

**TRANSACTIONS OF SOCIETY OF ACTUARIES
1991-92 REPORTS**

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

**I. MORTALITY UNDER CANADIAN
STANDARD ORDINARY INSURANCE ISSUES STUDIED
BETWEEN THE 1988 AND 1989 ANNIVERSARIES***

PREFACE

This report was prepared by the Committee on 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.

INTRODUCTION

This is the fortieth annual report submitted by the Committee on 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.

The following tables comprise the results of the 1988-89 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 Select period of Table 2 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 1981-82 through 1988-89.
- Table 5 The variation of the experience of the individual companies from the overall mortality ratio for the total intercompany experience.
- Table 6 Various classes in broad groups of policy years and ages at issue or attained ages.
- Table 7 Cause of death.

*Copyright © 1991 Canadian Institute of Actuaries.

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 Chairperson of the Committee on Expected Experience of the CIA.

The 1988-89 study is based on the data of 19 contributing companies.

<u>Contributors</u>	<u>Exposures</u>
Aetna	3.70%
Canada Life	3.82
Confederation Life	2.94
Crown Life	2.68
Desjardins	1.03
Equitable Life	0.62
Great-West Life	4.79
Industrial-Alliance	10.26
London Life	15.06
Manufacturers Life	5.10
Metroplitan Life	3.22
Mutual Life	13.14
National Life	3.44
North America Life	3.46
North-West Life	0.56
Prudential Assurance	3.06
Prudential of America	2.83
Sun Life	10.87
Transamerica	<u>9.42</u>
Total exposures	100.00%

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

	1986-87 Study	1987-88 Study	1988-89 Study
Exposures			
By Number	6,929,713	6,163,896	7,019,046
By Amount ('000)	164,875,777	170,782,585	216,689,266
Death Claims			
By Number	35,901	33,144	37,258
By Amount ('000)	285,047	283,049	332,475

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:

	1984-85	1985-86	1986-87	1987-88	1988-89
Males	23,400	25,700	26,493	30,927	34,538
Females	14,910	17,448	18,836	22,033	24,398
Combined	20,488	22,770	23,792	27,707	30,872

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

	1984-85	1985-86	1986-87	1987-88	1988-89
Average Claim	8,271	7,875	7,940	8,540	8,924

In Table 4, the combined mortality rates have declined from 82.4% of expected in 1981-82 to 66.0% of expected in 1988-89.

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

	Policy Years		
	1-5	6-15	16 and over
Accidents and Homicides	29.5%	14.1%	3.6% (88-89)
	24.0	11.7	3.2 (87-88)
	21.9	15.6	4.0 (86-87)
Heart and Circulatory	16.7	24.4	33.3 (88-89)
	18.1	21.6	32.1 (87-88)
	17.0	21.4	38.4 (86-87)
Malignant Neoplasms	30.7	36.5	29.2 (88-89)
	27.7	35.3	27.8 (87-88)
	32.7	37.0	27.6 (86-87)
Respiratory	1.7	3.4	6.1 (88-89)
	1.7	3.9	5.3 (87-88)
	1.5	2.6	4.8 (86-87)
Suicide	6.4	5.1	1.4 (88-89)
	8.1	6.1	1.5 (87-88)
	8.4	6.2	1.6 (86-87)
AIDS	2.1	2.0	1.6 (88-89)
	1.2	2.1	1.1 (87-88)
	N/A	N/A	N/A (86-87)

In Table 8, the following select ratios for smokers and nonsmokers were extracted from the 1988-89 study (with the comparable ratios from the previous year shown in brackets).

	A/E %	Expected Deaths ('000)
Males (by amount)		
Smokers	104.1 (95.2)	\$ 34,090 (26,631)
Nonsmokers	48.2 (52.1)	123,513 (72,352)
Nonclassified	58.2 (70.3)	120,669 (110,832)
Females (by amount)		
Smokers	99.2 (103.4)	\$ 7,207 (5,088)
Nonsmokers	47.2 (54.6)	21,602 (12,952)
Nonclassified	70.9 (72.2)	22,422 (19,207)
(Smoker A/E) / (Nonsmoker A/E) %		
	Number	Amount
Male	208.3 (211.1)	216.0 (182.7)
Female	196.6 (205.7)	210.2 (189.4)

The unclassified data fell from 50.5% of total select exposures (by amount) in the last study to 42.8% in the 1988-89 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 EXPECTED
EXPERIENCE

M.A. BENNETT
J.V. CASTELLINO
S.W. EASSON
A.G. JARDIN (VICE-CHAIRMAN)
H.H. PANJER
W.A. RAMSEY
R.A. WILLIS
R.W. WILSON

TABLE 1
CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1988 AND 1989
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 19 Companies									
Select Experience by Policy Year									
1	66.0	3.46	58.0	364	23,050	536,542	37,535,481	551.70	39,751.18
2	76.4	3.64	52.2	440	21,106	517,168	34,261,621	576.21	40,395.57
3	96.3	3.86	58.2	621	22,576	486,805	28,867,995	645.10	38,812.69
4	89.8	3.68	71.9	595	27,430	452,575	24,466,645	662.69	38,160.90
5	87.2	3.52	56.1	614	19,509	423,139	19,559,862	704.24	34,782.87
6-10	83.6	1.77	61.2	2,241	62,478	1,326,093	44,608,316	2,680.30	102,158.66
11-15	80.1	2.05	63.2	1,532	22,402	783,087	12,380,896	1,913.73	35,449.28
By Issue Age									
0-4	48.6	4.23	49.8	132	2,799	587,665	10,539,713	271.85	5,616.00
5-29	77.8	2.28	66.0	1,166	33,743	1,946,569	70,439,109	1,498.27	51,107.62
30-44	72.2	1.69	59.6	1,824	84,483	1,455,090	95,677,941	2,527.67	141,695.26
45-59	86.3	1.86	56.9	2,151	62,083	458,451	23,070,028	2,493.90	109,168.97
60+	120.3	3.57	70.4	1,134	15,441	77,634	1,954,025	942.28	21,923.30
Total Select	82.8	1.03	60.3	6,407	198,549	4,525,409	201,680,816	7,734.	329,511.
Policy Years 16 and Over from 19 Companies									
Ultimate Experience by Attained Age									
15-29	68.6	4.44	59.4	239	1,105	346,472	1,752,168	348.19	1,858.20
30-44	88.4	3.06	75.5	835	5,394	553,913	3,844,034	944.20	7,141.23
45-59	73.7	1.17	68.1	3,976	26,468	799,927	5,710,116	5,394.02	38,859.92
60-74	82.6	0.74	76.0	12,618	59,172	621,390	3,110,989	15,270.28	77,839.97
75+	92.6	0.81	85.7	13,183	41,787	171,935	591,144	14,239.80	48,753.14
Total Ultimate	85.2	0.49	76.8	30,851	133,926	2,493,637	15,008,450	36,196.	174,452.
Grand Total	84.8	0.44	66.0	37,258	332,475	7,019,046	216,689,266	43,930.	503,964.

