# Disabled Beneficiary Population, 1957-66

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BENEFICIARIES of the Federal disability insurance program make up a large and growing portion of workers and others in the United States who cannot enter or continue in the labor force because of severe and longlasting impairments.

From 1957, when disability benefits were first payable under the social security program, to the end of June 1970, more than 5 million persons have filed applications for these payments. Most of them were workers who had old-age, survivors, and disability insurance coverage and as a result of their labor, had some income protection against loss of wages due to disability. About 350,000 applicants, however, had never worked; their disabilities, largely perinatal in origin, began in childhood and continued into adulthood. These were children of insured workers who were retired or dead or who were themselves seriously disabled.

The presence of a disability severe enough and of sufficient duration to qualify them for benefits was established by medical evidence for more than 3 million former workers. Their disabilities were severe enough to force them into early retirement from the labor force, most of them permanently.

During adjudication of their claims it was established that most applicants, even those who did not qualify for benefits, had some abnormal mental or physical condition, usually chronic, that signaled the need for medical attention. In the years that followed, some of those who had not qualified earlier became able to meet the disability requirements and gain entitlement to benefits.

Of the 3.5 million who qualified for benefits over the years, 1.5 million were still receiving them at the end of 1970. For others, disability benefits had been terminated for one of three major reasons—death, recovery, or attainment of retirement age. About one-half of those whose benefits were terminated died and almost 2 in 5 became entitled to old-age benefits at age 65 (table 1). About 1 in 10 left the rolls because their conditions improved to such an extent that they no longer met medical standards for entitlement

under the program or they had returned to work. Among the reasons for termination of benefits, the disabled person's recovery and return to substantial, gainful employment showed the greatest year-to-year change, increasing from 3 percent of terminations in 1958—the first full year of benefits—to 18 percent in 1967. In 1968 and 1969, however, the proportion recovering declined.

Although the number of benefits in force and the number of terminations rose steadily from 1957 to 1969, the proportion of disabled worker beneficiaries whose benefits were terminated during the year remained relatively constant from 1960 to 1969. As table 2 shows, the proportion with benefits terminated was highest during the first 2½ years of benefit payments, when the beneficiaries were drawn primarily from a backlog of workers who had been severely disabled for many years. In 1959, benefits were terminated for 19.6 percent of the disabled workers in contrast to a low of 13.3 percent in 1966.

Although there was a small overall decrease, the proportion of workers who died before age 65 or who attained age 65 was also relatively constant. On the other hand, the proportion whose

Table 1.—Workers with disability benefits terminated, 1957–69: Number and percentage distribution, by reason for termination

Year of		F	ercentage of	distribution termination		n
termination	Number	Total	Death of bene- ficiary	Attain- ment of age 65	Recov-	Other
Total number.	1,768,066		865,050	672,440	204,244	26,332
Total percent		100.0	48.9	38.0	11.5	1.5
1957	16,131	100.0	55.4	35.7	.3	8.6
1958	52,949	100.0	53.1	43.4	2.6	.9
1959	81,982	100.0	52.2	43.5	3.9	.4
1960 1961	89,090	100.0 100.0	48.9 52.4	47.2	3.5	.4
1962	115,546 128,299	100.0	52.4	44.5 40.0	$\frac{2.5}{7.4}$	.6
1963	137,850	100.0	53.2	36.8	9.4	.7
1964	138,576	100.0	54.7	32.7	11.9	.7
1965	156,648	100.0	51.0	36.4	11.8	. 9
1966	168,630	100.0	50.0	35.4	13.7	9
1967 1968	208,899 222,197	100.0 100.0	44.1 45.0	36.8	17.8	1.3
1969	251,269	100.0	43.3	$\begin{array}{c c} 36.1 & \\ 37.2 & \end{array}$	17.0 15.2	1.9 4.3

 $<sup>^1</sup>$  Disabled persons ceased to meet medical standards for disability or continued to meet medical standards for disability but engaged in substantial gainful activity.

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Table 2.—Workers with disability benefits awarded and in force during year, 1957-69: Terminations as percent of benefits in force, by reason for termination

		ber of efits			s as percer eason for		
Year	Awarded	In force during year	Total	Death of bene- ficiary	Attain- ment of age 65	Re- cov- ery 1	Other
1957 1958 1959 1960 1961 1962		178,802 294,153 419,015 544,838 735,506 870,594	9.0 18.0 19.6 16.4 15.7 14.7	5.0 9.6 10.2 8.0 8.2 7.7	3. 2 7. 8 8. 5 7. 7 7. 0 5. 9	(2) 0.5 .8 .6 .4 1.1	0.8 .2 .1 .1 .1
1963 1964 1965 1966 1967 1968 1969		966,034 1,035,776 1,150,699 1,272,396 1,405,125 1,521,580 1,644,124	14.3 13.4 13.6 13.3 14.9 14.6 15.3	7.6 7.3 6.9 6.6 6.5 6.6	5.2 4.4 5.0 4.7 5.5 5.3 5.7	1.3 1.6 1.6 1.9 2.6 2.5 2.3	.1 .1 .1 .2 .3

<sup>&</sup>lt;sup>1</sup> Disabled person ceased to meet medical standards for disability or continued to meet medical standards for disability but engaged in substantial gainful activity.
<sup>2</sup> Less than 0.05 percent.

benefits were terminated because of recovery or improvement in their disabilities showed a small steady decline. The fact remains, however, that in 1969 less than 3 percent of those whose benefits were in payment status during that year had them terminated because of recovery.

A great volume of data about disabled persons is amassed in the records of the social security program during the process of insuring workers, adjudicating their claims for disability benefits, and carrying out postadjudicative responsibilities toward them. These byproducts of the operation of the insurance program can have significant relevance in assessing trends in the social and economic position of the disabled as a group. They are important also in any assessment, for national program purposes, of the magnitude of the therapeutic and rehabilitation needs of the disabled. Termination rates are also important factors in the continuing evaluation of the cost of the disability insurance program.

Who are these workers who qualify for disability benefits? What are their characteristics their ages, their sex and race? What are the causes of their impairments? How long have they been disabled? What is the relationship between these circumstances and the length of time they stay on the rolls? Why do they leave the rolls? What changes occur over the years in regard to these factors?

