

**TRANSACTIONS OF SOCIETY OF ACTUARIES  
1988-90 REPORTS**

**REPORT OF THE COMMITTEE  
ON LIFE INSURANCE EXPECTED EXPERIENCE  
OF THE CANADIAN INSTITUTE OF ACTUARIES**

**MORTALITY UNDER CANADIAN  
STANDARD ORDINARY INSURANCE ISSUES STUDIED  
BETWEEN THE 1987 AND 1988 ANNIVERSARIES\***

**PREFACE**

This report was prepared by the Committee on Life Insurance Expected Experience of the Canadian Institute of Actuaries. The Canadian Institute of Actuaries has given the Society of Actuaries permission to reproduce this report as part of the Society's expansion of its experience studies. Discussions of this report as well as of any experience study are encouraged. The Canadian Institute and the Society intend to cooperate in experience studies to benefit actuaries in both Canada and the United States.

---

**1. INTRODUCTION**

This is the 39th annual report submitted by the Committee on Life Insurance Expected Experience on the intercompany mortality experience for Canadian Standard Ordinary Life insurance policies. The CA 69-75 mortality tables are used to calculate the expected death claims separately for males and females. For data submitted without classification by sex, the male table was used.

**2. TABLES**

The following tables comprise the results of the 1987-88 mortality study:

- Table 1 The total experience analyzed for the select period by groups of duration and by groups of ages at issue; for the ultimate period by groups of attained ages.  
Table 2 Table 1 classified by: (a) males and (b) females.  
Table 3 Table 1 (select period only) classified by: (a) medical males, (b) medical females, (c) nonmedical males, (d) nonmedical females, (e) paramedical males, and (f) paramedical females.  
Table 4 Mortality ratios by amount for policy years 1980-81 through 1987-88.  
Table 5 The variation of the experience of the individual companies from the overall mortality ratio for the total intercompany experience.

\*Copyright© 1990 Canadian Institute of Actuaries.

- Table 6 Various classes in broad groups of policy years and ages at issue or attained ages.  
 Table 7 Cause of death.  
 Table 8 Smoking habits.  
 Table 9 Type of insurance.

Additional detailed data, showing mortality ratios by quinquennial age groupings, are available and can be obtained by writing to the Chairman of the Committee on Life Insurance Expected Experience of the CIA.

### 3. COMMENTS ON DATA FROM CONTRIBUTING COMPANIES

The 1987-88 study is based on the data of 16 contributing companies. Five companies are temporarily unable to submit data.

<u>Contributors</u>	<u>Exposures</u>
Canada Life	4.40%
Confederation Life	3.40
Crown Life	3.22
Equitable Life	0.67
Great-West Life	5.48
Imperial Life	1.81
Industrial-Alliance	12.27
London Life	17.29
Manufacturers Life	3.84
Metropolitan Life	4.77
Mutual Life	15.32
North American Life	4.70
North-West Life	0.69
Prudential Assurance	1.73
Sun Life	12.73
Transamerica	7.68
Total exposures	100.00%

A comparison of total exposures and death claims with previous years is as follows:

	1985-86 Study	1986-87 Study	1987-88 Study
Exposures			
By Number	6,942,570	6,929,713	6,163,896
By Amount ('000)	158,094,377	164,875,777	170,782,585
Death Claims			
By Number	36,296	35,901	33,144
By Amount ('000)	285,830	285,047	283,049

## 4. COMMENTS

In Table 1, the column entitled S.D. provides estimates of the standard deviation of the ratios of actual to expected numbers of deaths. These numbers measure the degree of confidence which may be placed in the ratios experienced. The formula used to calculate the standard deviations is as follows:

$$\text{S.D.} = \frac{(\text{actual \# of deaths})^{1/2}}{\text{expected \# of deaths}}$$

In Table 2, the average sum assured for the exposures has been steadily increasing as follows:

	1983-84	1984-85	1985-86	1986-87	1987-88
Males	21,539	23,400	25,700	26,493	30,927
Females	13,335	14,910	17,448	18,836	22,033
Combined	18,829	20,488	22,770	23,792	27,707

The following shows the trend in the average amount of claims over the last five years:

	1983-84	1984-85	1985-86	1986-87	1987-88
Average Claim	6,833	8,271	7,875	7,940	8,540

In Table 3, we note that paramedical results for males are slightly better than medical, which in turn are better than nonmedical.

In Table 4, the mortality rates generally have declined over the last eight years.

In Table 7, percentage of death claims (by amount) for the main cause of death groupings:

	Policy Years		
	1-5	6-15	16 and over
Motor Vehicle and Other Accidents and Homicides	24.0% 21.9 22.4	11.7% 15.6 12.6	3.2% (87-88) 4.0 (86-87) 3.8 (85-86)
Diseases of the Heart and Circulatory System	18.1% 17.0 18.6	21.6% 21.4 25.0	32.1% (87-88) 38.4 (86-87) 32.0 (85-86)
Malignant Neoplasms	27.7% 32.7 28.8	35.3% 37.9 32.4	27.8% (87-88) 27.6 (86-87) 24.1 (85-86)

This is the first year that AIDS has been included in the study.

In Table 8, the following select ratios for smokers and nonsmokers were extracted from the 1987-88 study (with the comparable ratios from the previous year shown in brackets).

	A/E %	Expected Deaths ('000)
Males (by amount)		
Smokers	95.2 (96.6)	\$26,631 (19,501)
Nonsmokers	52.1 (59.9)	72,352 (58,808)
Nonclassified	70.3 (78.6)	110,832 (112,601)
Females (by amount)		
Smokers	103.4 (86.6)	\$5,088 (4,360)
Nonsmokers	54.6 (51.5)	12,952 (10,267)
Nonclassified	72.2 (76.8)	19,207 (19,434)
(Smoker A/E)/(Nonsmokers A/E) %		
Male	211.1 (215.0)	182.7 (161.3)
Female	205.7 (198.1)	189.4 (168.2)

The unclassified data fell from 50.9% of total exposures (by amount) in the last study to 46.6% in the 1987-88 study.

In Table 9, the ratio of actual to expected for term-riders is less than for term, which in turn is less than for permanent in both the current and previous study years.

THIS REPORT WAS PREPARED AT  
THE UNIVERSITY OF WATERLOO BY:

W.H. AITKEN  
M.A. BENNETT  
R.L. BROWN  
V. BORCHERT

THE REPORT WAS APPROVED BY  
THE COMMITTEE ON LIFE  
INSURANCE EXPECTED  
EXPERIENCE

M.A. BENNETT  
J.V. CASTELLINO  
A.G. JARDIN (VICE-CHAIRMAN)  
J.A. MEREU  
W.A. RAMSEY  
R.A. WILLIS  
R.W. WILSON

**TABLE 1**  
**CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1987 AND 1988**  
**MALES AND FEMALES COMBINED—EXPECTED CA 69-75 TABLES**

