

1930-1932

1960-1962

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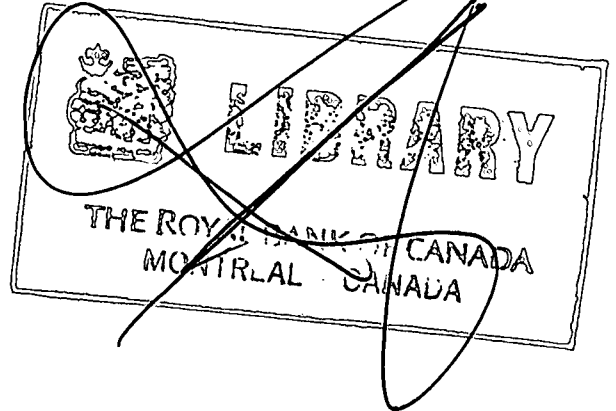
LIFE EXPECTANCY TRENDS

1930-1932 to 1960-1962

DOMINION BUREAU OF STATISTICS

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DOMINION BUREAU OF STATISTICS
Health and Welfare Division
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LIFE EXPECTANCY TRENDS

1930 - 1932 to 1960 - 1962

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PREFACE

This report, issued by the Dominion Bureau of Statistics, is a summary of the mortality experience described in the five official Canadian and Regional Life Tables published to date. These have been prepared about each of the census years 1931, 1941, 1951, 1956 and 1961 using corresponding three-year deaths.

The report contains descriptive analyses of various mortality functions by age, sex, and region appearing in the life tables from 1930-1932 to 1960-1962, and an international comparison of life expectancy among selected countries as closely comparable to the Canadian period of 1960-1962 as possible, supplemented by tables and charts.

The next official complete life tables to be published will be the 1965-1967 ones, these being for Canada and each of the ten provinces.

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INTRODUCTION

This Report describes various mortality functions appearing in life tables for Canada and the regions from 1930-1932 to 1960-1962. The first section deals with Canadian life tables for the period; the second section summarizes the changing pattern of mortality by leading causes and its effect on life expectancy; the third section pertains to regional life tables; the fourth section deals with the concept of life years lost by cause of death; and the final section compares Canadian life expectancy at various ages with that of other countries.

The analysis contained in this Report is based on the official Canadian and Regional Life Tables [1-5], prepared about each of the census years 1931, 1941, 1951, 1956 and 1961 using corresponding three-year deaths. The methods followed in the preparation of *Life Tables for Canada and Regions, 1931 and 1941* have been described by N. Keyfitz in Census Monograph No. 13 [7] and in a paper published in *Estadística* [8], respectively. The method followed in the preparation of Canadian and Regional Life Tables for the years 1950-1952, 1955-1957 and 1960-1962 is to be described in a Health and Welfare Technical Report to be released shortly.

The force of mortality in a population is usually measured by means of such indices as the crude death rate, infant mortality rate, age-specific death rate, or standardized death rate; the life table is another effective and comprehensive method

of describing mortality in a population. The life table indicates what happens to a cohort of 100,000 live births when it is subjected to the mortality influences at various ages affecting the population at a certain period of time. From the numbers of survivors the average lifetime a person can expect to live after any age is calculated. The principal life table functions are defined as follows:

- l_x is the number of persons, starting with a cohort of 100,000 live births, who survive to the exact age x marking the beginning of the age interval;
- d_x is the number of persons dying in the age interval beginning with age x out of 100,000 live births;
- q_x is the probability of dying before reaching the end of the age interval beginning with age x ;
- L_x denotes the number of persons in the hypothetical stationary population in the age interval beginning with age x ;
- T_x denotes the total number of persons in the hypothetical stationary population in the age interval beginning with age x and all subsequent age intervals; and
- o_e_x is the average remaining lifetime at age x , also called the expectation of life or life expectancy at that age.

Throughout the Report, unless otherwise stated, death rates are given per 100,000 population. The symbols —, *, and .. represent nil or zero, less than 0.5, and figures not available, respectively.

CANADIAN LIFE TABLES, 1930-1932 to 1960-1962

Life Expectancy

Table 1 compares expectation of life by sex for selected ages. The table shows a substantial increase in life expectancy at birth for both sexes over the period. The female gain from 62.10 years in 1930-1932 to 74.17 years in 1960-1962 is considerably larger than the corresponding male advance from 60.00 to 68.35 years.

Due to heavy infant mortality in 1931, an infant surviving to one year of age at that time had a much higher life expectancy than at birth. By 1961 the infant mortality picture was much improved. At this time, an infant surviving its first year of life still had a higher life expectancy than at birth but the difference between the two life expectancies was much smaller. Much of the gain in life expectancy at birth over the period was due to the great reduction in mortality among young persons, especially infants.

Throughout the period, female life expectancy has been consistently higher than the corresponding male life expectancy. Table 2 measures the excess

of female life expectancy over male life expectancy and illustrates how this sex difference has increased over the period for most ages. In 1930-1932, female life expectancy at birth was 2.10 years higher than the corresponding male figure. This was largely due to the higher level of infant mortality for males since the sex difference in expectancies for young children was only about one year. At 50 years of age the excess of female life expectancy over male life expectancy was 1.07 years and this difference steadily diminished with advancing years. In 1960-1962 the excess of female life expectancy over male life expectancy had increased to the point where the difference was more than five years from birth through to adolescence, more than four years to age 50, and more than three years at age 60. At age 75 the difference was still more than one year.

Table 3 shows the gains in life expectancy for each selected age as between life tables throughout the period, and the total gains for the entire period. By and large, gains in life expectancy were greatest from 1940-1942 to 1950-1952. For the entire period,

these gains were greatest at the younger ages, and female gains were generally higher than the corresponding male gains.

Female life expectancy has increased substantially over almost the whole range of the female life span. By contrast, while the male gains for infants and young children have been considerable, the advances for adult males have been small. The table shows that the period gain in life expectancy at birth was 8.35 years for males and 12.07 years for females. The corresponding gains at 25 years of age were 2.08 years for males and 6.26 years for females. At 40 years of age, female life expectancy had increased by a still substantial 4.43 years while male expectancy had risen by less than one year. In fact, as death rates for older men rose slightly between 1931 and 1941, life expectancy for males 40 or more years old actually declined.

Chart A compares life expectancy by age and sex between the life tables at the extremes of the period under study.

Survivorship of Life Table Cohorts

Table 4 shows the number of survivors from the original cohorts of 100,000, at five-year age intervals, as they are listed in the official Canadian Life Tables since the 1930-1932 one. Throughout the table, the probability of female survival at any given age exceeded the corresponding probability of male survival. Also, the number of males or females surviving from birth to any given age was invariably higher in each life table than it was in the previous one.

In the 1960-1962 male cohort, 3,058 of the hypothetical 100,000 births failed to survive their first year of life, as compared with 8,695 of the 1930-1932 cohort. These figures reflect the great decline in infant mortality during the past generation. Over the whole interval between birth and 50 years of age, the difference between the number of surviving males in the 1960-1962 table and the corresponding number in the 1930-1931 table grew constantly larger. In the 1960-1962 table, 87,896 of the original 100,000 males survived to 50 years of age as compared with 75,244 of the 1930-1932 males, a difference of 12,652.

Above 50 years of age, the male age-group death rates declined relatively little during the thirty-year period, and the size of the 1960-1962 male cohort decreased rapidly. There were 43,791 males survivors in the latter cohort at age 75, as compared with 36,589 in the 1930-1932 male cohort, a gain of only 7,202. The 1960-1962 cohort diminished very quickly over age 75.

In the 1960-1962 table, only 2,387 of the female cohort failed to survive their first year of life, as compared with 6,931 in the 1930-1932 life table. Throughout the interval from birth to 50 years

of age, the number of survivors in the 1960-1962 female cohort rose steadily relative to the corresponding number for 1930-1932. In the 1960-1962 cohort there were 92,394 survivors at age 50, a gain of 15,635 as compared with the 76,759 survivors in the 1930-1932 female cohort. As already stated, the corresponding number of survivors in the 1960-1962 male cohort was 87,896.

Between 1930-1932 and 1960-1962, female age-group death rates declined rapidly in the range from 50 to 75 years. In the 1960-1962 table, 43,791 of the male cohort, constituting less than one half of the survivors at age 50, were alive at age 75. By contrast, 61,052 of the female cohort, amounting to nearly two thirds of the survivors at age 50, were alive at age 75. More than three fifths of the entire 1960-1962 female cohort survived to age 75, as compared with just over two fifths of the 1930-1932 female cohort.

In the 1930-1932 table, the excess survivorship of aged women over elderly men was still relatively moderate. This excess rose steadily over the entire thirty years until the cohorts for the 1960-1962 life table showed a great predominance of surviving elderly women.

Chart D graphs the survivors out of 100,000 born alive by age and sex as indicated in the 1930-1932 and 1960-1962 life tables.

Deaths of Life Table Cohorts

Chart E compares the number of deaths out of 100,000 born alive by age and sex as indicated in the 1930-1932 life table with the corresponding figures in the 1960-1962 life table.

According to the 1930-1932 life tables, the number of male deaths out of 100,000 born alive declined abruptly from 8,695 at age 0 to a minimum of 133 at age 11, then rose rather steadily to a peak of 2,771 at age 77, and declined sharply henceforth until the cohort expired. The number of female deaths out of 100,000 born alive declined abruptly from 6,931 at age 0 to a minimum of 126 at age 10, then rose rather steadily to a peak of 2,909 at age 78, and declined sharply henceforth until the cohort expired.

Considerable changes occurred during the period between the 1930-1932 life tables and the 1960-1962 life tables. According to the 1960-1962 life table, the number of male deaths out of 100,000 born alive declined more abruptly, from 3,058 at age 0 to a minimum of 48 at age 10, then rose, interrupted by some oscillations during the twenties, to a peak of 2,992 at age 78, and declined sharply thereafter. The number of female deaths out of 100,000 born alive also declined quite abruptly, from 2,387 at

age 0 to a minimum of 27 at age 11, then rose quite steadily to a maximum of 3,700 at age 82, and declined very sharply thereafter.

The male 1930-1932 graph remained above the male 1960-1962 graph until age 50, after which the reverse held. For the females, the change in the relative positions of the two graphs occurred much later, at age 73.

Mortality Rates

Table 6 presents the mortality rates for the Canadian life tables by sex for certain selected ages, 1960-1962 compared with 1930-1932. These are also shown in Chart C, plotted on semi-logarithmic graph paper for ease in graphing and presentation. Male mortality has been consistently higher than female mortality in the 1960-1962 tables, but

this was not so in the 1930-1932 life tables. Female mortality was higher than male mortality in the latter tables between ages 23 and 42.

A very interesting phenomenon shows up in the mortality curve for males; there is a peak in the early twenties, followed by a trough in the late twenties, before the inevitable rise that occurs with advancing age. However, this is less prominent in the 1930-1932 life tables than in the 1960-1962 life tables. For all four mortality curves, the customary trough occurs at about age 10 or 12, following the sharp decline from the mortality rates at the infant and younger ages. The secondary peak and subsequent trough in the twenties for males are more noticeable in the 1960-1962 life tables than in the 1930-1932 life tables. These observations are quite similar to those made in connection with the United States Life Tables for 1959-1961 [9].

LEADING CAUSES OF DEATH BY AGE AND SEX, CANADA, 1931, 1941, 1951, 1956, 1961

It is necessary to consider cause of death by age group in order to explain and assess changes in life expectancy. This section presents a mortality summary for the relevant years to be used in an appraisal of life expectancy trends.

Infant Mortality

It can be seen from Table 7 that infant death rates for both sexes have been greatly reduced and that the discrepancy between male and female rates has diminished between 1931 and 1961. This is illustrated graphically in Chart F. The chart also shows that the decrease in the infant death rate began to lessen for both sexes around 1951.

The table shows that much of the reduction in the infant death rate over the period is due to lower mortality from diarrhoea and enteritis, influenza, bronchitis, and pneumonia, and the virtual elimination of whooping cough as a leading cause of death. Most of these reductions had been effected by 1951. Since then, improvement has been slower because of the steady toll from such causes as immaturity, congenital malformations, asphyxia and atelectasis, and accidents.

Age Group 1-4

Table 7 shows that great progress has been made over the period in reducing mortality among young children. Chart F traces this progress and clearly shows that the rate of improvement began to slow down quite perceptibly around 1951.

Investigation of the table reveals that mortality reduction in this age group was due in part to the virtual eradication of diarrhoea and enteritis, infectious diseases, and appendicitis, as leading causes of death. Influenza, bronchitis, and pneumonia, the leading cause of death in 1931, while still the second leading cause in 1961, has shown a very marked decrease. Accidents, the third leading cause in 1931, easily rank as the leading cause

of death in 1961 despite a rate decline of approximately 40 per cent over the period. Again, improvement has been slower since 1951 because of such causes as accidents, influenza, bronchitis, and pneumonia, congenital malformations, and cancer.

Age Group 5-14

Death rates for this age group, already low in 1931 as compared with the other age groups, were reduced by more than two-thirds over the period. Table 7 shows that accidents have been the leading cause of death for males throughout the period and for females since 1951. In 1931, several diseases such as tuberculosis, appendicitis, diphtheria, and influenza, bronchitis, and pneumonia took a fairly heavy toll of older children. By 1961, these diseases were almost eliminated as causes of death in this age group and cancer had become the second leading cause of death.

Chart F shows that improvement in the death rates for the both sexes began to slacken around 1951. It would seem that this trend will continue as it appears to be difficult to reduce deaths due to accidents and cancer in this age group.

Age Group 15-24

Mortality in this age group was greatly reduced between 1931 and 1961. Table 7 shows that the male death rate has been reduced by more than 50 per cent and the female death rate by more than 80 per cent over the period. One result of the very large female reduction has been that the difference between male and female rates has increased considerably by 1961. These changes are clearly shown in Chart F. It is evident from the table that the elimination of tuberculosis as a leading cause of death was the largest single factor in these rate changes. Important reductions also were made in the death rates for influenza, bronchitis and pneumonia, cardiovascular disease, appendicitis, and

maternal causes. By 1961, accidents and cancer were distinctly the leading causes of death. Accidents now account for over 70 per cent of all male fatalities in this age group. Not much improvement in the overall death rates for this age group can be expected because the rates for the current leading causes, accidents and cancer, have remained constant throughout the period.

Age Group 25 - 44

Table 7 shows that the female death rate, which was higher than the male death rate in 1931, has been reduced by more than 70 per cent during the period while the male death rate was reduced by almost one-half. Chart F traces these changes and shows that the rate of improvement for the both sexes began to slow down around 1951.

The table shows that these rate reductions were possible largely through the elimination of tuberculosis as a leading cause of death, along with such other causes as maternal ones, influenza, bronchitis, and pneumonia, nephritis and nephrosis, and appendicitis. Accidents, cardiovascular disease, and cancer remain the leading causes of death in this age group. Accident death rates have changed very little over the period. While the female cardiovascular rate has declined by more than one-half and the female cancer rate has also fallen, the male death rates for these causes have remained relatively stable over the period.

A pattern is beginning to take shape in this age group which becomes more pronounced in the later age groups. As diseases which formerly exacted a heavy toll have been eliminated as major causes of death, cardiovascular disease, cancer, and accidents have emerged as leading causes of death for all adults, making further reductions in mortality reduction for this age group difficult.

Age Group 45 - 64

It can be seen from Table 7 that, while the male death rate has declined only slightly, the female rate was reduced by more than 40 per cent during the period. Chart F clearly shows that the slight and irregular decline of the male death rate almost disappeared between 1956 and 1961 while the female death rate has declined steadily throughout the period, increasing considerably the discrepancy between male and female death rates by 1961.

The table shows that cardiovascular disease and cancer have been the leading causes of death for this age group throughout the period. The male death rates for these diseases have increased, while the corresponding female death rates have declined somewhat over the last one half of the period. Accidents have been the third leading cause of death for males throughout the period, and for females since 1951.

Examination of other leading causes shows that the trend in death rates, especially for females, has been one of decline. It would seem that further

improvement for the both sexes depends largely on what can be done to lower the death rates due to cardiovascular disease, cancer, and accidents.

Age Group 65 - 74

Table 7 shows that the male death rate from all causes reached a peak in 1941, fell to the period low in 1951, and then rose steadily until 1961, while the corresponding female rate was reduced by almost 30 per cent between 1941 and 1961. Chart F shows how the difference between the male and female death rates has increased over the period. While the female death rate continues to decline, the increase in the male death rate appears to be almost checked.

The table shows that cardiovascular disease and cancer have been the leading causes of death in this age group throughout the period. The male cardiovascular death rate has risen by more than 40 per cent during the period, and the male cancer death rate has also risen steadily but to a lesser extent. On the other hand, the female cancer death rate has declined by more than 15 per cent during the period; the female cardiovascular death rate has been declining since 1951.

Death rates from most other leading causes have been reduced over the period. The biggest improvement was for nephritis and nephrosis, a prominent cause of death until 1941; its mortality rate has been reduced by 90 per cent over the period. The death rate for influenza, bronchitis, and pneumonia has been greatly reduced, yet this group has been the third leading cause of death for most of the period. Accident rates, which have been reduced only moderately by comparison, are almost identical to the rates for influenza, bronchitis, and pneumonia in 1956 and 1961.

As more advanced ages are considered, it becomes increasingly difficult to talk meaningfully about improvement in longevity. A larger proportion of each sex reached this age group in 1961 than in 1931. Many of these people are not in good health and formerly would have died at an earlier age. Considering these facts, it is encouraging to note that the death rates for most major diseases in this age group have declined over the period.

Age Group 75 +

Table 7 indicates that mortality rates for both males and females in this terminal age group have declined steadily since 1941. This trend and the widening gap between male and female rates is shown in Chart F.

The table clearly demonstrates that cardiovascular disease has been the dominant cause of death in this age group throughout the period. Cardiovascular death rates for both sexes have declined somewhat from the period high in 1951. For cancer, the second leading cause of death, the male death rate has risen by 40 per cent over the period while the female death rate has increased

relatively little over the period, and has been declining since 1956. Influenza, bronchitis, and pneumonia, the third leading cause of death, still takes a heavy toll of lives in this age group despite a sharp rate reduction since 1931.

