

Recent Statistics on Diabetes

The death rate from diabetes in 1957 was higher than in both 1956 and 1955. For the United States as a whole provisional figures for the year 1957, based upon a 10 per cent sample of death certificates, showed a 4 per cent increase over 1956 (table 1). In the urban population of the United States, represented by Industrial policyholders of the Metropolitan Life Insurance Company, the death rate was 2 per cent above that for 1956. The rise in mortality attributed to diabetes was concentrated in the last quarter of the year when the death rate from the disease was over 15 per cent higher than in the corresponding period of 1956. For the first nine months, the rates for the two years were approximately the same.

The high mortality in the last quarter of 1957, which, moreover, has extended into the first quarter of 1958, reflected the prevalence of influenza, especially the so-called Asiatic strain. The widespread outbreak in October and November brought a rise in the general death rate as well as that from pneumonia and influenza.

Submitted by the Committee on Statistics, Herbert H. Marks, Chairman. The Committee welcomes suggestions or actual materials suitable for this section in future issues from Association members and other readers of the Journal.

Furthermore, the high mortality in the United States resulting from the influenza outbreak was largely concentrated at the older ages, the principal victims being those suffering from chronic diseases of later life, among them diabetes.

In the states and cities of the United States regularly contributing data to the Committee on Statistics, increases in diabetes mortality for 1957 were recorded for New York City and Baltimore; Philadelphia showed no change, but the rates for New York State, Maryland and Boston were below the preceding year.

Diabetes mortality in the two large Canadian cities, Toronto and Montreal, showed divergent trends. The rate for Montreal rose 13 per cent, but that for Toronto fell 14 per cent. It may be noted that the impact of the influenza epidemic was less in Canada than in this country.

In England and Wales the death rate from diabetes in the first nine months of 1957 was appreciably lower than for the corresponding period of 1956. In the last quarter of 1957, however, when England was experiencing an influenza epidemic, deaths from diabetes exceeded the number in the last quarter of 1956, the increase being especially large among females. For the year as a whole, the death rate from diabetes in 1957 was 4 per cent less

TABLE 1
Recent data on diabetes mortality
Deaths and death rates—1957 and 1956

Area	Death Rates Per 100,000		Number of Deaths	
	1957	1956	1957	1956
United States (10 per cent sample)	16.4	15.8	2,793	2,634
Metropolitan Life Insurance Company				
Industrial Policyholders	15.2	14.9	2,657	2,649
New York State	18.2	19.2	2,985	3,109
New York City	19.4	18.9	1,582	1,527
Maryland	17.3	18.4	500	511
Baltimore	26.0	25.1	255	244
Boston	14.3	18.1	118	148
Philadelphia	20.7	20.7	450	450
Toronto	17.3	20.2	114	130
Montreal, Resident	17.9	15.8	202	175
London (Administrative County)	7.5	8.2	245	267
England and Wales				
Total	7.0	7.3	3,139	3,242
Males	4.7	5.1	1,014	1,108
Females	9.1	9.2	2,125	2,134

Note: Rates for the states and cities are based upon local estimates of population. United States data are based upon returns from a 10 per cent sample of death certificates received in vital statistics offices, as published in "Current Mortality Analysis," a monthly report of the National Office of Vital Statistics of the U. S. Public Health Service.

than in 1956, due largely to the decline in the rate for males. In London (Administrative County) the rate also fell 9 per cent in 1957 as compared with 1956. Even for the last quarter of the year the rate in 1957 was less than in 1956, although the influenza outbreak brought a rise in the total death rate in London. Apparently many deaths of diabetics during the epidemic were ascribed to influenza. It may be noted that deaths ascribed to diabetes accounted for only 0.5 per cent of the city's deaths in the last quarter of 1957.

