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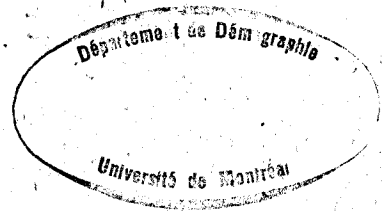
CANADIAN

ABRIDGED LIFE TABLES

1871, 1881, 1921, 1931

OTTAWA
1939

Preface

The present bulletin consists of eight abridged life tables, for males and females, covering the years 1871, 1881, 1921 (Registration Area) and 1931 (Canada, excluding Yukon and Northwest Territories). The areas used are not strictly comparable throughout, as for both 1871 and 1881 the data cover only the provinces of Nova Scotia, New Brunswick, Quebec and Ontario.

The Censuses of 1871 and 1881 reported the number and ages of persons dying during the census year. This, of course, was long prior to the National System of Vital Statistics, and some doubts existed as to the completeness of the data by age categories. The need for life tables for this period, however, was so great that it was deemed advisable to bring the data under close examination. As will be seen in the introductory matter in this bulletin the suspected incompleteness yielded to careful analysis. The consistency of the comparison between the sexes in the 1871 and 1881 data on the one hand, and in the 1921 and 1931 data on the other, offered further corroboration of reliability in the earlier years.

The tables were prepared by C. E. Kraemer of the Social Analysis Branch under the general direction of M. C. MacLean.

R. H. Coats.

Dominion Bureau of Statistics,
October, 1939.

Abridged Life Tables

Introduction

Data - The life tables given in the present report for 1871 and 1881, constructed for males and females, are based on the population of four provinces, Ontario, Quebec, New Brunswick and Nova Scotia, since the deaths are available for these provinces only. The population exposed was 3,689,257 or 94.5 p.c. of the total population of Canada in 1871, and 4,044,060 or 93.5 p.c. of the total population of Canada in 1881. A comparison with the tables of 1921 and 1931 can thus be made with assurance that most of the population of Canada has been exposed in the calculation of the tables. The population and deaths of 1921 are for the Registration Area, Quebec being omitted.

Grouping - The ages of the population in 1871 and the deaths of 1871 and 1881 are given in groups of varying sizes. In 1871 the population is given in five-year groups, 6-11, 11-16, etc., till age 20, and in ten-year groups, 21-31, 31-41, etc., thereafter. The deaths are given in five-, ten-, and twenty-year groups in 1871 and 1881 (see Table A of the Appendix).

In order to break up the ten- and twenty-year groups, formula (1) given at the end of the Introduction, a standard formula for bisection of an interval, was applied. The grouping is now in the form, 21-26, 26-31, etc. It was then necessary to put each group back one year, i.e., to 20-25, 25-29, etc., making the groups comparable with those of 1921 and 1931. This was done by applying formula (2) to the age groups.

Adjustment for 1871 and 1881 - In charting the q_x's (the probability of dying in a year), it was found that at age 82 there occurred a sudden dip. No reasonable explanation could be given for such behaviour other than under-statement of deaths in the age groups 61-81, and 81-101. In order to ascertain whether such understatement had occurred, an examination was made of the deaths in the census subdistricts. It was thought that, if deaths were understated

because of under-enumeration, the under-enumeration would occur in some districts rather than in all because there would seem to be no good reason why it should occur everywhere. In a few districts no deaths were reported at these ages, in others the reported deaths were far below the average death rate. Giving these districts the same rate as in the remaining districts, an additional 144 male deaths were estimated for 1871, and 167 for 1881; 146 female deaths for 1871, and 152 for 1881.

Due to the broadness of the age groups, it was impossible to point to any particular year or years in which the understatement might occur. By assuming the largest concentration of error to be in the ages 80-89, 120 male and 100 female deaths were added to the age group 80-84 and 24 male deaths and 46 female deaths to the age group 85-89 for 1871. For 1881, 142 male deaths and 152 female deaths were added to age group 80-84, and 25 male deaths and 60 female deaths to group 85-89. The result was a smoothing out of the curve from age 77 to 87 through a remedying of the only apparent cause of the irregular behaviour, i.e., understatement of deaths.

