



# **Nursing Facilities, Staffing, Residents and Facility Deficiencies, 2003 Through 2008**

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## **STATE DATA ON NURSING FACILITIES, STAFFING, RESIDENTS, AND FACILITY DEFICIENCIES, 2001 THROUGH 2007**

### **Introduction**

The large state and federal expenditures for freestanding nursing facilities (estimated to be \$131 billion in 2007) have drawn the attention of policy makers and researchers to understand the nursing home industry (Hartman et al., 2009). The demand for nursing home beds is growing with the aging of the population and many other factors. As the need for care grows, the nation's nursing facilities are an increasing subject of concern. The specific characteristics of the facilities, staff, and residents are of critical importance to the delivery of nursing home care.

The quality of care provided in nursing homes has long been a matter of great concern to consumers, professionals, and policy-makers. Because of the growing concern about nursing home quality, Congress requested a study by the Institute of Medicine (IOM). The IOM's Study on Nursing Home Regulation (1986) and other studies reported widespread quality of care problems and recommended the strengthening of federal regulations for nursing homes (US GAO, 1987; US Senate, 1986; Zimmerman et al., 1985). The IOM Committee recommendations and the active efforts of many consumer advocates resulted in Congress passing Nursing Home Reform Legislation (OBRA, 1987).

Major changes were made by the Health Care Financing Administration (HCFA) (now called the Centers for Medicare and Medicaid Services) (CMS) in the federal survey reports and the enforcement procedures in July 1995.

The OBRA 1987, implemented by HCFA regulations in 1990 and in 1992, mandated a number of changes. First, the regulations eliminated the priority hierarchy of conditions, standards, and elements that were in the prior regulations. Second, comprehensive assessments of all nursing home residents were mandated to determine the functional, cognitive, and affective levels of residents that must be used in the care planning process (Morris et al., 1990). Third, more specific requirements for nursing, medical and psychosocial services were designed to attain and maintain the highest possible mental and physical functional status by focusing on outcomes (such as incontinence, immobility, and decubitus ulcers). Regulations detailing and protecting residents' rights were added.

One valuable source of data on nursing facilities and the quality of care in these facilities is from the On-line Survey, Certification, and Reporting system (OSCAR). The OSCAR system has information from the state surveys of all (about 16,500) certified nursing facilities in the U.S., which are entered into a uniform, computerized database.

## **Purpose of the Data Book**

This book presents calendar year data on nursing facilities, staffing, resident characteristics, and surveyor reports of quality deficiencies by state. These OSCAR data are from surveys collected by state agency surveyors on nursing facilities during the federal certification process during the calendar year.

The report presents a description of facility characteristics. Detailed summaries about the type of certification, bed size, occupancy, ownership, hospital-based and chain affiliations and other facility characteristics are presented.

Resident characteristics are shown as reported by the nursing facilities. These include activities of daily living (ADLs), restraints, incontinence, psychological problems, and other special care needs of residents.

Nurse staffing (RNs, LVNs, and NAs) hours per resident day are presented for nursing facilities. These data are reported by facilities for a two-week period prior to when the state survey was conducted. The data are the only major source of information for all facilities on staffing levels.

Finally, data are presented on facility deficiencies based on state surveyor evaluations of the process and outcomes of care in the facilities. Deficiency data are presented for the 17 major areas used in the survey process: (1) resident rights; (2) admission, transfer and discharge rights; (3) resident behavior

and facility practices; (4) quality of life; (5) resident assessment; (6) quality of care; (7) nursing services; (8) dietary services; (9) physician services; (10) rehabilitation services; (11) dental services; (12) pharmacy services; (13) infection control; (14) physical environment; (15) administration; (16) laboratory services; and (17) other. The information compiled shows differences in the frequency of the deficiencies by type and category.

It should be noted that this report does not describe life safety code violations. A report by the General Accounting Office US GAO ( 2004) found that deaths of residents in nursing home fires pointed out the weaknesses in the federal fire safety standards and the federal oversight of nursing home fire safety is not effective.

In order to use the OSCAR data for this report, the researchers have undertaken a process to prepare the data. Certain decision rules were developed to use different components of the data. Technical issues are described in detail in the Appendix.

Earlier versions of this report included only deficiencies from the annual licensing and certification surveys. In 2009, the report was revised to include deficiencies from both the annual surveys and complaint investigations. The report findings were then revised to show all deficiencies for each year from 2003 through 2008.

## ***Background on the Survey System and Data Collection***

Every facility must have an initial survey to verify compliance with all federal regulatory requirements in order to be certified. Certified facilities are resurveyed annually in order to continue certification. States are required to survey each facility no less often than every 15 months, and the state average for all facilities is about every 12 months. Follow-up surveys may be conducted to assure that facilities correct identified deficiencies. In addition, surveys are required when there are substantial changes in a facility's organization and management. Finally, surveys may be conducted to follow-up a complaint that alleges substandard care.

OSCAR data are collected in two different ways. First, the facility characteristics, resident characteristics, and staffing levels are completed on standardized forms by individual nursing homes at the beginning of each survey and are certified by the facility as being accurate. The data are provided to the state surveyors on the appropriate forms as the state begins the survey process. During the survey, state surveyors review the data and conduct checks by comparing the facility report with individual resident medical records, staffing records, and observations of residents. After the review of the survey data, state staff enter the data into a computerized on-line OSCAR data base from written forms.

Second, state surveyors make decisions regarding whether the facility has met or not met each standard after the facility survey has been completed. If a facility is judged to not meet a standard, the facility is given a deficiency and OSCAR reports that the standard was NOT MET.

The survey evaluations are based upon data from a combination of sources including, but not limited to, the assessment of a selected sample of individual residents; interviews with a sample of residents, family members and staff; a review of the resident records and facility documents; and other data. After these judgments are made, the state surveyors record and enter the data for each item for each facility into the on-line OSCAR data system. Thus, the determinations of deficiencies are made by state surveyors independently of the facility, with standard forms, sampling and survey procedures to ensure accuracy. Team members and state supervisors subsequently review state surveyor deficiencies. Facilities have the option to challenge and appeal decisions through an administrative review process.

Because of these checks in the system, the likelihood of false positive deficiencies is low, and errors tend to be in under-reporting of failures to meet standards (US GAO, 1998). Thus, a note of caution is needed that under-reporting of deficiencies is more likely to be a problem than over-reporting.

## **CMS Procedures and State Survey Variation**

CMS is the Centers for Medicare & Medicaid Services, formerly known as the Health Care Financing Administration (HCFA). CMS uses "front-end" edit screens to ensure the accuracy of the OSCAR data. State staff enter the data for each survey item into the OSCAR data set within 45 days of each survey. Some "front-end edit" checks are established in the OSCAR program for entering the data for each component of the survey to identify entry errors. This computerized edit system has resolved many data problems. Beyond this, the regional offices conduct reviews of OSCAR data from each state survey.

One concern about the OSCAR data has been with the survey procedures and the inter-survey reliability (both across states and within states) in judging the quality of facilities (IOM, 1986; US GAO 1988). This issue has been addressed in part by the implementation of the 1990 federal survey procedures. First, the procedures require accuracy checks by surveyors to determine whether facilities are conducting comprehensive assessments of residents and whether or not these assessments are accurate and appropriately used in the care planning process. The federal regulations and survey forms have improved the sampling procedures and survey methods used by the survey teams. The federal procedures require state surveyors to use a stratified random sample of residents for in-depth reviews and to conduct face-to-face resident assessments, closed record reviews, and individual and group structured

interviews. These changes were designed to improve the reliability of the survey process and the data reported on OSCAR and to make surveys more oriented toward the residents. Moreover, CMS has provided extensive new federal training for state surveyors.

In addition, the Health Care Standards and Quality Bureau of CMS, using federal survey teams from the regional offices, conducts periodic oversight surveys. In the past, Federal staff resurveyed the same facilities within 60 days of the state survey for a sample of facilities. Regional CMS offices developed a survey concurrence index for key survey components (from OSCAR) for each state. This annual concurrence index becomes a part of the federal monitoring criteria along with other components conducted by CMS. States that fall below the concurrence standards established by CMS are critiqued and monitored by CMS. Using the procedures since July 1995, federal surveyors may accompany state surveyors on a selected number of surveys to observe the surveys.

Even though CMS has made efforts to standardize the reporting of deficiencies by state survey staff, some regional variations may exist. Different states may vary their survey procedures, training efforts, and enforcement stringency (US GAO, 1998; 1999a,b,c; USOIG, 1993; 1999; 2003). A national evaluation of the certification survey processes of nursing facilities conducted by HCFA (1998) also found variations in the survey procedures. Moreover, the enforcement procedures also vary across states (Harrington et al., 1999; 2004; 2008). In spite of the improvements that

have been made, the IOM (2001) recommended that there was a need to improve both the state survey process and the enforcement system and made specific recommendations for improvements.

Many studies continue to document the serious quality problems related to the ongoing problems with the federal and state survey and enforcement system including the complaint investigation process (U.S. Government Accountability Office [GAO], 2007, 2008, 2009).

Staff turnover and recruitment problems and fiscal problems at the state agency level may hamper survey and enforcement efforts (USOIG, 1993; US

GAO, 2000; 2003; Walshe and Harrington, 2002; Harrington and Swan, 2003; US CMS 2001).

Users of this report should consider that it is difficult to distinguish between real differences in the quality of care in facilities and differences in survey and enforcement procedures across states. It is hoped that this report will be useful to consumers, nursing facilities, researchers, and policy makers to understand trends over time and across states.

## FACILITY CHARACTERISTICS

### ***Background***

Facility characteristics are important. The most important feature of a facility is the number of beds that are certified for Medicare and Medicaid residents. The size of the facility determines the number of residents who can be admitted.

Occupancy rates are important in showing the potential availability of beds and such occupancy rates influence the financial status of the facility. Occupancy rates have begun to decline so there is some evidence of an excess supply of nursing home beds in many areas (Grabowski and Angelelli, 2004).

The percentage of Medicare and Medicaid patients in a facility is an important factor. Nursing homes have historically considered Medicaid reimbursement rates to be low and prefer private pay patients (Swan et al., 2000; 2001a,b). Higher Medicaid reimbursement rates have been associated with higher staffing and higher quality (Grabowski, 2001).

One of the major debates in research circles is whether the proprietary nature of the nursing home industry affects process and outcomes in terms of quality of care. A review of the research studies regarding ownership and quality shows a for-profit facilities generally have been reported to have lower overall quality of care but some studies have had mixed results (Comondore et al. 2009). Harrington et al. (2000a,b) showed higher deficiencies in for-profit facilities than non-profit and government

facilities. Thus, proprietary ownership and chains may be associated with lower staffing levels and poorer process and outcome measures.

Hospital-based nursing homes may have higher quality of care because they have more Medicare patients, have higher staffing levels, and/or are more likely to be non-profit in ownership (Harrington et al., 2000a,b).

Having accreditation may be positively associated with higher staffing levels and with higher quality of care. The existence of dedicated special care units, such as those for persons with Alzheimer's disease, may also be associated with higher quality of care because of higher staffing levels.

Large size facilities have been associated with lower quality although findings are mixed (Harrington et al., 2000a,b). Larger facilities tend to have lower staffing and perhaps have more difficulty in managing the quality of care.

Those facilities with organized residents groups or organized family groups may have higher quality of care. Facilities with the capacity to conduct research may also be expected to have higher quality of care.

The following section presents data from OSCAR to describe certified nursing facilities in the U.S.: beds by certification types (Medicare, Medicaid, or both), occupancy rate (number of

residents divided by total number of beds), ownership (non-profit religious, non-profit private, non-profit other, proprietary, or government), owned or leased by a multi-facility organization

(chain), and hospital-based facility (yes or no). The number of beds in special care units, organized resident group, and organized family member group were also reported.

## **FINDINGS**

### **FACILITY CHARACTERISTICS**

#### **Total Number of Certified Nursing Facilities Surveyed by Calendar Year**

Table 1 shows the total number of certified nursing facilities surveyed in the U.S. by calendar year. There were 15,209 certified nursing facilities surveyed in 2003 and 15,531 surveyed in 2008 out of approximately 16,500 certified facilities. Not all facilities are surveyed by state agencies during a calendar year.

**TABLE 1**  
**TOTAL NUMBER OF CERTIFIED NURSING FACILITIES IN THE U.S.**  
**BY CALENDAR YEAR**

<b>State</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	14	12	15	13	15	14
AL	216	202	163	169	161	212
AR	228	235	235	236	237	236
AZ	112	115	87	132	124	131
CA	1,291	1,278	1,228	1,189	1,197	1,240
CO	206	206	203	202	209	205
CT	227	211	227	237	233	231
DC	17	20	20	20	18	19
DE	37	39	41	42	44	45
FL	658	649	626	671	657	671
GA	343	327	338	351	346	358
HI	32	35	39	46	41	45
IA	409	434	435	435	430	444
ID	75	68	71	74	70	79
IL	752	777	749	764	787	777
IN	502	488	468	497	502	506
KS	342	359	349	347	331	345
KY	280	285	295	291	288	286
LA	292	304	272	274	282	285
MA	436	437	432	452	428	415
MD	220	213	228	225	216	227
ME	106	109	106	110	108	110
MI	426	420	407	411	421	415
MN	377	382	356	374	378	381
MO	507	490	491	506	502	513
MS	169	178	198	202	200	193
MT	92	87	88	85	85	91
NC	396	403	403	420	414	416
ND	82	82	78	81	80	81
NE	215	213	215	221	208	215
NH	74	76	76	76	81	74
NJ	331	345	341	350	354	357
NM	77	65	68	70	70	69
NV	44	41	46	47	48	47
NY	644	618	635	641	638	640
OH	903	897	864	928	918	950
OK	359	296	345	327	316	325
OR	133	134	124	133	134	136
PA	693	688	702	709	711	700
RI	36	78	84	87	85	84
SC	168	155	162	167	169	171
SD	108	100	107	107	106	100
TN	306	329	308	316	315	317
TX	1,094	1,098	1,074	1,106	1,149	1,153
UT	82	81	81	90	84	96
VA	269	259	248	268	268	283
VT	41	38	36	40	38	40
WA	241	240	243	237	238	237
WI	382	388	379	374	388	396
WV	130	118	120	109	121	131
WY	35	36	36	35	38	39
<b>US</b>	<b>15,209</b>	<b>15,138</b>	<b>14,942</b>	<b>15,294</b>	<b>15,281</b>	<b>15,531</b>

## **Total Number of Certified Nursing Facility Beds Surveyed by Calendar Year**

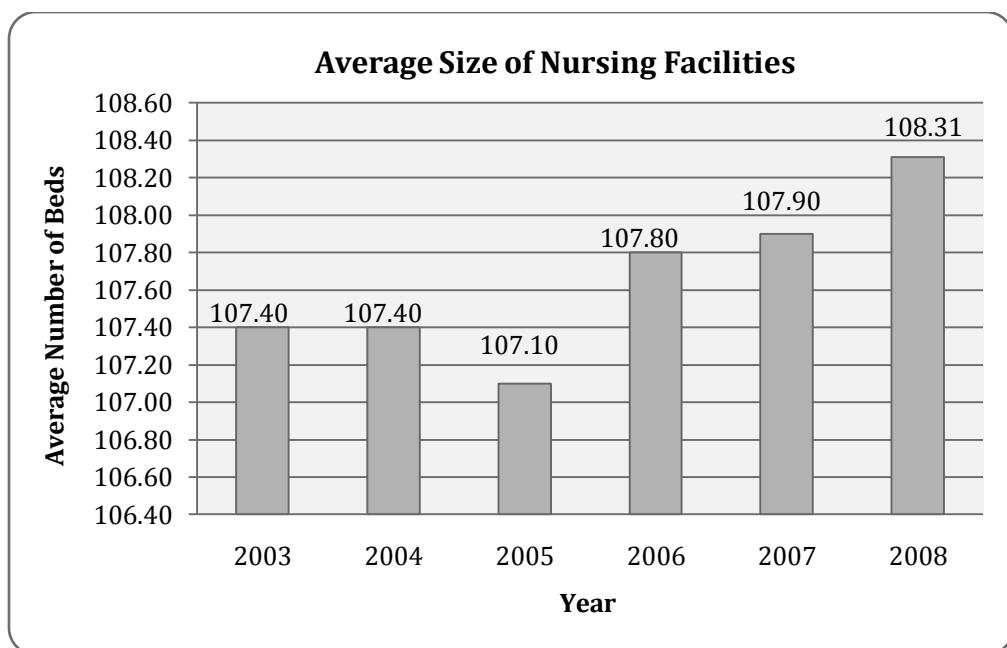
Table 2 shows the number of certified nursing facility beds in the U.S. surveyed during the calendar year and it excludes uncertified beds. There were 1,579,862 nursing facility beds surveyed in 2003, and 1,648,608 in 2008.

**TABLE 2**  
**TOTAL NUMBER OF CERTIFIED NURSING FACILITY BEDS IN THE U.S.**  
**BY CALENDAR YEAR**

<b>State</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	729	688	705	411	725	698
AL	24,684	22,993	17,775	20,040	17,763	24,885
AR	23,049	23,729	24,109	24,470	24,531	24,584
AZ	13,818	13,561	11,018	15,462	14,487	15,406
CA	121,261	120,460	116,339	113,527	115,158	120,359
CO	18,468	18,955	19,060	18,876	19,759	19,343
CT	27,945	25,415	27,513	28,863	28,241	28,511
DC	2,408	3,062	3,030	2,988	2,597	2,765
DE	3,930	4,003	4,235	4,276	4,605	4,807
FL	77,433	76,394	74,290	80,503	79,330	81,181
GA	37,368	35,888	37,734	38,631	38,350	39,762
HI	2,810	2,570	3,126	4,032	3,617	4,050
IA	30,391	31,740	32,023	31,454	30,118	31,897
ID	5,776	5,540	5,522	5,748	5,463	6,154
IL	89,511	93,060	90,507	93,331	95,879	94,406
IN	46,733	45,693	43,666	47,466	47,977	48,951
KS	22,695	23,327	23,113	22,801	21,969	23,022
KY	24,228	24,638	25,969	25,545	25,317	25,490
LA	35,105	37,101	33,737	34,425	34,845	34,803
MA	47,160	47,581	46,901	49,482	47,088	45,959
MD	26,407	25,437	27,953	28,241	26,622	28,508
ME	6,695	6,951	6,978	7,163	6,950	7,174
MI	46,885	46,006	45,115	45,114	46,141	45,491
MN	34,225	34,873	31,903	33,415	32,763	32,830
MO	47,433	47,342	47,990	49,474	49,504	51,382
MS	14,992	16,100	17,645	18,288	18,206	17,697
MT	6,848	6,764	6,659	6,199	6,616	7,029
NC	40,292	40,839	41,103	42,895	43,067	42,367
ND	6,468	6,465	6,285	6,351	6,272	6,228
NE	14,663	14,712	14,931	15,656	14,605	15,432
NH	7,217	7,006	7,277	7,054	7,708	6,903
NJ	46,385	48,425	47,966	49,641	49,685	50,729
NM	6,975	5,910	6,232	6,621	6,540	6,628
NV	5,109	4,672	5,200	5,554	5,643	5,597
NY	115,227	111,097	118,220	118,987	117,992	117,905
OH	84,168	84,346	80,977	88,619	88,667	92,131
OK	31,737	25,898	30,620	29,314	28,224	29,839
OR	12,014	12,227	11,454	11,972	12,148	12,317
PA	85,522	85,203	86,224	87,316	87,300	87,132
RI	3,935	7,830	8,445	8,914	8,581	8,644
SC	16,665	15,180	16,759	16,978	17,404	18,027
SD	6,967	6,376	6,465	6,547	6,390	5,943
TN	34,439	36,687	34,959	36,149	35,469	36,276
TX	108,195	110,049	111,407	116,163	122,018	123,367
UT	6,652	6,602	6,441	7,334	6,978	7,981
VA	29,780	28,349	27,708	29,995	29,786	31,423
VT	3,471	3,142	3,118	3,381	3,221	3,293
WA	21,998	21,785	22,189	21,544	21,744	22,242
WI	39,789	38,718	36,080	35,765	36,885	37,215
WV	10,526	9,144	9,577	8,941	10,022	10,852
WY	2,681	2,892	2,772	2,855	2,972	2,993
<b>US</b>	<b>1,579,862</b>	<b>1,573,425</b>	<b>1,567,024</b>	<b>1,614,771</b>	<b>1,613,942</b>	<b>1,648,608</b>

## Average Number of Certified Beds per Nursing Facility

The number of certified nursing beds per facility is calculated by dividing the total number of certified beds in a state by the total number of certified facilities in the state. Table 3 shows the overall average size was 107.40 beds in 2003 and the average increased to 108.31 beds per facility in 2008.



**TABLE 3**  
**AVERAGE NUMBER OF CERTIFIED NURSING FACILITY BEDS IN THE U.S.**  
**BY CALENDAR YEAR**

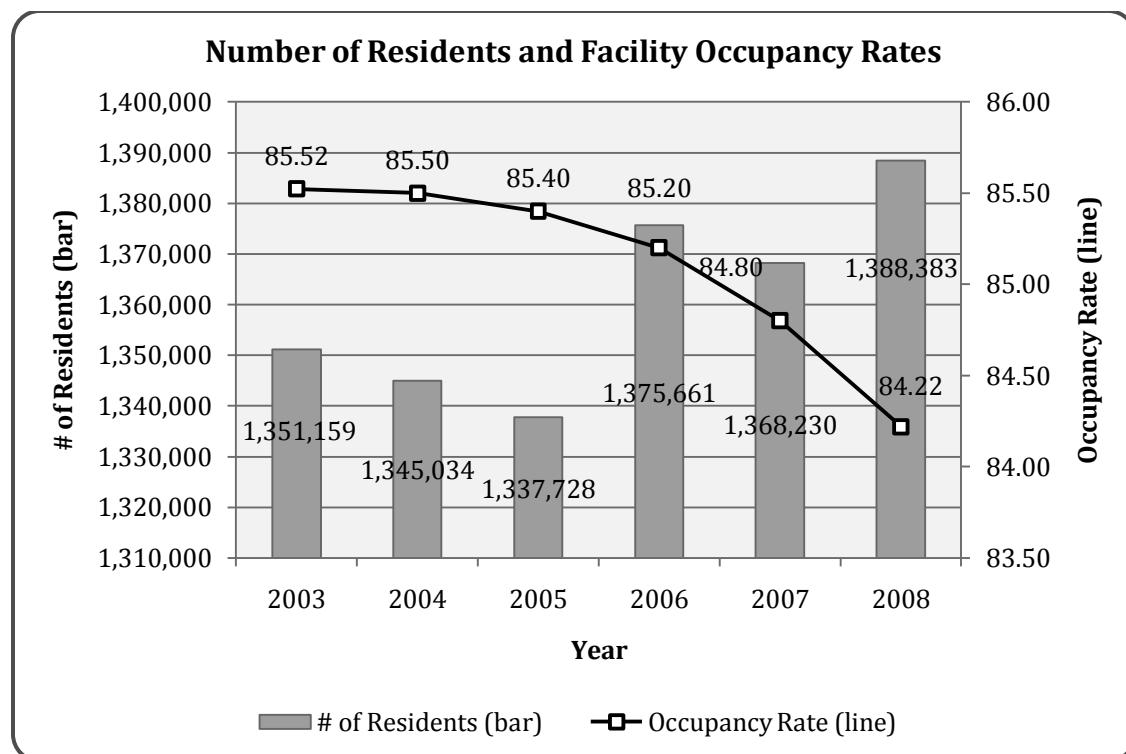
<b>State</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	52.10	59.00	48.30	31.60	48.30	49.86
AL	114.80	114.00	110.20	118.60	110.60	117.38
AR	102.80	103.00	103.00	104.00	104.10	104.28
AZ	124.50	121.20	127.30	119.90	117.50	120.54
CA	96.00	95.50	95.80	96.40	97.60	97.52
CO	90.30	92.90	94.00	93.70	94.60	94.38
CT	124.60	121.20	122.10	122.70	122.00	125.02
DC	141.60	153.10	151.50	149.40	144.30	145.53
DE	113.20	111.60	112.80	108.30	106.50	108.58
FL	118.80	118.80	119.80	121.10	124.10	121.59
GA	108.90	109.70	111.80	110.20	110.90	111.07
HI	89.50	75.00	83.00	89.70	90.60	92.24
IA	79.10	77.00	75.00	74.00	71.40	73.38
ID	77.00	81.50	77.80	77.70	78.00	77.90
IL	128.30	127.70	127.40	129.30	128.50	128.84
IN	107.10	107.90	108.90	111.50	112.50	113.23
KS	72.60	71.70	73.10	73.10	75.00	74.66
KY	87.90	87.80	89.30	89.10	89.00	89.85
LA	122.30	124.50	125.40	127.30	125.20	124.73
MA	109.80	110.40	110.20	111.00	111.60	112.38
MD	120.10	119.80	122.80	125.50	123.70	126.86
ME	63.80	63.80	66.10	65.40	64.70	65.48
MI	113.40	112.60	113.70	111.90	110.90	113.14
MN	91.50	91.90	90.10	89.90	87.20	86.72
MO	100.90	104.30	104.50	104.60	104.80	106.19
MS	88.70	90.40	89.20	90.50	91.00	91.73
MT	74.80	78.00	75.70	73.00	77.90	77.24
NC	102.70	102.00	103.00	103.30	105.20	103.48
ND	78.90	78.80	80.60	78.40	78.40	76.89
NE	70.60	71.40	71.30	72.60	71.10	72.72
NH	98.00	92.60	96.30	93.00	95.30	93.28
NJ	140.30	140.40	140.80	142.70	140.40	142.10
NM	91.20	91.30	92.60	95.40	95.30	96.06
NV	116.80	114.00	114.80	119.50	118.20	120.40
NY	178.90	179.80	186.20	185.70	185.10	185.03
OH	106.40	108.70	95.50	96.30	97.10	97.36
OK	88.90	88.20	90.20	90.60	90.90	92.18
OR	90.50	91.50	92.50	90.10	90.70	90.57
PA	123.80	124.00	123.00	123.30	122.80	124.50
RI	111.60	100.50	100.60	102.70	101.20	103.12
SC	102.60	101.10	106.30	104.50	105.90	108.29
SD	64.50	63.90	60.40	61.20	60.30	61.14
TN	113.60	112.60	114.40	115.70	113.50	116.15
TX	106.00	106.90	108.10	108.80	109.60	110.14
UT	82.70	82.90	80.00	82.00	83.30	83.49
VA	113.10	111.70	113.90	114.50	113.40	112.40
VT	84.90	82.70	86.60	84.60	85.90	82.33
WA	92.30	91.80	91.60	91.10	91.80	94.35
WI	104.30	100.30	95.20	95.60	95.10	93.99
WV	82.30	78.40	80.00	82.00	83.10	83.25
WY	76.60	80.30	77.00	81.60	78.20	76.74
<b>US</b>	<b>107.40</b>	<b>107.40</b>	<b>107.10</b>	<b>107.80</b>	<b>107.90</b>	<b>108.31</b>

## Number of Nursing Facility Residents

Table 4 reports the total number of nursing facility residents in certified nursing facilities surveyed in each state during a calendar year. There were 1,388,383 residents in certified nursing facilities that were surveyed in 2008. These data exclude residents in uncertified beds. The data generally show a slight increase in the number of residents in certified beds between 2003 and 2008.

## Average Occupancy Rates

Table 4 shows that the average certified nursing facility occupancy rate for the U.S. was 85.52 percent in 2003. Facility occupancy rates are calculated by dividing the number of nursing residents in a certified facility by the total number of certified beds (excluding all uncertified residents and beds). The occupancy rates declined to 84.22 percent in 2008.



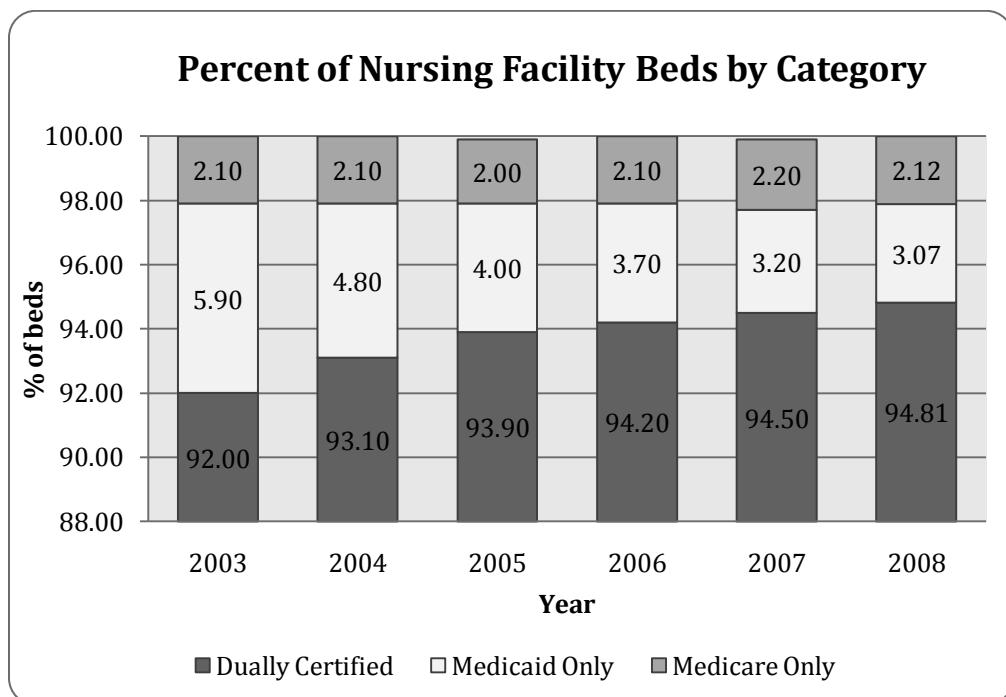
**TABLE 4**  
**TOTAL NUMBER OF RESIDENTS AND FACILITY OCCUPANCY RATES**  
**FOR CERTIFIED NURSING FACILITIES**

<b>State</b>	<b>Number of Residents</b>						<b>Facility Occupancy</b>					
	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	584	594	627	341	619	605	80.11	83.90	86.50	83.00	85.40	86.68
AL	21,937	20,476	15,678	17,677	15,547	21,492	88.87	88.90	87.30	88.20	87.50	86.37
AR	16,822	17,668	17,305	17,780	17,879	17,889	72.98	73.00	71.50	72.70	72.90	72.77
AZ	11,201	10,951	8,618	12,077	11,224	11,877	81.06	78.50	77.80	78.10	77.50	77.09
CA	103,677	102,851	100,268	97,180	97,530	101,792	85.50	84.30	85.20	85.60	84.70	84.57
CO	15,139	15,590	15,852	15,685	16,516	15,913	81.97	81.40	83.10	83.10	83.60	82.27
CT	26,069	23,342	25,571	26,566	25,991	25,826	93.29	91.30	92.20	92.00	92.00	90.58
DC	2,212	2,770	2,804	2,756	2,464	2,439	91.86	90.50	92.50	92.20	94.90	88.21
DE	3,484	3,541	3,799	3,677	3,908	4,111	88.65	81.30	82.20	86.00	84.90	85.52
FL	68,580	67,770	66,209	71,434	69,978	71,481	88.57	87.90	88.30	88.70	88.20	88.05
GA	33,831	31,892	33,907	34,601	33,982	34,838	90.53	88.90	89.70	89.60	88.60	87.62
HI	2,657	2,378	2,958	3,845	3,439	3,799	94.56	90.60	91.40	95.40	95.10	93.80
IA	25,220	26,296	26,057	25,609	24,388	25,772	82.99	78.70	79.80	81.40	81.00	80.80
ID	4,388	4,178	4,183	4,297	4,142	4,537	75.97	75.40	75.80	74.80	75.80	73.72
IL	72,172	75,015	72,298	73,767	76,065	74,557	80.63	75.60	75.80	79.00	79.30	78.97
IN	38,800	38,152	36,499	38,437	39,015	39,446	83.02	72.50	71.60	81.00	81.30	80.58
KS	19,164	19,932	19,684	19,454	18,558	19,198	84.44	77.50	77.10	85.30	84.50	83.39
KY	21,535	21,708	23,253	23,068	22,936	23,179	88.88	86.70	88.30	90.30	90.60	90.93
LA	26,930	28,005	25,569	25,698	25,787	25,283	76.71	74.00	75.00	74.60	74.00	72.65
MA	42,761	42,632	42,127	44,532	42,434	40,971	90.67	88.40	88.50	90.00	90.10	89.15
MD	22,819	21,769	24,164	24,712	23,092	24,873	86.41	85.30	86.30	87.50	86.70	87.25
ME	6,241	6,377	6,380	6,545	6,349	6,541	93.22	91.70	91.10	91.40	91.40	91.18
MI	41,230	40,365	39,880	39,859	39,963	39,093	87.94	85.30	86.20	88.40	86.60	85.94
MN	31,630	32,130	29,526	30,867	30,264	30,196	92.42	91.50	92.00	92.40	92.40	91.98
MO	35,280	35,165	35,684	36,942	36,696	37,254	74.38	68.80	69.60	74.70	74.10	72.50
MS	13,219	14,297	15,490	16,049	16,299	15,547	88.17	88.80	87.70	87.80	89.50	87.85
MT	5,239	5,019	4,883	4,599	4,745	5,128	76.50	73.90	73.30	74.20	71.70	72.95
NC	36,017	36,013	36,330	37,812	37,768	37,081	89.39	87.60	87.50	88.20	87.70	87.52
ND	6,051	6,007	5,768	5,830	5,774	5,680	93.55	92.90	91.80	91.80	92.10	91.20
NE	12,596	12,458	12,480	13,045	11,966	12,332	85.90	81.90	81.40	83.30	81.90	79.91
NH	6,671	6,354	6,597	6,338	6,923	6,126	92.43	90.30	90.10	89.80	89.80	88.74
NJ	40,920	42,617	42,075	44,110	44,459	45,423	88.22	88.00	87.60	88.90	89.50	89.54
NM	5,969	5,144	5,494	5,764	5,776	5,558	85.58	86.70	87.30	87.10	88.30	83.86
NV	4,296	3,928	4,261	4,673	4,737	4,693	84.09	84.00	80.70	84.10	83.90	83.85
NY	107,095	103,679	109,543	110,139	108,749	109,257	92.94	93.30	92.60	92.60	92.20	92.67
OH	72,258	73,484	71,174	77,848	77,751	79,992	85.85	75.40	86.20	87.80	87.70	86.82
OK	21,209	16,916	20,580	19,356	18,574	19,616	66.83	64.80	66.10	66.00	65.80	65.74
OR	8,034	7,951	7,424	7,767	7,937	7,910	66.87	64.90	64.70	64.90	65.30	64.22
PA	77,207	77,209	77,679	79,878	79,422	78,982	90.28	90.50	90.00	91.50	91.00	90.65
RI	3,570	7,305	7,804	8,302	7,908	7,739	90.72	93.20	92.30	93.10	92.20	89.53
SC	15,375	13,935	15,487	15,790	16,181	16,631	92.26	88.90	89.90	93.00	93.00	92.26
SD	6,467	5,923	6,360	6,542	6,361	5,944	92.82	92.70	98.40	99.90	99.50	100.02
TN	30,560	32,700	30,881	31,830	31,026	31,849	88.74	88.30	87.60	88.10	87.50	87.80
TX	84,065	85,685	84,104	86,442	89,698	90,216	77.70	73.00	72.40	74.40	73.50	73.13
UT	4,794	4,625	4,615	5,149	4,916	5,421	72.07	68.80	71.20	70.20	70.40	67.92
VA	26,966	25,487	25,065	27,298	26,979	28,243	90.55	88.10	88.70	91.00	90.60	89.88
VT	3,226	2,949	2,855	3,061	2,981	3,031	92.94	93.90	91.60	90.50	92.50	92.04
WA	18,737	18,851	19,104	18,672	18,824	18,618	85.18	85.50	85.80	86.70	86.60	83.71
WI	34,601	34,468	31,891	31,612	32,323	32,254	86.96	88.60	88.40	88.40	87.60	86.67
WV	9,497	8,134	8,679	8,014	9,031	9,732	90.22	88.00	90.40	89.60	90.10	89.68
WY	2,157	2,349	2,205	2,335	2,356	2,418	80.46	81.20	79.50	81.80	79.30	80.79
<b>US</b>	<b>1,351,159</b>	<b>1,345,034</b>	<b>1,337,728</b>	<b>1,375,661</b>	<b>1,368,230</b>	<b>1,388,383</b>	<b>85.52</b>	<b>85.50</b>	<b>85.40</b>	<b>85.20</b>	<b>84.80</b>	<b>84.22</b>

## Facility Beds by Certification Category

Licensed nursing facilities may apply to be certified for participation in the Medicare and/or Medicaid program on a voluntary basis. Facilities may apply to participate in: (1) the Medicaid only (Title 19) program, (2) the Medicare only (Title 18) program, or (3) in the Medicare/Medicaid dually certified (Title 18 and 19) program. Since 1991, the Medicare program classified facilities as skilled nursing facilities (SNFs) while the Medicaid-certified facilities are designated as "nursing facilities" (NFs). Certification requirements are detailed in the federal regulations 42 CFR 483. Federal Medicare certification allows for all or part of a facility to be certified.

Table 5 shows the percent of certified nursing facility beds for each program. The number of beds certified for Medicare-only were 2.1 percent and 2.12 percent, of the total beds in both 2003 and 2008, respectively. Medicaid-only certified beds declined from 5.9 percent in 2003 to 3.07 percent in 2008. Dually certified beds increased to make up the difference.

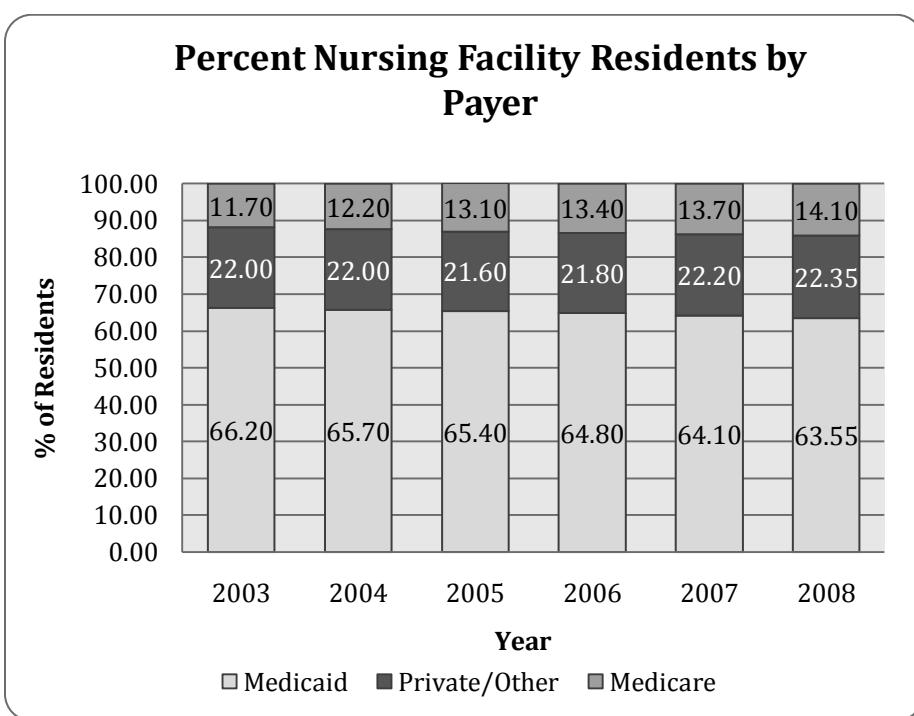


**TABLE 5**  
**PERCENT OF NURSING FACILITY BEDS BY CERTIFICATION CATEGORY IN THE U.S.**

State	Medicaid Only						Medicare Only						Dually Certified					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
AK	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.90	0.00	100.00	100.00	100.00	100.00	98.10	100.00
AL	1.40	1.10	0.50	0.70	0.30	0.57	1.60	1.70	2.80	1.90	2.80	1.51	97.00	97.20	96.70	97.40	96.80	97.91
AR	18.70	14.30	12.60	9.20	9.20	8.42	1.80	1.20	1.50	1.50	1.20	1.13	79.50	84.50	85.90	89.30	89.60	90.45
AZ	0.10	0.10	0.10	0.10	0.00	0.00	3.90	5.90	7.40	7.90	10.00	7.59	96.00	93.90	92.40	92.00	90.00	92.41
CA	6.30	6.20	5.90	5.90	5.40	5.52	3.70	3.30	2.80	3.10	2.90	2.89	90.00	90.50	91.30	91.00	91.60	91.59
CO	7.70	7.40	7.20	6.10	5.90	3.75	3.80	4.30	3.80	4.90	5.40	5.60	88.50	88.30	89.00	89.00	88.80	90.65
CT	0.00	0.00	0.00	0.00	0.00	0.00	1.40	1.60	1.20	1.50	1.30	1.28	98.60	98.40	98.80	98.50	98.70	98.72
DC	0.80	0.70	1.00	1.00	1.50	1.45	0.00	0.00	0.00	0.00	0.00	0.00	99.20	99.30	99.00	99.00	98.50	98.55
DE	4.90	4.00	4.10	5.40	4.60	4.66	7.80	5.90	3.60	5.80	5.40	3.20	87.30	90.10	92.30	88.80	89.90	92.14
FL	0.20	0.10	0.00	0.20	0.10	0.10	2.20	2.40	2.10	2.00	2.20	1.96	97.60	97.50	97.90	97.80	97.80	97.94
GA	6.40	6.50	1.60	1.20	0.70	1.00	0.80	1.40	1.40	1.50	1.40	1.36	92.80	92.00	97.10	97.20	97.90	97.64
HI	10.80	6.30	5.70	4.40	3.40	3.43	0.40	0.40	1.60	0.80	0.30	0.77	88.80	93.30	92.80	94.80	96.30	95.80
IA	17.80	10.50	10.50	9.60	7.50	8.13	0.60	0.60	0.60	0.80	0.60	0.82	81.60	88.90	89.00	89.70	91.90	91.05
ID	4.30	5.10	3.60	4.60	0.00	0.00	1.60	0.60	2.20	2.10	2.00	1.43	94.10	94.30	94.20	93.30	98.00	98.57
IL	13.40	12.40	10.60	10.00	9.80	9.47	2.30	2.40	2.10	2.20	2.30	2.11	84.20	85.20	87.30	87.80	87.90	88.42
IN	4.70	4.00	3.00	3.00	2.80	2.39	2.70	2.50	2.40	2.40	2.40	2.72	92.60	93.60	94.60	94.60	94.80	94.90
KS	20.80	20.40	17.70	17.60	15.70	13.77	0.60	1.00	1.50	1.50	1.60	2.25	78.50	78.60	80.70	80.90	82.70	83.98
KY	0.00	0.00	0.00	0.00	0.00	0.00	2.20	2.50	2.00	2.60	2.60	2.46	97.80	97.50	98.00	97.40	97.40	97.54
LA	8.90	1.40	0.00	0.00	0.00	0.00	1.80	2.10	1.20	1.50	2.30	1.69	89.30	96.50	98.80	98.50	97.70	98.31
MA	0.90	1.00	1.00	0.90	0.70	0.78	1.10	1.00	1.40	1.40	1.50	1.39	98.00	98.00	97.60	97.70	97.80	97.83
MD	2.30	2.00	1.60	1.40	0.80	0.84	3.20	2.30	1.70	1.80	2.20	1.88	94.50	95.60	96.70	96.80	97.00	97.28
ME	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.30	0.20	0.60	0.60	0.39	99.90	99.70	99.80	99.40	99.40	99.61
MI	4.80	4.60	3.50	3.20	2.30	2.20	1.90	2.40	2.80	1.90	3.00	2.96	93.30	93.00	93.70	95.00	94.70	94.84
MN	3.80	3.80	3.50	3.20	3.50	3.50	1.20	1.10	1.30	1.20	1.40	1.25	95.00	95.10	95.20	95.60	95.20	95.25
MO	6.30	5.00	4.50	4.40	3.60	3.27	1.30	0.90	0.70	1.00	0.80	0.74	92.40	94.10	94.80	94.60	95.60	95.98
MS	18.30	17.40	16.90	16.30	14.20	14.00	1.70	1.40	1.30	1.20	1.00	1.45	80.00	81.30	81.80	82.50	84.90	84.55
MT	2.80	2.80	2.90	3.10	2.90	2.72	0.70	0.90	0.90	1.20	1.10	1.08	96.60	96.30	96.20	95.70	96.00	96.20
NC	0.60	0.60	0.60	0.40	0.40	0.38	0.60	0.60	0.50	0.60	0.50	0.66	98.80	98.80	98.90	99.00	99.20	98.96
ND	0.00	0.00	0.00	0.00	0.00	0.00	0.90	1.10	0.80	1.20	1.20	1.19	99.10	98.90	99.20	98.80	98.80	98.81
NE	17.90	14.30	11.50	11.10	9.40	8.18	0.10	0.10	0.10	0.10	0.40	0.09	82.00	85.60	88.40	88.80	90.20	91.72
NH	8.30	9.30	8.30	9.30	7.20	5.94	1.30	1.50	1.70	1.70	1.60	1.71	90.40	89.20	90.00	89.10	91.20	92.35
NJ	0.00	0.00	0.00	0.00	0.00	0.00	4.40	4.40	4.40	4.70	5.20	5.06	95.60	95.60	95.60	95.30	94.80	94.94
NM	5.60	6.50	3.40	3.20	3.20	5.25	0.50	0.70	0.60	0.50	1.10	1.37	93.90	92.80	96.10	96.30	95.70	93.38
NV	5.10	5.60	5.00	4.70	4.60	4.65	0.80	1.30	0.00	0.00	0.00	1.11	94.10	93.10	95.00	95.30	95.40	94.25
NY	0.20	0.20	0.20	0.20	0.20	0.20	0.10	0.10	0.10	0.10	0.10	0.14	99.70	99.70	99.70	99.70	99.70	99.66
OH	3.60	2.30	1.40	0.90	0.00	0.08	1.50	1.30	1.40	1.20	1.20	1.11	94.90	96.40	97.20	97.90	98.80	98.81
OK	23.20	20.80	14.70	12.90	10.50	7.61	1.50	2.00	1.90	2.60	2.60	2.51	75.30	77.30	83.50	84.50	86.90	89.88
OR	8.90	9.10	8.30	9.20	7.90	8.40	2.20	1.40	2.30	2.40	1.50	1.45	88.90	89.50	89.40	88.40	90.60	90.15
PA	0.80	0.80	0.70	0.60	0.20	1.52	4.40	4.40	4.60	4.50	4.80	4.51	94.80	94.80	94.80	94.90	94.90	93.97
RI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.70	0.60	0.60	0.64	100.00	99.30	99.30	99.40	99.40	99.36
SC	0.00	0.00	0.00	0.00	0.00	0.00	4.40	5.80	4.40	4.40	4.80	4.71	95.60	94.20	95.60	95.60	95.20	95.29
SD	15.10	12.20	12.80	11.80	10.90	10.37	0.60	0.00	0.70	0.60	0.60	0.69	84.30	87.80	86.50	87.60	88.50	88.94
TN	6.40	5.60	5.50	5.20	4.90	4.30	2.80	3.10	2.50	2.90	3.00	2.97	90.80	91.20	92.00	91.90	92.00	92.74
TX	7.60	6.30	4.90	4.00	3.40	2.56	2.70	2.60	2.50	2.60	2.90	2.84	89.70	91.10	92.60	93.40	93.70	94.60
UT	4.90	4.80	3.30	4.30	3.10	3.57	4.10	4.00	7.30	6.70	7.30	7.94	91.00	91.10	89.40	89.00	89.50	88.49
VA	8.00	6.40	5.10	4.40	4.10	3.51	1.90	1.90	1.00	1.70	1.80	1.03	90.10	91.60	93.90	93.90	94.10	95.46
VT	0.00	0.00	0.00	0.00	0.00	0.00	0.90	1.00	1.00	0.90	0.90	0.91	99.10	99.00	99.00	99.10	99.10	99.09
WA	2.60	3.10	3.00	2.70	1.90	1.81	1.10	1.50	1.90	1.70	1.70	1.69	96.30	95.50	95.10	95.60	96.40	96.50
WI	6.80	5.70	5.10	4.90	4.60	4.39	1.00	1.40	1.80	1.40	1.30	1.15	92.20	92.90	93.10	93.70	94.10	94.47
WV	11.10	9.30	8.30	6.50	6.80	6.87	3.00	2.60	2.40	2.50	2.10	1.93	85.90	88.10	89.20	91.00	91.10	91.21
WY	8.40	7.00	4.60	7.60	7.60	7.55	0.60	0.90	1.00	0.80	0.90	0.90	91.00	92.10	94.40	91.60	91.50	91.55
US	<b>5.90</b>	<b>4.80</b>	<b>4.00</b>	<b>3.70</b>	<b>3.20</b>	<b>3.07</b>	<b>2.10</b>	<b>2.10</b>	<b>2.00</b>	<b>2.10</b>	<b>2.20</b>	<b>2.12</b>	<b>92.00</b>	<b>93.10</b>	<b>93.90</b>	<b>94.20</b>	<b>94.50</b>	<b>94.81</b>

## Residents by Payer Source

The percent of certified nursing facility residents by primary payer source is shown in Table 6. The percentage of total residents primarily paid for by Medicaid declined from 66.2 to 63.55 percent of the total residents in the 2003-2008 period. Medicare paid for 14.10 percent of the total residents in 2008, increasing from 11.7 percent in 2003. Private payers and other sources have decreased slightly (22.0 percent in 2003 and 22.35 percent in 2008). Even though most nursing facility beds are dually certified for either Medicare or Medicaid residents, the care for most residents is paid for by Medicaid.



**TABLE 6**  
**PERCENT OF CERTIFIED NURSING FACILITY RESIDENTS BY PRIMARY PAYER SOURCE**

State	Medicaid						Medicare					Private/Other						
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
AK	81.50	80.30	82.90	78.90	72.70	78.35	9.20	10.10	8.10	7.00	12.10	10.74	9.20	9.60	8.90	14.10	15.20	10.91
AL	72.30	72.20	70.70	69.40	68.90	68.74	12.00	13.10	13.00	13.80	13.60	13.99	15.60	14.70	16.30	16.80	17.50	17.27
AR	72.70	72.00	70.80	70.00	69.70	69.32	8.50	8.90	10.30	10.80	11.20	11.59	18.70	19.00	18.90	19.20	19.00	19.08
AZ	65.40	64.70	63.50	63.60	61.20	64.59	10.80	10.90	12.00	12.10	13.00	12.87	23.80	24.40	24.50	24.30	25.80	22.55
CA	66.40	66.20	66.40	65.60	65.40	66.14	10.60	11.20	11.80	12.70	12.90	13.71	23.00	22.50	21.90	21.70	21.60	20.15
CO	59.10	58.30	59.10	58.60	57.90	58.06	9.50	9.90	10.40	11.40	11.70	12.42	31.40	31.80	30.50	30.10	30.40	29.52
CT	66.70	66.50	64.70	66.10	66.10	66.56	14.00	14.50	17.20	16.30	15.70	15.26	19.30	19.00	18.10	17.50	18.20	18.18
DC	80.90	80.70	74.30	77.50	80.00	81.39	9.40	9.20	8.50	10.20	9.50	9.39	9.70	10.10	17.30	12.30	10.40	9.23
DE	57.70	60.40	59.50	58.00	58.40	57.46	18.10	17.90	15.90	18.00	15.00	16.03	24.10	21.70	24.60	24.00	26.60	26.51
FL	61.30	60.70	59.70	58.60	57.80	57.58	17.40	18.20	19.00	19.50	19.50	20.21	21.30	21.10	21.20	21.90	22.70	22.21
GA	77.30	76.60	76.10	74.90	73.80	72.35	9.50	9.80	10.20	11.20	11.20	12.02	13.20	13.60	13.70	13.90	15.00	15.63
HI	73.80	70.60	74.70	72.10	69.90	69.97	10.40	8.50	8.50	8.80	9.40	12.16	15.90	20.90	16.80	19.10	20.70	17.87
IA	50.10	49.00	49.60	49.30	48.10	47.96	5.10	5.70	6.10	6.40	6.60	7.67	44.80	45.30	44.20	44.30	45.30	44.37
ID	61.30	59.80	58.80	60.70	58.50	60.13	15.00	15.10	17.40	16.20	15.90	16.00	23.70	25.10	23.80	23.10	25.60	23.87
IL	62.30	62.20	62.80	62.70	62.60	62.36	11.20	12.10	12.80	13.40	13.70	14.18	26.50	25.70	24.50	24.00	23.70	23.45
IN	64.00	63.40	62.20	62.60	61.70	61.40	13.50	13.60	14.70	15.50	15.40	16.17	22.60	23.00	23.20	22.00	22.90	22.43
KS	53.80	54.00	54.00	52.60	53.00	53.40	6.70	6.90	7.60	9.30	8.70	9.82	39.60	39.10	38.40	38.10	38.30	36.78
KY	70.50	68.40	66.60	66.60	66.90	66.03	13.20	13.50	14.60	14.50	15.30	15.45	16.30	18.10	18.80	18.90	17.80	18.53
LA	76.90	76.80	77.70	75.00	73.80	73.38	8.40	8.40	9.50	10.60	11.40	12.39	14.60	14.80	12.80	14.40	14.80	14.23
MA	68.10	67.90	66.00	65.90	65.00	63.79	12.00	12.60	13.70	13.30	13.50	14.09	19.90	19.50	20.30	20.80	21.50	22.13
MD	60.50	61.80	61.00	61.10	60.50	60.90	13.50	14.60	15.30	15.60	16.10	16.66	25.90	23.60	23.70	23.20	23.40	22.44
ME	68.70	69.10	66.60	67.00	65.70	66.30	13.30	13.50	16.10	15.50	16.30	16.39	18.00	17.40	17.30	17.60	18.10	17.31
MI	66.70	66.70	65.70	65.70	64.30	62.65	14.70	15.00	16.60	16.70	16.90	17.87	18.60	18.40	17.70	17.60	18.80	19.48
MN	59.10	59.20	57.80	58.70	56.80	56.30	10.00	10.20	10.70	9.70	10.00	10.40	30.90	30.60	31.50	31.70	33.20	33.30
MO	63.80	63.50	63.60	62.40	61.40	60.57	9.70	10.40	11.40	11.70	12.60	13.01	26.60	26.10	25.00	25.80	26.00	26.42
MS	79.80	78.60	76.30	76.00	76.70	76.22	9.70	10.10	11.60	12.80	13.60	14.19	10.50	11.30	12.10	11.20	9.70	9.59
MT	57.90	58.70	57.50	57.30	57.70	58.05	9.60	9.60	9.90	11.10	10.50	10.67	32.50	31.70	32.60	31.60	31.80	31.28
NC	69.90	70.50	69.90	68.80	67.40	67.15	14.50	14.70	15.40	15.60	15.60	15.44	15.50	14.80	14.60	15.60	17.00	17.41
ND	54.50	54.90	56.00	54.90	55.40	54.44	6.90	7.20	7.40	7.40	7.60	6.94	38.70	38.00	36.70	37.60	37.10	38.63
NE	53.90	53.40	53.50	52.70	53.80	51.23	7.70	8.70	9.30	10.50	10.20	11.68	38.40	37.90	37.20	36.80	36.00	37.09
NH	68.70	69.10	66.30	65.90	64.80	63.06	10.30	11.20	13.00	13.00	14.90	15.52	21.10	19.70	20.80	21.10	20.30	21.42
NJ	65.00	64.70	64.80	63.60	62.90	62.82	14.80	15.10	16.30	16.60	17.00	16.95	20.20	20.20	18.90	19.80	20.10	20.23
NM	70.00	67.50	66.50	66.90	64.10	60.62	8.10	10.50	10.60	11.50	11.40	12.34	21.90	22.10	22.90	21.60	24.50	27.04
NV	62.00	59.70	62.00	59.60	58.00	60.28	11.00	11.70	10.90	13.40	13.80	15.90	27.00	28.60	27.00	27.00	28.20	23.82
NY	73.60	73.00	73.00	72.30	72.10	71.27	12.00	12.20	12.60	12.70	12.60	12.63	14.40	14.90	14.40	15.10	15.40	16.10
OH	64.90	64.20	64.60	63.90	63.20	62.58	11.80	12.30	13.10	13.40	14.00	13.53	23.40	23.50	22.30	22.60	22.70	23.88
OK	65.70	64.20	64.70	66.00	65.50	66.47	8.40	9.60	10.30	10.10	11.80	11.23	25.90	26.10	25.00	23.90	22.70	22.30
OR	61.10	61.70	60.50	60.80	61.00	61.10	12.10	13.30	14.50	13.50	13.20	12.88	26.80	24.90	24.90	25.60	25.80	26.02
PA	63.50	64.20	63.40	64.20	63.30	62.01	11.10	11.00	12.20	11.50	11.60	11.66	25.40	24.80	24.40	24.30	25.10	26.34
RI	70.20	67.00	67.40	66.80	65.60	65.65	9.00	9.90	9.40	9.40	8.80	8.70	20.80	23.10	23.30	23.80	25.60	25.65
SC	70.40	69.40	69.80	66.70	64.80	63.73	14.00	15.40	14.70	16.60	16.30	16.31	15.60	15.20	15.50	16.80	18.90	19.96
SD	58.20	58.20	55.40	55.60	56.70	57.39	6.90	6.60	6.00	7.50	7.20	7.55	34.80	35.30	38.60	36.90	36.10	35.06
TN	71.30	68.30	68.50	67.00	66.10	65.21	12.80	14.20	15.40	15.20	15.90	15.33	16.00	17.40	16.10	17.80	18.00	19.46
TX	69.10	67.80	67.90	66.10	65.30	63.24	11.30	11.80	12.90	13.40	14.20	14.70	19.60	20.40	19.20	20.50	20.50	22.06
UT	60.00	58.50	54.60	54.20	53.00	53.70	17.20	17.90	19.40	19.60	19.60	18.43	22.80	23.60	25.90	26.20	27.40	27.87
VA	63.90	64.20	63.40	62.00	60.40	59.95	14.60	14.70	15.60	16.30	17.20	17.52	21.60	21.20	21.10	21.70	22.40	22.53
VT	66.30	67.40	65.70	62.90	67.20	67.37	13.10	12.30	12.80	12.70	14.10	14.35	20.60	20.30	21.50	24.40	18.70	18.28
WA	64.00	61.70	61.10	62.20	59.80	59.49	12.00	13.60	14.90	15.00	16.50	16.41	24.00	24.80	23.90	22.80	23.60	24.10
WI	64.70	64.20	63.70	63.00	61.60	59.93	10.40	11.30	11.80	12.30	13.40	13.89	24.90	24.50	24.50	24.70	25.00	26.18
WV	72.50	73.00	73.10	72.40	72.30	73.15	13.50	13.80	13.30	14.10	13.90	13.73	14.00	13.20	13.60	13.50	13.80	13.12
WY	62.60	60.00	60.40	60.70	59.30	59.93	11.80	14.00	12.40	12.20	10.90	12.61	25.60	26.00	27.20	27.10	29.80	27.46
US	66.20	65.70	65.40	64.80	64.10	63.55	11.70	12.20	13.10	13.40	13.70	14.10	22.00	22.00	21.60	21.80	22.20	22.35

**Nursing Facilities, Staffing, Residents and Facility Deficiencies, 2003-2008**

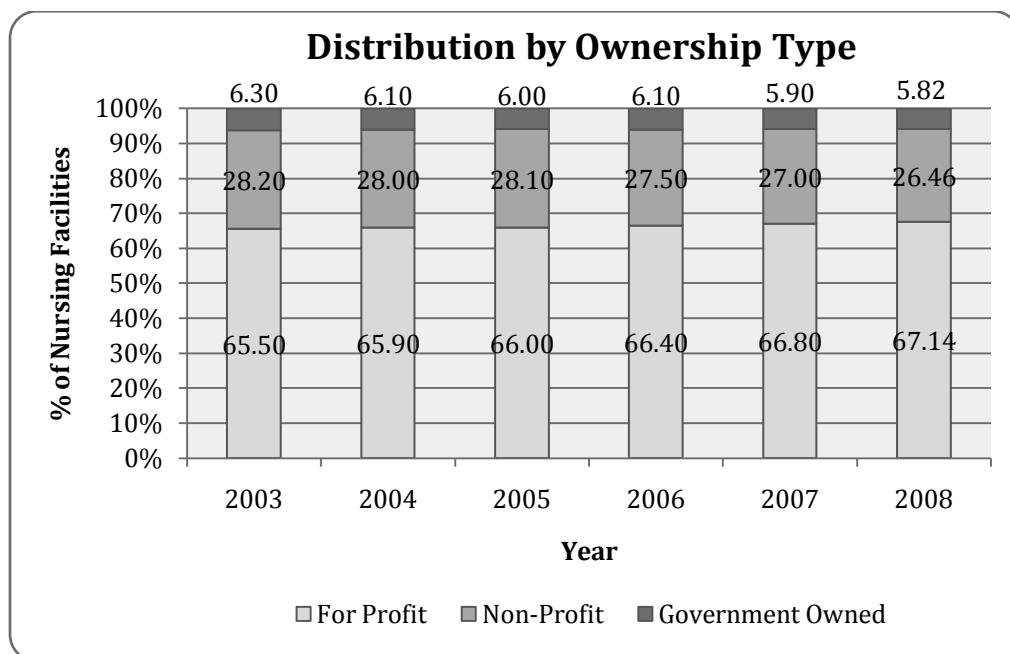
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## Distribution of Facilities by Ownership Type

Nursing facility ownership patterns were fairly stable in the 2003-2008 period, when the large majority of nursing facilities were proprietary. Table 7 shows that 67.14 percent of the surveyed facilities were for-profit facilities while non-profit facilities were 26.46 percent and government owned facilities were 5.82 percent in 2008.