These are some of the questions to which this report is directed. It focuses on the full complement of workers who received disability benefits at some time between July 1957 and the end of 1966, including those who were in institutions when they applied for benefits or at some time in the succeeding years.

The article discusses demographic, diagnostic, and related data on disabled-worker beneficiaries, including both those whose benefits were terminated and those who remained on the rolls at the end of the period under study. Additions to and attrition from the beneficiary rolls in terms of these characteristics are examined, as well as the reasons for termination of benefits—death, "recovery," attaining age 65 with entitlement to oldage benefits. Also studied are the characteristics of workers who returned to the disability benefit rolls after their benefits were terminated because of recovery.

(The term "recovery," when it is used as a reason for termination of disability benefits, refers to the level of disability as it applies to work ability rather than to the physical or mental condition that caused the disability. For example, a worker who qualified as disabled under the social security program because of a severely disabling heart condition of extended duration may, after therapy, be considered able to return to work because of a reduction in its severity although a heart abnormality remains. As another example, a beneficiary whose primary diagnosis was pulmonary tuberculosis may experience such. improvement in his condition that he regains the ability to work although the level of his disease has progressed only from active to "arrested." A third beneficiary may have experienced little change in his disability and continue to meet medical standards for disability but may engage in substantial gainful activity, and so be dis-

Table 3.—Workers entitled to disability benefits, 1957-66: Number and percentage distribution, by sex and race

		Percen	tage dist	ribution	by sex a	nd race
Year of entitlement	Total number	Total	Men	Women	White	Negro and other races
Total	2,156,196	100.0	78.3	21.7	86.0	14.0
1957	282,875	100.0	81.7	18.3	89.1	10.9
1958	148,797	100.0	82.4	17.6	87.3	12.7
1959	141,079	100.0	81.4	18.6	87.1	12.9
1960	320,116	100.0	80.0	20.0	85.6	14.4
1961	226,934	100.0	79.4	20.6	85.4	14.6
1962	206,870	100.0	77.0	23.0	85.1	14.9
1963	225,708	100.0	75.4	24.6	84.9	15.1
1964	223,228	100.0	74.3	25.7	84.9	15.1
1965	231,884	100.0	75.6	25.4	85.9	15.1
1966	148.705	100.0	77.3	22.7	85.3	14.7

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The data on which this report is based were obtained from the "termination rate" file developed by the Office of the Actuary. Data from several records were combined into one file. This file provided, on a continuing basis, data not previously available on disabled workers with benefits in force during and at the end of each year, starting with July 1957. The data include demographic characteristics, diagnoses, the date of case adjudication, and other claims information.

As a result of this data linkage, diagnostic and other disability characteristics are readily accessible for analysis on all persons receiving benefits during a particular time period, rather than, as previously, only for disabled workers "allowed" a period of disability. It is now possible, for example, to compare the diagnostic and related characteristics of disabled workers whose benefits were in payment status at the end of any year or who at one time did receive benefits.

It should be pointed out, however, that the data for 1965 and 1966 are incomplete. Applications for benefits processed in 1967 and in 1968 resulted in some retroactive entitlement to benefits for 1966 and 1965. Among workers who were awarded benefits in 1967 about 130,000 had entitlement periods that also began in 1966, and 24,000 workers had entitlement periods that began in 1965. Data processing for the 1957–66 period

described here was cut off at the end of 1966. The data for the calendar years 1966 and 1965 presented here may, therefore, not be truly representative of the characteristics of the disabled workers who were entitled in these years. It should be noted that entitlement can be retroactive and thus precede the date of award and that retroactivity can extend up to 12 months before the date of application for benefits. Differences in the proportional distributions of characteristics for 1955 and 1966 should be reexamined when data on retroactive entitlements become available.

#### **FINDINGS**

Most workers who became entitled to disability benefits between July 1957 and December 1966 were white (86 percent) and men (about 78 percent for all races), as table 3 shows. This aggregation represented a gradual increase among beneficiaries in the proportion of workers who were not white—from 11 percent in 1957 to 15 percent in 1966. Similarly, the ratio of women to men increased from 18 percent in 1957 to 25 percent in 1965. At the end of 1966, about 6 in 7 beneficiaries were white and more than 3 in 4 beneficiaries were men.

For women and for workers of races other than white, the upward trend that can be noted in the proportion becoming entitled to benefits each year does not necessarily reflect any changes in the prevalence of qualifying disabilities among these population groups during the 10 years from 1957 to 1966 or in the yearly incidence of physical or mental disabling conditions. Many factors may account for the changes, including increased

Table 4.—Workers entitled to disability benefits, 1957-66: Number and percentage distribution, by age in year of onset and age in year of entitlement

			Percentage distribution								
Year Number Total	Number	Total		Age	in year of on:	set		A	kge in year o	f entitlement	•
		Under 35	35–39	40–49	50-59	60-64	Under 35	35-49	50-59	60-64	
Total	2,156,196	100.0	6.7	4.9	18.5	46.7	23.1	4.3	19.8	45.2	30.
957 958 959	282,875 148,797 141,079	100.0 100.0 100.0	(¹) .1 .1	.6 .7 .9	15.0 11.3 9.9	60. 6 55. 2 53. 2	23.8 32.7 35.8	(2) (2)	(2) (2) (2)	52. 4 56. 3 58. 2	47. 43. 41.
960 961 962 963.	320,116 226,934 206,870 225,708	100.0 100.0 100.0 100.0	19.1 7.2 6.3 7.8	10.8 5.6 5.3 5.7	24. 2 19. 4 20. 0 20. 4	27.7 43.4 48.4 47.1	18.3 24.4 20.1 19.0	8.2 5.3 5.4 5.2	40.0 23.8 23.7 24.9	29.9 42.0 46.0 45.7	21. 28. 24. 24.
964 965 966	223, 228 231, 884 148, 705	100.0 100.0 100.0	6.5 6.3 5.2	5.2 5.2 4.3	20.2 19.8 18.0	48.6 46.7 46.3	19.4 22.0 26.3	5.0 5.3 4.7	23.7 23.5 20.7	46. 6 44. 4 43. 3	24. 26. 31.

