

# AGE, SEX, AND COLOR OF WAGE EARNERS FOR WHOM DEATH CLAIMS WERE CERTIFIED IN 1937

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RECORDS of the payment of claims which began in 1937 under title II of the Social Security Act furnish information which is of value not only to the Bureau of Old-Age Insurance but also to persons interested in social statistics and especially in mortality statistics. To explore the possibilities in this latter field, analysis has been made of some of the information obtained in the adjudication of death claims for the first year of payment—1937. Eligibility for payments requires that the worker must receive wages for covered employment after 1936 and before he attains age 65.

This is the first analysis of death claims in relation to vital statistics. Among the data which have been tabulated for this purpose are the sex, color, and age of the deceased wage earners for whom death claims were filed; the occupation and

industry in which such persons were employed at time of death; and the cause of death. The present article is limited to analysis of the sex, color, and age<sup>1</sup> factors; a later article will deal with occupation and cause of death. Although claims filed during the early years of old-age insurance payments, and especially during this first year, are less representative than those which will be filed in later years, when undoubtedly a larger proportion of all potential claims will be filed, these early claims warrant study and analysis. In 1937 nearly 35,300 death claims were received. The present tabulations cover approximately 33,500 claims certified through February 1938, all of which relate to deaths which occurred in 1937. On the basis of data now available as to the lag in the filing of death claims it is estimated that as many as

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<sup>1</sup> Data are limited to ages 15-64 except in table I. Age is computed by subtracting the year of birth from 1937.

**Table I.—Death claims<sup>1</sup> by sex and color and by age group of deceased workers, continental United States, 1937**

Age group (years)	Number of death claims											
	Total			White			Negro			Other		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total.....	33,549	31,306	2,243	31,442	29,314	2,128	2,070	1,960	110	37	32	5
15-19 <sup>2</sup> .....	527	429	98	505	409	96	21	20	1	1	0	1
20-24.....	2,037	1,749	288	1,920	1,639	281	117	110	7	0	0	0
25-29.....	2,467	2,143	324	2,242	1,931	311	224	211	13	1	1	0
30-34.....	2,860	2,582	298	2,593	2,311	282	262	246	16	5	5	0
35-39.....	3,190	2,937	259	2,859	2,621	238	328	309	19	9	7	2
40-44.....	3,727	3,470	257	3,425	3,199	226	286	285	21	6	6	0
45-49.....	4,681	4,368	313	4,294	4,092	202	280	270	10	7	6	1
50-54.....	4,040	4,734	206	4,096	4,503	193	242	229	13	2	2	0
55-59.....	4,731	4,570	161	4,552	4,399	153	177	170	7	2	1	1
60-64.....	4,171	4,040	131	4,048	3,920	128	120	117	3	3	3	0
65 <sup>3</sup> .....	312	304	8	298	290	8	13	13	0	1	1	0
Percentage distribution												
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
15-19 <sup>2</sup> .....	1.6	1.4	4.4	1.6	1.4	4.5	1.0	1.0	.9	-----	-----	-----
20-24.....	6.1	5.6	12.8	6.1	5.6	13.2	5.7	5.6	6.4	-----	-----	-----
25-29.....	7.4	6.8	14.4	7.1	6.6	14.6	10.8	10.8	11.8	-----	-----	-----
30-34.....	8.5	8.2	13.3	8.2	7.9	13.2	12.7	12.5	14.5	-----	-----	-----
35-39.....	9.5	9.4	11.5	9.1	8.9	11.2	15.8	15.8	17.3	-----	-----	-----
40-44.....	11.1	11.1	11.5	10.9	10.9	11.1	13.8	13.5	19.1	-----	-----	-----
45-49.....	13.7	13.9	9.5	13.7	13.9	9.5	13.5	13.8	9.1	-----	-----	-----
50-54.....	14.7	15.1	9.2	14.9	15.4	9.1	11.7	11.7	11.8	-----	-----	-----
55-59.....	14.1	14.6	7.2	14.6	15.0	7.2	8.6	8.7	6.4	-----	-----	-----
60-64.....	12.4	12.9	6.8	12.9	13.4	6.0	5.8	6.0	2.7	-----	-----	-----
65 <sup>3</sup> .....	.9	1.0	.4	1.0	1.0	.4	.6	.6	.6	-----	-----	-----

<sup>1</sup> Includes claims for the year 1937 certified through February 1938.