'Not Stated' Ages – The 'not stated' ages among the deaths are a larger proportion than the 'not stated' ages among the population. In order to avoid an error of understatement in the mortality rates a factor was applied to the q_x's distributing the 'not stated' among the age groups.

Comparison with Life Table, 1921 – Comparing the probable death rates for the three years, Charts 1 and 2 show higher rates for 1871 and 1881 from age 7 to 50, after which 1921 is above both 1871 and 1881 up to age 87. The question why 1921 should be above the other two years at the later ages arises. Is it due to further understatement of deaths in the early censuses?

The additional deaths required to raise the rates of 1871 and 1881 up to the level of 1921 were calculated for males. It was found that 1,092 deaths were needed in 1871 and 1,268 in 1881, i.e., understatements of 21.6 p.c.

and 18.0 p.c. took place in 1871 and 1881, respectively. Of the 1,092 deaths in
1871 786 or 72 p.c. would have to be distributed among the ages 70-84. Of the
1,268 deaths in 1881, 1,034 or 82 p.c. would have to be distributed among the
same ages. In other words, between ages 70 and 84 there would be an understate-
ment of deaths of about 36.5 p.c. in the census of 1871, and an understatement
of 25.8 p.c. in 1881 which is very improbable.

It has already been pointed out that an examination was made of the
deaths between ages 61-81 and 81-101 in the census subdistricts of 1871 and 1881.
The deaths estimated were used in the calculation of the life tables. The 1,092
deaths required in 1871 and the 1,268 in 1881 to bring ages 50-87 up to the ex-
pectation of 1921 would have to be in addition to the estimated deaths and an
examination of the districts showed no evidence of their omission.

Male deaths of 1871 and 1881 (actual) and deaths among 1871 and 1881 male
population if 1921 rates prevailed from age 55 to 100 and over, by age groups.

Age Group	Deaths of 1871	Deaths among 1871 Pop. If 1921 rates prevailed	Increase	P.C. Under-State-ment	Deaths of 1881	Deaths among 1881 Pop. If 1921 rates prevailed	Increase	P.C. Under-State-ment
55-59	598	682	84		749	825	76	
60-64	676	805	129		1,032	1,080	48	
65-69	937	940	3		1,143	1,158	15	
70-74	836	1,090	254)		1,123	1,416	293)	
75-79	724	1,061	337)	36.5	1,007	1,396	389)	25.8
80-84	(1)588	783	195)		(1)832	1,184	352)	
85-89	(1)324	411	87		(1)501	668	167	
90-94	203	206	3		362	290	-72	
95-99	130	130	-		237	237	-	
100 +	20	20	-		63	63	-	
Total	5,036	6,128	1,092	21.6	7,049	8,317	1,268	18.0

(1) Adjusted deaths.

There is, of course, always the possibility of an overstatement of the
ages of the population and an understatement of the ages at death. Although it
has been observed that these overstatements occur at the older ages, it is ob-
vious that if such overstatement occurred it would be shown in the distribution

of the q_x's by compensatory peaks and depressions, e.g., the rates, at, say, 50-60 would be lower than normal while those for 60-70 would compensate. There is no evidence of this being the case.

It would seem then that the differences in the life tables between 1871, 1881 and 1921 are more or less real. If so, is there any reason why the q_x's at 50-87 should be lower in the earlier years? (The differences in the lower ages are easily explained.) To answer this let us remember that the population of Canada at ages 50-87 in 1871 and 1881 was largely composed of pioneers. Evidence is given in 1931 life tables and elsewhere that the pioneer population—a moving population—is really a selection, and if this is granted there is no difficulty in believing that its life expectation was higher.

