

## *Persons with Disabilities*

# Demographic, income, and health care characteristics, 1993

*Due to lower rates of employment and other labor market difficulties, working-age persons with disabilities tend to have lower income and are more likely to live in poverty than persons without disabilities; those with severe disabilities are more likely to be female, African-American, older, and less educated than those without disabilities*

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Employment of persons with disabilities is a key concern of a number of existing and proposed programs and policies, as well as the focus of substantial current research.<sup>1</sup> While the article by Thomas W. Hale, Howard V. Hayghe, and John M. McNeil (pages 3–12 in this issue) examines employment patterns and other characteristics by disability status, this article analyzes demographic, income, and health care characteristics of working-age persons (aged 15 to 64) with and without disabilities.<sup>2</sup> Such characteristics may provide insights into the potential barriers to employment faced by persons with disabilities (related to their level of education, for example); they also may help explain the role of employment in personal and household income, poverty status, and access to health insurance.

Hale and his coauthors show that persons with disabilities, particularly those with severe disabilities, have both lower employment rates and lower earnings than do those without disabilities.<sup>3</sup> As will be seen, persons with disabilities differ in other characteristics as well—some of which stem from their labor market difficulties, and others that actually contribute to such difficulties. In particular, persons with disabilities are more likely to live in poverty because income from disability benefits and other nonemployment income generally do not make up for the lack of employment in-

come. Also, nonemployed persons with disabilities visit doctors and stay overnight in hospitals more frequently than other persons; thus, their problems in the labor market may be partly attributable to their health problems.

These and other outcomes are examined separately by demographic group to explore which segments of the working-age population with disabilities face the greatest difficulties. Like the study by Hale and others, this article uses data from the Bureau of the Census Survey of Income and Program Participation (SIPP), but for the 1993–94 wave.<sup>4</sup> It compares persons with and without disabilities, as well as those with severe and nonsevere disabilities within the disability population.

### Demographic characteristics

As shown in table 1, for many demographic characteristics, working-age persons with disabilities differ little from those without disabilities. For persons with *severe* disabilities, however, there are notable differences. Such persons are more likely to be “not married with a spouse present” (that is, single, separated, divorced, or widowed), and to be female, African-American, older, living alone, and less educated than are persons with nonsevere disabilities or no disabilities at all. (The box on pp. 11–12 defines types of disabilities.)

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**Table 1. Percent distribution of persons aged 15 to 64 by disability status and selected demographic characteristics, 1993**

[In percent, unless otherwise noted]

Characteristic	Nondisability population	Disability population		
		Total	Nonsevere	Severe
<b>Number:</b>				
Total population size .....	138,142,000	31,049,000	16,497,000	14,552,000
Sample size .....	51,789	11,622	6,247	5,375
<b>Gender</b>				
Female .....	50.5	51.1	47.0	55.9
Male .....	49.5	48.9	53.0	44.1
<b>Race</b>				
White .....	83.6	83.5	87.7	78.7
African-American .....	12.1	13.4	9.5	18.0
American Indians and Eskimos .....	.7	1.1	1.1	1.0
Asians and Pacific Islanders .....	3.7	2.1	1.8	2.4
<b>Ethnicity</b>				
Hispanic .....	10.1	9.1	7.7	10.8
Nonhispanic .....	89.9	90.9	92.3	89.2
<b>Age</b>				
15 to 24 years .....	23.8	11.3	14.6	7.5
25 to 34 years .....	26.5	17.5	18.5	16.4
35 to 44 years .....	24.7	23.0	25.0	20.7
45 to 54 years .....	15.8	23.3	23.4	23.3
55 to 64 years .....	9.3	24.9	18.5	32.1
Mean age in years .....	35.4	43.0	40.8	45.5
<b>Marital status</b>				
Married, spouse present .....	55.1	52.7	57.1	47.6
Widowed .....	1.3	4.5	2.9	6.2
Separated or divorced .....	10.8	18.6	16.5	21.0
Never married .....	32.7	24.3	23.5	25.2
<b>Household size</b>				
1 person .....	8.5	13.4	11.4	15.7
2 to 4 persons .....	48.0	53.1	53.0	53.7
4 or more persons .....	43.5	33.3	35.6	30.7
Mean number of persons per household .....	3.4	3.0	3.1	3.0
<b>Educational attainment<sup>2</sup></b>				
Less than 12 years .....	12.5	28.5	19.1	38.2
12 or more years .....	87.5	71.5	80.9	61.8
12 years .....	37.5	39.7	41.2	38.1
13 to 15 years .....	22.8	18.9	22.4	15.2
16 years or more .....	27.3	13.0	17.4	8.5
Mean years of education .....	13.3	11.9	12.6	11.3

<sup>1</sup> Difference between disability and nondisability categories is not statistically significant at the 95-percent level.