<sup>&</sup>lt;sup>1</sup> Less than 0.05 percent.

<sup>&</sup>lt;sup>2</sup> Persons under age 50 were not entitled to disability benefits until November 1960.

knowledge about social security benefits as a resource for disabled men and women and continuing efforts on the part of the Social Security Administration to reach potential beneficiaries.

The program rolls attest to the fact that although long-lasting disability is most often a condition of the middle and upper ages, workers of all ages may be similarly incapacitated and many can be expected to remain so for the rest of their lives. In 1957, for example, when disability benefits were payable only to persons aged 50-64, 16 percent of those who qualified had become disabled before they reached age 50 (table 4). In 1960, when workers under age 50 became eligible to receive benefits, more than half of those newly entitled in that year (54 percent) were disabled before age 50. These figures, of course, do not include the adults who received benefits as disabled "children" because they were sons and daughters of insured disabled, retired, or deceased workers and became disabled before age 18.

As reflected in the data here, the year of onset of the disability refers to the latest rather than the earliest time of onset of the disease or condition that caused or precipitated the disability. As applied by the Social Security Administration, onset pertains to the point in time at which the worker became unable to engage in "substantial gainful work." This onset date may or may not be the same as that of the disease or trauma that initiated the deterioration in the physical or mental condition. In some situations—a severe automobile injury, for example—the date of the trauma and the date of the disability onset may be the same. In other situations, such as tuberculosis cases, the disability may be the result of acceleration in the course of the disease-from slight deterioration to far advanced, for example.

Although upon entitlement workers were of necessity older than when they became disabled, a significant proportion were still in the younger age groups. In 1966, for example, about 1 in 20 was under age 36 and 1 in 4 under age 50.

## **Diagnostic Characteristics**

The diagnostic data in this report refer only to the condition considered to be the primary cause of disability. All the conditions that may have contributed to the severity of the qualifying impairment are not identified in the records. Yet, the fact that severe disability can result from a wide variety of related and unrelated diseases is demonstrated by the distribution of primary causes of disability among workers who qualified.

More than 700 different disabling conditions were identified, but 12 primary diagnoses accounted for more than half of the conditions reported. As table 5 indicates, arteriosclerotic heart disease, including coronary disease, was by far the most prevalent condition (18.0 percent). Emphysema was the primary cause of disability among 6.3 percent and schizophrenic disorders among 5.8 percent.

Certain differences in the distribution of these conditions were apparent for race and sex. White workers, for example, were only about half as likely as Negroes and those of other races to have pulmonary tuberculosis as a primary diagnosis, and men, regardless of race, were about three times as likely to have pulmonary tuberculosis as their female counterparts. On the other hand, arteriosclerotic heart disease was more frequently

Table 5.—Twelve primary diagnoses of disabling conditions occurring most often among workers entitled to disability benefits, 1957–66: Percent of all diagnoses, by race and sex

					Percer	t of all dia	diagnoses					
Primary diagnosis	Inter- national code	Number	Total		White Negro and other							
			10021	Total	Men	Women	Total	Men	Women			
Arteriosclerotic heart disease, including coronary disease		380,134	17.6	18.5	19.7 8.0	14.1	12.1	12.0	12.4			
EmphysemaSchizophrenic disorders	300	135,044 125,054	6.3 5.8	5.8	5.4	$\begin{bmatrix} 2.5 \\ 7.0 \end{bmatrix}$	6.0	3.6 6.2	1.1 5.3			
Certain and unspecified hypertensive heart diseasePulmonary tuberculosis	443 002	97,042 83,827	4.5 3.9	3.2 3.4	2.9	4.2	12.5	11.4	16.6			
Osteo-arthritis and allied conditions.	723	69,278	3.9	3.4	$\frac{4.0}{2.9}$	1.4 4.1	6.6 3.5	7.7 3.4	2.6			
Rheumatoid arthritis and allied conditions	722	58,979	2.7	2.9	2.3	4.9	1.7	1.3	3.2			
Cerebral haemorrhage	331 332	57,631	2.7 2.6	2.5 2.5	2.6 2.7	$\frac{2.1}{2.1}$	3.9 2.8	3.9 2.9	4.0			
Diabetes mellitus		55,348 53,806	2.5	2.4	2.7	3.0	3.1	$\frac{2.9}{2.3}$	5.9			
Displacement of intervertebral disc	735	29,437	1.3	1.4	1.5	1.2	1.1	1.2	".			
Diseases of the mitral valve	410	25,892	1.2	1.3	2.4	2.4	.7	.6				

Table 6.—Workers entitled to disability benefits, 1957-66: Number and percentage distribution, by diagnostic group, sex, and

	Inter-		F	ercentage di	stribution by	sex and rac	e
Diagnostic group	national code	Number	Total	Men	Women	White	Negro and other races
Total number		2,156,196		1,688,112	468,084	1,853,469	302,727
Total percent			100.0	100.0	100.0	100.0	100.0
Infective and parasitic diseases_Neoplasms.  Allergic, endocrine, metabolic, and nutritional diseases_Diseases of the blood and blood-forming organs.  Mental, psychoneurotic, and personality disorders. Diseases of the nervous system and sense organs. Diseases of the experiment of the circulatory system. Diseases of the respiratory system. Diseases of the genito-urinary system. Diseases of the genito-urinary system. Diseases of the skin and cellular tissue. Diseases of the bones and organs of movement. Congenital malformations. Symptoms, senility, and ill-defined conditions. Accidents, poisonings, and violence (alternative classification). All others (including unknown)	140-239 240-289 290-299 300-329 300-329 400-468 470-529 530-637 690-716 720-749 780-759 800-999	123,148 188,115 68,974 5,411 247,497 361,299 622,739 178,468 41,050 6,973 221,179 13,897 2,425 40,093 20,324	5.7 8.7 3.2 .3 11.5 16.8 28.9 9 8.3 1.9 .7 .3 10.3 6 .1 1.9 .9	6.5 8.1 2.7 .2 10.7 17.2 29.1 9.6 1.9 .6 .3 9.5 .6	2.9 11.2 4.9 .3 14.1 15.1 28.3 3.5 1.9 .9 .9 .5 13.0 .8 .1 1.5	5.0 9.1 3.1 .2 11.8 16.5 28.4 8.9 2.0 6 .3 10.5 .7 .1 1.8 .9	10.1 6.22 4.00 .33 9.88 18.3 31.88 4.6 1.2 9.9 .4 9.00 .5 .1 1.20

the cause of disability among white workers, and among white men, in particular.

