

Chapter 284-74 WAC
APPROVED INSURANCE TABLES

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WAC

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WAC 284-74-010 1983 Annuity tables. The purpose of this section is to recognize new mortality tables, the 1983 table "a" and the 1983 GAM table, for use in determining the minimum standard of valuation for annuity and pure endowment contracts, except as otherwise provided in WAC 284-74-020.

(1) The 1983 table "a" mortality table, which was developed by the society of actuaries committee to recommend a new mortality basis for individual annuity valuation and adopted as a recognized mortality table for annuities in June 1982 by the National Association of Insurance Commissioners (NAIC), and which is set forth in NAIC Proceedings, 1982 Vol. II, p. 454, is recognized and approved as an individual annuity mortality table for valuation and, at the option of the company, may be used for determining the minimum standard of valuation for any individual annuity or pure endowment contract issued on or after July 10, 1982.

(2) The 1983 table "a" referred to in subsection (1) of this section is to be used for determining the minimum standard of valuation

for any individual annuity or pure endowment contract issued on or after January 1, 1988.

(3) The 1983 GAM mortality table, which was developed by the society of actuaries committee on annuities and adopted as a recognized mortality table for annuities in December 1983 by the NAIC, and which is set forth in NAIC Proceedings, 1984 Vol. I, pp. 414-415, and the 1983 table "a" mortality table referred to in subsection (1) of this section, are recognized and approved as group annuity mortality tables for valuation and, at the option of the company, either table may be used for purposes of valuation for any annuity or pure endowment purchased on or after July 10, 1982, under a group annuity or pure endowment contract.

(4) The 1983 GAM table referred to in subsection (3) of this section is to be used for determining the minimum standard of valuation for any annuity or pure endowment purchased on or after January 1, 1988 under a group annuity or pure endowment contract.

[Statutory Authority: RCW 48.02.060. WSR 98-05-069 (Matter No. R 97-5), § 284-74-010, filed 2/17/98, effective 3/20/98; WSR 87-05-046 (Order R 87-3), § 284-74-010, filed 2/18/87.]

WAC 284-74-020 Annuity 2000 and 1994 GAR tables. The purpose of this section is to recognize the following mortality tables for use in determining the minimum standard of valuation for annuity and pure endowment contracts: The annuity 2000 mortality table, the 2012 individual annuity reserving (2012 IAR) table, and the 1994 group annuity reserving (1994 GAR) table.

(1) The following definitions apply to this section:

(a) "Period table" means a table of mortality rates applicable to a given year (the period).

(b) "Generational mortality table" means a mortality table containing a set of mortality rates that decreases for a given age from one year to the next based on a combination of a period table and a projection scale containing rates of mortality improvement.

(2) This section does not apply to an individual annuity or pure endowment contract, if the contract is based on life contingencies and is issued to fund periodic benefits arising from:

(a) Settlements of various forms of claims pertaining to court settlements or out of court settlements from tort actions;

(b) Settlements involving similar actions such as worker's compensation claims; or

(c) Settlements of long term disability claims where a temporary or life annuity has been used in lieu of continuing disability payments.

(3) The annuity 2000 mortality table, which was developed by the society of actuaries committee on life insurance research and adopted as a recognized mortality table for annuities in December 1996 by the National Association of Insurance Commissioners (NAIC), and which is set forth in *Transactions, Society of Actuaries*, Vol. XLVII (1995), p. 240, is recognized and approved as an individual annuity mortality table for valuation and shall be used for determining the minimum standard of valuation for any individual annuity or pure endowment contract issued on or after April 1, 1998. At the option of the company, the annuity 2000 mortality table may be used for determining the minimum standard of valuation for any individual annuity or pure endowment contract issued on or after January 1, 1998.

(4) The 2012 IAR table, which was developed by the society of actuaries committee on life insurance research and containing rates, q_x^{2012+n} , is the generational mortality table derived from a combination of the 2012 IAM period table and projection scale G2 and must be used for determining the minimum standard of valuation for any individual annuity or pure endowment contract issued on or after January 1, 2015.

(5) In using the 2012 IAR table, the mortality rate for a person age x in year $(2012 + n)$ is calculated as follows:

$$q_x^{2012+n} = q_x^{2012} (1 - G2_x)^n$$

The resulting q_x^{2012+n} shall be rounded to three decimal places per 1,000 e.g., 0.741 deaths per 1,000. Also, the rounding shall occur according to the formula above, starting at the 2012 period table rate.

(6) The 2012 individual annuity mortality period life (2012 IAM period) table, developed by the society of actuaries committee on life insurance research, shown below, contains loaded mortality rates for calendar year 2012. The table contains rates q_x 2012.

2012 IAM Period Table
Female, Age Nearest Birthday

AGE	1000 · qx2012						
0	1.621	30	0.300	60	3.460	90	88.377
1	0.405	31	0.321	61	3.916	91	97.491
2	0.259	32	0.338	62	4.409	92	107.269
3	0.179	33	0.351	63	4.933	93	118.201
4	0.137	34	0.365	64	5.507	94	130.969
5	0.125	35	0.381	65	6.146	95	146.449
6	0.117	36	0.402	66	6.551	96	163.908
7	0.110	37	0.429	67	7.039	97	179.695
8	0.095	38	0.463	68	7.628	98	196.151
9	0.088	39	0.504	69	8.311	99	213.150
10	0.085	40	0.552	70	9.074	100	230.722
11	0.086	41	0.600	71	9.910	101	251.505
12	0.094	42	0.650	72	10.827	102	273.007
13	0.108	43	0.697	73	11.839	103	295.086
14	0.131	44	0.740	74	12.974	104	317.591
15	0.156	45	0.780	75	14.282	105	340.362
16	0.179	46	0.825	76	15.799	106	362.371
17	0.198	47	0.885	77	17.550	107	384.113
18	0.211	48	0.964	78	19.582	108	400.000
19	0.221	49	1.051	79	21.970	109	400.000
20	0.228	50	1.161	80	24.821	110	400.000
21	0.234	51	1.308	81	28.351	111	400.000
22	0.240	52	1.460	82	32.509	112	400.000
23	0.245	53	1.613	83	37.329	113	400.000
24	0.247	54	1.774	84	42.830	114	400.000
25	0.250	55	1.950	85	48.997	115	400.000
26	0.256	56	2.154	86	55.774	116	400.000
27	0.261	57	2.399	87	63.140	117	400.000

AGE	1000 · qx2012						
28	0.270	58	2.700	88	71.066	118	400.000
29	0.281	59	3.054	89	79.502	119	400.000
						120	1000.000

APPENDIX II
2012 IAM Period Table
Male, Age Nearest Birthday

AGE	1000 · qx2012						
0	1.605	30	0.741	60	5.096	90	109.993
1	0.401	31	0.751	61	5.614	91	123.119
2	0.275	32	0.754	62	6.169	92	137.168
3	0.229	33	0.756	63	6.759	93	152.171
4	0.174	34	0.756	64	7.398	94	168.194
5	0.168	35	0.756	65	8.106	95	185.260
6	0.165	36	0.756	66	8.548	96	197.322
7	0.159	37	0.756	67	9.076	97	214.751
8	0.143	38	0.756	68	9.708	98	232.507
9	0.129	39	0.800	69	10.463	99	250.397
10	0.113	40	0.859	70	11.357	100	268.607
11	0.111	41	0.926	71	12.418	101	290.016
12	0.132	42	0.999	72	13.675	102	311.849
13	0.169	43	1.069	73	15.150	103	333.962
14	0.213	44	1.142	74	16.860	104	356.207
15	0.254	45	1.219	75	18.815	105	380.000
16	0.293	46	1.318	76	21.031	106	400.000
17	0.328	47	1.454	77	23.540	107	400.000
18	0.359	48	1.627	78	26.375	108	400.000
19	0.387	49	1.829	79	29.572	109	400.000
20	0.414	50	2.057	80	33.234	110	400.000
21	0.443	51	2.302	81	37.533	111	400.000
22	0.473	52	2.545	82	42.261	112	400.000
23	0.513	53	2.779	83	47.441	113	400.000
24	0.554	54	3.011	84	53.233	114	400.000
25	0.602	55	3.254	85	59.855	115	400.000
26	0.655	56	3.529	86	67.514	116	400.000
27	0.688	57	3.845	87	76.340	117	400.000
28	0.710	58	4.213	88	86.388	118	400.000
29	0.727	59	4.631	89	97.634	119	400.000
						120	1000.000

(7) Projection scale G2 (scale G2), which was developed by the society of actuaries committee on life insurance research, is a table of annual rates, $G2_x$, shown below, of mortality improvement by age for projecting future mortality rates beyond calendar year 2012.

Projection Scale G2
Female, Age Nearest Birthday

AGE	G2x	AGE	G2x	AGE	G2x	AGE	G2x
0	0.010	30	0.010	60	0.013	90	0.006
1	0.010	31	0.010	61	0.013	91	0.006

AGE	G2x	AGE	G2x	AGE	G2x	AGE	G2x
2	0.010	32	0.010	62	0.013	92	0.005
3	0.010	33	0.010	63	0.013	93	0.005
4	0.010	34	0.010	64	0.013	94	0.004
5	0.010	35	0.010	65	0.013	95	0.004
6	0.010	36	0.010	66	0.013	96	0.004
7	0.010	37	0.010	67	0.013	97	0.003
8	0.010	38	0.010	68	0.013	98	0.003
9	0.010	39	0.010	69	0.013	99	0.002
10	0.010	40	0.010	70	0.013	100	0.002
11	0.010	41	0.010	71	0.013	101	0.002
12	0.010	42	0.010	72	0.013	102	0.001
13	0.010	43	0.010	73	0.013	103	0.001
14	0.010	44	0.010	74	0.013	104	0.000
15	0.010	45	0.010	75	0.013	105	0.000
16	0.010	46	0.010	76	0.013	106	0.000
17	0.010	47	0.010	77	0.013	107	0.000
18	0.010	48	0.010	78	0.013	108	0.000
19	0.010	49	0.010	79	0.013	109	0.000
20	0.010	50	0.010	80	0.013	110	0.000
21	0.010	51	0.010	81	0.012	111	0.000
22	0.010	52	0.011	82	0.012	112	0.000
23	0.010	53	0.011	83	0.011	113	0.000
24	0.010	54	0.011	84	0.010	114	0.000
25	0.010	55	0.012	85	0.010	115	0.000
26	0.010	56	0.012	86	0.009	116	0.000
27	0.010	57	0.012	87	0.008	117	0.000
28	0.010	58	0.012	88	0.007	118	0.000
29	0.010	59	0.013	89	0.007	119	0.000
						120	0.000

APPENDIX IV
Projection Scale G2
Male, Age Nearest Birthday

AGE	G2x	AGE	G2x	AGE	G2x	AGE	G2x
0	0.010	30	0.010	60	0.015	90	0.007
1	0.010	31	0.010	61	0.015	91	0.007
2	0.010	32	0.010	62	0.015	92	0.006
3	0.010	33	0.010	63	0.015	93	0.005
4	0.010	34	0.010	64	0.015	94	0.005
5	0.010	35	0.010	65	0.015	95	0.004
6	0.010	36	0.010	66	0.015	96	0.004
7	0.010	37	0.010	67	0.015	97	0.003
8	0.010	38	0.010	68	0.015	98	0.003
9	0.010	39	0.010	69	0.015	99	0.002
10	0.010	40	0.010	70	0.015	100	0.002
11	0.010	41	0.010	71	0.015	101	0.002
12	0.010	42	0.010	72	0.015	102	0.001
13	0.010	43	0.010	73	0.015	103	0.001

AGE	G2x	AGE	G2x	AGE	G2x	AGE	G2x
14	0.010	44	0.010	74	0.015	104	0.000
15	0.010	45	0.010	75	0.015	105	0.000
16	0.010	46	0.010	76	0.015	106	0.000
17	0.010	47	0.010	77	0.015	107	0.000
18	0.010	48	0.010	78	0.015	108	0.000
19	0.010	49	0.010	79	0.015	109	0.000
20	0.010	50	0.010	80	0.015	110	0.000
21	0.010	51	0.011	81	0.014	111	0.000
22	0.010	52	0.011	82	0.013	112	0.000
23	0.010	53	0.012	83	0.013	113	0.000
24	0.010	54	0.012	84	0.012	114	0.000
25	0.010	55	0.013	85	0.011	115	0.000
26	0.010	56	0.013	86	0.010	116	0.000
27	0.010	57	0.014	87	0.009	117	0.000
28	0.010	58	0.014	88	0.009	118	0.000
29	0.010	59	0.015	89	0.008	119	0.000
						120	0.000

(8) The 1994 GAR table, which was developed by the society of actuaries group annuity valuation table task force and adopted as a recognized mortality table for annuities in December 1996 by the NAIC, and which is set forth in *Transactions, Society of Actuaries*, Vol. XLVII (1995), pp. 866 and 867, is recognized and approved as a group annuity mortality table for valuation and shall be used for determining the minimum standard of valuation for any annuity or pure endowment purchased on or after April 1, 1998, under a group annuity or pure endowment contract. At the option of the company, the 1994 GAR table may be used for determining the minimum standard of valuation for any annuity or pure endowment purchased on or after January 1, 1998, under a group annuity or pure endowment contract.