<sup>2</sup> Educational attainment data are limited to those 25 years and older.

For example, although women make up about half of the working-age populations with and without disabilities, they make up 56 percent of persons with severe disabilities. By contrast, women are underrepresented among those with nonsevere disabilities (47 percent). Similarly, African-Americans, who constitute 12 percent of persons without disabilities, are overrepresented among

persons with severe disabilities (18 percent) and underrepresented among persons with nonsevere disabilities (10 percent). Hispanics are slightly overrepresented among persons with severe disabilities (11 percent), and underrepresented among those with nonsevere disabilities (8 percent).

There are strong age differences between the disability and

nondisability populations. The average age of working-age persons without disabilities is about 35 years, compared with 43 years among persons with disabilities. Also, about half of the nondisability population is under age 35, compared with less than one-third (29 percent) of the disability population. Less than a tenth of working-age persons without disabilities are aged 55 or older, compared with one-fourth of persons with disabilities. The greater prevalence of older persons with disabilities combines with their lower employment rates (noted in the article by Hale and others) to pull down the overall employment rate of persons with disabilities.

Accompanying their higher average age, persons with disabilities are more likely to have been married at some point—only one-fourth have never married, compared with one-third of persons without disabilities. The pattern is very different, however, between those with severe and nonsevere disabilities. Those with severe disabilities are less likely (48 percent) than are those without disabilities (55 percent) to be currently married with a spouse present, and almost twice as likely to be separated or divorced (21 percent versus 11 percent). In contrast, those with nonsevere disabilities are more likely than either group to be married with a spouse present (57 percent) and are somewhat less likely than persons with severe disabilities to be separated or divorced (17 percent). While these simple tabulations show that persons with disabilities are more likely to have ever been married, estimates controlling for age and other demographic characteristics show that persons with disabilities—especially those with severe disabilities—are less likely to become or remain married.<sup>5</sup>

Consistent with their lower likelihood of being married with a spouse present, persons with disabilities tend to live in smaller households: the average household size is 3 among persons with disabilities, with more than one-eighth (13 percent) living alone; the average household size among persons without disabilities is 3.4, with about 9 percent living alone. Persons with severe disabilities are the most likely to live alone and the least likely to live in households with 4 or more people.

There also are important differences between the disability and nondisability populations with respect to education. Persons without disabilities who are aged 25 or older have completed an average of 13.3 years of education, compared with 11.9 years among persons with disabilities. While seven-eighths of persons without disabilities have completed 12 or more years of education, only three-fifths of persons with severe disabilities have done so. Similarly, persons without disabilities are more than 3 times as likely as those with severe disabilities to have completed 16 or more years of education. Because gaps in employment and earnings remain even after controlling for differences in education and other observable characteristics, however, the relatively low education levels among persons with disabilities account for only part of the employment difficulties faced by this group.<sup>6</sup>

## Household income and poverty status

Lower employment levels limit the household and personal income of persons with disabilities, although their income often is supplemented by Social Security and other benefits, as well as by the employment of other household members. Table 2 presents household income and poverty status among the disability categories, while table 3 breaks out poverty status by selected demographic characteristics.<sup>7</sup>

As can be seen in table 2, average household income is lower among persons with disabilities: the mean household income is \$2,960 per month, or about 73 percent of what persons without disabilities earn; similarly, the median household income is \$2,311, 67 percent of the median level for persons without disabilities. The values are particularly low for persons with severe disabilities, representing just 58 percent and 51 percent, respectively, of the mean and median levels for persons without disabilities.

Household income figures naturally vary with the number of people in the household, and part of the lower average income for persons with disabilities may be due to their lower average household size. Table 2 also shows household income figures adjusted to account for differences in household size.<sup>8</sup> This changes the overall differences by only a small amount: the adjusted mean and median household incomes of persons with disabilities are 77 percent and 71 percent, respectively, of the values for persons without disabilities.

The major reason for the lower mean income of persons with disabilities, as shown by the breakdown of major types of income, is the lower mean value of earned income (66 percent of the mean earned income of nondisability households). The households of persons with disabilities also receive lower average levels of asset income (82 percent of the nondisability average), but higher average levels of means-tested and other income (392 percent and 181 percent, respectively, of the nondisability averages). Among persons with severe disabilities, average earned income is particularly low (less than half the nondisability average), and average means-tested income is particularly high (more than 6 times the nondisability average).