Ownership patterns vary widely across states. Wyoming and Alaska have a high percentage of government owned facilities. North Dakota, South Dakota, and Minnesota have a high percentage of non-profit facilities. Oklahoma, Texas, Arkansas, Alabama, Utah, and Oregon have the highest percentages of proprietary facilities.



**TABLE 7**  
**PERCENT DISTRIBUTION OF NURSING FACILITIES BY OWNERSHIP TYPE**

State	For Profit						Non-Profit						Government Owned					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
AK	7.10	0.00	6.70	0.00	6.70	21.43	64.30	75.00	53.30	38.50	53.30	42.86	28.60	25.00	40.00	61.50	40.00	35.71
AL	76.40	77.20	81.00	81.10	77.60	79.25	14.40	13.40	12.90	11.20	16.80	13.68	9.30	9.40	6.10	7.70	5.60	7.08
AR	79.80	81.70	80.00	80.10	81.40	83.47	16.20	14.00	16.60	16.10	14.30	13.14	3.90	4.30	3.40	3.80	4.20	3.39
AZ	76.80	75.70	73.60	75.00	74.20	77.10	21.40	22.60	26.40	23.50	22.60	19.85	1.80	1.70	0.00	1.50	2.40	2.29
CA	77.50	79.20	78.70	79.70	78.80	78.71	18.40	17.40	17.30	16.50	16.70	16.05	4.00	3.40	3.90	3.80	3.80	3.71
CO	64.10	64.60	65.50	66.30	68.40	69.76	25.70	25.70	25.10	23.80	22.00	20.49	10.20	9.70	9.40	9.90	9.60	9.76
CT	79.30	76.80	76.70	77.20	78.50	78.79	20.30	22.70	22.50	21.90	20.20	19.91	0.40	0.50	0.90	0.80	0.90	0.87
DC	23.50	30.00	35.00	35.00	27.80	36.84	64.70	60.00	55.00	55.00	61.10	52.63	11.80	10.00	10.00	10.00	11.10	10.53
DE	45.90	56.40	53.70	52.40	50.00	51.11	45.90	35.90	36.60	38.10	38.60	37.78	8.10	7.70	9.80	9.50	11.40	11.11
FL	73.10	71.50	70.40	70.60	70.50	69.45	24.60	26.20	27.60	27.40	26.80	26.08	2.30	2.30	1.90	1.90	1.80	2.09
GA	68.80	65.40	64.80	65.00	67.60	66.20	23.60	26.90	28.40	26.50	24.00	27.09	7.60	7.60	6.80	8.50	8.40	6.70
HI	46.90	42.90	46.20	45.70	48.80	51.11	28.10	34.30	30.80	28.30	24.40	24.44	25.00	22.90	23.10	26.10	26.80	24.44
IA	51.80	52.80	52.20	51.70	51.40	52.70	43.50	42.40	43.40	43.20	43.70	43.02	4.60	4.80	4.40	5.10	4.90	4.28
ID	62.70	64.70	64.80	64.90	67.10	65.82	14.70	13.20	15.50	13.50	17.10	16.46	22.70	22.10	19.70	21.60	15.70	17.72
IL	68.00	69.00	68.50	68.80	68.20	70.14	27.40	26.60	27.80	27.00	27.40	25.87	4.70	4.40	3.70	4.20	4.30	3.86
IN	65.70	66.40	68.80	67.60	69.70	67.98	30.90	29.10	27.80	28.40	25.90	26.88	3.40	4.50	3.40	4.00	4.00	4.94
KS	50.90	51.30	51.90	49.90	49.80	50.72	36.30	35.90	36.10	37.20	37.50	37.39	12.90	12.80	12.00	13.00	12.40	11.88
KY	68.20	66.70	69.20	70.40	70.10	70.63	29.60	30.50	27.50	26.80	26.70	26.92	2.10	2.80	3.40	2.70	2.80	2.10
LA	74.00	74.00	75.70	74.50	74.80	73.68	21.60	21.70	20.20	21.20	19.50	18.25	4.50	4.30	4.00	4.40	5.00	5.96
MA	68.10	68.90	69.20	69.20	70.30	69.88	30.00	29.50	28.70	28.80	27.80	28.19	1.80	1.60	2.10	2.00	1.90	1.93
MD	61.40	62.40	63.20	63.10	63.00	64.32	35.50	34.30	33.80	33.80	34.30	31.72	3.20	3.30	3.10	3.10	2.80	3.52
ME	69.80	68.80	70.80	71.80	67.60	70.91	28.30	30.30	28.30	27.30	31.50	28.18	1.90	0.90	0.90	0.90	0.90	0.91
MI	62.70	64.80	64.40	65.20	67.00	68.92	27.20	25.00	25.80	25.10	24.00	22.89	10.10	10.20	9.80	9.70	9.00	7.47
MN	27.60	28.00	27.00	28.10	27.80	27.03	59.20	58.90	60.10	58.30	59.50	61.68	13.30	13.10	12.90	13.60	12.70	11.29
MO	64.70	66.30	66.40	66.20	67.90	69.20	26.80	26.90	27.10	27.10	25.10	23.59	8.50	6.70	6.50	6.70	7.00	7.21
MS	71.00	66.30	68.20	68.30	69.50	60.62	16.60	19.70	18.20	17.80	16.00	18.65	12.40	14.00	13.60	13.90	13.50	11.92
MT	33.70	39.10	36.40	37.60	37.60	40.66	50.00	46.00	46.60	45.90	45.90	41.76	16.30	14.90	17.00	16.50	15.30	16.48
NC	74.50	73.00	73.70	73.60	74.40	75.24	22.00	22.80	22.60	23.10	22.20	22.36	3.50	4.20	3.70	3.30	2.90	2.40
ND	8.50	7.30	6.40	6.20	7.50	4.94	87.80	89.00	91.00	90.10	88.80	90.12	3.70	3.70	2.60	3.70	3.80	4.94
NE	45.60	47.90	47.40	48.00	46.20	47.44	31.20	30.00	30.70	29.90	32.70	30.23	23.30	22.10	21.90	22.20	21.20	22.33
NH	54.10	50.00	48.70	50.00	53.10	54.05	31.10	34.20	34.20	34.20	33.30	32.43	14.90	15.80	17.10	15.80	13.60	13.51
NJ	62.50	64.10	63.90	64.90	65.50	65.83	31.70	31.00	30.50	29.40	28.80	27.73	5.70	4.90	5.60	5.70	5.60	6.16
NM	68.80	69.20	66.20	67.10	65.70	66.67	26.00	26.20	26.50	27.10	25.70	24.64	5.20	4.60	7.40	5.70	7.10	7.25
NV	77.30	75.60	73.90	76.60	68.80	70.21	9.10	9.80	13.00	10.60	16.70	17.02	13.60	14.60	13.00	12.80	12.50	10.64
NY	48.30	48.40	48.30	50.40	50.90	50.00	43.80	43.50	43.60	42.10	41.80	42.97	7.90	8.10	8.00	7.50	7.20	6.88
OH	74.50	75.60	75.90	74.90	75.60	76.42	23.00	21.70	21.60	22.40	21.50	20.95	2.40	2.70	2.40	2.70	2.90	2.63
OK	83.30	82.40	82.90	83.80	85.10	86.15	11.70	12.20	12.20	11.60	10.80	8.92	5.00	5.40	4.90	4.60	4.10	4.92
OR	76.70	77.60	76.60	80.50	79.90	80.15	18.80	18.70	19.40	15.00	16.40	14.71	4.50	3.70	4.00	4.50	3.70	5.15
PA	44.90	44.60	47.00	48.00	47.50	47.14	49.50	49.70	47.70	46.70	47.00	45.57	5.60	5.70	5.30	5.40	5.20	5.86
RI	86.10	76.90	79.80	78.20	80.00	79.76	13.90	21.80	20.20	20.70	20.00	20.24	0.00	1.30	0.00	1.10	0.00	0.00
SC	72.60	72.30	75.30	73.10	75.10	75.44	15.50	18.10	13.00	15.00	15.40	15.20	11.90	9.70	11.70	12.00	9.50	9.36
SD	30.60	33.00	31.80	34.60	34.00	33.00	63.90	62.00	63.60	60.70	61.30	62.00	5.60	5.00	4.70	4.70	4.70	4.00
TN	70.60	72.60	73.10	73.40	74.00	73.50	19.90	19.10	19.80	20.60	19.40	18.93	9.50	8.20	7.10	6.00	6.30	6.31
TX	79.60	81.50	81.40	82.40	82.90	83.95	17.30	15.70	15.50	14.80	14.10	13.10	3.10	2.80	3.20	2.80	3.00	2.78
UT	78.00	80.20	74.10	81.10	77.40	81.25	19.50	16.00	21.00	14.40	17.90	15.63	2.40	3.70	4.90	4.40	4.80	3.13
VA	68.00	67.20	64.10	64.90	68.30	65.37	28.30	29.70	32.70	31.30	27.20	30.04	3.70	3.10	3.20	3.70	3.40	3.89
VT	68.30	65.80	63.90	67.50	65.80	65.00	29.30	31.60	36.10	32.50	31.60	32.50	2.40	2.60	0.00	0.00	2.60	2.50
WA	70.10	69.60	70.00	71.30	72.30	71.73	21.60	22.50	22.20	20.70	20.20	20.68	8.30	7.90	7.80	8.00	7.60	7.59
WI	47.90	47.70	47.80	48.40	48.20	49.49	36.60	36.90	37.70	36.60	36.10	35.35	15.40	15.50	14.50	15.00	15.70	15.15
WV	66.90	66.10	65.80	64.20	69.40	67.18	23.80	23.70	25.00	25.70	22.30	22.14	9.20	10.20	9.20	10.10	8.30	10.69
WY	40.00	50.00	44.40	42.90	36.80	41.03	20.00	19.40	13.90	14.30	15.80	20.51	40.00	30.60	41.70	42.90	47.40	38.46
<b>US</b>	<b>65.50</b>	<b>65.90</b>	<b>66.00</b>	<b>66.40</b>	<b>67.14</b>	<b>28.20</b>	<b>28.00</b>	<b>28.10</b>	<b>27.50</b>	<b>27.00</b>	<b>26.46</b>	<b>6.30</b>	<b>6.10</b>	<b>6.00</b>	<b>6.10</b>	<b>5.90</b>	<b>5.82</b>	

**Nursing Facilities, Staffing, Residents and Facility Deficiencies, 2003-2008**

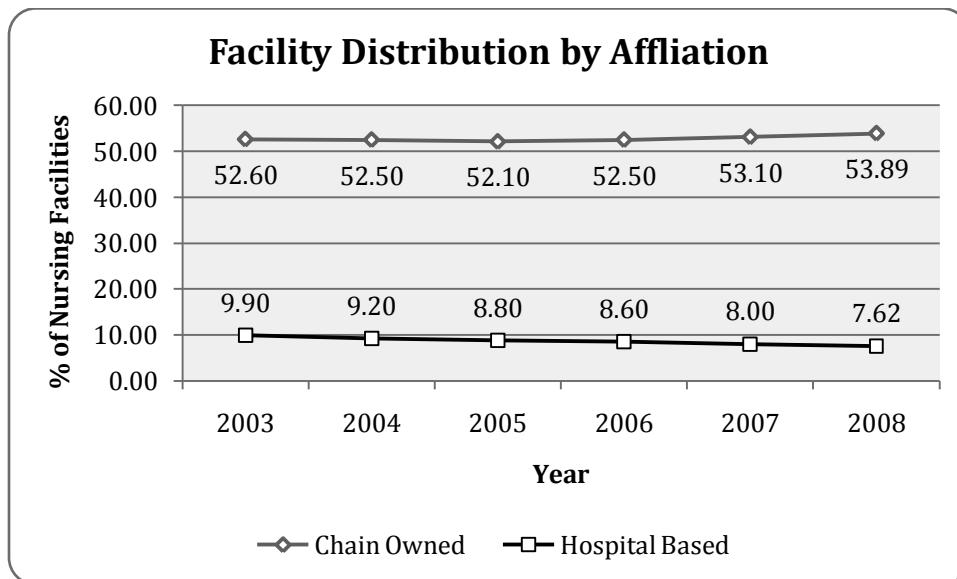
Department of Social & Behavioral Sciences

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## **Facilities by Affiliation**

Table 8 shows the percent of facilities that were owned or leased by multi-facility organizations (chains that have two or more facilities). The percentage that were owned or leased by chains was 52.6 percent in 2003 and increased by 1.29 percent to 53.89 percent in 2008.

Table 8 shows that certified hospital-based facilities that were surveyed decreased from 9.9 percent in 2003 declined to 7.62 percent of all facilities in 2008. These changes occurred after the introduction of the Medicare prospective payment system for nursing facilities in 1998.



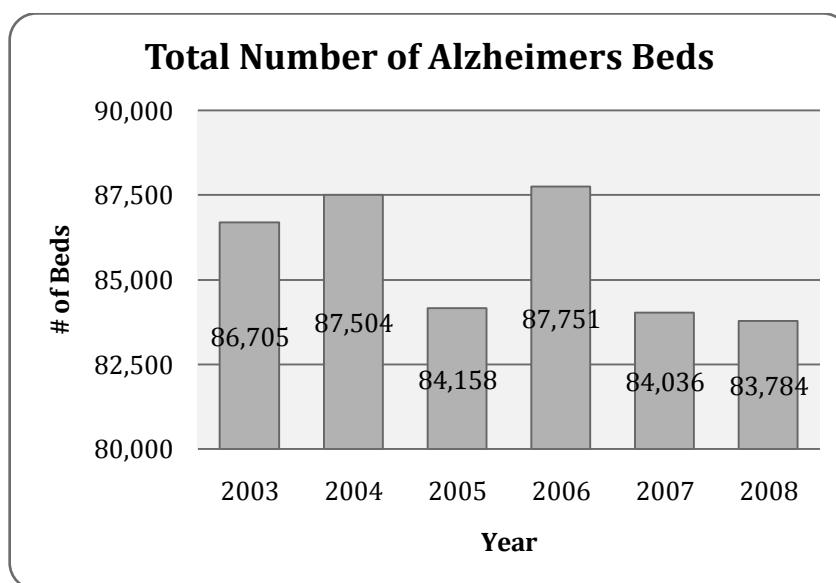
**TABLE 8**  
**PERCENT DISTRIBUTION OF CERTIFIED NURSING FACILITIES BY AFFILIATION IN THE  
U.S.**

State	Chain-Owned						Hospital-Based					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
AK	50.00	50.00	40.00	23.10	33.30	28.57	64.30	58.30	53.30	69.20	73.30	71.43
AL	60.60	60.40	57.70	55.00	64.60	61.79	8.30	6.90	5.50	7.10	7.50	7.08
AR	50.00	52.80	49.40	47.00	50.60	50.85	8.80	6.40	6.80	7.20	6.80	5.93
AZ	61.60	59.10	57.50	56.80	59.70	59.54	5.40	3.50	2.30	3.80	2.40	2.29
CA	55.50	55.20	52.40	53.50	52.00	51.45	13.30	12.90	12.30	12.40	10.90	11.37
CO	61.20	60.20	59.60	59.90	58.90	61.46	9.70	8.30	8.40	8.90	7.70	6.83
CT	41.00	43.60	46.70	45.60	47.20	48.92	1.30	1.40	1.30	1.70	1.70	1.30
DC	17.60	10.00	15.00	15.00	22.20	21.05	17.60	25.00	25.00	25.00	22.20	26.32
DE	59.50	59.00	56.10	59.50	54.50	51.11	5.40	7.70	7.30	7.10	9.10	2.22
FL	61.10	54.50	53.00	54.10	56.80	55.59	5.60	4.50	4.00	2.50	2.10	2.09
GA	73.50	74.60	74.00	71.80	72.50	70.95	16.30	16.20	15.40	15.40	14.50	14.25
HI	46.90	45.70	46.20	56.50	51.20	55.56	43.80	45.70	38.50	39.10	39.00	35.56
IA	48.20	50.70	52.90	52.20	50.00	51.80	9.50	8.80	9.70	10.30	10.50	9.23
ID	53.30	57.40	63.40	58.10	61.40	62.03	24.00	19.10	25.40	24.30	18.60	21.52
IL	44.40	44.90	45.90	47.90	47.90	49.03	8.40	8.50	8.30	7.70	7.50	6.69
IN	63.50	65.60	64.50	63.00	64.10	68.18	8.40	7.00	6.40	6.20	5.00	3.95
KS	49.10	49.90	51.30	51.60	51.10	49.57	13.20	13.10	13.80	13.50	13.30	13.04
KY	58.90	61.80	61.40	63.60	60.80	65.03	13.90	13.70	12.20	11.70	10.40	10.14
LA	40.80	41.80	43.80	46.40	49.60	50.88	8.60	7.20	7.40	6.90	7.10	5.96
MA	56.90	56.30	50.20	52.70	53.00	51.08	6.00	4.80	4.90	4.90	3.50	3.37
MD	51.80	51.60	53.10	53.30	54.20	56.39	7.30	8.00	7.00	7.60	7.90	5.29
ME	48.10	51.40	50.90	53.60	52.80	56.36	6.60	9.20	6.60	8.20	8.30	7.27
MI	50.90	51.00	52.10	52.30	52.50	53.98	5.90	5.70	3.70	4.90	6.40	5.78
MN	49.60	49.50	51.70	51.10	50.30	51.97	15.60	14.70	14.00	14.40	13.50	13.39
MO	53.80	54.70	49.30	47.80	50.80	52.24	9.70	6.70	5.90	5.90	5.40	4.68
MS	51.50	46.10	47.50	42.10	44.50	44.56	17.20	16.90	13.60	12.90	12.00	11.40
MT	33.70	36.80	35.20	34.10	41.20	36.26	42.40	34.50	39.80	36.50	35.30	35.16
NC	68.70	67.00	68.70	67.60	68.80	69.71	11.40	11.40	10.40	9.50	8.50	8.65
ND	48.80	45.10	46.20	44.40	45.00	43.21	23.20	23.20	19.20	21.00	18.80	19.75
NE	48.80	48.40	50.70	45.70	44.70	51.63	14.90	14.10	11.60	11.30	10.10	10.23
NH	52.70	51.30	48.70	50.00	50.60	52.70	2.70	6.60	6.60	5.30	6.20	5.41
NJ	35.60	37.10	37.50	34.90	33.60	35.01	4.50	4.10	4.40	4.30	4.00	4.48
NM	68.80	67.70	66.20	70.00	62.90	57.97	9.10	9.20	10.30	7.10	2.90	5.80
NV	52.30	53.70	58.70	61.70	62.50	61.70	22.70	19.50	21.70	21.30	18.80	12.77
NY	12.70	13.10	12.10	13.10	12.50	13.28	11.20	11.00	10.10	10.30	10.30	10.47
OH	56.50	57.10	58.40	58.50	61.10	60.53	6.50	5.20	5.00	5.10	4.20	4.00
OK	34.30	34.10	32.80	30.30	32.00	34.77	5.30	5.70	4.90	4.90	4.40	3.69
OR	64.70	64.90	68.50	68.40	69.40	73.53	5.30	4.50	3.20	3.80	3.70	4.41
PA	49.50	51.20	52.00	53.20	53.20	53.71	9.80	8.90	9.00	8.70	8.60	8.14
RI	36.10	30.80	26.20	28.70	31.80	32.14	2.80	2.60	2.40	1.10	1.20	0.00
SC	66.10	69.00	67.90	71.30	71.00	71.35	12.50	11.60	9.30	11.40	10.10	8.19
SD	53.70	55.00	56.10	57.00	56.60	62.00	21.30	20.00	15.90	15.00	15.10	14.00
TN	60.50	61.40	63.60	63.00	61.90	63.09	11.80	10.90	9.70	9.20	7.90	7.57
TX	63.30	62.10	62.50	63.30	65.00	64.87	6.00	4.70	4.50	4.10	3.70	3.21
UT	68.30	66.70	64.20	67.80	66.70	62.50	13.40	12.30	14.80	12.20	11.90	8.33
VA	63.90	62.90	64.50	68.70	70.50	71.02	7.80	8.50	8.90	7.10	6.70	7.07
VT	48.80	42.10	38.90	47.50	39.50	40.00	4.90	5.30	8.30	5.00	7.90	7.50
WA	61.00	60.40	58.00	62.40	60.50	62.03	7.90	7.50	7.40	7.20	7.10	6.33
WI	44.00	44.10	43.30	42.80	43.30	45.96	8.10	7.70	7.90	7.80	7.50	7.58
WV	47.70	47.50	45.80	44.00	48.80	48.09	20.00	22.00	21.70	23.90	21.50	19.08
WY	45.70	44.40	41.70	37.10	36.80	43.59	37.10	33.30	38.90	37.10	39.50	35.90
<b>US</b>	<b>52.60</b>	<b>52.50</b>	<b>52.10</b>	<b>52.50</b>	<b>53.10</b>	<b>53.89</b>	<b>9.90</b>	<b>9.20</b>	<b>8.80</b>	<b>8.60</b>	<b>8.00</b>	<b>7.62</b>

## **Special Care Beds**

Surveyed facilities reported the number of beds available in dedicated special care units. Table 9 shows the number of beds in special care units for Alzheimer's, AIDS and hospice for 2003 through 2008. The total number of beds dedicated to Alzheimer's was 83,784 in 2008, a decline after 2006. These special care beds were 5 percent of the total certified beds in the U.S surveyed in 2008.

The number of dedicated AIDS beds declined from 1,390 in 2003 to 733 in 2008. The number of hospice beds declined from 3,266 to 2,448 in 2008. Many nursing facilities offer care to Alzheimer's, AIDS and hospice residents outside of special care units.



**TABLE 9**  
**TOTAL NUMBER OF SPECIAL CARE BEDS IN CERTIFIED NURSING FACILITIES IN THE U.S.**

State	Alzheimers							AIDS					Hospice						
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	
AK	22	22	22	37	37	37	0	0	0	0	0	0	0	0	0	0	0	0	
AL	950	998	649	920	832	1,323	0	0	0	0	0	0	165	21	169	151	19	151	
AR	421	348	393	465	392	301	0	0	0	0	0	0	11	60	107	88	15	12	
AZ	1,487	1,511	968	1,427	1,515	1,446	0	0	0	0	0	0	0	0	12	19	22	0	
CA	4,325	4,294	3,580	3,467	4,096	3,746	57	58	54	32	35	60	72	107	253	237	119	54	
CO	2,121	2,175	2,109	1,980	2,136	2,036	0	0	0	0	242	242	138	158	66	61	333	385	
CT	1,788	1,359	1,585	1,904	1,548	1,704	70	70	70	34	70	70	14	8	16	22	10	8	
DC	21	39	47	108	69	49	0	0	0	0	0	0	0	13	0	0	4	4	
DE	320	341	330	300	346	359	0	0	0	0	0	0	0	1	6	6	0	3	
FL	4,851	5,069	4,196	5,020	4,899	3,603	44	241	143	313	327	49	208	457	302	567	498	19	
GA	1,067	1,173	1,303	1,346	1,471	1,666	12	15	0	0	0	0	10	10	0	1	2	2	
HI	124	48	164	106	137	106	10	10	0	0	0	0	10	10	10	0	2	2	
IA	1,771	1,970	2,076	2,082	1,934	2,037	0	0	0	0	0	0	59	298	62	95	161	171	
ID	464	405	340	381	415	383	58	0	0	0	0	0	85	151	148	96	196	82	
IL	5,745	6,086	5,662	5,614	5,444	5,552	44	44	28	28	122	103	855	136	98	234	144	257	
IN	4,605	4,498	4,543	5,114	5,227	5,354	12	6	0	26	0	0	164	10	4	207	4	146	
KS	1,797	1,938	1,842	1,841	1,625	1,433	0	0	0	0	0	0	3	94	13	4	3	2	
KY	460	297	454	663	575	744	0	0	0	0	0	0	160	177	158	164	34	34	
LA	1,420	1,607	1,586	1,447	1,595	1,548	12	12	13	1	0	0	3	8	0	0	5	0	
MA	3,727	4,143	4,340	4,782	4,780	4,232	0	0	10	0	0	0	3	10	6	9	11	28	
MD	1,257	1,305	1,196	1,190	851	844	0	0	0	0	0	0	24	30	20	1	42	25	
ME	641	703	428	514	408	450	0	0	0	0	0	0	1	1	0	6	5	0	
MI	1,710	1,865	2,016	1,934	1,459	1,174	0	0	0	0	0	0	27	189	35	40	54	68	
MN	2,761	3,146	2,704	2,903	2,892	2,894	16	0	0	0	0	0	16	29	27	14	17	16	
MO	4,250	4,138	4,565	4,581	4,181	4,407	16	16	16	16	16	16	21	20	87	88	16	266	
MS	44	20	116	139	376	365	0	0	0	0	0	0	0	0	0	0	0	0	
MT	568	602	535	460	575	707	0	0	0	0	0	0	6	6	5	4	5	13	
NC	1,756	1,784	1,544	1,408	1,726	1,778	0	0	0	0	0	0	12	17	20	2	0	1	
ND	379	397	442	443	458	422	0	0	0	0	0	0	0	0	0	0	0	1	
NE	1,101	1,092	1,193	1,352	1,217	1,365	0	0	0	0	0	0	81	83	81	82	55	17	
NH	648	651	597	440	29	469	0	0	0	0	0	0	0	1	0	0	0	3	
NJ	1,212	1,223	1,326	1,473	1,394	1,391	66	66	74	74	74	0	37	34	22	24	18	18	
NM	610	411	380	476	539	457	0	0	0	0	0	0	0	0	0	32	26	0	
NV	219	275	300	335	264	332	0	0	0	0	0	0	225	9	0	0	12	27	
NY	3,750	3,919	4,410	5,016	3,846	3,455	881	940	966	1,096	373	61	86	49	67	67	32	23	
OH	7,159	7,580	5,513	5,545	5,807	5,856	39	16	21	0	25	26	232	154	160	278	68	220	
OK	831	816	1,059	986	522	694	0	7	33	33	0	0	180	9	27	5	216	102	
OR	801	704	559	583	492	454	0	0	0	0	6	0	10	9	3	7	13	9	
PA	6,565	6,485	6,445	6,515	6,406	6,375	16	16	16	16	16	106	105	93	41	50	42	48	
RI	458	842	921	880	821	815	0	0	0	0	0	0	0	3	1	4	1	12	
SC	497	390	535	434	404	204	0	0	1	0	0	0	3	6	96	88	7	0	
SD	346	281	382	487	502	511	0	0	0	0	0	0	1	1	0	0	1	1	
TN	453	415	360	499	285	247	0	0	0	0	0	0	3	11	26	25	23	36	
TX	3,398	3,247	3,314	3,442	3,284	3,648	0	1	7	1	0	0	94	39	61	56	104	90	
UT	598	646	558	562	549	621	0	0	0	0	0	0	22	4	0	7	23	12	
VA	1,256	1,128	1,132	1,141	1,285	1,193	0	0	0	6	0	0	2	0	120	23	23	23	
VT	379	356	336	363	317	228	0	0	0	0	0	0	1	2	1	0	0	0	
WA	2,012	1,704	1,631	1,385	1,085	832	35	35	0	0	0	0	7	2	0	1	134	23	
WI	3,247	2,746	3,157	2,974	2,672	3,501	2	2	0	2	0	0	108	93	119	123	100	28	
WV	102	84	30	22	46	189	0	0	0	0	0	0	0	0	0	0	0	5	
WY	211	228	285	265	271	247	0	0	0	0	0	0	2	4	1	1	2	1	
US	86,705	87,504	84,158	87,751	84,036	83,784	1,390	1,555	1,452	1,678	1,306	733	3,266	2,627	2,450	2,989	2,621	2,448	

## **Special Care Beds (continued)**

Table 10 shows that there were 14,897 rehabilitation beds in special units surveyed in certified nursing facilities in the U.S. in 2008. This was less than one percent of the total certified nursing facility beds in the U.S. There were 7,414 ventilator beds reported in special units in 2008, and these beds had increased by 20 percent over 2003. There were 941 dialysis unit beds surveyed in 2008.

It should be noted that many nursing facilities accept residents with special needs but do not maintain separate units for such residents.

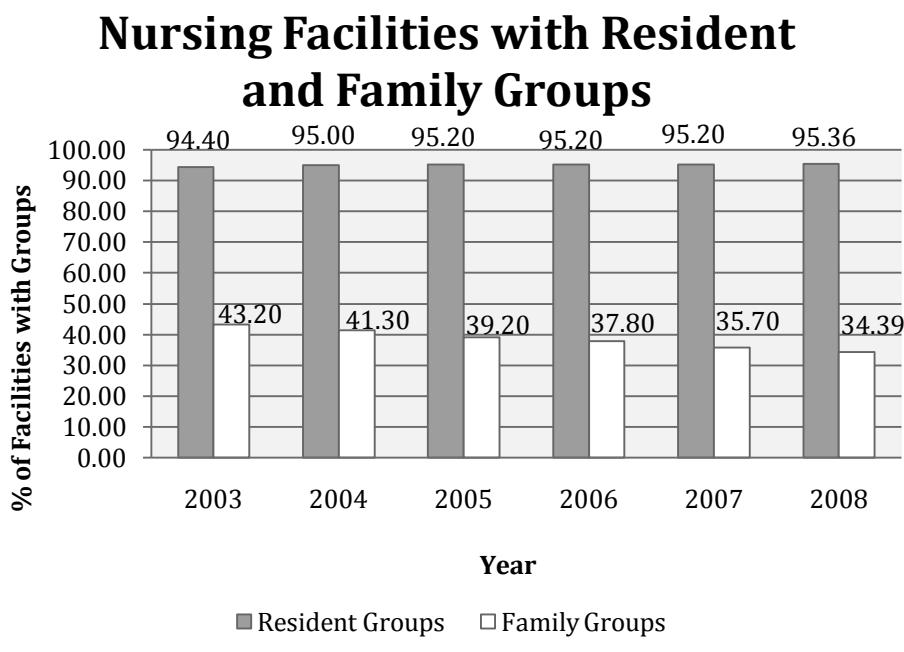
**TABLE 10**  
**TOTAL NUMBER OF SPECIAL CARE BEDS IN CERTIFIED NURSING FACILITIES IN THE U.S.**

State	Rehabilitation						Ventilator						Dialysis					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
AK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AL	356	259	451	325	245	638	17	17	0	17	0	13	0	0	0	0	0	0
AR	378	487	363	226	169	166	0	7	7	7	10	10	0	0	0	2	0	0
AZ	312	27	263	168	271	145	200	205	225	242	194	246	0	5	0	16	38	56
CA	1,456	1,618	1,909	1,612	1,046	1,574	2,102	2,223	2,129	2,015	1,867	2,344	10	5	7	17	20	16
CO	141	163	237	190	432	407	37	43	34	53	43	50	1	0	0	0	315	242
CT	1,420	910	1,147	1,203	1,157	1,326	66	42	60	62	75	72	4	0	0	10	0	0
DC	0	36	0	0	0	0	0	0	0	0	12	12	0	0	0	0	0	0
DE	0	15	15	15	35	126	11	1	17	17	17	30	0	0	1	1	0	0
FL	752	703	680	561	512	513	218	271	216	288	208	196	2	212	196	318	325	50
GA	243	263	187	227	365	261	2	0	0	0	1	0	1	0	0	0	0	0
HI	10	10	10	0	0	0	18	18	10	37	44	43	10	10	10	0	0	0
IA	124	97	114	147	109	172	81	16	16	15	16	74	0	105	6	0	8	0
ID	86	189	181	128	135	65	4	4	5	5	5	5	64	0	0	0	0	0
IL	1,455	537	604	952	934	1,116	413	481	475	723	528	471	87	106	82	253	305	215
IN	416	396	113	148	206	224	144	108	101	134	122	122	142	0	16	0	0	96
KS	50	125	50	110	48	17	18	0	18	24	18	18	0	0	0	0	0	0
KY	47	18	34	116	50	0	122	119	97	116	79	127	0	0	0	0	0	0
LA	19	243	43	43	65	55	196	193	189	255	188	171	1	2	1	1	2	0
MA	597	475	398	433	590	361	76	26	36	36	41	61	0	0	0	0	3	0
MD	170	112	109	160	132	68	97	23	124	120	163	183	30	50	0	6	54	60
ME	30	30	18	36	132	112	0	0	67	67	0	0	0	0	0	0	0	0
MI	320	369	238	314	148	191	177	305	186	208	208	180	0	102	1	1	1	0
MN	1,003	861	1,013	1,164	1,038	1,377	19	34	32	36	27	16	6	0	2	2	0	2
MO	421	500	415	391	500	405	25	45	10	10	0	0	7	32	11	36	22	6
MS	0	0	0	0	0	60	0	0	0	0	60	70	0	0	0	0	0	0
MT	22	22	22	22	0	22	0	0	0	0	0	0	0	0	0	0	0	3
NC	20	55	20	70	36	79	115	87	66	40	89	107	0	0	0	0	0	0
ND	16	16	16	16	16	16	0	0	0	0	0	0	0	0	0	0	0	0
NE	76	128	191	124	112	79	71	64	72	76	82	82	0	0	0	0	0	1
NH	111	133	63	133	0	114	0	0	6	7	0	12	0	0	0	0	0	0
NJ	146	118	131	180	152	106	157	163	188	217	315	217	0	0	0	0	10	22
NM	0	0	0	0	0	35	0	0	0	0	0	0	0	0	0	0	0	0
NV	130	0	138	138	32	32	54	52	110	114	82	86	0	0	0	0	0	0
NY	1,469	1,827	2,308	2,987	2,700	1,696	793	925	936	1,055	540	559	30	30	58	64	57	0
OH	852	963	740	659	675	613	689	577	488	681	460	445	37	3	8	28	22	37
OK	191	84	36	0	36	93	39	9	58	54	25	71	9	8	0	0	0	0
OR	15	30	128	95	156	27	0	0	5	0	2	0	0	0	0	0	1	0
PA	1,284	1,175	735	1,142	1,134	1,178	472	464	531	510	548	641	0	6	0	8	6	98
RI	186	151	355	328	375	417	10	0	10	10	10	10	0	0	0	1	0	4
SC	0	0	23	6	0	0	20	0	23	20	20	20	0	0	1	0	0	0
SD	0	10	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
TN	24	29	29	29	82	72	36	18	0	0	16	16	0	0	0	0	0	0
TX	240	65	139	183	205	245	138	147	82	150	156	251	4	7	9	7	10	10
UT	30	40	0	54	129	64	37	19	0	0	0	20	0	0	0	1	1	0
VA	56	94	267	103	103	133	126	154	260	149	119	127	0	0	0	120	0	9
VT	40	40	40	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WA	164	41	110	179	347	207	133	157	140	160	191	155	0	0	1	1	1	0
WI	474	379	300	352	199	241	54	77	39	38	90	81	10	10	0	10	0	0
WV	0	16	16	0	0	42	4	0	0	0	0	0	0	0	0	0	0	1
WY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
US	15,352	13,859	14,399	15,509	14,808	14,897	6,991	7,094	7,068	7,768	6,671	7,414	455	693	530	783	1201	941

## Resident Groups/ Family Groups

Facilities may have an organized group of residents who meet regularly to discuss and offer suggestions about policies and procedures affecting residents' care, treatment, and quality of life; to support each other; to plan resident and family activities; to participate in educational activities or for any other purposes. Table 11 shows that the percent of facilities with resident groups increased from 94.4 percent in 2003 to 95.36 percent in 2008.

Facilities may have organized groups of family members who meet regularly to discuss issues about residents' care, treatment, and quality of life. Table 11 shows that approximately 43.2 percent of facilities reported family groups in 2003, but this decreased to 34.39 percent by 2008.



**TABLE 11**  
**PERCENT CERTIFIED NURSING FACILITIES WITH RESIDENT GROUPS AND FAMILY GROUPS**

<b>State</b>	<b>Resident Groups</b>						<b>Family Groups</b>					
	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	78.60	83.30	73.30	92.30	86.70	78.57	50.00	41.70	53.30	38.50	46.70	35.71
AL	94.90	95.50	96.30	95.90	96.30	95.75	62.50	61.90	63.20	66.90	61.50	62.26
AR	92.50	94.50	94.50	93.20	94.90	95.34	53.10	50.60	47.70	44.10	41.40	39.83
AZ	98.20	98.30	96.60	95.50	94.40	96.18	29.50	29.60	18.40	18.90	17.70	16.79
CA	92.40	93.40	93.40	93.20	93.70	93.55	42.20	39.90	37.10	35.10	32.10	30.40
CO	93.70	94.20	94.10	95.00	93.80	95.61	53.90	51.00	44.30	43.10	42.10	42.44
CT	100.00	100.00	99.60	100.00	100.00	99.57	61.20	58.80	58.60	56.50	51.50	50.65
DC	88.20	90.00	95.00	95.00	100.00	94.74	64.70	75.00	75.00	80.00	83.30	78.95
DE	97.30	92.30	97.60	92.90	86.40	95.56	51.40	51.30	43.90	35.70	27.30	28.89
FL	95.60	97.10	96.80	96.40	97.90	96.87	65.30	63.30	60.40	56.90	53.00	52.31
GA	95.00	95.70	94.70	94.90	96.00	95.81	48.70	48.30	46.70	43.30	39.90	37.43
HI	93.80	91.40	89.70	91.30	90.20	91.11	53.10	48.60	43.60	43.50	51.20	55.56
IA	90.50	89.60	91.30	89.90	84.70	85.59	17.80	15.00	16.10	19.10	14.20	14.64
ID	88.00	95.60	88.70	90.50	90.00	92.41	36.00	27.90	22.50	18.90	20.00	17.72
IL	96.10	96.80	97.10	97.40	96.80	96.53	44.10	42.60	39.90	38.40	35.70	31.92
IN	94.20	94.50	94.90	94.20	94.40	94.86	25.70	25.00	25.60	22.30	19.50	16.60
KS	94.70	95.50	96.60	96.80	97.60	97.10	32.70	31.50	27.80	28.00	29.00	25.80
KY	92.90	93.00	94.90	95.20	95.80	95.80	40.40	36.80	37.30	34.40	33.70	33.22
LA	91.10	92.80	94.50	93.40	93.30	94.04	26.00	26.30	28.70	26.30	27.00	28.42
MA	94.30	95.00	95.60	95.10	95.10	94.94	49.50	48.30	48.40	45.80	40.40	38.07
MD	94.10	92.00	94.70	94.20	94.90	92.95	68.20	61.50	68.90	65.80	62.00	63.44
ME	95.30	96.30	96.20	95.50	94.40	95.45	32.10	26.60	30.20	28.20	25.90	21.82
MI	99.30	97.90	97.30	97.80	98.80	97.35	50.70	45.50	40.80	39.40	39.00	36.39
MN	98.40	98.70	98.90	98.90	99.20	99.21	62.90	54.50	52.80	55.60	54.80	59.58
MO	90.70	92.90	94.10	92.90	93.40	94.35	32.30	29.80	27.50	26.10	26.10	22.03
MS	92.30	94.90	93.90	94.60	95.00	94.30	60.90	60.10	53.50	54.00	50.00	51.81
MT	91.30	93.10	93.20	92.90	95.30	95.60	29.30	29.90	34.10	31.80	25.90	25.27
NC	94.70	95.80	95.00	96.20	97.10	96.39	44.70	42.70	38.20	39.80	35.50	29.33
ND	96.30	95.10	98.70	95.10	96.30	95.06	20.70	14.60	14.10	13.60	13.80	9.88
NE	96.30	96.70	97.20	97.30	96.60	97.67	30.20	26.80	27.00	28.10	25.50	26.05
NH	97.30	96.10	96.10	96.10	95.10	97.30	48.60	43.40	42.10	39.50	39.50	35.14
NJ	96.10	96.50	95.90	96.00	96.00	96.08	45.30	45.20	37.20	35.70	32.20	32.49
NM	92.20	90.80	94.10	97.10	95.70	97.10	45.50	49.20	48.50	50.00	41.40	37.68
NV	93.20	87.80	89.10	91.50	93.80	100.00	45.50	29.30	28.30	29.80	27.10	31.91
NY	98.90	99.70	99.20	99.10	98.70	98.28	60.40	59.70	60.30	59.80	58.00	57.19
OH	95.50	96.40	96.10	95.90	95.60	96.21	36.70	35.60	28.70	30.70	27.30	26.21
OK	95.00	95.90	96.50	96.30	96.50	96.62	23.70	21.30	17.10	16.20	18.00	18.15
OR	94.70	97.00	96.00	97.70	97.80	97.79	39.10	38.80	29.00	24.80	26.90	22.06
PA	93.50	94.30	93.90	94.20	93.70	94.00	39.20	37.90	36.80	35.50	31.60	29.71
RI	94.40	94.90	96.40	97.70	96.50	96.43	22.20	25.60	31.00	33.30	38.80	40.48
SC	92.30	94.20	95.10	95.20	93.50	95.32	42.30	43.90	46.90	42.50	42.60	42.11
SD	99.10	98.00	97.20	98.10	99.10	99.00	35.20	34.00	32.70	32.70	31.10	25.00
TN	93.10	93.30	94.20	94.90	94.00	94.32	57.20	53.50	52.60	45.30	43.50	41.32
TX	93.10	93.90	94.30	94.30	94.50	94.80	43.50	43.70	41.20	38.10	37.20	38.42
UT	85.40	84.00	84.00	85.60	86.90	86.46	25.60	22.20	24.70	23.30	22.60	21.88
VA	95.90	95.00	96.40	95.90	94.00	94.70	43.50	38.60	37.90	35.80	36.60	36.40
VT	100.00	100.00	100.00	100.00	100.00	97.50	22.00	23.70	25.00	22.50	26.30	25.00
WA	93.80	93.30	95.10	95.80	96.60	97.05	34.90	36.70	33.70	32.10	32.40	27.00
WI	93.70	95.10	93.90	94.90	96.10	96.72	33.00	32.20	30.10	29.10	28.10	23.99
WV	87.70	90.70	87.50	88.10	90.10	90.84	46.90	47.50	46.70	43.10	43.00	45.80
WY	94.30	91.70	91.70	91.40	92.10	94.87	45.70	33.30	36.10	34.30	31.60	35.90
<b>US</b>	<b>94.40</b>	<b>95.00</b>	<b>95.20</b>	<b>95.20</b>	<b>95.20</b>	<b>95.36</b>	<b>43.20</b>	<b>41.30</b>	<b>39.20</b>	<b>37.80</b>	<b>35.70</b>	<b>34.39</b>

## **RESIDENT CHARACTERISTICS**

### **Background**

Nursing facilities vary in the type of residents they serve. Resident characteristics affect the environment of the facility. Moreover, the special characteristics of nursing facility residents require different levels and types of staff resources and affect the facility's success in providing high quality care. A number of nursing facility resident classification systems have been developed and are often referred to as "case mix" indicators.

The resource utilization group system (RUGS-II) was the most well established case mix approach tested which as for reliability and validity (Fries and Cooney, 1985; Schneider et al., 1988; Fries et al., 1989). RUGS II was developed from a study of Medicaid nursing home residents in New York and consists of 16 groups which are first divided into five categories: special care, rehabilitation, clinically complex, severe behavioral problems, and reduced physical functioning. Subgroups are formed under each of these categories by degree of dependency in activities of daily living (ADL). RUGS III is the latest version developed for the current HCFA Nursing Home Case Mix demonstration project (Fries et al. 1994).

The OSCAR report has summary data on residents at the facility level describing resident's need for assistance with activities of daily living (ADL). Although interesting, such data are difficult to understand unless they are summarized in some way. Two types of summary data are presented. First, a simple summary of three major activities of daily living (ADLs) was compiled.

The facilities were asked to rate each resident's ADLs on a scale of 1 to 3 from needs little or no assistance to needs extensive assistance. The three ADL scores were for those residents who needed assistance in: (1) eating, (2) toileting, and (3) transferring. A score of 1 was assigned to residents who were independent. A score of 2 was assigned to those that needed some supervision. A score of 3 was assigned to those who were dependent.

Each ADL score was multiplied by the number of residents in that category for each facility. An average composite score was developed by adding each of the three scores together and dividing by the total number of residents in the facility to compute each facility's index score. Thus, a summary case mix score ranging from 3-9 was compiled for each facility based on resident ADL characteristics. Individual facility scores were then summarized for each state. Because of reporting changes by HCFA, data for the earlier years could not be computed for this report.

The second approach used was based upon a composite case mix index for nursing facilities. This approach was developed by Thoms (1975) and used by a number of researchers including Cowles (Health Data Associates 1994). This approach constructed a casemix score by multiplying the proportion of residents with selected ADL limitations and selected patient problems times the estimated number of management minutes required for care of those selected problems, developed from a study of service requirements by Thoms

(1975). Thus, a weighted score was multiplied by the percentage of residents in various categories as follows: completely bedfast times 46; needing assistance with ambulation times 32; needing full eating assistance times 45; needing some eating assistance times 20; having an indwelling catheter times 20; incontinent times 48; having decubitus ulcers times 20; receiving bowel or bladder retraining times 26; and receiving special skin care times 10. Thus, an index was constructed for each facility and then summarized to develop an average resident acuity at the state level.

In addition, the following characteristics show the type of more advanced care that residents receive: percent of clients receiving special treatments (injections, ostomy care, IV feedings, tube feedings, or suctioning), and percentage with organic psychiatric or other psychiatric conditions. Other characteristics that may be important are the percentage who receive psychotropic drugs and who have pressure ulcers, contractures, incontinence, and catheters.

## FINDINGS

### RESIDENT CHARACTERISTICS AND SERVICES PROVIDED

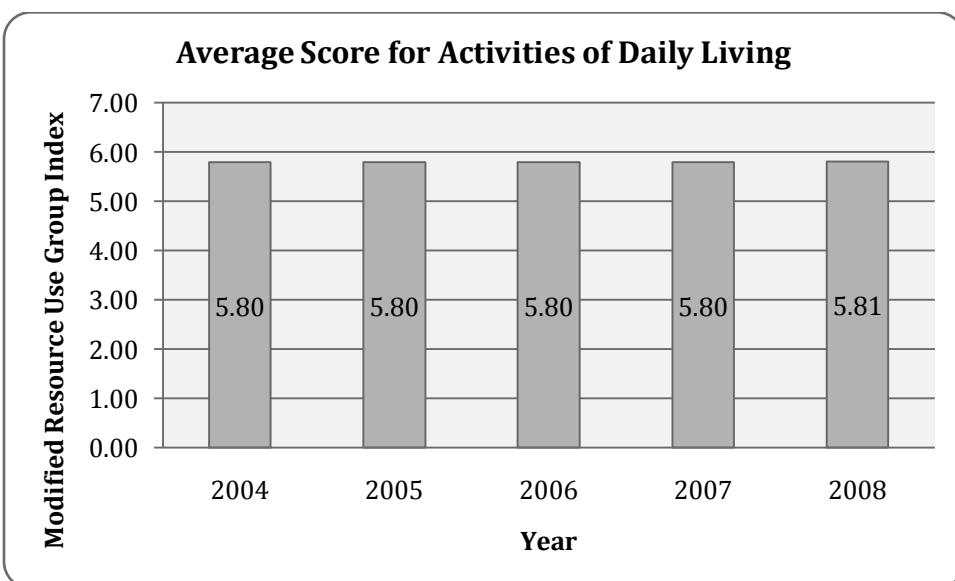
#### Assistance with Activities of Daily Living

Table 12 shows the average score for residents needing assistance with eating in facilities by state. Each state has an average score from 1 to 3 in terms of the need for assistance with eating, where 1 indicates the lowest need and 3 the greatest need for assistance. The U.S. average resident need for eating assistance remained almost constant at 1.7 for all facilities surveyed in the 2003-2007 period, and declined to 1.66 in 2008.

The average score for residents needing assistance in toileting is shown in Table 12. The U.S. average resident need for toileting assistance was 2.1 for all facilities in the 2003-2007 period, with an increase to 2.12 in 2008.

Finally, the need for resident assistance with transferring from surfaces such as to and from the bed, chair, wheelchair or to and from a standing position is shown in Table 12. The average resident need was 2.0 for transferring in the 2003-2007 period, and inclined to 2.03 in 2008.

Table 12 also shows the average summary scores for these three activities of daily living for all facilities in each state. The average resident need score for eating, toileting, and transferring for all facilities surveyed in the U.S. was 5.80 in the 2003-2007 period, and 5.81 in 2008. This approach of summary scores on a three-point scale shows some variation across states.



