Report on

Hong Kong Assured

Lives Mortality

1997

Actuarial Society of Hong Kong

Introduction

The Council of the Actuarial Society of Hong Kong has great pleasure in presenting its second full report on the mortality of assured lives in Hong Kong.

The Society is indebted to a number of people and companies:-

Dallas Reid of Winterthur Life for taking responsibility within the Council for this project and seeing through to a successful conclusion.

Elsa Lee and Alex Yue of Winterthur Life, and Annie Poon of the University of Hong Kong for their considerable time and effort which they have put into the production of this report.

AIA, CELA, Dah Sing Life, Eagle Star, East Asia Aetna, HSBC Life, CMG Life, Lippo Protective, Manulife, National Mutual, New York Life, Prudential and Winterthur Life for contributing the underlying data.

The Council intends to continue analysing the emerging experience of mortality and morbidity of Hong Kong's assured lives, and as the volume of data grows, it will become possible to make meaningful analyses of different aspects of mortality. The success of this work will depend on the continued co-operation of the life offices in Hong Kong, and of actuaries and actuarial students contributing their time and energy to the study.

CF Yam
President

HONG KONG ASSURED LIVES MORTALITY (1992 - 1996)

TABLE OF CONTENTS

SECTION I

Construction of the HKA97 mortality table

1. 1 Data

Study Period

The study period for mortality monitoring is from 1st January 1992 to 31st December 1996. The study period for cause of death is from 1991 to 1996.

Data Requirement

The specifications of the data are as follows :

- the data were based on numbers of lives
- the data were split by sex
- the data included smoker and non-smoker combined
- the data included medical and non-medical business combined
- only standard lives were included
- age definition is attained age last birthday
- the data was split into durations 0, 1, 2+, duration definition is actual curate duration inforce
- joint life policies were excluded
- non-forfeiture options such as ETI and RPU were excluded
- in force data were required at beginning of each year
- number of deaths included incurred but not paid

Data Collected

Thirteen companies has contributed data in this study. The participating companies are listed in Appendix 4.10.

Data was originally requested for the ten years 1987 to 1996 however only four companies could provide data for more than eight years. There are three new companies who have two to three years experience in Hong Kong. The remaining companies provided four to seven years of information , mainly due to system unavailability.

Some companies cannot conform to the calendar year basis for certain years. Adjustment has been made assuming uniform distribution.

Several companies cannot exclude multiple lives and a few of them cannot exclude non-forfeiture option as well. However, the effects are not expected to be significant.

We have added information from previous studies for those companies who included only 95 and 96 data, provided that they show consistency after adjustment.

For some companies, we have ignored part of the information when inconsistency among inforce and death data exists. For example, death of year x will be excluded if no exposure for the period can be calculated from the corresponding inforce data.

The inforce data, exposure and actual deaths are presented in Appendix 4.17 - 4.19. The tables are by calendar year, sex and duration.

1. 2 Calculation of Exposure

As in the previous studies, the exposed to risk was calculated by applying the simple census method. Let P_0 be the number of policies in force at the start of the calendar year, and P_1 be the number at the end of the year. The exposed to risk for each calendar year was found by :

$$E^c = \frac{(P_0 + P_1)}{2}$$

This method makes the assumption that new business is written halfway through the year. Hence, it may lead to slight overstatement of exposure in rapid business growth companies. However, as shown in Appendix 4.4, the overall skewed effect is minimal.

1. 3 Graduation Method (HKA97)

The methodology is that used in the study on Hong Kong Assured Life Mortality 1987-1991.

- The numbers relating to exposed to risk and deaths are grouped into five year age intervals.

- Pivotal exposure (E_x^P) and pivotal deaths (D_x^P) will be computed based on the third differences King's formula for age 9, 14, 19 , ... , 79.

$$E_x^P = .2\ {}_5E_{x-2} - .008\ ({}_5E_{x-7} - 2\ {}_5E_{x-2} + {}_5E_{x+3})$$ and

$$D_x^P = .2\ {}_5D_{x-2} - .008\ ({}_5D_{x-7} - 2\ {}_5D_{x-2} + {}_5D_{x+3})$$, for x = 9, 14, ... , 74, 79

where

${}_5E_x$ = number exposed to risk (duration 2 and over) , for age x to x+4

${}_5D_x$ = number exposed to deaths (duration 2 and over) , for age x to x+4

- The central crude death rates (m_x) will be then calculated based on the pivotal exposures and pivotal deaths.

$$m_x = \frac{D_x^P}{E_x^P}$$

- The crude death rates for duration 2 and over are graduated using the Whittaker Henderson (WH) method.

The **WH method** employs the following equation:

$$M = \sum_{x=1 \text{ to } n} W_x (V_x - m_x)^2 + h * \sum_{x=1 \text{ to } n-3} (\Delta^3 V_x)^2$$

where

m_x = central crude death rates

W_x = the weightings for each age

V_x = the graduated death rates

n = the number of groupings

h = the average of the W_x's over n groupings

- The weights are equal to the total exposure in each grouping.

- The V_x's for the pivotal ages within each group are calculated so as to minimise the value of M.

- The mortality rate (q_x) at a pivotal age is calculated by assuming a uniform distribution of death.

$$q_x = \frac{V_x}{(1 + .5 * V_x)}$$

- The intermediate values are calculated by the four point Karup-King interpolation method:

$$V_{x+s*5} = F(s)\, V_{x+5} + F(1-s)\, V_x$$

where

$$F(s) = s + .5\, s^2\, (s-1)\, \delta^2\,,\ s = .2, .4, \ldots, .8$$

- The graduation was carried out over the age range 14 to 74 for both sexes. The mortality rates above and below the age range were taken as a constant proportion of the Hong Kong Life Tables 1995. The proportions used were equal to the ratio of the graduated rates to the Hong Kong Life Tables rates at ages 14 and 74 for both sexes.

1. 4 Review of Graduation Method in previous studies

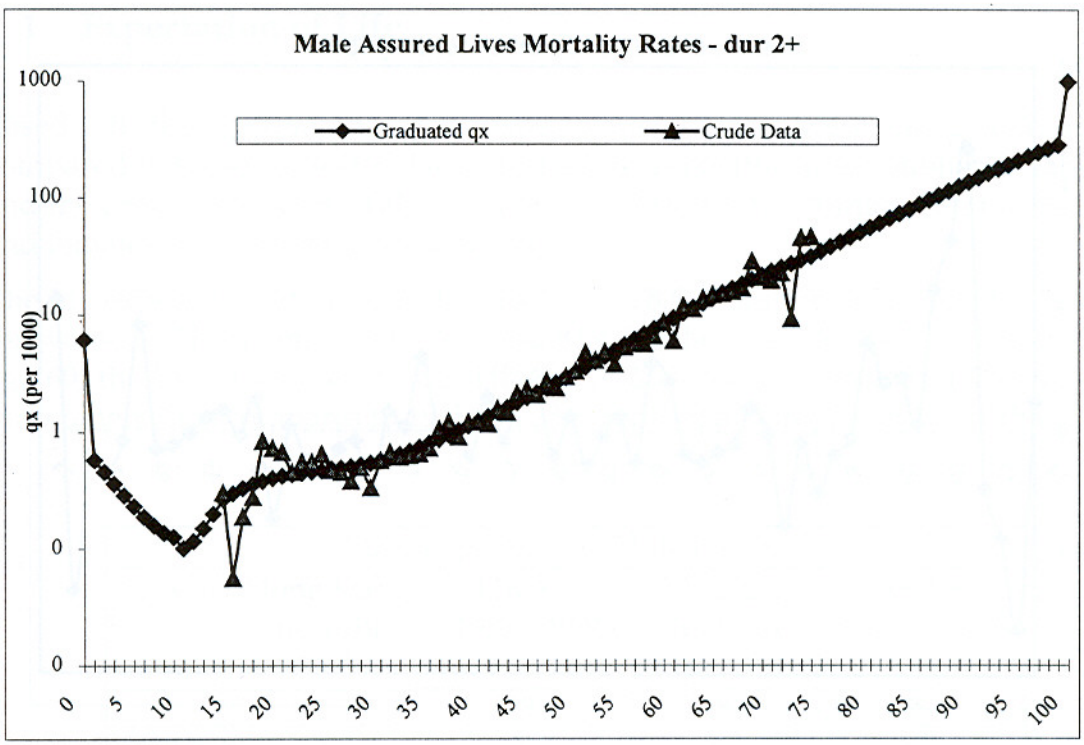
HKA93 Method (1987 - 1991)

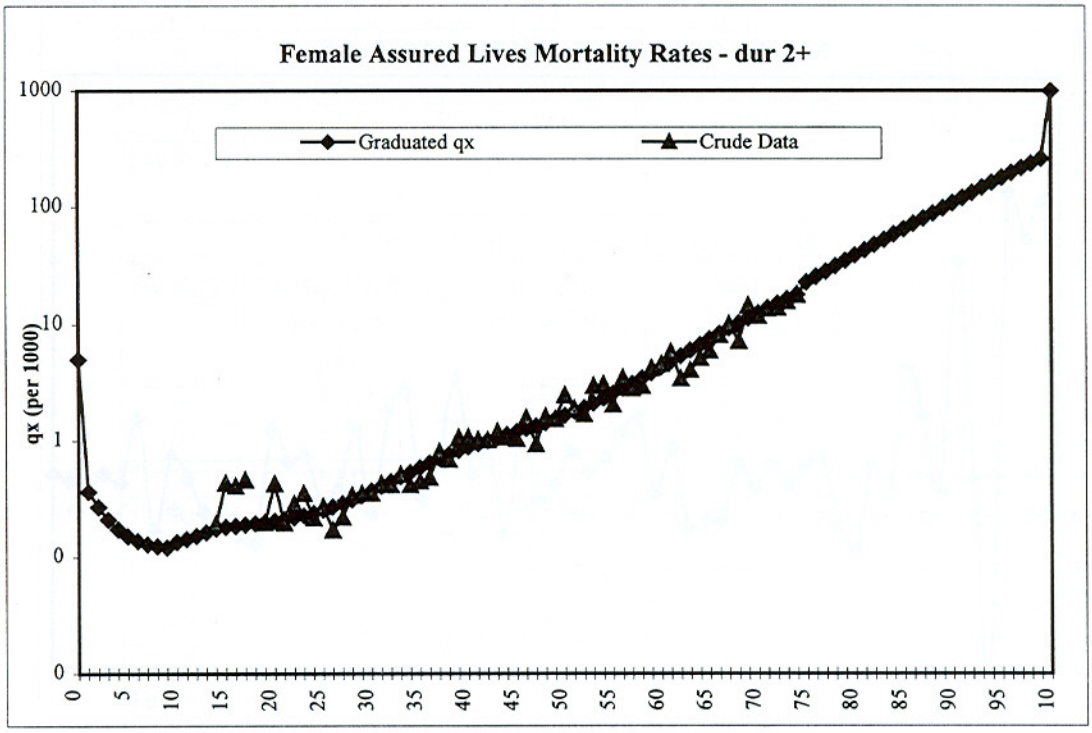
- The methodology is basically same as described above, except

- The graduation was carried out over the age range 13 to 74 for males and 13 to 68 for females. The mortality rates above and below the age ranges of 13 and 71 for males and 20 and 68 for females were taken as a constant proportion of the Hong Kong Life Tables 1991. The proportions used were equal to the ratio of the graduated rates to the Hong Kong Life Tables rates at ages 13 and 71 for males and ages 20 and 68 for females.

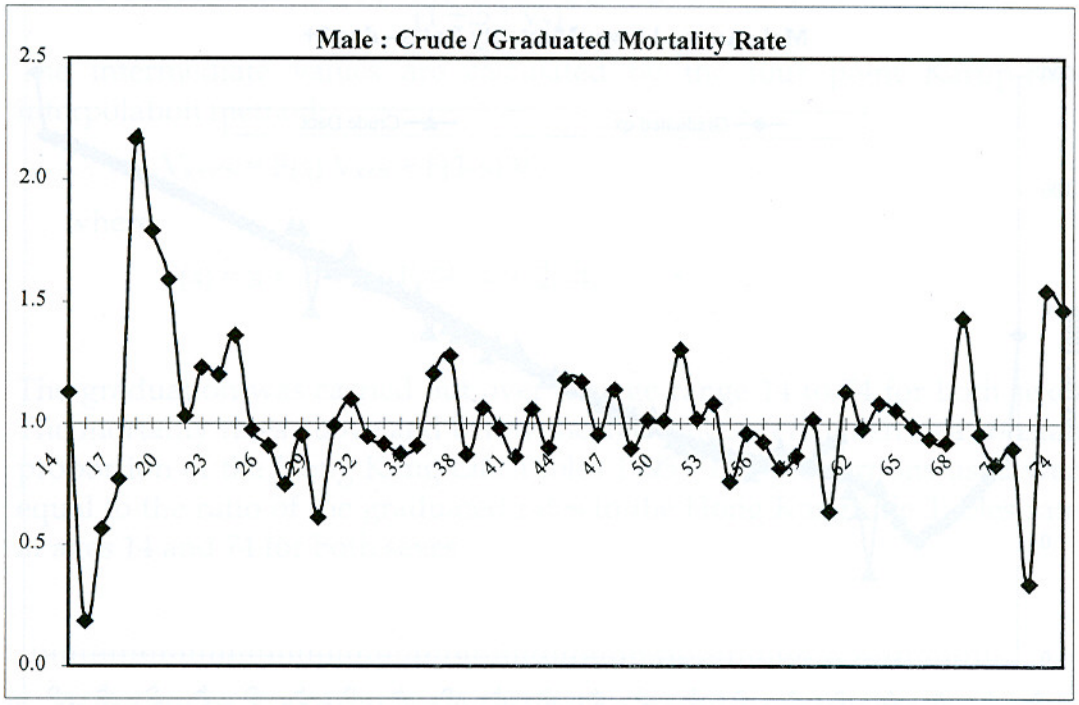
- The reason why the HKA93 study used different ranges for male and female was probably due to the lack of data. For example, there were only ten female deaths from age 2 to age 19 for the study period and none for ages 14, 15, 17 and 19. As shown in Appendix 4.9, we have got relatively more data in this study and thus, we do not follow exactly the graduated age ranges as the HKA93 Method.

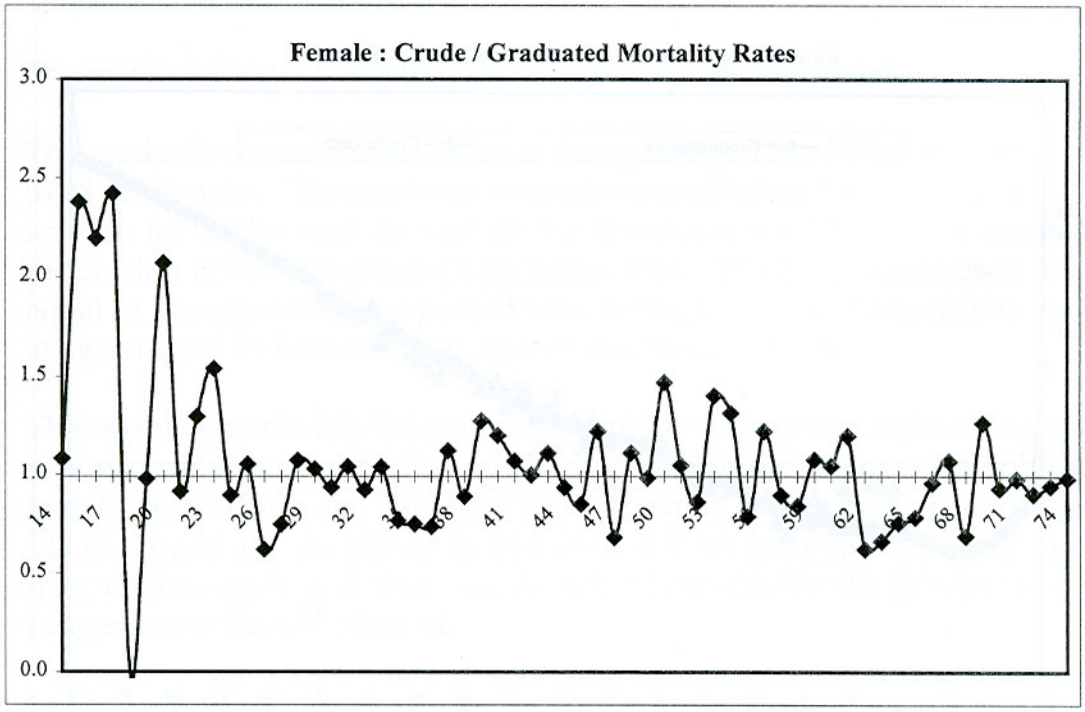
1. 5 Graphs of Graduated and Crude Mortality Rates





The following graphs show the ratio of crude mortality rates to the graduated mortality rates.





SECTION II

Results

2. 1 Expectation of Life

Based on the graduated rates, expectations of life were calculated and compared to those from 1995 Hong Kong Life Table (the latest published table) and the previous studies. Table 2.1.1 and 2.1.2 shows the comparison for males and females respectively at selected ages.

The life expectancy at birth under HKA97 is 78.6 years for men and 83.6 years for women. This compares to 76.0 and 81.4 for the Hong Kong Life Table. At age 60, the life expectancy under HKA97 is 22.1 years for men and 25.9 years for women. This compares to 19.9 and 23.8 under the Hong Kong Life Table.

Male Expectation of Life (years)				
At Age	Hong Kong Life Table 1995	HKA93 (1987 - 1991)	Modified Method (1988 - 1992)	HKA97 (1987 - 1996)
0	76.0	80.2	78.4	78.6
10	66.5	71.2	69.3	69.3
20	56.7	61.4	59.5	59.4
30	47.0	51.6	49.7	49.7
40	37.5	41.9	40.0	40.0
50	28.3	32.5	30.6	30.7
60	19.9	23.7	21.7	22.1
70	12.8	15.9	13.8	14.8

Table 2.1.1

Female Expectation of Life (years)				
At Age	Hong Kong Life Table 1995	HKA93 (1987 - 1991)	Modified Method (1988 - 1992)	HKA97 (1987 - 1996)
0	81.4	85.0	82.3	83.6
10	71.9	75.9	73.6	74.1
20	62.0	66.1	63.7	64.3
30	52.2	56.4	53.9	54.4
40	42.5	46.7	44.2	44.7
50	32.9	37.1	34.6	35.2
60	23.8	28.0	25.4	25.9
70	15.4	19.5	16.8	17.5

Table 2.1.2

2. 2 Selection Effects

The crude death rates for duration 0 and 1 were not graduated. A comparison of select to ultimate experience was made on an actual to expected deaths basis. The actual deaths for the select duration were compared with those that would be expected given the same exposure, by applying the graduated ultimate death rates. The results of this comparison are shown in Appendix 4.3.

For males, at duration 0, there appeared to be a significant selection effect. The overall ratio of actual to expected deaths was 49.1%. For duration 1, the actual to expected ratio was 78.0%.

For females, the observed effect of selection is more pronounced. At duration 0, the actual to expected death ratio was 39.8%. Whilst at duration 1, the ratio was 74.9%.

These results are similar to those observed in previous studies.

Actual select deaths to Expected ultimate deaths

Study	Male Duration 0	Male Duration 1	Female Duration 0	Female Duration 1
87 - 91 (HKA93)	71.7	104.9	43.6	66.2
88 - 92 (Modified)	67.9	91.5	39.0	58.4
92 - 96 (HKA97)	49.1	78.0	39.8	74.9

2. 3 Comparison with HKA 93

Appendix 4.5 shows a comparison of the HKA97 table with its predecessor, HKA93.

The aggregate female experience is very consistent with the earlier table with actual to expected ratio of 99.8% (using HKA93 as the expected deaths).

The aggregate male experience for HKA97 is 122.7% of HKA93. Whilst both tables were based on five years' experience (1987-1991 and 1992-1996) the number of deaths underlying the more recent table is 386% greater than that underlying HKA93 because of the substantial increase in insured lives in Hong Kong over this period. Further analysis of the experience year by year over the full ten year period demonstrates a much greater volatility year on year for the earlier period, which at least in part is caused by the relatively small volume of data.

Because of this, it is believed that HKA97 is likely to be a better reflection of the actual mortality risks in Hong Kong's current assured lives pool, and that subject to no major underlying changes in mortality (e.g. from AIDS) it is not expected that observed mortality will deviate significantly from this table in the near future.

2. 4 International Comparison

A comparison of HKA97 with other countries' assured lives mortality tables is given in Appendix 4.6. Both mortality rates and expectation of future life are shown at each attained age.

The figures appear to show that Hong Kong has the lightest assured lives mortality of any of the countries given. However, any direct comparison is not valid in a number of ways, in particular because the tables cover different calendar years of exposure (Hong Kong's being the most up to date), and because HKA97 represents the "best guess" of Hong Kong assured life mortality whereas several of the other tables have explicit or implicit loadings.

2. 5 Use of HKA97

As with HKA93 actuaries intending to use these tables should bear in mind : -

- the data is based on permanent assurance experience only;
- the data excludes the first two years of policy duration;
- despite the considerable increase in exposure compared to HKA93, the tables are based on a relatively small amount of data;
- the tables pool data across all offices and considerable variations in experience between offices have been observed;
- there is no margin for conservatism built into the tables

Accordingly appropriate adjustments should be made before any use is made of these tables.

SECTION III

Cause of Death Study

3. 1 Cause of Death Summary (1991 - 96)

Causes of death are studied and are grouped into the following nine categories.

Since the cause of death study is independent from the mortality study, we do not exclude data here. Thus the number of deaths are inconsistent with the results in Appendix 4.9.

