



**Nursing Facilities, Staffing,  
Residents and Facility  
Deficiencies, 2001 Through 2007**


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This research was funded in part by the AARP Public Policy Institute and was previously funded by Service Employees International Union, and by the U.S. Health Care Financing Administration #18-C-90034 and The Agency for Health Care Policy & Research #H500-97-0002

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## ACKNOWLEDGMENTS

The authors would like to acknowledge Susan C. Thollaug for the initial programming for this report for the 1991-1993 period. We would also like to thank Valerie Wellin and Peter R. Summers and for their assistance in critiquing the report throughout the years as well as Anna Burdin, Cassandra Crawford, and Cynthia Mercado-Scott. Lastly, we would like to thank Dr. Martin Kitchener and Terrence Ng, M.A. for their assistance.

# 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 \$125 billion in 2006) have drawn the attention of policy makers and researchers to understand the nursing home industry (Catlin et al., 2008). 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.

## **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 now 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). 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.

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. High occupancy rates can limit access to care, especially for those on Medicaid (US GAO, 1990).

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 (Phillips and Hawes, 1988). Nyman (1988b) found that nursing homes in Iowa with more private pay residents provided better quality of care. Gertler (1989) also found a relationship between greater Medicaid patients and poorer quality of nursing home care. Spector and Takada (1991) were able to confirm that facilities with a low percentage of private residents were associated with poorer outcomes of care. Thus, the percentage of Medicare or private pay patients should be included in descriptive information about facilities (Nyman, 1988a,b; 1989b; Davis, 1993).

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 on ownership and quality shows a mixed picture in terms of the relationship (Koetting, 1980; O'Brien et al., 1983; Greene and Monahan, 1981; Hawes and Phillips, 1986; Ullman, 1987; Nyman et al., 1990; Davis, 1991; Aaronson et al., 1994). Nyman (1988b) found that nonprofit nursing homes in Iowa were associated with higher quality of care. Davis (1993) found that for-profit and chain facilities in Kentucky had lower operating costs and lower quality, even though the facilities also had higher ratios of registered nurses per resident and lower overall staffing levels. Harrington et al. (2000a,b) showed higher deficiencies in for-profit facilities than non-profit and government facilities. Thus, proprietary ownership is an area of great debate, but proprietary facilities 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. 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 may also be associated

with higher quality although findings are mixed (Ullmann, 1981; Nyman 1998b; Davis, 1991). 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).

In addition, the number of beds in special care units (such as Alzheimer's, AIDS, etc.) was reported. Facilities that have an organized resident group (yes or no) or organized family member group (yes or no) were also reported. Summary data on each of these structural features are presented for each state.

## **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 14,997 certified nursing facilities surveyed in 2001 and 15,281 surveyed in 2007 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 SURVEYED IN**  
**THE U.S. By CALENDAR YEAR**

<b>State</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
AK	14	12	14	12	15	13	15
AL	195	218	216	202	163	169	161
AR	232	239	228	235	235	236	237
AZ	130	131	112	115	87	132	124
CA	1,147	1,190	1,291	1,278	1,228	1,189	1,197
CO	216	213	206	206	203	202	209
CT	244	239	227	211	227	237	233
DC	18	20	17	20	20	20	18
DE	38	33	37	39	41	42	44
FL	661	646	658	649	626	671	657
GA	322	323	343	327	338	351	346
HI	35	31	32	35	39	46	41
IA	440	442	409	434	435	435	430
ID	73	71	75	68	71	74	70
IL	788	799	752	777	749	764	787
IN	534	489	502	488	468	497	502
KS	360	360	342	359	349	347	331
KY	272	261	280	285	295	291	288
LA	322	313	292	304	272	274	282
MA	446	461	436	437	432	452	428
MD	201	229	220	213	228	225	216
ME	112	113	106	109	106	110	108
MI	424	410	426	420	407	411	421
MN	371	368	377	382	356	374	378
MO	494	506	507	490	491	506	502
MS	185	191	169	178	198	202	200
MT	85	74	92	87	88	85	85
NC	398	375	396	403	403	420	414
ND	85	81	82	82	78	81	80
NE	188	200	215	213	215	221	208
NH	69	62	74	76	76	76	81
NJ	330	338	331	345	341	350	354
NM	65	68	77	65	68	70	70
NV	46	44	44	41	46	47	48
NY	554	645	644	618	635	641	638
OH	906	868	903	897	864	928	918
OK	212	364	359	296	345	327	316
OR	129	135	133	134	124	133	134
PA	700	694	693	688	702	709	711
RI	87	83	36	78	84	87	85
SC	150	163	168	155	162	167	169
SD	106	101	108	100	107	107	106
TN	331	314	306	329	308	316	315
TX	1,113	1,096	1,094	1,098	1,074	1,106	1,149
UT	84	89	82	81	81	90	84
VA	251	239	269	259	248	268	268
VT	40	37	41	38	36	40	38
WA	251	240	241	240	243	237	238
WI	395	386	382	388	379	374	388
WV	114	123	130	118	120	109	121
WY	34	35	35	36	36	35	38
<b>US</b>	<b>14,997</b>	<b>15,162</b>	<b>15,209</b>	<b>15,138</b>	<b>14,942</b>	<b>15,294</b>	<b>15,281</b>

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

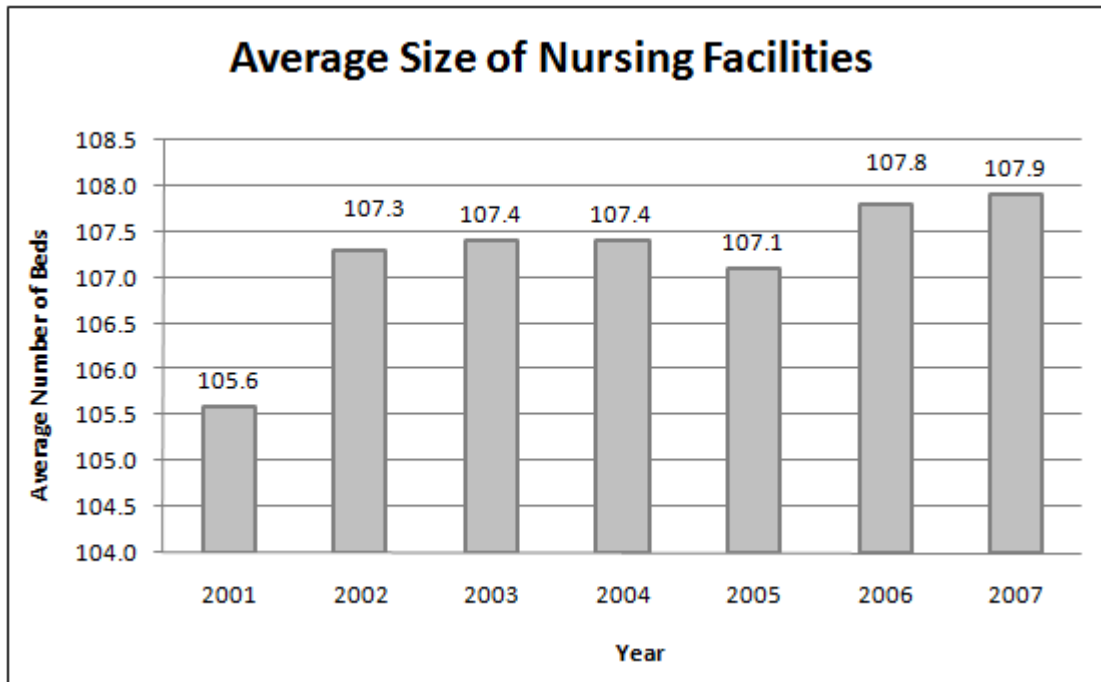
Table 2 shows the number of certified nursing facility beds in the U.S. surveyed during the calendar year and it excludes uncertified beds. There were 1,526,066 nursing facility beds surveyed in 2001, and 1,613,942 in 2007.

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

<b>State</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
AK	698	621	729	688	705	411	725
AL	21,704	24,891	24,684	22,993	17,775	20,040	17,763
AR	22,407	24,105	23,049	23,729	24,109	24,470	24,531
AZ	14,967	15,046	13,818	13,561	11,018	15,462	14,487
CA	105,504	110,170	121,261	120,460	116,339	113,527	115,158
CO	19,101	19,144	18,468	18,955	19,060	18,876	19,759
CT	29,581	29,282	27,945	25,415	27,513	28,863	28,241
DC	2,541	3,086	2,408	3,062	3,030	2,988	2,597
DE	3,911	3,464	3,930	4,003	4,235	4,276	4,605
FL	75,331	74,680	77,433	76,394	74,290	80,503	79,330
GA	34,949	35,210	37,368	35,888	37,734	38,631	38,350
HI	3,098	2,577	2,810	2,570	3,126	4,032	3,617
IA	32,186	32,076	30,391	31,740	32,023	31,454	30,118
ID	5,198	5,417	5,776	5,540	5,522	5,748	5,463
IL	91,080	94,837	89,511	93,060	90,507	93,331	95,879
IN	51,907	45,619	46,733	45,693	43,666	47,466	47,977
KS	23,111	23,408	22,695	23,327	23,113	22,801	21,969
KY	22,278	21,741	24,228	24,638	25,969	25,545	25,317
LA	36,843	37,479	35,105	37,101	33,737	34,425	34,845
MA	47,229	49,597	47,160	47,581	46,901	49,482	47,088
MD	22,987	27,902	26,407	25,437	27,953	28,241	26,622
ME	7,102	7,041	6,695	6,951	6,978	7,163	6,950
MI	46,169	45,219	46,885	46,006	45,115	45,114	46,141
MN	35,080	34,572	34,225	34,873	31,903	33,415	32,763
MO	45,140	47,296	47,433	47,342	47,990	49,474	49,504
MS	16,008	16,371	14,992	16,100	17,645	18,288	18,206
MT	6,355	5,559	6,848	6,764	6,659	6,199	6,616
NC	39,450	38,396	40,292	40,839	41,103	42,895	43,067
ND	6,515	6,367	6,468	6,465	6,285	6,351	6,272
NE	13,338	13,219	14,663	14,712	14,931	15,656	14,605
NH	6,257	6,225	7,217	7,006	7,277	7,054	7,708
NJ	46,663	48,526	46,385	48,425	47,966	49,641	49,685
NM	5,693	6,214	6,975	5,910	6,232	6,621	6,540
NV	5,135	5,107	5,109	4,672	5,200	5,554	5,643
NY	97,042	118,198	115,227	111,097	118,220	118,987	117,992
OH	84,496	82,615	84,168	84,346	80,977	88,619	88,667
OK	17,445	31,445	31,737	25,898	30,620	29,314	28,224
OR	10,812	11,994	12,014	12,227	11,454	11,972	12,148
PA	86,936	85,354	85,522	85,203	86,224	87,316	87,300
RI	8,846	8,267	3,935	7,830	8,445	8,914	8,581
SC	14,360	16,230	16,665	15,180	16,759	16,978	17,404
SD	7,037	6,789	6,967	6,376	6,465	6,547	6,390
TN	36,182	34,125	34,439	36,687	34,959	36,149	35,469
TX	103,035	106,577	108,195	110,049	111,407	116,163	122,018
UT	6,760	7,207	6,652	6,602	6,441	7,334	6,978
VA	26,459	26,098	29,780	28,349	27,708	29,995	29,786
VT	3,489	3,040	3,471	3,142	3,118	3,381	3,221
WA	22,316	21,797	21,998	21,785	22,189	21,544	21,744
WI	43,348	40,964	39,789	38,718	36,080	35,765	36,885
WV	9,275	10,175	10,526	9,144	9,577	8,941	10,022
WY	2,712	2,651	2,681	2,892	2,772	2,855	2,972
<b>US</b>	<b>1,526,066</b>	<b>1,573,990</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>

## 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 105.6 beds in 2001 and the average increased to 107.9 beds per facility in 2007.



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

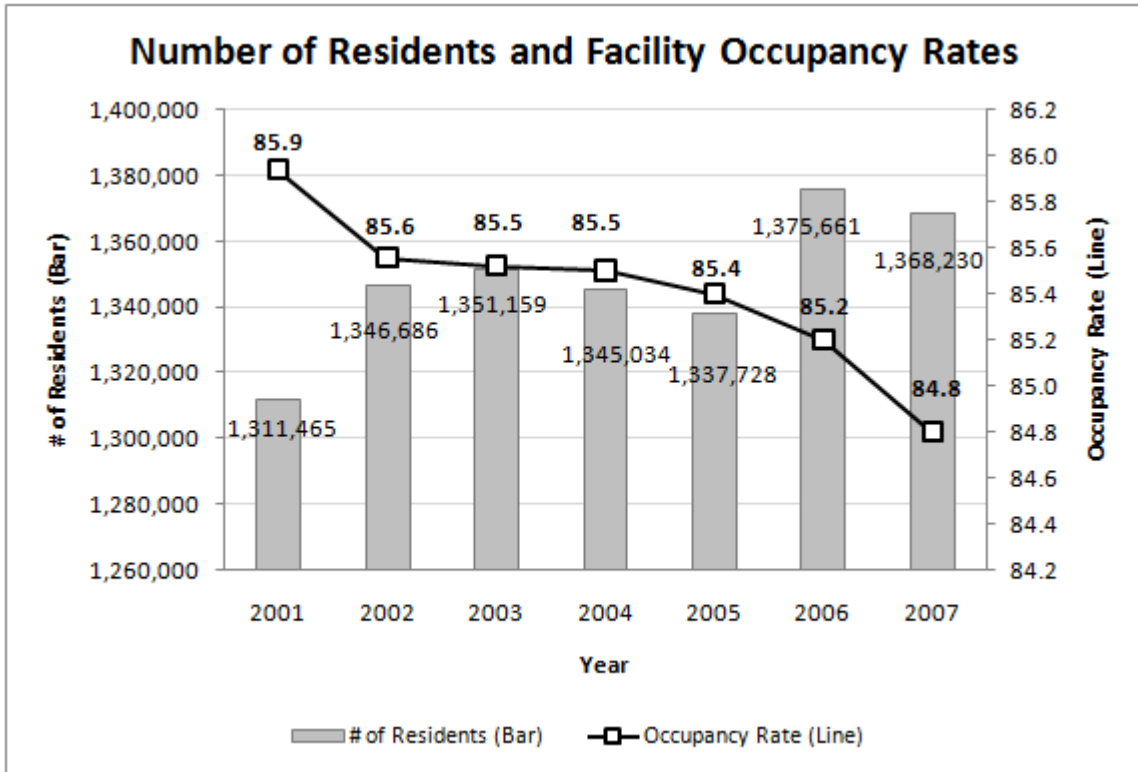
<b>State</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
AK	50.7	51.8	52.1	59.0	48.3	31.6	48.3
AL	112.1	114.9	114.8	114.0	110.2	118.6	110.6
AR	99.3	102.6	102.8	103.0	103.0	104.0	104.1
AZ	120.4	118.9	124.5	121.2	127.3	119.9	117.5
CA	94.2	95.1	96.0	95.5	95.8	96.4	97.6
CO	90.4	90.5	90.3	92.9	94.0	93.7	94.6
CT	123.0	123.7	124.6	121.2	122.1	122.7	122.0
DC	142.8	154.3	141.6	153.1	151.5	149.4	144.3
DE	113.1	113.8	113.2	111.6	112.8	108.3	106.5
FL	116.3	117.2	118.8	118.8	119.8	121.1	124.1
GA	108.7	109.2	108.9	109.7	111.8	110.2	110.9
HI	90.1	84.9	89.5	75.0	83.0	89.7	90.6
IA	76.8	76.7	79.1	77.0	75.0	74.0	71.4
ID	73.6	76.3	77.0	81.5	77.8	77.7	78.0
IL	125.7	128.3	128.3	127.7	127.4	129.3	128.5
IN	100.7	100.0	107.1	107.9	108.9	111.5	112.5
KS	69.8	70.9	72.6	71.7	73.1	73.1	75.0
KY	84.1	84.8	87.9	87.8	89.3	89.1	89.0
LA	117.4	121.5	122.3	124.5	125.4	127.3	125.2
MA	107.4	109.1	109.8	110.4	110.2	111.0	111.6
MD	116.9	121.9	120.1	119.8	122.8	125.5	123.7
ME	64.3	62.9	63.8	63.8	66.1	65.4	64.7
MI	113.2	114.9	113.4	112.6	113.7	111.9	110.9
MN	95.1	94.9	91.5	91.9	90.1	89.9	87.2
MO	98.9	100.4	100.9	104.3	104.5	104.6	104.8
MS	86.5	85.7	88.7	90.4	89.2	90.5	91.0
MT	75.2	75.5	74.8	78.0	75.7	73.0	77.9
NC	102.2	103.3	102.7	102.0	103.0	103.3	105.2
ND	76.6	78.6	78.9	78.8	80.6	78.4	78.4
NE	74.3	69.0	70.6	71.4	71.3	72.6	71.1
NH	93.0	101.6	98.0	92.6	96.3	93.0	95.3
NJ	145.0	144.6	140.3	140.4	140.8	142.7	140.4
NM	88.4	92.7	91.2	91.3	92.6	95.4	95.3
NV	111.6	116.5	116.8	114.0	114.8	119.5	118.2
NY	175.7	183.4	178.9	179.8	186.2	185.7	185.1
OH	102.7	106.9	106.4	108.7	95.5	96.3	97.1
OK	84.5	87.8	88.9	88.2	90.2	90.6	90.9
OR	86.9	89.8	90.5	91.5	92.5	90.1	90.7
PA	124.7	125.1	123.8	124.0	123.0	123.3	122.8
RI	103.1	100.3	111.6	100.5	100.6	102.7	101.2
SC	100.2	102.2	102.6	101.1	106.3	104.5	105.9
SD	66.4	67.3	64.5	63.9	60.4	61.2	60.3
TN	110.6	110.3	113.6	112.6	114.4	115.7	113.5
TX	103.4	105.5	106.0	106.9	108.1	108.8	109.6
UT	82.4	82.7	82.7	82.9	80.0	82.0	83.3
VA	109.2	112.5	113.1	111.7	113.9	114.5	113.4
VT	87.6	82.2	84.9	82.7	86.6	84.6	85.9
WA	92.5	91.5	92.3	91.8	91.6	91.1	91.8
WI	110.0	106.1	104.3	100.3	95.2	95.6	95.1
WV	81.7	84.5	82.3	78.4	80.0	82.0	83.1
WY	79.8	75.7	76.6	80.3	77.0	81.6	78.2
<b>US</b>	<b>105.6</b>	<b>107.3</b>	<b>107.4</b>	<b>107.4</b>	<b>107.1</b>	<b>107.8</b>	<b>107.9</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 1,368,230 residents in certified nursing facilities that were surveyed in 2007. These data exclude residents in uncertified beds. The data generally show a slight increase in the number of residents in certified beds between 2001 and 2007.

## Average Occupancy Rates

Table 4 shows that the average certified nursing facility occupancy rate for the U.S. was 85.9 percent in 2001. 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 84.8 percent in 2007.



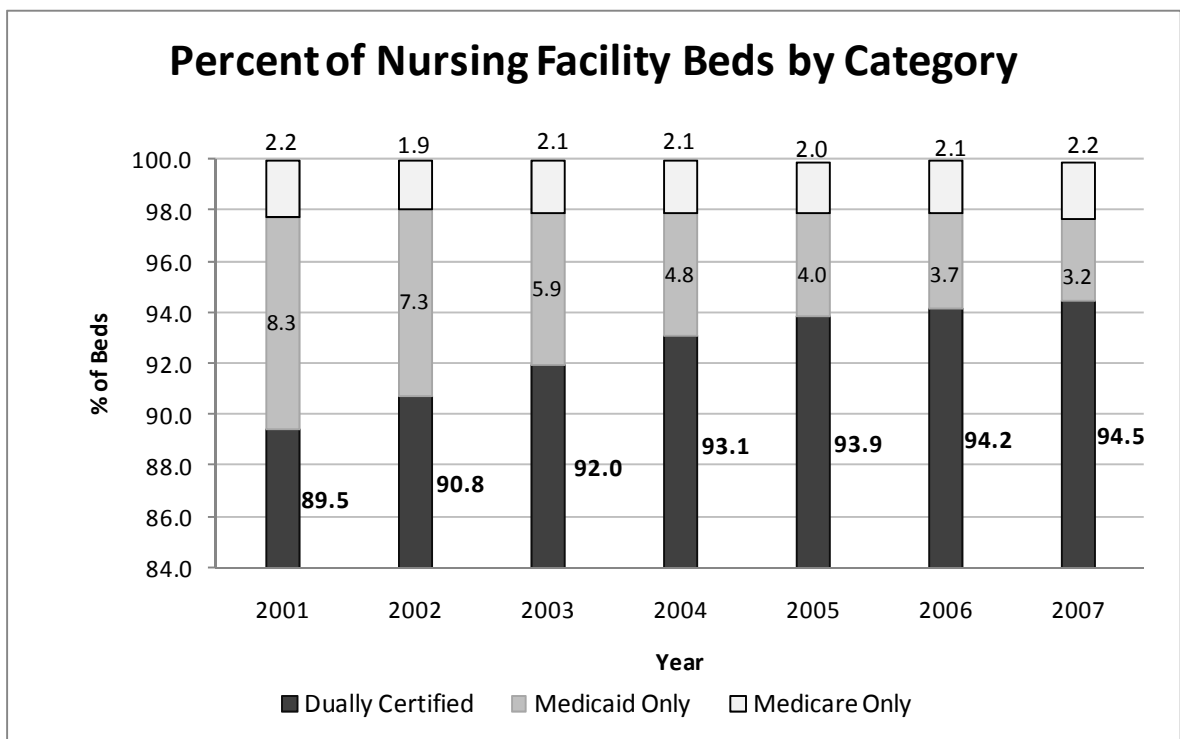
**TABLE 4  
TOTAL NUMBER OF RESIDENTS AND FACILITY OCCUPANCY RATES  
FOR CERTIFIED NURSING FACILITIES**

State	Number of Residents							Facility Occupancy						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	607	576	584	594	627	341	619	87.0	92.8	80.1	83.9	86.5	83.0	85.4
AL	19,969	22,511	21,937	20,476	15,678	17,677	15,547	92.0	90.4	88.9	88.9	87.3	88.2	87.5
AR	16,875	17,693	16,822	17,668	17,305	17,780	17,879	75.3	73.4	73.0	73.0	71.5	72.7	72.9
AZ	12,486	12,524	11,201	10,951	8,618	12,077	11,224	83.4	83.2	81.1	78.5	77.8	78.1	77.5
CA	89,526	93,573	103,677	102,851	100,268	97,180	97,530	84.9	84.9	85.5	84.3	85.2	85.6	84.7
CO	16,247	15,635	15,139	15,590	15,852	15,685	16,516	85.1	81.7	82.0	81.4	83.1	83.1	83.6
CT	27,841	27,299	26,069	23,342	25,571	26,566	25,991	94.1	93.2	93.3	91.3	92.2	92.0	92.0
DC	2,546	2,812	2,212	2,770	2,804	2,756	2,464	100.2	91.1	91.9	90.5	92.5	92.2	94.9
DE	3,602	3,196	3,484	3,541	3,799	3,677	3,908	92.1	92.3	88.7	81.3	82.2	86.0	84.9
FL	64,431	65,295	68,580	67,770	66,209	71,434	69,978	85.5	87.4	88.6	87.9	88.3	88.7	88.2
GA	32,025	32,093	33,831	31,892	33,907	34,601	33,982	91.6	91.1	90.5	88.9	89.7	89.6	88.6
HI	2,874	2,483	2,657	2,378	2,958	3,845	3,439	92.8	96.4	94.6	90.6	91.4	95.4	95.1
IA	27,098	27,036	25,220	26,296	26,057	25,609	24,388	84.2	84.3	83.0	78.7	79.8	81.4	81.0
ID	4,091	4,099	4,388	4,178	4,183	4,297	4,142	78.7	75.7	76.0	75.4	75.8	74.8	75.8
IL	75,009	77,271	72,172	75,015	72,298	73,767	76,065	82.4	81.5	80.6	75.6	75.8	79.0	79.3
IN	39,757	36,802	38,800	38,152	36,499	38,437	39,015	76.6	80.7	83.0	72.5	71.6	81.0	81.3
KS	20,047	20,301	19,164	19,932	19,684	19,454	18,558	86.7	86.7	84.4	77.5	77.1	85.3	84.5
KY	20,648	19,841	21,535	21,708	23,253	23,068	22,936	92.7	91.3	88.9	86.7	88.3	90.3	90.6
LA	29,114	29,146	26,930	28,005	25,569	25,698	25,787	79.0	77.8	76.7	74.0	75.0	74.6	74.0
MA	42,828	45,192	42,761	42,632	42,127	44,532	42,434	90.7	91.1	90.7	88.4	88.5	90.0	90.1
MD	20,109	24,214	22,819	21,769	24,164	24,712	23,092	87.5	86.8	86.4	85.3	86.3	87.5	86.7
ME	6,498	6,530	6,241	6,377	6,380	6,545	6,349	91.5	92.7	93.2	91.7	91.1	91.4	91.4
MI	40,448	39,457	41,230	40,365	39,880	39,859	39,963	87.6	87.3	87.9	85.3	86.2	88.4	86.6
MN	32,965	32,010	31,630	32,130	29,526	30,867	30,264	94.0	92.6	92.4	91.5	92.0	92.4	92.4
MO	34,152	35,166	35,280	35,165	35,684	36,942	36,696	75.7	74.4	74.4	68.8	69.6	74.7	74.1
MS	14,312	14,520	13,219	14,297	15,490	16,049	16,299	89.4	88.7	88.2	88.8	87.7	87.8	89.5
MT	4,903	4,392	5,239	5,019	4,883	4,599	4,745	77.2	79.0	76.5	73.9	73.3	74.2	71.7
NC	35,851	34,461	36,017	36,013	36,330	37,812	37,768	90.9	89.8	89.4	87.6	87.5	88.2	87.7
ND	6,106	6,005	6,051	6,007	5,768	5,830	5,774	93.7	94.3	93.6	92.9	91.8	91.8	92.1
NE	11,535	11,768	12,596	12,458	12,480	13,045	11,966	86.5	89.0	85.9	81.9	81.4	83.3	81.9
NH	5,740	5,648	6,671	6,354	6,597	6,338	6,923	91.7	90.7	92.4	90.3	90.1	89.8	89.8
NJ	41,476	42,530	40,920	42,617	42,075	44,110	44,459	88.9	87.6	88.2	88.0	87.6	88.9	89.5
NM	5,059	5,221	5,969	5,144	5,494	5,764	5,776	88.9	84.0	85.6	86.7	87.3	87.1	88.3
NV	4,234	4,200	4,296	3,928	4,261	4,673	4,737	82.5	82.2	84.1	84.0	80.7	84.1	83.9
NY	91,325	109,788	107,095	103,679	109,543	110,139	108,749	94.1	92.9	92.9	93.3	92.6	92.6	92.2
OH	72,823	71,420	72,258	73,484	71,174	77,848	77,751	86.2	86.4	85.8	75.4	86.2	87.8	87.7
OK	12,294	21,828	21,209	16,916	20,580	19,356	18,574	70.5	69.4	66.8	64.8	66.1	66.0	65.8
OR	8,057	8,256	8,034	7,951	7,424	7,767	7,937	74.5	68.8	66.9	64.9	64.7	64.9	65.3
PA	76,267	76,290	77,207	77,209	77,679	79,878	79,422	87.7	89.4	90.3	90.5	90.0	91.5	91.0
RI	8,143	7,474	3,570	7,305	7,804	8,302	7,908	92.1	90.4	90.7	93.2	92.3	93.1	92.2
SC	13,324	14,970	15,375	13,935	15,487	15,790	16,181	92.8	92.2	92.3	88.9	89.9	93.0	93.0
SD	6,502	6,279	6,467	5,923	6,360	6,542	6,361	92.4	92.5	92.8	92.7	98.4	99.9	99.5
TN	32,584	30,608	30,560	32,700	30,881	31,830	31,026	90.1	89.7	88.7	88.3	87.6	88.1	87.5
TX	80,615	82,209	84,065	85,685	84,104	86,442	89,698	78.2	77.1	77.7	73.0	72.4	74.4	73.5
UT	4,869	5,152	4,794	4,625	4,615	5,149	4,916	72.0	71.5	72.1	68.8	71.2	70.2	70.4
VA	24,016	23,595	26,966	25,487	25,065	27,298	26,979	90.8	90.4	90.6	88.1	88.7	91.0	90.6
VT	3,093	2,782	3,226	2,949	2,855	3,061	2,981	88.7	91.5	92.9	93.9	91.6	90.5	92.5
WA	19,145	18,199	18,737	18,851	19,104	18,672	18,824	85.8	83.5	85.2	85.5	85.8	86.7	86.6
WI	36,659	34,825	34,601	34,468	31,891	31,612	32,323	84.6	85.0	87.0	88.6	88.4	88.4	87.6
WV	8,498	9,328	9,497	8,134	8,679	8,014	9,031	91.6	91.7	90.2	88.0	90.4	89.6	90.1
WY	2,242	2,183	2,157	2,349	2,205	2,335	2,356	82.7	82.3	80.5	81.2	79.5	81.8	79.3
US	1,311,465	1,346,686	1,351,159	1,345,034	1,337,728	1,375,661	1,368,230	85.9	85.6	85.5	85.5	85.4	85.2	84.8

## 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 2.2 percent of the total beds in both 2001 and 2007. Medicaid-only certified beds declined from 8.3 percent in 2001 to 3.2 percent in 2007. Dually certified beds increased to make up the difference.

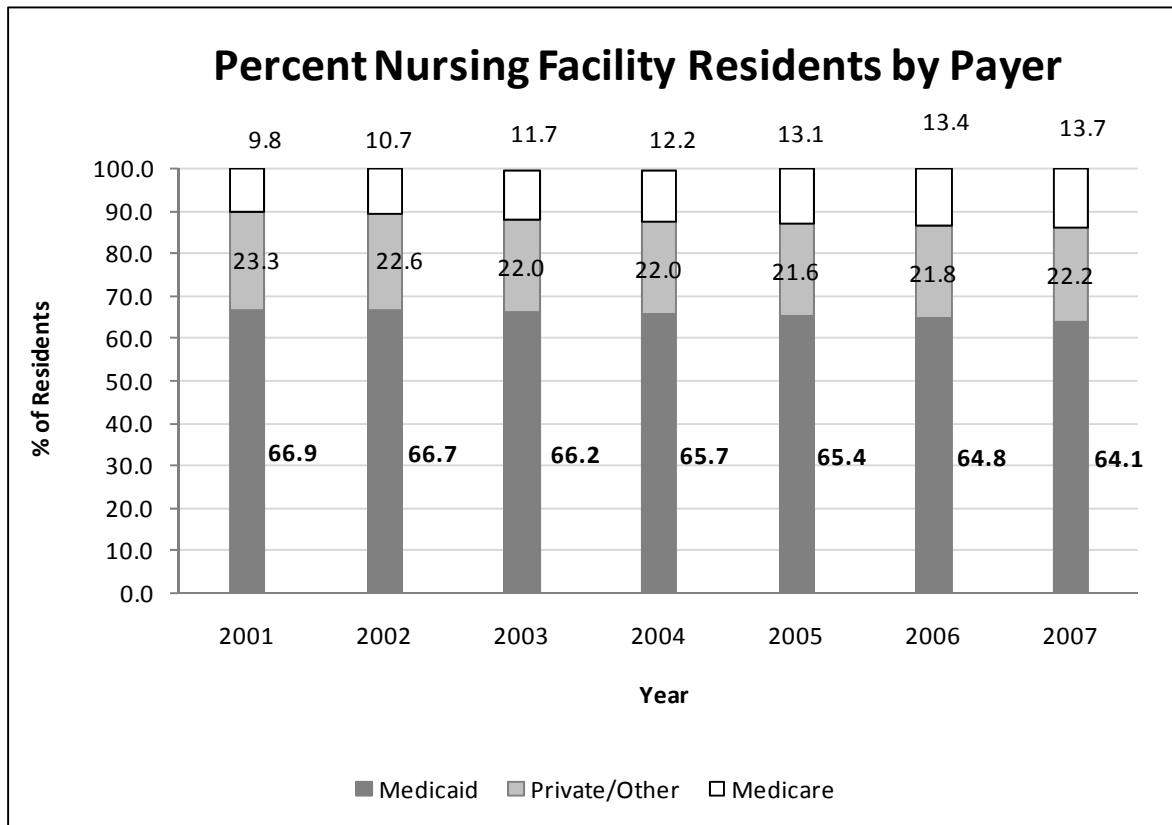


**TABLE 5**  
**PERCENT OF NURSING FACILITY BEDS BY CERTIFICATION CATEGORY IN THE U.S.**

State	Medicaid Only							Medicare Only							Dually Certified						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	100.0	100.0	100.0	100.0	100.0	100.0	98.1
AL	1.8	2.2	1.4	1.1	0.5	0.7	0.3	0.9	1.0	1.6	1.7	2.8	1.9	2.8	97.2	96.8	97.0	97.2	96.7	97.4	96.8
AR	21.9	21.7	18.7	14.3	12.6	9.2	9.2	2.4	2.0	1.8	1.2	1.5	1.5	1.2	75.7	76.2	79.5	84.5	85.9	89.3	89.6
AZ	0.1	0.1	0.1	0.1	0.1	0.1	0.0	3.4	4.2	3.9	5.9	7.4	7.9	10.0	96.4	95.7	96.0	93.9	92.4	92.0	90.0
CA	6.9	6.9	6.3	6.2	5.9	5.9	5.4	3.7	3.2	3.7	3.3	2.8	3.1	2.9	89.4	89.8	90.0	90.5	91.3	91.0	91.6
CO	8.3	8.3	7.7	7.4	7.2	6.1	5.9	5.7	4.2	3.8	4.3	3.8	4.9	5.4	86.0	87.5	88.5	88.3	89.0	89.0	88.8
CT	1.9	1.3	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.4	1.6	1.2	1.5	1.3	97.0	97.5	98.6	98.4	98.8	98.5	
DC	0.8	0.6	0.8	0.7	1.0	1.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.2	99.4	99.2	99.3	99.0	99.0	98.5
DE	3.8	5.9	4.9	4.0	4.1	5.4	4.6	7.7	3.8	7.8	5.9	3.6	5.8	5.4	88.5	90.3	87.3	90.1	92.3	88.8	89.9
FL	0.6	0.5	0.2	0.1	0.0	0.2	0.1	3.0	2.6	2.2	2.4	2.1	2.0	2.2	96.4	96.9	97.6	97.5	97.9	97.8	97.8
GA	7.6	7.0	6.4	6.5	1.6	1.2	0.7	1.3	0.7	0.8	1.4	1.4	1.5	1.4	91.2	92.4	92.8	92.0	97.1	97.2	97.9
HI	10.1	2.3	10.8	6.3	5.7	4.4	3.4	0.4	0.4	0.4	0.4	1.6	0.8	0.3	89.5	97.3	88.8	93.3	92.8	94.8	96.3
IA	32.5	24.4	17.8	10.5	10.5	9.6	7.5	0.5	0.7	0.6	0.6	0.6	0.8	0.6	67.0	74.9	81.6	88.9	89.0	89.7	91.9
ID	2.5	3.3	4.3	5.1	3.6	4.6	0.0	2.8	1.5	1.6	0.6	2.2	2.1	2.0	94.6	95.2	94.1	94.3	94.2	93.3	98.0
IL	17.7	15.7	13.4	12.4	10.6	10.0	9.8	2.2	1.9	2.3	2.4	2.1	2.2	2.3	80.0	82.4	84.2	85.2	87.3	87.8	87.9
IN	8.6	5.7	4.7	4.0	3.0	3.0	2.8	2.3	2.4	2.7	2.5	2.4	2.4	2.4	89.1	91.9	92.6	93.6	94.6	94.6	94.8
KS	24.6	24.5	20.8	20.4	17.7	17.6	15.7	1.3	0.8	0.6	1.0	1.5	1.5	1.6	74.1	74.6	78.5	78.6	80.7	80.9	82.7
KY	0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	1.7	2.2	2.5	2.0	2.6	2.6	97.7	98.3	97.8	97.5	98.0	97.4	97.4
LA	24.6	13.2	8.9	1.4	0.0	0.0	0.0	2.6	1.9	1.8	2.1	1.2	1.5	2.3	72.8	84.9	89.3	96.5	98.8	98.5	97.7
MA	1.6	1.6	0.9	1.0	1.0	0.9	0.7	1.0	0.9	1.1	1.0	1.4	1.4	1.5	97.4	97.5	98.0	98.0	97.6	97.7	97.8
MD	2.8	2.0	2.3	2.0	1.6	1.4	0.8	3.0	2.0	3.2	2.3	1.7	1.8	2.2	94.2	96.1	94.5	95.6	96.7	96.8	97.0
ME	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.2	0.6	0.6	100.0	99.9	99.9	99.7	99.8	99.4	99.4
MI	6.1	6.1	4.8	4.6	3.5	3.2	2.3	2.4	2.3	1.9	2.4	2.8	1.9	3.0	91.4	91.6	93.3	93.0	93.7	95.0	94.7
MN	3.3	3.4	3.8	3.8	3.5	3.2	3.5	1.8	1.7	1.2	1.1	1.3	1.2	1.4	94.9	94.9	95.0	95.1	95.2	95.6	95.2
MO	12.2	10.7	6.3	5.0	4.5	4.4	3.6	1.4	1.3	1.3	0.9	0.7	1.0	0.8	86.4	88.0	92.4	94.1	94.8	94.6	95.6
MS	28.4	23.7	18.3	17.4	16.9	16.3	14.2	2.2	1.9	1.7	1.4	1.3	1.2	1.0	69.4	74.4	80.0	81.3	81.8	82.5	
MT	3	0.0	2.8	2.8	2.9	3.1	2.9	0.5	1.3	0.7	0.9	0.9	1.2	1.1	96.5	98.7	96.6	96.3	96.2	95.7	96.0
NC	0.7	0.6	0.6	0.6	0.6	0.4	0.4	0.6	0.6	0.6	0.6	0.5	0.6	0.5	98.8	98.8	98.8	98.8	98.9	99.0	99.2
ND	0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.6	0.9	1.1	0.8	1.2	1.2	98.8	99.4	99.1	98.9	99.2	98.8	98.8
NE	18.3	16.6	17.9	14.3	11.5	11.1	9.4	0.1	0.2	0.1	0.1	0.1	0.1	0.4	81.5	83.2	82.0	85.6	88.4	88.8	90.2
NH	16.3	11.5	8.3	9.3	8.3	9.3	7.2	1.5	1.0	1.3	1.5	1.7	1.7	1.6	82.1	87.4	90.4	89.2	90.0	89.1	91.2
NJ	0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	4.5	4.4	4.4	4.4	4.7	5.2	95.7	95.5	95.6	95.6	95.6	95.3	94.8
NM	8.2	9.9	5.6	6.5	3.4	3.2	3.2	1.4	0.5	0.5	0.7	0.6	0.5	1.1	90.4	89.5	93.9	92.8	96.1	96.3	95.7
NV	5.1	5.1	5.1	5.6	5.0	4.7	4.6	2.1	1.1	0.8	1.3	0.0	0.0	0.0	92.8	93.8	94.1	93.1	95.0	95.3	95.4
NY	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.1	0.1	0.1	0.1	0.1	0.1	99.9	99.7	99.7	99.7	99.7	99.7	99.7
OH	5.8	5.7	3.6	2.3	1.4	0.9	0.0	1.9	1.4	1.5	1.3	1.4	1.2	1.2	92.3	92.9	94.9	96.4	97.2	97.9	98.8
OK	32.5	30.1	23.2	20.8	14.7	12.9	10.5	1.7	1.7	1.5	2.0	1.9	2.6	2.6	65.8	68.3	75.3	77.3	83.5	84.5	86.9
OR	10.9	10.5	8.9	9.1	8.3	9.2	7.9	2.4	2.9	2.2	1.4	2.3	2.4	1.5	86.7	86.5	88.9	89.5	89.4	88.4	90.6
PA	0.8	1.1	0.8	0.8	0.7	0.6	0.2	4.4	4.4	4.4	4.4	4.6	4.5	4.8	94.8	94.6	94.8	94.8	94.8	94.9	94.9
RI	0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.7	0.0	0.7	0.7	0.6	0.6	99.5	99.3	100.0	99.3	99.3	99.4	99.4
SC	0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	4.5	4.4	5.8	4.4	4.4	4.8	96.3	95.5	95.6	94.2	95.6	95.6	95.2
SD	13.1	15.2	15.1	12.2	12.8	11.8	10.9	0.6	0.6	0.6	0.0	0.7	0.6	0.6	86.3	84.1	84.3	87.8	86.5	87.6	88.5
TN	17.1	10.9	6.4	5.6	5.5	5.2	4.9	2.5	2.4	2.8	3.1	2.5	2.9	3.0	80.4	86.7	90.8	91.2	92.0	91.9	92.0
TX	13.5	10.8	7.6	6.3	4.9	4.0	3.4	2.9	2.4	2.7	2.6	2.5	2.6	2.9	83.6	86.7	89.7	91.1	92.6	93.4	93.7
UT	5.8	5.9	4.9	4.8	3.3	4.3	3.1	4.8	3.6	4.1	4.0	7.3	6.7	7.3	89.4	90.4	91.0	91.1	89.4	89.0	89.5
VA	8.5	8.1	8.0	6.4	5.1	4.4	4.1	1.4	1.1	1.9	1.9	1.0	1.7	1.8	90.1	90.7	90.1	91.6	93.9	93.9	94.1
VT	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.0	0.9	1.0	1.0	0.9	0.9	98.2	99.0	99.1	99.0	99.0	99.1	99.1
WA	3.7	3.5	2.6	3.1	3.0	2.7	1.9	0.3	0.7	1.1	1.5	1.9	1.7	1.7	96.1	95.8	96.3	95.5	95.1	95.6	96.4
WI	7.8	7.6	6.8	5.7	5.1	4.9	4.6	1.0	1.1	1.0	1.4	1.8	1.4	1.3	91.2	91.3	92.2	92.9	93.1	93.7	94.1
WV	15.3	15.0	11.1	9.3	8.3	6.5	6.8	3.0	1.9	3.0	2.6	2.4	2.5	2.1	81.7	83.1	85.9	88.1	89.2	91.0	91.1
WY	8.3	8.5	8.4	7.0	4.6	7.6	7.6	1.0	1.0	0.6	0.9	1.0	0.8	0.9	90.7	90.5	91.0	92.1	94.4	91.6	91.5
US	8.3	7.3	5.9	4.8	4.0	3.7	3.2	2.2	1.9	2.1	2.1	2.0	2.1	2.2	89.5	90.8	92.0	93.1	93.9	94.2	94.5

## 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 66.9 to 64.1 percent of the total residents in the 2001-2007 period. Medicare paid for 13.7 percent of the total residents in 2007, increasing from 9.8 percent in 2001. Private payers and other sources have decreased slightly (23.3 percent in 2001 and 22.2 percent in 2007). 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.



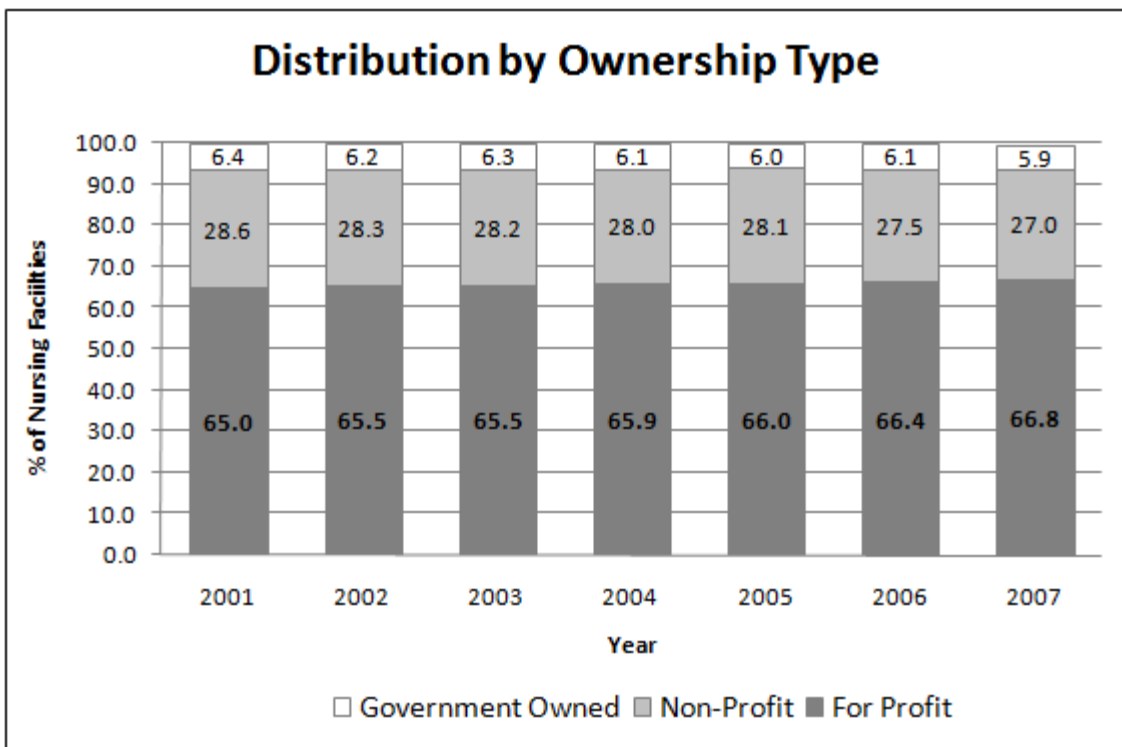
**TABLE 6**  
**PERCENT OF CERTIFIED NURSING FACILITY RESIDENTS BY PRIMARY PAYER SOURCE**

State	Medicaid							Medicare							Private/Other						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	86.3	85.4	81.5	80.3	82.9	78.9	72.7	6.8	6.3	9.2	10.1	8.1	7.0	12.1	6.9	8.3	9.2	9.6	8.9	14.1	15.2
AL	72.8	72.4	72.3	72.2	70.7	69.4	68.9	10.2	11.8	12.0	13.1	13.0	13.8	13.6	17.0	15.8	15.6	14.7	16.3	16.8	17.5
AR	73.7	73.7	72.7	72.0	70.8	70.0	69.7	6.5	7.5	8.5	8.9	10.3	10.8	11.2	19.7	18.8	18.7	19.0	18.9	19.2	19.0
AZ	64.4	65.6	65.4	64.7	63.5	63.6	61.2	9.0	10.3	10.8	10.9	12.0	12.1	13.0	26.6	24.0	23.8	24.4	24.5	24.3	25.8
CA	65.8	66.2	66.4	66.2	66.4	65.6	65.4	8.9	10.0	10.6	11.2	11.8	12.7	12.9	25.3	23.8	23.0	22.5	21.9	21.7	21.6
CO	59.4	59.8	59.1	58.3	59.1	58.6	57.9	7.8	9.0	9.5	9.9	10.4	11.4	11.7	32.8	31.2	31.4	31.8	30.5	30.1	30.4
CT	67.5	66.5	66.7	66.5	64.7	66.1	66.1	12.5	13.4	14.0	14.5	17.2	16.3	15.7	20.1	20.0	19.3	19.0	18.1	17.5	18.2
DC	82.4	81.8	80.9	80.7	74.3	77.5	80.0	8.0	7.7	9.4	9.2	8.5	10.2	9.5	9.5	10.5	9.7	10.1	17.3	12.3	10.4
DE	55.9	59.8	57.7	60.4	59.5	58.0	58.4	10.8	15.1	18.1	17.9	15.9	18.0	15.0	33.3	25.1	24.1	21.7	24.6	24.0	26.6
FL	61.9	60.9	61.3	60.7	59.7	58.6	57.8	14.7	16.5	17.4	18.2	19.0	19.5	19.5	23.4	22.5	21.3	21.1	21.2	21.9	22.7
GA	77.4	77.2	77.3	76.6	76.1	74.9	73.8	8.4	8.4	9.5	9.8	10.2	11.2	11.2	14.2	14.4	13.2	13.6	13.7	13.9	15.0
HI	73.5	70.4	73.8	70.6	74.7	72.1	69.9	8.1	12.4	10.4	8.5	8.5	8.8	9.4	18.4	17.2	15.9	20.9	16.8	19.1	20.7
IA	49.2	49.9	50.1	49.0	49.6	49.3	48.1	4.4	5.3	5.1	5.7	6.1	6.4	6.6	46.4	44.8	44.8	45.3	44.2	44.3	45.3
ID	60.2	61.7	61.3	59.8	58.8	60.7	58.5	13.8	14.2	15.0	15.1	17.4	16.2	15.9	26.0	24.2	23.7	25.1	23.8	23.1	25.6
IL	63.0	63.3	62.3	62.2	62.8	62.7	62.6	8.3	9.3	11.2	12.1	12.8	13.4	13.7	28.7	27.4	26.5	25.7	24.5	24.0	23.7
IN	65.8	66.0	64.0	63.4	62.2	62.6	61.7	11.0	11.8	13.5	13.6	14.7	15.5	15.4	23.2	22.2	22.6	23.0	23.2	22.0	22.9
KS	53.7	53.9	53.8	54.0	54.0	52.6	53.0	6.1	5.6	6.7	6.9	7.6	9.3	8.7	40.2	40.5	39.6	39.1	38.4	38.1	38.3
KY	74.2	72.4	70.5	68.4	66.6	66.6	66.9	10.3	11.9	13.2	13.5	14.6	14.5	15.3	15.5	15.7	16.3	18.1	18.8	18.9	17.8
LA	78.1	76.8	76.9	76.8	77.7	75.0	73.8	6.4	7.5	8.4	8.4	9.5	10.6	11.4	15.5	15.7	14.6	14.8	12.8	14.4	14.8
MA	70.1	69.2	68.1	67.9	66.0	65.9	65.0	9.8	11.0	12.0	12.6	13.7	13.3	13.5	20.0	19.8	19.9	19.5	20.3	20.8	21.5
MD	62.4	62.0	60.5	61.8	61.0	61.1	60.5	11.5	12.4	13.5	14.6	15.3	15.6	16.1	26.1	25.6	25.9	23.6	23.7	23.2	23.4
ME	69.5	69.1	68.7	69.1	66.6	67.0	65.7	11.2	12.8	13.3	13.5	16.1	15.5	16.3	19.3	18.1	18.0	17.4	17.3	17.6	18.1
MI	67.6	66.7	66.7	66.7	65.7	65.7	64.3	12.4	13.7	14.7	15.0	16.6	16.7	16.9	20.1	19.6	18.6	18.4	17.7	17.6	18.8
MN	59.0	59.0	59.1	59.2	57.8	58.7	56.8	9.3	9.2	10.0	10.2	10.7	9.7	10.0	31.8	31.8	30.9	30.6	31.5	31.7	33.2
MO	65.2	65.6	63.8	63.5	63.6	62.4	61.4	8.0	8.4	9.7	10.4	11.4	11.7	12.6	26.8	26.0	26.6	26.1	25.0	25.8	26.0
MS	81.6	80.3	79.8	78.6	76.3	76.0	76.7	8.1	8.9	9.7	10.1	11.6	12.8	13.6	10.3	10.8	10.5	11.3	12.1	11.2	9.7
MT	57.7	55.5	57.9	58.7	57.5	57.3	57.7	8.8	11.8	9.6	9.6	9.9	11.1	10.5	33.6	32.7	32.5	31.7	32.6	31.6	31.8
NC	71.6	71.1	69.9	70.5	69.9	68.8	67.4	12.3	14.1	14.5	14.7	15.4	15.6	15.6	16.0	14.8	15.5	14.8	14.6	15.6	17.0
ND	56.2	55.5	54.5	54.9	56.0	54.9	55.4	5.5	6.0	6.9	7.2	7.4	7.4	7.6	38.3	38.5	38.7	38.0	36.7	37.6	37.1
NE	51.8	52.1	53.9	53.4	53.5	52.7	53.8	6.8	7.3	7.7	8.7	9.3	10.5	10.2	41.4	40.6	38.4	37.9	37.2	36.8	36.0
NH	69.1	70.0	68.7	69.1	66.3	65.9	64.8	8.7	9.6	10.3	11.2	13.0	13.0	14.9	22.1	20.3	21.1	19.7	20.8	21.1	20.3
NJ	65.4	64.1	65.0	64.7	64.8	63.6	62.9	11.6	14.4	14.8	15.1	16.3	16.6	17.0	22.9	21.5	20.2	20.2	18.9	19.8	20.1
NM	72.3	72.4	70.0	67.5	66.5	66.9	64.1	7.4	6.3	8.1	10.5	10.6	11.5	11.4	20.3	21.3	21.9	22.1	22.9	21.6	24.5
NV	66.2	65.4	62.0	59.7	62.0	59.6	58.0	9.5	10.6	11.0	11.7	10.9	13.4	13.8	24.3	24.0	27.0	28.6	27.0	27.0	28.2
NY	73.1	74.8	73.6	73.0	73.0	72.3	72.1	11.5	10.8	12.0	12.2	12.6	12.7	12.6	15.4	14.4	14.4	14.9	14.4	15.1	15.4
OH	65.6	64.6	64.9	64.2	64.6	63.9	63.2	9.5	10.6	11.8	12.3	13.1	13.4	14.0	25.0	24.8	23.4	23.5	22.3	22.6	22.7
OK	65.0	63.5	65.7	64.2	64.7	66.0	65.5	6.5	7.6	8.4	9.6	10.3	10.1	11.8	28.5	29.0	25.9	26.1	25.0	23.9	22.7
OR	64.0	61.3	61.1	61.7	60.5	60.8	61.0	7.5	10.1	12.1	13.3	14.5	13.5	13.2	28.5	28.6	26.8	24.9	24.9	25.6	25.8
PA	63.9	63.7	63.5	64.2	63.4	64.2	63.3	9.6	10.3	11.1	11.0	12.2	11.5	11.6	26.6	26.1	25.4	24.8	24.4	24.3	25.1
RI	70.8	71.2	70.2	67.0	67.4	66.8	65.6	8.0	8.8	9.0	9.9	9.4	9.4	8.8	21.2	20.0	20.8	23.1	23.3	23.8	25.6
SC	72.3	71.1	70.4	69.4	69.8	66.7	64.8	12.0	12.7	14.0	15.4	14.7	16.6	16.3	15.7	16.2	15.6	15.2	15.5	16.8	18.9
SD	56.6	59.7	58.2	58.2	55.4	55.6	56.7	7.4	5.8	6.9	6.6	6.0	7.5	7.2	36.1	34.5	34.8	35.3	38.6	36.9	36.1
TN	72.3	71.1	71.3	68.3	68.5	67.0	66.1	10.4	11.8	12.8	14.2	15.4	15.2	15.9	17.3	17.2	16.0	17.4	16.1	17.8	18.0
TX	72.4	70.5	69.1	67.8	67.9	66.1	65.3	9.1	9.8	11.3	11.8	12.9	13.4	14.2	18.5	19.6	19.6	20.4	19.2	20.5	20.5
UT	58.3	59.5	60.0	58.5	54.6	54.2	53.0	15.3	16.1	17.2	17.9	19.4	19.6	19.6	26.4	24.4	22.8	23.6	25.9	26.2	27.4
VA	66.7	64.7	63.9	64.2	63.4	62.0	60.4	11.5	13.7	14.6	14.7	15.6	16.3	17.2	21.8	21.6	21.6	21.2	21.1	21.7	22.4
VT	68.6	64.4	66.3	67.4	65.7	62.9	67.2	9.8	10.6	13.1	12.3	12.8	12.7	14.1	21.6	25.1	20.6	20.3	21.5	24.4	18.7
WA	64.2	63.1	64.0	61.7	61.1	62.2	59.8	10.9	12.2	12.0	13.6	14.9	15.0	16.5	24.9	24.8	24.0	24.8	23.9	22.8	23.6
WI	65.7	65.9	64.7	64.2	63.7	63.0	61.6	8.8	9.4	10.4	11.3	11.8	12.3	13.4	25.5	24.7	24.9	24.5	24.5	24.7	25.0
WV	70.7	72.6	72.5	73.0	73.1	72.4	72.3	13.1	11.9	13.5	13.8	13.3	14.1	13.9	16.2	15.5	14.0	13.2	13.6	13.5	13.8
WY	62.5	59.9	62.6	60.0	60.4	60.7	59.3	9.3	10.6	11.8	14.0	12.4	12.2	10.9	28.2	29.5	25.6	26.0	27.2	27.1	29.8
US	66.9	66.7	66.2	65.7	65.4	64.8	64.1	9.8	10.7	11.7	12.2	13.1	13.4	13.7	23.3	22.6	22.0	22.0	21.6	21.8	22.2

## Distribution of Facilities by Ownership Type

Nursing facility ownership patterns were fairly stable in the 2001-2007 period, when the large majority of nursing facilities were proprietary. Table 7 shows that 66.8 percent of the surveyed facilities were for-profit facilities while non-profit facilities were 27 percent and government owned facilities were 5.9 percent in 2007.