**TABLE 12**  
**AVERAGE FACILITY SCORES FOR ACTIVITIES OF DAILY LIVING**

State	Eating*					Toileetting*					Transferring*					Modified Resource Use Group Index**				
	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
AK	1.80	1.80	1.80	1.70	1.73	2.30	2.20	2.20	2.20	2.19	2.20	2.20	2.10	2.10	2.10	6.30	6.20	6.00	6.00	6.02
AL	1.80	1.70	1.70	1.70	1.70	2.20	2.20	2.20	2.20	2.21	2.10	2.10	2.10	2.10	2.12	6.10	6.00	6.10	6.10	6.04
AR	1.60	1.60	1.60	1.60	1.61	2.10	2.10	2.10	2.10	2.08	2.00	2.00	2.00	2.00	1.98	5.70	5.70	5.70	5.70	5.68
AZ	1.60	1.60	1.60	1.60	1.58	2.10	2.10	2.10	2.10	2.15	2.00	2.00	2.00	2.00	2.04	5.70	5.70	5.80	5.80	5.77
CA	1.80	1.80	1.80	1.80	1.80	2.30	2.30	2.30	2.30	2.25	2.10	2.20	2.20	2.20	2.16	6.20	6.20	6.20	6.20	6.21
CO	1.60	1.60	1.60	1.60	1.59	2.00	2.00	2.00	2.00	2.05	1.90	1.90	1.90	1.90	1.96	5.50	5.60	5.50	5.50	5.59
CT	1.60	1.60	1.60	1.60	1.57	2.10	2.10	2.10	2.10	2.10	2.00	2.00	2.00	2.00	1.99	5.60	5.60	5.60	5.70	5.66
DC	1.70	1.80	1.70	1.70	1.75	2.20	2.30	2.20	2.20	2.30	2.10	2.20	2.20	2.20	2.18	6.10	6.20	6.10	6.10	6.23
DE	1.70	1.70	1.70	1.60	1.62	2.20	2.20	2.20	2.20	2.19	2.10	2.00	2.10	2.10	2.07	5.90	5.90	6.00	5.90	5.88
FL	1.70	1.70	1.70	1.70	1.71	2.20	2.20	2.20	2.20	2.21	2.10	2.10	2.10	2.10	2.13	6.00	6.00	6.00	6.10	6.06
GA	1.70	1.70	1.70	1.70	1.75	2.20	2.20	2.20	2.20	2.24	2.10	2.10	2.10	2.10	2.10	6.00	6.00	6.00	6.00	6.10
HI	1.90	1.90	1.90	2.00	1.97	2.30	2.40	2.40	2.40	2.40	2.20	2.20	2.20	2.20	2.29	6.40	6.50	6.40	6.70	6.66
IA	1.50	1.50	1.50	1.50	1.51	2.00	2.00	2.00	2.00	1.99	1.90	1.90	1.90	1.90	1.89	5.40	5.40	5.40	5.40	5.39
ID	1.60	1.60	1.60	1.60	1.62	2.10	2.10	2.10	2.10	2.07	2.00	2.00	2.00	2.00	2.00	5.70	5.60	5.70	5.70	5.69
IL	1.50	1.50	1.50	1.60	1.56	1.90	2.00	1.90	1.90	1.95	1.80	1.90	1.90	1.90	1.88	5.30	5.30	5.40	5.40	5.39
IN	1.70	1.70	1.70	1.70	1.69	2.00	2.00	2.00	2.00	2.06	2.00	2.00	2.00	2.00	1.99	5.70	5.70	5.70	5.70	5.74
KS	1.60	1.60	1.60	1.50	1.56	2.00	2.00	2.00	2.00	1.96	1.90	1.90	1.90	1.90	1.86	5.40	5.40	5.40	5.40	5.38
KY	1.80	1.80	1.80	1.70	1.71	2.30	2.20	2.20	2.20	2.19	2.20	2.10	2.10	2.10	2.11	6.20	6.20	6.10	6.10	6.02
LA	1.70	1.70	1.70	1.70	1.75	2.10	2.10	2.10	2.10	2.08	2.00	1.90	1.90	2.00	1.97	5.80	5.70	5.80	5.79	5.79
MA	1.60	1.60	1.60	1.60	1.63	2.10	2.20	2.10	2.20	2.16	2.00	2.00	2.00	2.00	2.06	5.80	5.80	5.80	5.80	5.84
MD	1.70	1.70	1.80	1.70	1.74	2.30	2.30	2.30	2.30	2.29	2.20	2.20	2.20	2.20	2.20	6.20	6.20	6.20	6.20	6.23
ME	1.60	1.60	1.60	1.60	1.62	2.20	2.20	2.20	2.20	2.17	2.10	2.10	2.10	2.10	2.11	5.90	5.90	5.90	5.90	5.90
MI	1.60	1.60	1.60	1.60	1.61	2.10	2.10	2.10	2.10	2.14	2.00	2.00	2.00	2.00	2.06	5.70	5.80	5.80	5.80	5.80
MN	1.50	1.50	1.50	1.50	1.52	2.00	2.00	2.00	2.00	1.96	1.90	1.90	1.90	1.90	1.88	5.40	5.40	5.40	5.40	5.35
MO	1.60	1.60	1.60	1.60	1.62	2.00	2.00	2.00	2.00	1.99	1.90	1.90	1.90	1.90	1.90	5.50	5.50	5.40	5.50	5.51
MS	1.70	1.70	1.70	1.70	1.70	2.10	2.10	2.10	2.10	2.09	2.00	2.00	2.00	2.00	2.03	5.80	5.80	5.80	5.80	5.82
MT	1.50	1.50	1.60	1.60	1.58	2.00	1.90	2.00	1.90	1.99	1.80	1.80	1.80	1.80	1.89	5.30	5.30	5.40	5.40	5.45
NC	1.70	1.70	1.70	1.70	1.73	2.30	2.30	2.20	2.20	2.23	2.20	2.20	2.10	2.10	2.14	6.20	6.20	6.10	6.10	6.10
ND	1.50	1.50	1.50	1.50	1.46	2.00	2.00	2.00	1.90	1.92	1.90	1.90	1.90	1.80	1.84	5.40	5.40	5.30	5.20	5.22
NE	1.60	1.60	1.60	1.60	1.62	2.00	2.00	2.10	2.00	2.04	1.90	1.90	1.90	1.90	1.94	5.60	5.60	5.60	5.60	5.60
NH	1.50	1.50	1.50	1.50	1.46	2.00	2.00	2.00	2.00	2.02	1.90	1.90	1.90	2.00	1.94	5.40	5.40	5.50	5.50	5.42
NJ	1.60	1.60	1.60	1.60	1.67	2.10	2.10	2.20	2.10	2.16	2.00	2.00	2.10	2.10	2.07	5.80	5.80	5.80	5.90	5.90
NM	1.60	1.60	1.70	1.70	1.75	2.10	2.10	2.10	2.10	2.14	2.00	2.00	2.00	2.00	2.06	5.70	5.70	5.80	5.90	5.94
NV	1.70	1.60	1.60	1.70	1.74	2.20	2.10	2.10	2.10	2.13	2.00	2.00	2.00	2.00	2.05	5.90	5.80	5.70	5.90	5.91
NY	1.80	1.70	1.70	1.70	1.74	2.20	2.20	2.10	2.10	2.16	2.10	2.10	2.10	2.10	2.08	6.00	6.00	6.00	6.00	5.98
OH	1.70	1.70	1.70	1.70	1.72	2.10	2.10	2.10	2.10	2.10	2.00	2.00	2.00	2.00	2.04	5.90	5.90	5.90	5.90	5.86
OK	1.60	1.60	1.60	1.60	1.53	2.00	2.00	2.00	2.00	1.98	1.90	1.90	1.90	1.90	1.89	5.60	5.60	5.50	5.50	5.40
OR	1.70	1.70	1.60	1.60	1.61	2.20	2.20	2.20	2.20	2.17	2.10	2.10	2.10	2.10	2.07	6.00	6.00	5.90	5.90	5.86
PA	1.70	1.70	1.60	1.60	1.63	2.20	2.20	2.20	2.20	2.13	2.10	2.10	2.10	2.10	2.08	6.00	5.90	5.90	5.90	5.85
RI	1.60	1.50	1.60	1.60	1.57	2.00	2.00	2.10	2.00	2.06	1.90	1.90	1.90	1.90	1.94	5.50	5.50	5.50	5.50	5.56
SC	1.80	1.80	1.80	1.80	1.78	2.40	2.40	2.30	2.40	2.36	2.20	2.20	2.20	2.20	2.22	6.40	6.40	6.30	6.40	6.36
SD	1.50	1.50	1.50	1.50	1.49	1.90	1.90	1.90	1.90	1.90	1.80	1.80	1.80	1.80	1.82	5.30	5.30	5.20	5.20	5.21
TN	1.80	1.80	1.80	1.80	1.79	2.30	2.20	2.20	2.20	2.22	2.10	2.10	2.10	2.10	2.12	6.20	6.20	6.10	6.10	6.13
TX	1.60	1.60	1.60	1.60	1.64	2.10	2.10	2.10	2.10	2.11	2.00	2.00	2.00	2.00	1.99	5.70	5.70	5.70	5.70	5.73
UT	1.70	1.70	1.60	1.70	1.70	2.00	2.00	2.10	2.00	2.07	1.90	1.90	2.00	1.90	2.01	5.60	5.60	5.70	5.60	5.78
VA	1.80	1.80	1.80	1.80	1.77	2.30	2.30	2.20	2.30	2.24	2.20	2.20	2.10	2.10	2.14	6.30	6.30	6.20	6.20	6.14
VT	1.60	1.60	1.60	1.60	1.56	2.10	2.10	2.20	2.20	2.17	2.00	2.00	2.00	2.10	2.05	5.70	5.70	5.80	5.80	5.79
WA	1.60	1.70	1.60	1.60	1.64	2.20	2.20	2.20	2.10	2.16	2.10	2.10	2.10	2.10	2.06	5.90	5.90	5.90	5.80	5.86
WI	1.50	1.50	1.50	1.50	1.50	2.00	2.00	2.00	2.00	2.03	1.90	1.90	1.90	1.90	1.95	5.50	5.50	5.50	5.50	5.48
WV	1.70	1.70	1.70	1.70	1.68	2.20	2.10	2.10	2.10	2.16	2.10	2.10	2.00	2.00	2.06	5.90	5.90	5.90	5.90	5.90
WY	1.60	1.50	1.50	1.50	1.56	2.00	1.90	2.00	2.00	1.99	1.90	1.90	1.90	1.90	1.91	5.50	5.40	5.40	5.40	5.46
US	1.70	1.70	1.70	1.70	1.66	2.10	2.10	2.10	2.10	2.12	2.00	2.00	2.00	2.00	2.03	5.80	5.80	5.80	5.80	5.81

**Nursing Facilities, Staffing, Residents and Facility Deficiencies, 2003-2008**

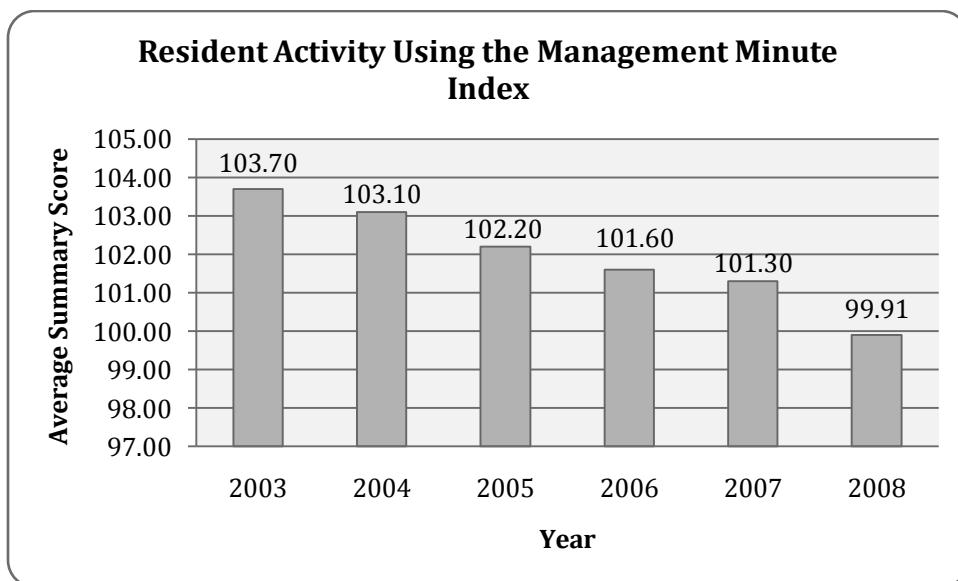
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## **Summary Resident Acuity Index**

Table 13 shows the average summary score for resident acuity using the management minute approach. This index is based on a compilation of resident characteristics including being bedfast, needing assistance with ambulation, needing full eating assistance, needing some eating assistance, having an indwelling catheter, being incontinent, having a pressure ulcer, receiving bowel or bladder retraining, and receiving special skin care. Each of these characteristics were weighted by the average amount of management minutes or the time needed to provide nursing care.

The average index was 103.70 in 2003 which declined to 99.91 in 2008 for all facilities surveyed in the U.S. This index allows for comparisons of acuity differences in facilities across states, which ranged from 76.76 in New Hampshire to 126.32 in Hawaii in 2008. This shows a wide variation in levels across states.



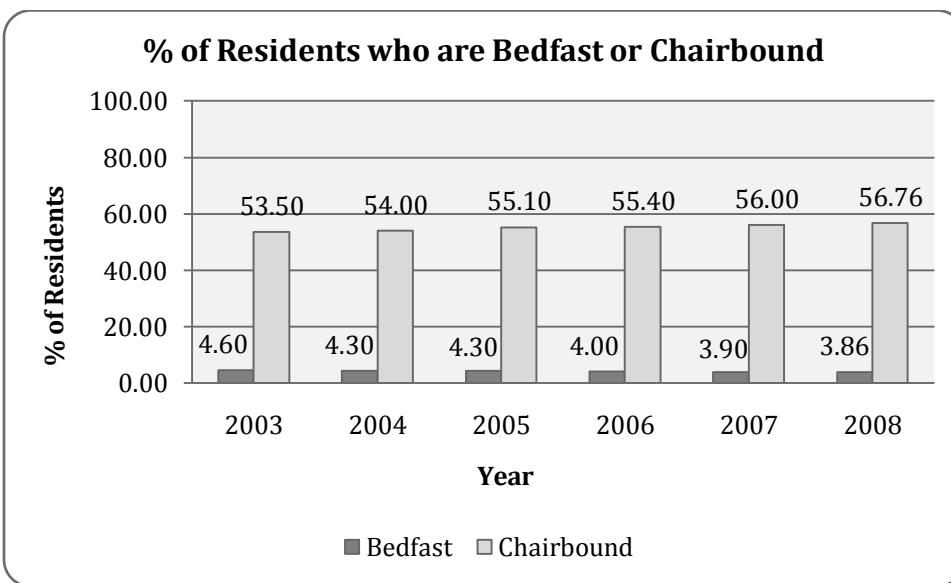
**TABLE 13**  
**AVERAGE SUMMARY SCORE FOR RESIDENT**  
**ACUITY**  
**USING THE MANAGEMENT MINUTE INDEX**

<b>State</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	94.20	99.70	85.30	42.00	92.70	93.63
AL	106.70	106.00	104.90	105.80	106.30	103.79
AR	102.90	104.20	101.20	102.20	100.10	93.36
AZ	100.90	98.30	101.50	98.20	93.30	98.96
CA	111.50	111.60	111.20	109.40	110.40	108.07
CO	90.50	89.20	88.30	90.60	90.20	91.85
CT	96.00	93.10	93.00	89.80	88.50	85.46
DC	103.00	99.70	113.00	102.30	107.10	111.99
DE	106.80	101.80	100.10	93.90	95.30	93.30
FL	106.70	107.10	105.40	107.70	108.00	106.56
GA	115.00	116.00	115.60	116.00	115.30	114.78
HI	125.50	114.40	111.90	120.40	129.90	126.32
IA	76.80	79.80	77.30	77.00	77.30	78.18
ID	101.20	100.10	96.90	90.20	87.90	100.64
IL	84.50	84.40	86.80	88.20	88.70	86.81
IN	93.60	94.70	93.60	95.40	96.50	94.12
KS	88.00	87.30	87.70	82.90	83.30	79.30
KY	111.20	111.70	108.80	107.10	106.80	107.52
LA	111.00	109.40	108.20	107.10	106.30	102.28
MA	95.30	96.70	93.50	94.80	97.00	95.26
MD	113.20	114.10	113.50	112.50	110.80	111.14
ME	107.20	108.00	101.30	101.10	98.50	101.94
MI	100.60	96.20	97.60	97.90	98.00	96.47
MN	95.70	94.70	92.40	91.80	93.50	88.52
MO	89.30	90.10	86.90	89.40	89.60	88.44
MS	113.20	115.50	112.00	113.30	113.80	111.66
MT	77.90	83.30	82.80	85.70	81.80	83.78
NC	114.50	113.70	116.70	114.90	114.90	111.16
ND	83.70	83.70	76.30	82.70	89.20	81.17
NE	83.60	81.10	78.50	76.60	76.30	81.09
NH	87.00	91.40	90.40	90.90	84.50	76.76
NJ	96.70	95.30	95.00	96.70	96.10	95.41
NM	94.60	99.90	102.20	105.33	106.20	103.11
NV	113.20	108.00	110.10	101.00	108.50	102.53
NY	115.70	114.60	112.60	110.90	108.60	108.08
OH	103.70	102.00	100.40	98.80	97.80	97.34
OK	94.70	97.10	97.80	97.80	97.10	91.22
OR	102.60	107.30	98.40	99.30	93.20	97.38
PA	106.40	107.70	105.60	104.50	103.40	102.35
RI	79.00	76.70	82.90	82.00	78.90	80.23
SC	125.80	123.80	127.30	127.00	127.40	120.21
SD	93.30	96.30	90.80	88.30	87.80	82.98
TN	115.70	112.40	112.10	111.90	111.60	112.23
TX	104.70	102.90	100.80	99.90	99.50	98.83
UT	96.70	98.60	93.90	91.94	101.70	95.91
VA	115.80	113.00	111.30	110.50	108.80	106.44
VT	99.70	107.80	101.60	105.30	106.40	103.59
WA	104.80	99.20	96.40	95.40	94.80	95.74
WI	88.40	84.80	83.80	82.80	84.20	82.45
WV	107.30	111.50	107.00	109.60	101.80	104.43
WY	79.20	89.30	78.50	94.30	79.10	87.86
<b>US</b>	<b>103.70</b>	<b>103.10</b>	<b>102.20</b>	<b>101.60</b>	<b>101.30</b>	<b>99.91</b>

## **Residents Who Are Bedfast or Chair Bound**

Table 14 shows the percent of total residents who were bedfast in the 2003 to 2008 period. This includes residents who were in a bed or recliner for 22 or more hours per day in the week before the survey. The percent of bedfast residents decreased from 4.6 in 2003 to 3.86 in 2008 for all facilities surveyed. In 2008, the average percent of bedfast residents ranged from 0.73 percent in Nebraska to 8.14 percent in Louisiana.

A number of residents depend on a chair for mobility or are unable to walk without extensive or constant support from others. The percent of total residents who were chair bound averaged from 53.5 to 56.76 percent in the U.S. in 2003-2008 (See Table 14). The percent of chair bound residents ranged from 38.95 percent in Rhode Island to 66.14 percent in Washington in 2008.



**TABLE 14**  
**PERCENTAGE OF RESIDENTS**  
**WHO ARE BEDFAST OR CHAIRBOUND**

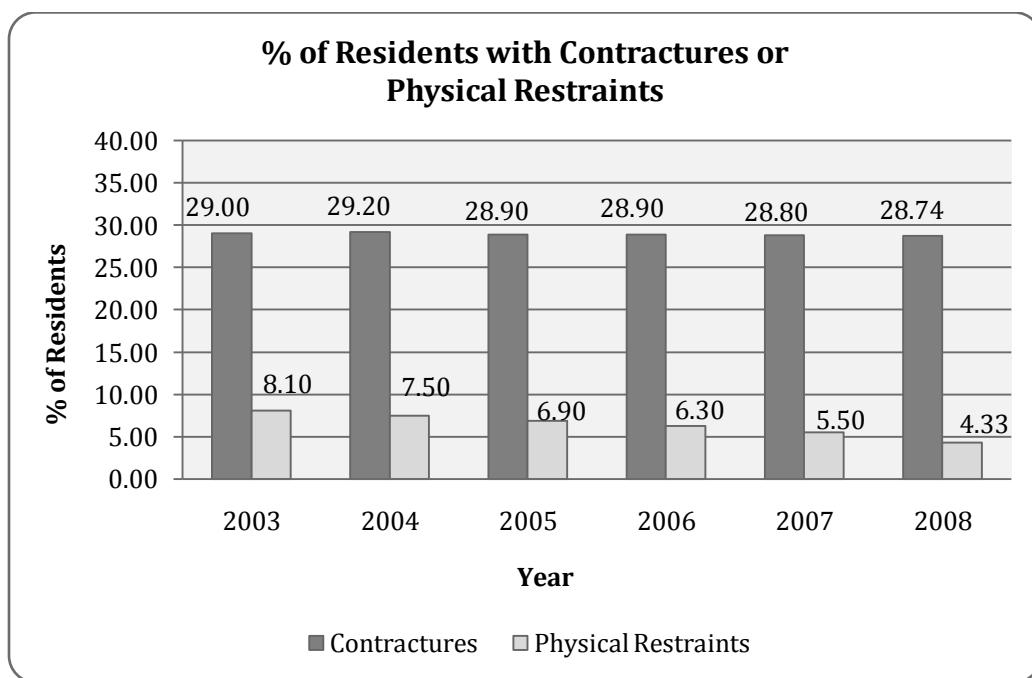
<b>State</b>	<b>Bedfast</b>						<b>Chairbound</b>					
	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	7.30	2.40	3.80	0.30	2.60	4.12	59.80	65.50	53.00	36.80	50.00	51.06
AL	8.80	7.00	7.90	7.30	7.10	5.74	53.90	56.20	57.50	56.60	58.00	59.24
AR	5.80	5.00	5.90	4.60	4.70	4.71	54.30	54.80	52.70	54.70	55.10	52.93
AZ	3.80	3.40	3.10	3.10	2.90	3.71	56.70	54.80	62.60	59.70	60.00	60.25
CA	6.60	6.40	6.30	6.00	5.90	6.14	56.30	55.70	56.40	55.70	56.70	56.59
CO	2.60	2.80	2.60	2.70	2.20	2.62	49.90	51.40	50.60	51.20	52.70	54.09
CT	1.80	1.70	2.30	1.80	1.80	1.73	48.30	50.30	50.40	49.10	49.50	51.10
DC	3.50	5.50	2.60	3.10	2.70	3.69	53.50	65.20	63.20	58.90	63.20	65.34
DE	3.90	5.80	3.20	3.80	4.50	3.23	54.60	53.00	60.20	57.30	58.70	61.97
FL	3.60	3.20	3.60	3.40	3.30	3.38	60.60	62.90	63.80	64.90	65.10	65.17
GA	6.10	6.30	6.40	6.60	6.70	5.96	53.70	52.70	56.00	56.00	57.30	58.42
HI	9.20	7.70	8.00	5.60	6.90	7.37	53.20	56.30	57.80	61.80	62.60	56.59
IA	1.70	1.80	1.40	1.60	1.50	1.87	47.30	47.00	47.40	45.10	45.40	48.09
ID	2.40	2.60	3.10	2.60	2.10	2.06	54.50	60.50	54.90	56.00	53.30	59.18
IL	2.20	2.40	2.20	2.00	1.90	1.95	48.80	50.40	51.30	51.80	52.00	52.81
IN	3.50	3.70	3.40	3.00	3.30	3.00	54.40	56.20	56.50	56.00	57.10	58.28
KS	2.10	1.90	1.80	1.80	1.80	1.78	49.10	50.40	51.90	51.40	51.00	50.12
KY	9.40	9.70	8.70	8.00	7.50	7.20	50.50	52.00	52.20	52.50	53.40	53.91
LA	10.30	10.50	10.50	8.50	8.40	8.14	50.60	50.50	53.40	54.70	53.50	52.02
MA	2.10	2.10	2.20	2.30	2.10	1.92	45.80	46.90	44.80	45.70	45.00	46.87
MD	4.60	4.80	4.80	4.40	4.70	4.56	54.60	55.90	55.30	58.80	60.30	59.78
ME	4.40	4.20	4.80	4.00	3.50	3.76	58.10	57.80	57.10	59.30	58.70	56.49
MI	2.80	2.50	2.70	2.90	3.00	2.75	57.90	57.40	58.90	60.40	62.40	63.87
MN	0.90	1.10	1.20	0.90	0.90	0.85	52.90	52.60	54.00	54.80	55.70	56.55
MO	2.90	2.20	2.20	2.10	2.00	1.98	52.90	53.50	52.70	52.80	55.10	55.24
MS	11.00	7.90	9.20	7.30	6.80	6.84	54.80	56.10	56.50	57.10	56.70	57.89
MT	1.50	2.10	2.80	2.50	2.80	2.65	46.20	48.10	47.40	45.10	46.30	46.91
NC	9.00	8.60	8.90	8.10	7.80	7.56	53.90	54.90	55.10	53.80	56.10	56.57
ND	1.30	1.60	1.50	1.90	1.30	1.72	55.90	55.50	57.20	56.20	55.40	56.34
NE	1.40	1.30	1.20	1.20	1.10	0.73	52.30	51.70	52.80	52.10	51.40	51.76
NH	2.10	2.50	2.10	2.20	1.90	2.22	44.90	44.50	45.20	47.60	46.30	46.80
NJ	3.50	3.40	3.30	3.10	3.00	3.06	55.10	57.00	57.30	58.90	59.70	59.71
NM	1.90	2.60	2.60	3.10	1.90	2.65	53.60	50.40	60.70	57.60	59.80	61.97
NV	6.00	3.50	5.40	7.40	6.60	6.74	55.20	56.40	58.50	57.90	60.60	59.18
NY	2.50	2.40	2.40	2.30	2.10	1.93	60.60	60.90	61.10	61.00	60.40	60.58
OH	3.90	3.70	3.50	3.60	3.50	3.41	52.60	53.90	53.20	52.30	51.80	52.69
OK	6.00	5.80	6.60	6.20	6.10	5.36	51.40	51.50	53.60	54.20	54.70	53.24
OR	5.70	5.00	5.80	5.80	4.90	5.34	58.30	61.30	59.40	58.50	61.60	59.93
PA	4.60	4.30	4.10	3.80	3.80	3.45	54.40	55.70	55.60	55.80	56.70	57.58
RI	1.20	1.10	1.70	1.60	1.70	1.77	40.60	37.30	37.80	39.60	38.60	38.95
SC	6.50	5.40	5.80	5.10	5.50	4.87	59.70	59.40	62.80	60.20	63.20	64.53
SD	1.40	1.20	1.20	0.60	0.90	0.99	56.80	57.60	59.00	56.60	53.40	55.70
TN	8.00	7.50	7.40	6.90	6.60	6.67	51.80	54.60	53.90	55.40	56.60	59.96
TX	7.80	6.70	6.70	6.30	6.20	5.63	54.70	57.50	56.70	58.80	59.50	61.18
UT	2.30	2.80	3.40	3.00	2.60	2.89	46.70	47.10	47.80	44.40	46.10	50.51
VA	5.60	5.70	5.50	5.10	4.90	5.22	62.40	62.50	60.80	60.40	62.20	62.88
VT	4.00	4.30	2.80	3.50	3.30	4.26	51.10	50.00	53.10	51.90	50.70	52.20
WA	4.70	4.40	4.10	4.10	4.40	4.15	63.30	65.20	63.10	64.90	64.80	66.14
WI	1.50	1.60	1.50	1.70	1.60	1.70	55.50	55.50	55.80	58.40	57.60	59.05
WV	5.60	6.10	4.70	5.30	4.80	4.40	49.20	52.50	52.60	54.60	55.10	58.19
WY	1.40	4.50	2.00	1.60	2.20	2.73	51.10	46.80	41.70	48.30	42.80	46.15
<b>US</b>	<b>4.60</b>	<b>4.30</b>	<b>4.30</b>	<b>4.00</b>	<b>3.90</b>	<b>3.86</b>	<b>53.50</b>	<b>54.00</b>	<b>55.10</b>	<b>55.40</b>	<b>56.00</b>	<b>56.76</b>

## **Contractures**

Contractures, which are restrictions in full range of motion of any joint due to deformity, disuse and pain, are common problems of nursing facility residents. In 2003, 29.0 percent of residents were reported as having contractures and this increased to 28.74 percent in all facilities surveyed in 2008 (See Table 15). The average percentage reported ranged from 16.8 percent in Connecticut facilities to 48.94 percent in South Dakota in 2008.

## **Physical Restraints**

Physical restraints include physical or mechanical devices, material or equipment, which cannot be easily removed by residents, to restrict freedom of movement or normal access to one's own body. In 2003, 8.1 percent of facilities reported using such restraints but this declined to 4.33 percent in all facilities surveyed in 2008 (See Table 15). The reduction may have been related to regulations and training about the negative effects of restraints on residents. The average percentage in 2008 ranged from 1.26 percent in New Hampshire to 8.56 in California.

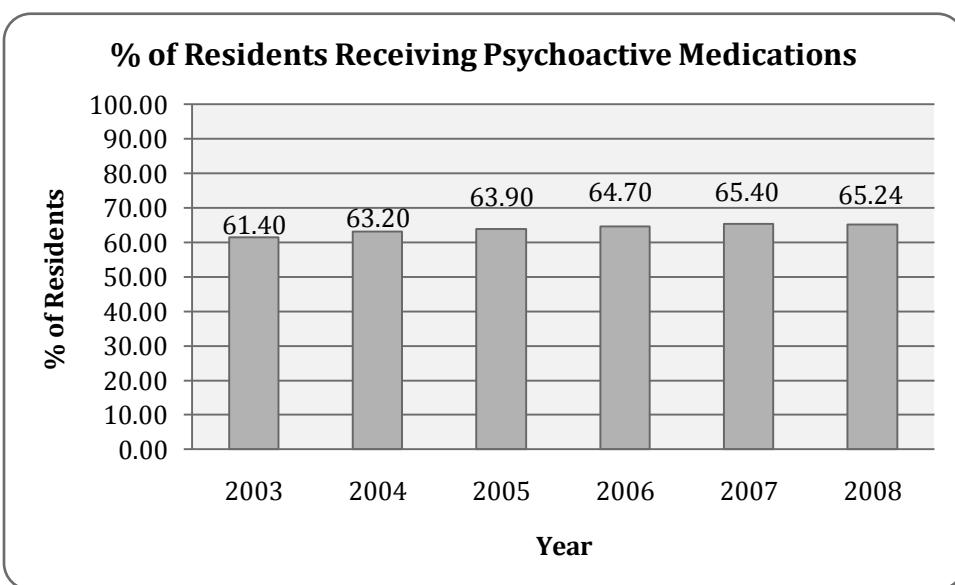


**TABLE 15**  
**PERCENT OF RESIDENTS**  
**WITH CONTRACTURES AND PHYSICAL RESTRAINTS**

State	Contractures						Physical Restraints					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
AK	42.60	48.60	51.20	56.20	55.80	45.20	2.50	4.10	6.70	5.40	4.50	1.35
AL	34.80	35.90	35.20	33.90	35.30	38.74	4.70	5.00	4.50	4.20	2.80	2.43
AR	24.00	22.70	22.50	21.60	19.90	18.02	17.10	16.20	15.00	13.70	11.90	6.37
AZ	17.90	20.90	21.70	24.20	24.40	30.19	9.70	9.00	11.30	8.10	5.00	3.55
CA	27.30	27.50	27.70	27.20	28.10	28.89	14.10	14.00	13.50	12.90	11.00	8.56
CO	24.00	22.80	24.40	24.10	23.40	25.42	9.30	8.20	7.50	7.50	6.90	5.59
CT	19.20	17.50	17.70	18.30	18.40	16.80	10.30	9.10	7.80	6.10	5.00	3.47
DC	27.90	27.60	31.60	26.70	24.70	25.11	5.30	2.20	2.00	1.90	2.10	2.67
DE	27.70	24.50	24.70	28.20	29.40	33.84	3.90	2.60	3.20	4.40	5.00	3.90
FL	21.80	21.70	20.60	21.10	21.70	21.10	8.10	8.50	7.90	7.70	6.70	4.78
GA	33.30	34.10	34.50	35.30	34.10	34.84	9.60	9.20	7.30	6.50	5.60	4.17
HI	42.20	45.60	34.10	41.00	41.80	42.81	5.50	4.80	4.70	5.60	4.40	7.24
IA	33.50	34.10	33.50	33.00	33.50	34.29	3.20	2.80	2.60	2.50	2.30	2.37
ID	28.10	31.00	26.10	28.10	27.40	32.10	7.30	6.70	6.20	3.20	3.80	3.68
IL	24.30	24.60	24.60	26.70	28.00	26.78	4.70	4.80	4.40	4.40	4.20	3.86
IN	24.60	25.90	24.40	24.90	25.60	23.80	5.90	5.70	5.50	5.60	4.70	3.54
KS	30.30	32.70	31.50	30.30	28.80	28.34	5.10	4.20	2.90	2.20	2.60	1.29
KY	28.10	27.20	26.40	25.10	25.70	25.67	6.80	7.50	6.80	6.40	5.90	5.30
LA	36.20	37.10	37.40	38.60	35.70	34.60	18.10	16.00	14.00	12.50	11.00	8.30
MA	17.60	17.50	18.10	18.00	19.30	18.24	6.30	6.70	6.00	5.30	4.80	4.20
MD	23.90	24.20	25.30	25.80	22.80	25.24	9.70	8.30	6.80	5.30	4.20	3.80
ME	39.30	41.70	40.30	38.20	37.00	42.08	9.00	6.60	4.60	3.40	2.90	1.88
MI	25.70	27.30	26.10	27.40	27.80	25.43	6.70	6.10	5.80	5.40	4.80	4.18
MN	33.00	32.30	34.30	33.40	33.70	30.88	4.80	4.60	4.00	3.30	2.80	2.33
MO	22.40	22.60	23.20	23.00	22.70	21.72	6.60	5.70	6.30	6.10	5.50	4.51
MS	44.50	46.60	45.10	43.20	44.00	42.24	12.50	12.20	11.10	10.80	8.80	6.01
MT	35.20	36.20	37.90	35.70	38.30	36.73	3.70	2.90	2.70	2.50	2.40	1.87
NC	34.10	34.10	36.10	34.60	31.80	33.34	8.30	8.60	9.20	9.10	7.20	4.44
ND	40.00	39.20	42.60	37.90	38.00	37.31	2.60	2.60	2.40	2.70	2.20	1.69
NE	40.20	38.60	39.80	39.10	37.90	38.69	1.90	1.60	1.80	1.60	1.50	1.57
NH	28.70	31.50	32.10	33.00	30.30	27.25	4.70	4.50	3.20	2.50	2.20	1.26
NJ	17.20	16.70	15.40	15.90	16.40	17.98	5.80	5.90	5.60	5.30	4.90	3.91
NM	30.40	32.70	29.30	33.10	32.30	32.73	7.80	7.90	8.20	7.50	6.20	5.74
NV	36.20	33.90	33.50	30.50	30.80	31.51	9.90	8.80	7.90	6.40	9.50	3.73
NY	46.30	44.00	41.80	39.90	38.60	37.29	7.10	6.20	5.60	5.10	4.60	3.76
OH	39.70	39.80	38.10	38.80	36.10	35.74	7.50	6.80	6.10	5.80	5.60	4.89
OK	26.70	26.70	25.50	24.70	25.30	24.75	12.10	12.70	13.30	12.30	10.60	6.90
OR	29.50	31.70	28.70	32.70	30.00	31.06	10.50	9.30	7.30	6.00	4.20	4.48
PA	21.60	22.20	22.30	22.50	23.00	22.58	6.00	5.40	4.70	4.40	3.80	3.05
RI	22.10	19.00	19.50	21.60	21.60	25.39	3.10	4.70	3.70	3.30	2.70	2.18
SC	36.50	37.50	37.80	36.30	38.80	37.12	8.20	8.40	9.10	8.40	6.50	6.14
SD	50.10	51.60	50.80	50.30	49.00	48.94	5.70	4.70	4.20	4.00	2.50	2.18
TN	25.30	26.60	26.70	23.70	26.60	25.03	10.90	10.10	8.90	8.20	7.30	6.63
TX	24.50	23.80	24.60	24.90	24.60	25.62	11.20	8.60	6.90	5.90	5.30	3.98
UT	24.60	23.20	21.40	23.30	24.10	24.34	10.90	11.30	8.90	7.70	6.90	5.74
VA	27.00	26.50	27.70	28.20	30.50	31.24	5.40	5.50	4.50	3.50	3.00	2.26
VT	35.90	39.30	31.90	34.70	33.80	34.50	5.70	6.00	3.10	3.50	2.30	1.88
WA	36.90	36.40	34.90	35.30	38.00	38.60	6.50	4.40	3.60	2.90	3.30	2.74
WI	26.70	28.80	29.00	28.50	28.20	26.99	3.80	3.50	2.70	2.40	2.00	1.48
WV	40.20	42.40	39.90	38.30	38.90	39.14	5.70	4.70	4.20	3.40	3.40	3.26
WY	28.90	27.90	23.00	30.00	23.60	26.83	6.00	5.20	4.10	4.90	2.80	2.43
<b>US</b>	<b>29.00</b>	<b>29.20</b>	<b>28.90</b>	<b>28.90</b>	<b>28.80</b>	<b>28.74</b>	<b>8.10</b>	<b>7.50</b>	<b>6.90</b>	<b>6.30</b>	<b>5.50</b>	<b>4.33</b>

## **Psychoactive Drugs**

The percent of residents receiving psychoactive medications is reported in Table 16. Such drugs include anti-depressants, anti-anxiety drugs, sedatives and hypnotics, and anti-psychotics. In 2003, 61.4 percent of residents in facilities in the U.S. were reported to be receiving such medications. This usage increased to 65.24 percent in 2008; specifically, these percentages ranged from 41.84 percent in Hawaii to 73.74 percent in Tennessee. The increase is somewhat surprising because federal regulations prohibit the use of anti-psychotics and other psychoactive drugs unless such drugs are shown to be necessary for particular resident problems. On the other hand, anti-depressants are sometimes under-prescribed and new educational efforts are focused on the appropriate use of anti-depressants.



## **Mental Retardation/Developmental Disabilities**

New federal regulations from OBRA 1987 require screening of all new residents to ensure that those who are mentally retarded, developmentally disabled, or mentally disabled are placed in appropriate facilities where they receive services designed to meet their needs. State officials are required to certify that those individuals with mental retardation who are placed in nursing facilities are receiving appropriate services. The percent of residents with developmental disability was reported. This includes residents who have mild to profound mental retardation. Table 16 shows that 2.60 to 2.49 percent of residents were reported to have developmental disabilities in 2003 and in 2008.

**TABLE 16**  
**PERCENT OF RESIDENTS**  
**RECEIVING PSYCHOACTIVE MEDICATION AND HAVING MENTAL RETARDATION**

State	Receiving Psychoactive Medications						Mental Retardation					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
AK	63.70	69.70	67.20	67.10	66.30	63.33	1.20	1.30	1.00	0.80	1.40	0.86
AL	62.00	64.80	67.70	66.20	68.30	68.49	5.20	5.40	5.00	5.40	4.80	5.11
AR	62.00	64.80	65.40	67.60	67.30	66.03	3.70	3.50	3.50	3.50	3.40	3.61
AZ	60.30	62.10	62.70	64.10	61.70	64.58	1.20	1.00	1.00	1.30	1.40	1.40
CA	54.70	55.80	56.60	57.50	58.00	57.36	2.20	2.40	2.40	2.40	2.30	2.32
CO	59.60	62.90	64.30	64.60	66.50	64.23	1.30	1.40	1.50	1.30	1.30	1.40
CT	63.20	65.40	67.20	67.00	68.20	69.02	2.50	2.50	2.60	2.70	2.60	2.55
DC	42.40	42.20	47.80	49.50	49.90	46.68	2.40	2.40	1.90	1.50	2.10	1.58
DE	60.10	62.00	65.40	63.40	62.40	61.17	2.10	2.70	2.50	2.70	2.40	2.32
FL	60.70	62.90	63.90	64.90	66.00	66.14	1.50	1.60	1.60	1.70	1.70	1.63
GA	61.80	63.30	64.90	65.90	67.60	68.34	4.60	4.50	4.40	4.60	4.40	4.46
HI	36.10	36.40	39.30	43.10	42.50	41.84	2.50	2.00	2.10	2.50	2.40	2.24
IA	59.90	61.40	62.20	64.50	64.60	64.98	2.40	2.10	2.20	2.20	2.00	2.16
ID	66.10	69.10	66.40	67.40	70.10	71.25	1.60	1.50	1.60	1.30	1.40	1.74
IL	60.80	62.20	63.40	63.50	64.00	64.66	2.10	2.10	2.20	2.10	2.10	2.07
IN	63.30	64.90	64.70	65.60	67.80	66.16	3.30	3.30	3.20	3.00	3.10	3.03
KS	64.40	66.30	66.80	67.20	68.70	68.07	1.40	1.40	1.50	1.40	1.40	1.40
KY	63.90	67.30	67.70	68.00	69.00	70.46	3.40	3.50	3.10	3.40	3.40	3.28
LA	64.00	66.00	65.90	66.60	67.10	68.10	3.10	3.20	3.40	3.20	3.10	3.38
MA	67.90	69.60	69.80	69.60	70.90	71.04	2.80	2.70	2.50	2.40	2.40	2.04
MD	56.00	56.00	58.00	56.80	57.30	55.76	1.60	2.00	1.80	1.70	2.00	1.73
ME	67.80	69.10	70.40	72.00	72.60	71.54	1.80	1.60	1.60	1.50	1.40	1.75
MI	58.60	60.60	61.10	63.60	63.10	61.69	2.00	1.90	2.20	1.80	1.70	1.77
MN	61.90	64.00	64.40	63.70	64.20	62.52	1.40	1.30	1.10	1.20	1.10	0.96
MO	64.70	67.10	67.40	68.60	69.10	69.84	2.70	2.90	2.70	2.90	2.90	2.94
MS	60.30	63.60	66.50	66.40	66.90	67.04	2.30	2.50	2.60	2.70	2.90	2.89
MT	60.40	64.60	61.80	61.10	64.30	67.09	1.50	1.70	1.60	1.50	1.60	1.69
NC	63.00	64.40	65.10	67.20	67.10	67.35	2.20	2.50	2.30	2.60	2.30	2.21
ND	63.50	64.60	66.00	67.30	67.30	68.17	2.10	2.00	2.30	2.20	2.30	2.00
NE	61.70	64.60	64.60	66.00	68.40	67.30	1.90	1.90	1.90	2.20	2.10	2.01
NH	66.10	66.50	68.70	70.70	69.00	68.00	2.10	2.00	1.70	1.80	1.80	1.35
NJ	54.00	56.60	56.40	57.40	57.50	55.60	3.70	3.40	3.50	3.70	3.90	3.94
NM	59.80	55.60	60.60	63.10	62.70	63.49	1.30	1.40	1.50	1.70	1.60	1.48
NV	56.00	57.30	63.70	58.20	59.90	60.92	2.10	2.60	2.10	2.10	1.80	1.83
NY	55.70	56.40	57.30	58.50	58.50	57.67	4.10	4.00	4.10	4.20	3.80	3.80
OH	66.00	67.10	67.90	69.10	68.90	68.44	2.50	2.40	2.50	2.40	2.50	2.52
OK	63.00	67.00	67.10	68.70	68.80	69.65	2.40	2.30	2.50	2.70	2.50	2.71
OR	68.20	69.90	70.50	69.30	68.50	66.15	1.90	1.70	1.90	1.70	1.80	1.58
PA	62.70	64.30	65.20	65.60	66.40	66.90	2.40	2.60	2.50	2.70	2.40	2.32
RI	62.40	61.80	66.60	67.70	71.00	71.93	1.90	1.50	1.70	1.50	1.20	1.19
SC	58.90	61.10	61.60	61.30	62.60	62.21	3.30	2.70	2.30	2.20	2.00	2.27
SD	60.00	63.30	63.40	63.30	64.80	66.28	1.90	1.70	1.60	1.50	1.70	1.51
TN	67.40	69.20	70.30	70.20	72.30	73.74	3.50	3.20	3.50	3.30	3.40	3.04
TX	63.00	64.60	64.40	65.50	67.10	67.06	2.50	2.60	2.60	2.70	2.60	2.58
UT	70.40	72.70	70.50	71.50	69.10	68.16	2.10	2.00	1.90	2.00	2.50	2.57
VA	62.30	60.80	62.30	63.60	64.50	63.88	4.30	4.30	4.10	4.10	4.10	3.95
VT	67.30	69.70	68.30	70.60	70.30	69.73	1.50	1.70	1.50	1.50	1.50	1.40
WA	63.70	65.60	65.70	65.70	65.90	66.09	2.90	3.00	3.00	2.90	2.80	2.76
WI	60.80	63.20	63.60	64.10	64.30	64.75	1.50	1.50	1.30	1.40	1.30	1.35
WV	59.90	62.80	64.40	63.00	64.30	64.65	3.10	3.20	3.40	3.80	3.70	3.48
WY	60.60	66.00	62.00	63.50	62.70	68.51	1.30	1.40	1.00	1.30	1.20	1.10
<b>US</b>	<b>61.40</b>	<b>63.20</b>	<b>63.90</b>	<b>64.70</b>	<b>65.40</b>	<b>65.24</b>	<b>2.60</b>	<b>2.50</b>	<b>2.50</b>	<b>2.60</b>	<b>2.50</b>	<b>2.49</b>

**Nursing Facilities, Staffing, Residents and Facility Deficiencies, 2003-2008**

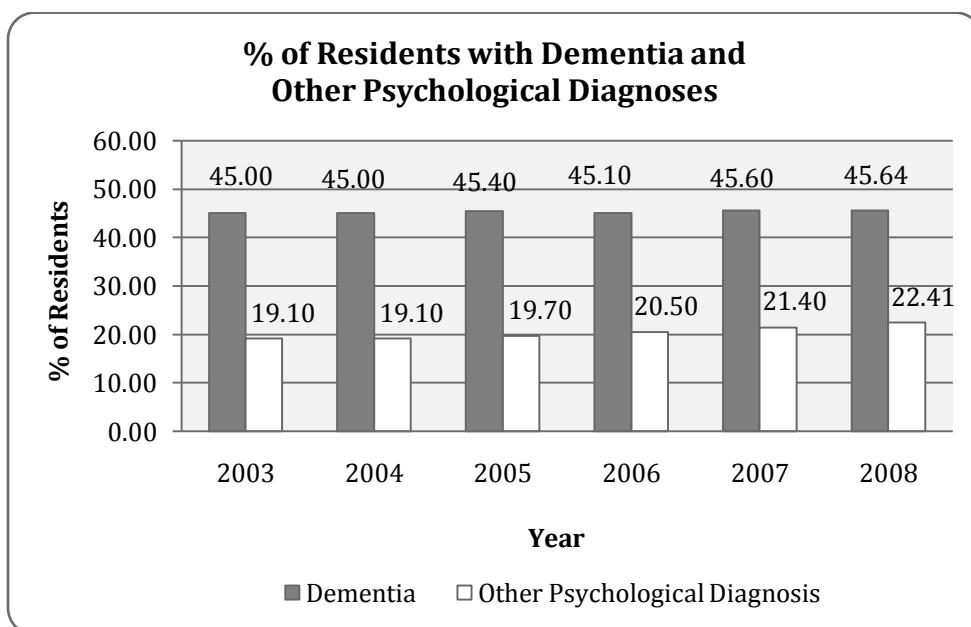
Department of Social & Behavioral Sciences

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## Dementia & Other Psychological Diagnoses

Table 17 shows the percent of residents that were reported by facilities and states with having a dementia diagnosis. The average percent of residents reported with dementia increased from 45 percent in 2003 to 45.64 percent in 2008. The percent varied from 38.09 percent in Arkansas to 57.51 percent in Maine in 2008.

The percent of residents with other psychiatric conditions such as schizophrenia, mood disorders, and other problems is reported in Table 17. Other psychiatric conditions increased from 19.1 percent of residents in 2003 to 22.41 percent in 2008. The percentage of conditions varied from 5.28 percent in Hawaii to 32.37 percent in Louisiana in 2008.



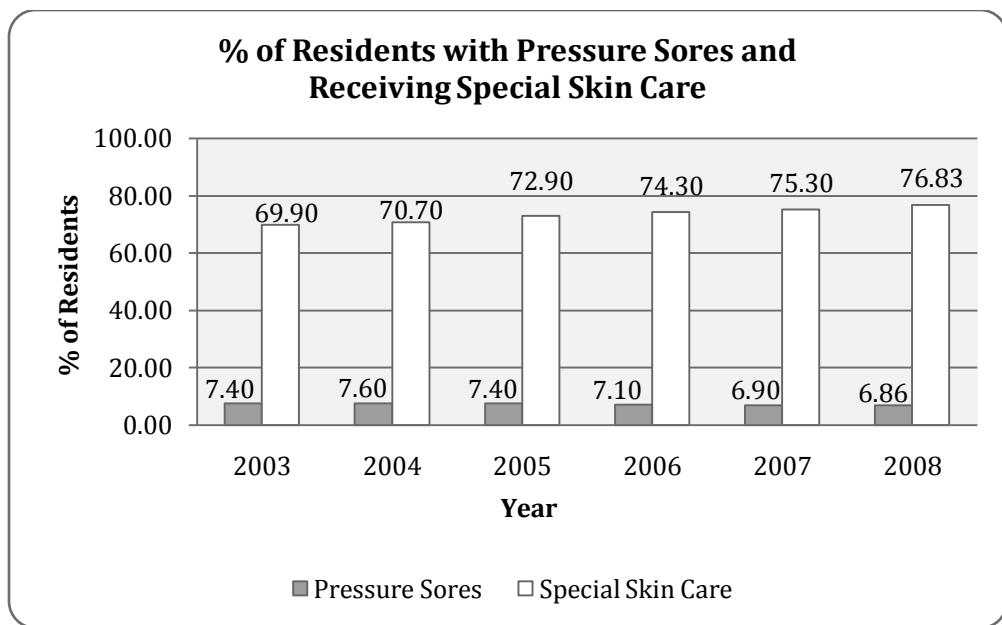
**TABLE 17**  
**PERCENT OF RESIDENTS**  
**WITH DEMENTIA AND OTHER PSYCHOLOGICAL DIAGNOSES**

State	Dementia						Other Psychological Diagnosis					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
AK	52.10	52.10	48.80	54.40	52.20	51.85	15.30	15.30	18.70	14.70	11.70	15.92
AL	52.80	52.80	52.40	52.90	50.70	51.46	22.90	22.90	24.50	24.90	25.20	26.43
AR	37.70	37.70	38.20	38.60	39.80	38.09	19.10	19.10	18.50	18.80	18.20	20.11
AZ	42.00	42.00	43.30	42.30	42.00	41.94	14.30	14.30	14.70	17.80	17.30	18.05
CA	38.40	38.40	39.10	38.60	39.20	38.30	18.20	18.20	19.20	19.70	20.40	20.97
CO	44.40	44.40	44.20	43.60	46.30	45.25	14.40	14.40	14.90	15.20	15.80	16.23
CT	46.60	46.60	45.80	46.30	47.20	48.92	13.10	13.10	13.20	15.20	15.10	16.33
DC	50.60	50.60	44.10	42.20	48.90	52.06	19.80	19.80	17.70	13.50	13.60	15.92
DE	45.40	45.40	47.40	45.40	47.20	45.52	12.70	12.70	19.00	17.30	15.40	14.49
FL	45.40	45.40	44.70	45.80	45.30	46.16	19.50	19.50	19.70	20.60	22.50	23.85
GA	45.30	45.30	46.40	47.60	49.30	49.54	16.70	16.70	18.90	21.70	23.50	23.30
HI	50.90	50.90	53.50	55.00	52.50	52.84	6.20	6.20	7.20	5.70	7.40	5.28
IA	46.60	46.60	47.80	45.80	46.30	46.84	16.50	16.50	17.30	17.70	18.40	19.39
ID	46.30	46.30	44.20	43.60	41.30	44.18	13.20	13.20	14.80	17.50	15.40	18.55
IL	39.50	39.50	41.20	41.20	41.60	42.38	23.30	23.30	23.60	24.10	24.50	25.58
IN	44.30	44.30	45.70	44.40	45.20	46.38	17.90	17.90	17.60	18.80	19.40	20.48
KS	44.40	44.40	45.60	45.90	46.30	46.55	22.20	22.20	22.00	22.40	23.60	23.77
KY	47.40	47.40	47.60	47.80	48.20	49.28	22.40	22.40	22.00	25.10	25.20	26.82
LA	41.10	41.10	42.40	42.70	43.00	42.13	25.80	25.80	27.50	29.30	29.40	32.37
MA	47.30	47.30	49.00	48.70	50.60	50.87	20.80	20.80	20.90	20.90	22.50	22.85
MD	42.10	42.10	40.60	44.00	43.00	42.82	15.40	15.40	16.00	15.60	15.70	16.98
ME	58.90	58.90	56.50	58.20	59.00	57.51	17.10	17.10	16.60	17.40	19.40	21.56
MI	56.00	56.00	55.10	55.50	55.90	55.12	16.00	16.00	16.40	16.60	17.60	18.13
MN	40.10	40.10	40.30	40.00	41.40	41.38	18.60	18.60	18.90	19.80	21.40	21.82
MO	44.00	44.00	42.90	43.70	44.00	43.03	21.40	21.40	20.30	22.80	23.20	24.26
MS	52.40	52.40	52.10	51.90	51.60	49.74	24.30	24.30	26.30	27.40	29.20	30.02
MT	42.40	42.40	42.20	44.80	41.70	41.36	12.80	12.80	13.50	15.40	14.90	17.03
NC	44.30	44.30	45.80	43.90	46.30	44.79	15.30	15.30	15.40	16.10	17.90	19.91
ND	50.20	50.20	51.30	51.60	51.80	53.19	20.60	20.60	19.70	21.90	22.80	25.65
NE	40.80	40.80	41.00	41.30	41.90	40.64	20.10	20.10	20.00	21.40	21.60	22.63
NH	50.00	50.00	51.90	53.40	54.50	56.50	16.30	16.30	19.50	18.90	20.30	22.05
NJ	40.80	40.80	41.90	41.00	41.50	41.96	14.60	14.60	14.80	15.10	15.50	15.57
NM	36.80	36.80	44.30	43.90	44.60	44.08	14.00	14.00	17.00	18.30	16.60	19.05
NV	39.60	39.60	39.40	37.90	38.20	39.04	16.90	16.90	16.30	16.60	20.30	17.14
NY	46.20	46.20	47.10	46.40	45.60	45.75	16.00	16.00	16.50	16.80	17.60	17.89
OH	50.80	50.80	49.70	47.60	47.70	46.37	28.70	28.70	28.80	28.20	28.40	29.27
OK	42.10	42.10	44.60	42.40	42.20	42.88	20.00	20.00	21.40	21.20	22.50	23.14
OR	47.40	47.40	47.10	45.50	45.40	46.31	15.80	15.80	15.00	15.40	17.50	16.49
PA	47.40	47.40	46.70	47.10	46.90	46.95	16.10	16.10	17.30	18.20	18.70	19.87
RI	45.80	45.80	46.10	47.30	46.50	50.03	15.20	15.20	14.50	16.40	17.30	18.11
SC	52.40	52.40	54.30	53.70	55.80	56.64	12.70	12.70	15.10	15.80	18.60	19.60
SD	50.20	50.20	50.30	47.70	50.20	49.74	22.50	22.50	23.60	23.50	24.60	25.23
TN	46.90	46.90	47.80	49.60	49.50	51.64	19.70	19.70	23.00	24.70	26.50	30.54
TX	42.20	42.20	41.60	41.80	42.70	43.59	22.10	22.10	23.40	25.20	25.90	28.23
UT	43.00	43.00	41.00	38.80	38.00	39.91	14.40	14.40	14.20	14.90	16.40	16.51
VA	44.10	44.10	44.50	43.50	44.70	45.10	16.10	16.10	15.30	14.40	16.80	17.01
VT	47.70	47.70	47.60	46.80	52.00	51.71	13.80	13.80	13.80	17.10	18.40	18.34
WA	53.50	53.50	54.40	51.40	50.00	48.69	15.70	15.70	15.30	18.70	18.80	21.04
WI	47.80	47.80	46.90	47.20	47.30	48.52	15.20	15.20	16.00	16.30	17.50	17.15
WV	44.90	44.90	49.80	48.90	51.10	51.86	22.20	22.20	25.20	24.90	29.20	30.83
WY	37.80	37.80	43.10	44.00	44.50	45.32	14.20	14.20	11.00	13.80	13.50	13.88
<b>US</b>	<b>45.00</b>	<b>45.00</b>	<b>45.40</b>	<b>45.10</b>	<b>45.60</b>	<b>45.64</b>	<b>19.10</b>	<b>19.10</b>	<b>19.70</b>	<b>20.50</b>	<b>21.40</b>	<b>22.41</b>

## Pressure Sores and Skin Care

Pressure ulcers (or bedsores) are areas of the skin and underlying tissues which erode as a result of pressure or friction and/or lack of blood supply. The severity of the ulcer ranges from persistent skin redness (without a break in the skin) to large open lesions which can expose skin tissue and bone. Table 18 shows the percent of residents in facilities with pressure sores declined from 7.4 percent in 2003 to 6.86 percent in 2008. The percent ranged from 3.9 percent in North Dakota to 9.56 percent in Maryland in 2008.

Special skin care is non-routine care according to a resident care plan or physician's order, usually designed to prevent or reduce pressure ulcers of the skin. In 2003, 69.9 percent and in 2008, 76.83 percent of nursing facilities reported providing special skin care to residents, ranging from 57.55 percent in New Jersey to 87.95 percent in Nebraska (See Table 18). Thus, as expected, the rate of such care is higher than the percent of actual pressure sores reported by facilities.