Number of Deaths by Cause

Cause of Death	1991 - 1996 Total Number		
	Male	Female	Total
1 Neoplasms (Malignacies)	1,759	778	2,537
2 Diseases of the Circulatory System	738	288	1,026
3 Diseases of the Respiratory System	461	186	647
4 Diseases of the Digestive System	346	85	431
5 Diseases of the Genito-Urinary System	76	66	142
6 Accidents, Poisonings and Violence	832	208	1,040
7 Suicide	256	164	420
8 Aids and its related Symptom	8	0	8
9 Others	1,068	355	1,423
Total	5,544	2,130	7,674

Table 3.1.1

Percentage of Deaths by Cause

Cause of Death	1991 - 1996 Percentage		
	Male	Female	Total
1 Neoplasms (Malignacies)	31.73%	36.53%	33.06%
2 Diseases of the Circulatory System	13.31%	13.52%	13.37%
3 Diseases of the Respiratory System	8.32%	8.73%	8.43%
4 Diseases of the Digestive System	6.24%	3.99%	5.62%
5 Diseases of the Genito-Urinary System	1.37%	3.10%	1.85%
6 Accidents, Poisonings and Violence	15.01%	9.77%	13.55%
7 Suicide	4.62%	7.70%	5.47%
8 Aids and its related Symptom	0.14%	0.00%	0.10%
9 Others	19.26%	16.67%	18.54%
Total	100%	100%	100%

Table 3.1.2

3. 2 Cause of Death Breakdown

Age below 25

Sex	Male			Female		
Duration	0	1	2+	0	1	2+
1. Neoplasms (Malignacies)	8	7	23	1	5	16
2. Diseases of the Circulatory System	8	6	12	6	6	10
3. Diseases of the Respiratory System	5	6	8	4	0	5
4. Diseases of the Digestive System	3	3	1	0	1	2
5. Diseases of the Genito-Urinary System	0	1	1	0	1	0
6. Accidents, Poisonings and Violence	63	35	62	17	15	22
7. Suicide	8	9	12	5	6	13
8. Aids and its related Symptom	0	0	0	0	0	0
9. Others	36	27	41	18	7	28
Total	131	94	160	51	41	96

Table 3.2.1

Age from 25 to 45 inclusively

Sex	Male			Female		
Duration	0	1	2+	0	1	2+
1. Neoplasms (Malignacies)	61	111	668	31	40	323
2. Diseases of the Circulatory System	34	33	202	23	13	70
3. Diseases of the Respiratory System	22	21	150	6	11	45
4. Diseases of the Digestive System	21	24	124	5	14	18
5. Diseases of the Genito-Urinary System	4	1	31	0	0	30
6. Accidents, Poisonings and Violence	122	94	357	35	15	76
7. Suicide	20	27	143	19	21	87
8. Aids and its related Symptom	2	0	5	0	0	0
9. Others	99	71	443	25	35	128
Total	385	382	2,123	144	149	777

Table 3.2.2

Age above 45

Sex	Male			Female		
Duration	0	1	2+	0	1	2+
1. Neoplasms (Malignacies)	53	86	742	24	37	301
2. Diseases of the Circulatory System	39	31	373	16	20	124
3. Diseases of the Respiratory System	15	24	210	13	13	89
4. Diseases of the Digestive System	10	13	147	2	6	37
5. Diseases of the Genito-Urinary System	3	3	32	2	4	29
6. Accidents, Poisonings and Violence	12	9	78	6	5	17
7. Suicide	4	3	30	4	2	7
8. Aids and its related Symptom	0	0	1	0	0	0
9. Others	32	41	278	6	16	92
Total	168	210	1,891	73	103	696

Table 3.2.3

Hong Kong Assured Lives Mortality Table 1997 (Males) - HKA97(M)

Age	q_x	l_x	d_x	L_x	T_x	e_x	$1000*q_x$
0	0.00617597	1,000,000	6,176	994,750	78,574,115	78.6	6.17597
1	0.00058268	993,824	579	993,534	77,579,365	78.1	0.58268
2	0.00046095	993,245	458	993,016	76,585,830	77.1	0.46095
3	0.00036526	992,787	363	992,606	75,592,814	76.1	0.36526
4	0.00029045	992,424	288	992,280	74,600,208	75.2	0.29045
5	0.00023268	992,136	231	992,021	73,607,928	74.2	0.23268
6	0.00018915	991,905	188	991,812	72,615,907	73.2	0.18915
7	0.00015781	991,718	157	991,640	71,624,096	72.2	0.15781
8	0.00013724	991,561	136	991,493	70,632,456	71.2	0.13724
9	0.00012654	991,425	125	991,362	69,640,963	70.2	0.12654
10	0.00010135	991,300	100	991,249	68,649,600	69.3	0.10135
11	0.00011640	991,199	115	991,142	67,658,351	68.3	0.11640
12	0.00014942	991,084	148	991,010	66,667,209	67.3	0.14942
13	0.00020016	990,936	198	990,837	65,676,199	66.3	0.20016
14	0.00026739	990,737	265	990,605	64,685,363	65.3	0.26739
15	0.00030113	990,473	298	990,323	63,694,758	64.3	0.30113
16	0.00033170	990,174	328	990,010	62,704,434	63.3	0.33170
17	0.00035926	989,846	356	989,668	61,714,424	62.3	0.35926
18	0.00038395	989,490	380	989,300	60,724,756	61.4	0.38395
19	0.00040594	989,110	402	988,910	59,735,456	60.4	0.40594
20	0.00042400	988,709	419	988,499	58,746,547	59.4	0.42400
21	0.00043805	988,290	433	988,073	57,758,047	58.4	0.43805
22	0.00044989	987,857	444	987,634	56,769,974	57.5	0.44989
23	0.00046135	987,412	456	987,184	55,782,340	56.5	0.46135
24	0.00047423	986,957	468	986,723	54,795,155	55.5	0.47423
25	0.00048666	986,489	480	986,249	53,808,433	54.5	0.48666
26	0.00049743	986,009	490	985,763	52,822,184	53.6	0.49743
27	0.00050936	985,518	502	985,267	51,836,421	52.6	0.50936
28	0.00052525	985,016	517	984,757	50,851,154	51.6	0.52525
29	0.00054793	984,499	539	984,229	49,866,396	50.7	0.54793
30	0.00057627	983,959	567	983,676	48,882,167	49.7	0.57627
31	0.00060839	983,392	598	983,093	47,898,491	48.7	0.60839
32	0.00064598	982,794	635	982,477	46,915,398	47.7	0.64598
33	0.00069072	982,159	678	981,820	45,932,922	46.8	0.69072
34	0.00074429	981,481	731	981,115	44,951,102	45.8	0.74429
35	0.00080541	980,750	790	980,355	43,969,986	44.8	0.80541
36	0.00087295	979,960	855	979,533	42,989,631	43.9	0.87295
37	0.00094885	979,105	929	978,640	42,010,099	42.9	0.94885
38	0.00103500	978,176	1,012	977,670	41,031,458	41.9	1.03500
39	0.00113334	977,163	1,107	976,610	40,053,789	41.0	1.13334
40	0.00124056	976,056	1,211	975,451	39,077,179	40.0	1.24056
41	0.00135539	974,845	1,321	974,184	38,101,728	39.1	1.35539
42	0.00148275	973,524	1,443	972,802	37,127,544	38.1	1.48275
43	0.00162757	972,080	1,582	971,289	36,154,742	37.2	1.62757
44	0.00179478	970,498	1,742	969,627	35,183,453	36.3	1.79478
45	0.00197742	968,756	1,916	967,799	34,213,825	35.3	1.97742
46	0.00217220	966,841	2,100	965,791	33,246,027	34.4	2.17220
47	0.00238952	964,741	2,305	963,588	32,280,236	33.5	2.38952
48	0.00263975	962,435	2,541	961,165	31,316,648	32.5	2.63975
49	0.00293325	959,895	2,816	958,487	30,355,483	31.6	2.93325
50	0.00326074	957,079	3,121	955,519	29,396,996	30.7	3.26074

Hong Kong Assured Lives Mortality Table 1997 (Males) - HKA97(M)

51	0.00361524	953,958	3,449	952,234	28,441,478	29.8	3.61524
52	0.00401061	950,509	3,812	948,603	27,489,244	28.9	4.01061
53	0.00446070	946,697	4,223	944,586	26,540,640	28.0	4.46070
54	0.00497929	942,474	4,693	940,128	25,596,055	27.2	4.97929
55	0.00555832	937,782	5,212	935,175	24,655,927	26.3	5.55832
56	0.00618846	932,569	5,771	929,684	23,720,751	25.4	6.18846
57	0.00688151	926,798	6,378	923,609	22,791,068	24.6	6.88151
58	0.00764927	920,420	7,041	916,900	21,867,459	23.8	7.64927
59	0.00850347	913,380	7,767	909,496	20,950,559	22.9	8.50347
60	0.00943941	905,613	8,548	901,338	20,041,063	22.1	9.43941
61	0.01044896	897,064	9,373	892,378	19,139,724	21.3	10.44896
62	0.01153856	887,691	10,243	882,570	18,247,347	20.6	11.53856
63	0.01271460	877,448	11,156	871,870	17,364,777	19.8	12.71460
64	0.01398341	866,292	12,114	860,235	16,492,907	19.0	13.98341
65	0.01534256	854,178	13,105	847,625	15,632,672	18.3	15.34256
66	0.01678725	841,073	14,119	834,013	14,785,047	17.6	16.78725
67	0.01832023	826,954	15,150	819,379	13,951,033	16.9	18.32023
68	0.01994420	811,804	16,191	803,708	13,131,655	16.2	19.94420
69	0.02166183	795,613	17,234	786,996	12,327,947	15.5	21.66183
70	0.02347198	778,378	18,270	769,243	11,540,951	14.8	23.47198
71	0.02537205	760,108	19,286	750,466	10,771,708	14.2	25.37205
72	0.02736250	740,823	20,271	730,687	10,021,242	13.5	27.36250
73	0.02944374	720,552	21,216	709,944	9,290,555	12.9	29.44374
74	0.03161614	699,336	22,110	688,281	8,580,611	12.3	31.61614
75	0.03506487	677,226	23,747	665,353	7,892,330	11.7	35.06487
76	0.03852195	653,479	25,173	640,892	7,226,977	11.1	38.52195
77	0.04231012	628,306	26,584	615,014	6,586,085	10.5	42.31012
78	0.04645896	601,722	27,955	587,744	5,971,071	9.9	46.45896
79	0.05100019	573,767	29,262	559,136	5,383,326	9.4	51.00019
80	0.05596781	544,505	30,475	529,267	4,824,191	8.9	55.96781
81	0.06139807	514,030	31,560	498,250	4,294,924	8.4	61.39807
82	0.06732952	482,469	32,484	466,227	3,796,674	7.9	67.32952
83	0.07380297	449,985	33,210	433,380	3,330,447	7.4	73.80297
84	0.08086140	416,775	33,701	399,924	2,897,067	7.0	80.86140
85	0.08854980	383,074	33,921	366,113	2,497,143	6.5	88.54980
86	0.09691499	349,153	33,838	332,234	2,131,030	6.1	96.91499
87	0.10600527	315,314	33,425	298,602	1,798,796	5.7	106.00527
88	0.11587004	281,889	32,663	265,558	1,500,194	5.3	115.87004
89	0.12655917	249,227	31,542	233,456	1,234,636	5.0	126.55917
90	0.13812243	217,685	30,067	202,651	1,001,180	4.6	138.12243
91	0.15060850	187,618	28,257	173,489	798,529	4.3	150.60850
92	0.16406397	159,361	26,145	146,288	625,039	3.9	164.06397
93	0.17853209	133,216	23,783	121,324	478,751	3.6	178.53209
94	0.19405121	109,432	21,235	98,815	357,427	3.3	194.05121
95	0.21065309	88,197	18,579	78,907	258,612	2.9	210.65309
96	0.22836088	69,618	15,898	61,669	179,705	2.6	228.36088
97	0.24718687	53,720	13,279	47,080	118,036	2.2	247.18687
98	0.26713009	40,441	10,803	35,040	70,956	1.8	267.13009
99	0.28817362	29,638	8,541	25,368	35,916	1.2	288.17362
100	1.00000000	21,097	21,097	10,549	10,549	0.5	1,000.00000

Note: $L_0 = l_0 - 0.85 * d_0$

Hong Kong Assured Lives Mortality Table 1997 (Females) - HKA97(F)

Age	q_x	l_x	d_x	L_x	T_x	e_x	$1000*q_x$
0	0.00501400	1,000,000	5,014	995,738	83,581,765	83.6	5.01400
1	0.00036514	994,986	363	994,804	82,586,027	83.0	0.36514
2	0.00026921	994,623	268	994,489	81,591,222	82.0	0.26921
3	0.00021018	994,355	209	994,250	80,596,734	81.1	0.21018
4	0.00017387	994,146	173	994,060	79,602,483	80.1	0.17387
5	0.00015152	993,973	151	993,898	78,608,424	79.1	0.15152
6	0.00013778	993,822	137	993,754	77,614,526	78.1	0.13778
7	0.00012931	993,686	128	993,621	76,620,772	77.1	0.12931
8	0.00012411	993,557	123	993,495	75,627,151	76.1	0.12411
9	0.00012090	993,434	120	993,374	74,633,655	75.1	0.12090
10	0.00013461	993,314	134	993,247	73,640,282	74.1	0.13461
11	0.00014254	993,180	142	993,109	72,647,035	73.1	0.14254
12	0.00015220	993,038	151	992,963	71,653,926	72.2	0.15220
13	0.00016353	992,887	162	992,806	70,660,963	71.2	0.16353
14	0.00017636	992,725	175	992,637	69,668,157	70.2	0.17636
15	0.00018108	992,550	180	992,460	68,675,520	69.2	0.18108
16	0.00018526	992,370	184	992,278	67,683,060	68.2	0.18526
17	0.00018942	992,186	188	992,092	66,690,781	67.2	0.18942
18	0.00019405	991,998	192	991,902	65,698,689	66.2	0.19405
19	0.00019967	991,806	198	991,707	64,706,787	65.2	0.19967
20	0.00020555	991,608	204	991,506	63,715,080	64.3	0.20555
21	0.00021136	991,404	210	991,299	62,723,575	63.3	0.21136
22	0.00021818	991,194	216	991,086	61,732,276	62.3	0.21818
23	0.00022708	990,978	225	990,866	60,741,189	61.3	0.22708
24	0.00023915	990,753	237	990,635	59,750,324	60.3	0.23915
25	0.00025379	990,516	251	990,390	58,759,689	59.3	0.25379
26	0.00027029	990,265	268	990,131	57,769,299	58.3	0.27029
27	0.00028952	989,997	287	989,854	56,779,168	57.4	0.28952
28	0.00031237	989,710	309	989,556	55,789,314	56.4	0.31237
29	0.00033970	989,401	336	989,233	54,799,758	55.4	0.33970
30	0.00037158	989,065	368	988,881	53,810,525	54.4	0.37158
31	0.00040742	988,698	403	988,496	52,821,643	53.4	0.40742
32	0.00044714	988,295	442	988,074	51,833,147	52.4	0.44714
33	0.00049064	987,853	485	987,611	50,845,073	51.5	0.49064
34	0.00053785	987,368	531	987,103	49,857,463	50.5	0.53785
35	0.00059003	986,837	582	986,546	48,870,360	49.5	0.59003
36	0.00064723	986,255	638	985,936	47,883,814	48.6	0.64723
37	0.00070756	985,617	697	985,268	46,897,878	47.6	0.70756
38	0.00076911	984,919	758	984,540	45,912,610	46.6	0.76911
39	0.00082997	984,162	817	983,753	44,928,069	45.7	0.82997
40	0.00088878	983,345	874	982,908	43,944,316	44.7	0.88878
41	0.00094680	982,471	930	982,006	42,961,408	43.7	0.94680
42	0.00100609	981,541	988	981,047	41,979,402	42.8	1.00609
43	0.00106869	980,553	1,048	980,029	40,998,355	41.8	1.06869
44	0.00113664	979,505	1,113	978,949	40,018,326	40.9	1.13664
45	0.00120572	978,392	1,180	977,802	39,039,377	39.9	1.20572
46	0.00127455	977,212	1,246	976,590	38,061,575	38.9	1.27455
47	0.00134948	975,967	1,317	975,308	37,084,986	38.0	1.34948
48	0.00143686	974,650	1,400	973,950	36,109,678	37.0	1.43686
49	0.00154302	973,249	1,502	972,498	35,135,728	36.1	1.54302
50	0.00166118	971,748	1,614	970,940	34,163,230	35.2	1.66118

Hong Kong Assured Lives Mortality Table 1997 (Females) - HKA97(F)

51	0.00178713	970,133	1,734	969,266	33,192,289	34.2	1.78713
52	0.00193100	968,400	1,870	967,465	32,223,023	33.3	1.93100
53	0.00210292	966,530	2,033	965,513	31,255,558	32.3	2.10292
54	0.00231304	964,497	2,231	963,382	30,290,045	31.4	2.31304
55	0.00255278	962,266	2,456	961,038	29,326,663	30.5	2.55278
56	0.00281539	959,810	2,702	958,459	28,365,625	29.6	2.81539
57	0.00311361	957,107	2,980	955,617	27,407,167	28.6	3.11361
58	0.00346021	954,127	3,301	952,477	26,451,549	27.7	3.46021
59	0.00386791	950,826	3,678	948,987	25,499,073	26.8	3.86791
60	0.00432878	947,148	4,100	945,098	24,550,086	25.9	4.32878
61	0.00483423	943,048	4,559	940,769	23,604,987	25.0	4.83423
62	0.00539597	938,489	5,064	935,957	22,664,219	24.1	5.39597
63	0.00602569	933,425	5,625	930,613	21,728,261	23.3	6.02569
64	0.00673501	927,801	6,249	924,676	20,797,648	22.4	6.73501
65	0.00751940	921,552	6,930	918,087	19,872,972	21.6	7.51940
66	0.00837084	914,622	7,656	910,794	18,954,885	20.7	8.37084
67	0.00929572	906,966	8,431	902,751	18,044,091	19.9	9.29572
68	0.01030036	898,535	9,255	893,908	17,141,340	19.1	10.30036
69	0.01139108	889,280	10,130	884,215	16,247,432	18.3	11.39108
70	0.01256584	879,150	11,047	873,627	15,363,217	17.5	12.56584
71	0.01382001	868,103	11,997	862,104	14,489,590	16.7	13.82001
72	0.01515588	856,106	12,975	849,618	13,627,486	15.9	15.15588
73	0.01657568	843,131	13,975	836,143	12,777,868	15.2	16.57568
74	0.01808164	829,155	14,992	821,659	11,941,725	14.4	18.08164
75	0.02293917	814,163	18,676	804,825	11,120,065	13.7	22.93917
76	0.02549563	795,487	20,281	785,346	10,315,241	13.0	25.49563
77	0.02833412	775,205	21,965	764,223	9,529,895	12.3	28.33412
78	0.03148462	753,240	23,715	741,383	8,765,672	11.6	31.48462
79	0.03498002	729,525	25,519	716,766	8,024,289	11.0	34.98002
80	0.03885635	704,006	27,355	690,329	7,307,524	10.4	38.85635
81	0.04315294	676,651	29,199	662,051	6,617,195	9.8	43.15294
82	0.04791275	647,452	31,021	631,941	5,955,144	9.2	47.91275
83	0.05318241	616,430	32,783	600,039	5,323,203	8.6	53.18241
84	0.05901254	583,647	34,442	566,426	4,723,164	8.1	59.01254
85	0.06545777	549,205	35,950	531,230	4,156,738	7.6	65.45777
86	0.07257689	513,255	37,250	494,630	3,625,509	7.1	72.57689
87	0.08043287	476,004	38,286	456,861	3,130,879	6.6	80.43287
88	0.08909276	437,718	38,998	418,219	2,674,018	6.1	89.09276
89	0.09862753	398,721	39,325	379,058	2,255,799	5.7	98.62753
90	0.10911173	359,396	39,214	339,789	1,876,740	5.2	109.11173
91	0.12062297	320,181	38,621	300,871	1,536,952	4.8	120.62297
92	0.13324120	281,560	37,515	262,802	1,236,081	4.4	133.24120
93	0.14704770	244,045	35,886	226,102	973,279	4.0	147.04770
94	0.16212373	208,159	33,747	191,285	747,177	3.6	162.12373
95	0.17854884	174,411	31,141	158,841	555,892	3.2	178.54884
96	0.19639876	143,270	28,138	129,201	397,051	2.8	196.39876
97	0.21574275	115,132	24,839	102,713	267,850	2.3	215.74275
98	0.23664048	90,293	21,367	79,610	165,138	1.8	236.64048
99	0.25913832	68,926	17,861	59,995	85,528	1.2	259.13832
100	1.00000000	51,065	51,065	25,532	25,532	0.5	1,000.00000