Since this terminal age group is open-ended, improvement in longevity is impossible in the broadest sense. However, the situation is improving in that a larger proportion of the population is reaching this age group and the death rates for most of the leading causes have been reduced over the period.

Summary of Mortality in Relation to Life Expectancy

The significance of age group mortality patterns in relation to life expectancy may be summarized as follows. During the period under study, reductions in death rates and, hence, improvement in life expectancy have been greatest at the younger ages and have tended to diminish with advancing age. Many diseases have been eliminated as leading causes of death in all or some age groups, and the death toll of most other major diseases has been reduced.

Generally, death rates from birth to middle age have been reduced except for leading causes such as congenital malformations, asphyxia and atelectasis, and birth injury for infants and accidents, cancer, and cardiovascular disease for the later age groups. Increases in life expectancy coincide with the reduc-

tions in the death rates. The greater part of these improvements occurred in the first half of the period. Since that time the rate of improvement in mortality reduction and, hence, life expectancy has declined.

Further improvement in life expectancy will depend largely on two conditions being met. Firstly, although infant mortality has been reduced sharply to the point where, in 1961, there is little difference between the life expectancy at birth and the life expectancy at one year of age, there is still room for improvement. Secondly, since life expectancy at a given age depends on the mortality rate at that age and at subsequent ages, an increasingly large proportion of the future improvement in life expectancy must come from death reductions at the older ages.

At the younger ages, death rates for most leading causes have generally been reduced to the point where they will have little effect on future overall mortality reduction. Future gains in life expectancy will depend to a large extent on a reduction in the death rates for major causes such as cardiovascular disease, cancer, and accidents. In the older age groups, influenza, bronchitis, and pneumonia and, possibly, diabetes must also be considered as major causes of death. While most other leading causes are declining, they can be reduced further. The trend is towards a situation in which the probability of reaching an older age is increased but so too is the probability of dying from cardiovascular disease, cancer, accidents, influenza, bronchitis, and pneumonia, or diabetes.

REGIONAL LIFE TABLES, 1930-1932 to 1960-1962

Table 8 and Table 9 are based on the official Regional Life Tables, 1930-1932 to 1960-1962 [1,3,5]. Regional life tables for the Atlantic Provinces excluded Newfoundland prior to 1950-1952. Generally speaking, all the regional life tables exhibited the same trends as the national tables.

Atlantic Provinces, 1950-1952

Table 8 indicates that, since 1950-1952, male life expectancy at birth in the Atlantic Provinces has been just above the national average. Male life expectancies at all subsequent ages were invariably slightly higher for the Atlantic Provinces than for Canada.

Female life expectancies for infants and young women in the Atlantic Provinces have remained close to the national levels. Life expectancies for women forty years of age and over have been only slightly higher than the corresponding Canadian figures.

Table 9 shows that male survivorship at one year of age was moderately below the corresponding Canada figure, reflecting a fairly high rate of infant mortality. Male survivorships in the Atlantic Provinces remained below the Canadian figures until

the age of about sixty. However, a comparatively large proportion of the Atlantic cohort survived to the advanced age of 75.

Female survivorships in the Atlantic region were somewhat lower than the corresponding national figures through most of the lifetime of the cohort.

Québec

Male life expectancy at birth in Quebec was nearly four years below the Canadian figure for 1930-1932. Quebec male life expectancy rose sharply, the difference being reduced to about one year by 1960-1962. Male life expectancy at one year of age advanced by over six years, and was less than a year below the national level by 1960-1962. Quebec life expectancies for men twenty years of age and over remained moderately below the Canadian level throughout the period.

Quebec female life expectancies at birth and at one year of age recorded very large gains, moving closer to the corresponding Canadian life expectancies by 1960-1962. The female life expectancy at age twenty rose slightly relative to the Canadian figure. Life expectancies for women forty years of

age and over increased by about the same amount as the national figures, and remained moderately below the Canadian figures throughout the period.

According to Table 9, male survivorship figures for Quebec were far below the corresponding Canadian figures at all ages for 1930-1932, but rose sharply during the period to reduce the gap markedly by 1960-1962. Quebec survivorships for elderly and aged men were still well below the Canadian level figures for 1960-1962.

The provincial female survivorship figures followed virtually the same pattern. The Quebec survivorships for middle-aged and elderly women showed particularly large gains over the period.

Ontario

Male life expectancy at birth in Ontario was somewhat above the national figure for 1930-1932, but the two were almost identical by 1960-1962. Male life expectancy at one year of age followed about the same course as the corresponding Canadian expectancy. Life expectancies for adult males in Ontario were slightly below the Canadian level throughout the period, rising only slightly after forty years of age.

Female life expectancies at birth and at one year of age rose less than the corresponding Canadian life expectancies during the period, and were almost equal to the 1960-1962 Canadian figures. Life expectancy at age 20 was also close to the national figure in that year. Ontario life expectancies for older women conformed to the Canadian pattern.

Ontario male survivorship figures up to the age of fifty were distinctly above the national level for 1930-1932, but were only moderately higher by 1960-1962. Survivorship at age 60 stood at just about the national level in 1960-1962. The proportion of the Ontario male cohort surviving to age 75 corresponded quite closely with the national figure in 1930-1932, but was distinctly below it by 1960-1962.

The Ontario female survivorship figures for all ages up to sixty-five were well above the Canadian level for 1930-1932, but were only moderately above the national figures by 1960-1962. The percentage of the female cohort surviving to age 75 was almost identical with the Canadian percentage for 1960-1962.

Prairie Provinces

Male life expectancy at birth in the Prairie Provinces was 3.5 years above the corresponding Canadian figure for 1930-1932, and was still 1.4 years greater in 1960-1962. Life expectancy at one year of age was 1.5 years above the Canadian level for 1960-1962. Life expectancies for adult males of all ages in the Prairie Provinces remained somewhat higher than the corresponding national figures throughout the period.

Female life expectancies at birth and at one year of age were considerably above the Canadian figures for 1930-1932, and still appreciably higher at the end of the period. Life expectancies for adult females in the Prairie region were consistently higher than the corresponding Canadian figures, with the gains since 1930-1932 following the national pattern very closely.

According to Table 8, the Prairie Provinces had the highest life expectancy at each of the selected ages for each of the two sexes for 1960-1962. Male survivorships at the ages of one and twenty were appreciably above the national level for 1930-1932, rising moderately to the Canadian levels in 1960-1962. Survivorship at age 40 was far above the Canadian level at the beginning of the period, but only slightly higher in 1960-1962. The proportion of the Prairie male cohort surviving to age 60 was much higher than the national proportion in 1930-1932, and still substantially above it thirty years later. In 1960-1962, 48,743 of the Prairie Region male cohort reached age 75, as compared with the male national figure of 43,791.

Female survivorship trends in the Prairie Provinces followed a similar pattern. Survivorships for all ages up to forty were distinctly above Canadian levels in 1930-1932, and about the same as the national figures at the end of the period. The proportion of the Prairie female cohort surviving into their sixties was far above the corresponding Canadian proportion for 1930-1932, and still appreciably higher at the end of the period under study. In 1960-1962, 65,408 of the female Prairie Region cohort reached age 75, as compared with 61,052 of the Canadian female cohort.

British Columbia

Male life expectancy at birth in British Columbia was appreciably above the national figure for 1930-1932, but only slightly greater by 1960-1962. Male life expectancies throughout the remainder of the life span were a little higher than the corresponding Canadian figures for 1960-1962.

Female life expectancy at birth was well above the Canadian level in 1930-1932, and still appreciably higher thirty years later. Female life expectancies in British Columbia at all subsequent ages followed about the same pattern of increase as Canadian life expectancies, but remained somewhat above the corresponding national figures throughout the period.

Male survivorship at one year of age in British Columbia was the highest in the five regions for 1930-1932. It rose relatively little, being only slightly above the Canadian level by 1960-1962. Male survivorship at age 20 followed a similar course. Survivorships at age 40 and age 50 rose less than the corresponding national survivorships, and stood at about the Canadian level in 1960-1962. The proportions of the British Columbia male cohort

surviving to age 60 and to more advanced ages were somewhat above the corresponding Canadian proportions throughout the period. Female survivorships in British Columbia stood well above the Canadian levels at all ages in 1930-1932. Gains in survivorship were considerably

below the national increases. In 1960-1962, provincial survivorships at all ages up to age 50 were still slightly higher than the corresponding Canadian figures and survivorship at age 60 was moderately greater. 68,184 of the British Columbia female cohort were alive at age 75, as compared with 61,052 of the Canadian female cohort.

LIFE YEARS LOST BY CAUSE AND SEX, CANADA, 1931, 1941, 1951, 1956, 1961

Life years lost, as used in this report, means the total number of years of life lost through the failure of individuals to live an allotted, normal life span. Certain diseases claim more lives at younger ages than do other diseases, and thus exact a heavier toll in terms of the years of life they destroy. Conversely, most victims of certain other diseases are advanced in years and may be said to have completed the normal span which they can reasonably expect to live. What constitutes a normal life span to open to debate but for this report a normal life span is defined to be the life expectancy at birth in the year concerned.

In Table 12, the number of years of life lost was obtained by multiplying the remainder of the allotted normal life span for a given age group by the number of deaths in that age group and summing the products for all age groups [6]. The totals do not pretend to be precise but they do create a common denominator, in terms of lost years, through which the relative importance of deaths due to different causes can be assessed. The allotted life spans appear in parentheses at the column heads of Table 12 under the sex designations. It is important to note that when a man and a woman of the same age die, the woman is the potentially greater loser by reason of her longer normal life span.

Two main observations follow from Table 12. Firstly, the relative importance of the leading causes of death is different in terms of life years lost than in terms of the number of deaths. Secondly, the number of life years lost exhibits a downward trend over the period for a majority of the leading causes, despite the fact that life expectancies have increased during the period.

To illustrate the first point, diseases of the circulatory system accounted for 39 per cent of all deaths in 1961, followed by cancer with 17 per cent,

diseases of the nervous system and sense organs with 12 per cent, and accidents, poisonings, and violence with 8 per cent, while certain diseases of early infancy ranked sixth, accounting for only 5 per cent of all deaths. Diseases of the circulatory system represent largely the natural termination of life, as discussed earlier, while deaths in early infancy represent the elimination of entire life spans. When life years lost are considered, diseases of early infancy become the leading cause accounting for 25 per cent of all life years lost, accidents, poisonings and violence are second with 18 per cent, followed by diseases of the circulatory system with 12 per cent and cancer with 11 per cent.

Since 1941, the total number of life years lost annually appears to have remained fairly steady at slightly over two million despite increasing life expectancies and a steadily growing population. The fact that this total has not increased reflects the declining death rates for infants and young people. Consequently, the number of life years lost due to such leading causes of death as infective and parasitic diseases has been greatly reduced as has the number of lost years associated with child birth and diseases of the digestive, respiratory, and genito-urinary systems; on the other hand, deaths and life years lost have increased greatly for diseases of the circulatory system, cancer, and accidents, poisonings and violence. Lost years totals for diseases of early infancy have not changed greatly over the period because lower infant mortality rates have been largely offset by the increased number of births and the increase in life expectancy. It is interesting to note that, while total deaths due to diseases of the nervous system and sense organs have more than tripled over the period, the number of life years lost due to this cause has increased by only 44 per cent. This indicates that the deaths are in the older age groups and that the increase is much less severe when viewed from the point of view of life years lost.

INTERNATIONAL COMPARISON OF LIFE EXPECTANCY

International comparisons of life expectancies are limited by the quality of the vital registration and census systems in the countries concerned, as well as by differences in the methods used for constructing the life tables. Vital statistics and census records are quite complete in most European countries, so that nineteen such countries are among those compared with Canada in Table 11. The list also includes the United States; four Asiatic

countries, Israel, Japan, Taiwan and India; two Latin American nations, Mexico and Venezuela; and one African country, Egypt. In all the countries selected, an official life table had been computed for a period reasonably comparable to the Canadian period of 1960-1962 [10].

Life expectancies for these nations are compared at four ages in the life span. Life expectancy

at one year of age may be compared with life expectancy at birth to measure the effect of infant mortality. If the former is appreciably greater than the latter, such mortality is high. Life expectancies at the beginning and at the end of the reproductive years are instructive from the economic and social points of view.

The table shows that Canadian life expectancies, for both sexes and at all ages, compared quite favourably with the other countries represented. Only Sweden, Norway, Iceland, and the Netherlands had consistently higher life expectancies than Canada for both sexes. Israel and Denmark had higher male life expectancies than Canada, but their female life expectancies were not as high. Among the twenty-eight countries shown, Sweden, Norway, Iceland, the Netherlands, Denmark and Canada best achieved a consistently high expectation of life, for both sexes, from birth through to age sixty.

At the lower end of the scale, life expectancies at birth in the two Latin American countries, especially in Mexico, were below the European level. This was also true of Taiwan. Life expectancies at birth in Egypt, again, were considerably lower than in the Latin American countries. Finally, life expectancies at birth in India were the lowest of any shown.

Life expectancies in the Latin American countries, Egypt, and India were distinctly higher at one year of age than at birth, indicating the effect of heavy infant mortality. Life expectancies at age 20 showed only India to be conspicuously below the general level.

India was also the only exception to the rule that female life expectancy for an infant or young person in any country was some years above the corresponding male life expectancy. By age 60, the female life expectancy exceeded the male life expectancy even in India.

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TABLE 1. Expectation of Life at Selected Ages by Sex, Canada,¹ 1930-1932 to 1960-1962

Age	1930-1932		1940-1942		1950-1952		1955-1957		1960-1962	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
At birth	60.00	62.10	62.96	66.30	66.33	70.83	67.61	72.92	68.35	74.17
1 year	64.69	65.71	66.14	68.73	68.33	72.33	69.04	73.99	69.50	74.98
5 years	62.30	63.17	63.22	65.69	64.86	68.80	65.45	70.35	65.83	71.27
10 "	57.96	58.72	58.70	61.08	60.15	64.02	60.67	65.51	61.02	66.41
15 "	53.41	54.15	54.06	56.36	55.39	59.19	55.86	60.64	56.20	61.51
20 "	49.05	49.76	49.57	51.76	50.76	54.41	51.19	55.80	51.51	56.65
25 "	44.83	45.54	45.18	47.26	46.20	49.67	46.61	50.97	46.91	51.80
30 "	40.55	41.38	40.73	42.81	41.60	44.94	41.98	46.17	42.24	46.98
35 "	36.23	37.19	36.26	38.37	37.00	40.24	37.34	41.40	37.56	42.18
40 "	31.98	33.02	31.87	33.99	32.45	35.63	32.74	36.69	32.96	37.45
45 "	27.79	28.87	27.60	29.67	28.05	31.14	28.28	32.09	28.49	32.82
50 "	23.72	24.79	23.49	25.46	23.88	26.80	24.04	27.65	24.25	28.33
55 "	19.88	20.84	18.54	21.42	20.02	22.61	20.12	23.38	20.30	24.01
60 "	16.29	17.15	16.06	17.62	16.49	18.64	16.54	19.34	16.73	19.90
65 "	12.98	13.72	12.81	14.08	13.21	14.97	13.36	15.60	13.53	16.07
70 "	10.06	10.63	9.94	10.93	10.41	11.62	10.51	12.17	10.06	12.58
75 "	7.57	7.98	7.48	8.19	7.89	8.73	7.98	9.15	8.21	9.48
80 "	5.61	5.92	5.54	6.03	5.84	6.38	5.89	6.75	6.14	6.90
85 "	4.10	4.38	4.05	4.35	4.27	4.57	4.27	4.97	4.46	4.89
90 "	2.97	3.24	2.93	3.13	3.10	3.24	3.07	3.67	3.16	3.39

¹ Newfoundland not included in 1930-1932 and 1940-1942.TABLE 2. Excess in Years of Female Life Expectancy over Male Life Expectancy at Selected Ages, Canada,¹ 1930-1932 to 1960-1962

Age	1930-1932	1940-1942	1950-1952	1955-1957	1960-1962
At birth	2.10	3.34	4.50	5.31	5.82
1 year	1.02	2.59	4.00	4.95	5.48
5 years	0.87	2.47	3.94	4.90	5.44
10 "	0.76	2.38	3.87	4.84	5.39
15 "	0.74	2.30	3.80	4.78	5.31
20 "	0.71	2.19	3.65	4.61	5.14
25 "	0.71	2.08	3.47	4.36	4.89
30 "	0.83	2.08	3.34	4.19	4.74
35 "	0.96	2.11	3.24	4.06	4.62
40 "	1.04	2.12	3.18	3.95	4.49
45 "	1.08	2.07	3.09	3.81	4.33
50 "	1.07	1.97	2.92	3.61	4.08
55 "	0.96	1.78	2.59	3.26	3.71
60 "	0.86	1.56	2.15	2.80	3.17
65 "	0.74	1.27	1.66	2.24	2.54
70 "	0.57	0.99	1.21	1.66	1.91
75 "	0.41	0.71	0.84	1.17	1.27
80 "	0.31	0.49	0.54	0.86	0.76
85 "	0.28	0.30	0.30	0.70	0.43
90 "	0.27	0.20	0.14	0.60	0.23

¹ Newfoundland not included in 1930-1932 and 1940-1942.