<sup>2</sup> No claims were filed for workers under 15 years of age.

<sup>3</sup> In some of these cases the individual had passed his 65th birthday prior

to his death, and a claim for lump-sum payment at age 65 could have been filed by worker immediately after attaining that age.

<sup>4</sup> Not computed because number of cases is too small.

80,000 claims for death benefits may ultimately be received for persons who died in 1937. This estimate does not include all potential claims since many may not be filed. The conspicuous lag in the filing of claims shown in 1937 will undoubtedly decrease as familiarity with the provisions of title II of the act increases. The extent of underfiling of claims for 1937 is considerably greater than may be expected in later years because of the lack of knowledge regarding benefits and because of the fact that the size of many of the claims in this first year was so small that potential claimants felt it not worth the effort to file them. The importance of this factor will decrease as the size of the amounts payable increases. Because of this lack of completeness in the 1937 data, they must be used with great caution.

On the basis of wage reports for 1937<sup>2</sup> it is estimated that approximately 32 million wage earners were engaged in covered employment during that year; this figure therefore represents the number of covered workers exposed to the possibility of death. There is a temptation to calculate a death rate on the basis of these figures, but, because of the large number of potential claims which have not been filed, even estimates based on claims data must be deferred to subsequent years. Analysis of the data will therefore be made along other lines.

The distribution by sex of persons for whom death claims were filed in 1937 differs considerably from that of account-number holders as of December 31, 1937, and of wage earners who worked in covered employment in 1937. (See table 2.) The proportion of women among the deceased wage earners was very much lower than among either the holders of account numbers or the persons in covered employment. This difference may be explained by several factors. In the first place, it reflects the differences in the age distribution of men and women in covered employment, since the lower average age of women in covered employment would naturally lead to a lower number of death claims for women than would be expected from their proportion in the total of covered workers.<sup>3</sup> The importance of this factor will gradually be reduced, however, as the average age of

<sup>1</sup> See *Social Security Bulletin*, Vol. 2, No. 3 (March 1939), pp. 3-9; Vol. 2, No. 4 (April 1939), pp. 3-8; and Vol. 2, No. 6 (June 1939), pp. 8-17.

<sup>2</sup> See Wasserman, Max J., and Wood, Katherine D., "Age and Sex Differentials in Taxable Wages Reported for 1937," *Social Security Bulletin*, Vol. 2, No. 6 (June 1939), p. 10.

women entitled to old-age insurance payments rises. This upward trend is to be expected, because women continue to be potential claimants even after they withdraw from the labor market if they have had earnings in covered employment. A second factor which may explain the low percentage of women among the decedents for whom death claims were filed is the lower death rate for women for specific age groups. A third factor is the smaller size of the claims of women than of men, because of the lower earnings of women,<sup>4</sup> which may reduce the incentive to file claims.

**Table 2.—Percentage distribution by sex and color of decedents represented in death claims,<sup>1</sup> of employees with reported taxable wages, 1937,<sup>2</sup> and of applicants<sup>3</sup> for account numbers,<sup>3</sup> continental United States, 1937**

Sex and color	Decedents represented in death claims <sup>1</sup>	Employees with reported taxable wages <sup>2</sup>	Applicants for account numbers <sup>3</sup>
Total number.....	33,549	30,154,024	3,613,022
Total percent.....	100.0	100.0	100.0
White.....	93.7	92.4	91.0
Negro.....	6.2	6.8	7.6
Other.....	.1	.8	1.4
Male, total.....	93.3	72.6	72.6
White.....	87.3	66.3	66.3
Negro.....	5.0	5.0	6.2
Other.....	.1	.7	1.1
Female, total.....	6.7	27.4	27.4
White.....	6.4	26.1	25.7
Negro.....	.3	1.1	1.4
Other.....	0	.2	.3

<sup>1</sup> Includes claims for the year 1937 certified through February 1938.

<sup>2</sup> Data corrected to Apr. 10, 1939.

<sup>3</sup> Based on a 10-percent sample of applications received prior to 1938.

The distribution by color of the persons for whom death claims were filed in 1937 was only slightly different from that of the potential claimants as shown by a comparison with the persons having wage records in 1937 and with the holders of account numbers at the end of that year. (See table 2.) A slightly smaller percentage of the death claims was filed for Negro decedents and for decedents of "other races" than would be expected from their proportions among covered workers. That the proportion of Negro claims was not higher is surprising, since the death rate among Negroes is higher than among white persons even for the same age groups, up to age 55, but the underfiling of claims of Negroes may have exceeded that of whites.

