

Background Information on the Hearing-Impaired Population

The hearing-impaired (i.e., hard-of-hearing and deaf) population of the United States is difficult to define. A census of the people with hearing impairments, taken in 1970-71, is the only extensive effort that has been made to date. Subject to errors resulting from nonresponse, this census still offers the best available figures: 13,362,842 hearing-impaired persons (persons with any degree of hearing impairment) in the United States, including 1,767,046 deaf persons (35).

A 1978 survey conducted by Bell Laboratories as part of its planning for products and services indicated that 16,650,000 people in the United States are hearing impaired to some degree (2). That survey found that 4,070,000 of these people have a hearing impairment that affects telephone use: 440,000 people who have a profound or total hearing loss and cannot use the telephone without a telecommunications device such as a teletypewriter (TTY); * 1,630,000 severely hearing-impaired people who use a hearing aid and who cannot use the telephone without additional amplification; ** and 2,000,000 less severely hearing-impaired people who probably do not use a personal hearing aid, but who can benefit from additional amplification in the telephone handset.

The Bell Laboratories survey also indicated that there are 8,000 people, not hearing impaired but with *severe* speech problems, who might use a telecommunications device. This figure is unquestionably low, because the nonvocal group of the disabled population, those who hear but cannot speak owing to neurological or motor impairment or surgery or an accident, are the most recently

defined and possibly still the most poorly identified of all the handicapped groups.

The Office of Demographic Studies, located at Gallaudet College, Washington, D. C., was formed to organize the 1970-71 census of the deaf, and it has continued publishing statistics, notably the results of its annual survey of hearing-impaired youth receiving education in special schools and programs. The Office of Demographic Studies and the National Center for Health Statistics make prevalence estimates based on the census and on new information from the annual survey of schools. Current estimates show 14.5 million persons with any type of hearing disorder and 2 million severely hearing-impaired persons who could be termed "deaf" (24).

Approximately 300,000 deaf persons were born deaf or lost their hearing before the age of 3 and thus are considered "prelingually" deaf. Traditionally, it was said that these children could not be educated in the regular school system, because they lacked a language base from which they could be taught to speak and read. With the implementation of the Education for All Handicapped Children Act (Public Law 94-142), more deaf and hearing-impaired youngsters are being educated within the regular public school system. Whether or not such education is effective for all prelingually deaf children is an issue hotly debated in the education community. However, the result of the "mainstreaming" trend is that fewer deaf children are being educated in State schools and special classes; the fewer deaf children there are in these school systems, the less likely they are to be reached by the Annual Survey of the Office of Demographic Studies, and the less complete is the information available.

Approximately 600,000 deaf persons became deaf before entering the work force and thus are considered "prevocationally" deaf. Some of these persons had a progressive hearing loss that did not manifest itself completely until young adult-

*TTY was formerly used as the generic term for telecommunications devices for the deaf. The acronym currently used for all telecommunications devices for the deaf, including teletypewriters (TTYs), cathode ray tubes (CRTs), and light-emitting diodes (LEDs) is TDD.

•Many telephones manufactured in the last 5 to 10 years are not compatible with the "telephone switch" on hearing aids, which has created a new barrier for hearing-impaired people.

hood, and others were deafened from disease or accident in childhood or adolescence. Although the rubella epidemic of 1964-65 as it affected pregnant women is a main cause of deafness in deaf youth who became 18 in 1982, "cause not determined" is still the most common cause of deafness in all age groups (24).

At least three-quarters of the hearing-impaired population of the country may have some hear-

ing loss due to aging. As the population of the country over 60 increases, the incidence of hearing impairment increases dramatically. Most individuals who lose their hearing in adulthood do not consider themselves part of the deaf community and do not take advantage of its information and services. Many technological devices can be of considerable benefit both to the traditional deaf community and to gradually deafened older Americans.