Regional mortality for diabetes in the United States for 1957 based upon the 10 per cent sample of death certificates likewise showed no consistent pattern (table 2). Five of the nine areas showed increased rates in 1957 as compared with 1956 ranging from 7 per cent to 28 per cent, while four areas showed declines ranging from 2 per cent to 12 per cent. The largest increase was recorded in the West South Central area; the largest decrease for the Rocky Mountain area, but the number of deaths in the sample there was small. It is possible that the complete figures will show somewhat greater uniformity geographically in the comparison of 1956 and 1957 rates.

Complete and final mortality data from diabetes by states are now available for the year 1955 and are shown together with the rates for the two preceding years in table 3. Death rates are still highest in the Northeastern section of the country and lowest in the South and in the Far West, with the Middle Western states generally showing rates of intermediate size. In 1955 the highest death rate was recorded in New Hampshire, with only a slight lead over Rhode Island which for many years

had ranked first. New Mexico had the lowest death rate from the disease in 1955 and Arizona next lowest. These two states likewise have for many years experienced the minimum rates recorded in the country. Only slightly higher were the rates in Tennessee and Alabama. The maximum figure for New Hampshire is somewhat over three times that of the minimum rate of New Mexico. On a regional basis the highest rate was recorded in the Middle Atlantic states, with New England next in line; the lowest in the East South Central states and next lowest in the Pacific Coast states. Within regions there are, in many cases, rather wide differences. In the Mountain states, Montana's rate was more than double that for New Mexico; in the South Atlantic states, Delaware's rate was double that for North Carolina; and in New England, the East North Central and the West North Central areas, the maximum rate in the area was about one and one half times the minimum.

The level of the rates for the individual states is affected by a number of factors. Most easily measurable of these is the composition of the population by age, the effect of which can be measured by the use of age-adjusted rates. For that purpose, however, it is necessary to use mortality figures for the period of years close to the last census. Such data, the first of the kind on the basis of the Sixth Revision of the International List, have recently been released by the National Office of Vital Statistics. Table 4 gives age-adjusted death rates by color and sex for each state in 1949-1951. For comparison, the crude death rates for the total population are given in the table. It will be seen first that the range of the adjusted death rates was appreciably less than that

TABLE 2

Number of deaths and death rates from diabetes in geographic division: United States reporting area for the 10 per cent sample: 1957, 1956 and 1955

Geographic Division	Death Rates per 100,000*			Number of Deaths*		
	1957	1956	1955	1957	1956	1955
U. S. reporting area	16.4	15.8	15.3	2,793	2,634	2,506
New England	20.9	19.5	19.1	206	190	184
Middle Atlantic	20.9	22.2	20.9	681	717	674
East North Central	19.0	19.4	18.1	666	668	609
West North Central	17.1	15.1	13.3	262	228	197
South Atlantic	14.1	11.3	12.6	348	271	295
East South Central	11.5	11.8	9.2	136	138	107
West South Central	13.4	10.5	12.1	218	168	190
Mountain	10.8	12.3	10.6	69	76	63
Pacific	11.2	10.0	10.6	207	178	187

*Excludes Armed Forces overseas.

Note: These data from the 10 per cent sample are subject to sampling error. The number of deaths, as given, does not cover the entire United States for each month but is limited by the completeness of the reporting area. The size of the reporting area is indicated by the footnote on page 7 of each monthly issue of the "Current Mortality Analysis."

Source: Data furnished by National Office of Vital Statistics of the U. S. Public Health Service.