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



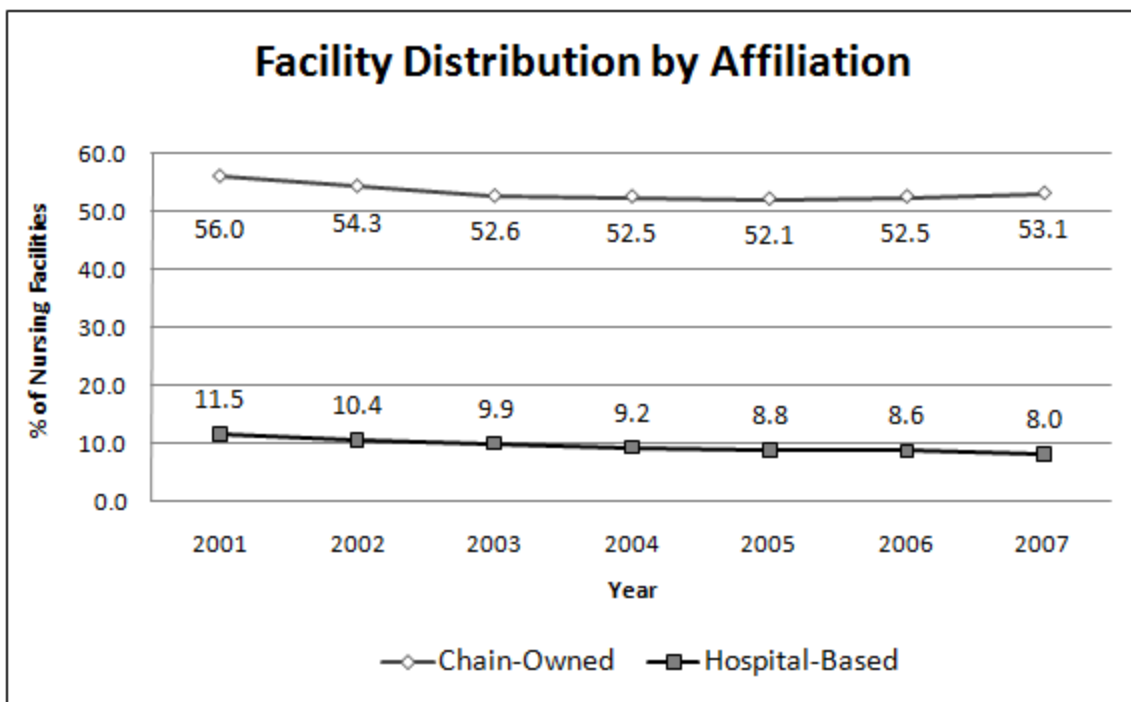
**TABLE 7**  
**PERCENT DISTRIBUTION OF NURSING FACILITIES BY OWNERSHIP TYPE**

State	For Profit							Non-Profit							Government Owned						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	7.1	8.3	7.1	0.0	6.7	0.0	6.7	57.1	58.3	64.3	75.0	53.3	38.5	53.3	35.7	33.3	28.6	25.0	40.0	61.5	40.0
AL	77.4	76.6	76.4	77.2	81.0	81.1	77.6	12.8	14.2	14.4	13.4	12.9	11.2	16.8	9.7	9.2	9.3	9.4	6.1	7.7	5.6
AR	79.7	79.1	79.8	81.7	80.0	80.1	81.4	16.8	16.7	16.2	14.0	16.6	16.1	14.3	3.4	4.2	3.9	4.3	3.4	3.8	4.2
AZ	71.5	71.0	76.8	75.7	73.6	75.0	74.2	26.9	28.2	21.4	22.6	26.4	23.5	22.6	1.5	0.8	1.8	1.7	0.0	1.5	2.4
CA	76.8	77.4	77.5	79.2	78.7	79.7	78.8	19.3	18.5	18.4	17.4	17.3	16.5	16.7	3.9	4.1	4.0	3.4	3.9	3.8	3.8
CO	63.4	66.7	64.1	64.6	65.5	66.3	68.4	26.9	23.5	25.7	25.7	25.1	23.8	22.0	9.7	9.9	10.2	9.7	9.4	9.9	9.6
CT	75.4	82.4	79.3	76.8	76.7	77.2	78.5	23.8	17.2	20.3	22.7	22.5	21.9	20.2	0.8	0.4	0.4	0.5	0.9	0.8	0.9
DC	33.3	30.0	23.5	30.0	35.0	35.0	27.8	61.1	60.0	64.7	60.0	55.0	55.0	61.1	5.6	10.0	11.8	10.0	10.0	10.0	11.1
DE	44.7	51.5	45.9	56.4	53.7	52.4	50.0	47.4	36.4	45.9	35.9	36.6	38.1	38.6	7.9	12.1	8.1	7.7	9.8	9.5	11.4
FL	74.6	75.4	73.1	71.5	70.4	70.6	70.5	23.4	22.9	24.6	26.2	27.6	27.4	26.8	2.0	1.7	2.3	2.3	1.9	1.9	1.8
GA	75.2	72.8	68.8	65.4	64.8	65.0	67.6	17.7	20.1	23.6	26.9	28.4	26.5	24.0	7.1	7.1	7.6	7.6	6.8	8.5	8.4
HI	45.7	41.9	46.9	42.9	46.2	45.7	48.8	37.1	29.0	28.1	34.3	30.8	28.3	24.4	17.1	29.0	25.0	22.9	23.1	26.1	26.8
IA	52.0	52.5	51.8	52.8	52.2	51.7	51.4	43.4	42.8	43.5	42.4	43.4	43.2	43.7	4.5	4.8	4.6	4.8	4.4	5.1	4.9
ID	57.5	64.8	62.7	64.7	64.8	64.9	67.1	17.8	12.7	14.7	13.2	15.5	13.5	17.1	24.7	22.5	22.7	22.1	19.7	21.6	15.7
IL	66.4	68.2	68.0	69.0	68.5	68.8	68.2	28.9	27.0	27.4	26.6	27.8	27.0	27.4	4.7	4.8	4.7	4.4	3.7	4.2	4.3
IN	67.8	66.7	65.7	66.4	68.8	67.6	69.7	29.2	30.3	30.9	29.1	27.8	28.4	25.9	3.0	3.1	3.4	4.5	3.4	4.0	4.0
KS	50.6	50.6	50.9	51.3	51.9	49.9	49.8	34.7	36.1	36.3	35.9	36.1	37.2	37.5	14.7	13.3	12.9	12.8	12.0	13.0	12.4
KY	66.5	65.9	68.2	66.7	69.2	70.4	70.1	30.9	31.4	29.6	30.5	27.5	26.8	26.7	2.6	2.7	2.1	2.8	3.4	2.7	2.8
LA	74.2	74.4	74.0	74.0	75.7	74.5	74.8	19.3	21.7	21.6	21.7	20.2	21.2	19.5	6.5	3.8	4.5	4.3	4.0	4.4	5.0
MA	70.0	69.0	68.1	68.9	69.2	69.2	70.3	27.8	29.3	30.0	29.5	28.7	28.8	27.8	2.2	1.7	1.8	1.6	2.1	2.0	1.9
MD	57.2	61.1	61.4	62.4	63.2	63.1	63.0	39.3	36.7	35.5	34.3	33.8	33.8	34.3	3.5	2.2	3.2	3.3	3.1	3.1	2.8
ME	70.5	69.0	69.8	68.8	70.8	71.8	67.6	25.9	30.1	28.3	30.3	28.3	27.3	31.5	3.6	0.9	1.9	0.9	0.9	0.9	0.9
MI	62.5	63.2	62.7	64.8	64.4	65.2	67.0	27.4	26.6	27.2	25.0	25.8	25.1	24.0	10.1	10.2	10.1	10.2	9.8	9.7	9.0
MN	26.4	27.7	27.6	28.0	27.0	28.1	27.8	58.2	59.0	59.2	58.9	60.1	58.3	59.5	15.4	13.3	13.3	13.1	12.9	13.6	12.7
MO	63.8	64.4	64.7	66.3	66.4	66.2	67.9	28.9	27.5	26.8	26.9	27.1	27.1	25.1	7.3	8.1	8.5	6.7	6.5	6.7	7.0
MS	71.9	67.5	71.0	66.3	68.2	68.3	69.5	14.1	18.8	16.6	19.7	18.2	17.8	16.0	14.1	13.6	12.4	14.0	13.6	13.9	13.5
MT	30.6	39.2	33.7	39.1	36.4	37.6	37.6	47.1	47.3	50.0	46.0	46.6	45.9	45.9	22.4	13.5	16.3	14.9	17.0	16.5	15.3
NC	73.1	73.1	74.5	73.0	73.7	73.6	74.4	22.6	23.2	22.0	22.8	22.6	23.1	22.2	4.3	3.7	3.5	4.2	3.7	3.3	2.9
ND	10.6	8.6	8.5	7.3	6.4	6.2	7.5	84.7	87.7	87.8	89.0	91.0	90.1	88.8	4.7	3.7	3.7	3.7	2.6	3.7	3.8
NE	50.0	44.5	45.6	47.9	47.4	48.0	46.2	28.2	34.0	31.2	30.0	30.7	29.9	32.7	21.8	21.5	23.3	22.1	21.9	22.2	21.2
NH	52.2	48.4	54.1	50.0	48.7	50.0	53.1	33.3	35.5	31.1	34.2	34.2	34.2	33.3	14.5	16.1	14.9	15.8	17.1	15.8	13.6
NJ	61.8	62.7	62.5	64.1	63.9	64.9	65.5	32.1	31.1	31.7	31.0	30.5	29.4	28.8	6.1	6.2	5.7	4.9	5.6	5.7	5.6
NM	66.2	61.8	68.8	69.2	66.2	67.1	65.7	30.8	32.4	26.0	26.2	26.5	27.1	25.7	3.1	5.9	5.2	4.6	7.4	5.7	7.1
NV	73.9	77.3	77.3	75.6	73.9	76.6	68.8	15.2	11.4	9.1	9.8	13.0	10.6	16.7	10.9	11.4	13.6	14.6	13.0	12.8	12.5
NY	46.6	47.6	48.3	48.4	48.3	50.4	50.9	45.1	44.2	43.8	43.5	43.6	42.1	41.8	8.3	8.2	7.9	8.1	8.0	7.5	7.2
OH	72.0	75.0	74.5	75.6	75.9	74.9	75.6	25.2	22.2	23.0	21.7	21.6	22.4	21.5	2.9	2.8	2.4	2.7	2.4	2.7	2.9
OK	84.9	83.2	83.3	82.4	82.9	83.8	85.1	9.4	12.1	11.7	12.2	12.2	11.6	10.8	5.7	4.7	5.0	5.4	4.9	4.6	4.1
OR	69.8	74.1	76.7	77.6	76.6	80.5	79.9	25.6	20.0	18.8	18.7	19.4	15.0	16.4	4.7	5.9	4.5	3.7	4.0	4.5	3.7
PA	43.7	43.4	44.9	44.6	47.0	48.0	47.5	50.9	51.2	49.5	49.7	47.7	46.7	47.0	5.4	5.5	5.6	5.7	5.3	5.4	5.2
RI	75.9	80.7	86.1	76.9	79.8	78.2	80.0	24.1	19.3	13.9	21.8	20.2	20.7	20.0	0.0	0.0	0.0	1.3	0.0	1.1	0.0
SC	70.7	71.2	72.6	72.3	75.3	73.1	75.1	14.0	17.2	15.5	18.1	13.0	15.0	15.4	15.3	11.7	11.9	9.7	11.7	12.0	9.5
SD	34.0	30.7	30.6	33.0	31.8	34.6	34.0	60.4	63.4	63.9	62.0	63.6	60.7	61.3	5.7	5.9	5.6	5.0	4.7	4.7	4.7
TN	69.5	72.3	70.6	72.6	73.1	73.4	74.0	22.4	19.1	19.9	19.1	19.8	20.6	19.4	8.2	8.6	9.5	8.2	7.1	6.0	6.3
TX	81.4	79.7	79.6	81.5	81.4	82.4	82.9	15.4	17.4	17.3	15.7	15.5	14.8	14.1	3.2	2.9	3.1	2.8	3.2	2.8	3.0
UT	81.0	77.5	78.0	80.2	74.1	81.1	77.4	17.9	19.1	19.5	16.0	21.0	14.4	17.9	1.2	3.4	2.4	3.7	4.9	4.4	4.8
VA	62.9	62.8	68.0	67.2	64.1	64.9	68.3	33.5	33.1	28.3	29.7	32.7	31.3	27.2	3.6	4.2	3.7	3.1	3.2	3.7	3.4
VT	65.0	67.6	68.3	65.8	63.9	67.5	65.8	32.5	29.7	29.3	31.6	36.1	32.5	31.6	2.5	2.7	2.4	2.6	0.0	0.0	2.6
WA	67.7	67.5	70.1	69.6	70.0	71.3	72.3	22.7	23.3	21.6	22.5	22.2	20.7	20.2	9.6	9.2	8.3	7.9	7.8	8.0	7.6
WI	48.1	48.2	47.9	47.7	47.8	48.4	48.2	36.7	36.8	36.6	36.9	37.7	36.6	36.1	15.2	15.0	15.4	15.5	14.5	15.0	15.7
WV	65.8	65.0	66.9	66.1	65.8	64.2	69.4	24.6	26.0	23.8	23.7	25.0	25.7	22.3	9.6	8.9	9.2	10.2	9.2	10.1	8.3
WY	35.3	37.1	40.0	50.0	44.4	42.9	36.8	14.7	14.3	20.0	19.4	13.9	14.3	15.8	50.0	48.6	40.0	30.6	41.7	42.9	47.4
US	65.0	65.5	65.5	65.9	66.0	66.4	66.8	28.6	28.3	28.2	28.0	28.1	27.5	27.0	6.4	6.2	6.3	6.1	6.0	6.1	5.9

## Facilities by Affiliation

Table 8 shows the percent of facilities that were owned or leased by multi-facility organizations (chains) (has two or more facilities). The percentage that were owned or leased by chains was 56 percent in 2001 and declined by 5 percent to 53.1 percent in 2007.

Table 8 shows that certified hospital-based facilities that were surveyed decreased from 11.5 percent in 2001 declined by 30 percent to 8 percent of all facilities in 2007. These changes occurred after the introduction of the Medicare prospective payment system for nursing facilities in 1998.



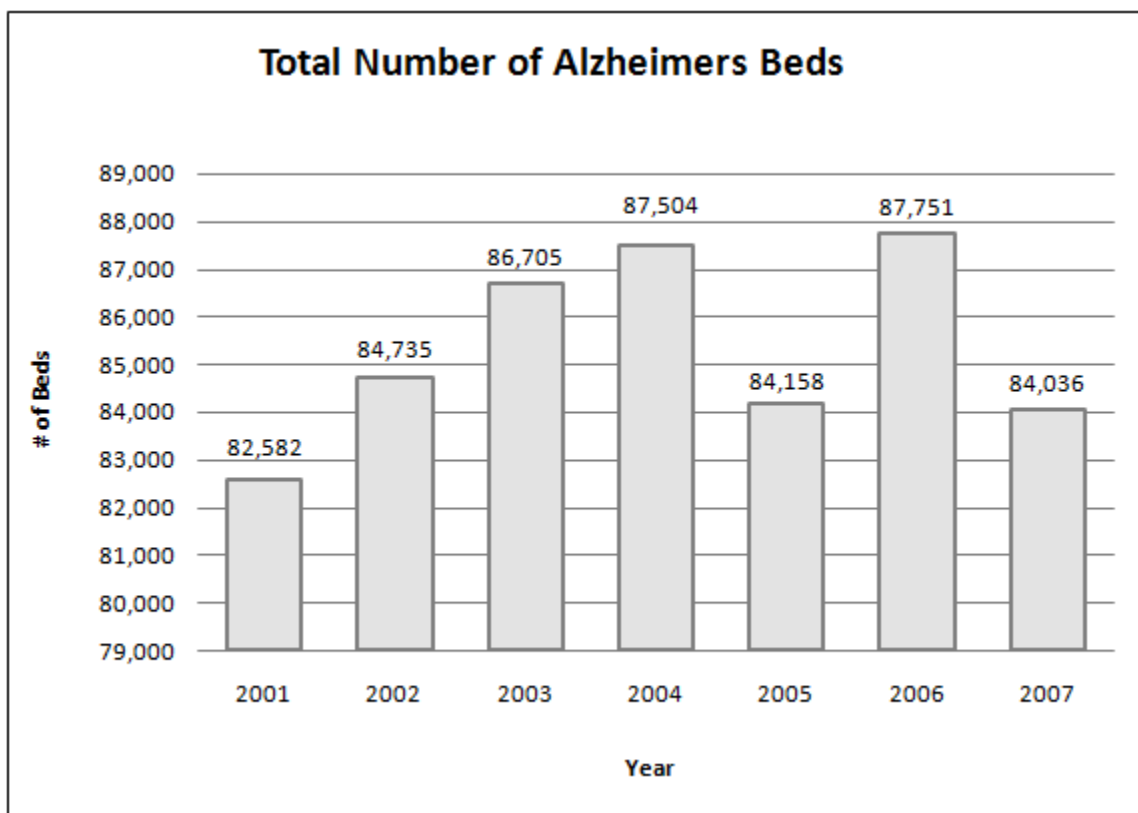
**TABLE 8  
PERCENT DISTRIBUTION OF CERTIFIED NURSING FACILITIES BY AFFILIATION IN THE U.S.**

State	Chain-Owned							Hospital-Based						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	28.6	33.3	50.0	50.0	40.0	23.1	33.3	57.1	66.7	64.3	58.3	53.3	69.2	73.3
AL	61.5	55.0	60.6	60.4	57.7	55.0	64.6	10.8	8.7	8.3	6.9	5.5	7.1	7.5
AR	59.1	55.6	50.0	52.8	49.4	47.0	50.6	8.6	7.9	8.8	6.4	6.8	7.2	6.8
AZ	66.9	61.1	61.6	59.1	57.5	56.8	59.7	9.2	6.9	5.4	3.5	2.3	3.8	2.4
CA	62.7	55.5	55.5	55.2	52.4	53.5	52.0	15.0	12.8	13.3	12.9	12.3	12.4	10.9
CO	65.7	62.4	61.2	60.2	59.6	59.9	58.9	10.2	8.9	9.7	8.3	8.4	8.9	7.7
CT	49.2	42.3	41.0	43.6	46.7	45.6	47.2	1.2	2.1	1.3	1.4	1.3	1.7	1.7
DC	27.8	20.0	17.6	10.0	15.0	15.0	22.2	27.8	20.0	17.6	25.0	25.0	25.0	22.2
DE	52.6	57.6	59.5	59.0	56.1	59.5	54.5	5.3	12.1	5.4	7.7	7.3	7.1	9.1
FL	64.0	62.2	61.1	54.5	53.0	54.1	56.8	8.6	5.7	5.6	4.5	4.0	2.5	2.1
GA	76.4	68.4	73.5	74.6	74.0	71.8	72.5	15.8	17.0	16.3	16.2	15.4	15.4	14.5
HI	37.1	35.5	46.9	45.7	46.2	56.5	51.2	40.0	45.2	43.8	45.7	38.5	39.1	39.0
IA	50.7	50.9	48.2	50.7	52.9	52.2	50.0	11.1	10.9	9.5	8.8	9.7	10.3	10.5
ID	53.4	52.1	53.3	57.4	63.4	58.1	61.4	30.1	23.9	24.0	19.1	25.4	24.3	18.6
IL	47.8	45.7	44.4	44.9	45.9	47.9	47.9	9.8	8.6	8.4	8.5	8.3	7.7	7.5
IN	66.5	61.6	63.5	65.6	64.5	63.0	64.1	9.9	8.4	8.4	7.0	6.4	6.2	5.0
KS	54.7	50.6	49.1	49.9	51.3	51.6	51.1	15.6	14.7	13.2	13.1	13.8	13.5	13.3
KY	58.8	60.9	58.9	61.8	61.4	63.6	60.8	16.5	16.1	13.9	13.7	12.2	11.7	10.4
LA	42.2	41.2	40.8	41.8	43.8	46.4	49.6	12.7	9.6	8.6	7.2	7.4	6.9	7.1
MA	56.3	55.5	56.9	56.3	50.2	52.7	53.0	6.3	5.4	6.0	4.8	4.9	4.9	3.5
MD	48.8	51.5	51.8	51.6	53.1	53.3	54.2	11.9	9.6	7.3	8.0	7.0	7.6	7.9
ME	48.2	53.1	48.1	51.4	50.9	53.6	52.8	8.9	7.1	6.6	9.2	6.6	8.2	8.3
MI	50.7	49.0	50.9	51.0	52.1	52.3	52.5	6.4	5.4	5.9	5.7	3.7	4.9	6.4
MN	49.3	51.1	49.6	49.5	51.7	51.1	50.3	16.4	14.4	15.6	14.7	14.0	14.4	13.5
MO	54.0	53.4	53.8	54.7	49.3	47.8	50.8	10.1	9.5	9.7	6.7	5.9	5.9	5.4
MS	57.3	52.9	51.5	46.1	47.5	42.1	44.5	21.1	18.8	17.2	16.9	13.6	12.9	12.0
MT	34.1	36.5	33.7	36.8	35.2	34.1	41.2	45.9	33.8	42.4	34.5	39.8	36.5	35.3
NC	66.1	69.1	68.7	67.0	68.7	67.6	68.8	12.1	11.7	11.4	11.4	10.4	9.5	8.5
ND	47.1	46.9	48.8	45.1	46.2	44.4	45.0	24.7	22.2	23.2	23.2	19.2	21.0	18.8
NE	51.6	50.0	48.8	48.4	50.7	45.7	44.7	17.0	14.0	14.9	14.1	11.6	11.3	10.1
NH	47.8	48.4	52.7	51.3	48.7	50.0	50.6	5.8	6.5	2.7	6.6	6.6	5.3	6.2
NJ	42.4	37.6	35.6	37.1	37.5	34.9	33.6	6.4	5.0	4.5	4.1	4.4	4.3	4.0
NM	72.3	70.6	68.8	67.7	66.2	70.0	62.9	12.3	8.8	9.1	9.2	10.3	7.1	2.9
NV	69.6	45.5	52.3	53.7	58.7	61.7	62.5	28.3	22.7	22.7	19.5	21.7	21.3	18.8
NY	17.1	12.6	12.7	13.1	12.1	13.1	12.5	11.6	10.9	11.2	11.0	10.1	10.3	10.3
OH	56.7	56.6	56.5	57.1	58.4	58.5	61.1	7.2	5.5	6.5	5.2	5.0	5.1	4.2
OK	50.9	36.0	34.3	34.1	32.8	30.3	32.0	7.1	6.6	5.3	5.7	4.9	4.9	4.4
OR	64.3	63.0	64.7	64.9	68.5	68.4	69.4	9.3	6.7	5.3	4.5	3.2	3.8	3.7
PA	50.7	48.3	49.5	51.2	52.0	53.2	53.2	12.6	10.8	9.8	8.9	9.0	8.7	8.6
RI	18.4	21.7	36.1	30.8	26.2	28.7	31.8	2.3	2.4	2.8	2.6	2.4	1.1	1.2
SC	64.7	63.8	66.1	69.0	67.9	71.3	71.0	15.3	12.3	12.5	11.6	9.3	11.4	10.1
SD	53.8	54.5	53.7	55.0	56.1	57.0	56.6	18.9	20.8	21.3	20.0	15.9	15.0	15.1
TN	64.4	61.5	60.5	61.4	63.6	63.0	61.9	14.8	13.1	11.8	10.9	9.7	9.2	7.9
TX	73.6	63.0	63.3	62.1	62.5	63.3	65.0	8.1	6.6	6.0	4.7	4.5	4.1	3.7
UT	79.8	71.9	68.3	66.7	64.2	67.8	66.7	15.5	13.5	13.4	12.3	14.8	12.2	11.9
VA	62.5	60.7	63.9	62.9	64.5	68.7	70.5	11.6	8.4	7.8	8.5	8.9	7.1	6.7
VT	47.5	51.4	48.8	42.1	38.9	47.5	39.5	7.5	5.4	4.9	5.3	8.3	5.0	7.9
WA	68.1	61.3	61.0	60.4	58.0	62.4	60.5	10.0	10.0	7.9	7.5	7.4	7.2	7.1
WI	46.6	43.8	44.0	44.1	43.3	42.8	43.3	7.6	9.8	8.1	7.7	7.9	7.8	7.5
WV	45.6	50.4	47.7	47.5	45.8	44.0	48.8	21.1	17.1	20.0	22.0	21.7	23.9	21.5
WY	47.1	45.7	45.7	44.4	41.7	37.1	36.8	38.2	37.1	37.1	33.3	38.9	37.1	39.5
<b>US</b>	<b>56.0</b>	<b>54.3</b>	<b>52.6</b>	<b>52.5</b>	<b>52.1</b>	<b>52.5</b>	<b>53.1</b>	<b>11.5</b>	<b>10.4</b>	<b>9.9</b>	<b>9.2</b>	<b>8.8</b>	<b>8.6</b>	<b>8.0</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 2001 through 2007. The total number of beds dedicated to Alzheimer's was 84,036 in 2007, an increase of 1 percent during the 2001-2007 period, but a decline after 2006. These special care beds were 5 percent of the total certified beds in the U.S surveyed in 2007.

The number of dedicated AIDS beds declined from 1,764 in 2001 to 1,306 in 2007. The number of hospice beds rose from 2,428 to 2,621 in 2007. 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							
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007	
AK	0	0	22	22	22	37	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AL	594	940	950	998	649	920	832	0	0	0	0	0	0	0	0	15	174	165	21	169	151	19
AR	574	463	421	348	393	465	392	0	0	0	0	0	0	0	4	12	11	60	107	88	15	
AZ	1,639	1,613	1,487	1,511	968	1,427	1,515	0	0	0	0	0	0	0	4	3	0	0	12	19	22	
CA	3,556	3,631	4,325	4,294	3,580	3,467	4,096	156	26	57	58	54	32	35	382	185	72	107	253	237	119	
CO	2,246	2,204	2,121	2,175	2,109	1,980	2,136	0	0	0	0	0	0	242	105	119	138	158	66	61	333	
CT	1,806	1,857	1,788	1,359	1,585	1,904	1,548	70	30	70	70	70	34	70	14	11	14	8	16	22	10	
DC	49	49	21	39	47	108	69	0	0	0	0	0	0	0	9	9	0	13	0	0	4	
DE	339	275	320	341	330	300	346	0	0	0	0	0	0	0	0	0	0	1	6	6	0	
FL	4,891	4,541	4,851	5,069	4,196	5,020	4,899	110	12	44	241	143	313	327	208	163	208	457	302	567	498	
GA	824	1,248	1,067	1,173	1,303	1,346	1,471	0	15	12	15	0	0	0	169	17	10	10	0	1	2	
HI	66	10	124	48	164	106	137	0	10	10	10	0	0	0	1	11	10	10	10	0	2	
IA	1,757	1,664	1,771	1,970	2,076	2,082	1,934	0	0	0	0	0	0	0	62	198	59	298	62	95	161	
ID	377	347	464	405	340	381	415	0	0	58	0	0	0	0	2	0	85	151	148	96	196	
IL	5,908	6,598	5,745	6,086	5,662	5,614	5,444	44	44	44	44	28	28	122	182	330	855	136	98	234	144	
IN	4,029	4,271	4,605	4,498	4,543	5,114	5,227	19	0	12	6	0	26	0	101	158	164	10	4	207	4	
KS	1,768	1,846	1,797	1,938	1,842	1,841	1,625	0	1	0	0	0	0	0	65	11	3	94	13	4	3	
KY	340	166	460	297	454	663	575	2	0	0	0	0	0	0	14	0	160	177	158	164	34	
LA	1,434	1,675	1,420	1,607	1,586	1,447	1,595	0	0	12	12	13	1	0	1	26	3	8	0	0	5	
MA	4,054	4,089	3,727	4,143	4,340	4,782	4,780	0	0	0	0	10	0	0	142	7	3	10	6	9	11	
MD	1,257	1,510	1,257	1,305	1,196	1,190	851	0	0	0	0	0	0	0	23	28	24	30	20	1	42	
ME	73	716	641	703	428	514	408	0	0	0	0	0	0	0	0	1	1	1	0	6	5	
MI	1,718	1,619	1,710	1,865	2,016	1,934	1,459	0	6	0	0	0	0	0	4	103	27	189	35	40	54	
MN	2,717	2,734	2,761	3,146	2,704	2,903	2,892	0	16	16	0	0	0	0	76	73	16	29	27	14	17	
MO	3,958	4,053	4,250	4,138	4,565	4,581	4,181	16	16	16	16	16	16	16	54	54	21	20	87	88	16	
MS	156	118	44	20	116	139	376	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MT	498	581	568	602	535	460	575	0	0	0	0	0	0	0	7	5	6	6	5	4	5	
NC	1,684	1,279	1,756	1,784	1,544	1,408	1,726	0	0	0	0	0	0	0	8	4	12	17	20	2	0	
ND	304	318	379	397	442	443	458	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NE	918	979	1,101	1,092	1,193	1,352	1,217	0	0	0	0	0	0	0	81	205	81	83	81	82	55	
NH	486	605	648	651	597	440	29	0	0	0	0	0	0	0	50	0	0	1	0	0	0	
NJ	930	1,047	1,212	1,223	1,326	1,473	1,394	60	62	66	66	74	74	74	9	18	37	34	22	24	18	
NM	573	675	610	411	380	476	539	0	0	0	0	0	0	0	0	120	0	0	0	32	26	
NV	321	293	219	275	300	335	264	0	0	0	0	0	0	0	2	0	225	9	0	0	12	
NY	3,394	3,187	3,750	3,919	4,410	5,016	3,846	865	801	881	940	966	1,096	373	28	37	86	49	67	67	32	
OH	6,900	6,416	7,159	7,580	5,513	5,545	5,807	306	19	39	16	21	0	25	63	82	232	154	160	278	68	
OK	578	1,142	831	816	1,059	986	522	0	84	0	7	33	33	0	4	222	180	9	27	5	216	
OR	504	753	801	704	559	583	492	0	0	0	0	0	0	6	2	8	10	9	3	7	13	
PA	5,838	5,946	6,565	6,485	6,445	6,515	6,406	30	30	16	16	16	16	16	170	76	105	93	41	50	42	
RI	878	807	458	842	921	880	821	0	15	0	0	0	0	0	0	0	0	3	1	4	1	
SC	462	442	497	390	535	434	404	0	0	0	0	1	0	0	13	2	3	6	96	88	7	
SD	290	293	346	281	382	487	502	0	0	0	0	0	0	0	1	1	1	1	0	0	1	
TN	573	430	453	415	360	499	285	0	0	0	0	0	0	0	2	3	3	11	26	25	23	
TX	3,176	3,729	3,398	3,247	3,314	3,442	3,284	0	0	0	1	7	1	0	54	41	94	39	61	56	104	
UT	699	606	598	646	558	562	549	0	0	0	0	0	0	0	0	2	22	4	0	7	23	
VA	1,101	1,208	1,256	1,128	1,132	1,141	1,285	0	0	0	0	0	6	0	5	132	2	0	120	23	23	
VT	238	254	379	356	336	363	317	0	0	0	0	0	0	0	0	0	1	2	1	0	0	
WA	2,084	2,068	2,012	1,704	1,631	1,385	1,085	75	0	35	35	0	0	0	181	36	7	2	0	1	134	
WI	3,567	3,078	3,247	2,746	3,157	2,974	2,672	11	2	2	2	0	2	0	109	108	108	93	119	123	100	
WV	163	112	102	84	30	22	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
WY	293	250	211	228	285	265	271	0	0	0	0	0	0	0	2	4	2	4	1	1	2	
<b>US</b>	<b>82,582</b>	<b>84,735</b>	<b>86,705</b>	<b>87,504</b>	<b>84,158</b>	<b>87,751</b>	<b>84,036</b>	<b>1,764</b>	<b>1,189</b>	<b>1,390</b>	<b>1,555</b>	<b>1,452</b>	<b>1,678</b>	<b>1,306</b>	<b>2,428</b>	<b>2,799</b>	<b>3,266</b>	<b>2,627</b>	<b>2,450</b>	<b>2,989</b>	<b>2,621</b>	

## Special Care Beds (continued)

Table 10 shows that there were 14,808 rehabilitation beds in special units surveyed in certified nursing facilities in the U.S. in 2007. This was less than one percent of the total certified nursing facility beds in the U.S. There were 6,671 ventilator beds reported in special units in 2007, and these beds had increased by 20 percent over 2001. There were 1201 dialysis unit beds surveyed in 2007.

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

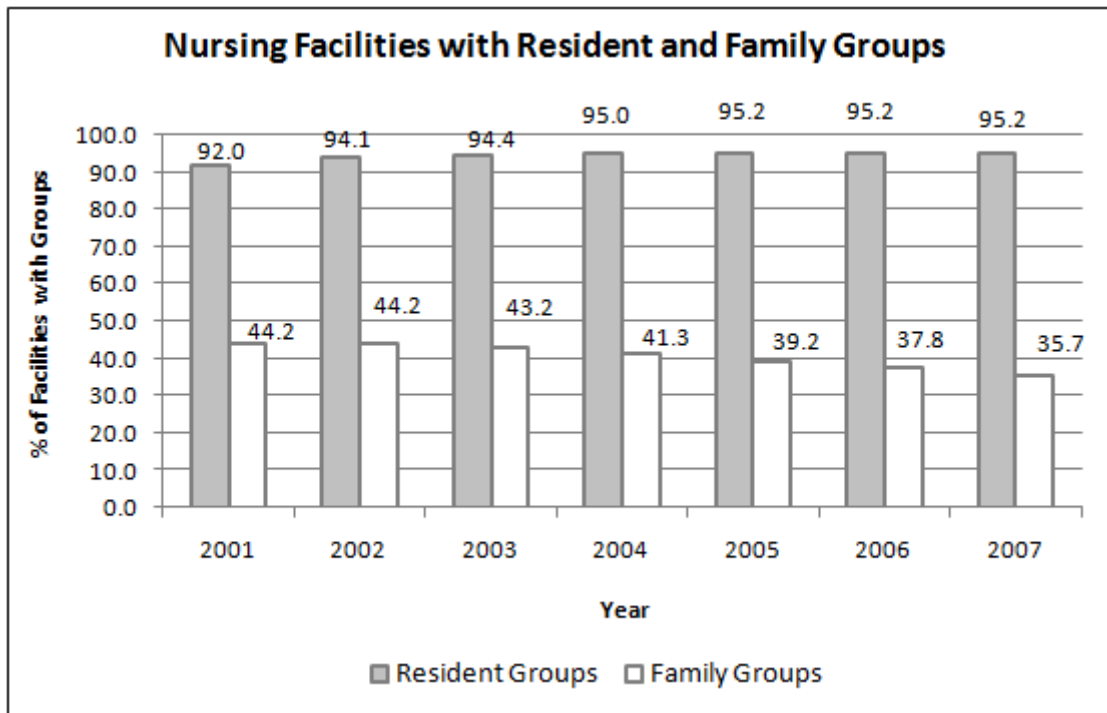
**TABLE 10**  
**TOTAL NUMBER OF SPECIAL CARE BEDS IN CERTIFIED NURSING FACILITIES IN THE U.S.**

State	Rehabilitation							Ventilator							Dialysis							
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007	
AK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AL	327	316	356	259	451	325	245	17	41	17	17	0	17	0	0	20	0	0	0	0	0	0
AR	184	401	378	487	363	226	169	7	7	0	7	7	7	10	0	0	0	0	0	0	2	0
AZ	209	225	312	27	263	168	271	126	136	200	205	225	242	194	0	0	0	5	0	16	38	
CA	2,151	1,902	1,456	1,618	1,909	1,612	1,046	1,446	1,640	2,102	2,223	2,129	2,015	1,867	177	99	10	5	7	17	20	
CO	153	1	141	163	237	190	432	16	49	37	43	34	53	43	1	1	1	0	0	0	315	
CT	1,046	1,089	1,420	910	1,147	1,203	1,157	45	66	66	42	60	62	75	4	3	4	0	0	10	0	
DC	0	0	0	36	0	0	0	17	0	0	0	0	0	12	0	0	0	0	0	0	0	
DE	0	15	0	15	15	15	35	35	41	11	1	17	17	17	0	0	0	0	1	1	0	
FL	720	416	752	703	680	561	512	207	216	218	271	216	288	208	34	0	2	212	196	318	325	
GA	176	277	243	263	187	227	365	0	2	2	0	0	0	1	2	1	1	0	0	0	0	
HI	0	10	10	10	10	0	0	4	16	18	18	10	37	44	0	10	10	10	10	0	0	
IA	205	143	124	97	114	147	109	5	27	81	16	16	15	16	6	0	0	105	6	0	8	
ID	90	87	86	189	181	128	135	0	4	4	4	5	5	5	0	10	64	0	0	0	0	
IL	687	686	1,455	537	604	952	934	544	499	413	481	475	723	528	43	60	87	106	82	253	305	
IN	363	265	416	396	113	148	206	114	67	144	108	101	134	122	0	143	142	0	16	0	0	
KS	92	117	50	125	50	110	48	0	0	18	0	18	24	18	0	1	0	0	0	0	0	
KY	70	0	47	18	34	116	50	80	77	122	119	97	116	79	0	0	0	0	0	0	0	
LA	34	33	19	243	43	43	65	156	147	196	193	189	255	188	1	8	1	2	1	1	2	
MA	576	509	597	475	398	433	590	157	116	76	26	36	36	41	2	0	0	0	0	0	3	
MD	132	255	170	112	109	160	132	63	133	97	23	124	120	163	0	0	30	50	0	6	54	
ME	0	78	30	30	18	36	132	0	0	0	0	67	67	0	0	0	0	0	0	0	0	
MI	316	316	320	369	238	314	148	162	171	177	305	186	208	208	0	0	0	102	1	1	1	
MN	813	996	1,003	861	1,013	1,164	1,038	28	31	19	34	32	36	27	0	0	6	0	2	2	0	
MO	368	429	421	500	415	391	500	4	55	25	45	10	10	0	6	7	7	32	11	36	22	
MS	168	0	0	0	0	0	0	0	0	0	0	0	0	60	0	0	0	0	0	0	0	
MT	42	34	22	22	22	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NC	0	0	20	55	20	70	36	126	21	115	87	66	40	89	0	0	0	0	0	0	0	
ND	0	16	16	16	16	16	16	8	0	0	0	0	0	0	0	0	0	0	0	0	0	
NE	182	82	76	128	191	124	112	22	71	71	64	72	76	82	0	0	0	0	0	0	0	
NH	72	131	111	133	63	133	0	12	0	0	0	6	7	0	50	0	0	0	0	0	0	
NJ	236	214	146	118	131	180	152	157	195	157	163	188	217	315	0	0	0	0	0	0	10	
NM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NV	78	16	130	0	138	138	32	44	38	54	52	110	114	82	0	0	0	0	0	0	0	
NY	1,503	1,442	1,469	1,827	2,308	2,987	2,700	570	746	793	925	936	1,055	540	95	30	30	30	58	64	57	
OH	943	1,017	852	963	740	659	675	571	673	689	577	488	681	460	0	27	37	3	8	28	22	
OK	32	38	191	84	36	0	36	4	21	39	9	58	54	25	0	0	9	8	0	0	0	
OR	173	60	15	30	128	95	156	0	4	0	0	5	0	2	2	0	0	0	0	0	1	
PA	730	572	1,284	1,175	735	1,142	1,134	361	384	472	464	531	510	548	0	29	0	6	0	8	6	
RI	420	263	186	151	355	328	375	11	11	10	0	10	10	10	2	2	0	0	0	1	0	
SC	14	0	0	0	23	6	0	16	20	20	0	23	20	20	0	0	0	0	1	0	0	
SD	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TN	165	96	24	29	29	29	82	15	8	36	18	0	0	16	0	2	0	0	0	0	0	
TX	211	371	240	65	139	183	205	108	121	138	147	82	150	156	2	3	4	7	9	7	10	
UT	28	46	30	40	0	54	129	0	21	37	19	0	0	0	0	0	0	0	0	1	1	
VA	206	100	56	94	267	103	103	133	167	126	154	260	149	119	0	0	0	0	120	0	0	
VT	21	0	40	40	40	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
WA	317	218	164	41	110	179	347	94	127	133	157	140	160	191	1	0	0	0	1	1	1	
WI	382	297	474	379	300	352	199	69	44	54	77	39	38	90	10	10	10	10	0	10	0	
WV	0	0	0	16	16	0	0	6	4	4	0	0	0	0	3	0	0	0	0	0	0	
WY	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4	0	0	0	0	0	
US	14,635	13,579	15,352	13,859	14,399	15,509	14,808	5,560	6,218	6,991	7,094	7,068	7,768	6,671	441	470	455	693	530	783	1201	

## 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 92 percent in 2001 to 95.2 percent in 2007.

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 44.2 percent of facilities reported family groups in 2001, but this decreased to 35.7 percent by 2007.



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

State	Resident Groups							Family Groups						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	0.0	75.0	78.6	83.3	73.3	92.3	86.7	0.0	50.0	50.0	41.7	53.3	38.5	46.7
AL	95.4	95.9	94.9	95.5	96.3	95.9	96.3	59.0	62.4	62.5	61.9	63.2	66.9	61.5
AR	91.8	94.6	92.5	94.5	94.5	93.2	94.9	57.3	54.4	53.1	50.6	47.7	44.1	41.4
AZ	90.8	96.2	98.2	98.3	96.6	95.5	94.4	40.0	35.1	29.5	29.6	18.4	18.9	17.7
CA	91.6	91.9	92.4	93.4	93.4	93.2	93.7	43.7	43.4	42.2	39.9	37.1	35.1	32.1
CO	94.4	93.9	93.7	94.2	94.1	95.0	93.8	54.2	54.0	53.9	51.0	44.3	43.1	42.1
CT	99.2	97.5	100.0	100.0	99.6	100.0	100.0	61.5	58.6	61.2	58.8	58.6	56.5	51.5
DC	88.9	95.0	88.2	90.0	95.0	95.0	100.0	72.2	85.0	64.7	75.0	75.0	80.0	83.3
DE	92.1	93.9	97.3	92.3	97.6	92.9	86.4	52.6	51.5	51.4	51.3	43.9	35.7	27.3
FL	94.3	95.7	95.6	97.1	96.8	96.4	97.9	67.9	65.2	65.3	63.3	60.4	56.9	53.0
GA	96.0	95.7	95.0	95.7	94.7	94.9	96.0	52.8	50.8	48.7	48.3	46.7	43.3	39.9
HI	88.6	83.9	93.8	91.4	89.7	91.3	90.2	60.0	51.6	53.1	48.6	43.6	43.5	51.2
IA	89.5	89.6	90.5	89.6	91.3	89.9	84.7	18.6	19.5	17.8	15.0	16.1	19.1	14.2
ID	86.3	91.5	88.0	95.6	88.7	90.5	90.0	35.6	28.2	36.0	27.9	22.5	18.9	20.0
IL	95.8	95.7	96.1	96.8	97.1	97.4	96.8	43.0	43.2	44.1	42.6	39.9	38.4	35.7
IN	92.1	93.3	94.2	94.5	94.9	94.2	94.4	29.2	29.7	25.7	25.0	25.6	22.3	19.5
KS	90.0	94.4	94.7	95.5	96.6	96.8	97.6	31.4	31.9	32.7	31.5	27.8	28.0	29.0
KY	90.8	94.6	92.9	93.0	94.9	95.2	95.8	44.1	42.5	40.4	36.8	37.3	34.4	33.7
LA	87.0	89.8	91.1	92.8	94.5	93.4	93.3	23.9	26.8	26.0	26.3	28.7	26.3	27.0
MA	95.7	93.9	94.3	95.0	95.6	95.1	95.1	48.9	50.3	49.5	48.3	48.4	45.8	40.4
MD	89.1	91.3	94.1	92.0	94.7	94.2	94.9	64.2	68.6	68.2	61.5	68.9	65.8	62.0
ME	13.4	93.8	95.3	96.3	96.2	95.5	94.4	2.7	30.1	32.1	26.6	30.2	28.2	25.9
MI	98.3	98.5	99.3	97.9	97.3	97.8	98.8	51.4	53.2	50.7	45.5	40.8	39.4	39.0
MN	99.5	98.9	98.4	98.7	98.9	98.9	99.2	64.2	61.7	62.9	54.5	52.8	55.6	54.8
MO	91.3	90.7	90.7	92.9	94.1	92.9	93.4	36.0	31.8	32.3	29.8	27.5	26.1	26.1
MS	89.7	92.7	92.3	94.9	93.9	94.6	95.0	51.9	57.1	60.9	60.1	53.5	54.0	50.0
MT	92.9	89.2	91.3	93.1	93.2	92.9	95.3	31.8	33.8	29.3	29.9	34.1	31.8	25.9
NC	94.5	95.5	94.7	95.8	95.0	96.2	97.1	46.2	45.9	44.7	42.7	38.2	39.8	35.5
ND	95.3	97.5	96.3	95.1	98.7	95.1	96.3	20.0	21.0	20.7	14.6	14.1	13.6	13.8
NE	92.0	95.5	96.3	96.7	97.2	97.3	96.6	34.6	33.0	30.2	26.8	27.0	28.1	25.5
NH	94.2	96.8	97.3	96.1	96.1	96.1	95.1	37.7	45.2	48.6	43.4	42.1	39.5	39.5
NJ	96.7	96.2	96.1	96.5	95.9	96.0	96.0	50.0	48.8	45.3	45.2	37.2	35.7	32.2
NM	89.2	91.2	92.2	90.8	94.1	97.1	95.7	47.7	55.9	45.5	49.2	48.5	50.0	41.4
NV	91.3	90.9	93.2	87.8	89.1	91.5	93.8	43.5	43.2	45.5	29.3	28.3	29.8	27.1
NY	97.7	98.4	98.9	99.7	99.2	99.1	98.7	63.9	62.9	60.4	59.7	60.3	59.8	58.0
OH	93.9	95.0	95.5	96.4	96.1	95.9	95.6	37.0	37.2	36.7	35.6	28.7	30.7	27.3
OK	92.5	94.5	95.0	95.9	96.5	96.3	96.5	22.6	28.3	23.7	21.3	17.1	16.2	18.0
OR	79.8	95.6	94.7	97.0	96.0	97.7	97.8	35.7	36.3	39.1	38.8	29.0	24.8	26.9
PA	91.9	92.7	93.5	94.3	93.9	94.2	93.7	42.7	40.8	39.2	37.9	36.8	35.5	31.6
RI	93.1	97.6	94.4	94.9	96.4	97.7	96.5	27.6	27.7	22.2	25.6	31.0	33.3	38.8
SC	88.7	90.8	92.3	94.2	95.1	95.2	93.5	52.7	45.4	42.3	43.9	46.9	42.5	42.6
SD	97.2	98.0	99.1	98.0	97.2	98.1	99.1	42.5	35.6	35.2	34.0	32.7	32.7	31.1
TN	89.1	91.4	93.1	93.3	94.2	94.9	94.0	56.5	59.6	57.2	53.5	52.6	45.3	43.5
TX	86.5	92.4	93.1	93.9	94.3	94.3	94.5	43.3	43.7	43.5	43.7	41.2	38.1	37.2
UT	83.3	86.5	85.4	84.0	84.0	85.6	86.9	34.5	29.2	25.6	22.2	24.7	23.3	22.6
VA	93.6	94.6	95.9	95.0	96.4	95.9	94.0	45.4	45.2	43.5	38.6	37.9	35.8	36.6
VT	97.5	97.3	100.0	100.0	100.0	100.0	100.0	27.5	24.3	22.0	23.7	25.0	22.5	26.3
WA	93.6	94.2	93.8	93.3	95.1	95.8	96.6	38.2	36.3	34.9	36.7	33.7	32.1	32.4
WI	95.9	95.3	93.7	95.1	93.9	94.9	96.1	37.7	37.0	33.0	32.2	30.1	29.1	28.1
WV	88.6	88.6	87.7	90.7	87.5	88.1	90.1	43.0	46.3	46.9	47.5	46.7	43.1	43.0
WY	94.1	91.4	94.3	91.7	91.7	91.4	92.1	35.3	37.1	45.7	33.3	36.1	34.3	31.6
US	92.0	94.1	94.4	95.0	95.2	95.2	95.2	44.2	44.2	43.2	41.3	39.2	37.8	35.7

## **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) is the most well established case mix approach tested 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

Dor (1989), Cohen and Dubay (1990), and by 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

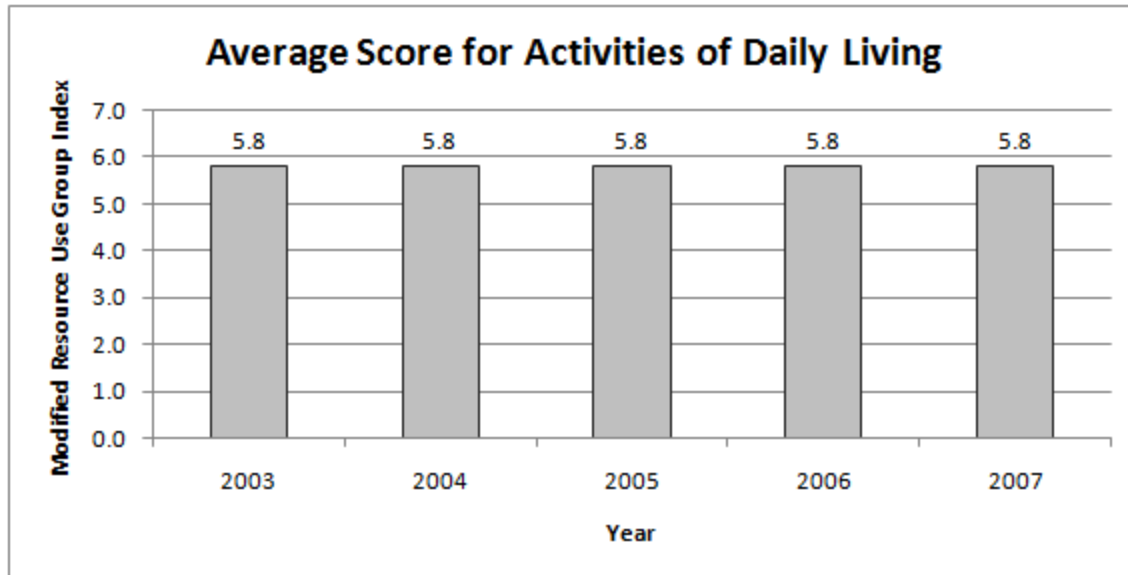
#### Assistance with Activities of Daily Living

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 constant at 1.7 for all facilities surveyed in the 2003-2007 period.

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.

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.