TABLE 3. Increases in Years in Life Expectancy at Selected Ages by Sex, Canada,¹ 1930-1932 to 1960-1962

Age	1930-1932 to 1940-1942		1940-1942 to 1950-1952		1950-1952 to 1955-1957		1955-1957 to 1960-1962		1930-1932 to 1960-1962	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
At birth.....	2.96	4.20	3.37	4.53	1.28	2.09	0.74	1.25	8.35	12.07
1 year.....	1.45	3.02	2.19	3.60	0.71	1.66	0.46	0.49	4.81	9.27
5 years.....	0.92	2.52	1.64	3.11	0.59	1.55	0.38	0.92	3.53	8.10
10 ".....	0.74	2.36	1.45	2.94	0.52	1.49	0.35	0.90	3.06	7.69
15 ".....	0.65	2.21	1.33	2.83	0.47	1.45	0.34	0.87	2.79	7.36
20 ".....	0.52	2.00	1.19	2.65	0.43	1.39	0.32	0.85	2.46	6.89
25 ".....	0.35	1.72	1.02	2.41	0.41	1.30	0.30	0.83	2.08	6.26
30 ".....	0.18	1.43	0.87	2.13	0.38	1.23	0.26	0.81	1.69	5.60
35 ".....	0.03	1.18	0.74	1.87	0.34	1.16	0.22	0.78	1.33	4.99
40 ".....	- 0.11	0.97	0.58	1.64	0.29	1.06	0.22	0.76	0.98	4.43
45 ".....	- 0.19	0.80	0.45	1.47	0.23	0.95	0.21	0.73	0.70	3.95
50 ".....	- 0.23	0.67	0.39	1.34	0.16	0.85	0.21	0.68	0.53	3.54
55 ".....	- 0.24	0.58	0.38	1.19	0.10	0.77	0.18	0.63	0.42	3.17
60 ".....	- 0.23	0.47	0.43	1.02	0.05	0.70	0.19	0.56	0.44	2.75
65 ".....	- 0.17	0.36	0.50	0.89	0.05	0.63	0.17	0.47	0.55	2.35
70 ".....	- 0.12	0.30	0.47	0.69	0.10	0.55	0.16	0.41	0.61	1.95
75 ".....	- 0.09	0.21	0.41	0.54	0.09	0.42	0.23	0.33	0.64	1.50
80 ".....	- 0.07	0.11	0.30	0.35	0.05	0.37	0.25	0.15	0.53	0.98
85 ".....	- 0.05	- 0.03	0.22	0.22	0.00	0.40	0.19	- 0.08	0.36	0.51
90 ".....	- 0.04	- 0.11	0.17	0.11	- 0.03	0.43	0.09	- 0.28	0.19	0.15

¹ Newfoundland not included in 1930-1932 and 1940-1942.TABLE 4. Survivors Out of 100,000 Born Alive at Selected Ages by Sex, Canada,¹ 1930-1932 to 1960-1962

Age	1930-1932		1940-1942		1950-1952		1955-1957		1960-1962		Gain in survivors 1930-1932 to 1960-1962	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
At birth.....	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	-	-
1 year.....	91,305	93,069	93,750	95,069	95,675	96,577	96,528	97,233	96,942	97,613	5,637	4,544
5 years.....	89,033	91,000	92,215	93,729	94,914	95,943	95,946	96,749	96,477	97,231	7,444	6,231
10 ".....	88,070	90,186	91,486	93,152	94,480	95,625	95,611	96,522	96,185	97,035	8,115	6,849
15 ".....	87,361	89,498	90,901	92,703	94,083	95,363	95,297	96,330	95,903	96,888	8,542	7,390
20 ".....	86,269	88,451	90,014	92,030	93,437	94,992	94,699	96,074	95,348	96,659	9,079	8,208
25 ".....	84,859	87,012	88,867	91,107	92,586	94,527	93,897	95,762	94,577	96,378	9,718	9,366
30 ".....	83,429	85,359	87,741	89,995	91,752	93,993	93,116	95,366	93,867	96,045	10,438	10,686
35 ".....	81,954	83,614	86,533	88,760	90,824	93,311	92,272	94,868	93,109	95,612	11,155	11,998
40 ".....	80,180	81,645	84,992	87,242	89,649	92,354	91,217	94,157	92,061	94,958	11,881	13,313
45 ".....	78,024	79,436	82,925	85,393	87,877	90,959	89,620	93,052	90,486	93,966	12,462	14,530
50 ".....	75,244	76,759	80,051	82,959	85,084	88,911	87,015	91,321	87,896	92,394	12,652	15,635
55 ".....	71,326	73,258	75,882	79,606	80,762	86,027	82,853	88,746	83,797	90,000	12,471	16,742
60 ".....	65,946	68,376	70,015	74,830	74,444	81,789	76,601	84,791	77,546	86,387	11,600	18,011
65 ".....	58,684	61,697	61,943	68,211	65,815	75,525	67,737	78,849	68,774	80,916	10,090	19,219
70 ".....	48,879	52,609	51,294	58,711	55,020	66,576	56,466	70,327	57,517	72,746	8,638	20,137
75 ".....	36,589	40,717	38,121	46,172	41,835	53,950	43,106	58,224	43,791	61,052	7,202	20,335
80 ".....	22,887	26,455	23,635	30,724	26,993	37,712	28,117	41,683	28,936	45,161	6,049	18,706
85 ".....	10,978	13,337	11,183	15,978	13,510	20,768	14,252	23,817	15,271	26,884	4,293	13,547
90 ".....	3,588	4,739	3,596	5,676	4,667	7,937	4,944	9,930	5,647	11,262	2,059	6,523

¹ Newfoundland not included in 1930-1932 and 1940-1942.100,000
100,000

TABLE 5. Deaths Out of 100,000 Born Alive at Selected Ages by Sex, Canada,¹ 1960-1962 Compared with 1930-1932

Age	1930-1932		1960-1962	
	Male	Female	Male	Female
At birth	8,695	6,931	3,058	2,387
1 year	1,083	1,005	179	160
5 years	233	211	70	52
10 "	141	126	48	28
15 "	181	174	85	39
20 "	266	261	146	53
25 "	289	319	148	62
30 "	284	339	141	76
35 "	326	375	180	110
40 "	396	418	260	165
45 "	491	488	421	260
50 "	679	617	679	403
55 "	948	851	1,060	608
60 "	1,278	1,172	1,550	919
65 "	1,746	1,606	2,044	1,390
70 "	2,265	2,134	2,569	2,018
75 "	2,709	2,742	2,937	2,847
80 "	2,638	2,849	2,920	3,586
85 "	1,885	2,145	2,326	3,527
90 "	887	1,083	1,283	2,332

¹ Newfoundland not included in 1930-1932.TABLE 6. Mortality Rates per Thousand at Selected Ages by Sex, Canada,¹ 1960-1962 Compared with 1930-1932

Age	1930-1932		1960-1962	
	Male	Female	Male	Female
At birth	86.95	69.31	30.58	23.87
1 year	11.87	10.80	1.85	1.64
5 years	2.62	2.32	0.73	0.53
10 "	1.60	1.40	0.50	0.29
15 "	2.07	1.95	0.89	0.40
20 "	3.08	2.95	1.53	0.55
25 "	3.40	3.67	1.57	0.64
30 "	3.41	3.98	1.50	0.79
35 "	3.98	4.48	1.93	1.15
40 "	4.94	5.12	2.82	1.74
45 "	6.30	6.15	4.65	2.77
50 "	9.03	8.04	7.72	4.36
55 "	13.29	11.62	12.65	6.75
60 "	19.38	17.14	19.99	10.64
65 "	29.75	26.03	29.72	17.18
70 "	46.34	40.57	44.67	27.74
75 "	74.03	67.35	67.06	46.64
80 "	115.27	107.69	100.91	79.41
85 "	171.67	160.86	152.31	131.18
90 "	247.11	228.60	227.12	207.08

¹ Newfoundland not included in 1930-1932.

TABLE 7. Death Rates¹ by Leading Cause, Age Group, and Sex, Canada,² 1931, 1941, 1951, 1956, 1961

Cause	1931		1941		1951		1956		1961	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Under 1										
All causes	9,439	7,436	6,698	5,196	4,259	3,390	3,499	2,873	3,047	2,375
Immaturity ³	1,993	1,593	1,340	1,008	1,361	1,053	1,326	1,009	1,251	965
Immaturity ⁴.....	..	..	..	..	602	509	546	437	534	424
Diarrhoea and enteritis	1,906	1,410	761	560	297	227	155	128	119	87
Influenza, bronchitis, and pneumonia	1,360	1,093	1,306	1,038	723	594	580	497	430	352
Congenital debility	857	719	479	336	..	..	..	..	..	..
Congenital malformations	596	496	688	628	548	537	520	505	483	437
Birth injury	641	378	595	376	462	303	398	286	298	231
Whooping cough	197	222	122	133	36	37	16	25	4	6
Asphyxia and atelectasis	104	78	185	137	361	246	430	295	373	256
Meningitis	112	89	93	60	47	40	39	40	28	21
Accidents, poisonings, and violence	78	68	99	103	128	114	114	109	152	108
Age group 1-4										
All causes	679	612	468	399	205	172	165	141	127	97
Influenza, bronchitis, and pneumonia	159	160	110	98	40	39	25	26	15	13
Diarrhoea and enteritis	92	70	52	41	9	7	5	5	4	5
Accidents, poisonings, and violence	81	50	77	49	61	37	55	38	49	32
Tuberculosis	51	45	32	31	14	12	4	2	1	1
Diphtheria	36	34	9	11	1	2	..	..	..	..
Whooping cough	21	32	9	16	3	5	1	2	1	..
Meningitis	22	22	19	15	8	7	5	3	3	2
Appendicitis	15	9	16	8	3	2	1	1	1	..
Poliomyelitis	14	8	1	1	1	1	1	1	..	..
Measles	8	12	14	12	5	5	5	5	2	2
Cardiovascular disease	7	10	11	8	2	2	2	2	1	1
Congenital malformations	9	6	10	15	11	11	16	17	15	11
Cancer	5	5	10	9	12	10	14	11	13	10
Age group 5-14										
All causes	185	162	155	114	89	59	70	43	60	36
Accidents, poisonings, and violence	46	15	48	18	45	16	39	18	35	13
Tuberculosis	23	28	19	20	6	8	1	1	..	..
Appendicitis	17	16	15	11	2	2	1	..	1	..
Influenza, bronchitis, and pneumonia	14	16	10	10	5	5	2	3	2	2
Diphtheria	11	12	6	5	1	1	..	..	..	..
Cardiovascular disease	8	11	5	5	2	2	1	1	1	1
Meningitis	5	6	4	5	1	1	1	1	1	1
Rheumatic fever	5	4	6	5	2	2	1	1	..	..
Poliomyelitis	4	4	1	..	2	1	1	..	..	..
Nephritis and nephrosis	4	3	2	2	2	2	2	1	1	1
Diarrhoea and enteritis	4	3	2	1	1	1	..	..	1	..
Cancer	4	3	6	4	7	6	8	5	7	5
Congenital malformations	2	1	2	1	1	2	3	2	3	3
Age group 15-24										
All causes	284	269	226	174	161	92	148	56	137	51
Tuberculosis	71	118	46	69	18	24	4	2	1	1
Accidents, poisonings, and violence	96	19	89	14	93	18	106	18	100	19
Influenza, bronchitis, and pneumonia	19	13	11	7	5	4	2	2	3	2
Cardiovascular disease	14	16	13	14	8	7	5	5	5	5
Appendicitis	17	10	11	6	2	1	1	..	1	1
Maternal causes .....	..	27	..	19	..	9	..	4	..	3
Cancer	7	5	8	5	10	6	9	7	10	7
Nephritis and nephrosis	5	7	5	6	3	3	2	3	3	2
Typhoid	6	5	2	1	..	..	..	..	..	..
Epilepsy	4	3	3	2	2	1	2	1	2	1
Rheumatic fever	4	2	3	3	1	2	1	..	1	..
Congenital malformations	1	1	1	1	3	2	3	2	3	3

See footnotes at end of table.

TABLE 7. Death Rates¹ by Leading Cause, Age Group, and Sex, Canada,² 1931, 1941, 1951, 1956, 1961 - Concluded

Cause	1931		1941		1951		1956		1961	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Age group 25-44										
All causes	410	440	347	318	252	183	226	137	215	122
Tuberculosis	86	110	65	71	28	26	8	6	3	3
Accidents, poisonings, and violence	102	20	100	18	87	16	95	19	91	19
Cardiovascular disease	43	48	54	46	59	34	58	25	57	21
Cancer	25	53	28	47	25	45	27	42	28	39
Maternal causes .....	...	69	...	43	...	15	...	10	...	7
Influenza, bronchitis, and pneumonia	31	26	13	11	6	5	4	3	4	3
Nephritis and nephrosis	15	21	12	14	7	6	4	3	3	2
Appendicitis	15	7	8	4	2	*	1	1	1	*
Ulcer of the stomach or duodenum	9	2	8	1	3	1	2	*	2	*
Hernia and intestinal obstruction	5	5	3	4	1	1	1	1	1	1
Typhoid	6	3	2	1	*	*	*	*	*	*
Epilepsy	4	4	3	1	2	1	2	2	2	2
Syphilis	5	3	7	2	1	*	*	*	*	*
Diabetes mellitus	4	3	3	3	3	2	3	2	3	2
Diarrhoea and enteritis	2	3	2	1	2	1	1	1	1	1
Anaemia	1	3	1	2	*	*	*	*	*	*
Rheumatic fever	2	2	3	3	2	3	*	1	*	*
Cirrhosis of the liver	1	1	2	2	2	1	3	2	4	3
Congenital malformations	*	*	1	1	2	1	2	1	2	2
Age group 45-64										
All causes	1,249	1,118	1,354	1,040	1,336	868	1,241	755	1,225	664
Cardiovascular disease	352	319	528	362	687	376	655	324	656	272
Cancer	202	267	230	282	243	266	251	248	255	236
Accidents, poisonings, and violence	136	34	137	34	120	30	114	35	114	32
Nephritis and nephrosis	86	89	81	84	30	27	19	15	11	8
Influenza, bronchitis, and pneumonia	89	71	56	35	35	25	29	13	29	13
Tuberculosis	90	61	78	40	48	21	20	9	12	3
Diabetes mellitus	20	35	25	41	16	20	12	19	14	18
Hernia and intestinal obstruction	17	16	14	13	7	6	6	5	6	4
Ulcer of the stomach or duodenum	24	6	31	5	17	3	15	3	13	4
Syphilis	23	6	30	7	10	3	5	2	3	1
Appendicitis	18	12	11	8	3	1	2	1	1	1
Anaemia	10	16	3	6	2	3	2	2	2	1
Cirrhosis of the liver	12	7	11	8	15	7	20	10	21	10
Age group 65-74										
All causes	4,352	3,835	4,591	3,742	4,309	3,207	4,349	2,888	4,388	2,726
Cardiovascular disease	1,754	1,532	2,219	1,794	2,488	1,862	2,589	1,730	2,597	1,625
Cancer	763	696	797	694	783	618	856	600	931	590
Influenza, bronchitis, and pneumonia	332	366	199	164	170	127	143	65	148	70
Nephritis and nephrosis	329	338	376	347	105	97	52	57	37	29
Accidents, poisoning, and violence	190	87	188	104	168	64	150	65	148	55
Diabetes mellitus	77	133	107	195	53	98	59	98	63	104
Tuberculosis	107	85	94	52	72	35	37	16	28	10
Senility	64	70	26	20	5	8	4	3	2	1
Hyperplasia of the prostate	124	...	116	...	48	...	38	...	24	...
Anaemia	52	65	22	20	17	18	8	10	8	8
Hernia and intestinal obstruction	49	44	42	27	27	24	27	22	23	23
Ulcer of the stomach or duodenum	42	16	53	17	43	11	46	13	42	10
Cirrhosis of the liver	29	22	28	18	26	18	34	15	37	17
Syphilis	29	12	46	12	17	4	15	3	11	3
Age group 75+										
All causes	11,881	11,635	13,060	11,855	12,169	11,039	11,650	10,215	11,304	9,462
Cardiovascular disease	5,247	5,302	6,817	6,327	7,456	7,085	7,342	6,835	7,208	6,532
Influenza, bronchitis, and pneumonia	1,142	1,336	882	929	890	808	653	542	637	489
Senility	1,021	1,205	571	640	234	273	165	204	99	95
Cancer	1,186	1,016	1,374	1,121	1,446	1,137	1,612	1,169	1,661	1,076
Nephritis and nephrosis	945	824	1,384	1,153	335	357	223	215	125	122
Accidents, poisonings, and violence	351	463	458	540	362	382	364	363	292	280
Hyperplasia of the prostate	477	...	399	...	295	...	220	...	157	...
Diabetes mellitus	93	132	187	222	101	140	125	163	136	166
Hernia and intestinal obstruction	128	85	121	81	74	57	67	58	81	77
Diarrhoea and enteritis	81	97	29	39	24	31	24	33	30	40
Tuberculosis	81	74	68	56	74	43	60	19	47	20
Anaemia	75	77	55	51	54	56	30	50	37	33
Ulcer of the stomach or duodenum	47	31	66	20	72	26	78	25	84	32

¹ Per 100,000 population.² Newfoundland not included in 1931 and 1941.³ All deaths of immature or premature babies.⁴ Deaths for which immaturity was stated to be a subsidiary cause.