Note: $L_0 = l_0 - 0.85 * d_0$

Actual and Expected Deaths - Males duration 2+

Age	Exposure	Crude Death Rates (per 1000)	Graduated Rates (per 1000)	Actual Deaths	Expected Deaths	A-E	Cumulative A-E
14	19869	0.30199	0.26739	6	5.31	0.69	0.69
15	17841	0.05605	0.30113	1	5.37	(4.37)	(3.69)
16	16026	0.18720	0.33170	3	5.32	(2.32)	(6.00)
17	14449	0.27684	0.35926	4	5.19	(1.19)	(7.19)
18	14420	0.83218	0.38395	12	5.54	6.46	(0.73)
19	15146	0.72626	0.40594	11	6.15	4.85	4.12
20	19296	0.67371	0.42400	13	8.18	4.82	8.94
21	24338	0.45197	0.43805	11	10.66	0.34	9.28
22	30680	0.55411	0.44989	17	13.80	3.20	12.48
23	37840	0.55497	0.46135	21	17.46	3.54	16.02
24	46445	0.64593	0.47423	30	22.03	7.97	24.00
25	56934	0.47423	0.48666	27	27.71	(0.71)	23.29
26	68551	0.45222	0.49743	31	34.10	(3.10)	20.19
27	81164	0.38194	0.50936	31	41.34	(10.34)	9.85
28	94012	0.49994	0.52525	47	49.38	(2.38)	7.47
29	107432	0.33510	0.54793	36	58.86	(22.86)	(15.40)
30	119204	0.57045	0.57627	68	68.69	(0.69)	(16.09)
31	128565	0.66892	0.60839	86	78.22	7.78	(8.31)
32	134136	0.61132	0.64598	82	86.65	(4.65)	(12.96)
33	135930	0.63268	0.69072	86	93.89	(7.89)	(20.85)
34	135098	0.65138	0.74429	88	100.55	(12.55)	(33.40)
35	132476	0.73221	0.80541	97	106.70	(9.70)	(43.10)
36	128130	1.05362	0.87295	135	111.85	23.15	(19.95)
37	122597	1.21536	0.94885	149	116.33	32.67	12.73
38	115194	0.90283	1.03500	104	119.23	(15.23)	(2.50)
39	107001	1.20560	1.13334	129	121.27	7.73	5.23
40	99570	1.21523	1.24056	121	123.52	(2.52)	2.71
41	93114	1.17061	1.35539	109	126.21	(17.21)	(14.50)
42	87311	1.56910	1.48275	137	129.46	7.54	(6.96)
43	81293	1.46385	1.62757	119	132.31	(13.31)	(20.27)
44	74933	2.12191	1.79478	159	134.49	24.51	4.25
45	66837	2.31909	1.97742	155	132.16	22.84	27.08
46	57914	2.07206	2.17220	120	125.80	(5.80)	21.28
47	48444	2.72480	2.38952	132	115.76	16.24	37.53
48	39243	2.36985	2.63975	93	103.59	(10.59)	26.93
49	31281	2.97305	2.93325	93	91.75	1.25	28.18
50	25159	3.29902	3.26074	83	82.04	0.96	29.14
51	21620	4.71796	3.61524	102	78.16	23.84	52.98
52	18838	4.08759	4.01061	77	75.55	1.45	54.43
53	16370	4.82590	4.46070	79	73.02	5.98	60.41
54	14753	3.79584	4.97929	56	73.46	(17.46)	42.95
55	13312	5.33353	5.55832	71	73.99	(2.99)	39.96
56	11897	5.71597	6.18846	68	73.62	(5.62)	34.34
57	10490	5.62440	6.88151	59	72.19	(13.19)	21.15
58	8898	6.63070	7.64927	59	68.06	(9.06)	12.09
59	7637	8.64214	8.50347	66	64.94	1.06	13.15
60	6487	6.01202	9.43941	39	61.23	(22.23)	(9.09)
61	5500	11.81818	10.44896	65	57.47	7.53	(1.56)
62	4700	11.27780	11.53856	53	54.23	(1.23)	(2.78)
63	3993	13.77583	12.71460	55	50.76	4.24	1.46
64	3394	14.73405	13.98341	50	47.45	2.55	4.00
65	2837	15.15953	15.34256	43	43.52	(0.52)	3.48
66	2419	15.70897	16.78725	38	40.61	(2.61)	0.88
67	2076	16.86341	18.32023	35	38.02	(3.02)	(2.15)
68	1716	28.56310	19.94420	49	34.21	14.79	12.64
69	1449	20.71108	21.66183	30	31.38	(1.38)	11.26
70	1233	19.47262	23.47198	24	28.93	(4.93)	6.33
71	1056	22.72727	25.37205	24	26.79	(2.79)	3.54
72	862	9.28613	27.36250	8	23.57	(15.57)	(12.03)
73	661	45.42014	29.44374	30	19.45	10.55	(1.48)
74	496	46.37097	31.61614	23	15.68	7.32	5.84

Actual and Expected Deaths - Females duration 2+

Age	Exposure	Crude Death Rates (per 1000)	Graduated Rates (per 1000)	Actual Deaths	Expected Deaths	A-E	Cumulative A-E
14	15570	0.19268	0.17636	3	2.75	0.25	0.25
15	13875	0.43245	0.18108	6	2.51	3.49	3.74
16	12227	0.40895	0.18526	5	2.27	2.73	6.48
17	10858	0.46049	0.18942	5	2.06	2.94	9.42
18	9849	0.00000	0.19405	0	1.91	(1.91)	7.51
19	10127	0.19750	0.19967	2	2.02	(0.02)	7.49
20	14014	0.42816	0.20555	6	2.88	3.12	10.61
21	20454	0.19557	0.21136	4	4.32	(0.32)	10.28
22	28071	0.28499	0.21818	8	6.12	1.88	12.16
23	36937	0.35195	0.22708	13	8.39	4.61	16.77
24	46146	0.21670	0.23915	10	11.04	(1.04)	15.74
25	55584	0.26986	0.25379	15	14.11	0.89	16.63
26	64520	0.17049	0.27029	11	17.44	(6.44)	10.19
27	72870	0.21957	0.28952	16	21.10	(5.10)	5.09
28	79836	0.33819	0.31237	27	24.94	2.06	7.15
29	85051	0.35273	0.33970	30	28.89	1.11	8.26
30	88030	0.35215	0.37158	31	32.71	(1.71)	6.55
31	88750	0.42817	0.40742	38	36.16	1.84	8.39
32	86182	0.41772	0.44714	36	38.54	(2.54)	5.86
33	81652	0.51438	0.49064	42	40.06	1.94	7.80
34	76552	0.41802	0.53785	32	41.17	(9.17)	(1.38)
35	71368	0.44838	0.59003	32	42.11	(10.11)	(11.49)
36	66181	0.48353	0.64723	32	42.83	(10.83)	(22.32)
37	61197	0.80069	0.70756	49	43.30	5.70	(16.62)
38	56339	0.69224	0.76911	39	43.33	(4.33)	(20.95)
39	51642	1.06503	0.82997	55	42.86	12.14	(8.81)
40	47450	1.07483	0.88878	51	42.17	8.83	0.02
41	44040	1.02181	0.94680	45	41.70	3.30	3.32
42	40430	1.01411	1.00609	41	40.68	0.32	3.64
43	36830	1.19468	1.06869	44	39.36	4.64	8.28
44	33498	1.07469	1.13664	36	38.08	(2.08)	6.21
45	29863	1.03809	1.20572	31	36.01	(5.01)	1.20
46	26149	1.56794	1.27455	41	33.33	7.67	8.87
47	22487	0.93387	1.34948	21	30.35	(9.35)	(0.47)
48	18650	1.60858	1.43686	30	26.80	3.20	2.73
49	15008	1.53252	1.54302	23	23.16	(0.16)	2.57
50	12206	2.45781	1.66118	30	20.28	9.72	12.30
51	10580	1.89045	1.78713	20	18.91	1.09	13.39
52	9498	1.68457	1.93100	16	18.34	(2.34)	11.05
53	8421	2.96877	2.10292	25	17.71	7.29	18.34
54	7842	3.06064	2.31304	24	18.14	5.86	24.20
55	7365	2.03680	2.55278	15	18.80	(3.80)	20.40
56	6934	3.46121	2.81539	24	19.52	4.48	24.88
57	6377	2.82264	3.11361	18	19.86	(1.86)	23.03
58	5766	2.94857	3.46021	17	19.95	(2.95)	20.08
59	5238	4.20048	3.86791	22	20.26	1.74	21.82
60	4822	4.56290	4.32878	22	20.87	1.13	22.95
61	4463	5.82633	4.83423	26	21.57	4.43	27.37
62	4103	3.41214	5.39597	14	22.14	(8.14)	19.23
63	3700	4.05460	6.02569	15	22.29	(7.29)	11.94
64	3305	5.14450	6.73501	17	22.26	(5.26)	6.69
65	3017	5.96718	7.51940	18	22.68	(4.68)	2.00
66	2717	8.09717	8.37084	22	22.74	(0.74)	1.26
67	2396	10.01669	9.29572	24	22.27	1.73	2.99
68	2088	7.18391	10.30036	15	21.51	(6.51)	(3.52)
69	1725	14.49275	11.39108	25	19.65	5.35	1.83
70	1440	11.80556	12.56584	17	18.09	(1.09)	0.74
71	1249	13.61634	13.82001	17	17.25	(0.25)	0.48
72	1013	13.82034	15.15588	14	15.35	(1.35)	(0.87)
73	761	15.76873	16.57568	12	12.61	(0.61)	(1.48)
74	560	17.87310	18.08164	10	10.12	(0.12)	(1.60)

Selection Effect

Duration 0 - Male

Age Group (ALB)	Exposure	Actual Death	Expected Death	A/E Ratio
0--4	87,406	22	246.91	8.9%
5--9	46,151	2	7.89	25.4%
10--14	37,490	2	6.05	33.1%
15--19	61,575	15	22.86	65.6%
20--24	132,185	54	59.68	90.5%
25--29	167,817	47	86.33	54.4%
30--34	173,193	69	112.65	61.3%
35--39	128,369	95	121.31	78.3%
40--44	79,234	73	116.81	62.5%
45--49	39,361	60	91.97	65.2%
50--54	15,581	31	61.82	50.1%
55--59	9,376	29	63.83	45.4%
60--64	4,895	24	55.48	43.3%
65--69	2,511	20	45.23	44.2%
70--74	463	3	11.69	25.7%
75--79	47	-	1.89	0.0%
80--84	3	-	0.17	0.0%
85--90	-	-	-	
Overall	985,654	546	1,112.56	49.1%

Duration 1 - Male

Age Group (ALB)	Exposure	Actual Death	Expected Death	A/E Ratio
0--4	62,768	5	29.74	16.8%
5--9	41,289	2	7.07	28.3%
10--14	33,425	9	5.38	167.4%
15--19	37,906	20	13.99	143.0%
20--24	96,524	51	43.66	116.8%
25--29	142,791	59	73.52	80.2%
30--34	155,267	89	101.04	88.1%
35--39	116,819	80	110.37	72.5%
40--44	73,199	83	107.72	77.1%
45--49	36,202	61	84.14	72.5%
50--54	13,897	37	54.58	67.8%
55--59	7,790	42	52.60	79.8%
60--64	3,985	33	44.99	73.3%
65--69	1,900	29	33.91	85.5%
70--74	505	5	12.64	39.6%
75--79	46	1	1.85	54.0%
80--84	4	-	0.20	0.0%
85--90	-	-	-	
Overall	824,313	606	777.39	78.0%

Duration 0 - Female

Age Group (ALB)	Exposure	Actual Death	Expected Death	A/E Ratio
0--4	75,850	17	170.75	10.0%
5--9	39,080	3	5.21	57.5%
10--14	31,237	1	4.76	21.0%
15--19	46,349	8	8.94	89.4%
20--24	121,711	15	26.96	55.6%
25--29	135,475	36	39.71	90.7%
30--34	119,555	25	53.38	46.8%
35--39	85,194	40	59.57	67.1%
40--44	53,631	19	53.50	35.5%
45--49	28,821	12	38.46	31.2%
50--54	12,842	15	24.82	60.4%
55--59	9,136	14	28.54	49.1%
60--64	6,005	11	32.21	34.1%
65--69	3,487	15	31.81	47.2%
70--74	676	4	9.43	42.4%
75--79	69	-	1.77	0.0%
80--84	2	-	0.08	0.0%
85--90	-	-	-	
Overall	769,116	235	589.91	39.8%

Duration 1 - Female

Age Group (ALB)	Exposure	Actual Death	Expected Death	A/E Ratio
0--4	54,084	3	15.62	19.2%
5--9	34,871	1	4.66	21.5%
10--14	27,503	6	4.19	143.2%
15--19	27,184	8	5.22	153.2%
20--24	92,565	21	20.58	102.0%
25--29	119,127	40	34.94	114.5%
30--34	106,698	36	47.59	75.6%
35--39	75,447	28	52.69	53.1%
40--44	48,249	34	48.07	70.7%
45--49	25,634	24	34.14	70.3%
50--54	11,096	19	21.30	89.2%
55--59	7,674	21	23.79	88.3%
60--64	4,925	14	26.34	53.1%
65--69	2,773	19	25.14	75.6%
70--74	752	6	10.30	58.3%
75--79	71	1	1.85	54.0%
80--84	3	1	0.13	785.5%
85--90	-	-	-	
Overall	638,654	282	376.54	74.9%

Study of Skewed Effect at Duration 0

Male

Age Group (ALB)	Actual Death	Uniform		Skewed	
		Expected Death	A/E Ratio	Expected Death	A/E Ratio
0--20	61	293.08	20.8%	287.24	21.2%
21--25	42	65.56	64.1%	66.76	62.9%
26--30	50	92.07	54.3%	94.27	53.0%
31--35	70	116.03	60.3%	116.90	59.9%
36--40	97	120.81	80.3%	120.35	80.6%
41--45	77	115.03	66.9%	114.05	67.5%
46--50	51	83.40	61.2%	80.70	63.2%
51--55	24	61.99	38.7%	60.38	39.7%
56--60	34	62.72	54.2%	59.54	57.1%
61--65	20	53.29	37.5%	50.02	40.0%
66--70	20	41.09	48.7%	37.64	53.1%
71+	0	7.49	0.0%	6.53	0.0%
All ages	546	1,112.56	49.1%	1,094.37	49.9%

Female

Age Group (ALB)	Actual Death	Uniform		Skewed	
		Expected Death	A/E Ratio	Expected Death	A/E Ratio
0--20	31	193.75	16.0%	188.99	16.4%
21--25	20	29.77	67.2%	29.99	66.7%
26--30	32	42.62	75.1%	42.92	74.6%
31--35	32	55.32	57.8%	54.85	58.3%
36--40	32	59.47	53.8%	58.52	54.7%
41--45	22	51.50	42.7%	50.56	43.5%
46--50	11	34.22	32.1%	32.73	33.6%
51--55	15	24.89	60.3%	24.05	62.4%
56--60	12	29.44	40.8%	28.06	42.8%
61--65	14	32.58	43.0%	30.90	45.3%
66--70	14	29.59	47.3%	27.42	51.1%
71+	0	6.76	0.0%	5.81	0.0%
All ages	235	589.91	39.8%	574.79	40.9%

Uniform exposure = {P (t) + P (t+1)} / 2

Skewed exposure = P (t) * 0.75 + P (t+1) * 0.25

where

P (t) = inforce number at begin of year t , 1 Jan yr (t)

P (t+1) = inforce number at end of year t , 1 Jan yr (t+1)

Comparison with HKA93

Male - Duration 2+

Age Group (ALB)	Actual (a) Death	HKA97 Expected (b) Death	HKA93 Expected (c) Death	(a) / (b) Ratio	(a) / (c) Ratio	(b) / (c) Ratio
0--20	75	104.17	124.74	72.0%	60.1%	83.5%
21--25	106	91.65	83.23	115.7%	127.4%	110.1%
26--30	213	252.38	203.86	84.4%	104.5%	123.8%
31--35	439	466.01	365.21	94.2%	120.2%	127.6%
36--40	638	592.19	485.38	107.7%	131.4%	122.0%
41--45	679	654.63	543.35	103.7%	125.0%	120.5%
46--50	521	518.94	415.14	100.4%	125.5%	125.0%
51--55	385	374.18	287.37	102.9%	134.0%	130.2%
56--60	291	340.05	260.91	85.6%	111.5%	130.3%
61--65	266	253.43	197.22	105.0%	134.9%	128.5%
66--70	176	173.15	137.69	101.6%	127.8%	125.8%
71--75	95	99.28	84.20	95.7%	112.8%	117.9%
76+	98	95.72	83.69	102.4%	117.1%	114.4%
	3982	4015.78	3272.01	99.2%	121.7%	122.7%

Female - Duration 2+

Age Group (ALB)	Actual (a) Death	HKA97 Expected (b) Death	HKA93 Expected (c) Death	(a) / (b) Ratio	(a) / (c) Ratio	(b) / (c) Ratio
0--20	56	56.14	91.51	99.8%	61.2%	61.3%
21--25	50	43.98	80.92	113.7%	61.8%	54.3%
26--30	115	125.08	179.22	91.9%	64.2%	69.8%
31--35	180	198.04	203.59	90.9%	88.4%	97.3%
36--40	226	214.50	171.50	105.4%	131.8%	125.1%
41--45	197	195.81	156.02	100.6%	126.3%	125.5%
46--50	145	133.91	124.04	108.3%	116.9%	108.0%
51--55	100	91.89	96.79	108.8%	103.3%	94.9%
56--60	103	100.46	104.55	102.5%	98.5%	96.1%
61--65	90	110.94	103.36	81.1%	87.1%	107.3%
66--70	103	104.27	86.03	98.8%	119.7%	121.2%
71--75	63	64.75	53.22	97.3%	118.4%	121.7%
76+	35	34.16	25.48	102.5%	137.4%	134.1%
	1463	1473.93	1476.24	99.3%	99.1%	99.8%

Comparison with HKA93 and HKLT95

Age	Male Mortality Rate (1000 q_x)					Male Life Expectancy (e_x)		
	(a) HKLT95	(b) HKA93	(c) HKA97	(c) / (a)	(c) / (b)	HKLT95	HKA93	HKA97
0	0.00451359	0.0090728	0.00617597	137%	68%	76.0	80.2	78.6
1	0.00042584	0.0004415	0.00058268	137%	132%	75.4	80.0	78.1
2	0.00033688	0.0003752	0.00046095	137%	123%	74.4	79.0	77.1
3	0.00026694	0.0003235	0.00036526	137%	113%	73.4	78.0	76.1
4	0.00021227	0.0002831	0.00029045	137%	103%	72.4	77.1	75.2
5	0.00017005	0.0002516	0.00023268	137%	92%	71.5	76.1	74.2
6	0.00013824	0.0002270	0.00018915	137%	83%	70.5	75.1	73.2
7	0.00011533	0.0002078	0.00015781	137%	76%	69.5	74.1	72.2
8	0.00010030	0.0001928	0.00013724	137%	71%	68.5	73.1	71.2
9	0.00009248	0.0001811	0.00012654	137%	70%	67.5	72.1	70.2
10	0.00007407	0.0002326	0.00010135	137%	44%	66.5	71.2	69.3
11	0.00008507	0.0002607	0.00011640	137%	45%	65.5	70.2	68.3
12	0.00010920	0.0002938	0.00014942	137%	51%	64.5	69.2	67.3
13	0.00014628	0.0003321	0.00020016	137%	60%	63.5	68.2	66.3
14	0.00019542	0.0003543	0.00026739	137%	75%	62.5	67.2	65.3
15	0.00025540	0.0003732	0.00030113	118%	81%	61.5	66.3	64.3
16	0.00032418	0.0003891	0.00033170	102%	85%	60.6	65.3	63.3
17	0.00039875	0.0004023	0.00035926	90%	89%	59.6	64.3	62.3
18	0.00047499	0.0004129	0.00038395	81%	93%	58.6	63.3	61.4
19	0.00054844	0.0004200	0.00040594	74%	97%	57.6	62.4	60.4
20	0.00061071	0.0004236	0.00042400	69%	100%	56.7	61.4	59.4
21	0.00065739	0.0004249	0.00043805	67%	103%	55.7	60.4	58.4
22	0.00068807	0.0004252	0.00044989	65%	106%	54.7	59.4	57.5
23	0.00070271	0.0004259	0.00046135	66%	108%	53.8	58.5	56.5
24	0.00070385	0.0004249	0.00047423	67%	112%	52.8	57.5	55.5
25	0.00069608	0.0004215	0.00048666	70%	115%	51.8	56.5	54.5
26	0.00068581	0.0004185	0.00049743	73%	119%	50.9	55.5	53.6
27	0.00068118	0.0004190	0.00050936	75%	122%	49.9	54.6	52.6
28	0.00068669	0.0004260	0.00052525	76%	123%	48.9	53.6	51.6
29	0.00070529	0.0004381	0.00054793	78%	125%	48.0	52.6	50.7
30	0.00073711	0.0004534	0.00057627	78%	127%	47.0	51.6	49.7
31	0.00078039	0.0004738	0.00060839	78%	128%	46.0	50.7	48.7
32	0.00083143	0.0005015	0.00064598	78%	129%	45.1	49.7	47.7
33	0.00089103	0.0005386	0.00069072	78%	128%	44.1	48.7	46.8
34	0.00096051	0.0005852	0.00074429	77%	127%	43.2	47.7	45.8
35	0.00104358	0.0006398	0.00080541	77%	126%	42.2	46.8	44.8
36	0.00114262	0.0007024	0.00087295	76%	124%	41.2	45.8	43.9
37	0.00125861	0.0007728	0.00094885	75%	123%	40.3	44.8	42.9
38	0.00139138	0.0008511	0.00103500	74%	122%	39.3	43.9	41.9
39	0.00153943	0.0009363	0.00113334	74%	121%	38.4	42.9	41.0
40	0.00168755	0.0010285	0.00124056	74%	121%	37.5	41.9	40.0
41	0.00182850	0.0011290	0.00135539	74%	120%	36.5	41.0	39.1
42	0.00196314	0.0012390	0.00148275	76%	120%	35.6	40.0	38.1
43	0.00209891	0.0013597	0.00162757	78%	120%	34.7	39.1	37.2
44	0.00224900	0.0014863	0.00179478	80%	121%	33.7	38.1	36.3
45	0.00244779	0.0016180	0.00197742	81%	122%	32.8	37.2	35.3
46	0.00271903	0.0017620	0.00217220	80%	123%	31.9	36.2	34.4
47	0.00307585	0.0019256	0.00238952	78%	124%	31.0	35.3	33.5
48	0.00351968	0.0021163	0.00263975	75%	125%	30.1	34.4	32.5
49	0.00404027	0.0023246	0.00293325	73%	126%	29.2	33.4	31.6
50	0.00459136	0.0025457	0.00326074	71%	128%	28.3	32.5	30.7