* Shown in \$1,000 units.

TABLE 2A
CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1988 AND 1989
MALE 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 19 Companies								
Select Experience by Policy Year								
1	63.0	57.4	242	18,471	308,391	25,665,665	383.95	32,207.47
2	72.5	48.8	299	16,311	298,972	23,700,520	412.15	33,421.69
3	97.2	57.4	458	18,617	281,829	19,962,073	471.08	32,453.57
4	84.2	70.0	407	22,594	262,424	17,115,899	483.37	32,270.01
5	85.4	56.3	435	16,596	242,510	13,782,696	509.24	29,478.19
6-10	82.4	61.2	1,564	53,649	768,539	32,402,666	1,898.63	87,674.96
11-15	76.7	62.0	1,073	19,082	482,418	9,297,102	1,399.81	30,766.49
By Issue Age								
0-4	47.7	43.7	80	1,473	308,158	5,499,090	167.64	3,374.27
5-29	80.0	66.5	863	26,144	1,103,238	43,903,224	1,079.36	39,300.81
30-44	70.6	60.2	1,286	70,982	909,502	71,779,908	1,820.38	117,829.26
45-59	79.9	54.4	1,483	53,798	283,904	19,264,267	1,856.35	98,939.24
60+	120.7	68.6	766	12,924	40,281	1,480,134	634.50	18,828.81
Total Select.....	80.6	59.4	4,478	165,321	2,645,083	141,926,622	5,558.	278,272.
Policy Years 16 and Over from 19 Companies								
Ultimate Experience by Attained Age								
15-29	66.7	58.1	182	899	203,994	1,158,745	272.88	1,547.45
30-44	91.9	76.0	671	4,784	383,103	3,177,450	730.24	6,291.83
45-59	71.6	67.4	3,354	24,667	630,995	5,146,669	4,683.88	36,600.50
60-74	83.2	76.2	10,971	56,093	485,070	2,824,892	13,193.98	73,644.15
75+	93.9	86.7	11,062	38,761	132,621	526,562	11,774.85	44,708.69
Total Ultimate	85.6	76.9	26,240	125,205	1,835,783	12,834,317	30,656.	162,793.
Grand Total	84.8	65.9	30,718	290,525	4,480,866	154,760,939	36,214.	441,065.

* Shown in \$1,000 units.

TABLE 2B

CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1988 AND 1989
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 19 Companies								
Select Experience by Policy Year								
1	72.7	60.7	122	4,579	228,151	11,869,816	167.75	7,543.72
2	85.9	68.8	141	4,795	218,194	10,560,941	164.06	6,973.68
3	93.7	62.3	163	3,958	204,968	8,905,268	173.98	6,357.21
4	104.8	82.1	188	4,836	190,146	7,350,456	179.32	5,890.51
5	91.8	54.9	179	2,912	180,625	5,776,821	194.97	5,303.35
6-10	86.6	61.0	677	8,829	557,547	12,204,857	781.62	14,479.45
11-15	89.3	70.9	459	3,319	300,667	3,083,739	513.92	4,682.62
By Issue Age								
0-4	49.9	59.1	52	1,326	279,507	5,040,623	104.22	2,241.73
5-29	72.3	64.4	303	7,599	843,327	26,535,620	418.90	11,806.58
30-44	76.1	56.6	538	13,502	545,572	23,896,451	707.26	23,862.01
45-59	104.8	81.0	668	8,286	174,543	3,805,445	637.53	10,228.51
60+	119.6	81.4	368	2,517	37,349	473,758	307.71	3,091.69
Total Select	88.7	64.9	1,929	33,229	1,880,298	59,751,898	2,176.	51,231.
Policy Years 16 and Over from 19 Companies								
Ultimate Experience by Attained Age								
15-29	75.7	66.1	57	206	142,478	593,423	75.31	310.75
30-44	76.7	71.8	164	610	170,809	666,579	213.96	849.38
45-59	87.6	79.7	622	1,801	168,932	563,446	710.14	2,259.42
60-74	79.3	73.4	1,647	3,079	136,320	286,097	2,076.30	4,195.82
75+	86.0	74.8	2,121	3,026	39,314	64,582	2,464.95	4,044.45
Total Ultimate	83.2	74.8	4,611	8,721	657,853	2,174,128	5,541.	11,660.
Grand Total	84.8	66.7	6,540	41,950	2,538,151	61,926,026	7,716.	62,890.

* Shown in \$1,000 units.

TABLE 2C
 CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1988 AND 1989
 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 19 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	2	160	0.00	0.20
3	0.0	0.0	0	0	8	653	0.04	1.92
4	0.0	0.0	0	0	5	290	0.01	0.38
5	0.0	0.0	0	0	4	345	0.03	1.33
6-10	0.0	0.0	0	0	7	792	0.05	4.25
11-15	0.0	0.0	0	0	2	55	0.01	0.18
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	4	265	0.00	0.24
30-44	0.0	0.0	0	0	16	1,582	0.03	3.99
45-59	0.0	0.0	0	0	4	316	0.02	1.22
60+	0.0	0.0	0	0	4	133	0.07	2.80
Total Select.....	0.0	0.0	0	0	28	2,296	0.	8.
Policy Years 16 and Over from 19 Companies								
Ultimate Experience by Attained Age								
15-29	0.0	0.0	0	0	0	0	0.00	0.00
30-44	0.0	0.0	0	0	1	5	0.00	0.01
45-59	0.0	0.0	0	0	0	0	0.00	0.00
60-74	0.0	0.0	0	0	0	0	0.00	0.00
75+	0.0	0.0	0	0	0	0	0.00	0.00
Total Ultimate	0.0	0.0	0	0	1	5	0.	0.
Grand Total	0.0	0.0	0	0	29	2,301	0.	8.