The lower household income of persons with disabilities is reflected not only in average values but in the distribution of incomes. Persons with disabilities are twice as likely as those without disabilities to live in poverty households (19 percent compared with 9 percent), and only two-thirds as likely to live in households with income more than 4 times the poverty level (24 percent compared with 38 percent). The poverty rate is especially high among persons with severe disabilities, of whom more than one-fourth (26 percent) live in poverty households, and only one-sixth (16 percent) live in households with income more than 4 times the poverty level.

Are some groups within the disability population more likely than others to be living in poverty? To answer this question, table 3 shows poverty rates by disability status and se-

lected demographic characteristics. Among persons with disabilities, the patterns of poverty are generally similar to those of persons without disabilities: poverty rates are higher among women, African-Americans, Hispanics, those who are not married with a spouse present, younger persons, those with less education, and those who are not employed. These characteristics, however, do not fully account for the higher poverty rates of persons with disabilities, who have significantly higher poverty rates across each demographic segment.<sup>9</sup>

For persons with severe disabilities, poverty rates are especially high—more than one-third—among African-Americans (44 percent), American Indians and Eskimos (44 percent), Hispanics (42 percent), those with less than 12 years of education (37 percent), and those who are not married with a spouse present (34 percent). While there is substantial overlap among some of these characteristics, they continue to be strongly associated with poverty status by demographic characteristic when all are entered into probit regressions.<sup>10</sup>

### Personal income sources and levels

What are the sources of income for persons with disabilities, and how do their personal income levels compare with those of persons without disabilities? Table 4 presents overall personal income by source and employment status, while table 5 breaks down income levels by selected demographic characteristics.

Income derived from disability benefits or retirement generally does not make up for the lower levels of earned income among persons with disabilities. The average monthly income for the total disability population (\$1,277) is only about three-

fourths the average for persons without disabilities (\$1,707), and the average for persons with severe disabilities (\$859) is only about half the nondisability average. (See table 4.)

Table 4 also shows the effects of relatively low employment rates among persons with disabilities. While earned income represents about 92 percent of the total income of persons without disabilities, it represents only 71 percent of the income of those with disabilities, and just 41 percent of the income of those with severe disabilities. Thus, as expected, income derived from disability benefits and retirement is very important for persons with disabilities.

More than a third of the personal income of persons with severe disabilities comes from non-means-tested disability and retirement income (such as Social Security Disability Income, workers' compensation, and public and private pensions). Another 11 percent comes from means-tested disability programs (particularly Supplemental Security Income), and 3 percent comes from general means-tested programs (such as Aid to Families with Dependent Children). Also, persons with severe disabilities receive, on average, more than 3 times the value of food stamps than do persons without disabilities.

These income patterns reflect not only the lower employment rates of persons with disabilities, but also the lower earnings of those who are employed. Among persons who were employed during the month prior to the survey, those with disabilities had both lower overall income and lower earned income than those without disabilities, largely due to their lower hourly and monthly earnings.<sup>11</sup> In addition, persons with disabilities are more likely to receive means-tested income.

Among persons who were not employed in the month prior

**Table 2. Household income of persons aged 15 to 64 by source of income, poverty status, and disability status, 1993**

Characteristic	Nondisability population income	Disability population					
		Total		Nonsevere		Severe	
		Income	Percent of nondisability income	Income	Percent of nondisability income	Income	Percent of nondisability income
Mean monthly household income .....	\$4,038	\$2,960	73.3	\$3,492	86.5	\$2,356	58.4
Median monthly household income .....	3,454	2,311	66.9	2,872	83.1	1,750	50.7
Mean monthly household income, adjusted <sup>1</sup> .....	4,038	3,111	77.0	3,620	89.6	2,510	62.2
Median monthly household income, adjusted <sup>1</sup> ...	3,454	2,465	71.4	3,000	86.9	1,903	55.1
Mean monthly household income by source:							
Earned income .....	3,620	2,403	66.4	3,084	85.2	1,600	44.2
Asset income .....	109	90	82.3	<sup>2</sup> 109	99.6	67	61.7
Means-tested income .....	28	109	392.4	43	156.3	186	671.5
Other income .....	282	509	180.9	384	136.4	658	233.7
Distribution of households by income as percent of poverty level:							
Less than 100 percent .....	8.9	18.7	( <sup>3</sup> )	12.3	( <sup>3</sup> )	26.3	( <sup>3</sup> )
100–199 percent .....	16.6	23.6	( <sup>3</sup> )	19.3	( <sup>3</sup> )	28.7	( <sup>3</sup> )
200–399 percent .....	36.0	33.3	( <sup>3</sup> )	<sup>2</sup> 36.8	( <sup>3</sup> )	29.2	( <sup>3</sup> )
400 percent or more .....	38.4	24.3	( <sup>3</sup> )	31.6	( <sup>3</sup> )	16.0	( <sup>3</sup> )

<sup>1</sup> Adjusted numbers represent income figures if the household size distributions in the disability categories were the same as in the nondisability category. See table 1 for household size comparisons.