	Ratio A/E			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Policy Years 1 to 15 from 16 Companies									
Select Experience by Policy Year									
1 .....	78.7	3.98	68.3	391	21,345	491,483	31,078,602	496.95	31,261.90
2 .....	104.3	4.39	55.0	564	17,242	465,315	27,352,180	540.72	31,354.24
3 .....	77.6	3.75	51.2	428	16,355	435,552	23,729,664	551.86	31,920.95
4 .....	95.2	4.07	60.6	547	17,071	399,678	18,270,416	574.48	28,156.51
5 .....	98.0	4.02	79.8	595	21,020	367,100	15,104,725	607.19	26,324.70
6-10 .....	84.9	2.10	73.8	1,640	51,047	1,073,357	31,967,438	1,932.33	69,182.71
11-15 .....	81.9	2.20	79.7	1,379	22,999	695,937	10,360,020	1,684.44	28,861.17
By Issue Age									
0-4 .....	57.5	4.88	52.2	139	2,442	527,404	8,719,767	241.68	4,678.33
5-29 .....	76.0	2.38	66.2	1,019	27,642	1,732,172	57,309,732	1,341.10	41,743.02
30-44 .....	75.6	1.88	62.8	1,617	67,550	1,239,966	73,618,104	2,138.78	107,583.47
45-49 .....	92.5	2.16	70.7	1,835	55,721	369,717	16,911,217	1,983.01	78,815.71
60+ .....	136.7	4.47	96.4	934	13,724	59,163	1,304,226	683.40	14,241.64
Total Select ....	86.8	1.17	67.6	5,544	167,079	3,928,422	157,863,046	6,388.	24,706.
Policy Years 16 and Over from 16 Companies									
Ultimate Experience by Attained Age									
15-29 .....	87.4	5.17	81.0	286	1,369	326,542	1,588,378	327.42	1,691.46
30-44 .....	81.2	3.14	67.0	669	4,071	482,553	3,264,648	823.63	6,079.00
45-59 .....	74.8	1.24	72.0	3,666	24,582	719,388	4,953,882	4,900.30	34,146.04
60-74 .....	83.9	0.78	77.3	11,443	50,456	554,963	2,632,908	13,645.53	65,285.51
75+ .....	91.3	0.85	88.6	11,536	35,492	152,028	479,723	12,639.29	40,041.36
Total Ultimate ..	85.4	0.51	78.8	27,600	115,970	2,235,474	12,919,538	32,336.	14,724.
Grand Total ....	85.6	0.47	71.8	33,144	283,049	6,163,896	170,782,585	38,724.	39,430.

\*Shown in \$1,000 units.

TABLE 2A  
CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1987 AND 1988  
MALES LIVES ONLY—EXPECTED CA 69-75 TABLES

	Ratio A/E		Actual Deaths		Exposures		Expected Deaths	
	Number	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Policy Years 1 to 15 from 16 Companies								
Select Experience by Policy Year								
1 .....	83.5	71.8	291	18,019	284,430	21,119,069	348.60	25,106.18
2 .....	105.0	52.5	414	13,641	271,879	18,839,172	394.45	25,958.97
3 .....	77.8	51.3	316	13,839	256,041	16,640,205	406.41	26,995.92
4 .....	90.4	58.0	381	13,873	232,304	12,920,435	421.59	23,904.55
5 .....	95.0	77.5	428	17,402	215,802	10,866,384	450.49	22,452.59
6-10 .....	84.2	73.1	1,190	43,893	638,750	23,608,296	1,412.82	60,025.96
11-15 .....	80.7	79.7	1,038	20,209	444,991	7,943,979	1,286.73	25,371.01
By Issue Age								
0-4 .....	54.0	47.5	81	1,342	278,614	4,597,857	149.95	2,821.95
5-29 .....	81.3	67.8	800	22,098	1,003,000	36,358,657	983.81	32,586.41
30-44 .....	74.9	62.2	1,183	56,103	793,225	55,776,058	1,579.26	90,240.51
45-59 .....	89.7	69.8	1,366	50,100	236,606	14,207,068	1,522.69	71,783.07
60+ .....	129.4	90.7	628	11,233	32,752	997,899	485.40	12,383.25
Total Select .....	86.0	67.1	4,058	140,876	2,344,197	111,937,540	4,721.	209,815.
Policy Years 16 and Over from 16 Companies								
Ultimate Experience by Attained Age								
15-29 .....	91.5	81.2	235	1,151	192,365	1,060,685	256.81	1,416.54
30-44 .....	81.0	65.6	519	3,549	337,357	2,742,176	641.00	5,411.64
45-59 .....	72.2	71.5	3,048	22,963	564,122	4,473,909	4,220.44	32,122.92
60-74 .....	83.2	76.8	9,601	46,736	424,725	2,359,275	11,538.42	60,857.60
75+ .....	92.7	88.0	9,377	31,245	113,845	413,788	10,011.54	35,504.25
Total Ultimate .....	85.1	78.1	22,780	105,643	1,632,414	11,049,832	26,768.	135,313.
Grand Total .....	85.2	71.4	26,838	246,519	3,976,611	122,987,372	31,489.	345,128.

\*Shown in \$1,000 units.

TABLE 2B

CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1987 AND 1988  
FEMALE LIVES ONLY—EXPECTED CA 69-75 TABLES

	Ratio A/E		Actual Deaths		Exposures		Expected Deaths	
	Number	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Policy Years 1 to 15 from 16 Companies								
Select Experience by Policy Year								
1 .....	67.4	54.0	100	3,325	207,053	9,959,533	148.35	6,155.72
2 .....	102.6	66.7	150	3,601	193,436	8,512,984	146.27	5,395.24
3 .....	77.0	51.1	112	2,516	179,509	7,089,438	145.45	4,924.98
4 .....	108.6	75.2	166	3,198	167,374	5,349,982	152.89	4,251.95
5 .....	106.6	93.4	167	3,618	151,297	4,238,315	156.70	3,872.08
6-10 .....	86.6	78.1	450	7,155	434,607	8,359,142	519.51	9,156.75
11-15 .....	85.7	79.9	341	2,789	250,946	2,415,941	397.70	3,489.99
By Issue Age								
0-4 .....	63.2	59.3	58	1,100	248,790	4,121,910	91.73	1,856.38
5-29 .....	61.3	60.6	219	5,544	729,171	20,950,949	357.29	9,156.42
30-44 .....	77.6	66.0	434	11,447	446,739	17,842,000	559.51	17,342.89
45-59 .....	101.9	79.9	469	5,621	133,111	2,704,149	460.32	7,032.64
60+ .....	154.5	134.0	306	2,490	26,411	306,327	198.00	1,858.39
Total Select .....	89.1	70.3	1,486	26,203	1,584,222	45,925,335	1,667.	37,247.
Policy Years 16 and Over from 16 Companies								
Ultimate Experience by Attained Age								
15-29 .....	72.2	79.5	51	218	134,177	527,693	70.60	274.92
30-44 .....	80.5	77.5	144	512	143,122	518,600	178.99	660.66
45-59 .....	92.1	80.0	587	1,509	150,664	465,072	637.60	1,885.63
60-74 .....	88.2	79.8	1,608	2,815	120,581	242,582	1,822.24	3,528.86
75+ .....	85.0	86.9	1,772	2,922	33,618	53,664	2,084.73	3,361.58
Total Ultimate .....	86.8	82.1	4,162	7,976	582,162	1,807,613	4,794.	9,712.
Grand Total .....	87.4	72.8	5,648	34,178	2,166,384	47,732,948	6,461.	46,958.

\*Shown in \$1,000 units.