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 5.8 in the 2003-2007 period. 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*					Toileting*					Transferring*					Group Index**				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
AK	1.8	1.8	1.8	1.8	1.7	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	6.1	6.3	6.2	6.0	6.0
AL	1.8	1.8	1.7	1.7	1.7	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	6.0	6.1	6.0	6.1	6.1
AR	1.7	1.6	1.6	1.6	1.6	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	5.7	5.7	5.7	5.7	5.7
AZ	1.6	1.6	1.6	1.6	1.6	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	5.7	5.7	5.7	5.8	5.8
CA	1.8	1.8	1.8	1.8	1.8	2.3	2.3	2.3	2.3	2.3	2.1	2.1	2.2	2.2	2.2	6.2	6.2	6.2	6.2	6.2
CO	1.6	1.6	1.6	1.6	1.6	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	5.6	5.5	5.6	5.5	5.5
CT	1.6	1.6	1.6	1.6	1.6	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	5.6	5.6	5.6	5.6	5.7
DC	1.7	1.7	1.8	1.7	1.7	2.3	2.2	2.3	2.2	2.2	2.1	2.1	2.2	2.1	2.2	6.1	6.1	6.2	6.1	6.1
DE	1.7	1.7	1.7	1.7	1.6	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.0	2.1	2.1	6.0	5.9	5.9	6.0	5.9
FL	1.7	1.7	1.7	1.7	1.7	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	6.0	6.0	6.0	6.0	6.1
GA	1.7	1.7	1.7	1.7	1.7	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	6.0	6.0	6.0	6.0	6.0
HI	1.9	1.9	1.9	1.9	2.0	2.3	2.3	2.4	2.4	2.4	2.2	2.2	2.2	2.2	2.3	6.4	6.4	6.5	6.4	6.7
IA	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	5.4	5.4	5.4	5.4	5.4
ID	1.6	1.6	1.6	1.6	1.6	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	5.7	5.7	5.6	5.7	5.7
IL	1.5	1.5	1.5	1.5	1.6	1.9	1.9	2.0	1.9	1.9	1.8	1.8	1.9	1.9	1.9	5.3	5.3	5.3	5.4	5.4
IN	1.7	1.7	1.7	1.7	1.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	5.7	5.7	5.7	5.7	5.7
KS	1.6	1.6	1.6	1.6	1.5	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	5.4	5.4	5.4	5.4	5.4
KY	1.8	1.8	1.8	1.8	1.7	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	6.3	6.2	6.2	6.1	6.1
LA	1.7	1.7	1.7	1.7	1.7	2.1	2.1	2.1	2.1	2.1	2.0	2.0	1.9	1.9	2.0	5.8	5.8	5.7	5.7	5.8
MA	1.6	1.6	1.6	1.6	1.6	2.1	2.1	2.2	2.1	2.2	2.0	2.0	2.0	2.0	2.0	5.8	5.8	5.8	5.8	5.8
MD	1.8	1.7	1.7	1.8	1.7	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	6.2	6.2	6.2	6.2	6.2
ME	1.6	1.6	1.6	1.6	1.6	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	6.0	5.9	5.9	5.9	5.9
MI	1.6	1.6	1.6	1.6	1.6	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	5.8	5.7	5.8	5.8	5.8
MN	1.6	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	5.5	5.4	5.4	5.4	5.4
MO	1.6	1.6	1.6	1.6	1.6	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	5.5	5.5	5.5	5.4	5.5
MS	1.7	1.7	1.7	1.7	1.7	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	5.8	5.8	5.8	5.8	5.8
MT	1.5	1.5	1.5	1.6	1.6	2.0	2.0	1.9	2.0	1.9	1.9	1.8	1.8	1.8	1.8	5.3	5.3	5.3	5.4	5.4
NC	1.7	1.7	1.7	1.7	1.7	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.1	2.1	6.2	6.2	6.2	6.1	6.1
ND	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.8	5.4	5.4	5.4	5.3	5.2
NE	1.6	1.6	1.6	1.6	1.6	2.1	2.0	2.0	2.1	2.0	2.0	1.9	1.9	1.9	1.9	5.6	5.6	5.6	5.6	5.6
NH	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	5.4	5.4	5.4	5.5	5.5
NJ	1.7	1.6	1.6	1.6	1.6	2.2	2.1	2.1	2.2	2.1	2.0	2.0	2.0	2.1	2.1	5.9	5.8	5.8	5.9	5.8
NM	1.5	1.6	1.6	1.7	1.7	2.0	2.1	2.1	2.1	2.1	1.9	2.0	2.0	2.0	2.0	5.5	5.7	5.7	5.8	5.9
NV	1.6	1.7	1.6	1.6	1.7	2.1	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	5.8	5.9	5.8	5.7	5.9
NY	1.8	1.8	1.7	1.7	1.7	2.2	2.2	2.2	2.1	2.1	2.0	2.1	2.1	2.1	2.1	6.0	6.0	6.0	6.0	6.0
OH	1.7	1.7	1.7	1.7	1.7	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	5.9	5.9	5.9	5.9	5.9
OK	1.6	1.6	1.6	1.6	1.6	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	5.6	5.6	5.6	5.5	5.5
OR	1.7	1.7	1.7	1.6	1.6	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	6.0	6.0	6.0	5.9	5.9
PA	1.7	1.7	1.7	1.6	1.6	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	6.0	6.0	5.9	5.9	5.9
RI	1.5	1.6	1.5	1.6	1.6	2.0	2.0	2.0	2.1	2.0	1.8	1.9	1.9	1.9	1.9	5.3	5.5	5.5	5.5	5.5
SC	1.8	1.8	1.8	1.8	1.8	2.4	2.4	2.4	2.3	2.4	2.2	2.2	2.2	2.2	2.2	6.4	6.4	6.4	6.3	6.4
SD	1.5	1.5	1.5	1.5	1.5	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	5.3	5.3	5.3	5.2	5.2
TN	1.8	1.8	1.8	1.8	1.8	2.3	2.3	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	6.2	6.2	6.2	6.1	6.1
TX	1.6	1.6	1.6	1.6	1.6	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	5.8	5.7	5.7	5.7	5.7
UT	1.6	1.7	1.7	1.6	1.7	2.0	2.0	2.0	2.1	2.0	1.9	1.9	1.9	2.0	1.9	5.5	5.6	5.6	5.7	5.6
VA	1.9	1.8	1.8	1.8	1.8	2.3	2.3	2.3	2.2	2.3	2.2	2.2	2.2	2.1	2.1	6.4	6.3	6.3	6.2	6.2
VT	1.6	1.6	1.6	1.6	1.6	2.1	2.1	2.1	2.2	2.2	2.0	2.0	2.0	2.0	2.1	5.8	5.7	5.7	5.8	5.8
WA	1.7	1.6	1.7	1.6	1.6	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	5.9	5.9	5.9	5.9	5.8
WI	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	5.5	5.5	5.5	5.5	5.5
WV	1.7	1.7	1.7	1.7	1.7	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	5.9	5.9	5.9	5.9	5.9
WY	1.5	1.6	1.5	1.5	1.5	1.9	2.0	1.9	2.0	2.0	1.8	1.9	1.9	1.9	1.9	5.3	5.5	5.4	5.4	5.4
US	1.7	1.7	1.7	1.7	1.7	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	5.8	5.8	5.8	5.8	5.8

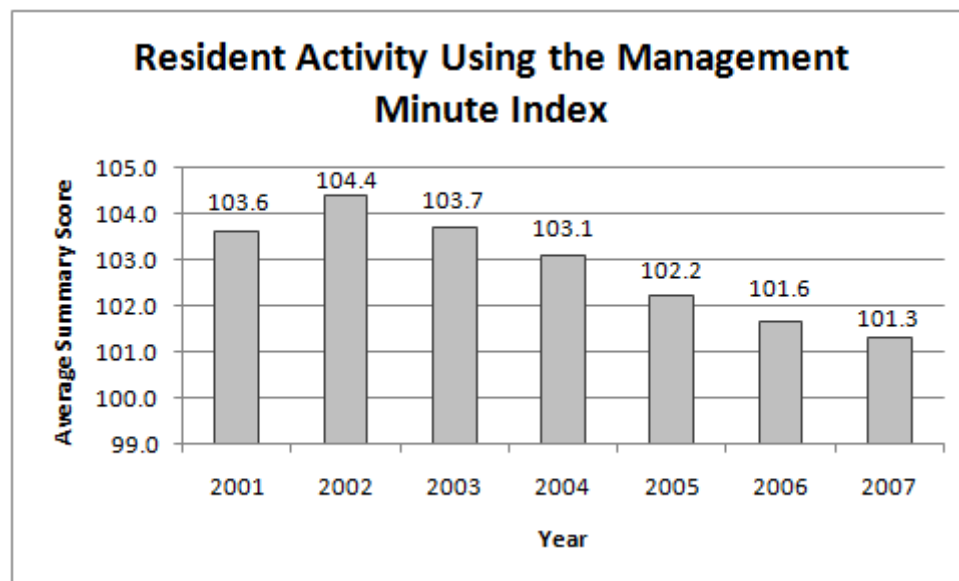
\* Scale is 1-3 with a score of 3 needing the most assistance.

\*\*Average resident dependence summary score for eating, toileting, and transferring.

## 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 103.6 in 2001, increased to 104.4 in 2002 and then declined to 101.3 in 2007 for all facilities surveyed in the U.S. This index allows for comparisons of acuity differences in facilities across states, which ranged from 76.3 in Nebraska to 129.9 in Hawaii in 2007. This shows a wide variation in levels across states.



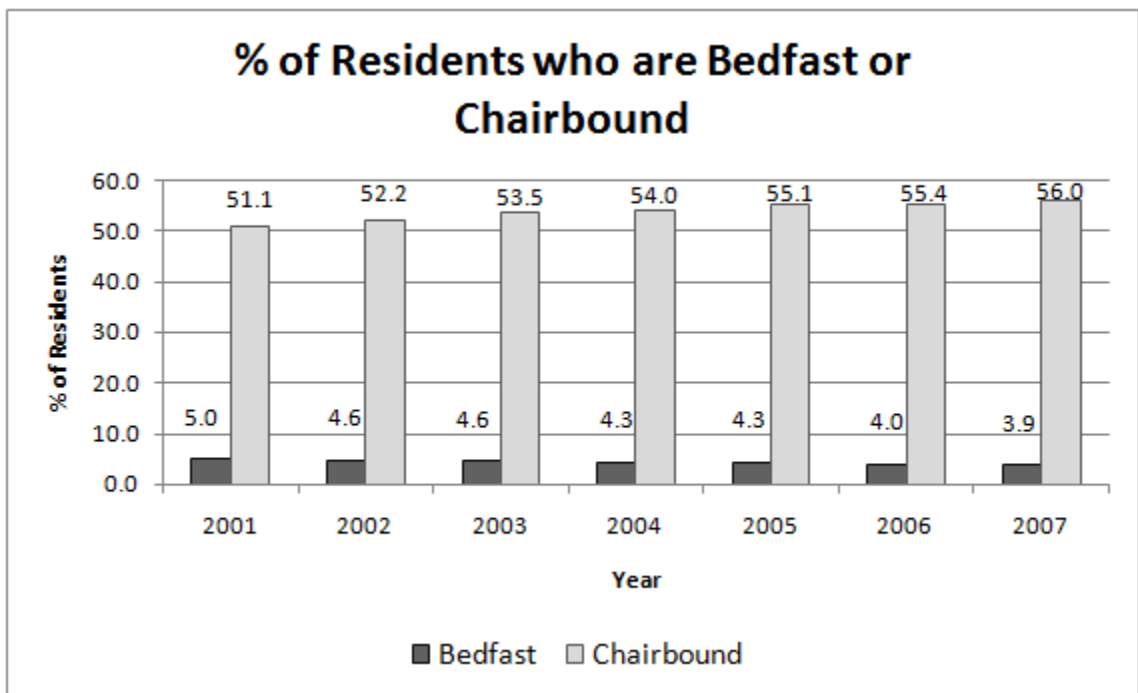
**TABLE 13**  
**AVERAGE SUMMARY SCORE FOR RESIDENT ACUITY**  
**USING THE MANAGEMENT MINUTE INDEX**

<b>State</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
AK	98.8	105.5	94.2	99.7	85.3	42.0	92.7
AL	107.4	107.6	106.7	106.0	104.9	105.8	106.3
AR	107.3	107.3	102.9	104.2	101.2	102.2	100.1
AZ	100.8	100.2	100.9	98.3	101.5	98.2	93.3
CA	113.1	113.3	111.5	111.6	111.2	109.5	110.4
CO	91.3	90.0	90.5	89.2	88.3	90.6	90.2
CT	93.3	93.8	96.0	93.1	93.0	89.8	88.5
DC	120.3	118.1	103.0	99.7	113.0	102.3	107.1
DE	92.9	100.7	106.8	101.8	100.1	93.9	95.3
FL	103.6	105.9	106.7	107.1	105.4	107.7	108.0
GA	111.8	114.5	115.0	116.0	115.6	116.0	115.3
HI	123.5	123.8	125.5	114.4	111.9	120.4	129.9
IA	75.0	78.4	76.8	79.8	77.3	77.0	77.3
ID	94.5	96.1	101.2	100.1	96.9	90.2	87.9
IL	85.4	85.0	84.5	84.4	86.8	88.2	88.7
IN	94.1	95.6	93.6	94.7	93.6	95.4	96.5
KS	89.5	88.9	88.0	87.3	87.7	82.9	83.3
KY	111.7	113.2	111.2	111.7	108.8	107.1	106.8
LA	102.0	107.0	111.0	109.4	108.2	107.1	106.3
MA	95.0	95.4	95.3	96.7	93.5	94.8	97.0
MD	113.2	116.7	113.2	114.1	113.5	112.6	110.8
ME	110.1	111.0	107.2	108.0	101.3	101.1	98.5
MI	97.5	99.6	100.6	96.2	97.6	97.9	98.0
MN	94.5	97.5	95.7	94.7	92.4	91.8	93.5
MO	90.6	91.5	89.3	90.1	86.9	89.4	89.6
MS	112.4	114.5	113.2	115.5	112.0	113.3	113.8
MT	85.3	74.2	77.9	83.3	82.8	85.7	81.8
NC	114.3	114.1	114.5	113.7	116.7	114.9	114.9
ND	90.0	89.9	83.7	83.7	76.3	82.7	89.2
NE	76.8	77.6	83.6	81.1	78.5	76.6	76.3
NH	87.5	84.3	87.0	91.4	90.4	90.9	84.5
NJ	97.6	96.7	96.7	95.3	95.0	96.7	96.1
NM	95.4	96.0	94.6	99.9	102.2	105.3	106.2
NV	108.7	108.6	113.2	108.0	110.1	101.0	108.5
NY	119.2	117.4	115.7	114.6	112.6	110.9	108.6
OH	107.3	105.8	103.7	102.0	100.4	98.8	97.8
OK	94.4	95.3	94.7	97.1	97.8	97.8	97.1
OR	109.8	104.2	102.6	107.3	98.4	99.3	93.2
PA	107.2	106.3	106.4	107.7	105.6	104.5	103.4
RI	84.0	79.5	79.0	76.7	82.9	82.0	78.9
SC	118.8	126.7	125.8	123.8	127.3	127.0	127.4
SD	103.6	88.7	93.3	96.3	90.8	88.3	87.8
TN	111.4	112.5	115.7	112.4	112.1	111.9	111.6
TX	106.4	109.3	104.7	102.9	100.8	99.9	99.5
UT	94.2	93.9	96.7	98.6	93.9	91.9	101.7
VA	122.8	123.5	115.8	113.0	111.3	110.5	108.8
VT	103.1	103.5	99.7	107.8	101.6	105.3	106.4
WA	108.8	107.7	104.8	99.2	96.4	95.4	94.8
WI	87.8	88.3	88.4	84.8	83.8	82.9	84.2
WV	107.9	109.7	107.3	111.5	107.0	109.6	101.8
WY	89.4	81.1	79.2	89.3	78.5	94.3	79.1
<b>US</b>	<b>103.6</b>	<b>104.4</b>	<b>103.7</b>	<b>103.1</b>	<b>102.2</b>	<b>101.6</b>	<b>101.3</b>

## Residents Who Are Bedfast or Chair Bound

Table 14 shows the percent of total residents who were bedfast in the 2001 to 2007 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 5.0 in 2001 to 3.9 in 2007 for all facilities surveyed. In 2007, the average percent of bedfast residents ranged from 0.9 percent in Minnesota and South Dakota to 8.4 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 51.1 to 56.0 percent in the U.S. in 2001-2007 (See Table 14). The percent of chair bound residents ranged from 38.6 percent in Rhode Island to 65.1 percent in Florida in 2007.



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

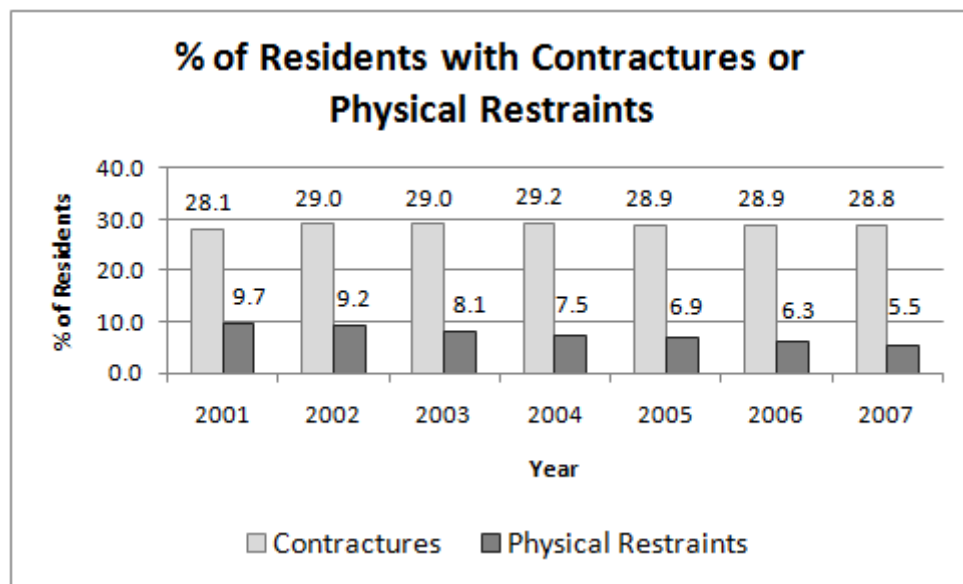
State	Bedfast							Chairbound						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	2.6	3.1	7.3	2.4	3.8	0.3	2.6	53.4	56.0	59.8	65.5	53.0	36.8	50.0
AL	8.9	8.4	8.8	7.0	7.9	7.3	7.1	55.6	54.5	53.9	56.2	57.5	56.6	58.0
AR	7.6	6.0	5.8	5.0	5.9	4.6	4.7	53.2	54.3	54.3	54.8	52.7	54.7	55.1
AZ	4.0	4.1	3.8	3.4	3.1	3.1	2.9	53.7	54.7	56.7	54.8	62.6	59.7	60.0
CA	7.3	6.5	6.6	6.4	6.3	6.0	5.9	54.1	56.0	56.3	55.7	56.4	55.7	56.7
CO	2.9	2.4	2.6	2.8	2.6	2.7	2.2	49.6	48.4	49.9	51.4	50.6	51.2	52.7
CT	2.2	1.9	1.8	1.7	2.3	1.8	1.8	47.8	49.2	48.3	50.3	50.4	49.1	49.5
DC	9.7	7.3	3.5	5.5	2.6	3.1	2.7	50.2	57.2	53.5	65.2	63.2	58.9	63.2
DE	3.6	2.8	3.9	5.8	3.2	3.8	4.5	52.2	51.6	54.6	53.0	60.2	57.3	58.7
FL	4.2	3.6	3.6	3.2	3.6	3.4	3.3	57.8	58.7	60.6	62.9	63.8	64.9	65.1
GA	7.2	6.7	6.1	6.3	6.4	6.6	6.7	56.2	54.7	53.7	52.7	56.0	56.0	57.3
HI	9.2	9.6	9.2	7.7	8.0	5.6	6.9	59.2	55.7	53.2	56.3	57.8	61.8	62.6
IA	1.6	1.5	1.7	1.8	1.4	1.6	1.5	46.1	47.2	47.3	47.0	47.4	45.1	45.4
ID	3.8	2.8	2.4	2.6	3.1	2.6	2.1	55.2	55.4	54.5	60.5	54.9	56.0	53.3
IL	2.5	2.5	2.2	2.4	2.2	2.0	1.9	44.7	47.3	48.8	50.4	51.3	51.8	52.0
IN	4.0	3.5	3.5	3.7	3.4	3.0	3.3	50.5	54.3	54.4	56.2	56.5	56.0	57.1
KS	2.2	2.1	2.1	1.9	1.8	1.8	1.8	47.6	48.6	49.1	50.4	51.9	51.4	51.0
KY	10.1	10.8	9.4	9.7	8.7	8.0	7.5	50.6	51.8	50.5	52.0	52.2	52.5	53.4
LA	11.3	9.9	10.3	10.5	10.5	8.5	8.4	46.1	49.7	50.6	50.5	53.4	54.7	53.5
MA	2.3	2.2	2.1	2.1	2.2	2.3	2.1	44.0	44.8	45.8	46.9	44.8	45.7	45.0
MD	4.4	4.8	4.6	4.8	4.8	4.4	4.7	51.7	53.6	54.6	55.9	55.3	58.8	60.3
ME	4.8	4.6	4.4	4.2	4.8	4.0	3.5	57.9	58.7	58.1	57.8	57.1	59.3	58.7
MI	3.2	2.6	2.8	2.5	2.7	2.9	3.0	54.8	56.7	57.9	57.4	58.9	60.4	62.4
MN	1.2	1.0	0.9	1.1	1.2	0.9	0.9	51.6	52.9	52.9	52.6	54.0	54.8	55.7
MO	3.2	3.3	2.9	2.2	2.2	2.1	2.0	52.4	52.4	52.9	53.5	52.7	52.8	55.1
MS	9.8	9.2	11.0	7.9	9.2	7.3	6.8	55.2	54.7	54.8	56.1	56.5	57.1	56.7
MT	2.1	1.8	1.5	2.1	2.8	2.5	2.8	47.6	45.7	46.2	48.1	47.4	45.1	46.3
NC	8.4	7.7	9.0	8.6	8.9	8.1	7.8	54.0	56.0	53.9	54.9	55.1	53.8	56.1
ND	1.6	1.3	1.3	1.6	1.5	1.9	1.3	54.2	54.6	55.9	55.5	57.2	56.2	55.4
NE	1.9	1.3	1.4	1.3	1.2	1.2	1.1	49.6	51.9	52.3	51.7	52.8	52.1	51.4
NH	2.7	2.3	2.1	2.5	2.1	2.2	1.9	42.0	43.9	44.9	44.5	45.2	47.6	46.3
NJ	3.7	3.6	3.5	3.4	3.3	3.1	3.0	53.4	56.0	55.1	57.0	57.3	58.9	59.7
NM	3.9	3.0	1.9	2.6	2.6	3.1	1.9	53.0	51.8	53.6	50.4	60.7	57.6	59.8
NV	7.2	5.2	6.0	3.5	5.4	7.4	6.6	58.2	58.9	55.2	56.4	58.5	57.9	60.6
NY	3.3	2.8	2.5	2.4	2.4	2.3	2.1	61.2	61.1	60.6	60.9	61.1	61.0	60.4
OH	4.3	3.8	3.9	3.7	3.5	3.6	3.5	51.6	52.1	52.6	53.9	53.2	52.3	51.8
OK	7.1	5.6	6.0	5.8	6.6	6.2	6.1	46.8	50.1	51.4	51.5	53.6	54.2	54.7
OR	6.3	6.7	5.7	5.0	5.8	5.8	4.9	56.3	53.6	58.3	61.3	59.4	58.5	61.6
PA	4.8	4.9	4.6	4.3	4.1	3.8	3.8	51.8	52.8	54.4	55.7	55.6	55.8	56.7
RI	2.2	1.7	1.2	1.1	1.7	1.6	1.7	39.6	37.9	40.6	37.3	37.8	39.6	38.6
SC	7.0	6.6	6.5	5.4	5.8	5.1	5.5	55.7	58.7	59.7	59.4	62.8	60.2	63.2
SD	1.2	1.1	1.4	1.2	1.2	0.6	0.9	58.6	55.1	56.8	57.6	59.0	56.6	53.4
TN	9.4	8.1	8.0	7.5	7.4	6.9	6.6	50.5	52.7	51.8	54.6	53.9	55.4	56.6
TX	8.5	7.4	7.8	6.7	6.7	6.3	6.2	53.2	55.1	54.7	57.5	56.7	58.8	59.5
UT	3.6	3.5	2.3	2.8	3.4	3.0	2.6	44.0	43.4	46.7	47.1	47.8	44.4	46.1
VA	6.2	6.2	5.6	5.7	5.5	5.1	4.9	63.4	61.8	62.4	62.5	60.8	60.4	62.2
VT	4.7	3.2	4.0	4.3	2.8	3.5	3.3	48.6	51.8	51.1	50.0	53.1	51.9	50.7
WA	4.9	5.2	4.7	4.4	4.1	4.1	4.4	62.2	64.7	63.3	65.2	63.1	64.9	64.8
WI	1.8	1.5	1.5	1.6	1.5	1.7	1.6	53.1	54.9	55.5	55.5	55.8	58.4	57.6
WV	6.8	6.1	5.6	6.1	4.7	5.3	4.8	48.2	51.1	49.2	52.5	52.6	54.6	55.1
WY	3.0	2.0	1.4	4.5	2.0	1.6	2.2	44.3	49.8	51.1	46.8	41.7	48.3	42.8
<b>US</b>	<b>5.0</b>	<b>4.6</b>	<b>4.6</b>	<b>4.3</b>	<b>4.3</b>	<b>4.0</b>	<b>3.9</b>	<b>51.1</b>	<b>52.2</b>	<b>53.5</b>	<b>54.0</b>	<b>55.1</b>	<b>55.4</b>	<b>56.0</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 2001, 28.1 percent of residents were reported as having contractures and this increased to 28.8 percent in all facilities surveyed in 2007 (See Table 15). The average percentage reported ranged from 16.4 percent in New Jersey facilities to 55.8 percent in Alaska in 2007.

## 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 2001, 9.7 percent of facilities reported using such restraints but this declined to 5.5 percent in all facilities surveyed in 2007 (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 2007 ranged from 1.5 percent in Nebraska to 11.9 in Arkansas.

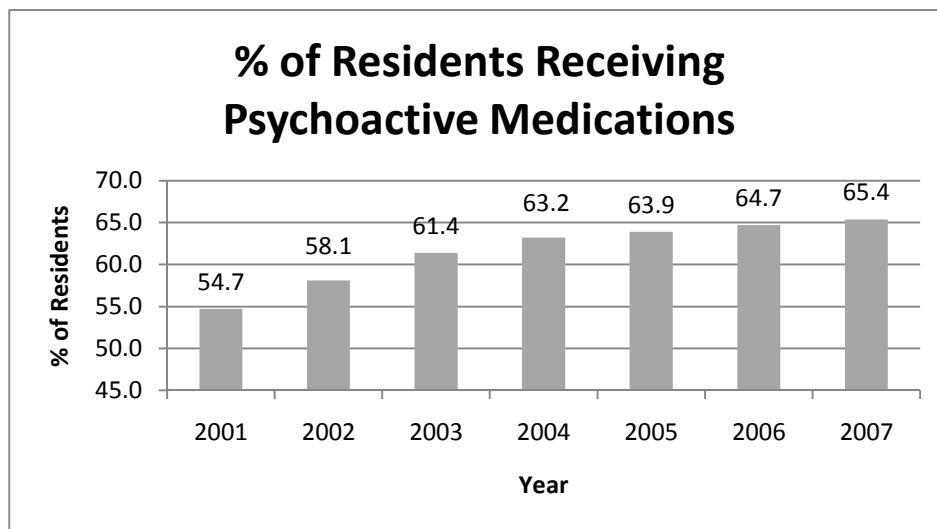


**TABLE 15**  
**PERCENT OF RESIDENTS**  
**WITH CONTRACTURES AND PHYSICAL RESTRAINTS**

State	Contractures							Physical Restraints						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	40.6	53.0	42.6	48.6	51.2	56.2	55.8	8.7	3.9	2.5	4.1	6.7	5.4	4.5
AL	32.8	35.6	34.8	35.9	35.2	33.9	35.3	5.1	4.7	4.7	5.0	4.5	4.2	2.8
AR	24.9	24.0	24.0	22.7	22.5	21.6	19.9	21.3	21.1	17.1	16.2	15.0	13.7	11.9
AZ	20.1	20.0	17.9	20.9	21.7	24.2	24.4	10.7	10.3	9.7	9.0	11.3	8.1	5.0
CA	25.6	27.5	27.3	27.5	27.7	27.2	28.1	16.8	15.7	14.1	14.0	13.5	12.9	11.0
CO	22.8	22.7	24.0	22.8	24.4	24.1	23.4	10.8	10.0	9.3	8.2	7.5	7.5	6.9
CT	18.0	18.8	19.2	17.5	17.7	18.3	18.4	11.5	10.5	10.3	9.1	7.8	6.1	5.0
DC	31.7	33.4	27.9	27.6	31.6	26.7	24.7	4.5	3.9	5.3	2.2	2.0	1.9	2.1
DE	32.1	29.8	27.7	24.5	24.7	28.2	29.4	3.0	4.7	3.9	2.6	3.2	4.4	5.0
FL	20.6	21.9	21.8	21.7	20.6	21.1	21.7	7.5	7.8	8.1	8.5	7.9	7.7	6.7
GA	28.9	32.8	33.3	34.1	34.5	35.3	34.1	10.4	9.9	9.6	9.2	7.3	6.5	5.6
HI	39.9	42.3	42.2	45.6	34.1	41.0	41.8	8.9	7.4	5.5	4.8	4.7	5.6	4.4
IA	32.7	32.0	33.5	34.1	33.5	33.0	33.5	3.5	3.5	3.2	2.8	2.6	2.5	2.3
ID	22.8	26.6	28.1	31.0	26.1	28.1	27.4	7.6	9.3	7.3	6.7	6.2	3.2	3.8
IL	23.2	23.2	24.3	24.6	24.6	26.7	28.0	5.6	5.1	4.7	4.8	4.4	4.4	4.2
IN	26.1	26.0	24.6	25.9	24.4	24.9	25.6	7.3	6.4	5.9	5.7	5.5	5.6	4.7
KS	29.1	29.3	30.3	32.7	31.5	30.3	28.8	5.2	4.9	5.1	4.2	2.9	2.2	2.6
KY	26.4	28.3	28.1	27.2	26.4	25.1	25.7	8.4	7.6	6.8	7.5	6.8	6.4	5.9
LA	29.9	34.9	36.2	37.1	37.4	38.6	35.7	19.5	18.7	18.1	16.0	14.0	12.5	11.0
MA	18.7	18.1	17.6	17.5	18.1	18.0	19.3	7.5	7.1	6.3	6.7	6.0	5.3	4.8
MD	23.8	24.1	23.9	24.2	25.3	25.8	22.8	10.0	9.9	9.7	8.3	6.8	5.3	4.2
ME	38.2	38.0	39.3	41.7	40.3	38.2	37.0	10.5	9.7	9.0	6.6	4.6	3.4	2.9
MI	26.3	25.8	25.7	27.3	26.1	27.4	27.8	6.8	7.2	6.7	6.1	5.8	5.4	4.8
MN	28.9	30.6	33.0	32.3	34.3	33.4	33.7	4.8	4.7	4.8	4.6	4.0	3.3	2.8
MO	23.1	22.0	22.4	22.6	23.2	23.0	22.7	7.2	6.8	6.6	5.7	6.3	6.1	5.5
MS	43.0	42.8	44.5	46.6	45.1	43.2	44.0	13.4	14.8	12.5	12.2	11.1	10.8	8.8
MT	32.2	30.7	35.2	36.2	37.9	35.7	38.3	6.2	2.8	3.7	2.9	2.7	2.5	2.4
NC	35.6	34.6	34.1	34.1	36.1	34.6	31.8	7.9	8.4	8.3	8.6	9.2	9.1	7.2
ND	41.6	43.8	40.0	39.2	42.6	37.9	38.0	6.2	3.7	2.6	2.6	2.4	2.7	2.2
NE	34.2	39.3	40.2	38.6	39.8	39.1	37.9	2.7	2.5	1.9	1.6	1.8	1.6	1.5
NH	33.0	33.3	28.7	31.5	32.1	33.0	30.3	4.1	5.2	4.7	4.5	3.2	2.5	2.2
NJ	19.1	18.3	17.2	16.7	15.4	15.9	16.4	6.1	6.1	5.8	5.9	5.6	5.3	4.9
NM	29.5	31.9	30.4	32.7	29.3	33.1	32.3	10.0	9.4	7.8	7.9	8.2	7.5	6.2
NV	29.2	27.9	36.2	33.9	33.5	30.5	30.8	13.5	13.2	9.9	8.8	7.9	6.4	9.5
NY	51.2	48.1	46.3	44.0	41.8	39.9	38.6	8.7	8.0	7.1	6.2	5.6	5.1	4.6
OH	41.6	41.2	39.7	39.8	38.1	38.8	36.1	8.9	7.9	7.5	6.8	6.1	5.8	5.6
OK	21.6	27.3	26.7	26.7	25.5	24.7	25.3	12.7	12.6	12.1	12.7	13.3	12.3	10.6
OR	27.1	28.6	29.5	31.7	28.7	32.7	30.0	12.7	11.8	10.5	9.3	7.3	6.0	4.2
PA	21.0	22.6	21.6	22.2	22.3	22.5	23.0	7.7	6.8	6.0	5.4	4.7	4.4	3.8
RI	24.0	21.1	22.1	19.0	19.5	21.6	21.6	6.2	5.9	3.1	4.7	3.7	3.3	2.7
SC	34.5	36.7	36.5	37.5	37.8	36.3	38.8	7.9	9.7	8.2	8.4	9.1	8.4	6.5
SD	51.2	49.1	50.1	51.6	50.8	50.3	49.0	10.0	7.8	5.7	4.7	4.2	4.0	2.5
TN	24.5	25.4	25.3	26.6	26.7	23.7	26.6	12.0	11.6	10.9	10.1	8.9	8.2	7.3
TX	22.8	24.4	24.5	23.8	24.6	24.9	24.6	17.9	17.2	11.2	8.6	6.9	5.9	5.3
UT	16.6	19.8	24.6	23.2	21.4	23.3	24.1	10.7	11.1	10.9	11.3	8.9	7.7	6.9
VA	28.2	28.3	27.0	26.5	27.7	28.2	30.5	7.9	6.7	5.4	5.5	4.5	3.5	3.0
VT	32.7	33.5	35.9	39.3	31.9	34.7	33.8	7.7	6.0	5.7	6.0	3.1	3.5	2.3
WA	31.1	36.2	36.9	36.4	34.9	35.3	38.0	12.8	8.1	6.5	4.4	3.6	2.9	3.3
WI	24.7	26.9	26.7	28.8	29.0	28.5	28.2	6.3	5.0	3.8	3.5	2.7	2.4	2.0
WV	41.4	43.3	40.2	42.4	39.9	38.3	38.9	7.5	7.1	5.7	4.7	4.2	3.4	3.4
WY	21.3	22.1	28.9	27.9	23.0	30.0	23.6	13.0	8.9	6.0	5.2	4.1	4.9	2.8
<b>US</b>	<b>28.1</b>	<b>29.0</b>	<b>29.0</b>	<b>29.2</b>	<b>28.9</b>	<b>28.9</b>	<b>28.8</b>	<b>9.7</b>	<b>9.2</b>	<b>8.1</b>	<b>7.5</b>	<b>6.9</b>	<b>6.3</b>	<b>5.5</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 2001, 54.7 percent of residents in facilities in the U.S. were reported to be receiving such medications. This usage increased to 65.4 percent in 2007; specifically, these percentages ranged from 42.5 percent in Hawaii to 72.6 percent in Maine. The increase is somewhat surprising because new 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 2.5 to 2.6 percent of residents were reported to have developmental disabilities in the 2001-2007 period.

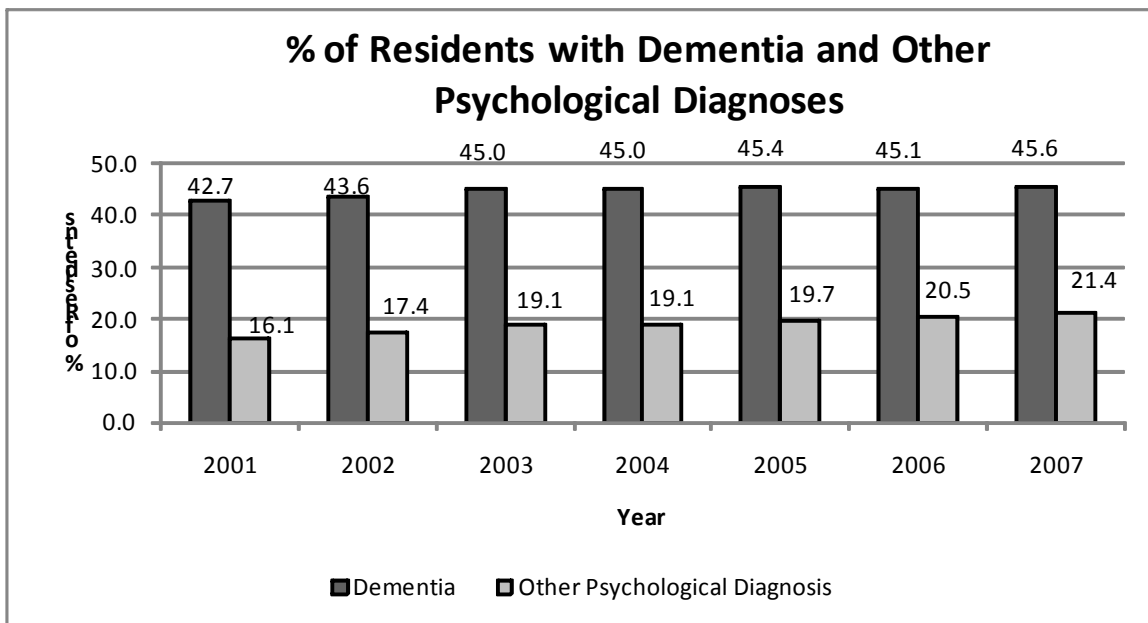
**TABLE 16**  
**PERCENT OF RESIDENTS**  
**RECEIVING PSYCHOACTIVE MEDICATION AND HAVING MENTAL RETARDATION**

State	Receiving Psychoactive Medications							Mental Retardation						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	61.9	63.3	63.7	69.7	67.2	67.1	66.3	1.3	1.2	1.2	1.3	1.0	0.8	1.4
AL	55.2	58.8	62.0	64.8	67.7	66.2	68.3	5.5	5.3	5.2	5.4	5.0	5.4	4.8
AR	55.1	59.5	62.0	64.8	65.4	67.6	67.3	3.5	3.6	3.7	3.5	3.5	3.5	3.4
AZ	54.4	56.8	60.3	62.1	62.7	64.1	61.7	1.1	1.1	1.2	1.0	1.0	1.3	1.4
CA	47.8	51.8	54.7	55.8	56.6	57.5	58.0	2.4	2.4	2.2	2.4	2.4	2.4	2.3
CO	53.3	57.8	59.6	62.9	64.3	64.6	66.5	1.4	1.3	1.3	1.4	1.5	1.3	1.3
CT	59.1	62.1	63.2	65.4	67.2	67.0	68.2	2.5	2.5	2.5	2.5	2.6	2.7	2.6
DC	33.6	41.8	42.4	42.2	47.8	49.5	49.9	3.2	2.5	2.4	2.4	1.9	1.5	2.1
DE	48.2	55.9	60.1	62.0	65.4	63.4	62.4	2.9	2.8	2.1	2.7	2.5	2.7	2.4
FL	52.7	57.1	60.7	62.9	63.9	64.9	66.0	1.3	1.5	1.5	1.6	1.6	1.7	1.7
GA	54.8	60.5	61.8	63.3	64.9	65.9	67.6	4.2	4.4	4.6	4.5	4.4	4.6	4.4
HI	36.2	31.9	36.1	36.4	39.3	43.1	42.5	2.3	2.7	2.5	2.0	2.1	2.5	2.4
IA	52.3	56.5	59.9	61.4	62.2	64.5	64.6	2.1	2.2	2.4	2.1	2.2	2.2	2.0
ID	57.8	65.4	66.1	69.1	66.4	67.4	70.1	1.2	1.3	1.6	1.5	1.6	1.3	1.4
IL	53.5	59.1	60.8	62.2	63.4	63.5	64.0	2.3	2.2	2.1	2.1	2.2	2.1	2.1
IN	57.1	60.9	63.3	64.9	64.7	65.6	67.8	3.0	3.3	3.3	3.3	3.2	3.0	3.1
KS	58.1	62.3	64.4	66.3	66.8	67.2	68.7	1.4	1.4	1.4	1.4	1.5	1.4	1.4
KY	56.8	63.5	63.9	67.3	67.7	68.0	69.0	3.7	3.5	3.4	3.5	3.1	3.4	3.4
LA	55.7	61.4	64.0	66.0	65.9	66.6	67.1	3.3	3.3	3.1	3.2	3.4	3.2	3.1
MA	61.1	66.0	67.9	69.6	69.8	69.6	70.9	2.9	2.7	2.8	2.7	2.5	2.4	2.4
MD	51.8	52.0	56.0	56.0	58.0	56.8	57.3	2.0	1.9	1.6	2.0	1.8	1.7	2.0
ME	62.7	67.4	67.8	69.1	70.4	72.0	72.6	2.6	1.6	1.8	1.6	1.6	1.5	1.4
MI	54.3	56.4	58.6	60.6	61.1	63.6	63.1	2.1	2.0	2.0	1.9	2.2	1.8	1.7
MN	55.6	59.7	61.9	64.0	64.4	63.7	64.2	1.5	1.6	1.4	1.3	1.1	1.2	1.1
MO	57.9	62.3	64.7	67.1	67.4	68.6	69.1	2.7	2.9	2.7	2.9	2.7	2.9	2.9
MS	56.6	59.9	60.3	63.6	66.5	66.4	66.9	2.0	2.2	2.3	2.5	2.6	2.7	2.9
MT	52.8	58.5	60.4	64.6	61.8	61.1	64.3	1.7	1.8	1.5	1.7	1.6	1.5	1.6
NC	56.1	59.9	63.0	64.4	65.1	67.2	67.1	2.4	2.2	2.2	2.5	2.3	2.6	2.3
ND	58.2	61.0	63.5	64.6	66.0	67.3	67.3	2.3	2.4	2.1	2.0	2.3	2.2	2.3
NE	54.7	59.2	61.7	64.6	64.6	66.0	68.4	2.0	2.1	1.9	1.9	1.9	2.2	2.1
NH	58.5	62.5	66.1	66.5	68.7	70.7	69.0	1.3	2.5	2.1	2.0	1.7	1.8	1.8
NJ	45.9	51.6	54.0	56.6	56.4	57.4	57.5	3.5	3.6	3.7	3.4	3.5	3.7	3.9
NM	49.3	54.5	59.8	55.6	60.6	63.1	62.7	1.5	1.5	1.3	1.4	1.5	1.7	1.6
NV	51.4	57.6	56.0	57.3	63.7	58.2	59.9	2.0	1.7	2.1	2.6	2.1	2.1	1.8
NY	48.9	53.0	55.7	56.4	57.3	58.5	58.5	3.9	4.1	4.1	4.0	4.1	4.2	3.8
OH	60.2	63.7	66.0	67.1	67.9	69.1	68.9	2.3	2.4	2.5	2.4	2.5	2.4	2.5
OK	53.9	61.0	63.0	67.0	67.1	68.7	68.8	2.4	2.2	2.4	2.3	2.5	2.7	2.5
OR	58.8	68.0	68.2	69.9	70.5	69.3	68.5	2.2	1.6	1.9	1.7	1.9	1.7	1.8
PA	56.1	59.6	62.7	64.3	65.2	65.6	66.4	2.5	2.4	2.4	2.6	2.5	2.7	2.4
RI	55.9	58.7	62.4	61.8	66.6	67.7	71.0	1.6	1.7	1.9	1.5	1.7	1.5	1.2
SC	51.9	56.0	58.9	61.1	61.6	61.3	62.6	2.1	2.9	3.3	2.7	2.3	2.2	2.0
SD	53.6	57.9	60.0	63.3	63.4	63.3	64.8	1.8	2.2	1.9	1.7	1.6	1.5	1.7
TN	60.1	65.2	67.4	69.2	70.3	70.2	72.3	3.0	3.0	3.5	3.2	3.5	3.3	3.4
TX	55.4	60.6	63.0	64.6	64.4	65.5	67.1	2.3	2.5	2.5	2.6	2.6	2.7	2.6
UT	61.8	68.2	70.4	72.7	70.5	71.5	69.1	1.8	2.0	2.1	2.0	1.9	2.0	2.5
VA	54.8	58.6	62.3	60.8	62.3	63.6	64.5	4.3	4.3	4.3	4.3	4.1	4.1	4.1
VT	56.0	64.4	67.3	69.7	68.3	70.6	70.3	2.5	1.4	1.5	1.7	1.5	1.5	1.5
WA	55.9	60.3	63.7	65.6	65.7	65.7	65.9	3.4	3.1	2.9	3.0	3.0	2.9	2.8
WI	54.1	58.7	60.8	63.2	63.6	64.1	64.3	1.4	1.4	1.5	1.5	1.3	1.4	1.3
WV	55.7	60.3	59.9	62.8	64.4	63.0	64.3	3.4	3.5	3.1	3.2	3.4	3.8	3.7
WY	46.4	62.8	60.6	66.0	62.0	63.5	62.7	1.6	1.2	1.3	1.4	1.0	1.3	1.2
<b>US</b>	<b>54.7</b>	<b>58.1</b>	<b>61.4</b>	<b>63.2</b>	<b>63.9</b>	<b>64.7</b>	<b>65.4</b>	<b>2.6</b>	<b>2.5</b>	<b>2.6</b>	<b>2.5</b>	<b>2.5</b>	<b>2.6</b>	<b>2.5</b>

## 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 42.7 percent in 2001 to 45.6 percent in 2007. The percent varied from 38 percent in Utah to 59 percent in Maine in 2007.

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 16.1 percent of residents in 2001 to 21.4 percent in 2007. The percentage of conditions varied from 7.4 percent in Hawaii to 29.4 percent in Louisiana in 2007.



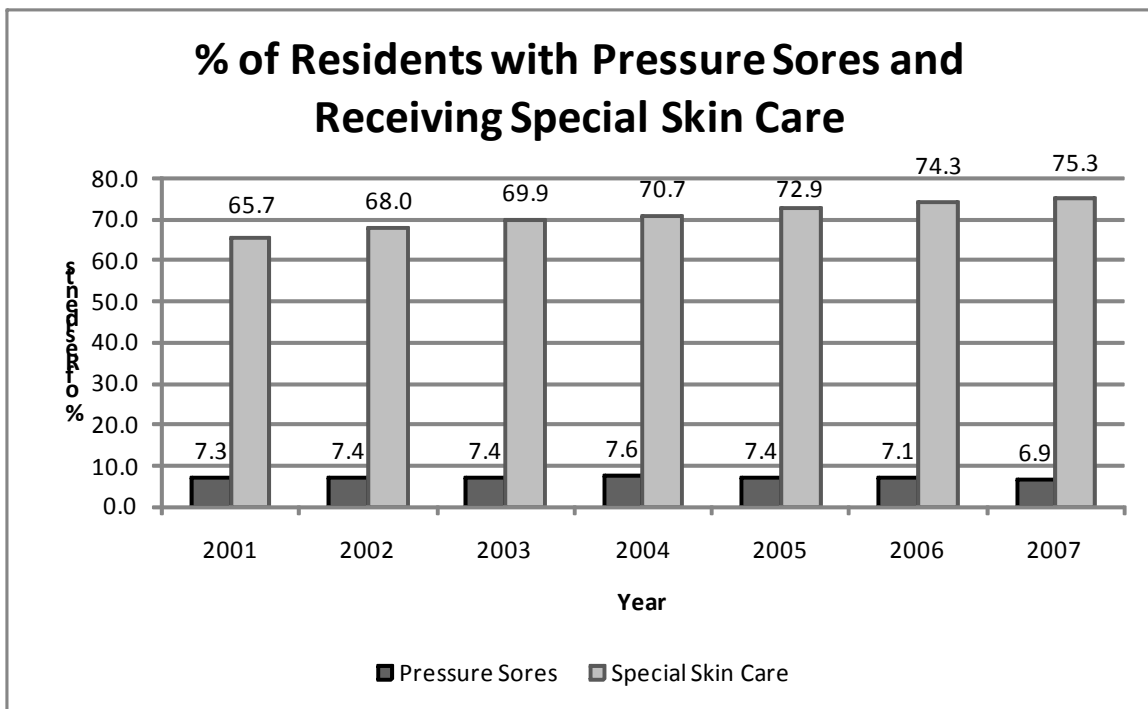
**TABLE 17**  
**PERCENT OF RESIDENTS**  
**WITH DEMENTIA AND OTHER PSYCHOLOGICAL DIAGNOSES**

State	Dementia							Other Psychological Diagnosis						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	40.4	36.2	52.1	52.1	48.8	54.4	52.2	15.3	11.9	15.3	15.3	18.7	14.7	11.7
AL	50.8	52.1	52.8	52.8	52.4	52.9	50.7	17.7	19.4	22.9	22.9	24.5	24.9	25.2
AR	35.0	32.9	37.7	37.7	38.2	38.6	39.8	16.7	17.2	19.1	19.1	18.5	18.8	18.2
AZ	41.6	42.7	42.0	42.0	43.3	42.3	42.0	12.0	13.5	14.3	14.3	14.7	17.8	17.3
CA	35.5	36.5	38.4	38.4	39.1	38.6	39.2	15.8	16.2	18.2	18.2	19.2	19.7	20.4
CO	40.3	41.1	44.4	44.4	44.2	43.6	46.3	13.7	13.7	14.4	14.4	14.9	15.2	15.8
CT	44.2	43.9	46.6	46.6	45.8	46.3	47.2	11.7	13.4	13.1	13.1	13.2	15.2	15.1
DC	42.7	47.3	50.6	50.6	44.1	42.2	48.9	16.9	13.7	19.8	19.8	17.7	13.5	13.6
DE	38.5	44.9	45.4	45.4	47.4	45.4	47.2	12.5	14.4	12.7	12.7	19.0	17.3	15.4
FL	41.3	42.7	45.4	45.4	44.7	45.8	45.3	13.7	16.1	19.5	19.5	19.7	20.6	22.5
GA	43.6	44.0	45.3	45.3	46.4	47.6	49.3	15.2	16.3	16.7	16.7	18.9	21.7	23.5
HI	49.9	51.0	50.9	50.9	53.5	55.0	52.5	6.2	5.9	6.2	6.2	7.2	5.7	7.4
IA	46.2	46.1	46.6	46.6	47.8	45.8	46.3	14.4	16.1	16.5	16.5	17.3	17.7	18.4
ID	42.8	47.5	46.3	46.3	44.2	43.6	41.3	10.0	14.4	13.2	13.2	14.8	17.5	15.4
IL	33.7	35.2	39.5	39.5	41.2	41.2	41.6	20.9	21.5	23.3	23.3	23.6	24.1	24.5
IN	40.4	43.3	44.3	44.3	45.7	44.4	45.2	16.3	18.2	17.9	17.9	17.6	18.8	19.4
KS	40.9	43.8	44.4	44.4	45.6	45.9	46.3	19.0	20.4	22.2	22.2	22.0	22.4	23.6
KY	46.0	47.8	47.4	47.4	47.6	47.8	48.2	16.2	19.1	22.4	22.4	22.0	25.1	25.2
LA	34.8	38.2	41.1	41.1	42.4	42.7	43.0	21.0	23.3	25.8	25.8	27.5	29.3	29.4
MA	44.6	45.6	47.3	47.3	49.0	48.7	50.6	18.6	20.0	20.8	20.8	20.9	20.9	22.5
MD	40.0	41.6	42.1	42.1	40.6	44.0	43.0	12.7	13.5	15.4	15.4	16.0	15.6	15.7
ME	54.4	53.5	58.9	58.9	56.5	58.2	59.0	10.7	13.3	17.1	17.1	16.6	17.4	19.4
MI	53.7	56.1	56.0	56.0	55.1	55.5	55.9	14.4	14.7	16.0	16.0	16.4	16.6	17.6
MN	37.5	37.9	40.1	40.1	40.3	40.0	41.4	15.4	16.7	18.6	18.6	18.9	19.8	21.4
MO	40.4	40.4	44.0	44.0	42.9	43.7	44.0	17.1	18.1	21.4	21.4	20.3	22.8	23.2
MS	50.5	49.7	52.4	52.4	52.1	51.9	51.6	20.8	22.0	24.3	24.3	26.3	27.4	29.2
MT	38.5	40.1	42.4	42.4	42.2	44.8	41.7	10.1	11.3	12.8	12.8	13.5	15.4	14.9
NC	42.4	43.6	44.3	44.3	45.8	43.9	46.3	11.4	13.7	15.3	15.3	15.4	16.1	17.9
ND	51.5	51.3	50.2	50.2	51.3	51.6	51.8	17.9	17.5	20.6	20.6	19.7	21.9	22.8
NE	37.8	37.9	40.8	40.8	41.0	41.3	41.9	16.0	18.1	20.1	20.1	20.0	21.4	21.6
NH	47.3	47.0	50.0	50.0	51.9	53.4	54.5	14.1	17.5	16.3	16.3	19.5	18.9	20.3
NJ	41.5	39.7	40.8	40.8	41.9	41.0	41.5	13.0	13.1	14.6	14.6	14.8	15.1	15.5
NM	38.8	39.5	36.8	36.8	44.3	43.9	44.6	12.6	12.0	14.0	14.0	17.0	18.3	16.6
NV	41.3	44.8	39.6	39.6	39.4	37.9	38.2	16.9	17.0	16.9	16.9	16.3	16.6	20.3
NY	47.2	46.6	46.2	46.2	47.1	46.4	45.6	13.4	15.1	16.0	16.0	16.5	16.8	17.6
OH	48.7	50.2	50.8	50.8	49.7	47.6	47.7	25.5	27.3	28.7	28.7	28.8	28.2	28.4
OK	41.9	40.8	42.1	42.1	44.6	42.4	42.2	16.9	17.6	20.0	20.0	21.4	21.2	22.5
OR	50.3	50.7	47.4	47.4	47.1	45.5	45.4	14.7	14.4	15.8	15.8	15.0	15.4	17.5
PA	45.2	45.3	47.4	47.4	46.7	47.1	46.9	13.2	14.3	16.1	16.1	17.3	18.2	18.7
RI	43.0	45.4	45.8	45.8	46.1	47.3	46.5	11.4	12.9	15.2	15.2	14.5	16.4	17.3
SC	49.2	54.1	52.4	52.4	54.3	53.7	55.8	10.7	12.9	12.7	12.7	15.1	15.8	18.6
SD	47.8	48.0	50.2	50.2	50.3	47.7	50.2	18.7	18.7	22.5	22.5	23.6	23.5	24.6
TN	44.3	45.1	46.9	46.9	47.8	49.6	49.5	16.2	20.2	19.7	19.7	23.0	24.7	26.5
TX	39.9	40.7	42.2	42.2	41.6	41.8	42.7	16.6	18.5	22.1	22.1	23.4	25.2	25.9
UT	44.6	44.4	43.0	43.0	41.0	38.8	38.0	13.2	12.7	14.4	14.4	14.2	14.9	16.4
VA	43.7	43.6	44.1	44.1	44.5	43.5	44.7	14.3	15.8	16.1	16.1	15.3	14.4	16.8
VT	47.6	51.1	47.7	47.7	47.6	46.8	52.0	10.1	12.9	13.8	13.8	13.8	17.1	18.4
WA	53.7	53.6	53.5	53.5	54.4	51.4	50.0	13.8	15.4	15.7	15.7	15.3	18.7	18.8
WI	46.2	46.9	47.8	47.8	46.9	47.2	47.3	12.1	13.4	15.2	15.2	16.0	16.3	17.5
WV	50.7	48.2	44.9	44.9	49.8	48.9	51.1	25.2	23.8	22.2	22.2	25.2	24.9	29.2
WY	44.4	43.0	37.8	37.8	43.1	44.0	44.5	9.9	10.5	14.2	14.2	11.0	13.8	13.5
<b>US</b>	<b>42.7</b>	<b>43.6</b>	<b>45.0</b>	<b>45.0</b>	<b>45.4</b>	<b>45.1</b>	<b>45.6</b>	<b>16.1</b>	<b>17.4</b>	<b>19.1</b>	<b>19.1</b>	<b>19.7</b>	<b>20.5</b>	<b>21.4</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 ranged from 7.3 to 7.4 percent in the 2001-2005 period and 6.9 percent in 2007. The percent ranged from 3.6 percent in North Dakota to 9.6 percent in District of Columbia in 2007.