There would be a further selection caused by the fact that the q_x's were so much higher at the earlier ages. They were not dying at 50-87 because the most vulnerable of them died before 50. In the 60 years intervening till 1931 the expectations up to 50 were raised very considerably, meaning that the persons over 50 in 1931 contained a considerable element who formerly were dying off below the age of 50. It is obvious that if the expectation of life is raised after a lapse of time, it is not raised indefinitely. Those who formerly would have died at 40 probably died 10 years later.

Sex Comparison - The comparison between sexes in 1871 and 1881 is of great interest. Its consistency with the findings of 1921 and 1931 carries conviction as to completeness of data and accuracy of statement of ages in the early years. There are sufficient points of difference as well as of resemblance to strengthen this conviction. As one would expect, the female line in the early adult ages crosses and recrosses the male line somewhat earlier in 1871 and 1881, and the differences between the two sexes where the female line is above that of the male are somewhat more drastic in these years. (See Chart 3).

Expectations of life ($\mathring{e}_x$) of Canada, 1881, England and Wales and Three Sel-
ected Healthy Districts of England, 1881-1890, showing improvement between
1881 and 1931, differences being data for correlations.

Age x	$\mathring{e}_x$ Canada 1881 (1)	$\mathring{e}_x$ Canada 1931 (2)	X Col.2- Col.1 (3)	$\mathring{e}_x$ England & Wales 1881-90 (4)	$\mathring{e}_x$ Three Selected Healthy Dists. 1881-90 (5)	$\mathring{e}_x$ England & Wales 1931 (6)	Y Col.6- Col. (7)	Y_1 Col.6- Col.5 (8)
7	57.60	60.57	2.97	51.50	55.61	58.47	6.97	2.86
12	54.42	56.14	1.72	47.18	51.28	53.95	6.77	2.67
17	50.54	51.64	1.10	42.74	46.90	49.40	6.66	2.50
22	46.52	47.36	0.84	38.66	42.78	45.10	6.44	2.32
27	42.90	43.14	0.24	34.75	38.83	40.82	6.07	1.99
32	39.33	38.84	-0.49	31.06	34.99	36.47	5.41	1.48
37	35.52	34.54	-0.98	27.50	31.18	32.15	4.65	0.97
42	31.64	30.31	-1.33	24.06	27.42	27.95	3.89	0.53
47	27.81	26.15	-1.66	20.75	23.71	23.92	3.17	0.21
52	23.96	22.17	-1.79	17.57	20.10	20.09	2.52	-0.01
57	20.19	18.43	-1.76	14.57	16.63	16.47	1.90	-0.16
62	16.68	14.90	-1.78	11.81	13.40	13.13	1.32	-0.27
67	13.61	11.76	-1.85	9.36	10.47	10.17	0.81	-0.37
72	10.88	9.01	-1.87	7.23	7.90	7.68	0.45	-0.22
77	8.37	6.74	-1.63	5.43	5.76	5.69	0.26	-0.07
82	6.04	4.97	-1.07	3.99	4.09	4.20	0.21	0.35
87	3.72	3.63	-0.09	2.89	2.86	3.12	0.23	0.26
92	2.20	2.57	0.37	2.08	2.00	2.35	0.27	0.35
97	0.94	1.69	0.75	1.51	1.42	1.76	0.25	0.34

<u>Method of Graduation and Formulae Used</u> - It was felt that an abridged

life table for 1871 and 1881 would fulfill all the purpose to which a complete

life table could be applied. The method followed was that of Mr. George King.[x]

Pivotal values were found for each age group at age 12, 17, etc., for

population and deaths by the formula

$$u_{12} = .216w_{10} - .008(w_5 + w_{15})$$

$$u_{17} = .216w_{15} - .008(w_{10} + w_{20}) \text{ etc.,}$$

where u_x is the number between age x and x+1 and w_x the number between x and

x+5. The unsymmetrical third degree formula

$$u_7 = .192w_5 + .016w_{10} - .008w_{15}$$

gave the value for age 7. The pivotal value for the deaths was divided by the

[x]See Supplement to the Seventy-Fifth Annual Report of the Registrar General
of Births, Deaths and Marriages in England and Wales, 1914, Part I, pp 26-30.

corresponding value of the number living, giving us m_x (the central rate of mortality). From this the rates q_x were calculated, using the formula

$$q_x = \frac{2m_x}{2 + m_x} \; ;$$

p_x, the probability of living a year is q_x subtracted from unity. Taking first, second and third differences of log p_x and employing formula (6) given at the end of the Introduction, we have the values of log $_5p_x$ (the logarithm of the probability of living five years) from age 12 to 92. Formula (7) was employed to give the value of log $_5p_x$ for age 7, the youngest age of the table.

