This abstract summarizes trends in disability rates from 1970-1994 data obtained in the National Health Interview Survey. Trends indicate a gradual rise in the prevalence of disability due to demographic shifts associated with an aging population, as well as a rapid increase that has taken place during the past several years due to a greater number of children and young adults reported as having disabilities. Age-specific disability trends and the proportion of the United States population with work disabilities are discussed. The proportion of the population that needs personal assistance is also assessed and indicates that among the working-age population (ages 18-64) the personal assistance rate rose from around 2 percent during the 1980s to 2.7 percent in 1993. Among youth ages 5-17, the rate rose from 0.3 percent in 1990 to 0.5 percent in 1994. Graphs illustrate activity limitation by age and gender, the population with work disability, and the population that needs personal assistance. (CR)

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The proportion of the U.S. population with disabilities has risen markedly during the past quarter-century. As the data presented in this abstract show, two distinct trends have contributed to the increasing overall prevalence of disability: a gradual rise, due largely to demographic shifts associated with an aging population, as well as a rapid increase that has taken place during the past several years. This recent change seems to be due not to demographics, but to greater numbers of children and young adults reported as having disabilities.

Data in this abstract come from the National Health Interview Survey (NHIS), a household survey of the noninstitutionalized U.S. population conducted by the Census Bureau for the National Center for Health Statistics. Disability data from the NHIS have been available annually since 1970 (with the exception of 1982, which is omitted due to a problem with the survey), continuing until 1994, the most recent year for which the survey has been analyzed. Because the NHIS questionnaire was changed substantially in 1982, the observed disability rates change markedly beginning in 1983. This discontinuity, which is an artifact of survey improvements rather than a real difference in the number of people with disabilities, should be kept in mind when examining the graphs presented in Figures 1 and 2. Data on work disability (Figure 3) and personal assistance needs (Figure 4) are only available for the period 1983–94.

Figure 1 shows the overall trend in the proportion of the U.S. population with disabilities, defined as limitations in activity due to chronic health conditions and impairments. In 1970, 11.7 percent of the population experienced activity limitation, increasing gradually over the next decade to 14.4 percent in 1981. During the 1980s, following the change in the survey, the rate remained roughly constant at about 14.0 percent, and then rose rapidly from 13.7 percent in 1990 to 15.0 percent in 1994.

The trends for men and women match each other closely. The 1982 changes to the NHIS resulted in more equal measurement of disability for both sexes in the survey, and since then, men have consistently reported lower disability rates than women. The greater average longevity of women is the main reason for this difference. Before 1982, men were asked specifically about work-related activity limitations, while women were asked about housekeeping; as a result, disability rates for women were artificially low, both for the working ages and for the elderly. Age-adjusted figures show almost identical rates for men and women after 1982, but widely divergent rates under the older version of the survey questionnaire.

The long-term increase in disability rates is largely due to demographic shifts.
**Figure 1: Proportion of U.S. Population with Activity Limitation, 1970–1994.**

When disability rates are computed separately for various age groups (Figure 2), the long-term increase in the proportion with disabilities is much less apparent. Among those 65 years of age and over, the disability rate held roughly constant during the 1970s, at about 48 percent for men and 42 percent for women, and again during the 1980s and early 1990s (using the revised survey questionnaire), at about 38 percent for men and 39 percent for women. The lower rates after 1982 are due to questions in the NHIS that mention self-care activities, rather than work or housekeeping, as the locus of disability within the elderly population.

The elderly experience disability at roughly twice the rate of those in the older working ages (45–64) and four times the rate of the younger working-age group (18–44). A still smaller fraction of children have disabilities. Therefore, the proportion of the overall population with disabilities is heavily influenced by the disability rate among the elderly (which has remained roughly constant) and by the proportion of the population that is elderly. This proportion increased rapidly during the 1970s and more slowly during the 1980s, from 9.5 percent in 1970 to 11.0 percent in 1980 and 12.1 percent in 1990; since then it

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**Note:** Age-adjusted rates are adjusted to the 1994 population in 4 age groups.

**Source:** National Health Interview Survey. National Center for Health Statistics tabulations compiled by the Disability Statistics Rehabilitation Research and Training Center, University of California, San Francisco.

**Age-Specific Disability Trends**

Disability rates for children and younger adults have risen considerably since 1990.
appears to have leveled off. Thus, the aging of the population, rather than an increase in disability rates among any one age group, seems to be responsible for a large part of the long-term increase in disability rates in the overall population. Indeed, when these rates are age adjusted (to the 1994 population using 4 age groups, see Figure 1), the increase is reduced by roughly two-thirds.