Comparison with HKA93 and HKLT95

Age	Male Mortality Rate (1000 q_x)					Male Life Expectancy (e_x)		
	(a) HKLT95	(b) HKA93	(c) HKA97	(c) / (a)	(c) / (b)	HKLT95	HKA93	HKA97
51	0.00513654	0.0027935	0.00361524	70%	129%	27.4	31.6	29.8
52	0.00564932	0.0030822	0.00401061	71%	130%	26.5	30.7	28.9
53	0.00613045	0.0034257	0.00446070	73%	130%	25.7	29.8	28.0
54	0.00659782	0.0038169	0.00497929	75%	130%	24.8	28.9	27.2
55	0.00708952	0.0042465	0.00555832	78%	131%	24.0	28.0	26.3
56	0.00765067	0.0047251	0.00618846	81%	131%	23.2	27.1	25.4
57	0.00833342	0.0052634	0.00688151	83%	131%	22.4	26.2	24.6
58	0.00916346	0.0058722	0.00764927	83%	130%	21.5	25.4	23.8
59	0.01015328	0.0065470	0.00850347	84%	130%	20.7	24.5	22.9
60	0.01128847	0.0072808	0.00943941	84%	130%	19.9	23.7	22.1
61	0.01254609	0.0080800	0.01044896	83%	129%	19.2	22.8	21.3
62	0.01389469	0.0089510	0.01153856	83%	129%	18.4	22.0	20.6
63	0.01533725	0.0099004	0.01271460	83%	128%	17.6	21.2	19.8
64	0.01688522	0.0109268	0.01398341	83%	128%	16.9	20.4	19.0
65	0.01853028	0.0120261	0.01534256	83%	128%	16.2	19.6	18.3
66	0.02028711	0.0131999	0.01678725	83%	127%	15.5	18.9	17.6
67	0.02219343	0.0144502	0.01832023	83%	127%	14.8	18.1	16.9
68	0.02428626	0.0157786	0.01994420	82%	126%	14.1	17.4	16.2
69	0.02660696	0.0173409	0.02166183	81%	125%	13.5	16.6	15.5
70	0.02916410	0.0191358	0.02347198	80%	123%	12.8	15.9	14.8
71	0.03197892	0.0209298	0.02537205	79%	121%	12.2	15.2	14.2
72	0.03508538	0.0230137	0.02736250	78%	119%	11.6	14.5	13.5
73	0.03853894	0.0252153	0.02944374	76%	117%	11.0	13.9	12.9
74	0.04239780	0.0275407	0.03161614	75%	115%	10.4	13.2	12.3
75	0.04702261	0.0304316	0.03506487	75%	115%	9.8	12.6	11.7
76	0.05165861	0.0334370	0.03852195	75%	115%	9.3	12.0	11.1
77	0.05673862	0.0367270	0.04231012	75%	115%	8.8	11.4	10.5
78	0.06230228	0.0403267	0.04645896	75%	115%	8.3	10.8	9.9
79	0.06839216	0.0442625	0.05100019	75%	115%	7.8	10.2	9.4
80	0.07505382	0.0485630	0.05596781	75%	115%	7.3	9.7	8.9
81	0.08233590	0.0532583	0.06139807	75%	115%	6.9	9.1	8.4
82	0.09029008	0.0583804	0.06732952	75%	115%	6.5	8.6	7.9
83	0.09897109	0.0639629	0.07380297	75%	115%	6.1	8.1	7.4
84	0.10843656	0.0700409	0.08086140	75%	115%	5.7	7.6	7.0
85	0.11874684	0.0766510	0.08854980	75%	116%	5.3	7.2	6.5
86	0.12996471	0.0838309	0.09691499	75%	116%	4.9	6.7	6.1
87	0.14215494	0.0916191	0.10600527	75%	116%	4.6	6.3	5.7
88	0.15538376	0.1000545	0.11587004	75%	116%	4.3	5.9	5.3
89	0.16971808	0.1091759	0.12655917	75%	116%	4.0	5.5	5.0
90	0.18522461	0.1190210	0.13812243	75%	116%	3.7	5.1	4.6
91	0.20196865	0.1296262	0.15060850	75%	116%	3.4	4.7	4.3
92	0.22001268	0.1410249	0.16406397	75%	116%	3.1	4.3	3.9
93	0.23941468	0.1532468	0.17853209	75%	116%	2.9	4.0	3.6
94	0.26022609	0.1663165	0.19405121	75%	117%	2.6	3.6	3.3
95	0.28248951	0.1802519	0.21065309	75%	117%	2.4	3.2	2.9
96	0.30623596	0.1950622	0.22836088	75%	117%	2.1	2.8	2.6
97	0.33148195	0.2107464	0.24718687	75%	117%	1.9	2.4	2.2
98	0.35822616	0.2272912	0.26713009	75%	118%	1.5	1.9	1.8
99	0.38644591	0.2446685	0.28817362	75%	118%	1.1	1.3	1.2
100	1.00000000	1.0000000	1.00000000	100%	100%	0.5	0.5	0.5

Comparison with HKA93 and HKLT95

Age	Female Mortality Rate (1000 q_x)					Female Life Expectancy (e_x)		
	(a) HKLT95	(b) HKA93	(c) HKA97	(c) / (a)	(c) / (b)	HKLT95	HKA93	HKA97
0	0.00456764	0.0091320	0.00501400	110%	55%	81.4	85.0	83.6
1	0.00033263	0.0004288	0.00036514	110%	85%	80.8	84.7	83.0
2	0.00024524	0.0003761	0.00026921	110%	72%	79.8	83.8	82.0
3	0.00019147	0.0003299	0.00021018	110%	64%	78.9	82.8	81.1
4	0.00015839	0.0002893	0.00017387	110%	60%	77.9	81.8	80.1
5	0.00013803	0.0002538	0.00015152	110%	60%	76.9	80.9	79.1
6	0.00012551	0.0002226	0.00013778	110%	62%	75.9	79.9	78.1
7	0.00011780	0.0001952	0.00012931	110%	66%	74.9	78.9	77.1
8	0.00011306	0.0001712	0.00012411	110%	72%	73.9	77.9	76.1
9	0.00011014	0.0001502	0.00012090	110%	80%	72.9	76.9	75.1
10	0.00012263	0.0002327	0.00013461	110%	58%	71.9	75.9	74.1
11	0.00012985	0.0002449	0.00014254	110%	58%	70.9	75.0	73.1
12	0.00013865	0.0002564	0.00015220	110%	59%	69.9	74.0	72.2
13	0.00014897	0.0002682	0.00016353	110%	61%	69.0	73.0	71.2
14	0.00016066	0.0002811	0.00017636	110%	63%	68.0	72.0	70.2
15	0.00017361	0.0002962	0.00018108	104%	61%	67.0	71.0	69.2
16	0.00018762	0.0003141	0.00018526	99%	59%	66.0	70.0	68.2
17	0.00020249	0.0003356	0.00018942	94%	56%	65.0	69.1	67.2
18	0.00021804	0.0003601	0.00019405	89%	54%	64.0	68.1	66.2
19	0.00023409	0.0003868	0.00019967	85%	52%	63.0	67.1	65.2
20	0.00025101	0.0004128	0.00020555	82%	50%	62.0	66.1	64.3
21	0.00026892	0.0004186	0.00021136	79%	50%	61.1	65.2	63.3
22	0.00028770	0.0004242	0.00021818	76%	51%	60.1	64.2	62.3
23	0.00030692	0.0004299	0.00022708	74%	53%	59.1	63.2	61.3
24	0.00032598	0.0004354	0.00023915	73%	55%	58.1	62.3	60.3
25	0.00034258	0.0004404	0.00025379	74%	58%	57.1	61.3	59.3
26	0.00035558	0.0004455	0.00027029	76%	61%	56.1	60.3	58.3
27	0.00036498	0.0004511	0.00028952	79%	64%	55.2	59.3	57.4
28	0.00037145	0.0004578	0.00031237	84%	68%	54.2	58.4	56.4
29	0.00037646	0.0004647	0.00033970	90%	73%	53.2	57.4	55.4
30	0.00038219	0.0004718	0.00037158	97%	79%	52.2	56.4	54.4
31	0.00039106	0.0004798	0.00040742	104%	85%	51.2	55.4	53.4
32	0.00040570	0.0004899	0.00044714	110%	91%	50.3	54.5	52.4
33	0.00042786	0.0005029	0.00049064	115%	98%	49.3	53.5	51.5
34	0.00045859	0.0005178	0.00053785	117%	104%	48.3	52.5	50.5
35	0.00049843	0.0005336	0.00059003	118%	111%	47.3	51.5	49.5
36	0.00054674	0.0005525	0.00064723	118%	117%	46.4	50.6	48.6
37	0.00060164	0.0005763	0.00070756	118%	123%	45.4	49.6	47.6
38	0.00066284	0.0006068	0.00076911	116%	127%	44.4	48.6	46.6
39	0.00073005	0.0006422	0.00082997	114%	129%	43.4	47.7	45.7
40	0.00080004	0.0006811	0.00088878	111%	130%	42.5	46.7	44.7
41	0.00087175	0.0007266	0.00094680	109%	130%	41.5	45.7	43.7
42	0.00094625	0.0007814	0.00100609	106%	129%	40.5	44.8	42.8
43	0.00102564	0.0008484	0.00106869	104%	126%	39.6	43.8	41.8
44	0.00111319	0.0009255	0.00113664	102%	123%	38.6	42.8	40.9
45	0.00121547	0.0010108	0.00120572	99%	119%	37.7	41.9	39.9
46	0.00133737	0.0011075	0.00127455	95%	115%	36.7	40.9	38.9
47	0.00148218	0.0012187	0.00134948	91%	111%	35.7	39.9	38.0
48	0.00165133	0.0013475	0.00143686	87%	107%	34.8	39.0	37.0
49	0.00184419	0.0014922	0.00154302	84%	103%	33.9	38.0	36.1
50	0.00205312	0.0016506	0.00166118	81%	101%	32.9	37.1	35.2

Comparison with HKA93 and HKLT95

Age	Female Mortality Rate (1000 q_x)					Female Life Expectancy (e_x)		
	(a) HKLT95	(b) HKA93	(c) HKA97	(c) / (a)	(c) / (b)	HKLT95	HKA93	HKA97
51	0.00227210	0.0018254	0.00178713	79%	98%	32.0	36.2	34.2
52	0.00249669	0.0020194	0.00193100	77%	96%	31.1	35.2	33.3
53	0.00272803	0.0022354	0.00210292	77%	94%	30.1	34.3	32.3
54	0.00297022	0.0024722	0.00231304	78%	94%	29.2	33.4	31.4
55	0.00321639	0.0027279	0.00255278	79%	94%	28.3	32.5	30.5
56	0.00347053	0.0030043	0.00281539	81%	94%	27.4	31.5	29.6
57	0.00374753	0.0033032	0.00311361	83%	94%	26.5	30.6	28.6
58	0.00406359	0.0036263	0.00346021	85%	95%	25.6	29.7	27.7
59	0.00443799	0.0039731	0.00386791	87%	97%	24.7	28.8	26.8
60	0.00488772	0.0043425	0.00432878	89%	100%	23.8	28.0	25.9
61	0.00542842	0.0047352	0.00483423	89%	102%	22.9	27.1	25.0
62	0.00607436	0.0051518	0.00539597	89%	105%	22.0	26.2	24.1
63	0.00684329	0.0055929	0.00602569	88%	108%	21.2	25.3	23.3
64	0.00774914	0.0061095	0.00673501	87%	110%	20.3	24.5	22.4
65	0.00878502	0.0067010	0.00751940	86%	112%	19.5	23.6	21.6
66	0.00994630	0.0072912	0.00837084	84%	115%	18.6	22.8	20.7
67	0.01123072	0.0078041	0.00929572	83%	119%	17.8	21.9	19.9
68	0.01265478	0.0081633	0.01030036	81%	126%	17.0	21.1	19.1
69	0.01424006	0.0091436	0.01139108	80%	125%	16.2	20.3	18.3
70	0.01593257	0.0102101	0.01256584	79%	123%	15.4	19.5	17.5
71	0.01773012	0.0113644	0.01382001	78%	122%	14.7	18.7	16.7
72	0.01968238	0.0126152	0.01515588	77%	120%	13.9	17.9	15.9
73	0.02186854	0.0139779	0.01657568	76%	119%	13.2	17.1	15.2
74	0.02439150	0.0154709	0.01808164	74%	117%	12.5	16.3	14.4
75	0.03094415	0.0169511	0.02293917	74%	135%	11.8	15.6	13.7
76	0.03439272	0.0188384	0.02549563	74%	135%	11.2	14.8	13.0
77	0.03822175	0.0209327	0.02833412	74%	135%	10.5	14.1	12.3
78	0.04247166	0.0232559	0.03148462	74%	135%	9.9	13.4	11.6
79	0.04718683	0.0258317	0.03498002	74%	135%	9.4	12.7	11.0
80	0.05241586	0.0286861	0.03885635	74%	135%	8.8	12.0	10.4
81	0.05821182	0.0318473	0.04315294	74%	135%	8.2	11.4	9.8
82	0.06463264	0.0353460	0.04791275	74%	136%	7.7	10.7	9.2
83	0.07174123	0.0392155	0.05318241	74%	136%	7.2	10.1	8.6
84	0.07960587	0.0434915	0.05901254	74%	136%	6.7	9.5	8.1
85	0.08830026	0.0482126	0.06545777	74%	136%	6.3	8.9	7.6
86	0.09790370	0.0534197	0.07257689	74%	136%	5.8	8.3	7.1
87	0.10850115	0.0591571	0.08043287	74%	136%	5.4	7.8	6.6
88	0.12018304	0.0654692	0.08909276	74%	136%	5.0	7.2	6.1
89	0.13304511	0.0724056	0.09862753	74%	136%	4.6	6.7	5.7
90	0.14718793	0.0800158	0.10911173	74%	136%	4.3	6.2	5.2
91	0.16271619	0.0883507	0.12062297	74%	137%	3.9	5.7	4.8
92	0.17973775	0.0974620	0.13324120	74%	137%	3.6	5.2	4.4
93	0.19836224	0.1074005	0.14704770	74%	137%	3.3	4.7	4.0
94	0.21869928	0.1182157	0.16212373	74%	137%	3.0	4.2	3.6
95	0.24085618	0.1299537	0.17854884	74%	137%	2.7	3.7	3.2
96	0.26493511	0.1426555	0.19639876	74%	138%	2.3	3.2	2.8
97	0.29102948	0.1563553	0.21574275	74%	138%	2.0	2.6	2.3
98	0.31921978	0.1710772	0.23664048	74%	138%	1.6	2.0	1.8
99	0.34956859	0.1868332	0.25913832	74%	139%	1.2	1.3	1.2
100	1.00000000	1.0000000	1.00000000	100%	100%	0.5	0.5	0.5

International Mortality Comparison

Life Expectancy of Male

Age	HKA97(M)	M94(M)	S92(M)	TSO89(M)	J89/91(M)	AM80	CSO80(M)
0	78.6	71	74	70	77	76	70
1	78.1	70	73	69	76	75	70
2	77.1	69	72	68	75	74	69
3	76.1	69	71	67	74	73	68
4	75.2	68	70	67	73	72	67
5	74.2	67	69	66	72	71	66
6	73.2	66	68	65	71	70	65
7	72.2	65	67	64	70	69	64
8	71.2	64	66	63	69	68	63
9	70.2	63	65	62	68	67	62
10	69.3	62	64	61	67	66	61
11	68.3	61	63	60	66	65	60
12	67.3	60	62	59	65	64	59
13	66.3	60	61	58	64	63	58
14	65.3	59	60	57	63	62	57
15	64.3	58	59	56	62	61	56
16	63.3	57	58	55	61	60	56
17	62.3	56	57	54	60	59	55
18	61.4	55	56	53	59	58	54
19	60.4	54	56	52	58	57	53
20	59.4	53	55	51	57	56	52
21	58.4	52	54	50	56	55	51
22	57.5	51	53	50	55	54	50
23	56.5	51	52	49	55	53	49
24	55.5	50	51	48	54	52	48
25	54.5	49	50	47	53	51	47
26	53.6	48	49	46	52	51	46
27	52.6	47	48	45	51	50	46
28	51.6	46	47	44	50	49	45
29	50.7	45	46	43	49	48	44
30	49.7	44	45	42	48	47	43
31	48.7	43	44	41	47	46	42
32	47.7	42	43	40	46	45	41
33	46.8	41	42	40	45	44	40
34	45.8	40	41	39	44	43	39
35	44.8	40	40	38	43	42	38
36	43.9	39	39	37	42	41	37
37	42.9	38	38	36	41	40	36
38	41.9	37	38	35	40	39	35
39	41.0	36	37	34	39	38	35
40	40.0	35	36	33	38	37	34
41	39.1	34	35	32	37	36	33
42	38.1	33	34	31	36	35	32
43	37.2	32	33	31	35	34	31
44	36.3	31	32	30	35	33	30
45	35.3	31	31	29	34	32	29
46	34.4	30	30	28	33	31	28
47	33.5	29	29	27	32	30	27
48	32.5	28	28	26	31	29	27
49	31.6	27	27	26	30	28	26
50	30.7	26	27	25	29	28	25

Age	HKA97(M)	M94(M)	S92(M)	TSO89(M)	J89/91(M)	AM80	CSO80(M)
51	29.8	25	26	24	28	27	24
52	28.9	25	25	23	27	26	23
53	28.0	24	24	22	26	25	22
54	27.2	23	23	21	26	24	22
55	26.3	22	22	21	25	23	21
56	25.4	21	22	20	24	22	20
57	24.6	21	21	19	23	22	19
58	23.8	20	20	18	22	21	19
59	22.9	19	19	18	21	20	18
60	22.1	18	18	17	21	19	17
61	21.3	18	18	16	20	18	16
62	20.6	17	17	16	19	18	16
63	19.8	16	16	15	18	17	15
64	19.0	16	16	14	17	16	14
65	18.3	15	15	14	17	15	14
66	17.6	14	14	13	16	15	13
67	16.9	14	14	12	15	14	12
68	16.2	13	13	12	15	13	12
69	15.5	12	12	11	14	13	11
70	14.8	12	12	11	13	12	11
71	14.2	11	11	10	12	11	10
72	13.5	11	11	9	12	11	10
73	12.9	10	10	9	11	10	9
74	12.3	10	9	8	11	10	9
75	11.7	9	9	8	10	9	8
76	11.1	9	8	7	9	9	8
77	10.5	8	8	7	9	8	7
78	9.9	8	8	7	8	8	7
79	9.4	7	7	6	8	7	6
80	8.9	7	7	6	7	7	6
81	8.4	6	6	5	7	6	6
82	7.9	6	6	5	6	6	5
83	7.4	6	5	5	6	6	5
84	7.0	5	5	4	5	5	5
85	6.5	5	5	4	5	5	4
86	6.1	5	4	4	5	5	4
87	5.7	4	4	3	4	4	4
88	5.3	4	4	3	4	4	4
89	5.0	4	3	3	4	4	3
90	4.6	4	3	3	3	4	3
91	4.3	3	3	2	3	3	3
92	3.9	3	2	2	3	3	3
93	3.6	3	2	2	3	3	2
94	3.3	3	2	2	2	3	2
95	2.9	2	1	2	2	3	2
96	2.6	2	1	2	2	2	1
97	2.2	2	1	2	2	2	1
98	1.8	1	1	2	1	2	1
99	1.2	1	1	1	1	2	1
100	0.5	1	-	1	1	2	-

HKA97 : **Hong Kong Assured Lives Mortality Table 1997**
M94 : **DGI 1994 Mortality Malaysia**
S92 : **Singapore 1992 Commissioner's ValuationTable**
TSO89 : **1989 Taiwan Standard Ordinary Experience Mortality Table (1982-86)**
J89/91 : **1996 Japan Life Insurance Companies Standard Mortality Table (1989-1991)**
AM80 : **United Kingdom Males Standard tables of mortality - the "80" series**
CSO80 : **US Commissioners 1980 Standard Ordinary Mortality Table**

International Mortality Comparison

Life Expectancy of Female

Age	HKA97(F)	M94(F)	S92(F)	TSO89(F)	J89/91(F)	AF80	CSO80(F)
0	83.6	74	77	75	83	81	75
1	83.0	73	76	74	82	81	75
2	82.0	72	75	73	81	80	74
3	81.1	71	74	73	80	79	73
4	80.1	70	73	72	79	78	72
5	79.1	69	72	71	78	77	71
6	78.1	69	71	70	77	76	70
7	77.1	68	70	69	76	75	69
8	76.1	67	69	68	75	74	68
9	75.1	66	68	67	74	73	67
10	74.1	65	67	66	73	72	66
11	73.1	64	66	65	72	71	65
12	72.2	63	65	64	71	70	64
13	71.2	62	64	63	70	69	63
14	70.2	61	63	62	69	68	62
15	69.2	60	62	61	68	67	61
16	68.2	60	61	60	67	66	60
17	67.2	59	60	59	66	65	59
18	66.2	58	59	58	65	64	58
19	65.2	57	58	57	64	63	58
20	64.3	56	57	56	63	62	57
21	63.3	55	56	55	62	61	56
22	62.3	54	56	54	61	60	55
23	61.3	53	55	53	60	59	54
24	60.3	52	54	52	59	58	53
25	59.3	51	53	51	58	57	52
26	58.3	51	52	50	57	56	51
27	57.4	50	51	49	56	55	50
28	56.4	49	50	48	56	54	49
29	55.4	48	49	47	55	53	48
30	54.4	47	48	47	54	52	47
31	53.4	46	47	46	53	51	46
32	52.4	45	46	45	52	50	45
33	51.5	44	45	44	51	49	44
34	50.5	43	44	43	50	48	43
35	49.5	42	43	42	49	47	43
36	48.6	41	42	41	48	46	42
37	47.6	40	41	40	47	45	41
38	46.6	40	40	39	46	44	40
39	45.7	39	39	38	45	43	39
40	44.7	38	38	37	44	42	38
41	43.7	37	38	36	43	41	37
42	42.8	36	37	35	42	40	36
43	41.8	35	36	34	41	39	35
44	40.9	34	35	34	40	38	34
45	39.9	33	34	33	39	38	33
46	38.9	32	33	32	38	37	33
47	38.0	31	32	31	37	36	32
48	37.0	31	31	30	36	35	31
49	36.1	30	30	29	35	34	30
50	35.2	29	29	28	34	33	29

