Agencies on Verifying Correction of Deficiencies Needs To Be Improved To Help Ensure the Health and Safety of Nursing Home Residents* ([A-09-18-02000](#)) found that seven of nine State agencies did not always verify nursing homes' correction of deficiencies as required. The findings from our previous report and our data analysis for this data brief suggest that nursing homes may not have been properly implementing systemic changes to ensure that deficiencies do not recur.

We made several recommendations to CMS in our previous report to help ensure the health and safety of nursing home residents, including recommending that CMS (1) revise and strengthen its guidance to State agencies on verifying nursing homes' correction of deficiencies and maintaining documentation to support verification, (2) consider improving its forms related to the survey and certification process, and (3) work with State agencies to address technical issues with the system for maintaining supporting documentation. Implementing those recommendations and considering the information in this data brief may help CMS and other stakeholders to identify areas for improvement in the nursing home survey and certification process, ensure that deficiencies recur less frequently at nursing homes, and improve the quality of care and the safety of residents at nursing homes across the Nation.

APPENDIX A: SCOPE AND METHODOLOGY

SCOPE

Our primary source of data for this data brief was nursing home survey and deficiency data obtained from CMS's CASPER system. CMS provided us with datasets of all surveys and deficiencies for nursing homes that participated in Medicare or Medicaid for CYs 2013 through 2017. We removed records that:

- were not associated with the 50 States and the District of Columbia for our review period;
- were not for surveys or deficiencies related to resident care and services;
- were for deficiencies that had ratings of *B* and *C*, which indicated that the nursing home was in substantial compliance with Federal participation requirements;¹⁵ and
- were for duplicate deficiencies.

For our review period, the data showed that there were about 16,400 nursing homes nation-wide, 346,000 surveys were performed related to resident care and services, and 571,100 deficiencies with ratings of *D* or higher were identified during those surveys.

We also used data from MDS reports obtained from the publicly available CMS website to determine the average number of nursing home residents nation-wide and in each State. These data also showed that the average number of nursing home residents nation-wide was 1.4 million per year for our review period.

Our data analysis had some limitations. We did not independently verify the accuracy of the data that we obtained from CMS and the publicly available CMS website. In addition, our data analysis did not account for possible variations in how State agencies conducted surveys and identified noncompliance with Federal participation requirements. Finally, we did not address any underlying reasons for changes in the data, such as changes to the ease of filing complaints or improvements in CMS's surveyor guidance. These factors could have affected the number of deficiencies identified in each State.

METHODOLOGY

To accomplish our objective, we:

- reviewed Federal requirements related to nursing homes' survey and certification procedures and Federal participation requirements;

¹⁵ The data provided by CMS did not include any deficiencies with an *A* rating.

- interviewed CMS regarding the CASPER system and deficiency data;
- obtained from CMS nursing home survey and deficiency data for our review period;
- compared the data provided by CMS with data that were publicly available on the CMS website and reviewed the data values for possible duplicates and missing values to determine whether we could rely on the data;
- analyzed, using Microsoft Excel and Access, the nursing home survey and deficiency data to determine:
 - the severity levels of deficiencies cited and the number of surveys and deficiencies nation-wide,
 - the most cited deficiencies in each State and nation-wide, and
 - the number of nursing homes that were cited with at least one repeat deficiency during our review period;
- reviewed and summarized examples of cited deficiencies from various CMS-2567 documents; and
- provided the results of our data analysis to CMS for technical comments and addressed them as appropriate.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