<sup>2</sup> Difference between disability and nondisability categories is not statistically significant at the 95-percent level.

<sup>3</sup> Not applicable.

**Table 3. Percent of persons aged 15 to 64 living below the poverty line by selected demographic characteristics and disability status, 1993**

Characteristic	Nondisability population	Disability population		
		Total	Nonsevere	Severe
Total .....	8.9	18.7	12.3	26.3
<b>Gender</b>				
Female .....	10.3	21.5	14.6	28.1
Male .....	7.5	16.0	10.2	23.9
<b>Race</b>				
White .....	7.3	15.5	10.4	21.9
African-American .....	19.2	37.9	27.5	44.1
American Indian or Eskimo .....	13.0	30.2	19.2	44.4
Asian or Pacific Islander .....	11.9	24.7	21.1	27.8
<b>Ethnicity</b>				
Hispanic .....	19.6	32.9	21.8	41.9
Non-Hispanic .....	7.7	17.4	11.5	24.4
<b>Marital status</b>				
Married, spouse present .....	6.2	11.8	7.6	17.4
Not married with spouse present <sup>2</sup> .....	12.2	26.7	18.5	34.3
<b>Age</b>				
Aged 15 to 34 .....	11.7	22.7	17.7	30.6
Aged 35 to 54 .....	6.3	18.3	10.7	27.8
Aged 55 to 64 .....	5.5	15.3	6.7	20.9
<b>Educational attainment<sup>3</sup></b>				
Less than 12 years of education .....	19.6	30.7	18.7	37.0
12 years of education .....	7.9	15.8	11.1	21.1
13 to 15 years of education .....	5.4	13.7	8.4	21.9
16 years or more of education .....	3.0	6.3	4.9	9.2
<b>Employment status</b>				
Employed last month .....	4.1	7.5	6.8	9.8
Not employed last month .....	23.2	30.6	28.0	31.6

<sup>1</sup> Difference between disability and nondisability categories is not statistically significant at the 95-percent confidence level.

<sup>2</sup> Includes single, separated, divorced, or widowed.

<sup>3</sup> Educational attainment figures are for persons 25 years and older.

to the survey, persons with disabilities had higher average personal income than those without disabilities, principally reflecting the disability and retirement income received by many nonemployed persons with disabilities.<sup>12</sup> Disability and retirement income together make up four-fifths of the overall income of persons with severe disabilities (combining the figures for means-tested and non-means-tested income). Such income represents about a third of the income of nonemployed persons without disabilities.<sup>13</sup>

Which segments of the disability population have especially low income? Table 5 presents median monthly income levels broken down by demographic characteristics. Among those with severe disabilities, income is particularly low for

men (38 percent of the median for the men without disabilities), those who are married with a spouse present (36 percent of the nondisability median), and those in the prime working years, aged 35 to 54 (31 percent of the nondisability median).

As with other populations, educational attainment is an important factor in determining the level of income for persons with disabilities. Among persons with only a high school education, the median monthly income of the disability population is 59 percent of that of the nondisability population. For those with at least a college degree, the comparable figure is 82 percent. Among persons with nonsevere disabilities, those with more than a high school education earn nearly as much as their nondisability counterparts.

**Table 4. Personal income levels of persons aged 15 to 64 by source of income, employment status, and disability status, 1993**