* Shown in \$1,000 units.

TABLE 3
 CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1988 AND 1989
 EXPECTED CA 69-75 TABLES
 (POLICY YEARS 1 TO 15 FROM 19 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	63.9	85.7	20	5,574	11,727	3,127,540	31.32	6,501.94
2	74.2	28.9	38	2,432	15,245	3,562,544	51.20	8,401.30
3	102.2	47.6	63	4,213	15,606	3,161,924	61.62	8,856.04
4	114.6	87.3	79	7,848	14,598	2,729,041	68.96	8,991.90
5	91.9	49.9	64	4,176	12,746	2,199,785	69.64	8,450.69
6-10	88.5	55.6	353	17,559	63,797	6,770,162	398.94	31,574.18
11-15	71.8	56.3	350	8,531	76,330	2,811,412	487.78	15,153.63
By Issue Age								
0-4	38.2	32.6	1	23	5,197	124,068	2.62	69.01
5-29	80.7	70.3	37	1,865	36,770	2,464,566	45.84	2,654.40
30-44	69.5	60.3	210	17,492	91,648	13,160,479	302.21	29,002.79
45-59	78.9	54.8	421	24,548	60,683	7,767,288	533.51	44,763.98
60+	104.5	56.0	298	6,404	15,751	846,008	285.27	11,439.50
Total	82.7	57.2	967	50,333	210,049	24,362,409	1,169.	87,930.
Medical Females								
By Policy Year								
1	90.3	49.9	10	303	6,183	492,592	11.07	607.35
2	134.6	88.3	21	623	6,787	521,323	15.60	705.85
3	134.8	90.9	24	624	6,241	450,702	17.81	686.09
4	132.4	56.1	21	321	4,991	320,457	15.86	572.67
5	124.5	53.6	19	263	4,186	222,002	15.26	489.52
6-10	102.7	65.7	110	1,383	22,080	738,262	107.10	2,105.34
11-15	87.9	62.3	102	716	22,279	358,146	116.05	1,148.37
By Issue Age								
0-4	0.0	0.0	0	0	3,676	78,479	1.11	29.12
5-29	84.1	95.0	8	341	15,079	693,308	9.51	358.78
30-44	92.1	54.7	35	1,047	19,336	1,378,380	38.01	1,915.11
45-59	89.1	64.6	106	1,534	21,572	722,336	119.00	2,373.40
60+	120.5	80.0	158	1,311	13,084	230,980	131.13	1,638.79
Total	102.8	67.0	307	4,233	72,747	3,103,484	299.	6,315.

* 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	68.5	58.0	177	8,724	253,007	15,703,371	258.40	15,040.52
2	73.7	51.8	191	7,908	246,666	14,963,998	259.25	15,279.85
3	106.2	60.0	323	9,030	235,554	13,207,971	304.07	15,040.19
4	82.7	72.5	242	10,718	220,027	11,459,136	292.70	14,774.89
5	81.0	54.6	249	7,083	203,611	9,146,506	307.35	12,983.45
6-10	86.7	67.0	778	19,272	594,359	18,360,939	897.81	28,746.64
11-15	77.2	67.0	459	5,684	351,114	4,828,408	594.77	8,487.86
By Issue Age								
0-4	48.0	44.1	79	1,451	302,258	5,355,186	164.57	3,291.04
5-29	80.2	66.4	795	22,413	1,027,934	38,324,669	991.35	33,741.15
30-44	71.9	58.3	810	32,098	665,312	40,091,050	1,126.84	55,060.94
45-59	97.3	63.1	491	10,000	99,926	3,699,936	504.42	15,855.82
60+	191.0	102.1	244	2,456	8,908	199,489	127.18	2,404.45
Total	83.0	62.0	2,419	68,418	2,104,338	87,670,329	2,914.	110,353.
Nonmedical Females								
By Policy Year								
1	67.9	65.1	87	3,566	203,784	9,935,261	128.11	5,479.76
2	76.3	65.0	93	3,257	196,639	8,985,999	121.89	5,009.76
3	85.6	60.3	111	2,813	186,408	7,772,593	129.67	4,663.78
4	103.4	83.0	138	3,649	174,257	6,528,306	133.41	4,393.42
5	84.9	52.3	122	2,052	165,400	5,127,768	143.73	3,927.09
6-10	78.0	60.3	357	5,391	487,283	10,127,583	457.63	8,933.08
11-15	85.4	72.3	249	1,848	258,421	2,433,319	291.60	2,554.94
By Issue Age								
0-4	50.5	60.1	52	1,326	275,303	4,948,977	102.88	2,205.83
5-29	72.5	64.9	291	7,186	813,566	25,045,788	401.19	11,066.73
30-44	74.8	59.1	446	10,622	484,564	19,400,239	596.41	17,972.82
45-59	116.7	92.4	304	3,056	91,346	1,444,840	260.59	3,307.03
60+	142.3	94.5	64	387	7,413	70,984	44.98	409.39
Total	82.3	64.6	1,157	22,575	1,672,192	50,910,829	1,406.	34,962.

* 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	49.7	32.3	41	2,821	36,920	5,689,055	82.46	8,735.37
2	71.6	70.5	65	5,746	32,565	4,398,620	90.74	8,155.54
3	70.9	72.8	67	4,984	27,298	2,989,320	94.49	6,843.10
4	75.1	56.9	83	3,682	25,093	2,329,256	110.54	6,475.34
5	95.5	73.9	117	4,816	24,159	2,049,435	122.57	6,515.68
6-10	70.4	57.5	393	13,018	103,054	6,283,376	558.01	22,651.73
11-15	85.3	67.0	238	3,953	50,097	1,461,963	278.97	5,900.47
By Issue Age								
0-4	0.0	0.0	0	0	458	11,117	0.23	6.75
5-29	75.6	69.0	29	1,783	34,638	2,742,458	38.35	2,582.73
30-44	70.3	63.5	249	18,247	136,978	15,782,886	354.04	28,741.78
45-59	70.7	53.4	529	16,306	113,019	6,355,957	747.98	30,555.74
60+	99.9	79.2	197	2,684	14,093	308,607	197.20	3,390.23
Total	75.0	59.8	1,004	39,020	299,186	25,201,025	1,338.	65,277.
Paramedical Females								
By Policy Year								
1	85.6	54.6	22	675	15,357	1,208,881	25.70	1,236.60
2	102.6	77.7	25	856	12,954	896,782	24.37	1,101.36
3	112.6	59.0	28	522	11,386	597,140	24.86	884.42
4	97.2	104.3	28	856	10,397	447,147	28.81	820.84
5	103.0	66.7	36	538	10,641	386,101	34.94	806.35
6-10	96.8	60.6	202	1,898	46,237	1,228,324	208.71	3,133.37
11-15	105.3	84.7	103	733	18,539	267,093	97.81	865.49
By Issue Age								
0-4	0.0	0.0	0	0	367	8,382	0.11	3.26
5-29	41.6	22.6	3	72	12,622	656,837	7.20	319.14
30-44	80.3	47.0	54	1,668	37,682	2,736,129	67.23	3,550.22
45-59	100.9	86.7	248	3,567	58,669	1,483,672	245.81	4,111.95
60+	111.3	89.2	139	771	16,171	146,447	124.85	863.86
Total	99.7	68.7	444	6,078	125,511	5,031,467	445.	8,848.