<sup>4</sup> See Corson, John J., "Wage Reports for Workers Covered by Federal Old-Age Insurance in 1937," *Social Security Bulletin*, Vol. 2, No. 3 (March 1939), pp. 3-9.

The age distribution of the men for whom death claims were filed differs markedly from that of women, as shown in table 1. The greater concentration of women in the younger age groups is reflected in the median age, which was 37 years as compared with 48 for the men.<sup>5</sup> (See table 3.) The low average age of the women represented in the death claims is, of course, a reflection of the correspondingly low average age of all women among covered workers. Whether other factors such as occupational differences must also be considered will be indicated by the study of cause of death as related to occupation.

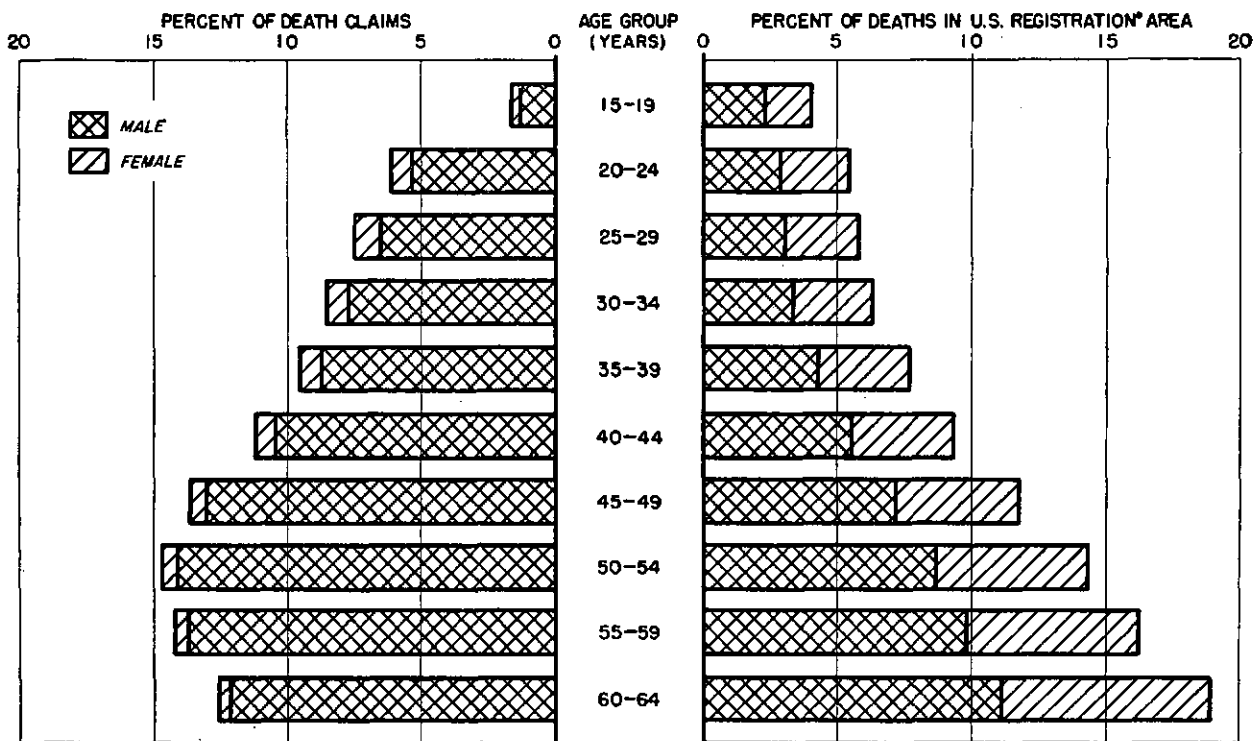
The age data for the entire country conceal rather wide differences among the individual States. The median age at death for men ranged from 35 years in North Dakota to 54 years in Vermont. Various factors are responsible for these interstate differences. In a number of the States the relatively high median age of the men covered by old-age insurance is reflected in the high median age among the death claims and vice

<sup>5</sup> Medians in all instances have been calculated for persons 15-64 years of age.

versa. Such a relationship is normal because of the increase in the death rate with the increase in age. The number of women among death claims was too small in many States to permit interstate comparisons. Further study of these State figures, together with supplementary information such as the cause of death and the occupational distribution of the individuals, should help to explain why the average age at death in some States is out of line with the average age of the covered population. Some of the State differences may be accounted for by regional differences in death rates for specific age groups, even after allowance for differences in race.