Termination of Tables - The life tables do not end at age 92, but in the case of the males they must be continued to age 102 for 1871, 1881, 1931 and to age 107 for 1921 to bring them to a satisfactory conclusion. The third difference of log p_x for age 82 in 1871 (the last age for which it is obtainable) was 2415. Being negative this figure was carried through as a constant, enabling us to find log $_5p_x$ for age 87, 92, 97 and also log p_x for age 102. However, in 1881 the third difference for 82 was positive and as a result could not be used as a constant. It was necessary to use age 77, the third difference for which was 7084 and negative. This then is our constant to the end of the table. Now in the case of 1921 the third differences for ages 77 and 82 were positive. The fourth difference (1356) for age 77 would then be negative. This difference was taken as the constant carried through to terminate the table at age 112.

The female tables are concluded in a similar manner, the last survivors reaching age 102 in 1871 and 1881 and age 107 in 1921 and 1931.

Radix - The column, l_x, or the number living, begins with 100,000 at age 7. Its logarithm is 5.00000. To this is added the corresponding log $_5p_x$ at each age successively, giving us the values of log l_x, and hence l_x. For 1921 and 1931, however, the l_x at age 7 as published in the Canadian Life Tables, 1931, was taken as the radix.

Expectation of life - Taking first, second and third differences of l_x at each quinquennial age and applying formula (8), given at the end of the Introduction, we arrive at $N'_{x:\overline{5|}}$, the sum of a quinquennial section of the sum of the column l_x from age x+1 to the oldest age in the table, which sum is denoted by the symbol N'_x. To find the value of $N'_{x:\overline{5|}}$ for age 7 formula (9) was used. To find $N'_{x:\overline{5|}}$ for age 97 the previous formula could not be applied; it was necessary to use another method. The l_x for age 97 is multiplied by the p_x of the same age. The result is the l_x for age 98. Having the l_x for age 102, by interpolation we arrive at l_{99}, l_{100}, l_{101}, which gives us $N'_{97:\overline{5|}}$. By adding successive values upwards we have the N'_x at each quinquennial age of the table. The complete expectation of life is then found by dividing N'_x at each age by the corresponding l_x and by adding .5 to the result.

The method just described to find $N'_{x:\overline{5|}}$ for an age where the formula cannot be used, instead of applying to age 97, may apply to a quinquennium later, depending on the age of the last survivors, as is the case in the table for males of 1921 and females of 1921 and 1931.

Notation -

l_x = the number living according to the life table at the beginning of the year of age x.

d_x = the number dying during the year of age x.

q_x = the probability of dying during the following year for a person of age x.

p_x = the probability of living to the end of the year of age for a person alive at age x.

$\overset{\circ}{e}_x$ = the complete expectation of life of a person alive at age x.

Practical Applications of the Tables - The need of life tables for 1871 and 1881 can best be illustrated by a table taken from the Population Monograph in which the object was to find the probable number of persons who em-

igrated from the province of Nova Scotia between the period 1881-91. It is seen that in 1881 the number aged 5-9 is 56,380; in 1891 this group had reached the ages 15-19, numbering 49,955 persons. There was a decrease of 6,425 due to two factors, death and emigration.

How many should be attributed to death and how many to emigration? By finding the chances of a person aged 7 (the mid-point of the group) living ten years we can easily find the chances of a person dying in ten years. Multiplying the population in age group 5-9 by the probable death rate the result is the number who probably died. Subtracting this from the total decrease we have the number who probably emigrated. To the figures in the table were applied the probable death rates of 1931 and 1881.