APPENDIX B: RELATED OFFICE OF INSPECTOR GENERAL REPORTS

| Report Title | Report Number | Date Issued |
|--|---------------------------------|-------------|
| <i>CMS Guidance to State Survey Agencies on Verifying Correction of Deficiencies Needs To Be Improved To Help Ensure the Health and Safety of Nursing Home Residents</i> | A-09-18-02000 | 2/7/2019 |
| <i>Nebraska Did Not Always Verify Correction of Deficiencies Identified During Surveys of Nursing Homes Participating in Medicare and Medicaid</i> | A-07-17-03224 | 5/30/2018 |
| <i>Florida Did Not Always Verify Correction of Deficiencies Identified During Surveys of Nursing Homes Participating in Medicare and Medicaid</i> | A-04-17-08052 | 4/27/2018 |
| <i>North Carolina Did Not Always Verify Correction of Deficiencies Identified During Surveys of Nursing Homes Participating in Medicare and Medicaid</i> | A-04-17-02500 | 1/4/2018 |
| <i>New York Did Not Always Verify Correction of Deficiencies Identified During Surveys of Nursing Homes Participating in Medicare and Medicaid</i> | A-02-15-01024 | 10/19/2017 |
| <i>A Few States Fell Short in Timely Investigation of the Most Serious Nursing Home Complaints: 2011-2015</i> | OEI-01-16-00330 | 9/28/2017 |
| <i>Kansas Did Not Always Verify Correction of Deficiencies Identified During Surveys of Nursing Homes Participating in Medicare and Medicaid</i> | A-07-17-03218 | 9/6/2017 |
| <i>Missouri Properly Verified Correction of Deficiencies Identified During Surveys of Nursing Homes</i> | A-07-16-03217 | 3/17/2017 |
| <i>Arizona Did Not Always Verify Correction of Deficiencies Identified During Surveys of Nursing Homes Participating in Medicare and Medicaid</i> | A-09-16-02013 | 10/20/2016 |
| <i>Oregon Properly Verified Correction of Deficiencies Identified During Surveys of Nursing Homes Participating in Medicare and Medicaid</i> | A-09-16-02007 | 3/14/2016 |
| <i>Washington State Did Not Always Verify Correction of Deficiencies Identified During Surveys of Nursing Homes Participating in Medicare and Medicaid</i> | A-09-13-02039 | 7/9/2015 |

APPENDIX C: DETAILED SURVEY AND DEFICIENCY DATA

Table 2: Average Number of Deficiencies by Survey Type, CYs 2013–2017

| Year | Survey Type | | | Overall Average | Overall Percentage Increase/Decrease From Prior Year |
|------|-------------|-----------|-------|-----------------|--|
| | Standard | Complaint | Other | | |
| 2013 | 5.46 | 0.55 | 2.37 | 1.68 | N/A |
| 2014 | 5.42 | 0.54 | 1.71 | 1.63 | (3.1%) |
| 2015 | 5.48 | 0.57 | 1.91 | 1.63 | 0.0% |
| 2016 | 5.73 | 0.60 | 1.69 | 1.66 | 1.7% |
| 2017 | 5.60 | 0.61 | 1.60 | 1.65 | (0.7%) |

Table 3: Number of Surveys and Deficiencies by State, CYs 2013–2017

| State | No. of Surveys | Average No. of Surveys per Nursing Home | No. of Deficiencies | Average No. of Deficiencies per Survey |
|----------------------|----------------|---|---------------------|--|
| Alabama | 1,985 | 8.56 | 5,855 | 2.95 |
| Alaska | 141 | 7.83 | 984 | 6.98 |
| Arizona | 1,401 | 9.16 | 4,784 | 3.41 |
| Arkansas | 3,931 | 15.60 | 7,454 | 1.90 |
| California | 56,364 | 44.63 | 66,359 | 1.18 |
| Colorado | 2,598 | 11.06 | 9,619 | 3.70 |
| Connecticut | 2,564 | 11.10 | 10,757 | 4.20 |
| Delaware | 454 | 9.87 | 2,783 | 6.13 |
| District of Columbia | 407 | 21.42 | 1,505 | 3.70 |
| Florida | 12,711 | 18.08 | 20,326 | 1.60 |
| Georgia | 4,931 | 13.40 | 5,677 | 1.15 |
| Hawaii | 252 | 5.14 | 1,464 | 5.81 |
| Idaho | 601 | 7.42 | 3,820 | 6.36 |
| Illinois | 21,847 | 27.58 | 29,443 | 1.35 |
| Indiana | 10,254 | 18.15 | 21,309 | 2.08 |
| Iowa | 6,429 | 13.71 | 12,199 | 1.90 |
| Kansas | 4,666 | 12.31 | 18,072 | 3.87 |
| Kentucky | 5,421 | 18.44 | 7,992 | 1.47 |
| Louisiana | 4,031 | 14.40 | 7,078 | 1.76 |
| Maine | 2,348 | 21.94 | 2,146 | 0.91 |
| Maryland | 5,194 | 22.29 | 14,790 | 2.85 |
| Massachusetts | 5,370 | 12.61 | 8,948 | 1.67 |
| Michigan | 13,460 | 29.45 | 22,512 | 1.67 |
| Minnesota | 3,832 | 9.75 | 12,246 | 3.20 |
| Mississippi | 2,939 | 13.67 | 5,010 | 1.70 |