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 2001, 65.7 percent and in 2007, 75.3 percent of nursing facilities reported providing special skin care to residents, ranging from 57.9 percent in Oklahoma to 85.2 percent in West Virginia (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						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	7.3	6.6	7.6	8.2	5.1	3.8	6.1	84.0	67.3	81.6	85.0	89.8	78.4	78.6
AL	5.8	6.2	6.7	6.6	6.6	6.8	6.4	74.7	77.6	76.9	77.6	79.9	81.4	81.2
AR	8.2	7.0	8.3	7.2	6.9	6.8	6.6	68.9	70.4	75.3	75.6	81.6	77.1	78.2
AZ	8.4	7.2	6.8	7.8	7.9	7.4	8.6	66.1	67.3	64.5	63.4	70.5	72.3	77.7
CA	9.1	9.1	9.2	9.0	8.6	8.7	8.6	57.4	58.8	61.4	61.8	63.5	63.4	64.5
CO	5.8	5.6	6.1	6.5	5.5	5.5	6.0	66.3	68.3	69.6	71.7	75.5	77.5	75.7
CT	5.5	5.4	5.8	5.7	6.0	5.4	5.6	58.9	58.2	58.8	59.7	61.9	62.1	60.3
DC	10.9	12.6	8.5	9.9	10.0	9.4	9.6	71.4	71.4	58.3	80.8	83.9	76.2	81.7
DE	7.5	8.3	8.9	6.7	7.6	7.2	7.3	62.1	62.7	72.6	67.3	76.6	73.9	77.5
FL	8.2	7.9	8.1	7.9	7.7	7.4	7.1	70.9	73.4	73.7	76.2	77.9	80.0	79.6
GA	7.7	8.1	8.3	7.7	7.4	7.7	7.3	64.6	68.1	71.7	73.2	74.8	76.8	80.3
HI	8.0	5.3	7.8	8.4	7.0	6.9	6.7	71.9	67.9	73.2	72.5	68.7	79.9	83.4
IA	4.0	4.7	4.6	4.9	4.8	4.4	4.0	62.6	64.8	69.8	70.5	71.5	72.6	76.4
ID	5.3	5.9	5.3	4.8	5.1	5.7	5.1	65.5	72.1	70.2	73.5	76.3	79.2	80.2
IL	7.1	7.7	7.6	7.6	7.5	7.3	7.1	64.7	65.7	67.8	68.1	73.2	75.3	78.1
IN	7.9	7.4	7.6	7.9	7.6	7.3	7.1	65.3	70.0	69.5	71.4	69.1	72.4	75.2
KS	5.5	6.6	6.9	6.0	5.9	5.3	5.4	61.6	63.8	64.0	64.5	67.8	69.0	70.4
KY	8.1	9.0	8.4	8.5	8.8	7.7	7.7	66.9	69.9	71.4	70.0	74.5	74.1	76.4
LA	9.7	10.6	9.8	9.7	10.1	9.5	8.9	51.4	62.3	68.0	69.3	68.4	73.1	74.3
MA	6.2	6.2	6.4	6.1	6.2	6.1	5.6	69.1	72.0	74.2	75.1	76.2	75.2	77.8
MD	9.3	9.8	9.1	9.8	8.8	8.6	8.3	64.9	70.7	70.6	69.7	73.2	77.2	79.3
ME	6.2	7.5	7.8	8.1	7.8	7.3	7.5	69.9	71.2	69.3	70.0	78.1	76.1	80.4
MI	7.2	7.1	7.4	7.1	7.4	7.0	6.7	68.2	68.2	70.0	70.6	76.4	77.5	77.1
MN	4.0	4.4	4.7	4.8	4.7	4.3	3.9	64.1	63.9	66.4	68.3	70.7	76.3	77.1
MO	6.6	6.6	6.7	6.4	6.6	6.3	6.1	62.5	63.0	64.9	67.1	70.5	69.2	72.7
MS	7.3	7.4	7.2	7.5	7.8	7.7	7.3	75.1	75.9	79.0	81.2	79.7	81.5	83.7
MT	4.1	3.3	5.0	5.0	5.7	5.5	4.9	70.8	70.1	71.9	72.2	72.9	70.8	75.2
NC	8.5	8.9	8.7	8.7	9.0	8.3	8.1	71.8	75.3	75.2	73.3	76.5	76.0	75.1
ND	3.7	3.7	4.0	3.7	3.9	3.5	3.6	62.5	67.1	69.3	71.1	74.3	74.9	81.8
NE	4.8	4.6	4.6	4.2	4.3	4.3	4.0	74.6	79.5	80.6	83.7	84.2	86.1	82.4
NH	4.5	5.6	5.0	5.4	5.1	5.0	4.9	68.0	69.7	69.9	75.6	79.2	79.0	79.3
NJ	8.9	8.9	8.9	8.9	8.3	8.5	8.2	54.3	55.9	58.8	59.5	62.1	65.2	66.4
NM	8.3	7.8	7.8	7.9	7.1	7.4	7.3	57.4	61.3	69.9	66.3	70.7	77.3	76.0
NV	9.8	8.1	8.5	9.0	9.1	7.7	7.7	60.5	62.2	63.3	71.0	72.9	73.0	77.6
NY	7.5	7.8	8.1	8.2	8.4	8.1	7.6	64.8	68.4	69.0	70.5	72.7	72.4	72.8
OH	6.8	6.6	6.5	6.6	6.6	6.5	6.1	78.6	81.5	82.5	82.6	83.7	84.9	85.0
OK	8.8	9.0	8.6	8.7	8.4	8.4	8.2	50.8	52.6	51.4	55.6	57.6	57.6	57.9
OR	8.2	8.0	7.9	9.0	8.6	7.8	7.5	59.8	64.5	65.6	70.3	72.7	71.3	73.5
PA	8.5	8.6	8.8	8.7	8.3	7.9	8.0	70.4	73.0	77.3	78.4	80.0	82.9	82.4
RI	6.0	6.5	9.4	6.5	6.8	6.1	5.4	64.1	62.9	70.0	64.1	65.4	71.4	73.6
SC	8.9	8.5	9.3	9.2	9.3	8.6	7.6	69.3	73.0	77.5	75.5	78.8	79.7	82.0
SD	5.3	6.2	6.9	6.5	5.1	4.9	4.8	76.7	75.4	76.0	77.9	80.2	82.4	79.9
TN	7.8	7.0	8.2	7.9	7.6	7.4	7.3	66.6	71.0	74.4	72.7	74.2	75.5	73.6
TX	8.5	7.8	7.6	7.6	7.7	7.6	7.2	63.9	65.9	68.2	67.8	69.4	71.9	70.2
UT	6.8	6.0	7.2	9.2	6.5	6.8	6.5	53.8	65.7	70.7	76.1	78.4	76.7	82.1
VA	9.7	8.8	8.9	9.0	9.5	8.0	8.1	68.2	69.6	66.4	68.5	71.8	75.0	76.0
VT	5.0	4.6	5.8	5.3	6.5	5.6	6.3	75.3	80.5	79.1	82.2	82.2	79.6	80.9
WA	7.3	7.6	8.4	7.7	7.4	7.5	7.8	69.3	72.1	75.9	73.6	76.4	76.4	76.0
WI	5.7	5.3	5.7	5.6	5.6	5.5	5.4	58.8	63.5	64.4	65.0	68.0	69.3	73.3
WV	10.0	9.0	9.6	9.1	8.8	7.9	8.1	80.1	81.3	85.5	84.2	86.2	85.4	85.2
WY	4.2	8.6	5.5	6.0	5.9	7.7	5.9	58.9	57.6	62.0	69.9	71.4	61.4	65.8
<b>US</b>	<b>7.3</b>	<b>7.4</b>	<b>7.4</b>	<b>7.6</b>	<b>7.4</b>	<b>7.1</b>	<b>6.9</b>	<b>65.7</b>	<b>68.0</b>	<b>69.9</b>	<b>70.7</b>	<b>72.9</b>	<b>74.3</b>	<b>75.3</b>

## 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 2001, 17.7 percent of residents in nursing facilities received such services and this was 23 percent in 2007 (See Table 19). These services varied from 11.6 percent of residents in South Dakota to 31.9 percent in Utah in 2007. 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 3.6 percent of nursing facility residents in 2001 and increased to 4.4 percent in 2007 (See Table 19).

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

State	Rehabilitation							Ostomy Care						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	22.5	15.0	21.0	13.0	15.6	17.7	22.4	9.3	9.7	6.7	7.6	6.5	5.8	5.0
AL	14.7	15.6	16.1	17.2	18.7	19.0	20.7	7.4	7.6	7.2	6.6	6.8	6.5	6.9
AR	13.5	14.9	15.8	15.0	16.6	17.1	18.5	4.3	4.6	4.2	4.5	4.2	4.2	5.2
AZ	21.7	20.4	18.3	21.1	21.3	20.9	24.3	3.0	2.6	2.7	3.0	3.5	2.8	2.4
CA	16.2	17.7	18.7	19.0	19.8	21.3	22.3	5.8	6.0	6.5	6.9	7.2	7.2	7.0
CO	17.4	18.1	17.3	18.1	19.5	21.7	22.2	2.6	2.3	2.8	2.5	3.0	3.1	3.1
CT	15.0	16.1	17.3	18.6	20.3	20.5	22.0	2.1	2.3	2.2	2.1	2.2	2.1	2.2
DC	20.3	17.2	24.6	23.2	22.7	25.0	23.0	6.4	6.2	3.7	4.8	7.3	6.5	4.9
DE	18.6	22.1	22.0	24.1	19.9	23.0	26.5	2.5	3.2	4.2	3.5	3.8	3.7	5.5
FL	25.1	24.3	26.0	25.8	27.0	28.0	29.7	4.3	4.9	5.2	5.1	4.8	4.9	5.4
GA	12.9	13.6	14.9	16.5	16.9	17.3	18.4	3.8	5.0	5.2	5.4	5.1	5.5	5.6
HI	8.7	8.5	13.1	13.1	16.1	16.6	12.4	6.3	6.4	8.2	6.0	6.3	8.5	11.7
IA	12.7	11.6	12.5	12.6	12.5	13.4	13.9	2.5	2.3	2.7	2.5	2.8	2.9	3.0
ID	27.3	23.4	25.8	21.4	29.7	27.1	29.2	2.5	2.8	3.2	3.0	3.9	3.6	3.0
IL	18.2	18.8	19.8	20.8	21.3	22.0	22.4	3.8	3.9	3.7	4.1	3.8	4.0	4.2
IN	19.7	20.2	22.7	23.1	24.8	25.8	26.9	3.8	4.3	4.3	4.0	4.4	4.3	4.1
KS	13.7	13.1	13.4	12.7	13.9	14.8	15.6	2.4	2.3	2.3	2.4	2.3	2.5	2.4
KY	19.7	20.9	22.3	22.9	25.1	26.2	27.5	6.0	6.7	7.2	7.1	7.7	7.2	6.8
LA	16.4	16.3	18.7	19.9	21.2	22.5	24.9	4.5	5.0	6.0	6.4	6.9	6.6	7.2
MA	15.8	17.2	19.2	19.6	21.5	21.7	22.7	2.2	2.1	2.2	2.3	2.1	2.2	2.0
MD	20.0	21.7	20.8	22.7	23.0	24.4	25.4	3.4	3.6	3.4	3.4	3.0	3.4	3.5
ME	14.3	16.9	16.7	19.0	21.6	22.0	22.7	3.1	3.1	3.2	3.1	2.9	3.1	2.6
MI	16.1	18.7	18.9	20.5	22.0	22.8	23.6	2.8	3.0	3.0	3.2	3.2	3.0	3.1
MN	11.7	12.3	14.2	15.2	16.6	15.7	17.0	2.4	2.4	2.4	2.6	2.8	2.8	3.0
MO	18.0	19.1	19.9	19.4	19.9	20.6	21.2	2.5	2.7	2.8	2.5	2.6	2.9	2.7
MS	19.5	20.2	20.9	21.8	22.3	23.6	25.5	6.2	5.6	6.5	7.1	7.5	7.5	7.6
MT	13.6	16.2	15.4	13.5	16.3	13.8	16.1	2.0	2.6	2.7	2.1	2.7	2.3	2.5
NC	17.8	20.7	21.3	23.4	25.1	24.9	25.6	4.8	5.4	5.5	5.8	5.8	5.3	5.4
ND	10.6	9.6	10.6	12.6	12.6	12.5	12.6	3.1	3.1	2.9	2.9	3.6	3.2	3.2
NE	13.4	12.6	13.3	13.6	15.5	15.5	17.0	2.7	3.2	3.5	3.9	3.6	3.8	4.1
NH	15.4	17.9	17.1	19.9	21.0	21.6	23.9	2.0	2.1	1.9	1.9	1.8	2.1	2.2
NJ	18.8	19.8	21.7	22.5	23.7	25.0	25.3	3.8	3.7	4.0	3.8	3.9	4.1	4.1
NM	19.7	18.6	20.4	20.6	23.3	22.5	23.7	2.1	2.6	2.3	2.5	2.2	2.4	2.7
NV	21.3	21.3	23.4	21.4	24.0	21.8	27.8	4.2	5.1	5.4	5.9	6.8	5.2	4.7
NY	17.8	17.5	17.4	17.7	18.3	18.4	18.7	4.7	5.1	5.0	5.0	5.0	4.9	4.7
OH	19.5	20.1	22.6	23.7	24.8	25.6	27.1	5.7	5.9	5.5	5.5	5.8	5.7	5.4
OK	15.0	16.3	15.6	16.6	16.7	15.5	17.8	2.5	2.8	2.9	3.1	3.0	3.1	2.9
OR	15.9	17.6	18.1	20.5	22.1	23.6	24.1	2.9	2.1	2.8	3.1	3.2	3.5	3.1
PA	23.2	24.0	24.1	25.0	27.0	27.1	29.3	3.2	3.6	3.4	3.3	3.4	3.3	3.6
RI	13.1	13.8	16.4	16.4	18.7	18.1	18.9	2.4	2.1	2.5	2.3	2.3	2.2	2.6
SC	22.1	22.0	23.3	25.9	24.0	27.4	27.5	4.1	4.8	5.7	5.2	4.8	4.8	5.3
SD	9.6	10.2	10.4	10.2	9.1	11.9	11.6	2.9	2.9	2.9	3.2	2.9	2.9	3.5
TN	22.0	21.7	23.2	24.1	24.6	24.9	26.2	2.6	3.2	3.0	2.9	3.0	3.3	3.4
TX	17.3	17.3	17.7	17.8	19.3	20.5	21.2	3.0	3.4	3.8	3.7	4.1	4.3	4.1
UT	29.2	27.7	30.1	30.1	33.4	33.7	31.9	1.8	2.3	2.2	2.5	2.1	2.0	2.8
VA	19.9	21.5	23.1	23.6	25.1	24.0	25.7	5.2	5.1	5.5	5.9	5.5	5.6	5.1
VT	11.3	12.2	13.8	14.8	14.0	15.0	18.4	3.0	2.7	3.1	3.6	3.6	3.4	3.1
WA	19.6	21.1	22.9	25.3	24.0	25.6	25.5	3.7	3.8	3.8	4.5	4.4	4.3	4.5
WI	14.8	15.9	17.7	19.2	20.4	20.6	22.6	2.2	2.2	2.2	2.4	2.8	2.5	2.8
WV	21.5	23.3	26.1	25.9	26.0	27.4	27.5	6.9	7.0	6.6	5.8	5.9	5.5	5.0
WY	20.1	20.8	16.1	22.2	18.5	21.0	22.1	2.2	1.8	1.7	2.6	1.6	1.4	1.3
<b>US</b>	<b>17.7</b>	<b>18.3</b>	<b>19.4</b>	<b>20.1</b>	<b>21.1</b>	<b>21.9</b>	<b>23.0</b>	<b>3.6</b>	<b>3.8</b>	<b>4.0</b>	<b>4.2</b>	<b>4.3</b>	<b>4.3</b>	<b>4.4</b>

## Injections and Intravenous Therapy

Injections are provided by facilities for a variety of medications. In 2001, 12.9 percent of residents in facilities were receiving injections compared with 19.8 percent in 2007 (See Table 20). The percent receiving injections ranged from 13.9 percent in Iowa to 24.1 percent in North Carolina in 2007.

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 2001 and 2.3 percent in 2007, with a range of 0.8 to 6.0 (New Hampshire and West Virginia respectively).

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

State	Injections							Intravenous Therapy						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	14.9	9.1	11.5	11.4	14.0	16.7	18.9	6.2	1.9	3.6	3.3	4.6	3.3	4.0
AL	14.7	14.5	15.7	17.1	17.3	18.6	20.3	0.8	1.1	1.5	1.5	1.1	1.2	1.5
AR	12.4	13.8	13.7	14.4	15.7	16.7	17.2	3.5	3.0	3.3	1.9	2.6	2.7	2.8
AZ	15.0	13.4	13.9	16.3	17.6	20.0	21.7	5.0	3.6	3.5	3.4	2.5	3.3	2.9
CA	14.3	15.2	15.9	17.0	17.9	20.2	21.0	3.2	3.4	3.5	3.6	3.4	3.4	3.1
CO	10.8	11.3	11.6	13.0	15.0	15.8	15.3	1.8	1.8	2.0	1.8	1.3	1.8	2.2
CT	11.4	12.3	13.3	14.3	15.8	16.6	16.9	1.0	1.1	0.9	1.1	1.1	1.1	1.2
DC	18.0	14.6	15.3	15.8	18.0	23.9	22.7	0.9	3.4	1.6	0.8	1.8	1.8	1.0
DE	13.2	16.6	15.4	16.4	19.4	19.3	19.0	1.8	2.1	2.0	1.8	2.0	2.9	2.5
FL	14.3	14.9	16.7	17.9	20.0	21.1	21.6	2.8	2.5	2.6	2.3	2.2	2.2	2.1
GA	14.2	15.9	16.6	17.7	18.3	19.8	21.5	1.3	1.4	1.8	1.7	1.7	1.7	1.3
HI	12.3	11.7	12.7	13.5	16.4	16.0	15.6	3.9	4.0	6.1	6.7	5.7	3.1	2.2
IA	10.9	11.8	12.1	13.3	13.7	14.8	13.9	1.6	2.0	1.5	2.0	2.0	2.5	2.0
ID	16.3	14.3	16.4	17.2	19.1	19.4	22.1	2.3	2.8	2.3	1.6	3.3	3.6	3.7
IL	13.8	14.1	15.1	16.0	17.5	18.6	20.3	2.6	2.1	2.2	2.7	2.8	2.3	2.5
IN	14.5	15.7	16.4	17.8	18.7	20.9	21.4	3.0	2.6	2.9	2.7	2.3	2.7	2.9
KS	11.2	11.6	12.6	12.5	14.2	15.4	16.9	2.6	1.8	1.8	2.0	1.7	1.5	1.7
KY	14.9	17.3	17.9	18.6	20.1	21.3	21.7	2.8	3.3	3.8	3.5	3.3	3.7	3.2
LA	14.8	15.6	16.2	17.1	17.6	18.1	20.5	7.0	5.0	4.7	4.8	4.8	3.9	4.7
MA	11.7	12.5	13.4	13.2	14.1	14.8	15.5	1.3	1.4	1.6	1.6	1.4	1.5	1.1
MD	15.5	16.7	17.5	18.4	20.8	23.8	23.6	3.6	3.1	3.4	3.6	2.6	4.0	3.4
ME	11.0	13.2	14.2	14.6	15.9	17.2	18.2	0.9	1.0	1.7	0.5	1.1	1.1	1.1
MI	12.7	13.9	14.8	15.5	17.1	18.2	18.9	0.9	1.0	1.2	1.4	1.5	1.8	1.8
MN	11.7	12.2	13.8	14.4	16.1	16.9	17.2	0.6	0.9	1.0	1.3	1.6	1.6	1.5
MO	13.3	14.1	14.6	16.5	16.6	18.2	19.4	3.0	2.9	3.0	2.0	2.1	2.3	2.2
MS	16.3	16.7	18.4	18.9	19.9	21.0	21.9	3.1	2.0	2.7	2.1	1.9	2.1	2.5
MT	14.2	14.2	14.0	17.5	15.7	16.1	18.2	1.0	1.9	3.3	2.9	2.6	3.0	2.8
NC	16.1	18.7	17.9	19.1	21.6	23.0	24.1	2.0	2.2	1.8	1.7	2.2	2.2	2.6
ND	12.3	12.6	15.2	17.1	16.2	17.5	18.2	1.9	1.9	1.3	2.1	2.2	2.9	2.6
NE	11.0	11.9	12.1	13.4	14.1	13.8	15.6	1.6	1.4	1.5	1.7	0.9	1.8	1.5
NH	9.9	11.3	11.3	12.0	14.5	14.4	15.7	0.5	1.3	0.6	2.3	0.7	0.7	0.8
NJ	11.6	12.2	13.4	15.0	16.3	17.5	17.8	1.3	1.8	1.6	1.9	1.7	1.6	1.8
NM	14.3	13.4	13.9	17.2	16.3	17.8	18.5	2.4	3.0	2.7	4.8	2.3	2.3	3.4
NV	16.2	15.8	15.3	18.3	20.7	18.2	24.0	5.3	6.1	4.6	4.1	5.0	3.5	5.7
NY	11.6	12.7	14.4	14.6	15.7	16.8	17.9	0.8	0.8	0.9	0.9	1.0	1.3	1.3
OH	16.2	16.3	17.9	19.7	21.1	21.4	22.8	2.8	2.4	2.6	2.2	2.5	2.7	2.2
OK	12.4	11.3	12.3	13.5	15.0	15.4	17.3	2.9	2.9	2.8	2.2	2.0	2.1	2.3
OR	13.2	14.2	14.0	16.1	16.8	18.5	17.9	2.3	1.4	1.5	1.5	2.2	2.2	2.1
PA	15.0	16.4	17.7	18.4	19.8	20.7	21.7	2.9	2.9	2.8	2.9	3.1	2.6	2.8
RI	10.3	11.9	15.4	14.1	16.0	15.8	16.0	1.5	1.8	1.6	2.0	1.5	1.2	2.0
SC	14.2	14.9	14.7	15.7	16.5	17.7	18.6	2.0	2.4	2.3	3.2	2.3	1.9	1.9
SD	13.2	12.0	12.7	14.2	14.0	16.2	16.9	1.3	1.6	1.5	1.7	1.3	1.1	1.4
TN	15.2	16.1	17.5	19.2	21.6	21.4	23.5	2.9	3.0	3.3	3.3	2.7	2.4	2.9
TX	14.2	14.2	15.2	16.0	17.5	18.4	19.7	3.0	2.4	2.4	2.4	1.9	2.1	2.1
UT	14.8	15.8	16.1	17.0	19.9	18.9	18.7	3.2	4.1	4.1	3.5	4.5	4.2	3.6
VA	14.0	14.7	16.2	18.6	19.8	20.1	21.5	2.0	1.9	1.8	2.0	2.4	2.1	2.1
VT	12.4	10.3	11.9	13.2	14.2	14.2	16.7	0.9	0.7	0.9	0.8	1.1	1.5	1.2
WA	15.2	17.1	19.2	20.0	19.7	22.0	22.5	3.2	2.9	3.3	3.3	2.6	2.4	3.3
WI	11.5	12.3	13.3	14.9	15.7	16.2	17.0	1.1	1.1	1.2	1.5	1.5	1.4	1.5
WV	14.8	16.5	19.1	20.4	23.1	22.7	23.7	6.4	5.0	5.8	6.8	4.7	5.8	6.0
WY	10.9	10.7	10.2	11.8	13.3	11.8	15.7	1.3	0.9	2.2	6.1	2.1	2.2	1.6
<b>US</b>	<b>12.9</b>	<b>13.7</b>	<b>14.4</b>	<b>15.4</b>	<b>16.7</b>	<b>18.8</b>	<b>19.8</b>	<b>2.4</b>	<b>2.3</b>	<b>2.4</b>	<b>2.4</b>	<b>2.3</b>	<b>2.3</b>	<b>2.3</b>

## Tube Feeding

Tube feedings are sometimes used to provide nutritional substances to residents into the gastrointestinal system. Table 21 shows that in 2001, 6.8 percent of residents were receiving tube feedings compared with 5.7 percent in 2007. The percent varied from 0.8 percent in Wyoming to 13.4 percent in Hawaii in 2007.

## Respiratory Therapy

Respiratory treatment is provided for respirators/ ventilators, oxygen, inhalation therapy, and other treatment. In 2001, 9.7 percent of facility residents received treatment compared to 13.4 percent in 2007 (See Table 21). Colorado reported 27.5 percent of residents receiving respiratory treatment compared to 6.5 percent in Hawaii in 2007.

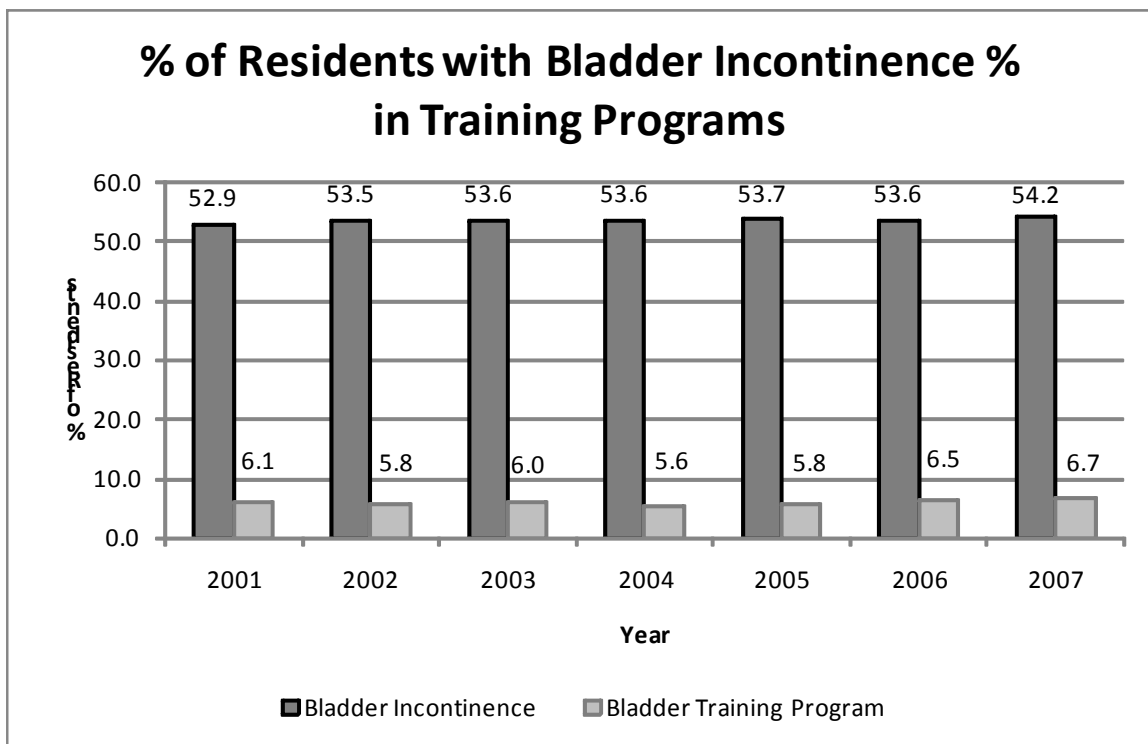
**TABLE 21**  
**PERCENT OF RESIDENTS**  
**RECEIVING TUBE FEEDING AND RESPIRATORY TREATMENT**

State	Tube Feeding							Respiratory Treatment						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	9.2	9.2	9.6	8.3	7.3	5.8	6.6	9.4	10.3	17.9	11.9	11.2	6.7	8.3
AL	13.2	12.0	11.9	11.3	11.0	10.1	9.3	8.1	9.0	9.3	10.6	12.8	13.4	14.1
AR	6.6	6.7	6.6	6.3	6.1	5.9	5.8	9.4	9.2	10.1	9.8	11.3	11.3	13.0
AZ	4.7	3.9	3.9	4.6	4.7	3.6	3.8	11.4	12.1	12.1	12.8	13.7	14.2	14.1
CA	12.2	12.1	12.5	12.0	12.2	12.1	11.5	9.2	10.1	11.4	11.7	12.4	12.8	12.6
CO	3.2	3.5	3.1	3.2	3.1	3.0	2.8	19.4	19.3	22.2	24.6	25.9	26.8	27.5
CT	4.2	4.0	4.2	3.6	3.3	3.2	2.9	7.9	8.8	9.3	10.0	10.5	11.3	11.1
DC	12.3	11.5	9.0	9.3	9.4	9.2	9.1	6.4	6.5	8.0	6.9	6.5	7.9	7.7
DE	7.4	7.2	7.4	7.2	7.9	6.8	7.4	8.6	10.6	10.7	12.7	12.2	14.6	16.2
FL	8.7	8.2	7.8	7.6	6.9	7.2	6.8	11.0	11.4	12.3	13.3	14.0	15.1	14.9
GA	8.7	8.5	8.3	8.0	7.6	7.6	7.3	7.6	8.1	9.1	10.0	10.3	11.6	11.6
HI	15.2	16.4	14.4	15.8	12.3	12.5	13.4	6.4	8.0	7.9	7.0	5.9	5.6	6.5
IA	2.5	2.5	2.2	2.3	2.2	2.3	2.0	8.9	9.4	10.7	10.9	11.5	12.7	12.8
ID	2.8	2.4	3.2	2.5	3.5	2.7	2.0	16.6	17.9	18.4	18.8	22.7	23.7	21.8
IL	4.6	4.4	4.4	4.4	4.2	4.3	4.1	7.4	8.1	8.9	9.5	10.4	10.6	10.8
IN	5.5	5.3	5.2	5.3	4.8	4.8	4.6	10.5	11.1	12.4	12.5	12.6	13.8	13.6
KS	2.4	2.2	2.3	2.1	2.1	2.1	2.0	9.5	10.2	10.9	11.2	12.1	12.5	13.5
KY	10.7	10.2	9.6	9.3	8.8	8.3	7.9	13.0	14.6	15.6	16.2	17.3	17.3	17.7
LA	10.5	10.1	9.5	8.9	8.8	8.2	8.3	9.4	9.5	9.2	8.7	8.7	8.7	8.8
MA	3.9	4.0	3.7	3.6	3.3	3.3	3.3	8.5	9.4	10.7	10.5	10.9	10.3	10.7
MD	8.8	9.3	8.5	8.5	7.8	7.7	7.6	8.7	9.9	10.4	11.9	11.0	12.3	12.5
ME	2.9	3.4	2.8	2.6	2.5	2.3	2.5	8.6	8.9	10.1	12.5	12.2	11.5	13.2
MI	5.2	5.0	5.1	5.0	5.1	5.0	5.2	7.8	8.5	9.4	10.1	11.0	11.8	12.3
MN	2.2	2.0	2.0	2.0	2.0	2.2	2.0	9.7	9.8	10.6	11.7	12.0	11.3	12.0
MO	4.5	4.5	4.2	4.0	3.7	3.5	3.4	9.3	10.3	10.7	11.3	12.5	12.9	13.1
MS	10.8	10.4	10.5	10.4	9.7	9.8	9.4	7.6	9.3	9.1	9.7	10.1	10.6	10.4
MT	2.3	2.4	2.1	2.2	2.7	2.2	2.5	12.5	12.4	16.0	17.9	17.9	17.7	17.4
NC	10.5	9.7	9.0	8.7	8.7	7.9	7.5	9.3	11.2	11.9	12.6	13.3	13.2	13.8
ND	2.6	2.6	2.4	2.1	2.2	1.6	1.7	9.0	9.8	10.0	11.6	13.4	14.0	13.9
NE	2.7	2.7	2.7	2.7	2.6	2.7	2.8	10.1	10.7	11.4	12.4	13.1	14.0	13.0
NH	1.8	1.9	1.7	1.8	1.9	2.0	1.7	8.8	8.5	9.6	12.2	10.6	11.4	11.6
NJ	8.0	7.7	7.7	7.1	6.9	6.9	7.0	7.5	7.9	9.6	10.1	10.8	10.5	11.9
NM	3.7	3.8	3.9	2.7	3.0	2.9	3.1	13.3	15.8	19.1	21.3	24.1	24.0	22.7
NV	9.9	8.4	9.2	7.4	7.9	7.8	9.8	13.5	10.6	16.1	18.1	18.2	20.1	20.4
NY	7.6	7.7	7.5	7.5	7.2	7.0	6.8	8.1	8.8	9.8	10.5	10.9	11.5	11.6
OH	7.2	6.8	6.3	5.9	5.9	5.6	5.3	11.5	12.3	13.4	14.2	15.2	15.7	15.9
OK	6.8	6.3	5.6	5.6	5.4	5.3	5.3	8.9	9.9	10.3	12.2	13.4	13.5	14.4
OR	4.7	3.3	4.2	4.3	3.9	4.3	4.1	7.8	8.9	8.2	9.6	10.6	9.8	9.9
PA	6.3	6.1	5.8	5.7	5.3	4.9	4.9	11.9	13.6	14.6	15.0	15.5	15.7	16.3
RI	3.4	3.8	3.5	2.7	2.7	2.7	2.6	5.7	6.7	7.4	7.5	8.4	8.5	10.3
SC	10.0	10.1	9.5	8.8	8.9	7.6	7.5	7.2	7.8	8.8	9.7	10.7	11.3	10.6
SD	2.3	2.1	2.1	2.0	1.9	1.9	1.6	8.5	10.4	10.7	12.1	12.6	13.4	13.1
TN	8.2	7.7	7.8	7.1	6.6	6.4	5.9	10.2	11.3	11.7	12.8	13.4	13.7	14.5
TX	8.1	7.9	7.6	7.4	7.3	7.0	7.0	9.2	9.9	10.5	10.5	11.2	11.9	12.1
UT	3.1	3.0	2.3	2.5	2.3	2.6	3.0	15.0	14.8	18.6	20.4	24.6	25.1	25.3
VA	8.8	8.6	7.5	7.5	6.9	6.5	6.5	10.7	11.7	13.2	13.5	15.1	14.6	15.8
VT	2.3	2.3	1.9	2.2	2.1	2.4	2.4	7.2	8.4	9.8	10.1	10.6	11.4	10.5
WA	5.1	5.3	5.0	4.8	4.9	4.8	4.5	9.6	10.2	11.5	11.5	13.2	13.4	12.8
WI	2.6	2.5	2.4	2.6	2.7	2.7	2.7	8.4	9.2	9.9	10.7	10.9	11.7	12.2
WV	6.6	6.4	5.7	5.8	5.4	4.8	4.3	14.7	14.8	14.5	14.9	16.8	15.5	16.1
WY	2.6	1.6	1.3	2.2	1.6	1.0	0.8	18.0	21.7	23.8	24.2	24.2	31.8	26.6
<b>US</b>	<b>6.8</b>	<b>6.6</b>	<b>6.5</b>	<b>6.2</b>	<b>6.0</b>	<b>5.8</b>	<b>5.7</b>	<b>9.7</b>	<b>10.4</b>	<b>11.4</b>	<b>12.0</b>	<b>12.7</b>	<b>13.2</b>	<b>13.4</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 52.9 percent of all residents were reported to have this problem in 2001 compared with 54.2 percent in 2007. This percentage ranged from 46.5 percent in Illinois to 65.1 percent in District of Columbia in 2007.

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 6.1 percent (in 2001) to 6.7 percent (in 2007). In 2007, the percent of facilities with toileting programs varied from 1.4 percent in Louisiana to 25.1 percent in Maine. The discrepancy between the high percentage of residents with incontinence problems and the low percentage of training programs is notable.



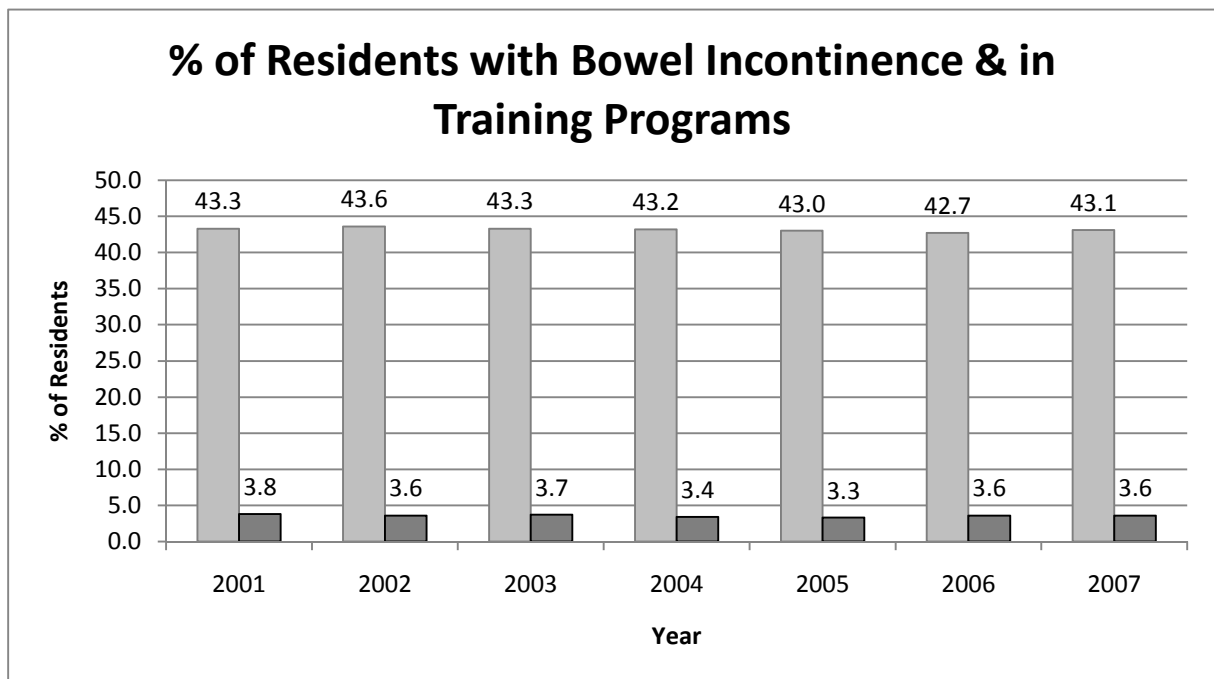
**TABLE 22**  
**PERCENT OF RESIDENTS**  
**WITH BLADDER INCONTINENCE & IN BLADDER TRAINING PROGRAM**

State	Bladder Incontinence							Bladder Training Program						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	52.4	56.6	56.9	59.2	60.6	55.3	55.5	5.4	0.3	9.8	7.1	1.9	8.4	1.9
AL	55.6	55.7	55.2	55.7	55.4	56.6	57.0	9.7	9.0	8.8	7.2	7.3	8.9	8.9
AR	51.3	50.7	49.9	50.9	50.8	51.9	52.2	4.5	3.6	3.6	4.0	3.7	3.8	3.0
AZ	49.8	52.1	52.4	52.8	50.5	50.5	51.7	3.7	3.2	2.6	2.3	2.8	2.2	2.2
CA	52.5	52.4	51.8	51.6	52.0	50.8	51.8	3.3	3.1	2.8	2.6	2.7	3.2	3.3
CO	48.4	49.2	50.2	50.5	50.0	49.9	50.4	4.1	4.5	3.5	3.8	3.7	4.8	3.6
CT	52.3	52.8	52.2	53.8	52.3	51.6	52.1	4.1	4.3	4.7	3.3	3.7	5.8	6.6
DC	58.5	62.1	55.6	57.7	59.3	61.7	65.1	7.4	7.4	7.5	6.3	2.0	3.9	3.5
DE	57.4	56.2	60.2	58.9	61.0	58.2	58.8	14.5	10.1	7.4	11.7	13.8	14.5	12.3
FL	51.9	52.8	52.9	53.2	52.8	53.6	54.7	7.3	7.5	7.2	6.7	6.2	7.1	6.3
GA	58.1	59.0	59.6	60.2	60.8	60.0	60.7	3.9	4.0	4.3	5.7	5.2	5.9	7.3
HI	65.9	63.0	62.9	58.9	58.6	65.2	64.7	6.7	4.6	8.8	4.0	5.7	4.7	4.4
IA	51.0	52.0	52.9	53.5	53.4	53.5	54.7	2.7	3.1	2.7	1.8	1.7	2.3	2.6
ID	53.4	54.7	54.0	57.8	55.8	54.7	53.8	7.2	5.5	6.5	5.3	8.3	9.6	9.4
IL	44.9	45.5	45.6	45.1	45.4	45.7	46.5	4.0	3.5	3.6	3.2	3.3	4.7	4.2
IN	47.5	49.8	48.5	50.0	50.3	50.0	50.8	7.7	8.0	9.9	8.7	8.9	8.0	8.8
KS	52.8	52.8	53.4	53.6	54.3	52.2	54.2	4.5	5.5	3.7	4.9	4.1	10.2	12.5
KY	55.0	55.5	54.6	54.9	55.1	55.3	55.6	5.1	5.7	6.3	6.9	7.3	8.1	8.8
LA	43.1	46.4	48.5	47.6	47.5	47.8	48.0	3.7	3.5	2.7	1.8	1.6	1.8	1.4
MA	56.2	55.2	56.7	56.8	56.7	56.5	58.5	3.8	4.0	4.1	3.4	3.9	4.4	4.4
MD	59.1	61.5	62.9	60.7	61.5	61.8	59.1	6.6	7.2	6.9	7.7	8.3	6.9	10.9
ME	67.4	65.5	65.5	66.5	65.8	66.5	65.0	17.3	12.7	15.3	18.0	17.5	26.7	25.1
MI	54.1	54.2	53.6	51.5	52.8	51.8	52.6	9.7	8.3	9.2	7.4	8.1	8.1	7.1
MN	57.0	56.6	56.4	56.1	56.8	56.1	55.6	9.9	8.1	8.0	7.1	7.3	9.3	8.3
MO	48.1	49.2	48.9	49.9	48.2	48.7	49.2	5.7	6.8	6.2	5.1	5.1	5.5	6.4
MS	51.2	52.5	50.9	53.0	51.8	53.2	54.7	3.5	1.5	1.3	1.4	1.5	1.4	2.1
MT	48.6	50.0	49.9	52.7	51.2	51.9	55.2	7.9	4.7	5.7	6.2	4.1	3.9	3.5
NC	57.8	57.1	57.3	56.4	57.7	57.2	59.1	5.8	5.4	5.1	5.5	6.3	5.2	4.8
ND	53.3	53.7	53.7	53.3	53.5	55.1	53.5	3.5	4.5	4.4	4.0	5.5	3.8	4.5
NE	51.0	54.2	55.0	53.9	55.2	54.5	55.2	7.0	6.0	7.1	6.4	5.5	4.7	6.4
NH	57.0	52.8	54.6	54.0	54.7	54.5	54.9	14.5	15.2	15.8	17.9	13.4	19.2	17.7
NJ	53.4	52.9	52.2	51.1	50.8	51.2	51.4	4.9	4.5	4.6	5.0	5.1	4.5	5.1
NM	46.9	50.6	50.0	46.2	52.8	53.8	53.3	5.2	2.7	3.4	1.0	4.5	2.4	3.2
NV	50.2	53.0	51.9	52.3	54.0	50.1	53.9	3.5	2.7	8.3	6.8	8.0	4.6	4.8
NY	62.0	61.1	60.2	60.1	59.8	59.8	59.5	5.0	4.8	5.2	5.3	5.0	5.2	4.6
OH	50.5	51.3	50.4	50.4	50.2	50.6	50.8	10.7	10.3	10.2	9.5	9.8	9.8	9.4
OK	47.4	47.4	47.9	47.7	49.3	50.7	49.8	4.2	3.7	3.7	2.9	4.4	5.2	4.9
OR	59.6	59.0	58.6	59.5	55.2	54.0	54.9	4.5	3.8	3.1	2.3	3.4	5.8	3.9
PA	57.4	57.6	58.1	58.4	58.2	58.9	58.9	10.4	11.1	11.8	12.9	13.1	14.2	15.0
RI	51.1	50.6	48.5	50.6	52.9	53.1	51.4	4.2	2.5	5.0	2.5	3.9	3.2	4.5
SC	59.2	60.5	61.7	60.9	63.9	63.1	64.1	2.2	3.5	3.1	1.9	2.6	3.4	3.8
SD	52.7	52.6	53.4	56.7	56.3	56.3	56.6	4.5	4.3	4.2	2.5	1.0	2.3	5.4
TN	53.6	54.9	55.5	55.2	55.4	56.7	57.2	6.7	5.0	6.2	5.7	5.0	5.8	6.5
TX	51.7	53.5	53.1	53.4	52.7	53.4	54.4	3.3	3.9	5.3	4.9	5.0	4.8	4.5
UT	50.8	50.2	52.9	52.5	51.2	48.9	49.5	7.4	6.2	3.8	3.1	8.2	8.1	8.5
VA	62.9	62.9	61.3	62.2	60.2	59.9	61.3	5.6	6.2	7.3	6.4	5.9	7.0	6.8
VT	63.0	62.6	62.6	64.0	63.2	62.1	63.4	9.3	7.6	8.5	13.9	18.9	19.1	20.0
WA	58.5	58.1	59.3	57.4	58.7	57.0	57.6	3.8	3.2	4.5	2.1	2.9	4.1	2.9
WI	50.0	51.0	51.2	50.7	50.6	51.0	51.2	12.7	12.0	11.8	7.7	9.8	13.5	15.8
WV	49.8	52.9	52.8	55.9	56.4	55.7	55.2	3.3	1.6	1.2	2.1	2.5	5.0	3.0
WY	41.9	42.1	45.5	43.6	47.9	46.7	49.4	23.1	21.5	13.8	16.4	16.9	17.4	14.3
<b>US</b>	<b>52.9</b>	<b>53.5</b>	<b>53.6</b>	<b>53.6</b>	<b>53.7</b>	<b>53.6</b>	<b>54.2</b>	<b>6.1</b>	<b>5.8</b>	<b>6.0</b>	<b>5.6</b>	<b>5.8</b>	<b>6.5</b>	<b>6.7</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 2001 to 43.1 percent in 2007 in the U.S (Table 23). The percent varied from 28.6 percent in North Dakota to 59.7 percent in Hawaii in 2007.

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 2001-2007 period, 3.8 to 3.6 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.

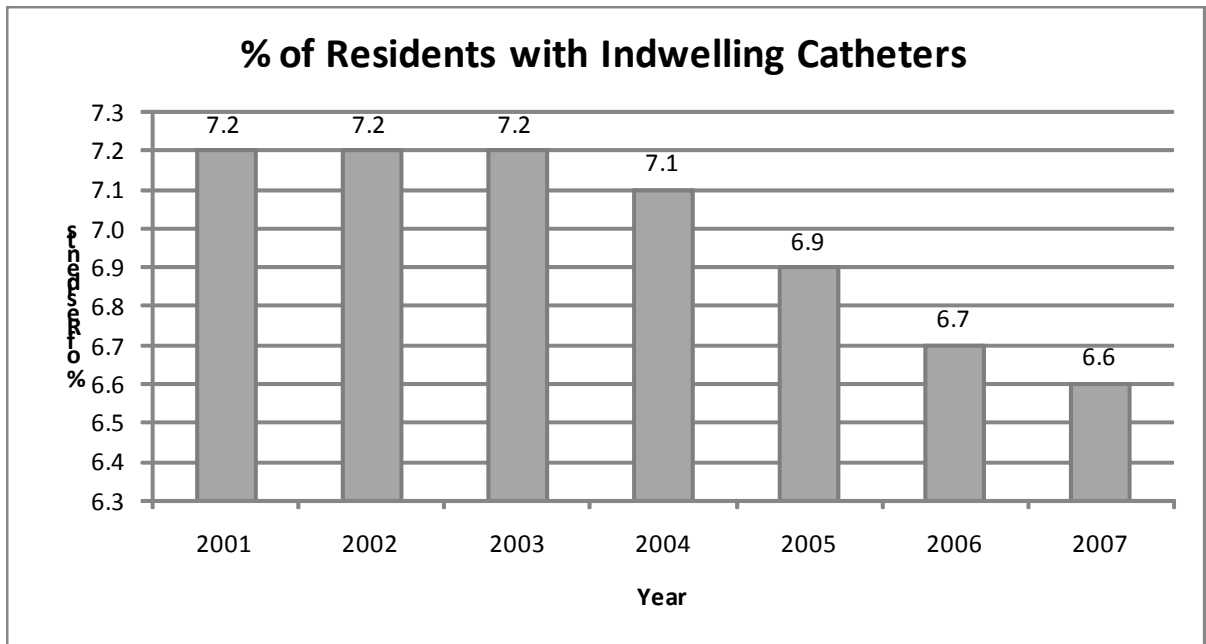


**TABLE 23**  
**PERCENT OF RESIDENTS**  
**WITH BOWEL INCONTINENCE & IN BOWEL TRAINING PROGRAM**

State	Bowel Incontinence							Bowel Training Program						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	36.1	40.1	42.9	47.3	51.8	37.0	42.1	7.7	6.6	6.5	5.1	2.7	2.3	6.8
AL	49.5	49.7	49.0	49.3	48.5	49.8	51.2	7.4	6.2	5.8	5.5	4.2	5.0	6.1
AR	45.5	45.7	43.3	44.7	44.5	43.5	44.0	4.1	3.1	2.9	3.4	2.5	2.8	2.1
AZ	43.2	44.4	45.5	44.9	45.1	45.3	46.3	3.8	2.5	2.0	1.6	1.7	2.4	2.0
CA	48.4	47.8	47.5	47.1	47.7	46.9	47.8	2.1	2.2	1.7	1.9	1.7	1.9	2.2
CO	38.0	37.8	38.0	37.3	37.2	35.8	37.1	3.0	4.0	2.0	2.3	2.0	2.9	2.9
CT	40.1	40.3	39.9	41.5	40.4	39.1	40.1	2.8	1.8	2.3	1.1	2.1	2.9	2.4
DC	52.6	54.3	49.5	50.6	51.1	53.4	55.7	9.8	5.4	7.4	3.9	1.8	2.2	3.8
DE	49.7	48.4	49.5	48.7	48.8	45.9	46.5	11.8	2.6	2.1	4.7	8.5	7.4	4.2
FL	46.5	47.4	46.7	47.4	47.2	48.3	49.5	4.9	5.0	4.9	5.1	4.2	5.2	4.4
GA	52.5	53.4	53.3	53.9	54.0	53.6	53.8	2.7	3.1	3.4	3.9	3.6	4.0	5.6
HI	57.0	53.3	55.7	54.4	52.2	57.2	59.7	5.9	2.4	6.8	6.4	3.9	5.7	4.6
IA	30.2	30.2	29.6	29.3	29.2	28.7	29.3	2.3	1.9	1.8	1.0	1.0	1.4	1.5
ID	34.5	36.6	37.8	39.1	37.8	33.4	34.5	3.2	4.1	2.7	1.8	2.8	4.3	2.8
IL	33.6	33.6	33.4	33.4	33.4	32.9	33.2	2.1	1.6	1.8	1.6	2.0	2.0	2.0
IN	38.1	40.0	38.2	39.7	39.1	39.2	39.3	4.6	4.4	5.6	4.1	4.1	3.4	4.2
KS	36.0	36.0	36.3	35.6	35.5	33.8	34.1	2.5	3.4	2.0	2.4	2.3	4.0	3.9
KY	49.5	50.1	47.9	47.8	47.8	46.9	47.4	3.7	4.4	4.4	4.3	4.4	5.2	5.4
LA	43.1	43.4	46.1	46.1	45.9	45.5	45.7	2.6	2.7	2.0	1.1	0.9	0.8	0.7
MA	44.7	44.5	45.0	45.8	45.2	44.8	46.3	1.0	1.3	1.6	0.8	1.3	1.3	1.2
MD	51.6	54.2	53.2	53.2	53.0	53.0	51.0	4.5	5.0	5.1	5.8	6.6	6.2	8.5
ME	48.5	47.9	46.3	45.6	46.5	45.0	45.4	10.9	6.9	12.1	11.1	10.2	12.7	11.3
MI	40.5	40.8	41.3	39.5	39.7	38.8	39.0	5.7	5.1	4.7	4.1	4.4	4.5	3.7
MN	37.9	37.2	36.4	36.0	34.5	33.2	32.8	11.7	11.5	10.2	10.4	9.1	10.0	7.6
MO	38.3	39.1	39.1	39.1	37.1	37.4	37.9	4.6	5.2	4.6	4.4	3.8	4.2	5.2
MS	46.1	48.1	46.5	49.0	48.3	48.1	48.7	2.4	1.1	0.8	0.9	0.6	1.0	1.3
MT	28.8	30.2	30.5	31.4	31.8	32.3	32.9	4.9	2.2	2.3	2.7	1.7	2.2	1.8
NC	53.6	52.1	51.6	51.1	52.8	52.4	53.8	3.0	2.9	3.2	3.7	3.9	2.9	2.4
ND	28.7	29.2	29.8	29.8	30.4	30.3	28.6	1.4	2.1	2.0	2.0	2.2	2.5	3.1
NE	30.1	32.8	31.7	30.6	30.7	29.7	29.2	5.8	6.8	5.9	5.5	4.0	5.1	5.2
NH	32.0	32.5	31.5	31.0	30.4	31.9	32.7	5.7	6.8	7.7	8.4	5.2	10.4	9.3
NJ	45.8	45.0	44.5	43.5	41.9	42.9	43.1	3.1	3.4	4.2	4.0	3.5	2.9	3.8
NM	42.0	42.7	41.8	41.0	44.4	45.5	46.3	3.4	2.0	2.2	0.5	2.5	2.3	2.0
NV	44.9	46.7	47.1	44.2	49.7	46.2	48.4	2.7	3.8	6.3	5.8	6.7	2.5	4.3
NY	50.7	50.2	49.1	49.2	49.2	48.7	48.0	1.9	2.0	1.7	2.0	2.1	1.8	2.0
OH	38.5	39.2	38.0	37.6	37.5	37.6	37.3	4.3	3.5	3.8	3.2	3.3	3.2	2.9
OK	41.6	41.1	41.2	40.8	41.3	42.5	41.0	3.3	2.9	2.7	1.9	3.2	3.6	3.5
OR	49.0	46.9	47.3	50.7	46.1	43.7	45.4	3.1	1.8	1.8	1.5	2.3	4.7	2.3
PA	47.7	47.0	47.4	47.5	46.8	46.3	46.7	6.4	6.6	6.7	6.5	6.5	6.6	6.5
RI	36.8	37.5	33.2	36.5	37.5	37.6	34.7	2.2	0.8	2.2	1.0	1.1	1.3	1.8
SC	55.5	55.5	57.6	55.8	59.0	56.7	57.7	1.3	2.0	1.8	1.3	1.6	2.5	2.4
SD	30.6	29.2	29.2	32.5	30.8	30.3	30.9	2.7	2.9	1.6	2.4	0.5	1.0	2.4
TN	49.8	50.6	50.9	50.7	49.8	50.2	51.6	5.4	3.1	3.8	4.2	3.3	3.5	4.0
TX	48.0	49.2	47.9	47.5	47.0	47.3	48.3	1.6	2.3	2.9	2.7	2.4	2.4	2.0
UT	42.0	39.9	39.2	38.6	35.6	36.2	37.9	4.8	4.1	2.6	2.8	4.8	6.2	7.1
VA	56.5	57.1	54.4	54.8	53.2	53.1	52.1	4.4	5.6	6.0	5.2	4.7	5.2	5.2
VT	42.3	43.3	40.0	42.3	42.9	43.9	43.7	9.7	7.2	5.6	12.7	16.3	17.4	20.2
WA	47.4	46.2	45.4	44.7	44.9	44.1	44.3	2.2	1.8	2.9	1.6	2.0	2.6	1.5
WI	32.3	32.6	33.0	32.1	31.6	31.2	31.3	7.2	6.4	6.3	4.4	4.7	5.8	7.3
WV	43.9	47.5	47.2	48.3	48.1	48.0	46.4	1.9	1.0	0.7	0.9	1.6	2.1	1.0
WY	28.9	28.1	28.2	31.3	29.6	29.0	28.9	16.9	15.6	11.1	16.6	13.9	11.0	9.4
<b>US</b>	<b>43.3</b>	<b>43.6</b>	<b>43.3</b>	<b>43.2</b>	<b>43.0</b>	<b>42.7</b>	<b>43.1</b>	<b>3.8</b>	<b>3.6</b>	<b>3.7</b>	<b>3.4</b>	<b>3.3</b>	<b>3.6</b>	<b>3.6</b>

## Catheters

Indwelling catheters are tubes used to drain urine from the bladder. In 2001, about 7.2 percent of facility residents were reported to be using catheters and this declined to 6.6 percent in 2007 (See Table 24).



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

<b>State</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
AK	12.1	7.6	9.1	8.5	7.3	6.6	7.7
AL	5.3	5.7	5.7	5.7	5.5	5.4	5.3
AR	8.8	7.4	8.1	7.4	7.6	6.8	7.2
AZ	9.9	8.2	9.5	9.1	8.5	8.6	9.0
CA	8.6	9.0	8.8	8.7	8.6	8.4	7.7
CO	7.9	7.9	8.4	8.9	8.3	9.1	8.3
CT	4.3	4.8	4.6	4.6	4.5	4.3	4.3
DC	5.4	4.6	3.7	4.5	5.3	3.5	5.3
DE	5.5	4.5	5.1	4.5	5.5	5.1	4.4
FL	7.1	7.1	7.2	6.9	6.9	6.6	6.3
GA	5.6	5.8	5.3	4.9	5.2	4.9	4.6
HI	6.3	4.7	7.2	8.1	5.6	5.1	8.3
IA	5.8	5.9	5.8	6.0	6.4	6.3	6.2
ID	7.9	7.4	9.6	7.6	7.6	7.1	7.8
IL	6.8	6.8	6.7	6.9	6.9	6.5	6.5
IN	8.3	7.2	7.5	7.3	7.1	7.4	7.0
KS	6.0	6.6	6.2	6.0	5.9	5.5	5.9
KY	9.4	10.2	9.2	9.2	8.9	8.4	7.8
LA	12.4	10.6	9.6	10.2	10.2	8.7	8.9
MA	5.3	5.3	5.5	5.3	5.3	5.2	5.3
MD	5.4	5.6	5.4	6.3	5.4	5.5	5.5
ME	6.6	7.5	7.1	7.2	7.4	6.6	7.0
MI	5.4	5.8	5.9	6.0	5.7	6.0	5.7
MN	4.4	5.1	5.1	5.4	5.5	5.2	5.3
MO	6.8	7.0	7.0	6.1	5.9	5.5	5.8
MS	7.3	6.7	6.8	7.2	7.2	6.3	6.1
MT	5.4	7.9	8.6	6.4	7.3	6.9	6.8
NC	6.2	7.0	7.1	7.0	6.5	6.1	6.0
ND	4.3	5.8	5.8	5.8	6.4	6.3	6.3
NE	6.0	6.5	7.2	7.1	7.2	7.0	6.7
NH	4.2	4.2	5.6	5.0	5.6	5.7	5.9
NJ	6.3	6.0	5.9	6.0	5.7	5.7	5.6
NM	8.5	7.4	9.6	8.8	7.9	7.2	7.2
NV	9.0	8.3	9.7	9.0	9.4	7.4	9.4
NY	5.1	5.2	5.5	5.7	5.5	5.4	5.5
OH	7.2	7.1	7.2	7.2	7.2	7.0	6.8
OK	8.9	9.3	9.4	8.6	7.9	8.0	8.2
OR	8.0	7.6	7.9	8.5	8.9	9.1	9.4
PA	7.1	7.3	7.1	7.4	7.0	6.6	6.8
RI	4.5	4.7	4.6	4.7	4.7	4.3	4.2
SC	5.8	5.8	6.1	5.8	6.3	5.3	4.4
SD	5.9	6.5	5.9	6.2	6.0	5.8	6.5
TN	9.4	8.2	8.5	8.5	8.0	7.3	7.1
TX	8.8	9.4	7.9	7.3	7.2	6.9	6.4
UT	9.1	9.0	9.2	9.0	11.0	10.1	9.4
VA	7.4	7.3	6.8	6.8	6.5	6.0	5.8
VT	6.9	5.9	6.3	6.7	6.9	6.7	6.3
WA	9.2	8.9	9.6	9.1	9.0	9.0	8.8
WI	6.0	6.5	6.4	6.9	7.0	6.8	6.8
WV	9.8	9.5	9.7	9.2	8.3	8.9	8.2
WY	11.5	9.5	9.3	14.0	10.5	10.7	8.8
<b>US</b>	<b>7.2</b>	<b>7.2</b>	<b>7.2</b>	<b>7.1</b>	<b>6.9</b>	<b>6.7</b>	<b>6.6</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; Schneider et al., 1988; Fries et al., 1989; 1994).