**TABLE 18**  
**PERCENT OF RESIDENTS**  
**WITH PRESSURE SORES AND RECEIVING SPECIAL SKIN CARE**

State	Pressure Sores						Special Skin Care					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
AK	7.60	8.20	5.10	3.80	6.10	8.58	81.60	85.00	89.80	78.40	78.60	83.86
AL	6.70	6.60	6.60	6.80	6.40	5.72	76.90	77.60	79.90	81.40	81.20	84.90
AR	8.30	7.20	6.90	6.80	6.60	6.79	75.30	75.60	81.60	77.10	78.20	78.95
AZ	6.80	7.80	7.90	7.40	8.60	8.33	64.50	63.40	70.50	72.30	77.70	78.59
CA	9.20	9.00	8.60	8.70	8.60	8.36	61.40	61.80	63.50	63.40	64.50	65.18
CO	6.10	6.50	5.50	5.50	6.00	6.04	69.60	71.70	75.50	77.50	75.70	79.42
CT	5.80	5.70	6.00	5.40	5.60	5.40	58.80	59.70	61.90	62.10	60.30	61.69
DC	8.50	9.90	10.00	9.40	9.60	8.29	58.30	80.80	83.90	76.20	81.70	80.18
DE	8.90	6.70	7.60	7.20	7.30	5.96	72.60	67.30	76.60	73.90	77.50	75.68
FL	8.10	7.90	7.70	7.40	7.10	7.06	73.70	76.20	77.90	80.00	79.60	80.81
GA	8.30	7.70	7.40	7.70	7.30	6.94	71.70	73.20	74.80	76.80	80.30	79.21
HI	7.80	8.40	7.00	6.90	6.70	6.03	73.20	72.50	68.70	79.90	83.40	81.22
IA	4.60	4.90	4.80	4.40	4.00	4.33	69.80	70.50	71.50	72.60	76.40	77.21
ID	5.30	4.80	5.10	5.70	5.10	5.12	70.20	73.50	76.30	79.20	80.20	82.97
IL	7.60	7.60	7.50	7.30	7.10	7.10	67.80	68.10	73.20	75.30	78.10	78.52
IN	7.60	7.90	7.60	7.30	7.10	6.82	69.50	71.40	69.10	72.40	75.20	78.27
KS	6.90	6.00	5.90	5.30	5.40	5.15	64.00	64.50	67.80	69.00	70.40	71.10
KY	8.40	8.50	8.80	7.70	7.70	7.71	71.40	70.00	74.50	74.10	76.40	79.51
LA	9.80	9.70	10.10	9.50	8.90	8.42	68.00	69.30	68.40	73.10	74.30	77.76
MA	6.40	6.10	6.20	6.10	5.60	5.61	74.20	75.10	76.20	75.20	77.80	79.44
MD	9.10	9.80	8.80	8.60	8.30	9.56	70.60	69.70	73.20	77.20	79.30	77.34
ME	7.80	8.10	7.80	7.30	7.50	7.24	69.30	70.00	78.10	76.10	80.40	82.25
MI	7.40	7.10	7.40	7.00	6.70	6.92	70.00	70.60	76.40	77.50	77.10	78.75
MN	4.70	4.80	4.70	4.30	3.90	4.19	66.40	68.30	70.70	76.30	77.10	79.44
MO	6.70	6.40	6.60	6.30	6.10	5.96	64.90	67.10	70.50	69.20	72.70	72.54
MS	7.20	7.50	7.80	7.70	7.30	7.55	79.00	81.20	79.70	81.50	83.70	85.59
MT	5.00	5.00	5.70	5.50	4.90	5.42	71.90	72.20	72.90	70.80	75.20	75.94
NC	8.70	8.70	9.00	8.30	8.10	7.85	75.20	73.30	76.50	76.00	75.10	75.93
ND	4.00	3.70	3.90	3.50	3.60	3.90	69.30	71.10	74.30	74.90	81.80	80.20
NE	4.60	4.20	4.30	4.30	4.00	4.27	80.60	83.70	84.20	86.10	82.40	87.95
NH	5.00	5.40	5.10	5.00	4.90	4.42	69.90	75.60	79.20	79.00	79.30	83.94
NJ	8.90	8.90	8.30	8.50	8.20	7.86	58.80	59.50	62.10	65.20	66.40	70.87
NM	7.80	7.90	7.10	7.40	7.30	8.14	69.90	66.30	70.70	77.30	76.00	76.37
NV	8.50	9.00	9.10	7.70	7.70	8.29	63.30	71.00	72.90	73.00	77.60	75.76
NY	8.10	8.20	8.40	8.10	7.60	7.41	69.00	70.50	72.70	72.40	72.80	76.22
OH	6.50	6.60	6.60	6.50	6.10	6.29	82.50	82.60	83.70	84.90	85.00	84.87
OK	8.60	8.70	8.40	8.40	8.20	7.52	51.40	55.60	57.60	57.60	57.90	57.55
OR	7.90	9.00	8.60	7.80	7.50	8.40	65.60	70.30	72.70	71.30	73.50	76.51
PA	8.80	8.70	8.30	7.90	8.00	7.99	77.30	78.40	80.00	82.90	82.40	85.06
RI	9.40	6.50	6.80	6.10	5.40	6.22	70.00	64.10	65.40	71.40	73.60	76.76
SC	9.30	9.20	9.30	8.60	7.60	7.94	77.50	75.50	78.80	79.70	82.00	82.05
SD	6.90	6.50	5.10	4.90	4.80	4.52	76.00	77.90	80.20	82.40	79.90	84.88
TN	8.20	7.90	7.60	7.40	7.30	6.85	74.40	72.70	74.20	75.50	73.60	78.97
TX	7.60	7.60	7.70	7.60	7.20	6.97	68.20	67.80	69.40	71.90	70.20	71.46
UT	7.20	9.20	6.50	6.80	6.50	7.96	70.70	76.10	78.40	76.70	82.10	78.37
VA	8.90	9.00	9.50	8.00	8.10	7.87	66.40	68.50	71.80	75.00	76.00	77.96
VT	5.80	5.30	6.50	5.60	6.30	4.65	79.10	82.20	82.20	79.60	80.90	79.52
WA	8.40	7.70	7.40	7.50	7.80	7.70	75.90	73.60	76.40	76.40	76.00	80.32
WI	5.70	5.60	5.60	5.50	5.40	5.17	64.40	65.00	68.00	69.30	73.30	75.02
WV	9.60	9.10	8.80	7.90	8.10	8.39	85.50	84.20	86.20	85.40	85.20	83.55
WY	5.50	6.00	5.90	7.70	5.90	6.79	62.00	69.90	71.40	61.40	65.80	72.92
<b>US</b>	<b>7.40</b>	<b>7.60</b>	<b>7.40</b>	<b>7.10</b>	<b>6.90</b>	<b>6.86</b>	<b>69.90</b>	<b>70.70</b>	<b>72.90</b>	<b>74.30</b>	<b>75.30</b>	<b>76.83</b>

**Nursing Facilities, Staffing, Residents and Facility Deficiencies, 2003-2008**

Department of Social & Behavioral Sciences

University of California San Francisco

## **Rehabilitation and Other Special Treatments**

Rehabilitation services are provided under the direction of a rehabilitation professional (physical therapist, occupational therapist, etc.) to improve functional ability. In 2003, 19.4 percent of residents in nursing facilities received such services and this was 24.57 percent in 2008 (See Table 19). These services varied from 12.38 percent of residents in North Dakota to 34.83 percent in Utah in 2008. These trends may have been related to changes in the Medicare prospective payment system for nursing facilities.

Ostomy care includes special care for a skin opening to the intestinal and/or urinary tract such as a colostomy (opening to the colon). Such care was provided to 4.0 percent of nursing facility residents in 2003 and increased to 4.56 percent in 2008 (See Table 19).

**TABLE 19**  
**PERCENT OF RESIDENTS**  
**RECEIVING REHABILITATION AND OSTOMY CARE**

<b>State</b>	<b>Rehabilitation</b>						<b>Ostomy Care</b>					
	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	21.00	13.00	15.60	17.70	22.40	17.47	6.70	7.60	6.50	5.80	5.00	4.21
AL	16.10	17.20	18.70	19.00	20.70	21.44	7.20	6.60	6.80	6.50	6.90	6.86
AR	15.80	15.00	16.60	17.10	18.50	19.19	4.20	4.50	4.20	4.20	5.20	4.60
AZ	18.30	21.10	21.30	20.90	24.30	26.45	2.70	3.00	3.50	2.80	2.40	3.94
CA	18.70	19.00	19.80	21.30	22.30	23.59	6.50	6.90	7.20	7.20	7.00	7.84
CO	17.30	18.10	19.50	21.70	22.20	24.45	2.80	2.50	3.00	3.10	3.10	3.54
CT	17.30	18.60	20.30	20.50	22.00	23.03	2.20	2.10	2.20	2.10	2.20	2.29
DC	24.60	23.20	22.70	25.00	23.00	22.98	3.70	4.80	7.30	6.50	4.90	4.59
DE	22.00	24.10	19.90	23.00	26.50	26.36	4.20	3.50	3.80	3.70	5.50	5.63
FL	26.00	25.80	27.00	28.00	29.70	31.65	5.20	5.10	4.80	4.90	5.40	5.69
GA	14.90	16.50	16.90	17.30	18.40	20.65	5.20	5.40	5.10	5.50	5.60	6.06
HI	13.10	13.10	16.10	16.60	12.40	17.58	8.20	6.00	6.30	8.50	11.70	9.96
IA	12.50	12.60	12.50	13.40	13.90	14.96	2.70	2.50	2.80	2.90	3.00	2.79
ID	25.80	21.40	29.70	27.10	29.20	28.68	3.20	3.00	3.90	3.60	3.00	3.67
IL	19.80	20.80	21.30	22.00	22.40	24.73	3.70	4.10	3.80	4.00	4.20	4.37
IN	22.70	23.10	24.80	25.80	26.90	28.38	4.30	4.00	4.40	4.30	4.10	3.97
KS	13.40	12.70	13.90	14.80	15.60	17.81	2.30	2.40	2.30	2.50	2.40	2.52
KY	22.30	22.90	25.10	26.20	27.50	29.30	7.20	7.10	7.70	7.20	6.80	6.68
LA	18.70	19.90	21.20	22.50	24.90	27.68	6.00	6.40	6.90	6.60	7.20	6.91
MA	19.20	19.60	21.50	21.70	22.70	23.97	2.20	2.30	2.10	2.20	2.00	2.19
MD	20.80	22.70	23.00	24.40	25.40	26.51	3.40	3.40	3.00	3.40	3.50	3.39
ME	16.70	19.00	21.60	22.00	22.70	24.02	3.20	3.10	2.90	3.10	2.60	2.92
MI	18.90	20.50	22.00	22.80	23.60	26.46	3.00	3.20	3.20	3.00	3.10	3.63
MN	14.20	15.20	16.60	15.70	17.00	18.02	2.40	2.60	2.80	2.80	3.00	2.94
MO	19.90	19.40	19.90	20.60	21.20	23.05	2.80	2.50	2.60	2.90	2.70	2.89
MS	20.90	21.80	22.30	23.60	25.50	28.64	6.50	7.10	7.50	7.50	7.60	8.54
MT	15.40	13.50	16.30	13.80	16.10	15.65	2.70	2.10	2.70	2.30	2.50	2.68
NC	21.30	23.40	25.10	24.90	25.60	27.84	5.50	5.80	5.80	5.30	5.40	5.29
ND	10.60	12.60	12.60	12.50	12.60	12.87	2.90	2.90	3.60	3.20	3.20	3.39
NE	13.30	13.60	15.50	15.50	17.00	18.26	3.50	3.90	3.60	3.80	4.10	4.08
NH	17.10	19.90	21.00	21.60	23.90	25.22	1.90	1.90	1.80	2.10	2.20	2.39
NJ	21.70	22.50	23.70	25.00	25.30	25.93	4.00	3.80	3.90	4.10	4.10	4.09
NM	20.40	20.60	23.30	22.50	23.70	24.85	2.30	2.50	2.20	2.40	2.70	3.25
NV	23.40	21.40	24.00	21.80	27.80	29.00	5.40	5.90	6.80	5.20	4.70	6.94
NY	17.40	17.70	18.30	18.40	18.70	20.15	5.00	5.00	5.00	4.90	4.70	5.00
OH	22.60	23.70	24.80	25.60	27.10	28.71	5.50	5.50	5.80	5.70	5.40	5.60
OK	15.60	16.60	16.70	15.50	17.80	16.72	2.90	3.10	3.00	3.10	2.90	2.93
OR	18.10	20.50	22.10	23.60	24.10	27.28	2.80	3.10	3.20	3.50	3.10	3.56
PA	24.10	25.00	27.00	27.10	29.30	31.10	3.40	3.30	3.40	3.30	3.60	3.47
RI	16.40	16.40	18.70	18.10	18.90	20.94	2.50	2.30	2.30	2.20	2.60	2.36
SC	23.30	25.90	24.00	27.40	27.50	28.03	5.70	5.20	4.80	4.80	5.30	5.65
SD	10.40	10.20	9.10	11.90	11.60	12.38	2.90	3.20	2.90	2.90	3.50	3.27
TN	23.20	24.10	24.60	24.90	26.20	27.51	3.00	2.90	3.00	3.30	3.40	3.70
TX	17.70	17.80	19.30	20.50	21.20	22.97	3.80	3.70	4.10	4.30	4.10	4.32
UT	30.10	30.10	33.40	33.70	31.90	34.83	2.20	2.50	2.10	2.00	2.80	2.42
VA	23.10	23.60	25.10	24.00	25.70	26.98	5.50	5.90	5.50	5.60	5.10	5.17
VT	13.80	14.80	14.00	15.00	18.40	19.38	3.10	3.60	3.60	3.40	3.10	3.06
WA	22.90	25.30	24.00	25.60	25.50	28.35	3.80	4.50	4.40	4.30	4.50	4.27
WI	17.70	19.20	20.40	20.60	22.60	24.47	2.20	2.40	2.80	2.50	2.80	2.60
WV	26.10	25.90	26.00	27.40	27.50	29.53	6.60	5.80	5.90	5.50	5.00	5.18
WY	16.10	22.20	18.50	21.00	22.10	20.67	1.70	2.60	1.60	1.40	1.30	1.65
<b>US</b>	<b>19.40</b>	<b>20.10</b>	<b>21.10</b>	<b>21.90</b>	<b>23.00</b>	<b>24.57</b>	<b>4.00</b>	<b>4.20</b>	<b>4.30</b>	<b>4.30</b>	<b>4.40</b>	<b>4.56</b>

## **Injections and Intravenous Therapy**

Injections are provided by facilities for a variety of medications. In 2003, 14.4 percent of residents in facilities were receiving injections compared with 20.86 percent in 2008 (See Table 20). The percent receiving injections ranged from 14.55 percent in Rhode Island to 26.0 percent in North Carolina in 2008.

Intravenous therapy and/or blood transfusions are used to provide fluid, medications, nutritional substances, and blood products for residents. The percent of residents reported receiving such therapy in nursing facilities was 2.4 percent in 2003 and 2.39 percent in 2008, with a range of 0.53 to 6.32 in the District of Columbia and Nevada respectively.

**TABLE 20**  
**PERCENT OF RESIDENTS**  
**RECEIVING INJECTION AND INTRAVENOUS THERAPY**

<b>State</b>	<b>Injections</b>						<b>Intravenous Therapy</b>					
	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	11.50	11.40	14.00	16.70	18.90	20.48	3.60	3.30	4.60	3.30	4.00	3.96
AL	15.70	17.10	17.30	18.60	20.30	20.06	1.50	1.50	1.10	1.20	1.50	1.66
AR	13.70	14.40	15.70	16.70	17.20	18.56	3.30	1.90	2.60	2.70	2.80	1.93
AZ	13.90	16.30	17.60	20.00	21.70	22.12	3.50	3.40	2.50	3.30	2.90	3.57
CA	15.90	17.00	17.90	20.20	21.00	22.23	3.50	3.60	3.40	3.40	3.10	3.27
CO	11.60	13.00	15.00	15.80	15.30	16.48	2.00	1.80	1.30	1.80	2.20	2.29
CT	13.30	14.30	15.80	16.60	16.90	18.98	0.90	1.10	1.10	1.10	1.20	1.11
DC	15.30	15.80	18.00	23.90	22.70	21.28	1.60	0.80	1.80	1.80	1.00	0.53
DE	15.40	16.40	19.40	19.30	19.00	19.89	2.00	1.80	2.00	2.90	2.50	2.53
FL	16.70	17.90	20.00	21.10	21.60	23.71	2.60	2.30	2.20	2.20	2.10	2.21
GA	16.60	17.70	18.30	19.80	21.50	22.43	1.80	1.70	1.70	1.70	1.30	1.60
HI	12.70	13.50	16.40	16.00	15.60	15.20	6.10	6.70	5.70	3.10	2.20	1.94
IA	12.10	13.30	13.70	14.80	13.90	15.23	1.50	2.00	2.00	2.50	2.00	3.05
ID	16.40	17.20	19.10	19.40	22.10	23.61	2.30	1.60	3.30	3.60	3.70	2.76
IL	15.10	16.00	17.50	18.60	20.30	21.14	2.20	2.70	2.80	2.30	2.50	2.67
IN	16.40	17.80	18.70	20.90	21.40	22.53	2.90	2.70	2.30	2.70	2.90	2.89
KS	12.60	12.50	14.20	15.40	16.90	18.69	1.80	2.00	1.70	1.50	1.70	1.82
KY	17.90	18.60	20.10	21.30	21.70	23.40	3.80	3.50	3.30	3.70	3.20	2.34
LA	16.20	17.10	17.60	18.10	20.50	20.75	4.70	4.80	4.80	3.90	4.70	4.38
MA	13.40	13.20	14.10	14.80	15.50	16.83	1.60	1.60	1.40	1.50	1.10	1.42
MD	17.50	18.40	20.80	23.80	23.60	24.53	3.40	3.60	2.60	4.00	3.40	3.78
ME	14.20	14.60	15.90	17.20	18.20	18.66	1.70	0.50	1.10	1.10	1.10	1.34
MI	14.80	15.50	17.10	18.20	18.90	21.05	1.20	1.40	1.50	1.80	1.80	2.15
MN	13.80	14.40	16.10	16.90	17.20	17.65	1.00	1.30	1.60	1.60	1.50	1.58
MO	14.60	16.50	16.60	18.20	19.40	19.36	3.00	2.00	2.10	2.30	2.20	2.28
MS	18.40	18.90	19.90	21.00	21.90	23.17	2.70	2.10	1.90	2.10	2.50	2.20
MT	14.00	17.50	15.70	16.10	18.20	19.65	3.30	2.90	2.60	3.00	2.80	2.70
NC	17.90	19.10	21.60	23.00	24.10	26.00	1.80	1.70	2.20	2.20	2.60	3.13
ND	15.20	17.10	16.20	17.50	18.20	18.31	1.30	2.10	2.20	2.90	2.60	2.25
NE	12.10	13.40	14.10	13.80	15.60	16.38	1.50	1.70	0.90	1.80	1.50	2.01
NH	11.30	12.00	14.50	14.40	15.70	16.09	0.60	2.30	0.70	0.70	0.80	0.95
NJ	13.40	15.00	16.30	17.50	17.80	19.55	1.60	1.90	1.70	1.60	1.80	1.87
NM	13.90	17.20	16.30	17.80	18.50	18.59	2.70	4.80	2.30	2.30	3.40	3.17
NV	15.30	18.30	20.70	18.20	24.00	25.53	4.60	4.10	5.00	3.50	5.70	6.32
NY	14.40	14.60	15.70	16.80	17.90	18.46	0.90	0.90	1.00	1.30	1.30	1.45
OH	17.90	19.70	21.10	21.40	22.80	24.26	2.60	2.20	2.50	2.70	2.20	2.47
OK	12.30	13.50	15.00	15.40	17.30	17.66	2.80	2.20	2.00	2.10	2.30	2.22
OR	14.00	16.10	16.80	18.50	17.90	20.04	1.50	1.50	2.20	2.20	2.10	2.14
PA	17.70	18.40	19.80	20.70	21.70	22.95	2.80	2.90	3.10	2.60	2.80	2.39
RI	15.40	14.10	16.00	15.80	16.00	14.55	1.60	2.00	1.50	1.20	2.00	2.08
SC	14.70	15.70	16.50	17.70	18.60	18.51	2.30	3.20	2.30	1.90	1.90	1.78
SD	12.70	14.20	14.00	16.20	16.90	17.48	1.50	1.70	1.30	1.10	1.40	1.73
TN	17.50	19.20	21.60	21.40	23.50	24.34	3.30	3.30	2.70	2.40	2.90	2.47
TX	15.20	16.00	17.50	18.40	19.70	20.92	2.40	2.40	1.90	2.10	2.10	2.12
UT	16.10	17.00	19.90	18.90	18.70	21.92	4.10	3.50	4.50	4.20	3.60	3.51
VA	16.20	18.60	19.80	20.10	21.50	22.64	1.80	2.00	2.40	2.10	2.10	2.06
VT	11.90	13.20	14.20	14.20	16.70	16.72	0.90	0.80	1.10	1.50	1.20	1.20
WA	19.20	20.00	19.70	22.00	22.50	22.61	3.30	3.30	2.60	2.40	3.30	3.15
WI	13.30	14.90	15.70	16.20	17.00	16.91	1.20	1.50	1.50	1.40	1.50	1.65
WV	19.10	20.40	23.10	22.70	23.70	25.20	5.80	6.80	4.70	5.80	6.00	5.80
WY	10.20	11.80	13.30	11.80	15.70	16.58	2.20	6.10	2.10	2.20	1.60	3.27
<b>US</b>	<b>14.40</b>	<b>15.40</b>	<b>16.70</b>	<b>18.80</b>	<b>19.80</b>	<b>20.86</b>	<b>2.40</b>	<b>2.40</b>	<b>2.30</b>	<b>2.30</b>	<b>2.39</b>	

## **Tube Feeding**

Tube feedings are sometimes used to provide nutritional substances to residents into the gastrointestinal system. Table 21 shows that in 2003, 6.5 percent of residents were receiving tube feedings compared with 5.6 percent in 2008. The percent varied from 1.13 percent in New Hampshire to 13.28 percent in Hawaii in 2008.

## **Respiratory Therapy**

Respiratory treatment is provided for respirators/ ventilators, oxygen, inhalation therapy, and other treatment. In 2003, 11.4 percent of facility residents received treatment compared to 14.3 percent in 2008 (See Table 21). Utah reported 29.6 percent of residents receiving respiratory treatment compared to 7.98 percent in Hawaii in 2008.

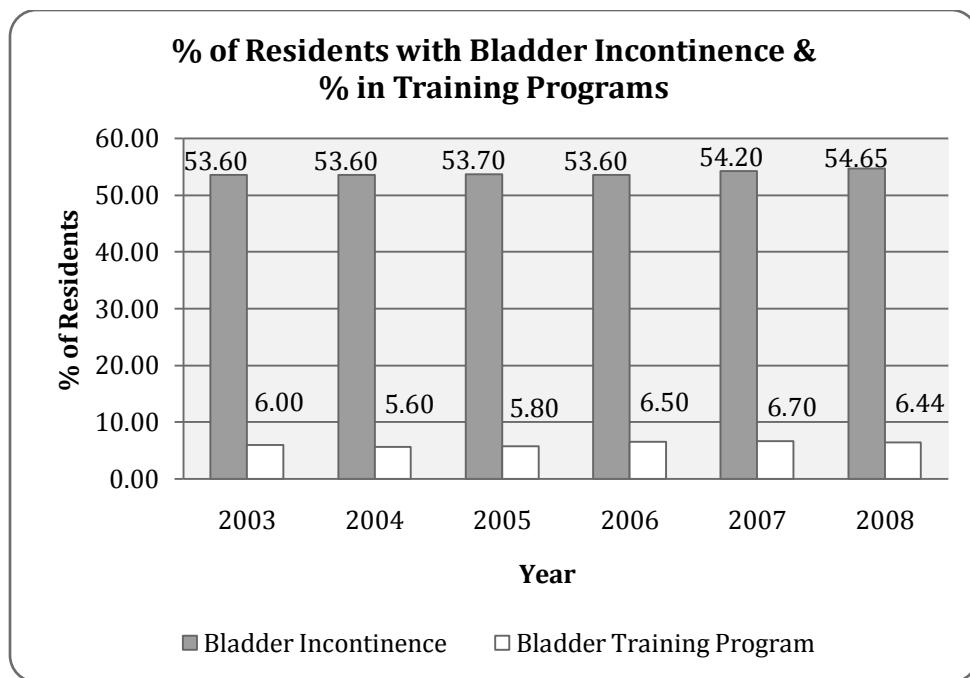
**TABLE 21**  
**PERCENT OF RESIDENTS**  
**RECEIVING TUBE FEEDING AND RESPIRATORY TREATMENT**

State	Tube Feeding						Respiratory Treatment					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
AK	9.60	8.30	7.30	5.80	6.60	5.85	17.90	11.90	11.20	6.70	8.30	9.41
AL	11.90	11.30	11.00	10.10	9.30	9.26	9.30	10.60	12.80	13.40	14.10	14.64
AR	6.60	6.30	6.10	5.90	5.80	5.18	10.10	9.80	11.30	11.30	13.00	12.79
AZ	3.90	4.60	4.70	3.60	3.80	4.21	12.10	12.80	13.70	14.20	14.10	16.81
CA	12.50	12.00	12.20	12.10	11.50	11.74	11.40	11.70	12.40	12.80	12.60	13.43
CO	3.10	3.20	3.10	3.00	2.80	2.83	22.20	24.60	25.90	26.80	27.50	28.18
CT	4.20	3.60	3.30	3.20	2.90	3.09	9.30	10.00	10.50	11.30	11.10	11.89
DC	9.00	9.30	9.40	9.20	9.10	9.01	8.00	6.90	6.50	7.90	7.70	8.23
DE	7.40	7.20	7.90	6.80	7.40	7.48	10.70	12.70	12.20	14.60	16.20	13.23
FL	7.80	7.60	6.90	7.20	6.80	6.75	12.30	13.30	14.00	15.10	14.90	15.00
GA	8.30	8.00	7.60	7.60	7.30	7.58	9.10	10.00	10.30	11.60	11.60	12.36
HI	14.40	15.80	12.30	12.50	13.40	13.28	7.90	7.00	5.90	5.60	6.50	7.98
IA	2.20	2.30	2.20	2.30	2.00	2.14	10.70	10.90	11.50	12.70	12.80	14.24
ID	3.20	2.50	3.50	2.70	2.00	2.33	18.40	18.80	22.70	23.70	21.80	23.49
IL	4.40	4.40	4.20	4.30	4.10	4.11	8.90	9.50	10.40	10.60	10.80	11.78
IN	5.20	5.30	4.80	4.80	4.60	4.59	12.40	12.50	12.60	13.80	13.60	14.65
KS	2.30	2.10	2.10	2.10	2.00	1.95	10.90	11.20	12.10	12.50	13.50	14.30
KY	9.60	9.30	8.80	8.30	7.90	7.45	15.60	16.20	17.30	17.30	17.70	18.74
LA	9.50	8.90	8.80	8.20	8.30	7.95	9.20	8.70	8.70	8.70	8.80	9.43
MA	3.70	3.60	3.30	3.30	3.30	3.48	10.70	10.50	10.90	10.30	10.70	11.50
MD	8.50	8.50	7.80	7.70	7.60	7.41	10.40	11.90	11.00	12.30	12.50	12.98
ME	2.80	2.60	2.50	2.30	2.50	2.56	10.10	12.50	12.20	11.50	13.20	13.19
MI	5.10	5.00	5.10	5.00	5.20	4.87	9.40	10.10	11.00	11.80	12.30	13.07
MN	2.00	2.00	2.00	2.20	2.00	1.92	10.60	11.70	12.00	11.30	12.00	12.57
MO	4.20	4.00	3.70	3.50	3.40	3.22	10.70	11.30	12.50	12.90	13.10	14.24
MS	10.50	10.40	9.70	9.80	9.40	9.65	9.10	9.70	10.10	10.60	10.40	11.99
MT	2.10	2.20	2.70	2.20	2.50	2.09	16.00	17.90	17.90	17.70	17.40	19.29
NC	9.00	8.70	8.70	7.90	7.50	6.83	11.90	12.60	13.30	13.20	13.80	14.46
ND	2.40	2.10	2.20	1.60	1.70	1.58	10.00	11.60	13.40	14.00	13.90	13.96
NE	2.70	2.70	2.60	2.70	2.80	2.87	11.40	12.40	13.10	14.00	13.00	15.05
NH	1.70	1.80	1.90	2.00	1.70	1.13	9.60	12.20	10.60	11.40	11.60	13.99
NJ	7.70	7.10	6.90	6.90	7.00	6.76	9.60	10.10	10.80	10.50	11.90	12.71
NM	3.90	2.70	3.00	2.90	3.10	2.56	19.10	21.30	24.10	24.00	22.70	24.92
NV	9.20	7.40	7.90	7.80	9.80	8.72	16.10	18.10	18.20	20.10	20.40	21.75
NY	7.50	7.50	7.20	7.00	6.80	6.54	9.80	10.50	10.90	11.50	11.60	12.60
OH	6.30	5.90	5.90	5.60	5.30	5.19	13.40	14.20	15.20	15.70	15.90	16.24
OK	5.60	5.60	5.40	5.30	5.30	4.81	10.30	12.20	13.40	13.50	14.40	15.18
OR	4.20	4.30	3.90	4.30	4.10	4.19	8.20	9.60	10.60	9.80	9.90	10.81
PA	5.80	5.70	5.30	4.90	4.90	4.51	14.60	15.00	15.50	15.70	16.30	17.38
RI	3.50	2.70	2.70	2.70	2.60	2.43	7.40	7.50	8.40	8.50	10.30	8.83
SC	9.50	8.80	8.90	7.60	7.50	7.41	8.80	9.70	10.70	11.30	10.60	11.31
SD	2.10	2.00	1.90	1.90	1.60	1.52	10.70	12.10	12.60	13.40	13.10	13.92
TN	7.80	7.10	6.60	6.40	5.90	6.00	11.70	12.80	13.40	13.70	14.50	15.62
TX	7.60	7.40	7.30	7.00	7.00	6.76	10.50	10.50	11.20	11.90	12.10	12.80
UT	2.30	2.50	2.30	2.60	3.00	2.70	18.60	20.40	24.60	25.10	25.30	29.60
VA	7.50	7.50	6.90	6.50	6.50	6.46	13.20	13.50	15.10	14.60	15.80	15.70
VT	1.90	2.20	2.10	2.40	2.40	2.18	9.80	10.10	10.60	11.40	10.50	10.89
WA	5.00	4.80	4.90	4.80	4.50	4.49	11.50	11.50	13.20	13.40	12.80	14.30
WI	2.40	2.60	2.70	2.70	2.70	2.44	9.90	10.70	10.90	11.70	12.20	13.06
WV	5.70	5.80	5.40	4.80	4.30	4.71	14.50	14.90	16.80	15.50	16.10	18.30
WY	1.30	2.20	1.60	1.00	0.80	1.79	23.80	24.20	24.20	31.80	26.60	26.72
<b>US</b>	<b>6.50</b>	<b>6.20</b>	<b>6.00</b>	<b>5.80</b>	<b>5.70</b>	<b>5.60</b>	<b>11.40</b>	<b>12.00</b>	<b>12.70</b>	<b>13.20</b>	<b>13.40</b>	<b>14.30</b>

## Urinary Incontinence and Bladder Training

Bladder or urinary incontinence more often than one time a week is a common problem in nursing facility residents. Table 22 shows that 53.6 percent of all residents were reported to have this problem in 2003 compared with 54.65 percent in 2008. This percentage ranged from 46.59 percent in Illinois to 65.48 percent in Maine in 2008.

Bladder training programs are designed to assist residents to gain control and maintain bladder control (such as by pelvic exercises or frequently toileting). Table 22 shows that the percent of residents with training programs in the U.S. ranged from 6.0 percent (in 2003) to 6.44 percent (in 2008). In 2008, the percent of facilities with toileting programs varied from 1.51 percent in Mississippi to 30.54 percent in Maine. The discrepancy between the high percentage of residents with incontinence problems and the low percentage of training programs is notable.



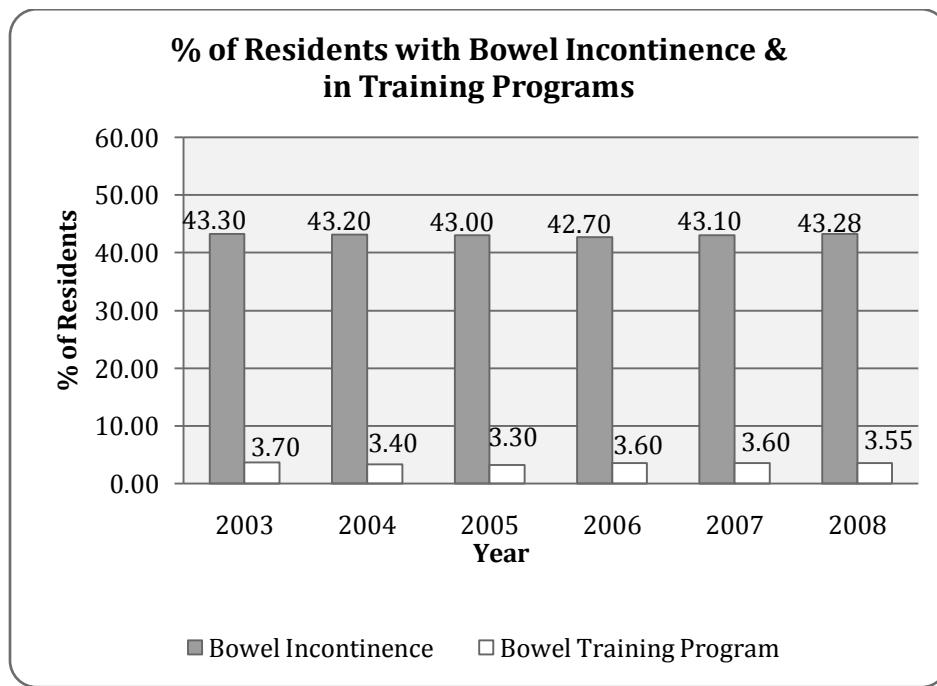
**TABLE 22**  
**PERCENT OF RESIDENTS**  
**WITH BLADDER INCONTINENCE & IN BLADDER TRAINING PROGRAM**

<b>State</b>	<b>Bladder Incontinence</b>						<b>Bladder Training Program</b>					
	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	56.90	59.20	60.60	55.30	55.50	55.28	9.80	7.10	1.90	8.40	1.90	5.40
AL	55.20	55.70	55.40	56.60	57.00	59.86	8.80	7.20	7.30	8.90	8.90	5.61
AR	49.90	50.90	50.80	51.90	52.20	51.70	3.60	4.00	3.70	3.80	3.00	3.92
AZ	52.40	52.80	50.50	50.50	51.70	51.73	2.60	2.30	2.80	2.20	2.20	1.78
CA	51.80	51.60	52.00	50.80	51.80	51.09	2.80	2.60	2.70	3.20	3.30	2.81
CO	50.20	50.50	50.00	49.90	50.40	49.72	3.50	3.80	3.70	4.80	3.60	3.30
CT	52.20	53.80	52.30	51.60	52.10	52.44	4.70	3.30	3.70	5.80	6.60	6.18
DC	55.60	57.70	59.30	61.70	65.10	59.98	7.50	6.30	2.00	3.90	3.50	3.64
DE	60.20	58.90	61.00	58.20	58.80	59.34	7.40	11.70	13.80	14.50	12.30	8.79
FL	52.90	53.20	52.80	53.60	54.70	54.55	7.20	6.70	6.20	7.10	6.30	7.13
GA	59.60	60.20	60.80	60.00	60.70	61.16	4.30	5.70	5.20	5.90	7.30	6.11
HI	62.90	58.90	58.60	65.20	64.70	62.82	8.80	4.00	5.70	4.70	4.40	5.54
IA	52.90	53.50	53.40	53.50	54.70	54.52	2.70	1.80	1.70	2.30	2.60	3.01
ID	54.00	57.80	55.80	54.70	53.80	56.33	6.50	5.30	8.30	9.60	9.40	7.79
IL	45.60	45.10	45.40	45.70	46.50	46.59	3.60	3.20	3.30	4.70	4.20	4.40
IN	48.50	50.00	50.30	50.00	50.80	52.01	9.90	8.70	8.90	8.00	8.80	8.66
KS	53.40	53.60	54.30	52.20	54.20	54.48	3.70	4.90	4.10	10.20	12.50	12.65
KY	54.60	54.90	55.10	55.30	55.60	57.12	6.30	6.90	7.30	8.10	8.80	8.85
LA	48.50	47.60	47.50	47.80	48.00	47.05	2.70	1.80	1.60	1.80	1.40	1.69
MA	56.70	56.80	56.70	56.50	58.50	59.18	4.10	3.40	3.90	4.40	4.40	4.89
MD	62.90	60.70	61.50	61.80	59.10	60.37	6.90	7.70	8.30	6.90	10.90	8.95
ME	65.50	66.50	65.80	66.50	65.00	65.48	15.30	18.00	17.50	26.70	25.10	30.54
MI	53.60	51.50	52.80	51.80	52.60	53.30	9.20	7.40	8.10	8.10	7.10	7.05
MN	56.40	56.10	56.80	56.10	55.60	58.34	8.00	7.10	7.30	9.30	8.30	7.87
MO	48.90	49.90	48.20	48.70	49.20	50.58	6.20	5.10	5.10	5.50	6.40	5.82
MS	50.90	53.00	51.80	53.20	54.70	54.77	1.30	1.40	1.50	1.40	2.10	1.51
MT	49.90	52.70	51.20	51.90	55.20	56.54	5.70	6.20	4.10	3.90	3.50	4.74
NC	57.30	56.40	57.70	57.20	59.10	59.06	5.10	5.50	6.30	5.20	4.80	5.02
ND	53.70	53.30	53.50	55.10	53.50	55.05	4.40	4.00	5.50	3.80	4.50	5.96
NE	55.00	53.90	55.20	54.50	55.20	55.30	7.10	6.40	5.50	4.70	6.40	6.14
NH	54.60	54.00	54.70	54.50	54.90	53.78	15.80	17.90	13.40	19.20	17.70	14.40
NJ	52.20	51.10	50.80	51.20	51.40	51.78	4.60	5.00	5.10	4.50	5.10	4.75
NM	50.00	46.20	52.80	53.80	53.30	55.50	3.40	1.00	4.50	2.40	3.20	2.88
NV	51.90	52.30	54.00	50.10	53.90	50.42	8.30	6.80	8.00	4.60	4.80	4.15
NY	60.20	60.10	59.80	59.80	59.50	59.25	5.20	5.30	5.00	5.20	4.60	4.42
OH	50.40	50.40	50.20	50.60	50.80	50.06	10.20	9.50	9.80	9.80	9.40	10.08
OK	47.90	47.70	49.30	50.70	49.80	50.38	3.70	2.90	4.40	5.20	4.90	4.81
OR	58.60	59.50	55.20	54.00	54.90	54.90	3.10	2.30	3.40	5.80	3.90	3.76
PA	58.10	58.40	58.20	58.90	58.90	59.27	11.80	12.90	13.10	14.20	15.00	13.47
RI	48.50	50.60	52.90	53.10	51.40	53.68	5.00	2.50	3.90	3.20	4.50	3.77
SC	61.70	60.90	63.90	63.10	64.10	61.97	3.10	1.90	2.60	3.40	3.80	3.36
SD	53.40	56.70	56.30	56.30	56.60	57.43	4.20	2.50	1.00	2.30	5.40	3.82
TN	55.50	55.20	55.40	56.70	57.20	57.15	6.20	5.70	5.00	5.80	6.50	6.85
TX	53.10	53.40	52.70	53.40	54.40	56.09	5.30	4.90	5.00	4.80	4.50	3.71
UT	52.90	52.50	51.20	48.90	49.50	50.74	3.80	3.10	8.20	8.10	8.50	8.90
VA	61.30	62.20	60.20	59.90	61.30	61.11	7.30	6.40	5.90	7.00	6.80	6.01
VT	62.60	64.00	63.20	62.10	63.40	63.75	8.50	13.90	18.90	19.10	20.00	23.43
WA	59.30	57.40	58.70	57.00	57.60	58.85	4.50	2.10	2.90	4.10	2.90	3.28
WI	51.20	50.70	50.60	51.00	51.20	54.11	11.80	7.70	9.80	13.50	15.80	13.99
WV	52.80	55.90	56.40	55.70	55.20	58.25	1.20	2.10	2.50	5.00	3.00	2.97
WY	45.50	43.60	47.90	46.70	49.40	48.78	13.80	16.40	16.90	17.40	14.30	14.68
<b>US</b>	<b>53.60</b>	<b>53.60</b>	<b>53.70</b>	<b>53.60</b>	<b>54.20</b>	<b>54.65</b>	<b>6.00</b>	<b>5.60</b>	<b>5.80</b>	<b>6.50</b>	<b>6.70</b>	<b>6.44</b>

## Bowel Incontinence and Bowel Training

Bowel incontinence more often than one time a week was also a common problem of nursing facility residents. The prevalence of this problem ranged from 43.3 percent in 2003 to 43.28 percent in 2008 in the U.S (Table 23). The percent varied from 29.02 percent in Wyoming to 57.02 percent in Hawaii in 2008.

Bowel training programs are also designed to assist residents to gain and maintain bowel control through the use of diet, fluids, and regular schedules. In the 2003-2008 period, 3.55 to 3.7 percent of residents in nursing facilities had such programs in the U.S (See Table 23). There was also a large discrepancy between the percent of residents with bowel incontinence and the percent of residents who were in training programs.

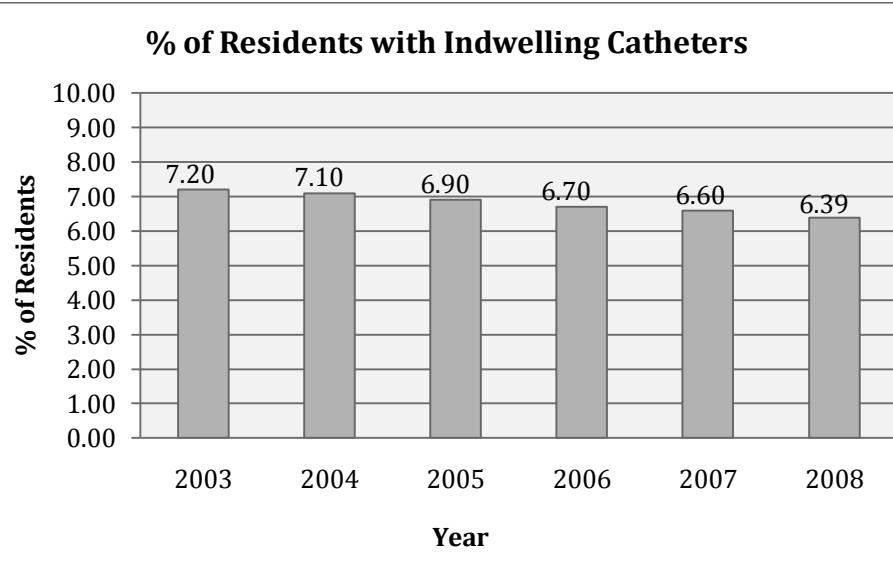


**TABLE 23**  
**PERCENT OF RESIDENTS**  
**WITH BOWEL INCONTINENCE & IN BOWEL TRAINING PROGRAM**

State	Bowel Incontinence						Bowel Training Program					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
AK	42.90	47.30	51.80	37.00	42.10	38.45	6.50	5.10	2.70	2.30	6.80	1.90
AL	49.00	49.30	48.50	49.80	51.20	51.58	5.80	5.50	4.20	5.00	6.10	4.03
AR	43.30	44.70	44.50	43.50	44.00	42.10	2.90	3.40	2.50	2.80	2.10	2.57
AZ	45.50	44.90	45.10	45.30	46.30	44.71	2.00	1.60	1.70	2.40	2.00	1.89
CA	47.50	47.10	47.70	46.90	47.80	46.79	1.70	1.90	1.70	1.90	2.20	1.90
CO	38.00	37.30	37.20	35.80	37.10	37.28	2.00	2.30	2.00	2.90	2.90	1.96
CT	39.90	41.50	40.40	39.10	40.10	40.45	2.30	1.10	2.10	2.90	2.40	2.45
DC	49.50	50.60	51.10	53.40	55.70	54.68	7.40	3.90	1.80	2.20	3.80	4.08
DE	49.50	48.70	48.80	45.90	46.50	48.94	2.10	4.70	8.50	7.40	4.20	2.86
FL	46.70	47.40	47.20	48.30	49.50	48.86	4.90	5.10	4.20	5.20	4.40	4.97
GA	53.30	53.90	54.00	53.60	53.80	54.88	3.40	3.90	3.60	4.00	5.60	4.16
HI	55.70	54.40	52.20	57.20	59.70	57.02	6.80	6.40	3.90	5.70	4.60	7.00
IA	29.60	29.30	29.20	28.70	29.30	29.80	1.80	1.00	1.00	1.40	1.50	1.32
ID	37.80	39.10	37.80	33.40	34.50	36.95	2.70	1.80	2.80	4.30	2.80	3.42
IL	33.40	33.40	33.40	32.90	33.20	33.23	1.80	1.60	2.00	2.00	2.00	2.21
IN	38.20	39.70	39.10	39.20	39.30	39.45	5.60	4.10	4.10	3.40	4.20	4.18
KS	36.30	35.60	35.50	33.80	34.10	34.32	2.00	2.40	2.30	4.00	3.90	5.88
KY	47.90	47.80	47.80	46.90	47.40	46.97	4.40	4.30	4.40	5.20	5.40	5.08
LA	46.10	46.10	45.90	45.50	45.70	44.66	2.00	1.10	0.90	0.80	0.70	1.22
MA	45.00	45.80	45.20	44.80	46.30	46.94	1.60	0.80	1.30	1.30	1.20	1.46
MD	53.20	53.20	53.00	53.00	51.00	52.66	5.10	5.80	6.60	6.20	8.50	6.73
ME	46.30	45.60	46.50	45.00	45.40	46.14	12.10	11.10	10.20	12.70	11.30	13.21
MI	41.30	39.50	39.70	38.80	39.00	39.71	4.70	4.10	4.40	4.50	3.70	4.17
MN	36.40	36.00	34.50	33.20	32.80	34.32	10.20	10.40	9.10	10.00	7.60	6.85
MO	39.10	39.10	37.10	37.40	37.90	37.62	4.60	4.40	3.80	4.20	5.20	4.00
MS	46.50	49.00	48.30	48.10	48.70	48.89	0.80	0.90	0.60	1.00	1.30	0.93
MT	30.50	31.40	31.80	32.30	32.90	36.40	2.30	2.70	1.70	2.20	1.80	1.43
NC	51.60	51.10	52.80	52.40	53.80	52.96	3.20	3.70	3.90	2.90	2.40	2.30
ND	29.80	29.80	30.40	30.30	28.60	29.10	2.00	2.00	2.20	2.50	3.10	1.80
NE	31.70	30.60	30.70	29.70	29.20	29.49	5.90	5.50	4.00	5.10	5.20	4.79
NH	31.50	31.00	30.40	31.90	32.70	32.27	7.70	8.40	5.20	10.40	9.30	7.86
NJ	44.50	43.50	41.90	42.90	43.10	42.61	4.20	4.00	3.50	2.90	3.80	3.64
NM	41.80	41.00	44.40	45.50	46.30	46.40	2.20	0.50	2.50	2.30	2.00	1.99
NV	47.10	44.20	49.70	46.20	48.40	46.51	6.30	5.80	6.70	2.50	4.30	3.44
NY	49.10	49.20	49.20	48.70	48.00	48.51	1.70	2.00	2.10	1.80	2.00	2.13
OH	38.00	37.60	37.50	37.60	37.30	37.10	3.80	3.20	3.30	3.20	2.90	3.54
OK	41.20	40.80	41.30	42.50	41.00	40.16	2.70	1.90	3.20	3.60	3.50	3.77
OR	47.30	50.70	46.10	43.70	45.40	45.01	1.80	1.50	2.30	4.70	2.30	2.48
PA	47.40	47.50	46.80	46.30	46.70	46.65	6.70	6.50	6.50	6.60	6.50	6.55
RI	33.20	36.50	37.50	37.60	34.70	38.12	2.20	1.00	1.10	1.30	1.80	2.19
SC	57.60	55.80	59.00	56.70	57.70	56.57	1.80	1.30	1.60	2.50	2.40	1.79
SD	29.20	32.50	30.80	30.30	30.90	31.75	1.60	2.40	0.50	1.00	2.40	1.77
TN	50.90	50.70	49.80	50.20	51.60	51.04	3.80	4.20	3.30	3.50	4.00	4.26
TX	47.90	47.50	47.00	47.30	48.30	49.75	2.90	2.70	2.40	2.40	2.00	1.90
UT	39.20	38.60	35.60	36.20	37.90	37.28	2.60	2.80	4.80	6.20	7.10	5.48
VA	54.40	54.80	53.20	53.10	52.10	52.39	6.00	5.20	4.70	5.20	5.20	4.73
VT	40.00	42.30	42.90	43.90	43.70	45.33	5.60	12.70	16.30	17.40	20.20	17.18
WA	45.40	44.70	44.90	44.10	44.30	46.50	2.90	1.60	2.00	2.60	1.50	1.94
WI	33.00	32.10	31.60	31.20	31.30	33.35	6.30	4.40	4.70	5.80	7.30	6.66
WV	47.20	48.30	48.10	48.00	46.40	49.76	0.70	0.90	1.60	2.10	1.00	1.11
WY	28.20	31.30	29.60	29.00	28.90	29.02	11.10	16.60	13.90	11.00	9.40	10.29
<b>US</b>	<b>43.30</b>	<b>43.20</b>	<b>43.00</b>	<b>42.70</b>	<b>43.10</b>	<b>43.28</b>	<b>3.70</b>	<b>3.40</b>	<b>3.30</b>	<b>3.60</b>	<b>3.60</b>	<b>3.55</b>

## Catheters

Indwelling catheters are tubes used to drain urine from the bladder. In 2003, about 7.2 percent of facility residents were reported to be using catheters and this declined to 6.39 percent in 2008 (See Table 24).



**TABLE 24**  
**PERCENTAGE OF RESIDENTS**  
**WITH INDWELLING CATHETERS**

<b>State</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	9.10	8.50	7.30	6.60	7.70	8.23
AL	5.70	5.70	5.50	5.40	5.30	4.80
AR	8.10	7.40	7.60	6.80	7.20	6.31
AZ	9.50	9.10	8.50	8.60	9.00	8.11
CA	8.80	8.70	8.60	8.40	7.70	7.78
CO	8.40	8.90	8.30	9.10	8.30	8.57
CT	4.60	4.60	4.50	4.30	4.30	4.16
DC	3.70	4.50	5.30	3.50	5.30	4.90
DE	5.10	4.50	5.50	5.10	4.40	3.88
FL	7.20	6.90	6.90	6.60	6.30	6.11
GA	5.30	4.90	5.20	4.90	4.60	4.55
HI	7.20	8.10	5.60	5.10	8.30	5.90
IA	5.80	6.00	6.40	6.30	6.20	6.14
ID	9.60	7.60	7.60	7.10	7.80	7.98
IL	6.70	6.90	6.90	6.50	6.50	6.21
IN	7.50	7.30	7.10	7.40	7.00	6.86
KS	6.20	6.00	5.90	5.50	5.90	5.73
KY	9.20	9.20	8.90	8.40	7.80	7.71
LA	9.60	10.20	10.20	8.70	8.90	7.84
MA	5.50	5.30	5.30	5.20	5.30	5.24
MD	5.40	6.30	5.40	5.50	5.50	5.41
ME	7.10	7.20	7.40	6.60	7.00	6.55
MI	5.90	6.00	5.70	6.00	5.70	5.78
MN	5.10	5.40	5.50	5.20	5.30	5.32
MO	7.00	6.10	5.90	5.50	5.80	5.88
MS	6.80	7.20	7.20	6.30	6.10	5.98
MT	8.60	6.40	7.30	6.90	6.80	7.41
NC	7.10	7.00	6.50	6.10	6.00	5.62
ND	5.80	5.80	6.40	6.30	6.30	5.88
NE	7.20	7.10	7.20	7.00	6.70	7.12
NH	5.60	5.00	5.60	5.70	5.90	5.20
NJ	5.90	6.00	5.70	5.70	5.60	5.46
NM	9.60	8.80	7.90	7.20	7.20	7.47
NV	9.70	9.00	9.40	7.40	9.40	8.23
NY	5.50	5.70	5.50	5.40	5.50	5.32
OH	7.20	7.20	7.20	7.00	6.80	6.82
OK	9.40	8.60	7.90	8.00	8.20	7.07
OR	7.90	8.50	8.90	9.10	9.40	9.52
PA	7.10	7.40	7.00	6.60	6.80	6.59
RI	4.60	4.70	4.70	4.30	4.20	4.22
SC	6.10	5.80	6.30	5.30	4.40	4.55
SD	5.90	6.20	6.00	5.80	6.50	6.69
TN	8.50	8.50	8.00	7.30	7.10	6.86
TX	7.90	7.30	7.20	6.90	6.40	6.20
UT	9.20	9.00	11.00	10.10	9.40	8.81
VA	6.80	6.80	6.50	6.00	5.80	5.34
VT	6.30	6.70	6.90	6.70	6.30	6.23
WA	9.60	9.10	9.00	9.00	8.80	8.71
WI	6.40	6.90	7.00	6.80	6.80	6.89
WV	9.70	9.20	8.30	8.90	8.20	8.20
WY	9.30	14.00	10.50	10.70	8.80	9.19
<b>US</b>	<b>7.20</b>	<b>7.10</b>	<b>6.90</b>	<b>6.70</b>	<b>6.60</b>	<b>6.39</b>

## STAFFING LEVELS

### **Background**

There is agreement that there is a strong relationship between resident characteristics, nurse staffing time requirements, and nursing costs in nursing homes. Numerous studies have examined these relationships and it is this relationship which serves as the basis for the casemix reimbursement systems used in some states (Fries and Cooney, 1985; Fries et al., 1989; 1994; Schneider et al., 1988;).

Not surprisingly, higher staffing levels in nursing homes have been associated with higher quality of care. Nursing homes with more RN hours per patients were associated with positive outcomes such as being alive, having improved physically, being discharged to home, and higher quality of care on a number of measures. The positive relationship between staffing and improved nutrition have also been shown (Simmons & Schnelle, 2006). Harrington and colleagues (2000b) found a relationship between more RNs and fewer deficiencies. Castle & Engberg (2007) examined the relationships between staffing and quality measures. Bostick, Rantz, Flesner, & Riggs (2006) and Collier and Harrington (2008) have reviewed some of the many studies on the positive relationship between staffing and nursing home quality.

The evidence from these studies recently led the Institute of Medicine Committee on Nurse Staff in Hospitals and Nursing Homes (1996) to conclude that the preponderance of evidence from a number of studies with different types of quality measures shows a positive

relationship between nursing staffing and quality of nursing home care. In 2001, the IOM again found a relationship between low staffing levels and poor quality of care in some facilities. Recent reports recommend that minimum staffing levels are needed to ensure quality of care (Harrington et al., 2000a; HCFA, 2000). An expert panel recommended minimum staffing levels of 4.55 hours per patient day, (Harrington et al., 2000a) including all RNs, LVNs, and nursing assistants. See also recommendations by the National Citizens Coalition for Nursing Home Reform (1995). The Institute of Medicine (IOM, 2001) also recommended improving the minimum staffing standards and adding RNs 24 hours per day.

More recently, the Centers for Medicare and Medicaid Services (CMS, 2001) reported that facilities with staffing levels below 4.1 hours per resident day for long stay residents may provide care that results in harm and jeopardy to the residents. A study by Schnelle and colleague (2004) also supports a threshold level of 4.1 total nursing hours per resident day to ensure that the processes of nursing care are adequate.