| State | No. of Surveys | Average No. of Surveys per Nursing Home | No. of Deficiencies | Average No. of Deficiencies per Survey |
|----------------|----------------|---|---------------------|--|
| Missouri | 14,654 | 27.44 | 16,959 | 1.16 |
| Montana | 716 | 8.52 | 3,483 | 4.86 |
| Nebraska | 2,954 | 12.57 | 8,124 | 2.75 |
| Nevada | 845 | 13.63 | 3,007 | 3.56 |
| New Hampshire | 692 | 8.99 | 959 | 1.39 |
| New Jersey | 3,827 | 10.23 | 8,078 | 2.11 |
| New Mexico | 853 | 10.04 | 3,457 | 4.05 |
| New York | 17,520 | 27.38 | 16,972 | 0.97 |
| North Carolina | 7,759 | 17.96 | 10,674 | 1.38 |
| North Dakota | 574 | 7.09 | 2,796 | 4.87 |
| Ohio | 17,953 | 17.81 | 24,769 | 1.38 |
| Oklahoma | 5,363 | 16.11 | 16,327 | 3.04 |
| Oregon | 1,770 | 12.38 | 5,714 | 3.23 |
| Pennsylvania | 13,801 | 19.25 | 26,021 | 1.89 |
| Rhode Island | 1,425 | 16.96 | 767 | 0.54 |
| South Carolina | 1,481 | 7.63 | 5,472 | 3.69 |
| South Dakota | 818 | 7.18 | 3,289 | 4.02 |
| Tennessee | 4,481 | 13.30 | 8,380 | 1.87 |
| Texas | 48,682 | 34.97 | 47,476 | 0.98 |
| Utah | 990 | 9.17 | 4,642 | 4.69 |
| Vermont | 984 | 25.89 | 1,385 | 1.41 |
| Virginia | 2,684 | 9.01 | 14,381 | 5.36 |
| Washington | 13,376 | 57.90 | 12,548 | 0.94 |
| West Virginia | 1,188 | 9.28 | 5,424 | 4.57 |
| Wisconsin | 5,964 | 14.58 | 14,687 | 2.46 |
| Wyoming | 465 | 11.34 | 2,139 | 4.60 |
| ----- | | | | |
| Total | 345,950 | N/A | 571,062 | N/A |

Table 4: Number of Surveys by Type of Survey, CYs 2013–2017

| Year | Standard | Complaint | Other | Total |
|--------------|---------------|----------------|--------------|----------------|
| 2013 | 14,733 | 49,250 | 546 | 64,529 |
| 2014 | 14,997 | 52,077 | 517 | 67,591 |
| 2015 | 15,051 | 54,769 | 771 | 70,591 |
| 2016 | 14,806 | 57,069 | 992 | 72,867 |
| 2017 | 14,475 | 55,071 | 826 | 70,372 |
| ----- | | | | |
| Total | 74,062 | 268,236 | 3,652 | 345,950 |