(9) In using the 1994 GAR table, the mortality rate for a person age x in year (1994 + n) is calculated as follows:

$$q_x^{1994+n} = q_x^{1994} (1 - AA_x)^n,$$

where the q_x^{1994} and AA_x s are as specified in the 1994 GAR table.

[Statutory Authority: RCW 48.02.060. WSR 14-01-040 (Matter No. R 2013-17), § 284-74-020, filed 12/11/13, effective 1/11/14; WSR 98-05-069 (Matter No. R 97-5), § 284-74-020, filed 2/17/98, effective 3/20/98.]

WAC 284-74-100 Smoker/nonsmoker mortality tables. The purpose of this section is to permit the use of mortality tables approved by the National Association of Insurance Commissioners (NAIC) that reflect differences in mortality between smokers and nonsmokers in determining minimum reserve liabilities, minimum cash surrender values and amounts of paid-up nonforfeiture benefits for plans of insurance with separate premium rates for smokers and nonsmokers.

(1) As used in this section, the following definitions apply:

(a) "1980 CSO table, with or without ten-year select mortality factors," means that mortality table consisting of separate rates of mortality for male and female lives, developed by the society of actuaries committee to recommend new mortality tables for valuation of standard individual ordinary life insurance, incorporated in the 1980 NAIC amendments to the model standard valuation law and standard nonforfeiture law for life insurance and referred to in those models as the commissioners 1980 standard ordinary mortality table, with or without ten-year select mortality factors and set forth in *Transactions, Society of Actuaries*, Vol. XXXIII (1981), pp. 617 and 618, and referred to as commissioners 1980 standard ordinary mortality table (1980 CSO). The same select factors will be used for both smokers and nonsmokers tables. These select factors are set forth in *Transactions, Society of Actuaries*, Vol. XXXIII (1981), p. 669, and referred to therein as selection factors for alternate method of determining life insurance reserves and deficiency reserve requirements (1980 CSO with ten-year select mortality factors).

(b) "1980 CET table" means that mortality table consisting of separate rates of mortality for male and female lives, developed by the society of actuaries committee to recommend new mortality tables for valuation of standard individual ordinary life insurance, incorporated in the 1980 NAIC amendments to the standard model nonforfeiture law for life insurance and referred to in those models as the commissioners 1980 extended term insurance table, and set forth in *Transactions, Society of Actuaries*, Vol. XXXIII (1981), pp. 617 and 619, and referred to as commissioners 1980 extended term insurance mortality table (1980 CET).

(c) "1958 CSO table" means that mortality table developed by the society of actuaries special committee on new mortality tables, incorporated in the NAIC model standard nonforfeiture law for life insurance and referred to in that model as the commissioners 1958 standard ordinary mortality table, and set forth in *Proceedings of the National Association of Insurance Commissioners*, 1959, Vol. I, p. 195 (also see 1960, Vol. I, p. 211, and 1978, Vol. I, p. 537) and referred to as commissioners 1958 standard ordinary mortality table (1958 CSO).

(d) "1958 CET table" means that mortality table developed by the society of actuaries special committee on new mortality tables, incorporated in the NAIC model standard nonforfeiture law for life insurance and referred to in that model as the commissioners 1958 extended term insurance table, and set forth in *Proceedings of the National Association of Insurance Commissioners*, 1959, Vol. I, p. 196, and referred to as commissioners 1958 extended term insurance mortality table (1958 CET).

(e) The phrase "smoker and nonsmoker mortality tables" refers to the mortality tables with separate rates of mortality for smokers and nonsmokers derived from the tables defined in (a) through (d) of this subsection which were developed by the society of actuaries task force on smoker/nonsmoker mortality and the California insurance department staff and recommended by the NAIC technical staff actuarial group, and are published in *Proceedings, National Association of Insurance Commissioners*, 1984, Vol. I, pp. 402-413.

(f) The phrase "composite mortality tables" refers to the mortality tables defined in (a) through (d) of this subsection as they were originally published with rates of mortality that do not distinguish between smokers and nonsmokers.

(2) For any policy of insurance delivered or issued for delivery in this state after the effective date of this section and before Jan-

uary 1, 1989, at the option of the company and subject to the conditions stated in subsection (4) of this section:

(a) The 1958 CSO smoker and nonsmoker mortality tables may be substituted for the 1958 CSO table; and

(b) The 1958 CET smoker and nonsmoker mortality tables may be substituted for the 1958 CET table for use in determining minimum reserve liabilities and minimum cash surrender values and amounts of paid-up nonforfeiture benefits.

Provided that for any category of insurance issued on female lives with minimum reserve liabilities and minimum cash surrender values and amounts of paid-up nonforfeiture benefits determined using the 1958 CSO or 1958 CET smoker and nonsmoker mortality tables, such minimum values may be calculated according to an age not more than six years younger than the actual age of the insured.

Provided further that the substitution of the 1958 CSO or 1958 CET smoker and nonsmoker mortality tables is available only if made for each policy of insurance on a policy form delivered or issued for delivery on or after the effective date of this section and before a date not later than January 1, 1989.

(3) For any policy of insurance delivered or issued for delivery in this state after the effective date of this regulation, at the option of the company and subject to the conditions stated in subsection (4) of this section:

(a) The 1980 CSO smoker and nonsmoker mortality tables, with or without ten-year select mortality factors, may be substituted for the 1980 CSO table, with or without ten-year select mortality factors; and

(b) The 1980 CET smoker and nonsmoker mortality tables may be substituted for the 1980 CET table for use in determining minimum reserve liabilities and minimum cash surrender values and amounts of paid-up nonforfeiture benefits.

(4) Conditions. For each plan of insurance with separate rates for smokers and nonsmokers an insurer may:

(a) Use composite mortality tables to determine minimum reserve liabilities, minimum cash surrender values and amounts of paid-up nonforfeiture benefits;

(b) Use smoker and nonsmoker mortality tables to determine the valuation net premiums and additional minimum reserves, if any, required by RCW 48.74.070 and use composite mortality tables to determine the basic minimum reserves, minimum cash surrender values and amounts of paid-up nonforfeiture benefits; or

(c) Use smoker and nonsmoker mortality tables to determine minimum reserve liabilities, minimum cash surrender values and amounts of paid-up nonforfeiture benefits.

(5) For purposes of determining nonforfeiture values and reserves, this section applies to all individual life insurance policies as defined in RCW 48.11.020 which are issued or delivered in this state after December 31, 1986. For purposes of RCW 48.74.070 (Minimum reserve if gross premium less than valuation net premium), this section applies to all individual life insurance policies as defined in RCW 48.11.020 which are issued or delivered in this state after December 31, 1985.

[Statutory Authority: RCW 48.02.060. WSR 87-05-046 (Order R 87-3), § 284-74-100, filed 2/18/87.]

WAC 284-74-200 Gender blended mortality tables for certain life insurance policies. The purpose of this section is to permit individual, franchise and group permanent (cash value) life insurance policies and pension plans funded in whole or in part by life insurance to provide the same cash values and paid-up nonforfeiture benefits to both men and women. No change in minimum valuation standards is implied by this section. However, if the gender blended smoker and nonsmoker mortality tables are used to determine cash surrender values and paid-up nonforfeiture benefits then pursuant to WAC 284-74-100 (4)(c) the smoker and nonsmoker mortality tables shall be used to determine minimum reserve liabilities.

(1) As used in this section, the following definitions apply:

(a) "1980 CSO table, with or without ten-year select mortality factors," means that mortality table, consisting of separate rates of mortality for male and female lives, developed by the society of actuaries committee to recommend new mortality tables for valuation of standard ordinary life insurance incorporated in the 1980 National Association of Insurance Commissioners (NAIC) amendments to the model standard valuation law and standard nonforfeiture law for life insurance and referred to in those models as the Commissioner's 1980 Standard Ordinary Mortality Table, with or without ten-year select mortality factors and set forth in Transactions, Society of Actuaries, Vol. XXXIII (1981), pp. 617 and 618, and referred to as the Commissioner's 1980 Standard Ordinary Mortality Table (1980 CSO).

(b) "1980 CSO table (M), with or without ten-year select mortality factors," means that mortality table consisting of the rates of mortality for male lives from the 1980 CSO table, with or without ten-year select mortality factors.

(c) "1980 CSO table (F), with or without ten-year select mortality factors," means that mortality table consisting of the rates of mortality for female lives from the 1980 CSO table, with or without ten-year select mortality factors.

(d) The "ten-year select mortality factors" referred to in (a), (b), and (c) of this subsection are those set forth in Transactions, Society of Actuaries, Vol. XXXIII (1981), p. 669, and referred to therein as selection factors for alternate method of determining life insurance reserves and deficiency reserve requirements (1980 CSO with ten-year select mortality factors).

(e) "1980 CET table" means that mortality table consisting of separate rates of mortality for male and female lives developed by the society of actuaries committee to recommend new mortality tables for valuation of standard individual ordinary life insurance, incorporated in the 1980 NAIC amendments to the standard model nonforfeiture law for life insurance and referred to in those models as the Commissioner's 1980 Extended Term Insurance Table, and set forth in Transactions, Society of Actuaries, Vol. XXXIII (1981), pp. 617 and 619, and referred to therein as the Commissioner's 1980 Extended Term Insurance Mortality Table (1980 CET).

(f) "1980 CET table (M)" means that mortality table consisting of the rates of mortality for male lives from the 1980 CET table.

(g) "1980 CET table (F)" means that mortality table consisting of the rates of mortality for female lives from the 1980 CET table.

(h) As used in this section, "1980 CSO and 1980 CET Smoker and Nonsmoker Mortality Tables" means the mortality tables with separate rates of mortality for smokers and nonsmokers which is found in NAIC Proceedings, 1984, Vol. I, pp. 406-413 and which is derived from the 1980 CSO and 1980 CET Mortality Tables.

(2) For any policy of insurance on the life of either a male or female insured delivered or issued for delivery in this state after the operative date of chapter 48.76 RCW for that policy form, for use in determining minimum cash surrender values and minimum amounts and minimum periods of paid-up nonforfeiture benefits:

(a) A mortality table which is a blend of the 1980 CSO table (M) and the 1980 CSO table (F) with or without ten-year select mortality factors may at the option of the company be substituted for the 1980 CSO table, with or without ten-year select mortality factors.

(b) A mortality table which is of the same blend as used in (a) of this subsection but applied to form a blend of the 1980 CET table (M) and the 1980 CET table (F) may at the option of the company be substituted for the 1980 CET table.

(c) The following tables, which are set forth in NAIC Proceedings, 1984, Vol. I, pp. 396-400, will be considered as the basis for acceptable tables:

(i) 100% male - 0% female for tables to be designated as the "1980 CSO-A" and "1980 CET-A" tables.

(ii) 80% male - 20% female for tables to be designated as the "1980 CSO-B" and "1980 CET-B" tables.

(iii) 60% male - 40% female for tables to be designated as the "1980 CSO-C" and "1980 CET-C" tables.

(iv) 50% male - 50% female for tables to be designated as the "1980 CSO-D" and "1980 CET-D" tables.

(v) 40% male - 60% female for tables to be designated as the "1980 CSO-E" and "1980 CET-E" tables.

(vi) 20% male - 80% female for tables to be designated as the "1980 CSO-F" and "1980 CET-F" tables.

(vii) 0% male - 100% female for tables to be designated as the "1980 CSO-G" and "1980 CET-G" tables.

(3) Tables 1980 CSO-A, 1980 CET-A, 1980 CSO-G and 1980 CET-G are not to be used with respect to policies issued on or after the effective date of this regulation, except where the proportion of persons insured is anticipated to be ninety percent or more of one sex or the other or except for certain policies converted from group insurance. Such group conversions issued on or after the effective date of this regulation must use mortality tables based on the blend of lives by sex expected for such policies if such group conversions are considered as extensions of the Norris decision or other federal law. This consideration has not been clearly defined by court or legislative action in all jurisdictions as of the date of promulgation of these sections.

(4) Notwithstanding any other provision of this rule, an insurer shall not use these blended tables unless the Norris decision or other federal law is known to apply to the policies involved, or unless there exists a bona fide concern on the part of the insurer that the Norris decision or other federal law might reasonably be construed to apply by a court having jurisdiction.

(5) It shall not be a violation of RCW 48.30.300 for an insurer to issue the same kind of policy of life insurance on both a sex distinct and sex neutral basis.

(6) In determining minimum cash surrender values and amounts of paid-up nonforfeiture benefits for any policy of insurance on the life of either a male or female insured on a form of insurance with separate rates for smokers and nonsmokers delivered or issued for delivery in this state after the operative date of chapter 48.76 RCW for that

policy form, in addition to the mortality tables that may be used according to subsection (2) of this section:

(a) A mortality table which is a blend of the male and female rates of mortality according to the 1980 CSO Smoker Mortality Table, in the case of lives classified as smokers, or the 1980 CSO Nonsmoker Mortality Table, in the case of lives classified as nonsmokers, with or without ten-year select mortality factors, may at the option of the company be substituted for the 1980 CSO table, with or without ten-year select mortality factors; and

(b) A mortality table which is of the same blend as used in (a) of this subsection but applied to form a blend of the male and female rates of mortality according to the corresponding 1980 CET Smoker Mortality Table or 1980 CET Nonsmoker Mortality Table may at the option of the company be substituted for the 1980 CET table.