The Institute of Medicine's 2003 report on Keeping Patient's Safe recommended that CMS adopt minimum staffing standards for nursing homes based on the recommendations in the CMS 2001 report.

The level of registered nurse staffing is a growing concern for quality of care

because of controls on Medicaid and Medicare reimbursement rates may have negative effects on staffing levels (Swan et al., 2000; IOM, 2001). Grabowski and colleagues have shown the relationship between low Medicaid reimbursement rates and low staffing and poor quality (2001; 2004; 2004). Harrington and colleagues (2006) found that although Medicaid reimbursement rates were related to higher staffing, minimum state staffing standards were a stronger predictor of higher staffing levels.

Nursing personnel in nursing facilities were of particular interest for this report. Nursing personnel included: registered nurses (RNs); licensed practical/vocational nurses (LPN/LVNs), and nursing aides/orderlies/ assistants (NAs). Staffing hours (including full-time, part-time, and contract staff) are reported by facilities as total hours worked in a fourteen day period. Nursing personnel hours are examined for each of the above three categories separately, for all licensed nursing personnel (RNs and LPN/LVNs combined), and for total nursing personnel (RNs, LPN/LVNs, and NAs). The staff time includes all administrative and direct care time.

To compute the staffing ratios for this report, the total number of staffing payroll hours reported in a two-week period was divided by the total number of residents and by the 14 days in the reporting period. In examining the staffing data, there were some facilities that reported very high or low levels of staffing. In order to minimize the number of facilities that may have reported erroneous data, we developed standard rules to remove these facilities from the data set. A conservative approach was taken by eliminating the

lower one percent of facilities and the upper 2 percent. (See the appendix).

Nursing facilities are required by regulation to meet minimum nursing standards. Facilities must have sufficient nursing staff to provide nursing and related services to attain or maintain the highest practicable physical, mental, and psychosocial well-being of residents. Facilities must also provide sufficient numbers of licensed nursing personnel to provide care on a 24 hour basis to all residents in accordance with resident care plans.

Facilities must also use the services of a registered nurse for at least 8 consecutive hours a day, 7 days a week, except when they have been given a waiver. A Medicare-only skilled nursing facility may have a waiver if it is located in a rural area and has one registered nurse who is on duty 40 hours a week. Waivers may also be granted under certain conditions where there is a shortage of appropriate personnel and where the health and safety of individuals is not jeopardized.

For this report, the total hours of staffing per resident day were examined separately for dually certified facilities (Title 18/19), for Medicare-only facilities (Title 18), and for Medicaid-only facilities (Title 19). It should be noted that the reported staffing ratios reflect reported hours per resident day and not the actual hours of care delivered directly to residents. These data are reported by each facility for the two weeks prior to the facility survey.

## **Facilities with Medicaid Only and Medicare and/or Medicaid Beds (Title 19 and Title 18/19)**

Tables 25 and 26 show the total facilities with Medicaid-only and Medicare/Medicaid beds in the U.S. for the 2003 through 2008 period. The number of facilities varied by year and category because missing and erroneous data that were removed, using consistent procedures over the time period. There were 13,922 facilities reporting beds in this category for RNs in 2008.

### **Registered Nursing Hours**

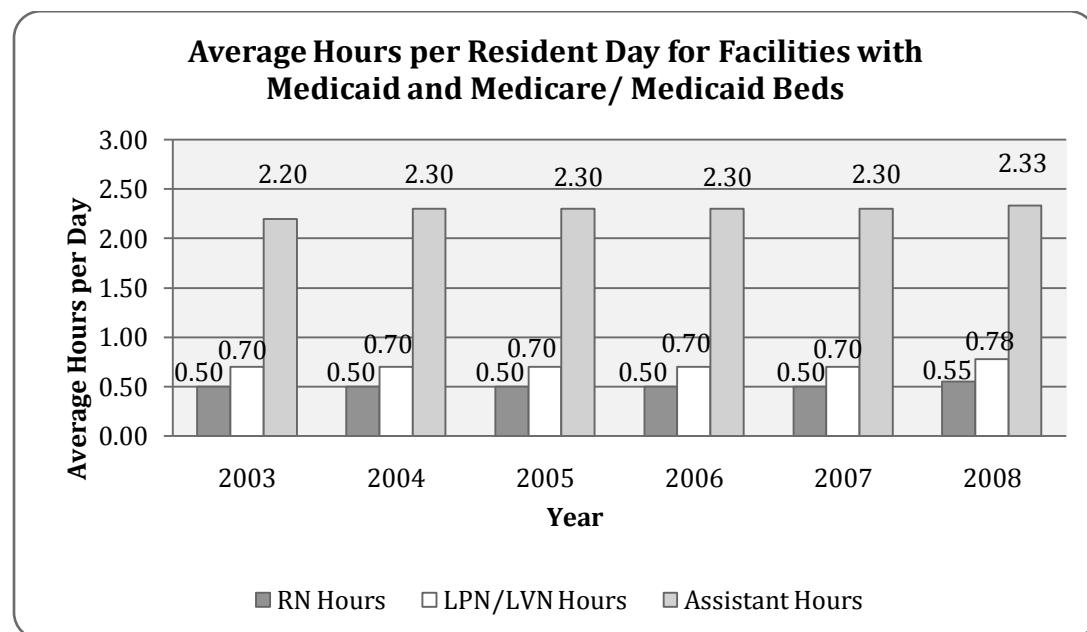
The average RN hours per resident day are shown in Table 25. The average hours slightly increase from 0.5 in 2003 to 0.55 in 2008 or a 10 percent increase. This converts to 33 minutes per resident day or about 11 minutes per 8 hour shift in 2008. The average ratio of RNs hours ranged from 0.29 hours (in Louisiana) to 1.38 hours (in Alaska) in 2008. This includes nurses who are in administrative positions.

### **LPN/LVN Nursing Hours**

The average LPN/LVN hours per resident day are shown in Table 25. In 2003-2008, the average LPN/LVN hours was 0.7 (42 minutes) to .78 per resident day (or 46.8 minutes per shift).

### **Nursing Aide/Assistant Hours**

The average NA hours per resident day are shown in Table 25. The average was 2.2 hours (132 minutes) in 2003. In 2008, the average NA hours increased to 2.33 hours (140 minutes per resident day or 46 minutes per shift).



**TABLE 25**  
**AVERAGE RN, LPN/LVN, AND ASSISTANT HOURS PER RESIDENT DAY**  
**IN FACILITIES WITH MEDICAID AND WITH MEDICARE/MEDICAID BEDS (TITLE 19 AND TITLE 18/19)**

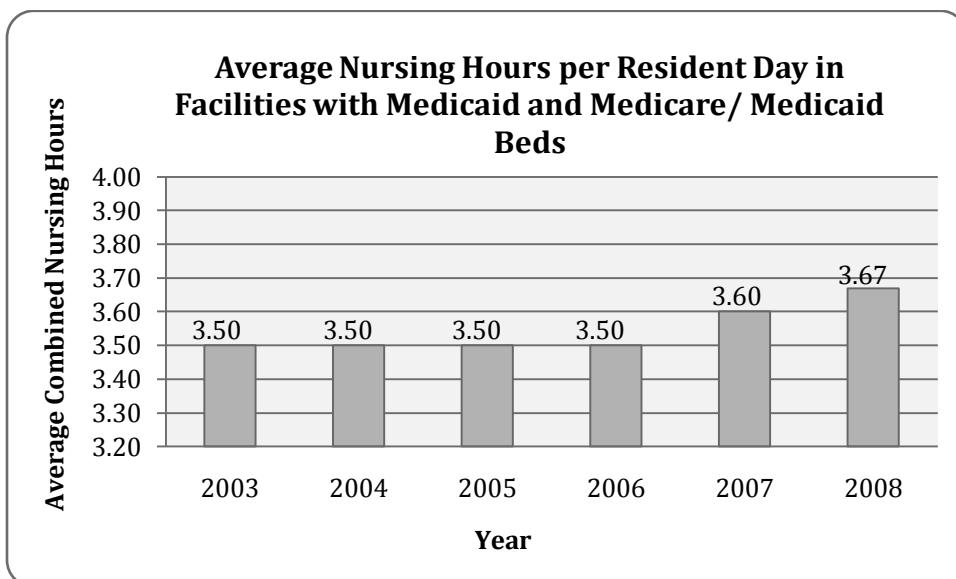
State	RN Hours						LPN/LVN Hours						Assistant Hours					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
AK	1.30	1.20	1.10	1.20	1.40	1.38	0.60	0.70	0.60	0.70	0.60	0.66	3.00	3.30	2.90	3.20	3.40	3.00
AL	0.40	0.40	0.40	0.40	0.40	0.47	0.90	0.90	1.00	1.00	0.90	1.01	2.50	2.50	2.50	2.50	2.40	2.54
AR	0.30	0.30	0.30	0.30	0.30	0.34	0.80	0.80	0.80	0.80	0.90	0.89	2.40	2.50	2.60	2.50	2.60	2.63
AZ	0.50	0.50	0.60	0.50	0.50	0.56	0.80	0.80	0.80	0.90	0.80	0.89	2.10	2.10	2.20	2.10	2.20	2.27
CA	0.50	0.50	0.50	0.50	0.50	0.53	0.60	0.60	0.60	0.70	0.70	0.75	2.50	2.50	2.50	2.40	2.50	2.53
CO	0.60	0.70	0.60	0.70	0.60	0.71	0.70	0.70	0.70	0.70	0.80	0.75	2.10	2.20	2.20	2.20	2.20	2.21
CT	0.70	0.70	0.70	0.70	0.70	0.73	0.60	0.60	0.60	0.60	0.60	0.73	2.20	2.30	2.30	2.30	2.30	2.42
DC	0.50	0.70	0.60	0.70	0.70	0.65	0.90	1.00	1.00	1.10	1.00	0.99	2.50	2.70	2.30	2.50	2.60	2.57
DE	0.80	0.80	0.70	0.80	0.80	0.79	0.70	0.80	0.90	0.90	0.90	0.97	2.50	2.40	2.40	2.40	2.40	2.41
FL	0.50	0.50	0.50	0.50	0.50	0.53	0.90	0.90	0.90	0.90	1.00	0.98	2.70	2.70	2.80	2.80	3.00	2.93
GA	0.30	0.30	0.30	0.30	0.30	0.35	0.80	0.80	0.90	0.90	0.90	0.95	2.10	2.10	2.10	2.10	2.10	2.09
HI	0.80	0.80	0.80	0.80	0.80	0.86	0.50	0.60	0.50	0.50	0.60	0.47	2.50	2.50	2.50	2.50	2.50	2.53
IA	0.60	0.50	0.60	0.60	0.60	0.56	0.50	0.50	0.50	0.60	0.60	0.60	2.00	2.00	2.10	2.10	2.10	2.18
ID	0.70	0.70	0.70	0.70	0.70	0.74	0.70	0.80	0.80	0.80	0.80	0.82	2.60	2.60	2.50	2.50	2.50	2.64
IL	0.60	0.60	0.60	0.50	0.60	0.56	0.50	0.50	0.50	0.50	0.50	0.57	1.80	1.80	1.90	1.90	1.90	1.91
IN	0.50	0.50	0.50	0.50	0.50	0.50	0.80	0.80	0.80	0.90	0.90	0.92	2.00	2.00	2.00	2.00	2.00	2.04
KS	0.50	0.50	0.50	0.50	0.50	0.56	0.50	0.50	0.50	0.60	0.60	0.58	2.20	2.30	2.30	2.30	2.40	2.39
KY	0.50	0.60	0.50	0.60	0.60	0.55	0.80	0.80	0.70	0.70	0.80	0.79	2.50	2.50	2.40	2.40	2.40	2.44
LA	0.20	0.30	0.30	0.30	0.30	0.29	0.70	0.80	0.80	0.80	0.80	0.84	2.00	2.00	2.00	2.00	2.00	2.10
MA	0.70	0.70	0.70	0.70	0.70	0.69	0.60	0.70	0.70	0.70	0.80	0.82	2.30	2.30	2.30	2.30	2.30	2.30
MD	0.60	0.60	0.60	0.60	0.60	0.58	0.70	0.70	0.80	0.80	0.90	0.92	2.30	2.30	2.40	2.30	2.30	2.34
ME	0.80	0.90	0.90	0.90	0.90	0.92	0.40	0.40	0.40	0.40	0.40	0.46	2.90	3.00	2.90	2.90	3.00	3.00
MI	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.70	0.70	0.70	0.70	0.74	2.40	2.30	2.30	2.30	2.40	2.40
MN	0.50	0.50	0.50	0.50	0.50	0.56	0.70	0.70	0.70	0.70	0.70	0.74	2.20	2.20	2.20	2.30	2.30	2.34
MO	0.40	0.40	0.40	0.40	0.40	0.42	0.60	0.60	0.60	0.60	0.70	0.69	2.30	2.30	2.30	2.30	2.40	2.39
MS	0.40	0.50	0.50	0.50	0.50	0.55	0.80	0.80	0.90	0.90	0.90	0.94	2.20	2.30	2.30	2.30	2.30	2.31
MT	0.80	0.70	0.80	0.80	0.80	0.79	0.50	0.50	0.50	0.50	0.50	0.54	2.50	2.40	2.10	2.40	2.50	2.44
NC	0.60	0.60	0.60	0.60	0.50	0.55	0.70	0.80	0.80	0.80	0.80	0.86	2.20	2.30	2.30	2.30	2.20	2.31
ND	0.60	0.60	0.60	0.60	0.60	0.67	0.60	0.50	0.60	0.60	0.60	0.61	2.60	2.70	2.70	2.60	2.70	2.79
NE	0.60	0.60	0.60	0.60	0.60	0.63	0.60	0.60	0.70	0.70	0.70	0.72	2.30	2.40	2.30	2.30	2.40	2.39
NH	0.80	0.80	0.80	0.80	0.80	0.80	0.60	0.60	0.60	0.60	0.60	0.71	2.30	2.30	2.40	2.40	2.40	2.56
NJ	0.60	0.60	0.60	0.70	0.60	0.66	0.60	0.70	0.70	0.70	0.70	0.73	2.10	2.20	2.10	2.10	2.10	2.13
NM	0.60	0.40	0.50	0.60	0.50	0.53	0.50	0.50	0.50	0.50	0.50	0.55	2.00	1.70	1.80	2.20	2.00	2.16
NV	0.60	0.60	0.60	0.60	0.60	0.72	0.80	0.70	0.80	0.70	0.70	0.83	2.20	2.10	2.20	2.00	2.20	2.10
NY	0.60	0.60	0.60	0.60	0.60	0.59	0.70	0.70	0.70	0.70	0.80	0.79	2.20	2.20	2.20	2.20	2.20	2.26
OH	0.60	0.60	0.60	0.60	0.60	0.58	0.80	0.80	0.90	0.80	0.90	0.90	2.30	2.30	2.30	2.20	2.30	2.29
OK	0.30	0.30	0.30	0.30	0.30	0.34	0.60	0.70	0.70	0.70	0.70	0.71	2.30	2.30	2.40	2.40	2.30	2.39
OR	0.70	0.70	0.70	0.70	0.70	0.73	0.40	0.50	0.50	0.50	0.50	0.53	2.50	2.50	2.50	2.60	2.60	2.81
PA	0.70	0.70	0.70	0.70	0.70	0.69	0.70	0.70	0.80	0.80	0.80	0.81	2.20	2.20	2.20	2.20	2.20	2.23
RI	0.70	0.70	0.70	0.70	0.70	0.76	0.30	0.30	0.30	0.30	0.30	0.36	2.20	2.20	2.40	2.30	2.40	2.44
SC	0.40	0.40	0.40	0.40	0.50	0.46	0.80	0.90	0.90	0.90	0.90	0.91	2.30	2.30	2.30	2.30	2.30	2.28
SD	0.70	0.70	0.70	0.70	0.70	0.71	0.30	0.30	0.30	0.30	0.30	0.36	2.20	2.20	2.20	2.20	2.20	2.30
TN	0.40	0.40	0.40	0.40	0.40	0.42	0.80	0.80	0.80	0.80	0.80	0.88	2.00	2.00	2.00	2.10	2.10	2.11
TX	0.30	0.30	0.30	0.30	0.30	0.36	0.70	0.70	0.80	0.80	0.80	0.78	2.10	2.10	2.10	2.10	2.10	2.12
UT	0.60	0.60	0.70	0.60	0.70	0.67	0.60	0.60	0.60	0.60	0.60	0.61	2.30	2.30	2.40	2.20	2.30	2.41
VA	0.50	0.50	0.50	0.50	0.50	0.50	0.80	0.90	0.90	0.90	0.90	0.97	2.00	2.10	2.00	2.10	2.10	2.15
VT	0.60	0.60	0.60	0.60	0.60	0.67	0.70	0.70	0.70	0.80	0.80	0.81	2.20	2.20	2.40	2.40	2.20	2.41
WA	0.70	0.70	0.70	0.70	0.70	0.76	0.60	0.60	0.70	0.70	0.70	0.73	2.40	2.40	2.40	2.40	2.40	2.45
WI	0.60	0.60	0.60	0.60	0.70	0.68	0.50	0.50	0.50	0.50	0.60	0.59	2.30	2.40	2.40	2.40	2.40	2.44
WV	0.50	0.50	0.50	0.50	0.50	0.53	0.80	0.80	0.80	0.80	0.80	0.89	2.10	2.20	2.10	2.10	2.10	2.14
WY	0.70	0.70	0.80	0.80	0.80	0.82	0.60	0.60	0.50	0.50	0.50	0.47	2.30	2.20	2.30	2.20	2.40	2.45
US	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>	<b>0.55</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.78</b>	<b>2.20</b>	<b>2.30</b>	<b>2.30</b>	<b>2.30</b>	<b>2.30</b>	<b>2.33</b>
Facilities	13,563	13,533	13,371	13,675	13,650	13,922	13,546	13,524	13,370	13,663	13,642	13,913	13,434	13,522	13,504	13,645	13,629	13,896

## **Licensed Nursing Hours**

Table 26 shows the average licensed nursing hours (RNs and LPN/LVNs) per resident day increased from 1.2 hours in 2003 to 1.34 in 2008. This was about 80.4 minutes per resident day or 26.8 minutes per 8-hour shift in 2008.

## **Total Nursing Hours**

The total nursing hours (RNs, LPN/LVNs, and NAs) per resident day increased from 3.5 in 2003 to 3.67 in 2008 (See Table 26) primarily because of the increase in unlicensed hours. The total nursing hours varied across states from 3.14 in Illinois to 4.96 in Alaska in 2008.



**TABLE 26**  
**AVERAGE LICENSED AND COMBINED NURSE HOURS PER RESIDENT DAY**  
**IN FACILITIES WITH MEDICAID AND MEDICARE/MEDICAID BEDS (TITLE 19 AND TITLE 18/19)**

State	Licensed Nurses						Total Nursing Staff					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
AK	2.00	1.90	1.90	1.90	1.90	1.92	5.30	5.20	5.00	5.40	5.10	4.96
AL	1.30	1.40	1.40	1.40	1.40	1.48	3.90	3.90	3.90	3.90	3.90	4.03
AR	1.10	1.10	1.10	1.10	1.20	1.23	3.50	3.60	3.80	3.70	3.70	3.84
AZ	1.30	1.40	1.40	1.40	1.30	1.47	3.50	3.50	3.60	3.50	3.50	3.77
CA	1.10	1.10	1.20	1.20	1.30	1.31	3.60	3.60	3.60	3.70	3.80	3.84
CO	1.30	1.30	1.40	1.40	1.40	1.46	3.50	3.50	3.60	3.60	3.60	3.67
CT	1.30	1.30	1.30	1.30	1.40	1.47	3.50	3.60	3.60	3.60	3.70	3.90
DC	1.50	1.70	1.60	1.70	1.70	1.68	4.00	4.30	4.00	4.00	4.20	4.22
DE	1.50	1.60	1.60	1.60	1.70	1.78	4.10	4.00	4.00	4.10	3.90	4.19
FL	1.40	1.40	1.50	1.50	1.50	1.51	4.10	4.20	4.20	4.20	4.50	4.45
GA	1.10	1.20	1.20	1.20	1.30	1.31	3.20	3.30	3.30	3.30	3.40	3.38
HI	1.30	1.30	1.20	1.30	1.30	1.32	3.90	3.80	3.80	3.90	3.80	3.77
IA	1.00	1.00	1.10	1.10	1.10	1.17	3.10	3.10	3.10	3.20	3.20	3.36
ID	1.40	1.50	1.50	1.50	1.50	1.57	4.00	4.00	4.00	4.00	4.00	4.15
IL	1.00	1.10	1.10	1.10	1.16		2.90	2.90	3.10	3.00	3.10	3.14
IN	1.20	1.30	1.30	1.30	1.40	1.42	3.20	3.30	3.30	3.40	3.40	3.45
KS	1.00	1.10	1.10	1.10	1.16		3.30	3.40	3.40	3.40	3.50	3.60
KY	1.30	1.30	1.30	1.30	1.33		3.70	3.70	3.70	3.70	3.70	3.78
LA	1.00	1.00	1.00	1.10	1.16		3.00	3.10	3.00	3.00	3.10	3.26
MA	1.40	1.40	1.40	1.40	1.50	1.51	3.60	3.70	3.70	3.70	3.80	3.81
MD	1.30	1.30	1.40	1.40	1.40	1.50	3.60	3.60	3.70	3.70	3.70	3.82
ME	1.30	1.30	1.30	1.30	1.30	1.39	4.20	4.30	4.20	4.30	4.30	4.43
MI	1.20	1.20	1.30	1.30	1.30	1.34	3.60	3.60	3.60	3.60	3.70	3.75
MN	1.20	1.20	1.30	1.30	1.30	1.31	3.40	3.40	3.50	3.60	3.60	3.71
MO	1.00	1.00	1.00	1.00	1.10	1.10	3.30	3.30	3.40	3.40	3.40	3.48
MS	1.20	1.30	1.30	1.30	1.40	1.48	3.50	3.60	3.60	3.60	3.70	3.83
MT	1.30	1.20	1.30	1.40	1.30	1.32	3.80	3.70	3.70	3.80	3.70	3.82
NC	1.30	1.40	1.40	1.40	1.40	1.41	3.60	3.70	3.70	3.70	3.60	3.71
ND	1.20	1.10	1.20	1.20	1.20	1.28	3.80	3.80	3.90	3.80	3.90	4.06
NE	1.20	1.20	1.20	1.30	1.30	1.34	3.60	3.60	3.60	3.60	3.60	3.73
NH	1.40	1.40	1.40	1.40	1.50	1.51	3.70	3.60	3.80	3.80	3.90	4.04
NJ	1.30	1.30	1.30	1.30	1.30	1.40	3.40	3.40	3.50	3.40	3.50	3.53
NM	1.10	1.10	1.20	1.10	1.20	1.09	3.30	3.30	3.30	3.30	3.40	3.28
NV	1.40	1.30	1.30	1.40	1.30	1.50	3.50	3.40	3.50	3.40	3.50	3.54
NY	1.30	1.30	1.30	1.30	1.40	1.38	3.50	3.60	3.60	3.60	3.60	3.63
OH	1.40	1.40	1.40	1.40	1.40	1.48	3.70	3.80	3.80	3.70	3.70	3.78
OK	0.90	1.00	1.00	1.00	1.00	1.06	3.30	3.30	3.40	3.40	3.40	3.47
OR	1.10	1.20	1.20	1.20	1.20	1.25	3.60	3.80	3.70	3.80	3.90	4.04
PA	1.40	1.40	1.40	1.40	1.40	1.49	3.60	3.60	3.60	3.60	3.60	3.72
RI	1.00	1.00	1.10	1.00	1.10	1.12	3.20	3.30	3.50	3.40	3.50	3.60
SC	1.20	1.30	1.30	1.30	1.40	1.37	3.60	3.70	3.60	3.60	3.70	3.66
SD	1.00	1.10	1.00	1.00	1.00	1.07	3.20	3.20	3.20	3.20	3.20	3.36
TN	1.20	1.20	1.20	1.30	1.30	1.31	3.20	3.20	3.30	3.30	3.30	3.43
TX	1.10	1.10	1.10	1.10	1.10	1.16	3.20	3.20	3.20	3.20	3.20	3.30
UT	1.20	1.20	1.20	1.20	1.30	1.29	3.50	3.50	3.60	3.40	3.60	3.65
VA	1.30	1.40	1.40	1.40	1.40	1.45	3.30	3.40	3.50	3.50	3.50	3.60
VT	1.40	1.30	1.40	1.40	1.40	1.49	3.70	3.60	3.80	3.80	3.60	3.90
WA	1.40	1.40	1.40	1.40	1.40	1.50	3.80	3.80	3.80	3.80	3.80	3.92
WI	1.10	1.10	1.20	1.20	1.20	1.27	3.40	3.50	3.50	3.60	3.60	3.73
WV	1.30	1.30	1.30	1.30	1.30	1.42	3.40	3.50	3.40	3.40	3.40	3.58
WY	1.30	1.30	1.30	1.30	1.30	1.31	3.50	3.50	3.60	3.60	3.70	3.65
<b>US</b>	<b>1.20</b>	<b>1.20</b>	<b>1.30</b>	<b>1.30</b>	<b>1.30</b>	<b>1.34</b>	<b>3.50</b>	<b>3.50</b>	<b>3.50</b>	<b>3.50</b>	<b>3.60</b>	<b>3.67</b>
<b>Fac.</b>	<b>12,807</b>	<b>13,119</b>	<b>13,213</b>	<b>13,193</b>	<b>13,033</b>	<b>13,558</b>	<b>13,009</b>	<b>13,000</b>	<b>12,851</b>	<b>13,122</b>	<b>13,109</b>	<b>13,366</b>

## **Facilities with Medicare Only Certified Beds (Title 18)**

Tables 27 and 28 show the certified facilities with Medicare only beds. In 2008 there were a total of 703 such facilities that had RN staffing data available. Medicare only certified nursing facility beds represented only 2.12 percent of the total nursing facility beds (Table 5).

### **Registered Nursing Hours**

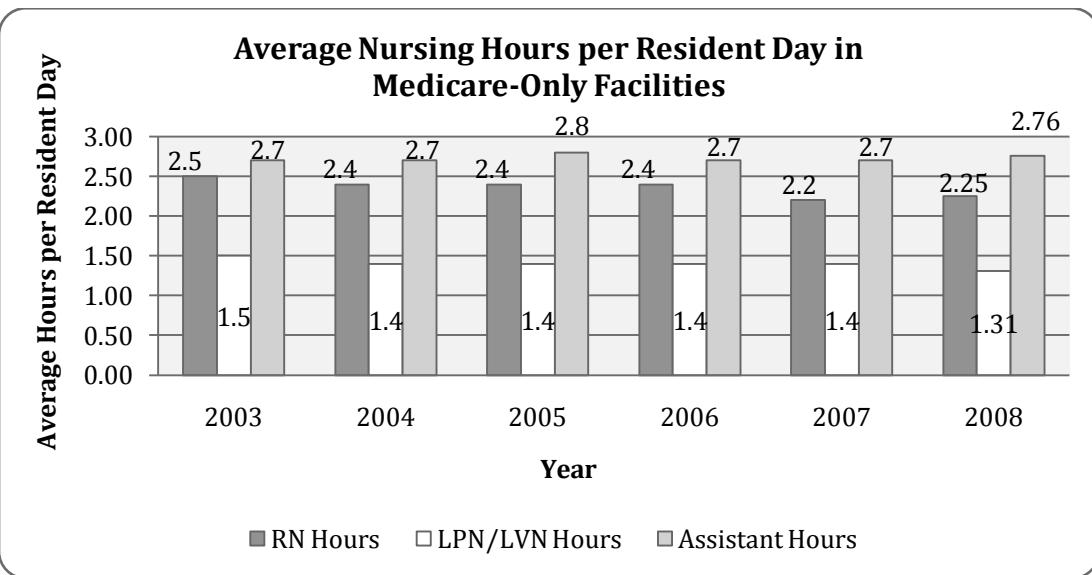
The average RN hours per resident day are shown in Table 27. The average RN hours were 2.5 in 2003 and then decreased to 2.25 hours per resident day (or 135 minutes) in 2008. This was a 10 percent decrease in RN hours per resident day since 2003. The ratio of RN hours varied across states.

### **LPN/LVN Nursing Hours**

The average LPN/LVN hours per resident day are shown in Table 27. There was an average of 1.5 hours per resident day in 2003 and this decreased to 1.31 in 2008. This was a 12.66 percent decrease in LPN/LVN hours per resident day. This was about 78.6 minutes per resident day or 26.2 minutes per 8 hour shift in 2008.

### **Nursing Aide/Assistant Hours**

The average NA hours per resident day are shown in Table 27. The average was 2.7 hours in 2003 and 2.76 hours in 2008.



**TABLE 27**  
**AVERAGE RN, LPN/LVN, AND ASSISTANT HOURS PER RESIDENT DAY**  
**IN FACILITIES WITH MEDICARE ONLY BEDS (TITLE 18)**

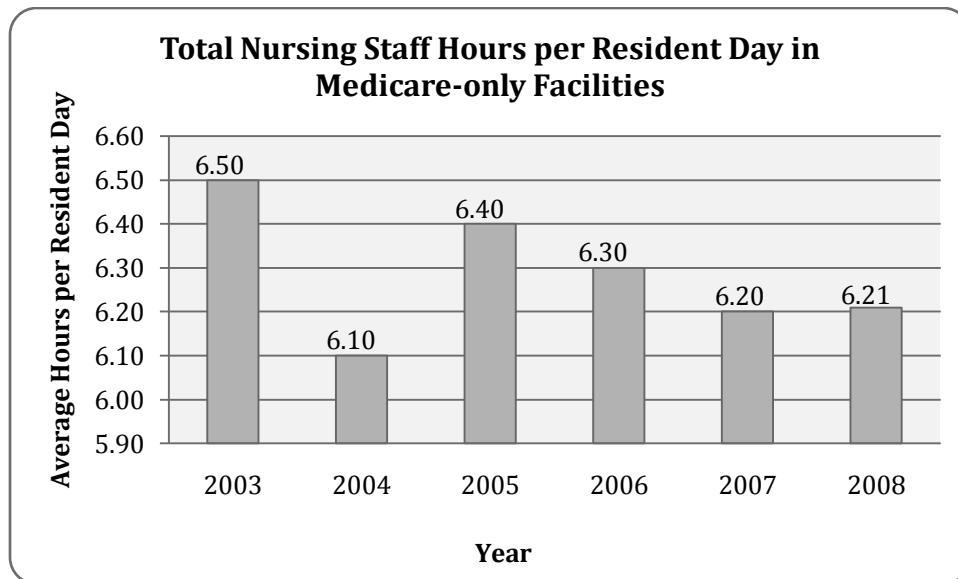
State	RN Hours						LPN/LVN Hours						Assistant Hours					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
AK	0.00	0.00	0.00	0.00	3.30	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00	4.10	0.00
AL	3.00	2.50	2.70	1.50	2.70	2.34	2.40	1.90	2.30	1.70	1.80	1.31	2.80	3.00	2.40	3.00	3.30	2.67
AR	3.30	2.80	3.50	3.70	3.50	3.93	2.90	2.70	2.60	2.30	2.20	2.35	2.80	2.30	2.60	2.40	2.20	2.54
AZ	1.50	0.90	0.70	0.60	0.80	1.01	0.60	1.10	0.70	0.80	0.90	1.04	3.00	2.30	2.20	1.90	2.10	2.82
CA	1.70	1.70	1.60	1.50	1.30	1.58	1.00	0.90	1.00	1.00	0.90	1.08	2.80	2.90	2.90	2.70	2.80	3.10
CO	2.30	2.00	2.40	2.20	1.90	1.75	0.90	1.00	0.90	1.10	1.00	1.28	2.20	2.30	2.80	2.10	2.40	3.06
CT	1.40	1.50	1.70	1.50	1.40	1.39	0.50	0.90	0.80	0.80	0.70	0.73	2.60	2.60	3.10	2.60	2.90	3.19
DC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DE	1.00	1.70	1.10	1.60	1.70	1.16	0.70	0.80	0.80	0.80	0.80	0.96	2.10	2.60	2.20	2.40	2.40	2.23
FL	1.90	1.90	2.20	1.30	1.30	1.41	1.30	1.40	1.60	1.50	1.40	1.54	2.70	2.80	3.30	3.30	3.20	3.34
GA	2.00	2.10	1.50	2.20	1.50	1.67	1.80	1.60	1.30	2.00	2.00	1.21	2.70	2.50	2.60	2.50	2.60	2.76
HI	0.00	0.00	0.00	5.90	0.00	4.70	0.00	0.00	1.70	3.20	0.00	1.32	0.00	0.00	5.60	3.80	0.00	2.34
IA	4.90	4.60	5.00	3.70	4.40	2.91	1.90	1.70	1.70	1.20	1.50	0.79	2.30	2.60	1.90	2.70	1.90	3.08
ID	2.60	2.30	3.10	2.70	4.10	4.20	1.90	1.90	2.00	1.80	2.20	1.37	3.00	2.90	3.60	3.30	4.50	4.10
IL	2.80	2.90	2.70	3.00	3.10	3.32	1.00	1.10	1.00	1.20	1.00	1.08	2.90	2.70	2.90	2.70	2.80	3.03
IN	2.10	2.10	2.10	2.20	2.00	1.88	1.90	1.70	1.90	1.90	1.80	1.73	2.80	2.70	2.80	2.70	2.70	2.33
KS	3.50	3.70	2.70	2.80	2.30	2.39	1.80	2.00	1.40	1.20	1.40	0.93	3.40	2.80	2.80	3.50	2.80	2.47
KY	2.60	3.40	3.10	2.70	3.20	2.72	2.10	2.20	1.60	1.60	1.50	1.53	2.30	2.60	2.70	2.60	3.00	2.90
LA	2.50	2.90	3.60	3.40	2.30	1.89	2.40	2.00	3.00	2.50	2.20	1.81	2.60	2.80	3.60	3.60	2.60	1.85
MA	1.50	1.70	2.00	1.90	1.50	1.62	0.90	0.90	0.80	0.80	1.00	1.01	2.30	2.30	2.70	2.60	2.90	2.70
MD	0.80	0.80	0.70	0.60	1.30	0.63	0.90	1.00	1.30	1.20	1.20	1.23	3.00	3.00	3.20	3.10	2.90	2.80
ME	7.40	2.40	2.30	2.90	2.00	2.40	3.20	1.20	1.90	1.20	1.30	0.76	0.00	2.90	2.70	3.50	2.80	2.37
MI	1.20	1.20	1.20	1.30	1.20	1.09	1.30	1.10	1.10	1.10	1.10	1.15	3.00	2.60	2.40	2.40	2.50	2.51
MN	1.90	2.50	1.80	1.30	1.80	1.51	1.40	2.30	1.60	1.20	1.90	1.99	3.20	2.70	2.40	2.50	2.30	2.42
MO	3.80	3.40	3.90	3.30	3.60	3.70	2.20	1.70	1.80	1.90	1.60	1.31	3.30	2.90	2.90	2.70	3.40	3.51
MS	3.60	3.30	3.30	3.10	3.80	3.20	1.90	1.80	1.50	1.50	1.70	1.54	2.60	2.70	1.90	1.90	2.70	2.51
MT	2.80	2.40	1.50	3.50	3.40	3.46	0.50	3.50	2.70	1.90	2.40	2.44	2.40	2.60	1.50	3.00	3.30	2.53
NC	2.90	2.60	3.30	2.40	3.70	3.39	2.00	1.60	2.50	1.80	2.30	1.90	2.70	3.70	4.20	2.90	3.80	3.04
ND	3.60	3.70	4.50	6.70	5.10	5.22	1.80	2.50	2.30	3.00	2.60	2.08	3.20	3.20	2.50	2.80	3.30	2.92
NE	6.20	6.30	3.10	5.80	3.00	3.23	0.90	2.90	2.20	3.50	1.90	1.80	4.20	3.30	8.10	2.50	2.70	2.76
NH	1.40	2.90	3.20	1.20	0.80	1.31	0.70	1.30	0.40	0.70	0.40	0.69	4.50	4.20	3.90	2.90	2.00	3.40
NJ	1.80	2.00	1.90	2.10	2.10	1.69	0.90	0.90	0.90	0.80	0.80	0.85	2.40	2.50	2.60	2.80	2.70	2.64
NM	5.80	4.00	3.50	2.80	0.20	3.94	2.10	0.50	2.20	2.10	0.50	1.12	6.10	5.00	3.20	2.20	0.80	2.14
NV	1.50	0.00	0.00	0.00	1.90	0.90	0.60	0.00	0.00	0.00	2.20	0.89	1.60	0.00	0.00	0.00	1.70	2.35
NY	0.90	1.00	1.00	4.20	2.40	3.42	0.70	0.80	0.70	0.40	1.00	0.59	2.60	2.70	2.80	5.10	2.50	3.29
OH	3.40	3.00	3.00	2.90	2.80	2.71	1.60	1.80	1.70	1.90	1.70	1.62	2.50	2.30	2.20	2.60	2.30	2.30
OK	2.20	2.90	2.50	3.30	2.50	2.65	2.00	1.90	2.80	2.10	2.50	2.04	2.60	3.00	3.50	2.90	3.20	3.50
OR	1.20	0.70	0.80	0.90	0.90	1.73	0.80	0.40	0.60	0.90	1.00	0.71	2.50	3.00	2.80	2.90	3.20	3.30
PA	2.30	2.20	2.20	2.40	2.40	2.23	1.10	1.10	1.10	1.20	1.30	1.16	2.30	2.30	2.30	2.30	2.30	2.25
RI	0.00	1.50	1.10	1.10	1.60	1.59	0.00	0.90	0.40	0.40	0.60	0.56	0.00	3.30	2.40	2.30	2.60	2.57
SC	2.10	2.20	2.60	2.40	1.70	1.98	1.10	1.30	1.80	1.50	1.30	1.23	3.00	2.60	4.20	3.10	2.80	3.15
SD	0.70	0.00	0.70	0.90	1.00	0.90	0.50	0.00	0.50	0.40	0.40	0.38	2.30	0.00	2.90	2.30	2.60	2.50
TN	2.10	2.50	2.40	2.20	2.30	2.10	1.50	1.50	1.30	1.30	1.70	1.31	2.50	2.60	2.90	2.70	3.10	2.24
TX	2.90	2.30	2.50	2.80	2.20	2.04	2.00	1.90	1.80	2.00	1.70	1.67	2.90	2.50	2.60	2.80	2.80	2.90
UT	3.10	3.10	2.80	2.70	2.50	2.63	0.80	1.00	1.20	0.90	0.90	0.86	2.80	3.50	3.40	3.10	3.30	3.52
VA	1.60	1.50	1.70	2.00	1.90	2.06	1.70	1.80	1.60	1.50	1.80	1.66	2.90	3.10	3.40	2.70	3.30	2.69
VT	1.30	1.40	1.40	1.20	1.40	0.97	0.90	1.00	0.70	0.80	2.40	1.36	2.80	4.20	2.90	2.90	7.20	3.59
WA	1.40	1.40	1.10	1.20	1.00	1.15	0.80	0.80	0.90	1.10	0.90	0.97	3.30	3.50	3.00	3.20	2.90	3.03
WI	2.90	2.40	2.30	1.30	1.80	2.27	0.50	0.60	0.60	0.70	0.60	0.69	2.40	2.50	2.90	2.10	2.20	2.60
WV	2.70	2.90	3.20	2.90	3.10	4.00	1.50	1.40	1.30	1.10	1.10	1.24	2.70	2.50	2.20	1.90	2.30	2.23
WY	5.40	5.00	4.50	5.50	3.90	4.70	1.00	1.50	1.30	2.40	1.30	0.84	4.10	2.40	2.30	3.90	2.60	2.94
US	<b>2.50</b>	<b>2.40</b>	<b>2.40</b>	<b>2.40</b>	<b>2.20</b>	<b>2.25</b>	<b>1.50</b>	<b>1.40</b>	<b>1.40</b>	<b>1.40</b>	<b>1.40</b>	<b>1.31</b>	<b>2.70</b>	<b>2.70</b>	<b>2.80</b>	<b>2.70</b>	<b>2.70</b>	<b>2.76</b>
Fac.	<b>796</b>	<b>748</b>	<b>707</b>	<b>734</b>	<b>727</b>	<b>703</b>	<b>790</b>	<b>742</b>	<b>709</b>	<b>732</b>	<b>729</b>	<b>699</b>	<b>778</b>	<b>720</b>	<b>699</b>	<b>715</b>	<b>715</b>	<b>691</b>

## Licensed Nursing Hours

Table 28 shows that the average licensed nursing hours (RNs and LPN/LVNs) per resident day was 3.9 in 2003 and declined to 3.53 for a 9.49 percent drop in 2008. The ratio varied across states.

## Total Nursing Hours

Table 28 shows that the total nursing hours (RNs, LPN/LVNs, and NAs) per resident day was 6.5 in 2003 and then declined to 6.21 hours in 2008. This was a decline in total hours of 4.46 percent since 2003. The total hours varied across states. The decrease in total nurse staffing hours appears to be related to the implementation of the Medicare prospective payment system in 1998 and the cuts in Medicare reimbursement rates since 2001. This was documented by Konetzka and colleagues (2004).



**TABLE 28**  
**AVERAGE LICENSED AND COMBINED NURSE HOURS PER RESIDENT**  
**DAY IN FACILITIES WITH MEDICARE ONLY BEDS (TITLE 18)**

State	Licensed Nurse Hours						Total Nursing Staff					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
AK	0.00	0.00	0.00	0.00	3.60	0.00	0.00	0.00	0.00	0.00	7.70	0.00
AL	5.40	4.40	5.00	3.20	4.50	3.64	8.20	6.70	6.40	6.20	7.90	6.31
AR	6.20	5.50	6.10	6.00	5.60	6.28	8.00	7.20	8.70	8.50	7.90	8.82
AZ	2.20	2.10	1.40	1.50	1.70	2.05	4.60	4.00	3.60	3.70	3.80	4.87
CA	2.70	2.70	2.70	2.50	2.30	2.59	5.50	5.30	5.40	5.20	4.90	5.64
CO	3.10	3.00	3.30	3.30	2.90	2.75	5.40	5.30	6.10	5.20	5.30	5.39
CT	1.80	2.40	2.50	2.30	2.10	2.12	4.40	5.00	5.50	4.90	5.10	5.31
DC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DE	1.70	2.50	1.90	2.40	2.50	2.11	3.70	5.10	4.10	4.80	4.80	4.34
FL	3.20	3.30	3.80	2.80	2.70	2.94	5.80	5.90	7.10	6.10	5.90	6.29
GA	3.80	3.70	3.10	4.10	3.50	2.41	6.50	6.20	6.00	6.60	4.50	4.66
HI	0.00	0.00	0.00	9.10	0.00	4.15	0.00	0.00	0.00	10.80	0.00	6.48
IA	6.70	6.20	6.10	4.50	5.40	3.81	9.10	8.60	8.00	6.90	7.30	6.95
ID	4.60	4.20	5.20	4.50	6.30	5.57	7.60	7.10	8.80	7.80	9.40	10.11
IL	3.70	4.00	3.70	4.20	4.10	4.30	6.60	6.20	6.20	6.40	6.60	6.99
IN	3.90	3.90	3.90	4.10	3.70	3.74	6.30	6.40	6.50	6.80	6.30	6.15
KS	4.80	4.40	3.90	4.00	3.70	3.65	8.00	6.70	6.90	7.50	6.00	6.00
KY	4.70	5.50	4.70	4.30	4.60	4.23	7.10	7.50	7.40	6.90	7.70	7.17
LA	4.90	4.90	6.30	5.30	4.90	3.92	7.10	7.00	9.10	8.90	7.80	5.87
MA	2.40	2.50	2.70	2.70	2.50	2.62	4.60	4.80	5.40	5.30	5.40	5.33
MD	1.70	1.80	2.00	1.80	1.80	1.86	4.70	4.80	5.20	4.90	4.80	4.66
ME	10.70	3.60	4.20	4.10	3.30	3.16	0.00	6.50	6.90	7.60	6.10	5.53
MI	2.50	2.30	2.30	2.40	2.30	2.25	5.50	4.90	4.70	4.80	4.80	4.76
MN	3.30	4.80	3.30	2.40	3.60	3.50	6.50	6.30	5.70	4.90	5.40	5.18
MO	5.90	5.30	5.70	5.20	5.20	5.06	8.80	8.30	8.60	7.90	8.60	8.52
MS	5.60	5.10	5.00	4.60	5.20	4.75	8.20	7.30	7.10	6.40	7.90	7.41
MT	4.20	7.80	6.80	4.90	5.90	7.37	6.90	10.30	8.10	7.50	9.20	10.54
NC	4.10	3.90	7.00	4.10	4.60	3.99	6.40	6.50	6.00	5.80	6.20	5.00
ND	5.40	6.20	6.90	7.50	7.60	7.30	8.60	9.40	9.40	10.30	10.90	10.22
NE	7.10	9.10	5.30	9.20	4.90	5.03	11.30	0.00	13.30	11.70	7.60	7.79
NH	2.10	4.20	3.60	1.90	1.80	2.00	6.60	8.30	7.50	4.70	4.80	5.40
NJ	2.70	2.90	2.80	2.90	2.90	2.58	5.10	5.10	5.40	5.80	5.60	5.08
NM	7.90	4.50	4.60	3.00	2.00	5.06	14.00	6.80	7.80	5.20	4.40	7.20
NV	2.10	0.00	0.00	0.00	4.10	1.79	3.70	0.00	0.00	0.00	5.80	4.14
NY	1.60	1.80	1.70	1.40	3.80	4.01	4.20	4.60	4.50	3.60	6.20	7.30
OH	5.10	4.50	4.60	4.80	4.30	4.33	7.60	6.30	6.80	7.30	6.70	6.64
OK	3.90	4.30	5.30	3.60	4.80	4.13	6.90	7.10	8.40	6.20	7.70	7.27
OR	2.00	1.10	1.40	1.80	1.90	2.43	4.50	4.20	4.20	4.70	5.10	5.74
PA	3.40	3.30	3.30	3.50	3.70	3.37	5.70	5.40	5.60	5.70	5.90	5.63
RI	0.00	2.40	1.50	1.50	2.10	2.15	0.00	5.70	3.90	3.80	4.70	4.72
SC	3.30	3.40	3.80	3.90	2.80	3.21	6.10	5.80	7.80	6.90	5.50	6.36
SD	1.20	0.00	1.20	1.30	1.40	1.27	3.50	0.00	4.20	3.60	4.00	3.77
TN	3.90	4.00	3.90	3.50	4.00	3.49	6.40	6.10	6.50	6.20	7.10	5.86
TX	4.60	4.10	4.20	4.70	3.80	3.81	7.60	6.30	6.60	6.80	6.60	6.44
UT	3.80	4.10	4.10	3.60	3.30	3.49	6.90	7.00	7.50	6.70	6.40	7.01
VA	3.30	3.30	3.00	2.90	3.60	3.72	5.80	5.90	6.40	5.60	7.00	6.02
VT	2.20	2.40	2.10	2.00	3.80	2.34	5.00	6.50	5.00	4.90	10.90	5.93
WA	2.20	2.30	2.30	2.30	1.90	2.12	5.50	5.80	5.00	5.50	4.80	5.16
WI	3.40	3.00	2.90	2.40	2.40	2.96	5.80	5.50	5.70	4.90	4.60	5.56
WV	4.30	4.30	4.50	4.40	4.20	5.04	7.00	6.60	7.30	6.50	6.60	7.27
WY	6.30	6.50	5.80	7.90	5.30	5.54	10.50	9.00	8.10	11.80	7.90	8.48
<b>US</b>	<b>3.90</b>	<b>3.80</b>	<b>3.80</b>	<b>3.80</b>	<b>3.60</b>	<b>3.53</b>	<b>6.50</b>	<b>6.10</b>	<b>6.40</b>	<b>6.30</b>	<b>6.20</b>	<b>6.21</b>
<b>Fac.</b>	<b>766</b>	<b>726</b>	<b>691</b>	<b>712</b>	<b>708</b>	<b>679</b>	<b>744</b>	<b>678</b>	<b>676</b>	<b>691</b>	<b>693</b>	<b>664</b>

## **Facilities with Medicaid-Only Certified Beds (Title 19)**

Tables 29 and 30 show facilities with Medicaid-only beds. In 2008, there were a total of 631 such facilities that had RN staffing data available. Medicaid-only nursing facilities represented only 3.07 percent of the total nursing facilities in 2008 (Table 5).

### **RN Hours**

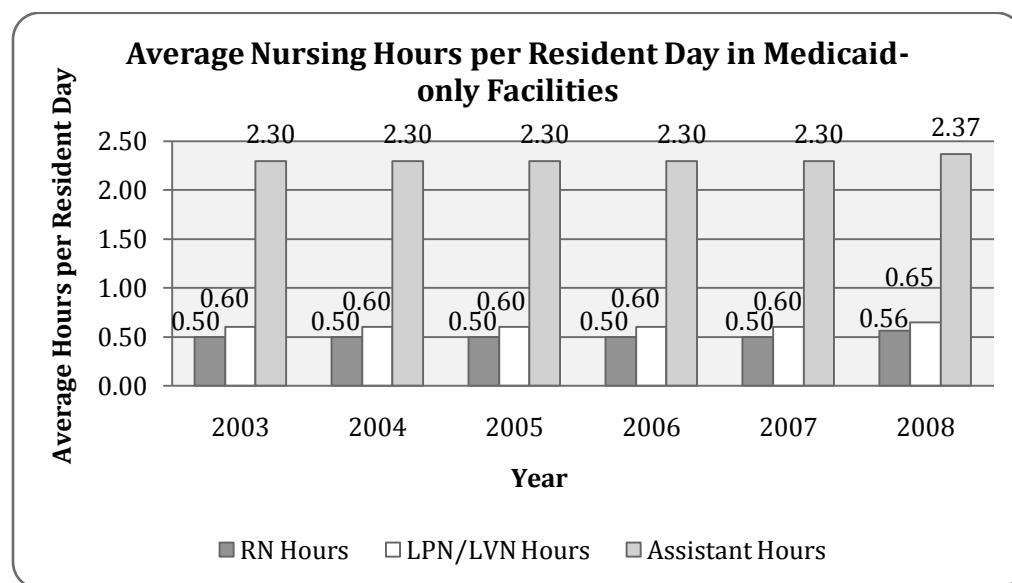
The average RN hours per resident day are shown in Table 29. In 2003, the average RN hours were 0.5 and these increased to 0.56 in 2008. The ratio of RNs hours varied across states.

### **LPN/LVN Hours**

The average LPN/LVN hours per resident day are shown in Table 29. The average LPN/LVN hours were 0.6 in 2003 and increased to 0.65 2008. The ratio of LPN/LVN hours varied across states.

### **Nursing Aide/Assistant Hours**

The average NA hours per resident day are shown in Table 29. The average NA hours were 2.3 in 2003 and increased to 2.37 by 2008 (or by 3.04 percent). The ratio of NA hours varied across states.



