

**TRANSACTIONS OF SOCIETY OF ACTUARIES
1995-96 REPORTS**

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

**MORTALITY UNDER CANADIAN STANDARD
ORDINARY INSURANCE ISSUES STUDIED
BETWEEN THE 1991 AND 1992 ANNIVERSARIES***

PREFACE

This report was prepared by the Individual Life Section of the Committee on Expected Experience of the Canadian Institute of Actuaries (CIA). The CIA 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 CIA and the Society intend to cooperate in experience studies to benefit actuaries in both Canada and the United States.

INTRODUCTION

This is the forty-third annual report submitted by the Subcommittee on Individual Life of the Committee on Expected Experience on the intercompany mortality experience for Canadian standard ordinary life insurance policies. The CIA 1982-88 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 1991-92 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 1986-87 through 1991-92.
- 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.
- Table 8 Smoking habits.
- Table 9 Type of insurance.

*Copyright 1994 Canadian Institute of Actuaries. Reprinted with permission.

Additional detailed data, showing mortality ratios by quinquennial age groupings, is available and can be obtained by writing to the chairperson of the Subcommittee on Individual Life of the Committee on Expected Experience of the CIA.

This year, we are also publishing Tables 1, 2 and 8 based on five-years' aggregate data between anniversaries in 1986 and 1991, and 1987 and 1992.

The 1991-92 study is based on the data of 21 contributing companies.

Contributors	Exposures
Aetna	3.19%
Canada Life	3.56
Crown Life	2.09
Desjardins	1.19
Equitable Life	0.84
Great-West Life	5.15
Imperial Life	1.06
Industrial-Alliance	8.77
London Life	13.94
Manufacturers Life	4.87
Maritime Life	3.37
Metropolitan Life	2.04
Mutual Life	11.51
National Life	3.16
North American Life	5.48
North-West Life	0.63
Prudential Assurance	3.35
Prudential of America	1.88
Sun Life	10.41
Transamerica	9.53
Westbury Life	3.98
Total exposures	100.00%

Nineteen companies contributed data to the cause of death study.

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

	1989-90 Study	1990-91 Study	1991-92 Study
Exposures			
By Number	6,415,057	6,401,701	7,027,850
By Amount ('000)	232,858,930	254,726,308	285,222,184
Death Claims			
By Number	33,675	33,263	36,969
By Amount ('000)	348,325	397,132	465,344

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:

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

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

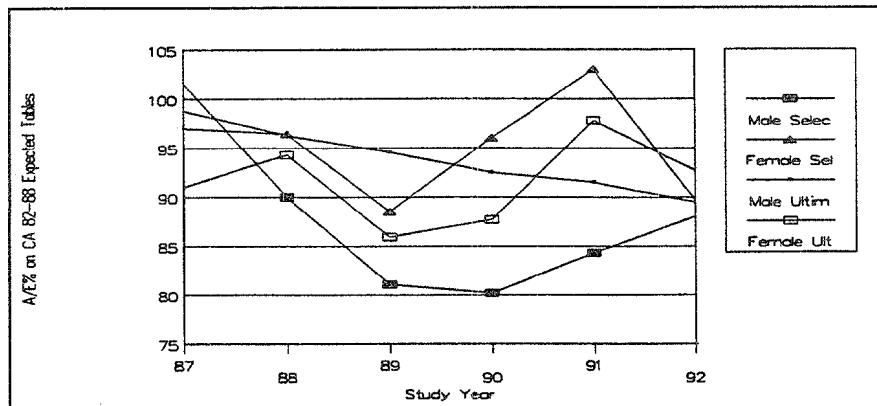
	1987-88	1988-89	1989-90	1990-91	1991-92
Males	30,927	34,538	40,507	44,037	45,283
Females	22,033	24,398	28,954	32,637	33,153
Combined	27,707	30,872	36,299	39,790	40,585

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

	1987-88	1988-89	1989-90	1990-91	1991-92
Average Claim	8,540	8,924	10,344	11,939	12,587

In Table 4, the combined mortality rates have declined from 99.7% of expected in 1986-87 to 88.7% of expected in 1991-92.

FIGURE 1
MORTALITY RATIOS FOR POLICY YEARS 1986-87 THROUGH 1991-92



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

	Policy Years		
	1-5	5-15	16 and over
Accidents and Homicides	18.8%	7.7%	2.7% (91-92)
	21.9	9.9	3.0 (90-91)
	24.8	12.8	3.5 (89-90)
Heart and Circulatory	12.7	19.9	27.6 (91-92)
	16.5	21.2	29.6 (90-91)
	15.2	20.6	34.2 (89-90)
Malignant Neoplasms	32.8	31.3	28.3 (91-92)
	30.6	32.7	29.1 (90-91)
	27.5	40.3	30.5 (89-90)
Respiratory	0.9	2.5	4.9 (91-92)
	1.1	9.9	5.9 (90-91)
	2.2	3.4	6.3 (89-90)
Suicide	6.7	5.3	0.9 (91-92)
	7.4	3.6	1.0 (90-91)
	9.3	5.9	1.4 (89-90)
AIDS	2.5	4.5	4.0 (91-92)
	2.2	2.1	1.5 (90-91)
	2.6	4.7	1.5 (89-90)

In Table 8, the following select ratios for smokers and nonsmokers were extracted from the 1991-92 study (with the comparable ratios from the previous year shown in brackets). The expected table is select, smoker, and nonsmoker distinct.

	A/E	%	Expected deaths ('000)
Males (by amount)			
Smokers	92.3	(88.6)	\$ 67,100 (57,452)
Nonsmokers	85.2	(77.8)	166,885 (129,630)
Nonclassified	90.7	(93.5)	68,431 (65,953)
Female (by amount)			
Smokers	90.8	(80.6)	15,764 (12,554)
Nonsmokers	90.9	(76.3)	32,188 (24,150)
Nonclassified	86.3	(166.6)	15,698 (14,544)

The unclassified data are 21.4% of the total select exposures (by amount).

THIS REPORT WAS PREPARED BY
THE INSTITUTE OF INSURANCE AND
PENSION RESEARCH, UNIVERSITY
OF WATERLOO BY:

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

THE REPORT WAS APPROVED BY
THE SUBCOMMITTEE ON INDIVID-
UAL LIFE OF THE COMMITTEE ON
EXPECTED EXPERIENCE

M.A. BENNETT
S.W. EASSON
A.L. JONKHANS
M. KIRR
R. LUMSDEN
W.A. RAMSEY
P. ST-ONGE, *CHAIRPERSON*
C.A. SENENSKY
R.A. WILLIS
R.W. WILSON
W.D. WYLIE

APRIL 1994

TABLE I
CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1991 AND 1992
MALES AND FEMALES COMBINED—EXPECTED CIA 82-88 TABLES

	Ratio A/F:			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount ^a	Number	Amount ^b	Number	Amount ^c
Select Experience by Policy Year									
1	109.3	5.97	79.2	334	17,938	435,660	34,113,686	306	22,635
2	97.2	4.70	83.5	426	27,952	464,548	38,590,945	438	33,479
3	91.2	4.56	88.6	399	29,514	415,715	33,512,924	437	33,318
4	100.5	4.49	87.4	501	30,882	424,242	30,794,071	498	35,347
5	100.7	4.23	85.6	565	30,558	416,037	27,736,460	561	35,693
6-10	97.9	1.66	87.8	3,452	133,705	1,696,063	83,792,004	3,525	152,257
11-15	91.5	2.16	98.9	1,778	52,754	786,470	19,464,662	1,943	53,345
Total	96.7	1.12	88.3	7,455	323,304	4,638,735	268,004,752	7,709	366,074
Select Experience by Issue Age									
0-4	78.7	7.53	66.6	109	2,255	555,832	12,931,410	138	3,383
5-29	96.5	2.96	91.5	1,057	45,202	1,831,238	86,658,012	1,095	49,426
30-44	93.3	2.09	90.8	1,983	130,675	1,608,345	132,043,965	2,126	143,917
45-59	97.0	1.85	85.6	2,738	113,695	538,403	33,211,606	2,823	132,871
60-74	102.7	2.61	85.8	1,546	30,628	104,287	3,131,815	1,505	35,697
75-89	102.7	21.8	108.9	22	849	630	27,945	21	780
Total	96.7	1.12	88.3	7,455	323,304	4,638,735	268,004,752	7,709	366,074
Ultimate Experience by Attained Age									
15-29	97.3	6.54	92.5	221	1,411	322,250	2,080,253	227	1,526
30-44	113.1	4.14	94.4	743	5,651	525,256	4,447,655	657	5,988
45-59	92.4	1.57	88.0	3,455	28,561	755,465	6,651,668	3,741	32,448
60-74	93.4	0.869	86.2	11,555	59,078	598,894	3,362,404	12,367	68,553
75-89	98.2	0.889	94.5	12,172	43,510	180,056	656,401	12,397	46,031
90-99	96.0	2.59	98.8	1,368	3,829	7,194	19,051	1,425	3,876
Total	95.8	0.557	89.7	29,514	142,040	2,389,115	17,217,432	30,814	158,422
Grand Total	96.0	0.5	88.7	36,969	465,344	7,027,850	285,222,184	38,523	524,496

*Shown in \$1,000 units.