TABLE 2C  
 CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1987 AND 1988  
 SEX NOT KNOWN—EXPECTED CA 69-75 TABLES

	Ratio A/E		Actual Deaths		Exposures		Expected Deaths	
	Number	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Policy Years 1 to 15 from 16 Companies								
Select Experience by Policy Year								
1 .....	0.0	0.0	0	0	0	0	0.00	0.00
2 .....	0.0	0.0	0	0	0	25	0.00	0.02
3 .....	0.0	0.0	0	0	2	21	0.00	0.05
4 .....	0.0	0.0	0	0	0	0	0.00	0.00
5 .....	0.0	0.0	0	0	1	26	0.00	0.02
6-10 .....	0.0	0.0	0	0	0	0	0.00	0.00
11-15 .....	0.0	0.0	0	0	0	100	0.00	0.17
By Issue Age								
0-4 .....	0.0	0.0	0	0	0	0	0.00	0.00
5-29 .....	0.0	0.0	0	0	1	126	0.00	0.19
30-44 .....	0.0	0.0	0	0	2	46	0.00	0.07
45-59 .....	0.0	0.0	0	0	0	0	0.00	0.00
60+ .....	0.0	0.0	0	0	0	0	0.00	0.00
Total Select .....	0.0	0.0	0	0	3	172	0.	0.
Policy Years 16 and Over from 16 Companies								
Ultimate Experience by Attained Age								
15-29 .....	0.0	0.0	0	0	0	0	0.00	0.00
30-44 .....	164.8	157.3	6	11	2,074	3,872	3.64	6.70
45-59 .....	73.4	80.3	31	110	4,602	14,900	42.26	137.49
60-74 .....	82.1	100.6	234	905	9,657	31,051	284.87	899.05
75+ .....	87.4	112.8	387	1,326	4,565	12,270	443.02	1,175.52
Total Ultimate .....	85.0	106.0	658	2,352	20,898	62,093	774.	2,219.
Grand Total .....	85.0	106.0	658	2,352	20,901	62,265	774.	2,219.

\*Shown in \$1,000 units.

TABLE 3  
CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1987 AND 1988  
EXPECTED CA 69-75 TABLES  
POLICY YEARS 1 TO 15 FROM 16 COMPANIES

Select Experience	Ratio A/E		Actual Deaths		Exposures		Expected Deaths	
	Number	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Medical Males								
By Policy Year								
1 .....	77.7	78.6	30	4,358	14,338	2,833,513	38.59	5,543.81
2 .....	79.3	24.8	41	1,822	16,650	3,219,502	51.68	7,354.39
3 .....	81.6	45.1	50	3,759	15,553	2,965,213	61.28	8,334.31
4 .....	73.4	41.2	46	3,212	13,371	2,336,895	62.69	7,788.86
5 .....	105.7	74.0	85	5,559	14,909	2,046,171	80.43	7,511.26
6-10 .....	88.1	72.8	343	20,163	71,537	6,596,506	389.45	27,678.62
11-15 .....	77.2	79.1	443	11,558	91,223	2,837,169	573.58	14,620.45
By Issue Age								
0-4 .....	96.3	51.2	3	36	6,685	135,261	3.11	70.37
5-29 .....	61.4	35.7	33	973	43,112	2,516,743	53.78	2,722.17
30-44 .....	65.3	53.6	232	14,955	106,382	12,602,885	355.44	27,901.79
45-59 .....	87.0	69.1	512	27,506	66,947	6,953,161	588.66	39,787.44
60+ .....	100.5	83.4	258	6,961	14,455	626,920	256.71	8,349.94
Total .....	82.5	64.0	1,038	50,430	237,581	22,834,971	1,258.	78,832.
Medical Females								
By Policy Year								
1 .....	148.2	59.4	20	327	6,713	466,930	13.50	551.13
2 .....	129.9	61.2	20	369	6,340	458,951	15.40	602.06
3 .....	135.6	34.3	18	173	5,104	348,538	13.27	505.25
4 .....	144.6	50.8	18	220	4,136	237,974	12.45	433.61
5 .....	166.4	101.9	28	467	4,981	223,319	16.83	458.70
6-10 .....	128.0	88.5	124	1,538	23,701	717,052	96.86	1,737.97
11-15 .....	83.3	77.3	94	823	22,745	330,734	112.78	1,064.33
By Issue Age								
0-4 .....	0.0	0.0	0	0	4,264	78,534	1.28	28.76
5-29 .....	113.6	89.9	11	289	15,152	615,636	9.68	321.87
30-44 .....	80.3	49.1	33	891	20,547	1,282,161	41.10	1,816.17
45-59 .....	104.2	75.3	126	1,574	22,330	649,059	120.95	2,088.02
60+ .....	140.6	106.0	152	1,164	11,427	158,107	108.08	1,098.02
Total .....	114.6	73.2	322	3,918	73,720	2,783,497	281.	5,353.

\*Shown in \$1,000 units.

TABLE 3—Continued

Select Experience	Ratio A/E		Actual Deaths		Exposures		Expected Deaths	
	Number	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Nonmedical Males								
By Policy Year								
1 .....	88.3	86.2	210	11,408	235,934	14,187,045	237.80	13,229.18
2 .....	121.0	70.4	319	8,949	224,608	12,510,201	263.55	12,715.18
3 .....	79.0	58.1	203	7,706	214,033	11,329,210	256.89	13,257.24
4 .....	98.1	75.9	260	8,471	196,922	8,751,683	265.04	11,157.39
5 .....	96.6	81.1	250	7,757	176,811	6,992,026	258.73	9,560.42
6-10 .....	89.5	84.1	583	14,946	480,258	12,296,363	651.06	17,778.70
11-15 .....	84.8	76.1	468	5,591	321,155	4,203,937	551.94	7,346.52
By Issue Age								
0-4 .....	53.8	48.1	78	1,306	269,858	4,418,586	145.09	2,712.30
5-29 .....	82.6	72.4	737	20,062	923,534	31,551,785	892.44	27,705.23
30-44 .....	82.7	74.1	772	30,589	565,988	31,341,498	933.32	41,275.11
45-59 .....	114.2	91.5	464	10,660	82,041	2,813,031	406.26	11,650.06
60+ .....	224.3	130.0	242	2,212	8,300	145,566	107.91	1,701.94
Total .....	92.3	76.2	2,293	64,829	1,849,721	70,270,465	2,485.	85,045.
Nonmedical Females								
By Policy Year								
1 .....	55.6	52.6	64	2,463	185,636	8,589,011	115.10	4,685.33
2 .....	98.5	63.5	110	2,569	174,548	7,410,238	111.62	4,043.84
3 .....	71.3	56.0	79	2,100	163,514	6,263,409	110.74	3,749.65
4 .....	102.3	75.0	120	2,427	154,769	4,780,036	117.31	3,233.89
5 .....	96.9	73.8	110	2,042	137,314	3,680,700	113.48	2,766.18
6-10 .....	71.4	60.7	229	3,320	380,282	6,749,576	320.91	5,465.97
11-15 .....	85.8	75.0	213	1,498	219,672	1,944,121	248.17	1,997.19
By Issue Age								
0-4 .....	63.8	60.2	57	1,085	242,743	4,006,754	89.32	1,803.48
5-29 .....	59.8	57.0	204	4,885	700,380	19,783,122	340.89	8,574.95
30-44 .....	77.3	61.1	361	7,907	394,267	14,506,385	467.26	12,937.39
45-59 .....	108.9	90.8	219	2,146	71,986	1,070,052	201.14	2,363.19
60+ .....	216.9	150.9	84	397	6,359	50,779	38.72	263.04
Total .....	81.3	63.3	925	16,419	1,415,735	39,417,092	1,137.	25,942.

\*Shown in \$1,000 units.