TABLE 3

Death rates per 100,000 from diabetes in the United States by geographic region and state,* 1955, 1954 and 1953

Region and State	1955	1954	1953	Region and State	1955	1954	1953
United States	15.5	15.6	16.3	<i>South Atlantic (continued)</i>			
<i>New England</i>	20.0	19.4	19.7	West Virginia	13.2	12.4	11.5
Maine	17.7	17.9	15.1	North Carolina	9.7	10.0	10.4
New Hampshire	26.6	21.8	21.1	South Carolina	10.7	10.5	12.0
Vermont	15.1	15.6	19.4	Georgia	11.2	10.6	11.9
Massachusetts	20.5	19.6	19.0	Florida	12.7	12.8	12.4
Rhode Island	26.2	24.6	30.0	<i>East South Central</i>	10.2	10.5	11.0
Connecticut	17.0	17.7	19.0	Kentucky	12.4	13.0	12.8
<i>Middle Atlantic</i>	21.1	20.8	22.5	Tennessee	9.2	8.7	9.2
New York	20.2	19.9	21.3	Alabama	9.2	9.7	10.8
New Jersey	21.0	21.0	21.2	Mississippi	10.1	10.9	11.6
Pennsylvania	22.5	22.0	24.7	<i>West South Central</i>	11.5	11.5	11.6
<i>East North Central</i>	17.9	19.0	19.5	Arkansas	10.7	10.1	9.7
Ohio	21.4	22.8	23.3	Louisiana	14.5	14.3	14.8
Indiana	16.7	16.9	17.6	Oklahoma	13.8	13.5	14.2
Illinois	13.9	15.4	16.7	Texas	10.1	10.2	10.3
Michigan	19.4	20.5	20.5	<i>Mountain</i>	11.3	9.9	10.7
Wisconsin	17.6	18.7	18.4	Montana	17.6	15.8	14.7
<i>West North Central</i>	15.8	16.3	17.3	Idaho	12.7	11.5	13.1
Minnesota	16.2	17.8	17.4	Wyoming	14.1	9.1	14.1
Iowa	16.8	15.3	16.7	Colorado	10.2	9.8	11.0
Missouri	15.2	15.3	16.8	New Mexico	7.9	7.2	5.4
North Dakota	12.8	13.9	15.5	Arizona	8.9	7.1	8.2
South Dakota	13.3	15.5	17.8	Utah	12.7	11.7	12.0
Nebraska	19.2	18.6	21.2	Nevada	10.2	6.7	11.2
Kansas	14.4	16.4	16.6	<i>Pacific</i>	10.9	10.4	10.9
<i>South Atlantic</i>	12.2	11.9	12.3	Washington	13.9	14.3	15.3
Delaware	20.0	18.6	22.1	Oregon	10.1	10.3	12.4
Maryland	17.7	16.9	17.6	California	10.4	9.7	9.9
District of Columbia	12.0	14.0	13.7				
Virginia	11.3	10.3	10.1				

*By place of residence. Excludes Armed Forces overseas.

Source: National Office of Vital Statistics of the U. S. Public Health Service. Special Reports—National Summaries.

for the crude rates. The maximum rate for Rhode Island (28.1) is approximately three and a half times that of the minimum recorded in California (7.9). As against this the maximum crude rate of Rhode Island was more than five times the minimum of 6.7 for New Mexico.

The effect of age adjustment of the rates is further seen by the relative levels of these rates both in comparisons between regions and within regions. Thus, the crude rates in several Northern and Eastern states were generally higher than those in the Middle West, but the age-adjusted rates were more nearly equal, and in some cases the relative positions were reversed. For example, the crude rate for New York State in 1949-1951 was 6 per cent above that for North Dakota, but its age-adjusted rate was 2 per cent less. Again, New York's crude rate was 55 per cent above that for South Carolina, although the age-adjusted rates were identical for the two states. Again South Carolina's crude rate was about identical with that for Florida, but its age-adjusted rate was 40 per cent higher than Florida's. While the age-adjusted

rate for California was the lowest in the country in 1949-1951, four other states had crude rates as low or lower than California's. New Mexico's crude rate was 27 per cent less than California's, although the age-adjusted rate was 10 per cent higher.

The table brings out many striking differences of distribution of diabetes mortality for the country as a whole and for the several areas of the country. Among the more notable items are these: The increase in the proportion of older persons in the population results in a very sizable difference, 12 per cent, between the crude rate (16.5) and the rate age-adjusted (14.5) on the basis of the 1940 population.