* 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							
		1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
Male and Female	Select and Ultimate	82.4	79.6	74.9	82.4	80.3	76.5	71.8	66.0
Male	Select and Ultimate	82.0	78.7	74.3	83.2	80.5	77.0	71.4	65.9
Female	Select and Ultimate	83.3	84.8	74.4	72.9	75.4	72.4	72.8	66.7
Male and Female	Select	80.8	76.9	68.9	81.6	73.4	74.2	67.6	60.3
Male	Select	81.0	75.7	68.4	83.3	73.3	74.9	67.1	59.4
Female	Select	79.2	86.8	72.8	70.5	74.0	70.4	70.3	64.9
Male and Female	Ultimate	84.0	82.6	81.7	83.4	90.1	79.8	78.8	76.8
Male	Ultimate	83.0	82.1	81.0	83.2	90.0	79.9	78.1	76.9
Female	Ultimate	92.2	79.4	79.3	80.3	80.0	79.3	82.1	74.8
Medical Male	Select	85.9	74.1	65.9	95.9	70.2	76.8	64.0	57.2
Nonmedical Male	Select	75.0	80.9	65.1	73.5	75.0	78.3	76.2	62.0
Paramedical Male	Select	73.6	71.7	80.4	71.4	76.6	64.7	56.7	59.8
Medical Female	Select	73.0	129.3	79.3	60.1	86.8	90.5	73.2	67.0
Nonmedical Female	Select	81.2	74.1	70.2	72.6	70.9	63.8	63.3	64.6
Paramedical Female	Select	82.5	72.3	74.3	73.2	75.0	79.7	100.5	68.7

TABLE 5
1988-1989 EXPERIENCE RATIO BY DEPARTMENT
FROM INTERCOMPANY EXPERIENCE RATIO BY AMOUNT
EXPECTED CA 69-75 TABLES

Percentage Departure	Number of Companies	Actual Claims*	Percentage of Claims
Within 5%	2	15,399	4.6%
5% to 10%	3	47,101	14.2
10% to 15%	5	115,977	34.9
15% to 20%	0	0	0.0
20% and Over	9	153,998	46.3
	19	332,475	100.0%

* Shown in \$1,000 units.

TABLE 6
CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES
IN 1988 AND 1989
EXPECTED CA 69-75 TABLE

	Ratio A/E		Exposure		Actual Deaths	
	Number	Amount	Number	Amount*	Number	Amount*
Medical Males						
Ages						
0-29	78.4	69.3	41,967	2,588,633	38	1,888
30-54	75.7	58.5	139,417	19,561,750	513	36,222
55+	93.8	52.4	28,665	2,212,026	416	12,223
Policy Years						
1-5	93.4	58.8	69,922	14,780,835	264	24,243
6-15	79.3	55.8	140,127	9,581,573	703	26,090
Total	82.7	57.2	210,049	24,362,409	967	50,333
Nonmedical Males						
Ages						
0-29	75.6	64.4	1,330,192	43,679,854	874	23,864
30-54	77.2	59.9	752,120	43,358,369	1,175	40,564
55+	157.0	70.8	22,026	632,106	370	3,990
Policy Years						
1-5	83.1	59.4	1,158,865	64,480,982	1,182	43,462
6-15	82.9	67.0	945,473	23,189,347	1,237	24,956
Total	83.0	62.0	2,104,338	87,670,329	2,419	68,418
Paramedical Males						
Ages						
0-29	75.2	68.9	35,096	2,753,575	29	1,783
30-54	69.2	56.4	224,473	21,234,478	599	29,529
55+	86.6	74.4	39,617	1,212,972	376	7,707
Policy Years						
1-5	74.5	60.0	146,035	17,455,686	373	22,049
6-15	75.4	59.4	153,151	7,745,339	631	16,971
Total	75.0	59.8	299,186	25,201,025	1,004	39,020

* 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	75.3	87.9	18,755	771,787	8	341
30-54	76.3	51.1	34,643	1,940,469	87	1,838
55+	121.8	88.2	19,349	391,227	212	2,054
Policy Years						
1-5	125.7	69.7	28,388	2,007,076	95	2,133
6-15	95.0	64.5	44,359	1,096,408	212	2,099
Total	102.8	67.0	72,747	3,103,484	307	4,233
Nonmedical Females						
Ages						
0-29	68.0	64.1	1,088,869	29,994,765	343	8,511
30-54	83.4	63.1	562,326	20,709,213	673	13,174
55+	149.0	107.7	20,997	206,851	141	890
Policy Years						
1-5	83.9	65.3	926,488	38,349,926	551	15,337
6-15	80.9	63.0	745,704	12,560,903	606	7,238
Total	82.3	64.6	1,672,192	50,910,829	1,157	22,575
Paramedical Females						
Ages						
0-29	41.0	22.3	12,989	665,219	3	72
30-54	93.9	67.6	78,799	3,955,521	210	4,520
55+	107.8	80.6	33,723	410,727	231	1,486
Policy Years						
1-5	100.2	71.1	60,735	3,536,050	139	3,447
6-15	99.5	65.8	64,776	1,495,417	305	2,631
Total	99.7	68.7	125,511	5,031,467	444	6,078