TABLE 2A

 CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1991 AND 1992
 MALES ONLY—EXPECTED CIA 82-88 TABLES

	Ratio A/E			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Select Experience by Policy Year									
1	103.9	6.90	70.0	226	12,869	242,161	22,237,901	218	18,392
2	99.2	5.69	81.2	303	21,948	260,893	25,621,722	305	27,045
3	90.4	5.46	95.7	274	25,788	234,509	22,520,368	303	26,939
4	99.3	5.37	85.1	341	24,513	238,009	20,676,537	343	28,806
5	96.0	4.99	83.5	369	24,279	234,980	18,766,354	384	29,090
6-10	98.4	2.01	87.1	2,381	110,141	972,058	58,335,308	2,419	126,393
11-15	97.9	2.74	102.0	1,274	46,648	460,439	14,412,363	1,302	45,752
Total	98.0	1.36	88.0	5,168	266,185	2,643,049	182,570,552	5,274	302,417
Select Experience by Issue Age									
0-4	84.9	10.2	70.1	68	1,301	288,513	6,638,861	80	1,857
5-29	97.5	3.55	91.4	754	34,062	1,000,736	51,541,125	773	37,283
30-44	93.4	2.51	91.9	1,381	107,333	971,172	95,154,733	1,479	116,850
45-59	96.3	2.19	84.2	1,924	98,813	329,162	26,992,796	1,997	117,367
60-74	110.2	3.43	84.0	1,027	23,928	53,165	2,227,224	932	28,846
75-89	105.5	28.2	130.4	14	749	301	15,814	13	574
Total	98.0	1.36	88.0	5,168	266,185	2,643,049	182,570,552	5,274	302,417
Ultimate Experience by Attained Age									
15-29	97.2	7.35	89.5	175	1,135	185,478	1,317,266	180	1,269
30-44	116.7	4.95	96.4	554	4,802	347,546	3,498,344	475	4,984
45-59	92.3	1.72	86.0	2,857	25,539	574,773	5,818,694	3,095	29,696
60-74	94.1	.957	86.5	9,648	55,033	458,034	3,017,629	10,253	63,638
75-89	99.2	1.00	94.9	9,819	39,337	132,276	570,349	9,900	41,461
90-99	98.3	3.02	100.6	1,054	3,329	5,064	15,689	1,073	3,310
Total	96.5	.621	89.5	24,107	129,175	1,703,171	14,237,971	24,976	144,358
Grand Total	96.8	0.57	88.5	29,275	395,360	4,346,220	196,808,523	30,250	446,755

*Shown in \$1,000 units.

TABLE 2B
CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1991 AND 1992
FEMALES ONLY—EXPECTED CIA 82-88 TABLES

	Ratio A/E			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Select Experience by Policy Year									
1	122.6	11.8	119.5	108	5,069	193,496	11,875,585	88	4,243
2	92.7	8.35	93.3	123	6,005	203,665	12,969,224	133	6,435
3	93.1	8.32	58.5	125	3,727	181,205	10,992,206	134	6,375
4	103.3	8.16	97.4	160	6,369	186,233	10,117,534	155	6,542
5	110.9	7.92	95.1	196	6,278	181,056	8,970,006	177	6,602
6-10	96.8	2.95	91.1	1,071	23,565	723,992	25,455,241	1,106	25,860
11-15	78.6	3.49	80.4	504	6,106	326,030	5,052,287	642	7,593
Total	93.9	1.96	89.7	2,287	57,119	1,995,667	85,432,082	2,435	63,650
Select Experience by Issue Age									
0-4	70.3	10.9	62.5	41	954	267,318	6,292,549	58	1,526
5-29	94.2	5.40	91.7	303	11,140	830,501	35,116,787	322	12,143
30-44	93.0	3.78	86.2	602	23,342	637,161	36,887,862	647	27,064
45-59	98.6	3.45	96.0	814	14,883	209,238	6,218,537	826	15,504
60-74	90.5	3.97	93.0	519	6,699	51,120	904,216	573	7,207
75-89	98.0	34.6	48.9	8	101	329	12,131	8	206
Total	93.9	1.96	89.7	2,287	57,119	1,995,667	85,432,082	2,435	63,650
Ultimate Experience by Attained Age									
15-29	97.6	14.3	107.4	46	276	136,772	762,987	47	257
30-44	103.6	7.57	84.7	187	847	176,423	946,849	180	1,001
45-59	93.5	3.85	110.4	588	2,980	178,109	825,410	629	2,699
60-74	91.9	2.18	83.2	1,764	3,587	133,237	320,893	1,920	4,310
75-89	94.8	2.10	93.3	2,024	3,332	43,303	73,605	2,135	3,572
90-99	88.3	5.48	81.0	259	361	1,858	2,792	293	445
Total	93.5	1.34	92.7	4,868	11,382	669,702	2,932,536	5,205	12,284
Grand Total	93.7	1.11	90.2	7,155	68,501	2,665,369	88,364,618	7,640	75,934

*Shown in \$1,000 units.

TABLE 3A
CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1991 AND 1992
MEDICAL MALES—EXPECTED CIA 82–88 TABLES

Select Experience	Ratio A/E			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount*	Number	Amount*	Number	Amount*
By Policy Year									
1	110.3	21.6	67.1	26	2,916	15,665	3,731,203	24	4,343
2	84.9	15.5	74.6	30	4,905	15,053	4,100,088	35	6,578
3	100.4	16.2	150.0	38	10,389	13,087	3,695,195	38	6,924
4	127.0	16.8	93.0	57	6,867	12,310	3,027,652	45	7,385
5	92.8	12.1	71.0	58	5,607	13,776	2,916,152	63	7,895
6–10	99.8	4.86	94.3	421	35,592	60,890	9,317,748	422	37,758
11–15	89.9	4.84	89.0	344	17,387	50,794	3,555,147	383	19,539
Total	96.5	3.09	92.5	974	83,663	181,575	30,343,186	1,009	90,422
By Issue Age									
0–4	125.4	125.0	55.8	1	20	2,595	108,977	1	36
5–29	140.7	24.8	82.0	32	1,790	26,401	2,907,539	23	2,184
30–44	95.8	7.64	128.8	157	31,557	77,161	16,412,580	164	24,491
45–59	92.7	4.55	79.5	414	37,366	57,314	9,699,007	447	47,026
60–74	100.2	5.21	79.0	369	12,902	17,962	1,205,573	368	16,321
75–89	15.2	15.2	7.8	1	28	142	9,511	7	364
Total	96.5	3.09	92.5	974	83,663	181,575	30,343,186	1,009	90,442

*Shown in \$1,000 units.