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 patients being alive, having improved physically, and being discharged to home (Linn et al., 1977). Fottler, Smith and James (1981) also found nursing hours to be a positive indicator of quality. Nyman (1988b) found that higher nursing hours per resident were significantly and positively associated with three of eight quality measures in Iowa nursing homes. Spector and Takada (1991) examined nursing homes in Rhode Island and found that low staffing in homes with very dependent residents was associated with reduced likelihood of improvement. Cohen and Spector (1996) also had similar findings about the importance of RN staffing. Harrington and colleagues (2000b) found a relationship between more RNs and fewer deficiencies.

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. 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 (Kanda and Mezey, 1991; 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 2001 through 2007 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 13,650 facilities reporting beds in this category for RNs in 2007.

### Registered Nursing Hours

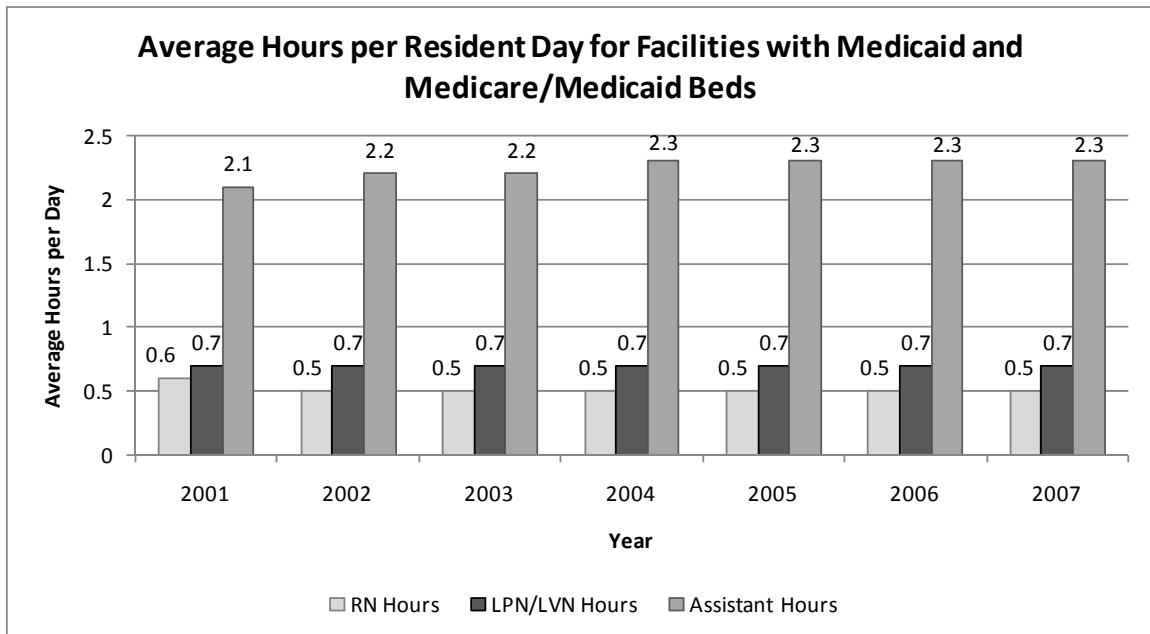
The average RN hours per resident day are shown in Table 25. The average hours decline from 0.6 in 2001 to 0.5 in 2007 or a 17 percent decline. This converts to 30 minutes per resident day or about 10 minutes per 8 hour shift in 2007. The average ratio of RNs hours ranged from 0.3 hours (in Arkansas, Georgia, Louisiana, Oklahoma and Texas) to 1.4 hours (in Alaska) in 2007. 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 2001-2007, the average LPN/LVN hours remained steady at 0.7 (42 minutes) per resident day (or 14 minutes per shift).

### Nursing Aide/Assistant Hours

The average NA hours per resident day are shown in Table 25. The average was 2.1 hours (126 minutes) in 2001. In 2002 and 2003, the average NA hours increased to 2.2 hours (132 minutes per resident day or 44 minutes per shift) and the NA hours were 2.3 in 2004-2007.



**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)**

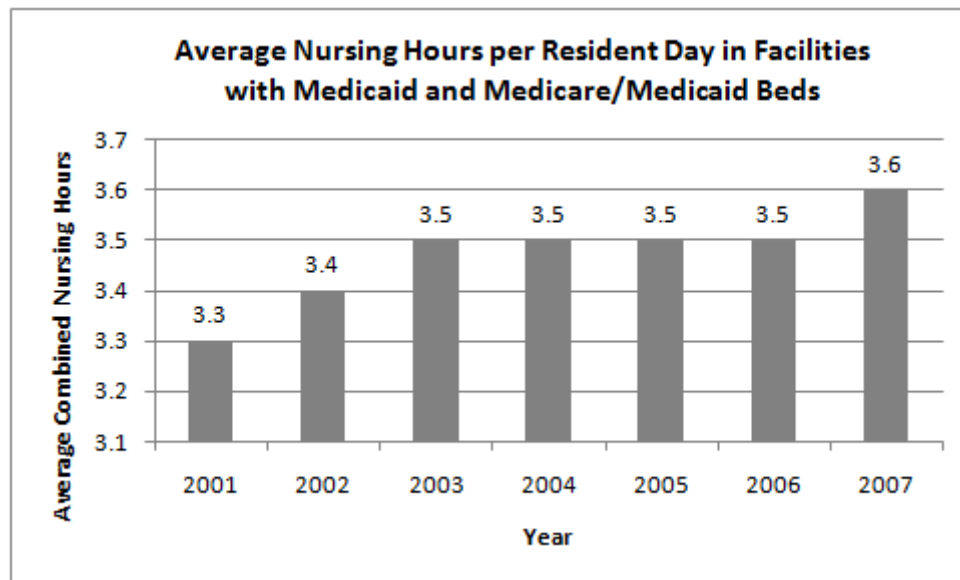
State	RN Hours							LPN/LVN Hours							Assistant Hours						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	1.1	0.9	1.3	1.2	1.1	1.2	1.4	0.6	0.6	0.6	0.7	0.6	0.7	0.6	2.7	2.7	3.0	3.3	2.9	3.2	3.4
AL	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9	0.9	0.9	0.9	1.0	1.0	0.9	2.5	2.5	2.5	2.5	2.5	2.5	2.4
AR	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.7	0.8	0.8	0.8	0.8	0.9	2.1	2.3	2.4	2.5	2.6	2.5	2.6
AZ	0.5	0.6	0.5	0.5	0.6	0.5	0.5	0.8	0.7	0.8	0.8	0.8	0.9	0.8	2.1	2.1	2.1	2.1	2.2	2.1	2.2
CA	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.6	0.6	0.6	0.7	0.7	2.3	2.4	2.5	2.5	2.5	2.4	2.5
CO	0.7	0.6	0.6	0.7	0.6	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.8	2.0	2.2	2.1	2.2	2.2	2.2	2.2
CT	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.5	0.6	0.6	0.6	0.6	0.6	0.6	2.1	2.2	2.2	2.3	2.3	2.3	2.3
DC	0.7	0.6	0.5	0.7	0.6	0.7	0.7	0.8	0.8	0.9	1.0	1.0	1.1	1.0	2.2	2.3	2.5	2.7	2.3	2.5	2.6
DE	0.8	0.8	0.8	0.8	0.7	0.8	0.8	0.7	0.7	0.7	0.8	0.9	0.9	0.9	2.4	2.6	2.5	2.4	2.4	2.4	2.4
FL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.8	0.9	0.9	0.9	0.9	0.9	1.0	2.1	2.5	2.7	2.7	2.8	2.8	3.0
GA	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	0.8	0.8	0.8	0.9	0.9	0.9	2.0	2.1	2.1	2.1	2.1	2.1	2.1
HI	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.6	0.5	0.5	0.6	2.6	2.6	2.5	2.5	2.5	2.5	2.5
IA	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.6	1.9	2.0	2.0	2.0	2.1	2.1	2.1
ID	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	2.5	2.6	2.6	2.6	2.5	2.5	2.5
IL	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.7	1.8	1.8	1.8	1.9	1.9	1.9
IN	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.8	0.8	0.8	0.8	0.8	0.9	0.9	1.8	1.9	2.0	2.0	2.0	2.0	2.0
KS	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	2.1	2.2	2.2	2.3	2.3	2.3	2.4
KY	0.6	0.6	0.5	0.6	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.7	0.7	0.8	2.4	2.5	2.5	2.5	2.4	2.4	2.4
LA	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.7	0.7	0.7	0.8	0.8	0.8	0.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0
MA	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.8	2.2	2.3	2.3	2.3	2.3	2.3	2.3
MD	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	2.3	2.3	2.3	2.3	2.4	2.3	2.3
ME	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.4	0.4	0.4	0.4	0.4	0.4	0.4	2.7	2.8	2.9	3.0	2.9	2.9	3.0
MI	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	2.3	2.4	2.4	2.3	2.3	2.3	2.4
MN	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.0	2.1	2.2	2.2	2.2	2.3	2.3
MO	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.6	0.6	0.6	0.6	0.6	0.7	2.2	2.3	2.3	2.3	2.3	2.3	2.4
MS	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.8	0.8	0.8	0.8	0.9	0.9	0.9	2.1	2.2	2.2	2.3	2.3	2.3	2.3
MT	0.7	0.7	0.8	0.7	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2.4	2.4	2.5	2.4	2.1	2.4	2.5
NC	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.7	0.7	0.7	0.8	0.8	0.8	0.8	2.2	2.3	2.2	2.3	2.3	2.3	2.2
ND	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6	2.6	2.6	2.6	2.7	2.7	2.6	2.7
NE	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	2.2	2.3	2.3	2.4	2.3	2.3	2.4
NH	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.6	0.6	0.6	0.6	0.6	2.2	2.3	2.3	2.3	2.4	2.4	2.4
NJ	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	2.1	2.1	2.1	2.2	2.1	2.1	2.1
NM	0.6	0.4	0.6	0.4	0.5	0.6	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	2.2	1.4	2.0	1.7	1.8	2.2	2.0
NV	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.8	0.7	0.8	0.7	0.7	1.9	2.0	2.2	2.1	2.2	2.0	2.2
NY	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8	2.1	2.2	2.2	2.2	2.2	2.2	2.2
OH	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.8	0.8	0.8	0.8	0.9	0.8	0.9	2.2	2.3	2.3	2.3	2.3	2.2	2.3
OK	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.7	0.7	0.7	0.7	2.2	2.3	2.3	2.3	2.4	2.4	2.3
OR	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.5	0.5	0.5	0.5	2.4	2.5	2.5	2.5	2.5	2.6	2.6
PA	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	2.1	2.2	2.2	2.2	2.2	2.2	2.2
RI	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2.1	2.1	2.2	2.2	2.4	2.3	2.4
SC	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.8	0.8	0.8	0.9	0.9	0.9	0.9	2.3	2.3	2.3	2.3	2.3	2.3	2.3
SD	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2.1	2.1	2.2	2.2	2.2	2.2	2.2
TN	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7	0.7	0.8	0.8	0.8	0.8	0.8	1.9	2.0	2.0	2.0	2.0	2.1	2.1
TX	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.7	0.7	0.7	0.8	0.8	0.8	2.0	2.1	2.1	2.1	2.1	2.1	2.1
UT	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	2.1	2.3	2.3	2.3	2.4	2.2	2.3
VA	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.8	0.8	0.8	0.9	0.9	0.9	0.9	2.1	2.1	2.0	2.1	2.0	2.1	2.1
VT	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.8	2.2	2.4	2.2	2.2	2.4	2.4	2.2
WA	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.7	2.4	2.4	2.4	2.4	2.4	2.4	2.3
WI	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.4	0.5	0.5	0.5	0.5	0.5	0.6	2.2	2.3	2.3	2.4	2.4	2.4	2.4
WV	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8	0.8	0.8	0.8	2.0	2.2	2.1	2.2	2.1	2.1	2.1
WY	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.6	0.5	0.6	0.6	0.5	0.5	0.5	2.2	2.5	2.3	2.2	2.3	2.2	2.4
US	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.1	2.2	2.2	2.3	2.3	2.3	2.3
Facilities	13161	13475	13563	13533	13371	13675	13650	13149	13461	13546	13524	13370	13663	13642	12961	13116	13434	13522	13504	13645	13629

## Licensed Nursing Hours

Table 26 shows the average licensed nursing hours (RNs and LPN/LVNs) per resident day was 1.2 hours in 2001 -2004, and 1.3 in 2005-2007. This was about 78 minutes per resident day or 26 minutes per 8-hour shift in 2007. The decline in RN hours was accompanied by an increase in LVN hours, to maintain the total licensed hours per resident day at 1.3.

## Total Nursing Hours

The total nursing hours (RNs, LPN/LVNs, and NAs) per resident day increased from 3.3 in 2001 to 3.6 in 2007 (See Table 26) primarily because of the increase in unlicensed hours. The total nursing hours varied across states from 3.1 in Illinois and Louisiana to 5.1 in Alaska in 2007.



**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						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	1.8	1.7	2.0	1.9	1.9	1.9	1.9	4.8	4.4	5.3	5.2	5.0	5.4	5.1
AL	1.3	1.3	1.3	1.4	1.4	1.4	1.4	3.8	3.9	3.9	3.9	3.9	3.9	3.9
AR	1.0	1.0	1.1	1.1	1.1	1.1	1.2	3.1	3.3	3.5	3.6	3.8	3.7	3.7
AZ	1.3	1.3	1.3	1.4	1.4	1.4	1.3	3.4	3.4	3.5	3.5	3.6	3.5	3.5
CA	1.2	1.2	1.1	1.1	1.2	1.2	1.3	3.5	3.6	3.6	3.6	3.6	3.7	3.8
CO	1.3	1.3	1.3	1.3	1.4	1.4	1.4	3.3	3.4	3.5	3.5	3.6	3.6	3.6
CT	1.3	1.3	1.3	1.3	1.3	1.3	1.4	3.4	3.5	3.5	3.6	3.6	3.6	3.7
DC	1.6	1.4	1.5	1.7	1.6	1.7	1.7	3.7	3.7	4.0	4.3	4.0	4.0	4.2
DE	1.5	1.5	1.5	1.6	1.6	1.6	1.7	3.9	4.0	4.1	4.0	4.0	4.1	3.9
FL	1.3	1.4	1.4	1.4	1.5	1.5	1.5	3.4	3.9	4.1	4.2	4.2	4.2	4.5
GA	1.1	1.2	1.1	1.2	1.2	1.2	1.3	3.2	3.3	3.2	3.3	3.3	3.3	3.4
HI	1.4	1.3	1.3	1.3	1.2	1.3	1.3	4.0	3.9	3.9	3.8	3.8	3.9	3.8
IA	1.0	1.0	1.0	1.0	1.1	1.1	1.1	2.9	3.0	3.1	3.1	3.1	3.2	3.2
ID	1.4	1.4	1.4	1.5	1.5	1.5	1.5	3.9	4.0	4.0	4.0	4.0	4.0	4.0
IL	1.1	1.0	1.0	1.1	1.1	1.1	1.1	2.8	2.9	2.9	2.9	3.1	3.0	3.1
IN	1.2	1.3	1.2	1.3	1.3	1.3	1.4	3.1	3.2	3.2	3.3	3.3	3.4	3.4
KS	1.1	1.0	1.0	1.1	1.1	1.1	1.1	3.1	3.2	3.3	3.4	3.4	3.4	3.5
KY	1.3	1.3	1.3	1.3	1.3	1.3	1.3	3.7	3.8	3.7	3.7	3.7	3.7	3.7
LA	0.9	1.0	1.0	1.0	1.0	1.1	1.1	2.9	3.0	3.0	3.1	3.0	3.0	3.1
MA	1.4	1.4	1.4	1.4	1.4	1.4	1.5	3.6	3.6	3.6	3.7	3.7	3.7	3.8
MD	1.3	1.3	1.3	1.3	1.4	1.4	1.4	3.6	3.6	3.6	3.6	3.7	3.7	3.7
ME	1.3	1.3	1.3	1.3	1.3	1.3	1.3	4.0	4.2	4.2	4.3	4.2	4.3	4.3
MI	1.2	1.2	1.2	1.2	1.3	1.3	1.3	3.5	3.6	3.6	3.6	3.6	3.6	3.7
MN	1.1	1.2	1.2	1.2	1.3	1.3	1.3	3.2	3.3	3.4	3.4	3.5	3.6	3.6
MO	1.0	1.0	1.0	1.0	1.0	1.0	1.1	3.2	3.3	3.3	3.3	3.4	3.4	3.4
MS	1.2	1.2	1.2	1.3	1.3	1.3	1.4	3.4	3.5	3.5	3.6	3.6	3.6	3.7
MT	1.3	1.2	1.3	1.2	1.3	1.4	1.3	3.6	3.6	3.8	3.7	3.7	3.8	3.7
NC	1.3	1.3	1.3	1.4	1.4	1.4	1.4	3.6	3.6	3.6	3.7	3.7	3.7	3.6
ND	1.1	1.1	1.2	1.1	1.2	1.2	1.2	3.7	3.7	3.8	3.8	3.9	3.8	3.9
NE	1.2	1.2	1.2	1.2	1.2	1.3	1.3	3.3	3.5	3.6	3.6	3.6	3.6	3.6
NH	1.3	1.4	1.4	1.4	1.4	1.4	1.5	3.5	3.6	3.7	3.6	3.8	3.8	3.9
NJ	1.3	1.3	1.3	1.3	1.3	1.3	1.3	3.4	3.4	3.4	3.4	3.5	3.4	3.5
NM	1.1	1.1	1.1	1.1	1.2	1.1	1.2	3.3	3.1	3.3	3.3	3.3	3.3	3.4
NV	1.4	1.4	1.4	1.3	1.3	1.4	1.3	3.3	3.4	3.5	3.4	3.5	3.4	3.5
NY	1.2	1.3	1.3	1.3	1.3	1.3	1.4	3.3	3.5	3.5	3.6	3.6	3.6	3.6
OH	1.4	1.4	1.4	1.4	1.4	1.4	1.4	3.6	3.7	3.7	3.8	3.8	3.7	3.7
OK	0.9	0.9	0.9	1.0	1.0	1.0	1.0	3.2	3.3	3.3	3.3	3.4	3.4	3.4
OR	1.1	1.1	1.1	1.2	1.2	1.2	1.2	3.5	3.5	3.6	3.8	3.7	3.8	3.9
PA	1.4	1.4	1.4	1.4	1.4	1.4	1.4	3.5	3.6	3.6	3.6	3.6	3.6	3.6
RI	1.1	1.0	1.0	1.0	1.1	1.0	1.1	3.2	3.2	3.2	3.3	3.5	3.4	3.5
SC	1.2	1.2	1.2	1.3	1.3	1.3	1.4	3.5	3.6	3.6	3.7	3.6	3.6	3.7
SD	1.0	1.0	1.0	1.1	1.0	1.0	1.0	3.1	3.2	3.2	3.2	3.2	3.2	3.2
TN	1.1	1.1	1.2	1.2	1.2	1.3	1.3	3.1	3.1	3.2	3.2	3.3	3.3	3.3
TX	1.1	1.1	1.1	1.1	1.1	1.1	1.1	3.1	3.2	3.2	3.2	3.2	3.2	3.2
UT	1.2	1.2	1.2	1.2	1.2	1.2	1.3	3.3	3.4	3.5	3.5	3.6	3.4	3.6
VA	1.3	1.3	1.3	1.4	1.4	1.4	1.4	3.4	3.4	3.3	3.4	3.5	3.5	3.5
VT	1.4	1.4	1.4	1.3	1.4	1.4	1.4	3.7	3.7	3.7	3.6	3.8	3.8	3.6
WA	1.4	1.4	1.4	1.4	1.4	1.4	1.4	3.8	3.8	3.8	3.8	3.8	3.8	3.8
WI	1.1	1.1	1.1	1.1	1.2	1.2	1.2	3.3	3.4	3.4	3.5	3.5	3.6	3.6
WV	1.2	1.2	1.3	1.3	1.3	1.3	1.3	3.3	3.4	3.4	3.5	3.4	3.4	3.4
WY	1.4	1.2	1.3	1.3	1.3	1.3	1.3	3.5	3.7	3.5	3.5	3.6	3.6	3.7
US	1.2	1.2	1.2	1.2	1.3	1.3	1.3	3.3	3.4	3.5	3.5	3.5	3.5	3.6
<b>Facilities</b>	<b>12,807</b>	<b>13,119</b>	<b>13,213</b>	<b>13,193</b>	<b>13,033</b>	<b>13,322</b>	<b>13,305</b>	<b>12,615</b>	<b>12,912</b>	<b>13,009</b>	<b>13,000</b>	<b>12,851</b>	<b>13,122</b>	<b>13,109</b>

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

Tables 27 and 28 show the certified facilities with Medicare only beds. In 2007 there were a total of 727 such facilities that had RN staffing data available. Medicare only certified nursing facility beds represented only 2.2 percent of the total nursing facility beds (Table 5).

### Registered Nursing Hours

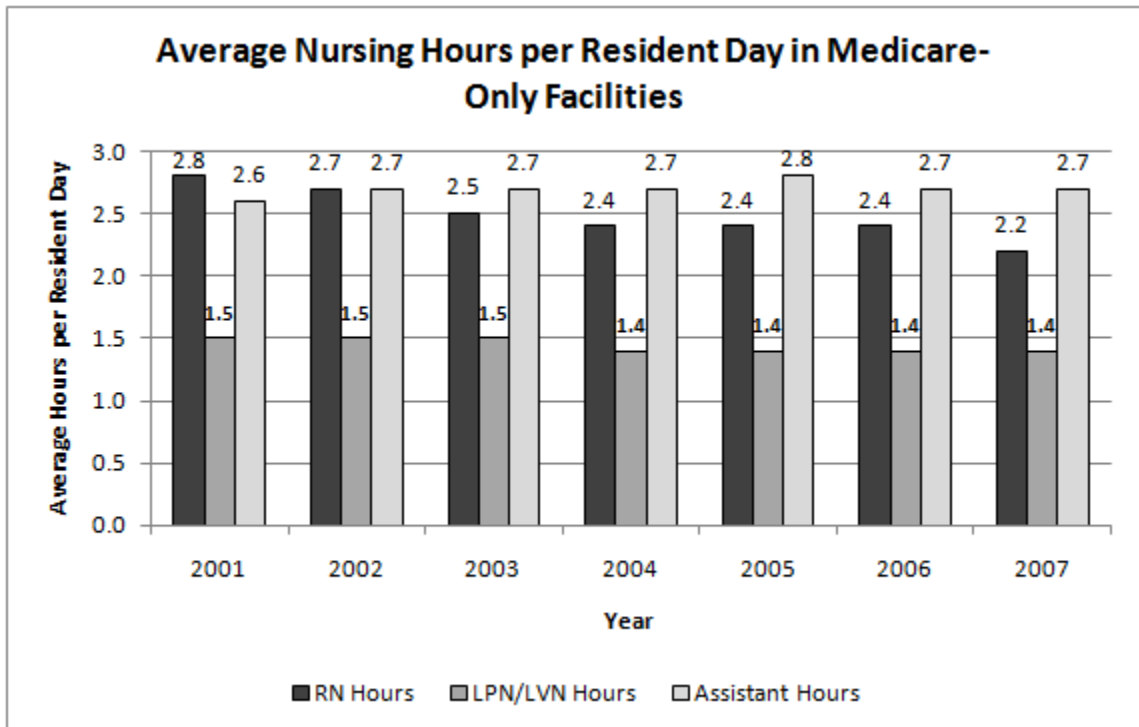
The average RN hours per resident day are shown in Table 27. The average RN hours were 2.8 in 2001 and then decreased to 2.2 hours per resident day (or 132 minutes) in 2007. This was a 21 percent decrease in RN hours per resident day. The ratio of RN hours varied across states.

### 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 2001 and this decreased to 1.4 in 2007. This was an 7 percent decrease in LPN/LVN hours per resident day. This was about 84 minutes per resident day or 28 minutes per 8 hour shift in 2007.

### Nursing Aide/Assistant Hours

The average NA hours per resident day are shown in Table 27. The average was 2.6 hours in 2001 and this increased to 2.7 hours in 2007, or by 4 percent.



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

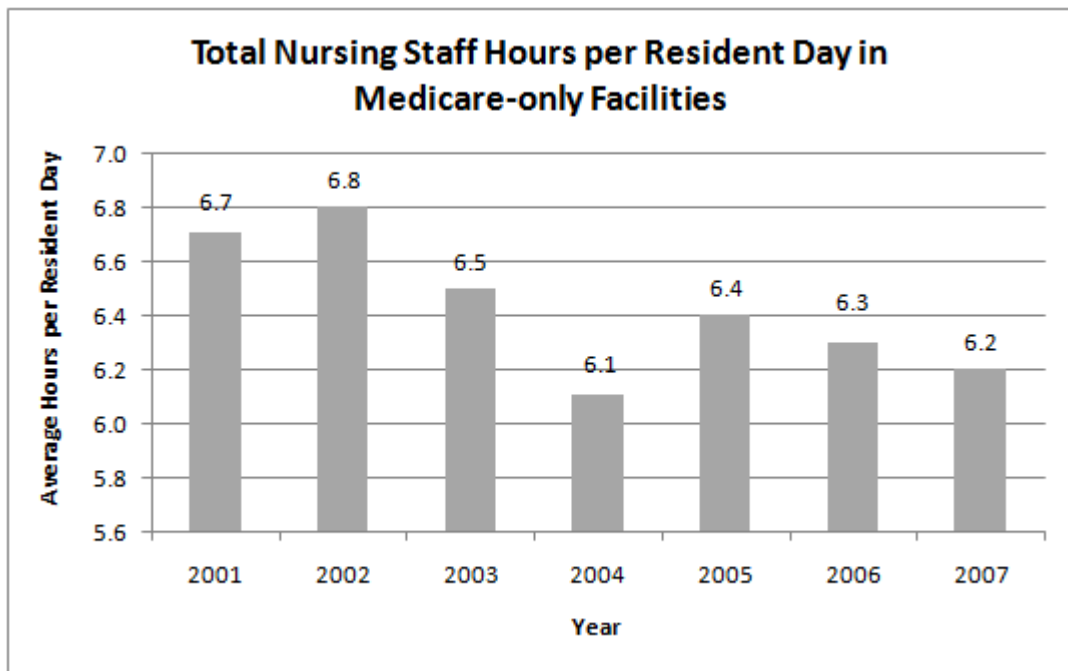
State	RN Hours							LPN/LVN Hours							Assistant Hours						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	4.1
AL	2.8	2.6	3.0	2.5	2.7	1.5	2.7	1.5	1.4	2.4	1.9	2.3	1.7	1.8	3.4	3.3	2.8	3.0	2.4	3.0	3.3
AR	2.8	3.0	3.3	2.8	3.5	3.7	3.5	2.0	2.4	2.9	2.7	2.6	2.3	2.2	2.1	2.4	2.8	2.3	2.6	2.4	2.2
AZ	2.4	2.1	1.5	0.9	0.7	0.6	0.8	1.4	1.6	0.6	1.1	0.7	0.8	0.9	2.0	2.4	3.0	2.3	2.2	1.9	2.1
CA	1.8	2.0	1.7	1.7	1.6	1.5	1.3	1.2	1.3	1.0	0.9	1.0	1.0	0.9	2.5	2.8	2.8	2.9	2.9	2.7	2.8
CO	2.5	2.6	2.3	2.0	2.4	2.2	1.9	1.1	1.0	0.9	1.0	0.9	1.1	1.0	2.1	2.4	2.2	2.3	2.8	2.1	2.4
CT	1.4	1.4	1.4	1.5	1.7	1.5	1.4	0.4	0.5	0.5	0.9	0.8	0.8	0.7	2.8	2.8	2.6	2.6	3.1	2.6	2.9
DC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DE	1.1	0.8	1.0	1.7	1.1	1.6	1.7	0.8	0.7	0.7	0.8	0.8	0.8	0.8	1.8	1.6	2.1	2.6	2.2	2.4	2.4
FL	2.7	2.1	1.9	1.9	2.2	1.3	1.3	1.4	1.2	1.3	1.4	1.6	1.5	1.4	2.3	2.5	2.7	2.8	3.3	3.3	3.2
GA	2.1	3.2	2.0	2.1	1.5	2.2	1.5	1.5	1.5	1.8	1.6	1.3	2.0	2.0	3.2	3.4	2.7	2.5	2.6	2.5	2.6
HI	0.0	0.0	0.0	0.0	0.0	5.9	0.0	0.0	0.0	0.0	0.0	1.7	3.2	0.0	0.0	0.0	0.0	5.6	3.8	0.0	0.0
IA	4.8	4.8	4.9	4.6	5.0	3.7	4.4	2.1	1.6	1.9	1.7	1.7	1.2	1.5	2.6	2.1	2.3	2.6	1.9	2.7	1.9
ID	3.9	2.7	2.6	2.3	3.1	2.7	4.1	1.6	1.9	1.9	1.9	2.0	1.8	2.2	3.6	2.6	3.0	2.9	3.6	3.3	4.5
IL	3.3	3.6	2.8	2.9	2.7	3.0	3.1	1.0	1.3	1.0	1.1	1.0	1.2	1.0	2.7	3.4	2.9	2.7	2.9	2.7	2.8
IN	3.1	2.3	2.1	2.1	2.1	2.2	2.0	1.8	1.6	1.9	1.7	1.9	1.9	1.8	2.6	2.7	2.8	2.7	2.8	2.7	2.7
KS	3.8	3.8	3.5	3.7	2.7	2.8	2.3	1.9	1.6	1.8	2.0	1.4	1.2	1.4	3.0	3.7	3.4	2.8	2.8	3.5	2.8
KY	2.7	2.9	2.6	3.4	3.1	2.7	3.2	1.7	1.7	2.1	2.2	1.6	1.6	1.5	2.6	2.4	2.3	2.6	2.7	2.6	3.0
LA	2.7	2.8	2.5	2.9	3.6	3.4	2.3	2.5	2.2	2.4	2.0	3.0	2.5	2.2	2.6	2.6	2.6	2.8	3.6	3.6	2.6
MA	1.6	1.6	1.5	1.7	2.0	1.9	1.5	0.8	0.7	0.9	0.9	0.8	0.8	1.0	2.5	2.5	2.3	2.3	2.7	2.6	2.9
MD	0.9	0.8	0.8	0.8	0.7	0.6	1.3	0.7	0.7	0.9	1.0	1.3	1.2	1.2	2.3	2.5	3.0	3.0	3.2	3.1	2.9
ME	0.0	3.0	7.4	2.4	2.3	2.9	2.0	0.0	2.3	3.2	1.2	1.9	1.2	1.3	0.0	5.3	0.0	2.9	2.7	3.5	2.8
MI	1.6	1.8	1.2	1.2	1.2	1.3	1.2	1.2	1.7	1.3	1.1	1.1	1.1	1.1	3.1	3.9	3.0	2.6	2.4	2.4	2.5
MN	2.5	2.2	1.9	2.5	1.8	1.3	1.8	1.3	1.0	1.4	2.3	1.6	1.2	1.9	3.3	3.1	3.2	2.7	2.4	2.5	2.3
MO	3.7	3.7	3.8	3.4	3.9	3.3	3.6	2.0	2.1	2.2	1.7	1.8	1.9	1.6	3.3	3.3	3.3	2.9	2.9	2.7	3.4
MS	3.5	3.3	3.6	3.3	3.3	3.1	3.8	1.9	1.8	1.9	1.8	1.5	1.5	1.7	2.6	2.6	2.6	2.7	1.9	1.9	2.7
MT	2.8	3.0	2.8	2.4	1.5	3.5	3.4	1.8	2.4	0.5	3.5	2.7	1.9	2.4	2.7	2.5	2.4	2.6	1.5	3.0	3.3
NC	3.6	3.3	2.9	2.6	3.3	2.4	3.7	0.5	1.7	2.0	1.6	2.5	1.8	2.3	4.1	4.2	2.7	3.7	4.2	2.9	3.8
ND	3.1	3.2	3.6	3.7	4.5	6.7	5.1	2.2	2.7	1.8	2.5	2.3	3.0	2.6	1.9	2.1	3.2	3.2	2.5	2.8	3.3
NE	5.2	5.5	6.2	6.3	3.1	5.8	3.0	1.1	0.4	0.9	2.9	2.2	3.5	1.9	0.3	4.3	4.2	3.3	8.1	2.5	2.7
NH	1.7	2.3	1.4	2.9	3.2	1.2	0.8	0.8	2.4	0.7	1.3	0.4	0.7	0.4	3.5	3.7	4.5	4.2	3.9	2.9	2.0
NJ	2.6	1.7	1.8	2.0	1.9	2.1	2.1	0.9	0.9	0.9	0.9	0.9	0.8	0.8	2.4	2.2	2.4	2.5	2.6	2.8	2.7
NM	2.6	3.7	5.8	4.0	3.5	2.8	0.2	0.9	0.0	2.1	0.5	2.2	2.1	0.5	3.0	1.4	6.1	5.0	3.2	2.2	0.8
NV	2.8	2.1	1.5	0.0	0.0	0.0	1.9	0.9	1.9	0.6	0.0	0.0	0.0	2.2	3.5	2.4	1.6	0.0	0.0	0.0	1.7
NY	0.0	1.0	0.9	1.0	1.0	4.2	2.4	0.0	0.7	0.7	0.8	0.7	0.4	1.0	0.0	2.7	2.6	2.7	2.8	5.1	2.5
OH	3.4	3.3	3.4	3.0	3.0	2.9	2.8	1.5	1.6	1.6	1.8	1.7	1.9	1.7	2.2	2.6	2.5	2.3	2.2	2.6	2.3
OK	2.6	2.7	2.2	2.9	2.5	3.3	2.5	2.1	2.1	2.0	1.9	2.8	2.1	2.5	2.4	3.1	2.6	3.0	3.5	2.9	3.2
OR	0.9	1.4	1.2	0.7	0.8	0.9	0.9	0.4	0.7	0.8	0.4	0.6	0.9	1.0	2.8	2.6	2.5	3.0	2.8	2.9	3.2
PA	2.6	2.3	2.3	2.2	2.2	2.4	2.4	1.1	1.0	1.1	1.1	1.1	1.2	1.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
RI	1.5	1.7	0.0	1.5	1.1	1.1	1.6	0.6	0.6	0.0	0.9	0.4	0.4	0.6	3.1	2.6	0.0	3.3	2.4	2.3	2.6
SC	3.2	2.3	2.1	2.2	2.6	2.4	1.7	1.2	1.3	1.1	1.3	1.8	1.5	1.3	3.4	2.7	3.0	2.6	4.2	3.1	2.8
SD	0.8	0.6	0.7	0.0	0.7	0.9	1.0	0.4	0.5	0.5	0.0	0.5	0.4	0.4	2.5	2.5	2.3	0.0	2.9	2.3	2.6
TN	2.8	2.6	2.1	2.5	2.4	2.2	2.3	1.8	1.8	1.5	1.5	1.3	1.3	1.7	2.2	2.4	2.5	2.6	2.9	2.7	3.1
TX	2.9	3.2	2.9	2.3	2.5	2.8	2.2	2.2	2.1	2.0	1.9	1.8	2.0	1.7	2.3	2.9	2.9	2.5	2.6	2.8	2.8
UT	3.1	3.1	3.1	3.1	2.8	2.7	2.5	1.1	1.1	0.8	1.0	1.2	0.9	0.9	3.0	3.7	2.8	3.5	3.4	3.1	3.3
VA	2.7	1.8	1.6	1.5	1.7	2.0	1.9	1.9	1.8	1.7	1.8	1.6	1.5	1.8	2.7	3.3	2.9	3.1	3.4	2.7	3.3
VT	1.3	1.3	1.3	1.4	1.4	1.2	1.4	1.0	0.7	0.9	1.0	0.7	0.8	2.4	2.8	2.5	2.8	4.2	2.9	2.9	7.2
WA	3.3	1.7	1.4	1.4	1.1	1.2	1.0	0.6	0.7	0.8	0.8	0.9	1.1	0.9	4.8	3.4	3.3	3.5	3.0	3.2	2.9
WI	2.8	2.5	2.9	2.4	2.3	1.3	1.8	0.5	0.5	0.5	0.6	0.6	0.7	0.6	2.5	2.6	2.4	2.5	2.9	2.1	2.2
WV	3.6	3.7	2.7	2.9	3.2	2.9	3.1	1.9	2.3	1.5	1.4	1.3	1.1	1.1	2.7	3.5	2.7	2.5	2.2	1.9	2.3
WY	4.1	3.6	5.4	5.0	4.5	5.5	3.9	1.8	1.6	1.0	1.5	1.3	2.4	1.3	2.2	3.8	4.1	2.4	2.3	3.9	2.6
US	2.8	2.7	2.5	2.4	2.4	2.4	2.2	1.5	1.5	1.5	1.4	1.4	1.4	1.4	2.6	2.7	2.7	2.7	2.8	2.7	2.7
Facilities	861	781	796	748	707	734	727	859	777	790	742	709	732	729	827	750	778	720	699	715	715

## Licensed Nursing Hours

Table 28 shows that the average licensed nursing hours (RNs and LPN/LVNs) per resident day was 4.4 in 2001 and declined to 3.6 for a 18 percent drop in 2007. 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 6.7 in 2001 and then declined to 6.2 hours in 2007. This was a decline in total hours of 7.0 percent since 2001. 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 and the cuts in Medicare reimbursement rates since 2001. This was recently 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						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	7.7
AL	4.3	4.0	5.4	4.4	5.0	3.2	4.5	7.7	7.4	8.2	6.7	6.4	6.2	7.9
AR	4.9	5.4	6.2	5.5	6.1	6.0	5.6	7.2	7.8	8.0	7.2	8.7	8.5	7.9
AZ	3.7	3.1	2.2	2.1	1.4	1.5	1.7	4.7	4.9	4.6	4.0	3.6	3.7	3.8
CA	3.1	3.1	2.7	2.7	2.7	2.5	2.3	5.0	5.5	5.5	5.3	5.4	5.2	4.9
CO	3.7	3.6	3.1	3.0	3.3	3.3	2.9	5.6	6.2	5.4	5.3	6.1	5.2	5.3
CT	1.8	1.9	1.8	2.4	2.5	2.3	2.1	4.6	4.7	4.4	5.0	5.5	4.9	5.1
DC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DE	1.9	2.0	1.7	2.5	1.9	2.4	2.5	3.6	3.6	3.7	5.1	4.1	4.8	4.8
FL	4.2	3.3	3.2	3.3	3.8	2.8	2.7	6.3	5.8	5.8	5.9	7.1	6.1	5.9
GA	3.6	4.1	3.8	3.7	3.1	4.1	3.5	6.8	7.5	6.5	6.2	6.0	6.6	4.5
HI	0.0	0.0	0.0	0.0	0.0	9.1	0.0	0.0	0.0	0.0	0.0	0.0	10.8	0.0
IA	6.9	6.4	6.7	6.2	6.1	4.5	5.4	7.6	8.5	9.1	8.6	8.0	6.9	7.3
ID	4.5	4.5	4.6	4.2	5.2	4.5	6.3	7.9	7.1	7.6	7.1	8.8	7.8	9.4
IL	4.3	4.7	3.7	4.0	3.7	4.2	4.1	6.7	8.1	6.6	6.2	6.2	6.4	6.6
IN	4.8	3.9	3.9	3.9	3.9	4.1	3.7	7.1	6.5	6.3	6.4	6.5	6.8	6.3
KS	5.7	5.3	4.8	4.4	3.9	4.0	3.7	8.6	7.7	8.0	6.7	6.9	7.5	6.0
KY	4.4	4.6	4.7	5.5	4.7	4.3	4.6	6.8	7.1	7.1	7.5	7.4	6.9	7.7
LA	5.1	5.2	4.9	4.9	6.3	5.3	4.9	7.6	7.7	7.1	7.0	9.1	8.9	7.8
MA	2.5	2.4	2.4	2.5	2.7	2.7	2.5	4.9	4.9	4.6	4.8	5.4	5.3	5.4
MD	1.6	1.6	1.7	1.8	2.0	1.8	1.8	3.9	4.1	4.7	4.8	5.2	4.9	4.8
ME	0.0	5.3	10.7	3.6	4.2	4.1	3.3	0.0	10.7	0.0	6.5	6.9	7.6	6.1
MI	3.0	3.6	2.5	2.3	2.3	2.4	2.3	5.7	7.7	5.5	4.9	4.7	4.8	4.8
MN	3.8	2.5	3.3	4.8	3.3	2.4	3.6	5.9	6.4	6.5	6.3	5.7	4.9	5.4
MO	5.6	5.8	5.9	5.3	5.7	5.2	5.2	8.5	9.0	8.8	8.3	8.6	7.9	8.6
MS	5.4	5.1	5.6	5.1	5.0	4.6	5.2	8.0	7.7	8.2	7.3	7.1	6.4	7.9
MT	4.6	5.6	4.2	7.8	6.8	4.9	5.9	7.3	8.0	6.9	10.3	8.1	7.5	9.2
NC	2.8	3.9	4.1	3.9	7.0	4.1	4.6	6.9	7.4	6.4	6.5	6.0	5.8	6.2
ND	5.4	5.9	5.4	6.2	6.9	7.5	7.6	7.3	8.0	8.6	9.4	9.4	10.3	10.9
NE	6.3	5.5	7.1	9.1	5.3	9.2	4.9	6.5	9.8	11.3	0.0	13.3	11.7	7.6
NH	2.5	4.7	2.1	4.2	3.6	1.9	1.8	6.0	8.5	6.6	8.3	7.5	4.7	4.8
NJ	3.5	2.5	2.7	2.9	2.8	2.9	2.9	5.6	4.7	5.1	5.1	5.4	5.8	5.6
NM	3.5	5.0	7.9	4.5	4.6	3.0	2.0	6.5	9.3	14.0	6.8	7.8	5.2	4.4
NV	3.7	3.1	2.1	0.0	0.0	0.0	4.1	7.3	5.6	3.7	0.0	0.0	0.0	5.8
NY	0.0	1.7	1.6	1.8	1.7	1.4	3.8	0.0	4.4	4.2	4.6	4.5	3.6	6.2
OH	4.9	4.9	5.1	4.5	4.6	4.8	4.3	7.0	7.4	7.6	6.3	6.8	7.3	6.7
OK	4.6	5.0	3.9	4.3	5.3	3.6	4.8	7.6	8.0	6.9	7.1	8.4	6.2	7.7
OR	1.4	2.3	2.0	1.1	1.4	1.8	1.9	4.2	4.9	4.5	4.2	4.2	4.7	5.1
PA	3.8	3.3	3.4	3.3	3.3	3.5	3.7	6.0	5.6	5.7	5.4	5.6	5.7	5.9
RI	2.1	2.3	0.0	2.4	1.5	1.5	2.1	5.2	4.9	0.0	5.7	3.9	3.8	4.7
SC	4.2	3.6	3.3	3.4	3.8	3.9	2.8	7.8	5.9	6.1	5.8	7.8	6.9	5.5
SD	1.2	1.1	1.2	0.0	1.2	1.3	1.4	3.7	3.6	3.5	0.0	4.2	3.6	4.0
TN	4.6	4.4	3.9	4.0	3.9	3.5	4.0	6.8	6.9	6.4	6.1	6.5	6.2	7.1
TX	5.1	5.2	4.6	4.1	4.2	4.7	3.8	7.4	8.1	7.6	6.3	6.6	6.8	6.6
UT	4.5	4.1	3.8	4.1	4.1	3.6	3.3	7.4	7.6	6.9	7.0	7.5	6.7	6.4
VA	4.6	3.6	3.3	3.3	3.0	2.9	3.6	6.1	6.3	5.8	5.9	6.4	5.6	7.0
VT	2.2	2.0	2.2	2.4	2.1	2.0	3.8	5.0	4.5	5.0	6.5	5.0	4.9	10.9
WA	3.9	2.3	2.2	2.3	2.3	2.3	1.9	8.7	5.7	5.5	5.8	5.0	5.5	4.8
WI	3.3	3.1	3.4	3.0	2.9	2.4	2.4	5.8	5.7	5.8	5.5	5.7	4.9	4.6
WV	5.2	5.7	4.3	4.3	4.5	4.4	4.2	7.6	8.9	7.0	6.6	7.3	6.5	6.6
WY	5.9	5.3	6.3	6.5	5.8	7.9	5.3	8.1	9.1	10.5	9.0	8.1	11.8	7.9
<b>US</b>	<b>4.4</b>	<b>4.1</b>	<b>3.9</b>	<b>3.8</b>	<b>3.8</b>	<b>3.8</b>	<b>3.6</b>	<b>6.7</b>	<b>6.8</b>	<b>6.5</b>	<b>6.1</b>	<b>6.4</b>	<b>6.3</b>	<b>6.2</b>
<b>total</b>	<b>833</b>	<b>753</b>	<b>766</b>	<b>726</b>	<b>691</b>	<b>712</b>	<b>708</b>	<b>792</b>	<b>721</b>	<b>744</b>	<b>678</b>	<b>676</b>	<b>691</b>	<b>693</b>

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

Tables 29 and 30 show facilities with Medicaid-only beds. In 2007, there were a total of 664 such facilities that had RN staffing data available. Medicaid-only nursing facilities represented only 3.2 percent of the total nursing facilities in 2007 (Table 5).

### RN Hours

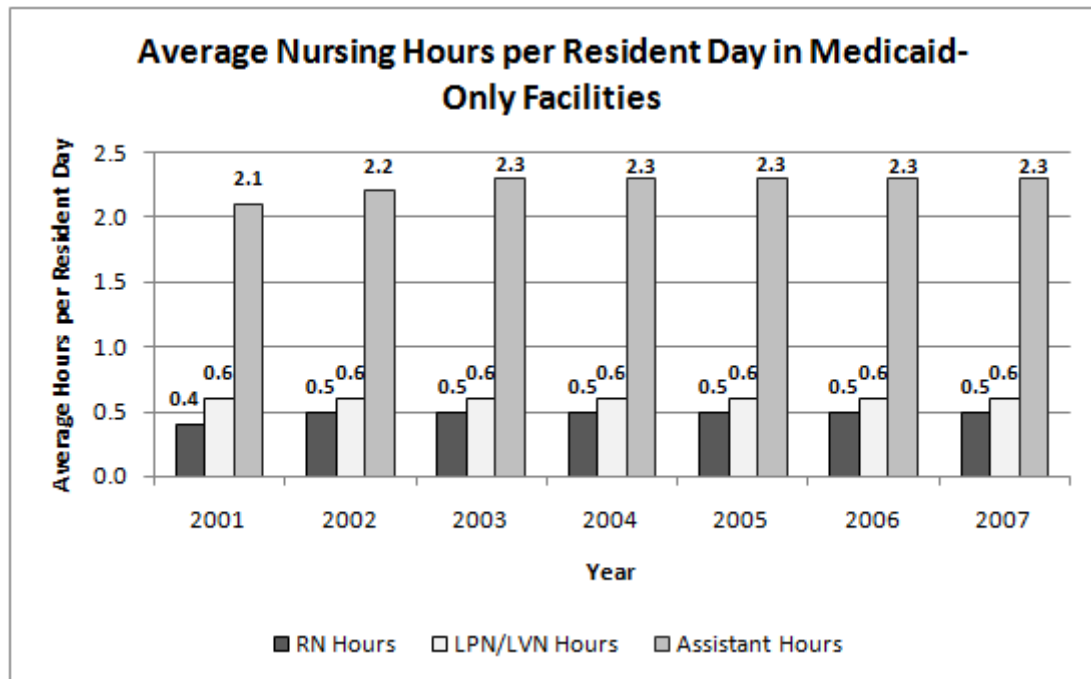
The average RN hours per resident day are shown in Table 29. In 2001, the average RN hours were 0.4 and increased to 0.5 for 2002-2007. The ratio of RNs hours varied across states.