One of the first questions which will be asked by persons interested in figures concerning deceased persons who were covered by old-age insurance is how they compare with similar data for the total population. Some differences were anticipated between the covered population and the total working population of the country because of the rather large groups excepted from the old-age insurance provisions of the Social Security Act. Many of the excepted occupations normally have

Chart I.—Percentage distribution of death claims<sup>1</sup> and of deaths<sup>2</sup> in the United States registration area, by age and sex of decedents aged 15-64, 1937



<sup>1</sup> Includes claims for the year 1937 certified through February 1938.

<sup>2</sup> Source: U. S. Bureau of the Census.

age characteristics different from those of the covered population, which are reflected currently in the lower average age for covered workers. The median age in 1930 of male gainful workers aged 15-64 was 36 years,<sup>6</sup> and that of male holders of account numbers of the same age groups at the end of 1937 was 34 years. The 2-year difference in the medians shown by this comparison might have been increased or decreased by a higher or

<sup>6</sup> Computed from *Fifteenth Census of the United States: 1930, Population*, Vol. IV, p. 42.

**Table 3.—Median age<sup>1</sup> of decedents represented in death claims<sup>2</sup> and of applicants for account numbers<sup>3</sup> by sex and by States, 1937**

State	Number of death claims	Median age <sup>1</sup>					
		Decedents represented in death claims <sup>2</sup>			Applicants for account numbers <sup>3</sup>		
		Total	Male	Female	Total	Male	Female
Total.....	33,549	47	48	37	32	34	28
Alabama.....	423	42	42	(*)	30	31	28
Arizona.....	97	40	41	(*)	30	31	28
Arkansas.....	127	48	46	(*)	31	32	28
California.....	1,257	47	47	40	33	34	30
Colorado.....	287	48	49	(*)	32	33	29
Connecticut.....	707	50	51	39	32	35	27
Delaware.....	117	50	50	(*)	31	33	28
District of Columbia.....	156	47	48	(*)	31	32	29
Florida.....	218	41	41	(*)	31	32	29
Georgia.....	423	42	43	30	29	30	28
Idaho.....	73	43	43	(*)	31	32	27
Illinois.....	2,493	48	48	35	33	35	28
Indiana.....	1,226	46	47	34	32	33	28
Iowa.....	217	47	48	(*)	32	33	28
Kansas.....	210	45	46	(*)	31	33	28
Kentucky.....	302	42	42	(*)	32	33	29
Louisiana.....	343	42	43	(*)	31	32	28
Maine.....	199	48	50	(*)	33	34	30
Maryland.....	555	48	49	38	31	33	28
Massachusetts.....	1,468	50	50	39	33	35	29
Michigan.....	1,653	45	45	38	32	34	27
Minnesota.....	308	46	47	40	32	34	28
Mississippi.....	109	43	44	(*)	29	30	28
Missouri.....	913	47	48	35	32	34	29
Montana.....	191	49	49	(*)	33	34	28
Nebraska.....	108	47	47	(*)	31	33	28
Nevada.....	24	(*)	(*)	0	34	35	29
New Hampshire.....	163	50	50	(*)	33	34	30
New Jersey.....	1,844	49	50	36	32	34	27
New Mexico.....	56	37	37	(*)	30	31	27
New York.....	3,842	50	50	42	33	36	29
North Carolina.....	816	41	42	34	29	30	27
North Dakota.....	40	35	35	(*)	31	32	26
Ohio.....	2,413	47	48	36	33	35	28
Oklahoma.....	230	43	44	(*)	32	33	29
Oregon.....	228	47	47	(*)	34	36	30
Pennsylvania.....	4,637	48	48	38	32	34	27
Rhode Island.....	365	52	52	40	33	35	29
South Carolina.....	255	40	41	(*)	28	29	27
South Dakota.....	24	(*)	(*)	(*)	31	33	28
Tennessee.....	363	42	43	(*)	31	32	28
Texas.....	1,102	42	42	34	31	32	28
Utah.....	156	46	47	(*)	30	32	25
Vermont.....	112	53	54	(*)	32	33	29
Virginia.....	575	42	42	35	30	31	28
Washington.....	527	47	48	40	33	35	29
West Virginia.....	558	42	43	(*)	32	33	28
Wisconsin.....	920	46	47	32	32	34	28
Wyoming.....	46	39	39	(*)	32	33	27

<sup>1</sup> Medians calculated on distribution of persons aged 15-64.