In the population as a whole the female age-adjusted rate was nearly one and a half times that of males. Among whites the excess of the female rate was about 50 per cent, but among nonwhites the female rate was nearly double that for males. The nonwhite rate was about 20 per cent higher than the white rate, but this difference was virtually all accounted for by the excess of more than

TABLE 4

Crude and age-adjusted death rates per 100,000 from diabetes mellitus for total persons and age-adjusted rates by color and sex, United States and each state, 1949-51

Area	Crude Rates Total persons	Both sexes	Total		Age-Adjusted Death Rates			Nonwhite		
			Male	Female	White	Both sexes	Male	Female	Male	Female
United States	16.5	14.5	11.5	17.4	14.3	11.4	16.9	17.0	11.5	22.4
<i>New England</i>										
Maine	18.6	13.9	11.4	16.2	13.9	11.4	16.2			
New Hampshire	21.8	15.1	14.1	16.2	15.2	14.1	16.3			
Vermont	18.3	13.7	11.7	15.7	13.7	11.7	15.7			
Massachusetts	21.6	16.0	13.4	18.1	15.9	13.3	18.0	22.6		25.6
Rhode Island	35.1	28.1	20.2	34.7	28.0	20.1	34.5			
Connecticut	19.2	15.5	11.0	19.6	15.4	10.9	19.4			
<i>Middle Atlantic</i>										
New York	19.5	15.9	12.3	19.1	15.6	12.2	18.7	20.2	13.1	26.2
New Jersey	20.8	17.6	12.4	22.2	17.2	12.3	21.4	24.8	13.1	36.5
Pennsylvania	21.9	18.5	12.3	24.3	18.3	12.2	24.0	20.9	14.1	27.9
<i>East North Central</i>										
Ohio	23.0	18.9	14.4	23.2	18.5	14.3	22.5	24.5	14.5	34.9
Indiana	17.8	14.5	11.8	17.2	14.4	11.8	16.8	17.6		24.0
Illinois	21.4	17.4	13.3	21.4	17.4	13.4	21.1	16.4	9.4	23.5
Michigan	22.9	21.7	16.5	27.0	21.3	16.4	26.3	26.2	15.5	37.8
Wisconsin	18.9	15.2	12.1	18.3	15.2	12.2	18.1			
<i>West North Central</i>										
Minnesota	16.8	13.3	11.2	15.6	13.3	11.2	15.5			
Iowa	17.0	12.1	10.3	13.9	12.1	10.3	13.8			
Missouri	17.9	13.2	10.5	15.6	12.7	10.3	14.9	19.1	13.4	24.7