Most pronounced was the difference in the relative position of hypertensive heart disease as a cause of disability (table 6). It was almost four times as likely to be indicated as the primary diagnosis among men and women who were not white as among white workers. For Negroes and those of other races, it was more prevalent among women than men.

By disease groups—categories of separate but usually related morbid conditions—diseases of the circulatory system were the most prevalent (28.9 percent). Diseases of the nervous system and sense organs (16.8 percent), mental, psychoneurotic, and personality disorders (11.5 percent), and diseases of the bones and organs of movement (10.0 percent) were second, third, and fourth in order of frequency.

Table 7.—Workers entitled to disability benefits, 1957-66: Number with benefits terminated as a percent of total, by reason for termination

Year of	Termina	tions as per ter	cent of tota mination	al, by reaso	on for
entitlement	Total	Attained age 65	Death	Re- covery	Other
Total number	1,053,011	416,845	556,496	69,474	10,196
Percent	48.8	19.3	25.8	3.2	0.5
1957. 1958. 1959. 1960. 1961. 1962. 1963. 1964. 1965.	87.5 81.7 76.2 50.0 55.5 46.3 35.4 25.9 18.9	47.6 41.9 38.8 18.3 21.0 12.8 7.5 3.6 2.5	36.8 37.4 35.3 27.2 29.6 27.8 23.4 19.1 12.8 6.8	1.4 1.7 2.0 4.4 4.8 5.4 4.3 3.0	1.7 .7 .2 .1 .1 .2 .2 .3

About a third of the beneficiaries had primary disease conditions that were dispersed throughout the remaining diagnostic groups. Here, too, their distribution differed with sex and race. For example, women were more likely than men to have qualified as disabled because of a neoplastic condition—11.2 compared with 8.1 percent, and white workers were more likely than those who were not white—9.1 percent compared with 6.2 percent. Respiratory conditions were about three times as prevalent among men as among women and about twice as prevalent among white workers as among the others.

Of course, these sex and race differences in the prevalence of the primary diseases do not necessarily reflect the distribution of the same conditions among similar groups in the general population or among all of the severely disabled workers under age 65 who because of ill health are no longer in the labor force. The time and duration of their employment, as well as the

Table 8.—Workers with disability benefits in force during year, 1957-66: Benefits terminated as a percent of benefits in force, by sex and race

Year of	Number of benefits	Terminat	ions as percer by sex a		s in force,
entitlement	in force during year	Men	Women	White	Negro and other races
1957 1958 1959 1960 1961 1962 1963 1964 1965 1966	282,875 407,901 490,899 737,132 872,754 965,071 1,067,659 1,157,867 1,255,891 1,252,129	9.3 15.7 16.8 13.7 14.3 13.8 13.4 12.3 12.9 12.5	4.6 7.7 8.0 7.4 8.8 9.2 9.5 9.2 9.5	8.5 14.6 15.4 12.7 13.4 13.0 12.7 11.7 12.2 12.1	7.3 11.6 12.9 10.6 11.6 11.2 11.7 11.9

Table 9.—Workers entitled to disability benefits, 1957-66, and with benefits in force at end of 1966: Benefits terminated as a percent of benefits in force, by year of termination, sex, and race

						Pe	ercentage	distribu	ıtion					
Year of entitlement	Number	ı	With			Wi	th benef	its termi	nated, by	year of	terminat	ion		
i		Total	benefits in force at end of 1966	Total, 1957-66	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
						All	workers						·	
Total number	2,156,196		1,103,185	1,053,011	23,771	58,081	73,883	91,312	114,553	123,120	133,020	133,860	152,467	148,944
Total percent		100.0	51.2	48.8	1.1	2.7	3.4	4.2	5.3	5.7	6.2	6.2	7.1	6.9
1957 1958 1959 1960 1961 1962 1963 1964 1965	282,875 148,797 141,079 320,116 226,934 206,870 225,708 223,228 231,884 148,705	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	12.5 18.3 23.8 50.0 44.5 53.7 64.6 74.1 81.1 91.2	87. 5 81. 7 76. 2 50. 0 55. 5 46. 3 35. 4 25. 9 18. 9 8. 8					9.8 11.5 12.8 10.6 7.9			5.0 6.1 7.3 6.7 8.8 10.0 10.3 6.8	4.7 5.6 6.9 6.2 8.9 9.8 9.7 10.3 6.9	3.3 3.9 4.8 4.6 6.5 8.3 8.8 12.0 8.8
							Men							
Total number	1,688,112		813,308	874,804	21,408	52,299	66,230	80,059	98,093	103,078	108,805	107,345	120,806	116,681
Total percent		100.0	48.2	51.8	1.3	3.1	3.9	4.7	5.8	6.1	6.4	6.4	7.2	6.9
1957	231,107 122,659 114,897 256,021 180,210 159,333 170,156 165,768 173,082 114,879	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	10.5 15.6 20.7 47.5 41.7 51.4 62.1 72.0 79.7 90.8	89. 5 84. 4 79. 3 52. 5 58. 3 48. 6 37. 9 28. 0 20. 3 9. 2		18.4					6.1 7.8 9.4 8.5 11.9 12.0 7.1	4.5 5.7 7.1 6.7 9.2 10.8 11.0 7.3	4.2 5.2 6.6 6.2 8.8 10.3 10.5 11.1 7.4	2.9 3.5 4.4 4.4 6.3 8.4 9.3 9.6 12.9 9.2
						v	Vomen							
Total number	468,084		289,877	178,207	2,363	5,782	7,653	11,253	16,460	20,042	24,215	26,515	31,661	32,263
Total percent		100.0	61.9	38.1	0.5	1.2	1.6	2.4	3.5	4.3	5. 2	5.7	6.8	6.9
1957	26,138 26,132 64,095 46,724	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	21. 4 30. 5 37. 3 60. 1 55. 2 61. 7 72. 1 80. 0 85. 3 92. 5	78. 6 69. 5 62. 7 39. 9 44. 8 38. 3 27. 9 20. 0 14. 7 7. 5								6.9 7.9 8.3 6.3 7.5 7.4 8.3 5.2	6.9 7.3 8.2 6.3 9.2 8.3 7.1 8.1 5.4	5.3 5.8 6.5 5.1 6.9 8.2 7.4 6.7 9.4 7.5

nature of their impairments, are among the many personal situations that affect the makeup of the beneficiary groups in comparison with the general population.<sup>1</sup>