Age	HKA97(F)	M94(F)	S92(F)	TSO89(F)	J89/91(F)	AF80	CSO80(F)
51	34.2	28	28	27	34	32	28
52	33.3	27	27	27	33	31	27
53	32.3	26	27	26	32	30	27
54	31.4	25	26	25	31	29	26
55	30.5	25	25	24	30	28	25
56	29.6	24	24	23	29	27	24
57	28.6	23	23	23	28	27	23
58	27.7	22	22	22	27	26	22
59	26.8	21	22	21	26	25	22
60	25.9	21	21	20	25	24	21
61	25.0	20	20	19	25	23	20
62	24.1	19	19	19	24	22	19
63	23.3	18	18	18	23	21	18
64	22.4	18	18	17	22	21	18
65	21.6	17	17	16	21	20	17
66	20.7	16	16	16	20	19	16
67	19.9	16	16	15	19	18	15
68	19.1	15	15	14	19	17	15
69	18.3	14	14	14	18	17	14
70	17.5	14	14	13	17	16	13
71	16.7	13	13	12	16	15	13
72	15.9	12	12	12	15	15	12
73	15.2	12	12	11	15	14	11
74	14.4	11	11	10	14	13	11
75	13.7	11	11	10	13	13	10
76	13.0	10	10	9	12	12	9
77	12.3	10	9	9	12	11	9
78	11.6	9	9	8	11	11	8
79	11.0	9	8	8	10	10	8
80	10.4	8	8	7	10	10	7
81	9.8	8	8	7	9	9	7
82	9.2	7	7	6	8	8	6
83	8.6	7	7	6	8	8	6
84	8.1	6	6	5	7	7	5
85	7.6	6	6	5	7	7	5
86	7.1	6	5	4	6	7	5
87	6.6	5	5	4	6	6	4
88	6.1	5	5	4	5	6	4
89	5.7	5	4	3	5	5	4
90	5.2	4	4	3	4	5	3
91	4.8	4	4	3	4	5	3
92	4.4	4	3	3	4	4	3
93	4.0	4	3	3	3	4	2
94	3.6	3	3	2	3	4	2
95	3.2	3	2	2	3	3	2
96	2.8	3	2	2	3	3	1
97	2.3	3	2	2	2	3	1
98	1.8	2	1	2	2	3	1
99	1.2	2	1	2	2	3	1
100	0.5	2	1	1	2	2	-

HKA97 : Hong Kong Assured Lives Mortality Table 1997
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S92 : Singapore 1992 Commissioner's ValuationTable
TSO89 : 1989 Taiwan Standard Ordinary Experience Mortality Table (1982-86)
J89/91 : 1996 Japan Life Insurance Companies Standard Mortality Table (1989-1991)
AM80 : United Kingdom Females Standard tables of mortality - the "80" series
CSO80 : US Commissioners 1980 Standard Ordinary Mortality Table

International Mortality Comparison

Mortality Rates of Male (as % of HKA97)

Age	HKA97(M)	M94(M)	S92(M)	TSO89(M)	J89/91(M)	AM80	CSO80(F)
0	100	25	7	166	18	21	43
1	100	269	76	403	130	146	177
2	100	341	95	330	108	111	215
3	100	430	120	277	90	104	266
4	100	541	151	248	83	121	320
5	100	675	189	254	95	138	378
6	100	830	233	291	116	159	439
7	100	995	279	342	133	171	494
8	100	1,144	321	393	138	182	546
9	100	1,241	348	411	134	190	585
10	100	1,549	434	483	148	237	740
11	100	1,340	404	404	120	206	696
12	100	997	381	328	100	174	616
13	100	724	335	280	110	140	535
14	100	539	284	284	127	127	464
15	100	478	282	342	173	136	472
16	100	446	277	420	220	160	479
17	100	429	276	526	262	233	479
18	100	425	271	530	284	231	474
19	100	434	269	523	283	206	463
20	100	448	267	510	269	184	448
21	100	473	265	494	244	171	434
22	100	487	256	475	220	157	418
23	100	473	236	452	199	145	399
24	100	445	230	426	186	135	380
25	100	419	222	400	177	126	360
26	100	398	217	378	171	138	346
27	100	377	210	359	167	112	336
28	100	356	206	343	160	106	324
29	100	332	197	327	153	101	314
30	100	309	189	315	146	96	304
31	100	291	184	306	140	93	296
32	100	277	178	300	136	90	289
33	100	268	172	297	133	88	282
34	100	259	168	294	132	87	275
35	100	251	169	292	130	86	269
36	100	245	171	291	129	86	266
37	100	238	176	289	129	66	262
38	100	231	178	286	129	79	259
39	100	224	178	283	127	90	256
40	100	219	177	280	126	92	254
41	100	216	174	279	126	95	252
42	100	215	169	278	127	98	250
43	100	214	162	278	128	100	248
44	100	213	155	276	128	103	243
45	100	212	150	274	127	105	239
46	100	212	145	271	126	108	236
47	100	211	144	266	124	111	231
48	100	209	144	257	122	114	226
49	100	206	144	247	119	115	220
50	100	202	146	236	116	117	215

Age	HKA97(M)	M94(M)	S92(M)	TSO89(M)	J89/91(M)	AM80	CSO80(F)
51	100	199	149	228	115	119	211
52	100	197	155	220	114	120	208
53	100	194	159	213	114	121	205
54	100	190	162	206	113	122	201
55	100	186	162	201	113	122	197
56	100	181	162	196	114	123	193
57	100	176	161	193	113	123	189
58	100	169	158	189	113	124	185
59	100	162	155	186	112	124	181
60	100	157	151	184	108	124	178
61	100	153	149	182	105	125	176
62	100	151	147	180	104	126	174
63	100	150	144	179	104	127	174
64	100	149	142	178	102	128	174
65	100	149	141	177	101	129	174
66	100	149	142	177	101	131	174
67	100	150	143	177	102	132	174
68	100	151	145	178	103	134	174
69	100	152	148	179	105	132	175
70	100	154	152	181	107	139	176
71	100	156	155	183	109	142	179
72	100	159	158	185	112	145	183
73	100	162	162	188	116	149	188
74	100	164	165	192	120	153	193
75	100	162	162	189	120	152	192
76	100	161	161	191	121	152	191
77	100	161	160	192	123	152	190
78	100	160	159	190	124	174	188
79	100	159	158	188	126	152	186
80	100	158	156	184	127	152	184
81	100	157	155	186	129	152	183
82	100	155	154	187	131	151	182
83	100	154	152	185	133	151	181
84	100	153	151	183	135	150	181
85	100	151	148	180	137	149	180
86	100	149	145	188	139	149	178
87	100	147	142	194	141	147	175
88	100	146	141	197	143	137	172
89	100	144	143	198	145	145	169
90	100	142	149	198	147	144	165
91	100	141	158	197	150	142	162
92	100	139	171	195	152	141	159
93	100	139	188	192	154	139	158
94	100	138	208	189	156	138	160
95	100	139	231	185	157	136	167
96	100	140	256	180	159	135	184
97	100	142	285	176	161	132	219
98	100	144	315	171	162	131	279
99	100	148	347	167	163	129	347
100	100	100	100	50	51	39	100

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International Mortality Comparison

Mortality Rates of Female (as % of HKA97)

Age	HKA97(F)	M94(F)	S92(F)	TSO89(F)	J89/91(F)	AF80	CSO80(F)
0	100	31	9	174	19	22	37
1	100	430	121	542	189	197	230
2	100	583	163	457	178	167	297
3	100	747	209	357	147	147	371
4	100	903	253	282	115	144	443
5	100	1,036	290	238	92	145	495
6	100	1,139	319	232	94	145	530
7	100	1,214	340	240	101	147	549
8	100	1,265	355	242	105	153	564
9	100	1,299	364	240	99	149	571
10	100	1,166	327	215	82	134	505
11	100	1,101	309	210	70	126	491
12	100	1,032	289	210	66	118	480
13	100	960	269	214	79	110	471
14	100	885	267	239	96	125	465
15	100	823	315	281	116	144	480
16	100	783	362	330	135	162	497
17	100	760	401	390	153	162	507
18	100	742	438	405	160	154	515
19	100	741	461	410	160	141	516
20	100	749	482	408	161	140	516
21	100	771	492	402	156	134	511
22	100	807	500	392	156	129	504
23	100	837	498	379	159	123	493
24	100	866	485	364	155	117	481
25	100	863	453	351	150	112	461
26	100	807	403	343	144	107	444
27	100	729	376	339	138	103	428
28	100	653	346	340	134	100	410
29	100	583	318	341	130	99	389
30	100	517	288	339	124	97	369
31	100	459	265	332	120	96	349
32	100	407	242	319	119	94	329
33	100	363	222	301	116	94	314
34	100	329	208	282	117	93	299
35	100	303	195	263	117	92	288
36	100	286	184	247	117	92	281
37	100	273	177	237	117	92	277
38	100	263	177	233	117	93	277
39	100	258	180	234	117	95	280
40	100	254	188	241	118	98	285
41	100	252	194	250	120	101	290
42	100	252	201	263	123	105	296
43	100	255	206	276	125	109	299
44	100	258	208	289	128	113	303
45	100	265	207	301	131	117	305
46	100	274	207	314	133	131	308
47	100	284	207	323	136	128	310
48	100	292	206	329	138	126	312
49	100	298	205	330	139	137	310
50	100	304	206	330	140	141	309

Age	HKA97(F)	M94(F)	S92(F)	TSO89(F)	J89/91(F)	AF80	CSO80(F)
51	100	309	213	330	141	145	308
52	100	312	219	329	140	148	307
53	100	314	226	326	136	151	303
54	100	312	233	320	132	156	296
55	100	309	243	311	128	152	287
56	100	308	252	302	125	153	277
57	100	304	259	290	121	154	265
58	100	299	261	275	118	153	251
59	100	290	259	260	113	151	238
60	100	280	255	248	108	149	226
61	100	268	251	241	104	148	218
62	100	256	245	239	100	147	213
63	100	245	237	240	98	145	210
64	100	237	231	243	96	144	207
65	100	232	225	245	94	142	203
66	100	227	219	245	94	142	200
67	100	224	214	242	93	141	195
68	100	222	211	237	94	141	190
69	100	220	209	230	94	141	186
70	100	219	209	223	96	141	184
71	100	218	210	218	97	142	185
72	100	218	212	215	99	143	188
73	100	218	215	214	102	145	193
74	100	219	218	215	105	147	199
75	100	189	189	187	94	128	177
76	100	187	187	189	95	127	178
77	100	184	184	189	96	126	179
78	100	181	181	188	98	125	179
79	100	178	177	184	100	125	179
80	100	175	174	180	102	124	179
81	100	172	171	182	104	123	180
82	100	169	168	182	106	122	182
83	100	166	165	181	108	122	184
84	100	163	161	178	110	121	186
85	100	160	158	174	112	120	187
86	100	157	155	186	114	119	187
87	100	153	152	195	117	118	187
88	100	150	147	200	119	118	186
89	100	147	142	202	122	118	184
90	100	143	138	202	124	116	182
91	100	140	135	201	127	115	180
92	100	137	136	198	129	122	179
93	100	134	140	194	132	128	179
94	100	131	147	189	134	113	182
95	100	128	157	184	137	113	191
96	100	126	171	178	139	112	211
97	100	124	187	172	142	111	249
98	100	124	205	166	144	111	314
99	100	123	226	160	145	111	386
100	100	35	70	44	41	31	100

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Appendix 4.7

Inforce

Male , Duration 0

Sex	Male	Male	Male	Male	Male	Male
Duration	0	0	0	0	0	0
Date of IF	01/01/92	01/01/93	01/01/94	01/01/95	01/01/96	01/01/97
Age Last Birthday						
0	4,699	6,174	7,075	7,504	8,955	9,173
1	2,395	3,068	3,146	3,219	3,838	4,206
2	2,306	2,568	2,480	2,427	2,734	2,862
3	1,960	2,557	2,373	2,104	2,377	2,819
4	1,776	2,271	2,215	2,022	2,119	2,472
5	1,743	2,029	2,016	2,065	2,017	2,364
6	1,732	2,102	1,871	1,773	2,055	2,245
7	1,609	1,939	1,756	1,666	1,893	2,186
8	1,717	1,868	1,755	1,637	1,650	2,128
9	1,631	1,905	1,768	1,657	1,716	1,898
10	1,435	1,841	1,737	1,454	1,713	1,834
11	1,397	1,654	1,733	1,585	1,664	1,951
12	1,197	1,483	1,574	1,471	1,624	1,823
13	1,033	1,269	1,340	1,371	1,598	1,854
14	962	1,218	1,277	1,266	1,458	1,737
15	936	1,207	1,257	1,199	1,418	1,630
16	1,810	1,763	1,718	1,543	1,633	1,713
17	2,258	2,244	2,086	1,911	1,987	1,919
18	4,012	3,843	3,598	2,975	3,487	3,350
19	4,505	4,367	4,081	3,363	3,814	3,657
20	5,225	4,821	4,733	3,862	4,414	3,991
21	5,775	5,315	4,891	4,126	5,015	4,585
22	6,176	5,639	5,316	4,666	5,721	5,257
23	6,804	6,063	5,859	5,186	6,015	6,045
24	7,230	6,589	6,080	5,315	6,187	6,023
25	7,497	6,717	6,585	5,531	6,296	6,058
26	7,752	7,212	6,586	5,690	6,353	5,945
27	8,200	7,797	6,817	5,989	6,569	5,896
28	8,321	8,044	7,461	6,145	6,607	6,145
29	7,980	8,459	7,880	6,594	6,903	6,095
30	7,694	8,057	8,056	6,855	7,177	6,439
31	7,177	7,720	7,621	7,011	7,418	6,729
32	6,804	7,412	7,548	6,630	7,367	6,926
33	6,286	7,075	7,204	6,607	7,016	6,846
34	5,715	6,835	6,971	6,149	6,715	6,546
35	5,250	6,266	6,632	5,824	6,407	6,413
36	4,683	5,465	6,060	5,651	6,023	5,939
37	4,191	4,852	5,484	5,014	5,637	5,759
38	3,831	4,364	5,013	4,783	5,205	5,413
39	3,598	4,009	4,471	4,218	4,848	4,983
40	3,232	3,725	4,117	3,809	4,209	4,388
41	2,859	3,307	3,708	3,240	3,667	3,906
42	2,591	3,111	3,546	3,104	3,281	3,456
43	2,183	2,600	3,142	2,974	3,224	3,070
44	1,870	2,366	2,892	2,807	2,883	2,921
45	1,310	1,911	2,440	2,363	2,670	2,738
46	952	1,285	1,944	1,940	2,274	2,383
47	927	1,051	1,429	1,714	2,029	2,196
48	815	964	1,148	1,181	1,771	1,906
49	652	781	1,115	1,012	1,326	1,626
50	593	595	781	936	1,029	1,157

Male , Duration 1

Sex	Male	Male	Male	Male	Male	Male
Duration	1	1	1	1	1	1
Date of IF	01/01/92	01/01/93	01/01/94	01/01/95	01/01/96	01/01/97
Age Last Birthday						
0	0	0	0	0	0	0
1	3,125	4,503	5,613	6,304	6,998	8,196
2	1,861	2,468	2,756	2,788	3,018	3,378
3	1,601	2,236	2,265	2,167	2,212	2,431
4	1,435	1,909	2,313	2,079	1,941	2,079
5	1,451	1,726	2,063	1,947	1,842	1,846
6	1,352	1,671	1,808	1,773	1,881	1,756
7	1,294	1,662	1,884	1,607	1,656	1,790
8	1,289	1,556	1,754	1,556	1,508	1,648
9	1,204	1,672	1,682	1,528	1,528	1,469
10	1,098	1,596	1,712	1,544	1,503	1,502
11	997	1,408	1,679	1,508	1,320	1,479
12	971	1,374	1,499	1,506	1,449	1,442
13	862	1,175	1,368	1,366	1,328	1,434
14	688	1,032	1,161	1,171	1,256	1,405
15	583	919	1,110	1,114	1,152	1,262
16	713	853	1,051	1,071	1,068	1,259
17	1,359	1,453	1,407	1,330	1,323	1,325
18	1,713	1,742	1,732	1,515	1,546	1,544
19	2,638	2,888	2,812	2,496	2,298	2,594
20	3,162	3,378	3,242	2,823	2,627	2,802
21	3,731	3,997	3,676	3,326	3,039	3,235
22	4,435	4,515	4,046	3,487	3,314	3,681
23	4,880	4,941	4,444	3,892	3,792	4,347
24	5,396	5,573	4,909	4,435	4,333	4,645
25	5,949	6,124	5,382	4,648	4,433	4,843
26	6,465	6,519	5,619	5,121	4,654	5,013
27	6,862	6,846	6,073	5,189	4,813	5,117
28	7,012	7,488	6,607	5,455	5,166	5,251
29	6,799	7,682	6,993	6,039	5,345	5,371
30	6,455	7,563	7,362	6,377	5,674	5,636
31	6,191	7,356	7,073	6,586	5,964	5,929
32	5,655	6,961	6,803	6,262	6,062	6,164
33	5,357	6,550	6,601	6,256	5,754	6,062
34	4,866	6,288	6,271	6,000	5,772	5,870
35	4,454	5,694	6,063	5,829	5,372	5,680
36	3,974	5,258	5,586	5,529	5,025	5,293
37	3,454	4,697	4,878	5,110	4,984	5,071
38	3,061	4,268	4,370	4,627	4,393	4,763
39	3,008	3,829	3,920	4,195	4,160	4,354
40	2,756	3,754	3,645	3,785	3,688	4,049
41	2,565	3,349	3,421	3,434	3,318	3,507
42	2,093	2,996	3,026	3,103	2,808	3,151
43	1,823	2,677	2,877	3,001	2,681	2,732
44	1,492	2,285	2,371	2,660	2,573	2,695
45	1,140	1,983	2,215	2,396	2,502	2,396
46	960	1,423	1,780	2,061	1,997	2,231
47	781	1,004	1,176	1,650	1,692	1,873
48	612	1,000	988	1,222	1,476	1,641
49	517	802	912	921	1,003	1,478
50	502	680	707	899	877	1,113

Appendix 4.7

Inforce

Male , Duration 0

Male , Duration 1

Sex	Male	Male	Male	Male	Male	Male	Male	Male	Male	Male	Male	Male
Duration	0	0	0	0	0	0	1	1	1	1	1	1
Date of IF	01/01/92	01/01/93	01/01/94	01/01/95	01/01/96	01/01/97	01/01/92	01/01/93	01/01/94	01/01/95	01/01/96	01/01/97
Age Last Birthday												
51	408	475	639	660	865	892	437	624	562	659	797	868
52	370	469	598	584	706	812	343	451	435	541	559	711
53	349	419	591	573	653	744	298	418	436	495	503	610
54	299	381	524	616	653	603	294	390	380	475	488	516
55	264	385	478	559	649	610	239	359	368	433	546	548
56	215	245	328	422	449	532	205	285	351	399	497	535
57	188	265	312	479	500	567	136	234	227	271	360	353
58	160	206	273	382	476	580	165	212	251	257	417	427
59	139	182	252	366	416	590	130	186	194	244	330	393
60	103	154	193	345	382	462	92	152	173	201	312	375
61	85	101	161	287	262	315	77	126	151	170	309	342
62	53	96	146	287	261	287	63	109	97	149	250	228
63	57	93	112	240	250	310	52	79	89	123	260	222
64	47	74	96	222	225	271	46	93	87	94	214	209
65	29	48	84	210	204	255	27	62	69	91	215	202
66	24	42	59	166	147	219	16	51	49	80	191	176
67	19	29	29	170	155	168	9	39	35	52	155	130
68	14	16	39	163	126	183	16	29	24	31	152	133
69	14	28	35	154	107	150	6	19	13	37	148	106
70	2	18	18	81	94	121	5	21	25	31	135	95
71	0	6	12	13	26	30	4	7	14	17	77	87
72	0	4	6	13	23	28	0	4	5	11	9	24
73	0	2	4	7	12	31	0	2	2	6	12	23
74	0	5	1	4	8	28	0	2	3	4	6	10
75	0	0	5	1	3	14	0	1	5	1	4	8
76	0	1	1	4	2	1	0	2	0	6	1	3
77	0	1	0	5	2	7	0	1	1	1	6	2
78	0	1	2	0	2	5	0	0	1	0	6	2
79	0	0	0	2	2	1	0	0	1	2	0	2
80	0	0	0	0	3	0	0	0	0	0	1	2
81	0	0	0	0	0	0	0	0	0	0	0	3
82	0	0	0	0	0	0	0	0	0	0	0	0
83	0	0	0	0	0	0	0	0	0	0	0	0
84	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0
86	0	0	0	0	0	0	0	0	0	0	0	0
87	0	0	0	0	0	0	0	0	0	0	0	0
88	0	0	0	0	0	0	0	0	0	0	0	0
89	0	0	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0	0
91	0	0	0	0	0	0	0	0	0	0	0	0
92	0	0	0	0	0	0	0	0	0	0	0	0
93	0	0	0	0	0	0	0	0	0	0	0	0
94	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0
96	0	0	0	0	0	0	0	0	0	0	0	0
97	0	0	0	0	0	0	0	0	0	0	0	0
98	0	0	0	0	0	0	0	0	0	0	0	0
99	0	0	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	0	0
Total	188,125	201,523	205,384	188,153	209,669	210,417	145,301	175,281	174,753	167,569	163,078	173,177