The following blended mortality tables found in NAIC Proceedings, 1981, Vol. I, pp. 406-413 and NAIC Proceedings, 1987, Vol. I, 521-530, will be considered acceptable:

- SA: 100% Male 0% Female smoker tables designated as "1980 CSO-SA" and "1980 CET-SA" tables.
- SB: 80% Male 20% Female smoker tables designated as "1980 CSO-SB" and "1980 CET-SB" tables.
- SC: 60% Male 40% Female smoker tables designated as "1980 CSO-SC" and "1980 CET-SC" tables.
- SD: 50% Male 50% Female smoker tables designated as "1980 CSO-SD" and "1980 CET-SD" tables.
- SE: 40% Male 60% Female smoker tables designated as "1980 CSO-SE" and "1980 CET-SE" tables.
- SF: 20% Male 80% Female smoker tables designated as "1980 CSO-SF" and "1980 CET-SF" tables.
- SG: 0% Male 100% Female smoker tables designated as "1980 CSO-SG" and "1980 CET-SG" tables.
- NA: 100% Male 0% Female nonsmoker tables designated as "1980 CSO-NA" and "1980 CET-NA" tables.
- NB: 80% Male 20% Female nonsmoker tables designated as "1980 CSO-NB" and "1980 CET-NB" tables.
- NC: 60% Male 40% Female nonsmoker tables designated as "1980 CSO-NC" and "1980 CET-NC" tables.
- ND: 50% Male 50% Female nonsmoker tables designated as "1980 CSO-ND" and "1980 CET-ND" tables.
- NE: 40% Male 60% Female nonsmoker tables designated as "1980 CSO-NE" and "1980 CET-NE" tables.
- NF: 20% Male 80% Female nonsmoker tables designated as "1980 CSO-NF" and "1980 CET-NF" tables.
- NG: 0% Male 100% Female nonsmoker tables designated as "1980 CSO-NG" and "1980 CET-NG" tables.

Tables SA, SG, NA, and NG are not acceptable as blended tables unless the proportion of persons insured is anticipated to be 90% or more of one sex or the other.

(7) The effective date of this rule is February 29, 1987, and is intended to comply with the Norris decision and other federal law. It

is recognized that the insurance commissioner has approved Norris-type tables prior to this effective date on an individual basis. Tables so approved are hereby deemed to be in compliance with this regulation.

[Statutory Authority: RCW 48.02.060. WSR 89-03-031 (Order R 89-1), § 284-74-200, filed 1/11/89; WSR 88-04-054 (Order R 88-1), § 284-74-200, filed 1/29/88, effective 2/29/88.]

WAC 284-74-300 Purpose. (1) The purpose of this regulation, WAC 284-74-300 through 284-74-380 is to provide:

(a) Tables of select mortality factors and rules for their use;
(b) Rules concerning a minimum standard for the valuation of plans with nonlevel premiums or benefits; and
(c) Rules concerning a minimum standard for the valuation of plans with secondary guarantees.

(2) The method for calculating reserves defined in this regulation will constitute the commissioner's reserve valuation method for policies to which this regulation is applicable.

[Statutory Authority: RCW 48.02.060, 48.74.030, 48.74.040, 48.74.070, and 48.74.080. WSR 00-07-069, § 284-74-300, filed 3/13/00, effective 4/13/00.]

WAC 284-74-310 Authority. This regulation is issued under the authority of RCW 48.02.060(3), 48.12.030(3), 48.74.040(1), 48.74.080 and 48.74.030 (1)(a)(iii).

[Statutory Authority: RCW 48.02.060, 48.74.030, 48.74.040, 48.74.070, and 48.74.080. WSR 00-07-069, § 284-74-310, filed 3/13/00, effective 4/13/00.]

WAC 284-74-320 Applicability. This regulation shall apply to all life insurance policies, with or without nonforfeiture values, issued on or after the operative date of this regulation, subject to the following exceptions and conditions.

(1)(a) This regulation shall not apply to any individual life insurance policy issued on or after the operative date of this regulation if the policy is issued in accordance with and as a result of the exercise of a reentry provision contained in the original life insurance policy of the same or greater face amount, issued before the operative date of this regulation, that guarantees the premium rates of the new policy. This regulation also shall not apply to subsequent policies issued as a result of the exercise of such a provision, or a derivation of the provision, in the new policy.

(b) This regulation shall not apply to any universal life insurance policy that meets all the following requirements:

(i) The secondary guarantee period, if any, is five years or less;

(ii) The specified premium for the secondary guarantee period is not less than the net level reserve premium for the secondary guarantee period based on the 1980 CSO valuation tables as defined in WAC 284-74-330(6) and the applicable valuation interest rate; and

(iii) The initial surrender charge is not less than one hundred percent of the first year annualized specified premium for the secondary guarantee period.

(c) This regulation shall not apply to any variable life insurance policy that provides for life insurance, the amount or duration of which varies according to the investment experience of any separate account or accounts.

(d) This regulation shall not apply to any variable universal life insurance policy that provides for life insurance, the amount or duration of which varies according to the investment experience of any separate account or accounts.

(e) This regulation shall not apply to a group life insurance certificate unless the certificate provides for a stated or implied schedule of maximum gross premiums required in order to continue coverage in force for a period in excess of one year.

(2)(a) Calculation of the minimum valuation standard for policies with gross premiums subject to a nonlevel guaranteed maximum or with benefits subject to a nonlevel guaranteed minimum (other than universal life policies), or both, shall be in accordance with the provisions of WAC 284-74-350.

(b) Calculation of the minimum valuation standard for flexible premium and fixed premium universal life insurance policies, that contain provisions resulting in the ability of a policyholder to keep a policy in force over a secondary guarantee period, shall be in accordance with the provisions of WAC 284-74-360.

[Statutory Authority: RCW 48.02.060, 48.74.030, 48.74.040, 48.74.070, and 48.74.080. WSR 00-07-069, § 284-74-320, filed 3/13/00, effective 4/13/00.]

WAC 284-74-330 Definitions. For purposes of this regulation:

(1) "Basic reserves" means reserves calculated in accordance with RCW 48.74.040(1).

(2) "Contract segmentation method" means the method of dividing the period from issue to mandatory expiration of a policy into successive segments, with the length of each segment being defined as the period from the end of the prior segment (from policy inception, for the first segment) to the end of the latest policy year as determined below. All calculations are made using the 1980 CSO valuation tables, as defined in subsection (6) of this section (or any other valuation mortality table adopted by the National Association of Insurance Commissioners (NAIC) after the operative date of this regulation and promulgated by regulation by the commissioner for this purpose), and, if elected for the plan, the optional minimum mortality standard for deficiency reserves stipulated in WAC 284-74-340(2).

The length of a particular contract segment shall be set equal to the minimum of the value t for which G_t is greater than R_t (if G_t never exceeds R_t the segment length is deemed to be the number of years from the beginning of the segment to the mandatory expiration date of the policy), where G_t and R_t are defined as follows:

$$G_t = \frac{GP_{x+k+t}}{GP_{x+k+t-1}}$$

where:

$x =$ original issue age;
 $k =$ the number of years from the date of issue to the beginning of the segment;
 $t =$ 1, 2, ...; t is reset to 1 at the beginning of each segment;
 $GP_{x+k+t-1} =$ Guaranteed maximum gross premium per thousand of face amount for year t of the segment, ignoring policy fees only if level for the premium paying period of the policy.

$R_t = \frac{q_{x+k+t}}{q_{x+k+t-1}}$, However, R_t may be increased or decreased by one percent in any policy year, at the company's option, but R_t shall not be less than one;

where: x, k and t are as defined above, and

$q_{x+k+t-1} =$ valuation mortality rate for deficiency reserves in policy year $k+t$ but using the mortality of WAC 284-74-340 (2)(b) if WAC 284-74-340 (2)(c) is elected for deficiency reserves.

However, if GP_{x+k+t} is greater than 0 and $GP_{x+k+t-1}$ is equal to 0, G_t shall be deemed to be 1000. If GP_{x+k+t} and $GP_{x+k+t-1}$ are both equal to 0, G_t shall be deemed to be 0.

(3) "Deficiency reserves" means the excess, if greater than zero, of

(a) Minimum reserves calculated in accordance with RCW 48.74.070 over

(b) Basic reserves.

(4) "Guaranteed maximum gross premiums" means the premiums guaranteed and determined at issue that the actual gross premiums under a policy of life insurance cannot exceed.

(5) "Maximum valuation interest rates" means the interest rates defined in RCW 48.74.030(3) that are to be used in determining the minimum standard for the valuation of life insurance policies.

(6) "1980 CSO valuation tables" means the commissioners 1980 standard ordinary mortality table (1980 CSO table) without ten-year select mortality factors, incorporated into the 1980 amendments to the NAIC model standard valuation law, and variations of the 1980 CSO table approved by the NAIC, such as the smoker and nonsmoker versions approved in December 1983.

(7) "Scheduled gross premium" means the smallest illustrated gross premium at issue for other than universal life insurance policies. For universal life insurance policies, scheduled gross premium means the smallest specified premium described in WAC 284-74-360 (1)(c), if any, or else the minimum premium described in WAC 284-74-360 (1)(d).

(8)(a) "Segmented reserves" means reserves, calculated using segments produced by the contract segmentation method, equal to the present value of all future guaranteed benefits less the present value of all future net premiums to the mandatory expiration of a policy, where the net premiums within each segment are a uniform percentage of

the respective guaranteed maximum gross premiums within the segment. The uniform percentage for each segment is such that, at the beginning of the segment, the present value of the net premiums within the segment equals:

(i) The present value of the death benefits within the segment, plus

(ii) The present value of any unusual guaranteed cash value (see WAC 284-74-350(4)) occurring at the end of the segment, less

(iii) Any unusual guaranteed cash value occurring at the start of the segment, plus

(iv) For the first segment only, the excess of the item (A) over item (B), as follows:

(A) A net level annual premium equal to the present value, at the date of issue, of the benefits provided for in the first segment after the first policy year, divided by the present value, at the date of issue, of an annuity of one per year payable on the first and each subsequent anniversary within the first segment on which a premium falls due. However, the net level annual premium shall not exceed the net level annual premium on the nineteen-year premium whole life plan of insurance of the same renewal year equivalent level amount at an age one year higher than the age at issue of the policy.

(B) A net one year term premium for the benefits provided for in the first policy year.

(b) The length of each segment is determined by the contract segmentation method, as defined in this section.

(c) The interest rates used in the present value calculations for any policy may not exceed the maximum valuation interest rate, determined with a guarantee duration equal to the sum of the lengths of all segments of the policy.

(d) For both basic reserves and deficiency reserves computed by the segmented method, present values shall include future benefits and net premiums in the current segment and in all subsequent segments.

(9) "Tabular cost of insurance" means the net single premium at the beginning of a policy year for one-year term insurance in the amount of the guaranteed death benefit in that policy year.

(10) "Ten-year select mortality factors" means the select factors adopted with the 1980 amendments to the NAIC standard valuation law.

(11)(a) "Unitary reserves" means the present value of all future guaranteed benefits less the present value of all future modified net premiums, where:

(i) Guaranteed benefits and modified net premiums are considered to the mandatory expiration of the policy; and

(ii) Modified net premiums are a uniform percentage of the respective guaranteed maximum gross premiums, where the uniform percentage is such that, at issue, the present value of the net premiums equals the present value of all death benefits and pure endowments, plus the excess of item (A) over item (B), as follows:

(A) A net level annual premium equal to the present value, at the date of issue, of the benefits provided for after the first policy year, divided by the present value, at the date of issue, of an annuity of one per year payable on the first and each subsequent anniversary of the policy on which a premium falls due. However, the net level annual premium shall not exceed the net level annual premium on the nineteen-year premium whole life plan of insurance of the same renewal year equivalent level amount at an age one year higher than the age at issue of the policy.

(B) A net one year term premium for the benefits provided for in the first policy year.

(b) The interest rates used in the present value calculations for any policy may not exceed the maximum valuation interest rate, determined with a guarantee duration equal to the length from issue to the mandatory expiration of the policy.

(12) "Universal life insurance policy" means any individual life insurance policy under the provisions of which separately identified interest credits (other than in connection with dividend accumulations, premium deposit funds, or other supplementary accounts) and mortality or expense charges are made to the policy.

[Statutory Authority: RCW 48.02.060, 48.74.030, 48.74.040, 48.74.070, and 48.74.080. WSR 00-07-069, § 284-74-330, filed 3/13/00, effective 4/13/00.]

WAC 284-74-340 General calculation requirements for basic reserves and premium deficiency reserves.

(1) At the election of the company for any one or more specified plans of life insurance, the minimum valuation standard of mortality under RCW 48.74.030(1) for basic reserves may be calculated using the 1980 CSO mortality table with select mortality factors (or any other valuation mortality table adopted by the NAIC after the operative date of this regulation and promulgated by regulation by the commissioner for this purpose). If select mortality factors are elected, they may be:

(a) The ten-year select mortality factors incorporated into the 1980 amendments to the NAIC standard valuation law;

(b) The select mortality factors in WAC 284-74-380; or

(c) Any other table of select mortality factors adopted by the NAIC after the operative date of this regulation and promulgated by regulation by the commissioner for the purpose of calculating basic reserves.