## **Changes in Disability Benefit Status**

Although severe disability need not always be irreversible, for workers who qualified for disability benefits the likelihood of a marked reduction in the level of severity of their impairments seems slight. Their qualifying physical or mental conditions were usually well-established and chronic and had a history of pathological progression to the point where the performance of gainful work was contraindicated. It was to be expected, therefore, that the majority would remain on the rolls until they reached age 65 when their disability benefits would be converted to old-age benefits, or until they died without reaching age 65.

As table 7 shows, most beneficiaries who became entitled in each year left the rolls because they reached age 65—19 percent in the 10-year period—or because they died (26 percent). A small pro-

<sup>&</sup>lt;sup>1</sup> For a discussion of major disabling conditions among the general population, see Lawrence D. Haber, *Epi*demiological Factors in Disability: Major Disabling Conditions, Report No. 6, Social Security Survey of the Disabled, 1966, February 1969.

portion (3 percent) experienced such improvement in their conditions that they were able to work again.

In sum, more than one-half of those who drew benefits during the period 1957-66 were still receiving them at the end of 1966. About a third of those who remained on the rolls first became entitled from 1957-61, the initial years when monthly disability benefits were payable. About 1 in 6 of those who were first entitled in 1957-59, when only persons aged 50-64 could be paid benefits, were still getting benefits at the end of 1966.

In each year except 1966, the number of new entitlements exceeded the number of benefit terminations. The size of the group who had disability benefits in force during any year was therefore greater in successive years. After 1957 workers who had their benefits terminated declined as a proportion of workers with benefits in force during the year, most markedly among men and among white workers (table 8). The proportion of women whose benefits were terminated, however, rose.

The time elapsed between entitlement and termination also varied with sex and race. In each year the proportion of terminations was greater for men than for women. From 1957 to 1966, however, women made up a steadily increasing proportion of workers with benefits terminated.

The pace at which men left the rolls was also more rapid. Among men who became entitled to benefits during 1957 and 1958, for example, about half left the rolls by the end of 1960, a fact consistent with the ages of the first beneficiaries under the revised disability provisions and the severity of their impairments (table 9). Among women the corresponding proportion was one-fourth. Of those who gained entitlement in 1960–63, about two-fifths of the men and less than one-third of the women had their benefits terminated in the 4 years that followed.

For those whose benefits were in payment status at some time during the 10-year period from 1957 to 1966 less than half of the men (48 percent) had benefits in force at the end of 1966, but more than 3 in 5 (62 percent) of the women

Table 9.—Workers entitled to disability benefits, 1957-66, and with benefits in force at end of 1966: Benefits terminated as a percent of benefits in force, by year of termination, sex and race—Continued

						Pe	rcentage	distribu	tion					
Year of entitlement	Number		With			With	benefits	termina	ted, by	year of te	rminatio	n		
		Total	benefits in force at end of 1966	Total, 1957-66	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
						1	White		·					
Total number	1,853,469		934,554	918,915	21,509	52,572	66,124	80,837	100,533	107,710	115,515	115,295	129,892	128,92
Total percent		100.0	50.4	49.6	1.2	2.8	3.6	4.4	5.4	5.8	6.2	6.2	7.0	7.
1957		100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	12.4 18.1 23.3 49.6 43.9 53.2 64.0 73.7 80.7 90.9	56.1									4.5 5.4 6.7 6.1 8.7 9.8 9.7 10.5 7.1	3. 3. 4. 4. 6. 8. 8. 12.
						Negro aı	nd other	races			•			
Total number	302,727		168,631	134,096	2,262	5,509	7,759	10,475	14,020	15,410	17,505	18,565	22,575	20,01
Total percent		100.0	55.7	44.3	0.7	1.8	2.6	3.5	4.6	5.1	5.8	6.1	7.5	6.0
1957	30,802 18,938 18,185 46,246 33,184 30,756 34,001 33,757 34,943 21,915	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	13. 7 19. 0 26. 7 52. 2 47. 8 56. 9 67. 5 76. 5 76. 5 83. 7 93. 0	43.1 32.5 23.5	7.3					ł	6.5 8.3 9.2 8.1 10.9 9.9 5.5	5.4 6.1 7.6 6.8 9.1 10.4 9.3 5.5	5.9 7.0 8.2 6.9 9.6 9.8 9.8 9.5 5.7	3. 8 3. 7 4. 6 6. 2 7. 7 8. 0 8. 0 7. 0

were still receiving benefits. This difference between men and women beneficiaries obtained, regardless of race. At the same time, white workers were less likely than the others to have continued on the rolls—50 percent compared with 56 percent (table 9). White workers tended to move off the rolls faster than workers of other races.

During the years 1957-66, about 3.2 percent of the disability beneficiaries recovered. Not all who recovered remained off the benefit rolls, however. About 1 in 8 returned to the rolls because their impairments again reached the level of severity necessary for reentitlement; one-fourth of these disabled persons became entitled to benefits before 1960 (table 10). More than two-thirds of the 8,733 persons in this group continued to receive benefits past 1966.

Age, as shown earlier, was the second most frequent reason for termination of disability benefits and their conversion to old-age benefits. In the 10 years covered in this report, more than 400,000 disabled-worker beneficiaries were added to the old-age beneficiary rolls. Their problems, attendant on the usual circumstances of aging, were further complicated by those resulting from a history of chronic and severe disabilities.