### 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 2001 and in 2007. 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 2.1 in 2001 and increased to 2.3 for 2003-2007 (or by 9.5 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)**

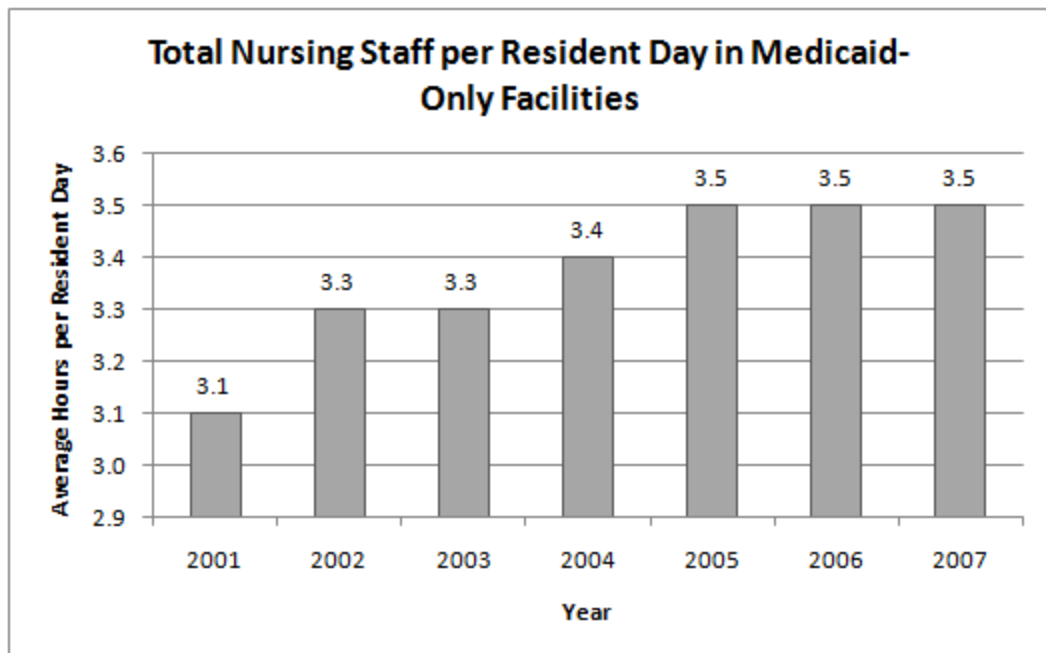
State	RN Hours							LPN/LVN Hours							Assistant Hours						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AL	0.6	0.8	0.7	0.6	1.0	0.9	0.4	0.8	0.9	0.9	1.1	1.3	1.2	0.8	3.2	3.8	3.9	3.6	4.0	3.5	2.2
AR	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.7	0.8	0.8	0.8	0.9	0.9	0.8	2.1	2.4	2.5	2.6	2.7	2.8	2.7
AZ	0.5	0.6	0.6	0.7	0.7	0.7	0.0	1.1	1.4	1.4	1.4	1.1	1.4	0.0	0.9	0.9	0.9	1.2	1.0	1.6	0.0
CA	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.7	0.7	0.7	1.9	2.1	2.2	2.2	2.3	2.3	2.1
CO	0.6	0.7	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.7	2.2	2.3	2.5	2.4	2.7	2.7	2.5
CT	0.7	0.6	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.0	1.2	0.6	0.0	0.0	0.0	0.0	0.0
DC	0.0	0.0	0.0	1.8	0.0	1.5	1.3	0.0	0.3	0.1	0.3	1.7	1.1	0.7	4.6	0.0	4.7	3.8	0.0	0.0	3.6
DE	1.0	1.0	1.0	1.3	1.1	1.2	1.3	0.8	0.6	0.7	1.3	1.5	1.2	0.9	3.0	3.1	2.8	2.5	3.0	3.0	3.2
FL	0.5	0.5	0.7	0.9	0.4	0.8	0.5	0.7	0.9	1.1	1.5	0.9	0.6	1.1	2.3	2.5	2.8	3.0	2.6	2.7	3.0
GA	0.4	0.4	0.4	0.5	0.5	0.4	1.0	0.8	0.8	0.8	0.9	0.7	0.5	1.0	2.2	2.3	2.4	2.4	3.6	2.9	2.8
HI	0.5	0.6	0.6	0.7	0.6	0.5	0.6	0.3	0.1	0.4	0.4	0.4	0.4	0.5	2.7	2.6	2.7	2.5	3.1	2.9	2.7
IA	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.6	0.5	2.0	2.2	2.3	2.3	2.3	2.4	2.3
ID	0.7	0.8	0.9	0.8	0.7	0.9	0.0	0.7	0.6	0.6	0.7	0.7	0.7	0.0	2.5	2.5	2.7	2.5	2.6	2.9	0.0
IL	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.5	0.5	0.5	0.4	1.6	1.6	1.6	1.6	1.7	1.6	1.6
IN	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.8	2.1	2.3	2.2	2.6	2.0	2.6	2.3
KS	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.5	2.1	2.1	2.2	2.3	2.4	2.5	2.6
KY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LA	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.7	0.7	0.7	0.9	0.0	0.0	0.0	2.0	2.0	2.1	2.0	0.0	0.0	0.0
MA	0.7	0.6	0.7	0.7	0.7	0.7	0.8	0.6	0.7	0.6	0.7	0.7	0.7	0.7	2.2	2.2	2.5	2.5	2.5	2.6	2.6
MD	0.5	0.5	0.5	0.5	0.6	0.5	0.6	0.6	0.5	0.5	0.6	0.6	0.8	0.6	2.2	2.2	2.3	2.4	2.6	2.9	2.5
ME	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MI	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.6	0.6	0.7	0.7	2.3	2.3	2.2	2.3	2.4	2.4	2.5
MN	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.8	0.7	0.8	0.8	0.9	0.8	0.9
MO	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.6	0.5	0.6	0.5	0.7	2.4	2.4	2.6	2.6	2.6	2.4	2.4
MS	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.8	0.8	0.8	0.9	0.9	0.9	1.0	2.3	2.3	2.4	2.6	2.6	2.6	2.6
MT	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0
NC	1.1	0.9	1.3	0.8	1.0	0.9	1.1	0.7	0.5	0.5	0.7	0.9	0.2	0.3	0.0	0.0	0.0	3.4	0.0	3.0	0.0
ND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	2.3	2.4	2.6	2.5	2.6	2.6	2.6
NH	0.7	0.8	0.9	0.9	0.9	0.8	1.0	0.5	0.5	0.4	0.4	0.5	0.6	0.6	2.3	2.6	2.3	2.9	2.8	2.6	3.1
NJ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NM	0.5	0.4	0.7	0.6	0.6	0.8	0.7	0.5	0.4	0.6	0.4	0.8	0.6	0.6	2.1	1.3	1.7	1.6	2.1	2.4	2.3
NV	0.6	0.5	0.5	0.3	0.4	0.4	0.3	0.5	0.7	1.0	0.7	0.8	0.6	0.8	1.3	1.6	1.7	1.6	1.6	1.4	1.7
NY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	0.8	1.5	1.3	1.1	1.0	3.6	3.3	3.4	3.5	3.8	3.7	3.5
OH	0.5	0.6	0.0	0.6	0.6	0.7	0.8	0.0	0.0	0.0	0.9	1.0	0.9	0.9	0.0	0.0	0.0	2.4	2.6	2.3	2.1
OK	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.7	0.7	0.7	0.7	2.4	2.4	2.4	2.3	2.4	2.4	2.4
OR	0.6	0.5	0.5	0.6	0.7	0.6	0.8	0.4	0.4	0.4	0.5	0.4	0.3	0.4	2.4	2.5	2.7	2.5	2.7	2.6	2.5
PA	0.9	0.9	0.8	0.9	0.9	0.8	0.9	0.4	0.5	0.5	0.6	0.6	0.5	0.5	2.3	2.3	2.3	2.4	2.5	2.5	2.5
RI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SD	0.6	0.7	0.7	0.8	0.8	0.7	0.8	0.4	0.4	0.4	0.4	0.0	0.3	0.3	2.1	2.2	2.3	2.3	2.2	2.3	2.4
TN	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.7	0.6	0.7	0.6	0.7	0.7	2.0	2.0	2.1	2.2	2.0	2.2	2.3
TX	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.7	0.7	0.7	0.7	0.7	0.8	2.2	2.3	2.3	2.4	2.3	2.4	2.2
UT	0.5	0.5	0.4	0.5	0.5	0.6	0.5	0.6	0.7	0.6	0.6	0.6	0.5	0.7	1.7	2.0	2.0	2.1	1.9	1.7	2.1
VA	0.5	0.5	0.6	0.6	0.7	0.6	0.8	0.8	0.8	0.8	0.8	0.8	0.9	1.0	2.4	2.5	2.7	2.5	2.5	2.5	3.1
VT	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0
WA	0.9	1.0	0.8	1.0	1.0	1.0	1.3	0.8	0.8	0.9	0.6	0.9	0.8	0.9	3.1	2.5	3.1	2.9	3.5	3.2	3.9
WI	0.7	0.7	0.7	0.6	0.7	0.6	0.8	0.4	0.4	0.4	0.5	0.6	0.7	0.6	2.4	2.3	2.4	2.6	2.8	2.5	2.7
WV	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.7	0.7	0.8	1.0	0.9	0.9	0.9	2.3	2.4	2.5	2.9	2.6	2.3	2.6
WY	0.8	0.7	0.8	1.0	1.0	1.0	1.3	0.7	0.6	0.7	0.7	1.0	0.5	0.5	2.7	3.1	2.8	2.5	2.9	2.8	2.9
US	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	2.1	2.2	2.3	2.3	2.3	2.3	2.3
total	1,531	1,422	1,129	974	815	768	664	1,533	1,419	1,127	974	815	767	663	1,791	1,658	1,535	1,417	1,128	764	661

## Licensed Nursing Hours

Table 30 shows that the average licensed nursing hours (RNs and LPN/LVNs) per resident day in Medicaid only facilities were 1.0 in 2001 and 1.2 in 2007. 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 3.1 in 2001 and 3.5 in 2007 (a 13 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						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AL	1.5	1.7	1.8	1.7	2.7	2.3	1.2	4.9	5.5	5.5	5.1	7.3	5.6	3.4
AR	1.0	1.0	1.0	1.0	1.1	1.2	1.1	3.1	3.4	3.6	3.7	3.9	4.0	3.9
AZ	1.6	1.9	1.9	2.1	1.8	2.0	0.0	2.5	2.9	2.9	3.3	2.8	3.6	0.0
CA	1.0	1.0	1.0	0.9	1.1	1.1	1.1	3.0	3.2	3.2	3.2	3.5	3.4	3.3
CO	1.2	1.3	1.3	1.2	1.3	1.2	1.4	3.3	3.7	3.8	3.6	4.0	3.9	3.9
CT	0.9	1.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1	0.0	0.0	0.0	0.0	0.0
DC	0.0	0.0	0.0	2.1	0.0	2.6	2.0	0.0	0.0	0.0	6.0	0.0	0.0	5.6
DE	1.7	1.6	1.6	2.1	2.6	2.2	2.3	4.7	4.5	4.4	4.6	5.5	5.2	4.8
FL	1.1	1.5	1.5	2.0	1.2	1.4	1.4	3.2	4.0	4.5	5.6	3.8	4.2	4.3
GA	1.1	1.2	1.2	1.4	1.1	1.1	1.7	3.2	3.4	3.4	3.8	5.1	4.3	5.0
HI	0.8	0.7	1.0	1.1	1.0	0.8	1.1	3.6	3.3	3.6	3.5	4.0	3.8	3.8
IA	1.0	1.0	1.0	1.0	1.2	1.2	1.2	3.0	3.2	3.3	3.3	3.5	3.6	3.4
ID	1.3	1.4	1.5	1.5	1.4	1.7	0.0	3.9	3.9	4.2	4.0	3.9	4.5	0.0
IL	0.9	0.9	0.9	0.9	0.9	0.9	0.9	2.6	2.5	2.5	2.5	2.5	2.5	2.5
IN	1.1	1.3	1.2	1.3	1.3	1.4	1.4	3.2	3.5	3.4	3.8	3.5	3.9	3.7
KS	1.0	1.0	1.0	1.1	1.1	1.1	1.1	3.1	3.1	3.3	3.4	3.5	3.6	3.7
KY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LA	0.9	0.9	0.9	1.1	0.0	0.0	0.0	3.0	3.0	3.1	3.1	0.0	0.0	0.0
MA	1.3	1.3	1.3	1.5	1.4	1.4	1.5	3.4	3.5	3.6	4.0	3.8	3.8	4.0
MD	1.1	1.0	0.9	1.1	1.2	1.2	1.2	3.3	3.2	3.2	3.5	3.8	4.2	3.7
ME	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MI	1.1	1.0	1.1	1.1	1.1	1.1	1.2	3.4	3.4	3.3	3.4	3.5	3.5	3.7
MN	0.8	0.8	0.8	0.9	0.8	0.9	0.8	1.7	1.5	1.8	1.7	1.8	1.8	1.8
MO	0.9	1.0	0.9	0.9	1.0	1.0	1.1	3.3	3.4	3.5	3.5	3.5	3.4	3.5
MS	1.2	1.2	1.3	1.3	1.4	1.3	1.4	3.5	3.6	3.7	3.9	3.9	3.9	4.0
MT	1.1	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0
NC	1.6	1.2	1.8	1.6	1.3	1.1	1.4	0.0	0.0	0.0	4.4	0.0	4.1	0.0
ND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	1.2	1.2	1.3	1.3	1.4	1.4	1.4	3.5	3.7	3.9	3.9	4.1	3.9	4.0
NH	1.2	1.2	1.3	1.3	1.4	1.4	1.6	3.7	3.9	3.6	4.2	4.1	4.0	4.7
NJ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NM	1.0	1.2	1.5	1.4	2.5	1.4	1.4	3.1	3.1	3.1	3.6	6.7	3.8	3.6
NV	1.0	1.2	1.4	1.1	1.2	1.0	1.1	2.3	2.8	3.1	2.7	2.8	2.5	2.8
NY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OH	1.4	1.4	1.5	1.5	1.6	1.6	1.7	3.5	3.6	3.9	3.9	4.3	3.8	3.8
OK	0.9	0.9	0.9	1.0	1.0	1.0	1.0	3.3	3.3	3.4	3.4	3.4	3.4	3.5
OR	1.0	0.9	0.9	1.0	1.1	1.0	1.1	3.3	3.4	3.5	3.4	3.7	3.5	3.7
PA	1.4	1.4	1.3	1.5	1.5	1.4	1.4	3.5	3.8	3.6	3.9	4.0	3.8	3.8
RI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SD	1.0	1.1	1.1	1.2	1.1	1.1	1.1	3.1	3.3	3.3	3.5	3.4	3.3	3.5
TN	0.9	1.0	0.9	1.0	1.0	1.0	1.0	3.0	3.1	3.1	3.2	3.0	3.3	3.3
TX	1.0	1.0	1.1	1.1	1.1	1.1	1.1	3.2	3.3	3.4	3.5	3.4	3.5	3.4
UT	1.1	1.1	1.0	1.0	1.1	1.1	1.2	2.8	3.2	3.0	3.1	3.0	2.8	3.3
VA	1.2	1.3	1.3	1.4	1.4	1.5	1.8	3.5	3.8	3.9	3.8	4.0	3.9	4.5
VT	0.7	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0
WA	1.7	1.7	1.7	1.6	1.9	1.8	2.1	4.6	3.7	4.4	4.5	5.2	4.5	5.8
WI	1.1	1.1	1.1	1.1	1.2	1.2	1.3	3.4	3.5	3.5	3.7	3.9	3.7	4.0
WV	1.1	1.1	1.2	1.5	1.4	1.3	1.4	3.4	3.6	3.7	4.4	3.9	3.6	4.1
WY	1.5	1.2	1.5	1.7	2.0	1.4	1.8	3.5	4.1	4.3	4.2	4.9	4.3	4.7
<b>US</b>	<b>1.0</b>	<b>1.1</b>	<b>1.1</b>	<b>1.1</b>	<b>1.1</b>	<b>1.1</b>	<b>1.2</b>	<b>3.1</b>	<b>3.3</b>	<b>3.3</b>	<b>3.4</b>	<b>3.5</b>	<b>3.5</b>	<b>3.5</b>
<b>Facilities</b>	<b>1,489</b>	<b>1,381</b>	<b>1,100</b>	<b>951</b>	<b>795</b>	<b>749</b>	<b>648</b>	<b>1,473</b>	<b>1,361</b>	<b>1,082</b>	<b>934</b>	<b>781</b>	<b>737</b>	<b>636</b>

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

Table 31 and 32 shows a combined total of about 13,800 to 14,400 facilities (with Title 19, Title 18/19, and Title 18 only beds) that had useable staffing data for the staffing analysis in 2007.

### Registered Nursing Hours

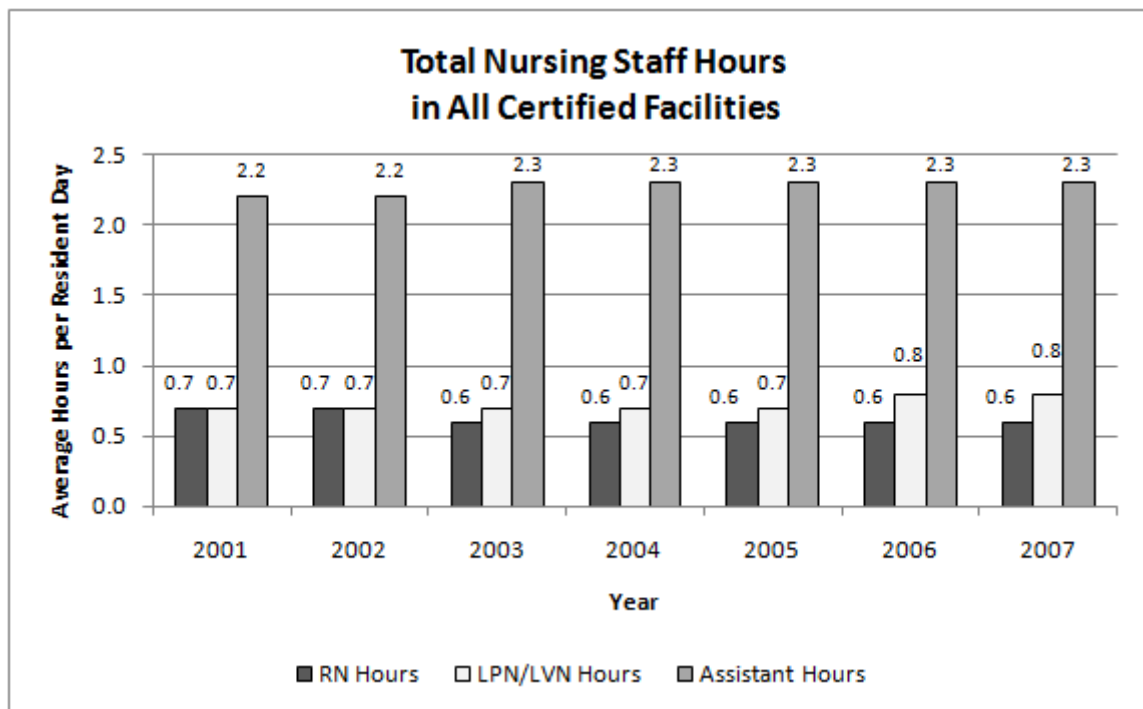
The average RN hours per resident day are shown in Table 31. The average hours were 0.7 in 2001 then declining to 0.6 during 2003-2007. This is a 14 percent decline in RN hours since 2001. The 0.6 ratio translates to 36 minutes per resident day or 12 minutes per 8 hour shift. This table shows that nursing 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 2001-2007. This represents 42 minutes per resident day or 14 minutes per 8 hour shift. This table shows that nursing assistant hours are partially being

### Nursing Aide/Assistant Hours

The average NA hours per resident day are shown in Table 31. The average was 2.2 hours in 2001 and 2002, and increased to 2.3 in 2003-2007, (4.5 percent increase). This was 138 minutes per resident day or 46 minutes per 8 hour shift in 2007.



**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						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	1.1	0.9	1.3	1.2	1.1	1.2	1.6	0.6	0.6	0.6	0.7	0.6	0.7	0.6	2.7	2.7	3.0	3.3	2.9	3.2	3.4
AL	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.9	0.9	1.0	1.0	1.0	1.0	1.0	2.5	2.5	2.6	2.6	2.5	2.5	2.4
AR	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.8	0.9	0.9	0.9	0.9	0.9	0.9	2.1	2.3	2.4	2.5	2.6	2.5	2.5
AZ	0.7	0.7	0.6	0.6	0.6	0.5	0.6	0.8	0.8	0.8	0.9	0.8	0.9	0.8	2.1	2.1	2.2	2.2	2.2	2.1	2.2
CA	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.7	0.7	2.3	2.4	2.5	2.5	2.5	2.5	2.5
CO	0.9	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	2.0	2.2	2.1	2.2	2.2	2.2	2.2
CT	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.5	0.6	0.6	0.6	0.6	0.6	0.7	2.1	2.2	2.2	2.3	2.3	2.3	2.3
DC	0.7	0.6	0.5	0.7	0.6	0.7	0.7	0.8	0.8	0.9	1.0	1.0	1.1	1.0	2.2	2.3	2.5	2.7	2.3	2.5	2.6
DE	0.8	0.8	0.8	0.9	0.8	0.9	0.9	0.7	0.7	0.7	0.8	0.9	0.9	0.9	2.3	2.4	2.4	2.5	2.4	2.4	2.4
FL	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.8	0.9	0.9	0.9	1.0	1.0	1.0	2.1	2.5	2.7	2.7	2.8	2.8	3.0
GA	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.8	0.8	0.9	0.9	0.9	1.0	2.1	2.2	2.1	2.1	2.1	2.1	2.1
HI	0.9	0.8	0.8	0.8	0.8	1.1	0.8	0.5	0.5	0.5	0.6	0.6	0.7	0.6	2.6	2.6	2.5	2.5	2.6	2.6	2.5
IA	0.6	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.6	0.6	1.9	2.0	2.1	2.1	2.1	2.1	2.1
ID	1.1	0.8	0.8	0.8	0.9	0.9	1.1	0.8	0.8	0.8	0.8	0.9	0.9	0.9	2.7	2.6	2.7	2.6	2.6	2.6	2.7
IL	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.5	0.6	0.6	0.6	1.8	1.9	1.9	1.9	2.0	1.9	2.0
IN	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.9	0.8	0.9	0.9	0.9	0.9	1.0	1.9	2.0	2.0	2.1	2.0	2.1	2.1
KS	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	2.1	2.2	2.2	2.3	2.3	2.4	2.4
KY	0.7	0.7	0.7	0.8	0.7	0.7	0.8	0.8	0.8	0.9	0.9	0.8	0.8	0.8	2.4	2.5	2.4	2.5	2.4	2.4	2.4
LA	0.5	0.5	0.4	0.5	0.5	0.5	0.4	0.9	0.8	0.9	0.9	0.9	0.9	0.9	2.0	2.0	2.1	2.1	2.1	2.1	2.1
MA	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.8	2.2	2.3	2.3	2.3	2.3	2.3	2.3
MD	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	2.3	2.3	2.4	2.4	2.4	2.3	2.3
ME	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.4	0.5	0.5	0.4	0.4	0.4	0.4	2.7	2.8	2.9	3.0	2.9	2.9	3.0
MI	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.7	2.3	2.4	2.4	2.3	2.3	2.3	2.4
MN	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.1	2.1	2.2	2.2	2.2	2.3	2.3
MO	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.3	2.4	2.4	2.4	2.4	2.4	2.4
MS	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.9	0.9	0.9	0.9	0.9	0.9	0.9	2.2	2.2	2.3	2.3	2.2	2.3	2.4
MT	0.8	0.9	0.9	0.8	0.8	0.9	0.9	0.6	0.6	0.5	0.6	0.6	0.6	0.6	2.4	2.4	2.5	2.5	2.1	2.4	2.5
NC	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.7	0.8	0.8	0.8	0.8	0.8	0.9	2.2	2.3	2.2	2.3	2.3	2.3	2.2
ND	0.7	0.6	0.7	0.7	0.7	0.8	0.8	0.6	0.6	0.6	0.6	0.6	0.7	0.7	2.5	2.5	2.6	2.7	2.7	2.6	2.7
NE	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	2.2	2.3	2.4	2.4	2.4	2.3	2.4
NH	0.8	0.9	0.8	0.9	0.9	0.8	0.8	0.5	0.6	0.6	0.6	0.6	0.6	0.6	2.2	2.3	2.3	2.4	2.4	2.4	2.4
NJ	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.1	2.1	2.2	2.2	2.2	2.2	2.2
NM	0.7	0.5	0.8	0.6	0.6	0.6	0.5	0.5	0.3	0.6	0.5	0.6	0.6	0.5	2.2	1.4	2.2	1.9	1.9	2.2	1.9
NV	1.0	0.8	0.7	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.7	0.8	0.7	0.7	2.1	2.1	2.2	2.1	2.2	2.0	2.2
NY	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8	2.1	2.2	2.2	2.2	2.2	2.2	2.2
OH	0.8	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9	2.2	2.3	2.3	2.3	2.3	2.3	2.3
OK	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.8	0.8	0.8	2.2	2.4	2.3	2.4	2.4	2.4	2.4
OR	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.5	0.5	0.5	0.5	2.4	2.5	2.5	2.5	2.5	2.6	2.7
PA	1.0	0.9	0.9	0.8	0.8	0.9	0.9	0.7	0.7	0.8	0.8	0.8	0.8	0.9	2.2	2.2	2.2	2.2	2.2	2.2	2.2
RI	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2.1	2.1	2.2	2.2	2.4	2.3	2.4
SC	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.8	0.9	0.9	0.9	1.0	1.0	1.0	2.5	2.3	2.4	2.4	2.5	2.4	2.3
SD	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2.1	2.1	2.2	2.2	2.2	2.2	2.2
TN	0.6	0.5	0.5	0.6	0.5	0.5	0.6	0.8	0.8	0.8	0.8	0.9	0.9	0.9	1.9	2.0	2.0	2.1	2.1	2.1	2.1
TX	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.9	0.8	0.8	0.8	0.8	0.8	0.8	2.0	2.2	2.2	2.1	2.1	2.1	2.1
UT	0.9	0.9	1.0	0.9	1.1	1.0	1.0	0.6	0.7	0.6	0.6	0.7	0.6	0.7	2.3	2.4	2.4	2.5	2.6	2.4	2.5
VA	0.6	0.6	0.6	0.5	0.5	0.6	0.5	0.8	0.9	0.9	0.9	0.9	0.9	1.0	2.1	2.1	2.1	2.1	2.1	2.1	2.2
VT	0.7	0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	2.2	2.4	2.2	2.3	2.4	2.4	2.4
WA	0.8	0.8	0.8	0.8	0.7	0.8	0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.7	2.4	2.4	2.4	2.4	2.5	2.4	2.3
WI	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.4	0.5	0.5	0.5	0.5	0.5	0.6	2.2	2.3	2.3	2.4	2.4	2.4	2.4
WV	0.8	0.7	0.8	0.7	0.7	0.7	0.7	0.9	0.9	0.9	0.9	0.9	0.8	0.9	2.1	2.3	2.1	2.2	2.1	2.0	2.1
WY	0.9	0.9	0.8	1.0	1.0	1.0	1.0	0.7	0.5	0.6	0.6	0.6	0.6	0.5	2.2	2.6	2.4	2.2	2.3	2.3	2.4
US	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.8	2.2	2.2	2.3	2.3	2.3	2.3	2.3
Facilities	14022	14256	14359	14281	14078	14409	14377	14008	14238	14336	14266	14079	14395	14371	13943	14184	14300	14224	14044	14360	14344

## Licensed Nursing Hours

Table 32 shows the average licensed nursing hours (RNs and LPN/LVNs) per resident day was stable in during 2001-2007.

## Total Nursing Hours

Table 32 shows the total nursing hours (RNs, LPN/LVNs, and NAs) per resident day was 3.5 hours per resident day in 2001 and this increased to 3.7 hours per resident day in 2007. In 2007, this was about 222 minutes per resident day or 74 minutes per 8 hour shift. The decline in licensed nursing hours was offset by an increase in nursing assistant hours.

**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						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	1.8	1.7	2.0	1.9	1.9	1.9	2.1	4.8	4.4	5.3	5.2	5.0	5.4	5.5
AL	1.4	1.4	1.5	1.5	1.6	1.5	1.6	3.9	3.9	4.0	4.0	4.0	4.0	4.1
AR	1.3	1.4	1.5	1.3	1.5	1.4	1.4	3.5	3.7	3.8	3.9	4.1	4.0	4.0
AZ	1.5	1.4	1.4	1.4	1.4	1.4	1.4	3.4	3.5	3.5	3.5	3.6	3.5	3.5
CA	1.3	1.3	1.2	1.2	1.2	1.3	1.3	3.6	3.7	3.7	3.7	3.7	3.8	3.8
CO	1.6	1.5	1.4	1.5	1.5	1.6	1.5	3.6	3.7	3.6	3.7	3.8	3.8	3.7
CT	1.3	1.3	1.3	1.3	1.3	1.4	1.4	3.5	3.5	3.5	3.7	3.6	3.6	3.7
DC	1.6	1.4	1.5	1.7	1.6	1.7	1.7	3.7	3.7	4.0	4.3	4.0	4.0	4.2
DE	1.5	1.5	1.6	1.7	1.6	1.7	1.8	3.8	4.0	4.0	4.2	4.0	4.2	4.0
FL	1.5	1.5	1.5	1.5	1.6	1.5	1.5	3.6	4.1	4.2	4.3	4.4	4.3	4.6
GA	1.2	1.2	1.2	1.2	1.3	1.3	1.3	3.3	3.4	3.3	3.4	3.4	3.4	3.4
HI	1.4	1.3	1.3	1.3	1.2	1.7	1.3	4.0	3.9	3.9	3.8	3.8	4.1	3.8
IA	1.1	1.2	1.2	1.2	1.2	1.2	1.2	3.0	3.2	3.2	3.2	3.2	3.3	3.3
ID	1.7	1.6	1.7	1.6	1.8	1.8	2.0	4.4	4.2	4.4	4.1	4.5	4.5	4.5
IL	1.3	1.3	1.2	1.3	1.3	1.3	1.3	3.1	3.2	3.1	3.2	3.3	3.2	3.3
IN	1.6	1.5	1.4	1.5	1.5	1.6	1.6	3.4	3.5	3.4	3.5	3.5	3.6	3.6
KS	1.3	1.2	1.1	1.1	1.1	1.2	1.2	3.4	3.3	3.4	3.5	3.5	3.5	3.6
KY	1.5	1.5	1.5	1.6	1.5	1.5	1.6	4.0	4.0	4.0	4.1	4.0	3.9	4.0
LA	1.4	1.3	1.3	1.3	1.4	1.3	1.4	3.5	3.4	3.3	3.4	3.4	3.4	3.4
MA	1.4	1.4	1.4	1.4	1.5	1.5	1.5	3.6	3.7	3.6	3.7	3.8	3.8	3.8
MD	1.3	1.3	1.3	1.3	1.4	1.4	1.4	3.6	3.6	3.7	3.7	3.8	3.7	3.8
ME	1.3	1.3	1.4	1.4	1.3	1.4	1.3	4.0	4.3	4.2	4.3	4.3	4.3	4.3
MI	1.3	1.3	1.2	1.3	1.3	1.3	1.3	3.6	3.7	3.6	3.6	3.6	3.7	3.7
MN	1.2	1.2	1.2	1.3	1.3	1.3	1.3	3.2	3.3	3.5	3.5	3.6	3.6	3.6
MO	1.3	1.3	1.3	1.2	1.2	1.2	1.2	3.5	3.7	3.6	3.5	3.5	3.6	3.6
MS	1.7	1.6	1.6	1.6	1.6	1.5	1.5	3.9	3.9	3.9	3.9	3.8	3.8	3.9
MT	1.4	1.5	1.4	1.3	1.4	1.5	1.6	3.8	3.9	3.8	3.8	3.8	3.9	4.0
NC	1.4	1.4	1.4	1.4	1.5	1.4	1.4	3.6	3.7	3.6	3.7	3.7	3.7	3.7
ND	1.3	1.3	1.3	1.3	1.4	1.4	1.4	3.9	3.8	3.9	4.0	4.1	4.0	4.2
NE	1.2	1.2	1.2	1.3	1.3	1.3	1.3	3.4	3.5	3.6	3.7	3.6	3.6	3.7
NH	1.3	1.5	1.4	1.5	1.5	1.4	1.5	3.6	3.8	3.8	3.8	3.9	3.8	3.9
NJ	1.5	1.4	1.4	1.4	1.4	1.5	1.5	3.5	3.5	3.6	3.6	3.6	3.6	3.6
NM	1.2	1.2	1.5	1.4	1.3	1.2	1.2	3.5	3.3	3.9	3.7	3.5	3.4	3.4
NV	1.6	1.5	1.4	1.3	1.3	1.4	1.4	3.7	3.5	3.5	3.4	3.5	3.4	3.5
NY	1.2	1.3	1.3	1.3	1.3	1.3	1.4	3.3	3.5	3.5	3.6	3.6	3.6	3.6
OH	1.6	1.6	1.6	1.6	1.6	1.6	1.5	3.8	3.9	4.0	3.9	3.9	3.8	3.8
OK	1.2	1.1	1.1	1.1	1.2	1.1	1.2	3.4	3.5	3.4	3.5	3.7	3.5	3.6
OR	1.1	1.1	1.2	1.2	1.2	1.2	1.2	3.5	3.6	3.7	3.8	3.7	3.8	3.9
PA	1.7	1.6	1.6	1.6	1.6	1.7	1.7	3.9	3.8	3.9	3.8	3.9	3.9	3.9
RI	1.1	1.0	1.0	1.0	1.1	1.0	1.1	3.3	3.2	3.2	3.3	3.5	3.4	3.5
SC	1.6	1.6	1.5	1.6	1.6	1.7	1.6	4.1	3.9	3.9	4.0	4.1	4.0	3.9
SD	1.0	1.0	1.0	1.1	1.0	1.0	1.0	3.1	3.2	3.2	3.2	3.2	3.2	3.3
TN	1.4	1.4	1.4	1.4	1.4	1.4	1.5	3.4	3.4	3.5	3.5	3.5	3.5	3.6
TX	1.5	1.4	1.4	1.3	1.3	1.4	1.3	3.5	3.6	3.5	3.5	3.4	3.4	3.5
UT	1.6	1.5	1.5	1.6	1.8	1.7	1.7	3.8	3.9	3.9	4.0	4.3	4.1	4.1
VA	1.4	1.4	1.4	1.4	1.5	1.4	1.5	3.4	3.5	3.5	3.5	3.6	3.6	3.7
VT	1.4	1.4	1.4	1.3	1.4	1.4	1.5	3.7	3.8	3.8	3.6	3.8	3.9	3.8
WA	1.4	1.4	1.4	1.4	1.4	1.4	1.4	3.8	3.8	3.8	3.8	3.9	3.8	3.8
WI	1.2	1.2	1.2	1.2	1.2	1.2	1.3	3.4	3.5	3.5	3.5	3.6	3.6	3.7
WV	1.7	1.6	1.7	1.6	1.6	1.6	1.6	3.8	3.8	3.9	3.8	3.8	3.7	3.7
WY	1.7	1.4	1.4	1.6	1.6	1.7	1.5	3.8	4.0	3.8	3.8	3.8	4.2	4.0
US	1.4	1.4	1.4	1.4	1.4	1.4	1.4	3.5	3.6	3.6	3.7	3.7	3.7	3.7
Facilities	13,569	13,640	13,872	13,919	13,724	14,034	14,013	13,407	13,633	13,753	13,696	13,527	13,813	13,802

## 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 (Morris et al., 1990; Gustafson et al., 1990). These care processes can include urinary training programs, assistance with feeding and mobility, and other activities. A number of clinical process measures have been associated with poor patient outcomes. Urethral catheterization may place residents at greater risk for urinary infection and hospitalization or other complications such as bladder and renal stones, abscesses, and renal failure (Ouslander, Kane and Abrass, 1982; Ouslander and Kane, 1984; Ribeiro and Smith, 1985). Restraints have been under criticism because their use may cause decreased muscle tone and increased likelihood of falls, incontinence, pressure ulcers, depression, confusion and mental deterioration (Evans and Strumpf, 1989; Libow and Starer, 1989; Burton et al., 1992; Phillips et al., 1993). Tube feedings also increase the risk of complications including lung infections, aspiration, misplacement of the tube and pain (Libow and Starer, 1989). Another common problem in nursing homes is the improper use of psychotropic drugs identified in a number of studies (Harrington et al., 1992). 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: urinary incontinence, falls, weight loss, and infectious disease (Libow and Starer, 1989). 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 a total of 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 which was published in June 1995 by the Health Care Financing Administration.

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, Influenza/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).

By 2001, there was a gradual increase in deficiencies over the previous three years. Another study by Harrington et al (2004) showed that the enforcement activities were limited across the states.

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.

## FINDINGS

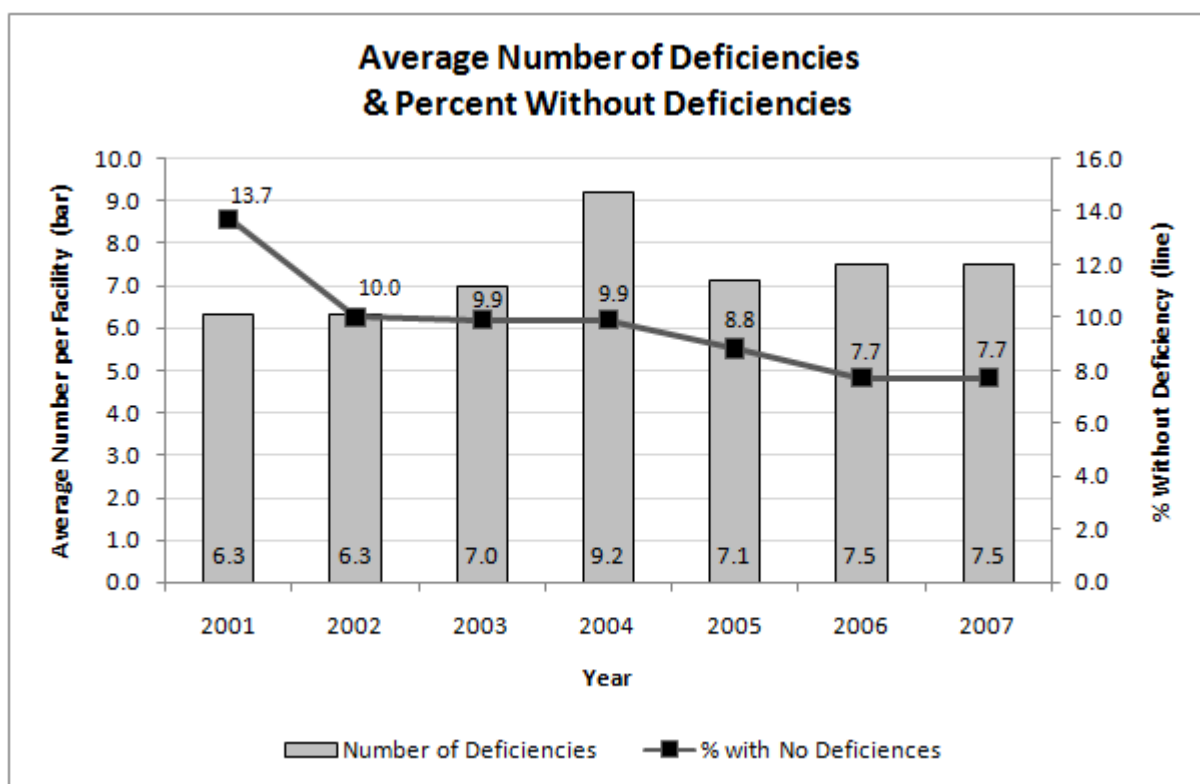
### DEFICIENCIES FROM QUALITY OF CARE EVALUATION

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

Table 33 shows the U.S. average number of deficiencies per facility increased from 6.3 deficiencies per facility in 2001 to 9.9 per facility in 2004, but decreased to 7.5 in 2007. In 2007, the average number of deficiencies varied substantially across the states (from 2.7 percent in Rhode Island to 17.4 percent in the District of Columbia).

#### Percent of Facilities with No Deficiencies

The percent of facilities reporting no deficiencies in the U.S. decreased from 13.7 percent in 2001 to 7.7 percent in 2007 (See Table 33). The percent of facilities with no deficiencies varied by state from 0 percent in the Arkansas, District of Columbia, Idaho, and Wyoming to 24.7 percent in Rhode Island in 2007.

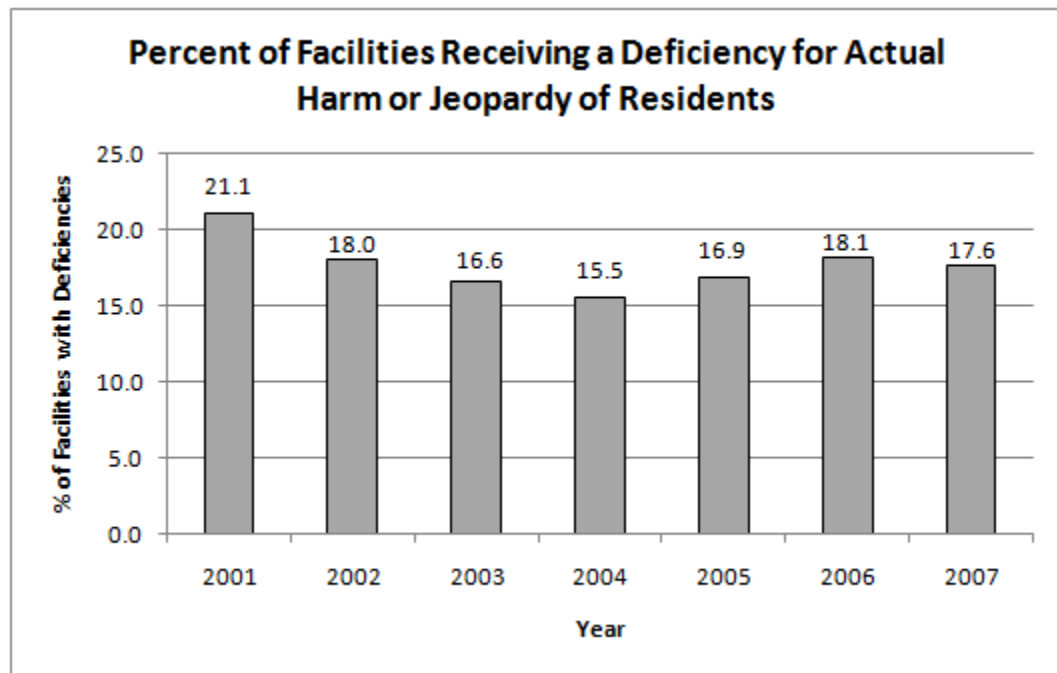


**TABLE 33**  
**AVERAGE NUMBER OF DEFICIENCIES PER CERTIFIED NURSING FACILITY**  
**AND PERCENT OF FACILITIES WITH NO DEFICIENCIES**

State	Average Number Of Deficiencies Per Facility							Percent of Facilities With No Deficiencies						
	2001	2002	2003	2004	2005	2006	2007	2001	2002	2003	2004	2005	2006	2007
AK	6.1	4.4	3.8	6.9	5.5	9.6	7.2	7.1	8.3	7.1	0.0	20.0	0.0	0.0
AL	6.5	6.2	7.0	10.1	9.6	6.9	6.7	8.2	8.3	8.3	9.9	2.5	3.0	3.1
AR	7.9	6.8	9.7	12.2	10.4	13.3	10.3	4.7	3.4	2.2	2.1	3.0	1.7	1.3
AZ	10.2	7.5	9.0	11.6	10.1	9.4	8.0	3.9	0.8	5.4	2.6	6.9	6.1	2.4
CA	11.3	9.9	10.8	15.6	10.8	11.6	12.2	1.8	2.5	2.8	1.9	1.1	1.8	0.9
CO	5.3	5.6	7.8	10.9	9.2	10.3	11.1	12.5	6.1	6.3	3.9	3.9	4.0	3.4
CT	5.7	5.8	7.4	12.1	9.0	10.4	9.8	6.2	3.8	4.9	3.3	3.5	2.1	1.7
DC	11.5	9.5	12.8	18.2	14.6	15.8	17.4	0.0	10.0	0.0	0.0	0.0	0.0	0.0
DE	6.6	4.2	7.7	13.4	9.7	14.1	14.6	15.8	30.3	2.7	10.3	2.4	2.4	2.3
FL	7.9	7.3	9.2	10.4	8.4	9.2	8.5	3.0	2.9	2.9	3.9	2.2	2.7	3.0
GA	5.7	8.1	9.9	10.0	7.2	7.4	6.7	9.6	4.6	4.1	8.3	3.0	5.4	11.9
HI	10.4	9.5	9.9	12.8	10.6	8.0	7.2	5.7	0.0	3.1	2.9	0.0	0.0	2.4
IA	4.2	4.1	4.6	6.6	4.5	4.5	5.1	13.4	13.8	17.9	16.1	12.4	13.1	11.4
ID	6.6	9.4	7.8	11.2	9.9	10.2	8.8	8.2	2.8	4.0	1.5	2.8	0.0	0.0
IL	5.2	4.3	5.0	6.2	4.9	5.3	5.8	12.8	12.9	13.0	12.9	9.2	12.4	8.8
IN	6.2	5.4	5.3	6.8	7.0	7.2	8.4	12.4	16.0	18.5	18.9	9.0	10.7	10.6
KS	6.9	7.3	8.3	11.8	10.1	10.9	10.6	11.1	9.2	9.4	9.8	5.7	4.6	2.4
KY	8.4	7.4	9.0	7.9	4.9	6.0	5.1	3.7	7.7	5.4	9.8	6.8	8.6	12.2
LA	6.9	10.7	8.6	11.7	8.6	7.8	8.4	10.9	5.8	8.9	7.9	6.3	7.3	5.3
MA	4.7	4.8	5.2	6.6	5.8	6.0	5.8	27.8	25.4	22.9	21.5	12.0	16.4	19.2
MD	4.4	6.5	7.6	10.0	8.4	10.0	10.8	12.4	12.2	12.7	10.8	4.8	3.1	4.6
ME	5.1	7.5	10.5	11.1	9.3	9.5	10.3	3.6	3.5	1.9	2.8	0.0	1.8	5.6
MI	8.4	9.2	9.9	10.9	8.8	8.3	9.2	3.1	2.4	3.8	4.3	3.9	4.9	4.3
MN	4.6	5.8	10.1	11.9	9.5	11.6	11.4	13.8	12.8	2.9	5.5	2.3	0.8	2.1
MO	5.5	6.3	7.0	10.1	6.8	7.6	8.9	12.2	10.7	11.2	11.2	10.0	9.7	7.2
MS	6.4	4.8	5.9	5.5	4.1	5.3	4.7	4.3	7.9	10.1	14.0	10.1	9.4	11.5
MT	5.2	4.2	6.3	8.4	7.9	7.7	6.9	10.6	14.9	13.0	4.6	3.4	5.9	8.2
NC	6.2	4.5	7.0	7.7	5.5	5.9	5.0	8.0	13.9	10.4	10.4	6.7	7.4	9.9
ND	3.8	4.4	5.2	5.9	5.4	5.4	4.3	11.8	2.5	6.1	1.2	0.0	1.2	6.3
NE	4.4	4.6	4.3	7.5	4.6	5.9	6.8	19.2	20.5	13.0	9.4	11.6	8.6	8.7
NH	4.7	3.5	4.1	6.8	7.3	5.3	4.4	18.8	37.1	27.0	29.0	9.2	25.0	14.8
NJ	4.9	4.9	5.7	6.8	4.7	4.6	4.4	14.2	14.2	8.8	12.5	8.8	10.9	8.5
NM	5.9	5.5	7.8	9.7	8.1	7.8	8.4	18.5	13.2	14.3	12.3	5.9	7.1	2.9
NV	10.1	9.1	9.6	15.3	9.4	10.5	8.3	0.0	2.3	11.4	9.8	10.9	8.5	14.6
NY	5.6	5.1	5.4	6.3	4.5	5.1	5.9	8.5	6.8	11.8	12.3	6.3	8.1	7.4
OH	5.3	6.0	6.0	6.7	5.4	5.3	5.7	12.7	10.5	13.6	14.8	11.1	13.3	12.1
OK	6.7	7.1	9.4	12.2	8.5	9.4	9.6	15.6	7.4	3.3	5.4	4.9	5.2	6.3
OR	6.1	6.1	7.2	6.1	5.4	5.1	5.0	17.8	11.9	15.8	23.1	25.0	24.1	17.9
PA	4.2	4.0	5.7	7.4	5.2	5.8	4.9	14.4	14.0	7.8	6.3	7.8	6.4	9.7
RI	3.5	4.7	4.4	5.9	4.4	4.3	2.7	21.8	16.9	11.1	20.5	8.3	11.5	24.7
SC	6.0	6.0	9.2	11.8	9.0	8.7	7.8	8.7	15.3	3.6	5.2	4.9	3.6	7.1
SD	5.3	5.1	6.4	7.4	4.6	5.3	4.6	6.6	5.9	6.5	2.0	8.4	5.6	11.3
TN	6.5	8.2	8.8	11.0	7.0	6.5	5.7	3.0	1.3	3.9	4.0	3.3	8.2	7.6
TX	6.5	6.7	6.7	8.4	7.1	7.4	7.1	9.6	7.5	10.4	10.7	6.3	8.3	9.6
UT	3.7	4.8	5.8	6.8	5.6	5.4	6.0	15.5	9.0	7.3	11.1	11.1	6.7	2.4
VA	3.3	3.4	4.6	6.3	5.7	6.7	7.6	33.9	25.9	21.6	23.9	12.9	11.9	6.7
VT	2.8	2.8	5.1	8.3	9.2	7.4	8.1	27.5	18.9	17.1	7.9	5.6	2.5	5.3
WA	8.8	8.5	9.3	9.7	6.7	6.9	7.1	4.8	4.2	5.0	6.3	7.4	7.2	9.2
WI	3.4	3.0	3.7	4.8	4.1	4.5	4.9	21.8	24.4	23.0	23.5	15.8	15.5	13.7
WV	7.9	7.5	9.5	12.9	8.7	8.2	9.0	6.1	4.1	2.3	0.9	1.7	4.6	4.1
WY	9.4	8.3	10.5	9.6	9.5	15.4	12.3	5.9	2.9	2.9	2.8	0.0	0.0	0.0
<b>US</b>	<b>6.3</b>	<b>6.3</b>	<b>7.0</b>	<b>9.2</b>	<b>7.1</b>	<b>7.5</b>	<b>7.5</b>	<b>13.7</b>	<b>10.0</b>	<b>9.9</b>	<b>9.9</b>	<b>8.8</b>	<b>7.7</b>	<b>7.7</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 21.1 in 2001, which then declined sharply to 15.5 percent in 2004, then increased to 17.6 in 2007. There is some evidence that some state agencies may be down grading the severity ratings for deficiencies (US GAO, 2003).

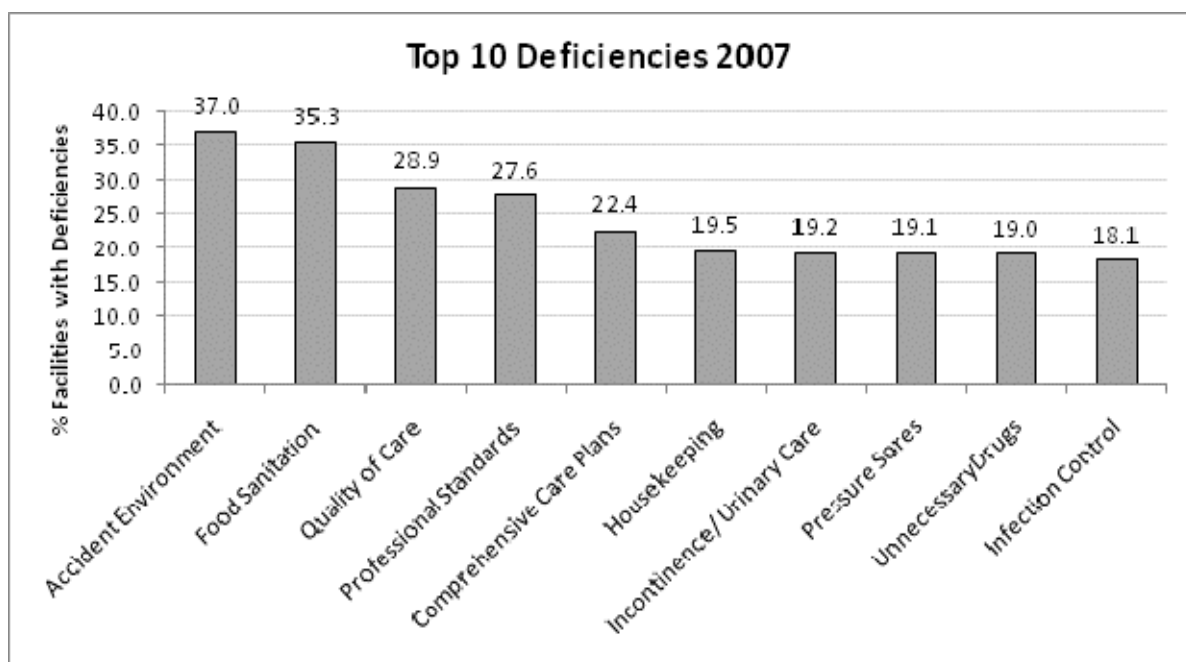


**TABLE 34**  
**PERCENT OF FACILITIES RECEIVING A DEFICIENCY**  
**FOR ACTUAL HARM OR JEOPARDY OF RESIDENTS**  
**BY CALENDAR YEAR**

<b>State</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
AK	35.7	8.3	0.0	0.0	13.3	30.8	6.7
AL	15.9	12.8	14.8	19.3	23.3	22.5	14.3
AR	27.6	14.2	23.7	15.7	12.8	13.1	15.2
AZ	9.2	4.6	11.6	6.1	16.1	28.8	15.3
CA	9.7	3.1	3.8	6.8	8.7	14.6	11.5
CO	25.9	23.5	23.8	24.8	40.9	44.6	42.6
CT	49.6	42.7	47.1	53.1	43.2	43.9	40.8
DC	38.9	30.0	47.1	30.0	20.0	30.0	44.4
DE	18.4	3.0	8.1	18.0	22.0	33.3	38.6
FL	20.9	9.9	9.6	5.9	5.9	6.7	8.2
GA	18.3	18.6	22.2	14.7	15.4	13.7	15.6
HI	11.4	19.4	18.8	17.1	0.0	4.4	7.3
IA	11.6	7.9	9.8	14.3	9.2	14.7	14.4
ID	28.8	36.6	26.7	36.8	39.4	37.8	34.3
IL	16.2	15.9	17.2	16.7	18.8	23.3	24.7
IN	26.0	21.9	20.1	23.2	30.8	33.4	35.3
KS	30.8	27.8	27.2	32.0	40.1	33.1	27.8
KY	27.6	22.6	24.6	9.1	7.5	10.3	6.6
LA	23.9	20.1	13.4	10.2	18.8	12.8	12.4
MA	22.4	23.6	25.0	16.9	20.4	19.7	16.6
MD	19.4	16.6	17.7	17.4	5.3	10.7	16.2
ME	10.7	8.0	14.2	9.2	6.6	10.0	6.5
MI	24.3	29.5	24.9	23.1	25.8	28.2	30.4
MN	18.1	20.7	16.5	13.1	17.1	19.3	15.3
MO	10.7	15.0	10.3	13.7	15.9	14.6	16.3
MS	22.2	15.2	18.3	16.3	10.6	6.9	11.5
MT	23.5	13.5	18.5	14.9	20.5	10.6	18.8
NC	31.9	22.7	27.8	20.4	16.1	12.9	10.1
ND	28.2	12.4	11.0	14.6	25.6	16.1	11.3
NE	19.7	18.0	13.0	17.4	16.7	24.9	25.0
NH	27.5	27.4	24.3	23.7	26.3	18.4	11.1
NJ	23.0	15.1	12.4	10.7	17.9	13.4	16.1
NM	20.0	14.7	26.0	21.5	35.3	24.3	27.1
NV	6.5	9.1	9.1	22.0	10.9	17.0	14.6
NY	33.2	24.7	11.0	9.6	15.1	17.9	18.0
OH	24.5	23.9	13.8	11.0	13.1	14.1	15.0
OK	22.2	21.7	23.1	18.9	20.3	20.2	19.9
OR	31.0	17.8	21.1	14.2	17.7	20.3	16.4
PA	14.3	14.6	16.3	21.4	13.3	14.0	10.6
RI	10.3	3.6	5.6	9.0	3.6	3.5	3.5
SC	16.0	25.2	28.6	31.0	19.8	14.4	8.9
SD	31.1	17.8	32.4	20.0	15.0	18.7	23.6
TN	16.9	21.0	20.9	19.5	13.6	12.7	16.2
TX	26.2	19.5	15.2	11.9	16.5	16.3	14.1
UT	14.3	23.6	13.4	9.9	11.1	14.4	8.3
VA	11.6	13.0	13.8	10.4	16.5	14.9	16.8
VT	17.5	16.2	9.8	15.8	25.0	12.5	7.9
WA	39.8	40.0	24.5	28.3	22.6	25.7	25.2
WI	9.4	11.7	11.8	11.6	20.6	26.2	31.4
WV	16.7	15.5	10.0	12.7	8.3	12.8	19.8
WY	20.6	25.7	28.6	11.1	11.1	20.0	23.7
<b>US</b>	<b>21.1</b>	<b>18.0</b>	<b>16.6</b>	<b>15.5</b>	<b>16.9</b>	<b>18.1</b>	<b>17.6</b>

## Top Ten Deficiencies for Certified Facilities in 2007

The top ten most frequently cited deficiencies in the U.S. in 2007 are shown by state on Table 35. The categories with the highest number of deficiencies were given for failures in accident environment (37.0 percent); food sanitation (35.3 percent); quality of care (28.9 percent); professional standards (27.6 percent); and comprehensive care plans (22.4 percent).



## Top Ten States Citing the Top Deficiencies in 2007

Table 35 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 2007, the District of Columbia had 8, the state with the most deficiencies in the top ten deficiency categories.