(2) Deficiency reserves, if any, are calculated under RCW 48.74.070 for each policy as the excess, if greater than zero, of the quantity A over the basic reserve. The quantity A is obtained by recalculating the basic reserve for the policy using the minimum valuation standards of mortality under RCW 48.74.030(1) and rate of interest under RCW 48.74.030(3), and replacing the net premium by the actual gross premium in each contract year the actual gross premium is less than the corresponding net premium. The actual gross premiums shall be the maximum gross premiums guaranteed on the valuation date.

The quantity A and the corresponding net premiums used in the determination of quantity A shall be based upon the minimum valuation standard of mortality under subsection (1) of this section for basic reserves: Provided, That at the election of the company for any one or more specified plans of life insurance, the quantity A and the corresponding net premiums used in the determination of the quantity A may be based upon the 1980 CSO mortality table with select mortality factors (or any other valuation mortality table adopted by the NAIC after the operative date of this regulation and promulgated by regulation by the commissioner). If select mortality factors are elected, they may be:

(a) The ten-year select mortality factors incorporated into the 1980 amendments to the NAIC standard valuation law;

(b) The select mortality factors in WAC 284-74-380;

(c) Subject to the conditions in subsection (3) of this section, X percent of the select mortality factors in WAC 284-74-380; or

(d) Any other table of select mortality factors adopted by the NAIC after the operative date of this regulation and promulgated by regulation by the commissioner for the purpose of calculating deficiency reserves.

(3) If X percent of the select mortality factors in WAC 284-74-380 is elected under subsection (2)(c) of this section, then that election is subject to the following conditions:

(a) X may vary by policy year, policy form, underwriting classification, issue age, or any other policy factor expected to affect mortality experience;

(b) Using the valuation interest rate for basic reserves, subparagraph (i) is greater than or equal to subparagraph (ii);

(i) The actuarial present value of future death benefits, calculated using the mortality rates resulting from the application of X;

(ii) The actuarial present value of future death benefits, calculated using anticipated mortality experience without recognition of mortality improvement beyond the valuation date;

(c) The mortality rates resulting from the application of X are at least as great as anticipated mortality experience, without recognition of mortality improvement beyond the valuation date, in each of the first five years after the valuation date;

(d) The appointed actuary shall increase X at any valuation date where it is necessary to continue to meet all the requirements of this subsection (3);

(e) The appointed actuary may decrease X at any valuation date as long as it continues to meet all the requirements of this subsection (3);

(f) The appointed actuary shall specifically take into account the adverse effect on expected mortality and lapsation of any anticipated or actual increase in gross premiums; and

(g) If X is less than one hundred percent at any duration for any policy, the following requirements shall be met:

(i) The appointed actuary shall annually prepare an actuarial opinion and memorandum in conformance with the requirements of WAC 284-07-380 through 284-07-400;

(ii) The appointed actuary shall disclose in the regulatory asset adequacy issues summary the impact of insufficiency of assets to support the payment of benefits and expenses and the establishment of statutory reserves during one or more interim periods; and

(iii) The appointed actuary shall annually opine for all policies subject to this regulation as to whether the mortality rates resulting from the application of X meet the requirements of this subsection (3). This opinion shall be included with or attached to the company's annual statement, and shall disclose the lowest X factor used for any policy on the valuation date. This opinion shall be supported by an actuarial report, subject to appropriate actuarial standards of practice promulgated by the Actuarial Standards Board of the American Academy of Actuaries. The X factors shall reflect anticipated future mortality, without recognition of mortality improvement beyond the valuation date, taking into account relevant emerging experience.

(4) This subsection applies to both basic reserves and deficiency reserves. Any set of select mortality factors may be used only for the first segment. However, if the first segment is less than ten years, the appropriate ten-year select mortality factors incorporated into

the 1980 amendments to the NAIC standard valuation law may be used thereafter through the tenth policy year from the date of issue.

(5) In determining basic reserves or deficiency reserves, guaranteed maximum gross premiums without policy fees may be used where the calculation involves the guaranteed maximum gross premium but only if the policy fee is specified in the policy and is a level dollar amount for the entire premium paying period of the policy. In determining deficiency reserves, policy fees may be included in guaranteed maximum gross premiums, even if not included in the actual calculation of basic reserves.

(6) Reserves for policies under which the insurer has changed its guarantees after issue with respect to gross premiums, benefits, charges, or credits, with the new guarantees effective for more than one year after the date of the change, shall be the greatest of the following:

- (a) Reserves calculated ignoring the change;
- (b) Reserves assuming the guarantee was made at issue; and
- (c) Reserves assuming that the policy was issued on the date of the guarantee.

(7) The commissioner may require that the company document the extent of the adequacy of reserves for specified blocks, including, but not limited to, policies issued prior to the operative date of this regulation. This documentation may include a demonstration of the extent to which aggregation with other nonspecified blocks of business is relied upon in the formation of the appointed actuary opinion pursuant to and consistent with the requirements of WAC 284-07-380 and 284-07-400.

[Statutory Authority: RCW 48.02.060, 48.74.030, 48.74.080 and 48.74.070. WSR 12-06-027 (Matter No. R 2011-29), § 284-74-340, filed 3/1/12, effective 4/1/12. Statutory Authority: RCW 48.02.060, 48.74.030, 48.74.040, 48.74.070, and 48.74.080. WSR 00-07-069, § 284-74-340, filed 3/13/00, effective 4/13/00.]

WAC 284-74-350 Calculation of minimum valuation standard for policies with nonlevel guaranteed maximum gross premiums or nonlevel guaranteed minimum benefits (other than universal life policies).

(1) Basic reserves shall be calculated as the greater of the segmented reserves and the unitary reserves. Both the segmented reserves and the unitary reserves for any policy shall use the same valuation mortality table and select mortality factors. At the option of the insurer, in calculating segmented reserves and net premiums, either of the adjustments described in (a) or (b) of this subsection may be made:

(a) Treat the unitary reserve, if greater than zero, applicable at the end of each segment as a pure endowment; and subtract the unitary reserve, if greater than zero, applicable at the beginning of each segment from the present value of guaranteed life insurance and endowment benefits for each segment.

(b) Treat the guaranteed cash surrender value, if greater than zero, applicable at the end of each segment as a pure endowment; and subtract the guaranteed cash surrender value, if greater than zero, applicable at the beginning of each segment from the present value of guaranteed life insurance and endowment benefits for each segment.

(2) (a) The deficiency reserve at any duration shall be calculated:

(i) On a unitary basis if the corresponding basic reserve determined by subsection (1) of this section is unitary;

(ii) On a segmented basis if the corresponding basic reserve determined by subsection (1) of this section is segmented; or

(iii) On the segmented basis if the corresponding basic reserve determined by subsection (1) of this section is equal to both the segmented reserve and the unitary reserve.

(b) This subsection shall apply to any policy for which the guaranteed maximum gross premium or actual gross premium at any duration is less than the corresponding modified net premium calculated by the method used in determining the basic reserves, but using the minimum valuation standards of mortality (specified in WAC 284-074-340(2)) and rate of interest.

(c) Deficiency reserves, if any, shall be calculated for each policy as the excess if greater than zero, for the current and all remaining periods, of the quantity A over the basic reserve, where A is obtained as indicated in WAC 284-74-340(2).

(d) For deficiency reserves determined on a segmented basis, the quantity A is determined using segment lengths equal to those determined for segmented basic reserves.

(3) Basic reserves may not be less than the tabular cost of insurance for the balance of the policy year, if mean reserves are used. Basic reserves may not be less than the tabular cost of insurance for the balance of the current modal period or to the paid-to-date, if later, but not beyond the next policy anniversary, if midterminal reserves are used. The tabular cost of insurance shall use the same valuation mortality table and interest rates as those used for the calculation of the segmented reserves. However, if select mortality factors are used, they shall be the ten-year select mortality factors incorporated into the 1980 amendments to the NAIC standard valuation law. In no case may total reserves (including basic reserves, deficiency reserves and any reserves held for supplemental benefits that would expire upon contract termination) be less than the amount that the policy owner would receive (including the cash surrender value of the supplemental benefits, if any, referred to above), exclusive of any deduction for policy loans, upon termination of the policy.

(4)(a) For any policy with an unusual pattern of guaranteed cash surrender values, the reserves actually held prior to the first unusual guaranteed cash surrender value shall not be less than the reserves calculated by treating the first unusual guaranteed cash surrender value as a pure endowment and treating the policy as an n year policy providing term insurance plus a pure endowment equal to the unusual cash surrender value, where n is the number of years from the date of issue to the date the unusual cash surrender value is scheduled.

(b) The reserves actually held subsequent to any unusual guaranteed cash surrender value shall not be less than the reserves calculated by treating the policy as an n year policy providing term insurance plus a pure endowment equal to the next unusual guaranteed cash surrender value, and treating any unusual guaranteed cash surrender value at the end of the prior segment as a net single premium, where:

(i) n is the number of years from the date of the last unusual guaranteed cash surrender value prior to the valuation date to the earlier of:

(A) The date of the next unusual guaranteed cash surrender value, if any, that is scheduled after the valuation date; or

(B) The mandatory expiration date of the policy; and

(ii) The net premium for a given year during the n year period is equal to the product of the net to gross ratio and the respective gross premium; and

(iii) The net to gross ratio is equal to item (A) divided by item (B) as follows:

(A) The present value, at the beginning of the n year period, of death benefits payable during the n year period plus the present value, at the beginning of the n year period, of the next unusual guaranteed cash surrender value, if any, minus the amount of the last unusual guaranteed cash surrender value, if any, scheduled at the beginning of the n year period.

(B) The present value, at the beginning of the n year period, of the scheduled gross premiums payable during the n year period.

(c) For purposes of this subsection, a policy is considered to have an unusual pattern of guaranteed cash surrender values if any future guaranteed cash surrender value exceeds the prior year's guaranteed cash surrender value by more than the sum of:

(i) One hundred ten percent of the scheduled gross premium for that year;

(ii) One hundred ten percent of one year's accrued interest on the sum of the prior year's guaranteed cash surrender value and the scheduled gross premium using the nonforfeiture interest rate used for calculating policy guaranteed cash surrender values; and

(iii) Five percent of the first policy year surrender charge, if any.

(5) At the option of the company, the following approach for reserves on yearly renewal term reinsurance may be used:

(a) Calculate the valuation net premium for each future policy year as the tabular cost of insurance for that future year.

(b) Basic reserves shall never be less than the tabular cost of insurance for the appropriate period, as defined in subsection (3) of this section.

(c) For each policy year, calculate the excess, if greater than zero, of the valuation net premium over the respective guaranteed maximum gross premium.

(d) Deficiency reserves shall never be less than the sum of the present values, at the date of valuation, of the excesses determined in accordance with (c) of this subsection.

(e) For purposes of this subsection, the calculations use the maximum valuation interest rate and the 1980 CSO mortality table with or without ten-year select mortality factors, or any other table adopted after the operative date of this regulation by the NAIC and promulgated by regulation by the commissioner for this purpose.

(f) A reinsurance agreement shall be considered yearly renewable term reinsurance for purposes of this subsection if only the mortality risk is reinsured.

(g) If the assuming company chooses this optional exemption, the ceding company's reinsurance reserve credit shall be limited to the amount of reserve held by the assuming company for the affected policies.

(6) At the option of the company, the following approach for reserves for attained-age-based yearly renewable term life insurance policies may be used:

(a) Calculate the valuation net premium for each future policy year as the tabular cost of insurance for that future year.

(b) Basic reserves shall never be less than the tabular cost of insurance for the appropriate period, as defined in subsection (3) of this section.

(c) For each policy year, calculate the excess, if greater than zero, of the valuation net premium over the respective guaranteed maximum gross premium.

(d) Deficiency reserves shall never be less than the sum of the present values, at the date of valuation, of the excesses determined in accordance with (c) of this subsection.

(e) For purposes of this subsection, the calculations use the maximum valuation interest rate and the 1980 CSO mortality tables with or without ten-year select mortality factors, or any other table adopted after the operative date of this regulation by the NAIC and promulgated by regulation by the commissioner for this purpose.

(f) A policy shall be considered an attained-age-based yearly renewable term life insurance policy for purposes of this subsection if:

(i) The premium rates (on both the initial current premium scale and the guaranteed maximum premium scale) are based upon the attained age of the insured such that the rate for any given policy at a given attained age of the insured is independent of the year the policy was issued; and

(ii) The premium rates (on both the initial current premium scale and the guaranteed maximum premium scale) are the same as the premium rates for policies covering all insureds of the same sex, risk class, plan of insurance and attained age.

(g) For policies that become attained-age-based yearly renewable term policies after an initial period of coverage, the approach of this subsection may be used after the initial period if:

(i) The initial period is constant for all insureds of the same sex, risk class and plan of insurance; or

(ii) The initial period runs to a common attained age for all insureds of the same sex, risk class and plan of insurance; and

(iii) After the initial period of coverage, the policy meets the conditions of (f) of this subsection.

(h) If this election is made, this approach shall be applied in determining reserves for all attained-age-based yearly renewable term life insurance policies issued on or after the operative date of this regulation.

(7) Unitary basic reserves and unitary deficiency reserves need not be calculated for a policy if the following conditions are met:

(a) The policy consists of a series of n-year periods, including the first period and all renewal periods, where n is the same for each period, except that for the final renewal period, n may be truncated or extended to reach the expiry age: Provided, That this final renewal period is less than ten years and less than twice the size of the earlier n-year periods, and for each period, the premium rates on both the initial current premium scale and the guaranteed maximum premium scale are level;

(b) The guaranteed maximum gross premiums in all n-year periods are not less than the corresponding net premiums based upon the 1980 CSO mortality table with or without the ten-year select mortality factors; and

(c) There are no cash surrender values in any policy year.