Inforce

Male , Duration 2 and over **Female , Duration 0**

Sex	Male	Male	Male	Male	Male	Male	Female	Female	Female	Female	Female	Female
Duration	2+	2+	2+	2+	2+	2+	0	0	0	0	0	0
Date of IF	01/01/92	01/01/93	01/01/94	01/01/95	01/01/96	01/01/97	01/01/92	01/01/93	01/01/94	01/01/95	01/01/96	01/01/97
Age Last Birthday												
0	0	0	0	0	0	0	3,889	5,437	6,267	6,524	7,788	8,118
1	0	0	0	0	0	0	2,033	2,673	2,770	2,823	3,295	3,710
2	1,898	2,811	3,816	4,844	5,645	6,286	1,951	2,212	2,065	2,067	2,405	2,598
3	1,964	3,788	4,727	5,875	7,052	8,035	1,611	2,154	1,903	1,810	2,163	2,479
4	1,885	3,812	5,394	6,354	7,500	8,629	1,577	1,950	1,944	1,704	1,896	2,118
5	1,882	3,498	5,094	6,976	7,839	8,679	1,534	1,740	1,706	1,670	1,754	2,010
6	1,822	3,606	4,642	6,477	8,290	8,917	1,324	1,781	1,558	1,502	1,754	1,994
7	1,797	3,450	4,638	5,869	7,725	9,460	1,408	1,660	1,609	1,435	1,592	1,986
8	1,753	3,355	4,557	5,918	6,958	8,720	1,363	1,596	1,511	1,336	1,419	1,764
9	1,720	3,321	4,381	5,796	7,012	7,862	1,287	1,591	1,434	1,332	1,483	1,606
10	1,620	3,170	4,480	5,535	6,801	7,909	1,196	1,475	1,514	1,271	1,411	1,586
11	1,495	2,973	4,267	5,662	6,580	7,720	1,114	1,377	1,391	1,294	1,318	1,632
12	1,346	2,728	3,899	5,398	6,666	7,337	930	1,249	1,310	1,295	1,424	1,555
13	1,193	2,555	3,673	4,942	6,415	7,545	825	1,092	1,153	1,135	1,305	1,598
14	1,130	2,284	3,282	4,581	5,859	7,150	747	978	1,066	998	1,242	1,465
15	945	2,007	2,985	4,042	5,282	6,586	658	860	997	972	1,197	1,353
16	902	1,737	2,631	3,713	4,767	5,934	872	946	1,051	1,114	1,198	1,356
17	790	1,676	2,265	3,291	4,346	5,324	1,304	1,359	1,356	1,348	1,477	1,478
18	978	1,844	2,529	3,107	4,091	5,088	2,643	2,609	2,580	2,241	2,670	2,709
19	1,132	2,053	2,745	3,432	4,010	4,995	3,482	3,524	3,451	3,008	3,394	3,462
20	1,826	2,806	3,752	4,265	5,046	5,382	4,284	4,235	4,025	3,608	4,214	3,929
21	2,690	3,845	4,694	5,410	6,029	6,524	4,570	4,754	4,618	4,147	4,919	4,561
22	3,714	5,021	6,176	6,631	7,444	7,729	5,162	4,847	5,006	4,679	5,647	5,330
23	4,907	6,591	7,657	8,253	8,657	9,255	5,345	5,434	5,219	5,134	6,264	5,913
24	6,264	8,186	9,635	9,907	10,654	10,846	5,135	5,637	5,304	5,123	6,222	6,121
25	8,400	10,121	11,681	12,316	12,657	13,160	5,508	5,504	5,427	5,150	6,095	5,723
26	10,421	12,649	13,979	14,625	15,223	15,204	5,494	5,630	5,238	5,324	5,997	5,676
27	12,208	15,567	16,800	16,933	17,963	17,814	5,372	5,811	5,523	5,120	5,903	5,508
28	14,059	18,102	19,886	20,042	20,099	20,407	5,074	5,878	5,503	5,167	5,680	5,547
29	14,466	20,553	23,014	23,426	23,426	22,882	4,649	5,820	5,709	5,420	5,874	5,267
30	14,507	21,364	25,516	26,725	27,225	26,122	4,309	5,260	5,470	5,528	5,949	5,362
31	14,199	21,834	26,538	29,520	30,661	30,205	3,991	4,983	5,042	5,206	5,844	5,345
32	13,987	21,881	26,898	30,449	33,511	33,640	3,736	4,639	4,694	4,947	5,714	5,524
33	13,584	21,677	26,638	30,703	34,426	36,565	3,445	4,351	4,493	4,593	5,327	5,488
34	12,630	21,713	26,162	30,391	34,808	37,079	3,195	4,124	4,155	4,367	5,030	5,048
35	11,957	20,309	26,122	29,761	34,264	37,595	3,020	3,784	3,882	4,039	4,640	4,928
36	10,700	19,712	24,283	29,567	33,606	36,954	2,623	3,431	3,629	3,827	4,309	4,487
37	10,061	17,942	23,394	27,616	33,318	36,088	2,468	3,061	3,245	3,456	4,130	4,269
38	9,365	16,729	21,225	26,258	31,007	35,740	2,234	2,814	2,998	3,108	3,812	3,918
39	8,965	15,494	19,732	23,793	29,302	33,224	2,105	2,727	2,769	2,919	3,608	3,672
40	8,537	15,114	18,208	22,017	26,638	31,366	1,914	2,372	2,467	2,636	3,249	3,332
41	7,686	14,655	17,803	20,345	24,608	28,445	1,702	2,035	2,211	2,376	2,734	2,880
42	6,977	13,531	17,040	19,815	22,593	26,233	1,542	1,998	2,076	2,132	2,533	2,719
43	5,882	12,176	15,742	18,835	21,765	23,845	1,271	1,707	1,874	2,037	2,390	2,406
44	5,078	10,451	14,063	17,468	20,795	23,009	1,279	1,525	1,686	1,916	2,160	2,128
45	3,569	9,033	12,064	15,427	19,209	21,952	938	1,400	1,541	1,637	2,072	2,054
46	3,003	6,743	10,476	13,415	16,932	20,388	692	904	1,246	1,375	1,733	1,860
47	2,629	5,128	7,759	11,519	14,666	17,869	554	766	951	1,286	1,552	1,682
48	2,088	4,458	5,861	8,370	12,568	15,424	512	702	751	940	1,479	1,581
49	1,854	3,636	5,199	6,410	9,170	13,209	464	542	707	800	1,081	1,500
50	1,744	3,089	4,261	5,732	6,959	9,493	419	461	534	729	822	1,098

Appendix 4.7

Inforce

Male , Duration 2 and over | **Female , Duration 0**

Sex	Male	Male	Male	Male	Male	Male	Female	Female	Female	Female	Female	Female
Duration	2+	2+	2+	2+	2+	2+	0	0	0	0	0	0
Date of IF	01/01/92	01/01/93	01/01/94	01/01/95	01/01/96	01/01/97	01/01/92	01/01/93	01/01/94	01/01/95	01/01/96	01/01/97
Age Last Birthday												
51	1,630	3,043	3,607	4,665	6,333	7,370	286	360	416	545	751	812
52	1,493	2,796	3,471	3,872	5,084	6,709	313	371	426	492	670	741
53	1,310	2,496	3,133	3,664	4,186	5,325	283	350	407	526	582	699
54	1,089	2,239	2,851	3,366	3,958	4,422	245	339	425	574	571	572
55	925	1,925	2,541	3,012	3,644	4,178	219	284	422	542	535	582
56	800	1,648	2,167	2,726	3,317	3,915	190	281	314	461	503	496
57	715	1,407	1,856	2,387	2,988	3,556	181	220	277	445	487	570
58	626	1,179	1,563	1,956	2,538	3,139	166	200	264	435	500	559
59	481	1,087	1,351	1,701	2,083	2,756	141	218	231	425	471	561
60	397	844	1,226	1,420	1,840	2,241	88	165	206	426	402	508
61	327	714	944	1,281	1,538	2,012	97	149	169	370	343	369
62	301	654	818	1,010	1,367	1,707	89	144	154	338	331	352
63	233	564	722	855	1,112	1,511	80	106	135	375	319	357
64	201	440	627	751	928	1,287	71	121	121	325	262	362
65	176	370	509	651	775	1,056	39	99	109	275	262	295
66	164	326	405	538	681	925	30	51	90	261	238	274
67	150	290	368	413	589	829	24	59	63	242	191	256
68	90	261	315	372	440	692	15	35	57	220	172	222
69	111	208	272	321	369	563	18	28	50	201	167	162
70	67	206	217	264	325	475	8	28	30	136	103	131
71	57	122	218	230	278	421	2	7	16	27	33	59
72	44	134	123	223	232	338	0	3	10	17	27	52
73	36	97	128	121	219	215	0	2	8	13	22	39
74	28	88	92	114	112	209	0	3	9	17	11	45
75	27	69	83	85	111	108	0	1	3	6	8	24
76	19	55	65	82	76	108	0	1	3	3	6	6
77	14	38	56	57	79	69	0	1	3	3	6	5
78	14	27	35	51	51	73	0	0	0	1	3	4
79	13	29	22	30	49	52	0	0	0	0	1	2
80	7	22	28	19	31	39	0	0	0	0	2	0
81	0	29	20	19	13	31	0	0	0	0	0	0
82	5	5	29	16	19	13	0	0	0	0	0	0
83	2	32	6	28	11	16	0	0	0	0	0	0
84	0	8	16	6	22	8	0	0	0	0	0	0
85	0	3	6	16	6	13	0	0	0	0	0	0
86	0	3	3	6	16	6	0	0	0	0	0	0
87	0	4	3	3	6	16	0	0	0	0	0	0
88	1	2	4	2	2	6	0	0	0	0	0	0
89	0	5	2	3	2	2	0	0	0	0	0	0
90	0	6	5	2	3	2	0	0	0	0	0	0
91	0	5	6	4	2	3	0	0	0	0	0	0
92	0	0	4	6	2	2	0	0	0	0	0	0
93	0	0	0	0	3	2	0	0	0	0	0	0
94	0	1	0	0	0	3	0	0	0	0	0	0
95	0	0	1	1	0	0	0	0	0	0	0	0
96	0	0	0	1	0	0	0	0	0	0	0	0
97	0	4	0	0	1	0	0	0	0	0	0	0
98	0	0	4	0	0	1	0	0	0	0	0	0
99	0	0	0	4	0	0	0	0	0	0	0	0
100	0	0	0	0	4	4	0	0	0	0	0	0
Total	285,762	474,263	592,185	694,110	803,512	892,252	127,339	149,025	151,047	153,306	177,147	180,549

Appendix 4.7

Inforce

Female , Duration 1

Sex	Female	Female	Female	Female	Female	Female
Duration	1	1	1	1	1	1
Date of IF	01/01/92	01/01/93	01/01/94	01/01/95	01/01/96	01/01/97
Age Last Birthday						
0	0	0	0	0	0	0
1	2,623	3,750	4,901	5,606	6,073	7,129
2	1,620	2,114	2,419	2,440	2,658	2,930
3	1,318	1,897	1,992	1,801	1,903	2,086
4	1,235	1,635	1,927	1,679	1,644	1,890
5	1,175	1,563	1,730	1,704	1,548	1,627
6	1,078	1,487	1,549	1,465	1,532	1,520
7	1,092	1,303	1,603	1,362	1,358	1,542
8	1,057	1,387	1,495	1,398	1,300	1,373
9	960	1,313	1,421	1,321	1,204	1,241
10	886	1,250	1,462	1,282	1,230	1,295
11	777	1,176	1,350	1,292	1,129	1,208
12	706	1,076	1,284	1,216	1,176	1,154
13	664	903	1,139	1,117	1,178	1,235
14	540	797	980	1,006	1,024	1,143
15	457	743	898	933	899	1,083
16	454	632	765	852	865	1,039
17	609	726	769	858	977	1,006
18	925	1,078	1,057	1,069	1,145	1,189
19	1,910	2,096	2,057	1,893	1,871	2,074
20	2,493	2,965	2,811	2,685	2,612	2,707
21	2,971	3,660	3,433	3,115	3,123	3,413
22	3,544	4,053	3,976	3,726	3,667	4,047
23	3,910	4,738	4,162	4,114	4,153	4,752
24	4,053	5,025	4,697	4,365	4,645	5,346
25	4,352	4,949	4,933	4,507	4,644	5,388
26	4,395	5,423	4,865	4,592	4,719	5,286
27	4,230	5,519	5,054	4,452	4,855	5,197
28	3,951	5,490	5,207	4,765	4,674	5,122
29	3,631	5,239	5,314	4,750	4,751	4,970
30	3,355	4,991	5,276	4,952	5,000	5,141
31	2,992	4,557	4,763	4,734	5,045	5,188
32	2,768	4,227	4,542	4,406	4,739	5,081
33	2,479	3,993	4,200	4,089	4,535	4,999
34	2,443	3,607	3,974	3,906	4,202	4,688
35	2,211	3,383	3,754	3,632	3,979	4,531
36	1,967	3,153	3,458	3,422	3,709	4,111
37	1,734	2,847	3,135	3,159	3,534	3,787
38	1,633	2,591	2,812	2,843	3,127	3,637
39	1,491	2,387	2,564	2,597	2,830	3,362
40	1,391	2,222	2,532	2,441	2,692	3,196
41	1,258	2,031	2,160	2,147	2,420	2,816
42	1,080	1,773	1,904	1,933	2,185	2,398
43	987	1,613	1,838	1,830	1,981	2,229
44	917	1,330	1,547	1,636	1,862	2,089
45	683	1,368	1,357	1,460	1,739	1,896
46	561	1,006	1,296	1,341	1,501	1,823
47	472	725	835	1,089	1,271	1,549
48	386	612	701	824	1,183	1,371
49	330	535	648	658	870	1,295
50	322	505	511	612	765	940

Female , Duration 2 and over

Sex	Female	Female	Female	Female	Female	Female
Duration	2+	2+	2+	2+	2+	2+
Date of IF	01/01/92	01/01/93	01/01/94	01/01/95	01/01/96	01/01/97
Age Last Birthday						
0	0	0	0	0	0	0
1	0	0	0	0	0	0
2	1,603	2,353	3,231	4,233	5,030	5,466
3	1,677	3,225	3,982	5,073	6,150	7,116
4	1,606	3,214	4,535	5,385	6,429	7,510
5	1,578	3,002	4,313	5,845	6,560	7,414
6	1,518	2,973	4,085	5,520	7,001	7,477
7	1,393	2,854	3,919	5,139	6,532	7,886
8	1,462	2,681	3,704	5,016	6,074	7,337
9	1,278	2,756	3,636	4,722	5,936	6,767
10	1,236	2,441	3,649	4,613	5,648	6,591
11	1,080	2,322	3,278	4,632	5,467	6,394
12	1,075	2,050	3,085	4,177	5,439	6,095
13	939	1,948	2,784	3,990	4,982	6,134
14	833	1,779	2,539	3,530	4,687	5,676
15	619	1,512	2,306	3,154	4,167	5,227
16	601	1,179	1,987	2,877	3,733	4,603
17	534	1,128	1,616	2,456	3,431	4,196
18	552	1,088	1,571	2,087	2,961	3,978
19	729	1,313	1,745	2,227	2,793	3,612
20	1,317	2,129	2,661	3,091	3,592	4,074
21	2,071	3,163	4,133	4,511	5,091	5,467
22	3,101	4,446	5,573	6,352	6,862	7,293
23	4,202	5,988	7,224	8,205	9,205	9,413
24	5,186	7,561	9,312	9,960	11,306	12,108
25	6,706	8,899	11,135	12,375	13,331	14,591
26	7,731	10,883	12,337	14,379	15,737	16,561
27	8,463	12,354	14,680	15,547	17,833	18,887
28	8,331	13,527	16,129	18,008	18,942	21,042
29	7,793	13,334	17,384	19,455	21,543	21,985
30	7,381	12,920	17,003	20,898	22,948	24,554
31	6,734	12,344	16,543	20,590	24,524	26,189
32	6,224	11,523	15,583	19,693	24,149	27,655
33	5,615	10,683	14,597	18,634	22,999	27,078
34	4,977	9,947	13,613	17,415	21,736	25,927
35	4,627	8,963	12,561	16,373	20,328	24,444
36	4,138	8,299	11,415	15,142	19,080	22,888
37	3,858	7,658	10,634	13,821	17,671	21,430
38	3,611	6,978	9,751	12,818	16,137	19,921
39	3,295	6,439	8,879	11,677	14,914	18,105
40	3,189	5,940	8,250	10,671	13,566	16,715
41	2,900	5,635	7,606	10,038	12,492	15,311
42	2,517	5,080	7,134	9,104	11,565	14,061
43	2,292	4,437	6,411	8,469	10,559	12,972
44	1,851	4,038	5,665	7,735	9,819	11,852
45	1,385	3,436	5,025	6,758	8,968	11,078
46	1,190	2,547	4,497	5,997	7,867	10,132
47	1,050	2,060	3,290	5,463	7,038	8,836
48	859	1,755	2,628	3,882	6,258	7,873
49	805	1,417	2,199	3,150	4,510	7,059
50	749	1,260	1,854	2,667	3,639	5,128

Appendix 4.7

Inforce

Female , Duration 1

Female , Duration 2 and over

Sex	Female	Female	Female	Female	Female	Female	Female	Female	Female	Female	Female	Female
Duration	1	1	1	1	1	1	2+	2+	2+	2+	2+	2+
Date of IF	01/01/92	01/01/93	01/01/94	01/01/95	01/01/96	01/01/97	01/01/92	01/01/93	01/01/94	01/01/95	01/01/96	01/01/97
Age Last Birthday												
51	318	420	421	481	694	734	783	1,196	1,659	2,236	3,160	4,173
52	231	310	342	359	503	669	795	1,252	1,564	1,974	2,634	3,656
53	234	335	357	366	475	605	710	1,197	1,502	1,792	2,246	2,964
54	201	311	341	368	492	524	577	1,116	1,466	1,737	2,082	2,595
55	214	287	322	385	541	513	514	895	1,368	1,707	2,040	2,414
56	176	245	278	376	509	470	477	840	1,141	1,602	2,003	2,448
57	159	246	281	285	422	459	443	755	1,063	1,349	1,923	2,367
58	134	223	212	252	415	430	391	721	983	1,272	1,589	2,228
59	138	210	194	228	402	451	391	670	906	1,139	1,486	1,911
60	116	205	206	214	382	432	338	643	854	1,034	1,324	1,798
61	79	135	155	178	402	360	283	573	808	1,012	1,213	1,609
62	74	137	142	149	338	310	295	502	700	930	1,148	1,546
63	74	108	133	146	307	306	244	474	620	804	1,041	1,435
64	64	96	109	129	352	292	235	427	557	716	913	1,295
65	53	84	113	118	307	245	203	409	521	628	822	1,225
66	38	62	95	98	263	241	152	368	483	600	727	1,069
67	27	42	51	85	250	210	145	276	417	550	672	940
68	18	36	53	57	216	172	122	262	312	453	621	869
69	26	27	31	55	207	152	81	216	289	345	483	798
70	15	38	27	50	187	143	88	196	227	307	390	652
71	7	17	25	28	119	92	57	163	227	243	343	561
72	1	6	7	18	25	29	46	124	175	241	264	443
73	0	1	3	11	16	28	28	93	122	171	251	275
74	0	5	2	9	13	20	24	56	93	120	167	256
75	0	3	2	9	16	8	16	54	61	92	124	174
76	0	1	1	3	6	9	11	39	56	59	98	131
77	0	0	0	3	3	6	4	25	38	51	59	101
78	0	2	1	3	3	6	5	18	23	34	51	56
79	0	2	0	0	1	3	2	15	18	21	34	50
80	0	0	0	0	0	1	3	5	16	14	19	32
81	0	1	0	1	0	2	1	6	5	16	13	18
82	0	0	0	0	0	0	0	5	5	4	16	12
83	0	0	0	0	0	0	0	5	5	4	4	14
84	0	0	0	0	0	0	0	2	4	5	4	4
85	0	0	0	0	0	0	0	0	2	3	4	2
86	0	0	0	0	0	0	0	1	0	1	3	4
87	0	0	0	0	0	0	0	1	1	0	0	2
88	0	0	0	0	0	0	0	0	1	1	0	0
89	0	0	0	0	0	0	0	0	0	1	1	0
90	0	0	0	0	0	0	0	0	0	0	0	1
91	0	0	0	0	0	0	0	0	0	0	0	0
92	0	0	0	0	0	0	0	0	0	0	0	0
93	0	0	0	0	0	0	0	0	0	0	0	0
94	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	2	0	0
96	0	0	0	0	0	0	0	0	0	0	0	0
97	0	0	0	0	0	0	0	0	0	0	0	0
98	0	0	0	0	0	0	0	0	0	0	0	0
99	0	0	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	1	0
Total	91,473	127,038	132,961	129,540	139,592	154,041	151,925	269,061	359,963	450,824	547,202	640,236