For younger beneficiaries, age was also a factor in the extent to which they left the rolls because of return to work or improved health or death. About one-half of those whose benefits were terminated because of recovery (52 percent) were under age 50, but only 13 percent of those who died were that young (table 11). Deaths

Table 10.—Workers entitled to disability benefits, 1957–66: Number who recovered and percent with second entitlement after recovery, by year of first entitlement

			recovered wit ment after re	
Year of first entitlement	Number who recovered	Total	With second termination	With benefits in force at end of 1966
Total number	69,474	8,733	2,661	6,072
Total percent	100.0	12.6	3.8	8.7
1957 1958 1960 1960 1961 1962 1963 1963 1964 1965	3,972 2,588 2,776 14,214 10,835 11,271 9,802 6,586 7,023 407	27. 1 27. 1 25. 0 17. 4 14. 4 10. 4 7. 5 4. 3	15.6 11.7 10.7 4.3 3.8 2.3 1.3 .6	11.5 15.4 14.3 13.1 10.7 8.1 6.1 3.7

<sup>1</sup> Less than 0.05 percent.

Table 11.—Workers entitled to disability benefits, 1957–66, whose benefits were terminated: Numbεr and percentage distribution of terminations, by reason for termination, age, sex, and race

		Perce	ntage dis			on for
Age in year of termination	Number		Attain-	t termina		<del>.</del>
		Total	ment of age 65	Death	Re- covery	Other
			All wo	rkers		
Total number	1,053,011		416,845	556,496	69,474	10,196
Total percent		100.0	100.0	100.0	100.0	100.0
Under 29	5,312 11,047	.5 1.0		.4	4.0 8.5	.7 1.2
35-39	18,800	$\frac{1.8}{2.8}$		1.9 3.6	12.0 14.0	1.6 2.5
45-49	29,813 45,760	4.3		6.4	14.0	3.6
50-54	101,895 166,286	$\frac{9.7}{15.8}$		$16.0 \\ 27.6$	$17.1 \\ 16.2$	9.7 15.0
60 and over	674,098	64.0	100.0	43.2	14.3	65.6
			Me	n		
Total number	874,804		350,992	456,892	58,134	8,786
Total percent		100.0	100.0	100.0	100.0	100.0
Under 29 30-34	4,545 9,134	. 5 1. 0		.5	4.1 8.6	1.2
35-39	15.396	1.8		1.8	12.1	1.5
40-44	24,019 36,216	2.7 4.1		3.4 6.1	14.2 13.8	2.5 3.4
50-54	81,078	9.3		15.4	16.8	9.3
55-59 60 and over	134,489 569,927	15.4 65.1	100.0	27.1 44.8	16.1 14.4	14.3 67.1
			·			
Total number	178,207		65,853	99,604	11,340	1,410
Total percent		100.0	100.0	100.0	100.0	100.0
Under 29	767 1,913	.4 1.1		1.0	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1.6
35-39	3.404	1.9		2.1	11.4	1.7
40-44 45-49	5,794 9,544	3.3 5.4		4.2 7.8	13.5 14.7	2.6 5.2
50-54	20,817	11.7		18.6	18.4	12.8
55-59 60 and over	31,797 104,171	17.8 58.5	100.0	29.1 36.1	17.0 13.9	19.0 56.5
		<u> </u>	Wh	ite	l	
Total number	918,915		371,153	480,785	58,024	8,953
Total percent		100.0	100.0	100.0	100.0	100.0
Under 29	4,433 8,911	1.0		.4	3.8 8.0	1.2
35-39	15,161	1.6		1.8	11.3	1.5
40-44 45-49	24,407 38,024	2.7 4.1		6.2	13.6	2.3 3.4
50-54	86,439	9.4		6.2 15.7	17.4	9.2
55–59 60 and over	143,176 598,364	15.6 65.1	100.0	27.5 44.2	16.9 15.2	3.4 9.2 14.3 67.5
		Ne	gro and	ther rac	es	
	104 000		45,692	75,711	11,450	1,243
Total number	134,096				1	100.0
Total percent		100.0	100.0	100.0	100.0	I
Total percent			100.0	.4		1.0
Total percent	879 2,136 3,639	.7 1.6 2.7	100.0	.4 1.1 2.5	4.7 11.0 15.1	1.0 1.8 2.1
Total percent	879 2,136 3,639 5,406 7,736	.7 1.6 2.7 4.0	100.0	.4 1.1 2.5 4.6	4.7 11.0 15.1 16.3 14.7	1.6 1.8 2.1 3.8 5.6
Total percent	879 2,136	.7 1.6 2.7	100.0	.4 1.1 2.5	4.7 11.0 15.1 16.3	

among women occurred at somewhat lower ages than among men--16 percent were under age 50 when they died, compared with 13 percent for men. Among both men and women who recovered, about half were under age 50.

This general age pattern held whether or not the disabled workers were white. Among those who recovered, half of the white workers were under age 50, compared with somewhat less than two-thirds of those of other races. About 14 percent of those who recovered were aged 60 and older when their benefits were terminated—an indication that even among these severely disabled workers a potential for regaining an ability to work may exist at any age.

In terms of the primary disease conditions with which they were identified, the workers' experience was marked by wide variation in the proportions that were removed from the rolls and in the reasons for termination of their benefits. When a neoplastic condition was the primary cause of the disability, for example, 7 out 10 beneficiaries went off the rolls before age 65 because of early death, and only 1 percent regained the ability to work (table 12).

Beneficiaries with diseases of the bones and organs of movement and with mental, psychoneurotic, and personality disorders were least likely to have their benefits terminated in the 10-year period—about one-third of the former and one-fourth of the latter.

Of those with circulatory and respiratory diseases, more than half had their benefits terminated. About one-fourth of these beneficiaries

reached age 65 while they were on the rolls, and about one-fourth died.

Recovery was the exception rather than the rule and some conditions were more susceptible than others to recovery. Disabled persons with infective or parasitic diseases had the highest frequency of recovery: 16 percent had benefits terminated for this reason. Next in terms of recovery were the mentally and psychoneurotically ill: 8 percent.