<sup>2</sup> Includes claims for the year 1937 certified through February 1938.

<sup>3</sup> Based on a 10-percent sample of applications received prior to 1938.

<sup>4</sup> Not computed, because number of cases is less than 25.

**Table 4.—Percentage distribution of death claims and of deaths in the United States registration area,<sup>1</sup> by age and sex of decedents, 1937**

Age group (years)	United States registration area, 1937			Death claims, 1937		
	Total	Male	Female	Total	Male	Female
Total 15-64.....	100.0	58.2	41.8	100.0	93.3	6.7
15-19.....	4.1	2.3	1.8	1.0	1.3	.3
20-24.....	5.4	2.9	2.5	6.1	5.3	.8
25-29.....	5.8	3.1	2.7	7.5	6.5	1.0
30-34.....	6.3	3.4	2.9	8.6	7.7	.9
35-39.....	7.7	4.3	3.4	9.6	8.8	.8
40-44.....	9.4	5.5	3.9	11.2	10.4	.8
45-49.....	11.8	7.1	4.7	13.7	13.1	.6
50-54.....	14.4	8.7	5.7	14.8	14.2	.6
55-59.....	16.2	9.8	6.4	14.3	13.8	.5
60-64.....	18.9	11.1	7.8	12.6	12.2	.4

<sup>1</sup> U. S. Bureau of the Census, *Vital Statistics—Special Reports*, Vol. 7, No. 23.

lower average age for the total population of 1937 as compared with 1930. But other factors also must be considered in this connection, such, for example, as the possibility that for given age groups the death rates of covered workers are higher than for other workers of the same age groups, perhaps because of a greater risk of death in the industrial occupations which constitute such a large proportion of covered employment. All such questions of possible factors influencing death rates for the covered population will require long study and additional information before definite conclusions can be reached. The present study provides only a few facts which will lead the way for further investigation.

Statistics of deaths in 1937 in the United States registration area are available at the present time only for the total population, not for gainful workers alone. For this reason comparisons of the data for the registration area with death claims have less meaning than they would if both applied to the working population. Some of the differences arise from the fact that one set of figures includes large numbers of persons who had not been in the current labor market and, for that matter, many who never had sought gainful employment. Both the sex and age distributions of deaths in the registration area are therefore very different from the corresponding data for death claims of the same year. A comparison of the sex ratio for each age group of death claims with that of deaths in the registration area brings out very clearly one factor which is partially responsible for the fact that the average age at death among deceased covered workers is lower

than among deaths in the registration area. (See chart I and table 4.) The smaller proportion of women represented by death claims is due partly to the fact that all women are included in registration area figures, not merely those who have been gainful workers, and partly to the concentration of women in covered employment in the younger age groups.

In both sets of mortality statistics only the deaths in the broad age group 15-64 are included, but owing to the difference in the coverage of the two sets of mortality statistics it is not surprising to find that the average age at death as shown by the claims data is lower than the average for the registration area—for persons of both sexes a median age of 47 years as compared with 50 years. The significance of this difference from the standpoint of old-age insurance is its effect on actuarial estimates, which are based on mortality statistics collected over a number of years but are not restricted to individuals who are working or who have worked in the past. This difference is probably greater now than it will be in later years

when more women in the higher age groups will have become eligible for old-age insurance payments and will therefore be represented in death claims. Whether a differential exists between covered and noncovered groups can better be measured at the present time by a comparison of the data for men. This is roughly indicated by the median ages, which were 50 years for males in the registration area and 48 years for males represented in the death claims.

From the standpoint of vital statistics, the age data obtained from death claims for 1937 would seem to indicate that if it were possible to calculate mortality rates for the covered population some differences might be found by comparison with the death rates for specific age groups of the total population. Further study of death claims in subsequent years, as well as additional data regarding the occupational characteristics of the decedents and the cause of death, will help to determine whether or not such differences exist and, if they do, the reasons for them.