**TABLE 35**  
**TOP TEN U.S. DEFICIENCIES BY STATE FOR FACILITIES CERTIFIED**  
**CALENDAR YEAR 2007**

<b>Percent of Facilities with Deficiencies</b>					
	<b>Accident Environment (F323)</b>	<b>Food Sanitation (F371)</b>	<b>Quality of Care (F309)</b>	<b>Professional Standards (F281)</b>	<b>Comprehensive Care Plans (F279)</b>
AK	6.7	83.3 *	0.0	33.3	26.7
AL	26.7	50.3 *	9.3	41.0	20.5
AR	77.2 *	44.7	61.2 *	4.6	5.5
AZ	56.5 *	28.2	28.2	62.1 *	19.4
CA	40.2	55.3 *	36.6	30.9	44.4 *
CO	59.3 *	47.4	53.1 *	37.3	45.5 *
CT	56.7 *	31.3	45.5	53.6 *	45.1 *
DC	83.3 *	100.0 *	77.8 *	27.8	77.8 *
DE	81.8 *	63.6 *	77.3 *	22.7	38.6 *
FL	21.8	46.9	18.4	51.3 *	30.1
GA	27.7	25.4	48.6 *	11.8	13.9
HI	22.0	26.8	22.0	12.2	41.5 *
IA	39.8	37.4	22.1	40.9	12.3
ID	72.9 *	35.7	35.7	34.3	10.0
IL	47.3	25.4	21.5	33.0	10.0
IN	44.2	27.7	34.9	34.9	31.7
KS	52.9 *	45.3	31.7	46.8 *	37.8 *
KY	22.6	34.0	17.0	30.6	20.5
LA	43.3	40.8	13.5	13.5	20.9
MA	26.2	8.4	15.2	28.3	23.6
MD	47.7	48.6 *	67.6 *	32.9	25.9
ME	35.2	38.9	17.6	65.7 *	42.6 *
MI	58.4 *	49.6 *	44.4	33.5	17.8
MN	52.6	40.2	21.2	2.4	29.9
MO	36.3	41.8	22.3	60.8 *	32.3
MS	22.5	28.5	7.5	26.0	23.0
MT	23.5	41.2	10.6	48.2 *	14.1
NC	26.3	47.8	14.0	25.8	3.9
ND	50.0	33.8	22.5	13.8	5.0
NE	37.5	42.3	32.7	37.5	12.0
NH	12.3	29.6	6.2	42.0 *	14.8
NJ	28.2	22.6	19.8	22.0	12.4
NM	24.3	18.6	20.0	1.4	40.0 *
NV	20.8	39.6	52.1 *	18.8	33.3
NY	33.1	24.3	22.1	40.4	6.4
OH	45.8	20.6	27.3	21.8	17.3
OK	29.1	64.6 *	28.5	1.3	33.9
OR	23.9	8.2	55.2 *	8.2	10.4
PA	32.9	29.3	44.7	5.8	18.3
RI	10.6	5.9	3.5	12.9	3.5
SC	29.6	40.8	45.0	14.2	11.8
SD	29.2	31.1	17.9	32.1	8.5
TN	34.6	19.4	30.2	27.6	10.2
TX	24.8	33.2	20.0	3.2	21.8
UT	11.9	54.8 *	20.2	14.3	11.9
VA	37.3	41.8	51.1 *	42.5 *	11.2
VT	21.1	39.5	13.2	68.4 *	26.3
WA	28.2	33.2	27.7	31.5	25.6
WI	32.5	10.6	19.6	15.2	24.0
WV	28.9	40.5	46.3 *	24.8	47.1 *
WY	57.9 *	63.2 *	34.2	39.5	15.8
<b>US</b>	<b>37.0</b>	<b>35.3</b>	<b>28.9</b>	<b>27.6</b>	<b>22.4</b>

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

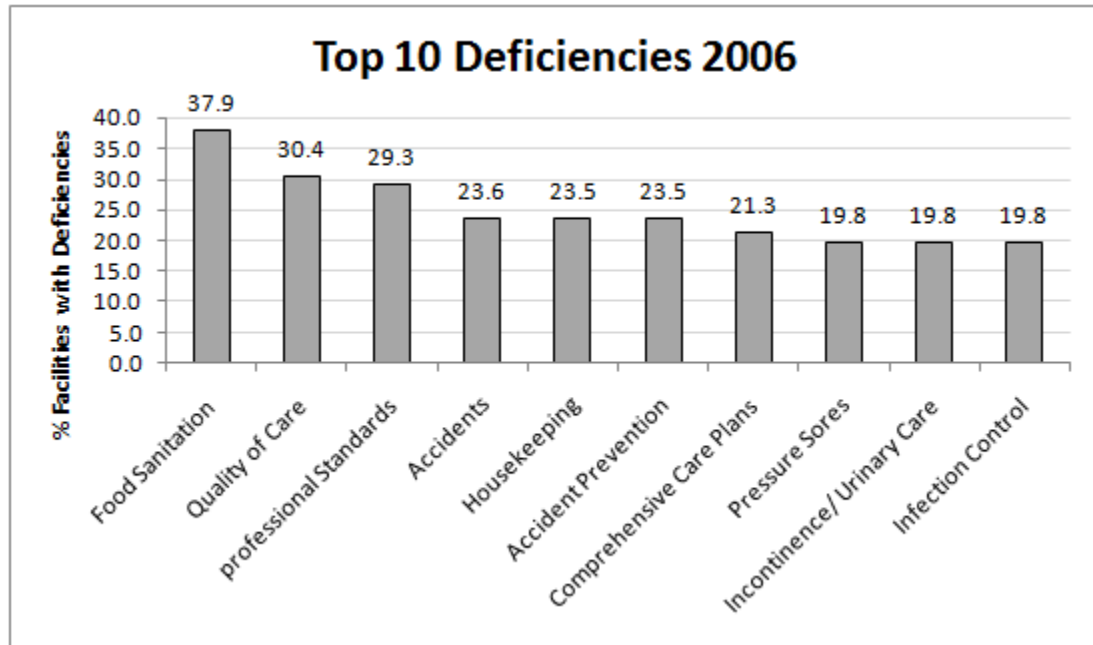
**TABLE 35**  
**TOP TEN U.S. DEFICIENCIES BY STATE FOR FACILITIES CERTIFIED**  
**CALENDAR YEAR 2007**

	Percent of Facilities with Deficiencies				
	Housekeeping (F253)	Incontinence/ Urinary Care (F315)	Pressure Sores (F314)	Unnecessary Drugs (F329)	Infection Control (F441)
AK	13.3	6.7	6.7	13.3	6.7
AL	13.0	17.4	16.8	1.2	20.5
AR	24.8	33.3 *	49.4 *	16.5	30.8 *
AZ	26.9	29.8 *	16.1	19.4	38.7 *
CA	29.3 *	25.0	20.1	32.8 *	29.8
CO	24.4	31.6 *	22.5	38.8 *	20.6
CT	21.9	19.3	34.8 *	24.5	19.7
DC	77.8 *	11.1	33.3 *	33.3 *	66.7 *
DE	52.3 *	25.0	36.4 *	6.8	25.0
FL	30.0 *	25.4	10.4	17.7	19.6
GA	35.3 *	35.3 *	18.2	8.1	18.2
HI	0.0	31.7 *	9.8	14.6	31.7 *
IA	18.6	10.7	17.7	8.1	23.5
ID	22.9	35.7 *	30.0 *	47.1 *	15.7
IL	16.8	20.7	23.1	16.5	7.6
IN	22.5	27.5	27.1 *	25.1	16.9
KS	39.6 *	42.9 *	40.8 *	33.2 *	9.4
KY	34.0 *	12.5	12.2	3.8	5.2
LA	19.5	11.3	17.4	24.8	36.9 *
MA	6.8	10.3	9.1	15.7	7.2
MD	27.8	21.3	10.2	39.4 *	31.5 *
ME	24.1	35.2 *	17.6	14.8	13.9
MI	26.8	12.6	20.2	30.9	14.7
MN	11.1	62.2 *	67.2 *	46.6 *	15.3
MO	12.0	23.3	27.1 *	8.4	12.4
MS	11.5	8.5	6.0	9.0	20.5
MT	20.0	10.6	14.1	27.1	9.4
NC	9.4	12.3	7.5	16.2	2.9
ND	6.3	3.8	8.8	18.8	5.0
NE	28.4	21.6	21.2	17.8	9.1
NH	1.2	0.0	7.4	4.9	2.5
NJ	7.1	7.3	15.8	28.2	3.1
NM	17.1	18.6	15.7	14.3	7.1
NV	4.2	25.0	12.5	16.7	27.1
NY	15.4	6.6	18.8	10.0	31.2 *
OH	18.0	13.7	21.5	17.1	17.1
OK	30.1 *	19.9	13.0	32.9 *	42.1 *
OR	2.2	14.9	12.7	27.6	2.2
PA	9.0	10.4	8.6	17.2	18.3
RI	10.6	0.0	7.1	1.2	0.0
SC	32.0 *	24.3	22.5	4.7	26.0
SD	29.2 *	1.9	4.7	7.5	7.5
TN	6.3	23.5	8.6	2.2	18.4
TX	21.3	10.2	11.7	8.2	18.2
UT	16.7	3.6	3.6	13.1	7.1
VA	10.4	10.1	21.3	12.7	16.0
VT	28.9	7.9	18.4	21.1	42.1 *
WA	28.2	26.1	23.5 *	23.5	11.3
WI	8.2	23.5	19.3	15.7	8.0
WV	5.0	14.0	7.4	40.5 *	42.1 *
WY	13.2	34.2 *	15.8	47.4 *	15.8
<b>US</b>	<b>19.5</b>	<b>19.2</b>	<b>19.1</b>	<b>19.0</b>	<b>18.1</b>

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

## Top Ten Deficiencies for Facilities Certified in 2006

The top ten most frequently cited deficiencies in the U.S. are shown by state in 2006 on Table 36. The five categories with the largest number of deficiencies were given for failure to ensure sanitary food (37.9 percent); to ensure quality of care (30.4 percent); to meet professional standards (29.3 percent); the occurrence of accidents (23.6 percent); and adequate housekeeping (23.5 percent).



## Top Ten States Citing the Top Deficiencies for Facilities Certified in 2006

Table 36 also shows the top ten states in terms of the number of deficiencies that were issued to nursing facilities for each of the top 10 deficiencies (See states with asterisks). For facilities certified in calendar year 2006, Delaware had the most deficiencies (9) in the top 10 categories.

**TABLE 36**  
**TOP TEN U.S. DEFICIENCIES BY STATE FOR FACILITIES CERTIFIED**  
**CALENDAR YEAR 2006**

**Percent of Facilities with Deficiencies**

	Food Sanitation (F371)	Quality of Care (F309)	Professional Standards (F281)	Accidents (F323)	Housekeeping (F253)
AK	61.5 *	7.7	38.5	23.1	0.0
AL	42.6	14.2	29.0	7.7	20.1
AR	56.8 *	60.6 *	8.5	64.4 *	55.5 *
AZ	43.2	24.2	62.1 *	48.5 *	44.7 *
CA	52.7 *	40.4	30.1	29.1	27.4
CO	40.1	65.3 *	32.2	38.6 *	32.2
CT	29.1	55.3 *	61.6 *	38.0 *	13.5
DC	85.0 *	90.0 *	40.0	65.0 *	95.0 *
DE	66.7 *	90.5 *	31.0	71.4 *	57.1 *
FL	53.4 *	19.2	47.2 *	18.3	33.4
GA	36.8	55.6 *	23.1	25.9	45.3 *
HI	37.0	8.7	15.2	10.9	2.2
IA	34.7	23.2	42.8	21.8	16.1
ID	60.8 *	39.2	40.5	48.6 *	29.7
IL	22.4	17.3	34.7	31.3	16.6
IN	29.2	31.0	47.1 *	20.7	25.8
KS	38.3	36.9	54.5 *	30.5	35.7 *
KY	39.9	22.0	32.6	22.0	39.9 *
LA	33.9	15.3	16.4	38.3 *	20.8
MA	12.6	17.9	24.3	10.4	6.2
MD	49.8 *	64.0 *	41.3	22.7	31.1
ME	33.6	34.5	64.5 *	32.7	27.3
MI	41.4	36.7	31.9	30.2	28.7
MN	38.8	25.7	1.3	23.3	13.4
MO	38.3	20.6	57.7 *	9.7	7.1
MS	38.1	18.3	34.2	21.8	6.9
MT	49.4	9.4	37.6	35.3	35.3
NC	49.5	18.6	38.3	15.5	16.0
ND	42.0	35.8	1.2	38.3 *	8.6
NE	41.6	28.5	29.4	25.8	24.9
NH	26.3	9.2	48.7 *	5.3	5.3
NJ	22.3	22.3	26.9	17.1	8.9
NM	25.7	40.0	0.0	8.6	14.3
NV	38.3	55.3 *	27.7	10.6	8.5
NY	23.1	22.9	36.2	19.7	18.4
OH	26.3	27.7	25.4	21.9	21.0
OK	67.3 *	22.9	0.0	22.6	45.6 *
OR	14.3	49.6	8.3	6.8	3.0
PA	31.9	52.3 *	8.7	22.4	9.6
RI	14.9	12.6	8.0	11.5	16.1
SC	37.7	40.7	25.1	17.4	40.1 *
SD	46.7	11.2	57.0 *	17.8	34.6
TN	27.8	31.0	25.6	16.1	7.6
TX	34.0	22.5	7.4	18.5	29.7
UT	46.7	23.3	20.0	12.2	24.4
VA	28.4	52.6 *	31.3	9.3	7.1
VT	27.5	17.5	45.0 *	17.5	15.0
WA	43.9	25.7	30.0	15.6	28.3
WI	13.6	20.3	13.1	11.2	9.6
WV	46.8	25.7	44.0	13.8	2.8
WY	74.3 *	34.3	42.9	65.7 *	62.9 *
<b>US</b>	<b>37.9</b>	<b>30.4</b>	<b>29.3</b>	<b>23.6</b>	<b>23.5</b>

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

**TABLE 36**  
**TOP TEN U.S. DEFICIENCIES BY STATE FOR FACILITIES CERTIFIED**  
**CALENDAR YEAR 2006**

<b>Percent of Facilities with Deficiencies</b>					
	<b>Accident Prevention (F324)</b>	<b>Comprehensive Care Plans (F279)</b>	<b>Pressure Sores (F314)</b>	<b>Incontinence/ Urinary Care (F315)</b>	<b>Infection Control (F441)</b>
AK	23.1	15.4	0.0	7.7	30.8
AL	17.8	23.1	17.2	20.1	17.8
AR	39.4 *	10.2	32.2 *	35.6 *	50.4 *
AZ	8.3	16.7	13.6	20.5	40.9 *
CA	23.6	37.8	19.2	26.2	29.6
CO	42.6 *	41.1 *	23.8	26.2	18.3
CT	53.6 *	57.4 *	38.4 *	19.8	19.4
DC	35.0	75.0 *	30.0 *	10.0	90.0 *
DE	45.2 *	42.9 *	40.5 *	42.9 *	45.2 *
FL	11.0	24.3	10.1	18.8	18.9
GA	17.1	10.3	19.9	32.8 *	19.7
HI	13.0	54.3 *	6.5	32.6 *	23.9
IA	15.2	8.5	10.6	8.3	17.0
ID	40.5 *	13.5	41.9 *	31.1 *	32.4
IL	22.9	12.0	20.9	15.4	7.1
IN	39.4 *	17.5	23.3	21.1	22.3
KS	43.2 *	38.9 *	45.0 *	60.5 *	8.6
KY	10.7	20.3	7.6	15.1	13.4
LA	15.7	19.7	13.9	7.3	36.1 *
MA	24.1	19.5	10.2	11.1	8.0
MD	35.1	33.3	8.9	11.6	34.2 *
ME	5.5	52.7 *	31.8 *	43.6 *	19.1
MI	36.5 *	11.4	22.9	9.5	20.4
MN	38.2 *	32.4	74.9 *	78.9 *	17.4
MO	31.0	29.8	25.7 *	23.7	12.8
MS	11.9	23.8	5.0	5.9	33.7
MT	11.8	35.3	5.9	7.1	7.1
NC	19.0	5.0	8.3	10.5	4.0
ND	35.8 *	1.2	19.8	18.5	3.7
NE	26.7	12.7	17.2	21.7	8.1
NH	18.4	25.0	13.2	10.5	9.2
NJ	26.0	14.6	16.3	11.1	6.3
NM	11.4	38.6 *	10.0	24.3	12.9
NV	12.8	59.6 *	21.3	21.3	51.1 *
NY	18.4	5.3	20.4	7.5	23.1
OH	31.0	15.0	19.5	10.5	15.4
OK	13.1	18.7	15.0	26.9 *	51.7 *
OR	18.8	9.0	18.0	15.0	2.3
PA	23.6	21.3	14.1	11.8	26.7
RI	19.5	1.1	11.5	3.4	3.4
SC	18.6	9.6	22.8	22.8	19.8
SD	10.3	15.9	10.3	3.7	10.3
TN	26.9	11.1	10.8	22.8	26.3
TX	10.6	24.5	16.1	9.4	21.2
UT	3.3	18.9	2.2	0.0	0.0
VA	23.1	18.7	19.4	11.2	11.6
VT	17.5	17.5	22.5	22.5	67.5 *
WA	24.5	16.5	20.7	23.6	13.1
WI	23.8	17.6	12.3	25.1	7.8
WV	11.9	43.1 *	8.3	11.0	33.0
WY	20.0	25.7	28.6 *	37.1 *	37.1 *
<b>US</b>	<b>23.5</b>	<b>21.3</b>	<b>19.8</b>	<b>19.8</b>	<b>19.8</b>

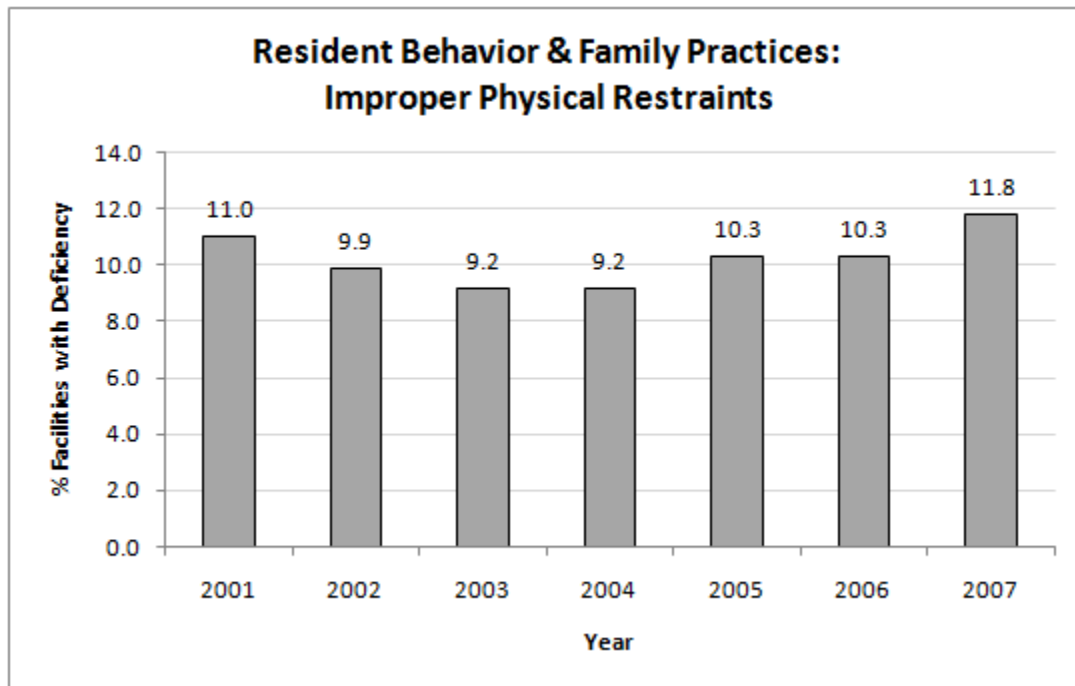
\* The ten states in which the highest percentage of facilities had deficiencies.

## 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 2001, 11.0 percent of facilities received deficiencies for this category. In 2003-2004, the number of facilities with deficiencies for physical restraints declined to 9.2 percent, and then they increased to 11.8 percent in 2007 (See Table 37).

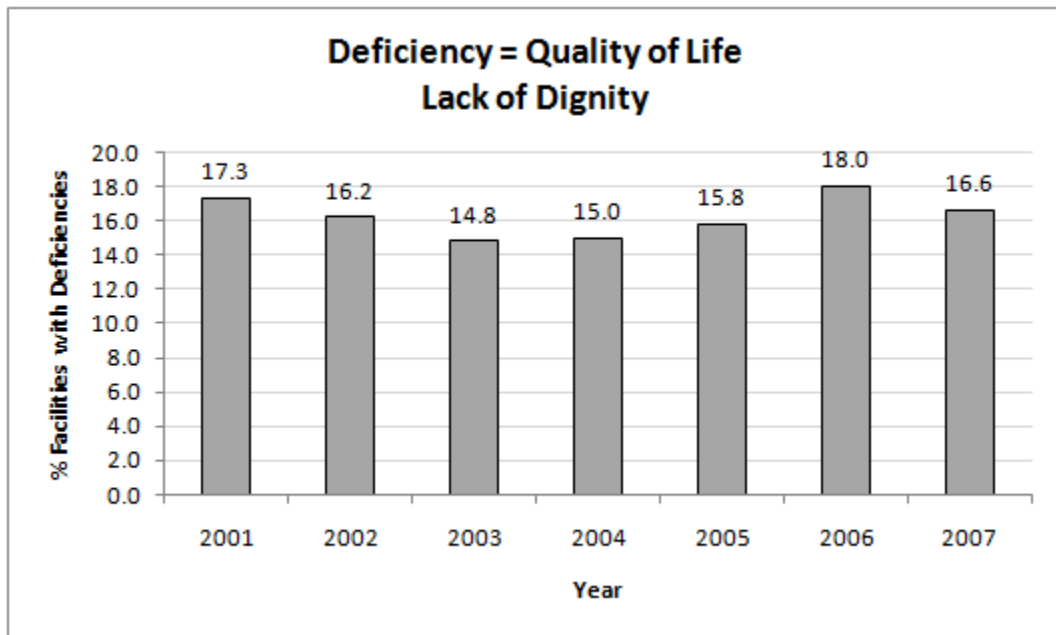


**TABLE 37**  
**DEFICIENCY GROUP=RESIDENT BEHAVIOR & FACILITY PRACTICES**  
**PHYSICAL RESTRAINTS (F221)**

Percent of Facilities with Deficiencies							
State	2001	2002	2003	2004	2005	2006	2007
AK	0.0	8.3	0.0	0.0	0.0	7.7	0.0
AL	7.7	1.8	3.7	5.4	7.4	5.3	6.2
AR	18.5	7.5	8.8	8.9	15.7	19.5	19.4
AZ	6.9	6.9	4.5	1.7	19.5	12.9	12.1
CA	18.6	14.4	13.9	14.9	15.1	18.1	26.3
CO	10.2	13.6	15.5	11.2	16.3	13.9	15.8
CT	23.8	18.8	19.4	24.6	22.9	21.5	15.5
DC	5.6	10.0	11.8	0.0	35.0	15.0	22.2
DE	10.5	3.0	8.1	0.0	4.9	16.7	9.1
FL	7.7	7.1	6.8	5.7	6.9	6.3	6.2
GA	7.8	13.9	11.4	10.1	9.2	6.0	4.9
HI	37.1	19.4	21.9	25.7	23.1	23.9	22.0
IA	3.2	4.5	5.1	4.4	5.1	8.5	8.1
ID	13.7	9.9	6.7	7.4	4.2	6.8	4.3
IL	9.4	6.3	8.5	9.8	10.3	11.8	14.5
IN	8.6	4.7	4.4	7.8	8.8	12.5	13.9
KS	17.8	16.1	13.2	16.7	15.2	11.5	9.4
KY	14.0	9.6	10.4	15.8	12.2	13.4	11.8
LA	22.0	32.6	16.4	10.9	10.3	6.6	13.8
MA	13.5	8.5	8.3	5.3	6.9	5.5	5.1
MD	4.0	8.3	5.5	4.7	2.2	4.9	4.6
ME	9.8	12.4	18.9	9.2	2.8	4.5	9.3
MI	10.4	10.5	8.2	6.4	6.9	6.6	8.6
MN	4.6	4.9	11.1	9.9	14.9	22.2	23.8
MO	5.9	6.1	5.9	5.7	10.2	12.8	19.7
MS	15.7	4.2	5.9	6.7	8.6	8.4	5.5
MT	8.2	9.5	3.3	9.2	1.1	1.2	3.5
NC	9.0	3.7	3.5	3.0	6.2	10.0	14.3
ND	9.4	2.5	3.7	6.1	5.1	9.9	3.8
NE	5.3	8.0	8.8	7.0	4.7	5.4	5.3
NH	7.2	8.1	4.1	17.1	3.9	0.0	4.9
NJ	11.2	10.1	9.4	5.5	5.6	4.3	2.5
NM	13.8	5.9	9.1	1.5	2.9	4.3	10.0
NV	30.4	36.4	27.3	14.6	13.0	8.5	8.3
NY	13.5	14.1	9.8	9.9	7.9	7.5	9.4
OH	7.9	10.3	8.7	9.0	11.0	11.0	14.3
OK	26.4	22.0	17.8	14.2	12.2	11.9	21.8
OR	11.6	6.7	4.5	8.2	9.7	3.8	8.2
PA	7.1	5.6	6.8	12.5	8.0	8.0	6.3
RI	9.2	2.4	0.0	1.3	0.0	2.3	3.5
SC	4.0	6.1	8.3	8.4	6.8	6.6	7.7
SD	12.3	10.9	12.0	8.0	12.1	16.8	9.4
TN	18.7	16.9	14.7	14.3	11.4	9.2	8.6
TX	6.8	7.0	5.9	8.3	11.2	10.2	11.7
UT	6.0	12.4	9.8	4.9	2.5	3.3	6.0
VA	10.4	8.8	9.7	5.8	5.6	3.4	4.5
VT	12.5	16.2	17.1	10.5	11.1	15.0	15.8
WA	13.9	12.1	4.6	3.8	3.7	3.0	4.6
WI	10.1	10.9	11.0	7.7	4.2	6.1	4.1
WV	9.6	4.1	3.1	3.4	7.5	2.8	4.1
WY	14.7	2.9	14.3	5.6	11.1	22.9	10.5
<b>US</b>	<b>11.0</b>	<b>9.9</b>	<b>9.2</b>	<b>9.2</b>	<b>10.3</b>	<b>10.3</b>	<b>11.8</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 2001, 17.3 percent of facilities received deficiencies for this, which increased to 18 percent in 2006, then declined to 16.6 percent in 2007 (See Table 38).

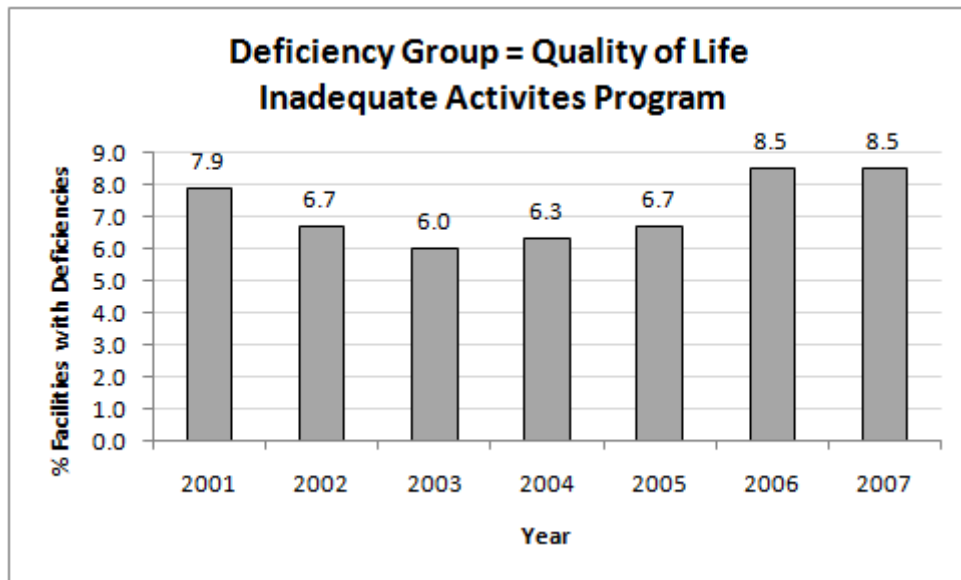


**TABLE 38  
DEFICIENCY GROUP=QUALITY OF LIFE  
DIGNITY (F241)**

Percent of Facilities with Deficiencies							
State	2001	2002	2003	2004	2005	2006	2007
AK	14.3	25.0	0.0	16.7	26.7	69.2	40.0
AL	23.1	19.3	19.4	19.3	27.0	18.3	13.7
AR	9.9	10.5	14.0	20.4	24.7	32.2	21.5
AZ	44.6	29.0	19.6	20.9	23.0	18.2	12.1
CA	39.4	29.5	25.3	32.5	29.5	33.7	36.9
CO	7.4	9.4	17.0	21.8	35.0	30.2	28.7
CT	18.0	20.5	20.3	26.1	27.3	25.3	19.7
DC	27.8	25.0	35.3	15.0	30.0	30.0	16.7
DE	10.5	6.1	8.1	5.1	26.8	52.4	36.4
FL	28.1	26.3	25.1	27.9	27.5	30.3	25.3
GA	16.8	16.1	14.0	13.8	10.9	13.7	13.0
HI	20.0	35.5	37.5	34.3	51.3	43.5	41.5
IA	7.0	5.2	7.1	7.6	6.9	5.3	8.4
ID	27.4	33.8	20.0	27.9	28.2	33.8	28.6
IL	15.5	9.9	10.0	9.5	10.1	10.2	9.5
IN	11.4	8.2	7.8	6.4	7.3	11.3	12.2
KS	11.9	14.4	13.5	15.6	18.6	25.1	23.3
KY	15.8	16.5	12.5	9.5	7.8	11.0	8.7
LA	18.6	26.5	21.2	24.0	25.4	25.9	22.7
MA	6.5	6.7	6.4	7.8	5.6	6.2	6.3
MD	5.5	13.1	11.8	10.8	14.9	16.9	13.4
ME	20.5	29.2	19.8	16.5	11.3	19.1	18.5
MI	23.8	24.6	20.9	15.2	18.7	19.7	20.4
MN	14.8	17.1	28.9	20.7	25.3	29.1	21.4
MO	10.7	16.2	12.8	11.2	13.8	18.4	20.1
MS	25.9	24.1	23.7	11.8	8.6	11.4	11.0
MT	8.2	5.4	12.0	18.4	8.0	9.4	8.2
NC	29.6	18.9	20.7	19.4	13.4	17.1	12.1
ND	10.6	13.6	6.1	6.1	11.5	18.5	16.3
NE	6.4	5.0	1.9	7.5	3.3	3.6	10.1
NH	1.4	4.8	1.4	5.3	5.3	5.3	6.2
NJ	14.8	17.8	7.9	7.0	7.0	8.9	9.0
NM	18.5	16.2	15.6	9.2	22.1	22.9	22.9
NV	23.9	22.7	25.0	31.7	30.4	40.4	18.8
NY	24.0	18.4	11.8	14.2	11.0	12.0	15.4
OH	15.3	15.8	11.7	10.5	10.6	11.4	9.9
OK	24.1	22.8	26.5	21.3	19.4	20.2	12.0
OR	11.6	11.1	8.3	9.7	8.9	7.5	11.9
PA	6.4	6.2	6.5	7.7	10.1	13.0	11.7
RI	2.3	1.2	2.8	15.4	13.1	13.8	4.7
SC	22.7	12.3	17.3	12.3	17.9	12.6	16.0
SD	6.6	7.9	6.5	8.0	9.3	13.1	11.3
TN	14.5	19.1	19.6	10.9	12.0	14.2	11.4
TX	10.8	11.8	7.8	7.6	12.6	12.0	12.4
UT	14.3	16.9	22.0	23.5	24.7	24.4	19.0
VA	4.4	7.1	5.9	6.6	7.3	10.8	17.2
VT	12.5	8.1	14.6	2.6	36.1	32.5	18.4
WA	23.1	23.8	19.9	19.2	18.1	18.1	22.3
WI	12.2	8.3	9.2	7.7	10.3	16.6	13.7
WV	36.0	33.3	28.5	33.1	24.2	24.8	21.5
WY	38.2	11.4	17.1	22.2	27.8	51.4	50.0
<b>US</b>	<b>17.3</b>	<b>16.2</b>	<b>14.8</b>	<b>15.0</b>	<b>15.8</b>	<b>18.0</b>	<b>16.6</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 2001, 7.9 percent of facilities in the U.S. were given deficiencies in this category while 8.5 percent received deficiencies in 2007 (See Table 39).

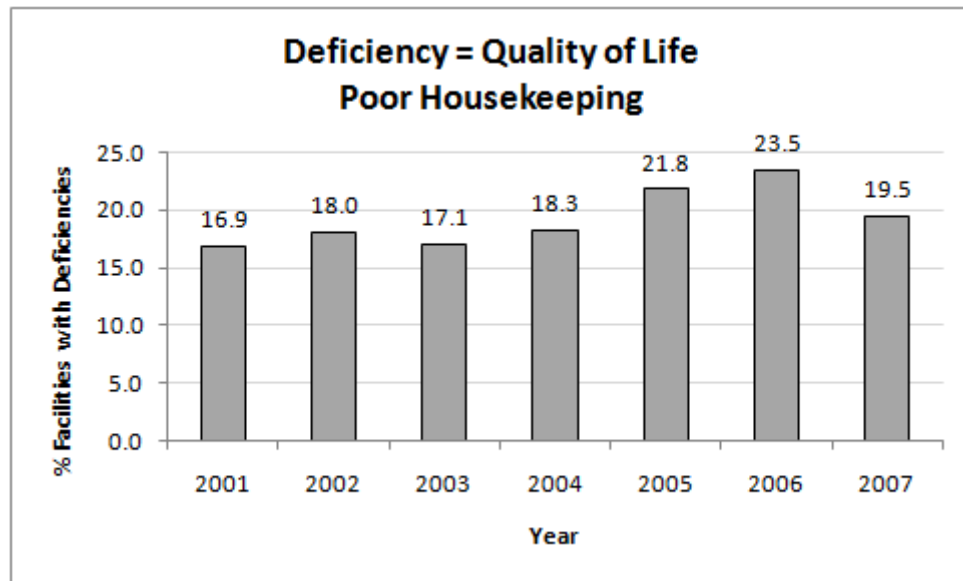


**TABLE 39**  
**DEFICIENCY GROUP=QUALITY OF LIFE**  
**ACTIVITIES PROGRAM (F248)**

<b>Percent of Facilities with Deficiencies</b>							
<b>State</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
AK	0.0	0.0	7.1	25.0	6.7	23.1	20.0
AL	8.7	5.0	5.1	6.4	9.2	12.4	19.3
AR	3.4	4.6	5.3	5.5	6.0	11.0	9.7
AZ	4.6	1.5	2.7	7.8	9.2	11.4	5.6
CA	15.3	11.2	9.5	10.6	9.4	10.1	10.5
CO	11.1	10.3	11.2	5.8	14.8	23.8	22.5
CT	4.5	2.9	1.8	3.8	3.5	5.9	4.7
DC	16.7	10.0	5.9	0.0	0.0	5.0	0.0
DE	5.3	6.1	10.8	2.6	7.3	11.9	15.6
FL	9.2	6.7	6.4	8.9	7.5	8.6	8.2
GA	1.6	3.7	6.4	3.7	4.7	4.0	4.0
HI	11.4	9.7	9.4	28.6	25.6	30.4	34.1
IA	3.6	3.2	4.9	2.3	5.1	6.2	4.2
ID	5.5	7.0	6.7	8.8	11.3	18.9	14.3
IL	4.7	3.6	3.9	3.6	4.8	8.8	9.7
IN	14.2	9.4	7.6	7.8	10.5	11.3	8.4
KS	11.1	12.8	14.3	17.0	16.0	17.3	17.5
KY	7.4	10.7	7.5	4.2	4.7	5.8	3.5
LA	4.3	9.3	7.5	5.9	9.9	8.4	6.4
MA	5.4	4.8	2.8	3.7	1.9	4.4	3.5
MD	2.0	2.2	1.4	1.4	3.5	2.7	2.3
ME	0.0	2.7	3.8	1.8	1.9	5.5	9.3
MI	16.7	12.2	7.3	5.7	7.6	7.3	8.3
MN	5.4	5.2	8.5	11.3	9.3	10.4	11.1
MO	7.9	6.7	7.9	9.0	8.4	13.0	12.9
MS	3.8	1.6	1.8	0.6	1.0	4.0	6.5
MT	5.9	2.7	2.2	0.0	4.5	2.4	5.9
NC	5.3	4.3	3.3	2.7	2.0	7.4	5.3
ND	0.0	4.9	2.4	0.0	3.8	8.6	10.0
NE	3.7	2.5	0.9	2.8	2.8	7.2	10.6
NH	4.3	1.6	1.4	0.0	1.3	1.3	2.5
NJ	6.7	7.1	4.2	2.6	2.1	4.3	5.9
NM	7.7	2.9	6.5	15.4	8.8	12.9	12.9
NV	19.6	9.1	9.1	19.5	8.7	12.8	16.7
NY	7.6	3.9	2.6	3.7	3.1	4.7	8.8
OH	10.6	8.4	7.4	8.5	6.9	8.4	7.5
OK	7.5	5.8	11.7	7.1	5.5	11.0	16.1
OR	11.6	14.8	11.3	8.2	10.5	7.5	4.5
PA	3.1	2.3	2.7	5.1	3.0	5.1	3.5
RI	1.1	0.0	0.0	1.3	0.0	4.6	5.9
SC	1.3	1.2	1.8	1.9	8.6	7.8	2.4
SD	5.7	3.0	4.6	5.0	0.9	2.8	6.6
TN	6.3	12.7	7.5	9.7	7.5	7.9	7.6
TX	12.7	7.8	5.3	7.0	7.2	9.4	10.0
UT	1.2	4.5	4.9	3.7	3.7	2.2	3.6
VA	0.8	0.4	0.4	1.2	2.0	4.5	9.0
VT	5.0	2.7	2.4	5.3	2.8	7.5	2.6
WA	11.2	12.9	11.6	7.9	7.4	13.1	10.5
WI	5.3	3.6	3.4	2.3	4.0	5.9	2.8
WV	4.4	3.3	5.4	6.8	3.3	4.6	5.8
WY	20.6	17.1	20.0	13.9	13.9	22.9	13.2
<b>US</b>	<b>7.9</b>	<b>6.7</b>	<b>6.0</b>	<b>6.3</b>	<b>6.7</b>	<b>8.5</b>	<b>8.5</b>

## Housekeeping (F253)

Housekeeping and maintenance services must be provided to maintain a sanitary, orderly, and comfortable environment. In 2001, 16.9 percent of facilities received deficiencies for failing to meet this requirement, which increased to 19.5 in 2007 (See Table 40).

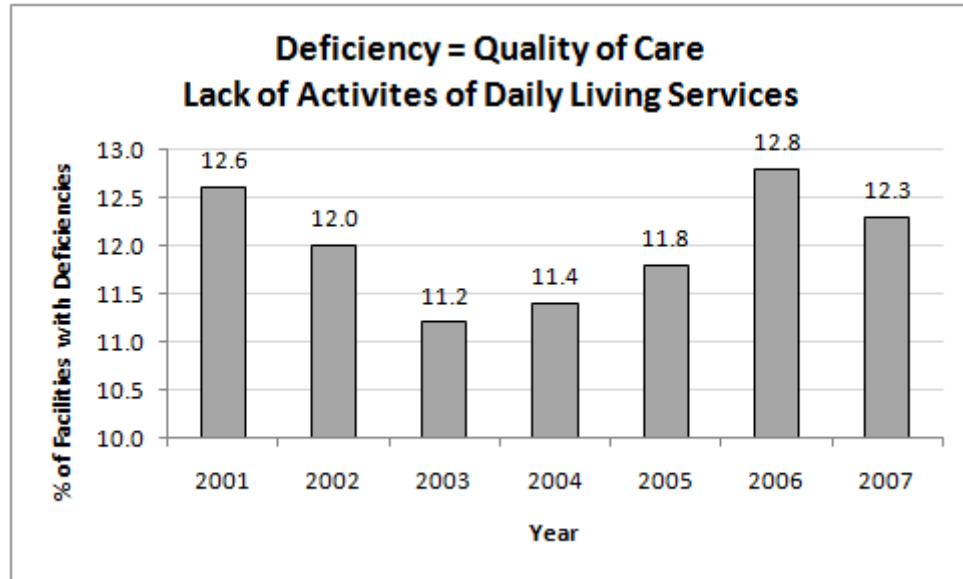


**TABLE 40**  
**DEFICIENCY GROUP=QUALITY OF LIFE**  
**HOUSEKEEPING (F253)**

<b>Percent of Facilities with Deficiencies</b>							
<b>State</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
AK	7.1	0.0	0.0	8.3	26.7	0.0	13.3
AL	12.8	12.8	7.4	5.4	16.6	20.1	13.0
AR	33.2	26.8	31.6	28.9	44.3	55.5	24.8
AZ	44.6	46.6	43.8	41.7	37.9	44.7	26.9
CA	27.0	22.8	22.2	24.8	25.4	27.4	29.3
CO	19.4	13.6	15.5	34.5	30.0	32.2	24.4
CT	7.8	7.1	4.8	7.6	12.3	13.5	21.9
DC	77.8	70.0	94.1	95.0	95.0	95.0	77.8
DE	34.2	21.2	56.8	56.4	41.5	57.1	52.3
FL	11.3	18.7	23.3	25.6	32.3	33.4	30.0
GA	37.6	43.7	39.4	42.2	44.4	45.3	35.3
HI	0.0	0.0	0.0	11.4	7.7	2.2	0.0
IA	7.5	10.2	13.4	13.6	12.4	16.1	18.6
ID	23.3	40.8	14.7	22.1	29.6	29.7	22.9
IL	17.6	13.6	11.8	14.8	13.9	16.6	16.8
IN	1.9	2.5	1.0	10.9	24.6	25.8	22.5
KS	20.3	25.0	25.4	30.4	31.2	35.7	39.6
KY	29.4	30.3	31.4	24.9	38.3	39.9	34.0
LA	14.0	22.4	19.2	22.0	14.7	20.8	19.5
MA	4.5	5.0	8.0	5.3	6.0	6.2	6.8
MD	5.5	7.4	3.6	8.0	9.6	31.1	27.8
ME	20.5	16.8	18.9	9.2	28.3	27.3	24.1
MI	32.3	34.6	27.0	26.0	25.6	28.7	26.8
MN	3.2	3.0	4.8	6.3	12.9	13.4	11.1
MO	2.2	2.6	2.0	3.7	4.5	7.1	12.0
MS	43.8	29.3	26.0	14.0	8.6	6.9	11.5
MT	7.1	8.1	8.7	11.5	28.4	35.3	20.0
NC	13.1	12.8	17.7	19.4	16.9	16.0	9.4
ND	2.4	1.2	0.0	6.1	7.7	8.6	6.3
NE	13.3	17.5	19.5	24.9	22.8	24.9	28.4
NH	11.6	4.8	6.8	10.5	10.5	5.3	1.2
NJ	10.6	13.3	11.2	11.9	9.1	8.9	7.1
NM	6.2	8.8	11.7	13.8	13.2	14.3	17.1
NV	6.5	2.3	11.4	9.8	4.3	8.5	4.2
NY	17.0	15.0	12.4	10.8	14.6	18.4	15.4
OH	17.2	21.5	16.6	17.2	16.6	21.0	18.0
OK	34.0	38.5	45.1	34.5	39.1	45.6	30.1
OR	7.8	18.5	12.0	6.7	9.7	3.0	2.2
PA	3.9	7.2	6.8	5.5	7.0	9.6	9.0
RI	19.5	22.9	19.4	17.9	22.6	16.1	10.6
SC	15.3	19.6	31.0	19.4	35.2	40.1	32.0
SD	30.2	25.7	11.1	31.0	19.6	34.6	29.2
TN	20.2	24.2	18.3	13.1	9.4	7.6	6.3
TX	26.2	31.9	23.5	30.7	33.7	29.7	21.3
UT	17.9	18.0	26.8	25.9	18.5	24.4	16.7
VA	1.6	6.3	6.3	2.7	6.0	7.1	10.4
VT	2.5	5.4	4.9	26.3	19.4	15.0	28.9
WA	33.5	27.5	29.9	20.8	23.5	28.3	28.2
WI	9.9	8.5	5.8	10.3	11.3	9.6	8.2
WV	7.0	1.6	3.8	5.9	5.0	2.8	5.0
WY	11.8	2.9	22.9	13.9	30.6	62.9	13.2
<b>US</b>	<b>16.9</b>	<b>18.0</b>	<b>17.1</b>	<b>18.3</b>	<b>21.8</b>	<b>23.5</b>	<b>19.5</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 2001, 12.6 percent of facilities were given deficiencies for this violation compared with 12.3 percent of facilities in 2007 (See Table 41).

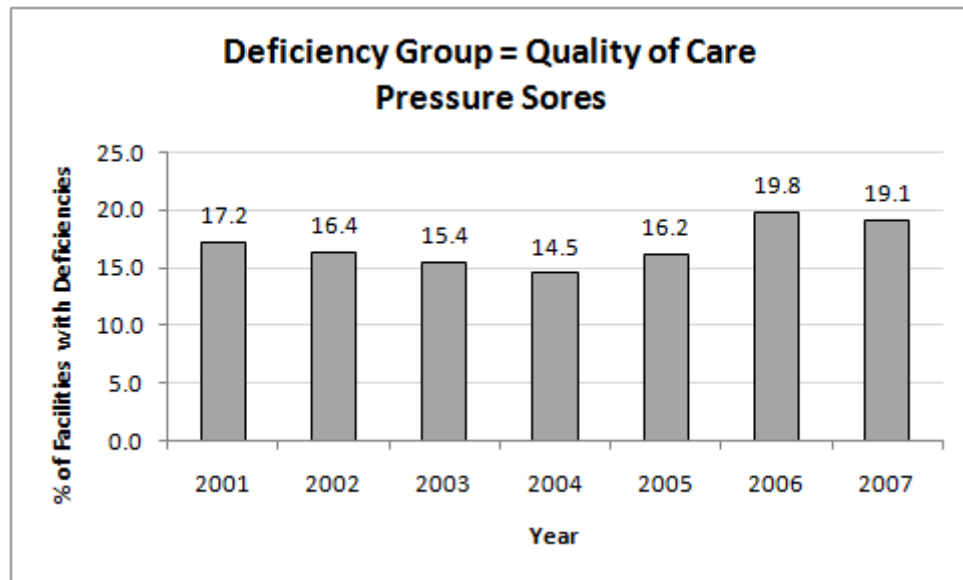


**TABLE 41**  
**DEFICIENCY GROUP=QUALITY OF CARE**  
**ACTIVITIES OF DAILY LIVING SERVICES (F312)**

<b>Percent of Facilities with Deficiencies</b>							
<b>State</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
AK	0.0	0.0	0.0	0.0	6.7	23.1	6.7
AL	33.8	35.8	26.4	29.7	20.2	16.0	13.7
AR	7.8	13.0	15.8	21.3	48.9	63.6	60.3
AZ	3.1	6.1	10.7	6.1	8.0	9.8	3.2
CA	17.3	12.3	9.5	9.3	8.2	9.6	10.9
CO	19.0	14.1	14.6	21.4	20.7	23.8	30.0
CT	20.9	13.8	17.6	19.0	19.4	14.3	16.7
DC	5.6	5.0	0.0	5.0	5.0	0.0	11.1
DE	5.3	6.1	0.0	10.3	4.9	14.3	23.0
FL	10.0	7.0	6.4	3.9	7.0	8.2	9.6
GA	14.9	24.8	18.4	14.7	10.4	8.8	6.9
HI	5.7	12.9	3.1	11.4	0.0	2.2	4.9
IA	20.0	15.8	19.6	22.6	20.5	23.2	17.2
ID	19.2	25.4	16.0	14.7	16.9	23.0	14.6
IL	15.7	12.8	10.9	13.3	13.0	9.4	10.8
IN	12.7	9.2	6.6	8.0	8.1	11.3	12.5
KS	22.8	27.2	27.8	30.1	30.4	36.0	31.4
KY	10.7	4.2	6.4	7.4	4.4	5.8	6.9
LA	3.4	6.7	4.1	9.2	11.4	8.0	9.2
MA	6.5	5.4	3.0	3.4	1.6	2.7	2.8
MD	2.0	2.6	1.8	1.4	1.8	1.8	2.3
ME	3.6	1.8	4.7	1.8	0.9	1.8	1.9
MI	17.7	16.3	11.5	16.0	12.5	13.4	11.2
MN	10.5	12.2	23.6	20.2	25.8	27.0	29.9
MO	23.7	21.9	22.7	25.3	31.2	34.8	36.5
MS	5.9	1.0	1.2	0.6	4.0	4.0	2.0
MT	16.5	12.2	17.4	16.1	11.4	3.5	4.7
NC	19.1	17.1	18.7	14.1	15.6	17.9	17.9
ND	17.6	13.6	8.5	7.3	12.8	7.4	8.8
NE	20.7	17.0	19.1	16.0	9.3	10.0	12.0
NH	1.4	1.6	0.0	1.3	3.9	2.6	0.0
NJ	3.6	2.4	2.1	4.1	3.5	3.1	2.5
NM	0.0	2.9	2.6	12.3	5.9	11.4	7.1
NV	10.9	9.1	13.6	7.3	4.3	2.1	2.1
NY	14.4	12.1	7.8	6.0	6.9	5.9	6.7
OH	9.4	9.9	9.0	7.5	7.5	6.4	8.4
OK	24.5	23.4	18.4	20.6	17.4	23.2	19.0
OR	10.9	9.6	7.5	0.7	8.9	6.8	3.7
PA	4.0	3.6	2.7	3.9	3.8	3.8	2.5
RI	0.0	3.6	5.6	5.1	4.8	4.6	1.2
SC	1.3	12.3	20.8	15.5	8.0	9.0	3.6
SD	6.6	5.0	6.5	3.0	0.0	0.9	1.9
TN	6.6	6.4	10.1	16.1	15.9	10.4	7.0
TX	12.3	12.9	10.1	9.1	11.9	12.1	10.9
UT	4.8	4.5	8.5	18.5	2.5	3.3	6.0
VA	7.6	9.6	8.6	9.7	11.7	12.3	11.6
VT	10.0	8.1	14.6	15.8	27.8	12.5	32.1
WA	16.7	18.3	15.4	9.2	9.9	11.8	14.3
WI	4.6	7.5	8.6	5.7	7.9	8.6	6.7
WV	15.8	10.6	10.8	8.5	6.7	5.5	5.8
WY	17.6	42.9	31.4	19.4	36.1	48.6	42.1
<b>US</b>	<b>12.6</b>	<b>12.0</b>	<b>11.2</b>	<b>11.4</b>	<b>11.8</b>	<b>12.8</b>	<b>12.3</b>

## Pressure Sores (F314)

Facilities must ensure that residents without pressure sores do not develop them if it is avoidable. In 2001, 17.2 percent of facilities received deficiencies for failing to meet this standard (See Table 42). Although violations for pressure sores have fluctuated since 2001, the percent of facilities cited for this violation was 19.1 in 2007.

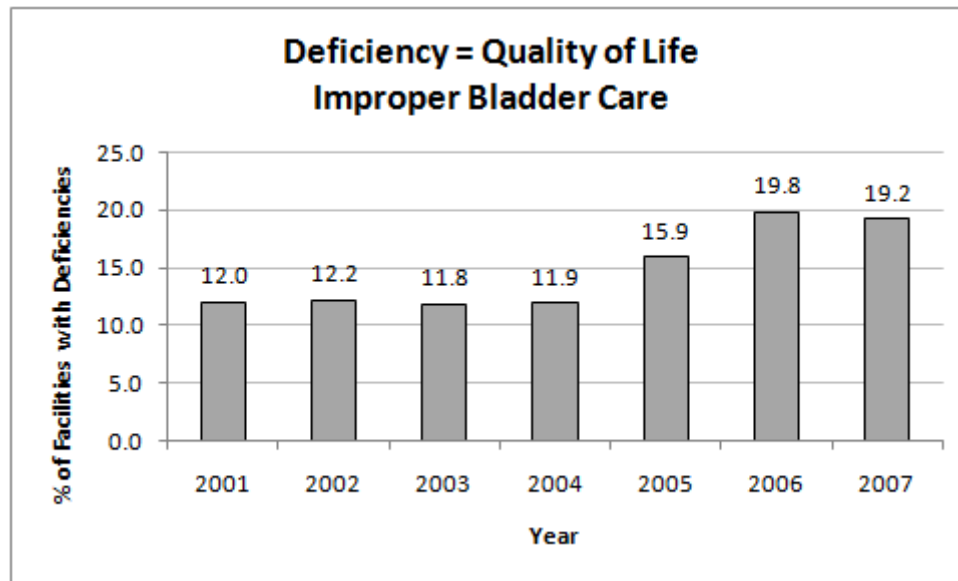


**TABLE 42**  
**DEFICIENCY GROUP=QUALITY OF CARE**  
**PRESSURE SORES (F314)**

<b>Percent of Facilities with Deficiencies</b>							
<b>State</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
AK	0.0	0.0	0.0	8.3	0.0	0.0	6.7
AL	12.3	13.8	11.1	15.3	12.9	17.2	16.8
AR	21.1	12.6	13.6	18.7	23.8	32.2	49.4
AZ	10.8	5.3	7.1	11.3	14.9	13.6	16.1
CA	23.2	19.9	18.7	18.6	16.2	19.2	20.1
CO	24.1	30.0	25.7	22.8	19.7	23.8	22.5
CT	31.1	31.4	34.8	33.6	36.6	38.4	34.8
DC	38.9	5.0	11.8	5.0	40.0	30.0	33.3
DE	26.3	6.1	10.8	28.2	24.4	40.5	36.4
FL	9.5	7.1	6.1	5.5	7.5	10.1	10.4
GA	11.8	22.0	19.2	18.3	23.1	19.9	18.2
HI	14.3	35.5	28.1	14.3	12.8	6.5	9.8
IA	7.0	8.4	6.8	9.4	8.0	10.6	17.7
ID	9.6	26.8	20.0	29.4	39.4	41.9	30.0
IL	23.6	17.5	19.7	18.3	19.2	20.9	23.1
IN	13.5	12.3	12.2	14.8	15.8	23.3	27.1
KS	24.4	23.3	21.3	25.3	44.1	45.0	40.8
KY	19.9	16.1	14.3	6.7	5.1	7.6	12.2
LA	18.3	13.4	10.3	12.2	17.6	13.9	17.4
MA	13.5	12.6	11.7	7.6	9.3	10.2	9.1
MD	11.9	11.8	10.5	11.7	15.4	8.9	10.2
ME	5.4	5.3	5.7	4.6	41.5	31.8	17.6
MI	25.0	24.6	25.4	21.0	20.4	22.9	20.2
MN	8.6	10.6	13.5	17.0	37.4	74.9	67.2
MO	15.4	20.0	16.8	16.7	24.2	25.7	27.1
MS	14.6	10.5	5.3	1.7	2.0	5.0	6.0
MT	22.4	12.2	14.1	8.0	3.4	5.9	14.1
NC	13.6	12.0	12.6	9.7	6.5	8.3	7.5
ND	12.9	17.3	12.2	4.9	20.5	19.8	8.8
NE	15.4	13.5	12.6	10.3	13.0	17.2	21.2
NH	11.6	14.5	8.1	13.2	19.7	13.2	7.4
NJ	21.5	19.5	19.6	11.0	16.4	16.3	15.8
NM	9.2	11.8	9.1	13.8	14.7	10.0	15.7
NV	13.0	11.4	20.5	29.3	13.0	21.3	12.5
NY	28.7	26.7	20.3	16.8	17.2	20.4	18.8
OH	19.8	22.4	16.2	13.9	16.0	19.5	21.5
OK	19.8	15.9	13.1	12.2	9.9	15.0	13.0
OR	27.1	23.0	21.8	16.4	14.5	18.0	12.7
PA	14.3	13.8	14.9	15.3	12.7	14.1	8.6
RI	10.3	18.1	19.4	19.2	9.5	11.5	7.1
SC	17.3	16.6	21.4	22.6	18.5	22.8	22.5
SD	12.3	5.0	15.7	11.0	4.7	10.3	4.7
TN	13.6	15.3	14.1	20.4	13.6	10.8	8.6
TX	14.0	12.1	11.6	9.0	12.2	16.1	11.7
UT	9.5	13.5	6.1	3.7	1.2	2.2	3.6
VA	11.2	11.7	13.4	13.1	18.1	19.4	21.3
VT	10.0	10.8	29.3	34.2	13.9	22.5	18.4
WA	25.9	27.5	26.1	23.3	18.5	20.7	23.5
WI	10.4	10.6	13.6	9.8	10.3	12.3	19.3
WV	14.9	8.1	6.9	6.8	1.7	8.3	7.4
WY	32.4	28.6	25.7	13.9	13.9	28.6	15.8
<b>US</b>	<b>17.2</b>	<b>16.4</b>	<b>15.4</b>	<b>14.5</b>	<b>16.2</b>	<b>19.8</b>	<b>19.1</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 2001, 12.0 percent of facilities received deficiencies for this standard compared with 19.2 percent in 2007 (See Table 43).