Appendix 4.8

Exposure

Male , Duration 0

Sex	Male	Male	Male	Male	Male
Duration	0	0	0	0	0
Date of IF	1992	1993	1994	1995	1996
Age Last Birthday					
0	5,258	6,625	7,228	8,145	9,064
1	2,538	3,107	3,152	3,441	4,022
2	2,327	2,524	2,427	2,530	2,798
3	2,156	2,465	2,206	2,197	2,598
4	1,939	2,243	2,100	2,024	2,296
5	1,818	2,023	2,016	1,998	2,191
6	1,847	1,987	1,798	1,877	2,150
7	1,703	1,848	1,693	1,737	2,040
8	1,731	1,812	1,680	1,610	1,889
9	1,711	1,837	1,694	1,661	1,807
10	1,584	1,789	1,580	1,560	1,774
11	1,477	1,694	1,643	1,597	1,808
12	1,286	1,529	1,508	1,524	1,724
13	1,099	1,305	1,344	1,462	1,726
14	1,044	1,248	1,256	1,338	1,598
15	1,033	1,232	1,214	1,285	1,524
16	1,739	1,741	1,612	1,561	1,673
17	2,180	2,165	1,968	1,919	1,953
18	3,829	3,721	3,242	3,153	3,419
19	4,306	4,224	3,674	3,478	3,736
20	4,878	4,777	4,240	4,011	4,203
21	5,389	5,103	4,441	4,423	4,800
22	5,698	5,478	4,918	5,017	5,489
23	6,205	5,961	5,436	5,433	6,030
24	6,638	6,335	5,609	5,573	6,105
25	6,807	6,651	5,970	5,731	6,177
26	7,119	6,899	6,039	5,853	6,149
27	7,607	7,307	6,304	6,097	6,233
28	7,733	7,753	6,707	6,207	6,376
29	7,729	8,170	7,146	6,560	6,499
30	7,369	8,057	7,368	6,827	6,808
31	6,959	7,671	7,217	7,012	7,074
32	6,604	7,480	7,001	6,804	7,147
33	6,200	7,140	6,813	6,644	6,931
34	5,771	6,903	6,481	6,289	6,631
35	5,285	6,449	6,159	5,962	6,410
36	4,652	5,763	5,801	5,706	5,981
37	4,102	5,168	5,190	5,209	5,698
38	3,769	4,689	4,843	4,872	5,309
39	3,475	4,240	4,295	4,432	4,916
40	3,173	3,921	3,929	3,925	4,299
41	2,821	3,508	3,437	3,380	3,787
42	2,602	3,329	3,290	3,134	3,369
43	2,179	2,871	3,025	3,038	3,147
44	1,940	2,629	2,823	2,783	2,902
45	1,460	2,176	2,373	2,460	2,704
46	993	1,615	1,924	2,066	2,329
47	910	1,240	1,554	1,842	2,113
48	823	1,056	1,155	1,443	1,839
49	662	948	1,056	1,151	1,476
50	549	688	853	965	1,093

Male , Duration 1

Sex	Male	Male	Male	Male	Male
Duration	1	1	1	1	1
Date of IF	1992	1993	1994	1995	1996
Age Last Birthday					
0	0	0	0	0	0
1	3,671	5,058	5,959	6,557	7,576
2	1,984	2,612	2,772	2,823	3,184
3	1,813	2,251	2,216	2,139	2,308
4	1,578	2,111	2,196	1,965	1,999
5	1,515	1,895	2,005	1,862	1,833
6	1,441	1,740	1,791	1,791	1,808
7	1,414	1,773	1,746	1,590	1,713
8	1,352	1,655	1,655	1,505	1,565
9	1,372	1,677	1,605	1,501	1,490
10	1,274	1,654	1,628	1,498	1,496
11	1,136	1,544	1,594	1,391	1,395
12	1,118	1,437	1,503	1,444	1,439
13	957	1,272	1,367	1,326	1,374
14	802	1,097	1,166	1,195	1,324
15	709	1,015	1,112	1,110	1,198
16	747	952	1,061	1,053	1,159
17	1,359	1,430	1,369	1,299	1,314
18	1,673	1,737	1,624	1,492	1,536
19	2,690	2,850	2,654	2,340	2,428
20	3,170	3,310	3,033	2,650	2,693
21	3,752	3,837	3,501	3,094	3,116
22	4,340	4,281	3,767	3,275	3,468
23	4,742	4,693	4,168	3,715	4,038
24	5,303	5,241	4,672	4,222	4,450
25	5,810	5,753	5,015	4,381	4,605
26	6,210	6,069	5,370	4,725	4,803
27	6,526	6,460	5,631	4,830	4,925
28	6,851	7,048	6,031	5,125	5,165
29	6,794	7,338	6,516	5,506	5,309
30	6,554	7,463	6,870	5,848	5,597
31	6,320	7,215	6,830	6,101	5,897
32	5,838	6,882	6,533	5,986	6,058
33	5,534	6,576	6,429	5,855	5,852
34	5,117	6,280	6,136	5,734	5,769
35	4,648	5,879	5,946	5,457	5,485
36	4,241	5,422	5,558	5,168	5,113
37	3,722	4,788	4,994	4,931	4,971
38	3,346	4,319	4,499	4,405	4,536
39	3,153	3,875	4,058	4,095	4,218
40	2,948	3,700	3,715	3,655	3,836
41	2,698	3,385	3,428	3,315	3,377
42	2,298	3,011	3,065	2,898	2,955
43	2,021	2,777	2,939	2,786	2,682
44	1,690	2,328	2,516	2,566	2,615
45	1,385	2,099	2,306	2,404	2,421
46	1,047	1,602	1,921	1,992	2,093
47	799	1,090	1,413	1,637	1,769
48	718	994	1,105	1,320	1,548
49	601	857	917	941	1,230
50	537	694	803	874	989

Appendix 4.8

Exposure

Male , Duration 0

Male , Duration 1

Sex	Male	Male	Male	Male	Male	Male	Male	Male	Male	Male
Duration	0	0	0	0	0	1	1	1	1	1
Date of IF	1992	1993	1994	1995	1996	1992	1993	1994	1995	1996
Age Last Birthday										
51	411	557	644	748	879	474	593	611	717	825
52	387	534	584	632	759	351	443	488	538	630
53	347	505	578	601	699	314	427	466	487	554
54	304	453	565	624	628	305	385	428	472	499
55	299	432	512	592	630	257	364	401	479	545
56	208	287	372	432	491	216	318	375	439	512
57	197	289	392	481	534	161	231	249	310	356
58	160	240	326	424	528	162	232	254	331	420
59	142	217	307	388	503	133	190	219	282	360
60	112	174	267	359	422	106	163	187	252	342
61	81	131	223	271	289	83	139	161	237	325
62	62	121	216	270	274	70	103	123	196	239
63	61	103	176	244	280	51	84	106	189	239
64	51	85	159	222	248	50	90	91	153	212
65	33	66	146	204	230	34	66	80	150	208
66	25	51	112	156	183	21	50	65	133	183
67	18	29	99	162	162	16	37	44	101	143
68	10	28	101	145	155	16	27	28	90	143
69	17	32	95	131	129	9	16	25	93	127
70	5	18	50	87	108	9	23	28	83	115
71	0	9	13	20	28	3	11	16	46	82
72	0	5	10	18	26	0	5	8	10	17
73	0	3	6	10	22	0	2	4	9	18
74	0	3	3	6	18	0	3	4	5	8
75	0	3	3	2	9	0	3	3	3	6
76	0	1	3	3	2	0	1	3	4	2
77	0	1	3	4	5	0	1	1	4	4
78	0	2	1	1	4	0	1	1	3	4
79	0	0	1	2	2	0	1	2	1	1
80	0	0	0	2	2	0	0	0	1	2
81	0	0	0	0	0	0	0	0	0	2
82	0	0	0	0	0	0	0	0	0	0
83	0	0	0	0	0	0	0	0	0	0
84	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0
86	0	0	0	0	0	0	0	0	0	0
87	0	0	0	0	0	0	0	0	0	0
88	0	0	0	0	0	0	0	0	0	0
89	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0
91	0	0	0	0	0	0	0	0	0	0
92	0	0	0	0	0	0	0	0	0	0
93	0	0	0	0	0	0	0	0	0	0
94	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0
96	0	0	0	0	0	0	0	0	0	0
97	0	0	0	0	0	0	0	0	0	0
98	0	0	0	0	0	0	0	0	0	0
99	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0
Total	183,616	203,454	194,375	194,167	210,043	150,148	175,017	171,161	161,166	166,822

Appendix 4.8

Exposure

Male , Duration 2 and over **Female , Duration 0**

Sex	Male	Male	Male	Male	Male	Female	Female	Female	Female	Female
Duration	2+	2+	2+	2+	2+	0	0	0	0	0
Date of IF	1992	1993	1994	1995	1996	1992	1993	1994	1995	1996
Age Last Birthday										
0	0	0	0	0	0	4,481	5,852	6,348	7,073	7,953
1	0	0	0	0	0	2,185	2,722	2,760	2,986	3,503
2	2,248	3,314	4,330	5,213	5,927	1,982	2,139	2,037	2,199	2,502
3	2,640	4,258	5,301	6,396	7,523	1,799	2,029	1,835	1,948	2,321
4	2,510	4,603	5,874	6,861	8,048	1,678	1,947	1,804	1,767	2,007
5	2,400	4,296	6,035	7,344	8,244	1,574	1,723	1,670	1,684	1,882
6	2,392	4,124	5,560	7,319	8,590	1,487	1,670	1,517	1,598	1,874
7	2,299	4,044	5,254	6,731	8,580	1,470	1,635	1,505	1,482	1,789
8	2,251	3,956	5,238	6,384	7,823	1,428	1,554	1,408	1,352	1,592
9	2,201	3,851	5,089	6,354	7,428	1,378	1,513	1,371	1,385	1,545
10	2,103	3,825	5,008	6,122	7,343	1,284	1,495	1,379	1,320	1,499
11	1,967	3,620	4,965	6,084	7,141	1,200	1,384	1,325	1,291	1,475
12	1,763	3,314	4,649	5,998	6,994	1,043	1,280	1,290	1,334	1,490
13	1,630	3,114	4,308	5,649	6,969	932	1,123	1,133	1,196	1,452
14	1,474	2,783	3,932	5,186	6,495	825	1,022	1,024	1,094	1,354
15	1,269	2,496	3,514	4,636	5,927	727	929	971	1,061	1,275
16	1,125	2,184	3,172	4,206	5,340	871	999	1,069	1,135	1,277
17	1,073	1,971	2,778	3,800	4,829	1,289	1,358	1,339	1,386	1,478
18	1,259	2,187	2,818	3,578	4,579	2,546	2,595	2,379	2,399	2,690
19	1,471	2,399	3,089	3,701	4,488	3,366	3,488	3,193	3,108	3,428
20	2,194	3,279	4,009	4,621	5,194	4,058	4,130	3,773	3,806	4,072
21	3,107	4,270	5,052	5,652	6,258	4,425	4,686	4,316	4,392	4,740
22	4,181	5,599	6,404	6,934	7,564	4,728	4,927	4,764	4,985	5,489
23	5,510	7,124	7,955	8,326	8,925	5,088	5,327	5,116	5,518	6,089
24	6,921	8,911	9,771	10,125	10,718	5,005	5,471	5,154	5,487	6,172
25	8,863	10,901	11,999	12,305	12,867	5,124	5,466	5,214	5,430	5,909
26	11,040	13,314	14,302	14,722	15,173	5,190	5,434	5,209	5,505	5,837
27	13,095	16,184	16,867	17,178	17,841	5,168	5,667	5,263	5,362	5,706
28	15,073	18,994	19,964	19,778	20,204	5,026	5,691	5,275	5,271	5,614
29	16,208	21,784	23,220	23,117	23,104	4,768	5,765	5,513	5,506	5,571
30	16,395	23,440	26,121	26,628	26,621	4,330	5,365	5,445	5,585	5,656
31	16,246	24,186	28,029	29,722	30,382	4,087	5,013	5,072	5,390	5,595
32	15,954	24,390	28,674	31,588	33,531	3,780	4,667	4,774	5,201	5,619
33	15,501	24,158	28,671	32,160	35,441	3,544	4,422	4,500	4,844	5,408
34	14,766	23,938	28,277	32,217	35,901	3,300	4,140	4,209	4,576	5,039
35	13,797	23,216	27,942	31,643	35,880	3,116	3,833	3,917	4,249	4,784
36	12,739	21,998	26,925	31,234	35,235	2,748	3,530	3,687	3,983	4,398
37	11,654	20,668	25,505	30,112	34,659	2,514	3,153	3,318	3,712	4,200
38	10,808	18,977	23,742	28,327	33,341	2,295	2,906	3,023	3,383	3,865
39	10,134	17,613	21,763	26,262	31,230	2,193	2,748	2,818	3,186	3,640
40	9,739	16,661	20,113	24,087	28,972	1,970	2,420	2,530	2,883	3,291
41	9,056	16,229	19,074	22,255	26,500	1,722	2,123	2,269	2,507	2,807
42	8,205	15,286	18,428	21,006	24,387	1,615	2,037	2,087	2,286	2,626
43	7,126	13,959	17,289	20,137	22,783	1,369	1,791	1,939	2,171	2,398
44	6,067	12,257	15,766	18,961	21,883	1,281	1,606	1,778	1,986	2,144
45	4,808	10,549	13,746	17,172	20,563	1,068	1,471	1,573	1,818	2,063
46	3,673	8,610	11,946	15,045	18,641	727	1,075	1,300	1,526	1,797
47	3,135	6,444	9,639	12,975	16,252	604	859	1,103	1,389	1,617
48	2,623	5,160	7,116	10,360	13,986	547	727	830	1,171	1,530
49	2,174	4,418	5,805	7,708	11,178	454	625	741	921	1,291
50	1,971	3,675	4,997	6,294	8,223	406	498	625	756	960

Appendix 4.8

Exposure

Male , Duration 2 and over **Female , Duration 0**

Sex	Male	Male	Male	Male	Male	Female	Female	Female	Female	Female
Duration	2+	2+	2+	2+	2+	0	0	0	0	0
Date of IF	1992	1993	1994	1995	1996	1992	1993	1994	1995	1996
Age Last Birthday										
51	1,864	3,325	4,136	5,447	6,848	292	388	474	631	782
52	1,711	3,134	3,672	4,432	5,891	318	399	454	571	706
53	1,512	2,815	3,399	3,895	4,751	290	379	461	541	641
54	1,289	2,545	3,109	3,625	4,186	265	382	493	565	572
55	1,096	2,233	2,777	3,300	3,908	221	353	475	530	559
56	943	1,908	2,447	2,988	3,612	198	298	385	473	500
57	815	1,632	2,122	2,656	3,267	178	249	359	458	529
58	705	1,371	1,760	2,228	2,836	160	232	346	459	530
59	602	1,219	1,526	1,874	2,417	144	225	327	438	516
60	472	1,035	1,323	1,619	2,039	104	186	314	410	455
61	392	829	1,113	1,394	1,774	101	159	269	350	356
62	335	736	914	1,179	1,536	90	149	245	331	342
63	280	643	789	972	1,310	76	121	254	342	338
64	231	534	689	834	1,107	72	121	220	292	312
65	198	440	580	704	915	57	104	189	267	279
66	175	366	472	605	803	31	71	174	249	256
67	153	329	391	496	708	33	61	152	217	224
68	119	288	344	401	565	19	46	138	195	197
69	103	240	297	345	465	21	39	125	184	165
70	86	212	241	295	400	11	29	83	120	117
71	60	170	224	253	350	2	12	22	30	46
72	49	129	173	227	285	0	7	14	22	40
73	37	113	125	170	217	0	5	11	18	31
74	30	90	103	113	161	0	6	13	14	28
75	26	76	84	98	110	0	2	5	7	16
76	22	60	74	79	92	1	2	3	5	6
77	15	47	57	68	74	0	2	3	5	6
78	13	31	43	51	62	0	0	1	2	4
79	13	26	26	40	51	0	0	0	1	2
80	10	25	24	25	35	0	0	0	1	1
81	4	25	20	16	22	0	0	0	0	0
82	3	17	23	18	16	0	0	0	0	0
83	3	19	17	20	14	0	0	0	0	0
84	1	12	11	14	15	0	0	0	0	0
85	0	5	11	11	10	0	0	0	0	0
86	0	3	5	11	11	0	0	0	0	0
87	0	4	3	5	11	0	0	0	0	0
88	1	3	3	2	4	0	0	0	0	0
89	1	4	3	3	2	0	0	0	0	0
90	0	6	4	3	3	0	0	0	0	0
91	0	6	5	3	3	0	0	0	0	0
92	0	2	5	4	2	0	0	0	0	0
93	0	0	0	2	3	0	0	0	0	0
94	0	1	0	0	2	0	0	0	0	0
95	0	1	1	1	0	0	0	0	0	0
96	0	0	1	1	0	0	0	0	0	0
97	0	2	0	1	1	0	0	0	0	0
98	0	2	2	0	1	0	0	0	0	0
99	0	0	2	2	0	0	0	0	0	0
100	0	0	0	2	4	0	0	0	0	0
Total	330,182	533,224	643,148	740,720	846,580	128,462	150,036	150,482	161,289	178,848

Appendix 4.8

Exposure

Female , Duration 1 **Female , Duration 2 and over**

Sex	Female	Female	Female	Female	Female	Female	Female	Female	Female	Female
Duration	1	1	1	1	1	2+	2+	2+	2+	2+
Date of IF	1992	1993	1994	1995	1996	1992	1993	1994	1995	1996
Age Last Birthday										
0	0	0	0	0	0	0	0	0	0	0
1	3,050	4,326	5,254	5,763	6,583	0	0	0	0	0
2	1,710	2,267	2,430	2,474	2,782	1,897	2,792	3,732	4,606	5,216
3	1,509	1,945	1,897	1,809	1,987	2,249	3,604	4,528	5,560	6,608
4	1,340	1,781	1,803	1,624	1,756	2,111	3,875	4,960	5,848	6,952
5	1,289	1,647	1,717	1,593	1,579	2,015	3,658	5,079	6,139	6,976
6	1,219	1,518	1,507	1,469	1,518	1,967	3,529	4,803	6,215	7,228
7	1,128	1,453	1,483	1,337	1,441	1,832	3,387	4,529	5,777	7,197
8	1,158	1,441	1,447	1,324	1,328	1,810	3,193	4,360	5,504	6,699
9	1,088	1,367	1,371	1,240	1,216	1,750	3,196	4,179	5,288	6,342
10	1,012	1,356	1,372	1,235	1,257	1,599	3,045	4,131	5,095	6,110
11	926	1,263	1,321	1,192	1,162	1,469	2,800	3,955	5,016	5,922
12	843	1,180	1,250	1,172	1,160	1,346	2,568	3,631	4,778	5,761
13	740	1,021	1,128	1,128	1,195	1,253	2,366	3,387	4,456	5,548
14	633	889	993	1,000	1,077	1,114	2,159	3,035	4,091	5,173
15	562	821	916	905	983	906	1,909	2,730	3,640	4,690
16	506	699	809	840	945	759	1,583	2,432	3,289	4,164
17	638	748	814	900	987	723	1,372	2,036	2,920	3,807
18	957	1,068	1,063	1,088	1,160	717	1,330	1,829	2,508	3,466
19	1,932	2,077	1,975	1,839	1,961	920	1,529	1,986	2,497	3,196
20	2,599	2,888	2,748	2,568	2,640	1,609	2,395	2,876	3,313	3,822
21	3,159	3,547	3,274	3,021	3,241	2,478	3,648	4,322	4,745	5,261
22	3,604	4,015	3,851	3,566	3,832	3,547	5,010	5,963	6,503	7,050
23	4,084	4,450	4,138	3,968	4,415	4,799	6,606	7,715	8,544	9,274
24	4,247	4,861	4,531	4,365	4,959	5,947	8,437	9,636	10,464	11,663
25	4,342	4,941	4,720	4,423	4,970	7,253	10,017	11,755	12,633	13,927
26	4,555	5,144	4,729	4,493	4,966	8,610	11,610	13,358	14,828	16,114
27	4,481	5,287	4,753	4,502	4,987	9,484	13,517	15,114	16,436	18,319
28	4,314	5,349	4,986	4,579	4,863	9,783	14,828	17,069	18,210	19,947
29	4,008	5,277	5,032	4,609	4,823	9,322	15,359	18,420	20,224	21,727
30	3,730	5,134	5,114	4,847	5,032	8,773	14,962	18,951	21,634	23,712
31	3,387	4,660	4,749	4,756	5,077	8,161	14,444	18,567	22,261	25,319
32	3,123	4,385	4,474	4,448	4,871	7,496	13,553	17,638	21,633	25,862
33	2,905	4,097	4,145	4,214	4,727	6,858	12,640	16,616	20,531	25,009
34	2,732	3,791	3,940	3,960	4,406	6,118	11,780	15,514	19,338	23,803
35	2,521	3,569	3,693	3,702	4,216	5,660	10,762	14,467	18,122	22,357
36	2,306	3,306	3,440	3,483	3,877	5,170	9,857	13,279	16,928	20,948
37	2,050	2,991	3,147	3,267	3,639	4,725	9,146	12,228	15,578	19,521
38	1,912	2,702	2,828	2,916	3,356	4,348	8,365	11,285	14,338	18,005
39	1,745	2,476	2,581	2,662	3,068	4,046	7,659	10,278	13,169	16,491
40	1,626	2,377	2,487	2,514	2,924	3,777	7,095	9,461	11,999	15,119
41	1,486	2,096	2,154	2,226	2,599	3,560	6,621	8,822	11,154	13,884
42	1,308	1,839	1,919	2,010	2,277	3,161	6,107	8,119	10,248	12,795
43	1,180	1,726	1,834	1,862	2,093	2,794	5,424	7,440	9,425	11,748
44	1,013	1,439	1,592	1,713	1,964	2,429	4,852	6,700	8,694	10,825
45	914	1,363	1,409	1,564	1,801	1,952	4,231	5,892	7,782	10,008
46	696	1,151	1,319	1,384	1,650	1,544	3,522	5,247	6,852	8,985
47	547	780	962	1,148	1,401	1,334	2,675	4,377	6,177	7,925
48	444	657	763	973	1,269	1,134	2,192	3,255	5,012	7,058
49	392	592	653	736	1,070	971	1,808	2,675	3,778	5,777
50	373	508	562	664	849	891	1,557	2,261	3,124	4,374