TABLE 3—Continued

Select Experience	Ratio A/E		Actual Deaths		Exposures		Expected Deaths	
	Number	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Paramedical Males								
By Policy Year								
1 .....	73.8	36.7	49	2,189	28,768	3,777,062	66.37	5,966.51
2 .....	66.5	49.3	49	2,720	26,031	2,833,378	73.66	5,517.36
3 .....	75.2	47.7	62	2,364	22,478	2,086,838	82.50	4,956.29
4 .....	79.9	44.2	75	2,190	22,011	1,831,856	93.86	4,958.30
5 .....	83.5	75.9	93	4,086	24,082	1,828,187	111.33	5,380.91
6-10 .....	70.9	60.3	264	8,783	86,955	4,715,399	372.31	14,568.54
11-15 .....	78.8	89.9	127	3,061	32,610	902,664	161.19	3,402.98
By Issue Age								
0-4 .....	0.0	0.0	0	0	420	8,268	0.20	4.91
5-29 .....	87.4	53.7	29	1,053	30,485	2,026,835	33.16	1,962.49
30-44 .....	61.1	50.6	174	10,405	115,727	11,384,025	285.00	20,563.15
45-59 .....	74.1	59.4	388	11,874	86,470	4,343,032	523.61	20,002.13
60+ .....	107.3	92.9	128	2,060	9,833	213,224	119.24	2,218.20
Total .....	74.8	56.7	719	25,392	242,935	17,975,385	961.	44,751.
Paramedical Females								
By Policy Year								
1 .....	75.4	57.1	13	473	10,861	760,549	17.24	828.16
2 .....	98.9	88.6	17	600	9,324	530,518	17.20	677.62
3 .....	76.7	40.7	15	242	8,213	379,125	19.54	594.65
4 .....	121.0	94.3	28	551	8,469	331,971	23.13	584.45
5 .....	109.9	171.3	29	1,109	9,002	334,296	26.39	647.20
6-10 .....	95.3	117.6	97	2,296	30,624	892,514	101.74	1,952.80
11-15 .....	92.5	109.2	34	468	8,529	141,087	36.75	428.47
By Issue Age								
0-4 .....	0.0	0.0	0	0	316	5,860	0.10	2.23
5-29 .....	58.0	172.5	3	360	9,107	407,712	5.17	208.65
30-44 .....	79.7	104.9	39	2,599	28,901	1,898,769	48.95	2,479.00
45-59 .....	89.0	73.8	122	1,876	38,170	963,253	137.05	2,539.94
60+ .....	136.0	187.1	69	905	8,528	94,465	50.72	483.53
Total .....	96.3	100.5	233	5,740	85,022	3,370,060	242.	5,713.

\*Shown in \$1,000 units.

TABLE 4  
 CANADIAN STANDARD ORDINARY EXPERIENCE  
 COMPARISON OF RATIOS (A/E) BY AMOUNT—EXPECTED CIA 69-75 TABLES

Combined Data	Grouping	Policy Year							
		1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
Male and Female	Select and Ultimate	80.1	82.4	79.6	74.9	82.4	80.3	76.5	71.8
Male	Select and Ultimate	79.4	82.0	78.7	74.3	83.2	80.5	77.0	71.4
Female	Select and Ultimate	80.4	83.3	84.8	74.4	72.9	75.4	72.4	72.8
Male and Female	Select	76.0	80.8	76.9	68.9	81.6	73.4	74.2	67.6
Male	Select	75.7	81.0	75.7	68.4	83.3	73.3	74.9	67.1
Female	Select	78.9	79.2	86.8	72.8	70.5	74.0	70.4	70.3
Male and Female	Ultimate	84.5	84.0	82.6	81.7	83.4	90.1	79.8	78.8
Male	Ultimate	83.7	83.0	82.1	81.0	83.2	90.0	79.9	78.1
Female	Ultimate	84.2	92.2	79.4	79.3	80.3	80.0	79.3	82.1
Medical Male	Select	71.7	85.9	74.1	65.9	95.9	70.2	76.8	64.0
Nonmedical Male	Select	83.0	75.0	80.9	65.1	73.5	75.0	78.3	76.2
Paramedical Male	Select	78.2	73.6	71.7	80.4	71.4	76.6	64.7	56.7
Medical Female	Select	89.5	73.0	129.3	79.3	60.1	86.8	90.5	73.2
Nonmedical Female	Select	75.9	81.2	74.1	70.2	72.6	70.9	63.8	63.3
Paramedical Female	Select	68.1	82.5	72.3	74.3	73.2	75.0	79.7	100.5

TABLE 5  
1987-1988 EXPERIENCE RATIO BY DEPARTURE  
FROM INTERCOMPANY EXPERIENCE RATIO BY AMOUNT  
EXPECTED CA 69-75 TABLES

Percentage Departure	Number of Companies	Actual Claims*	Percentage of Claims
Within 5%	3	60,107	21.2%
5% to 10%	3	46,115	16.3
10% to 15%	2	73,355	25.9
15% to 20%	5	73,425	25.9
20% and Over	3	30,046	10.6
	16	283,049	100.0%

\*Shown in \$1,000 units.

TABLE 6  
CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1987 AND 1988  
EXPECTED CA 69-75 TABLE

	Ratio A/E		Exposure		Actual Deaths	
	Number	Amount	Number	Amount*	Number	Amount*
Medical Males						
Ages						
0-29 .....	63.3	36.1	49,797	2,652,004	36	1,009
30-54 .....	75.3	60.2	159,308	18,302,019	584	34,417
55+ .....	98.2	79.5	28,476	1,880,947	418	15,005
Policy Years						
1-5 .....	85.5	51.2	74,821	13,401,296	252	18,709
6-15 .....	81.6	75.0	162,760	9,433,675	786	31,721
Total .....	82.5	64.0	237,581	22,834,971	1,038	50,430
Nonmedical Males						
Ages						
0-29 .....	78.6	70.2	1,193,392	35,970,371	815	21,367
30-54 .....	88.7	76.7	636,937	33,839,919	1,110	38,859
55+ .....	187.3	116.2	19,392	460,175	368	4,603
Policy Years						
1-5 .....	96.9	73.9	1,048,308	53,770,165	1,242	44,292
6-15 .....	87.4	81.7	801,413	16,500,300	1,051	20,537
Total .....	92.3	76.2	1,849,721	70,270,465	2,293	64,829
Paramedical Males						
Ages						
0-29 .....	86.9	53.5	30,905	2,035,103	29	1,053
30-54 .....	66.2	52.7	183,339	15,091,569	431	18,989
55+ .....	93.6	79.3	28,691	848,713	259	5,350
Policy Years						
1-5 .....	76.7	50.6	123,370	12,357,322	328	13,548
6-15 .....	73.3	65.9	119,565	5,618,063	391	11,844
Total .....	74.8	56.7	242,935	17,975,385	719	25,392

\*Shown in \$1,000 units.

TABLE 6—Continued

	Ratio A/E		Exposure		Actual Deaths	
	Number	Amount	Number	Amount*	Number	Amount*
Medical Females						
Ages						
0-29 .....	100.3	82.7	19,416	694,170	11	289
30-54 .....	85.4	59.4	36,717	1,803,996	103	2,000
55+ .....	139.2	99.5	17,587	285,331	208	1,629
Policy Years						
1-5 .....	145.6	61.0	27,274	1,735,712	104	1,557
6-15 .....	104.0	84.3	46,446	1,047,786	218	2,361
Total .....	114.6	73.2	73,720	2,783,497	322	3,918
Nonmedical Females						
Ages						
0-29 .....	60.7	57.5	943,123	23,789,875	261	5,970
30-54 .....	82.2	64.3	455,416	15,476,540	518	9,649
55+ .....	190.3	144.3	17,196	150,676	146	800
Policy Years						
1-5 .....	85.0	62.8	815,781	30,723,395	483	11,601
6-15 .....	77.7	64.6	599,954	8,693,697	442	4,818
Total .....	81.3	63.3	1,415,735	39,417,092	925	16,419
Paramedical Females						
Ages						
0-29 .....	57.0	170.7	9,423	413,572	3	360
30-54 .....	88.7	92.0	56,312	2,690,176	125	4,090
55+ .....	109.6	122.0	19,287	266,312	105	1,289
Policy Years						
1-5 .....	98.6	89.3	45,869	2,336,459	102	2,975
6-15 .....	94.6	116.1	39,153	1,033,600	131	2,764
Total .....	96.3	100.5	85,022	3,370,060	233	5,740

\*Shown in \$1,000 units.