**TABLE 29**  
**AVERAGE RN, LPN/LVN, AND ASSISTANT HOURS PER RESIDENT DAY**  
**IN FACILITIES WITH MEDICAID ONLY BEDS (TITLE 19)**

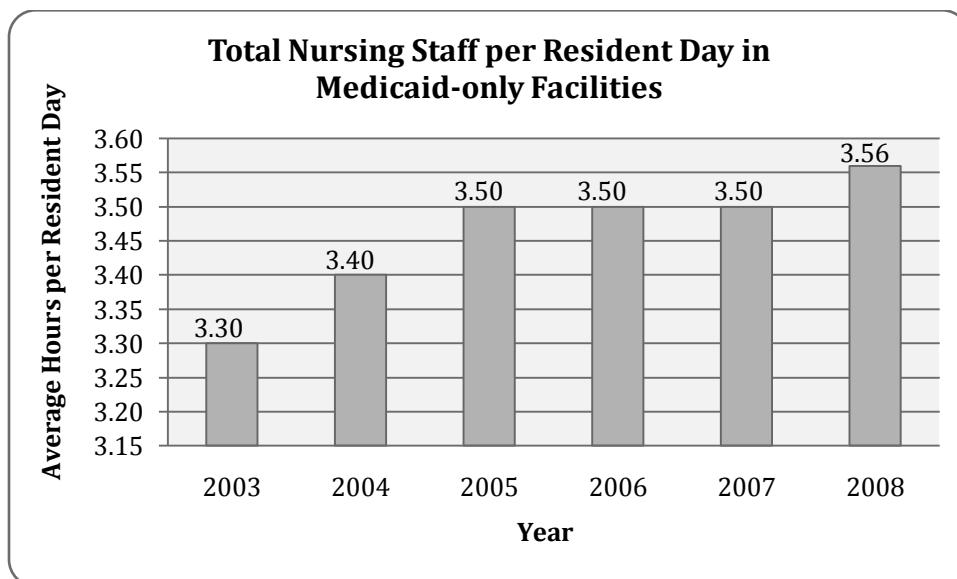
State	RN Hours						LPN/LVN Hours						Assistant Hours					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
AK	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AL	0.70	0.60	1.00	0.90	0.40	0.78	0.90	1.10	1.30	1.20	0.80	1.08	3.90	3.60	4.00	3.50	2.20	2.99
AR	0.20	0.30	0.30	0.30	0.30	0.29	0.80	0.80	0.90	0.90	0.80	0.78	2.50	2.60	2.70	2.80	2.70	2.78
AZ	0.60	0.70	0.70	0.70	0.00	0.00	1.40	1.40	1.10	1.40	0.00	0.00	0.90	1.20	1.00	1.60	0.00	0.00
CA	0.40	0.50	0.50	0.50	0.50	0.43	0.50	0.50	0.70	0.70	0.70	0.73	2.20	2.20	2.30	2.30	2.10	2.25
CO	0.70	0.60	0.70	0.60	0.70	0.72	0.60	0.60	0.60	0.60	0.70	0.66	2.50	2.40	2.70	2.70	2.50	2.26
CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DC	0.00	1.80	0.00	1.50	1.30	1.11	0.10	0.30	1.70	1.10	0.70	0.98	4.70	3.80	0.00	0.00	3.60	4.17
DE	1.00	1.30	1.10	1.20	1.30	1.16	0.70	1.30	1.50	1.20	0.90	1.21	2.80	2.50	3.00	3.00	3.20	4.06
FL	0.70	0.90	0.40	0.80	0.50	1.16	1.10	1.50	0.90	0.60	1.10	1.16	2.80	3.00	2.60	2.70	3.00	3.27
GA	0.40	0.50	0.50	0.40	1.00	0.93	0.80	0.90	0.70	0.50	1.00	1.18	2.40	2.40	3.60	2.90	2.80	3.61
HI	0.60	0.70	0.60	0.50	0.60	0.59	0.40	0.40	0.40	0.40	0.50	0.29	2.70	2.50	3.10	2.90	2.70	3.27
IA	0.50	0.50	0.60	0.60	0.60	0.57	0.50	0.50	0.60	0.60	0.50	0.57	2.30	2.30	2.30	2.40	2.30	2.33
ID	0.90	0.80	0.70	0.90	0.00	0.00	0.60	0.70	0.70	0.70	0.00	0.00	2.70	2.50	2.60	2.90	0.00	0.00
IL	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.50	0.50	0.50	0.40	0.48	1.60	1.60	1.70	1.60	1.60	1.56
IN	0.50	0.50	0.60	0.60	0.60	0.63	0.70	0.80	0.80	0.80	0.80	0.80	2.20	2.60	2.00	2.60	2.30	2.35
KS	0.50	0.60	0.60	0.60	0.60	0.59	0.50	0.50	0.50	0.60	0.50	0.52	2.20	2.30	2.40	2.50	2.60	2.60
KY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LA	0.20	0.20	0.00	0.00	0.00	0.00	0.70	0.90	0.00	0.00	0.00	0.00	2.10	2.00	0.00	0.00	0.00	0.00
MA	0.70	0.70	0.70	0.70	0.80	0.69	0.60	0.70	0.70	0.70	0.70	0.89	2.50	2.50	2.50	2.60	2.60	2.69
MD	0.50	0.50	0.60	0.50	0.60	0.58	0.50	0.60	0.60	0.80	0.60	0.78	2.30	2.40	2.60	2.90	2.50	2.66
ME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MI	0.50	0.50	0.50	0.50	0.50	0.58	0.50	0.60	0.60	0.70	0.70	0.69	2.20	2.30	2.40	2.40	2.50	2.50
MN	0.30	0.30	0.30	0.40	0.30	0.34	0.50	0.60	0.50	0.50	0.50	0.55	0.80	0.80	0.90	0.80	0.90	0.82
MO	0.40	0.40	0.40	0.40	0.40	0.44	0.60	0.50	0.60	0.50	0.70	0.71	2.60	2.60	2.60	2.40	2.40	2.36
MS	0.40	0.40	0.50	0.40	0.50	0.60	0.80	0.90	0.90	0.90	1.00	1.10	2.40	2.60	2.60	2.60	2.60	2.63
MT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	1.30	0.80	1.00	0.90	1.10	1.12	0.50	0.70	0.90	0.20	0.30	0.22	0.00	3.40	0.00	3.00	0.00	0.00
ND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NE	0.60	0.60	0.60	0.60	0.70	0.71	0.70	0.70	0.70	0.70	0.80	0.72	2.60	2.50	2.60	2.60	2.60	2.53
NH	0.90	0.90	0.90	0.80	1.00	1.00	0.40	0.40	0.50	0.60	0.60	0.59	2.30	2.90	2.80	2.60	3.10	3.23
NJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NM	0.70	0.60	0.60	0.80	0.70	1.15	0.60	0.40	0.80	0.60	0.60	0.46	1.70	1.60	2.10	2.40	2.30	1.90
NV	0.50	0.30	0.40	0.40	0.30	0.31	1.00	0.70	0.80	0.60	0.80	0.75	1.70	1.60	1.60	1.40	1.70	1.61
NY	0.00	0.00	0.00	0.00	0.00	0.00	0.80	1.50	1.30	1.10	1.00	1.16	3.40	3.50	3.80	3.70	3.50	2.94
OH	0.00	0.60	0.60	0.70	0.80	0.28	0.00	0.90	1.00	0.90	0.90	0.98	0.00	2.40	2.60	2.30	2.10	3.74
OK	0.30	0.30	0.30	0.30	0.30	0.36	0.60	0.70	0.70	0.70	0.70	0.71	2.40	2.30	2.40	2.40	2.40	2.16
OR	0.50	0.60	0.70	0.60	0.80	0.74	0.40	0.50	0.40	0.30	0.40	0.40	2.70	2.50	2.70	2.60	2.50	2.96
PA	0.80	0.90	0.90	0.80	0.90	1.00	0.50	0.60	0.60	0.50	0.50	0.68	2.30	2.40	2.50	2.50	2.50	2.78
RI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SD	0.70	0.80	0.80	0.70	0.80	0.77	0.40	0.40	0.00	0.30	0.30	0.36	2.30	2.30	2.20	2.30	2.40	2.37
TN	0.30	0.30	0.30	0.30	0.30	0.27	0.60	0.70	0.60	0.70	0.70	0.78	2.10	2.20	2.00	2.20	2.30	2.32
TX	0.30	0.30	0.30	0.30	0.30	0.34	0.70	0.70	0.70	0.70	0.80	0.74	2.30	2.40	2.30	2.40	2.20	2.40
UT	0.40	0.50	0.50	0.60	0.50	0.57	0.60	0.60	0.60	0.50	0.70	0.63	2.00	2.10	1.90	1.70	2.10	2.45
VA	0.60	0.60	0.70	0.60	0.80	0.82	0.80	0.80	0.80	0.90	1.00	0.97	2.70	2.50	2.50	2.50	3.10	2.95
VT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WA	0.80	1.00	1.00	1.00	1.30	1.15	0.90	0.60	0.90	0.80	0.90	0.61	3.10	2.90	3.50	3.20	3.90	3.33
WI	0.70	0.60	0.70	0.60	0.80	0.67	0.40	0.50	0.60	0.70	0.60	0.63	2.40	2.60	2.80	2.50	2.70	2.55
WV	0.40	0.50	0.40	0.40	0.50	0.48	0.80	1.00	0.90	0.90	0.90	0.96	2.50	2.90	2.60	2.30	2.60	2.61
WY	0.80	1.00	1.00	1.00	1.30	1.14	0.70	0.70	1.00	0.50	0.50	0.41	2.80	2.50	2.90	2.80	2.90	2.97
US	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>	<b>0.56</b>	<b>0.60</b>	<b>0.60</b>	<b>0.60</b>	<b>0.60</b>	<b>0.60</b>	<b>0.65</b>	<b>2.30</b>	<b>2.30</b>	<b>2.30</b>	<b>2.30</b>	<b>2.30</b>	<b>2.37</b>
Fac.	<b>1,129</b>	<b>974</b>	<b>815</b>	<b>768</b>	<b>664</b>	<b>631</b>	<b>1,127</b>	<b>974</b>	<b>815</b>	<b>767</b>	<b>663</b>	<b>631</b>	<b>1,535</b>	<b>1,417</b>	<b>1,128</b>	<b>764</b>	<b>661</b>	<b>629</b>

## **Licensed Nursing Hours**

Table 30 shows that the average licensed nursing hours (RNs and LPN/LVNs) per resident day in Medicaid only facilities were 1.1 in 2003 and 1.23 in 2008. The average hours varied across states.

## **Total Nursing Hours**

Table 30 shows that the total nursing hours (RNs, LPN/LVNs, and NAs) per resident day were 3.3 in 2003 and 3.56 in 2008 (a 7.88 percent increase). The total hours varied across states.



**TABLE 30**  
**AVERAGE LICENSED AND COMBINED NURSE HOURS PER RESIDENT**  
**DAY IN FACILITIES WITH MEDICAID ONLY BEDS (TITLE 19)**

State	Licensed Nurse Hours						Total Nursing Staff					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
AK	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AL	1.80	1.70	2.70	2.30	1.20	1.94	5.50	5.10	7.30	5.60	3.40	4.83
AR	1.00	1.00	1.10	1.20	1.10	1.07	3.60	3.70	3.90	4.00	3.90	3.85
AZ	1.90	2.10	1.80	2.00	0.00	0.00	2.90	3.30	2.80	3.60	0.00	0.00
CA	1.00	0.90	1.10	1.10	1.10	1.18	3.20	3.20	3.50	3.40	3.30	3.43
CO	1.30	1.20	1.30	1.20	1.40	1.32	3.80	3.60	4.00	3.90	3.90	3.78
CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DC	0.00	2.10	0.00	2.60	2.00	2.09	0.00	6.00	0.00	0.00	5.60	6.26
DE	1.60	2.10	2.60	2.20	2.30	2.45	4.40	4.60	5.50	5.20	4.80	4.92
FL	1.50	2.00	1.20	1.40	1.40	2.31	4.50	5.60	3.80	4.20	4.30	5.58
GA	1.20	1.40	1.10	1.10	1.70	2.18	3.40	3.80	5.10	4.30	5.00	6.54
HI	1.00	1.10	1.00	0.80	1.10	0.88	3.60	3.50	4.00	3.80	3.80	4.15
IA	1.00	1.00	1.20	1.20	1.20	1.17	3.30	3.30	3.50	3.60	3.40	3.52
ID	1.50	1.50	1.40	1.70	0.00	0.00	4.20	4.00	3.90	4.50	0.00	0.00
IL	0.90	0.90	0.90	0.90	0.90	0.88	2.50	2.50	2.50	2.50	2.50	2.44
IN	1.20	1.30	1.30	1.40	1.40	1.43	3.40	3.80	3.50	3.90	3.70	3.75
KS	1.00	1.10	1.10	1.10	1.10	1.11	3.30	3.40	3.50	3.60	3.70	3.71
KY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LA	0.90	1.10	0.00	0.00	0.00	0.00	3.10	3.10	0.00	0.00	0.00	0.00
MA	1.30	1.50	1.40	1.40	1.50	1.58	3.60	4.00	3.80	3.80	4.00	4.22
MD	0.90	1.10	1.20	1.20	1.20	1.36	3.20	3.50	3.80	4.20	3.70	4.02
ME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MI	1.10	1.10	1.10	1.10	1.20	1.28	3.30	3.40	3.50	3.50	3.70	3.78
MN	0.80	0.90	0.80	0.90	0.80	0.89	1.80	1.70	1.80	1.80	1.80	1.80
MO	0.90	0.90	1.00	1.00	1.10	1.15	3.50	3.50	3.50	3.40	3.50	3.47
MS	1.30	1.30	1.40	1.30	1.40	1.66	3.70	3.90	3.90	3.90	4.00	4.21
MT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	1.80	1.60	1.30	1.10	1.40	1.34	0.00	4.40	0.00	4.10	0.00	0.00
ND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NE	1.30	1.30	1.40	1.40	1.40	1.43	3.90	3.90	4.10	3.90	4.00	3.97
NH	1.30	1.30	1.40	1.40	1.60	1.59	3.60	4.20	4.10	4.00	4.70	4.82
NJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NM	1.50	1.40	2.50	1.40	1.40	1.61	3.10	3.60	6.70	3.80	3.60	3.34
NV	1.40	1.10	1.20	1.00	1.10	1.06	3.10	2.70	2.80	2.50	2.80	2.67
NY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OH	1.50	1.50	1.60	1.60	1.70	1.26	3.90	3.90	4.30	3.80	3.80	5.00
OK	0.90	1.00	1.00	1.00	1.00	1.08	3.40	3.40	3.40	3.40	3.50	3.24
OR	0.90	1.00	1.10	1.00	1.10	1.14	3.50	3.40	3.70	3.50	3.70	4.10
PA	1.30	1.50	1.50	1.40	1.40	1.68	3.60	3.90	4.00	3.80	3.80	4.46
RI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SD	1.10	1.20	1.10	1.10	1.10	1.13	3.30	3.50	3.40	3.30	3.50	3.44
TN	0.90	1.00	1.00	1.00	1.00	1.05	3.10	3.20	3.00	3.30	3.30	3.37
TX	1.10	1.10	1.10	1.10	1.10	1.10	3.40	3.50	3.40	3.50	3.40	3.57
UT	1.00	1.00	1.10	1.10	1.20	1.34	3.00	3.10	3.00	2.80	3.30	3.38
VA	1.30	1.40	1.40	1.50	1.80	1.78	3.90	3.80	4.00	3.90	4.50	4.51
VT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WA	1.70	1.60	1.90	1.80	2.10	1.76	4.40	4.50	5.20	4.50	5.80	5.06
WI	1.10	1.10	1.20	1.20	1.30	1.32	3.50	3.70	3.90	3.70	4.00	3.92
WV	1.20	1.50	1.40	1.30	1.40	1.41	3.70	4.40	3.90	3.60	4.10	4.07
WY	1.50	1.70	2.00	1.40	1.80	1.63	4.30	4.20	4.90	4.30	4.70	4.48
<b>US</b>	<b>1.10</b>	<b>1.10</b>	<b>1.10</b>	<b>1.10</b>	<b>1.20</b>	<b>1.23</b>	<b>3.30</b>	<b>3.40</b>	<b>3.50</b>	<b>3.50</b>	<b>3.50</b>	<b>3.56</b>
<b>Fac.</b>	<b>1,100</b>	<b>951</b>	<b>795</b>	<b>749</b>	<b>648</b>	<b>614</b>	<b>1,082</b>	<b>934</b>	<b>781</b>	<b>737</b>	<b>636</b>	<b>601</b>

## Total Certified Facilities (Title 19, Title 18/19, and Title 18)

Table 31 and 32 shows a combined total of about 14,030 to 14,625 facilities (with Title 19, Title 18/19, and Title 18 only beds) that had useable staffing data for the staffing analysis in 2008.

### Registered Nursing Hours

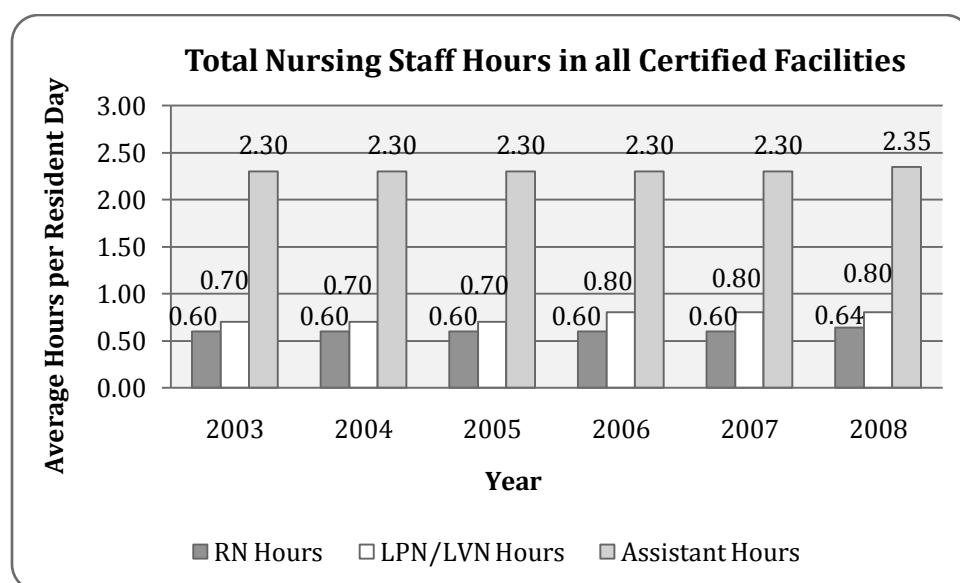
The average RN hours per resident day are shown in Table 31. The average hours were 0.6 in 2003 and then increased to 0.64 during 2008. In 2008, this was 38.4 minutes per resident day or 12.8 minutes per 8 hour shift. This table shows that nursing assistant hours are partially being substituted for RN hours.

### LPN/LVN Nursing Hours

The average LPN/LVN hours per resident day are shown in Table 31. There were an average of 0.7 hours per resident day in 2003, and increased to 0.8 in 2006-2008. In 2008, this represents 48 minutes per resident day or 16 minutes per 8 hour shift.

### Nursing Aide/Assistant Hours

The average NA hours per resident day are shown in Table 31. The average was 2.3 hours during in 2003, and increased to 2.35 in 2008. This was 141 minutes per resident day or 47 minutes per 8 hour shift in 2008.



**TABLE 31**  
**AVERAGE RN, LPN/LVN, & ASSISTANT HOURS PER RESIDENT DAY**  
**IN ALL CERTIFIED NURSING FACILITIES IN THE U.S.**

State	RN Hours						LPN/LVN Hours						Assistant Hours					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
AK	1.30	1.20	1.10	1.20	1.60	1.38	0.60	0.70	0.60	0.70	0.60	0.66	3.00	3.30	2.90	3.20	3.40	3.00
AL	0.50	0.50	0.50	0.50	0.60	0.53	1.00	1.00	1.00	1.00	1.02	2.60	2.60	2.50	2.50	2.40	2.55	
AR	0.50	0.40	0.50	0.50	0.50	0.53	0.90	0.90	0.90	0.90	0.90	0.96	2.40	2.50	2.60	2.50	2.50	2.63
AZ	0.60	0.60	0.60	0.50	0.60	0.62	0.80	0.90	0.80	0.90	0.80	0.91	2.20	2.20	2.20	2.10	2.20	2.34
CA	0.60	0.60	0.60	0.60	0.60	0.58	0.60	0.60	0.60	0.70	0.70	0.76	2.50	2.50	2.50	2.50	2.50	2.55
CO	0.80	0.80	0.80	0.80	0.70	0.79	0.70	0.70	0.70	0.80	0.80	0.80	2.10	2.20	2.20	2.20	2.20	2.29
CT	0.70	0.70	0.70	0.70	0.70	0.76	0.60	0.60	0.60	0.60	0.70	0.73	2.20	2.30	2.30	2.30	2.30	2.45
DC	0.50	0.70	0.60	0.70	0.70	0.65	0.90	1.00	1.00	1.10	1.00	0.99	2.50	2.70	2.30	2.50	2.60	2.57
DE	0.80	0.90	0.80	0.90	0.90	0.82	0.70	0.80	0.90	0.90	0.90	0.97	2.40	2.50	2.40	2.40	2.40	2.40
FL	0.60	0.60	0.60	0.60	0.60	0.56	0.90	0.90	1.00	1.00	1.00	1.01	2.70	2.70	2.80	2.80	3.00	2.95
GA	0.40	0.40	0.40	0.40	0.40	0.39	0.80	0.90	0.90	0.90	1.00	0.96	2.10	2.10	2.10	2.10	2.10	2.10
HI	0.80	0.80	0.80	1.10	0.80	1.07	0.50	0.60	0.60	0.70	0.60	0.49	2.50	2.50	2.60	2.60	2.50	2.53
IA	0.70	0.60	0.60	0.60	0.60	0.62	0.50	0.60	0.60	0.60	0.60	0.60	2.10	2.10	2.10	2.10	2.10	2.21
ID	0.80	0.80	0.90	0.90	1.10	0.99	0.80	0.80	0.90	0.90	0.90	0.85	2.70	2.60	2.60	2.60	2.70	2.76
IL	0.70	0.70	0.70	0.70	0.70	0.74	0.50	0.50	0.60	0.60	0.60	0.60	1.90	1.90	2.00	1.90	2.00	1.98
IN	0.60	0.60	0.60	0.60	0.60	0.59	0.90	0.90	0.90	0.90	1.00	0.97	2.00	2.10	2.00	2.10	2.10	2.06
KS	0.60	0.60	0.60	0.60	0.60	0.62	0.60	0.60	0.60	0.60	0.60	0.59	2.20	2.30	2.30	2.40	2.40	2.39
KY	0.70	0.80	0.70	0.70	0.80	0.72	0.90	0.90	0.80	0.80	0.80	0.84	2.40	2.50	2.40	2.40	2.40	2.48
LA	0.40	0.50	0.50	0.50	0.40	0.40	0.90	0.90	0.90	0.90	0.90	0.91	2.10	2.10	2.10	2.10	2.10	2.08
MA	0.70	0.70	0.70	0.70	0.70	0.72	0.70	0.70	0.70	0.70	0.80	0.82	2.30	2.30	2.30	2.30	2.30	2.31
MD	0.60	0.60	0.60	0.60	0.60	0.58	0.70	0.70	0.80	0.80	0.90	0.94	2.40	2.40	2.40	2.30	2.30	2.35
ME	0.90	0.90	0.90	0.90	0.90	0.93	0.50	0.40	0.40	0.40	0.40	0.46	2.90	3.00	2.90	2.90	3.00	2.99
MI	0.60	0.60	0.60	0.60	0.60	0.62	0.60	0.70	0.70	0.70	0.70	0.76	2.40	2.30	2.30	2.40	2.41	2.41
MN	0.50	0.60	0.60	0.60	0.60	0.58	0.70	0.70	0.70	0.70	0.70	0.75	2.20	2.20	2.20	2.30	2.30	2.34
MO	0.60	0.50	0.50	0.50	0.50	0.51	0.70	0.70	0.70	0.70	0.70	0.71	2.40	2.40	2.40	2.40	2.40	2.42
MS	0.70	0.60	0.60	0.60	0.60	0.69	0.90	0.90	0.90	0.90	0.90	0.97	2.30	2.30	2.20	2.30	2.40	2.32
MT	0.90	0.80	0.80	0.90	0.90	0.96	0.50	0.60	0.60	0.60	0.60	0.65	2.50	2.50	2.10	2.40	2.50	2.45
NC	0.70	0.60	0.60	0.60	0.60	0.62	0.80	0.80	0.80	0.80	0.90	0.87	2.20	2.30	2.30	2.30	2.20	2.32
ND	0.70	0.70	0.70	0.80	0.80	0.84	0.60	0.60	0.60	0.70	0.70	0.67	2.60	2.70	2.70	2.60	2.70	2.79
NE	0.60	0.60	0.60	0.60	0.60	0.64	0.60	0.60	0.70	0.70	0.70	0.72	2.40	2.40	2.40	2.30	2.40	2.39
NH	0.80	0.90	0.90	0.80	0.80	0.81	0.60	0.60	0.60	0.60	0.60	0.71	2.30	2.40	2.40	2.40	2.40	2.58
NJ	0.70	0.70	0.70	0.80	0.70	0.74	0.70	0.70	0.70	0.70	0.70	0.74	2.20	2.20	2.20	2.20	2.20	2.17
NM	0.80	0.60	0.60	0.60	0.50	0.69	0.60	0.50	0.60	0.60	0.50	0.57	2.20	1.90	1.90	2.20	1.90	2.16
NV	0.70	0.60	0.60	0.60	0.70	0.72	0.80	0.70	0.80	0.70	0.70	0.83	2.20	2.10	2.20	2.00	2.20	2.10
NY	0.60	0.60	0.60	0.60	0.60	0.62	0.70	0.70	0.70	0.70	0.80	0.79	2.20	2.20	2.20	2.20	2.20	2.26
OH	0.80	0.70	0.70	0.70	0.70	0.64	0.90	0.90	0.90	0.90	0.90	0.92	2.30	2.30	2.30	2.30	2.30	2.29
OK	0.40	0.40	0.40	0.40	0.40	0.44	0.70	0.70	0.80	0.80	0.80	0.75	2.30	2.40	2.40	2.40	2.40	2.44
OR	0.70	0.70	0.70	0.70	0.70	0.77	0.40	0.50	0.50	0.50	0.50	0.53	2.50	2.50	2.50	2.60	2.70	2.83
PA	0.90	0.80	0.80	0.90	0.90	0.87	0.80	0.80	0.80	0.80	0.90	0.85	2.20	2.20	2.20	2.20	2.20	2.24
RI	0.70	0.70	0.70	0.70	0.70	0.77	0.30	0.30	0.30	0.30	0.30	0.36	2.20	2.20	2.40	2.30	2.40	2.44
SC	0.70	0.70	0.70	0.70	0.60	0.68	0.90	0.90	1.00	1.00	1.00	0.96	2.40	2.40	2.50	2.40	2.30	2.41
SD	0.70	0.70	0.70	0.70	0.70	0.71	0.30	0.30	0.30	0.30	0.30	0.36	2.20	2.20	2.20	2.20	2.30	
TN	0.50	0.60	0.50	0.50	0.60	0.53	0.80	0.80	0.90	0.90	0.90	0.91	2.00	2.10	2.10	2.10	2.10	2.12
TX	0.50	0.50	0.50	0.50	0.47	0.80	0.80	0.80	0.80	0.80	0.80	0.84	2.20	2.10	2.10	2.10	2.10	2.17
UT	1.00	0.90	1.10	1.00	1.00	1.01	0.60	0.60	0.70	0.60	0.70	0.65	2.40	2.50	2.60	2.40	2.50	2.60
VA	0.60	0.50	0.50	0.60	0.50	0.56	0.90	0.90	0.90	0.90	1.00	0.99	2.10	2.10	2.10	2.10	2.20	2.17
VT	0.60	0.60	0.60	0.60	0.70	0.68	0.70	0.70	0.80	0.80	0.80	0.83	2.20	2.30	2.40	2.40	2.44	
WA	0.80	0.80	0.70	0.80	0.70	0.77	0.60	0.60	0.70	0.70	0.70	0.74	2.40	2.40	2.50	2.40	2.30	2.46
WI	0.70	0.70	0.70	0.70	0.70	0.72	0.50	0.50	0.50	0.50	0.60	0.59	2.30	2.40	2.40	2.40	2.40	2.44
WV	0.80	0.70	0.70	0.70	0.70	0.83	0.90	0.90	0.90	0.80	0.90	0.92	2.10	2.20	2.10	2.00	2.10	2.15
WY	0.80	1.00	1.00	1.00	1.00	1.04	0.60	0.60	0.60	0.60	0.50	0.49	2.40	2.20	2.30	2.30	2.40	2.47
US	<b>0.60</b>	<b>0.60</b>	<b>0.60</b>	<b>0.60</b>	<b>0.60</b>	<b>0.64</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.80</b>	<b>0.80</b>	<b>0.80</b>	<b>2.30</b>	<b>2.30</b>	<b>2.30</b>	<b>2.30</b>	<b>2.30</b>	<b>2.35</b>
Fac.	<b>14,359</b>	<b>14,281</b>	<b>14,078</b>	<b>14,409</b>	<b>14,377</b>	<b>14,625</b>	<b>14,336</b>	<b>14,266</b>	<b>14,079</b>	<b>14,395</b>	<b>14,371</b>	<b>14,612</b>	<b>14,300</b>	<b>14,224</b>	<b>14,044</b>	<b>14,360</b>	<b>14,344</b>	<b>14,587</b>

## **Licensed Nursing Hours**

Table 32 shows the average licensed nursing hours (RNs and LPN/LVNs) per resident day was stable during 2003-2008.

## **Total Nursing Hours**

Table 32 shows the total nursing hours (RNs, LPN/LVNs, and NAs) per resident day was 3.6 hours per resident day in 2003 and this increased to 3.79 hours per resident day in 2008. In 2008, this was about 227.4 minutes per resident day or 75.8 minutes per 8 hour shift.

**TABLE 32**  
**AVERAGE LICENSED AND COMBINED NURSE HOURS PER RESIDENT DAY**  
**IN ALL CERTIFIED NURSING FACILITIES COMBINED**

State	Licensed Nurse Hours						Total Nursing Staff Hours					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
AK	2.00	1.90	1.90	1.90	2.10	1.92	5.30	5.20	5.00	5.40	5.50	4.96
AL	1.50	1.50	1.60	1.50	1.60	1.55	4.00	4.00	4.00	4.00	4.10	4.11
AR	1.50	1.30	1.50	1.40	1.40	1.49	3.80	3.90	4.10	4.00	4.00	4.11
AZ	1.40	1.40	1.40	1.40	1.40	1.54	3.50	3.50	3.60	3.50	3.50	3.92
CA	1.20	1.20	1.20	1.30	1.30	1.37	3.70	3.70	3.70	3.80	3.80	3.93
CO	1.40	1.50	1.50	1.60	1.50	1.56	3.60	3.70	3.80	3.80	3.70	3.81
CT	1.30	1.30	1.30	1.40	1.40	1.49	3.50	3.70	3.60	3.60	3.70	3.95
DC	1.50	1.70	1.60	1.70	1.70	1.68	4.00	4.30	4.00	4.00	4.20	4.22
DE	1.60	1.70	1.60	1.70	1.80	1.80	4.00	4.20	4.00	4.20	4.00	4.20
FL	1.50	1.50	1.60	1.50	1.50	1.56	4.20	4.30	4.40	4.30	4.60	4.52
GA	1.20	1.20	1.30	1.30	1.30	1.33	3.30	3.40	3.40	3.40	3.40	3.41
HI	1.30	1.30	1.20	1.70	1.30	1.40	3.90	3.80	3.80	4.10	3.80	3.85
IA	1.20	1.20	1.20	1.20	1.20	1.22	3.20	3.20	3.20	3.30	3.30	3.44
ID	1.70	1.60	1.80	1.80	2.00	1.80	4.40	4.10	4.50	4.50	4.50	4.56
IL	1.20	1.30	1.30	1.30	1.30	1.37	3.10	3.20	3.30	3.20	3.30	3.40
IN	1.40	1.50	1.50	1.60	1.60	1.55	3.40	3.50	3.50	3.60	3.60	3.62
KS	1.10	1.10	1.10	1.20	1.20	1.23	3.40	3.50	3.50	3.50	3.60	3.67
KY	1.50	1.60	1.50	1.50	1.60	1.55	4.00	4.10	4.00	3.90	4.00	4.04
LA	1.30	1.30	1.40	1.30	1.40	1.35	3.30	3.40	3.40	3.40	3.40	3.44
MA	1.40	1.40	1.50	1.50	1.50	1.54	3.60	3.70	3.80	3.80	3.80	3.85
MD	1.30	1.30	1.40	1.40	1.40	1.51	3.70	3.70	3.80	3.70	3.80	3.86
ME	1.40	1.40	1.30	1.40	1.30	1.41	4.20	4.30	4.30	4.30	4.30	4.44
MI	1.20	1.30	1.30	1.30	1.30	1.37	3.60	3.60	3.60	3.70	3.70	3.79
MN	1.20	1.30	1.30	1.30	1.30	1.34	3.50	3.50	3.60	3.60	3.60	3.72
MO	1.30	1.20	1.20	1.20	1.20	1.22	3.60	3.50	3.50	3.60	3.60	3.63
MS	1.60	1.60	1.60	1.50	1.50	1.66	3.90	3.90	3.80	3.80	3.90	4.03
MT	1.40	1.30	1.40	1.50	1.60	1.62	3.80	3.80	3.80	3.90	4.00	4.18
NC	1.40	1.40	1.50	1.40	1.40	1.45	3.60	3.70	3.70	3.70	3.70	3.73
ND	1.30	1.30	1.40	1.40	1.40	1.50	3.90	4.00	4.10	4.00	4.20	4.30
NE	1.20	1.30	1.30	1.30	1.30	1.36	3.60	3.70	3.60	3.60	3.70	3.75
NH	1.40	1.50	1.50	1.40	1.50	1.52	3.80	3.80	3.90	3.80	3.90	4.08
NJ	1.40	1.40	1.40	1.50	1.50	1.49	3.60	3.60	3.60	3.60	3.60	3.65
NM	1.50	1.40	1.30	1.20	1.20	1.28	3.90	3.70	3.50	3.40	3.40	3.47
NV	1.40	1.30	1.30	1.40	1.40	1.50	3.50	3.40	3.50	3.40	3.50	3.56
NY	1.30	1.30	1.30	1.30	1.40	1.40	3.50	3.60	3.60	3.60	3.60	3.67
OH	1.60	1.60	1.60	1.60	1.50	1.57	4.00	3.90	3.90	3.80	3.80	3.87
OK	1.10	1.10	1.20	1.10	1.20	1.16	3.40	3.50	3.70	3.50	3.60	3.60
OR	1.20	1.20	1.20	1.20	1.20	1.31	3.70	3.80	3.70	3.80	3.90	4.12
PA	1.60	1.60	1.60	1.70	1.70	1.70	3.90	3.80	3.90	3.90	3.90	3.94
RI	1.00	1.00	1.10	1.00	1.10	1.13	3.20	3.30	3.50	3.40	3.50	3.61
SC	1.50	1.60	1.60	1.70	1.60	1.63	3.90	4.00	4.10	4.00	3.90	4.05
SD	1.00	1.10	1.00	1.00	1.00	1.07	3.20	3.20	3.20	3.20	3.30	3.36
TN	1.40	1.40	1.40	1.40	1.50	1.44	3.50	3.50	3.50	3.50	3.60	3.57
TX	1.40	1.30	1.30	1.40	1.30	1.33	3.50	3.50	3.40	3.40	3.50	3.49
UT	1.50	1.60	1.80	1.70	1.70	1.68	3.90	4.00	4.30	4.10	4.10	4.24
VA	1.40	1.40	1.50	1.40	1.50	1.54	3.50	3.50	3.60	3.60	3.70	3.68
VT	1.40	1.30	1.40	1.40	1.50	1.51	3.80	3.60	3.80	3.90	3.80	3.95
WA	1.40	1.40	1.40	1.40	1.40	1.52	3.80	3.80	3.90	3.80	3.80	3.95
WI	1.20	1.20	1.20	1.20	1.30	1.32	3.50	3.50	3.60	3.60	3.70	3.78
WV	1.70	1.60	1.60	1.60	1.60	1.71	3.90	3.80	3.80	3.70	3.70	3.89
WY	1.40	1.60	1.60	1.70	1.50	1.56	3.80	3.80	3.80	4.20	4.00	3.92
<b>US</b>	<b>1.40</b>	<b>1.40</b>	<b>1.40</b>	<b>1.40</b>	<b>1.40</b>	<b>1.44</b>	<b>3.60</b>	<b>3.70</b>	<b>3.70</b>	<b>3.70</b>	<b>3.70</b>	<b>3.79</b>
<b>Fac.</b>	<b>13,872</b>	<b>13,919</b>	<b>13,724</b>	<b>14,034</b>	<b>14,013</b>	<b>14,237</b>	<b>13,753</b>	<b>13,696</b>	<b>13,527</b>	<b>13,813</b>	<b>13,802</b>	<b>14,030</b>

## **FACILITY DEFICIENCIES FROM STATE SURVEY EVALUATIONS**

### ***Background***

Nursing facilities provide care to prevent problems or to address resident problems with cognition, communication/hearing, vision, physical functioning, continence, psychosocial functioning, mood and behavior, oral/ nutritional and dental care, skin condition, and medications.

A number of clinical process measures have been associated with poor patient outcomes. These include urethral catheterization, physical restraints, and tube feedings. Another common problem in nursing homes is the improper use of psychotropic drugs identified in a number of studies.

An outcome is an evaluation of the impact of facility care on a resident, whereas a process indicator is services or activities which a facility does or does not provide. A number of quality outcomes have been identified, such as: pressure ulcers, falls, weight loss, and infectious disease. Other negative outcomes are behavioral/ emotional problems, cognitive problems, pressure ulcers, and deterioration in physical functioning (Zimmerman et al., 1995).

State surveyors assess both the process and the outcomes of nursing home care in 15 major areas. Each of these areas has specific regulations which state surveyors review to determine whether or not facilities have met the standards. In July 1995, HCFA consolidated the 325 measures of quality to about 185 measures. This report shows data for

1996 through 2002 using the 185 consolidated measures.

Of the total survey requirements, most are considered process indicators and some are outcome measures. The process measures include whether proper procedures are used in providing each of the major nursing home services. The outcome measures include ensuring that negative problems do not occur such as: residents without an indwelling catheter are not catheterized; residents do not experience a reduction in range of motion; residents able to eat alone/with assistance are not fed by naso-gastric tube; and residents maintain acceptable parameters of nutritional status.

Where a facility fails to meet a standard, a deficiency or citation is given to the facility for that individual standard. The deficiencies are given for problems which can result in a negative impact on the health and safety of residents. Beginning in July 1995, HCFA surveyors also rate each deficiencies based on scope and severity for purposes of enforcement.

The deficiencies rated as causing actual harm or immediate jeopardy are the most serious (rated at a G level or higher). The overall deficiency data on process and outcome measures from OSCAR are limited to whether or not the facility meets each of the minimum standards. Since there are many survey measures (or items), only a selected number of these are presented in the report. The

measures with the highest percent of facilities with deficiencies were examined.

Each table shows an identifying number (F-tag) and a short description of each standard or item. A detailed list of all the F-tags and longer descriptions are shown in the last table. Definitions of deficiencies are given in the State Operations Manual published by the Centers for Medicare and Medicaid Services.

Changes were made in some of the deficiency categories by the Centers for Medicare and Medicaid Services. Two new items were requirements were added and several requirements were combined. These changes were taken into account in the data book for 2006 and these requirements were then revised for the previous years, as follows:

F315 and 316 were combined into F315, Urinary Incontinence Care

F329, F330 and F331 were combined into F329, Unnecessary Drugs.

F334, Influencia/Pneumococcal Immunizations became a new requirement.

F355, Nursing Waivers is a new item (there were none for 2006)

F356, Posting Nurse Staff Information was new

F425, F426, and F427 were combined into F425, Pharmacy Services

F428, F429, F430 were combined into F428, Drug Regimen Review

F431 and F432 were combined into F431, Consultation, Labeling and Storage

In 2007, accident prevention (F324) was combined with accident environment (F323).

Nevertheless, as noted earlier, the IOM (2001) recommended that CMS strengthen the survey and the enforcement process to achieve greater uniformity across states and to encourage facilities to comply with federal standards. The US GAO (2003; 2004) and the Inspector General (2004) continue to recommend improvements in enforcement and standardization of the survey and enforcement process.

Earlier versions of this report included only deficiencies from the annual licensing and certification surveys. In 2009, the report was revised to include deficiencies from both the annual surveys and complaint investigations. The report findings were then revised for each year from 2003 through 2008.

## FINDINGS

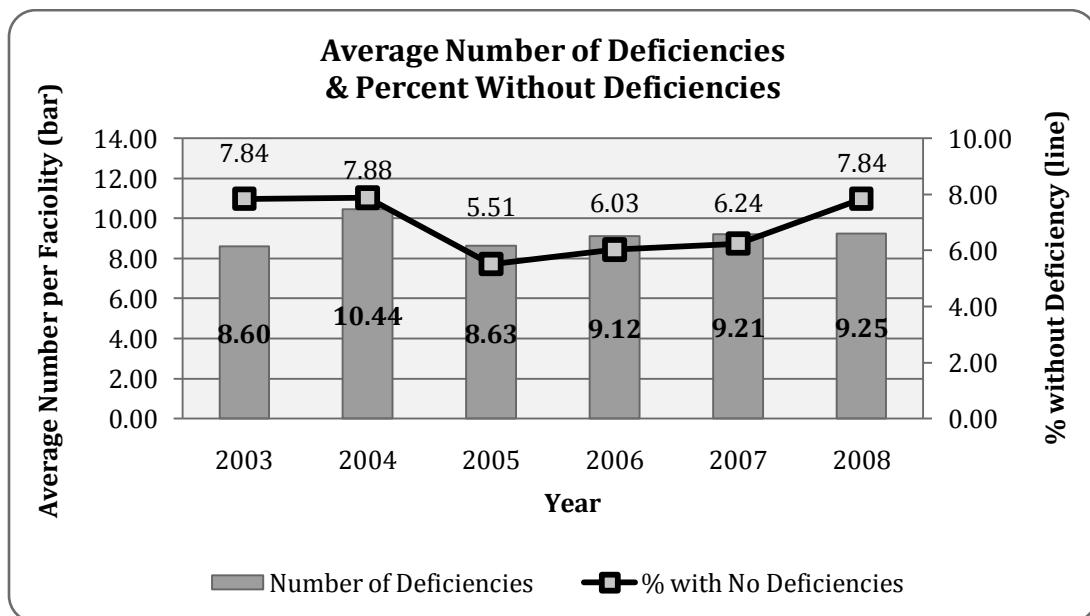
### DEFICIENCIES FROM QUALITY OF CARE EVALUATION

#### Average Number of Deficiencies per Certified Nursing Facility

Table 33 shows the U.S. average number of deficiencies per facility was 8.6 deficiencies per facility in 2003 and increased to 9.25 in 2008. In 2008, the average number of deficiencies varied substantially across the states (from 3.16 in North Dakota to 23.51 in Delaware).

#### Percent of Facilities with No Deficiencies

The percent of facilities reporting no deficiencies in the U.S. fluctuated, but was 7.84 percent in 2003 and in 2008 (See Table 33). The percent of facilities with no deficiencies varied by state from 0.0 percent in Delaware up to 15.79 percent in New Jersey in 2008.

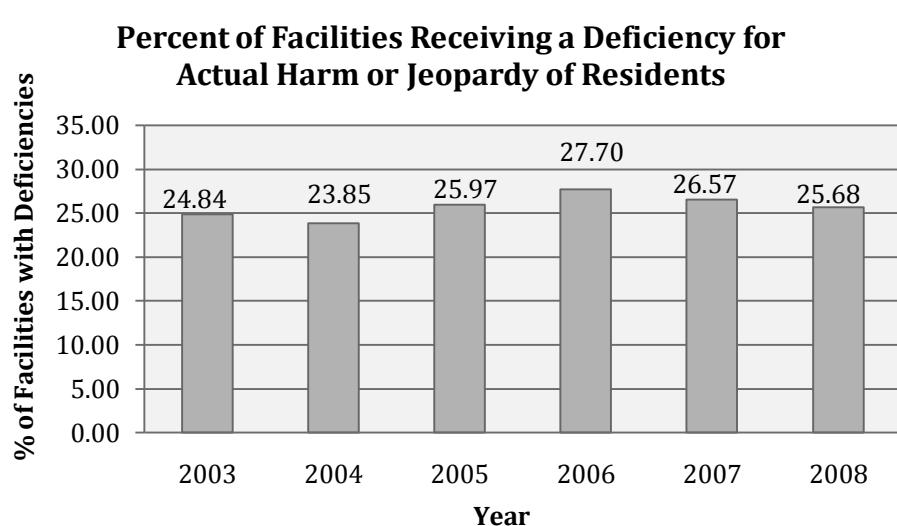


**TABLE 33**  
**AVERAGE NUMBER OF DEFICIENCIES PER CERTIFIED NURSING  
 FACILITY AND PERCENT OF FACILITIES WITH NO DEFICIENCIES**

<b>State</b>	<b>Average Deficiencies Per Facility</b>						<b>Pct. of Facilities With No Deficiencies</b>					
	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	3.93	7.08	5.60	9.20	7.73	6.64	7.14	0.00	13.33	0.00	0.00	14.29
AL	8.29	11.19	10.76	8.14	8.18	7.89	8.26	6.67	1.61	1.59	2.23	5.66
AR	12.50	14.48	13.16	16.03	12.74	12.17	1.67	2.09	2.52	1.65	0.84	2.12
AZ	11.83	13.21	12.83	11.30	11.29	13.86	4.03	2.38	5.00	4.44	2.34	4.58
CA	10.99	16.25	12.19	13.11	13.39	12.78	2.79	1.70	0.96	1.06	0.73	5.08
CO	9.11	11.80	10.76	11.83	13.61	13.53	6.05	3.37	3.32	3.38	2.86	1.95
CT	10.89	14.65	12.09	14.38	12.89	12.09	2.52	2.55	3.35	0.83	1.26	3.46
DC	14.05	20.10	17.10	18.85	18.00	14.05	0.00	0.00	0.00	0.00	0.00	15.79
DE	10.66	16.78	13.55	19.34	19.93	23.51	2.44	9.76	2.38	0.00	0.00	0.00
FL	10.24	11.15	9.46	10.38	9.80	11.27	2.65	3.32	2.02	2.07	2.11	2.38
GA	11.63	11.07	8.53	8.67	7.62	7.19	2.82	5.81	2.32	3.94	9.92	8.94
HI	10.94	12.38	10.90	8.17	7.27	8.71	3.03	2.70	0.00	0.00	2.44	6.67
IA	5.64	7.73	5.80	6.09	7.23	8.42	14.89	12.69	10.56	11.01	9.01	8.56
ID	8.63	12.15	11.58	11.11	10.01	9.90	4.00	1.41	2.70	0.00	0.00	10.13
IL	6.32	7.99	6.68	7.25	7.95	8.33	9.45	9.26	5.99	8.66	6.46	7.21
IN	6.90	8.44	9.40	9.52	11.62	11.80	14.67	13.83	7.07	7.72	8.06	9.88
KS	9.30	13.49	11.99	13.61	13.61	13.38	8.07	7.95	5.07	4.01	1.78	7.83
KY	10.23	8.66	5.84	7.37	6.68	7.43	4.58	8.68	6.44	8.22	10.34	11.89
LA	10.04	13.27	10.35	9.95	10.90	10.88	7.17	6.39	4.50	6.16	3.51	5.61
MA	5.61	7.17	6.36	6.83	6.40	6.34	20.95	16.59	10.41	11.26	16.02	15.18
MD	10.09	12.30	12.26	14.75	15.08	14.62	10.82	8.23	2.99	1.29	3.48	1.32
ME	12.18	12.33	11.27	11.17	11.91	9.31	1.82	1.77	0.00	0.00	4.50	5.45
MI	11.17	11.94	10.21	9.65	10.57	10.76	3.26	2.57	2.86	2.62	4.02	4.34
MN	10.38	12.08	9.84	11.67	11.55	10.56	2.60	5.19	2.20	0.79	2.11	7.87
MO	8.34	11.39	8.41	8.72	10.93	10.82	9.58	9.07	7.78	8.38	6.07	5.85
MS	6.70	6.12	4.89	5.96	5.94	6.87	9.36	13.89	9.50	7.92	7.39	9.84
MT	6.65	8.72	8.44	8.38	7.57	7.37	12.63	3.33	3.30	4.71	8.05	10.99
NC	8.82	9.14	7.09	7.63	6.59	5.21	7.65	8.47	6.34	6.60	8.21	14.66
ND	5.44	6.04	5.59	5.40	4.40	3.16	6.10	1.22	0.00	1.23	6.25	3.70
NE	5.39	8.49	5.68	7.71	8.74	8.84	11.47	8.11	10.96	7.66	7.76	3.72
NH	5.60	8.08	8.61	5.99	5.95	7.59	21.79	26.32	8.86	22.08	14.81	12.16
NJ	7.49	8.08	6.18	5.94	5.64	6.56	5.11	7.34	5.65	6.13	7.24	6.44
NM	8.79	11.01	10.39	10.69	9.94	8.74	10.00	10.45	5.56	5.63	2.78	7.25
NV	12.80	18.00	12.57	12.98	10.73	11.57	11.36	9.09	8.51	4.26	10.42	2.13
NY	5.98	6.89	5.10	5.81	6.66	5.77	10.14	11.16	4.99	7.30	6.09	9.06
OH	6.83	7.34	6.44	6.41	7.10	7.66	10.95	11.91	8.57	11.03	9.80	10.95
OK	11.30	13.73	9.96	10.97	11.43	13.39	2.69	3.68	4.14	4.48	5.18	7.69
OR	7.86	6.98	6.67	6.82	6.68	6.63	14.07	18.98	18.32	12.41	12.41	11.03
PA	7.65	8.78	6.53	7.07	6.10	6.96	6.60	5.08	5.63	5.21	7.54	6.43
RI	4.57	6.49	5.51	5.00	3.60	4.39	8.51	15.85	7.14	9.20	24.42	11.90
SC	10.62	13.28	11.23	9.61	8.28	7.33	2.94	4.79	4.85	3.55	7.10	10.53
SD	6.44	7.40	4.79	5.30	4.62	4.75	6.48	2.00	8.41	5.61	11.32	12.00
TN	10.36	12.12	8.33	7.71	7.16	7.44	3.79	3.59	3.12	6.48	5.57	4.10
TX	8.46	10.40	9.78	10.04	9.19	7.97	8.01	8.41	4.69	6.83	7.96	12.23
UT	7.03	7.50	6.91	6.13	6.87	6.45	6.98	9.30	10.23	6.38	2.33	13.54
VA	5.91	8.18	7.17	8.54	8.78	8.96	19.19	20.97	12.60	11.85	6.67	11.31
VT	5.93	9.36	11.73	11.30	10.24	8.10	17.07	7.69	5.00	2.50	5.26	7.50
WA	12.44	12.83	9.44	9.59	10.27	10.68	2.37	5.26	3.61	4.56	4.15	3.38
WI	4.82	5.98	5.76	6.05	6.64	7.66	17.10	18.53	14.40	12.99	10.69	10.10
WV	10.90	14.43	10.95	9.20	11.44	10.86	1.47	0.00	1.59	3.94	3.23	5.34
WY	11.68	10.94	11.59	18.26	14.53	12.46	2.63	2.78	0.00	0.00	0.00	2.56
<b>US</b>	<b>8.60</b>	<b>10.44</b>	<b>8.63</b>	<b>9.12</b>	<b>9.21</b>	<b>9.25</b>	<b>7.84</b>	<b>7.88</b>	<b>5.51</b>	<b>6.03</b>	<b>6.24</b>	<b>7.84</b>

## **Percent of Facilities Receiving a Deficiency for Actual Harm or Immediate Jeopardy**

Beginning in July 1996, surveyors rated the scope and severity of each deficiency. Table 34 shows the percent of facilities that received one or more deficiencies that caused harm or immediate jeopardy to residents (rated as a G-level deficiency or higher). The average percent was 24.84 in 2003, and increased to 25.68 in 2008.



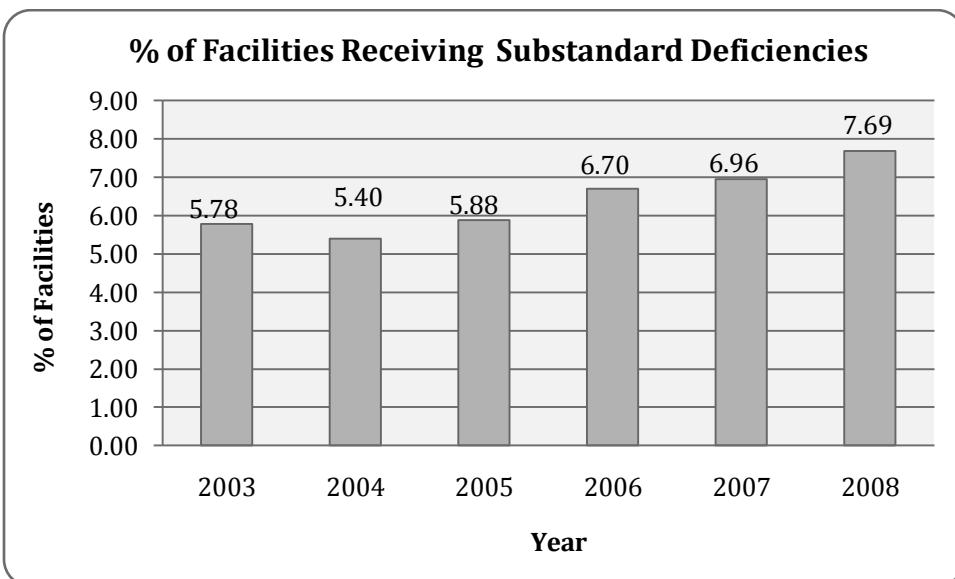
**TABLE 34**  
**PERCENT OF FACILITIES RECEIVING A DEFICIENCY**  
**FOR ACTUAL HARM OR JEOPARDY OF RESIDENTS**

<b>State</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	7.14	0.00	13.33	33.33	40.00	21.43
AL	23.39	30.48	37.63	39.68	21.79	25.00
AR	33.75	28.87	24.37	29.34	32.64	27.97
AZ	21.77	13.49	26.00	32.59	26.56	33.59
CA	4.10	9.06	12.27	18.89	15.80	16.85
CO	34.88	31.25	46.45	49.28	50.00	40.98
CT	65.55	59.15	51.88	56.61	48.74	38.53
DC	55.00	35.00	20.00	30.00	47.37	21.05
DE	14.63	24.39	30.95	54.55	44.44	46.67
FL	14.58	10.27	10.23	11.98	13.08	9.39
GA	27.89	22.97	20.58	21.13	20.11	23.46
HI	18.18	16.22	0.00	4.35	7.32	17.78
IA	16.08	26.28	19.78	25.62	26.80	27.25
ID	29.33	47.89	48.65	42.11	42.25	34.18
IL	34.63	37.42	39.03	41.27	43.29	40.41
IN	32.05	36.87	48.89	51.68	51.87	44.66
KS	34.58	37.81	47.32	44.13	34.32	28.99
KY	32.75	14.93	11.53	18.15	16.90	22.38
LA	22.48	18.53	26.99	22.46	22.46	26.67
MA	32.66	25.11	26.47	30.46	24.71	22.65
MD	22.94	23.38	18.80	25.86	29.57	22.47
ME	25.45	15.04	23.85	24.32	10.81	14.55
MI	40.09	36.68	38.66	45.48	46.10	42.65
MN	18.18	15.84	20.05	26.19	17.37	20.21
MO	25.29	26.43	27.74	24.17	28.77	34.89
MS	30.99	22.22	19.50	12.38	22.17	28.50
MT	23.16	23.33	25.27	16.47	24.14	17.58
NC	35.56	27.60	25.61	25.47	20.77	17.07
ND	13.41	14.63	26.92	18.52	11.25	16.05
NE	21.10	22.97	23.29	32.43	30.59	21.86
NH	35.90	25.00	30.38	22.08	17.28	27.03
NJ	20.74	18.36	24.86	22.84	25.07	28.85
NM	36.25	26.87	50.00	53.52	41.67	40.58
NV	15.91	29.55	21.28	23.40	29.17	25.53
NY	15.67	15.63	20.59	24.69	24.38	19.69
OH	18.28	15.02	18.15	20.57	21.51	24.00
OK	32.53	27.30	28.18	26.27	27.44	33.23
OR	26.67	29.93	32.82	41.61	35.77	33.82
PA	29.78	29.10	20.70	20.85	20.39	22.86
RI	6.38	10.98	13.10	5.75	9.30	19.05
SC	35.29	40.12	30.91	17.75	11.83	17.54
SD	32.41	20.00	14.95	20.56	23.58	26.00
TN	26.18	24.25	20.25	19.44	25.08	22.08
TX	24.56	21.79	29.05	27.15	22.41	18.13
UT	18.60	17.44	20.45	19.15	13.95	11.46
VA	16.61	20.60	22.44	18.52	18.52	14.84
VT	17.07	28.21	45.00	27.50	18.42	20.00
WA	46.64	48.99	42.97	43.57	41.49	45.99
WI	20.21	19.54	30.08	36.62	39.44	37.63
WV	16.18	23.26	19.84	26.77	29.84	16.79
WY	28.95	25.00	24.32	25.71	34.21	33.33
<b>US</b>	<b>24.84</b>	<b>23.85</b>	<b>25.97</b>	<b>27.70</b>	<b>26.57</b>	<b>25.68</b>

## **Percent of Facilities Receiving Substandard Deficiencies**

Deficiencies that constitute substandard care are those that have a scope and severity that are rated as having a wide-spread impact with the potential for harm or jeopardy or those that had a pattern of widespread actual harm or cause immediate jeopardy (rated as F, H, I, J, K or L) for any of the following areas: resident behavior and nursing home practices, quality of life, or quality of care.

In 2003, 5.78 facilities had one or more deficiencies that were in the category of substandard deficiencies. This increased to 7.69 percent of facilities in 2008 – a 33 percent increase.