North Dakota	18.4	16.3	13.1	20.1	16.3	13.2	20.0			
South Dakota	17.7	14.7	13.8	15.7	14.4	13.7	15.3			
Nebraska	18.7	13.7	11.9	15.5	13.7	11.9	15.5			
Kansas	17.5	12.8	11.3	14.2	12.7	11.4	13.9	15.4		
<i>South Atlantic</i>										
Delaware	24.7	21.6	13.2	29.3	20.0	12.8	26.3	33.1		53.1
Maryland	17.7	17.8	12.9	21.9	17.6	13.2	21.1	18.1	10.6	26.1
District of Columbia	14.0	13.3	12.9	13.6	11.6	12.6	10.8	17.3	13.0	21.0
Virginia	11.0	12.0	9.2	14.5	10.5	9.0	11.7	17.4	10.0	25.0
West Virginia	12.8	13.0	8.8	17.5	12.7	8.8	16.8	17.0		28.1
North Carolina	9.8	12.0	11.0	12.9	11.0	10.7	11.2	15.4	11.8	18.8
South Carolina	12.6	15.9	14.4	17.4	15.1	14.9	15.4	18.2	14.3	21.4
Georgia	11.8	13.2	11.8	14.5	11.5	11.8	11.4	17.7	12.2	22.6
Florida	12.7	11.3	9.3	13.1	9.8	8.7	10.8	16.8	11.1	22.6
<i>East South Central</i>										
Kentucky	12.3	11.3	9.7	12.8	10.5	9.3	11.7	20.2	14.1	26.1
Tennessee	9.2	9.3	8.2	10.5	8.2	7.8	8.6	14.9	9.9	19.8
Alabama	10.2	11.3	10.4	12.2	9.9	10.0	9.7	15.0	11.6	18.0
Mississippi	11.4	12.0	9.7	14.4	10.3	9.0	11.5	14.5	10.7	18.3
<i>West South Central</i>										
Arkansas	9.9	9.4	7.8	11.0	8.6	7.3	9.9	12.2	9.6	14.9
Louisiana	13.4	14.4	10.1	18.4	13.3	9.5	16.7	17.5	12.0	22.7
Oklahoma	13.5	11.4	10.1	12.6	10.8	9.9	11.8	17.6	13.0	22.2
Texas	11.0	11.6	9.9	13.2	11.2	10.0	12.4	13.8	9.4	18.2
<i>Mountain</i>										
Montana	14.3	12.0	8.3	16.7	12.0	8.4	16.6			
Idaho	13.6	13.0	12.3	13.8	12.9	12.3	13.7			
Wyoming	12.9	13.7	8.8	19.7	13.6	8.8	19.5			
Colorado	11.5	9.6	8.9	10.3	9.6	9.0	10.2			
New Mexico	6.7	8.7	6.9	10.7	8.6	7.2	10.1			
Arizona	8.3	9.5	7.4	11.8	9.3	6.9	11.8			
Utah	11.3	12.6	10.3	15.0	12.7	10.6	14.8			
Nevada	12.9	12.7	11.4	14.7	12.9	12.0	14.1			
<i>Pacific</i>										
Washington	14.8	12.2	10.6	14.0	12.1	10.5	13.8			
Oregon	11.8	9.7	7.9	11.6	9.6	8.0	11.4			
California	9.2	7.9	7.4	8.5	7.8	7.3	8.3	10.0	9.4	10.7