TABLE 3B
CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1991 AND 1992
MEDICAL FEMALES—EXPECTED CIA 82-88 TABLES

Select Experience	Ratio A/E			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount*	Number	Amount*	Number	Amount*
By Policy Year									
1	137.7	41.5	186.9	11	1,151	8,784	1,063,401	8	616
2	82.1	24.7	97.0	11	887	7,565	921,853	13	915
3	83.5	24.1	27.7	12	278	6,089	734,731	14	1,000
4	125.8	26.8	101.7	22	937	6,040	530,674	17	922
5	92.8	19.3	36.0	23	337	6,182	479,526	25	934
6-10	102.3	8.29	136.2	152	5,081	22,396	1,235,603	149	3,732
11-15	85.6	7.91	88.7	117	1,497	18,130	428,384	137	1,689
Total	95.8	5.13	103.7	348	10,168	75,186	5,394,173	363	9,807
By Issue Age									
0-4	244.3	244.0	9.7	1	3	2,183	95,165	0	26
5-29	106.6	40.3	80.0	7	339	15,242	1,254,825	7	424
30-44	105.0	19.4	157.4	29	3,213	21,902	2,451,065	28	2,041
45-59	102.5	9.39	92.1	119	3,269	20,448	1,159,528	116	3,549
60-74	90.7	6.61	91.4	188	3,316	15,205	425,124	207	3,629
75-89	74.2	37.1	20.7	4	29	206	8,466	5	138
Total	95.8	5.13	103.7	348	10,168	75,186	5,394,173	363	9,807

*Shown in \$1,000 units.

TABLE 3C
CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1991 AND 1992
NONMEDICAL MALES—EXPECTED CIA 82-88 TABLES

Select Experience	Ratio A/E			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount*	Number	Amount*	Number	Amount*
By Policy Year									
1	103.5	9.04	76.0	131	5,534	178,439	11,272,211	127	7,283
2	99.7	7.85	81.8	161	8,366	192,136	13,035,151	161	10,230
3	97.1	7.93	83.6	150	7,870	169,175	10,990,724	154	9,409
4	97.8	7.37	104.2	176	10,986	177,239	10,997,991	180	10,539
5	98.0	6.99	80.5	196	9,011	179,128	10,634,513	200	11,195
6-10	105.0	2.91	89.5	1,298	42,833	755,762	34,997,103	1,236	47,833
11-15	103.2	4.55	87.0	513	9,550	334,142	6,777,854	497	10,971
Total	102.7	2.00	87.6	2,625	94,151	1,986,021	98,705,547	2,556	107,461
By Issue Age									
0-4	85.3	10.5	72.9	66	1,280	279,388	6,314,619	77	1,754
5-29	96.5	3.75	83.7	660	24,334	887,802	40,179,776	684	29,074
30-44	96.5	3.17	90.7	925	47,677	684,367	46,782,642	958	52,579
45-59	108.0	4.15	86.2	676	17,356	122,988	5,144,967	626	20,133
60-74	140.4	8.25	88.1	289	3,379	11,379	281,077	206	3,836
75-89	184.5	61.4	150.1	9	126	97	2,467	5	84
Total	102.7	2.00	87.6	2,625	94,151	1,986,021	98,705,547	2,556	107,461

*Shown in \$1,000 units.

TABLE 3D
CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1991 AND 1992
NONMEDICAL FEMALES—EXPECTED CIA 82-88 TABLES

Select Experience	Ratio A/E			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount*	Number	Amount*	Number	Amount*
By Policy Year									
1	122.4	14.4	117.7	72	2,999	156,285	8,343,266	59	2,547
2	89.8	10.6	81.8	71	3,042	165,986	9,439,899	79	3,720
3	102.1	11.4	73.2	79	2,512	146,322	7,853,721	77	3,433
4	96.1	10.1	98.5	89	3,733	153,387	7,650,063	93	3,791
5	118.7	10.5	116.5	126	4,636	152,594	7,034,788	106	3,979
6-10	101.7	3.95	83.7	661	13,274	627,585	20,874,932	650	15,857
11-15	91.2	5.59	70.5	266	2,632	275,219	3,874,401	292	3,734
Total	100.6	2.72	88.6	1,364	32,827	1,677,378	65,067,069	1,355	37,061
By Issue Age									
0-4	69.2	11.0	65.3	39	947	259,390	6,018,101	56	1,449
5-29	93.6	5.62	90.1	277	9,491	760,673	30,223,083	296	10,537
30-44	91.6	4.13	82.6	490	15,796	532,756	26,485,601	535	19,123
45-59	114.0	5.57	110.8	418	5,453	113,524	2,204,515	367	4,924
60-74	137.7	11.7	116.1	138	1,137	10,977	133,425	100	979
75-89	138.7	98.0	4.5	2	2	58	2,344	1	48
Total	100.6	2.72	88.6	1,364	32,287	1,677,378	65,067,069	1,355	37,061

*Shown in \$1,000 units.

TABLE 3E
CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1991 AND 1992
PARAMEDICAL MALES—EXPECTED CIA 82–88 TABLES

Select Experience	Ratio A/E			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount*	Number	Amount*	Number	Amount*
By Policy Year									
1	104.1	14.1	59.0	54	3,048	31,750	5,569,632	52	5,162
2	104.1	10.9	63.7	91	4,949	36,218	6,396,288	87	7,772
3	77.4	9.38	74.5	68	5,802	34,031	5,648,807	88	7,785
4	92.9	9.95	64.1	87	5,050	29,498	4,446,622	94	7,878
5	93.0	9.85	91.0	89	6,301	25,127	3,256,896	96	6,927
6–10	85.4	3.63	78.5	550	21,828	102,012	8,283,190	644	27,804
11–15	86.7	4.80	99.2	326	10,122	61,927	2,637,434	376	10,200
Total	88.1	2.47	77.7	1,265	57,099	320,563	36,238,868	1,437	73,530
By Issue Age									
0–4	0.0	0.0	0.0	0	0	384	15,941	0	5
5–29	101.7	19.2	150.6	28	4,440	32,594	4,172,488	28	2,949
30–44	82.5	5.53	74.9	222	21,335	141,205	22,678,329	269	28,500
45–59	87.2	3.27	74.0	707	26,678	124,943	8,847,768	811	36,042
60–74	93.7	5.34	77.1	307	4,643	21,399	523,709	328	6,019
75–89	90.3	90.3	16.4	1	3	38	634	1	15
Total	88.1	2.47	77.7	1,265	57,099	320,563	36,238,868	1,437	73,530

*Shown in \$1,000 units.

TABLE 3F
CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1991 AND 1992
PARAMEDICAL FEMALES—EXPECTED CIA 82-88 TABLES

Select Experience	Ratio A/E			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount*	Number	Amount†	Number	Amount‡
By Policy Year									
1	134.9	28.7	46.5	22	377	16,280	1,696,799	16	810
2	110.4	18.3	139.3	36	1,909	17,406	1,754,288	33	1,370
3	92.2	16.2	55.6	32	803	15,836	1,530,747	35	1,445
4	112.4	17.7	110.7	40	1,409	13,210	1,054,543	36	1,273
5	90.2	15.6	71.6	33	832	10,950	732,506	37	1,162
6-10	81.0	5.37	82.3	227	3,832	46,809	1,715,519	280	4,658
11-15	52.2	5.02	71.2	108	1,340	28,867	549,994	207	1,882
Total	77.5	3.47	83.3	498	10,501	149,358	9,034,397	643	12,599
By Issue Age									
0-4	0.0	0.0	0.0	0	0	331	15,956	0	4
5-29	157.9	49.9	146.4	10	659	14,518	1,366,475	6	450
30-44	95.8	12.9	66.5	55	2,605	44,259	4,995,922	57	3,918
45-59	79.2	4.95	90.3	255	5,428	66,584	2,362,761	322	6,011
60-74	69.2	5.20	81.8	177	1,805	23,615	292,631	256	2,206
75-89	93.5	93.5	48.1	1	5	51	651	1	10
Total	77.5	3.47	83.3	498	10,501	149,358	9,034,397	643	12,599

*Shown in \$1,000 units.