Among the older working ages (45–64), disability rates have remained
Figure 3: Proportion of U.S. Population with Work Disability, by Age, 1983–1994.

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**Source:** National Health Interview Survey.

roughly constant from the mid-1970s through the early 1990s (Figure 2). The rates were about 25 percent for men and 23 percent for women before 1982, and 22 percent for men and 23 percent for women after 1982. The proportion with disabilities did increase during the early 1970s, from 21.1 percent of men in 1970 to 25.3 percent in 1974, and from 18.0 percent of women in 1970 to 23.0 percent in 1974. This change may be another consequence of demographic shifts, with a greater fraction of this age group nearing retirement age, and experiencing greater likelihood of disability as a result.

Among people under 45 years of age, the most dramatic changes in disability rates have occurred during the 1990s. Among younger adults (18–44), the proportion with activity limitation increased from 8.7 percent of men and 8.9 percent of women in 1990 to 10.2 percent of men and 10.3 percent of women in 1994. Among children under 18, disability rates underwent a similar increase between 1990 and 1994:

Greater numbers of younger Americans have experienced work disability and personal assistance needs during recent years.

From 5.6 percent to 7.9 percent for boys and from 4.2 percent to 5.6 percent for girls. These changes may be partly accounted for by the increases in the prevalence of asthma, mental disorders (including attention deficit disorder), mental retardation, and learning disabilities that have been noted among children in recent years. Among younger adults, rates of orthopedic impairments and mental and nervous disorders have gone up during the same period.1

Because about 70 percent of the population is under age 45, these steep increases in disability prevalences are responsible for the recent rise in the proportion of the
overall population with disabilities, as shown in Figure 1. The higher rate amounts to an additional 1.5 million children and 3.1 million working-age adults reported as having disabilities in 1994, compared to 1990. Although the Social Security Administration has also seen an increase in the number of younger disability beneficiaries during this same period, the number of people involved is much smaller: between 1990 and 1994, the Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI) rolls grew by 0.6 million children and 1.7 million working-age adults. Thus, the NHIS hints at a much broader phenomenon than that reflected by the increase in Social Security recipients.

Before 1990, disability rates for both children and younger adults had held steady for nearly 2 decades. Among children, girls had a (post-1982) disability rate of about 4.5 percent, while boys had a higher rate, roughly 6 percent. The rate for boys is consistently higher due to a greater prevalence of mental retardation and developmental disabilities. Among adults under 45, the disability rate for men was about 9 percent, and for women about 8.5 percent. Again, there is some evidence for an increase in disability rates for both of these age groups during the early 1970s.

Work Disability

Work disability is measured as a limitation in a person's ability to work due to a chronic health condition or impairment. Figure 3 shows the rates of work disability—both for people unable to work and those who are limited in

Source: National Health Interview Survey.
the amount or kind of work they can do—for the working-age U.S. population from 1983 through 1994. No significant trend is observed for the older working ages, among whom roughly 11 percent are unable to work and 7 percent are limited in amount or kind of work.

Among the younger working ages, the rate of work disability is generally much lower, with roughly 3 percent unable to work and about 3.5 percent limited in amount or kind of work. Beginning in 1990, a trend is apparent among those younger adults who are unable to work, echoing that found in the activity limitation data: an increase from 2.9 percent unable to work in 1990 to 3.7 percent in 1994.

### Personal Assistance Needs

Figure 4 shows the trend in personal assistance needs from 1983 to 1994. People who need the assistance of another person in order to perform basic life activities—the so-called activities of daily living (ADL), such as bathing, dressing, and feeding oneself, and the instrumental activities of daily living (IADL), including household chores, handling money, and shopping—are considered to have fairly severe disabilities. No trend is visible among the elderly population, of whom roughly 16 percent require personal assistance.

Among the working-age population (ages 18–64), however, the personal assistance rate rises from roughly 2.0 percent during the 1980s to 2.7 percent in 1993. Among youth (ages 5–17), the rate rises from 0.3 percent in 1990 to 0.5 percent in 1994. Thus the need for personal assistance is another indicator of the increase in the prevalence of disability among younger Americans during the past several years.

### Notes

1. Disabling condition trend data from unpublished tabulations by Mitchell P. LaPlante.
2. This category includes persons under 17 years of age for 1970-81 and under 18 for 1983-94.
3. Age range for younger adults is 17–44 for the

### Credits

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