TABLE 6—Continued

	Ratio A/E		Exposure		Actual Deaths	
	Number	Amount	Number	Amount*	Number	Amount*
Males Combined (Ultimate)						
Ages						
15-44 .....	84.0	68.8	529,722	3,802,860	754	4,699
45-69 .....	77.7	73.5	891,406	6,389,295	8,913	54,026
70+ .....	91.1	85.4	211,286	857,677	13,113	46,917
Total .....	85.1	78.1	1,632,414	11,049,832	22,780	105,643
Females Combined (Ultimate)						
Ages						
15-44 .....	78.1	78.1	277,299	1,046,294	195	730
45-69 .....	85.9	75.1	241,980	656,986	1,514	3,155
70+ .....	88.2	89.5	62,883	104,333	2,453	4,090
Total .....	86.8	82.1	582,162	1,807,613	4,162	7,976
All Codes—Select						
Ages						
0-29 .....	73.2	64.8	2,259,576	66,029,499	1,158	30,084
30-54 .....	80.4	64.6	1,537,594	87,906,801	2,880	108,271
55+ .....	123.0	86.9	131,252	3,926,746	1,506	28,724
Policy Years						
1-5 .....	91.1	62.4	2,159,128	115,535,588	2,525	93,033
6-15 .....	83.5	75.5	1,769,294	42,327,458	3,019	74,046
Total .....	86.8	67.6	3,928,422	157,863,046	5,544	167,079
All Codes—Ultimate						
Ages						
15-44 .....	83.0	70.0	809,095	4,853,026	955	5,440
45-69 .....	78.9	73.8	1,144,761	7,083,583	10,592	57,870
70+ .....	90.4	86.2	281,618	982,930	16,053	52,660
Total .....	85.4	78.8	2,235,474	12,919,538	27,600	115,970

\*Shown in \$1,000 units.



TABLE 7A  
 STANDARD MEDICAL AND NONMEDICAL ISSUES FOR MALES AND FEMALES COMBINED  
 DISTRIBUTION BY CAUSE OF DEATH AND AMOUNT OF DEATH CLAIMS FOR POLICY YEAR 1987-1988  
 POLICY YEARS 1-5  
 (AMOUNTS SHOWN IN \$1,000 UNITS)

Age at Issue	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage
	Infective and Parasitic Diseases (Tuberculosis, etc.) (01-17)*		Malignant Neoplasms (18-33)*		Diabetes Mellitus (37)*		Nervous System and Mental Diseases			
							Vascular Lesions (42)*		Other (41, 43-47)*	
0-9 .....	20	1.1	177	10.1	0	0.0	13	0.7	10	0.6
10-19 .....	87	3.0	92	3.2	0	0.0	0	0.0	10	0.3
20-29 .....	30	0.3	1,251	10.6	40	0.3	414	3.5	50	0.4
30-39 .....	251	1.1	5,080	22.0	110	0.5	485	2.1	450	2.0
40-49 .....	513	2.2	7,699	33.3	0	0.0	1,782	7.7	96	0.4
50-59 .....	143	0.6	10,057	39.6	20	0.1	778	3.1	315	1.2
Total .....	1,045	1.2	24,355	27.7	170	0.2	3,473	3.9	931	1.1
	Diseases of the Heart and Circulatory System				Respiratory Diseases		Diseases of the Digestive System			
	Arteriosclerotic and Degenerative Heart Disease (50,5A)*		Hypertensive and Rheumatic, etc. (49, 51-55)*		Pneumonia and Influenza, etc. (56-63)*		Cirrhosis of the Liver (70)*		Other (64-69, 71-72)*	
0-9 .....	22	1.3	20	1.1	0	0.0	0	0.0	68	3.9
10-19 .....	95	3.3	10	0.3	60	2.1	0	0.0	0	0.0
20-29 .....	276	2.3	167	1.4	200	1.7	50	0.4	65	0.6
30-39 .....	1,364	5.9	1,307	5.7	613	2.7	25	0.1	98	0.4
40-49 .....	3,390	14.7	2,680	11.6	153	0.7	111	0.5	138	0.6
50-59 .....	4,966	19.5	1,650	6.5	433	1.7	105	0.4	113	0.4
Total .....	10,113	11.5	5,834	6.6	1,459	1.7	291	0.3	481	0.5

TABLE 7A—Continued

Age at Issue	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage
	Genito-Urinary Diseases (Nephritis, etc.) (73-77)*		Motor Vehicle Accidents (88)*		Other Accidents and Homicides (89-96, 98)*		All Other Diseases			
							Suicides (97)*		Unknown Causes (Other Codes)†	
0-9 .....	0	0.0	365	20.9	202	11.6	10	0.6	839	48.1
10-19 .....	0	0.0	1,559	53.6	505	17.4	280	9.6	211	7.2
20-29 .....	0	0.0	4,048	34.3	2,184	18.5	1,255	10.6	1,776	15.0
30-39 .....	40	0.2	4,480	19.4	2,839	12.3	2,344	10.2	3,585	15.5
40-49 .....	100	0.4	995	4.3	710	3.1	2,703	11.7	2,039	8.8
50-59 .....	37	0.1	2,023	8.0	1,192	4.7	515	2.0	3,073	12.1
Total .....	177	0.2	13,471	15.3	7,632	8.7	7,106	8.1	11,522	13.1
	AIDS (02)*									
0-9 .....	15	0.9								
10-19 .....	0	0.0								
20-29 .....	362	3.1								
30-39 .....	470	2.0								
40-49 .....	204	0.9								
50-59 .....	40	0.2								
Total .....	1,091	1.2								

\*1980, codes for cause of death.

†(34-36, 38-40, 48, 78-83, 85-87, 99).

TABLE 7B  
 STANDARD MEDICAL AND NONMEDICAL ISSUES FOR MALES AND FEMALES COMBINED  
 DISTRIBUTION BY CAUSE OF DEATH AND AMOUNT OF DEATH CLAIMS FOR POLICY YEAR 1987-1988  
 POLICY YEARS 6-15  
 (AMOUNTS SHOWN IN \$1,000 UNITS)

Age at Issue	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage
	Infective and Parasitic Diseases (Tuberculosis, etc.) (01-17)*		Malignant Neoplasms (18-33)*		Diabetes Mellitus (37)*		Nervous System and Mental Diseases			
							Vascular Lesions (42)*		Other (41, 43-47)*	
0-9 .....	0	0.0	143	12.6	0	0.0	0	0.0	98	8.6
10-19 .....	5	0.3	361	20.1	3	0.1	35	2.0	17	0.9
20-29 .....	135	1.7	1,760	21.7	38	0.5	203	2.5	38	0.5
30-39 .....	214	1.1	6,394	32.6	28	0.1	560	2.9	74	0.4
40-49 .....	196	1.0	9,307	48.4	200	1.0	496	2.6	194	1.0
50-59 .....	61	0.3	6,337	33.3	57	0.3	292	1.5	192	1.0
Total .....	611	0.9	24,303	35.3	325	0.5	1,586	2.3	612	0.9
	Diseases of the Heart and Circulatory System				Respiratory Diseases		Diseases of the Digestive System			
	Arteriosclerotic and Degenerative Heart Disease (50,5A)*		Hypertensive and Rheumatic, etc. (49, 51-55)*		Pneumonia and Influenza, etc. (56-63)*		Cirrhosis of the Liver (70)*		Other (64-69, 71-72)*	
0-9 .....	17	1.5	45	3.9	54	4.7	0	0.0	10	0.9
10-19 .....	15	0.8	25	1.4	0	0.0	0	0.0	35	2.0
20-29 .....	485	6.0	239	2.9	159	2.0	0	0.0	80	1.0
30-39 .....	2,774	14.2	871	4.4	458	2.3	318	1.6	258	1.3
40-49 .....	3,081	16.0	1,338	7.0	703	3.7	2	0.0	172	0.9
50-59 .....	3,309	17.4	2,734	14.4	1,297	6.8	520	2.7	107	0.6
Total .....	9,681	14.0	5,251	7.6	2,670	3.9	840	1.2	662	1.0