* 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	85.0	72.5	587,097	4,336,195	853	5,683
45-69	77.7	72.0	1,005,442	7,426,753	10,117	62,224
70+	91.8	83.6	243,244	1,071,370	15,270	57,297
Total	85.6	76.9	1,835,783	12,834,317	26,240	125,205
Females Combined (Ultimate)						
Ages						
15-44	76.4	70.3	313,287	1,260,002	221	815
45-69	81.0	77.5	271,771	789,790	1,608	3,893
70+	85.2	73.3	72,795	124,336	2,782	4,012
Total	83.2	74.8	657,853	2,174,128	4,611	8,721
All Codes Select						
Ages						
0-29	73.3	64.4	2,534,234	80,978,822	1,298	36,542
30-54	76.9	58.8	1,821,471	115,153,749	3,314	131,748
55+	108.5	62.3	169,704	5,548,246	1,795	30,259
Policy Years						
1-5	83.9	59.2	2,416,229	144,691,604	2,634	113,670
6-15	82.1	61.7	2,109,180	56,989,212	3,773	84,879
Total	82.8	60.3	4,525,409	201,680,816	6,407	198,549
All Codes Ultimate						
Ages						
15-44	83.1	72.2	900,385	5,596,202	1,074	6,499
45-69	78.2	72.3	1,277,213	8,216,543	11,725	66,118
70+	90.7	82.8	316,039	1,195,705	18,052	61,310
Total	85.2	76.8	2,493,637	15,008,450	30,851	133,926

* Shown in \$1,000 units.

TABLE 7A
 STANDARD MEDICAL AND NONMEDICAL ISSUES FOR MALES AND FEMALES COMBINED
 DISTRIBUTION BY CAUSE OF DEATH OF AMOUNT OF DEATH CLAIMS FOR POLICY YEAR 1988-1989
 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, 03-17)*		Malignant Neoplasms (18-33)*		Diabetes Mellitus (37)*		Nervous System and Mental Diseases			
							Vascular Lesions (53)*		Other (41, 43-47)*	
0-9.....	171	1.3	3,258	25.1	5	0.0	0	0.0	230	1.8
10-19.....	50	1.6	283	9.2	0	0.0	25	0.8	0	0.0
20-29.....	76	0.5	1,395	9.5	0	0.0	107	0.7	168	1.1
30-39.....	310	1.2	6,398	24.5	100	0.4	501	1.9	512	2.0
40-49.....	89	0.4	7,587	35.8	10	0.0	719	3.4	330	1.6
50-59.....	180	0.7	13,030	50.3	3	0.0	483	1.9	720	2.8
Total	875	0.8	31,951	30.7	118	0.1	1,835	1.8	1,960	1.9
	Diseases of the Heart and Circulatory System				Respiratory Diseases		Diseases of the Digestive System			
	Arteriosclerotic and Degenerative Heart Disease (50)*		Hypertensive and Rheumatic, etc. (49, 51, 52, 54, 55)*		Pneumonia and Influenza, etc. (56-63)*		Cirrhosis of the Liver (70)*		Other (64-69, 71-72)*	
0-9.....	150	1.2	1,548	11.9	258	2.0	23	0.2	65	0.5
10-19.....	40	1.3	30	1.0	10	0.3	0	0.0	1	0.0
20-29.....	373	2.5	305	2.1	232	1.6	0	0.0	13	0.1
30-39.....	2,121	8.1	741	2.8	548	2.1	50	0.2	548	2.1
40-49.....	3,209	15.2	845	4.0	163	0.8	70	0.3	584	2.8
50-59.....	5,363	20.7	2,702	10.4	536	2.1	73	0.3	508	2.0
Total	11,256	10.8	6,172	5.9	1,746	1.7	216	0.2	1,718	1.7

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 (89-91, 93-96, 98)*		All Other Diseases			
							Suicides (97)*		Unknown Causes (Other Codes)†	
0-9.....	15	0.1	1,451	11.2	4,466	34.4	620	4.8	733	5.6
10-19.....	0	0.0	1,360	44.4	584	19.1	456	14.9	223	7.3
20-29.....	0	0.0	5,343	36.3	3,369	22.9	1,593	10.8	1,753	11.9
30-39.....	0	0.0	4,749	18.2	4,033	15.5	2,254	8.6	3,226	12.4
40-49.....	10	0.0	3,031	14.3	1,354	6.4	1,534	7.2	1,633	7.7
50-59.....	83	0.3	301	1.2	687	2.7	164	0.6	1,051	4.1
Total.....	108	0.1	16,234	15.6	14,493	13.9	6,621	6.4	8,619	8.3
	AIDS (02)*									
0-9.....	208	1.6								
10-19.....	0	0.0								
20-29.....	335	2.3								
30-39.....	731	2.8								
40-49.....	163	0.8								
50-59.....	699	2.7								
Total.....	2,136	2.1								

* 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 OF AMOUNT OF DEATH CLAIMS FOR POLICY YEAR 1988-1989
 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, 03-17)*		Malignant Neoplasms (18-33)*		Diabetes Mellitus (37)*		Nervous System and Mental Diseases			
							Vascular Lesions (53)*		Other (41, 43-47)*	
0-9.....	7	0.2	952	28.1	26	0.8	20	0.6	68	2.0
10-19.....	0	0.0	262	12.6	50	2.4	13	0.6	22	1.0
20-29.....	130	1.4	2,910	31.6	7	0.1	245	2.7	143	1.6
30-39.....	172	0.8	8,226	36.4	0	0.0	197	0.9	204	0.9
40-49.....	10	0.0	8,793	39.7	22	0.1	847	3.8	186	0.8
50-59.....	112	0.7	6,501	39.8	51	0.3	1,006	6.2	154	0.9
Total.....	431	0.6	27,644	36.5	156	0.2	2,328	3.1	775	1.0
	Diseases of the Heart and Circulatory System				Respiratory Diseases Pneumonia and Influenza, etc. (56-63)*		Diseases of the Digestive System			
	Arteriosclerotic and Degenerative Heart Disease (50)*		Hypertensive and Rheumatic, etc. (49, 51, 52, 54, 55)*				Cirrhosis of the Liver (70)*		Other (64-69, 71-72)*	
0-9.....	152	4.5	391	11.5	340	10.0	0	0.0	0	0.0
10-19.....	60	2.9	82	4.0	5	0.2	0	0.0	0	0.0
20-29.....	768	8.3	370	4.0	269	2.9	60	0.7	72	0.8
30-39.....	3,269	14.5	1,512	6.7	542	2.4	252	1.1	333	1.5
40-49.....	2,728	12.3	4,299	19.4	367	1.7	44	0.2	92	0.4
50-59.....	3,044	18.6	1,861	11.4	1,027	6.3	71	0.4	265	1.6
Total.....	10,022	13.2	8,515	11.2	2,549	3.4	427	0.6	762	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 (89-91, 93-96, 98)*		All Other Diseases			
							Suicides (97)*		Unknown Causes (Other Codes)†	
0-9.....	0	0.0	430	12.7	448	13.2	319	9.4	234	6.9
10-19.....	10	0.5	565	27.3	574	27.7	253	12.2	179	8.6
20-29.....	86	0.9	1,305	14.2	962	10.5	1,108	12.0	763	8.3
30-39.....	100	0.4	2,050	9.1	1,827	8.1	1,285	5.7	2,616	11.6
40-49.....	121	0.5	1,010	4.6	895	4.0	699	3.2	2,037	9.2
50-59.....	85	0.5	449	2.7	142	0.9	191	1.2	1,382	8.5
Total.....	402	0.5	5,810	7.7	4,848	6.4	3,854	5.1	7,212	9.5
	AIDS (02)*									
0-9.....	6	0.2								
10-19.....	39	1.9								
20-29.....	272	3.0								
30-39.....	209	0.9								
40-49.....	162	0.7								
50-59.....	799	4.9								
Total.....	1,487	2.0								

