

disabled persons. Even today, a separate division for the blind exists within the N.C. Department of Human Resources.

But community-oriented and advocacy-based services were the exception. Institutional care remained the dominant state response to handicapped persons, and each institution evolved into an autonomous agency. In 1943, the bureaucratic structures began to change. After a

special inquiry into complaints of abuse and neglect in the institutions, Gov. J. Melville Broughton recommended to the General Assembly that a Hospital Board of Control be established to oversee the operations of the institutions for the mentally ill.

From 1943 to 1963, this board administered these institutions. In addition, the Mental Hygiene section within the Department of

How Many North Carolinians Are Disabled?

In writing about handicapped persons, one must first determine just what is a handicap. Is an elderly person who can't hear a handicapped person? An alcoholic undergoing rehabilitation? A person who can no longer work because of an injury or disease? The two best sources for defining "handicapped persons" are federal regulations in this area and federal data-gathering studies.

Regulations issued in 1977 by the then U.S. Department of Health, Education, and Welfare to implement Section 504 of the Rehabilitation Act of 1973 defined a "handicapped person" as "any person who (i) has a physical or mental impairment which substantially limits one or more major life activities, (ii) has a record of such an impairment, or (iii) is regarded as having such an impairment" 45 CFR 84.3(j) (1). The regulations go on to define "major life activities" as "functions such as eating for one's self, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working" 45 CFR 84.3(j) (2) (ii). If a condition limits one or more major life activities, it is a handicapping condition, according to these regulations.

The U.S. Census, in a 1976 Survey of Income and Education, used a similar definition. It considered persons disabled if they had a chronic health condition that prevented them from participating in a major activity appropriate to their age group. The National Center for Health Statistics used similar criteria in its 1980 Health Interview Survey, identifying handicapped persons as those limited in some way by a chronic health condition.

Using virtually the same criteria, it is not surprising that the U.S. Census and the National Center for Health Statistics reported about the same statistics on the number of handicapped persons living in the United States. The Health

Statistics study found that 14.6 percent of the noninstitutionalized population is limited in some way by a chronic health condition, or some 31.5 million Americans. The study found 3.7 percent of the population with a severe disability, where a person is unable to carry on some major activity such as attending school, working, or housekeeping. Disability increases significantly with age: 46 percent, or almost one of every two persons over age 65, had a chronic condition that limited a normal activity; 16.9 percent of the elderly population could not continue some major activity.

The U.S. Census reported other factors underlying these figures. The Census found, for example, that 17.6 percent of the nation's black population was disabled, compared to 13.7 percent of the white population. The Census reported a much higher prevalence* of disability among poor people than the non-poor (28.7



Table 1. Three Methods of Estimating the Number of Disabled Persons in North Carolina

<i>1. Based on reported figures for different age groups:</i>	
15,000	pre-school children (estimate from Frank Porter Graham Center for Child Development)
175,000	school children receiving special education (Department of Public Instruction)
371,000	persons aged 18-64 with a work disability (U.S. Census)
277,000	persons aged 65 and over with some disability (using the 46 percent of elderly population reported by the National Center for Health Statistics)
838,000	Total Disabled Persons in North Carolina
<i>2. Based on Race (Census):</i>	
232,000	17.6 percent of black population (1,319,000)
611,000	13.7 percent of white population (4,458,000)
14,000	13.7 percent of "other" population (105,000)
857,000	Total Disabled Persons in North Carolina
<i>3. Based on Flat Percentage (Katz and Martin)</i>	
1,012,000	Total Disabled Persons in North Carolina
	17.2 percent of total population (5,882,000)

*Note the difference in prevalence and incidence. Incidence rates measure the rate at which people without a handicapping condition develop the condition during a specified period of time, i.e., the number of new cases in a population over a period of time. Prevalence rates measure the total number of people in a population who have a handicapping condition at a given point in time. Throughout this discussion of the number of handicapped persons, we are referring to prevalence rates.

Public Welfare monitored the quality of care in the institutions. Then in 1963, as part of a general government reorganization, the Hospital Board of Control was abolished and the Department of Public Welfare was reorganized. A new Department of Mental Health, under the control of a new State Board of Mental Health, took over responsibility for the mental hospitals. Two other new departments—Health Services

and Social Services—assumed responsibility for the few community-based services that existed. Finally, in 1973, the current Department of Human Resources came into being, with its various divisions having the lead responsibility for most handicapped services. Education, building regulations, transportation accessibility, and other services affecting the handicapped are in other departments (see chart

percent compared to 11.8 percent for the 18 to 64 age group).