TABLE 7B—Continued

Age at Issue	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage
	Genito-Urinary Diseases (Nephritis, etc.) (73-77)*		Motor Vehicle Accidents (88)*		Other Accidents and Homicides (89-96, 98)*		All Other Diseases			
							Suicides (97)*		Unknown Causes (Other Codes)*	
0-9 .....	0	0.0	301	26.4	152	13.4	70	6.1	249	21.9
10-19 .....	0	0.0	439	24.5	442	24.6	276	15.4	142	7.9
20-29 .....	23	0.3	1,204	14.8	1,619	19.9	878	10.8	1,260	15.5
30-39 .....	55	0.3	1,164	5.9	1,320	6.7	2,235	11.4	2,874	14.7
40-49 .....	220	1.1	286	1.5	346	1.8	598	3.1	2,098	10.9
50-59 .....	608	3.2	614	3.2	171	0.9	124	0.7	2,602	13.7
Total .....	905	1.3	4,007	5.8	4,050	5.9	4,180	6.1	9,227	13.4
	AIDS (02)*									
0-9 .....	0	0.0								
10-19 .....	59	3.3								
20-29 .....	184	2.3								
30-39 .....	729	3.7								
40-49 .....	155	0.8								
50-59 .....	298	1.6								
Total .....	1,424	2.1								

\*1980, codes for cause of death.

†(34-36, 38-40, 48, 78-83, 85-87, 99).

TABLE 7C  
 STANDARD MEDICAL AND NONMEDICAL ISSUES FOR MALES AND FEMALES COMBINED  
 DISTRIBUTION BY CAUSE OF DEATH AND AMOUNT OF DEATH CLAIMS FOR POLICY YEAR 1987-1988  
 POLICY YEARS 16 AND OVER  
 (AMOUNTS SHOWN IN \$1,000 UNITS)

Attained Age	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage
	Infective and Parasitic Diseases (Tuberculosis, etc.) (01-17)*		Malignant Neoplasms (18-33)*		Diabetes Mellitus (37)*		Nervous System and Mental Diseases			
							Vascular Lesions (42)*		Other (41, 43-47)*	
15-19 .....	0	0.0	31	7.7	0	0.0	5	1.3	10	2.5
20-29 .....	5	0.5	114	11.3	8	0.8	7	0.7	41	4.1
30-39 .....	22	1.3	469	28.7	5	0.3	4	0.2	17	1.1
40-49 .....	123	1.8	2,085	31.1	0	0.0	114	1.7	75	1.1
50-59 .....	491	2.7	6,255	35.0	29	0.2	302	1.7	162	0.9
60-69 .....	419	1.4	9,714	32.9	33	0.1	1,004	3.4	676	2.3
70-99 .....	1,079	2.3	10,351	21.9	72	0.2	3,025	6.4	1,068	2.3
Total .....	2,139	2.0	29,018	27.8	148	0.1	4,462	4.3	2,050	2.0
	Diseases of the Heart and Circulatory System				Respiratory Diseases		Diseases of the Digestive System			
	Arteriosclerotic and Degenerative Heart Disease (50,5A)*		Hypertensive and Rheumatic, etc. (49, 51-55)*		Pneumonia and Influenza, etc. (56-63)*		Cirrhosis of the Liver (70)*		Other (64-69, 71-72)*	
15-19 .....	25	6.3	0	0.0	15	3.8	0	0.0	5	1.3
20-29 .....	47	4.7	25	2.4	15	1.5	17	1.7	6	0.6
30-39 .....	96	5.9	214	13.1	33	2.0	7	0.4	5	0.3
40-49 .....	1,145	17.1	446	6.7	182	2.7	97	1.4	103	1.5
50-59 .....	4,169	23.3	1,622	9.1	377	2.1	301	1.7	465	2.6
60-69 .....	6,455	21.8	3,783	12.8	1,121	3.8	165	0.6	542	1.8
70-99 .....	8,749	18.5	6,702	14.2	3,759	8.0	95	0.2	483	1.0
Total .....	20,687	19.8	12,792	12.3	5,503	5.3	682	0.7	1,609	1.5

TABLE 7C—Continued

Attained Age	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage
	Genito-Urinary Diseases Nephritis, etc.) (73-77)*		Motor Vehicle Accidents (88)*		Other Accidents and Homicides (89-96, 98)*		All Other Diseases			
							Suicides (97)*		Unknown Causes (Other Codes)†*	
15-19 .....	0	0.0	200	50.4	38	9.6	38	9.7	30	7.5
20-29 .....	2	0.2	214	21.2	204	20.2	140	13.9	164	16.3
30-39 .....	8	0.5	82	5.0	182	11.1	179	11.0	310	19.0
40-49 .....	70	1.0	331	4.9	392	5.8	327	4.9	1,209	18.0
50-59 .....	41	0.2	267	1.5	365	2.0	582	3.3	2,463	13.8
60-69 .....	473	1.6	288	1.0	377	1.3	255	0.9	4,257	14.4
70-99 .....	680	1.4	121	0.3	297	0.6	18	0.0	10,670	22.6
Total .....	1,274	1.2	1,502	1.4	1,854	1.8	1,539	1.5	19,103	18.3
	AIDS (02)*									
15-19 .....	0	0.0								
20-29 .....	8	0.8								
30-39 .....	55	3.4								
40-49 .....	150	2.2								
50-59 .....	277	1.5								
60-69 .....	342	1.2								
70-99 .....	362	0.8								
Total .....	1,194	1.1								

\*1980, codes for cause of death.

†(34-36, 38-40, 48, 78-83, 85-87, 99).

TABLE 8  
CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1987 AND 1988  
EXPECTED CA 69-75 TABLES  
POLICY YEARS 1 TO 15 FROM 14 COMPANIES