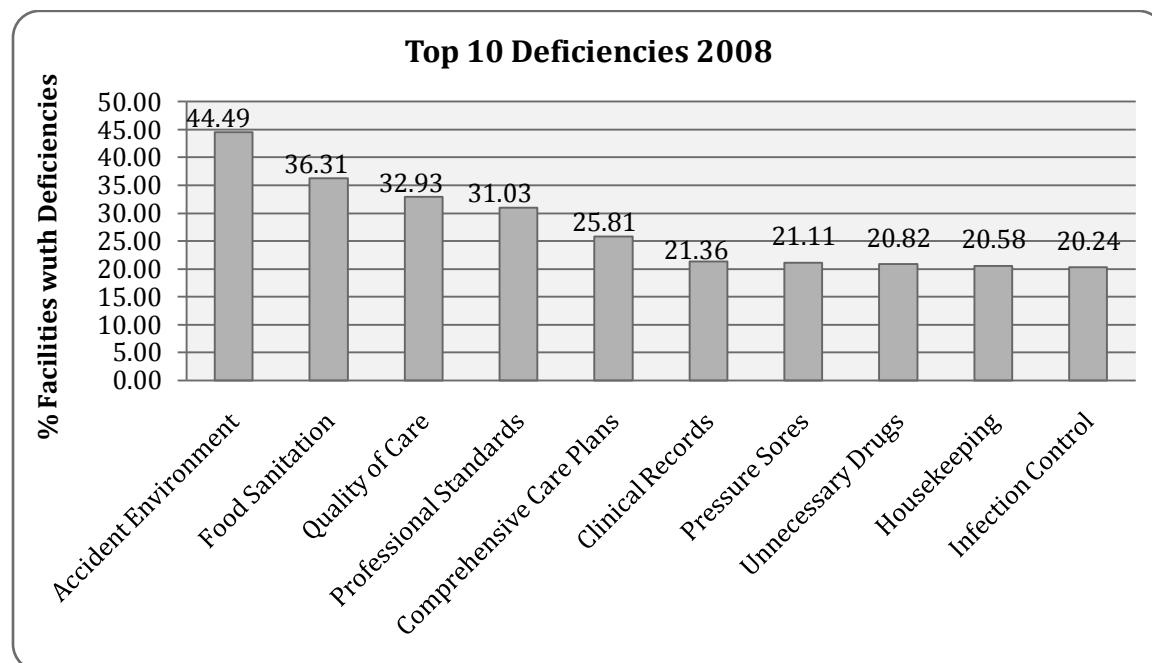


**TABLE 35**  
**PERCENT OF FACILITIES RECEIVING**  
**SUBSTANDARD DEFICIENCIES**

<b>State</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	0.00	0.00	0.00	6.67	6.67	21.43
AL	8.72	9.05	7.53	16.40	8.38	9.43
AR	32.08	24.27	16.81	19.83	21.34	21.19
AZ	2.42	2.38	11.00	8.15	5.47	9.92
CA	0.77	2.09	2.57	3.92	3.42	4.60
CO	5.12	3.37	7.11	5.80	6.19	6.34
CT	4.62	3.83	2.93	4.13	2.94	4.33
DC	0.00	0.00	5.00	25.00	15.79	10.53
DE	0.00	2.44	0.00	0.00	2.22	2.22
FL	4.86	2.42	3.72	4.14	3.76	4.02
GA	7.32	6.40	5.22	4.79	5.10	6.98
HI	3.03	5.41	2.50	6.52	2.44	2.22
IA	3.78	3.34	2.92	3.60	1.80	3.15
ID	6.67	12.68	8.11	10.53	4.23	11.39
IL	8.82	9.76	13.01	14.65	13.67	9.40
IN	6.76	7.62	11.11	13.27	12.97	10.67
KS	8.36	12.05	14.08	14.90	13.61	9.28
KY	9.51	3.13	7.12	8.90	8.62	16.43
LA	8.14	4.79	7.61	4.71	8.42	10.53
MA	2.93	2.02	2.26	3.75	1.83	1.20
MD	2.60	1.30	0.43	2.16	3.04	2.64
ME	11.82	7.08	10.09	13.51	6.31	4.55
MI	8.62	6.78	5.25	8.81	15.60	12.77
MN	3.38	1.82	2.47	5.56	2.63	4.99
MO	8.05	8.09	6.99	6.82	10.18	13.65
MS	20.47	11.11	9.50	1.98	11.82	15.54
MT	3.16	8.89	7.69	9.41	8.05	2.20
NC	7.16	7.26	5.37	8.02	7.97	7.21
ND	1.22	2.44	2.56	0.00	1.25	2.47
NE	3.67	2.25	2.28	3.15	4.11	2.79
NH	11.54	3.95	6.33	5.19	4.94	9.46
NJ	5.11	5.65	3.95	6.13	8.91	10.92
NM	13.75	4.48	15.28	12.68	16.67	11.59
NV	4.55	6.82	2.13	4.26	6.25	4.26
NY	3.38	3.83	5.62	6.21	5.94	6.72
OH	2.55	3.22	2.23	3.61	3.41	4.32
OK	9.68	11.66	12.15	13.13	11.28	20.92
OR	3.70	3.65	6.11	5.11	2.19	3.68
PA	3.51	2.26	1.83	1.69	1.68	1.71
RI	4.26	3.66	1.19	2.30	2.33	8.33
SC	11.18	14.97	11.52	7.10	4.73	5.85
SD	2.78	3.00	2.80	1.87	3.77	0.00
TN	7.57	9.58	6.85	4.94	10.22	11.04
TX	4.14	4.61	5.76	5.86	8.38	12.32
UT	5.81	2.33	6.82	2.13	1.16	1.04
VA	3.69	3.37	1.57	2.22	1.48	2.12
VT	4.88	7.69	5.00	12.50	7.89	0.00
WA	9.49	6.88	4.82	4.98	5.39	8.02
WI	3.63	3.81	9.77	12.21	12.47	12.12
WV	2.21	1.55	3.17	2.36	4.03	6.11
WY	5.26	8.33	8.11	5.71	2.63	2.56
<b>US</b>	<b>5.78</b>	<b>5.40</b>	<b>5.88</b>	<b>6.70</b>	<b>6.96</b>	<b>7.69</b>

## **Top Ten Deficiencies for Certified Facilities in 2008**

The top ten most frequently cited deficiencies in the U.S. in 2008 are shown by state on Table 36. The categories with the highest number of deficiencies were given for failures in accident environment (44.49 percent); food sanitation (36.31 percent); quality of care (32.93 percent); professional standards (31.03 percent); and comprehensive care plans (25.81 percent).



## **Top Ten States Citing the Top Deficiencies in 2008**

Table 36 also shows the top ten states in terms of the number of deficiencies, which were issued to nursing facilities for each of the top 10 deficiencies (See states with asterisks). In 2008, Delaware had 8, the state with the most deficiencies in the top ten deficiency categories.

**TABLE 36**  
**TOP TEN U.S. DEFICIENCIES BY STATE FOR FACILITIES CERTIFIED**  
**CALENDAR YEAR 2008**

**Percent of Facilities with Deficiencies**

	<b>Accident</b>	<b>Food</b>	<b>Quality of Care</b>	<b>Professional</b>	<b>Comprehensive</b>
	<b>Environment</b>	<b>Sanitation</b>	<b>Standards</b>	<b>Care Plans</b>	
	(F323)	(F371)	(F309)	(F281)	(F279)
AK	21.43	57.14 *	14.29	42.86	21.43
AL	33.49	50.94	12.26	43.40	25.94
AR	72.46 *	45.76	57.63 *	3.81	3.81
AZ	54.96	21.37	51.15	70.23 *	38.17
CA	45.24	55.73 *	39.35	27.42	44.44 *
CO	74.15 *	51.22 *	65.37 *	54.15 *	53.17 *
CT	58.44 *	24.68	46.75	63.64 *	38.53 *
DC	57.89 *	47.37	73.68 *	0.00	68.42 *
DE	80.00 *	75.56 *	88.89 *	33.33	40.00 *
FL	30.70	53.95 *	26.38	60.51 *	41.88 *
GA	36.59	28.77	41.62	13.69	12.85
HI	33.33	42.22	26.67	8.89	33.33
IA	52.03	39.19	33.78	48.20	15.32
ID	63.29 *	34.18	45.57	41.77	5.06
IL	55.73	24.71	31.66	37.71	15.96
IN	58.70 *	34.39	28.46	16.21	36.96
KS	57.68	39.42	37.10	36.52	41.16 *
KY	37.41	38.46	21.33	32.87	24.13
LA	43.86	44.21	20.00	13.68	36.49
MA	32.05	12.29	14.70	32.53	23.37
MD	60.35 *	46.26	68.72 *	42.29	34.80
ME	26.36	34.55	21.82	51.82 *	36.36
MI	65.06 *	47.95	35.90	44.10	22.17
MN	48.29	36.22	22.31	4.20	39.11 *
MO	51.07	42.69	31.77	63.35 *	30.99
MS	37.31	30.57	22.28	46.63	30.57
MT	36.26	46.15	9.89	40.66	21.98
NC	25.24	39.90	13.94	27.64	6.49
ND	40.74	29.63	24.69	7.41	2.47
NE	44.19	52.09 *	26.51	45.58	13.95
NH	29.73	31.08	10.81	59.46 *	25.68
NJ	50.42	20.73	31.93	39.22	20.45
NM	31.88	14.49	18.84	1.45	55.07 *
NV	31.91	51.06 *	61.70 *	34.04	34.04
NY	37.50	21.72	20.47	41.41	9.69
OH	45.26	23.58	28.63	28.32	22.11
OK	36.62	57.23 *	45.23	1.54	32.31
OR	47.79	14.71	63.24 *	25.74	19.12
PA	45.71	32.43	55.57 *	10.29	23.29
RI	11.90	4.76	11.90	54.76 *	3.57
SC	30.41	29.24	41.52	22.22	13.45
SD	32.00	34.00	14.00	29.00	8.00
TN	40.06	27.44	26.81	30.28	12.62
TX	29.14	33.91	24.63	3.47	19.34
UT	27.08	32.29	15.63	36.46	8.33
VA	45.23	40.64	54.77 *	43.46	17.31
VT	32.50	42.50	12.50	62.50 *	17.50
WA	62.45 *	35.86	40.51	44.30	23.63
WI	48.23	20.71	26.77	14.90	27.78
WV	40.46	54.20 *	54.20 *	32.06	54.96 *
WY	53.85	56.41 *	33.33	61.54 *	17.95
<b>US</b>	<b>44.49</b>	<b>36.31</b>	<b>32.93</b>	<b>31.03</b>	<b>25.81</b>

**TABLE 36**  
**TOP TEN U.S. DEFICIENCIES BY STATE FOR FACILITIES CERTIFIED**  
**CALENDAR YEAR 2008**

Percent of Facilities with Deficiencies					
	Clinical Records (F514)	Pressure Sores (F314)	Unnecessary Drugs (F329)	Housekeeping (F253)	Infection Control (F441)
AK	7.14	7.14	14.29	0.00	7.14
AL	24.53	12.26	2.36	18.87	20.75
AR	8.90	47.46 *	43.22 *	10.17	33.05 *
AZ	64.12 *	22.14	42.75 *	15.27	35.88 *
CA	37.82 *	20.73	31.13	28.06	33.95 *
CO	35.12	26.34	31.22	31.71 *	25.85
CT	30.74	29.00 *	27.71	17.75	8.66
DC	31.58	26.32	10.53	63.16 *	21.05
DE	62.22 *	44.44 *	20.00	57.78 *	31.11 *
FL	32.34	15.50	31.59	36.96 *	26.97
GA	15.36	24.30	3.63	40.78 *	12.85
HI	4.44	11.11	11.11	2.22	35.56 *
IA	4.73	18.69	10.36	15.77	36.71 *
ID	25.32	30.38 *	26.58	35.44 *	11.39
IL	2.57	28.31	15.06	16.47	9.14
IN	47.23 *	30.83 *	26.68	17.00	25.69
KS	14.78	41.45 *	39.42 *	36.23 *	10.43
KY	13.99	11.19	6.64	20.28	9.79
LA	30.53	19.65	34.04 *	30.53	25.61
MA	32.29	7.23	13.49	7.47	5.54
MD	47.58 *	13.66	37.00	35.68 *	31.28 *
ME	44.55 *	20.91	19.09	24.55	9.09
MI	14.94	22.89	34.94 *	31.08	21.20
MN	6.82	46.46 *	51.97 *	14.17	12.86
MO	3.90	32.16 *	11.31 *	26.32	22.61
MS	36.79 *	8.81	5.70	24.35	22.28
MT	31.87	3.30	26.37	24.18	13.19
NC	5.05	12.50	13.22	11.54	2.40
ND	4.94	6.17	11.11	1.23	8.64
NE	27.44	19.07	25.12	39.53 *	17.21
NH	43.24 *	10.81	22.97	5.41	10.81
NJ	8.40	17.93	24.37	15.13	8.12
NM	21.74	17.39	46.38 *	5.80	7.25
NV	6.38	19.15	29.79	6.38	23.40
NY	10.31	14.69	8.75	17.03	21.88
OH	13.37	24.11	20.84	18.00	19.37
OK	40.00 *	24.62	28.62	35.38 *	44.31 *
OR	12.50	18.38	30.15	0.00	2.21
PA	18.86	15.57	14.71	9.00	23.00
RI	29.76	15.48	1.19	7.14	0.00
SC	16.96	19.88	8.77	14.62	18.13
SD	13.00	2.00	4.00	19.00	16.00
TN	19.56	7.57	0.63	10.41	19.56
TX	17.09	13.27	8.41	15.78	16.05
UT	33.33	8.33	21.88	25.00	19.79
VA	45.58 *	23.67	12.72	13.07	22.97
VT	25.00	15.00	40.00 *	12.50	35.00 *
WA	18.14	29.11 *	29.11	27.00	13.92
WI	9.85	29.29 *	18.94	12.12	16.41
WV	36.64	19.08	26.72	5.34	41.98 *
WY	0.00	28.21 *	38.46 *	28.21	30.77
<b>US</b>	<b>21.36</b>	<b>21.11</b>	<b>20.82 #</b>	<b>20.58 #</b>	<b>20.24</b>

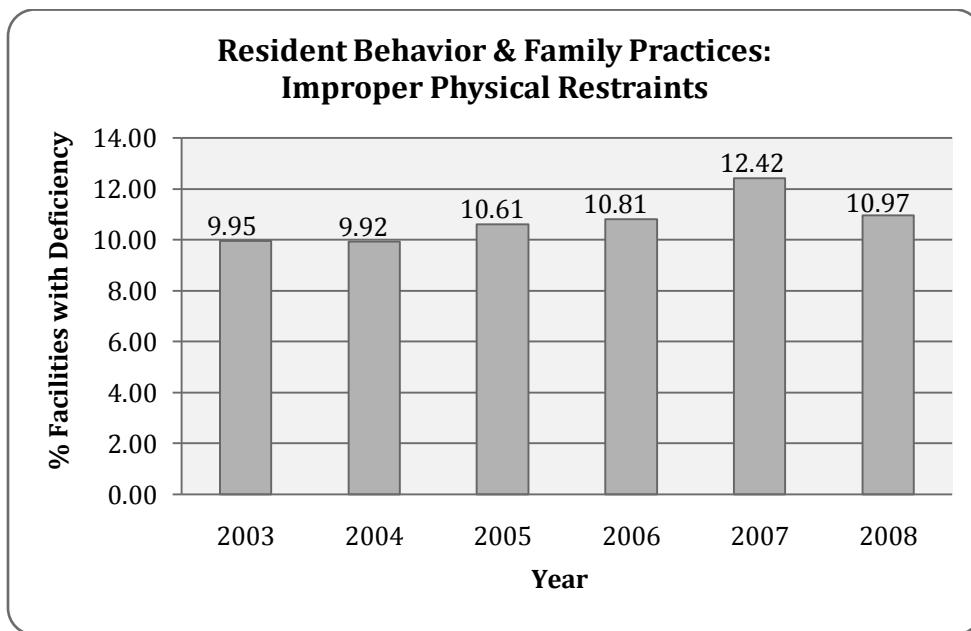
\* The ten states in which the highest percentage of facilities had deficiencies.

## **Selected Deficiencies by State**

The following is a presentation of selected deficiencies by state and year. These are presented in the order of the deficiency groups on the survey forms and not based on the number of deficiencies cited. These data show trends over time by state.

### **Physical Restraints (F221)**

Residents have the right to be free of physical restraints imposed for purposes of discipline or convenience and not required to treat the resident's medical symptoms. Restraints are defined as mechanical devices, materials, or equipment that restricts freedom of movement or normal access to one's body. In 2003, 9.95 percent of facilities received deficiencies for this category. Restraint deficiencies increased to 10.97 percent in 2008 (See Table 37).

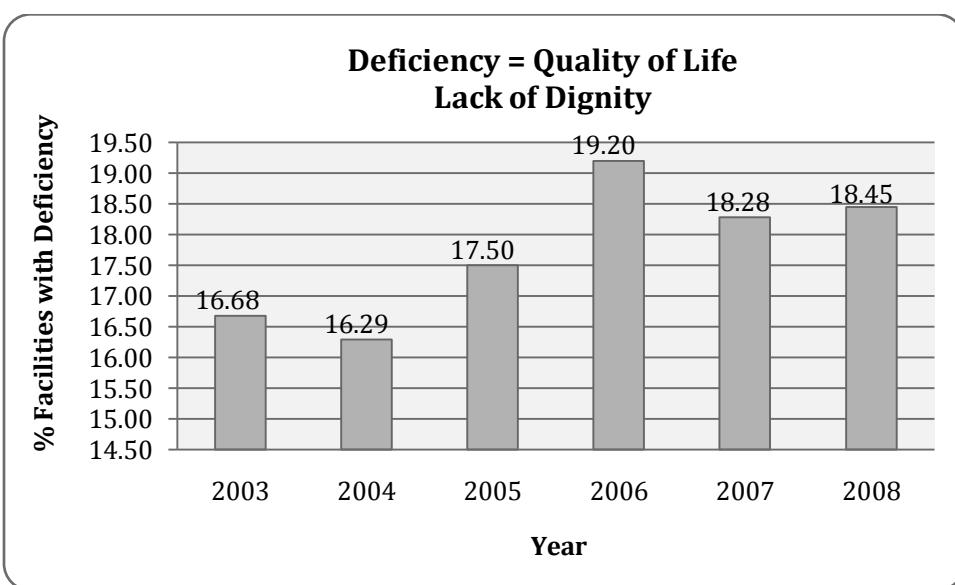


**TABLE 37**  
**DEFICIENCY GROUP=RESIDENT BEHAVIOR & FACILITY PRACTICES**  
**PHYSICAL RESTRAINTS (F221)**

State	2003	2004	2005	2006	2007	2008
AK	0.00	0.00	0.00	6.67	0.00	7.14
AL	4.13	6.19	6.45	5.82	6.70	5.66
AR	12.92	11.30	20.59	21.07	21.76	22.46
AZ	10.48	7.14	23.00	13.33	12.50	8.40
CA	13.85	15.25	15.80	18.81	26.14	19.27
CO	16.74	12.02	17.54	14.98	17.14	18.05
CT	20.17	25.11	24.69	23.14	16.81	8.66
DC	15.00	0.00	35.00	15.00	21.05	10.53
DE	9.76	2.44	4.76	20.45	8.89	15.56
FL	7.51	6.04	7.29	7.10	6.92	5.51
GA	13.24	10.17	9.86	6.48	5.67	11.73
HI	24.24	24.32	25.00	23.91	21.95	24.44
IA	5.67	5.12	5.39	8.76	8.78	8.11
ID	6.67	8.45	5.41	6.58	4.23	11.39
IL	8.94	10.26	11.10	12.61	15.57	14.29
IN	5.41	8.82	10.91	13.86	15.52	18.77
KS	14.99	17.26	17.18	11.75	9.76	10.43
KY	10.56	15.97	12.88	14.38	12.07	8.74
LA	17.92	11.82	11.07	7.97	16.49	11.58
MA	8.33	6.05	8.82	6.62	5.26	2.89
MD	5.19	5.19	4.27	7.33	4.78	7.93
ME	20.91	10.62	3.67	5.41	9.91	0.91
MI	8.86	7.24	7.64	7.14	8.75	9.64
MN	11.17	9.87	15.38	21.96	23.68	13.12
MO	6.13	5.92	10.98	13.06	20.74	24.37
MS	7.02	6.67	8.50	8.91	6.90	10.36
MT	3.16	8.89	1.10	2.35	3.45	7.69
NC	4.20	2.91	7.07	11.32	15.94	6.97
ND	4.88	6.10	5.13	9.88	3.75	3.70
NE	9.63	7.21	4.57	5.86	5.48	5.58
NH	8.97	18.42	6.33	0.00	4.94	0.00
NJ	10.23	7.63	5.93	5.29	3.06	3.08
NM	10.00	2.99	5.56	5.63	9.72	11.59
NV	31.82	15.91	23.40	8.51	8.33	19.15
NY	9.98	10.05	8.27	7.92	9.69	8.28
OH	9.35	9.33	11.92	11.24	14.59	12.53
OK	20.43	16.26	13.26	12.24	22.26	25.23
OR	5.93	8.76	9.16	5.84	9.49	5.88
PA	7.72	13.42	8.87	8.59	7.40	7.43
RI	0.00	1.22	1.19	2.30	5.81	2.38
SC	8.24	8.38	7.88	7.10	7.69	4.68
SD	12.04	8.00	12.15	16.82	9.43	11.00
TN	15.14	14.37	11.84	9.57	9.91	13.25
TX	7.04	10.10	12.84	11.36	12.57	7.89
UT	9.30	4.65	3.41	3.19	5.81	4.17
VA	9.96	7.12	5.91	3.33	4.81	5.65
VT	17.07	12.82	10.00	17.50	15.79	15.00
WA	5.14	6.88	4.02	4.15	4.56	4.22
WI	11.40	8.12	4.88	6.23	4.58	6.06
WV	4.41	3.10	8.73	4.72	6.45	7.63
WY	13.16	5.56	16.22	22.86	10.53	7.69
<b>US</b>	<b>9.95</b>	<b>9.92</b>	<b>10.61</b>	<b>10.81</b>	<b>12.42</b>	<b>10.97</b>

## Dignity (F241)

Facilities must promote care for residents in a manner and in an environment that maintains or enhances dignity and respect in full recognition of his or her individuality. This involves assisting residents to be well groomed, dress appropriately, promote independence in dining, allowing private space and property, speaking and listening respectfully, and focusing on the individual's communication. In 2003, 16.68 percent of facilities received deficiencies for this, which increased to 19.2 percent in 2006, then declined to 18.45 percent in 2008 (See Table 38).

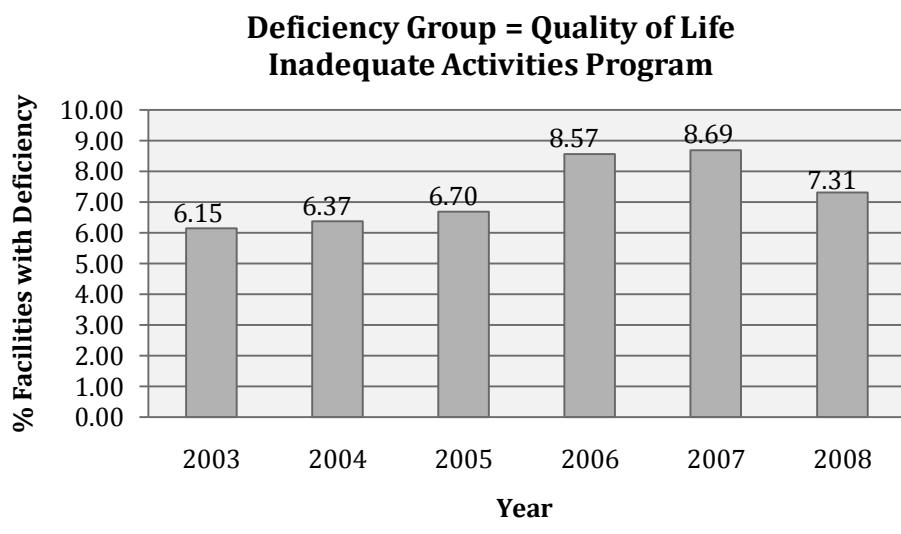


**TABLE 38**  
**DEFICIENCY GROUP=QUALITY OF LIFE**  
**DIGNITY (F241)**

Percent of Facilities with Deficiencies						
<b>State</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	0.00	16.67	26.67	60.00	40.00	21.43
AL	19.27	19.52	26.34	16.93	12.29	8.49
AR	17.08	21.76	28.99	35.12	25.52	21.19
AZ	24.19	23.81	23.00	17.78	12.50	22.14
CA	25.85	33.67	32.08	36.22	39.09	35.81
CO	20.00	22.12	36.49	31.88	30.00	29.76
CT	28.99	31.06	32.64	32.23	23.95	28.57
DC	35.00	15.00	30.00	35.00	15.79	31.58
DE	9.76	4.88	26.19	50.00	40.00	62.22
FL	26.95	28.25	30.39	30.62	25.71	29.51
GA	16.34	14.24	11.88	14.37	13.60	14.80
HI	39.39	32.43	50.00	43.48	41.46	40.00
IA	9.69	9.58	8.54	8.54	10.59	15.32
ID	20.00	29.58	27.03	35.53	28.17	34.18
IL	10.58	10.14	11.35	11.59	10.76	12.74
IN	8.69	6.61	8.08	14.46	13.95	20.16
KS	14.41	16.16	19.72	25.79	24.56	20.29
KY	15.14	10.42	8.47	11.30	9.31	6.99
LA	23.78	27.16	26.64	29.35	27.37	23.16
MA	7.43	8.30	6.11	7.06	7.09	5.06
MD	16.45	13.42	18.38	22.84	16.09	16.30
ME	22.73	20.35	12.84	23.42	20.72	19.09
MI	26.34	19.86	24.34	22.62	25.77	27.71
MN	30.65	20.52	25.82	28.84	21.32	19.69
MO	13.03	12.23	14.37	18.52	21.72	18.52
MS	23.98	12.78	10.00	12.38	14.29	17.62
MT	11.58	17.78	8.79	10.59	9.20	5.49
NC	25.43	22.03	18.29	20.05	16.18	8.41
ND	6.10	6.10	11.54	18.52	16.25	8.64
NE	3.21	7.66	5.48	3.60	10.05	6.05
NH	3.85	6.58	7.59	5.19	8.64	4.05
NJ	14.49	11.86	8.76	12.26	11.14	19.61
NM	20.00	8.96	23.61	23.94	25.00	24.64
NV	25.00	31.82	34.04	40.43	22.92	42.55
NY	12.14	14.19	11.54	11.96	15.94	14.06
OH	12.65	11.27	11.47	12.09	10.76	11.37
OK	27.15	20.86	19.89	20.60	13.41	15.08
OR	8.15	11.68	10.69	8.03	14.60	8.82
PA	10.25	10.03	11.83	15.21	12.57	15.43
RI	2.13	14.63	16.67	13.79	4.65	10.71
SC	17.06	12.57	18.18	12.43	15.98	15.79
SD	6.48	8.00	10.28	13.08	11.32	8.00
TN	21.45	11.68	14.02	17.28	13.93	13.88
TX	10.21	9.30	14.88	13.58	14.37	11.62
UT	25.58	25.58	27.27	25.53	20.93	23.96
VA	5.90	7.12	7.87	12.22	18.52	21.55
VT	17.07	5.13	40.00	35.00	18.42	20.00
WA	22.92	20.65	20.08	21.16	26.14	21.52
WI	9.33	9.64	12.08	18.44	14.50	19.44
WV	32.35	34.11	28.57	23.62	27.42	35.88
WY	18.42	25.00	29.73	54.29	50.00	38.46
<b>US</b>	<b>16.68</b>	<b>16.29</b>	<b>17.50</b>	<b>19.20</b>	<b>18.28</b>	<b>18.45</b>

## **Activities Program (F248)**

Facilities must provide residents with ongoing activities that meet the interests and the physical, mental, and psychosocial well-being needs of each resident. In 2003, 6.15 percent of facilities in the U.S. were given deficiencies in this category while 7.31 percent received deficiencies in 2008 (See Table 39).



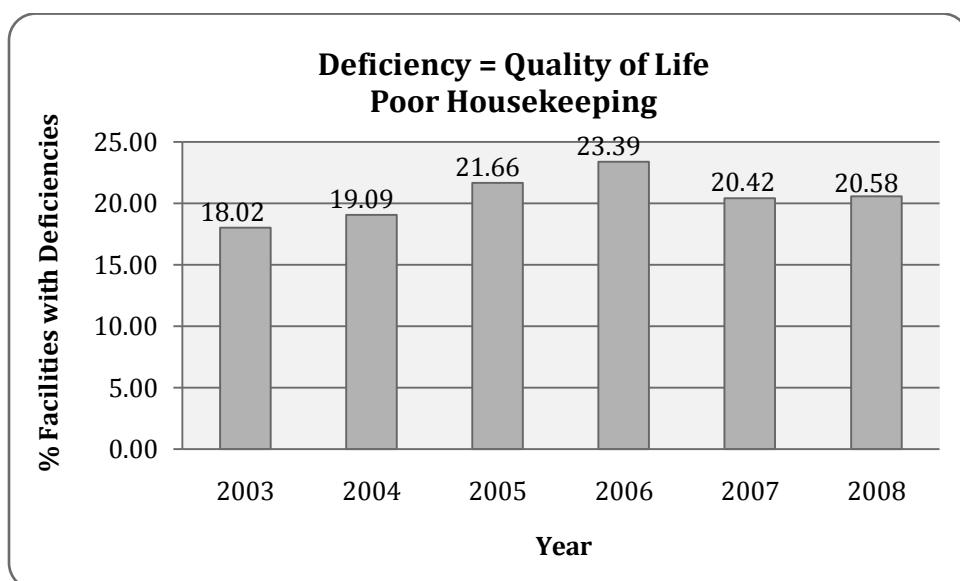
**TABLE 39**  
**DEFICIENCY GROUP=QUALITY OF LIFE**  
**ACTIVITIES PROGRAM (F248)**

**Percent of Facilities with Deficiencies**

<b>State</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	7.14	25.00	6.67	20.00	20.00	0.00
AL	5.50	6.19	8.60	11.11	17.88	5.66
AR	5.83	5.44	6.30	11.16	9.62	5.51
AZ	6.45	7.94	10.00	11.11	5.47	5.34
CA	9.52	10.60	9.30	9.98	10.50	11.85
CO	11.16	5.77	15.64	23.19	23.81	25.37
CT	2.10	3.40	3.35	6.20	4.62	6.93
DC	5.00	0.00	0.00	5.00	0.00	5.26
DE	9.76	2.44	9.52	11.36	28.89	24.44
FL	6.77	8.76	7.75	8.88	8.72	9.54
GA	6.20	3.49	5.51	4.51	3.97	3.07
HI	12.12	27.03	25.00	30.43	34.15	22.22
IA	5.20	2.67	5.62	6.74	5.18	7.43
ID	6.67	9.86	12.16	18.42	15.49	12.66
IL	3.78	3.50	5.10	8.92	10.51	9.14
IN	8.30	7.62	10.91	12.48	9.04	6.32
KS	14.12	16.71	16.34	17.19	17.46	15.36
KY	7.39	4.17	4.75	6.16	3.79	5.59
LA	7.49	6.07	9.34	9.06	6.67	8.77
MA	2.70	3.59	2.04	4.42	3.89	3.13
MD	1.30	1.30	3.42	3.02	3.04	0.44
ME	3.64	1.77	1.83	5.41	9.01	3.64
MI	7.23	6.07	7.40	7.14	8.51	7.71
MN	8.31	11.17	9.89	10.32	11.05	11.29
MO	8.05	9.07	9.18	12.87	12.72	9.16
MS	1.75	1.11	1.00	3.96	6.40	7.25
MT	2.11	1.11	5.49	2.35	5.75	4.40
NC	3.21	2.66	2.20	7.55	5.80	3.37
ND	2.44	0.00	3.85	8.64	10.00	4.94
NE	0.92	2.70	3.20	7.21	10.05	8.37
NH	1.28	0.00	1.27	1.30	3.70	1.35
NJ	4.55	2.54	2.26	4.46	5.85	3.92
NM	6.25	16.42	11.11	15.49	12.50	13.04
NV	9.09	20.45	10.64	14.89	16.67	12.77
NY	2.61	3.67	3.28	4.66	8.91	3.13
OH	7.44	8.37	7.24	8.70	7.77	5.68
OK	11.83	6.75	6.08	11.34	15.85	9.54
OR	11.11	8.76	11.45	7.30	4.38	2.94
PA	3.37	5.65	4.08	5.49	4.19	5.57
RI	0.00	1.22	0.00	4.60	6.98	1.19
SC	2.35	2.99	9.70	7.69	2.37	6.43
SD	4.63	5.00	0.93	2.80	6.60	3.00
TN	7.89	9.88	7.79	7.72	7.74	5.99
TX	5.72	7.17	7.97	9.67	9.84	6.50
UT	4.65	3.49	3.41	2.13	4.65	5.21
VA	0.37	1.12	2.36	4.44	8.89	6.01
VT	2.44	5.13	2.50	7.50	2.63	5.00
WA	12.65	8.50	8.03	13.28	11.62	9.28
WI	3.37	2.79	4.37	6.23	2.80	1.77
WV	5.15	6.98	5.56	4.72	5.65	12.21
WY	18.42	13.89	16.22	22.86	13.16	5.13
<b>US</b>	<b>6.15</b>	<b>6.37</b>	<b>6.70</b>	<b>8.57</b>	<b>8.69</b>	<b>7.31</b>

## **Housekeeping (F253)**

Housekeeping and maintenance services must be provided to maintain a sanitary, orderly, and comfortable environment. In 2003, 18.02 percent of facilities received deficiencies for failing to meet this requirement, which increased to 20.58 in 2008 (See Table 40).



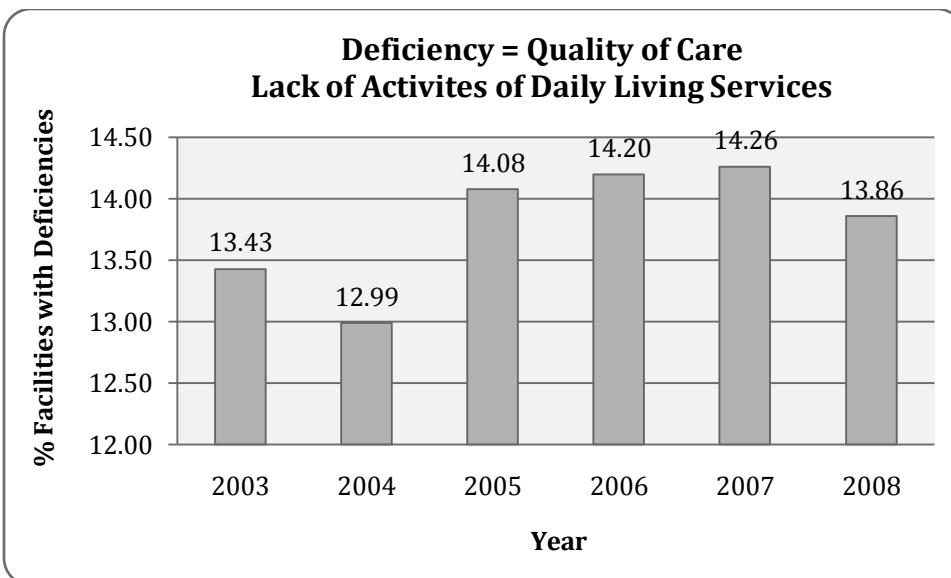
**TABLE 40**  
**DEFICIENCY GROUP=QUALITY OF LIFE**  
**HOUSEKEEPING (F253)**

**Percent of Facilities with Deficiencies**

<b>State</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	0.00	8.33	26.67	0.00	13.33	0.00
AL	7.34	5.24	17.74	17.99	11.73	18.87
AR	32.08	30.13	45.80	57.02	16.32	10.17
AZ	42.74	39.68	37.00	43.70	17.97	15.27
CA	22.21	24.77	25.98	27.72	29.23	28.06
CO	17.67	35.58	31.28	31.88	24.29	31.71
CT	5.88	7.66	13.81	13.64	21.43	17.75
DC	90.00	95.00	95.00	95.00	73.68	63.16
DE	56.10	56.10	40.48	56.82	51.11	57.78
FL	25.48	26.89	33.64	35.50	32.03	36.96
GA	41.13	41.28	45.22	45.35	35.69	40.78
HI	3.03	10.81	7.50	2.17	0.00	2.22
IA	14.66	14.48	13.03	16.63	19.14	15.77
ID	14.67	23.94	29.73	31.58	22.54	35.44
IL	12.47	16.52	15.69	18.22	19.49	16.47
IN	1.54	12.22	25.86	26.73	23.77	17.00
KS	25.94	30.14	31.27	36.39	39.35	36.23
KY	32.04	25.69	38.98	40.41	36.55	20.28
LA	20.20	22.68	15.57	22.46	21.05	30.53
MA	8.11	5.61	6.33	6.62	7.09	7.47
MD	5.63	9.96	10.68	32.33	27.83	35.68
ME	19.09	9.73	29.36	27.03	24.32	24.55
MI	27.97	25.93	26.25	28.33	27.66	31.08
MN	5.45	6.23	13.19	13.23	11.32	14.17
MO	1.92	3.94	4.79	7.60	12.33	26.32
MS	26.32	13.89	9.00	8.42	11.82	24.35
MT	10.53	12.22	28.57	36.47	19.54	24.18
NC	19.75	20.82	18.54	18.16	12.80	11.54
ND	0.00	6.10	7.69	8.64	6.25	1.23
NE	20.64	26.13	22.83	25.23	28.31	39.53
NH	7.69	10.53	11.39	5.19	3.70	5.41
NJ	13.35	12.71	11.02	9.75	7.52	15.13
NM	11.25	13.43	13.89	15.49	19.44	5.80
NV	11.36	9.09	6.38	8.51	8.33	6.38
NY	13.36	11.32	15.13	18.79	15.78	17.03
OH	18.28	18.45	17.93	22.06	19.06	18.00
OK	45.97	35.28	40.61	47.16	31.40	35.38
OR	11.85	6.57	9.16	3.65	2.19	0.00
PA	8.29	7.20	8.59	11.27	10.75	9.00
RI	17.02	17.07	23.81	16.09	10.47	7.14
SC	31.76	20.36	37.58	39.64	31.95	14.62
SD	11.11	31.00	19.63	34.58	29.25	19.00
TN	20.50	15.57	10.59	8.95	7.74	10.41
TX	24.74	31.80	37.11	31.50	22.41	15.78
UT	30.23	26.74	20.45	24.47	19.77	25.00
VA	6.27	3.75	6.69	7.04	10.37	13.07
VT	4.88	28.21	22.50	22.50	28.95	12.50
WA	29.64	21.86	24.50	27.80	30.71	27.00
WI	6.99	11.42	13.88	9.87	8.65	12.12
WV	4.41	9.30	7.94	5.51	8.06	5.34
WY	21.05	13.89	32.43	62.86	13.16	28.21
<b>US</b>	<b>18.02</b>	<b>19.09</b>	<b>21.66</b>	<b>23.39</b>	<b>20.42</b>	<b>20.58</b>

## **Activities of Daily Living Services (F312)**

Residents who are unable to carry out activities of daily living (ADL) should be given the necessary services to maintain nutrition, grooming, and personal and oral hygiene. In 2003, 13.43 percent of facilities were given deficiencies for this violation compared with 13.86 percent of facilities in 2008 (See Table 41).

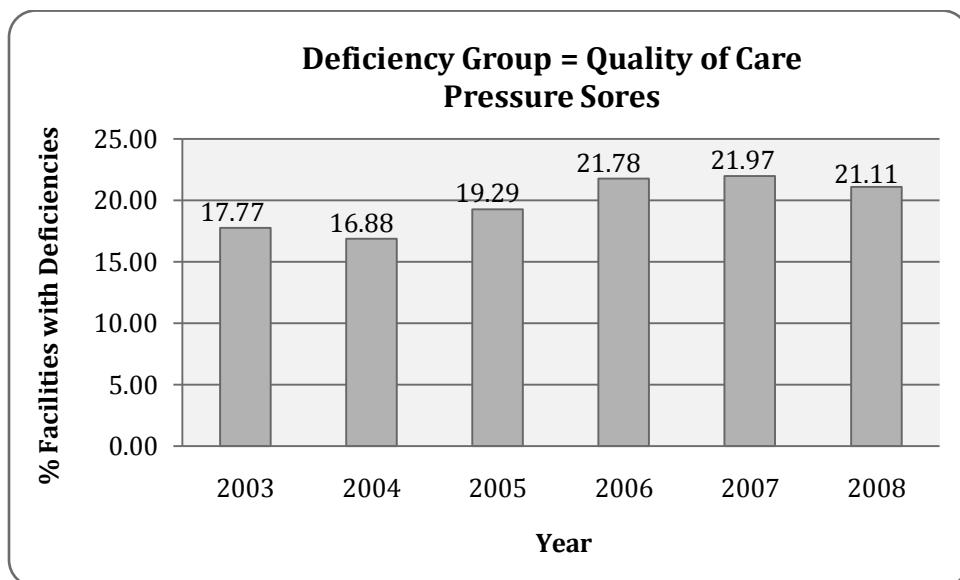


**TABLE 41**  
**DEFICIENCY GROUP=QUALITY OF CARE**  
**ACTIVITIES OF DAILY LIVING SERVICES (F312)**

Percent of Facilities with Deficiencies						
<b>State</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	0.00	0.00	6.67	20.00	6.67	7.14
AL	28.44	30.95	22.58	17.46	13.97	11.32
AR	18.33	25.52	52.10	67.36	62.34	54.24
AZ	12.10	7.14	9.00	9.63	3.91	9.16
CA	9.44	9.83	9.54	10.55	11.24	9.76
CO	18.14	23.08	24.17	26.09	36.19	24.39
CT	18.91	20.00	20.08	14.46	17.23	17.32
DC	0.00	5.00	10.00	0.00	10.53	0.00
DE	7.32	12.20	4.76	15.91	24.44	35.56
FL	7.36	4.53	7.91	9.62	11.58	11.48
GA	22.54	16.28	13.91	12.39	10.20	9.50
HI	6.06	10.81	0.00	2.17	4.88	6.67
IA	22.46	24.72	25.62	26.97	20.95	32.66
ID	17.33	18.31	22.97	26.32	15.49	13.92
IL	14.11	16.15	15.05	11.08	14.18	17.63
IN	9.07	10.42	11.92	13.66	16.11	16.01
KS	28.82	30.96	33.24	37.25	33.43	31.01
KY	9.15	9.03	6.44	7.53	8.97	4.20
LA	8.14	11.82	14.19	11.23	12.98	11.23
MA	3.15	3.59	2.04	2.87	3.20	2.65
MD	2.60	3.03	2.56	3.45	6.09	3.96
ME	4.55	2.65	1.83	3.60	1.80	5.45
MI	13.52	17.99	14.08	14.29	12.06	13.49
MN	24.68	20.26	26.65	26.72	29.74	26.51
MO	23.75	25.84	32.93	34.70	37.38	38.21
MS	1.17	2.78	5.00	4.46	1.97	1.55
MT	17.89	15.56	10.99	4.71	6.90	8.79
NC	24.94	17.68	19.02	21.70	23.43	22.84
ND	9.76	7.32	12.82	7.41	8.75	3.70
NE	20.64	16.22	10.96	10.81	13.70	12.56
NH	0.00	1.32	3.80	2.60	1.23	0.00
NJ	10.80	7.63	8.76	7.80	6.13	7.56
NM	3.75	11.94	6.94	12.68	9.72	5.80
NV	15.91	9.09	8.51	2.13	4.17	8.51
NY	8.29	6.54	7.49	6.21	7.34	5.00
OH	9.99	8.80	8.35	7.64	10.22	7.47
OK	20.43	20.86	19.34	25.07	23.78	27.69
OR	8.89	1.46	10.69	6.57	4.38	2.21
PA	6.74	6.07	6.34	5.63	5.17	7.43
RI	4.26	4.88	7.14	4.60	1.16	1.19
SC	21.18	15.57	10.91	8.88	3.55	2.34
SD	6.48	3.00	0.00	0.93	1.89	4.00
TN	15.46	18.26	19.00	12.96	8.05	11.99
TX	14.88	13.02	16.74	16.50	14.11	9.19
UT	10.47	18.60	4.55	4.26	5.81	4.17
VA	9.23	10.86	12.99	13.33	12.22	14.84
VT	21.95	15.38	27.50	20.00	42.11	10.00
WA	17.79	11.34	14.06	15.35	17.01	15.61
WI	8.81	7.11	9.77	9.61	7.63	13.38
WV	12.50	10.85	10.32	9.45	9.68	9.92
WY	36.84	19.44	40.54	54.29	47.37	43.59
<b>US</b>	<b>13.43</b>	<b>12.99</b>	<b>14.08</b>	<b>14.20</b>	<b>14.26</b>	<b>13.86</b>

## **Pressure Sores (F314)**

Facilities must ensure that residents without pressure sores do not develop them if it is avoidable. In 2003, 17.77 percent of facilities received deficiencies for failing to meet this standard (See Table 42). Although violations for pressure sores have fluctuated since 2003, the percent of facilities cited for this violation was 21.11 in 2008.

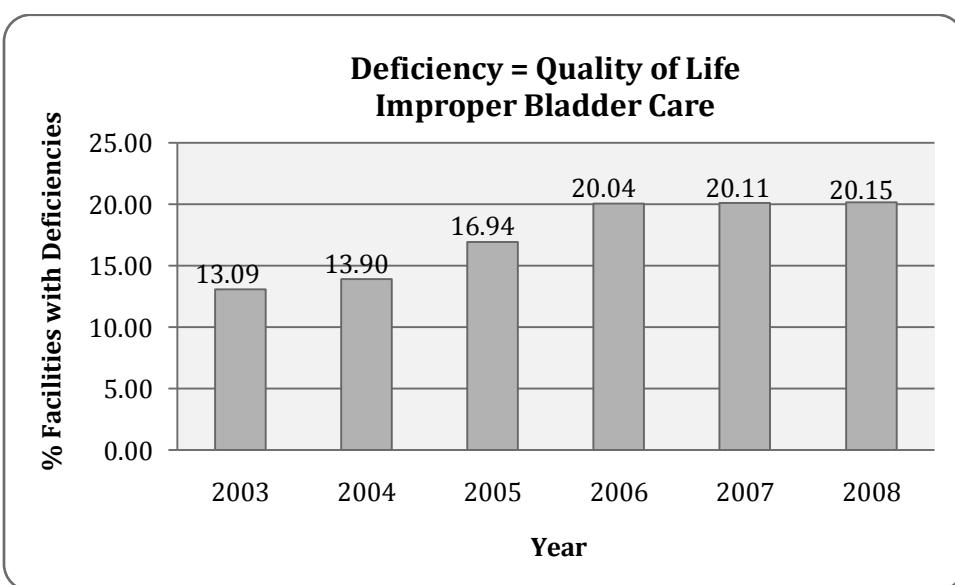


**TABLE 42**  
**DEFICIENCY GROUP=QUALITY OF CARE**  
**PRESSURE SORES (F314)**

<b>State</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	0.00	8.33	0.00	0.00	6.67	7.14
AL	11.93	15.71	16.13	16.40	15.64	12.26
AR	20.42	21.34	28.57	35.95	55.23	47.46
AZ	14.52	13.49	17.00	13.33	18.75	22.14
CA	18.89	19.35	18.12	20.61	21.74	20.73
CO	29.30	26.44	22.27	26.09	27.14	26.34
CT	35.29	31.49	36.82	39.67	37.82	29.00
DC	25.00	5.00	40.00	35.00	36.84	26.32
DE	17.07	26.83	33.33	40.91	35.56	44.44
FL	8.69	6.80	8.99	12.13	14.29	15.50
GA	21.41	20.64	27.25	23.66	20.40	24.30
HI	33.33	13.51	15.00	6.52	9.76	11.11
IA	8.27	10.69	11.01	12.81	18.92	18.69
ID	22.67	33.80	48.65	46.05	33.80	30.38
IL	24.56	23.40	25.51	26.75	29.87	28.31
IN	16.41	20.64	23.03	27.52	33.01	30.83
KS	22.77	27.12	47.89	46.42	42.31	41.45
KY	17.25	6.60	6.78	9.93	13.79	11.19
LA	13.03	16.61	21.45	20.29	24.56	19.65
MA	12.39	8.07	10.18	11.26	10.07	7.23
MD	11.69	13.85	20.51	13.36	19.57	13.66
ME	6.36	4.42	46.79	35.14	18.02	20.91
MI	28.21	23.36	21.48	25.24	24.35	22.89
MN	14.81	17.92	38.74	74.34	66.84	46.46
MO	20.31	19.53	27.54	26.71	30.92	32.16
MS	5.26	5.00	4.00	6.44	7.88	8.81
MT	13.68	7.78	4.40	8.24	14.94	3.30
NC	17.53	14.29	9.02	10.61	9.90	12.50
ND	12.20	4.88	20.51	19.75	8.75	6.17
NE	14.22	11.26	15.07	17.57	21.92	19.07
NH	8.97	13.16	18.99	12.99	9.88	10.81
NJ	21.59	13.28	22.60	20.06	18.66	17.93
NM	12.50	17.91	23.61	21.13	26.39	17.39
NV	25.00	38.64	25.53	21.28	14.58	19.15
NY	20.74	18.34	17.94	21.43	20.16	14.69
OH	18.17	14.91	17.37	21.21	23.54	24.11
OK	15.59	15.95	12.71	16.72	15.55	24.62
OR	23.70	17.52	17.56	22.63	14.60	18.38
PA	17.98	17.94	15.07	17.18	11.87	15.57
RI	17.02	20.73	11.90	11.49	9.30	15.48
SC	21.18	25.75	21.21	22.49	22.49	19.88
SD	15.74	11.00	5.61	10.28	4.72	2.00
TN	16.09	22.75	17.13	13.58	9.91	7.57
TX	15.40	13.02	16.39	20.76	15.06	13.27
UT	6.98	5.81	2.27	2.13	3.49	8.33
VA	16.24	17.23	20.47	21.48	21.48	23.67
VT	29.27	35.90	17.50	27.50	21.05	15.00
WA	28.06	29.15	24.50	25.73	27.80	29.11
WI	16.84	11.42	14.14	16.10	21.37	29.29
WV	9.56	10.85	6.35	8.66	12.90	19.08
WY	23.68	19.44	21.62	28.57	18.42	28.21
<b>US</b>	<b>17.77</b>	<b>16.88</b>	<b>19.29</b>	<b>21.78</b>	<b>21.97</b>	<b>21.11</b>

## **Bladder Incontinence Care (F315)**

Residents who have bladder incontinence should receive appropriate treatment and services to prevent incontinence and to restore as much bladder functioning as possible. In 2003, 13.09 percent of facilities received deficiencies for this standard compared with 20.15 percent in 2008 (See Table 43).



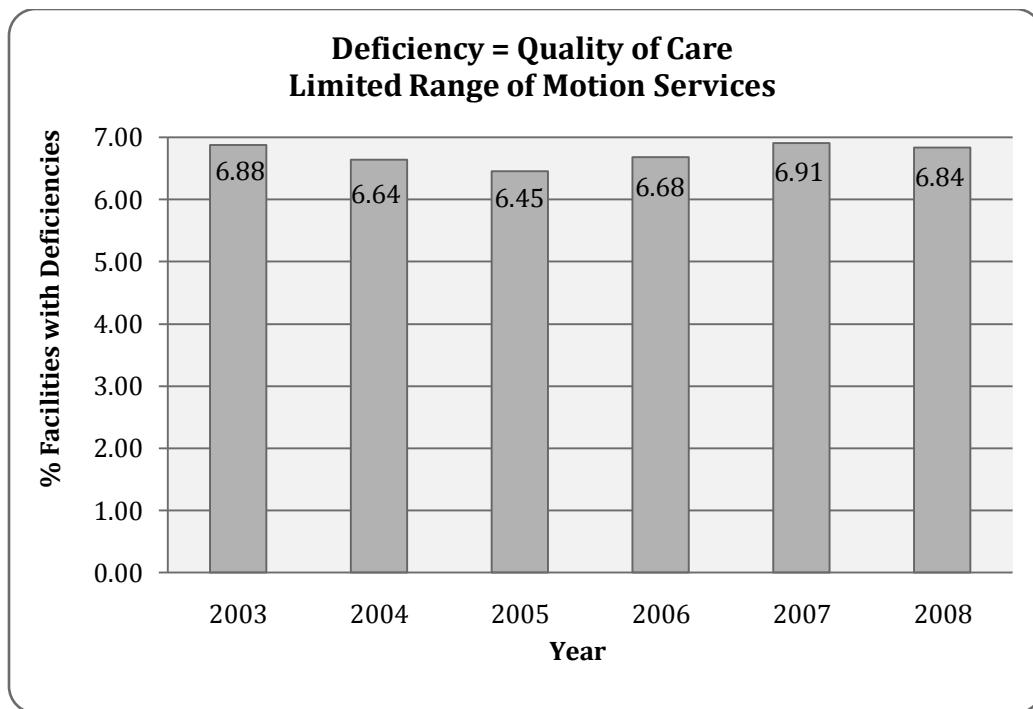
**TABLE 43**  
**DEFICIENCY GROUP=QUALITY OF CARE**  
**Urinary/Incontinence Care (F315)**

**Percent of Facilities with Deficiencies**

<b>State</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	0.00	0.00	0.00	6.67	6.67	0.00
AL	14.22	23.80	19.89	19.05	17.32	18.40
AR	15.84	10.20	40.76	38.43	37.66	33.90
AZ	15.33	4.30	16.00	21.48	28.91	27.48
CA	19.12	27.40	24.05	26.41	25.00	24.27
CO	8.37	7.30	16.11	26.57	35.71	31.22
CT	21.43	25.10	20.50	20.66	19.33	21.21
DC	0.00	10.00	5.00	15.00	10.53	5.26
DE	4.88	25.60	26.19	45.45	28.89	26.67
FL	12.52	10.00	16.90	20.71	26.62	22.50
GA	20.00	22.00	28.41	34.65	36.26	33.24
HI	12.12	22.90	22.50	32.61	31.71	24.44
IA	9.70	12.40	11.46	9.89	10.81	23.65
ID	13.33	26.50	35.13	32.89	40.85	30.38
IL	17.64	20.10	15.44	16.56	22.28	21.62
IN	10.04	16.00	21.42	23.56	30.65	28.06
KS	28.82	50.10	54.36	61.32	44.08	39.42
KY	19.37	22.10	9.83	15.75	13.79	11.19
LA	8.14	13.20	10.04	8.33	13.33	13.68
MA	7.66	12.10	9.73	11.04	10.30	8.19
MD	4.33	9.40	13.25	12.93	21.74	16.30
ME	8.18	4.60	25.69	44.14	34.23	28.18
MI	10.72	11.70	13.36	10.24	13.71	16.39
MN	27.79	53.10	43.41	78.04	61.84	49.61
MO	11.88	19.80	17.77	23.59	23.29	26.71
MS	5.85	7.30	4.50	7.43	8.87	12.44
MT	2.11	2.30	9.89	7.06	11.49	3.30
NC	17.28	15.60	10.00	12.74	14.73	10.10
ND	9.76	11.00	16.67	18.52	3.75	8.64
NE	8.71	15.00	9.13	21.62	21.92	32.09
NH	5.13	15.80	6.33	10.39	0.00	1.35
NJ	5.68	11.60	9.60	10.86	7.80	11.76
NM	3.75	10.80	16.67	25.35	23.61	24.64
NV	52.27	61.00	23.40	21.28	25.00	19.15
NY	3.07	5.20	2.65	7.92	6.56	7.19
OH	10.20	12.80	10.47	10.82	14.16	16.53
OK	20.97	35.50	23.21	27.16	21.34	25.85
OR	5.18	4.50	9.16	15.33	15.33	14.71
PA	8.85	15.60	12.39	13.38	11.17	16.00
RI	6.39	1.30	3.57	3.45	1.16	3.57
SC	30.00	36.10	24.25	22.49	24.26	38.60
SD	3.70	5.00	1.87	3.74	1.89	2.00
TN	31.55	28.60	29.28	22.84	23.22	17.67
TX	7.13	6.40	9.04	10.56	11.12	10.67
UT	1.16	1.20	0.00	0.00	5.81	3.13
VA	5.17	8.90	9.45	11.85	10.37	13.43
VT	0.00	10.50	22.50	25.00	7.89	5.00
WA	11.86	27.10	20.08	23.65	29.05	29.54
WI	16.84	22.90	21.60	25.97	23.66	24.24
WV	8.82	6.80	18.26	12.60	16.13	9.92
WY	23.68	19.40	27.03	48.57	36.84	51.28
<b>US</b>	<b>13.09</b>	<b>13.90</b>	<b>16.94</b>	<b>20.04</b>	<b>20.11</b>	<b>20.15</b>

### **Limited Range of Motion Services (F318)**

Residents with limited range of motion must receive appropriate treatment and services to increase their range and/or to prevent declines in range of motion. In 2003, 6.88 percent of facilities received deficiencies for violating this requirement. The percent of facilities with deficiencies decreased to 6.84 percent in 2008 (See Table 44).