TABLE 4
 CANADIAN STANDARD ORDINARY EXPERIENCE
 COMPARISON OF RATIOS (A/E) BY AMOUNT—EXPECTED CIA 82–88 TABLES

Combined Data	Policy Year Grouping	Policy Year					
		1986–87	1987–88	1988–89	1989–90	1990–91	1991–92
Male and Female	Select and Ultimate	99.7	93.2	86.6	85.9	88.9	88.7
Male	Select and Ultimate	100.3	92.6	86.4	84.6	86.8	88.5
Female	Select and Ultimate	95.4	95.9	87.9	94.4	102.1	90.2
Male and Female	Select	100.8	90.9	82.3	82.7	87.5	88.3
Male	Select	101.5	90.0	81.1	80.2	84.3	88.0
Female	Select	97.0	96.4	88.5	96.0	103.0	89.7
Male and Female	Ultimate	98.1	96.5	94.0	92.1	92.0	89.7
Male	Ultimate	98.8	96.3	94.6	92.5	91.5	89.5
Female	Ultimate	91.0	94.3	85.9	87.8	97.8	92.7
Medical Male	Select	102.4	83.7	76.3	71.9	75.3	92.5
Nonmedical Male	Select	106.3	103.1	84.8	87.4	96.8	87.6
Paramedical Male	Select	90.2	77.9	83.2	81.0	77.5	77.7
Medical Female	Select	106.2	84.2	76.0	86.9	211.0	103.7
Nonmedical Female	Select	92.8	91.5	93.2	99.1	80.0	88.6
Paramedical Female	Select	103.0	129.3	87.9	94.8	80.7	83.3

TABLE 5
 1991-1992 EXPERIENCE RATIO BY DEPARTURE
 FROM INTERCOMPANY EXPERIENCE RATIO BY AMOUNT
 EXPECTED CIA 82-88 TABLES

Percentage Departure	Number of Companies	Actual Claims*	Percentage of Claims
Within 5%	4	188,542	40.5
5% to 10%	6	97,071	20.9
10% to 15%	6	98,308	21.1
15% to 20%	1	18,031	3.9
20% and over	4	63,393	13.6
	21	465,345	100.0

*Shown in \$1,000 units.

TABLE 6A
CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1991 AND 1992
EXPECTED CIA 82-88 TABLES

Select Experience	Ratio A/E			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Medical Males									
By Policy Year									
1-5	102.4	7.08	92.6	209	30,683	69,891	17,470,291	204	33,125
6-15	95.1	3.43	92.5	765	52,979	111,684	12,872,895	805	57,297
Total	96.5	3.09	92.5	974	83,663	181,575	30,343,186	1,009	90,422
By Issue Age									
0-29	140.2	24.4	81.5	33	1,810	28,996	3,016,516	24	2,220
30-54	96.9	4.66	103.0	432	59,030	120,906	24,354,487	446	57,301
55-89	94.3	4.18	73.9	509	22,823	31,673	2,972,183	540	30,902
Total	96.5	3.09	92.5	974	83,663	181,575	30,343,186	1,009	90,422
Nonmedical Males									
By Policy Year									
1-5	99.0	3.46	85.5	814	41,768	896,117	56,930,590	822	48,656
6-15	104.5	2.45	89.1	1,811	52,383	1,089,904	41,774,957	1,734	58,804
Total	102.7	2.00	87.6	2,625	94,151	1,986,021	98,705,547	2,556	107,461
By Issue Age									
0-29	95.4	3.53	83.1	726	25,613	1,167,190	46,494,395	761	30,828
30-54	99.6	2.64	90.2	1,423	61,526	790,800	51,340,384	1,428	68,199
55-89	129.8	5.94	83.1	476	7,011	28,031	870,769	367	8,434
Total	102.7	2.00	87.6	2,625	94,151	1,986,021	98,705,547	2,556	107,461

*Shown in \$1,000 units.

TABLE 6A—Continued

Select Experience	Ratio A/E			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Combined Evidence of Health-Males									
By Policy Year									
1-5	91.2	9.07	91.0	101	11,795	87,920	10,103,756	111	12,965
6-15	125.5	8.80	108.0	203	19,477	66,970	7,179,195	162	18,039
Total	111.5	6.39	100.9	304	31,273	154,890	17,282,951	273	31,004
By Issue Age									
0-29	85.2	14.4	111.5	35	3,499	60,085	4,480,646	41	3,138
30-54	93.0	7.41	72.7	157	15,998	88,415	12,119,776	169	22,013
55-89	179.1	16.9	201.2	112	11,775	6,390	682,529	63	5,852
Total	111.5	6.39	100.9	304	31,273	154,890	17,282,951	273	31,004
Paramedical Males									
By Policy Year									
1-5	93.4	4.73	70.8	389	25,149	156,624	25,318,244	416	35,525
6-15	85.9	2.90	84.1	876	31,949	163,939	10,920,624	1,020	38,004
Total	88.1	2.47	77.7	1,265	57,099	320,563	36,238,868	1,437	73,530
By Issue Age									
0-29	101.3	19.1	150.3	28	4,440	32,978	4,188,429	28	2,954
30-54	85.3	3.31	75.4	663	41,554	235,556	30,250,730	778	55,097
55-89	90.9	3.79	71.7	574	11,105	52,029	1,799,709	631	15,479
Total	88.1	2.47	77.7	1,265	57,099	320,563	36,238,868	1,437	73,530

*Shown in \$1,000 units.

TABLE 6B
CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1991 AND 1992
EXPECTED CIA 82-88 TABLES

Select Experience	Ratio A/E			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Medical Females									
By Policy Year									
1-5	101.2	11.3	81.8	79	3,589	34,660	3,730,185	78	4,386
6-15	94.3	5.74	121.4	269	6,579	40,526	1,663,987	285	5,421
Total	95.8	5.13	103.7	348	10,168	75,186	5,394,173	363	9,807
By Issue Age									
0-29	114.7	40.5	75.9	8	342	17,425	1,349,991	7	450
30-54	104.9	10.7	135.0	95	5,762	35,835	3,336,664	91	4,268
55-89	92.2	5.88	79.9	245	4,064	21,926	707,518	266	5,088
Total	95.8	5.13	103.7	348	10,168	75,186	5,394,173	363	9,807
Nonmedical Females									
By Policy Year									
1-5	105.6	5.04	96.9	437	16,921	774,574	40,321,737	414	17,469
6-15	98.5	3.23	81.2	927	15,906	902,804	24,745,333	941	19,592
Total	100.6	2.72	88.6	1,364	32,827	1,677,378	65,067,069	1,355	37,061
By Issue Age									
0-29	89.7	5.04	87.1	316	10,438	1,020,063	36,241,184	352	11,986
30-54	97.7	3.48	87.0	788	20,147	629,079	28,485,477	806	23,155
55-89	132.3	8.20	116.8	260	2,241	28,236	340,408	197	1,919
Total	100.6	2.72	88.6	1,364	32,827	1,677,378	65,067,069	1,355	37,061

*Shown in \$1,000 units.

TABLE 6B *Continued*

Select Experience	Ratio A/E			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Combined Evidence of Health-Females									
By Policy Year									
1-5	84.8	14.7	70.5	33	1,609	62,729	4,103,750	39	2,282
6-15	127.9	19.2	106.0	44	2,014	31,016	1,832,694	34	1,901
Total	105.0	11.9	86.6	77	3,623	93,745	5,936,443	73	4,182
By Issue Age									
0-29	68.6	21.7	84.2	10	656	45,482	2,435,729	15	778
30-54	103.5	15.5	15.5	44	2,285	45,502	3,385,506	43	2,270
55-89	141.6	29.5	107.6	23	682	2,761	115,208	16	634
Total	105.0	11.9	86.6	77	3,623	93,745	5,936,443	73	4,182
Paramedical Females									
By Policy Year									
1-5	104.6	8.19	88.0	163	5,329	73,682	6,768,883	156	6,060
6-15	68.8	3.75	79.1	335	5,172	75,676	2,265,514	487	6,540
Total	77.5	3.47	83.3	498	10,501	149,358	9,034,397	643	12,599
By Issue Age									
0-29	156.3	49.4	144.9	10	659	14,849	1,382,432	6	454
30-54	88.8	6.17	79.4	207	6,386	89,389	6,930,691	233	8,042
55-89	69.7	4.15	84.3	281	3,457	45,120	721,274	403	4,103
Total	77.5	3.47	83.3	498	10,501	149,358	9,034,397	643	12,599

*Shown in \$1,000 units.