Table 13 shows that, among the 12 specific diseases occurring most often as primary causes of disability and affecting more than one-half the beneficiary group, those who had been disabled by pulmonary tuberculosis were by far the most likely to have their benefits terminated because of improvement in their ability to work (22 percent). Benefits were terminated for about half this proportion among workers who had primary schizophrenic disorders. The least sanguine as to prognosis were those who were disabled as a result of a disease of the mitral valve or of diabetes mellitus—45 percent and 34 percent, respectively, died.

Data on current disability beneficiaries similar to that for workers who qualified during the first 10 years of the disability benefit program are not yet available. It is likely, however, that those who now receive benefits differ little as a group with respect to overall characteristics from the 1.2 million workers who received benefits during 1966—the final year covered by this report—or the 2.2 million whose benefits were in payment status some time between 1957 and 1966.

Table 12.—Workers entitled to disability benefits, 1957-66: Number and percent with benefits terminated, by diagnostic group and reason for termination

	Totan	!	Reason for termination					
Diagnostic group	Inter- national code	Number	Total	Attained age 65	Death	Recovery	Other	
Total number		2,156,196	1,053,011	416,845	556,496	69,474	10,196	
Total percent			48.8	19.3	25.8	3.2	0.5	
Neoplasms Infective and parasitic diseases Diseases of the circulatory system Diseases of the genito-urinary system Diseases of the ligestive system Diseases of the blood and blood-forming organs Diseases of the respiratory system Allergic, endocrine system, metabolic, and nutritional diseases. Diseases of the nervous system and sense organs. Diseases of the nervous system and sense organs. Diseases of the skin and cellular tissue. Diseases of the skin and cellular tissue. Diseases of the bones and organs of movement. Congenital malformations. Mental, psychoneurotic, and personality disorders Accidents, poisonings, and violence (alternative classification). All others (including unknown)	1-138 400-468 590-637 530-587 290-299 470-529 240-289 330-398 690-716 720-749 750-759 300-329 800-999	188,155 123,148 622,737 14,600 41,056 5,411 178,468 68,974 361,299 6,973 221,179 13,897 247,497 40,093 22,749	79. 9 56. 0 55. 2 53. 7 53. 4 52. 1 48. 9 46. 5 36. 0 28. 0 28. 0 26. 5 14. 3 20. 9	7.4 15.5 25.2 14.0 16.9 18. 4 24.9 17. 4 22.8 11. 7 22.5 8.9 9.5 3.8	70. 4 24. 2 27. 9 36. 9 33. 3 32. 7 26. 2 29. 7 21. 9 21. 1 10. 4 15. 4 9. 2 4. 0 8. 1	.9 15.9 1.5 2.3 3.1 1.9 1.3 1.4 4.3 2.8 3.4 7.6 6.4 5.6	1.1 .4 .5 .6 .4 .4 .4 .4 .4 .2 .2	

Each year since 1957, changes in the distribution of such characteristics as age, sex, and race were gradual and relatively limited in scope among disabled workers who became newly entitled to benefits. A profile view of the 1.1 million with benefits in force at the end of December 1966 would show that for the most part they were men, white, and middle-aged. Women made up about one-fourth of the beneficiaries regardless of race. Three out of 4 were aged 50–64 and the median age was 57. White men tended to be slightly older than the others.

More than three-fourths of these beneficiaries came on the rolls after 1960 when disability benefits became payable to persons under age 50. One-third of the total began drawing benefits in 1960-62. There was little difference in this respect by sex or race (table 14).

As tables 6 and 15 show, the primary causes of disability among workers receiving benefits at the end of 1966 were approximately in the same order of rank as among 1957–66 beneficiaries as a whole. Diseases of the circulatory system continued to account for a fourth of the disabilities. The proportion declined by the end of 1966 when it was a nervous or sensory condition that precipitated the application for benefits (from 17 percent to 13.5 percent) and it rose for mental, psychoneurotic, and personality disorders (from 11.5 to 16.5 percent). About one in 8 were severely disabled because of a disorder of the bones and organs of movement—an increase from 1 in 10 of all beneficiaries.

Deaths were particularly high among persons with neoplastic diseases: 70 percent of those who came on the rolls with this diagnosis died within the 10-year period. Only 3.4 percent of all who

received benefits at the end of 1966 had these conditions.

For the most part, the proportion of workers with disabling conditions in the several disease groups was similar for men and women and for white workers and those of other races. As table 15 shows, exceptions were found within some of the diagnostic groups when the proportions with these diseases were smaller. Four percent of the women had respiratory diseases, for example, in contrast to 9 percent of the men. Similarly, twice as many white workers (8 percent) as the others (4 percent) had this diagnosis. On the other hand, 8 percent of the workers other than white had infective and parasitic diseases, but the proportion was half as large for those who were white (4 percent).

#### Summary

Between 1957 and 1966, the first 10 years in which disability benefits were payable under the Social Security Act, more than 4 million workers who considered themselves too disabled to work applied for these monthly benefits. This study of data on the 2,200,000 workers who qualified reveals that:

Eighty-six percent of those who drew benefits during the 10 years were white and 78 percent were men. The proportions both of Negroes and other races and of women increased by about one-third between 1957 and 1966: about 6 in 7 beneficiaries were white and 3 in 4 were men at the end of 1966. Although long-lasting disability was primarily a condition of the middle and upper ages, and the great majority of workers became disabled after they reached age 50, about 3 in 10 were under age 50 at onset.