Select Experience	Ratio A/E		Actual Deaths		Exposures		Expected Deaths	
	Number	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Male Smokers								
By Policy Year								
1 .....	126.9	150.6	81	5,905	53,079	3,488,744	63.83	3,920.71
2 .....	205.3	92.0	206	3,938	54,985	3,208,600	100.35	4,279.09
3 .....	127.4	88.7	101	4,204	50,726	3,018,741	79.25	4,736.69
4 .....	128.7	77.5	97	2,804	42,612	2,030,676	75.38	3,619.94
5 .....	106.0	79.7	91	2,676	44,588	1,786,221	85.82	3,357.54
6-10 .....	108.5	87.9	162	5,817	72,203	2,748,562	149.27	6,615.07
By Issue Age								
0-4 .....	21.4	20.6	3	54	24,172	440,180	14.05	263.43
5-14 .....	43.5	27.4	5	60	20,179	398,250	11.50	219.12
15-24 .....	124.4	117.2	73	2,155	57,884	1,886,018	58.68	1,839.13
25-34 .....	99.5	76.0	92	4,243	104,475	6,465,360	92.44	5,579.43
35-44 .....	118.3	105.5	144	8,970	68,123	5,030,369	121.77	8,501.75
45-54 .....	120.7	93.8	154	6,169	30,043	1,657,301	127.63	6,572.95
55-64 .....	191.8	102.0	172	3,188	10,900	395,456	89.67	3,124.93
65+ .....	240.4	95.4	95	506	2,816	35,900	39.51	530.05
Total .....	133.0	95.2	738	25,345	318,592	16,308,834	555.	26,631.
Male Nonsmokers								
By Policy Year								
1 .....	73.3	50.8	92	5,636	92,907	8,421,256	125.49	11,092.61
2 .....	63.3	41.7	86	4,876	88,551	7,585,773	135.82	11,706.68
3 .....	51.4	39.6	81	5,131	90,902	7,150,756	157.52	12,944.03
4 .....	60.9	55.7	94	6,534	78,864	5,705,372	154.43	11,734.98
5 .....	62.1	62.0	93	6,357	65,623	4,396,808	149.72	10,248.46
6-10 .....	68.7	63.6	141	9,155	78,254	5,027,167	205.19	14,388.23
By Issue Age								
0-4 .....	30.8	26.8	4	73	20,619	408,792	13.00	272.61
5-14 .....	36.3	19.2	3	30	14,478	285,569	8.27	156.50
15-24 .....	69.6	63.9	62	2,586	88,269	4,144,397	89.04	4,044.97
25-34 .....	68.3	60.7	98	7,145	166,302	13,749,684	143.44	11,766.69
35-44 .....	55.4	50.9	118	10,891	122,993	12,682,824	213.19	21,384.65
45-54 .....	56.1	43.4	134	9,119	58,586	5,400,466	238.91	21,014.18
55-64 .....	70.0	53.2	126	6,362	21,820	1,558,123	180.07	11,955.77
65+ .....	92.7	84.4	42	1,482	3,006	113,876	45.32	1,757.10
Total .....	63.0	52.1	587	37,688	496,073	38,343,731	931.	72,352.

\*Shown in \$1,000 units.

TABLE 8—Continued

Select Experience	Ratio A/E		Actual Deaths		Exposures		Expected Deaths	
	Number	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Male Unclassified								
By Policy Year								
1 .....	74.1	64.2	118	6,478	138,444	9,209,069	159.28	10,092.86
2 .....	77.1	48.4	122	4,827	128,343	8,044,798	158.27	9,973.21
3 .....	79.0	49.2	134	4,579	114,413	6,470,708	169.63	9,315.19
4 .....	99.1	53.0	190	4,535	110,828	5,184,387	191.78	8,549.64
5 .....	113.5	94.6	244	8,369	105,591	4,683,355	214.96	8,846.59
6-10 .....	83.8	74.1	887	28,920	488,293	15,832,568	1,058.37	39,022.66
By Issue Age								
0-4 .....	60.2	53.1	74	1,214	233,823	3,748,884	122.90	2,285.92
5-14 .....	88.3	81.3	91	1,337	121,283	2,447,086	103.05	1,643.64
15-24 .....	81.8	68.5	263	5,244	311,994	7,676,120	321.57	7,658.83
25-34 .....	75.6	64.3	469	16,051	461,683	21,967,237	620.68	24,974.50
35-44 .....	72.5	55.8	565	19,564	258,562	15,401,801	779.45	35,057.71
45-54 .....	89.3	78.7	661	21,088	103,769	4,929,698	739.80	26,810.41
55-64 .....	101.4	100.2	431	10,519	32,807	1,014,596	425.24	10,503.22
65+ .....	146.8	152.8	179	2,900	5,611	99,550	121.93	1,897.70
Total .....	84.5	70.3	2,733	77,917	1,529,532	57,284,972	3,235.	110,832.
Female Smokers								
By Policy Year								
1 .....	102.6	98.5	25	966	37,128	1,772,377	24.36	981.43
2 .....	179.5	137.0	55	1,301	37,515	1,571,637	30.64	949.61
3 .....	107.5	56.2	29	510	35,763	1,382,611	26.98	907.35
4 .....	110.3	81.9	29	545	31,728	908,826	26.29	665.70
5 .....	134.8	117.8	39	712	31,634	719,968	28.94	604.19
6-10 .....	132.7	126.1	60	1,229	45,741	990,930	45.21	974.57
By Issue Age								
0-4 .....	133.8	136.6	12	227	21,863	391,406	8.97	166.15
5-14 .....	38.2	57.4	2	55	17,717	331,858	5.23	95.84
15-24 .....	92.9	123.9	19	756	55,223	1,708,596	20.44	610.47
25-34 .....	85.1	80.0	31	1,266	66,388	3,093,174	36.42	1,583.42
35-44 .....	113.4	96.7	50	1,528	35,323	1,403,035	44.08	1,579.85
45-54 .....	116.7	107.3	42	772	15,469	333,213	36.00	719.49
55-64 .....	243.2	178.0	53	454	6,157	75,511	21.79	255.35
65+ .....	293.4	262.9	28	204	1,415	11,616	9.54	77.52
Total .....	130.2	103.4	237	5,262	219,555	7,348,409	182.	5,088.

\*Shown in \$1,000 units.



TABLE 8—Continued

Select Experience	Ratio A/E		Actual Deaths		Exposures		Expected Deaths	
	Number	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Female Nonsmokers								
By Policy Year								
1 .....	48.7	35.9	25	960	67,601	4,119,915	51.38	2,678.33
2 .....	66.1	48.6	32	1,173	60,612	3,511,729	48.42	2,411.76
3 .....	66.7	52.7	35	1,231	61,727	3,110,100	52.51	2,337.03
4 .....	76.6	62.0	40	1,252	53,931	2,328,106	52.22	2,019.64
5 .....	75.2	95.0	38	1,554	44,572	1,584,585	50.53	1,634.72
6-10 .....	50.5	48.3	32	898	49,179	1,531,086	63.42	1,860.58
By Issue Age								
0-4 .....	102.0	109.0	9	205	19,501	383,769	8.82	188.02
5-14 .....	50.8	49.3	2	35	13,180	246,976	3.94	71.05
15-24 .....	45.5	36.8	12	386	72,349	2,953,255	26.40	1,050.38
25-34 .....	54.7	41.7	34	1,534	115,084	7,136,706	62.17	3,677.90
35-44 .....	47.8	52.0	41	2,333	72,146	4,074,468	85.79	4,483.51
45-54 .....	56.6	58.8	38	1,297	30,168	1,062,723	67.17	2,205.08
55-64 .....	86.6	59.8	39	564	12,604	283,718	45.06	944.43
65+ .....	139.2	214.9	27	713	2,743	48,374	19.40	331.62
Total .....	63.3	54.6	202	7,067	337,775	16,189,989	319.	12,952.
Female Unclassified								
By Policy Year								
1 .....	68.9	56.0	50	1,399	102,324	4,067,241	72.61	2,495.96
2 .....	93.7	55.4	63	1,127	95,309	3,429,617	67.20	2,033.88
3 .....	72.8	46.1	48	775	82,019	2,596,726	65.95	1,680.60
4 .....	130.4	89.4	97	1,401	81,715	2,113,049	74.39	1,566.62
5 .....	116.5	82.8	90	1,352	75,091	1,933,762	77.23	1,633.17
6-10 .....	87.1	79.5	358	5,028	339,687	5,837,126	410.88	6,321.60
By Issue Age								
0-4 .....	50.0	44.5	37	668	207,426	3,346,735	73.95	1,502.20
5-14 .....	63.8	62.1	24	398	102,264	2,078,760	37.61	640.81
15-24 .....	63.8	55.7	71	1,032	221,890	4,204,646	111.37	1,851.28
25-34 .....	65.3	65.3	149	3,566	267,544	7,826,196	228.01	5,458.67
35-44 .....	85.4	76.0	218	4,101	136,802	3,735,278	255.33	5,396.13
45-54 .....	100.7	84.4	234	2,275	59,593	905,294	232.36	2,694.30
55-64 .....	129.5	99.8	200	1,161	25,295	241,553	154.39	1,163.28
65+ .....	157.0	134.1	114	671	6,078	48,473	72.62	499.96
Total .....	89.8	72.2	1,047	13,872	1,026,892	22,386,935	1,166.	19,207.