Note: Age-adjusted on the basis of the age distribution of the population of the United States as enumerated in 1940. For nonwhites the death rates are not shown in states with less than thirty deaths in 1949-51.
Source: National Office of Vital Statistics.

30 per cent among nonwhite females compared with white females. The rates for white and nonwhite males were approximately the same.

The excess of the death rate of nonwhite females as compared with white females was found in virtually every state where there were sizable nonwhite populations. In several Northern states extremely high rates were found among the nonwhite female population—53.1 in Delaware, 37.8 in Michigan, 36.5 in New Jersey and 34.9 in Ohio. In all these states these rates were 40 per cent or more above the corresponding rates for white females. Even in the South the margin between the diabetes mortality of females of the two races was wide, with rates for the nonwhite females double or more that for white females in several cases.

The excess of female over male rates was quite general; among whites, the only exceptions were Alabama, Georgia and the District of Columbia, where the male rate was slightly the higher. The range of difference among whites was fairly marked—from less than 20 per cent in several states, chiefly in the South, to 75 per cent or more in some others—Connecticut, Pennsylvania, Delaware, West Virginia, Montana and Wyoming.

The latest detailed statistics on mortality from diabetes in the United States by color, sex and age, for the year

1955, are given in table 5. In the aggregate and for all color-sex groups except nonwhite females, the death rates rose steadily through adult life to a maximum at ages eighty to eighty-four. Among nonwhite females the peak was reached at ages sixty-five to sixty-nine and fell appreciably in the later age groups. Among white persons the death rates at the younger childhood ages were the same for both sexes, but in the teens the female rates were somewhat the higher. From ages twenty to forty-nine the male rates were the higher, the difference being especially marked at ages thirty-five to forty-four. At ages fifty and over the female rates were distinctly the higher. Among nonwhites the number of deaths in the age groups under thirty-five was too few to reveal any sex difference in mortality. From ages thirty-five on, the female death rates were greatly in excess of those of males—more than double between ages forty-five and sixty-nine. Comparison of the mortality of whites with nonwhites showed that among males the nonwhites were the higher from ages twenty-five through sixty-nine and among females from ages twenty-five through seventy-four. The differences were particularly large among females between ages thirty-five and fifty-nine where the rates were several times as high among the nonwhite as among the white. The figures would indicate that the

TABLE 5

Number of deaths and death rates per 100,000 from diabetes mellitus by race, sex and age. United States, 1955.
(Excludes Armed Forces overseas)

Age Period (Years)	Death Rates					Deaths				
	Total	White		Nonwhite		Total	White		Nonwhite	
		Male	Female	Male	Female		Male	Female	Male	Female
All Ages	15.5	12.8	18.5	9.7	18.6	25,488	9,242	13,714	840	1,692
Under 1	0.6	0.6	0.3	2.0	1.6	23	10	4	5	4
1-4	0.3	0.3	0.3	0.3	0.1	42	21	17	3	1
5-9	0.3	0.3	0.3	0.1	0.2	51	24	24	1	2
10-14	0.5	0.4	0.5	1.0	0.9	64	23	26	8	7
15-19	0.7	0.4	0.8	1.3	1.1	75	19	39	9	8
20-24	1.4	1.4	1.3	1.4	2.0	141	59	61	8	13
25-29	2.1	2.3	1.9	2.8	2.6	248	115	98	17	18
30-34	2.6	2.7	2.3	3.9	3.2	320	143	131	24	22
35-39	3.2	3.6	1.9	7.3	7.9	374	185	102	39	48
40-44	4.5	4.5	3.0	8.1	13.2	503	224	155	44	80
45-49	7.7	7.1	5.9	8.0	30.3	777	318	270	38	151
50-54	14.4	12.1	12.4	20.9	48.6	1,270	476	501	86	207
55-59	27.0	21.9	27.6	31.8	70.9	2,123	769	1,013	105	236
60-64	49.6	37.9	56.7	45.9	102.4	3,318	1,143	1,804	113	258
65-69	82.9	60.6	100.3	65.0	146.4	4,433	1,455	2,593	117	268
70-74	111.6	91.8	129.2	76.4	137.0	4,538	1,615	2,641	97	185
75-79	145.0	127.7	165.2	84.3	110.1	2,689	1,363	2,158	70	98
80-84	168.8	154.2	187.6	97.6	115.9	2,238	834	1,313	40	51
85 +	160.0	150.3	183.4	43.8	81.0	1,251	442	761	14	34
Not stated						10	4	3	2	1

Source: United States Department of Health, Education and Welfare, Public Health Service, National Office of Vital Statistics Special Reports—National Summaries, volume 46, number 5, May 6, 1957.

duration of life of nonwhite diabetics is less than that of whites and perhaps, too, that the frequency of undetected diabetes is fairly high among elderly nonwhites, especially the females.

The World Health Organization regularly compiles available vital statistics from countries all over the world and publishes them in some detail in its annual *Epidemiological and Vital Statistics*. Table 6 has been assembled from the annual volumes containing the statistics for 1952 to 1954 for those countries which furnish the statistics on diabetes mortality by sex. The international differences in the mortality recorded in the table cannot be taken at face value because the level of the diabetes rates in the different countries is influenced by many factors such as the age composition of the population, differences in point of view of physicians with regard to the designation of the cause of death of diabetics, and the quality and abundance of the facilities for diagnosis and treatment.*

In 1954 the range of mortality displayed in the table was rather large—from 2.2 to 12.4 per 100,000 among males and from 2.4 to 18.7 for females. For Western Europe alone the range was from 3.3 to 9.5 among males and from 6.0 to 17.4 among females.