Because of the great improvement in mortality over the fifty-year period the results obtained from the 1931 rates do not present a true picture of the actual situation. Hence the importance of the life tables of 1871 and 1881 when treating statistics of the same years. This is only one case of many to which these life tables can be applied.

Population 5-44, by age groups, and same population 10 years later,
Nova Scotia, 1881, showing decrease due to death and emigration
using Life Tables of 1881 and 1931.

| Age in 1881 | Population in 1881 | Population in 1891 | Age in 1891 | Decrease | Decrease Probably Due to | | | |
| | | | | | Death | | Emigration | |
					By 1881 Life Table	By 1931 Life Table	By 1881 Life Table	By 1931 Life Table
5-9	56,380	49,955	15-19	6,425	2,948	1,070	3,477	5,355
10-14	52,879	43,223	20-24	9,656	2,140	1,244	7,516	8,412
15-19	48,180	33,029	25-29	15,151	2,402	1,505	12,749	13,646
20-24	41,574	26,329	30-34	15,245	2,651	1,401	12,594	13,844
25-29	32,382	23,383	35-39	8,999	2,088	1,151	6,911	7,848
30-34	26,432	21,901	40-44	4,531	1,667	1,111	2,864	3,420
35-39	24,618	20,180	45-49	4,438	1,729	1,293	2,709	3,145
40-44	20,997	18,005	50-54	2,992	1,693	1,465	1,299	1,527

Formulae -

(1) $u_{x+10} = .5w_{x+10} - .0625 (w_{x+20} - w_x)$

(2) $u_x = \dfrac{3w_{x-1} + 24w_x - 2w_{x+1}}{25}$

(3) $u_{12} = .216w_{10} - .008(w_5 + w_{15})$

$u_{17} = .216w_{15} - .008(w_{10} + w_{20})$

(4) $u_7 = .192w_5 + .016w_{10} - .008w_{15}$

(5) $q_x = \dfrac{2m_x}{2+m_x}$

(6) $w_5 = 5u_0 + 7\Delta u_0 + 1.6\Delta^2 u_0 - .2\Delta^3 u_0$

(7) $w_0 = 5u_0 + 2\Delta u_0 - .4\Delta^2 u_0 + .2\Delta^3 u_0$

(8) $w_6 = 5u_0 + 8\Delta u_0 + 2.6\Delta^2 u_0 - .2\Delta^3 u_0$

(9) $w_1 = 5u_0 + 5\Delta u_0 - .4\Delta^2 u_0 + .2\Delta^3 u_0$

Tables

TABLE 1 – Abridged Life Table of four provinces[1] of Canada, males and females, based on the population and deaths of 1871

Age$_x$	l_x	d_x	q_x	p_x	$\overset{\circ}{e}_x$
			MALES		
7	100,000	442	.00442	.99558	58.10
12	97,927	371	.00379	.99621	54.28
17	96,137	366	.00381	.99619	50.25
22	93,899	580	.00618	.99382	46.38
27	90,711	690	.00761	.99239	42.92
32	87,452	582	.00666	.99334	39.43
37	84,620	558	.00660	.99340	35.66
42	81,726	616	.00754	.99246	31.84
47	78,518	685	.00872	.99128	28.03
52	75,010	742	.00989	.99011	24.25
57	70,945	937	.01321	.98679	20.47
62	65,890	1,188	.01803	.98197	16.84
67	58,410	1,925	.03295	.96705	13.65
72	48,408	2,079	.04294	.95706	10.95
77	37,764	2,250	.05957	.94043	8.52
82	25,835	2,520	.09755	.90245	5.99
87	15,831	2,159	.15608	.84392	4.06
92	4,555	1,260	.27653	.72347	2.59
97	534	247	.46219	.53781	1.53
102	10	10			
			FEMALES		
7	100,000	434	.00434	.99566	57.67
12	97,879	396	.00405	.99595	53.87
17	95,964	389	.00405	.99595	49.89
22	93,758	591	.00630	.99370	46.01
27	90,546	699	.00772	.99228	42.55
32	87,054	688	.00790	.99210	39.15
37	83,595	694	.00830	.99170	35.67
42	80,247	633	.00789	.99211	32.05
47	77,099	633	.00821	.99179	28.26
52	73,911	661	.00894	.99106	24.37
57	70,414	813	.01154	.98846	20.45
62	65,340	1,337	.02046	.97954	16.83
67	57,844	1,723	.02979	.97021	13.68
72	48,598	2,023	.04162	.95838	10.79
77	38,160	2,217	.05811	.94189	8.05
82	26,417	2,500	.09463	.90537	5.50
87	14,195	2,218	.15624	.84376	3.03
92	4,964	1,263	.25441	.74559	2.72
97	689	309	.44825	.55175	1.55
102	12	8	.69800	.50200	–