\*Shown in \$1,000 units.

**TABLE 9**  
**CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1987 AND 1988**  
**EXPECTED CA 69-75 TABLES**  
**POLICY YEARS 1 TO 15 FROM 16 COMPANIES**

	Ratio A/E		Actual Deaths		Exposures		Expected Deaths	
	Number	Amount	Number	Amount*	Number	Amount*	Number	Amount*
<b>Permanent</b>								
<b>By Issue Age</b>								
0-29 .....	74.6	68.0	1,090	23,614	2,106,597	50,428,571	1,462.03	34,717.30
30-54 .....	82.9	70.1	2,321	55,570	1,168,221	40,569,255	2,800.15	79,229.38
55+ .....	126.4	102.1	1,382	20,398	114,790	2,202,664	1,093.67	19,976.90
<b>By Policy Year</b>								
1-5 .....	95.9	70.5	2,164	54,211	1,810,322	66,701,831	2,256.50	76,942.20
6-15 .....	84.8	79.6	2,629	45,371	1,579,286	26,498,659	3,099.35	56,981.39
<b>Total</b> .....	<b>89.5</b>	<b>74.4</b>	<b>4,793</b>	<b>99,582</b>	<b>3,389,608</b>	<b>93,200,490</b>	<b>5,356.</b>	<b>133,924.</b>
<b>Term</b>								
<b>By Issue Age</b>								
0-29 .....	59.0	49.5	66	3,768	137,650	9,940,061	111.80	7,609.58
30-54 .....	71.8	60.7	528	44,087	343,789	37,507,738	735.07	72,606.79
55+ .....	86.4	60.4	76	6,075	11,193	1,346,401	87.98	10,063.39
<b>By Policy Year</b>								
1-5 .....	69.7	54.4	307	30,874	311,707	36,638,876	440.27	56,769.71
6-15 .....	73.4	68.8	363	23,056	180,925	12,155,323	494.58	33,510.05
<b>Total</b> .....	<b>71.7</b>	<b>59.7</b>	<b>670</b>	<b>53,930</b>	<b>492,632</b>	<b>48,794,199</b>	<b>935.</b>	<b>90,280.</b>
<b>Term Rider</b>								
<b>By Issue Age</b>								
0-29 .....	0.0	73.7	0	2,635	0	4,849,120	0.00	3,574.50
30-54 .....	0.0	62.0	0	7,277	0	7,490,389	0.00	11,736.50
55+ .....	0.0	56.3	0	453	0	118,775	0.00	804.13
<b>By Policy Year</b>								
1-5 .....	0.0	60.6	0	5,894	0	9,144,939	0.00	9,729.88
6-15 .....	0.0	70.0	0	4,471	0	3,313,345	0.00	6,385.24
<b>Total</b> .....	<b>0.0</b>	<b>64.3</b>	<b>0</b>	<b>10,365</b>	<b>0</b>	<b>12,458,284</b>	<b>0.00</b>	<b>16,115.</b>

\*Shown in \$1,000 units.

TABLE 9—Continued

	Ratio A/E		Actual Deaths		Exposures		Expected Deaths	
	Number	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Permanent Term								
By Issue Age								
0-29 .....	15.7	12.0	1	60	10,046	777,863	6.37	501.10
30-54 .....	65.2	34.4	27	1,373	24,827	2,331,327	41.43	3,987.39
55+ .....	112.6	81.9	48	1,798	5,256	258,785	42.64	2,194.54
By Policy Year								
1-5 .....	72.9	38.2	54	2,130	36,069	3,043,377	74.05	5,574.06
6-15 .....	134.3	99.4	22	1,102	4,060	324,597	16.39	1,108.96
Total .....	84.4	48.4	76	3,232	40,129	3,367,974	90.	6,683.
Other								
By Issue Age								
0-29 .....	38.8	37.1	1	7	5,283	33,886	2.58	18.88
30-54 .....	99.5	97.9	4	39	757	8,093	4.02	39.82
55+ .....	0.0	0.0	0	0	13	121	0.23	1.98
By Policy Year								
1-5 .....	0.0	0.0	0	0	1,030	6,566	0.38	2.44
6-15 .....	77.5	77.8	5	45	5,023	35,534	6.45	58.23
Total .....	71.4	73.8	5	45	6,053	42,100	7.	61.
Unknown								
By Issue Age								
0-29 .....	0.0	0.0	0	0	0	0	0.00	0.00
30-54 .....	0.0	0.0	0	0	0	0	0.00	0.00
55+ .....	0.0	0.0	0	0	0	0	0.00	0.00
By Policy Year								
1-5 .....	0.0	0.0	0	0	0	0	0.00	0.00
6-15 .....	0.0	0.0	0	0	0	0	0.00	0.00
Total .....	0.0	0.0	0	0	0	0	0.	0.

\*Shown in \$1,000 units.

TABLE 9—Continued

	Ratio A/E		Actual Deaths		Exposures		Expected Deaths	
	Number	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Permanent (Ultimate)								
By Attained Age								
15-44 .....	83.6	72.3	950	5,227	801,225	4,586,785	1,136.09	7,230.08
45-69 .....	79.0	74.3	10,424	54,913	1,117,192	6,493,572	13,190.32	73,930.14
70+ .....	90.4	86.2	16,046	52,609	281,414	981,933	17,741.37	60,997.49
Total .....	85.5	79.3	27,420	112,749	2,199,831	12,062,290	32,068.	142,158.
Term (Ultimate)								
By Attained Age								
15-44 .....	49.2	41.4	6	84	5,920	92,246	12.20	202.92
45-69 .....	66.0	79.6	142	2,389	24,793	364,931	215.13	2,999.31
70+ .....	134.4	145.0	3	31	33	294	2.23	21.38
Total .....	65.7	77.7	151	2,504	30,746	457,471	230.	3,224.
Term Rider (Ultimate)								
By Attained Age								
15-44 .....	0.0	40.0	0	130	0	165,943	0.00	324.41
45-69 .....	0.0	31.4	0	427	0	211,298	0.00	1,358.92
70+ .....	0.0	55.8	0	12	0	339	0.00	21.52
Total .....	0.0	33.4	0	569	0	377,580	0	1,705

\*Shown in \$1,000 units.

TABLE 9—Continued

	Ratio A/E		Actual Deaths		Exposures		Expected Deaths	
	Number	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Permanent Term (Ultimate)								
By Attained Age								
15-44 .....	0.0	0.0	0	0	0	0	0.00	0.00
45-69 .....	0.0	0.0	0	0	0	0	0.00	0.00
70+ .....	0.0	0.0	0	0	0	0	0.00	0.00
Total .....	0.0	0.0	0	0	0	0	0.	0.
Other (Ultimate)								
By Attained Age								
15-44 .....	0.0	0.0	0	0	1,950	8,053	2.76	13.04
45-69 .....	98.8	113.4	26	140	2,776	13,782	26.30	123.61
70+ .....	41.0	43.8	4	9	171	364	9.77	20.55
Total .....	76.9	94.9	30	149	4,897	22,199	39.	157.
Unknown (Ultimate)								
By Attained Age								
15-44 .....	0.0	0.0	0	0	0	0	0.00	0.00
45-69 .....	0.0	0.0	0	0	0	0	0.00	0.00
70+ .....	0.0	0.0	0	0	0	0	0.00	0.00
Total .....	0.0	0.0	0	0	0	0	0.	0.