Characteristic	Nondisability population		Disability population					
	Mean monthly income (dollars)	Percent of total	Total		Nonsevere		Severe	
			Mean monthly income (dollars)	Percent of total	Mean monthly income (dollars)	Percent of total	Mean monthly income (dollars)	Percent of total
<b>Total</b>								
Total monthly cash income .....	\$1,707	100.0	\$1,277	100.0	\$1,646	100.0	\$859	100.0
By source:								
Earned income .....	1,564	91.6	906	71.0	1,397	84.9	350	40.8
Asset income .....	46	2.7	141	3.2	149	3.0	32	3.7
Disability and retirement income .....								
Not means-tested .....	40	2.4	207	16.2	116	7.1	311	36.2
Means-tested .....	0	0	43	3.3	1	0	91	10.5
Other means-tested cash income .....	8	.5	19	1.5	13	.8	25	2.9
Other cash income .....	49	2.8	61	4.7	70	4.2	150	5.8
Food stamps (noncash income) .....	7	( <sup>2</sup> )	17	( <sup>2</sup> )	11	( <sup>2</sup> )	24	( <sup>2</sup> )
<b>Employed</b>								
Total monthly cash income .....	2,188	100.0	1,977	100.0	2,060	100.0	1,694	100.0
By source:								
Earned income .....	2,082	95.2	1,775	89.8	1,878	91.2	1,421	83.9
Asset income .....	45	2.1	145	2.3	146	2.2	142	2.5
Disability and retirement income .....								
Not means-tested .....	24	1.1	96	4.9	83	4.0	142	8.4
Means-tested .....	0	0	10	.5	1	0	141	2.4
Other means-tested cash income .....	2	.1	4	.2	3	.2	7	.4
Other cash income .....	36	1.6	47	2.4	49	2.4	41	2.4
Food stamps (noncash income) .....	3	( <sup>2</sup> )	5	( <sup>2</sup> )	4	( <sup>2</sup> )	8	( <sup>2</sup> )
<b>Not employed</b>								
Total monthly cash income .....	277	100.0	553	100.0	463	100.0	588	100.0
By source:								
Earned income .....	23	8.3	8	1.4	122	4.8	2	.4
Asset income .....	48	17.3	38	6.8	160	12.9	29	4.9
Disability and retirement income .....								
Not means-tested .....	90	32.4	322	58.3	211	45.6	366	62.2
Means-tested .....	0	.1	77	13.9	1	.2	107	18.1
Other means-tested cash income .....	29	10.4	34	6.1	40	8.7	131	5.3
Other cash income .....	87	31.6	174	13.5	129	27.9	53	9.0
Food stamps (noncash income) .....	19	( <sup>2</sup> )	29	( <sup>2</sup> )	29	( <sup>2</sup> )	29	( <sup>2</sup> )

<sup>1</sup> Difference in mean dollar value between disability and nondisability categories is not statistically significant at the 95-percent confidence level.  
<sup>2</sup> Not applicable.

### Health insurance and health care utilization

Health insurance and health care are particularly important concerns for many persons with disabilities, given that some disabilities are associated with special health needs or risks. The overall rate of health insurance coverage for the disability and nondisability populations is about the same—80 percent and 82 percent, respectively. Nonetheless, the *sources* of health insurance for the two groups differ considerably. Almost two-thirds (64 percent) of all persons without disabilities have health insurance from a current employer or union, compared with just two-fifths (40 percent) of those with disabilities. The gap is made up by medicaid and medicare coverage among persons with disabilities. About 20 percent of

the disability population receives medicaid, and about 10 percent receives medicare, while only 5 percent of the nondisability population receives medicaid and none receives medicare. This pattern is strongest among persons with severe disabilities, who have the lowest probability of being covered by current employer or union insurance (24 percent), and who have high rates of coverage under medicaid (34 percent) and medicare (22 percent).

Health care utilization is more common among persons with disabilities than among those without them. For example, the disability population was nearly 3 times more likely than was the nondisability population to have had a hospital visit during the 12 months prior to the survey (15 percent compared with 5 percent). In addition, persons with disabilities stayed in the

hospital, on average, 1.51 nights per year, while the comparable figure for those without disabilities was 0.22 night.

Persons with disabilities also were more likely to have visited a doctor or doctor's assistant during the previous 12 months than were persons without disabilities (80 percent versus 65 percent). And the disability population tended to make such visits more frequently than the nondisability population, averaging more than seven visits per year, compared with fewer than three visits for the nondisability population. The rates of hospital and doctor's office visits were highest among persons with severe disabilities (21 percent and 84 percent, respectively).

Table 7 breaks down health insurance status and nights stayed in the hospital by selected characteristics. Following the pattern

for those without disabilities, the segments of the disability population most likely to have health insurance are women, whites, non-Hispanics, and those who are married with a spouse present; they also are more likely to be older, to be more educated, and to have been employed during the month prior to the survey. Because of access to medicare and medicaid, persons with severe disabilities are more likely than are those without disabilities to have health insurance across most population segments, particularly among American Indians and Eskimos, Hispanics, and those with fewer than 12 years of education.