(8) Unitary basic reserves and unitary deficiency reserves need not be calculated for a policy if the following conditions are met, based upon the initial current premium scale at issue:

(a) At issue, the insured is age twenty-four or younger;

(b) Until the insured reaches the end of the juvenile period, which shall occur at or before age twenty-five, the gross premiums and death benefits are level, and there are no cash surrender values; and

(c) After the end of the juvenile period, gross premiums are level for the remainder of the premium paying period, and death benefits are level for the remainder of the life of the policy.

[Statutory Authority: RCW 48.02.060, 48.74.030, 48.74.040, 48.74.070, and 48.74.080. WSR 00-07-069, § 284-74-350, filed 3/13/00, effective 4/13/00.]

WAC 284-74-360 Calculation of minimum valuation standard for flexible premium and fixed premium universal life insurance policies that contain provisions resulting in the ability of a policy owner to keep a policy in force over a secondary guarantee period. (1)(a) Policies with a secondary guarantee include:

(i) A policy with a guarantee that the policy will remain in force at the original schedule of benefits over a specified period of time, subject only to the payment of specified premiums;

(ii) A policy in which the minimum premium at any duration is less than the corresponding one year valuation premium, calculated using the maximum valuation interest rate and the 1980 CSO mortality tables with or without ten-year select mortality factors, or any other table adopted after the operative date of this regulation by the NAIC and promulgated by regulation by the commissioner for this purpose; or

(iii) A policy with any combination of (a)(i) and (ii) of this subsection.

(b) A secondary guarantee period is the period for which the policy is guaranteed to remain in force subject only to a secondary guarantee. When a policy contains more than one secondary guarantee, the minimum reserve shall be the greatest of the respective minimum reserves at that valuation date of each unexpired secondary guarantee, ignoring all other secondary guarantees. Secondary guarantees that are unilaterally changed by the insurer after issue shall be considered to have been made at issue. Reserves described in subsections (2) and (3) of this section shall be recalculated from issue to reflect these changes.

(c) Specified premiums mean the premiums specified by the insurer, the payment of which guarantees that the policy will remain in force at the original schedule of benefits, but which otherwise would be insufficient to keep the policy in force in the absence of the guarantee if maximum mortality and expense charges and minimum interest credits were made and any applicable surrender charges were assessed.

(d) For purposes of this section, the minimum premium for any policy year is the premium that, when paid into a policy with a zero account value at the beginning of the policy year, produces a zero account value at the end of the policy year. The minimum premium calculation shall use the policy cost factors (including mortality charges, loads and expense charges) and the interest crediting rate, which are all guaranteed at issue.

(e) The one-year valuation premium means the net one-year premium based upon the original schedule of benefits for a given policy year. The one-year valuation premiums for all policy years are calculated at issue. The select mortality factors defined in WAC 284-74-340 (2)(b),

(c) and (d) may not be used to calculate the one-year valuation premiums.

(f) The one-year valuation premium should reflect the frequency of fund processing, as well as the distribution of deaths assumption employed in the calculation of the monthly mortality charges to the fund.

(2) Basic reserves for the secondary guarantees shall be the segmented reserves for the secondary guarantee period. In calculating the segments and the segmented reserves, the gross premiums shall be set equal to the specified premiums, if any, or otherwise to the minimum premiums, that keep the policy in force and the segments will be determined according to the contract segmentation method as defined in WAC 284-74-330(2).

(3) Deficiency reserves, if any, for the secondary guarantees shall be calculated for the secondary guarantee period in the same manner as described in WAC 284-74-350(2) with gross premiums set equal to the specified premiums, if any, or otherwise to the minimum premiums that keep the policy in force.

(4) The minimum reserves during the secondary guarantee period are the greater of:

(a) The basic reserves for the secondary guarantee plus the deficiency reserve, if any, for the secondary guarantees; or

(b) The minimum reserves required by other statutory provisions, rules or regulations governing universal life plans.

[Statutory Authority: RCW 48.02.060, 48.74.030, 48.74.040, 48.74.070, and 48.74.080. WSR 00-07-069, § 284-74-360, filed 3/13/00, effective 4/13/00.]

WAC 284-74-365 Implementation of WAC 284-74-360. (1) Insurers will fully apply NAIC Actuarial Guideline XXXVIII, as adopted on September 12, 2012, to properly and uniformly implement WAC 284-74-360.

(2) NAIC Actuarial Guideline XXXVIII will be effective July 1, 2013.

[Statutory Authority: RCW 48.02.060 and 48.74.020. WSR 13-06-041 (Matter No. R 2012-30), § 284-74-365, filed 3/4/13, effective 7/1/13.]

WAC 284-74-370 Operative date. On or after the effective date of this regulation, the company to whose policies this regulation applies may elect January 1, 2000, as its operative date. If the company makes no such election, this regulation shall become operative on its effective date.

[Statutory Authority: RCW 48.02.060, 48.74.030, 48.74.040, 48.74.070, and 48.74.080. WSR 00-07-069, § 284-74-370, filed 3/13/00, effective 4/13/00.]

WAC 284-74-380 Select mortality factors. This section contains the tables of select mortality factors to which WAC 284-74-340 (1)(b), (2)(b) and (c) refer. The factors in this section are percentages to be applied to the 1980 CSO valuation tables.

The six tables of select mortality factors contained herein include:

- (1) Male composite;
- (2) Male nonsmoker;
- (3) Male smoker;
- (4) Female composite;
- (5) Female nonsmoker; and
- (6) Female smoker.

The same factors apply to both age last birthday and age nearest birthday mortality tables.

(1) The select mortality factors for male composite are as shown in the table below:

Issue		Male Composite - Select Mortality Factors																			
		Duration																			
Age		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
0-15		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
16		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
17		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
18		96	98	98	99	99	100	100	90	92	92	92	92	93	93	96	97	98	98	99	100
19		83	84	84	87	87	87	79	79	79	81	81	82	82	82	85	88	91	94	97	100
20		69	71	71	74	74	69	69	67	69	70	71	71	71	71	74	79	84	90	95	100
21		66	68	69	71	66	66	67	66	67	70	70	70	70	71	71	77	83	88	94	100
22		65	66	66	63	63	64	64	64	65	68	68	68	68	69	71	77	83	88	94	100
23		62	63	59	60	62	62	63	63	64	65	65	67	67	69	70	76	82	88	94	100
24		60	56	56	59	59	60	61	61	61	64	64	64	66	67	70	76	82	88	94	100
25		52	53	55	56	58	58	60	60	60	63	62	63	64	67	69	75	81	88	94	100
26		51	52	55	56	58	58	57	61	61	62	63	64	66	69	66	73	80	86	93	100
27		51	52	55	57	58	60	61	61	60	63	63	64	67	66	67	74	80	87	93	100
28		49	51	56	58	60	60	61	62	62	63	64	66	65	66	68	74	81	87	94	100
29		49	51	56	58	60	61	62	62	62	64	64	62	66	67	70	76	82	88	94	100
30		49	50	56	58	60	60	62	63	63	64	62	63	67	68	71	77	83	88	94	100
31		47	50	56	58	60	62	63	64	64	62	63	66	68	70	72	78	83	89	94	100
32		46	49	56	59	60	62	63	66	62	63	66	67	70	72	73	78	84	89	95	100
33		43	49	56	59	62	63	64	62	65	66	67	70	72	73	75	80	85	90	95	100
34		42	47	56	60	62	63	61	63	66	67	70	71	73	75	76	81	86	90	95	100
35		40	47	56	60	63	61	62	65	67	68	71	73	74	76	76	81	86	90	95	100
36		38	42	56	60	59	61	63	65	67	68	70	72	74	76	77	82	86	91	95	100
37		38	45	56	57	61	62	63	65	67	68	70	72	74	76	76	81	86	90	95	100
38		37	44	53	58	61	62	65	66	67	69	69	73	75	76	77	82	86	91	95	100
39		37	41	53	58	62	63	65	65	66	68	69	72	74	76	76	81	86	90	95	100
40		34	40	53	58	62	63	65	65	66	68	68	71	75	76	77	82	86	91	95	100
41		34	41	53	58	62	63	65	64	64	66	68	70	74	76	77	82	86	91	95	100
42		34	43	53	58	61	62	63	63	63	64	66	69	72	75	77	82	86	91	95	100
43		34	43	54	59	60	61	63	62	62	64	66	67	72	74	77	82	86	91	95	100
44		34	44	54	58	59	60	61	60	61	62	64	67	71	74	77	82	86	91	95	100
45		34	45	53	58	59	60	60	60	59	60	63	66	71	74	77	82	86	91	95	100
46		31	43	52	56	57	58	59	59	59	60	63	67	71	74	75	80	85	90	95	100
47		32	42	50	53	55	56	57	58	59	60	65	68	71	74	75	80	85	90	95	100
48		32	41	47	52	54	56	57	57	57	61	65	68	72	73	74	79	84	90	95	100
49		30	40	46	49	52	54	55	56	57	61	66	69	72	73	74	79	84	90	95	100
50		30	38	44	47	51	53	54	56	57	61	66	71	72	73	75	80	85	90	95	100
51		28	37	42	46	49	53	54	56	57	61	66	71	72	73	75	80	85	90	95	100
52		28	35	41	45	49	51	54	56	57	61	66	71	72	74	75	80	85	90	100	100
53		27	35	39	44	48	51	53	55	57	61	67	71	74	75	76	81	86	100	100	100
54		27	33	38	44	48	50	53	55	57	61	67	72	74	75	76	81	100	100	100	100
55		25	32	37	43	47	50	53	55	57	61	68	72	74	75	78	100	100	100	100	100
56		25	32	37	43	47	49	51	54	56	61	67	70	73	74	100	100	100	100	100	100
57		24	31	38	43	47	49	51	54	56	59	66	69	72	100	100	100	100	100	100	100

Male Composite - Select Mortality Factors																				
Issue	Duration																			
Age	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
58	24	31	38	43	48	48	50	53	56	59	64	67	100	100	100	100	100	100	100	100
59	23	30	39	43	48	48	51	53	55	58	63	100	100	100	100	100	100	100	100	100
60	23	30	39	43	48	47	50	52	53	57	100	100	100	100	100	100	100	100	100	100
61	23	30	39	43	49	49	50	52	53	75	100	100	100	100	100	100	100	100	100	100
62	23	30	39	44	49	49	51	52	75	75	100	100	100	100	100	100	100	100	100	100
63	22	30	39	45	50	50	52	75	75	75	100	100	100	100	100	100	100	100	100	100
64	22	30	39	45	50	51	75	75	75	75	100	100	100	100	100	100	100	100	100	100
65	22	30	39	45	50	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
66	22	30	49	45	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
67	22	30	39	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
68	23	32	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
69	23	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
70	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
71	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
72	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
73	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
74	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
75	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
76	48	52	55	60	60	65	70	70	70	100	100	100	100	100	100	100	100	100	100	100
77	48	52	55	60	60	65	70	70	100	100	100	100	100	100	100	100	100	100	100	100
78	48	52	55	60	60	65	70	100	100	100	100	100	100	100	100	100	100	100	100	100
79	48	52	55	60	60	65	100	100	100	100	100	100	100	100	100	100	100	100	100	100
80	48	52	55	60	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
81	48	52	55	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
82	48	52	55	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
83	48	52	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
84	48	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
85+	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

(2) The select mortality factors for male nonsmoker are as shown in the table below:

Male Nonsmoker - Select Mortality Factors																				
Issue	Duration																			
Age	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
0-15	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
16	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
17	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
18	93	95	96	98	99	100	100	90	92	92	92	92	95	95	96	97	98	98	99	100
19	80	81	83	86	87	87	79	79	79	81	81	82	83	83	86	89	92	94	97	100
20	65	68	69	72	74	69	69	67	69	70	71	71	72	72	75	80	85	90	95	100
21	63	66	68	71	66	66	67	66	67	70	70	70	71	71	73	78	84	89	95	100
22	62	65	66	62	63	64	64	64	67	68	68	68	70	70	73	78	84	89	95	100
23	60	62	58	60	62	62	63	63	64	67	68	68	67	69	71	77	83	88	94	100
24	59	55	56	58	59	60	61	61	63	65	67	66	66	69	71	77	83	88	94	100
25	52	53	55	56	58	58	60	60	61	64	64	64	64	67	70	76	82	88	94	100
26	51	53	55	56	58	60	61	61	61	63	64	64	66	69	67	74	80	87	93	100
27	51	52	55	58	60	60	61	61	62	63	64	66	67	66	67	74	80	87	93	100
28	49	52	57	58	60	61	63	62	62	64	66	66	63	66	68	74	81	87	94	100
29	49	51	57	60	61	61	62	62	63	64	66	63	65	67	68	74	81	87	94	100
30	49	51	57	60	61	62	63	63	63	64	62	63	66	68	70	76	82	88	94	100
31	47	50	57	60	60	62	63	64	64	62	63	65	67	70	71	77	83	88	94	100
32	46	50	57	60	62	63	64	64	62	63	65	66	68	71	72	78	83	89	94	100
33	45	49	56	60	62	63	64	62	63	65	66	68	71	73	74	79	84	90	95	100
34	43	48	56	62	63	64	62	62	65	66	67	70	72	74	74	79	84	90	95	100