The United States had the highest recorded death rate both among males and females. The rate in this country was about one and one half times that for Canada. Of the European countries, Switzerland experienced the highest rate in both sexes, while that for Finland was lowest among the males and that for Portugal lowest among the females. There were surprisingly large differences between countries with populations of the same ethnic group. For example, the rates for Sweden were distinctly higher than those for Norway and Denmark. The rates for England and Wales were comparatively low while those for France and Italy relatively high. The rates among males in Italy averaged slightly higher than those for French males, but the reverse was true among females. Rather surprising was the low rate for the Jewish population of Israel. The classification of the causes of death among diabetics may be in part responsible, but so are such factors as the low average age of the population, the large increase in the population drawn from non-European areas, and the high proportion of the population engaged in agricultural and manual work. The economic and occupational distribution of Jews in Israel is quite different from that among those in western countries.

*For a more detailed statement on this matter, see World Health Organization—Epidemiological and Vital Statistics Report, vol. 8, no. 11, 1955, p. 467.

TABLE 6

Death rates per 100,000 from diabetes in various countries, by sex, 1952-1954

Country	Males			Females		
	1954	1953	1952	1954	1953	1952
United States	12.4	12.7	13.0	18.7	19.8	19.7
Canada ¹	8.4	8.8	8.9	12.9	13.2	13.1
Austria	4.8	5.3	5.9*	9.3	8.3	8.9*
Denmark	4.7	4.4	3.9	7.2	5.7	6.7
Finland	3.3	4.9	3.9	7.8	7.4	7.9
France	8.0	8.3	7.7	14.4	14.6	13.6
Germany Federal Republic	7.3	7.7	8.3	12.5	13.3	13.7
Italy	8.5	8.2	7.9	12.6	11.9	11.6
Norway	5.5	5.1	6.1	8.1	7.4	7.6
Netherlands	7.4	6.5	7.1	16.3	16.0	15.7
Portugal	5.5	4.3	4.6	6.0	5.5	6.0
England and Wales	4.9	5.0	5.2	8.6	9.3	9.8
Scotland	5.2	5.3	5.8	11.8	11.6	12.5
Northern Ireland	5.3	4.4	4.3	9.6	7.2	6.5
Sweden	7.7	7.8	9.6	12.8	14.0	14.3
Switzerland	9.5	11.1	10.1	17.4	18.4	17.6
Israel ²	3.0	2.8	3.2	3.5	3.3	4.1
Australia ³	8.2	8.1	8.7	16.3	17.0	16.5
New Zealand ⁴	7.3	8.7	9.7	12.4	16.5	13.9
Ceylon	8.7	8.4	8.9	4.9	4.8	4.4
Japan	2.2	2.4	2.2	2.4	2.5	2.4

¹Excludes Yukon and Northwest Territories.

²Jewish population.

³Excludes full-blood aboriginals.

⁴Excludes Maoris.

*5th Revision (1938).

Source: World Health Organization—Annual Epidemiological and Vital Statistics, 1952, 1953 and 1954.

Among males in Australia and New Zealand the death rate from diabetes was of the same order as in Canada, but among females somewhat higher. In these three Commonwealth countries, the rates were well above those recorded in Great Britain.

Japan recorded the lowest death rate of diabetes of all the countries listed. In Ceylon the reported rates for males were relatively high, in sharp contrast with the situation among females.

Except for Ceylon, the rates among females were uniformly higher than among males. The sex ratio of the death rate varies widely; it is comparatively low in Japan and Israel, whereas in Finland, the Netherlands, Scotland and Australia the female rate was about double the male rate.

No consistent trend was present in the mortality from diabetes over the three-year period in the various countries included in the table. It may be noted, however, that the 1954 rates were lower than those for 1952 in the majority of countries both among males and females.