For each of the different population segments presented in table 7, the number of nights spent in the hospital during the 12 months prior to the survey is greater for persons with disabilities than for those without disabilities. Among those with-

**Table 5. Median personal income of persons aged 15 to 64 by selected demographic characteristics, employment status, and disability status, 1993**

Characteristic	Nondisability population Income in dollars	Disability population					
		Total		Nonsevere		Severe	
		Income in dollars	Percent of nondisability income	Income in dollars	Percent of nondisability income	Income in dollars	Percent of nondisability income
Total .....	\$1,297	\$792	61.1	\$1,202	92.7	\$551	42.5
<b>Gender</b>							
Female .....	930	583	62.7	812	87.3	474	51.0
Male .....	1,750	1,132	64.7	1,700	97.1	669	38.2
<b>Race</b>							
White .....	1,370	850	62.0	1,264	92.3	595	43.4
African-American .....	974	520	53.4	824	84.6	465	47.7
American Indian or Eskimo .....	992	603	60.8	844	85.1	454	45.8
Asian or Pacific Islander .....	1,113	603	54.2	950	85.4	508	45.6
<b>Ethnicity</b>							
Hispanic .....	850	566	66.6	880	103.5	445	52.4
Non-Hispanic .....	1,373	804	58.6	1,231	89.7	571	41.6
<b>Marital status</b>							
Married, spouse present .....	1,649	1,002	60.8	1,500	91.0	594	36.0
Not married with spouse present <sup>1</sup> .....	899	629	70.0	900	100.1	536	59.6
<b>Age</b>							
Aged 15 to 34 .....	840	530	63.1	655	78.0	463	55.1
Aged 35 to 54 .....	1,864	958	51.4	1,563	83.9	570	30.6
Aged 55 to 64 .....	1,550	831	53.6	1,442	93.0	634	40.9
<b>Educational attainment<sup>2</sup></b>							
Less than 12 years of education .....	1,000	570	57.0	902	90.2	486	48.6
12 years of education .....	1,449	850	58.7	1,255	86.6	592	40.9
13 to 15 years of education .....	1,760	1,250	71.0	1,700	96.6	703	39.9
16 years or more of education .....	2,698	2,218	82.2	2,600	96.4	1,290	47.8
<b>Employment status</b>							
Employed last month .....	1,750	1,540	88.0	1,621	92.6	1,281	73.2
Not employed last month .....	2	432	( <sup>3</sup> )	83	( <sup>3</sup> )	454	( <sup>3</sup> )

<sup>1</sup> Includes single, separated, divorced, or widowed.

<sup>2</sup> Educational attainment figures are for persons 25 years and older.

<sup>3</sup> Because income of nonemployed among the nondisability population is virtually zero, percent of nondisability income is not shown.

out disabilities, the average number of nights spent in the hospital was about 0.3 or less for each of the demographic groups. For the population with disabilities, on the other hand, the corresponding figure is greater than 1.0 for most groups, and it is especially high for African-Americans (2.29), persons aged 55 to 64 (2.14), and persons who were not employed in the previous month (2.31).

### Summary

Working-age persons with disabilities are well represented in every demographic and economic group. As a group, they nonetheless differ in several respects from the general population. For example, due largely to lower employment rates, persons with disabilities have lower average household and personal incomes and are more likely to be living in poverty and receiving means-tested income than are persons without disabilities. Also, while the rate of health insurance coverage is similar for the two populations, persons with disabilities are more likely to receive coverage from medicare or medicaid. Moreover, persons with disabilities utilize the health care system to a greater extent than do persons without disabilities.

Some of these findings reflect barriers to employment facing many persons with disabilities, while others reflect the effects of lower employment and earnings. One of the most important barriers is that persons with disabilities—particularly those with severe disabilities—have lower average levels of education. Education is a strong positive predictor of employment and earnings in general, and may play an even greater role in helping people overcome disadvantages associated with disability. In particular, in today’s high-tech economy, education focused on learning computer skills es-

pecially enhances the earnings potential of persons with disabilities.<sup>14</sup> Also, the fact that persons with severe disabilities are more likely to be female and African-American—characteristics that are associated with lower employment and earnings rates in the general population—may add to the employment difficulties stemming from disability.

The patterns in health insurance coverage and health care utilization also illustrate some of the barriers to employment faced by many persons with disabilities. In particular, non-employed persons with disabilities spend more nights in the hospital each year, on average, than do those without disabilities, suggesting that health problems prevent at least some of them from performing productive work (although it should be noted that only 1 in 5 had any hospital visit in the 12 months prior to the survey). Medicaid and medicare coverage, encompassing nearly one-third of persons with disabilities, may also represent an employment barrier in many cases because the potential loss of such coverage can be an important disincentive to taking a job.