TABLE 6C
CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES IN 1991 AND 1992
ALL EVIDENCE CODES COMBINED—EXPECTED CIA 82-88 TABLES

	Ratio A/E			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Males Only									
Ultimate Experience By Attained Age									
15-44	111.3	4.12	95.0	729	5,937	533,024	4,815,610	655	6,253
45-69	93.9	1.00	85.2	8,705	61,209	920,655	8,241,724	9,272	71,867
70-99	97.5	.804	93.6	14,673	62,029	249,492	1,180,638	15,049	66,239
Total	96.5	.621	89.5	24,107	129,175	1,703,171	14,237,971	24,976	144,358
Females Only									
Ultimate Experience By Attained Age									
15-44	102.4	6.70	89.3	233	1,123	313,195	1,709,836	228	1,258
45-69	93.6	2.32	96.2	1,625	5,247	275,577	1,077,097	1,737	5,456
70-99	92.9	1.69	90.0	3,010	5,011	80,930	145,603	3,241	5,570
Total	93.5	1.34	92.7	4,868	11,382	669,702	2,932,536	5,205	12,284

*Shown in \$1,000 units.

TABLE 6C—Continued

	Ratio A/B:			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Males and Females Combined									
Ultimate Experience By Attained Age									
15-44	109.0	3.51	94.0	964	7,062	847,506	6,527,908	884	7,514
45-69	93.6	.917	85.9	10,410	66,715	1,203,747	9,341,901	11,121	77,673
70-99	96.4	.716	93.2	18,140	68,262	337,862	1,347,623	18,809	73,235
Total	95.8	.557	89.7	29,514	142,040	2,389,115	17,217,432	30,814	158,422
Select Experience By Policy Year									
1-5	99.3	2.10	85.3	2,225	136,844	2,156,202	164,748,086	2,241	160,472
6-15	95.6	1.32	90.7	5,230	186,459	2,482,533	103,256,666	5,468	205,601
Total	96.7	1.12	88.3	7,455	323,304	4,638,735	268,004,752	7,709	366,074
Select Experience By Issue Age									
0-29	94.5	2.76	89.9	1,166	47,457	2,387,070	99,589,422	1,234	52,809
30-54	95.4	1.54	88.3	3,809	212,688	2,035,496	160,205,347	3,993	240,850
55-89	99.9	2.00	87.2	2,480	63,159	216,169	8,209,983	2,482	72,415
Total	96.7	1.12	88.3	7,455	323,304	4,638,735	268,004,752	7,709	366,074

*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 1991-1992
 POLICY YEARS 01-05
 (AMOUNTS SHOWN IN \$1,000 UNITS)

Age at Issue	No. of Deaths	Amount	Percentage Claims	No. of Deaths	Amount	Percentage Claims	No. of Deaths	Amount	Percentage Claims	No. of Deaths	Amount	Percentage Claims
	Malignant Neoplasms (18-33)*			Diabetes Mellitus (37)*			Infective & Parasitic Diseases Tuberculosis, etc. (01,03-17)*			AIDS (02)*		
00-09	26	5,848	54.1		0	0.0	1	75	.7	2	125	1.2
10-19	8	267	6.2		0	0.0	3	232	5.4	1	15	.4
20-29	34	1,616	9.3	3	150	.9	4	637	3.7	9	428	2.5
30-39	70	4,870	18.6	2	100	.4	6	198	.8	15	429	1.6
40-49	154	13,840	40.9	2	60	.2	13	1,285	3.8	20	1,757	5.2
50-89	389	16,277	43.1	1	10	.0	36	761	2.0	44	556	1.5
Total	681	42,718	32.8	8	320	.2	63	3,188	2.4	91	3,309	2.5
	Diseases of the Heart & Circulatory System						Diseases of the Digestive System					
	Arteriosclerotic & Degenerative Heart Disease (50)*			Hypertensive & Rheumatic, etc. (49,51,52,54,55)*			Cirrhosis of the Liver (70)*			Other (64, 69,71,72)*		
00-09	6	262	2.4	11	624	5.8	0	10	.1	3	35	.3
10-19	0	2	.0	5	156	3.7		0	0.0		0	0.0
20-29	6	234	1.4	5	423	2.4		0	0.0		0	0.0
30-39	27	1,746	6.7	13	848	3.2	1	115	.4	1	21	.1
40-49	50	3,750	11.1	36	1,990	5.9	3	35	.1	2	45	.1
50-89	113	2,264	6.0	102	4,320	11.4	3	81	.2	20	442	1.2
Total	202	8,259	6.3	172	8,362	6.4	7	241	.2	26	542	.4

*1980 codes for Cause of Death

TABLE 7A—Continued

Age at Issue	No. of Deaths	Amount	Percentage Claims	No. of Deaths	Amount	Percentage Claims	No. of Deaths	Amount	Percentage Claims	No. of Deaths	Amount	Percentage Claims	
Nervous System & Mental Diseases													
Vascular Lesions (53)*				Other (41,43-47)*				Respiratory Diseases				Genito-Urinary Diseases	
00-09	2	141	1.3	8	254	2.4	3	60	.6		0	0.0	
10-19	2	45	1.1	1	10	.2		0	0.0		0	0.0	
20-29	4	215	1.2	3	330	1.9	3	99	.6		0	0.0	
30-39	12	1,461	5.6	3	190	.7	4	232	.9		0	0.0	
40-49	8	267	.8	7	358	1.1	6	174	.5	2	67	.2	
50-89	35	845	2.2	14	451	1.2	33	631	1.7	6	68	.2	
Total	63	2,973	2.3	36	1,593	1.2	49	1,196	.9	8	135	.1	
Motor Vehicle Accidents (88)*													
Other Accidents & Homicides (89-91,93-96,98)*				Suicides (97)**				All Other Diseases & Unknown Causes (Other Codes ***)*					
00-09	15	1,452	13.4	9	1,033	9.6	4	335	3.1	17	554	5.1	
10-19	22	957	22.4	14	981	22.9	9	1,346	31.4	8	271	6.3	
20-29	59	3,773	21.8	27	3,349	19.3	30	2,256	13.0	49	3,820	22.0	
30-39	42	4,468	17.1	24	2,443	9.3	33	2,877	11.0	59	6,200	23.7	
40-49	14	1,204	3.6	16	2,210	6.5	19	1,562	4.6	60	5,273	15.6	
50-89	27	1,737	4.6	13	987	2.6	11	395	1.0	112	7,921	21.0	
Total	179	13,592	10.4	103	11,002	8.4	106	8,771	6.7	305	24,038	18.5	

*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 1991-1992
 POLICY YEARS 06-15
 (AMOUNTS SHOWN IN \$1,000 UNITS)

Age at Issue	No. of Deaths	Amount	Percentage Claims	No. of Deaths	Amount	Percentage Claims	No. of Deaths	Amount	Percentage Claims	No. of Deaths	Amount	Percentage Claims
	Malignant Neoplasms (18-33)*			Diabetes Mellitus (37)*			Infective & Parasitic Diseases Tuberculosis, etc. (01,03, 17)*			AIDS (02)*		
00-09	36	2,014	33.7	4	25	.4	3	51	.9	2	50	.8
10-19	40	3,163	50.4	3	25	.4	3	135	2.1	8	201	3.2
20-29	109	3,119	20.5	8	121	.8	13	631	4.2	55	2,068	13.6
30-39	260	13,827	30.4	3	52	.1	44	1,813	4.0	72	2,997	6.6
40-49	418	18,013	34.7	8	441	.9	42	1,780	3.4	72	1,546	3.0
50-89	791	14,776	29.2	2	15	.0	96	3,040	6.0	94	968	1.9
Total	1,654	54,913	31.3	28	680	.4	201	7,450	4.2	303	7,829	4.5
	Diseases of the Heart & Circulatory System						Diseases of the Digestive System					
	Arteriosclerotic & Degenerative Heart Disease (50)*			Hypertensive & Rheumatic, etc. (49,51,52,54,55)*			Cirrhosis of the Liver (70)*			Other (64-69,71,72)*		
00-09	5	168	2.8	16	764	12.8	1	12	.2	3	615	10.3
10-19	2	11	.2	11	328	5.2		0	0.0		0	0.0
20-29	24	725	4.8	19	457	3.0		0	0.0	5	109	.7
30-39	81	3,603	7.9	71	3,713	8.2	7	300	.7	9	531	1.2
40-49	110	5,824	11.2	91	4,872	9.4	5	232	.4	15	610	1.2
50-89	338	10,390	20.6	201	4,014	7.9	11	389	.8	24	271	.5
Total	560	20,720	11.8	409	14,148	8.1	24	933	.5	56	2,136	1.2