[1] Ontario, Quebec, Nova Scotia, New Brunswick.

TABLE 2 — Abridged Life Table of four provinces[1] of Canada, males and females, based on the population and deaths of 1881

Age_x	l_x	d_x	q_x	p_x	$\overset{\circ}{e}_x$
MALES					
7	100,000	722	.00722	.99278	57.60
12	96,799	493	.00509	.99491	54.42
17	94,772	317	.00334	.99666	50.54
22	92,882	501	.00539	.99461	46.52
27	90,047	638	.00708	.99292	42.90
32	86,960	569	.00654	.99346	39.33
37	84,242	522	.00620	.99380	35.52
42	81,476	609	.00748	.99252	31.64
47	78,325	661	.00844	.99156	27.81
52	74,908	736	.00982	.99018	23.96
57	70,830	968	.01366	.98634	20.19
62	65,290	1,352	.02071	.97929	16.68
67	57,449	1,867	.03249	.96751	13.61
72	47,630	2,093	.04394	.95606	10.88
77	36,709	2,300	.06266	.93734	8.37
82	25,221	2,292	.09086	.90914	6.04
87	14,382	2,143	.14901	.85099	3.72
92	4,044	1,403	.34697	.65303	2.20
97	234	132	.56423	.43577	0.94
102	1	1			
FEMALES					
7	100,000	743	.00743	.99257	56.25
12	97,429	473	.00485	.99515	52.66
17	94,178	445	.00472	.99528	49.39
22	90,380	536	.00593	.99407	46.36
27	87,466	683	.00781	.99219	42.82
32	84,033	671	.00798	.99202	39.47
37	80,790	617	.00764	.99236	35.95
42	77,727	612	.00787	.99213	32.27
47	74,705	616	.00824	.99176	28.48
52	71,251	641	.00899	.99101	24.73
57	67,250	823	.01224	.98776	21.05
62	62,455	1,205	.01930	.98070	17.47
67	55,507	1,653	.02978	.97022	14.32
72	46,669	1,818	.03896	.96104	11.55
77	37,166	2,050	.05515	.94485	8.86
82	26,367	2,299	.08721	.91279	6.47
87	15,044	2,162	.14374	.85626	4.27
92	5,392	1,416	.26261	.73739	2.68
97	689	315	.45791	.54209	1.54
102	12				

[1]Ontario, Quebec, New Brunswick and Nova Scotia.

TABLE 3 — Abridged Life Table of Registration Area of 1921[1], Canada, males and females, based on the population and deaths of 1921.