Table 5: Number of More Serious Deficiencies Identified Through Standard, Complaint, and Other Surveys, CYs 2013–2017

| Year | Standard | Complaint | Other | Total |
|--------------|---------------|---------------|------------|---------------|
| 2013 | 2,697 | 3,671 | 65 | 6,433 |
| 2014 | 2,991 | 3,916 | 58 | 6,965 |
| 2015 | 2,880 | 3,994 | 86 | 6,960 |
| 2016 | 2,920 | 4,604 | 95 | 7,619 |
| 2017 | 2,680 | 4,554 | 58 | 7,292 |
| ----- | | | | |
| Total | 14,168 | 20,739 | 362 | 35,269 |

Table 6: Number and Percentage of Nursing Homes With at Least One Repeat Deficiency (by State), CYs 2013–2017

| State | Average No. of Nursing Home Residents per Year | Total No. of Nursing Homes Surveyed ¹⁶ | No. of Nursing Homes With at Least One Repeat Deficiency | Percentage of Nursing Homes With at Least One Repeat Deficiency |
|----------------------|--|---|--|---|
| Alabama | 23,367 | 232 | 65 | 28.0% |
| Alaska | 606 | 18 | 4 | 22.2% |
| Arizona | 12,668 | 153 | 36 | 23.5% |
| Arkansas | 18,051 | 252 | 81 | 32.1% |
| California | 107,920 | 1263 | 659 | 52.2% |
| Colorado | 16,966 | 235 | 80 | 34.0% |
| Connecticut | 24,558 | 231 | 152 | 65.8% |
| Delaware | 4,363 | 46 | 30 | 65.2% |
| District of Columbia | 2,591 | 19 | 17 | 89.5% |
| Florida | 77,442 | 703 | 105 | 14.9% |
| Georgia | 34,363 | 368 | 17 | 4.6% |
| Hawaii | 3,775 | 49 | 2 | 4.1% |
| Idaho | 4,098 | 81 | 30 | 37.0% |
| Illinois | 72,941 | 792 | 337 | 42.6% |
| Indiana | 40,243 | 565 | 223 | 39.5% |
| Iowa | 24,647 | 469 | 158 | 33.7% |
| Kansas | 18,303 | 379 | 202 | 53.3% |
| Kentucky | 23,705 | 294 | 67 | 22.8% |
| Louisiana | 26,349 | 280 | 52 | 18.6% |
| Maine | 6,313 | 107 | 21 | 19.6% |
| Maryland | 25,675 | 233 | 171 | 73.4% |
| Massachusetts | 42,119 | 426 | 40 | 9.4% |

¹⁶ The total number of nursing homes surveyed represents nursing homes with a unique provider number.

| State | Average No. of Nursing Home Residents per Year | Total No. of Nursing Homes Surveyed ¹⁶ | No. of Nursing Homes With at Least One Repeat Deficiency | Percentage of Nursing Homes With at Least One Repeat Deficiency |
|----------------|---|--|---|--|
| Michigan | 41,123 | 457 | 274 | 60.0% |
| Minnesota | 26,447 | 393 | 51 | 13.0% |
| Mississippi | 16,165 | 215 | 23 | 10.7% |
| Missouri | 38,945 | 534 | 188 | 35.2% |
| Montana | 4,547 | 84 | 28 | 33.3% |
| Nebraska | 12,064 | 235 | 79 | 33.6% |
| Nevada | 5,332 | 62 | 36 | 58.1% |
| New Hampshire | 6,825 | 77 | 5 | 6.5% |
| New Jersey | 46,430 | 374 | 60 | 16.0% |
| New Mexico | 5,959 | 85 | 27 | 31.8% |
| New York | 109,612 | 640 | 118 | 18.4% |
| North Carolina | 38,049 | 432 | 67 | 15.5% |
| North Dakota | 5,605 | 81 | 30 | 37.0% |
| Ohio | 77,857 | 1008 | 125 | 12.4% |
| Oklahoma | 19,002 | 333 | 132 | 39.6% |
| Oregon | 7,977 | 143 | 67 | 46.9% |
| Pennsylvania | 80,447 | 717 | 255 | 35.6% |
| Rhode Island | 8,184 | 84 | 1 | 1.2% |
| South Carolina | 17,228 | 194 | 28 | 14.4% |
| South Dakota | 6,298 | 114 | 25 | 21.9% |
| Tennessee | 29,439 | 337 | 39 | 11.6% |
| Texas | 99,160 | 1392 | 429 | 30.8% |
| Utah | 5,862 | 108 | 31 | 28.7% |
| Vermont | 2,696 | 38 | 19 | 50.0% |
| Virginia | 29,278 | 298 | 151 | 50.7% |
| Washington | 17,487 | 231 | 142 | 61.5% |
| West Virginia | 9,681 | 128 | 33 | 25.8% |
| Wisconsin | 26,982 | 409 | 135 | 33.0% |
| Wyoming | 2,384 | 41 | 12 | 29.3% |
| ----- | | | | |
| Total | N/A | 16,439 | 5,159 | N/A |