* 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 OF AMOUNT OF DEATH CLAIMS FOR POLICY YEAR 1988-1989
 POLICY YEARS 16+
 (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, 03-17)*		Malignant Neoplasms (18-33)*		Diabetes Mellitus (37)*		Nervous System and Mental Diseases			
							Vascular Lesions (53)*		Other (41, 43-47)*	
15-19.....	10	3.3	9	3.0	0	0.0	6	2.1	8	2.5
20-29.....	0	0.0	32	4.1	5	0.6	6	0.8	28	3.6
30-39.....	17	0.8	369	17.9	20	1.0	26	1.3	43	2.1
40-49.....	50	0.7	2,547	35.0	27	0.4	114	1.6	162	2.2
50-59.....	248	1.3	7,047	36.7	71	0.4	536	2.8	203	1.1
60-69.....	468	1.4	12,017	35.0	34	0.1	1,337	3.9	451	1.3
70-99.....	894	1.6	12,661	23.1	195	0.4	3,249	5.9	1,534	2.8
Total	1,687	1.4	34,683	29.2	352	0.3	5,274	4.4	2,427	2.0
	Diseases of the Heart and Circulatory System				Respiratory Diseases Pneumonia and Influenza, etc. (56-63)*		Diseases of the Digestive System			
	Arteriosclerotic and Degenerative Heart Disease (50)*		Hypertensive and Rheumatic, etc. (49, 51, 52, 54, 55)*				Cirrhosis of the Liver (70)*		Other (64-69, 71-72)*	
15-19.....	6	1.9	5	1.7	16	5.3	0	0.0	0	0.0
20-29.....	17	2.2	14	1.8	29	3.8	0	0.0	5	0.6
30-39.....	270	13.1	64	3.1	41	2.0	42	2.1	43	2.1
40-49.....	1,397	19.2	546	7.5	174	2.4	73	1.0	148	2.0
50-59.....	4,453	23.2	1,836	9.6	595	3.1	155	0.8	372	1.9
60-69.....	8,786	25.6	3,637	10.6	1,453	4.2	386	1.1	403	1.2
70-99.....	11,678	21.4	6,819	12.5	4,969	9.1	370	0.7	542	1.0
Total	26,607	22.4	12,920	10.9	7,276	6.1	1,025	0.9	1,512	1.3

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 (89-91, 93-96, 98)*		All Other Diseases			
							Suicides (97)*		Unknown Causes (Other Codes)†	
15-19.....	5	1.7	141	46.4	38	12.4	45	14.9	15	5.0
20-29.....	5	0.6	290	37.7	137	17.9	128	16.6	75	9.7
30-39.....	8	0.4	243	11.8	355	17.3	268	13.0	248	12.1
40-49.....	36	0.5	236	3.2	581	8.0	454	6.2	729	10.0
50-59.....	119	0.6	428	2.2	475	2.5	405	2.1	2,241	11.7
60-69.....	279	0.8	268	0.8	533	1.6	276	0.8	3,998	11.6
70-99.....	585	1.1	323	0.6	262	0.5	54	0.1	10,557	19.3
Total	1,037	0.9	1,928	1.6	2,381	2.0	1,629	1.4	17,863	15.1
	AIDS (02)*									
15-19.....	0	0.0								
20-29.....	1	0.1								
30-39.....	109	5.3								
40-49.....	106	1.5								
50-59.....	412	2.1								
60-69.....	645	1.9								
70-99.....	631	1.2								
Total	1,906	1.6								

* 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 1988 AND 1989
 EXPECTED CA 69-75 TABLES
 (POLICY YEARS 1 TO 15 FROM 19 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	90.5	80.4	69	3,942	62,962	4,343,121	76.22	4,900.78
2	117.2	110.6	92	5,450	58,323	3,826,856	78.53	4,926.98
3	170.6	84.3	205	4,192	59,055	3,356,945	120.17	4,975.89
4	138.9	136.5	129	6,908	52,508	2,938,081	92.84	5,062.34
5	127.2	100.4	120	4,308	47,011	2,212,808	94.35	4,289.18
6-10	110.7	107.2	290	10,297	113,832	4,135,729	262.07	9,601.97
11-15	135.9	119.3	7	397	1,051	80,084	5.15	332.88
By Issue Age								
0-4	25.2	21.0	5	79	33,092	597,560	19.87	378.03
5-14	88.0	86.7	13	248	24,885	492,148	14.78	286.60
15-24	115.5	84.9	77	1,895	66,308	2,308,157	66.67	2,233.16
25-34	109.2	107.2	130	8,199	129,754	8,621,215	119.05	7,645.78
35-44	107.5	104.3	174	11,417	86,161	6,351,344	161.92	10,950.26
45-54	119.6	97.5	206	8,064	37,948	2,026,308	172.23	8,267.01
55-64	148.2	117.8	182	4,442	13,500	463,691	122.83	3,770.31
65+	240.4	205.9	125	1,151	3,094	33,201	52.00	558.87
Total	125.0	104.1	912	35,495	394,742	20,893,624	729.	34,090.