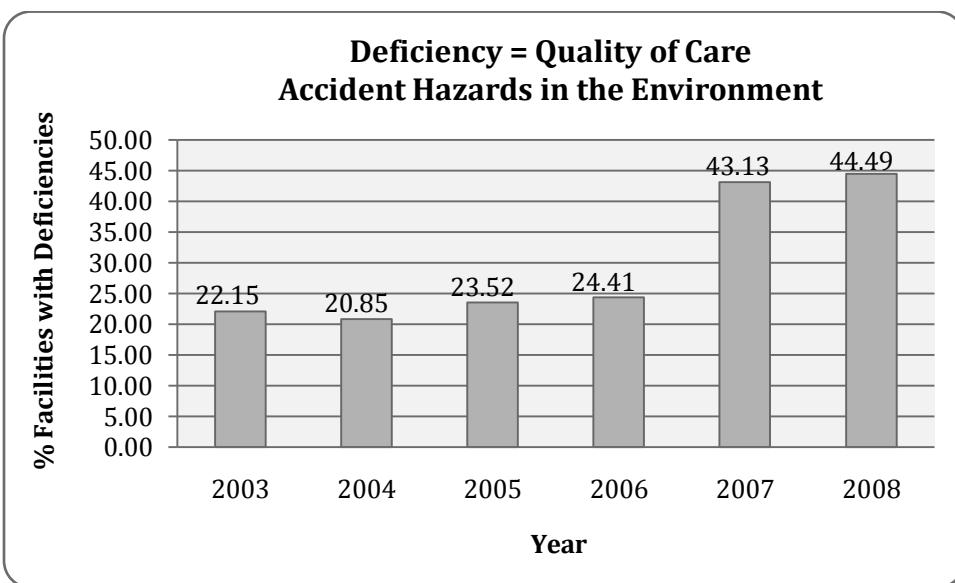


**TABLE 44**  
**DEFICIENCY GROUP=QUALITY OF CARE**  
**LIMITED RANGE OF MOTION SERVICES (F318)**

Percent of Facilities with Deficiencies						
<b>State</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	0.00	0.00	0.00	6.67	0.00	7.14
AL	2.29	5.24	1.61	4.23	2.79	1.42
AR	14.58	13.39	14.71	17.36	21.76	20.34
AZ	7.26	3.17	6.00	5.19	1.56	3.05
CA	8.75	8.20	7.70	8.91	8.55	8.23
CO	18.60	11.06	9.00	10.14	5.71	6.83
CT	7.56	9.79	6.69	4.55	8.40	7.79
DC	15.00	15.00	35.00	20.00	10.53	0.00
DE	2.44	4.88	4.76	13.64	6.67	8.89
FL	4.42	4.08	3.41	3.25	4.06	5.37
GA	8.73	6.69	8.70	9.01	6.23	4.19
HI	3.03	8.11	5.00	6.52	2.44	2.22
IA	5.91	7.13	7.87	7.19	10.14	15.77
ID	4.00	11.27	14.86	13.16	19.72	2.53
IL	6.05	7.63	6.38	5.10	5.70	7.34
IN	3.67	5.01	4.04	4.36	4.13	4.74
KS	17.58	24.11	21.41	24.36	19.53	20.00
KY	2.82	3.82	3.39	1.37	5.52	3.15
LA	4.23	4.15	2.42	3.99	5.26	7.02
MA	4.05	2.91	2.26	1.99	4.58	2.17
MD	6.93	4.33	7.26	9.05	8.70	7.49
ME	0.91	0.88	0.92	2.70	2.70	1.82
MI	10.96	7.01	7.40	7.62	11.35	11.08
MN	20.00	18.18	16.21	16.93	18.16	19.42
MO	6.51	7.89	9.38	7.02	9.59	7.21
MS	0.58	3.33	2.00	3.47	1.48	2.59
MT	0.00	1.11	1.10	1.18	2.30	0.00
NC	6.67	6.05	6.59	6.60	9.90	4.09
ND	1.22	7.32	1.28	2.47	1.25	0.00
NE	3.21	4.50	6.85	8.56	13.24	8.84
NH	0.00	0.00	0.00	0.00	0.00	0.00
NJ	5.40	5.93	5.93	4.18	2.51	5.60
NM	2.50	2.99	1.39	1.41	4.17	5.80
NV	2.27	6.82	8.51	6.38	6.25	2.13
NY	9.22	5.58	6.86	4.66	4.38	3.75
OH	7.01	5.47	5.12	4.98	6.18	6.84
OK	12.90	10.12	8.56	8.66	8.84	8.62
OR	7.41	5.84	7.63	6.57	1.46	2.94
PA	5.20	4.38	4.37	5.77	5.73	5.43
RI	6.38	9.76	7.14	14.94	4.65	4.76
SC	12.35	8.38	7.88	4.73	5.92	5.26
SD	2.78	4.00	2.80	3.74	1.89	0.00
TN	5.05	6.89	4.05	3.09	2.79	3.47
TX	3.26	3.01	3.45	5.77	3.76	5.55
UT	1.16	0.00	0.00	0.00	2.33	1.04
VA	8.86	4.87	5.12	5.56	5.56	4.24
VT	0.00	2.56	0.00	2.50	2.63	2.50
WA	4.35	3.64	8.84	11.20	12.45	8.02
WI	4.15	6.09	5.14	4.42	4.33	6.31
WV	5.15	6.20	6.35	2.36	3.23	4.58
WY	7.89	16.67	27.03	28.57	13.16	7.69
<b>US</b>	<b>6.88</b>	<b>6.64</b>	<b>6.45</b>	<b>6.68</b>	<b>6.91</b>	<b>6.84</b>

## **Accident Environment (F323)**

Facilities must ensure that the environment is as free of accident hazards as possible. This is designed to prevent unexpected and unintended injury. In 2003, 22.15 percent of facilities received deficiencies for failing to meet this standard (See Table 45). In 2007, the percent of facilities that received deficiencies for this requirement sharply increased to 43.13, and slightly increased again in 2008 to 44.49 percent. The sharp increase was the result of combining F323 and F324 into one category of F323 in 2007.



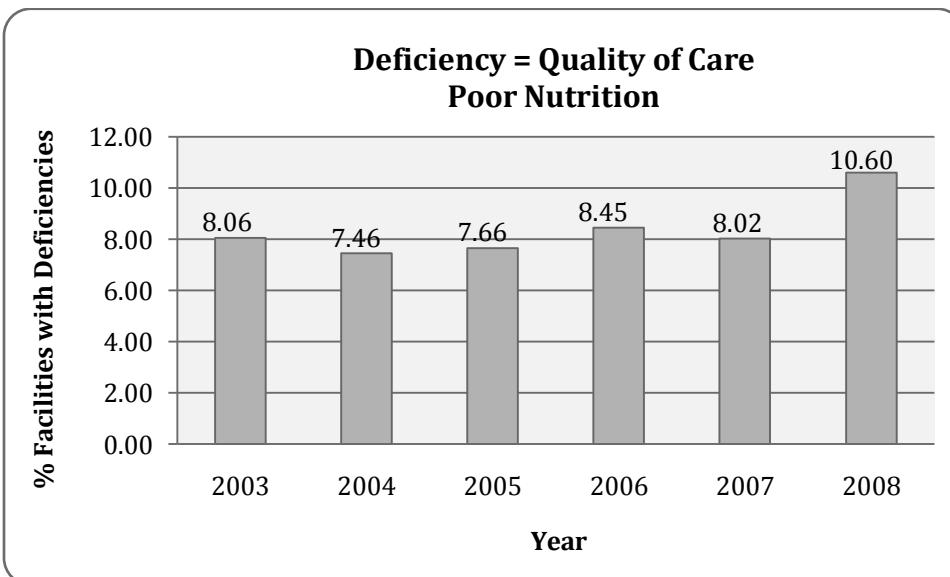
**TABLE 45**  
**DEFICIENCY GROUP=QUALITY OF CARE**  
**ACCIDENT ENVIRONMENT (F323)**

**Percent of Facilities with Deficiencies**

<b>State</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	0.00	25.00	13.33	20.00	26.67	21.43
AL	16.06	13.81	13.98	10.05	33.52	33.49
AR	42.08	38.91	47.06	67.36	79.92	72.46
AZ	44.35	40.48	39.00	50.37	58.59	54.96
CA	24.69	26.78	29.11	30.01	42.59	45.24
CO	30.70	37.02	36.02	38.65	62.86	74.15
CT	22.69	29.36	46.03	40.91	62.18	58.44
DC	70.00	75.00	65.00	65.00	84.21	57.89
DE	36.59	70.73	61.90	68.18	82.22	80.00
FL	18.56	13.90	18.91	19.67	26.77	30.70
GA	37.18	30.52	28.12	28.17	31.44	36.59
HI	15.15	27.03	12.50	10.87	21.95	33.33
IA	22.70	27.17	26.97	22.92	51.80	52.03
ID	24.00	30.99	44.59	48.68	74.65	63.29
IL	27.83	26.41	28.06	32.74	58.35	55.73
IN	18.53	14.23	22.63	22.57	54.03	58.70
KS	31.99	29.59	28.73	30.95	57.99	57.68
KY	27.11	22.92	17.97	25.68	28.62	37.41
LA	24.43	32.91	37.72	39.13	48.77	43.86
MA	4.28	5.61	11.76	10.82	31.58	32.05
MD	21.65	18.61	23.50	23.28	54.35	60.35
ME	41.82	33.63	40.37	35.14	34.23	26.36
MI	33.80	32.01	28.64	32.86	66.67	65.06
MN	32.21	20.00	25.55	23.54	52.89	48.29
MO	8.24	8.09	9.58	9.75	40.90	51.07
MS	10.53	10.00	22.50	24.75	30.05	37.31
MT	15.79	36.67	35.16	37.65	27.59	36.26
NC	19.26	17.68	16.83	18.16	34.78	25.24
ND	20.73	29.27	34.62	39.51	50.00	40.74
NE	27.52	34.68	25.11	27.93	46.12	44.19
NH	8.97	9.21	12.66	5.19	16.05	29.73
NJ	21.31	18.64	18.64	17.83	40.95	50.42
NM	26.25	25.37	30.56	9.86	27.78	31.88
NV	6.82	6.82	10.64	10.64	33.33	31.91
NY	18.13	13.24	17.00	21.74	40.63	37.50
OH	22.10	17.17	21.49	23.86	50.59	45.26
OK	27.96	23.93	25.41	24.48	33.54	36.62
OR	17.04	6.57	9.16	8.03	44.53	47.79
PA	21.35	19.07	20.42	24.65	40.36	45.71
RI	4.26	10.98	5.95	11.49	16.28	11.90
SC	19.41	23.95	27.88	17.75	31.36	30.41
SD	4.63	6.00	15.89	17.76	29.25	32.00
TN	19.87	21.26	22.43	18.21	39.94	40.06
TX	18.93	17.45	21.97	19.79	30.62	29.14
UT	16.28	11.63	15.91	12.77	15.12	27.08
VA	4.80	6.37	7.87	10.74	38.15	45.23
VT	17.07	5.13	25.00	20.00	28.95	32.50
WA	36.36	27.94	25.30	18.67	43.15	62.45
WI	13.47	10.91	14.65	12.73	37.15	48.23
WV	17.65	12.40	20.63	21.26	35.48	40.46
WY	21.05	11.11	35.14	68.57	60.53	53.85
<b>US</b>	<b>22.15</b>	<b>20.85</b>	<b>23.52</b>	<b>24.41</b>	<b>43.13</b>	<b>44.49</b>

## Nutrition (F325)

Facilities must ensure that residents receive acceptable nutrition to maintain body weight unless a resident's condition makes this impossible. In 2003, 8.06 percent of facilities failed to meet this standard compared with 10.6 percent in 2008 (See Table 46).



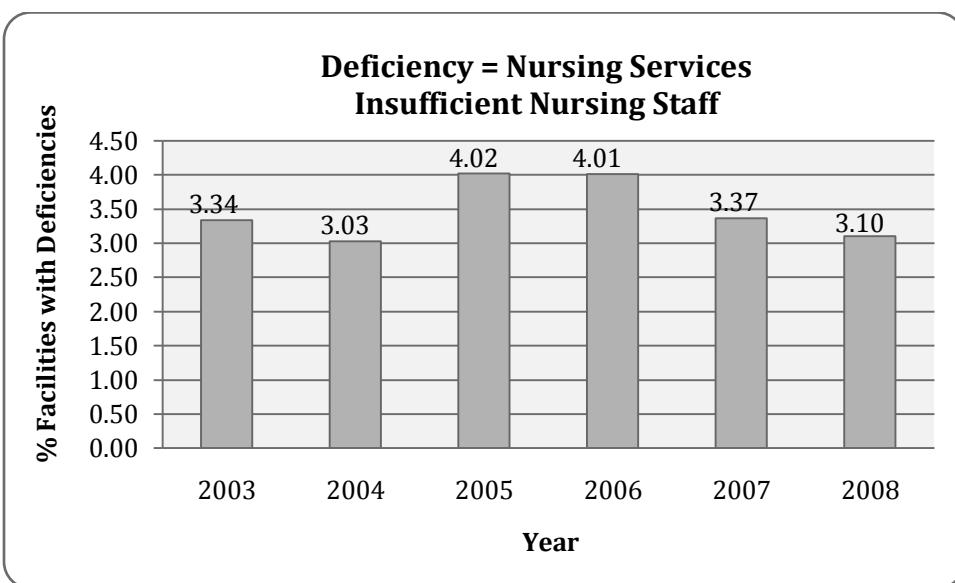
**TABLE 46**  
**DEFICIENCY GROUP=QUALITY OF CARE**  
**NUTRITION (F325)**

**Percent of Facilities with Deficiencies**

<b>State</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	7.14	0.00	13.33	6.67	6.67	0.00
AL	5.96	4.29	5.38	3.70	3.91	4.72
AR	9.17	10.46	5.04	9.92	9.21	13.56
AZ	6.45	2.38	3.00	5.19	5.47	12.98
CA	11.84	13.85	10.26	11.77	10.34	13.87
CO	17.21	18.27	12.32	17.87	18.57	20.98
CT	7.14	8.09	9.21	11.16	11.34	16.02
DC	10.00	15.00	5.00	20.00	21.05	10.53
DE	4.88	7.32	7.14	9.09	22.22	6.67
FL	5.30	5.44	5.12	6.36	5.71	7.75
GA	5.92	6.98	12.46	14.08	9.92	18.99
HI	15.15	16.22	15.00	10.87	4.88	15.56
IA	4.96	4.23	3.60	4.04	4.28	5.41
ID	5.33	4.23	9.46	14.47	11.27	8.86
IL	8.19	8.39	8.04	10.96	7.09	16.09
IN	9.27	6.81	6.87	10.89	8.64	13.64
KS	12.10	12.05	18.87	15.47	14.20	18.55
KY	7.39	5.90	4.07	3.42	6.21	9.79
LA	8.79	7.99	10.73	7.25	9.12	9.47
MA	4.73	4.71	5.66	5.08	4.81	5.30
MD	11.26	9.09	11.97	11.21	17.39	16.74
ME	3.64	1.77	0.00	1.80	5.41	10.91
MI	15.38	7.94	13.84	14.05	13.71	15.18
MN	4.42	3.12	2.75	4.23	5.53	8.66
MO	9.77	7.69	10.18	11.11	13.31	16.96
MS	4.09	2.78	4.50	4.95	2.96	2.59
MT	6.32	2.22	3.30	3.53	4.60	2.20
NC	8.15	6.30	5.61	5.66	4.35	5.77
ND	2.44	3.66	10.26	7.41	0.00	4.94
NE	4.59	8.56	6.85	10.36	10.05	13.49
NH	1.28	0.00	1.27	1.30	3.70	0.00
NJ	10.80	8.19	7.34	5.01	6.41	11.48
NM	3.75	2.99	6.94	2.82	1.39	5.80
NV	18.18	22.73	17.02	17.02	16.67	29.79
NY	11.37	12.92	9.83	11.96	11.88	9.38
OH	4.14	2.25	4.45	6.36	6.82	7.68
OK	10.22	4.91	7.46	5.97	5.18	10.77
OR	8.89	7.30	8.40	6.57	16.06	5.15
PA	7.44	9.18	8.59	9.72	8.38	12.29
RI	4.26	2.44	5.95	4.60	1.16	3.57
SC	8.82	6.59	4.85	5.33	1.78	4.68
SD	12.96	11.00	7.48	7.48	6.60	7.00
TN	5.68	8.08	6.54	4.94	4.64	5.68
TX	6.51	5.76	5.76	6.92	4.62	7.03
UT	12.79	3.49	5.68	6.38	1.16	1.04
VA	7.75	6.37	4.33	3.70	5.56	10.95
VT	2.44	5.13	2.50	7.50	13.16	5.00
WA	13.83	13.77	17.67	16.60	12.86	9.70
WI	3.63	3.05	4.37	4.42	7.12	8.84
WV	0.74	3.10	3.17	2.36	8.87	7.63
WY	5.26	8.33	2.70	5.71	0.00	5.13
<b>US</b>	<b>8.06</b>	<b>7.46</b>	<b>7.66</b>	<b>8.45</b>	<b>8.02</b>	<b>10.60</b>

## **Sufficient Nursing Staff (F353)**

Facilities must have sufficient nursing staff to provide nursing and related services to attain or maintain the highest practicable physical, mental, and psychosocial well-being of residents. In 2003, 3.34 percent of facilities were given deficiencies for failing to meet this requirement compared with only 3.10 percent in 2008 (See Table 47). These low deficiency rates are a concern considering that the CMS (2001) report found that 9 out of 10 facilities have inadequate staffing.



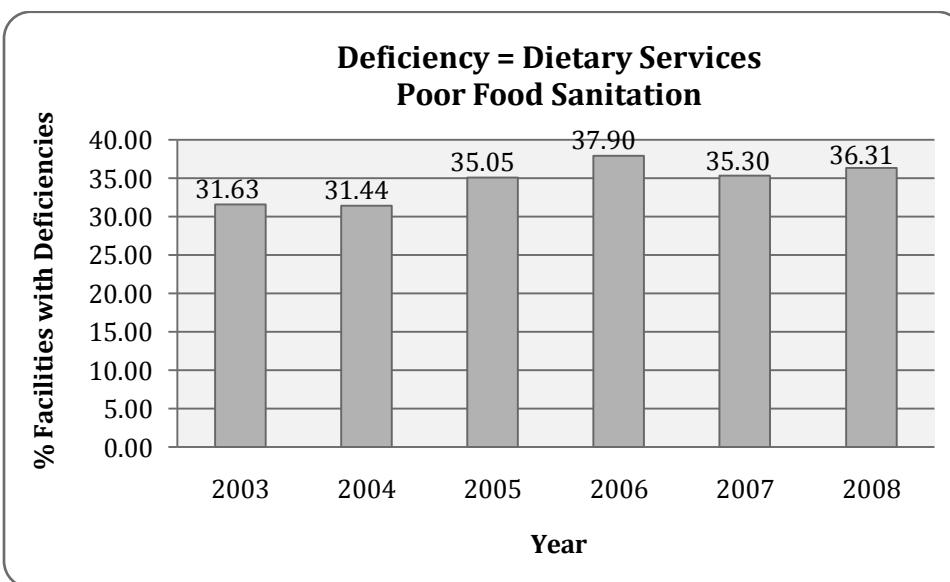
**TABLE 47**  
**DEFICIENCY GROUP=NURSING SERVICES**  
**SUFFICIENT NURSING STAFF (F353)**

**Percent of Facilities with Deficiencies**

<b>State</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	0.00	0.00	0.00	0.00	0.00	0.00
AL	5.05	7.62	5.91	4.23	0.56	0.47
AR	2.08	1.26	3.78	2.07	0.84	0.42
AZ	2.42	0.00	2.00	3.70	2.34	1.53
CA	4.41	3.95	5.69	5.31	3.58	4.52
CO	1.86	0.96	3.79	3.38	6.67	2.44
CT	2.10	2.98	0.42	3.72	3.78	3.90
DC	5.00	0.00	5.00	10.00	5.26	0.00
DE	2.44	0.00	0.00	2.27	0.00	0.00
FL	8.39	6.19	8.22	8.43	4.81	2.38
GA	4.79	2.03	3.48	2.25	1.98	1.68
HI	6.06	5.41	2.50	0.00	2.44	11.11
IA	3.55	4.90	5.62	5.62	4.73	7.43
ID	6.67	2.82	12.16	10.53	4.23	5.06
IL	3.02	2.50	2.68	2.68	3.92	4.25
IN	3.09	2.61	4.65	4.75	4.13	4.35
KS	5.48	8.77	12.11	14.61	11.83	11.59
KY	5.63	5.56	3.39	4.11	2.41	4.90
LA	7.17	7.35	11.07	11.96	8.77	5.26
MA	2.03	0.45	1.81	1.99	1.60	0.96
MD	0.43	0.00	2.14	1.29	1.30	0.44
ME	4.55	0.88	0.92	2.70	2.70	1.82
MI	5.83	4.91	6.68	6.67	4.02	4.10
MN	4.42	4.42	3.30	3.17	2.11	2.62
MO	6.32	3.75	5.19	4.09	5.87	3.90
MS	4.68	2.78	0.50	0.00	0.49	0.52
MT	0.00	0.00	1.10	1.18	2.30	0.00
NC	2.47	1.21	1.95	1.42	1.69	0.72
ND	1.22	0.00	0.00	0.00	0.00	0.00
NE	0.92	0.00	0.46	2.70	4.57	0.93
NH	0.00	2.63	2.53	0.00	1.23	1.35
NJ	0.85	0.28	0.56	0.56	0.56	0.84
NM	7.50	8.96	8.33	1.41	4.17	2.90
NV	15.91	15.91	6.38	12.77	8.33	0.00
NY	0.15	0.96	0.31	0.31	1.25	1.41
OH	1.70	1.07	1.78	2.55	2.77	2.84
OK	2.15	1.23	3.59	4.48	3.96	5.54
OR	2.96	5.11	5.34	5.11	2.19	0.74
PA	1.26	1.84	1.83	1.55	1.54	1.29
RI	0.00	0.00	1.19	1.15	1.16	0.00
SC	0.00	2.99	4.24	5.92	0.59	1.17
SD	1.85	5.00	3.74	5.61	0.94	1.00
TN	6.31	5.99	5.30	4.63	3.10	1.89
TX	2.38	2.30	4.52	3.11	2.48	2.52
UT	1.16	1.16	0.00	2.13	2.33	3.13
VA	0.74	1.12	0.79	2.96	3.70	3.53
VT	0.00	10.26	12.50	20.00	5.26	5.00
WA	4.35	3.24	4.42	4.15	6.64	4.64
WI	1.55	2.03	4.63	3.90	3.56	2.78
WV	4.41	6.20	4.76	7.09	8.87	6.87
WY	7.89	5.56	29.73	22.86	15.79	15.38
<b>US</b>	<b>3.34</b>	<b>3.03</b>	<b>4.02</b>	<b>4.01</b>	<b>3.37</b>	<b>3.10</b>

## **Food Sanitation (F371)**

Sanitary conditions must be ensured in storing, preparing, distributing, and serving food to prevent food borne illness. In 2003, 31.63 percent of facilities were given deficiencies for failure to meet this regulation compared to 36.31 percent in 2008 (See Table 48).



**TABLE 48**  
**DEFICIENCY GROUP=DIETARY SERVICES**  
**FOOD SANITATION (F371)**

**Percent of Facilities with Deficiencies**

<b>State</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
AK	21.43	33.33	46.67	61.50	83.30	57.14
AL	44.04	35.24	49.46	42.60	50.30	50.94
AR	55.00	51.88	47.06	56.80	44.70	45.76
AZ	45.97	36.51	33.00	43.20	28.20	21.37
CA	43.19	45.90	46.99	52.70	55.30	55.73
CO	24.65	43.75	33.65	40.10	47.40	51.22
CT	21.85	23.83	24.27	29.10	31.30	24.68
DC	75.00	80.00	100.00	85.00	100.00	47.37
DE	51.22	48.78	57.14	66.70	63.60	75.56
FL	46.24	45.77	57.05	53.40	46.90	53.95
GA	39.44	31.10	35.36	36.80	25.40	28.77
HI	33.33	16.22	32.50	37.00	26.80	42.22
IA	37.12	36.75	38.20	34.70	37.40	39.19
ID	36.00	39.44	62.16	60.80	35.70	34.18
IL	15.62	18.40	22.70	22.40	25.40	24.71
IN	18.34	20.24	27.47	29.20	27.70	34.39
KS	29.39	29.32	35.49	38.30	45.30	39.42
KY	32.39	32.99	35.59	39.90	34.00	38.46
LA	37.46	31.63	30.45	33.90	40.80	44.21
MA	13.74	12.56	14.93	12.60	8.40	12.29
MD	30.74	25.54	36.75	49.80	48.60	46.26
ME	49.09	33.63	38.53	33.60	38.90	34.55
MI	38.00	37.85	37.71	41.40	49.60	47.95
MN	37.14	32.99	38.74	38.80	40.20	36.22
MO	37.16	39.45	35.73	38.30	41.80	42.69
MS	35.09	32.78	33.00	38.10	28.50	30.57
MT	46.32	58.89	57.14	49.40	41.20	46.15
NC	36.30	36.32	45.61	49.50	47.80	39.90
ND	24.39	24.39	41.03	42.00	33.80	29.63
NE	28.44	36.49	48.86	41.60	42.30	52.09
NH	15.38	14.47	32.91	26.30	29.60	31.08
NJ	22.16	24.29	26.84	22.30	22.60	20.73
NM	25.00	11.94	34.72	25.70	18.60	14.49
NV	34.09	47.73	34.04	38.30	39.60	51.06
NY	19.66	15.31	17.94	23.10	24.30	21.72
OH	28.27	24.68	26.50	26.30	20.60	23.58
OK	42.47	44.79	60.22	67.30	64.60	57.23
OR	9.63	4.38	4.58	14.30	8.20	14.71
PA	19.80	22.88	27.75	31.90	29.30	32.43
RI	6.38	20.73	17.86	14.90	5.90	4.76
SC	44.71	35.33	43.03	37.70	40.80	29.24
SD	44.44	42.00	44.86	46.70	31.10	34.00
TN	37.22	41.32	36.45	27.80	19.40	27.44
TX	34.51	33.39	36.05	34.00	33.20	33.91
UT	45.35	36.05	48.86	46.70	54.80	32.29
VA	14.39	20.22	20.87	28.40	41.80	40.64
VT	17.07	17.95	32.50	27.50	39.50	42.50
WA	39.13	38.46	38.15	43.90	33.20	35.86
WI	9.07	8.88	11.83	13.60	10.60	20.71
WV	47.06	56.59	53.97	46.80	40.50	54.20
WY	52.63	55.56	54.05	74.30	63.20	56.41
<b>US</b>	<b>31.63</b>	<b>31.44</b>	<b>35.05</b>	<b>37.90</b>	<b>35.30</b>	<b>36.31</b>

## **PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES BY SURVEY CATEGORY**

### **Percent of Deficiencies**

This section presents a listing of about 185 survey items for each survey category based on the federal survey requirements (excluding the life safety requirements). The percent of facilities in the U.S. with deficiencies are presented for the 2003-2008 period.

### **Resident Rights**

In this category of survey items, the highest percent of deficiencies were given for failure to give notice of changes (See Table 49). Only 8 of the 26 items in this category were cited in 2 percent or more of the facilities in the U.S. in 2008.

**TABLE 49**  
**PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES FOR**  
**RESIDENT RIGHTS**  
**DEFICIENCY GROUP=RESIDENT RIGHTS**

<b>FTAG</b>	<b>DESCRIPTION</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
F151	Exercise of Rights	1.37	1.37	1.13	1.62	1.27	1.37
F152	Free of Reprisal	0.70	0.78	1.29	1.16	0.97	1.03
F153	Access to Records	0.38	0.38	0.33	0.37	0.28	0.28
F154	Informed of Condition	0.97	1.00	1.13	1.28	1.70	1.56
F155	Refuse Treatment	1.46	1.53	2.03	2.23	2.10	2.16
F156	Notice of Rights and Services	4.22	4.45	4.42	4.89	6.07	6.68
F157	Notice of Changes	12.42	13.19	14.97	15.95	16.27	16.59
F158	Resident Manage Financial Affairs	0.12	0.10	0.11	0.12	0.17	0.16
F159	Facility Manage Personal Funds	2.83	2.58	2.82	3.37	3.26	3.53
F160	Convey Funds	1.13	1.03	1.19	1.45	1.24	1.46
F161	Financial Security	0.93	1.17	1.45	1.66	1.48	1.31
F162	Limit on Charges to Funds	0.29	0.27	0.20	0.25	0.17	0.24
F163	Choice of Physician	0.17	0.08	0.12	0.10	0.14	0.15
F164	Privacy and Confidentiality	9.31	8.87	10.29	10.65	9.33	8.47
F165	Voice Grievances	0.15	0.27	0.21	0.23	0.26	0.25
F166	Resolve Grievances	3.52	3.23	3.65	3.63	3.62	3.41
F167	Survey Results	3.69	4.04	3.89	4.12	4.03	4.13
F168	Information	0.06	0.10	0.10	0.11	0.17	0.18
F169	Work	0.03	0.03	0.04	0.04	0.03	0.00
F170	Mail	1.47	1.35	1.67	1.80	1.43	1.38
F172	Visitors	0.18	0.16	0.14	0.20	0.26	0.20
F173	Ombudsman	0.01	0.01	0.01	0.01	0.01	0.00
F174	Telephone	1.35	1.43	1.50	1.70	1.58	1.52
F175	Married Couples	0.04	0.01	0.04	0.08	0.06	0.05
F176	Administer Own Drugs	3.92	3.79	4.70	4.70	4.23	3.84
F177	Refuse Transfers	0.08	0.05	0.05	0.06	0.09	0.05

## **Admission, Transfer, and Discharge Rights**

In this category of survey items, the most deficiencies were given for failure to provide notice of facility policies and to provide notice before transfer, although few deficiencies were given in this category (See Table 50). In 2008, 2 items in this category, Notice of Policies and Notice Before Transfer, was cited in more than 1 percent of the facilities in the U.S.

## **Resident Behavior and Facility Practices**

In this category of survey items, the highest percent of deficiencies were given for unemployable individuals (16.62 percent). In addition, 13.87 percent were cited for failure to follow policies and procedures for staff; and 10.97 were given citations for improper physical restraints (See Table 50).

**TABLE 50**

**PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES FOR ADMISSION,  
TRANSFER & DISCHARGE RIGHTS AND FOR RESIDENT BEHAVIOR & FACILITY  
PRACTICES**

**DEFICIENCY GROUP=ADMISSION, TRANSFER AND DISCHARGE RIGHTS**

FTAG	DESCRIPTION	2003	2004	2005	2006	2007	2008
F201	Transfer and Discharge	0.49	0.51	0.54	0.53	0.63	0.65
F202	Documentation	0.22	0.33	0.49	0.62	0.64	0.68
F203	Notice Before Transfer	1.28	1.42	1.51	1.62	1.96	1.80
F204	Orientation for Transfer or Discharge	0.38	0.50	0.61	0.65	0.78	0.84
F205	Notice of Policies	1.09	0.97	1.19	1.25	1.15	1.18
F206	Permitting Resident to Return to Facility	0.13	0.21	0.22	0.26	0.34	0.31
F207	Equal Access to Quality Care	0.03	0.04	0.03	0.06	0.03	0.03
F208	Admission Policy	0.10	0.19	0.14	0.13	0.19	0.03

**DEFICIENCY GROUP=RESIDENT BEHAVIOR AND FACILITY  
PRACTICES**

FTAG	DESCRIPTION	2003	2004	2005	2006	2007	2008
F221	Physical Restraints	9.95	9.92	10.6	10.8	12.4	10.9
F222	Chemical Restraints	0.39	0.34	0.50	0.59	0.57	0.69
F223	Abuse	2.46	2.35	2.89	3.13	2.74	2.87
F224	Staff Treatment of Residents	3.54	3.46	3.83	4.33	3.39	2.85
F225	Unemployable Individuals	16.1 9	16.4 9	17.2 8	16.9 7	16.3 7	16.6 2
F226	Policy and Procedures for Staff	11.2 7	10.9 3	12.3 6	13.5 1	13.4 7	13.8 7

## **Quality of Life**

Most deficiencies were issued to facilities for poor housekeeping (20.58 percent in 2008) and for failure to maintain the dignity of residents (18.45 percent in 2008). Failure to accommodate needs, failure to provide adequate social services, and failure to provide an adequate activities program were also frequently cited (See Table 51). Seven of the 19 items in this category were cited in 2 percent or more of the facilities.

**TABLE 51**  
**PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES FOR**  
**QUALITY OF LIFE**

**DEFICIENCY GROUP=QUALITY OF LIFE**

FTAG	DESCRIPTION	2003	2004	2005	2006	2007	2008
F240	Quality of Life	0.38	0.33	0.53	0.60	0.60	0.38
F241	Dignity	16.68	16.29	17.50	19.20	18.28	18.45
F242	Self-Determination/Participation	2.52	2.17	2.74	2.95	2.63	2.59
F243	Resident and Family Groups	0.32	0.34	0.32	0.22	0.32	0.28
F244	Listen to Group	0.75	0.85	1.14	1.28	1.53	1.48
F245	Participate in Other Activities	0.07	0.08	0.12	0.08	0.12	0.10
F246	Accommodate Needs	9.63	9.52	9.41	9.87	10.06	10.40
F247	Notice Before Room Change	0.20	0.11	0.20	0.37	0.37	0.64
F248	Activities Program	6.15	6.37	6.70	8.57	8.69	7.31
F249	Activities Director	0.51	0.51	0.60	0.83	0.80	0.75
F250	Social Services	6.78	6.74	7.39	8.17	8.29	7.88
F251	Social Work Qualification	0.21	0.22	0.25	0.27	0.19	0.15
F252	Environment	6.88	6.54	6.10	6.25	6.21	5.73
F253	Housekeeping	18.02	19.09	21.66	23.39	20.42	20.58
F254	Clean Linens	1.10	1.18	1.12	1.22	1.11	0.95
F255	Private Closet	0.03	0.06	0.06	0.08	0.12	0.09
F256	Adequate Lighting	0.30	0.40	0.34	0.50	0.35	0.41
F257	Comfortable Temperatures	0.89	0.85	1.02	1.11	1.05	0.97
F258	Comfortable Sound	1.40	1.31	1.24	1.39	1.38	1.18

## **Resident Assessment**

In 2008, most deficiencies were issued to facilities for failure to meet professional standards (31.03 percent), failure to provide comprehensive care plans for residents (25.81 percent), failure to provide for qualified personnel (16.32 percent), failure to make comprehensive assessments (14.58 percent) and failure to meet plan requirements (13.57 percent) (See Table 52). Eight of 15 items in this category were cited in 2 percent or more of facilities.

**TABLE 52**  
**PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES FOR  
 RESIDENT ASSESSMENT**

**DEFICIENCY GROUP=RESIDENT ASSESSMENT**

FTAG	DESCRIPTION	2003	2004	2005	2006	2007	2008
F271	Admission Orders	0.31	0.29	0.34	0.30	0.42	0.50
F272	Comprehensive Assessments	10.10	9.68	12.60	14.80	15.16	14.58
F273	Frequency	0.89	1.05	1.06	1.27	1.33	1.31
F274	Change in Condition	3.84	3.62	3.78	3.97	4.44	3.91
F275	Annual Assessment	0.86	0.88	0.93	0.94	0.91	0.77
F276	Review of Assessments	2.27	2.10	2.69	3.80	2.89	2.64
F277	Coordination	0.00	0.02	0.00	0.00	0.00	0.00
F278	Accuracy of Assessments	9.94	10.25	12.05	13.49	13.41	13.32
F279	Comprehensive Care Plans	16.91	16.05	20.52	22.62	24.86	25.81
F280	Plan Requirements	10.73	11.01	13.36	14.00	12.69	13.57
F281	Professional Standards	24.08	25.22	29.83	31.40	30.96	31.03
F282	Qualified Personnel	10.93	11.10	13.73	15.69	16.71	16.32
F283	Discharge Summary	1.09	0.99	1.15	1.22	1.49	1.20
F284	Post Discharge Plan	0.70	0.72	0.88	0.97	1.04	0.85
F285	Preadmission Screening	0.59	0.61	0.60	0.83	1.07	1.15

## **Quality of Care**

The quality of care category contained a number of important items that were given citations. The failure to keep the environment as free of hazards that cause accidents (including accident prevention) (F323) was cited in 44.49 percent of facilities in 2008 (Table 53). General quality of care was a deficiency in 32.93 percent of facilities in 2008, which had increased from 30.12 percent in 2003. Failure to prevent pressure sores and use of unnecessary drugs were deficiencies in 21.11 and 20.82 percent of the facilities in 2008. Sixteen out of the 22 items in this category were cited in 2 percent or more of the facilities in the U.S.

**TABLE 53**  
**PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES FOR**  
**QUALITY OF CARE**

**DEFICIENCY GROUP=QUALITY OF CARE**

FTAG	DESCRIPTION	2003	2004	2005	2006	2007	2008
F309	Quality of Care	30.12	31.03	33.42	34.48	34.11	32.93
F310	Activities of Daily Living Maintenance	1.30	1.12	1.39	1.19	1.19	1.00
F311	Appropriate ADL Treatment	3.81	3.96	3.96	3.74	3.63	3.66
F312	ADL Services	13.43	12.99	14.08	14.20	14.26	13.86
F313	Vision and Hearing	0.68	0.51	0.64	0.80	0.85	0.94
F314	Pressure Sores	17.77	16.88	19.29	21.78	21.97	21.11
F315	Urinary / Incontinence Care	13.09	13.90	16.94	20.04	20.11	20.15
F317	Range of Motion Maintenance	0.46	0.42	0.45	0.40	0.51	0.45
F318	Limited Range of Motion Services	6.88	6.64	6.45	6.68	6.91	6.84
F319	Mental and Psychosocial Services	1.96	1.65	1.86	2.26	2.22	2.21
F320	Maintenance of Psychosocial Functioning	0.11	0.10	0.15	0.23	0.19	0.17
F321	Nasogastric Tubes (Tube Feeding)	0.04	0.03	0.03	0.06	0.06	0.05
F322	Nasogastric Care	5.69	5.95	6.58	7.08	6.77	6.52
F323	Accident Environment	22.15	20.85	23.52	24.41	43.13	44.49
F324	Accident Prevention	25.28	26.15	27.94	29.58		
F325	Nutrition	8.06	7.46	7.66	8.45	8.02	10.60
F326	Therapeutic Diet	2.62	2.69	2.86	2.15	2.19	0.39
F327	Hydration	4.83	4.86	4.64	4.60	4.73	4.36
F328	Special Needs	6.00	6.27	7.03	7.80	8.27	8.62
F329	Unnecessary Drugs	14.80	14.45	14.28	14.42	19.81	20.82
F332	Medication Errors	10.59	11.24	12.16	12.54	12.36	11.69
F333	Significant Medication Errors	4.60	4.45	4.75	4.98	8.08	8.87
F334	Influenza/Pneumococcal Immunizations				1.01	10.05	8.96

## **Nursing Services**

Nursing services are key to quality of care in nursing facilities. Of the facilities given deficiencies, 3.34 percent of facilities were given deficiencies for insufficient staff to provide appropriate care in 2003 compared to 3.1 percent in 2008 (a 7 percent decrease). The number of deficiencies for inadequate registered nurse staffing increased from 1.78 percent in 2003 to 2.08 in 2008, a 17 percent increase (Table 54).

## **Dietary Services**

In 2008, 36.31 percent of facilities were given deficiencies for inadequate food sanitation while 8.08 percent received citations for inadequate food, 6.85 for nutritionally inadequate menus, and 3.51 for having inadequate garbage disposal (Table 54).

**TABLE 54**  
**PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES FOR**  
**NURSING SERVICES & DIETARY SERVICES**

**DEFICIENCY GROUP=NURSING SERVICES**

FTAG	DESCRIPTION	2003	2004	2005	2006	2007	2008
F353	Sufficient Nursing Staff	3.34	3.03	4.02	4.01	3.37	3.10
F354	Registered Nurse Staff	1.78	2.00	2.06	1.97	1.90	2.08
F356	Posting of Nurse Staffing				1.53	4.23	4.64

**DEFICIENCY GROUP=DIETARY SERVICES**

FTAG	DESCRIPTION	2003	2004	2005	2006	2007	2008
F360	Well-Balanced Diet	0.36	0.33	0.42	0.35	0.41	0.36
F361	Qualified Staff	0.63	0.67	0.75	0.82	0.93	0.71
F362	Sufficient Staff	0.74	0.65	0.75	0.87	1.06	0.84
F363	Menus and Nutritional Adequacy	6.62	6.70	6.49	6.42	6.81	6.85
F364	Food	8.01	7.39	7.90	8.43	8.74	8.08
F365	Individual Needs	2.99	2.69	2.90	3.15	2.90	2.72
F366	Food Substitutes	1.04	1.21	1.27	1.26	1.20	1.21
F367	Therapeutic Diets	2.52	2.75	3.66	4.16	3.61	3.26
F368	Frequency of Meals	4.32	4.46	4.13	4.36	3.80	3.41
F369	Assistive Devices	0.99	0.85	0.91	1.29	1.12	0.80
F370	Sanitary Conditions	0.04	0.04	0.03	0.04	0.05	0.01
F371	Food Sanitation	31.63	31.44	35.05	37.90	35.30	36.31
F372	Garbage Disposal	3.58	3.20	3.44	3.75	3.45	3.51

## **Physician Services**

Few nursing facilities were given deficiencies for physician services. In 2008, 3.59 percent received deficiencies for inadequate frequency of visits and 2.55 percent received deficiencies for inadequate physician visits (Table 55).

## **Rehabilitative Services**

In 2008, 1.67 percent of facilities were given deficiencies for inadequate rehabilitative services (Table 55).

## **Dental Services**

Fewer facilities (less than one percent) were given deficiencies for poor dental services than for other types of professional services in the 2003 to 2008 period (Table 55).

**TABLE 55**  
**PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES FOR**  
**PHYSICIAN, REHABILITATIVE & DENTAL SERVICES**

**DEFICIENCY GROUP=PHYSICIAN SERVICES**

FTAG	DESCRIPTION	2003	2004	2005	2006	2007	2008
F385	Physician Supervision	0.46	0.57	0.53	0.60	0.66	0.73
F386	Physician Visits	2.11	2.28	2.25	2.54	2.80	2.55
F387	Frequency	2.77	2.87	2.78	3.20	3.40	3.59
F388	Physician Alternates	0.24	0.24	0.30	0.31	0.30	0.35
F389	Availability	0.12	0.12	0.10	0.15	0.10	0.05
F390	Physician Delegation of Tasks	0.05	0.04	0.05	0.06	0.03	0.03

**DEFICIENCY GROUP=REHABILITATIVE SERVICES**

FTAG	DESCRIPTION	2003	2004	2005	2006	2007	2008
F406	Services	1.38	1.26	1.61	1.68	1.52	1.67
F407	Qualifications	0.05	0.12	0.15	0.17	0.19	0.14

**DEFICIENCY GROUP=DENTAL SERVICES**

FTAG	DESCRIPTION	2003	2004	2005	2006	2007	2008
F411	Routine and Emergency Services (SNF)	0.89	0.81	0.99	1.02	0.99	1.27
F412	Routine and Emergency Services (NF)	0.56	0.44	0.45	0.63	0.62	0.68

## **Pharmacy Services**

In 2008, 16.44 percent of facilities received deficiencies for improper consultation, labeling, and storage of drugs, 14.84 percent of facilities received deficiencies for failure to provide proper pharmacy services, and 9.45 for failure to review drug regimens (Table 56). All pharmacy categories were cited in more than 2 percent of facilities in 2008.

## **Infection Control**

Infection control is an important category. In 2003, 15.48 percent of facilities received deficiencies for inadequate infection control, compared to 20.24 percent in 2008 (Table 56). In addition, 12.95 percent had deficiencies for inadequate hand washing.

**TABLE 56**  
**PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES FOR**  
**PHARMACY SERVICE & INFECTION CONTROL**

**DEFICIENCY GROUP=PHARMACY SERVICES**

FTAG	DESCRIPTION	2003	2004	2005	2006	2007	2008
F425	Pharmacy Services	11.23	11.99	15.50	14.92	14.47	14.84
F428	Drug Regimen Review	7.44	7.17	7.19	6.95	9.53	9.45
F431	Consultation, Labeling & Storage	11.30	11.19	13.09	13.09	14.76	16.44

**DEFICIENCY GROUP=INFECTION CONTROL**

FTAG	DESCRIPTION	2003	2004	2005	2006	2007	2008
F441	Infection Control	15.48	15.61	17.84	20.00	19.22	20.24
F442	Preventing Spread of Infections	1.37	1.64	1.87	2.19	2.08	2.34
F443	Direct Contact	0.20	0.17	0.25	0.27	0.16	0.17
F444	Handwashing	9.11	9.48	10.90	11.95	12.49	12.95
F445	Linens	3.31	3.52	4.20	4.27	4.05	4.17

## **Physical Environment**

The category for physical environment includes 16 requirements. In 2008, 12.72 percent of facilities received deficiencies for other inadequate environmental conditions, and 4.69 percent for inadequate space and equipment (Table 57). Other facilities received deficiencies for inadequate resident call systems (3.36 percent), inadequate pest control (3.35 percent), and inadequate room space (2.57 percent).

**TABLE 57**  
**PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES FOR**  
**PHYSICAL ENVIRONMENT**

**DEFICIENCY GROUP=PHYSICAL ENVIRONMENT**

<b>FTAG</b>	<b>DESCRIPTION</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
F454	General Health and Safety	2.56	2.71	1.60	1.70	1.53	2.20
F455	Emergency Power	0.36	0.23	0.20	0.15	0.29	0.23
F456	Space and Equipment	3.70	3.46	4.53	4.91	4.25	4.69
F457	Resident Rooms	0.34	0.29	0.36	0.30	0.26	0.33
F458	Room Space	3.01	2.98	2.99	2.83	2.72	2.57
F459	Exits	0.03	0.01	0.03	0.01	0.04	0.04
F460	Privacy	1.28	1.06	1.38	1.23	1.27	0.94
F461	Windows	0.07	0.06	0.03	0.04	0.06	0.04
F462	Toilets	0.03	0.01	0.01	0.01	0.03	0.01
F463	Resident Call System	2.82	2.40	3.04	2.98	2.94	3.36
F464	Dining and Activities	0.62	0.61	0.60	0.75	0.66	0.71
F465	Other Environmental Condition	11.39	9.75	9.78	10.72	12.21	12.72
F466	Emergency Water	0.48	0.35	0.75	0.83	1.01	0.79
F467	Ventilation	1.02	0.86	0.85	1.26	1.31	1.26
F468	Equipment in Corridors	1.37	1.30	1.31	1.60	1.51	1.51
F469	Pest Control	3.58	3.25	3.78	4.08	3.69	3.35

## **Administration Services**

In 2008, 4.59 percent of facilities received deficiencies for failure to demonstrate the proficiency of nursing assistants, 3.75 percent for failure to comply with laws, 3.29 percent for ineffective administration, and 2.42 percent for inadequate inservice education (Table 58). Four of the 12 administrative requirements were cited in more than 2 percent of facilities in 2008.

## **Laboratory Services**

In 2008, only two of the 8 laboratory services requirements were cited in more than 2 percent of facilities. These deficiencies were for failure to provide high quality, timely laboratory services (8.47 percent in 2008) and inadequate physician notification (2.17 percent in 2008).

## **Other Activities**

Three of the 8 other activities requirements were cited in more than 2 percent of facilities in 2008. These deficiencies were issued for inadequate clinical record keeping (21.36 percent), failure of the quality assurance committee to meet requirements (4.77 percent), and inadequate emergency training (3.57 percent).

**TABLE 58**  
**PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES FOR**  
**ADMINISTRATION AND OTHER SERVICES**

**DEFICIENCY GROUP=ADMINISTRATION**

FTAG	DESCRIPTION	2003	2004	2005	2006	2007	2008
F490	Administered Effectively	2.81	2.60	2.67	3.24	3.21	3.29
F491	Licensure	0.07	0.01	0.01	0.03	0.01	0.02
F492	Compliance With Laws	3.85	3.70	4.50	4.22	3.62	3.75
F493	Governing Body	0.85	0.78	0.78	0.87	0.82	0.73
F494	Required Training	0.81	0.80	0.51	0.57	0.35	0.41
F495	Employee Competency Program	0.33	0.42	0.38	0.40	0.32	0.35
F496	Registry Verifications	1.67	1.55	1.52	1.56	1.37	1.21
F497	Inservice Education	2.26	2.59	2.65	3.06	2.89	2.42
F498	Proficiency of Nurse Aides	4.65	4.77	5.84	6.06	5.00	4.59
F499	Qualified Professionals	0.45	0.58	0.56	0.83	0.80	0.61
F500	Outside Services	0.98	1.01	1.25	1.36	1.37	1.56
F501	Medical Director	0.77	0.50	0.86	1.62	1.74	1.28

**DEFICIENCY GROUP=LABORATORY SERVICES**

FTAG	DESCRIPTION	2003	2004	2005	2006	2007	2008
F502	High Quality, Timely Services	4.66	4.88	5.96	6.70	7.67	8.47
F503	Meets Lab Standards	0.34	0.24	0.08	0.13	0.21	0.15
F504	Services Ordered by a Physician	0.51	0.62	0.64	0.80	0.96	1.19
F505	Notifies Physicians	1.37	1.35	1.49	1.70	2.06	2.17
F507	Clinical Records	0.31	0.34	0.45	0.53	0.71	0.55
F508	Radiology and Other Services	0.46	0.47	0.49	0.51	0.52	0.58
F511	Radiology Notification of Physician	0.13	0.13	0.17	0.13	0.12	0.17
F513	Records Signed and Dated	0.09	0.08	0.14	0.13	0.19	0.18

**DEFICIENCY GROUP=OTHER ACTIVITIES**

FTAG	DESCRIPTION	2003	2004	2005	2006	2007	2008
F514	Clinical Records	15.90	16.20	18.70	20.87	20.26	21.36
F516	Records Safeguarded	0.79	0.85	0.87	0.83	0.91	0.76
F517	Plans for Emergency	0.90	1.05	0.97	1.47	1.85	1.40
F518	Emergency Training	2.66	2.94	2.96	3.35	3.46	3.57
F519	Transfer Agreement	0.03	0.03	0.05	0.08	0.09	0.03
F520	Quality Assurance Committee	1.51	1.23	3.35	3.67	4.48	4.77
F521	Quality Assurance Activities	1.93	1.57	0.12	0.00	0.00	0.00
F522	Disclosure of Ownership	0.06	0.04	0.03	0.04	0.08	0.06

## SUMMARY

In summary, this report has provided information on nursing facilities in the states. The data are from the federal OSCAR system which provides comprehensive information about facility characteristics, resident characteristics and services provided, staffing, and deficiencies from federal surveys. The federal survey findings can be expected to change over time as policies are implemented to encourage

improvements in the quality of nursing care.

This is one of the few reports which has been able to provide historical data on nursing facilities. The overall trend lines are fairly stable over time for most of the items. Thus, these data provide an opportunity to examine quality issues and deficiency patterns over time.

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## TECHNICAL NOTES

### **Data Sources**

The OSCAR system includes data for all certified nursing homes in the U.S. The data are collected in three separate sets of files: (1) provider information, which include facility characteristics and staffing data; (2) health survey file (with facility-level summary information regarding resident characteristics); and the (3) survey deficiencies. In addition to the OSCAR data for annual surveys, data from OSCAR complaint files were combined with the annual survey data. OSCAR is an on-line data system from the Centers for Medicare and Medicaid Services (CMS). The OSCAR data for this report included the most recent surveys for all facilities for the period of 2003-2008.

All nursing facilities federally certified for Medicare (skilled nursing care) and Medicaid (nursing facilities) and surveyed during the calendar year were included (about 15,100 facilities) in these data. Intermediate care facilities for the mentally retarded (ICF-MR) were excluded because they use different federal certification forms and have different standards of care. Facilities located in the trust territories and Puerto Rico were excluded.

### **Data Cleaning and Duplicate Records**

In preparing the data for this report, discussions were held with HCFA officials as necessary to discuss data acquisition, formatting, and cleaning issues. Frequency distributions were developed for all the indicators on the data set and a series of cleaning activities undertaken.

The first step in cleaning was to eliminate any duplicate provider records. Duplicate records were considered generally to be the result of changes in certification for Medicare and Medicaid (Title 18/19) facilities or Medicare only (Title 18) facilities. Since 1990, because of OBRA 1987 legislation, Medicaid only (Title 19) SNF and ICF facilities are certified together as nursing facilities (NFs). With this change, some problems with duplicate SNF and ICF reporting were essentially eliminated.

To correct the duplicate problems, we identified all those facilities showing identical values for the following areas: state, city, facility name, and facility address. Where duplicate records were identified, a decision-making procedure was invoked as follows:

- (1) The most recent record within a calendar year was selected over earlier records; and
- (2) A record reporting a category of either: (01) skilled nursing facility (SNF) -- Medicare participation; (02) nursing facility (NF) -- Medicaid participation; or (03) SNF/ICF -- Medicare/Medicaid participation was selected over facilities reporting as (10) hospital based.

For those remaining facilities with the same name and/or address, data on telephone numbers and survey data were then examined. Where there appeared to be two facilities at one site with different data, neither facility was eliminated. This overall process resulted in dropping about 100 facilities annually.

### **Data Errors**

The data were examined for missing values and gross errors. Means and standard deviations of the data were computed and examined. Logic checks confirming the reasonableness of data were conducted. Preliminary work identified some missing data and errors, primarily in reporting the beds, staffing and the number of residents. Each problem area, and the cleaning procedures, are discussed below.

### **Total Number of Beds**

During the preliminary work, the total number of beds in each state reported on OSCAR was compared to the total licensed bed supply for each state from an independent survey of states (DuNah et al. 1994). The total number of beds reported by facilities was significantly higher than the total licensed beds in the U.S. An analysis of this discrepancy found that some hospital-based facilities had reported the total number of acute care beds rather than the total number of skilled nursing beds for their facility. To correct this error, the maximum number of beds for a hospital-based facility was set to equal the maximum number of certified skilled nursing beds in the facility. Thus, this process made the total certified nursing facility beds more comparable to the total state licensed nursing facility beds in each state.

### **Total Number of Residents**

Several problems concerning resident data were detected. First, some facilities had missing data for their total number of residents. These facilities were left in the data set, but where resident data were not available, these facilities were not included in the tables report.

Second, some facilities reported extremely low numbers of residents. In order to identify facilities with possible errors in reporting residents, occupancy rates were computed for all nursing facilities. Free-standing (non-hospital based) facilities reporting 50 or less residents than total beds were considered to have erroneous data and were eliminated from the staffing and resident characteristics' analysis.

Third, some facilities reported more residents than beds, suggesting more than 100 percent occupancy. Hospital-based facilities may have had approval for swing beds which would allow the hospital to use an acute care bed for a nursing home resident. Therefore, hospital-based facilities with more residents than beds were left in the data set, but the maximum occupancy rate for such facilities was reported to be 100 percent. Finally, facilities with numbers of residents reported at greater than 100 percent of total beds, which were not hospital-based, were dropped from the analysis.

### **Staffing Data**

Frequencies for hours of staffing per resident day were examined separately for Medicaid only facilities and for Medicare only and/or dually certified facilities. The total number of hours of staff reported in a two week period was divided by the total number of residents and by the 14 days in the reporting period.

There were a number of problems identified with the facility staffing data. Some facilities reported extremely high staff hours per resident day while others reported no registered nurses or no nursing staff hours. Where a facility reported nurse staffing hours per resident day which did not fall within a reasonable range, the data for that item were considered invalid. The following uniform decision-making rules were created for eliminating facility staffing data which clearly appeared to be too high or too low:

First, facilities with average nursing hours per resident day that were greater than 24 hours of nursing per resident were considered erroneous and eliminated from the analysis. Distributions of the nursing hours per resident were then examined.

To correct further for staffing levels that were unreasonably high, facilities reporting staffing hours per resident day in the upper 2 percent by type of facility (separately for Medicaid only and for Medicare only/dually certified) and by type of staff (RN, LVN/LPN, and nursing assistants) were eliminated from the staffing analysis.

Facilities reporting extremely low staffing hours per resident day were identified. Since some Title 19 facilities and Title 18/19 facilities were given HCFA waivers from the staffing requirements, these facilities may have few or no RN staff.

Since all facilities are required to have some licensed nurses, nursing facilities with no licensed staff (RNs and/or LVN/LPNs) and/or no nursing staff were eliminated from these analyses. In addition, facilities with computed staffing levels in the lower 1 percent range for licensed or combined nursing personnel for each type of facility (separately for Medicaid only and for Medicare only and/or dually certified) were removed from the staffing report because some of these may have been erroneous.

Other reporting errors in staffing data may occur. For example, facility errors in the reporting of time periods may have occurred or rounding errors may have occurred. These types of errors cannot be detected in the data set. Thus, because further accuracy checks could not be conducted, only the high and low outlier facilities were removed from the tables on staff.

RNs, LPN/LVNs, and Aides are presented separately. Total licensed nurses are also presented; these include RNs and LPN/LVNs added together. Total combined nursing personnel are included as combined RNs, LPN/LVNs, and nursing aide hours.