*1980 codes for Cause of Death

TABLE 7B—Continued

Age at Issue	No. of Deaths	Amount	Percentage Claims	No. of Deaths	Amount	Percentage Claims	No. of Deaths	Amount	Percentage Claims	No. of Deaths	Amount	Percentage Claims		
	Nervous System & Mental Diseases						Respiratory Diseases Pneumonia & Influenza, etc. (56-63)*			Genito-Urinary Diseases Nephritis, etc. (73-77)*				
	Vascular Lesions (53)*			Other (41,43-47)*										
00-09	2	25	.4	6	103	1.7	3	69	1.2	1	22	.4		
10-19	1	5	.1	5	78	1.2	5	107	1.7	1	4	.1		
20-29	9	365	2.4	7	149	1.0	10	445	2.9	1	10	.1		
30-39	20	589	1.3	15	1,069	2.3	17	710	1.6	5	115	.3		
40-49	32	1,024	2.0	16	392	.8	31	1,482	2.9	8	108	.2		
50-89	87	2,630	5.2	30	715	1.4	122	1,541	3.0	9	156	.3		
Total	151	4,639	2.6	79	2,506	1.4	188	4,354	2.5	25	415	.2		
	Other Accidents & Homicides (89-91,93,96,98)*						Suicides (97)*			All Other Diseases & Unknown Causes (Other Codes ***)*				
	Motor Vehicle Accidents (88)*													
00-09	27	570	9.5	11	452	7.6	9	679	11.4	18	358	6.0		
10-19	24	642	10.2	15	381	6.1	20	536	8.5	38	665	10.6		
20-29	44	1,597	10.5	25	1,645	10.8	43	1,602	10.5	70	2,152	14.2		
30-39	39	2,547	5.6	30	2,027	4.4	37	3,897	8.6	124	7,763	17.0		
40-49	29	1,639	3.2	15	602	1.2	23	2,065	4.0	124	11,231	21.7		
50-89	15	621	1.2	16	795	1.6	11	497	1.0	238	9,713	19.2		
Total	178	7,616	4.3	112	5,902	3.4	143	9,276	5.3	612	31,881	18.2		

*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 1991-1992
 POLICY YEARS 16+
 (AMOUNTS SHOWN IN \$1,000 UNITS)

Age at Issue	No. of Deaths	Amount	Percentage Claims	No. of Deaths	Amount	Percentage Claims	No. of Deaths	Amount	Percentage Claims	No. of Deaths	Amount	Percentage Claims	
Malignant Neoplasms (18-33)*				Diabetes Mellitus (37)*				Infective & Parasitic Diseases Tuberculosis, etc. (01,03-17)*				AIDS (02)*	
15-19	10	96	23.5	2	19	4.7	0	0	0.0	0	0	0.0	
20-29	22	127	6.1	5	24	1.1	1	10	.5	6	67	3.2	
30-39	62	343	18.4	9	45	2.4	5	32	1.7	38	285	15.3	
40-49	283	2,558	27.1	20	110	1.2	52	355	3.8	85	763	8.1	
50-59	770	6,528	32.5	7	91	.5	143	886	4.4	167	828	4.1	
60-69	1,941	11,861	34.6	13	74	.2	384	1,851	5.4	388	1,608	4.7	
70-99	3,512	14,976	24.7	49	177	.3	731	2,888	4.8	410	1,581	2.6	
Total	6,600	36,489	28.3	105	539	.4	1,316	6,021	4.7	1,094	5,132	4.0	
Diseases of the Heart & Circulatory System													
Arteriosclerotic & Degenerative Heart Disease (50)*				Hypertensive & Rheumatic, etc. (49,51,52,54,55)*				Diseases of the Digestive System					
Cirrhosis of the Liver (70)*				Other (64-69,71,72)*									
15-19	0	0	0.0	3	40	9.8	0	0	0.0	0	0	0.0	
20-29	6	29	1.4	6	41	2.0	0	0	0.0	3	16	.8	
30-39	20	174	9.3	23	137	7.3	1	5	.3	6	50	2.7	
40-49	89	685	7.3	111	1,602	17.0	6	58	.6	12	55	.6	
50-59	334	2,974	14.8	350	2,970	14.8	17	176	.9	48	203	1.0	
60-69	738	4,101	12.0	877	5,553	16.2	36	233	.7	73	388	1.1	
70-99	1,665	5,993	9.9	2,771	11,314	18.6	22	98	.2	116	335	.6	
Total	2,852	13,956	10.8	4,141	21,656	16.8	82	570	.4	258	1,047	.8	

*1980 codes for Cause of Death

TABLE 7C--Continued

Age at Issue	No. of Deaths	Amount	Percentage Claims	No. of Deaths	Amount	Percentage Claims	No. of Deaths	Amount	Percentage Claims	No. of Deaths	Amount	Percentage Claims	
Nervous System & Mental Diseases													
Vascular Lesions (53)*				Other (41,43-47)*				Respiratory Diseases				Genito-Urinary Diseases	
								Pneumonia & Influenza, etc. (56-63)*				Nephritis, etc. (73-77)*	
15-19	0	0	0.0	1	13	3.2	2	8	2.0	0	0	0.0	
20-29	1	5	.2	6	36	1.7	7	48	2.3	0	0	0.0	
30-39	14	54	2.9	7	65	3.5	7	44	2.3	2	6	.3	
40-49	25	250	2.7	17	103	1.1	38	412	4.4	9	74	.8	
50-59	75	674	3.4	41	364	1.8	55	413	2.1	26	189	.9	
60-69	207	1,371	4.0	61	298	.9	235	1,089	3.2	58	296	.9	
70-99	779	3,499	5.8	345	1,676	2.8	1,151	4,325	7.1	182	804	1.3	
Total	1,101	5,854	4.5	478	2,554	2.0	1,495	6,338	4.9	277	1,368	1.1	
Motor Vehicle Accidents (88)*													
Other Accidents & Homicides (89, 91, 93, 96, 98)*				Suicides (97)*				All Other Diseases & Unknown Causes (Other Codes **)*					
15-19	16	125	30.7	6	45	11.0	4	31	7.5	6	31	7.6	
20-29	35	194	9.3	19	103	4.9	15	93	4.4	279	1,295	62.1	
30-39	26	123	6.6	16	96	5.1	17	146	7.8	52	264	14.1	
40-49	39	416	4.4	31	455	4.8	32	383	4.1	133	1,156	12.3	
50-59	36	354	1.8	33	478	2.4	27	260	1.3	302	2,691	13.4	
60-69	51	375	1.1	36	267	.8	23	160	.5	716	4,716	13.8	
70-99	56	198	.3	46	172	.3	18	66	.1	3,037	12,593	20.7	
Total	259	1,785	1.4	187	1,615	1.3	136	1,140	.9	4,525	22,747	17.7	

*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 1991 AND 1992
EXPECTED CIA 82-88 TABLES