* 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 Nonsmokers								
By Policy Year								
1	52.4	57.0	78	9,253	105,832	11,493,082	148.77	16,231.89
2	57.4	29.7	103	5,472	112,381	11,552,542	179.58	18,440.26
3	68.3	49.1	130	8,691	105,017	9,592,853	190.43	17,701.36
4	62.3	56.8	131	10,096	102,189	8,375,784	210.23	17,772.08
5	54.2	42.9	115	7,209	90,158	6,973,618	212.10	16,805.09
6-10	61.3	50.3	297	18,021	165,315	11,728,268	484.54	35,802.96
11-15	68.8	107.9	9	820	2,332	138,794	13.08	759.43
By Issue Age								
0-4	55.9	42.3	8	145	23,356	520,203	14.31	342.39
5-14	74.8	49.7	8	118	17,173	409,459	10.69	236.97
15-24	82.3	69.7	98	3,972	117,900	5,840,075	119.14	5,695.30
25-34	66.8	49.3	137	9,224	225,049	20,775,263	205.00	18,698.98
35-44	49.8	49.5	164	18,199	175,434	20,494,445	329.40	36,783.30
45-54	51.8	46.6	200	17,300	87,064	9,016,339	386.16	37,151.58
55-64	58.8	41.3	172	8,693	32,428	2,581,827	292.74	21,034.92
65+	93.5	53.5	76	1,911	4,820	217,332	81.29	3,569.64
Total	60.0	48.2	863	59,562	683,224	59,854,941	1,439.	123,513.

* 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	59.8	47.6	95	5,275	139,597	9,829,462	158.96	11,074.80
2	67.5	53.6	104	5,389	128,268	8,321,122	154.04	10,054.45
3	76.6	58.7	123	5,734	117,757	7,012,275	160.47	9,776.32
4	81.5	59.2	147	5,590	107,727	5,802,034	180.29	9,435.59
5	98.6	60.6	200	5,080	105,341	4,596,269	202.80	8,383.92
6-10	84.8	59.9	977	25,330	489,392	16,538,670	1,152.02	42,270.04
11-15	76.5	60.2	1,057	17,865	479,035	9,078,224	1,381.58	29,674.17
By Issue Age								
0-4	50.2	47.1	67	1,249	251,710	4,381,327	133.46	2,653.85
5-14	74.7	77.4	88	1,544	139,811	2,977,690	117.78	1,994.10
15-24	79.4	65.2	257	5,192	312,436	7,938,957	323.58	7,964.74
25-34	69.8	66.6	438	17,756	457,001	23,053,342	627.88	26,650.83
35-44	70.3	51.0	565	19,363	260,828	16,421,037	803.85	37,990.06
45-54	83.2	53.7	642	15,601	104,952	5,218,311	771.46	29,057.96
55-64	99.4	65.0	466	7,746	34,196	1,069,924	468.59	11,911.64
65+	125.4	74.1	180	1,813	6,183	117,469	143.56	2,446.11
Total	79.7	58.2	2,703	70,263	1,567,117	61,178,057	3,390.	120,669.

* 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 Smokers								
By Policy Year								
1	105.5	83.6	34	1,057	46,037	2,208,144	32.23	1,264.47
2	115.3	84.8	35	971	42,308	1,885,609	30.36	1,145.46
3	163.4	136.2	62	1,521	41,975	1,639,473	37.94	1,117.39
4	174.7	135.7	60	1,401	38,869	1,376,753	34.34	1,031.96
5	116.2	85.8	42	748	36,393	1,017,279	36.15	871.13
6-10	116.9	82.5	114	1,449	80,584	1,680,335	97.50	1,756.61
11-15	0.0	0.0	0	0	220	9,608	0.48	20.06
By Issue Age								
0-4	23.5	22.8	3	55	29,779	530,140	12.77	242.79
5-14	30.3	34.6	2	42	21,796	410,348	6.61	122.38
15-24	100.5	78.7	25	617	65,652	2,146,349	24.88	784.23
25-34	100.1	99.6	50	2,231	86,600	4,219,747	49.96	2,240.51
35-44	101.1	87.5	65	1,942	48,707	1,910,775	64.30	2,218.19
45-54	152.6	118.0	86	1,257	22,385	471,150	56.37	1,065.53
55-64	220.7	188.8	85	780	9,477	112,364	38.51	413.26
65+	198.4	184.9	31	222	1,990	16,328	15.62	120.19
Total	129.0	99.2	347	7,147	286,386	9,817,201	269.	7,207.

* 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	52.3	37.6	33	1,334	78,823	5,291,877	63.10	3,550.08
2	70.0	58.8	48	2,167	80,551	5,071,031	68.57	3,683.12
3	55.4	37.1	38	1,222	73,083	4,156,129	68.61	3,291.18
4	68.5	56.4	51	1,766	72,044	3,544,831	74.44	3,128.76
5	72.7	41.4	56	1,165	64,025	2,766,765	77.02	2,811.23
6-10	68.7	49.8	119	2,538	111,404	3,858,293	173.12	5,095.86
11-15	0.0	0.0	0	0	559	19,454	1.38	41.51
By Issue Age								
0-4	41.2	34.4	4	80	22,134	485,480	9.71	232.27
5-14	102.5	223.2	5	232	15,558	348,312	4.88	103.80
15-24	75.3	61.4	28	961	99,332	4,281,236	37.20	1,564.74
25-34	54.4	43.6	51	2,601	162,327	10,882,030	93.79	5,961.14
35-44	46.8	36.1	64	2,706	107,124	6,423,713	136.88	7,504.09
45-54	62.2	53.3	71	2,000	47,196	1,706,804	114.10	3,752.12
55-64	88.9	70.7	79	1,256	21,816	487,027	88.84	1,776.44
65+	105.3	50.3	43	356	5,002	93,778	40.85	707.15
Total	65.6	47.2	345	10,191	480,489	24,708,380	526.	21,602.