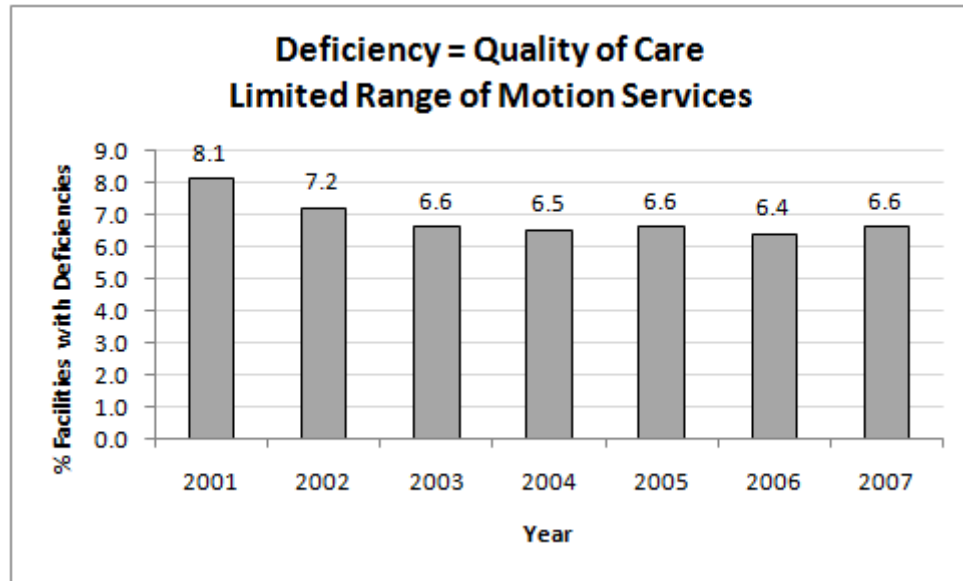


**TABLE 43**  
**DEFICIENCY GROUP=QUALITY OF CARE**  
**Urinary/Incontinence Care (F315)**

Percent of Facilities with Deficiencies							
<b>State</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
AK	0.0	0.0	0.0	0.0	0.0	7.7	6.7
AL	22.1	24.8	15.7	23.8	17.8	20.1	17.4
AR	4.3	6.3	13.6	10.2	34.9	35.6	33.3
AZ	20.8	9.2	17.0	4.3	14.9	20.5	29.8
CA	17.8	18.9	23.3	27.4	23.5	26.2	25.0
CO	8.8	4.2	7.3	7.3	14.3	26.2	31.6
CT	18.4	14.2	21.6	25.1	20.3	19.8	19.3
DC	0.0	0.0	0.0	10.0	5.0	10.0	11.1
DE	13.2	0.0	0.0	25.6	26.8	42.9	25.0
FL	10.4	9.3	12.8	10.0	16.3	18.8	25.4
GA	15.5	16.4	19.8	22.0	26.0	32.8	35.3
HI	5.7	38.7	18.8	22.9	20.5	32.6	31.7
IA	11.1	9.5	10.5	12.4	10.6	8.3	10.7
ID	11.0	23.9	14.7	26.5	33.8	31.1	35.7
IL	20.3	17.1	19.0	20.1	14.4	15.4	20.7
IN	9.0	9.0	10.0	16.0	17.9	21.1	27.5
KS	35.6	29.4	29.8	50.1	53.9	60.5	42.9
KY	15.1	10.0	20.0	22.1	9.5	15.1	12.5
LA	7.8	14.7	8.6	13.2	10.3	7.3	11.3
MA	11.0	13.7	10.3	12.1	10.0	11.1	10.3
MD	6.5	6.1	5.5	9.4	10.1	11.6	21.3
ME	1.8	5.3	10.4	4.6	24.5	43.6	35.2
MI	9.0	13.4	12.9	11.7	12.0	9.5	12.6
MN	16.4	20.1	32.9	53.1	43.0	78.9	62.2
MO	7.9	12.8	13.0	19.8	17.3	23.7	23.3
MS	16.2	14.7	8.9	7.3	3.5	5.9	8.5
MT	3.5	5.4	3.3	2.3	10.2	7.1	10.6
NC	13.3	11.2	17.9	15.6	8.9	10.5	12.3
ND	12.9	7.4	12.2	11.0	16.7	18.5	3.8
NE	11.2	8.0	8.4	15.0	9.3	21.7	21.6
NH	14.5	6.5	6.8	15.8	6.6	10.5	0.0
NJ	5.8	6.8	7.3	11.6	9.7	11.1	7.3
NM	12.3	13.2	2.6	10.8	17.6	24.3	18.6
NV	30.4	50.0	63.6	61.0	17.4	21.3	25.0
NY	3.2	4.5	3.4	5.2	2.5	7.5	6.6
OH	11.8	14.7	11.4	12.8	10.1	10.5	13.7
OK	15.6	15.9	20.9	35.5	22.9	26.9	19.9
OR	14.0	7.4	5.3	4.5	8.9	15.0	14.9
PA	9.9	7.3	9.5	15.6	11.3	11.8	10.4
RI	0.0	1.2	8.3	1.3	3.6	3.4	0.0
SC	19.3	17.8	31.5	36.1	23.5	22.8	24.3
SD	7.5	5.9	4.6	5.0	1.9	3.7	1.9
TN	10.0	19.4	36.9	28.6	27.6	22.8	23.5
TX	7.5	7.1	7.1	6.4	7.5	9.4	10.2
UT	2.4	1.1	1.2	1.2	0.0	0.0	3.6
VA	2.8	1.7	4.1	8.9	8.9	11.2	10.1
VT	5.0	0.0	0.0	10.5	19.4	22.5	7.9
WA	18.3	15.8	15.8	27.1	19.8	23.6	26.1
WI	5.3	6.2	13.6	22.9	19.8	25.1	23.5
WV	9.6	8.9	11.5	6.8	17.5	11.0	14.0
WY	29.4	25.7	22.9	19.4	27.8	37.1	34.2
<b>US</b>	<b>12.0</b>	<b>12.2</b>	<b>11.8</b>	<b>11.9</b>	<b>15.9</b>	<b>19.8</b>	<b>19.2</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 2001, 8.1 percent of facilities received deficiencies for violating this requirement. The percent of facilities with deficiencies decreased to 6.6 percent in 2007 (See Table 44).

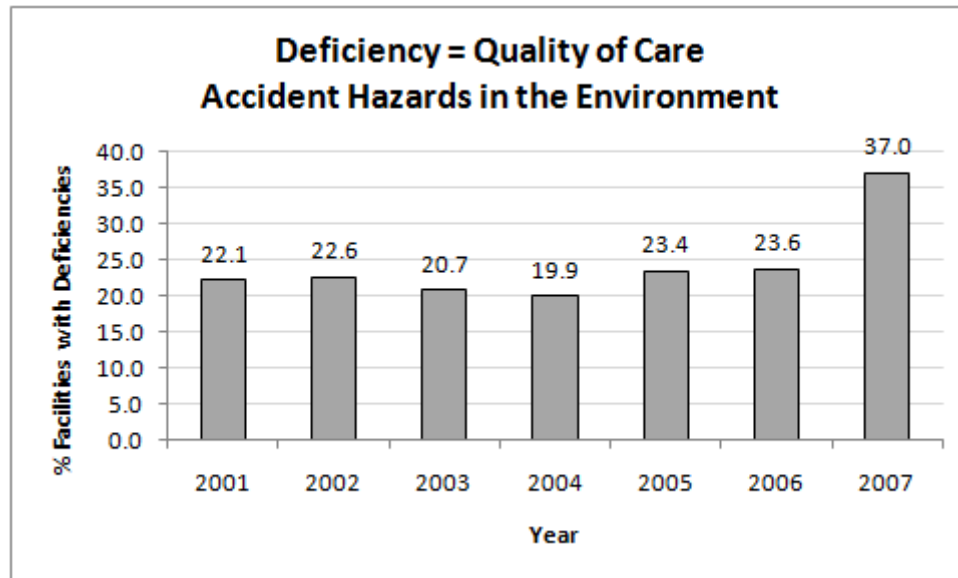


**TABLE 44**  
**DEFICIENCY GROUP=QUALITY OF CARE**  
**LIMITED RANGE OF MOTION SERVICES (F318)**

<b>Percent of Facilities with Deficiencies</b>							
<b>State</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
AK	0.0	0.0	0.0	0.0	0.0	7.7	0.0
AL	5.1	8.7	1.9	5.0	1.8	4.7	3.1
AR	9.9	9.6	12.3	12.8	14.0	14.8	21.1
AZ	5.4	3.1	7.1	2.6	6.9	5.3	1.6
CA	12.9	9.0	8.8	8.1	7.6	8.9	8.5
CO	13.0	7.5	18.0	11.2	9.4	9.4	5.3
CT	8.2	6.7	7.5	10.0	5.3	4.2	8.2
DC	16.7	10.0	11.8	15.0	35.0	20.0	10.6
DE	5.3	0.0	0.0	5.1	4.9	11.9	6.8
FL	4.8	4.5	4.4	4.2	3.2	3.1	3.8
GA	5.0	13.6	9.0	6.7	8.3	8.5	6.1
HI	2.9	3.2	3.1	8.6	5.1	6.5	2.4
IA	6.1	6.1	5.1	7.1	7.6	7.1	9.1
ID	9.6	9.9	4.0	11.8	15.5	12.2	17.1
IL	9.8	7.5	6.0	7.5	6.0	4.8	5.3
IN	7.5	6.3	3.4	4.7	3.8	4.0	3.8
KS	15.0	12.8	17.5	24.0	21.2	23.9	19.6
KY	9.6	3.8	2.9	2.5	3.4	1.4	5.2
LA	6.5	6.7	4.1	4.3	2.6	2.9	5.3
MA	2.7	4.3	4.1	3.0	2.3	2.0	4.2
MD	2.5	3.1	5.0	3.8	7.0	6.2	7.4
ME	0.0	0.9	0.9	0.9	0.9	2.7	2.8
MI	12.0	13.2	10.6	6.9	7.1	7.5	11.2
MN	8.9	9.0	19.6	18.3	15.7	17.1	18.3
MO	5.9	8.1	6.3	7.6	8.6	6.9	9.2
MS	13.5	6.8	0.6	2.8	2.0	3.0	1.0
MT	12.9	2.7	0.0	1.1	1.1	1.2	2.4
NC	14.1	10.1	6.6	6.2	6.7	6.2	8.5
ND	2.4	2.5	1.2	7.3	1.3	2.5	1.3
NE	2.7	3.5	3.3	4.2	7.0	8.1	13.0
NH	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NJ	5.5	3.8	4.5	5.8	4.7	4.0	2.5
NM	4.6	1.5	1.3	3.1	1.5	1.4	2.9
NV	4.3	4.5	2.3	7.3	6.5	6.4	4.2
NY	9.6	8.4	9.3	5.5	6.8	4.7	4.2
OH	7.5	8.8	6.6	5.6	5.0	4.6	6.1
OK	22.6	10.4	12.5	10.5	7.8	8.0	6.6
OR	11.6	5.2	7.5	6.0	8.1	6.0	1.5
PA	6.3	5.9	4.3	4.1	4.0	5.5	4.8
RI	4.6	14.5	8.3	9.0	6.0	14.9	4.7
SC	4.0	12.3	11.9	7.1	8.0	4.8	5.9
SD	4.7	3.0	2.8	4.0	2.8	3.7	1.9
TN	4.5	4.8	4.6	6.7	3.2	2.8	2.9
TX	5.3	6.8	3.1	2.7	3.1	5.3	3.7
UT	4.8	2.2	1.2	0.0	0.0	0.0	2.4
VA	8.0	7.5	8.9	4.2	4.4	5.6	5.6
VT	0.0	0.0	0.0	2.6	0.0	2.5	2.6
WA	14.3	5.4	4.1	2.5	7.4	10.5	11.8
WI	5.1	4.9	3.9	5.4	4.7	4.3	4.4
WV	13.2	1.6	5.4	6.8	4.2	2.8	2.5
WY	14.7	5.7	8.6	11.1	19.4	25.7	13.2
<b>US</b>	<b>8.1</b>	<b>7.2</b>	<b>6.6</b>	<b>6.5</b>	<b>6.6</b>	<b>6.4</b>	<b>6.6</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 2001, 22.1 percent of facilities received deficiencies for failing to meet this standard (See Table 45). In 2007, 37.0 percent of facilities received deficiencies for this requirement.

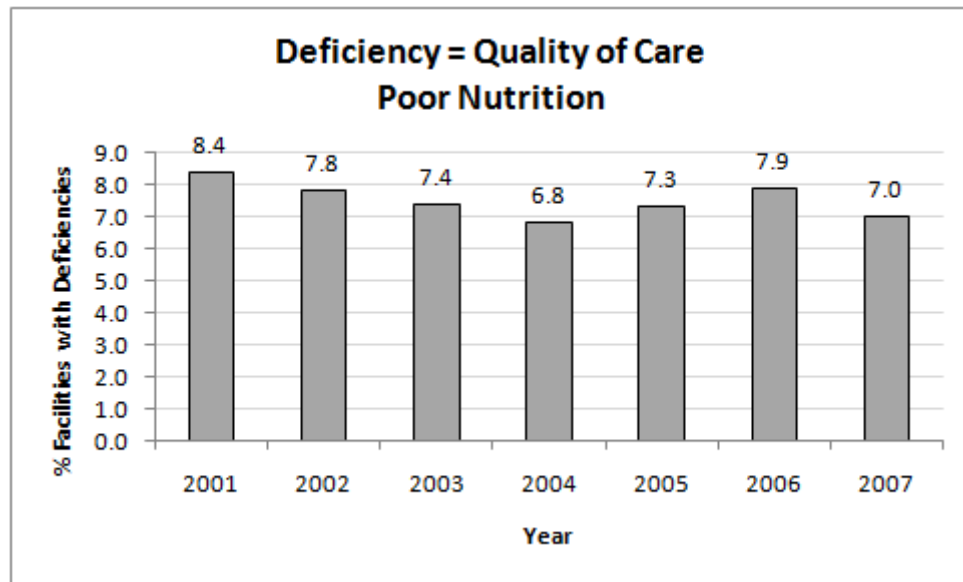


**TABLE 45**  
**DEFICIENCY GROUP=QUALITY OF CARE**  
**ACCIDENT ENVIRONMENT (F323)**

Percent of Facilities with Deficiencies							
State	2001	2002	2003	2004	2005	2006	2007
AK	0.0	8.3	0.0	25.0	13.3	23.1	6.7
AL	18.5	18.8	15.7	12.9	12.3	7.7	26.7
AR	42.7	33.5	42.1	36.6	44.7	64.4	77.2
AZ	46.2	54.2	39.3	42.6	40.2	48.5	56.5
CA	32.4	30.5	24.5	26.4	28.0	29.1	40.2
CO	33.3	28.6	30.6	36.9	35.5	38.6	59.3
CT	12.7	15.9	17.6	28.9	45.4	38.0	56.7
DC	33.3	50.0	70.6	75.0	65.0	65.0	83.3
DE	21.1	18.2	32.4	69.2	63.4	71.4	81.8
FL	19.2	17.5	15.3	13.3	16.8	18.3	21.8
GA	33.9	36.5	32.1	28.4	26.9	25.9	27.7
HI	20.0	3.2	15.6	28.6	12.8	10.9	22.0
IA	30.9	30.8	21.5	24.9	24.6	21.8	39.8
ID	19.2	46.5	24.0	29.4	43.7	48.6	72.9
IL	31.5	25.3	28.2	26.3	28.0	31.3	47.3
IN	27.7	21.9	17.3	12.3	21.2	20.7	44.2
KS	23.3	25.0	31.6	30.1	28.7	30.5	52.9
KY	23.9	24.1	26.1	21.4	17.3	22.0	22.6
LA	16.5	37.4	23.3	31.9	37.9	38.3	43.3
MA	5.2	4.6	3.7	5.3	10.4	10.4	26.2
MD	11.4	22.3	20.0	15.0	19.7	22.7	47.7
ME	35.7	34.5	39.6	31.2	40.6	32.7	35.2
MI	39.6	44.1	32.2	31.7	26.5	30.2	58.4
MN	11.9	18.2	30.8	20.2	25.8	23.3	52.6
MO	7.7	9.9	7.1	7.3	9.2	9.7	36.3
MS	29.2	16.8	10.1	10.1	20.7	21.8	22.5
MT	12.9	20.3	14.1	34.5	34.1	35.3	23.5
NC	17.1	13.1	18.2	17.6	15.1	15.5	26.3
ND	10.6	16.0	20.7	29.3	34.6	38.3	50.0
NE	16.0	28.0	26.0	33.8	21.4	25.8	37.5
NH	13.0	11.3	5.4	9.2	10.5	5.3	12.3
NJ	20.0	24.6	19.0	18.8	17.3	17.1	28.2
NM	15.4	14.7	27.3	26.2	32.4	8.6	24.3
NV	17.4	9.1	4.5	7.3	8.7	10.6	20.8
NY	14.1	18.0	16.8	12.3	15.9	19.7	33.1
OH	25.4	23.5	20.6	16.2	19.8	21.9	45.8
OK	12.7	19.0	25.6	23.6	24.1	22.6	29.1
OR	14.7	21.5	17.3	6.7	5.6	6.8	23.9
PA	9.6	12.2	18.2	16.1	17.8	22.4	32.9
RI	6.9	13.3	5.6	11.5	6.0	11.5	10.6
SC	23.3	20.9	18.5	23.9	27.2	17.4	29.6
SD	29.2	19.8	4.6	6.0	15.0	17.8	29.2
TN	27.2	30.3	17.3	20.7	19.8	16.1	34.6
TX	23.0	23.3	17.2	16.3	19.4	18.5	24.8
UT	10.7	11.2	14.6	12.3	16.0	12.2	11.9
VA	2.0	4.6	3.3	4.6	7.3	9.3	37.3
VT	5.0	2.7	17.1	2.6	8.3	17.5	21.1
WA	34.3	36.3	35.7	23.8	19.8	15.6	28.2
WI	13.4	10.9	11.8	9.5	12.7	11.2	32.5
WV	22.8	17.9	17.7	11.0	12.5	13.8	28.9
WY	32.4	2.9	22.9	8.3	30.6	65.7	57.9
<b>US</b>	<b>22.1</b>	<b>22.6</b>	<b>20.7</b>	<b>19.9</b>	<b>23.4</b>	<b>23.6</b>	<b>37.0</b>

## Nutrition (F325)

Facilities must ensure that residents receive acceptable nutrition to maintain body weight unless a resident's condition makes this impossible. In 2001, 8.4 percent of facilities failed to meet this standard compared with 7.0 percent in 2007 (See Table 46).

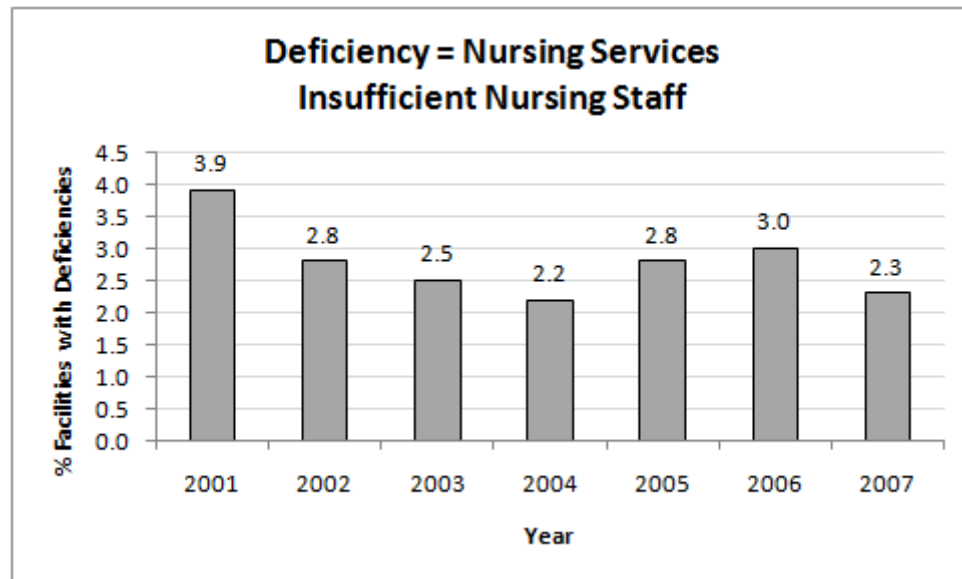


**TABLE 46**  
**DEFICIENCY GROUP=QUALITY OF CARE**  
**NUTRITION (F325)**

<b>Percent of Facilities with Deficiencies</b>							
<b>State</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
AK	14.3	8.3	7.1	0.0	13.3	7.7	6.7
AL	5.1	4.6	5.1	2.5	3.7	1.8	3.1
AR	9.5	7.9	8.8	9.4	5.1	7.2	8.4
AZ	0.8	1.5	4.5	1.7	2.3	5.3	5.6
CA	17.5	11.9	11.7	14.0	9.6	11.7	9.7
CO	10.2	8.5	16.5	18.0	11.8	17.3	15.8
CT	3.7	4.2	5.7	8.1	8.8	10.1	10.3
DC	0.0	0.0	5.9	15.0	0.0	20.0	22.2
DE	5.3	0.0	5.4	7.7	7.3	9.5	15.9
FL	8.9	6.8	4.7	4.8	4.5	6.1	4.9
GA	6.5	8.4	5.2	5.8	12.1	12.8	9.0
HI	5.7	9.7	12.5	17.1	15.4	8.7	4.9
IA	1.8	5.4	4.6	3.7	3.0	3.9	3.0
ID	4.1	7.0	5.3	4.4	5.6	13.5	7.1
IL	7.1	6.4	7.6	7.6	7.1	10.3	5.7
IN	6.0	7.6	8.2	6.1	5.1	9.5	7.0
KS	11.1	13.1	11.7	11.7	17.8	15.3	13.0
KY	15.1	7.7	6.8	4.9	3.7	3.4	5.2
LA	6.2	9.6	6.2	5.3	9.9	6.2	6.7
MA	5.8	5.0	4.1	4.6	5.1	4.4	4.7
MD	8.5	6.6	10.5	9.4	10.1	8.4	14.8
ME	0.0	0.0	2.8	1.8	0.0	1.8	4.6
MI	14.4	16.3	13.4	7.1	12.3	13.9	13.1
MN	2.7	2.4	4.2	3.1	2.2	4.3	5.0
MO	7.3	8.7	8.3	7.1	9.4	11.1	12.4
MS	12.4	7.9	4.1	2.8	4.5	5.0	1.5
MT	9.4	1.4	6.5	2.3	3.4	2.4	3.5
NC	7.3	4.8	7.6	5.2	5.0	4.3	3.9
ND	3.5	3.7	2.4	3.7	9.0	7.4	0.0
NE	5.9	3.5	4.2	7.5	6.5	10.0	10.1
NH	2.9	1.6	1.4	0.0	0.0	1.3	3.7
NJ	7.6	9.2	10.6	7.8	6.7	4.9	5.9
NM	6.2	1.5	3.9	1.5	7.4	1.4	1.4
NV	13.0	25.0	18.2	22.0	13.0	17.0	16.7
NY	9.9	8.4	11.2	12.5	9.8	11.9	11.6
OH	4.1	4.4	4.1	2.1	4.1	5.8	6.6
OK	9.0	5.5	9.7	4.4	6.7	4.9	3.8
OR	18.6	12.6	9.0	6.7	8.1	5.3	15.7
PA	8.7	5.5	6.3	7.6	7.5	8.3	7.5
RI	3.4	2.4	5.6	0.0	6.0	4.6	0.0
SC	4.7	11.7	8.9	7.1	3.7	5.4	1.8
SD	16.0	14.9	13.0	11.0	7.5	7.5	6.6
TN	4.8	10.2	4.6	7.3	6.2	4.7	3.5
TX	9.8	6.8	5.2	4.8	4.7	5.7	3.0
UT	2.4	14.6	12.2	3.7	4.9	6.7	1.2
VA	8.8	5.4	6.7	4.6	4.0	3.7	5.6
VT	2.5	0.0	2.4	5.3	0.0	5.0	7.9
WA	15.5	15.8	13.3	11.3	15.6	14.8	10.1
WI	7.6	4.1	3.4	1.8	3.7	3.7	4.9
WV	3.5	4.9	0.8	2.5	2.5	1.8	7.4
WY	5.9	5.7	5.7	8.3	2.8	5.7	0.0
<b>US</b>	<b>8.4</b>	<b>7.8</b>	<b>7.4</b>	<b>6.8</b>	<b>7.3</b>	<b>7.9</b>	<b>7.0</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 2001, 3.9 percent of facilities were given deficiencies for failing to meet this requirement compared with only 2.3 percent in 2007 (See Table 47). These low deficiency rates are a concern considering that the CMS (2002) report found that 9 out of 10 facilities have inadequate staffing.

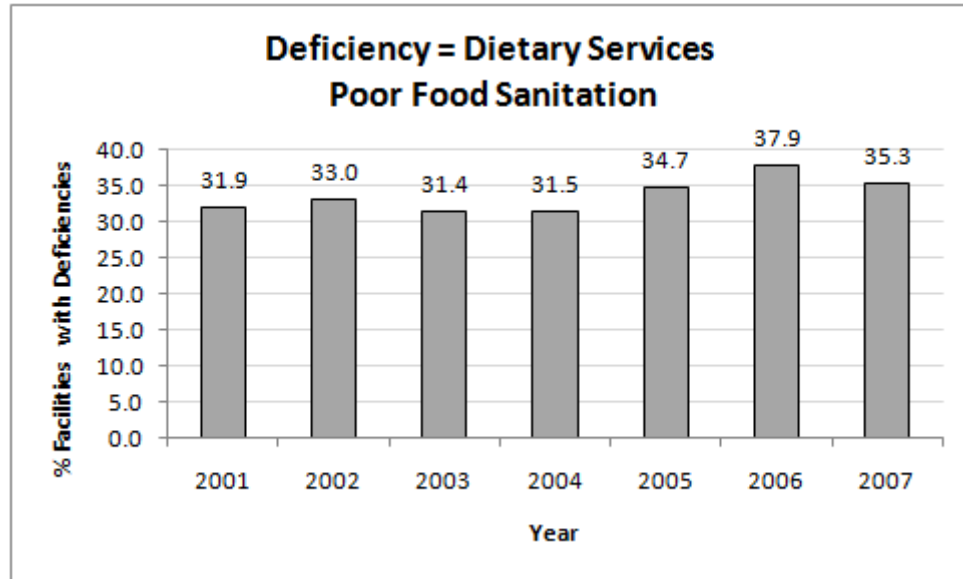


**TABLE 47**  
**DEFICIENCY GROUP=NURSING SERVICES**  
**SUFFICIENT NURSING STAFF (F353)**

Percent of Facilities with Deficiencies							
State	2001	2002	2003	2004	2005	2006	2007
AK	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AL	9.2	1.8	3.2	4.0	4.3	3.6	0.0
AR	0.4	0.8	0.9	1.3	2.1	0.8	0.8
AZ	2.3	2.3	0.9	0.0	2.3	3.8	1.6
CA	6.6	3.9	4.3	3.3	4.4	5.0	2.9
CO	2.3	0.5	1.0	1.0	3.0	3.0	5.7
CT	4.1	2.9	1.3	2.8	0.0	2.1	3.4
DC	16.7	5.0	5.9	0.0	5.0	10.0	0.0
DE	2.6	0.0	2.7	0.0	0.0	2.4	0.0
FL	11.5	7.4	7.6	4.9	6.7	6.0	3.3
GA	5.3	5.0	2.6	1.8	2.4	1.4	1.2
HI	11.4	12.9	6.3	5.7	2.6	0.0	2.4
IA	4.1	1.6	2.4	3.2	2.8	2.5	2.6
ID	4.1	7.0	6.7	2.9	4.2	4.1	0.0
IL	2.7	2.4	2.0	1.7	1.7	1.8	2.7
IN	2.8	2.0	2.2	1.8	2.1	2.4	1.8
KS	5.8	4.4	5.0	7.8	9.5	13.3	11.5
KY	8.8	4.2	3.6	2.1	1.7	3.8	1.0
LA	4.0	8.0	4.5	4.6	8.5	5.8	4.6
MA	2.0	2.2	1.8	0.5	1.4	2.0	1.4
MD	1.5	0.9	0.5	0.0	1.3	0.9	0.9
ME	2.7	0.9	1.9	0.9	0.0	1.8	2.8
MI	6.8	6.1	5.4	4.5	6.4	5.8	3.3
MN	3.5	3.8	4.2	4.5	3.1	3.2	2.1
MO	6.7	5.7	4.9	2.0	4.3	3.8	4.8
MS	4.3	4.7	3.0	1.7	0.5	0.0	0.5
MT	1.2	0.0	0.0	0.0	0.0	1.2	1.2
NC	2.5	1.3	2.0	1.0	1.7	1.2	1.0
ND	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	1.1	0.5	0.0	0.0	0.0	1.4	2.9
NH	2.9	3.2	0.0	2.6	1.3	0.0	0.0
NJ	0.6	0.3	0.6	0.3	0.3	0.6	0.6
NM	4.6	2.9	6.5	7.7	7.4	1.4	4.3
NV	4.3	6.8	11.4	7.3	6.5	12.8	2.1
NY	1.6	1.1	0.2	0.6	0.2	0.3	0.8
OH	2.3	1.0	0.9	0.8	1.6	2.0	1.9
OK	3.3	2.5	1.4	1.4	2.3	3.7	1.6
OR	8.5	3.0	3.0	4.5	4.8	5.3	1.5
PA	1.1	0.9	0.7	0.6	0.6	0.4	0.4
RI	0.0	0.0	0.0	0.0	1.2	1.1	0.0
SC	2.0	0.6	0.0	2.6	4.3	6.0	0.0
SD	1.9	2.0	1.9	5.0	2.8	5.6	0.9
TN	3.3	2.5	4.2	5.8	3.6	3.2	2.2
TX	3.1	2.7	1.1	1.3	2.6	2.0	1.8
UT	1.2	0.0	0.0	1.2	0.0	0.0	0.0
VA	1.6	0.8	0.7	0.4	0.8	2.6	2.6
VT	7.5	5.4	0.0	10.5	11.1	10.0	0.0
WA	5.2	4.6	4.1	2.5	2.9	2.5	5.0
WI	2.5	0.5	0.8	1.0	1.3	3.2	2.8
WV	3.5	0.8	3.1	2.5	1.7	1.8	5.0
WY	0.0	2.9	8.6	0.0	2.2	17.1	13.2
<b>US</b>	<b>3.9</b>	<b>2.8</b>	<b>2.5</b>	<b>2.2</b>	<b>2.8</b>	<b>3.0</b>	<b>2.3</b>

## Food Sanitation (F371)

Sanitary conditions must be ensured in storing, preparing, distributing, and serving food to prevent food borne illness. In 2001, 31.9 percent of facilities were given deficiencies for failure to meet this regulation compared to 35.3 percent in 2007 (See Table 48).



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

Percent of Facilities with Deficiencies							
State	2001	2002	2003	2004	2005	2006	2007
AK	50.0	33.3	21.4	33.3	46.7	61.5	83.3
AL	52.8	50.9	43.5	36.6	54.6	42.6	50.3
AR	61.6	51.0	55.7	52.8	45.1	56.8	44.7
AZ	53.1	57.3	50.0	36.5	34.5	43.2	28.2
CA	45.9	46.1	43.1	46.2	46.8	52.7	55.3
CO	17.1	21.6	24.8	43.7	33.5	40.1	47.4
CT	20.5	16.3	21.1	24.6	24.7	29.1	31.3
DC	72.2	85.0	76.5	75.0	90.0	85.0	100.0
DE	44.7	27.3	54.1	48.7	58.5	66.7	63.6
FL	44.5	43.5	44.5	45.6	56.5	53.4	46.9
GA	35.4	42.4	38.5	32.7	34.0	36.8	25.4
HI	42.9	41.9	31.3	17.1	33.3	37.0	26.8
IA	39.3	39.6	37.4	36.4	37.7	34.7	37.4
ID	30.1	50.7	36.0	38.2	62.0	60.8	35.7
IL	33.0	20.4	16.0	18.0	21.6	22.4	25.4
IN	26.8	21.1	17.7	19.7	26.1	29.2	27.7
KS	26.4	31.9	28.9	29.2	35.8	38.3	45.3
KY	41.9	33.0	32.5	33.0	35.6	39.9	34.0
LA	39.1	53.7	38.4	31.6	31.6	33.9	40.8
MA	11.7	15.4	14.0	12.8	14.6	12.6	8.4
MD	18.4	30.1	30.5	26.8	34.6	49.8	48.6
ME	50.9	55.8	50.9	34.9	38.7	33.6	38.9
MI	45.0	47.1	38.3	38.1	37.8	41.4	49.6
MN	18.6	24.7	36.6	33.2	38.8	38.8	40.2
MO	33.6	34.0	37.3	39.4	35.2	38.3	41.8
MS	41.1	35.6	35.5	33.1	33.3	38.1	28.5
MT	15.3	40.5	44.6	58.6	56.8	49.4	41.2
NC	31.2	28.0	36.4	36.5	44.2	49.5	47.8
ND	16.5	22.2	24.4	24.4	41.0	42.0	33.8
NE	22.9	37.5	27.9	37.6	48.8	41.6	42.3
NH	24.6	8.1	13.5	13.2	34.2	26.3	29.6
NJ	21.8	24.0	23.0	24.9	26.1	22.3	22.6
NM	18.5	19.1	24.7	12.3	33.8	25.7	18.6
NV	58.7	27.3	31.8	48.8	32.6	38.3	39.6
NY	19.1	20.0	19.9	14.6	17.6	23.1	24.3
OH	31.3	37.6	28.3	24.6	26.2	26.3	20.6
OK	30.7	43.1	43.2	47.6	61.4	67.3	64.6
OR	10.9	17.8	9.8	4.5	4.0	14.3	8.2
PA	11.6	18.9	18.6	22.2	26.6	31.9	29.3
RI	17.2	20.5	5.6	21.8	16.7	14.9	5.9
SC	37.3	25.8	43.5	37.4	42.6	37.7	40.8
SD	32.1	53.5	44.4	42.0	44.9	46.7	31.1
TN	42.3	39.2	36.9	41.0	36.7	27.8	19.4
TX	37.6	41.1	33.6	33.0	35.3	34.0	33.2
UT	36.9	36.0	45.1	38.3	48.1	46.7	54.8
VA	4.0	11.3	13.4	20.1	19.8	28.4	41.8
VT	20.0	2.7	14.6	15.8	33.3	27.5	39.5
WA	44.6	35.4	39.0	37.5	37.9	43.9	33.2
WI	13.2	6.5	9.2	8.8	11.6	13.6	10.6
WV	43.0	43.1	46.2	59.3	52.5	46.8	40.5
WY	29.4	42.9	54.3	55.6	55.6	74.3	63.2
<b>US</b>	<b>31.9</b>	<b>33.0</b>	<b>31.4</b>	<b>31.5</b>	<b>34.7</b>	<b>37.9</b>	<b>35.3</b>

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

### **Percent of Deficiencies**

This section presents a listing of 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 2001-2007 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 7 of the 26 items in this category were cited in 2 percent or more of the facilities in the U.S. in 2007.

**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>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
F151	Exercise of Rights	0.8	1.4	1.2	1.2	0.9	1.4	1.1
F152	Free of Reprisal	0.5	0.6	0.6	0.7	1.2	1.0	0.9
F153	Access to Records	0.1	0.1	0.2	0.2	0.1	0.2	0.1
F154	Informed of Condition	0.9	1.0	0.8	0.9	1.0	1.2	1.6
F155	Refuse Treatment	1.0	1.3	1.2	1.3	1.7	2.0	1.9
F156	Notice of Rights and Services	3.4	4.0	4.1	4.3	4.5	4.6	5.8
F157	Notice of Changes	8.4	8.2	7.9	8.2	10.2	10.9	10.9
F158	Resident Manage Financial Affairs	0.1	0.1	0.1	0.1	0.1	0.1	0.1
F159	Facility Manage Personal Funds	2.3	2.7	2.5	2.4	2.8	3.2	3.1
F160	Convey Funds	1.0	1.0	1.0	0.9	1.1	1.3	1.2
F161	Financial Security	1.0	1.3	0.9	1.1	1.4	1.6	1.5
F162	Limit on Charges to Funds	0.3	0.3	0.2	0.2	0.2	0.2	0.1
F163	Choice of Physician	0.2	0.1	0.1	0.1	0.1	0.1	0.1
F164	Privacy and Confidentiality	8.6	8.6	8.7	8.6	9.6	10.4	9.0
F165	Voice Grievances	0.2	0.2	0.1	0.2	0.2	0.2	0.2
F166	Resolve Grievances	3.1	2.6	2.8	2.8	3.2	3.1	2.8
F167	Survey Results	4.3	4.0	3.5	4.1	4.0	4.1	4.0
F168	Information	0.1	0.1	0.1	0.1	0.1	0.1	0.2
F169	Work	0.0	0.0	0.0	0.0	0.0	0.0	0.0
F170	Mail	1.1	1.4	1.4	1.3	1.7	1.8	1.4
F172	Visitors	0.1	0.2	0.1	0.1	0.1	0.1	0.2
F173	Ombudsman	0.0	0.0	0.0	0.0	0.0	0.0	0.0
F174	Telephone	1.4	1.3	1.3	1.4	1.5	1.6	1.5
F175	Married Couples	0.0	0.1	0.0	0.0	0.0	0.1	0.1
F176	Administer Own Drugs	3.2	3.6	3.7	3.7	4.5	4.6	4.1
F177	Refuse Transfers	0.1	0.1	0.1	0.0	0.0	0.0	0.0

## **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 2007, none of the 8 items in this category were 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 improper use of physical restraints (11.8 percent). The percent with deficiencies for each survey item were as follows: 11.2 percent for hiring unemployable individuals; 10.4 percent were cited for failure to follow policy and procedures for staff; and 1.8 were given citations for improper staff treatment of residents (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**

<b>FTAG</b>	<b>DESCRIPTION</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
F201	Transfer and Discharge	0.2	0.1	0.1	0.1	0.2	0.2	0.3
F202	Documentation	0.1	0.2	0.1	0.2	0.2	0.2	0.3
F203	Notice Before Transfer	0.6	0.5	0.5	0.5	0.5	0.6	0.8
F204	Orientation for Transfer or Discharge	0.2	0.2	0.1	0.1	0.2	0.2	0.3
F205	Notice of Policies	0.5	0.5	0.7	0.6	0.7	0.7	0.6
F206	Permitting Resident to Return to Facility	0.0	0.0	0.0	0.0	0.0	0.0	0.1
F207	Equal Access to Quality Care	0.1	0.0	0.0	0.0	0.0	0.0	0.0
F208	Admission Policy	0.1	0.1	0.1	0.1	0.1	0.1	0.1

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

<b>FTAG</b>	<b>DESCRIPTION</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
F221	Physical Restraints	11.0	9.9	9.2	9.2	10.3	10.3	11.8
F222	Chemical Restraints	0.4	0.4	0.3	0.3	0.5	0.5	0.5
F223	Abuse	1.5	1.4	1.1	1.0	1.1	0.0	1.2
F224	Staff Treatment of Residents	2.5	1.9	1.8	1.7	2.0	2.2	1.8
F225	Unemployable Individuals	10.8	11.9	11.0	11.1	12.1	12.1	11.2
F226	Policy and Procedures for Staff	10.3	10.0	8.9	8.5	10.0	10.6	10.4

## Quality of Life

Most deficiencies were issued to facilities for poor housekeeping (19.35 percent in 2007) and for failure to maintain the dignity of residents (16.6 percent in 2007). Failure to provide adequate social services, a quality environment and 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**

<b>FTAG</b>	<b>DESCRIPTION</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
F240	Quality of Life	0.3	0.3	0.3	0.3	0.4	0.5	0.5
F241	Dignity	17.3	16.2	14.8	15.0	15.8	18.0	16.6
F242	Self-Determination/Participation	2.0	1.9	2.1	2.0	2.5	2.6	2.4
F243	Resident and Family Groups	0.3	0.3	0.3	0.3	0.3	0.2	0.3
F244	Listen to Group	0.4	0.8	0.7	0.8	1.1	1.2	1.4
F245	Participate in Other Activities	0.1	0.1	0.1	0.1	0.1	0.1	0.1
F246	Accomodate Needs	9.7	8.9	8.5	8.5	8.7	9.0	8.9
F247	Notice Before Room Change	0.1	0.2	0.2	0.1	0.2	0.3	0.3
F248	Activities Program	7.9	6.7	6.0	6.3	6.7	8.5	8.5
F249	Activities Director	0.6	0.5	0.5	0.5	0.6	0.8	0.7
F250	Social Services	6.8	6.5	6.1	6.0	7.0	7.3	7.2
F251	Social Work Qualification	0.2	0.3	0.2	0.2	0.2	0.2	0.2
F252	Environment	7.7	7.2	6.5	6.1	6.0	6.1	5.8
F253	Housekeeping	16.9	18.0	17.1	18.3	21.8	23.5	19.5
F254	Clean Linens	1.2	1.0	0.9	1.0	0.9	1.0	0.9
F255	Private Closet	0.1	0.1	0.0	0.1	0.1	0.1	0.1
F256	Adequate Lighting	0.4	0.4	0.3	0.4	0.3	0.5	0.3
F257	Comfortable Temperatures	0.8	0.8	0.8	0.8	0.9	0.9	0.9
F258	Comfortable Sound	1.6	1.4	1.4	1.3	1.2	1.4	1.4

## Resident Assessment

Most deficiencies were issued to facilities for failure to meet professional standards (27.6 percent in 2007), failure to provide comprehensive care plans for residents (22.4 percent in 2007), failure to provide for qualified personnel (15.2 percent in 2007), failure to make comprehensive assessments (13.6 percent in 2007) and inaccuracy of assessments (12.8 percent in 2007) (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**

<b>FTAG</b>	<b>DESCRIPTION</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
F271	Admission Orders	0.3	0.1	0.2	0.2	0.3	0.3	0.3
F272	Comprehensive Assessments	12.6	10.7	9.1	8.9	10.9	14.3	13.6
F273	Frequency	1.1	1.0	0.7	0.9	0.9	1.1	1.2
F274	Change in Condition	4.0	4.0	3.6	3.4	3.8	3.9	4.3
F275	Annual Assessment	0.9	0.8	0.8	0.8	0.9	0.9	0.9
F276	Review of Assessments	3.0	3.0	2.1	1.8	2.5	3.7	2.7
F277	Coordination	0.0	0.0	0.0	0.0	0.0	0.0	0.0
F278	Accuracy of Assessments	9.1	9.7	9.4	9.8	11.3	13.1	12.8
F279	Comprehensive Care Plans	17.9	16.7	15.2	14.5	19.5	21.3	22.4
F280	Plan Requirements	9.9	10.2	9.5	10.0	12.8	13.0	11.5
F281	Professional Standards	18.8	20.4	20.5	22.1	28.1	29.3	27.6
F282	Qualified Personnel	9.8	9.6	9.7	10.0	13.1	14.9	15.2
F283	Discharge Summary	1.1	0.9	1.0	1.0	1.1	1.1	1.4
F284	Post Discharge Plan	0.6	0.7	0.5	0.5	0.8	0.7	0.8
F285	Preadmission Screening	0.3	0.5	0.5	0.6	0.6	0.8	1.0

## 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 (F323) was cited in 37.0 percent of facilities in 2007 (Table 53). In 2007, this category included accident prevention (F324). General quality of care was a deficiency in 28.9 percent of facilities in 2007, which had increased from 23.7 percent in 2001. Urinary/ incontinence care and failure to prevent pressure sores were deficiencies in 19.2 and 19.1 percent of the facilities in 2007. 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**

<b>FTAG</b>	<b>DESCRIPTION</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
F309	Quality of Care	23.7	25.2	25.0	26.2	29.5	30.4	28.9
F310	Activities of Daily Living Maintenance	1.7	1.2	1.2	1.1	1.3	1.1	1.1
F311	Appropriate ADL Treatment	4.8	3.9	3.6	3.7	4.0	3.6	3.3
F312	ADL Services	12.6	12.0	11.2	11.4	11.8	12.8	12.3
F313	Vision and Hearing	0.6	0.7	0.6	0.5	0.6	0.8	0.8
F314	Pressure Sores	17.2	16.4	15.4	14.5	16.2	19.8	19.1
F315	Urinary / Incontinence Care	12.0	12.2	11.8	11.9	15.9	19.8	19.2
F317	Range of Motion Maintenance	0.6	0.6	0.5	0.4	0.4	0.4	0.5
F318	Limited Range of Motion Services	8.1	7.2	6.6	6.5	6.6	6.4	6.6
F319	Mental and Psychosocial Services	1.9	1.8	1.6	1.3	1.6	2.0	1.9
F320	Maintenance of Psychosocial Functionii	0.2	0.2	0.1	0.1	0.1	0.2	0.2
F321	Nasogastric Tubes (Tube Feeding)	0.1	0.0	0.0	0.0	0.0	0.1	0.1
F322	Nasogastric Care	5.3	5.7	5.4	5.7	6.4	6.9	6.4
F323	Accident Environment	22.1	22.6	20.7	19.9	23.4	23.6	37.0
F324	Accident Prevention	18.6	19.5	18.7	19.2	22.1	23.5	
F325	Nutrition	8.4	7.8	7.4	6.8	7.3	7.9	7.0
F326	Therapeutic Diet	3.0	2.8	2.4	2.6	2.7	2.1	2.2
F327	Hydration	5.1	4.6	4.0	4.1	3.8	3.9	3.9
F328	Special Needs	4.6	4.9	5.3	5.7	6.6	7.2	7.4
F329	Unnessary Drugs	14.7	14.6	14.3	14.2	14.5	14.1	19.0
F332	Medication Errors	9.9	9.9	10.1	10.9	12.1	12.5	12.0
F333	Significant Medication Errors	3.9	4.0	4.0	4.0	4.3	4.4	6.4
F334	Influenza/Pneumococcal Immunizations						1.0	10.1

## **Nursing Services**

Nursing services are key to quality of care in nursing facilities. Of the facilities given deficiencies, 3.9 percent of facilities were given deficiencies for insufficient staff to provide appropriate care in 2001 compared to 2.3 percent in 2007 (a 41 percent decrease). The number of deficiencies for inadequate registered nurse staffing decreased from 1.5 percent in 2001 to 1.4 in 2007 (Table 54).

## **Dietary Services**

In 2007, 35.3 percent of facilities were given deficiencies for inadequate food sanitation while 8.2 percent received citations for inadequate food, 6.5 for nutritionally inadequate menus, and 3.7 for having infrequent meals (Table 54).

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

**DEFICIENCY GROUP=NURSING SERVICES**

<b>FTAG</b>	<b>DESCRIPTION</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
F353	Sufficient Nursing Staff	3.9	2.8	2.5	2.2	2.8	3.0	2.3
F354	Registered Nurse Staff	1.5	1.7	1.3	1.5	1.6	1.5	1.4
F356	Posting of Nurse Staffing						1.4	4.0

**DEFICIENCY GROUP=DIETARY SERVICES**

<b>FTAG</b>	<b>DESCRIPTION</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
F360	Well-Balanced Diet	0.0	0.3	0.3	0.3	0.4	0.3	0.4
F361	Qualified Staff	0.7	0.6	0.6	0.6	0.7	0.8	0.9
F362	Sufficient Staff	0.7	0.7	0.7	0.6	0.7	0.8	1.0
F363	Menus and Nutritional Adequacy	5.3	6.3	6.4	6.6	6.6	6.3	6.5
F364	Food	7.9	8.1	7.5	7.0	7.8	8.1	8.2
F365	Individual Needs	3.0	3.1	2.8	2.6	2.8	3.0	2.7
F366	Food Substitutes	1.2	1.1	1.0	1.2	1.3	1.2	1.2
F367	Therapeutic Diets	2.7	2.9	2.4	2.6	3.5	4.0	3.4
F368	Frequency of Meals	5.5	4.8	4.2	4.4	4.2	4.3	3.7
F369	Assistive Devices	0.8	0.9	1.0	0.9	0.9	1.3	1.1
F370	Sanitary Conditions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
F371	Food Sanitation	31.9	33.0	31.4	31.5	34.7	37.9	35.3
F372	Garbage Disposal	3.6	3.7	3.6	3.2	3.6	3.8	3.5

## **Physician Services**

Few nursing facilities were given deficiencies for physician services. In 2007, 3.2 percent received deficiencies for inadequate frequency of visits and 2.6 percent received deficiencies for inadequate physician visits (Table 55).

## **Rehabilitative Services**

In 2007, 1.3 percent of facilities were given deficiencies for inadequate rehabilitative services (Table 55).

## **Dental Services**

Even fewer facilities (less than one percent) were given deficiencies for poor dental services than for other types of professional services in the 2001 to 2007 period (Table 55).

**TABLE 55**

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

**DEFICIENCY GROUP=PHYSICIAN SERVICES**

<b>FTAG</b>	<b>DESCRIPTION</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
F385	Physician Supervision	0.3	0.5	0.4	0.5	0.4	0.5	0.5
F386	Physician Visits	2.1	2.1	1.9	2.1	2.1	2.4	2.6
F387	Frequency	2.4	2.6	2.5	2.7	2.8	3.0	3.2
F388	Physician Alternates	0.3	0.2	0.2	0.2	0.3	0.3	0.3
F389	Availability	0.1	0.1	0.1	0.1	0.1	0.1	0.1
F390	Physician Delegation of Tasks	0.0	0.1	0.0	0.0	0.1	0.0	0.0

**DEFICIENCY GROUP=REHABILITATIVE SERVICES**

<b>FTAG</b>	<b>DESCRIPTION</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
F406	Services	0.9	1.1	1.1	1.1	1.4	1.5	1.3
F407	Qualifications	0.1	0.1	0.0	0.1	0.1	0.2	0.2

**DEFICIENCY GROUP=DENTAL SERVICES**

<b>FTAG</b>	<b>DESCRIPTION</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
F411	Routine and Emergency Services (SNF)	0.6	0.7	0.9	0.8	0.8	0.9	0.9
F412	Routine and Emergency Services (NF)	0.5	0.6	0.6	0.5	0.4	0.6	0.6

## Pharmacy Services

In 2007, 14.2 percent of facilities received deficiencies for improper consultation, labeling, and storage of drugs, 13.4 percent of facilities received deficiencies for failure to comply with proper pharmacy services, and 9.4 for failure to review drug regimens (Table 56). All pharmacy categories were cited in more than 2 percent of facilities in 2007.

## Infection Control

Infection control is an important category. In 2001, 12.8 percent of facilities received deficiencies for inadequate infection control, compared to 18.1 percent in 2007 (Table 56). In addition, 12.1 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**

<b>FTAG</b>	<b>DESCRIPTION</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
F425	Pharmacy Services	8.6	8.9	9.5	10.1	12.8	14.1	13.4
F428	Drug Regimen Review	7.7	7.7	7.3	7.1	7.4	6.9	9.4
F431	Consultation, Labeling & Storage	9.8	10.2	10.6	10.6	12.5	6.8	14.2

**DEFICIENCY GROUP=INFECTION CONTROL**

<b>FTAG</b>	<b>DESCRIPTION</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
F441	Infection Control	12.8	14.0	14.4	14.8	16.7	19.8	18.1
F442	Preventing Spread of Infections	1.2	1.1	1.2	1.4	1.8	2.0	1.9
F443	Direct Contact	0.1	0.1	0.2	0.2	0.2	0.2	0.1
F444	Handwashing	7.4	8.7	8.7	9.2	10.4	11.7	12.1
F445	Linens	3.3	3.4	3.0	3.3	4.1	4.1	3.9

## Physical Environment

The category for physical environment includes 16 requirements. In 2007, 11.9 percent of facilities received deficiencies for other environmental conditions, and 4.0 percent for inadequate space and equipment (Table 57). Other facilities received deficiencies for inadequate pest control (3.2 percent), inadequate resident call systems (2.8 percent) and an inadequate room space (2.8 percent).

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

**DEFICIENCY GROUP=PHYSICAL ENVIRONMENT**

<b>FTAG</b>	<b>DESCRIPTION</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
F454	General Health and Safety	2.4	2.5	2.7	2.4	2.7	1.6	1.4
F455	Emergency Power	0.4	0.5	0.3	0.3	0.2	0.2	0.3
F456	Space and Equipment	2.9	3.6	3.5	3.3	3.2	4.7	4.0
F457	Resident Rooms	0.2	0.3	0.3	0.3	0.3	0.3	0.3
F458	Room Space	3.4	3.5	3.4	3.0	3.1	3.0	2.8
F459	Exits	0.0	0.0	0.0	0.0	0.0	0.0	0.0
F460	Privacy	0.8	1.2	0.9	1.2	1.1	1.2	1.2
F461	Windows	0.0	0.0	0.1	0.1	0.1	0.0	0.1
F462	Toilets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
F463	Resident Call System	2.8	3.0	2.8	2.6	2.3	2.8	2.8
F464	Dining and Activities	1.0	1.1	1.0	0.6	0.6	0.7	0.7
F465	Other Environmental Condition	9.9	11.4	11.3	10.8	9.4	10.6	11.9
F466	Emergency Water	0.6	0.8	0.6	0.5	0.4	0.8	1.0
F467	Ventilation	0.9	0.9	1.1	1.0	0.9	1.2	1.3
F468	Equipment in Corridors	1.4	1.3	1.4	1.4	1.3	1.6	1.5
F469	Pest Control	3.7	4.0	3.7	3.2	2.9	3.7	3.2

## Administration Services

In 2007, 4.3 percent of facilities received deficiencies for failure to demonstrate the proficiency of nursing assistants, 3.1 percent for failure to comply with laws, 2.6 percent for inadequate inservice education, and 2.1 percent for ineffective administration (Table 58). Four of the 12 administrative requirements were cited in more than 2 percent of facilities in 2007.

## Laboratory Services

In 2007, only one of the 8 laboratory services requirements was cited in more than 2 percent of facilities. This deficiency was for failure to provide high quality, timely laboratory services (7.1 percent in 2007).

## Other Activities

Three of the 8 other activities requirements were cited in more than 2 percent of facilities in 2007. These deficiencies were issued for inadequate clinical record keeping (17.2 percent), failure of the quality assurance committee to meet requirements (4.1 percent), and inadequate emergency training (3.4 percent).

**TABLE 58  
PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES**

**DEFICIENCY GROUP=ADMINISTRATION**

<b>FTAG</b>	<b>DESCRIPTION</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
F490	Administered Effectively	2.0	1.9	1.7	1.6	1.8	2.2	2.1
F491	Licensure	0.0	0.0	0.1	0.0	0.0	0.0	0.0
F492	Compliance With Laws	2.1	1.7	3.2	3.1	4.0	3.6	3.1
F493	Governing Body	0.9	0.4	0.4	0.4	0.6	0.6	0.6
F494	Required Training	0.9	0.9	0.5	0.5	0.3	0.4	0.3
F495	Employee Competency Program	0.5	0.5	0.2	0.3	0.3	0.3	0.3
F496	Registry Verifications	1.6	1.7	1.5	1.3	1.4	1.3	1.3
F497	Inservice Education	2.2	2.2	2.0	2.4	2.4	2.7	2.6
F498	Proficiency of Nurse Aides	3.4	4.0	4.0	4.1	5.0	5.2	4.3
F499	Qualified Professionals	0.2	0.2	0.3	0.4	0.4	0.6	0.6
F500	Outside Services	1.6	1.5	1.0	0.9	1.1	1.3	1.3
F501	Medical Director	0.7	0.7	0.6	0.4	0.7	1.4	1.5

**DEFICIENCY GROUP=LABORATORY SERVICES**

<b>FTAG</b>	<b>DESCRIPTION</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
F502	High Quality, Timely Services	3.2	4.2	4.1	4.6	5.5	6.4	7.1
F503	Meets Lab Standards	0.4	0.3	0.3	0.2	0.1	0.1	0.2
F504	Services Ordered by a Physician	0.3	0.5	0.5	0.6	0.6	0.8	0.9
F505	Notifys Physicians	1.1	1.2	1.1	1.2	1.3	1.4	1.8
F507	Clinical Records	0.2	0.2	0.3	0.3	0.4	0.5	0.7
F508	Radiology and Other Services	0.3	0.2	0.3	0.4	0.4	0.4	0.4
F511	Radiology Notification of Physician	0.1	0.1	0.1	0.1	0.1	0.1	0.1
F513	Records Signed and Dated	0.1	0.1	0.1	0.1	0.1	0.1	0.2

**DEFICIENCY GROUP=OTHER ACTIVITIES**

<b>FTAG</b>	<b>DESCRIPTION</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
F514	Clinical Records	12.7	12.6	13.3	13.4	14.8	18.6	17.2
F516	Records Safeguarded	0.8	0.7	0.7	0.7	0.9	0.8	0.8
F517	Plans for Emergency	0.9	0.9	0.9	1.0	0.9	1.4	1.8
F518	Emergency Training	2.5	2.6	2.7	2.9	3.0	3.3	3.4
F519	Transfer Agreement	0.0	0.0	0.0	0.0	0.0	0.1	0.1
F520	Quality Assurance Committee	1.2	1.4	0.9	0.9	2.9	3.5	4.1
F521	Quality Assurance Activities	2.2	2.0	2.0	1.6	1.0	0.0	0.0
F522	Disclosure of Ownership	0.0	0.0	0.0	0.0	0.0	0.0	0.0

## 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. OSCAR is an on-line data system from the Health Care Financing Administration (HCFA). The OSCAR data for this report included the most recent surveys for all facilities for the period of 1997-2003. These data were available on several sets of tapes.

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 30 facilities in 1994, 73 facilities in 1995, 91 facilities in 1996, 127 facilities in 1999, 167 facilities in 2000, 89 facilities in 2001, and 65 facilities in 2002. In 2006, 74 facilities were dropped and 100 were dropped in 2007 because of reporting errors or duplicating.

## **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 be 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.