Appendix 4.8

Exposure

	Female , Duration 1					Female , Duration 2 and over				
Sex	Female	Female	Female	Female	Female	Female	Female	Female	Female	Female
Duration	1	1	1	1	1	2+	2+	2+	2+	2+
Date of IF	1992	1993	1994	1995	1996	1992	1993	1994	1995	1996
Age Last Birthday										
51	341	421	451	566	710	887	1,428	1,948	2,662	3,656
52	243	326	351	417	582	909	1,408	1,769	2,272	3,141
53	256	346	362	408	536	832	1,350	1,647	1,992	2,601
54	224	326	355	421	506	728	1,291	1,602	1,885	2,336
55	220	305	354	452	525	623	1,132	1,538	1,850	2,223
56	185	262	327	430	488	574	991	1,372	1,777	2,221
57	166	264	283	346	437	520	909	1,206	1,605	2,138
58	151	218	232	327	418	473	852	1,128	1,407	1,907
59	145	202	211	308	424	437	788	1,023	1,293	1,698
60	124	206	210	293	403	415	749	944	1,157	1,557
61	78	145	167	284	380	355	691	910	1,098	1,410
62	79	140	146	242	322	318	601	815	1,025	1,345
63	74	121	140	225	306	293	547	712	911	1,238
64	67	103	119	238	319	265	492	637	808	1,104
65	57	99	116	208	276	240	465	575	716	1,022
66	34	79	97	175	251	195	426	542	659	897
67	29	47	68	163	230	158	347	484	605	803
68	20	45	55	136	194	144	287	383	532	743
69	20	29	43	129	180	104	253	317	411	641
70	16	33	39	118	165	96	212	267	346	520
71	7	21	27	73	106	76	195	235	291	452
72	1	7	13	22	27	52	150	208	251	353
73	0	2	7	14	22	37	108	147	208	263
74	0	4	6	11	17	24	75	107	144	212
75	0	3	6	13	12	20	58	77	108	149
76	0	1	2	5	8	12	48	58	79	115
77	0	0	2	3	5	6	32	45	55	80
78	0	2	2	3	5	5	21	29	43	54
79	0	1	0	1	2	3	17	20	28	42
80	0	0	0	0	1	3	11	15	17	26
81	0	1	1	1	1	1	6	11	15	16
82	0	0	0	0	0	0	5	5	10	14
83	0	0	0	0	0	0	5	5	4	9
84	0	0	0	0	0	0	3	5	5	4
85	0	0	0	0	0	0	1	3	4	3
86	0	0	0	0	0	0	1	1	2	4
87	0	0	0	0	0	0	1	1	0	1
88	0	0	0	0	0	0	1	1	1	0
89	0	0	0	0	0	0	0	1	1	1
90	0	0	0	0	0	0	0	0	0	1
91	0	0	0	0	0	0	0	0	0	0
92	0	0	0	0	0	0	0	0	0	0
93	0	0	0	0	0	0	0	0	0	0
94	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	1	1	0
96	0	0	0	0	0	0	0	0	0	0
97	0	0	0	0	0	0	0	0	0	0
98	0	0	0	0	0	0	0	0	0	0
99	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	1	1
Total	100,541	130,000	131,251	131,087	145,776	182,959	314,512	405,394	493,157	592,666

Appendix 4.9

Death

Male , Duration 0

Male , Duration 1

Sex	Male	Male	Male	Male	Male	Male	Male	Male	Male	Male
Duration	0	0	0	0	0	1	1	1	1	1
Calender Year	1992	1993	1994	1995	1996	1992	1993	1994	1995	1996
Age Last Birthday										
0	5	4	0	1	4	0	0	0	0	0
1	0	2	1	0	0	1	1	0	1	1
2	2	0	0	0	0	0	0	0	0	0
3	1	1	0	0	0	0	0	0	1	0
4	0	0	0	0	1	0	0	0	0	0
5	1	0	0	0	0	0	0	0	0	1
6	0	0	0	0	0	0	0	0	0	0
7	1	0	0	0	0	0	0	0	1	0
8	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0
10	0	0	0	1	0	0	0	0	1	0
11	0	0	0	0	0	0	0	0	1	1
12	0	1	0	0	0	1	1	0	1	0
13	0	0	0	0	0	0	1	0	1	0
14	0	0	0	0	0	0	0	0	1	0
15	0	0	0	0	0	0	0	0	0	0
16	2	0	0	0	0	0	0	0	0	0
17	0	1	0	0	1	0	0	1	1	1
18	2	1	1	1	0	1	1	1	0	5
19	1	1	1	1	2	2	3	1	2	1
20	6	4	5	1	4	3	0	5	0	3
21	1	0	1	3	3	3	3	1	1	1
22	2	0	4	2	1	3	3	1	2	1
23	1	0	2	1	3	2	2	2	3	1
24	3	1	1	2	3	2	3	2	0	4
25	0	2	3	2	1	1	2	0	0	2
26	2	1	2	0	4	2	1	6	3	4
27	2	3	1	2	1	4	2	0	1	5
28	3	3	0	3	1	2	3	2	1	1
29	1	1	2	3	4	2	4	2	3	6
30	1	3	2	3	2	3	4	4	2	1
31	5	4	5	1	5	3	3	5	0	7
32	3	2	4	6	1	3	0	4	6	1
33	2	1	0	4	1	4	4	2	1	7
34	6	2	3	2	1	2	5	8	6	4
35	2	2	1	4	3	5	7	3	1	1
36	4	3	8	2	6	2	1	2	2	8
37	2	1	4	3	7	3	1	8	3	2
38	3	2	5	2	15	3	4	3	1	4
39	3	1	3	4	5	4	2	4	4	2
40	3	2	2	4	3	2	2	6	2	1
41	4	1	2	1	14	2	3	7	2	3
42	2	3	5	3	1	1	5	7	2	4
43	2	1	0	3	5	2	5	1	4	11
44	2	2	1	3	4	0	4	3	1	3
45	0	1	2	3	12	2	1	4	5	2
46	1	1	3	4	4	0	4	4	3	3
47	1	1	0	6	5	0	1	4	4	2
48	2	0	2	1	1	0	2	3	3	3
49	2	1	1	4	2	2	0	2	2	5
50	1	0	2	3	3	3	1	1	2	1

Appendix 4.9

Death

Male , Duration 0

Sex	Male	Male	Male	Male	Male
Duration	0	0	0	0	0
Calender Year	1992	1993	1994	1995	1996
Age Last Birthday					
51	1	0	1	2	1
52	1	0	2	2	0
53	0	1	0	2	4
54	2	0	3	0	0
55	0	0	1	0	1
56	0	0	0	3	2
57	0	0	2	4	1
58	1	2	3	1	3
59	1	1	2	1	0
60	0	0	3	1	3
61	1	1	1	1	0
62	0	0	1	0	3
63	0	1	0	2	0
64	1	3	2	0	0
65	0	1	0	1	1
66	0	0	1	1	1
67	0	0	0	0	2
68	1	0	2	1	1
69	1	0	2	3	1
70	0	0	0	2	1
71	0	0	0	0	0
72	0	0	0	0	0
73	0	0	0	0	0
74	0	0	0	0	0
75	0	0	0	0	0
76	0	0	0	0	0
77	0	0	0	0	0
78	0	0	0	0	0
79	0	0	0	0	0
80	0	0	0	0	0
81	0	0	0	0	0
82	0	0	0	0	0
83	0	0	0	0	0
84	0	0	0	0	0
85	0	0	0	0	0
86	0	0	0	0	0
87	0	0	0	0	0
88	0	0	0	0	0
89	0	0	0	0	0
90	0	0	0	0	0
91	0	0	0	0	0
92	0	0	0	0	0
93	0	0	0	0	0
94	0	0	0	0	0
95	0	0	0	0	0
96	0	0	0	0	0
97	0	0	0	0	0
98	0	0	0	0	0
99	0	0	0	0	0
100	0	0	0	0	0
Total	97	70	105	116	158

Male , Duration 1

Sex	Male	Male	Male	Male	Male
Duration	1	1	1	1	1
Calender Year	1992	1993	1994	1995	1996
Age Last Birthday					
51	0	0	2	2	3
52	0	1	0	5	1
53	1	1	0	2	5
54	1	1	1	1	2
55	1	0	1	2	4
56	0	1	3	2	0
57	2	0	2	2	6
58	1	1	1	2	1
59	2	1	0	2	5
60	0	2	1	3	1
61	2	2	0	3	1
62	1	0	1	0	1
63	0	2	0	2	2
64	0	0	1	3	5
65	0	0	2	4	1
66	3	1	2	1	1
67	0	1	2	3	1
68	1	0	0	0	0
69	1	0	2	0	3
70	0	0	0	1	2
71	0	0	0	0	0
72	0	1	0	0	0
73	0	0	0	0	0
74	0	0	0	0	1
75	0	0	1	0	0
76	0	0	0	0	0
77	0	0	0	0	0
78	0	0	0	0	0
79	0	0	0	0	0
80	0	0	0	0	0
81	0	0	0	0	0
82	0	0	0	0	0
83	0	0	0	0	0
84	0	0	0	0	0
85	0	0	0	0	0
86	0	0	0	0	0
87	0	0	0	0	0
88	0	0	0	0	0
89	0	0	0	0	0
90	0	0	0	0	0
91	0	0	0	0	0
92	0	0	0	0	0
93	0	0	0	0	0
94	0	0	0	0	0
95	0	0	0	0	0
96	0	0	0	0	0
97	0	0	0	0	0
98	0	0	0	0	0
99	0	0	0	0	0
100	0	0	0	0	0
Total	91	104	131	121	159

Appendix 4.9

Death

Male , Duration 2 and over **Female , Duration 0**

Sex	Male	Male	Male	Male	Male	Female	Female	Female	Female	Female
Duration	2+	2+	2+	2+	2+	0	0	0	0	0
Calender Year	1992	1993	1994	1995	1996	1992	1993	1994	1995	1996
Age Last Birthday										
0	0	0	0	0	0	0	1	1	5	3
1	0	0	0	0	0	0	0	0	2	1
2	0	4	1	0	1	0	0	0	0	1
3	0	0	0	1	0	0	0	1	2	0
4	0	1	1	1	0	0	0	0	0	0
5	0	0	0	1	0	1	0	0	0	0
6	1	0	0	1	0	0	0	0	1	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	1	0	1	0	0	0	0	1
9	0	0	1	0	0	0	0	0	0	0
10	0	1	0	0	1	0	0	0	0	0
11	0	1	0	0	0	0	0	0	0	0
12	0	1	0	0	0	0	0	0	0	0
13	0	1	0	0	4	0	0	0	0	1
14	1	0	1	1	3	0	0	0	0	0
15	1	0	0	0	0	0	0	1	0	0
16	0	2	0	0	1	1	0	0	1	0
17	0	1	0	2	1	0	1	0	0	0
18	2	0	3	0	7	0	2	0	0	0
19	1	1	1	4	4	0	1	0	0	1
20	2	2	5	3	1	0	0	1	0	1
21	1	4	1	2	3	0	1	2	0	4
22	0	3	2	5	7	2	0	0	0	0
23	5	5	3	3	5	0	0	0	0	1
24	2	9	10	3	6	0	1	0	2	0
25	6	6	2	6	7	2	0	1	2	2
26	6	5	7	6	7	2	0	2	0	1
27	5	10	6	5	5	2	0	2	1	3
28	4	11	10	10	12	0	1	1	0	9
29	6	7	6	6	11	0	0	1	2	2
30	9	12	14	12	21	0	0	1	2	0
31	14	10	19	25	18	1	2	0	1	0
32	8	10	21	25	18	1	0	0	3	2
33	14	18	17	17	20	1	0	0	1	6
34	9	12	23	23	21	1	0	0	2	1
35	19	19	21	19	19	1	1	3	0	5
36	17	24	23	30	41	0	1	1	0	2
37	23	19	27	38	42	0	2	1	1	3
38	9	21	21	18	35	0	1	3	0	2
39	8	25	28	34	34	1	1	1	1	9
40	15	13	29	27	37	1	1	0	0	0
41	9	22	14	22	42	3	0	2	0	0
42	6	14	30	34	53	0	0	1	2	1
43	9	30	23	22	35	0	0	1	2	0
44	22	27	26	36	48	2	1	0	1	1
45	10	26	40	33	46	0	2	1	2	0
46	9	29	13	32	37	0	0	0	0	0
47	7	16	29	48	32	0	0	1	0	0
48	15	11	13	28	26	0	2	0	1	0
49	7	8	21	23	34	0	1	1	0	1
50	8	10	12	22	31	2	0	1	1	0

Appendix 4.9

Death

Male , Duration 2 and over **Female , Duration 0**

Sex	Male	Male	Male	Male	Male	Female	Female	Female	Female	Female
Duration	2+	2+	2+	2+	2+	0	0	0	0	0
Calender Year	1992	1993	1994	1995	1996	1992	1993	1994	1995	1996
Age Last Birthday										
51	14	15	20	26	27	0	0	0	0	1
52	8	13	11	16	29	0	2	0	0	2
53	4	13	18	16	28	0	2	1	0	2
54	7	4	11	15	19	0	0	1	0	0
55	5	7	11	9	39	1	2	0	1	0
56	4	8	12	18	26	0	0	0	0	1
57	2	9	16	13	19	0	0	0	0	2
58	4	7	11	21	16	0	0	0	0	0
59	4	7	15	21	19	0	0	1	3	3
60	4	8	7	13	7	0	1	1	0	0
61	5	5	17	21	17	0	0	0	0	2
62	5	14	9	8	17	0	0	0	1	1
63	2	12	12	12	17	0	0	0	1	3
64	4	7	15	8	16	0	0	1	0	0
65	0	7	11	16	9	0	1	0	3	1
66	1	6	7	7	17	0	0	1	0	0
67	0	10	9	6	10	0	0	0	0	0
68	2	10	17	3	17	0	0	1	2	2
69	3	5	9	4	9	0	0	1	0	3
70	0	5	2	10	7	0	1	0	1	2
71	5	1	7	3	8	0	0	0	0	0
72	0	2	0	2	4	0	0	0	0	0
73	1	3	9	9	8	0	0	0	0	0
74	2	4	8	4	5	0	0	0	0	0
75	0	2	4	2	2	0	0	0	0	0
76	0	3	4	6	3	0	0	0	0	0
77	0	3	3	1	6	0	0	0	0	0
78	0	2	1	1	1	0	0	0	0	0
79	1	1	4	0	6	0	0	0	0	0
80	0	1	5	1	1	0	0	0	0	0
81	0	2	3	0	0	0	0	0	0	0
82	0	0	1	0	1	0	0	0	0	0
83	0	0	0	8	0	0	0	0	0	0
84	0	15	0	0	4	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0
86	0	0	0	0	0	0	0	0	0	0
87	0	0	0	1	0	0	0	0	0	0
88	0	0	1	0	0	0	0	0	0	0
89	0	0	0	0	0	0	0	0	0	0
90	0	0	0	3	0	0	0	0	0	0
91	0	1	1	0	0	0	0	0	0	0
92	0	0	3	0	0	0	0	0	0	0
93	0	0	0	0	0	0	0	0	0	0
94	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0
96	0	0	0	0	0	0	0	0	0	0
97	0	0	0	0	0	0	0	0	0	0
98	0	0	0	0	0	0	0	0	0	0
99	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0
Total	377	663	819	932	1191	25	32	39	50	89

Appendix 4.9

Death

Female , Duration 1 **Female , Duration 2 and over**

Sex	Female	Female	Female	Female	Female	Female	Female	Female	Female	Female
Duration	1	1	1	1	1	2+	2+	2+	2+	2+
Calender Year	1992	1993	1994	1995	1996	1992	1993	1994	1995	1996
Age Last Birthday										
0	0	0	0	0	0	0	0	0	0	0
1	1	1	0	1	0	0	0	0	0	0
2	0	0	0	0	0	0	0	1	0	1
3	0	0	0	0	0	0	0	0	1	0
4	0	0	0	0	0	1	0	0	0	0
5	0	0	0	0	0	0	0	1	1	1
6	0	0	0	0	0	0	0	0	0	7
7	0	0	0	0	0	0	1	1	0	1
8	0	0	1	0	0	0	0	0	0	1
9	0	0	0	0	0	0	0	0	1	1
10	0	0	1	0	0	0	0	2	2	0
11	0	0	0	0	1	0	1	0	0	2
12	0	0	0	0	0	0	1	0	0	0
13	0	0	0	0	2	0	0	0	1	0
14	1	1	0	0	0	0	0	3	0	0
15	1	0	0	0	1	0	2	1	1	2
16	0	0	0	0	0	0	0	1	2	2
17	0	1	0	0	0	0	2	1	0	2
18	0	2	0	1	0	0	0	0	0	0
19	0	1	0	0	1	0	1	0	1	0
20	0	0	0	0	0	0	3	1	1	1
21	2	0	1	1	0	0	0	0	1	3
22	1	1	4	0	1	2	0	1	4	1
23	0	2	2	0	0	0	2	5	1	5
24	1	2	2	0	1	3	2	1	1	3
25	0	0	0	0	3	0	6	6	1	2
26	1	3	0	2	3	3	1	3	2	2
27	1	1	0	1	0	2	3	2	4	5
28	2	2	1	2	12	1	6	5	5	10
29	0	3	0	1	2	3	3	3	7	14
30	0	0	1	2	1	2	10	4	10	5
31	0	4	1	2	0	5	6	3	8	16
32	0	1	1	7	1	6	6	3	6	15
33	1	2	0	0	6	2	4	8	2	26
34	1	2	0	1	2	1	5	4	8	14
35	0	2	2	2	1	4	5	8	6	9
36	2	1	1	0	1	1	10	5	6	10
37	2	1	0	2	0	5	5	7	16	16
38	0	1	2	0	0	4	10	10	4	11
39	0	3	1	2	2	3	7	15	14	16
40	2	0	0	1	3	9	7	5	7	23
41	1	1	1	2	4	1	3	14	7	20
42	2	1	1	1	0	4	3	8	10	16
43	1	1	1	0	2	4	6	8	12	14
44	2	2	2	0	3	4	7	8	8	9
45	0	3	1	2	1	3	1	7	7	13
46	1	2	1	0	2	1	6	3	12	19
47	0	0	4	1	0	1	3	5	5	7
48	1	0	0	0	4	5	5	5	1	14
49	0	0	0	0	1	2	5	7	3	6
50	0	0	2	2	2	3	3	6	5	13

Appendix 4.9

Death

Female , Duration 1 **Female , Duration 2 and over**

Sex	Female	Female	Female	Female	Female	Female	Female	Female	Female	Female
Duration	1	1	1	1	1	2+	2+	2+	2+	2+
Calender Year	1992	1993	1994	1995	1996	1992	1993	1994	1995	1996
Age Last Birthday										
51	2	2	0	3	1	1	5	4	7	3
52	1	0	2	0	0	0	3	4	5	4
53	0	0	0	0	1	3	4	8	5	5
54	0	0	0	1	0	2	2	7	6	7
55	2	0	2	1	2	2	3	3	4	3
56	1	1	0	2	0	1	3	8	8	4
57	0	1	0	0	1	5	4	1	5	3
58	0	2	0	2	0	2	4	4	6	1
59	0	0	1	3	0	1	5	1	10	5
60	0	0	0	1	2	1	5	5	3	8
61	1	1	0	1	2	1	3	5	6	11
62	0	1	0	0	1	1	3	3	3	4
63	0	0	1	0	1	2	4	3	3	3
64	0	0	0	1	1	2	4	2	4	5
65	0	0	1	1	1	4	2	5	1	6
66	0	1	0	0	0	2	2	2	6	10
67	0	2	0	1	1	2	5	6	5	6
68	0	0	0	3	3	2	3	4	2	4
69	0	0	1	0	4	3	3	2	8	9
70	0	0	0	0	3	0	5	4	6	2
71	0	0	0	2	1	2	3	4	3	5
72	0	0	0	0	0	0	2	7	3	2
73	0	0	0	0	0	0	3	1	4	4
74	0	0	0	0	0	1	2	4	1	2
75	0	0	0	0	0	1	1	2	2	4
76	0	0	0	1	0	0	0	0	0	2
77	0	0	0	0	0	0	0	0	1	5
78	0	0	0	0	0	1	1	2	2	2
79	0	0	0	0	0	0	1	1	2	1
80	0	0	0	0	0	0	0	2	0	2
81	0	1	0	0	0	0	0	0	2	1
82	0	0	0	0	0	0	2	1	0	0
83	0	0	0	0	0	0	1	0	0	2
84	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	1	0	0
86	0	0	0	0	0	0	0	0	0	0
87	0	0	0	0	0	0	0	0	0	0
88	0	0	0	0	0	0	0	0	0	0
89	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0
91	0	0	0	0	0	0	0	0	0	0
92	0	0	0	0	0	0	0	0	0	0
93	0	0	0	0	0	0	0	0	0	0
94	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0
96	0	0	0	0	0	0	0	0	0	0
97	0	0	0	0	0	0	0	0	0	0
98	0	0	0	0	0	0	0	0	0	0
99	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0
Total	34	59	42	59	88	127	239	287	317	493

APPENDIX 4.10

PARTICIPATING COMPANIES

- America International Assurance Company Limited
- Canadian Eastern Life Assurance Limited
- Dah Sing Life Assurance Company Limited
- Eagle Star Life Assurance Company Limited
- East Asia Aetna Insurance Group
- HSBC Life (International) Limited
- Jardine CMG Life Assurance Limited
- Lippo Protective Life Insurance Company Limited
- Manulife (International) Limited
- National Mutual Insurance Company
- New York Life Insurance Worldwide Limited
- The Prudential Assurance Company Limited
- Winterthur Life Hong Kong