* 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*
<i>Female Unclassified</i>								
By Policy Year								
1	76.0	80.2	55	2,188	103,291	4,369,796	72.42	2,729.17
2	89.0	77.2	58	1,656	95,335	3,604,301	65.14	2,145.09
3	93.4	62.4	63	1,215	89,910	3,109,666	67.42	1,948.64
4	109.2	96.5	77	1,669	79,233	2,428,872	70.54	1,729.79
5	99.0	61.7	81	1,000	80,207	1,992,777	81.79	1,620.99
6-10	86.9	63.5	444	4,842	365,559	6,666,229	511.00	7,626.99
11-15	89.6	71.8	459	3,319	299,888	3,054,677	512.05	4,621.04
By Issue Age								
0-4	55.1	67.4	45	1,190	227,594	4,025,004	81.74	1,766.68
5-14	72.1	48.8	32	394	120,976	2,603,986	44.40	808.29
15-24	75.5	65.6	92	1,353	234,846	4,567,023	121.93	2,063.44
25-34	71.9	59.4	179	3,647	278,204	8,518,786	248.97	6,134.99
35-44	84.8	71.0	248	4,374	147,777	4,119,767	292.36	6,162.81
45-54	101.3	94.9	285	3,042	66,833	1,036,591	281.33	3,206.83
55-64	111.9	81.8	234	1,251	29,892	291,325	209.04	1,529.38
65 +	121.3	85.3	122	639	7,301	63,835	100.58	749.30
Total	89.6	70.9	1,237	15,890	1,113,423	25,226,317	1,380.	22,422.

* Shown in \$1,000 units.

TABLE 9
 CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1988 AND 1989
 EXPECTED CA 69-75 TABLES
 POLICY YEARS 1 TO 15 FROM 19 COMPANIES

	Ratio A/E		Actual Deaths		Exposures		Expected Deaths	
	Number	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Permanent								
By Issue Age								
0-29	74.7	67.1	1,205	27,379	2,327,190	59,327,619	1,613.57	40,827.55
30-54	81.5	63.7	2,711	65,277	1,347,633	50,514,945	3,327.27	102,420.10
55+	113.3	68.9	1,670	20,428	146,912	3,082,594	1,473.55	29,630.37
By Policy Year								
1-5	90.5	66.2	2,216	61,550	1,935,672	77,633,469	2,447.40	93,034.22
6-15	85.0	64.5	3,370	51,534	1,886,063	35,291,688	3,966.99	79,843.80
Total	87.1	65.4	5,586	113,084	3,821,735	112,925,157	6,414.	172,878.
Term								
By Issue Age								
0-29	53.0	57.9	63	5,244	147,605	11,959,638	118.97	9,055.57
30-54	61.2	56.2	517	53,162	396,396	48,470,195	844.13	94,661.73
55+	65.3	50.3	70	6,637	13,476	1,750,839	107.13	13,206.53
By Policy Year								
1-5	57.5	54.4	291	39,689	351,478	46,595,515	506.39	73,024.00
6-15	63.7	57.8	359	25,354	205,999	15,585,157	563.84	43,899.83
Total	60.7	55.6	650	65,043	557,477	62,180,672	1,070.	116,924.
Term Rider								
By Issue Age								
0-29	0.0	44.5	0	2,247	0	6,875,137	0.00	5,051.42
30-54	0.0	41.1	0	7,100	0	10,549,529	0.00	17,284.34
55+	0.0	44.3	0	608	0	190,419	0.00	1,373.01
By Policy Year								
1-5	0.0	39.9	0	5,437	0	12,536,043	0.00	13,636.45
6-15	0.0	44.9	0	4,519	0	5,079,042	0.00	10,072.33
Total	0.0	42.0	0	9,955	0	17,615,085	0.00	23,709.

* 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	90.8	95.1	12	1,084	20,919	1,797,402	13.22	1,139.85
30-54	65.0	60.9	64	5,374	52,303	4,895,357	98.50	8,829.41
55+	74.0	57.6	53	2,501	8,892	516,675	71.60	4,339.26
By Policy Year								
1-5	70.1	52.1	93	5,581	70,755	6,269,886	132.58	10,707.89
6-15	70.9	93.8	36	3,378	11,359	939,548	50.75	3,600.64
Total	70.4	62.6	129	8,959	82,114	7,209,434	183.	14,309.
Other								
By Issue Age								
0-29	73.9	90.4	18	587	38,520	1,019,026	24.37	649.23
30-54	55.8	83.5	22	837	25,139	723,722	39.44	1,001.84
55+	89.8	205.7	2	84	424	7,718	2.23	40.92
By Policy Year								
1-5	63.5	94.2	34	1,413	58,324	1,656,691	53.58	1,500.66
6-15	64.2	49.5	8	95	5,759	93,776	12.45	191.34
Total	63.6	89.1	42	1,508	64,083	1,750,467	66.	1,692.
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	0.00	0.00

* 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	74.9	1,064	6,136	890,245	5,194,899	1,273.34	8,190.20
45-69	78.6	72.8	11,533	61,789	1,240,710	7,376,412	14,672.34	84,873.21
70+	90.7	82.6	18,035	61,055	315,700	1,193,426	19,887.31	73,914.89
Total	85.5	77.2	30,632	128,981	2,446,655	13,764,737	35,833.	166,978.
Term (Ultimate)								
By Attained Age								
15-44	65.3	45.2	9	119	6,701	119,376	13.79	262.60
45-69	57.8	74.0	131	2,740	26,898	455,817	226.54	3,702.31
70+	161.3	76.5	5	15	51	435	3.10	20.07
Total	59.6	72.1	145	2,874	33,650	575,628	243.	3,985.
Term Rider (Ultimate)								
By Attained Age								
15-44	0.0	54.9	0	239	0	218,406	0.00	435.16
45-69	0.0	63.0	0	1,111	0	273,424	0.00	1,764.07
70+	0.0	36.3	0	9	0	371	0.00	24.18
Total	0.0	61.1	0	1,358	0	492,201	0.	2,223.

* Shown in \$1,000 units.

TABLE 9--Continued

Select Experience	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	491	48,129	0.88	84.82
45-69	51.2	33.7	14	251	2,105	74,860	27.36	744.86
70+	124.7	394.2	4	214	75	1,059	3.21	54.21
Total	57.2	52.5	18	464	2,671	124,048	31.	884.
Other (Ultimate)								
By Attained Age								
15-44	22.8	18.8	1	5	2,948	15,392	4.38	26.65
45-69	64.5	68.0	47	226	7,498	36,029	72.82	332.85
70+	70.2	73.2	8	16	213	414	11.40	22.36
Total	63.2	64.9	56	248	10,659	51,836	89.	382.
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	2	1	0.01	0.01
70+	0.0	0.0	0	0	0	0	0.00	0.00
Total	0.0	0.0	0	0	2	1	0.00	0.00

* Shown in \$1,000 units.