TABLE 8. Expectation of Life at Selected Ages by Sex, Canada¹ and Regions, 1930-1932 to 1960-1962

Region and age	Male						Female					
	1930-1932	1940-1942	1950-1952	1955-1957	1960-1962	Gain in expectancy 1930-1932 to 1960-1962	1930-1932	1940-1942	1950-1952	1955-1957	1960-1962	Gain in expectancy 1930-1932 to 1960-1962
At birth												
Canada	60.00	62.96	66.33	67.61	68.35	8.35	62.10	66.30	70.83	72.92	74.17	12.07
Atlantic Provinces	60.20	61.69	66.57	67.91	68.58	8.38	61.91	64.63	70.50	72.89	73.92	12.01
Quebec	56.19	60.18	64.42	66.13	67.28	11.09	57.80	63.07	68.58	71.02	72.77	14.97
Ontario	61.30	64.55	66.87	67.80	68.32	7.02	63.92	68.43	71.85	73.57	74.40	10.48
Prairie Provinces	63.47	65.43	68.36	69.26	69.79	6.32	65.49	68.19	72.28	74.18	75.66	10.17
British Columbia	62.15	63.65	66.73	68.14	68.94	6.79	65.34	68.96	72.37	73.91	75.42	10.08
Age 1												
Canada	64.69	66.14	68.33	69.04	69.50	4.81	65.71	68.73	72.33	73.99	74.98	9.27
Atlantic Provinces	64.76	65.68	69.08	69.68	70.06	5.30	65.44	67.78	72.41	74.23	75.10	9.66
Quebec	62.45	64.45	67.19	68.11	68.71	6.26	62.62	66.28	70.71	72.56	73.80	11.18
Ontario	65.05	66.74	68.34	68.76	69.14	4.09	66.84	70.07	72.91	74.25	74.95	8.11
Prairie Provinces	67.24	68.02	69.90	70.48	70.96	3.72	68.30	70.22	73.43	75.06	76.40	8.10
British Columbia	64.55	65.40	67.97	69.19	69.83	5.28	67.16	70.17	73.32	74.68	76.00	8.84
Age 20												
Canada	49.05	49.57	50.76	51.19	51.51	2.46	49.76	51.76	54.41	55.80	56.65	6.89
Atlantic Provinces	49.22	49.36	51.59	51.95	52.17	2.95	49.62	51.33	54.52	56.01	56.82	7.20
Quebec	47.77	48.38	49.76	50.36	50.82	3.05	47.73	49.85	52.92	54.43	55.54	7.81
Ontario	48.79	49.57	50.58	50.81	51.03	2.24	50.13	52.40	54.76	55.95	56.53	6.40
Prairie Provinces	50.98	51.28	52.24	52.55	52.90	1.92	51.68	53.08	55.53	56.88	58.08	6.40
British Columbia	48.68	48.99	50.41	51.32	51.85	3.17	51.18	53.09	55.51	56.52	57.61	6.43
Age 40												
Canada	31.98	31.87	32.45	32.74	32.96	0.98	33.02	33.99	35.63	36.69	37.45	4.43
Atlantic Provinces	32.73	32.22	33.48	33.58	33.76	1.03	33.70	34.19	35.99	37.03	37.70	4.00
Quebec	31.04	30.94	31.54	31.91	32.29	1.25	31.75	32.72	34.36	35.42	36.38	4.63
Ontario	31.56	31.54	32.03	32.24	32.35	0.79	32.90	34.11	35.75	36.74	37.27	4.37
Prairie Provinces	33.34	33.32	33.86	34.12	34.37	1.03	34.35	34.96	36.63	37.71	38.83	4.48
British Columbia	32.17	31.70	32.45	33.11	33.56	1.39	34.27	35.14	36.72	37.49	38.46	4.19
Age 65												
Canada	12.98	12.81	13.31	13.36	13.53	0.55	13.72	14.08	14.97	15.60	16.07	2.35
Atlantic Provinces	13.63	13.13	13.90	13.95	14.16	0.53	14.59	14.50	15.42	15.91	16.35	1.76
Quebec	12.60	12.44	12.81	12.88	13.16	0.56	13.15	13.41	14.17	14.73	15.27	2.12
Ontario	12.67	12.63	13.07	12.97	13.05	0.38	13.47	14.03	14.92	15.56	15.90	2.43
Prairie Provinces	13.60	13.35	13.88	14.01	14.22	0.62	14.40	14.62	15.51	16.20	17.00	2.60
British Columbia	13.36	12.96	13.50	13.72	13.98	0.62	14.60	14.83	15.86	16.15	16.94	2.34

¹ Newfoundland not included in 1930-1932 and 1940-1942.

TABLE 9. Survivors Out of 100,000 Born Alive at Selected Ages by Sex, Canada¹ and Regions, 1930-1932 to 1960-1962

Region and age	Male						Female					
	1930-1932	1940-1942	1950-1952	1955-1957	1960-1962	Gain in survivors 1930-1932 to 1960-1962	1930-1932	1940-1942	1950-1952	1955-1957	1960-1962	Gain in survivors 1930-1932 to 1960-1962
Age 1												
Canada	91,305	93,750	95,675	96,528	96,942	5,637	93,069	95,069	96,577	97,233	97,613	4,544
Atlantic Provinces	91,519	92,499	94,985	96,070	96,509	4,990	93,160	93,933	96,024	96,884	97,136	3,976
Quebec	88,507	91,913	94,462	95,681	96,510	8,003	90,819	93,726	95,616	96,538	97,281	6,462
Ontario	92,789	95,282	96,431	97,181	97,402	4,613	94,207	96,287	97,210	97,763	97,953	3,746
Prairie Provinces	92,997	94,786	96,416	96,889	96,988	3,991	94,498	95,734	97,116	97,524	97,744	3,246
British Columbia	94,801	95,850	96,740	97,066	97,328	2,527	95,854	96,895	97,367	97,658	97,944	2,090
Age 20												
Canada	86,269	90,014	93,437	94,699	95,348	9,079	88,451	92,030	94,992	96,074	96,659	8,208
Atlantic Provinces	86,325	88,421	92,677	94,116	94,763	8,438	88,324	90,145	94,407	95,767	96,120	7,796
Quebec	82,189	87,462	92,007	93,708	94,750	12,561	84,576	89,824	93,824	95,261	96,216	11,640
Ontario	88,544	92,378	94,459	95,488	95,967	7,423	90,701	94,262	95,960	96,738	97,116	6,415
Prairie Provinces	88,906	91,349	94,346	95,221	95,510	6,604	90,936	92,987	95,512	96,349	96,778	5,842
British Columbia	89,820	91,683	94,407	95,267	95,716	5,896	91,191	93,988	95,638	96,453	97,072	5,881
Age 40												
Canada	80,180	84,992	89,649	91,217	92,061	11,881	81,645	87,242	92,354	94,157	94,958	13,313
Atlantic Provinces	79,195	82,324	88,566	90,511	91,243	12,048	80,015	84,200	91,315	93,599	94,262	14,247
Quebec	75,543	81,897	87,985	90,159	91,376	15,833	76,300	83,688	90,659	93,089	94,383	18,083
Ontario	82,555	87,898	91,124	92,205	92,921	10,366	84,726	90,477	93,779	95,040	95,519	10,793
Prairie Provinces	84,020	87,004	90,814	91,815	92,325	8,305	85,336	88,985	93,208	94,625	95,239	9,903
British Columbia	82,333	85,662	89,834	91,287	91,905	9,572	84,766	89,618	93,065	94,436	95,324	10,558
Age 65												
Canada	58,684	61,943	65,815	67,737	68,774	10,090	61,697	68,211	75,525	78,849	80,916	19,219
Atlantic Provinces	59,143	60,586	67,493	69,109	69,705	10,562	60,742	65,732	74,751	78,802	80,400	19,658
Quebec	53,298	57,563	62,490	65,038	66,676	13,378	55,200	62,834	71,724	75,700	78,836	23,636
Ontario	59,641	63,038	65,754	67,409	68,139	8,498	64,080	71,139	77,134	79,919	81,287	17,207
Prairie Provinces	64,510	67,247	70,492	71,828	72,597	8,087	67,313	71,521	78,252	81,149	83,359	16,046
British Columbia	60,147	61,693	65,590	68,125	69,805	9,658	65,882	72,185	77,585	80,468	82,333	16,451
Age 75												
Canada	36,589	38,121	41,835	43,106	43,791	7,202	40,717	46,172	53,950	58,224	61,052	20,335
Atlantic Provinces	38,392	38,154	44,931	46,318	46,669	8,277	41,738	45,517	54,672	58,757	60,601	18,863
Quebec	32,154	34,379	38,152	39,894	41,439	9,285	34,927	40,592	48,843	53,451	57,295	22,368
Ontario	36,475	38,206	40,895	41,470	41,867	5,392	41,993	48,250	54,935	58,886	61,091	19,098
Prairie Provinces	42,043	43,037	46,878	48,071	48,743	6,700	46,022	49,913	57,664	62,028	65,408	19,386
British Columbia	38,588	38,502	42,262	44,132	45,196	6,608	45,938	50,654	57,585	61,462	64,184	18,246

¹ Newfoundland not included in 1930-1932 and 1940-1942.

TABLE 10. Deaths Out of 100,000 Born Alive at Selected Ages by Sex, Canada¹ and Regions, 1960 - 1962 Compared with 1930 - 1932

Region and age	1930 - 1932		1960 - 1962	
	Male	Female	Male	Female
At birth				
Canada	8,695	6,931	3,058	2,387
Atlantic Provinces	8,481	6,840	3,491	2,864
Quebec	11,493	9,181	3,490	2,719
Ontario	7,211	5,793	2,598	2,047
Prairie Provinces	7,003	5,502	3,012	2,256
British Columbia	5,199	4,146	2,672	2,056
Age 1				
Canada	1,083	1,005	179	160
Atlantic Provinces	1,129	1,109	191	197
Quebec	1,580	1,478	204	181
Ontario	791	711	143	123
Prairie Provinces	745	672	196	166
British Columbia	734	706	185	145
Age 20				
Canada	266	261	146	53
Atlantic Provinces	319	337	150	52
Quebec	295	319	142	53
Ontario	248	221	137	46
Prairie Provinces	220	204	149	59
British Columbia	331	257	168	67
Age 40				
Canada	396	418	260	165
Atlantic Provinces	405	454	274	182
Quebec	456	506	288	182
Ontario	405	387	246	162
Prairie Provinces	320	376	231	141
British Columbia	433	361	270	153
Age 65				
Canada	1,746	1,606	2,044	1,390
Atlantic Provinces	1,640	1,454	1,859	1,368
Quebec	1,716	1,591	2,102	1,521
Ontario	1,855	1,691	2,187	1,425
Prairie Provinces	1,682	1,543	1,818	1,197
British Columbia	1,700	1,581	1,985	1,267

¹ Newfoundland not included in 1930 - 1932.

TABLE 11. International Comparison of Life Expectancy for Selected Countries at Selected Ages

Life table period	Country	Males		Females		Males		Females	
		Life expectancy	Rank	Life expectancy	Rank	Life expectancy	Rank	Life expectancy	Rank
		At birth				Age 1			
1959-1961	Austria.....	65.8	19	72.2	15	67.6	18	73.6	11
1959-1963	Belgium.....	67.7	9	73.5	11	68.4	11	73.9	10
1960-1962	Canada.....	68.4	7	74.2	7	69.5	6	75.0	4
1960-1961	Czechoslovakia.....	67.6	10	73.1	12	68.4	11	73.6	11
1962-1963	Denmark ¹	70.3	6	74.4	6	71.0	5	74.7	6
1960	Egypt.....	51.6	27	53.8	27	56.2	26	59.9	26
1960-1962	England and Wales.....	68.0	8	74.0	8	68.8	9	74.4	7
1956-1960	Finland.....	64.9	21	71.6	19	65.7	22	72.1	19
1961	France.....	67.6	10	74.5	5	68.3	13	74.9	5
1960-1961	German Democratic Republic ²	67.3	13	72.2	15	69.0	8	73.4	14
1960-1962	German Federal Republic ³	66.9	16	72.4	13	68.3	13	73.5	13
1959-1960	Hungary.....	65.2	20	69.6	22	68.0	15	71.9	20
1951-1960	Iceland.....	70.7	4	75.0	4	71.2	4	75.3	3
1951-1960	India.....	41.9	28	40.6	28	48.4	27	46.0	27
1961	Israel (Jews).....	70.5	5	73.6	9	71.4	2	74.2	8
1962	Japan ⁴	66.2	17	71.2	20	67.2	20	71.9	20
1960	Mexico.....	56.9	26	60.4	26	60.9	25	64.0	25
1962	Netherlands.....	71.1	3	75.7	1	71.3	3	75.7	1
1960-1962	Northern Ireland.....	67.6	10	72.4	13	68.7	10	73.2	16
1956-1960	Norway.....	71.3	2	75.6	2	..	..	..	..
1960-1961	Poland.....	64.8	22	70.5	21	68.0	15	73.1	17
1960-1962	Scotland.....	66.2	17	71.9	17	67.3	19	72.5	18
1960	Spain.....	67.3	13	71.9	17	69.2	7	73.3	15
1961	Sweden.....	71.6	1	75.4	3	71.9	1	75.4	2
1959-1960	Taiwan.....	61.3	24	65.6	23	63.2	24	67.3	24
1961	United States.....	67.0	15	73.6	9	68.0	15	74.2	8
1960	Venezuela ⁵	61.2	25	65.6	23	65.1	23	68.7	23
1960-1961	Yugoslavia.....	62.2	23	65.3	25	67.2	20	70.0	22
		Age 20				Age 60			
1959-1961	Austria.....	49.7	20	55.4	12	15.4	18	18.8	12
1959-1963	Belgium.....	50.3	13	55.5	11	15.5	14	18.7	14
1960-1962	Canada.....	51.5	7	56.7	5	16.7	7	19.9	4
1960-1961	Czechoslovakia.....	50.4	12	55.2	14	15.5	16	18.4	18
1962-1963	Denmark ¹	52.8	6	56.3	7	17.0	5	19.3	9
1960	Egypt.....	47.7	25	52.9	25	15.1	22	18.0	21
1960-1962	England and Wales.....	50.6	10	55.9	8	15.1	22	19.0	10
1956-1960	Finland.....	47.8	24	53.9	20	14.4	25	17.5	24
1961	France.....	50.2	16	56.6	6	16.0	11	20.0	3
1960-1961	German Democratic Republic ²	51.1	9	55.1	16	16.0	11	18.5	16
1960-1962	German Federal Republic ³	50.3	13	55.2	14	15.5	16	18.5	16
1959-1960	Hungary.....	50.2	16	53.8	22	15.3	20	17.4	25
1951-1960	Iceland.....	53.3	3	57.0	3	18.6	1	20.4	1
1951-1960	India.....	37.0	28	35.6	28	11.8	28	13.0	28
1961	Israel (Jews).....	53.3	3	55.8	10	16.9	6	18.9	11
1962	Japan ⁴	49.4	21	53.9	20	14.9	24	17.9	22
1960	Mexico.....	47.3	26	50.7	27	16.6	9	18.2	19
1962	Netherlands.....	53.2	5	57.3	2	17.3	4	19.8	5
1960-1962	Northern Ireland.....	50.5	11	54.8	18	15.3	20	18.1	20
1956-1960	Norway.....	53.9	1	57.5	1	18.1	2	20.1	2
1960-1961	Poland.....	50.1	18	55.0	17	15.8	15	18.6	15
1960-1962	Scotland.....	49.1	23	54.1	19	14.3	26	17.8	23
1960	Spain.....	51.4	8	55.3	13	16.3	10	18.8	12
1961	Sweden.....	53.7	2	57.0	3	17.6	3	19.6	8
1959-1960	Taiwan.....	47.2	27	51.5	26	13.9	27	16.9	27
1961	United States.....	49.9	19	55.9	8	16.0	11	19.8	5
1960	Venezuela ⁵	49.3	22	53.2	23	16.7	7	19.8	5
1960-1961	Yugoslavia.....	50.3	13	53.2	23	15.4	18	17.4	25

¹ Excluding Faeroes.² Including data for East Berlin.³ Excluding Berlin.⁴ Data are for Japanese nationals in Japan only.⁵ Based on mortality data for urban and rural sectors of sample registration area.

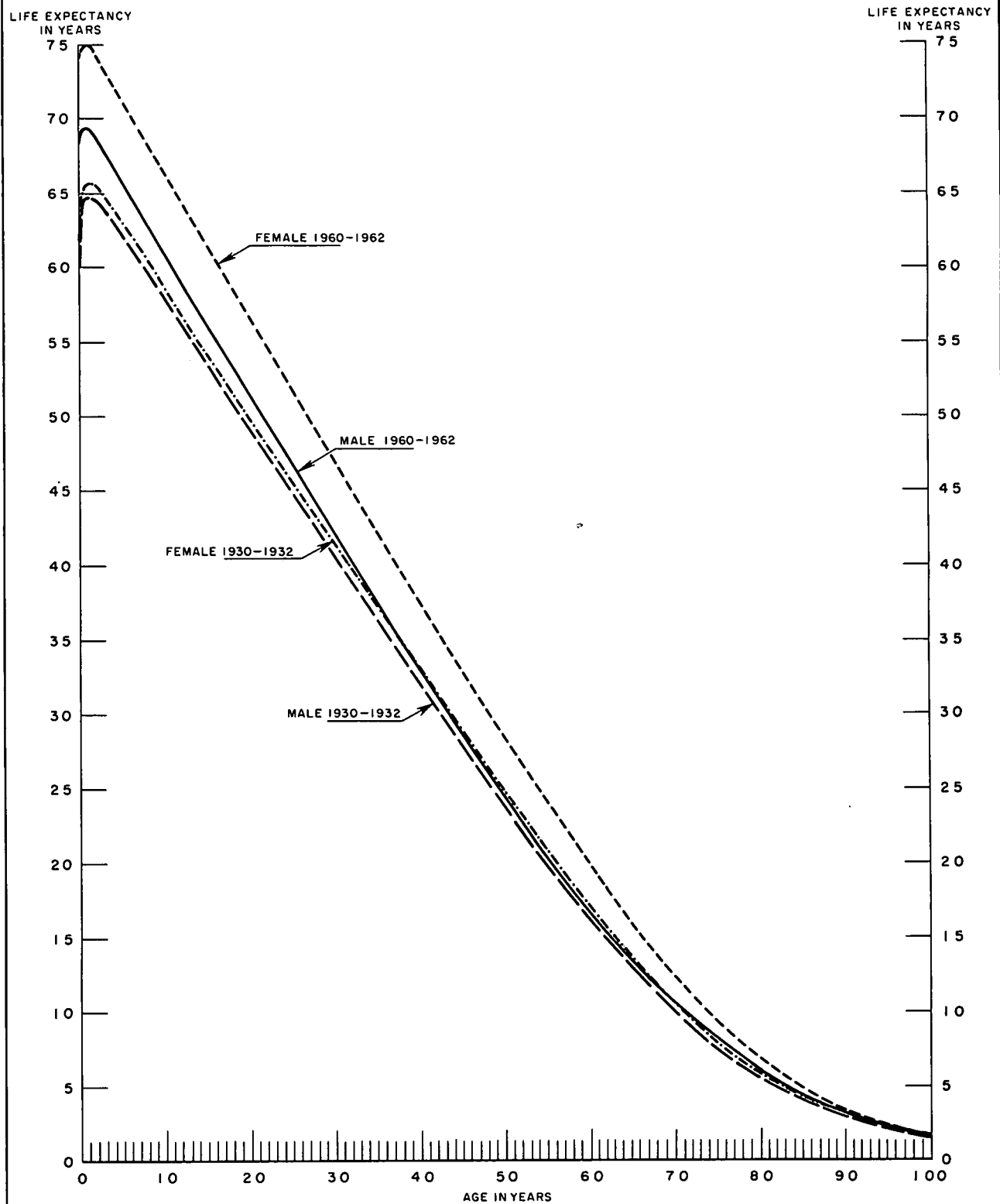
**TABLE 12. Life Years Lost in Thousands by Leading Cause of Death and Sex, Canada,¹
1931, 1941, 1951, 1956, 1961**

Cause of death	1931		1941		1951		1956		1961	
	Male (60)	Female (62)	Male (63)	Female (66)	Male (66)	Female (71)	Male (68)	Female (73)	Male (68)	Female (74)
Infective and parasitic diseases	187.1	217.4	147.6	157.2	77.9	79.2	38.5	35.4	23.3	18.9
Neoplasms	25.3	38.4	40.7	62.1	59.3	98.9	83.9	119.4	92.8	133.5
Diseases of the nervous system and sense organs	37.3	32.1	43.7	39.0	46.6	54.3	46.9	55.8	44.5	55.2
Diseases of the circulatory system	42.5	45.7	67.2	56.0	104.3	78.9	132.6	82.5	150.4	90.3
Diseases of the respiratory system	189.2	161.2	166.8	135.6	121.5	112.0	110.7	97.9	87.6	78.1
Diseases of the digestive system	232.2	175.8	129.1	96.5	64.2	52.2	53.1	43.8	50.2	42.4
Diseases of the genito-urinary system	18.9	25.8	18.5	27.3	14.9	16.7	14.7	15.8	12.1	13.2
Deliveries and complications of pregnancy, childbirth and the puerperium .....	...	37.0	...	31.7	...	16.0	...	11.3	...	9.1
Congenital malformations	47.3	38.0	61.5	56.9	79.2	78.4	95.1	94.4	95.8	89.4
Certain diseases of early infancy	309.1	235.2	233.8	164.5	281.3	209.1	298.0	227.6	284.5	216.4
Accidents, poisonings, and violence	135.7	43.0	157.0	51.6	195.3	72.1	237.8	92.7	258.3	96.9
All other causes	57.4	52.4	51.9	52.0	48.6	47.9	39.9	41.4	32.5	35.4
Totals, each sex	1,282.0	1,102.0	1,117.8	930.4	1,093.1	915.7	1,151.2	918.0	1,132.0	878.8
Totals, both sexes	2,384.0		2,048.2		2,008.8		2,069.2		2,010.8	

¹ Newfoundland not included in 1931 and 1941.