Table 7: Top 10 States With the Highest Number of Deficiencies, CYs 2013–2017

| State | No. of Deficiencies | No. of Nursing Homes With Deficiencies | Average No. of Deficiencies per Survey |
|------------------------|----------------------------|---|---|
| California | 66,359 | 1,254 | 1.18 |
| Texas | 47,476 | 1,290 | 0.98 |
| Illinois | 29,443 | 784 | 1.35 |
| Pennsylvania | 26,021 | 713 | 1.89 |
| Ohio | 24,769 | 986 | 1.38 |
| Michigan | 22,512 | 455 | 1.67 |
| Indiana | 21,309 | 560 | 2.08 |
| Florida | 20,326 | 696 | 1.60 |
| Kansas | 18,072 | 364 | 3.87 |
| New York | 16,972 | 634 | 0.97 |
| Subtotal for 10 States | 293,259 | 7,736 | N/A |
| ----- | | | |
| Nation-wide | 571,062 | 16,122 | 1.65 |

APPENDIX D: EXAMPLES OF DEFICIENCIES FOR THE TOP 10 DEFICIENCY TYPES

| Ranking | F-tag | Example of Deficiency |
|---------|-------|---|
| 1 | F323 | A resident fell while trying to go under a stop sign placed across the room door. The resident was transported to a hospital emergency department and received sutures for a left frontal scalp wound. |
| 2 | F441 | A nursing home's medication refrigerator was contaminated with a thick black, sticky substance mixed with debris and a thick white, powdery substance. A nurse touched the contaminated refrigerator with a gloved hand, prepped an oral syringe, and administered the medication without removing the contaminated gloves or washing his or her hands. |
| 3 | F309 | A nursing home did not provide a fluid and potassium-restricted diet to a resident who had end-stage renal disease. The resident was to be served a total of 120 ml of fluids at breakfast. However, the nursing home served a total of 540 ml of fluids and a banana (a high-potassium fruit). |
| 4 | F371 | A nursing home had expired food (milk and pudding) in a nutrition refrigerator. |
| 5 | F279 | A nursing home did not develop a care plan for a resident who later developed a pressure ulcer on the sacrum (at the base of the spine). |
| 6 | F329 | A doctor ordered that a nursing home should not give medications to a resident when the resident's systolic and diastolic blood pressures were less than 100 and 60, respectively. However, for 14 days in a month, the nursing home gave the medications to the resident when the resident's systolic blood pressure fell below the ordered parameter of 60. |
| 7 | F431 | A nurse left a medication cart unlocked when called away by a resident. |
| 8 | F514 | A resident's treatment administration record had blanks on 5 days when a wound care nurse at a nursing home was off duty. Other nursing staff provided wound care to the resident on those days but did not document the care provided. |
| 9 | F241 | A resident was provided a toothbrush and toothpaste by a nurse assistant. The assistant left the room without providing the resident with means to spit or rinse the toothpaste from his mouth. The resident called for assistance, and the assistant returned to the resident's room 21 minutes after initiating the task. The resident stated he did not believe that staff treated him with respect and dignity. |
| 10 | F225 | One resident reported to multiple nursing home staff that another resident had made threats to return to the nursing home to shoot and stab nursing home staff once he was discharged. The nursing home did not report the threat to a law enforcement entity and take other appropriate actions. |