Apart from employment barriers, the findings presented here illustrate the importance of employment in personal and household income. The average monthly earned income of \$906 among persons with disabilities is less than two-thirds that of persons without disabilities. Supplemental income derived from disability or retirement benefits and the earnings of other household members does not compensate for the personal earnings gap between persons with and without disabilities. The overall household income of persons with disabilities averages about three-fourths that of persons without disabilities; also, persons with disabilities are more than twice as likely to be living in poverty. While many of these differences can be attributed to lower employment rates among persons with disabilities, income differences persist even when compari-

**Table 6. Persons aged 15 to 64 by health insurance status, health care utilization, and disability status, 1993**

[In percent, except where noted]

Characteristic	Nondisability population	Disability population		
		Total	Nonsevere	Severe
Percent with health insurance .....	81.6	79.9	78.0	182.2
Source of health insurance: .....				
Medicaid .....	4.6	19.9	7.2	34.3
Medicare .....	0	10.3	.0	22.1
Current employer or union .....	63.7	40.1	54.3	24.0
From own job .....	41.8	25.4	37.6	11.6
Household member's job .....	21.1	14.1	16.1	11.7
Former employer .....	3.5	7.0	5.4	8.9
Military <sup>2</sup> .....	3.1	4.3	4.4	4.1
Other .....	6.8	7.2	16.9	7.5
Health care utilization:				
Any hospital visit .....	5.3	15.4	10.1	21.4
Mean nights in hospital .....	.22	1.51	.60	2.59
Any doctor's office visit .....	64.8	80.0	76.8	83.6
Mean number of visits .....	2.58	7.41	5.62	9.44

<sup>1</sup> Difference between disability and nondisability categories is not statistically significant at the 95-percent confidence level.

<sup>2</sup> Includes CHAMPUS and CHAMPVA.



**Table 7. Health insurance status and health care utilization of persons aged 15 to 64 by selected demographic characteristics and disability status, 1993**

Characteristic	Nondisability population		Disability population					
	With health insurance (in percent)	Mean nights in hospital	Total		Nonsevere		Severe	
			With health insurance (in percent)	Mean nights in hospital	With health insurance (in percent)	Mean nights in hospital	With health insurance (in percent)	Mean nights in hospital
<b>Gender</b>								
Women .....	83.9	.29	83.0	1.53	81.1	.74	84.7	2.29
Men .....	79.3	.15	76.7	1.53	75.2	.47	78.9	2.97
<b>Race</b>								
White .....	82.8	.22	80.4	1.44	79.1	.60	82.1	2.50
African-American .....	75.2	.25	77.4	2.29	69.1	.66	82.4	3.26
American Indian or Eskimo .....	66.5	.28	73.0	.75	66.3	.42	81.6	1.17
Asian or Pacific Islander .....	79.3	.17	78.4	.57	75.4	.13	80.9	.94
<b>Ethnicity</b>								
Hispanic .....	63.9	.26	72.9	1.62	67.0	.97	77.6	2.16
Non-Hispanic .....	83.6	.22	80.6	1.52	78.9	.57	82.7	2.64
<b>Marital status</b>								
Married, spouse present .....	86.6	.24	83.0	1.36	83.0	.50	83.0	2.53
Not married with spouse present <sup>1</sup> .....	75.5	.19	76.5	1.72	71.3	.72	81.4	2.64
<b>Age</b>								
Aged 15 to 34 .....	76.9	.24	77.0	1.24	73.1	.71	83.1	2.08
Aged 35 to 54 .....	85.8	.18	79.3	1.38	78.8	.52	79.9	2.46
Aged 55 to 64 .....	88.9	.28	84.5	2.14	84.5	.60	84.5	3.15
<b>Educational attainment<sup>2</sup></b>								
Less than 12 years of education .....	66.1	.22	76.0	1.92	66.6	.63	81.0	2.60
12 years of education .....	81.6	.24	80.1	1.32	78.6	.52	81.9	2.23
13 to 15 years of education .....	85.9	.22	82.1	1.73	81.4	.65	83.2	3.39
16 years or more of education .....	92.0	.19	88.7	1.38	89.1	.50	88.0	3.29
<b>Employment status</b>								
Employed last month .....	84.5	.19	80.6	.78	80.1	.54	82.3	1.59
Not employed last month .....	73.1	.31	67.0	2.31	71.8	.76	82.1	2.91

<sup>1</sup> Includes single, separated, divorced, or widowed.