Issue	Male Nonsmoker - Select Mortality Factors																			
	Age	Duration																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
35	41	47	56	62	63	61	62	63	66	67	68	70	72	74	75	80	85	90	95	100
36	40	47	56	62	59	61	62	63	66	67	68	70	72	74	75	80	85	90	95	100
37	38	45	56	58	59	61	62	63	66	67	67	69	71	73	74	79	84	90	95	100
38	38	45	53	58	61	62	63	65	65	67	68	70	72	74	73	78	84	89	95	100
39	37	41	53	58	61	62	63	64	65	67	68	70	71	73	73	78	84	89	95	100
40	34	41	53	58	61	62	63	64	64	66	67	69	71	73	72	78	83	89	94	100
41	34	41	53	58	61	61	62	62	63	65	65	67	69	71	71	77	83	88	94	100
42	34	43	53	58	60	61	62	61	61	63	64	66	67	69	71	77	83	88	94	100
43	32	43	53	58	60	61	60	60	60	60	62	64	66	68	69	75	81	88	94	100
44	32	44	52	57	59	60	60	59	59	58	60	62	65	67	69	75	81	88	94	100
45	32	44	52	57	59	60	59	57	57	57	59	61	63	66	68	74	81	87	94	100
46	32	42	50	54	56	57	57	56	55	56	59	61	63	65	67	74	80	87	93	100
47	30	40	48	52	54	55	55	54	54	55	59	61	62	63	66	73	80	86	93	100
48	30	40	46	49	51	52	53	53	54	55	57	61	62	63	63	70	78	85	93	100
49	29	39	43	48	50	51	50	51	53	54	57	61	61	62	62	70	77	85	92	100
50	29	37	42	45	47	48	49	50	51	54	57	61	61	61	61	69	77	84	92	100
51	27	35	40	43	45	47	48	50	51	53	57	60	61	61	62	70	77	85	92	100
52	27	34	39	42	44	45	48	49	50	53	56	60	60	62	62	70	77	85	100	100
53	25	31	37	41	44	45	47	49	50	51	56	59	61	61	62	70	77	100	100	100
54	25	30	36	39	43	44	47	48	49	51	55	59	59	61	62	70	100	100	100	100
55	24	29	35	38	42	43	45	48	49	50	56	58	59	61	62	100	100	100	100	100
56	23	29	35	38	42	42	44	47	48	50	55	57	58	59	100	100	100	100	100	100
57	23	28	35	38	42	42	43	45	47	49	53	55	56	100	100	100	100	100	100	100
58	22	28	33	37	41	41	43	45	45	47	51	53	100	100	100	100	100	100	100	100
59	22	26	33	37	41	41	42	44	44	46	50	100	100	100	100	100	100	100	100	100
60	20	26	33	37	41	40	41	42	42	45	100	100	100	100	100	100	100	100	100	100
61	20	26	33	37	41	40	41	42	42	75	100	100	100	100	100	100	100	100	100	100
62	19	25	32	38	40	40	41	42	75	75	100	100	100	100	100	100	100	100	100	100
63	19	25	33	36	40	40	41	75	75	75	100	100	100	100	100	100	100	100	100	100
64	18	24	32	36	39	40	75	75	75	75	100	100	100	100	100	100	100	100	100	100
65	18	24	32	36	39	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
66	18	24	32	36	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
67	18	24	32	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
68	18	24	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
69	18	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
70	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
71	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
72	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
73	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
74	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
75	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
76	48	52	55	60	60	65	70	70	70	100	100	100	100	100	100	100	100	100	100	100
77	48	52	55	60	60	65	70	70	100	100	100	100	100	100	100	100	100	100	100	100
78	48	52	55	60	60	65	70	100	100	100	100	100	100	100	100	100	100	100	100	100
79	48	52	55	60	60	65	100	100	100	100	100	100	100	100	100	100	100	100	100	100
80	48	52	55	60	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
81	48	52	55	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
82	48	52	55	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
83	48	52	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
84	48	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
85+	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

(3) The select mortality factors for male smoker are as shown in the table below:

Issue		Male Smoker - Select Mortality Factors																			
		Duration																			
Age		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
0-15		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
16		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
17		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
18		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
19		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
20		98	100	100	100	100	100	100	99	99	99	100	99	99	99	100	100	100	100	100	100
21		95	98	99	100	95	96	96	95	96	97	97	96	96	96	96	97	98	98	99	100
22		92	95	96	90	90	93	93	92	93	95	95	93	93	92	93	94	96	97	99	100
23		90	92	85	88	88	89	89	89	90	90	90	90	89	90	92	94	95	97	98	100
24		87	81	82	85	84	86	88	86	86	88	88	86	86	88	89	91	93	96	98	100
25		77	78	79	82	81	83	83	82	83	85	84	84	84	85	86	89	92	94	97	100
26		75	77	79	82	82	83	83	82	83	84	84	84	84	85	81	85	89	92	96	100
27		73	75	78	82	82	83	83	82	82	82	82	84	84	80	81	85	89	92	96	100
28		71	73	79	82	81	82	83	81	81	82	82	82	80	80	81	85	89	92	96	100
29		69	72	78	81	81	82	82	81	81	81	81	77	80	80	81	85	89	92	96	100
30		68	71	78	81	81	81	82	81	81	81	76	77	80	80	81	85	89	92	96	100
31		65	70	77	81	79	81	82	81	81	76	77	79	81	81	83	86	90	93	97	100
32		63	67	77	78	79	81	81	81	76	77	77	80	83	83	85	88	91	94	97	100
33		60	65	74	78	79	79	81	76	77	77	79	80	83	85	85	88	91	94	97	100
34		57	62	74	77	79	79	75	76	77	79	79	81	83	85	87	90	92	95	97	100
35		53	60	73	77	79	75	75	76	77	79	80	82	84	86	88	90	93	95	98	100
36		52	59	71	75	74	75	75	76	77	79	79	81	83	85	87	90	92	95	97	100
37		49	58	70	71	74	74	75	76	77	78	79	81	84	86	86	89	92	94	97	100
38		48	55	66	70	72	74	74	75	76	78	79	81	83	85	87	90	92	95	97	100
39		45	50	65	70	72	72	74	74	75	77	79	81	84	86	86	89	92	94	97	100
40		41	49	63	68	71	72	73	74	74	76	78	80	83	85	86	89	92	94	97	100
41		40	49	63	68	71	72	72	72	73	75	76	78	81	84	85	88	91	94	97	100
42		40	49	62	68	70	71	71	71	71	73	75	76	81	83	85	88	91	94	97	100
43		39	50	62	67	69	69	70	70	70	71	73	76	79	83	85	88	91	94	97	100
44		39	50	60	66	68	69	68	69	69	69	71	74	79	81	85	88	91	94	97	100
45		37	50	60	66	68	68	68	67	67	67	69	73	78	81	85	88	91	94	97	100
46		37	48	58	63	65	67	66	66	66	67	71	74	78	81	84	87	90	94	97	100
47		36	47	55	61	63	64	64	64	65	67	71	75	79	81	84	87	90	94	97	100
48		35	46	53	58	60	62	63	63	65	67	72	75	79	81	83	86	90	93	97	100
49		34	45	51	56	58	59	61	62	63	67	72	77	80	81	83	86	90	93	97	100
50		34	43	49	53	55	57	60	61	63	67	73	78	80	81	81	85	89	92	96	100
51		32	42	47	52	55	57	60	61	63	67	73	78	80	83	84	87	90	94	97	100
52		32	40	46	50	54	56	60	61	63	67	73	78	81	84	85	88	91	94	100	100
53		30	37	44	49	54	56	59	61	65	67	74	79	83	85	87	90	92	100	100	100
54		30	36	43	48	53	55	59	61	65	67	74	80	84	85	89	91	100	100	100	100
55		29	35	42	47	53	55	59	61	65	67	75	80	84	86	90	100	100	100	100	100
56		28	35	42	47	53	55	57	60	63	68	74	79	83	85	100	100	100	100	100	100
57		28	35	42	47	53	54	57	60	64	67	74	78	81	100	100	100	100	100	100	100
58		26	33	43	48	54	54	56	59	63	67	73	78	100	100	100	100	100	100	100	100
59		26	33	43	48	54	53	57	59	63	66	73	100	100	100	100	100	100	100	100	100
60		25	33	43	48	54	53	56	58	62	66	100	100	100	100	100	100	100	100	100	100
61		25	33	43	49	55	55	57	59	63	75	100	100	100	100	100	100	100	100	100	100
62		25	33	43	50	56	56	58	61	75	75	100	100	100	100	100	100	100	100	100	100
63		24	33	45	51	56	56	59	75	75	75	100	100	100	100	100	100	100	100	100	100
64		24	34	45	51	57	57	75	75	75	75	100	100	100	100	100	100	100	100	100	100
65		24	34	45	52	57	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
66		24	35	45	53	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
67		25	35	45	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100

Male Smoker - Select Mortality Factors																				
Issue	Duration																			
Age	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
68	25	36	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
69	27	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
70	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
71	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
72	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
73	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
74	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
75	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
76	48	52	55	60	60	65	70	70	70	100	100	100	100	100	100	100	100	100	100	100
77	48	52	55	60	60	65	70	70	100	100	100	100	100	100	100	100	100	100	100	100
78	48	52	55	60	60	65	70	100	100	100	100	100	100	100	100	100	100	100	100	100
79	48	52	55	60	60	65	100	100	100	100	100	100	100	100	100	100	100	100	100	100
80	48	52	55	60	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
81	48	52	55	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
82	48	52	55	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
83	48	52	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
84	48	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
85+	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

(4) The select mortality factors for female composite are as shown in the table below:

Female Composite - Select Mortality Factors																				
Issue	Duration																			
Age	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
0-15	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
16	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
17	99	100	100	100	100	100	100	100	93	95	96	97	97	100	100	100	100	100	100	100
18	83	83	84	84	84	84	86	78	78	79	82	84	85	88	88	90	93	95	98	100
19	65	66	68	68	68	68	63	63	64	66	69	71	72	74	75	80	85	90	95	100
20	48	50	51	51	51	47	48	48	49	51	56	57	58	61	63	70	78	85	93	100
21	47	48	50	51	47	47	48	49	51	53	57	60	61	64	64	71	78	86	93	100
22	44	47	48	45	47	47	48	49	53	54	60	61	63	64	66	73	80	86	93	100
23	42	45	44	45	47	47	49	51	53	54	61	64	64	67	69	75	81	88	94	100
24	39	40	42	44	47	47	50	51	54	56	64	64	66	69	70	76	82	88	94	100
25	34	38	41	44	47	47	50	53	56	57	64	67	69	71	73	78	84	89	95	100
26	34	38	41	45	49	49	51	56	58	59	66	69	70	73	70	76	82	88	94	100
27	34	38	41	47	50	51	54	57	59	60	69	70	73	70	71	77	83	88	94	100
28	34	37	43	47	53	53	56	59	62	63	70	73	70	72	74	79	84	90	95	100
29	34	38	43	49	54	56	58	60	63	64	73	70	72	74	75	80	85	90	95	100
30	35	38	43	50	56	56	59	63	66	67	70	71	74	75	76	81	86	90	95	100
31	35	38	43	51	56	58	60	64	67	65	71	72	74	75	76	81	86	90	95	100
32	35	39	45	51	56	59	63	66	65	66	72	72	75	76	76	81	86	90	95	100
33	36	39	44	52	58	62	64	65	66	67	72	74	75	76	76	81	86	90	95	100
34	36	40	45	52	58	63	63	66	67	68	74	74	76	76	76	81	86	90	95	100
35	36	40	45	53	59	61	65	67	68	70	75	74	75	76	75	80	85	90	95	100
36	36	40	45	53	55	62	65	67	68	70	74	74	74	75	75	80	85	90	95	100
37	36	41	47	52	57	62	65	67	68	69	72	72	73	75	74	79	84	90	95	100
38	34	41	44	52	57	63	66	68	69	70	72	71	72	74	75	80	85	90	95	100
39	34	40	45	53	58	63	66	68	69	69	70	70	70	73	74	79	84	90	95	100
40	32	40	45	53	58	65	65	67	68	69	70	69	70	73	73	78	84	89	95	100
41	32	40	45	53	57	63	64	67	68	68	69	69	69	73	74	79	84	90	95	100
42	32	40	45	52	56	61	63	65	66	68	69	68	70	74	75	80	85	90	95	100
43	31	39	45	51	55	59	61	65	65	66	68	69	69	74	77	82	86	91	95	100
44	31	39	45	50	54	58	61	63	64	66	67	68	71	75	78	82	87	91	96	100