CHART-A

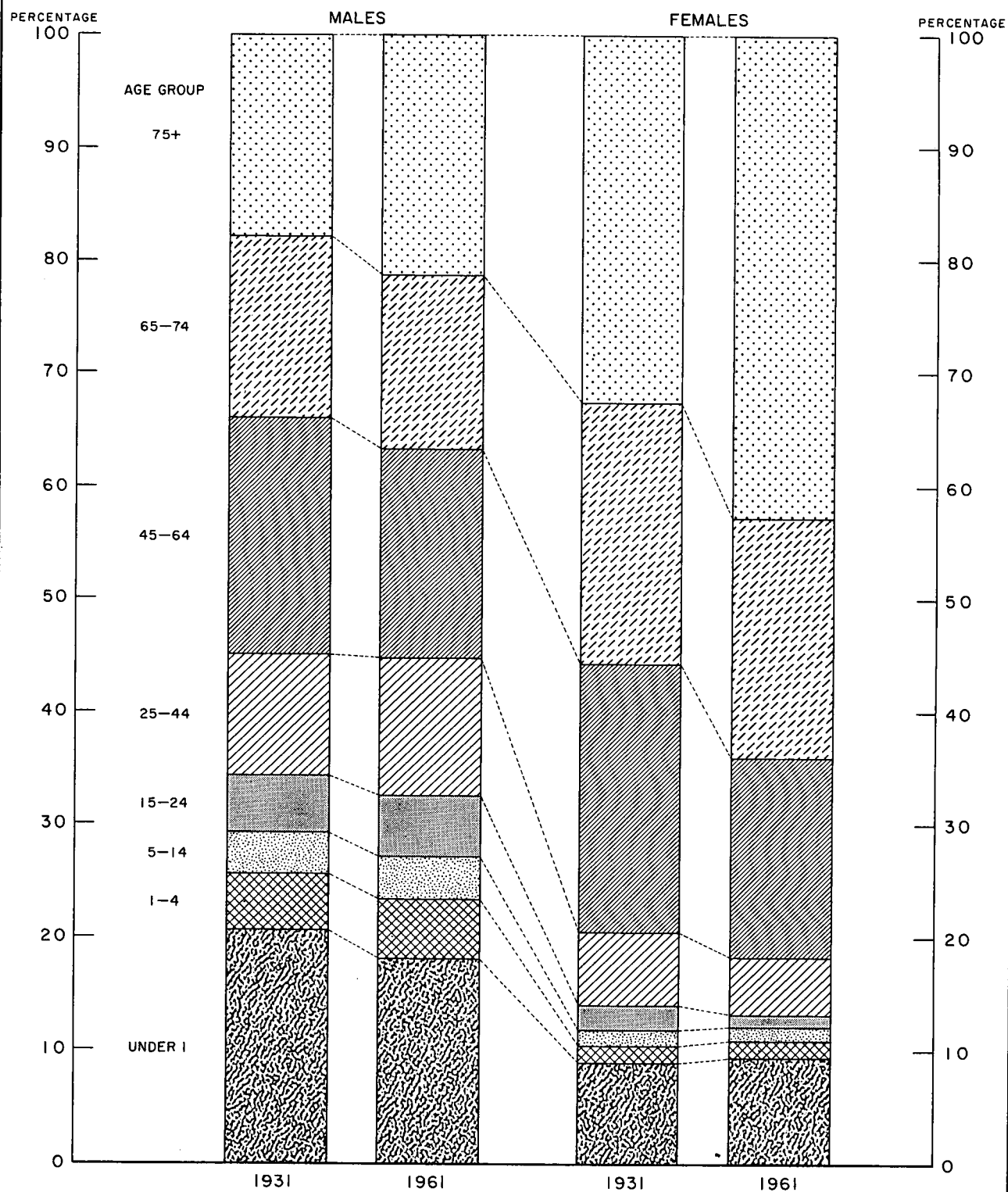
LIFE EXPECTANCY BY AGE AND SEX, CANADA*,
1960-1962 COMPARED WITH 1930-1932



*NEWFOUNDLAND NOT INCLUDED IN 1930-1932.

CHART-B

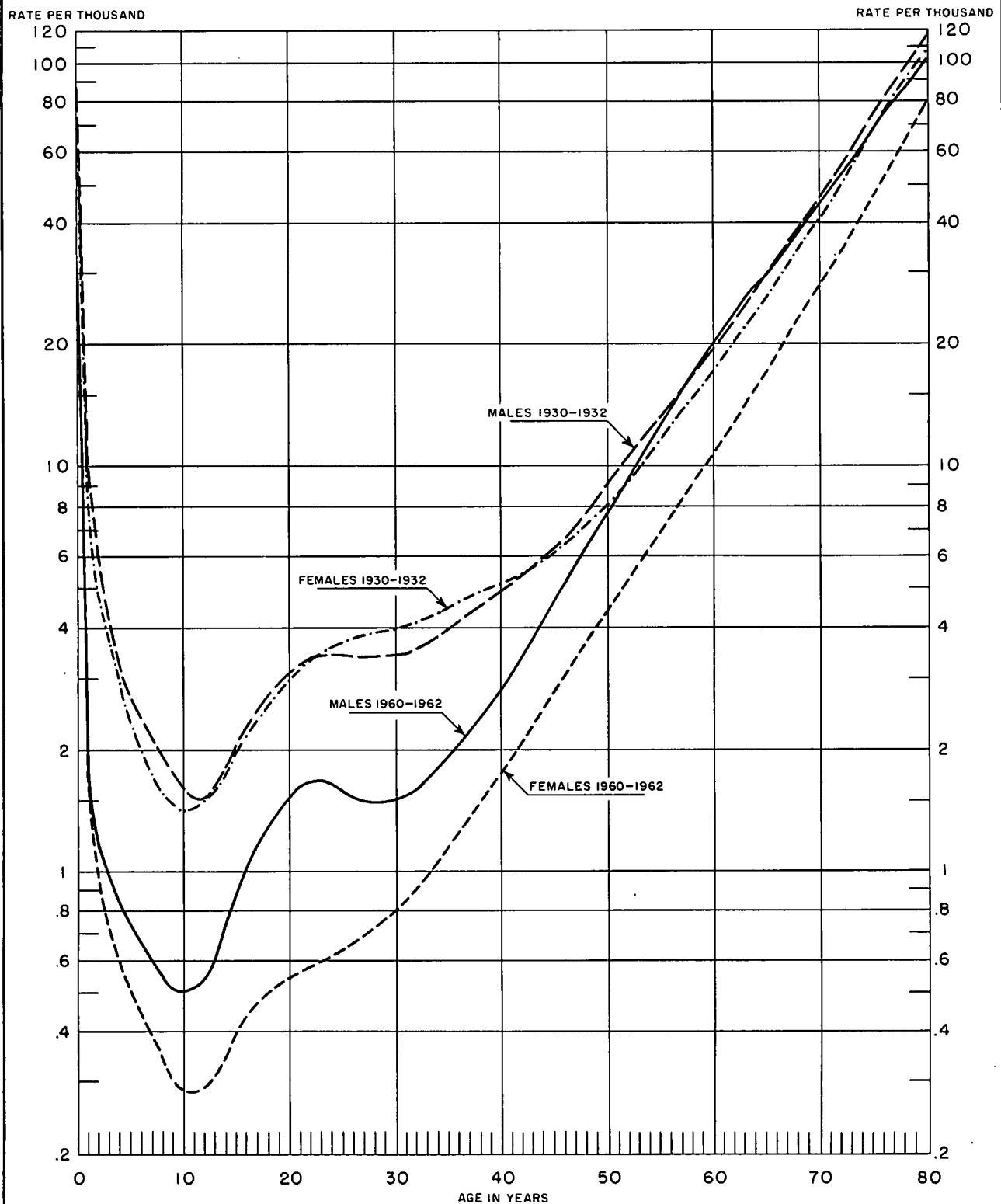
PERCENTAGE DISTRIBUTION OF DEATHS BY AGE GROUP AND SEX, CANADA*, 1961 COMPARED WITH 1931



*NEWFOUNDLAND NOT INCLUDED IN 1931.

CHART-C

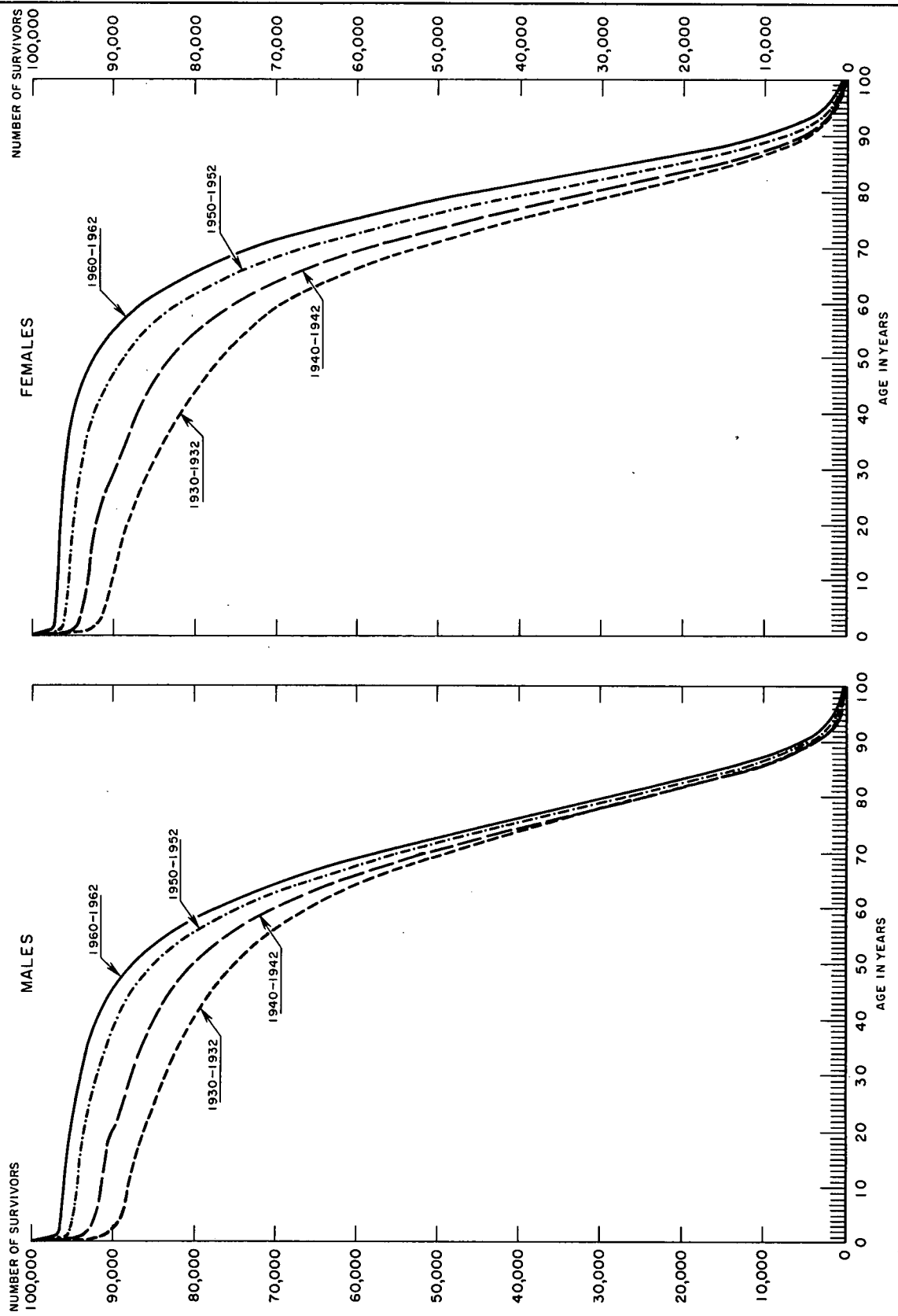
MORTALITY RATE PER THOUSAND BY AGE AND SEX,
CANADA*, 1960-1962 COMPARED WITH 1930-1932



*NEWFOUNDLAND NOT INCLUDED IN 1930-1932.

CHART-D

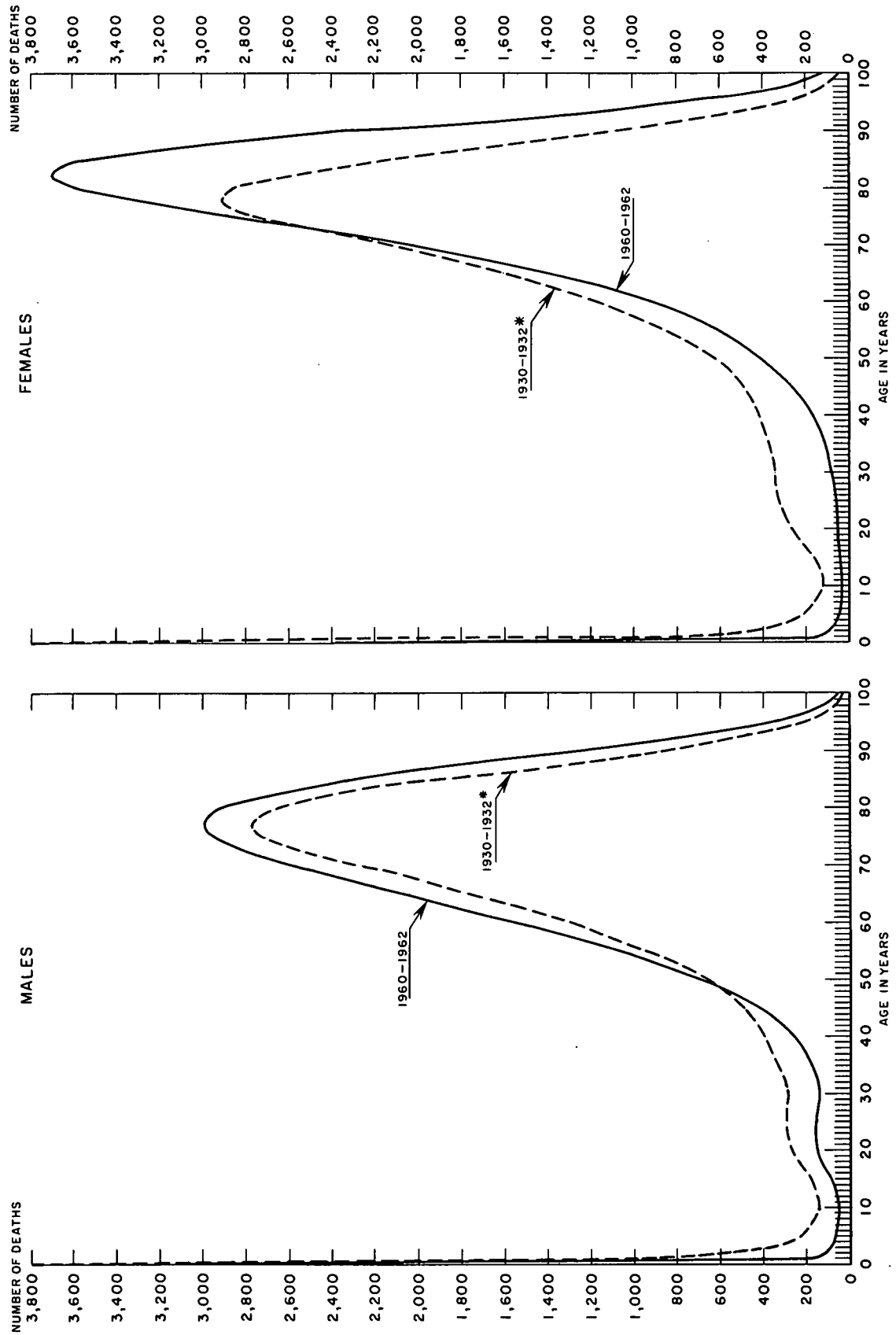
NUMBER OF SURVIVORS OUT OF 100,000 BORN ALIVE BY AGE AND SEX, CANADA,* 1930-1932 TO 1960-1962



* NEWFOUNDLAND NOT INCLUDED IN 1930-1932.