Age x	l_x	d_x	q_x	p_x	$\overset{o}{e}_x$
MALES					
7	99,298	301	.00303	.99696	60.23
12	98,136	196	.00200	.99800	55.92
17	96,981	299	.00308	.99692	51.55
22	95,229	358	.00376	.99624	47.45
27	93,391	372	.00398	.99602	43.34
32	91,613	340	.00371	.99629	39.13
37	89,782	416	.00463	.99537	34.88
42	87,574	485	.00554	.99446	30.69
47	84,911	616	.00726	.99274	26.57
52	81,532	792	.00972	.99028	22.57
57	76,872	1,160	.01509	.98491	18.78
62	70,392	1,523	.02163	.97837	15.26
67	61,879	2,033	.03286	.96714	12.00
72	50,119	2,798	.05582	.94418	9.21
77	35,335	3,066	.08677	.91323	6.99
82	20,665	2,640	.12773	.87227	5.21
87	8,948	1,737	.19408	.80592	3.96
92	2,634	652	.24740	.75260	3.18
97	578	162	.28062	.71938	2.63
102	104	32	.30908	.69092	1.99
107	14	5	.36562	.63438	1.79
112	1	1			
FEMALES					
7	99,384	260	.00262	.99738	60.64
12	98,319	185	.00188	.99812	56.26
17	97,273	261	.00268	.99732	51.84
22	95,765	356	.00372	.99628	47.62
27	93,905	389	.00414	.99586	43.51
32	91,923	414	.00450	.99550	39.39
37	89,685	497	.00554	.99446	35.31
42	87,182	508	.00583	.99417	31.25
47	84,504	598	.00708	.99292	27.16
52	81,076	825	.01017	.98983	23.20
57	76,581	1,027	.01341	.98659	19.41
62	70,854	1,380	.01947	.98053	15.77
67	62,660	2,054	.03278	.96722	12.48
72	51,132	2,647	.05177	.94823	9.71
77	37,198	2,916	.07838	.92162	7.40
82	22,923	2,683	.11705	.88295	5.46
87	10,724	1,957	.18252	.81748	3.96
92	3,269	840	.25697	.74303	2.87
97	581	172	.29569	.70431	1.95
102	49	20	.41150	.58850	1.74
107	1				

[1] Canada exclusive of Quebec, Yukon and Northwest Territories.

TABLE 4 -- Abridged Life Table of Canada[1], 1931, males and females, based on population of 1931 and deaths of 1930-32.

Age$_x$	l_x	d_x	q_x	p_x	$\overset{o}{e}_x$
MALES					
7	99,500	215	.00216	.99784	60.57
12	98,527	150	.00152	.99848	56.14
17	97,612	248	.00254	.99746	51.64
22	96,210	321	.00334	.99666	47.36
27	94,563	321	.00339	.99661	43.14
32	92,966	327	.00352	.99648	38.84
37	91,204	399	.00437	.99563	34.54
42	89,057	483	.00542	.99458	30.31
47	86,413	617	.00714	.99286	26.15
52	82,846	878	.01060	.98940	22.17
57	77,834	1,206	.01549	.98451	18.43
62	71,201	1,625	.02282	.97718	14.90
67	61,805	2,205	.03567	.96433	11.76
72	49,656	2,762	.05563	.94437	9.01
77	34,930	3,109	.08900	.91100	6.74
82	19,880	2,701	.13586	.86414	4.97
87	8,320	1,658	.19933	.80067	3.63
92	2,231	632	.28331	.71669	2.57
97	314	123	.39022	.60978	1.69
102	17	17			
FEMALES					
7	99,571	170	.00171	.99829	61.44
12	98,828	147	.00149	.99851	56.88
17	97,947	230	.00235	.99765	52.37
22	96,611	319	.00330	.99670	48.06
27	94,903	365	.00385	.99615	43.88
32	93,045	381	.00409	.99591	39.70
37	91,040	434	.00477	.99523	35.52
42	88,778	483	.00544	.99456	31.36
47	86,185	586	.00680	.99320	27.23
52	82,947	763	.00920	.99080	23.19
57	78,564	1,072	.01364	.98636	19.34
62	72,482	1,462	.02017	.97983	15.74
67	64,159	1,998	.03114	.96886	12.44
72	53,003	2,608	.04920	.95080	9.51
77	38,628	3,172	.08211	.91789	7.10
82	22,906	2,917	.12736	.87264	5.26
87	10,174	1,893	.18610	.81390	3.89
92	3,040	791	.26010	.73990	2.83
97	528	185	.35045	.64955	1.92
102	44	20	.45595	.54405	1.73
107	1				

[1]Exclusive of Yukon and Northwest Territories.