<sup>2</sup> Educational attainment data are limited to those 25 years and older.

sons are limited to those who were employed at the time the survey was conducted. Employed persons with disabilities earn less per hour and work fewer hours per week than do workers without disabilities.

The rapid development and spread of computer technologies in U.S. workplaces hold special promise for enhancing the employment and earnings of persons with disabilities. In fact, acquiring computer skills can virtually eliminate the average

gap in weekly pay between employees with and without disabilities.<sup>15</sup> The computer revolution may work in combination with the Americans with Disabilities Act and other public policies to open up new job opportunities for the disability population. As technological and policy developments continue in the coming decade, it is likely that persons with disabilities will have greater access to the labor market and the benefits of employment. □

## Footnotes

<sup>1</sup> See, for example, Jane West, ed., *Implementing the Americans with Disabilities Act* (Cambridge, MA, Blackwell Publishers, 1996); and Jerry L. Mashaw, Virginia Reno, Richard Burkhauser, and Monroe Berkowitz, eds., *Disability, Work, and Cash Benefits* (Kalamazoo, MI, W.E. Upjohn Institute for Employment Research, 1996).

<sup>2</sup> This article draws from the material presented in Douglas L. Kruse, *Disability and Employment: Characteristics of Employed and Non-employed People with Disabilities*, Report to the Office of Policy, U.S. Department of Labor, September 1997.

<sup>3</sup> The "employment rate" is the proportion of a given population that is employed.

<sup>4</sup> The Survey of Income and Program Participation (SIPP), a household survey sponsored by the Bureau of the Census, is designed to help meet the statistical needs of many Federal agencies. SIPP collects core data on employment, income, and participation in certain Federal Government programs. The data used in this study were collected between October 1993 and January 1994. For more information on SIPP, see Thomas W. Hale, Howard V. Hayghe, and John M. McNeil, "Persons with disabilities: Labor

market activity, 1994," this issue, pp. 3–12, footnote 1 and references cited therein, including the SIPP page <<http://www.sipp.census.gov/sipp/>> at the official Bureau of the Census Web site <<http://www.census.gov/>>.

<sup>5</sup> This statistic is based on probit regressions using the other demographic variables in table 1 as independent variables. Across the entire sample, persons with severe (nonsevere) disabilities are 16.5 (2.6) percentage points less likely than those without disabilities to have ever been married; once married, they are 12.0 (5.8) percentage points less likely to have remained married.

<sup>6</sup> For more on this topic, see Hale and others, "Labor market activity;" and Kruse, *Disability and Employment*.

<sup>7</sup> Because the SIPP is based on households, but this analysis is based on persons, a particular household's income can show up several times (in as many observations as there are household members meeting the criteria for the analysis). Because larger households therefore get more weight, care should be taken to construe these figures not as averages across *households* (requiring equal weights among households) but as averages across *persons*.

<sup>8</sup> This adjustment was accomplished by weighting each disability household size by the ratio of the proportion of households of that size in the nondisability population to the proportion of households of that size in the disability population.

<sup>9</sup> Probit regressions of poverty status show that, after controlling for the demographic characteristics in table 3 (not employment status), the

poverty rate is 8 percentage points higher among all persons with disabilities than it is among those without disabilities, and 14 percentage points higher among persons with severe disabilities than it is among the nondisability population.

<sup>10</sup> The probit regressions include all demographic characteristics (not employment status) and were run separately for each disability category. All differences by demographic status are significant ( $p < .05$ ) for those without disabilities, and are significant for those with disabilities except for the difference between the two younger age groups, between African-Americans and American Indians and Eskimos, and between whites and Asians and Pacific Islanders among those with severe disabilities.

<sup>11</sup> See Hale and others, "Labor market activity;" and Kruse, *Disability and Employment*.

<sup>12</sup> The positive levels of earned income among nonemployed persons reflect payments for work performed earlier.

<sup>13</sup> A small portion of the disability or retirement income received by persons without disabilities was for temporary sickness or disability.

<sup>14</sup> See Douglas L. Kruse, Alan Krueger, and Susan Drastal, "Disability, Employment, and Earnings in the Dawn of the Computer Age" (Bureau of Economic Research, Rutgers University, 1995).

<sup>15</sup> See Kruse and others, "Disability, Employment, and Earnings;" and Alan Krueger and Douglas L. Kruse, "Labor Market Effects of Spinal Cord Injuries in the Dawn of the Computer Age," Working Paper 5302, (National Bureau of Economic Research, October 1995).