Table 13.—Twelve primary diagnoses of disabling conditions occurring most often among workers entitled to disability benefits, 1957–66: Percent with benefits terminated, by reason for termination

Primary diagnosis	Inter-		Percent with benefits terminated, by reason for termination					
	national code	al Number	Total	Attained age 65	Death	Recovery	Other	
Arteriosclerotic heart disease, including coronary disease Emphysema Schizophrenic disorders. Certain and unspecified hypertensive heart disease Pulmonary tuberculosis Osteo-arthritis and allied conditions Rheumatoid arthritis and allied conditions. Cerebral haemorrhage Cerebral hemoism and thrombosis Disbates mellitus. Displacement of intervertebral disc. Diseases of the mittral valve.	528 300 443 002 723 722 331 332 260 735	380,134 135,044 125,054 97,042 83,827 69,278 58,979 57,631 55,348 53,806 29,437 25,892	55. 5 52. 5 20. 5 56. 5 42. 0 36. 8 58. 9 56. 1 54. 4 206.	26. 9 24. 2 3. 7 26. 6 13. 2 32. 4 19. 5 26. 7 26. 5 18. 8 9. 8	26. 4 27. 3 6. 1 28. 7 24. 3 8. 0 15. 6 29. 0 28. 2 34. 0 4. 8 45. 2	1.7 .6 10.5 .8 21.6 1.2 1.2 .7 .9 1.1 5.7	0.5 .4 .2 .4 .4 .4 .5 .5 .5	

Table 14.—Workers entitled to disability benefits, 1956-66, and with benefits in force at end of 1966: Number and percentage distribution, by year of entitlement, sex, and race

		Percentage distribution by sex and race								
Year of entitlement	Total number	Total	Men	Women	White	Negro and other races				
Total number	1,103,185		831,308	289,877	934,554	168,631				
Total percent		100.0	100.0	100.0	100.0	100.0				
1957-59 1960	96,122 160,090	8.7 14.5	8.2 14.9	9.9	8.9 14.5	7.5 14.3				
1961	100,874	9.1	9.2	8.9	9.1	9.4				
1962	111,186 145,708	10.1 13.2	10.1 13.0	10.1 13.8	10.0 13.1	10.4 13.6				
1964	165,421	15.0	14.7	15.9	14.9	15.3				
1965	188,167	17.1	17.0	17.3	17.0	17.3				
1966	135,617	12.3	12.8	10.8	12.3	12.1				

Of the conditions identified as primary causes of disability among beneficiaries, arteriosclerotic heart disease represented the highest proportion; the proportion having emphysema was next highest, followed by schizophrenic disorders. Diseases of the circulatory system were the most prevalent group. Diseases of the nervous system and sense organs, mental, psychoneurotic, and personality disorders, and diseases of the bones and organs of movement ranked second, third, and fourth.

The benefits of about half the 2.2 million workers who came on the disability rolls in the 10-year period were terminated by the end of 1966. About one-fourth died before age 65, and 1 in 5 became entitled to old-age benefits at age 65. As would be expected, the benefits of early entrants—those whose benefits began before 1960—were more likely than the others to be terminated because they reached age 65: these workers were all aged 50 or over when they came on the rolls. Death accounted for a larger proportion of benefit terminations for those who were entitled in 1960 and thereafter. For younger workers, age was also a factor in determining the extent to which they returned to work or died. More than half

who recovered were under age 50, but only 13 percent who died were this young.

In spite of the gravity of their impairments, the condition of some beneficiaries—about 1 in 30—improved to such an extent that they could no longer be considered disabled under the definition in the Social Security Act and so their benefits were terminated. About 1 in 8 of these, however, returned to the rolls.

As expected, the primary causative condition also influenced the worker's continuance on the beneficiary rolls, as well as the reasons for the termination of his benefits. Seven out of 10 beneficiaries with a neoplastic condition left the rolls before age 65 because of early death. Only 1 percent regained the ability to work. When the diagnosis was a respiratory disease, more than half of the disabled workers had their benefits terminated because of age or death—in approximately equal proportions. Recovery occurred most frequently among beneficiaries who had infective and parasitic diseases or who were mentally or psychoneurotically ill.

This study does not answer the question of the extent to which the economic needs of disabled workers are met by disability benefits.<sup>2</sup> It does point up the fact that these benefits are reaching a steadily increasing number of workers—more than 3 million in 10 years—who had social insurance coverage which provided some protection against a loss of income resulting from disability.

Table 15.—Workers entitled to disability benefits, 1957-66, and with benefits in force at end of 1966: Number and percentage distribution, by diagnostic group, sex, and race

Diagnostic group				With benefits in force, end of 1966				
	Interna- tional	Number	Pe	ercentage dis	stribution by	sex and rac	е	
	code		Total	Men	Women	White	Negro and other races	
Total number		1,103,185		813,308	289,877	934,554	168,631	
Total percent			100.0	100.0	100.0	100.0	100.0	
Infective and parasitic disease Neoplasms. Allergic, endocrine system, metabolic, and nutritional diseases. Diseases of the blood and blood-forming organs. Mental, psychoneurotic, and personality disorders. Diseases of the nervous system and sense organs. Diseases of the circulatory system. Diseases of the eignatory system. Diseases of the digestive system. Diseases of the gentio-urinary system. Diseases of the skin and cellular tissue. Diseases of the bones and organs of movement. Congenital malformations. Accidents, poisonings, and violence (alternative classification). All others (including unknown).	140-239 240-289 290-299 300-329 330-398 400-468 470-529 530-587 590-637 690-716 720-749 750-759 800-999	54, 219 37, 863 35, 214 2, 522 181, 825 193, 187 279, 183 85, 411 19, 021 6, 746 4, 358 141, 479 10, 007 34, 354 17, 796	4.9 3.4 3.2 .2 16.5 13.5 25.3 7.7 1.7 .6 .4 12.8 .9 3.1	5.6 3.0 2.6 .2 16.1 18.1 24.7 9.1 1.7 .5 .3 12.0 9 3.5	2.8 4.9 4.9 .3 17.5; 15.8 27.0 3.9 .6 15.2 1.0 2.1	4.3 3.6 3.0 .2 16.9 17.3 24.7 8.3 1.8 .6 .4 13.1 1.0 3.1	8.4 2.6 4.2 3 13.9 18.7 28.7 4.4 1.1 7 .5 11.0 6 3.1	

<sup>&</sup>lt;sup>2</sup> For a discussion of social insurance and other sources of income of the disabled in the general population see Idella G. Swisher, *Family Income of the Disabled*, Report No. 13, The Social Security Survey of the Disabled, 1966, October 1970, and Idella G. Swisher, *Sources and Size of Income of the Disabled*, Report No. 16, Social Security Survey of the Disabled, 1966, June 1971.