CHART - E

NUMBER OF DEATHS OUT OF 100,000 BORN ALIVE BY AGE AND SEX, CANADA,
1960-1962 COMPARED WITH 1930-1932

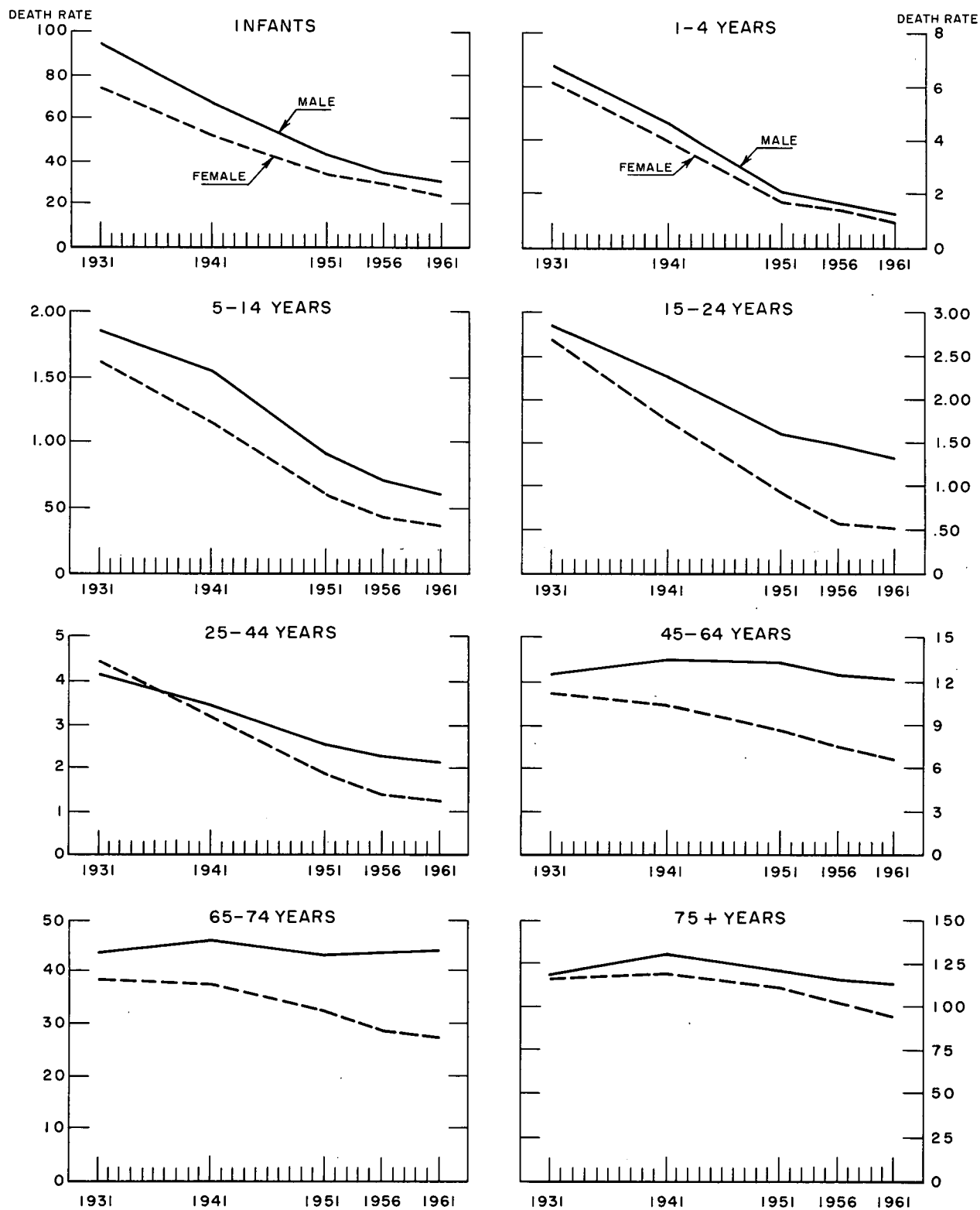


* NEWFOUNDLAND NOT INCLUDED.

CHART-F

AGE GROUP DEATH RATES BY SEX, CANADA*, 1931, 1941, 1951, 1956, 1961

(RATE PER 1,000 POPULATION)



*NEWFOUNDLAND NOT INCLUDED IN 1931 AND 1941.

CHART-G

NUMBER OF SURVIVORS OUT OF 100,000 BORN ALIVE BY AGE, SEX, AND REGION, 1960-1962 COMPARED WITH 1930-1932

ATLANTIC PROVINCES

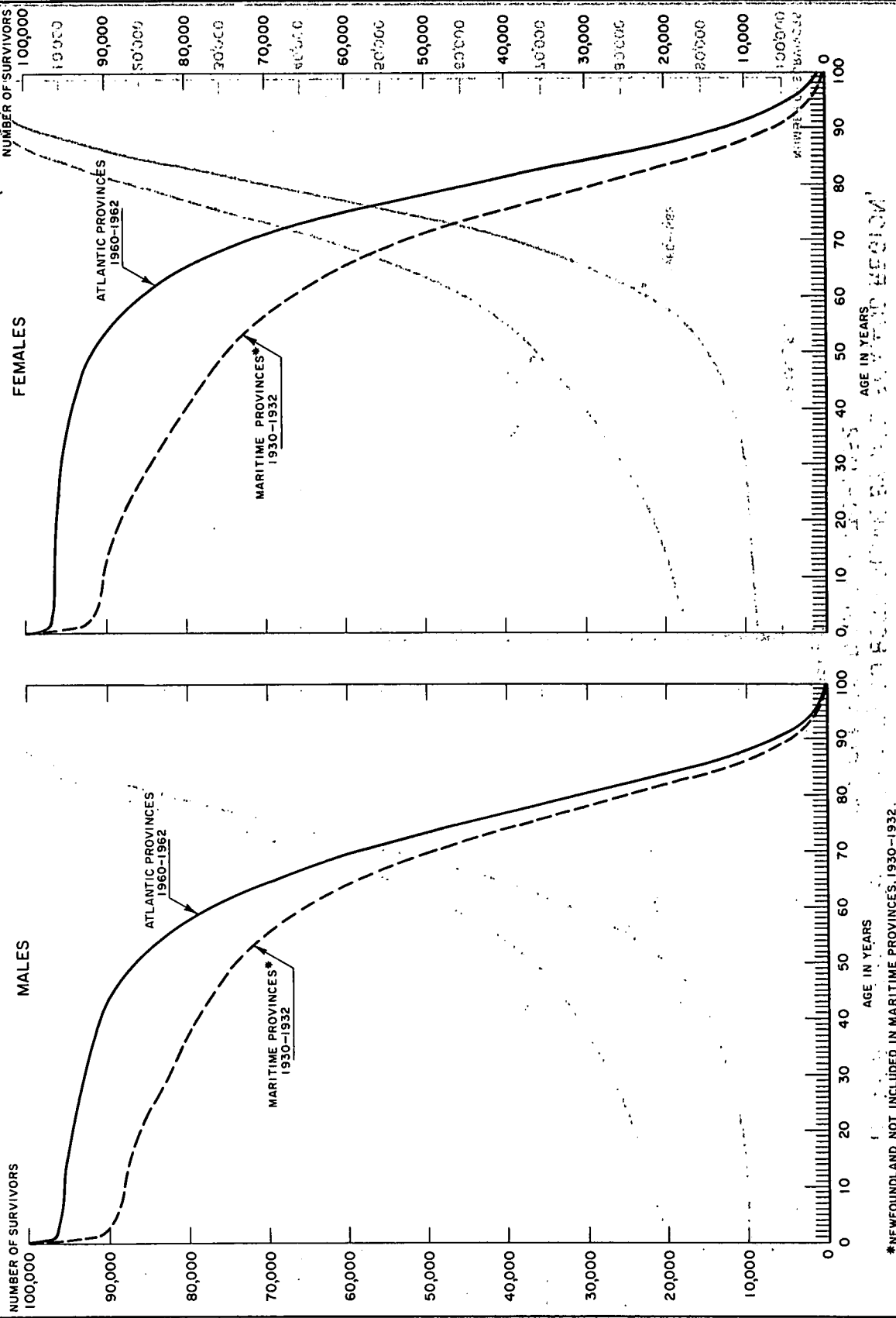


CHART-G

NUMBER OF SURVIVORS OUT OF 100,000 BORN ALIVE BY AGE, SEX, AND REGION, 1960-1962 COMPARED WITH 1930-1932

QUEBEC

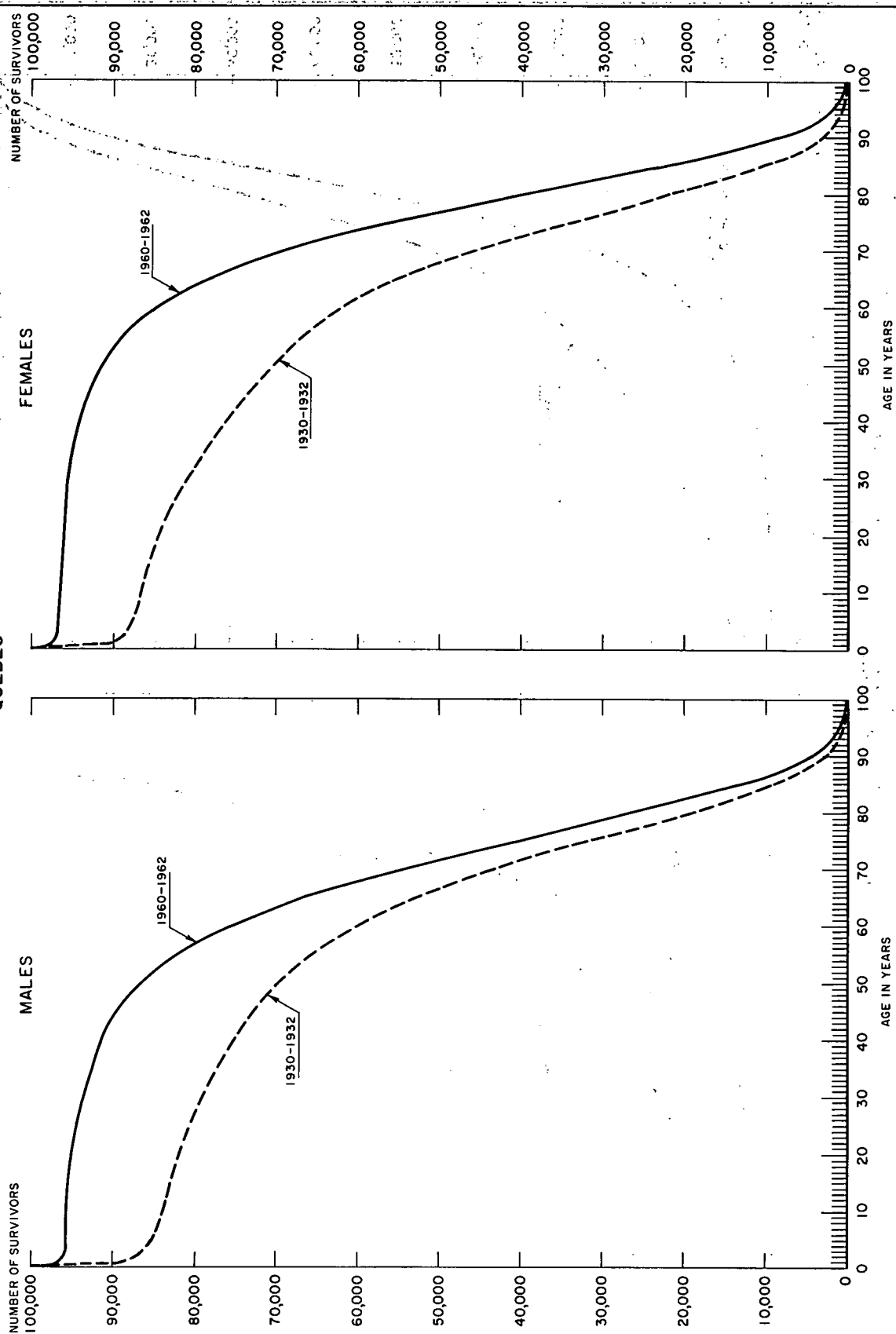


CHART - G

NUMBER OF SURVIVORS OUT OF 100,000 BORN ALIVE BY AGE, SEX, AND REGION,
1960-1962 COMPARED WITH 1930-1932

ONTARIO

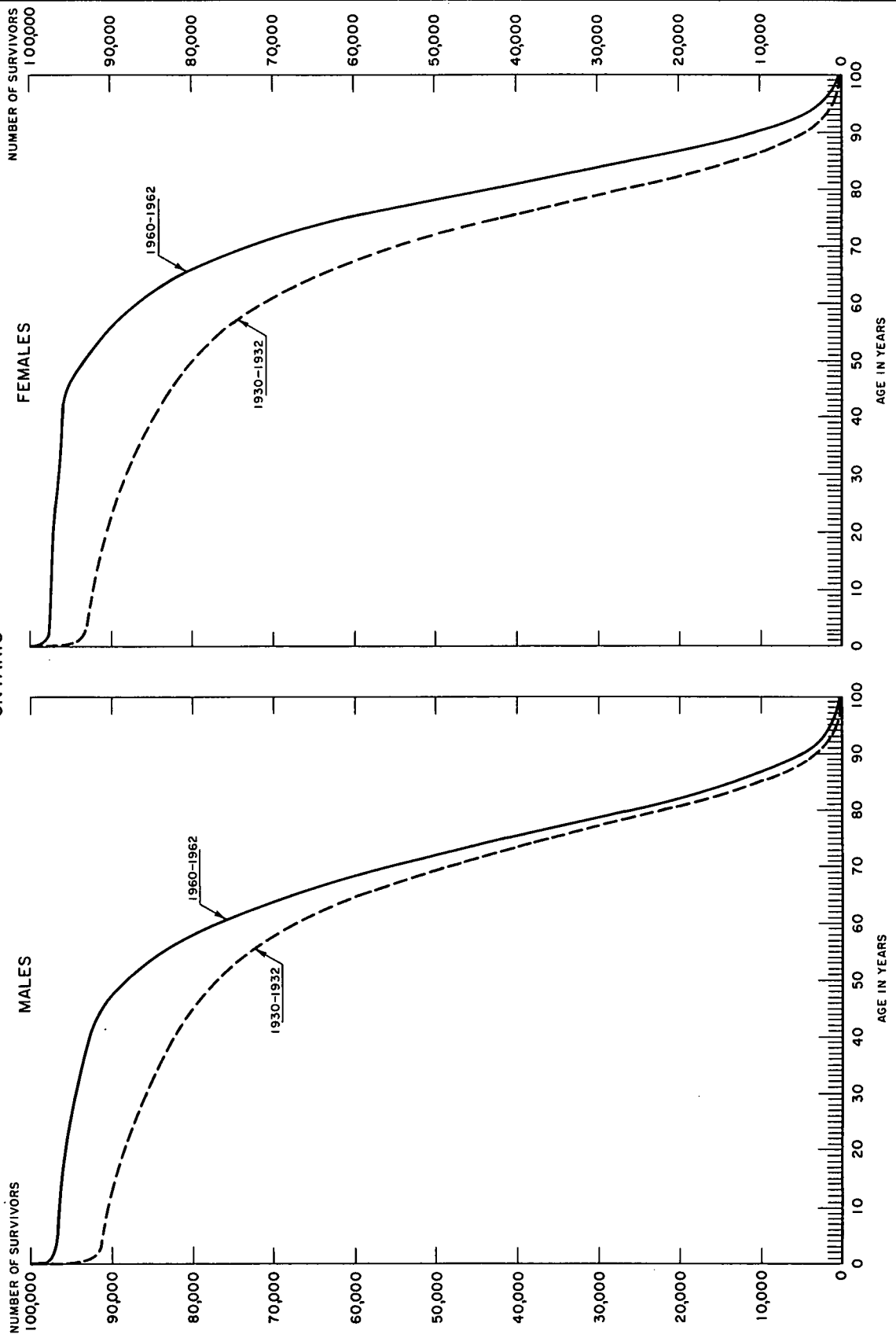


CHART - G

NUMBER OF SURVIVORS OUT OF 100,000 BORN ALIVE BY AGE, SEX, AND REGION, 1960-1962 COMPARED WITH 1930-1932

PRAIRIE PROVINCES

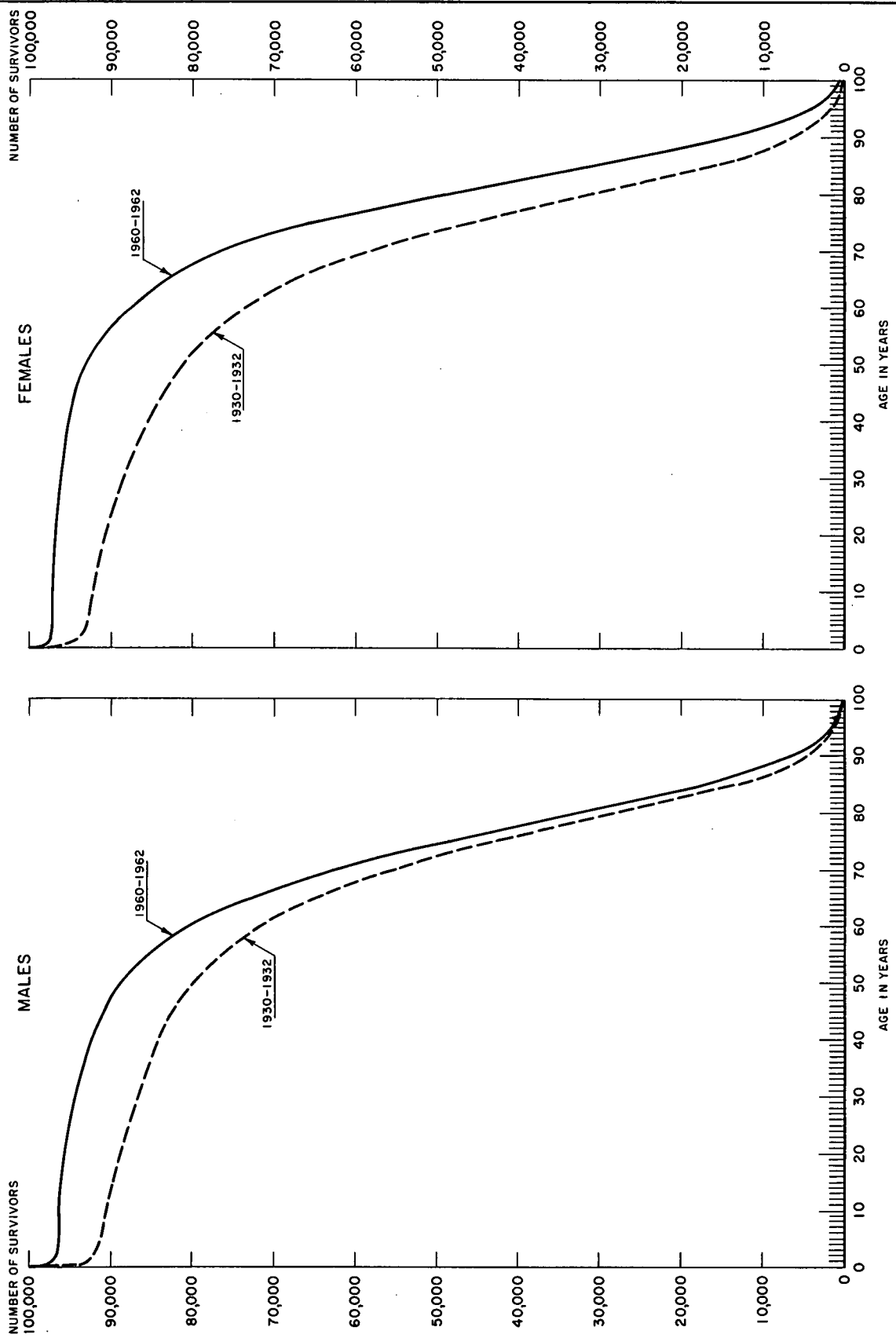


CHART-G

NUMBER OF SURVIVORS OUT OF 100,000 BORN ALIVE BY AGE, SEX, AND REGION,
1960-1962 COMPARED WITH 1930-1932
BRITISH COLUMBIA