Select Experience	Ratio A/E			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Male Smokers									
By Policy Year									
1	91.2	11.9	82.8	58	3,977	60,175	4,628,617	64	4,806
2	87.8	9.93	97.2	78	6,662	66,767	5,239,959	89	6,853
3	96.5	10.0	95.9	93	6,567	60,363	4,458,580	96	6,845
4	113.0	10.2	89.5	122	6,383	59,048	4,030,245	108	7,131
5	98.1	9.23	82.8	113	5,644	53,017	3,301,492	115	6,816
6-10	109.9	3.77	92.8	847	27,774	219,514	10,272,799	771	29,943
11-15	100.4	9.16	104.5	120	4,917	26,863	972,970	120	4,706
Total	105.1	2.77	92.3	1,431	61,924	545,747	32,904,661	1,362	67,100
By Issue Age									
0-4	60.7	17.5	56.2	12	322	73,964	2,038,704	20	573
5-14	70.4	17.0	66.9	17	472	50,792	1,630,554	24	706
15-24	107.0	12.1	104.0	78	3,182	74,737	3,248,412	73	3,060
25-34	94.9	7.13	81.5	177	11,295	163,337	12,895,846	186	13,860
35-44	83.8	5.38	71.4	242	14,844	113,790	9,503,490	289	20,785
45-54	106.6	5.41	116.6	388	20,845	48,595	2,926,620	364	17,882
55-64	124.9	6.56	103.6	362	8,971	16,928	604,132	290	8,660
65-89	133.2	10.6	126.6	155	1,994	3,604	56,903	116	1,575
Total	105.1	2.77	92.3	1,431	61,924	545,747	32,904,661	1,362	67,100

*Shown in \$1,000 units.

TABLE 8--Continued

Select Experience	Ratio A/B:			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount ^a	Number	Amount ^b	Number	Amount ^c
Male Nonsmokers									
By Policy Year									
1	100.8	10.9	65.7	85	6,814	102,392	13,572,511	84	10,374
2	99.3	8.74	79.1	129	12,688	119,472	16,417,849	130	16,048
3	80.7	7.62	102.3	112	16,772	112,601	14,663,969	139	16,396
4	85.0	7.23	84.6	138	15,081	117,303	13,578,103	162	17,826
5	88.1	6.89	85.6	163	15,729	118,600	12,533,102	185	18,368
6-10	77.3	2.77	80.9	776	61,970	462,464	37,810,172	1,004	76,640
11-15	88.6	8.90	116.9	99	13,132	36,686	3,491,810	112	11,235
Total	82.7	2.13	85.2	1,502	142,186	1,069,518	112,067,516	1,816	166,885
By Issue Age									
0-4	14.9	14.8	.6	1	1	29,060	707,717	7	181
5-14	51.3	19.3	21.3	7	82	23,494	700,340	14	385
15-24	87.5	8.79	111.8	99	7,513	158,429	9,636,946	113	6,723
25-34	81.7	5.77	83.2	200	21,924	363,554	40,303,423	245	26,365
35-44	89.0	4.89	103.2	331	47,459	294,421	39,545,597	372	45,994
45-54	80.3	4.09	70.1	385	34,823	140,617	16,495,147	479	49,650
55-64	80.0	4.31	78.4	344	24,022	51,031	4,253,956	430	30,643
65-89	85.9	7.39	91.6	135	6,362	8,912	424,389	157	6,944
Total	82.7	2.13	85.2	1,502	142,186	1,069,518	112,067,516	1,816	166,885

*Shown in \$1,000 units.

TABLE 8—Continued

Select Experience	Ratio A/E			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Male Unclassified									
By Policy Year									
1	119.2	13.0	64.7	83	2,078	79,594	4,036,773	70	3,212
2	110.7	11.2	62.7	96	2,597	74,654	3,963,914	87	4,144
3	101.7	12.2	66.2	69	2,449	61,545	3,397,820	68	3,698
4	110.7	12.2	79.2	81	3,049	61,658	3,068,188	73	3,849
5	110.5	11.4	74.4	93	2,906	63,363	2,931,760	84	3,907
6-10	117.7	4.27	103.0	758	20,397	290,080	10,252,337	644	19,809
11-15	98.6	3.03	95.9	1,055	28,599	396,890	9,947,583	1,070	29,811
Total	106.6	2.25	90.7	2,235	62,075	1,027,784	37,598,375	2,096	68,431
By Issue Age									
0-4	102.6	13.8	88.7	55	978	185,489	3,892,440	54	1,102
5-14	105.6	12.7	114.9	69	1,584	104,998	2,653,808	65	1,378
15-24	111.9	8.43	92.4	176	3,752	184,598	4,888,845	157	4,061
25-34	107.1	5.96	99.4	322	12,292	275,049	12,440,106	301	12,361
35-44	101.0	4.94	92.1	417	16,996	164,709	9,248,489	413	18,456
45-54	104.5	4.57	82.9	521	15,108	75,293	3,488,876	499	18,229
55-64	107.8	4.94	80.8	475	8,289	30,972	867,423	441	10,260
65-89	120.2	8.49	119.1	200	3,076	6,676	118,387	166	2,584
Total	106.6	2.25	90.7	2,235	62,075	1,027,784	37,598,375	2,096	68,431

*Shown in \$1,000 units.

TABLE 8—Continued

Select Experience	Ratio A/I:			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount ^a	Number	Amount ^b	Number	Amount ^c
Female Smokers									
By Policy Year									
1	135.5	23.9	116.9	32	1,296	44,870	2,533,748	24	1,108
2	98.2	16.1	80.3	37	1,433	51,879	2,960,957	38	1,785
3	93.8	15.0	60.7	39	1,089	46,528	2,460,375	42	1,795
4	111.8	15.3	119.4	53	2,170	45,867	2,243,976	47	1,817
5	135.9	16.3	120.9	69	2,026	40,040	1,744,244	51	1,676
6-10	95.1	5.38	84.4	312	5,788	163,789	5,056,119	328	6,859
11-15	93.7	16.0	71.8	34	520	15,937	336,893	36	724
Total	101.9	4.24	90.8	576	14,321	408,910	17,336,313	565	15,764
By Issue Age									
0-4	42.6	16.0	33.5	7	166	68,026	1,907,902	16	497
5-14	97.3	32.4	133.7	9	371	44,949	1,427,280	9	278
15-24	92.6	17.8	86.1	27	955	72,057	2,968,788	29	1,110
25-34	89.6	10.5	90.0	72	3,777	112,093	6,705,590	80	4,196
35-44	87.0	8.65	75.2	101	3,444	66,811	3,285,773	116	4,581
45-54	105.4	8.88	113.4	141	3,168	29,565	793,867	134	2,793
55-64	116.3	9.49	106.9	150	1,841	12,659	211,476	129	1,723
65-89	134.3	16.1	101.7	69	598	2,750	35,637	51	588
Total	101.9	4.24	90.8	576	14,321	408,910	17,336,313	565	15,764

*Shown in \$1,000 units.

TABLE 8—Continued

Select Experience	Ratio A/E			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Female Nonsmokers									
By Policy Year									
1	87.6	16.8	125.6	27	2,784	78,049	6,920,539	31	2,216
2	79.5	12.1	104.3	43	3,741	88,636	7,790,944	54	3,586
3	86.8	12.1	58.0	51	2,106	81,082	6,581,722	59	3,629
4	96.5	11.7	86.4	67	3,286	86,161	6,102,543	69	3,802
5	104.8	11.4	82.0	84	3,216	84,764	5,493,049	80	3,924
6-10	85.1	4.46	92.2	363	12,902	314,143	14,674,266	427	13,989
11-15	78.8	18.5	116.5	18	1,215	17,293	803,319	23	1,043
Total	87.9	3.44	90.9	653	29,249	750,128	48,366,381	743	32,188
By Issue Age									
0-4	76.2	38.0	47.3	4	69	27,230	654,603	5	146
5-14	64.5	37.2	29.4	3	35	20,926	563,246	5	119
15-24	107.1	16.5	94.7	42	1,907	137,284	7,338,836	39	2,014
25-34	85.8	8.80	73.6	95	6,119	264,338	21,599,552	111	8,308
35-44	96.1	8.09	106.9	141	10,069	178,658	13,360,587	147	9,418
45-54	96.2	7.96	102.9	146	5,857	76,845	3,572,988	152	5,690
55-64	81.5	6.70	96.7	148	4,080	35,302	1,026,280	182	4,218
65-89	72.0	8.36	49.0	74	1,114	9,545	250,288	103	2,275
Total	87.9	3.44	90.9	653	29,249	750,128	48,366,381	743	32,188

*Shown in \$1,000 units.