Female Composite - Select Mortality Factors																				
Issue	Duration																			
Age	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
45	31	38	44	49	53	56	59	62	63	65	67	68	71	77	79	83	87	92	96	100
46	29	37	43	48	51	54	59	62	63	65	67	69	71	77	78	82	87	91	96	100
47	28	35	41	46	49	54	57	61	62	66	68	69	71	77	77	82	86	91	95	100
48	28	35	41	44	49	52	57	61	63	66	68	71	72	75	77	82	86	91	95	100
49	26	34	39	43	47	52	55	61	63	67	69	71	72	75	75	80	85	90	95	100
50	25	32	38	41	46	50	55	61	63	67	69	72	72	75	74	79	84	90	95	100
51	25	32	38	41	45	50	55	61	63	66	68	69	71	74	74	79	84	90	95	100
52	23	30	36	41	45	51	56	61	62	65	66	68	68	73	73	78	84	89	100	100
53	23	30	36	41	47	51	56	61	62	63	65	66	68	72	72	78	83	100	100	100
54	22	29	35	41	47	53	57	61	61	62	62	66	66	69	70	76	100	100	100	100
55	22	29	35	41	47	53	57	61	61	61	62	63	64	68	69	100	100	100	100	100
56	22	29	35	41	45	51	56	59	60	61	62	63	64	67	100	100	100	100	100	100
57	22	29	35	41	45	50	54	56	58	59	61	62	63	100	100	100	100	100	100	100
58	22	30	36	41	44	49	53	56	57	57	61	62	100	100	100	100	100	100	100	100
59	22	30	36	41	44	48	51	53	55	56	59	100	100	100	100	100	100	100	100	100
60	22	30	36	41	43	47	50	51	53	55	100	100	100	100	100	100	100	100	100	100
61	22	29	35	39	42	46	49	50	52	80	100	100	100	100	100	100	100	100	100	100
62	20	28	33	39	41	45	47	49	80	80	100	100	100	100	100	100	100	100	100	100
63	20	28	33	38	41	44	46	80	80	80	100	100	100	100	100	100	100	100	100	100
64	19	27	32	36	40	42	80	80	80	80	100	100	100	100	100	100	100	100	100	100
65	19	25	30	35	39	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
66	19	25	30	35	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
67	19	25	30	72	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
68	19	25	68	72	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
69	19	64	68	72	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
70	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
71	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
72	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
73	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
74	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
75	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
76	60	60	64	68	68	72	75	75	80	100	100	100	100	100	100	100	100	100	100	100
77	60	60	64	68	68	72	75	75	100	100	100	100	100	100	100	100	100	100	100	100
78	60	60	64	68	68	72	75	100	100	100	100	100	100	100	100	100	100	100	100	100
79	60	60	64	68	68	72	100	100	100	100	100	100	100	100	100	100	100	100	100	100
80	60	60	64	68	68	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
81	60	60	64	68	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
82	60	60	64	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
83	60	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
84	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
85+	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

(5) The select mortality factors for female nonsmoker are as shown in the table below:

Female Nonsmoker - Select Mortality Factors																				
Issue	Duration																			
Age	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
0-15	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
16	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
17	96	98	98	98	98	99	99	99	92	92	93	95	95	97	99	99	99	100	100	100
18	78	80	80	80	80	81	81	74	75	75	78	79	82	83	85	88	91	94	97	100
19	60	62	63	63	63	65	59	59	60	60	64	67	67	70	72	78	83	89	94	100
20	42	44	45	45	45	42	42	42	45	45	50	51	53	56	58	66	75	83	92	100
21	41	42	44	45	41	42	42	44	47	47	51	53	54	57	59	67	75	84	92	100

Female Nonsmoker - Select Mortality Factors																				
Issue	Duration																			
Age	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
22	39	41	44	41	41	42	44	45	49	49	54	56	57	58	60	68	76	84	92	100
23	38	41	38	40	41	42	44	46	49	50	56	57	58	60	62	70	77	85	92	100
24	36	36	38	40	41	42	46	47	50	51	58	59	60	62	63	70	78	85	93	100
25	32	34	37	40	41	43	46	49	51	53	59	60	62	63	64	71	78	86	93	100
26	32	34	37	41	43	45	47	50	53	53	60	62	63	64	62	70	77	85	92	100
27	32	34	38	43	46	47	49	51	53	55	62	63	64	62	62	70	77	85	92	100
28	30	34	39	43	47	49	51	53	56	58	63	63	61	62	63	70	78	85	93	100
29	30	35	40	45	50	51	52	55	58	59	64	61	62	63	63	70	78	85	93	100
30	31	35	40	46	51	52	53	56	59	60	62	62	63	65	65	72	79	86	93	100
31	31	35	40	46	51	53	55	58	60	58	62	62	63	65	65	72	79	86	93	100
32	32	35	40	45	51	53	56	59	57	58	62	63	63	65	64	71	78	86	93	100
33	32	36	41	47	52	55	58	55	58	59	63	63	65	65	65	72	79	86	93	100
34	33	36	41	47	52	55	55	57	58	59	63	65	64	65	64	71	78	86	93	100
35	33	36	41	47	52	53	57	58	59	61	63	64	64	64	64	71	78	86	93	100
36	33	36	41	47	49	53	57	58	59	61	63	64	63	64	63	70	78	85	93	100
37	32	36	41	44	49	53	57	58	59	60	62	62	61	62	63	70	78	85	93	100
38	32	37	39	45	50	54	57	58	60	60	61	61	61	62	61	69	77	84	92	100
39	30	35	39	45	50	54	57	58	60	59	60	60	59	60	61	69	77	84	92	100
40	28	35	39	45	50	54	56	57	59	59	60	59	59	59	60	68	76	84	92	100
41	28	35	39	45	49	52	55	55	58	57	58	59	58	59	60	68	76	84	92	100
42	27	35	39	44	49	52	54	55	56	57	57	57	58	60	61	69	77	84	92	100
43	27	34	39	44	47	50	53	53	55	55	56	57	56	60	61	69	77	84	92	100
44	26	34	38	42	47	50	52	53	54	55	55	55	56	61	62	70	77	85	92	100
45	26	33	38	42	45	48	51	51	52	53	54	55	56	61	62	70	77	85	92	100
46	24	32	37	40	43	47	49	51	52	53	54	55	56	60	61	69	77	84	92	100
47	24	30	35	39	42	45	47	49	51	53	54	55	56	59	60	68	76	84	92	100
48	23	30	35	37	40	44	47	49	50	53	54	55	55	59	57	66	74	83	91	100
49	23	29	33	35	39	42	45	48	50	53	54	55	55	57	56	65	74	82	91	100
50	21	27	32	34	37	41	44	48	50	53	54	55	55	56	55	64	73	82	91	100
51	21	26	30	34	37	41	44	48	49	51	53	53	54	55	55	64	73	82	91	100
52	20	25	30	33	37	41	44	47	48	50	50	51	51	55	53	62	72	81	100	100
53	19	24	29	32	37	41	43	47	48	48	49	49	51	52	52	62	71	100	100	100
54	18	24	29	32	37	41	43	45	47	47	47	49	49	51	51	61	100	100	100	100
55	18	23	28	32	37	41	43	45	45	45	46	46	47	50	50	100	100	100	100	100
56	18	23	28	32	36	39	42	44	44	45	46	46	46	49	100	100	100	100	100	100
57	18	23	28	31	35	38	41	42	44	44	45	45	46	100	100	100	100	100	100	100
58	17	23	26	31	35	36	38	41	41	42	45	45	100	100	100	100	100	100	100	100
59	17	23	26	30	33	35	38	39	40	41	44	100	100	100	100	100	100	100	100	100
60	17	23	26	30	32	34	36	38	39	40	100	100	100	100	100	100	100	100	100	100
61	17	22	25	29	32	33	35	36	38	80	100	100	100	100	100	100	100	100	100	100
62	16	22	25	28	30	32	34	35	80	80	100	100	100	100	100	100	100	100	100	100
63	16	20	24	28	30	32	34	80	80	80	100	100	100	100	100	100	100	100	100	100
64	14	21	24	27	29	30	80	80	80	80	100	100	100	100	100	100	100	100	100	100
65	15	19	23	25	28	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
66	15	19	23	25	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
67	15	19	22	72	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
68	13	18	68	72	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
69	13	64	68	72	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
70	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
71	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
72	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
73	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
74	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100

Female Nonsmoker - Select Mortality Factors																				
Issue	Duration																			
Age	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
75	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
76	60	60	64	68	68	72	75	75	80	100	100	100	100	100	100	100	100	100	100	100
77	60	60	64	68	68	72	75	75	100	100	100	100	100	100	100	100	100	100	100	100
78	60	60	64	68	68	72	75	100	100	100	100	100	100	100	100	100	100	100	100	100
79	60	60	64	68	68	72	100	100	100	100	100	100	100	100	100	100	100	100	100	100
80	60	60	64	68	68	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
81	60	60	64	68	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
82	60	60	64	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
83	60	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
84	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
85+	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

(6) The select mortality factors for female smoker are as shown in the table below:

Female Smoker - Select Mortality Factors																				
Issue	Duration																			
Age	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
0-15	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
16	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
17	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
18	99	100	100	100	100	100	100	95	96	97	100	100	100	100	100	100	100	100	100	100
19	87	89	92	92	92	92	84	84	86	86	92	93	95	96	99	99	99	100	100	100
20	74	77	80	80	80	73	73	73	75	77	83	83	86	88	90	92	94	96	98	100
21	71	74	78	78	71	71	73	74	77	79	85	86	88	89	90	92	94	96	98	100
22	68	71	75	70	71	71	73	74	78	79	88	90	89	89	92	94	95	97	98	100
23	65	69	67	70	70	70	73	77	79	81	89	90	90	92	92	94	95	97	98	100
24	62	60	64	69	70	70	74	77	79	81	92	90	92	93	93	94	96	97	99	100
25	53	58	63	67	69	70	74	78	81	82	92	93	93	95	95	96	97	98	99	100
26	53	58	63	69	71	72	75	79	82	82	93	93	95	96	90	92	94	96	98	100
27	52	56	63	70	74	74	78	81	82	84	93	95	95	90	90	92	94	96	98	100
28	52	56	64	71	75	77	79	82	85	86	95	95	90	92	92	94	95	97	98	100
29	51	56	64	71	78	78	81	84	86	88	95	90	90	92	92	94	95	97	98	100
30	51	56	64	72	79	79	82	85	88	89	90	90	92	93	93	94	96	97	99	100
31	51	56	64	72	78	81	84	84	88	84	90	90	92	93	93	94	96	97	99	100
32	51	56	64	71	78	81	85	86	84	85	90	90	92	94	93	94	96	97	99	100
33	51	57	62	71	78	82	85	83	84	85	90	92	93	93	93	94	96	97	99	100
34	51	56	62	71	78	82	81	83	85	86	90	92	92	94	93	94	96	97	99	100
35	51	56	62	71	78	79	83	84	85	86	90	91	91	93	93	94	96	97	99	100
36	49	56	62	71	74	79	83	84	85	86	90	90	91	93	92	94	95	97	98	100
37	48	55	62	67	74	79	83	84	85	86	89	90	89	92	91	93	95	96	98	100
38	47	55	57	66	72	77	81	84	86	86	87	88	88	90	91	93	95	96	98	100
39	45	50	57	66	72	77	81	83	85	86	86	87	86	89	90	92	94	96	98	100
40	41	50	57	66	72	77	81	83	84	85	86	86	86	86	89	91	93	96	98	100
41	40	50	57	65	71	76	79	81	83	84	85	86	85	89	90	92	94	96	98	100
42	40	49	57	65	69	74	77	80	82	83	84	85	86	90	92	94	95	97	98	100
43	39	49	55	63	69	73	76	78	80	82	83	84	85	92	93	94	96	97	99	100
44	39	48	55	62	67	71	75	78	80	80	82	84	86	93	96	97	98	98	99	100
45	37	47	55	61	65	70	73	76	78	80	81	84	86	94	97	98	98	99	99	100
46	36	46	53	59	63	68	71	75	77	79	83	85	86	93	96	97	98	98	99	100
47	34	44	51	57	62	66	70	75	77	80	83	85	86	93	94	95	96	98	99	100
48	34	44	50	54	60	64	69	74	77	80	84	86	87	92	92	94	95	97	98	100
49	33	42	48	53	58	63	68	74	77	81	84	86	87	92	91	93	95	96	98	100
50	31	41	46	51	57	61	67	74	77	81	85	87	87	91	90	92	94	96	98	100
51	30	39	45	51	56	61	67	74	75	80	83	85	85	90	90	92	94	96	98	100

Issue	Female Smoker - Select Mortality Factors																			
	Duration																			
Age	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
52	29	38	45	50	56	62	68	74	75	79	81	83	84	90	90	92	94	96	100	100
53	28	37	43	49	57	62	68	73	74	77	79	81	83	89	89	91	93	100	100	100
54	28	36	43	49	57	63	69	73	74	75	78	80	81	87	89	91	100	100	100	100
55	26	35	42	49	57	63	69	73	73	74	76	78	79	86	87	100	100	100	100	100
56	26	35	42	49	56	62	67	71	72	74	76	78	79	85	100	100	100	100	100	100
57	26	35	42	49	55	61	66	69	72	73	76	78	79	100	100	100	100	100	100	100
58	28	36	43	49	55	59	63	68	69	72	76	78	100	100	100	100	100	100	100	100
59	28	36	43	49	54	57	63	67	68	70	76	100	100	100	100	100	100	100	100	100
60	28	36	43	49	53	57	61	64	67	69	100	100	100	100	100	100	100	100	100	100
61	26	35	42	48	52	56	59	63	66	80	100	100	100	100	100	100	100	100	100	100
62	26	33	41	47	51	55	58	62	80	80	100	100	100	100	100	100	100	100	100	100
63	25	33	41	46	51	55	57	80	80	80	100	100	100	100	100	100	100	100	100	100
64	25	33	40	45	50	53	80	80	80	80	100	100	100	100	100	100	100	100	100	100
65	24	32	39	44	49	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
66	24	32	39	44	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
67	24	32	39	72	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
68	24	32	68	72	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
69	24	64	68	72	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
70	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
71	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
72	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
73	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
74	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
75	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
76	60	60	64	68	68	72	75	75	80	100	100	100	100	100	100	100	100	100	100	100
77	60	60	64	68	68	72	75	75	100	100	100	100	100	100	100	100	100	100	100	100
78	60	60	64	68	68	72	75	100	100	100	100	100	100	100	100	100	100	100	100	100
79	60	60	64	68	68	72	100	100	100	100	100	100	100	100	100	100	100	100	100	100
80	60	60	64	68	68	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
81	60	60	64	68	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
82	60	60	64	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
83	60	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
84	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
85+	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

[Statutory Authority: RCW 48.02.060, 48.74.030, 48.74.040, 48.74.070, and 48.74.080. WSR 00-07-069, § 284-74-380, filed 3/13/00, effective 4/13/00.]