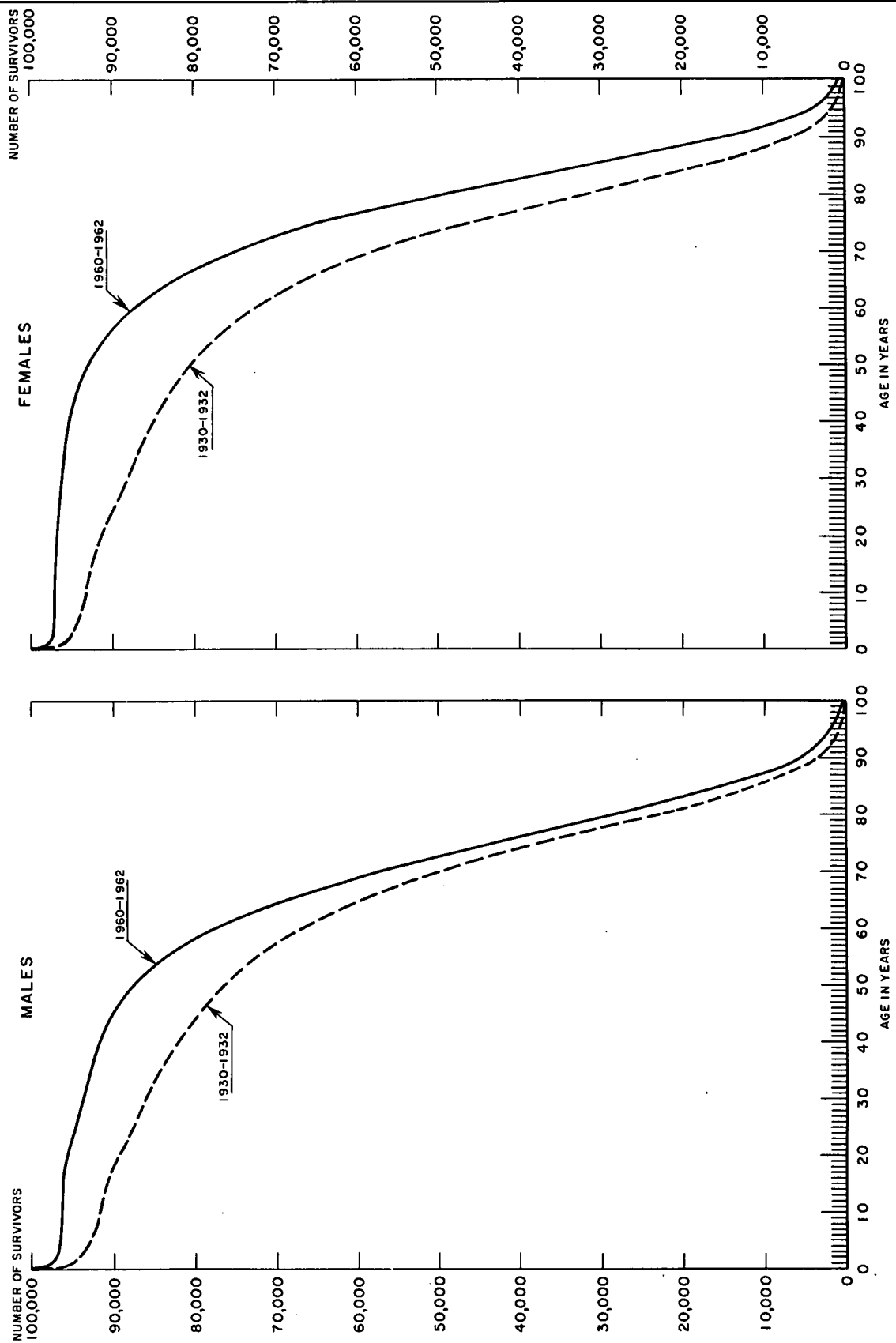
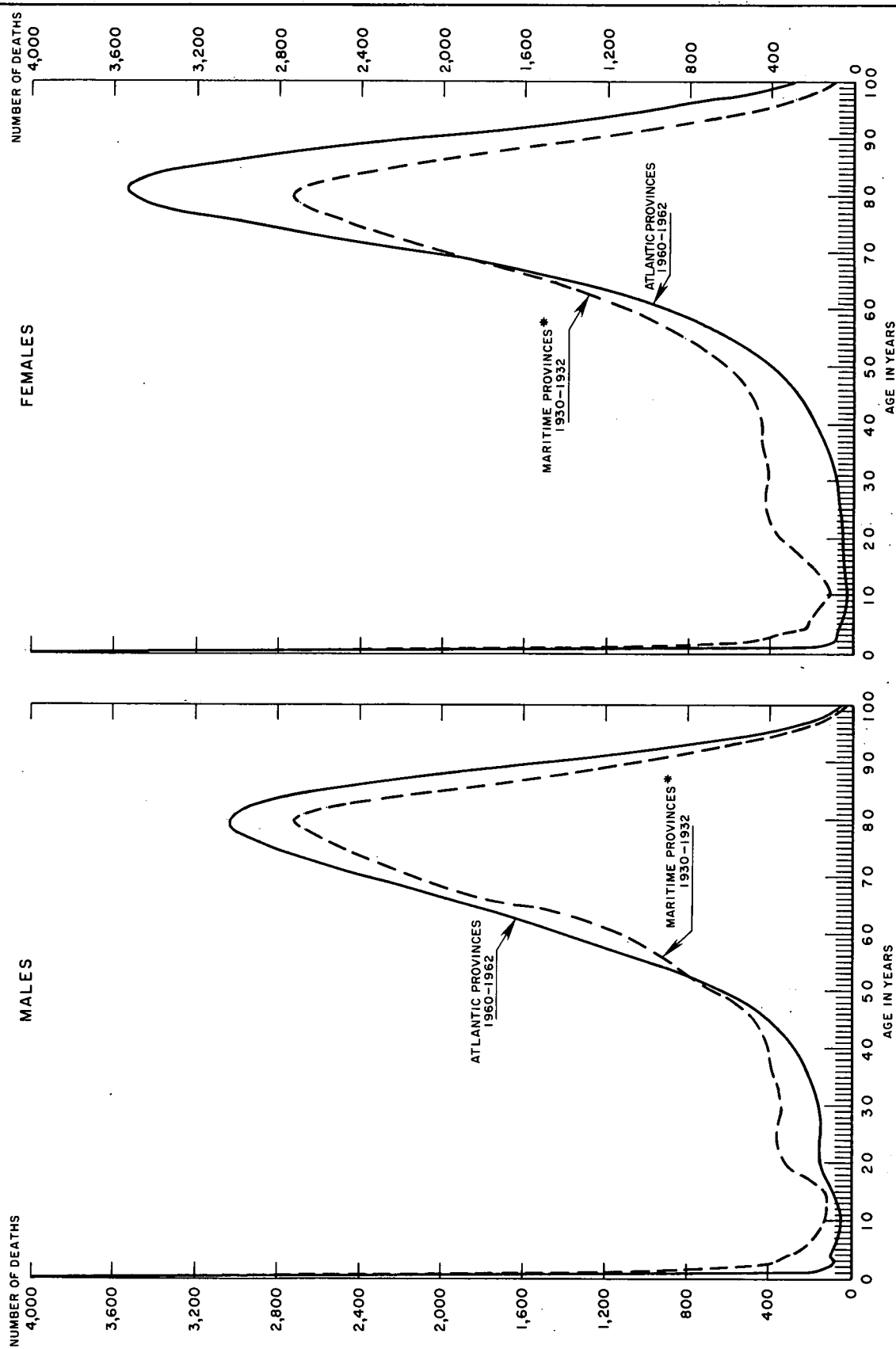


CHART-H

NUMBER OF DEATHS OUT OF 100,000 BORN ALIVE BY AGE, SEX, AND REGION,
1960-1962 COMPARED WITH 1930-1932

ATLANTIC PROVINCES



* NEWFOUNDLAND NOT INCLUDED IN MARITIME PROVINCES, 1930-1932.

CHART - H

NUMBER OF DEATHS OUT OF 100,000 BORN ALIVE BY AGE, SEX, AND REGION,
1960-1962 COMPARED WITH 1930-1932

QUEBEC

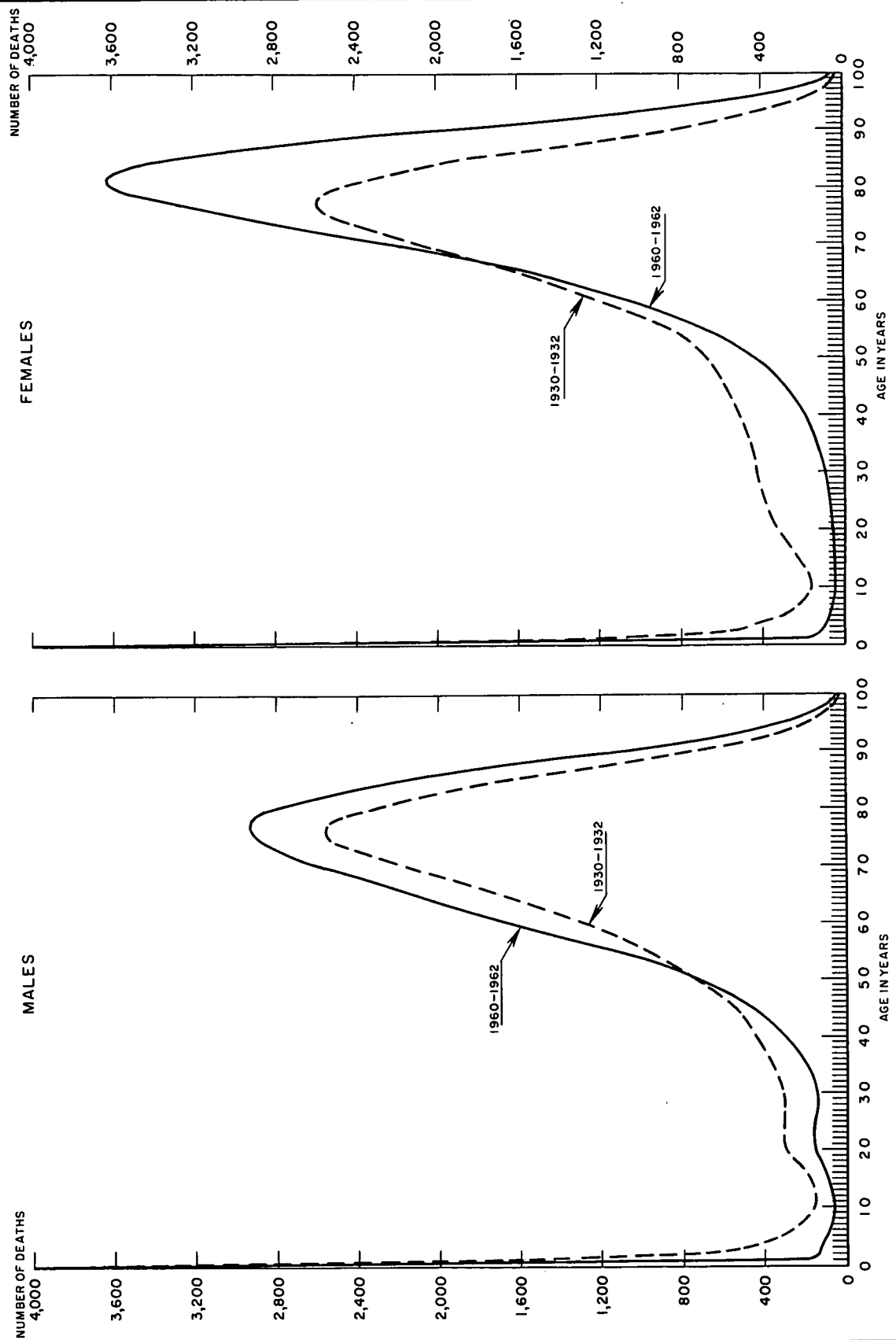


CHART-H

NUMBER OF DEATHS OUT OF 100,000 BORN ALIVE BY AGE, SEX, AND REGION,
1960-1962 COMPARED WITH 1930-1932

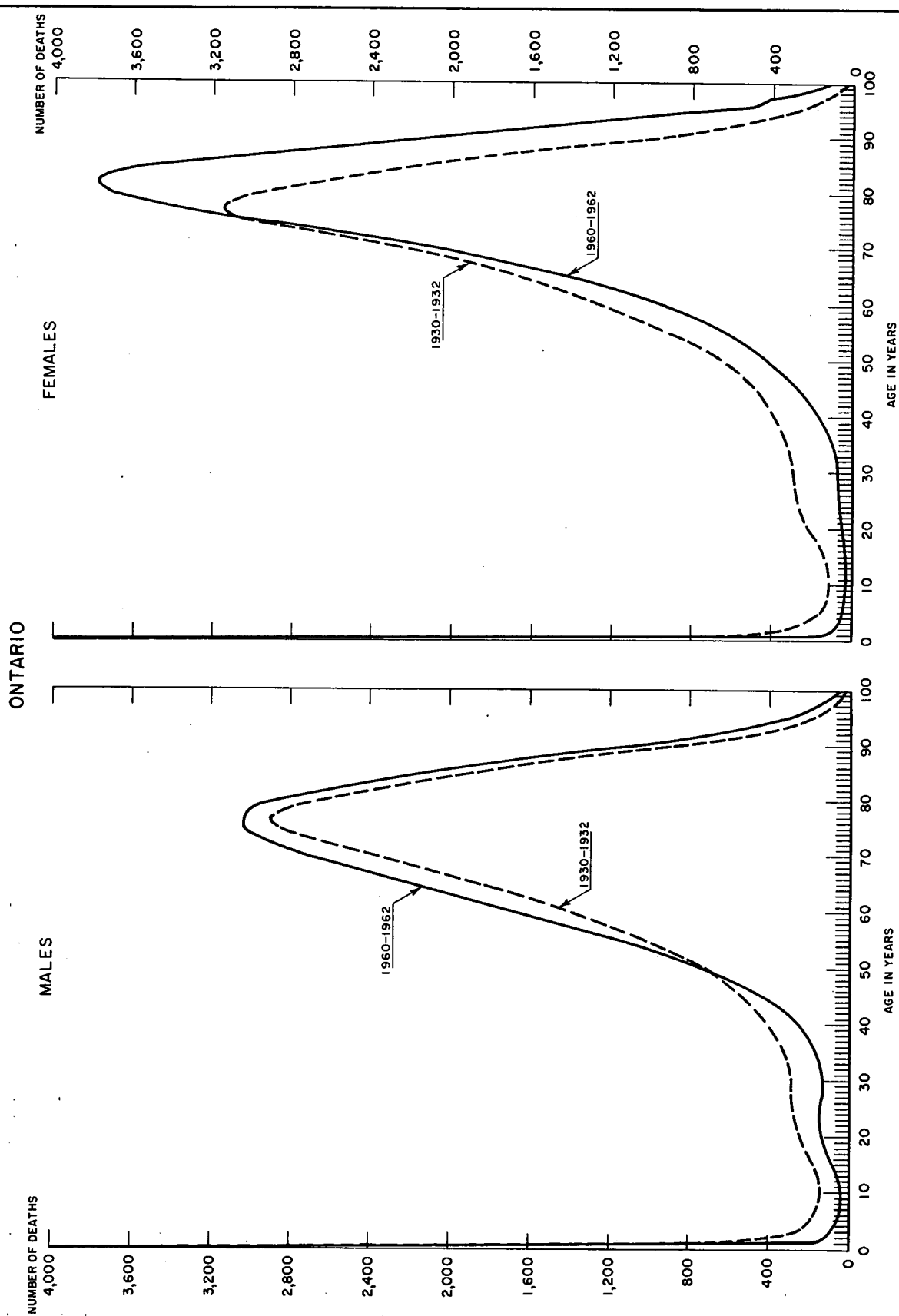
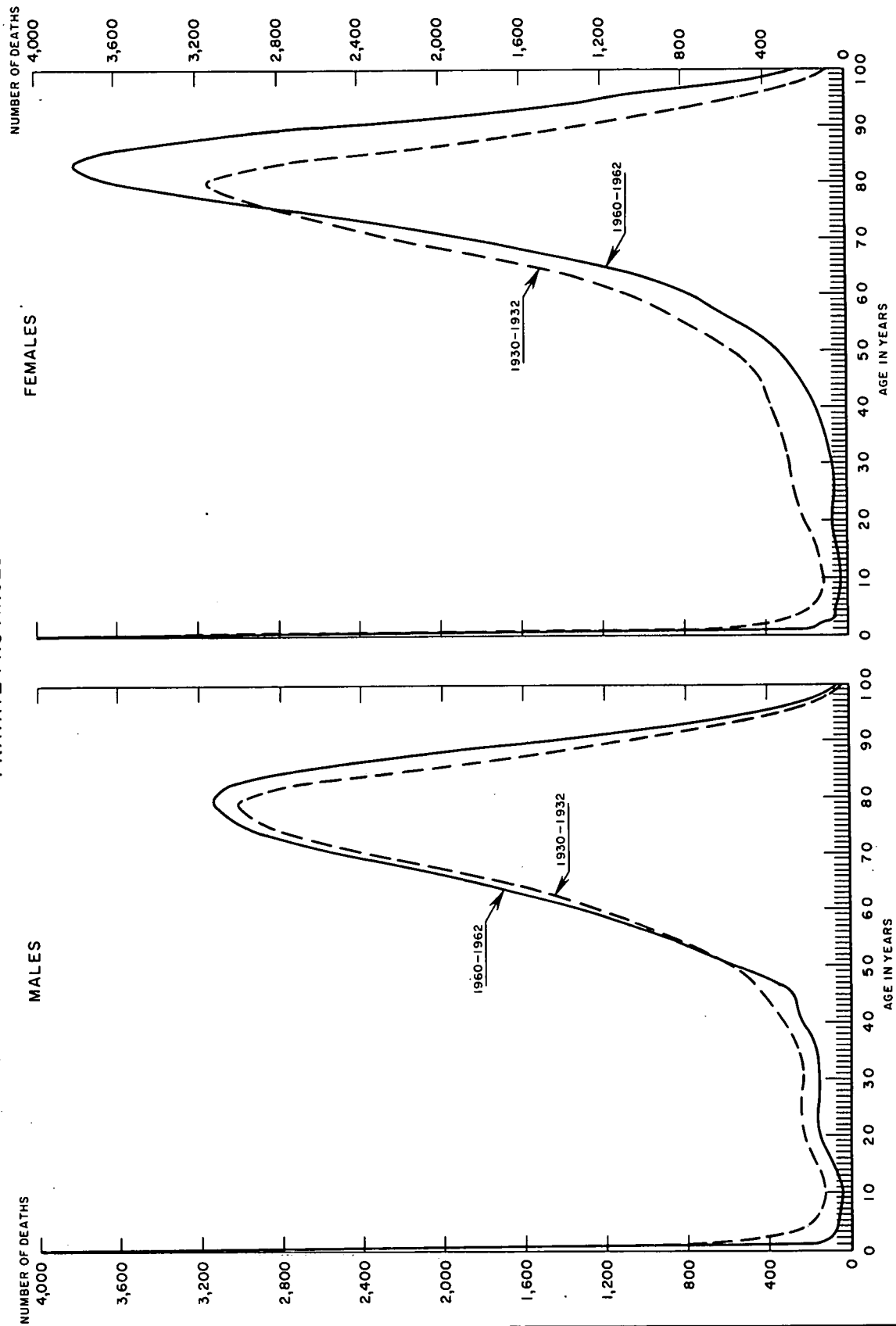