TABLE 8--Continued

Select Experience	Ratio A/E			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount*	Number	Amount†	Number	Amount‡
Female Unclassified									
By Policy Year									
1	145.8	20.8	107.8	49	990	70,577	2,421,298	34	919
2	104.9	15.9	78.1	43	831	63,140	2,217,323	41	1,064
3	102.9	17.3	55.9	35	532	53,595	1,950,108	34	952
4	105.2	16.6	99.0	40	913	54,205	1,771,015	38	922
5	93.9	14.3	103.4	43	1,037	56,252	1,732,713	46	1,003
6-10	112.6	5.65	97.3	396	4,875	246,060	5,724,856	352	5,012
11-15	77.6	3.65	75.0	452	4,371	292,800	3,912,075	582	5,826
Total	93.9	2.88	86.3	1,058	13,549	836,629	19,729,388	1,127	15,698
By Issue Age									
0-4	81.8	14.9	81.3	30	719	172,062	3,730,044	37	884
5-14	118.0	23.1	125.9	26	642	94,624	2,463,212	22	510
15-24	93.9	11.7	75.5	64	959	156,181	3,242,774	68	1,270
25-34	78.2	7.20	64.0	118	2,333	203,609	5,968,698	151	3,647
35-44	107.8	7.49	103.1	207	3,871	116,132	3,080,312	192	3,755
45-54	102.2	6.52	82.3	245	2,214	56,234	883,620	240	2,690
55-64	90.8	5.69	87.1	254	1,745	29,507	290,257	280	2,002
65-89	83.1	7.78	113.6	114	1,067	8,280	70,471	137	939
Total	93.9	2.88	86.3	1,058	13,549	836,629	19,729,388	1,127	15,698

*Shown in \$1,000 units.

TABLE 9

CANADIAN STANDARD ORDINARY EXPERIENCE BETWEEN POLICY ANNIVERSARIES N 1991 AND 1992
MALES & FEMALES COMBINED—EXPECTED CIA 82–88 TABLES

Select Experience	Ratio A/E			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Permanent									
By Policy Year									
1–5	103.4	2.56	91.0	1,620	61,166	1,549,416	73,845,524	1,567	67,227
6–15	97.0	1.44	95.1	4,531	107,248	2,143,686	59,924,845	4,673	112,789
Total	98.6	1.25	93.6	6,151	168,413	3,693,102	133,770,369	6,240	180,016
By Issue Age									
0–29	94.9	2.95	88.5	1,032	30,789	2,118,238	67,830,949	1,087	34,776
30–54	97.9	1.81	98.6	2,917	99,580	1,397,399	61,539,589	2,980	101,013
55–89	101.3	2.15	86.0	2,202	38,044	177,465	4,399,831	2,173	44,226
Total	98.6	1.25	93.6	6,151	168,413	3,693,102	133,770,369	6,240	180,016
Term									
By Policy Year									
1–5	82.6	4.46	77.6	342	52,508	395,865	63,932,475	414	67,629
6–15	92.3	3.84	94.0	578	62,797	279,878	29,680,341	626	66,793
Total	88.5	2.91	85.8	920	115,305	675,743	93,612,815	1,040	134,421
By Issue Age									
0–29	88.5	9.48	92.4	87	9,298	157,281	17,038,492	98	10,059
30–54	89.2	3.32	83.7	718	89,916	500,800	74,147,678	805	107,383
55–89	84.1	7.83	94.8	115	16,091	17,662	2,426,645	137	16,979
Total	88.5	2.91	85.8	920	115,305	675,743	93,612,815	1,040	134,421
Other									
By Policy Year									
1–5	84.5	12.3	88.4	47	1,416	88,843	2,571,069	56	1,602
6–15	67.1	15.8	93.5	18	616	21,930	565,144	27	658
Total	78.9	9.78	89.9	65	2,031	110,773	3,136,212	82	2,260
By Issue Age									
0–29	69.6	15.9	72.9	19	563	70,092	1,877,944	27	773
30–54	86.7	13.0	99.7	44	1,398	39,909	1,242,279	51	1,401
55–89	45.3	32.0	81.7	2	71	772	15,989	4	87
Total	78.9	9.78	89.9	65	2,031	110,773	3,136,212	82	2,260

*Shown in \$1,000 units.

TABLE 9—Continued

Select Experience	Ratio A/F			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Term Rider									
By Policy Year									
1-5	0.0	0	80.5	0	7,979	0	13,260,070	0	9,915
6-15	0.0	0	65.0	0	9,986	0	10,013,062	0	15,366
Total	0.0	0	71.1	0	17,965	0	23,273,132	0	25,281
By Issue Age									
0-29	0.0	0	57.6	0	3,071	0	9,125,155	0	5,329
30-54	0.0	0	75.6	0	13,527	0	13,890,385	0	17,884
55-89	0.0	0	66.1	0	1,366	0	257,592	0	2,067
Total	0.0	0	71.1	0	17,965	0	23,273,132	0	25,281
Permanent Term									
By Policy Year									
1-5	105.9	7.20	97.7	216	13,775	122,078	11,138,948	204	14,100
6-15	72.3	7.12	58.2	103	5,814	37,039	3,073,275	142	9,996
Total	92.1	5.15	81.3	319	19,589	159,117	14,212,223	346	24,096
By Issue Age									
0-29	133.9	25.3	199.5	28	3,735	41,459	3,716,882	21	1,872
30-54	82.4	7.22	62.8	130	8,267	97,388	9,385,416	158	13,168
55-89	96.0	7.56	83.8	161	7,587	20,270	1,109,926	168	9,056
Total	92.1	5.15	81.3	319	19,589	159,117	14,212,223	346	24,096

*Shown in \$1,000 units.

TABLE 9—Continued

Ultimate Data	Ratio A/E			Actual Deaths		Exposures		Expected Deaths	
	Number	S.D.	Amount	Number	Amount*	Number	Amount*	Number	Amount*
Unknown									
By Attained Age									
45–69	0.0	0.0	0.0	0	0	2	1	0	0
Total	0.0	0.0	0.0	0	0	2	1	0	0
Permanent									
By Attained Age									
15–44	109.7	3.55	97.6	950	6,204	835,089	5,731,842	866	6,359
45–69	94.2	.933	88.1	10,177	59,463	1,156,231	7,613,589	10,809	67,502
70–99	96.5	.716	93.1	18,124	67,545	337,188	1,331,028	18,781	72,581
Total	96.0	.561	91.0	29,251	133,212	2,328,508	14,676,459	30,456	146,442
Term									
By Attained Age									
15–44	89.4	24.8	95.0	13	402	9,493	266,784	15	423
45–69	75.5	5.82	67.5	168	3,530	36,916	932,415	223	5,228
70–99	23.6	23.6	24.3	1	15	107	1,773	4	62
Total	75.4	5.59	69.1	182	3,947	46,516	1,200,971	241	5,713
Other									
By Attained Age									
15–44	37.4	37.4	68.5	1	12	2,302	13,734	3	17
45–69	63.2	10.9	94.8	33	244	7,089	37,432	52	257
70–99	96.4	30.4	98.6	10	21	207	416	10	21
Total	67.4	10.1	93.5	44	277	9,598	51,583	65	296
Term Rider									
By Attained Age									
15–44	0.0	0.0	66.2	0	425	0	461,177	0	641
45–69	0.0	0.0	64.8	0	2,239	0	614,197	0	3,456
70–99	0.0	0.0	166.3	0	635	0	8,844	0	382
Total	0.0	0.0	73.7	0	3,299	0	1,084,218	0	4,479
Permanent-Term									
By Attained Age									
15–44	0.0	0.0	27.4	0	20	622	54,371	1	73
45–69	87.9	15.5	100.8	32	1,239	3,509	144,267	36	1,230
70–99	35.1	15.6	24.2	5	46	360	5,562	14	189
Total	71.9	11.8	87.5	37	1,305	4,491	204,200	51	1,492

*Shown in \$1,000 units.