Finally, an extensive study of handicapped persons by Alfred H. Katz and Knute Martin (*A Handbook of Services for the Handicapped*, Greenwood Press, 1982) reported that in 1980, 17.2 percent of the nation's population had an "activity limitation caused by chronic physical or mental impairment." The Katz and Martin study relied on the studies mentioned above as well as other reports and studies on handicapped persons (see Table 1 of that book, p. xi).

In North Carolina, no one has made an actual survey of the number of handicapped persons in the state, although various studies and estimates of some portion of the handicapped population have been made. In 1974, for example, the Department of Public Instruction, the Department of Human Resources, and Parents and Professionals for Handicapped Children jointly sponsored a statewide census of children with special educational needs. Even this 1974 study, which cost \$100,000 and was mandated by the General Assembly when it passed the Creech Bill, depended upon statewide estimates based on in-depth surveys of only 10 counties. The Council on Developmental Disabilities estimates that there are 92,760 persons in North Carolina with a developmental disability. The council arrived at this figure through a projection formula based on a national model (see "Developmental Disabilities Three Year State Plan, 1984-86," p. 1.3). This figure does not include many children covered by special education law, many adults who cannot work because of an acquired disability, and many elderly persons with a disabling condition.

Using the percentages of the population that are disabled in the national studies mentioned above, about 850,000 North Carolinians would be expected to have some kind of disabling condition, or about one of every seven persons in the state (See Table 1 at left).

Just as determining the total number of handicapped persons is an inexact science, identifying the number of persons having different types of handicapping conditions also requires estimates. Depending on how a researcher defines a handicapping condition, prevalence levels might vary significantly from study to study. A 1973 study conducted by the Fiscal Research Division of the General Assembly ("Study of Exceptional Children in North Carolina" by Ran Coble and Ray Shurling) explains why. "If you define speech-impaired as 'having a cleft palate', the study points out, 'you have a different clientele than would be approached if you define speech-

Table 2. Prevalence of Handicapping Conditions

	Bureau of Education for the Handicapped (August, 1970) ¹	Public Instruction (1970-71) ²	Studies Done for N.C. Office of Comprehensive Health Planning by Ken Lessler, Ph.D (Jan.-March, 1971) ³
Speech-impaired	3.5%	6.0%	5-64%
Emotionally disturbed	2.0%	3.0%	1.1-70%
Mentally retarded	2.3%	3.9% ⁴	
Learning disabled	1.0%	3.0%	15-66% ⁵
Hearing-impaired	0.5% for hard of hearing 0.075% for deaf	0.5%	less than 1%
Crippled	0.5% for crippled or other health-impaired	0.5%	less than 2% 0.2-0.3% ⁶
Visually impaired	0.1%	0.2%	4.9-10.0% ⁷

¹Published in Samuel Kirk, *Educating Exceptional Children*, p. 24.

²Estimates in use by the State Department of Public Instruction's Exceptional Children's Division.

³This column is the least solid and most likely to be misunderstood, but because part of the author's task was getting incidence data, we include his ranges of prevalence. The reason ranges are given is because Dr. Lessler was aware of many studies; he served to consolidate them and to illustrate the problem of definition.

⁴Trainable and educable retarded.

⁵Visual perception problems only.

⁶Heart disease only.

⁷Vision or eye defects beginning at 20/40 acuity.

Reprinted from "Study of Exceptional Children in North Carolina," Fiscal Research Division, N.C. General Assembly, August 1, 1973.



Courtesy DHR

impaired as 'having an impairment which limits the ability to communicate.' To show how widely prevalence rates can vary, the fiscal researchers included the chart reprinted here (see Table 2). While the figures may be somewhat dated, they still illustrate three important points: 1) that there are different prevalence rates for different types of handicaps; 2) that how you define a handicapping condition determines whether the prevalence levels are high or low; and 3) that there is a wide range of prevalence levels reported by various researchers.

Handicapping conditions include everything from alcoholism, cancer, and diabetes to learning disabilities, mental retardation, and speech and visual impairments. Often, persons have multiple handicaps, which makes counting the exact number of persons with handicapping conditions even harder. Regardless of the exact number of disabled persons in the state, the number of handicapped persons is high indeed, and it will get higher, especially as the percentage of the population over age 65 increases.