CHART - H

NUMBER OF DEATHS OUT OF 100,000 BORN ALIVE BY AGE, SEX, AND REGION,
1960-1962 COMPARED WITH 1930-1932
PRAIRIE PROVINCES



NUMBER OF DEATHS OUT OF 100,000 BORN ALIVE BY AGE, SEX, AND REGION,
1960-1962 COMPARED WITH 1930-1932
BRITISH COLUMBIA

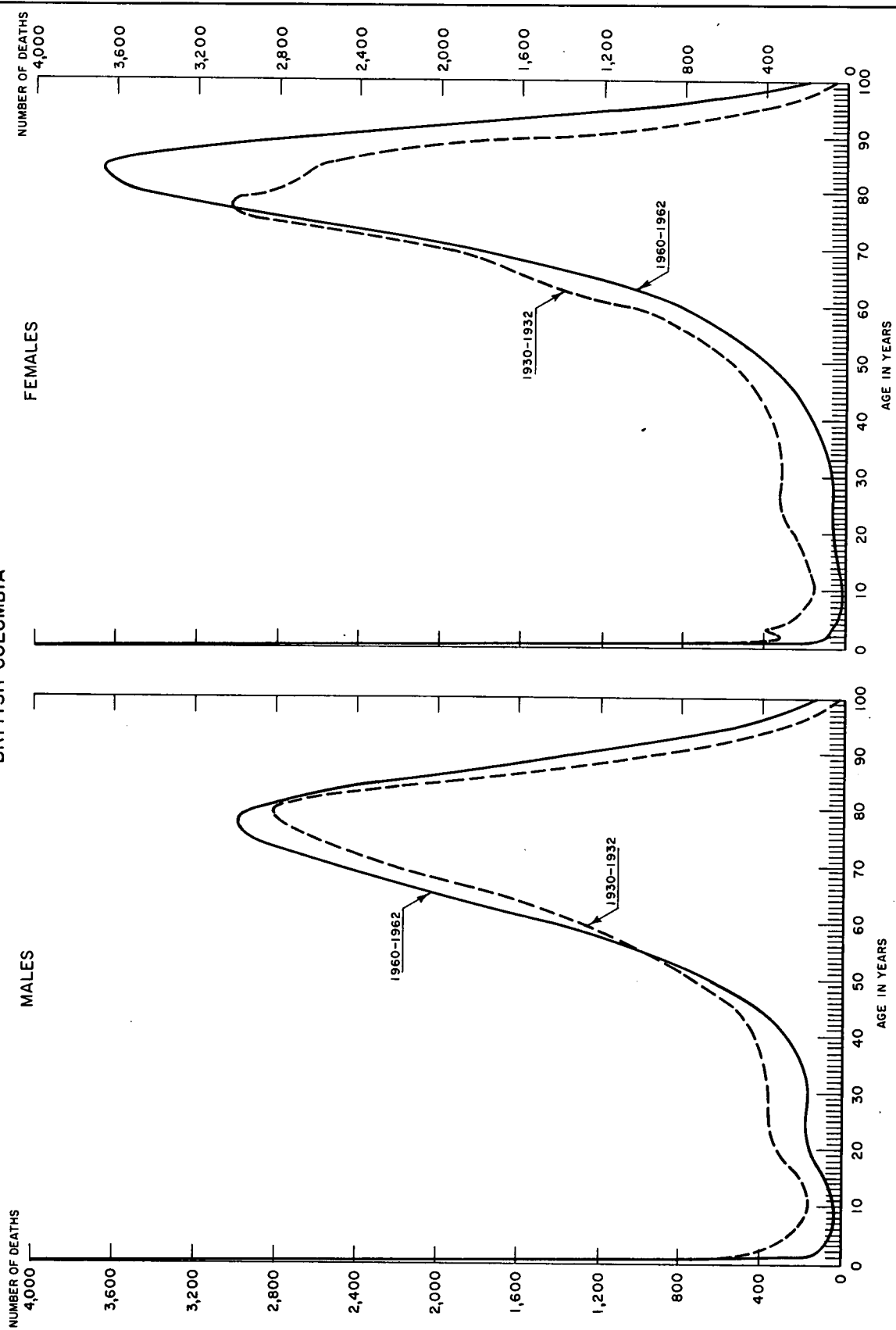


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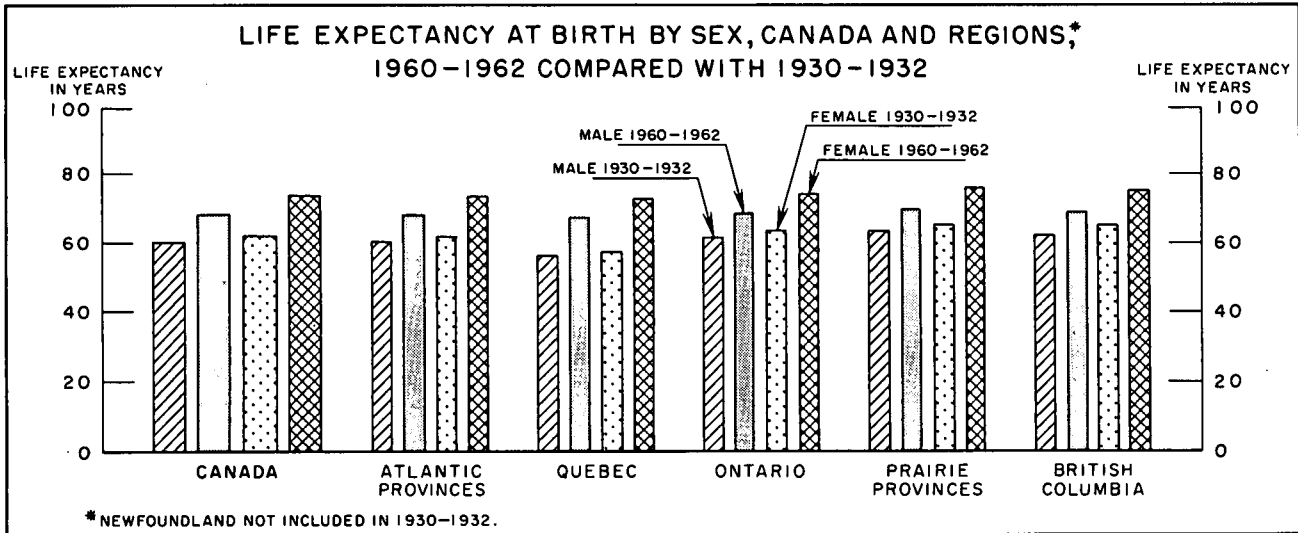


CHART-J

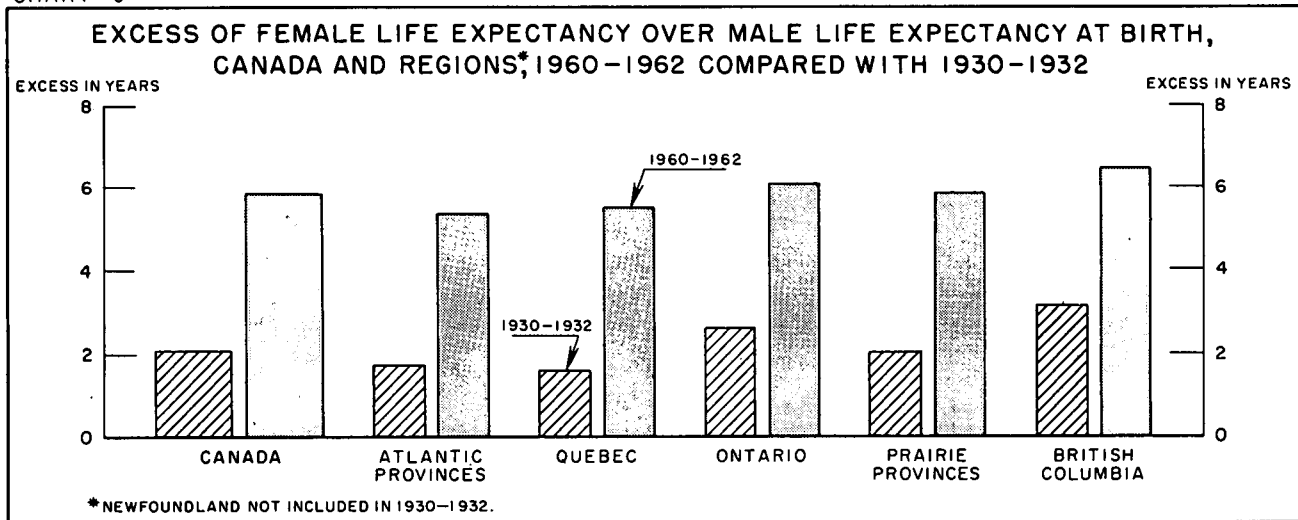
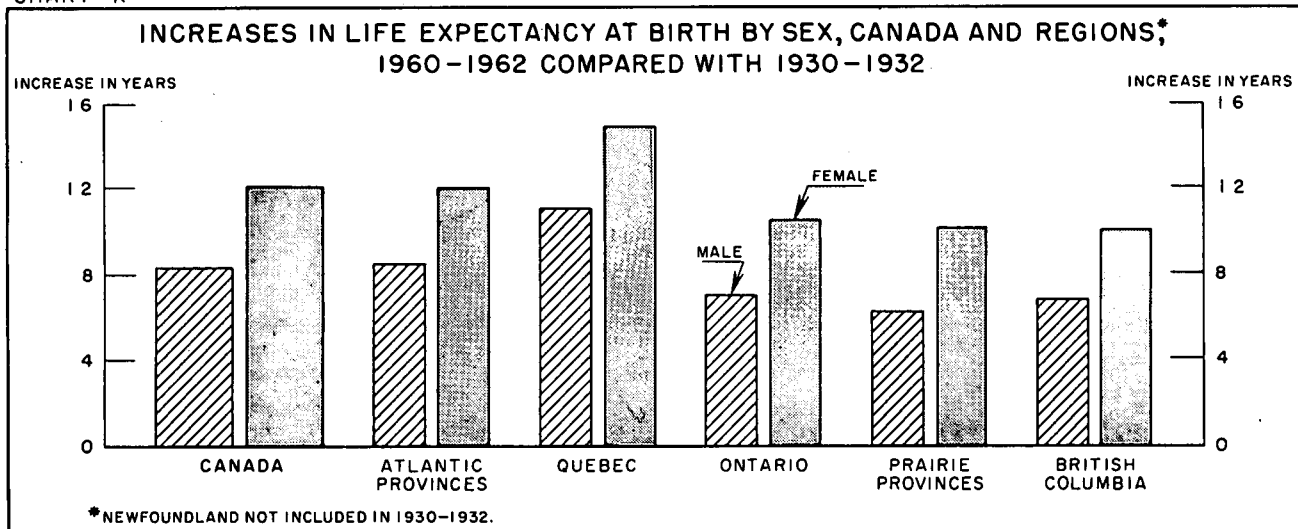
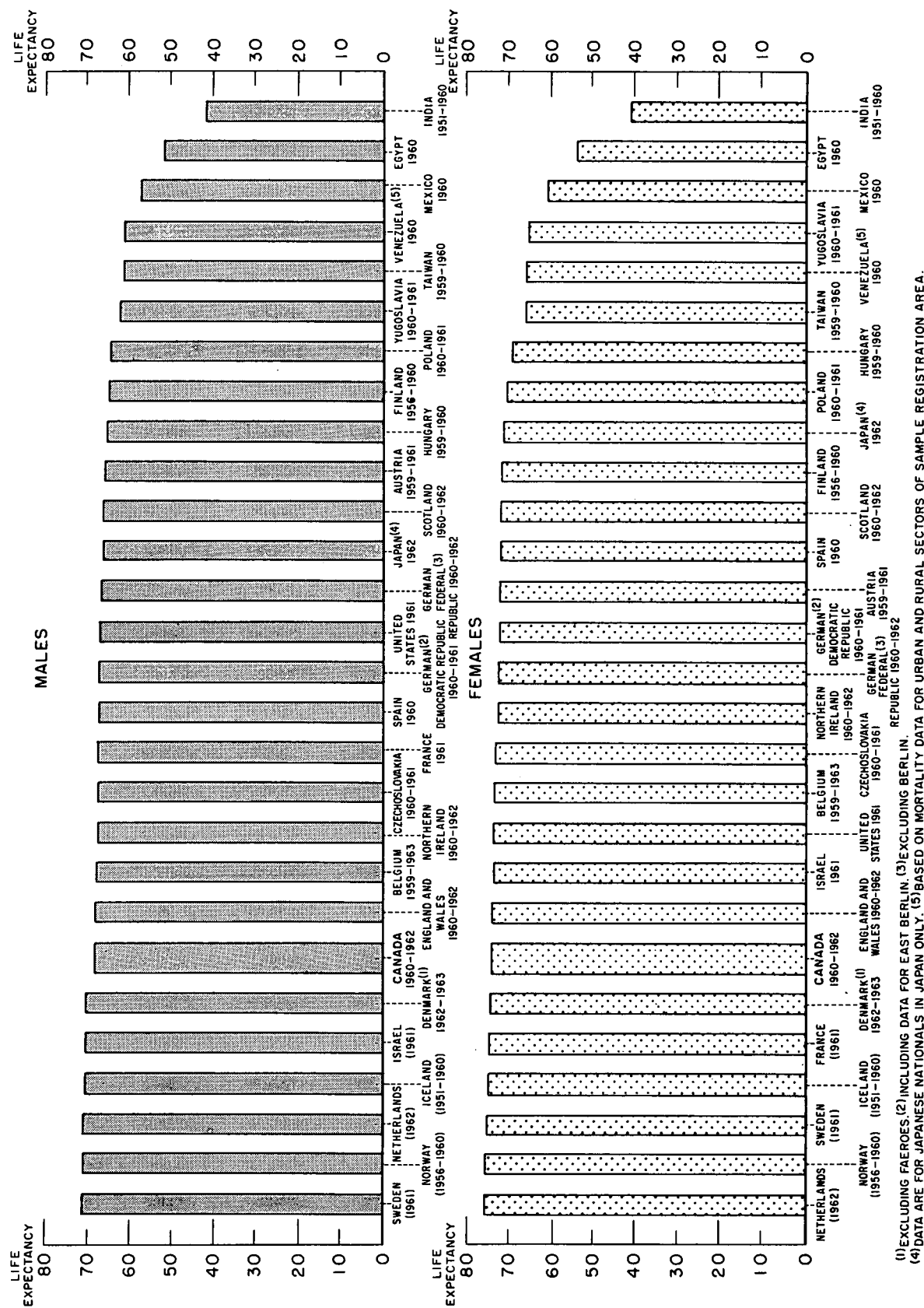


CHART-K



LIFE EXPECTANCY AT BIRTH FOR SELECTED COUNTRIES BY SEX,





DATE DUE
DATE DE RETOUR

[illegible]

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Obtainable from Publications Distribution Unit, Financial Services Section,
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91-202—Estimates (Age and Sex), Canada and Provinces, (A. Supp. to 91-503)25
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