WAC 284-74-400 Purpose. The purpose of this regulation, WAC 284-74-400 through 284-74-460, is to recognize and prescribe the use of the 2001 commissioners standard ordinary (CSO) mortality table in compliance with RCW 48.74.030 (1)(a)(iii), 48.76.050 (4)(h)(vi), and WAC 284-74-340 (1) and (2).

[Statutory Authority: RCW 48.02.060, 48.74.030, and 48.76.050. WSR 04-04-070 (Matter No. R 2003-02), § 284-74-400, filed 2/2/04, effective 3/4/04.]

WAC 284-74-410 Definitions. (1) "2001 CSO mortality table" means that mortality table, consisting of separate rates of mortality

for male and female lives, adopted by the National Association of Insurance Commissioners (NAIC) in December of 2002. The 2001 CSO mortality table is included in the *Proceedings of the NAIC (2nd Quarter 2002)*. Unless the context indicates otherwise, the "2001 CSO mortality table" includes both the ultimate form and the select and ultimate form of that table and includes both the smoker and nonsmoker mortality tables and the composite mortality tables. It also includes both the age-nearest-birthday and age-last-birthday bases of the mortality tables.

(2) "2001 CSO mortality table (F)" means that mortality table consisting of the rates of mortality for female lives from the 2001 CSO mortality table.

(3) "2001 CSO mortality table (M)" means that mortality table consisting of the rates of mortality for male lives from the 2001 CSO mortality table.

(4) "Composite mortality tables" means mortality tables with rates of mortality that do not distinguish between smokers and nonsmokers.

(5) "Smoker and nonsmoker mortality tables" means mortality tables with separate rates of mortality for smokers and nonsmokers.

[Statutory Authority: RCW 48.02.060, 48.74.030, and 48.76.050. WSR 04-04-070 (Matter No. R 2003-02), § 284-74-410, filed 2/2/04, effective 3/4/04.]

WAC 284-74-420 2001 CSO mortality table. (1) The 2001 commissioner standard ordinary (CSO) mortality table may be used as allowed in RCW 48.74.030 (1)(a)(iii), 48.76.050 (4)(h)(vi), and WAC 284-74-340 (1) and (2), subject to the conditions in this regulation.

(2) An insurer may elect to use the 2001 CSO mortality table as the minimum standard for policies issued on or after January 1, 2004, until January 1, 2009. This table may be used for any one or more specified plans of insurance subject to the conditions in this regulation. If the insurer elects to use the 2001 CSO mortality table, it must do so for both valuation and nonforfeiture purposes.

(3) An insurer must use the 2001 CSO mortality table as the minimum standard for policies issued on or after January 1, 2009.

[Statutory Authority: RCW 48.02.060, 48.74.030, and 48.76.050. WSR 04-04-070 (Matter No. R 2003-02), § 284-74-420, filed 2/2/04, effective 3/4/04.]

WAC 284-74-430 Conditions. (1) For each plan of insurance with separate rates for smokers and nonsmokers an insurer may use:

(a) Composite mortality tables to determine minimum reserve liabilities and minimum cash surrender values and amounts of paid-up nonforfeiture benefits;

(b) Smoker and nonsmoker mortality tables to determine the valuation net premiums and additional minimum reserves, if any, required by RCW 48.74.070 and use composite mortality tables to determine the basic minimum reserves, minimum cash surrender values and amounts of paid-up nonforfeiture benefits; or

(c) Smoker and nonsmoker mortality to determine minimum reserve liabilities and minimum cash surrender values and amounts of paid-up nonforfeiture benefits.

(2) The composite mortality tables must be used for plans of insurance without separate rates for smokers and nonsmokers.

(3) The insurer for each plan of insurance may use the 2001 CSO mortality table in its ultimate or select and ultimate form to determine minimum reserve liabilities and minimum cash surrender values and amounts of paid-up nonforfeiture benefits. This is subject to the restrictions of WAC 284-74-440 and 284-74-300 through 284-74-380 regarding the use of the select and ultimate form.

(4) When the 2001 CSO mortality table is the minimum reserve standard for any plan for an insurer, the actuarial opinion in the annual statement filed with the commissioner must be based on an asset adequacy analysis as specified in WAC 284-07-380. The commissioner may exempt an insurer from this requirement if it only does business in Washington.

[Statutory Authority: RCW 48.02.060, 48.74.030, and 48.76.050. WSR 04-04-070 (Matter No. R 2003-02), § 284-74-430, filed 2/2/04, effective 3/4/04.]

WAC 284-74-440 Applicability to WAC 284-74-300 through 284-74-380. (1) The 2001 CSO mortality table may be used in applying WAC 284-74-300 through 284-74-380 in the following manner, subject to the transition dates for use of the 2001 CSO mortality table in WAC 284-74-420 of this regulation (unless otherwise noted, the references in this section are to WAC 284-74-300 through 284-74-380):

(a) WAC 284-74-320 (1)(b)(ii): The net level reserve premium is based on the ultimate mortality rates in the 2001 CSO mortality table.

(b) WAC 284-74-330(2): All calculations are made using the 2001 CSO mortality rate, and, if elected, the optional minimum mortality standard for deficiency reserves stipulated in (d) of this subsection. The value of " $q_{x+k+t-1}$ " is the valuation mortality rate for deficiency reserves in policy year $k+t$, but using the unmodified select mortality rates if modified select mortality rates are used in the computation of deficiency reserves.

(c) WAC 284-74-340(1): The 2001 CSO mortality table is the minimum standard for basic reserves.

(d) WAC 284-74-340(2): The 2001 CSO mortality table is the minimum standard for deficiency reserves. If select mortality rates are used, they may be multiplied by X percent for durations in the first segment, subject to the conditions specified in WAC 284-74-340 (3)(a) through (i). In demonstrating compliance with those conditions, the demonstrations may not combine the results of tests that utilize the 1980 CSO mortality table with those tests that utilize the 2001 CSO mortality table, unless the combination is explicitly required by regulation or necessary to be in compliance with relevant actuarial standards of practice.

(e) WAC 284-74-350(3): The valuation mortality table used in determining the tabular cost of insurance is the ultimate mortality rates in the 2001 CSO mortality table.

(f) WAC 284-74-350 (5)(e): The calculations specified in WAC 284-74-350(5) must use the ultimate mortality rates in the 2001 CSO mortality table.

(g) WAC 284-74-350 (6)(e): The calculations specified in WAC 284-74-350(6) must use the ultimate mortality rates in the 2001 CSO mortality table.

(h) WAC 284-74-350 (7)(b): The calculations specified in WAC 284-74-350(7) must use the ultimate mortality rates in the 2001 CSO mortality table.

(i) WAC 284-74-360 (1)(a)(ii): The one-year valuation premium must be calculated using the ultimate mortality rates in the 2001 CSO mortality table.

(2) Nothing in this section expands the applicability of WAC 284-74-300 through 284-74-380 to include life insurance policies exempted under WAC 284-74-320(1).

[Statutory Authority: RCW 48.02.060, 48.74.030, and 48.76.050. WSR 04-04-070 (Matter No. R 2003-02), § 284-74-440, filed 2/2/04, effective 3/4/04.]

WAC 284-74-450 Gender blended tables. (1) On or after January 1, 2004, an insurer may substitute a blended mortality table for the 2001 CSO mortality table for any ordinary life insurance policy delivered or issued for delivery in this state. The ordinary life policy must have (a) utilized the same premium rates and charges for male and female lives and (b) been issued in circumstances where applicable law does not permit distinctions on the basis of gender. The substituted table may blend the 2001 CSO mortality table (M) and the 2001 CSO mortality table (F) for use in determining minimum cash surrender values and amounts of paid-up nonforfeiture benefits. The table may be used for any one or more specified plans of insurance subject to the conditions in this regulation. No change in minimum valuation standards is implied by this subsection.

(2) The insurer may choose from among the blended tables developed by the American Academy of Actuaries CSO task force and adopted by the NAIC in December of 2002. The mortality table chosen must be based on the blend of lives by gender expected for the policies to be issued. The 2001 CSO mortality table (M) and 2001 CSO mortality table (F) may only be used where the proportion of individuals insured is anticipated to be ninety percent or more of one gender or the other.

(3) An insurer shall not use gender blended mortality tables unless:

(a) The Norris decision (Arizona Governing Committee v. Norris, 463 U.S. 1073, 103 S. Ct. 3492, 77 1. Ed 2d 1236 (1983)) or other federal law is known to apply to the policies involved; or

(b) The insurer has a bona fide concern that the Norris decision or other federal law might reasonably be construed to apply by a court having jurisdiction.

(4) It is not a violation of RCW 48.30.300 for an insurer to issue the same kind of policy of life insurance on both a gender distinct and gender neutral basis.

[Statutory Authority: RCW 48.02.060, 48.74.030, and 48.76.050. WSR 04-04-070 (Matter No. R 2003-02), § 284-74-450, filed 2/2/04, effective 3/4/04.]

WAC 284-74-460 Effective date. The effective date of this regulation is January 1, 2004.

[Statutory Authority: RCW 48.02.060, 48.74.030, and 48.76.050. WSR 04-04-070 (Matter No. R 2003-02), § 284-74-460, filed 2/2/04, effective 3/4/04.]

WAC 284-74-470 Purpose. The purpose of these rules, WAC 284-74-470 through 284-74-510, is to recognize, permit and prescribe the use of mortality tables that reflect differences in mortality between preferred and standard lives in determining minimum reserve liabilities in accordance with RCW 48.74.030 (1)(a)(iii), and WAC 284-74-340 (1) and (2).

[Statutory Authority: RCW 48.02.060, 48.74.030 (1)(b), and 48.02.160(1). WSR 11-15-084 (Matter No. R 2011-03), § 284-74-470, filed 7/20/11, effective 9/1/11.]

WAC 284-74-480 Definitions. (1) "2001 CSO mortality table" means that mortality table, consisting of separate rates of mortality for male and female lives, developed by the American Academy of Actuaries CSO task force from the Valuation Basic Mortality Table developed by the society of actuaries individual life insurance valuation mortality task force, and adopted by the National Association of Insurance Commissioners (NAIC) in December of 2002. The 2001 CSO mortality table is included in the *Proceedings of the NAIC (2nd Quarter 2002)* and supplemented by the 2001 CSO preferred class structure mortality table defined in subsection (2) of this section. Unless the context indicates otherwise, the 2001 CSO mortality table includes both the ultimate form and the select and ultimate form of that table and includes both the smoker and nonsmoker mortality tables and the composite mortality tables. It also includes both the age-nearest-birthday and age-last-birthday bases of the mortality tables. Mortality tables in the 2001 CSO mortality table include the following:

(a) "2001 CSO mortality table (F)" means that mortality table consisting of the rates of mortality for female lives from the 2001 CSO mortality table.

(b) "2001 CSO mortality table (M)" means that mortality table consisting of the rates of mortality for male lives from the 2001 CSO mortality table.

(c) "Composite mortality tables" means mortality tables with rates of mortality that do not distinguish between smokers and nonsmokers.

(d) "Smoker and nonsmoker mortality tables" means mortality tables with separate rates of mortality for smokers and nonsmokers.

(2) "2001 CSO preferred class structure mortality table" means mortality tables with separate rates of mortality for super preferred nonsmokers, preferred nonsmokers, residual standard nonsmokers, preferred smokers, and residual standard smoker splits of the 2001 CSO nonsmoker and smoker tables, as adopted by the NAIC at the September, 2006 national meeting and published in the *NAIC Proceedings (3rd Quarter 2006)*. Unless the context indicates otherwise, the 2001 CSO preferred class structure mortality table includes both the ultimate form of that table and the select and ultimate form of that table. It includes both the smoker and nonsmoker mortality tables. It includes both the male and female mortality tables and the gender composite

mortality tables. It also includes both the age-nearest-birthday and age-last-birthday bases of the mortality table.

(3) "Statistical agent" means an entity with proven systems for protecting the confidentiality of individual insured and insurer information; demonstrated resources for and history of ongoing electronic communications and data transfer ensuring data integrity with insurers, which are its members or subscribers; and a history of and means for aggregation of data and accurate promulgation of the experience modifications in a timely manner.

[Statutory Authority: RCW 48.02.060, 48.74.030 (1)(b), and 48.02.160(1). WSR 11-15-084 (Matter No. R 2011-03), § 284-74-480, filed 7/20/11, effective 9/1/11.]

WAC 284-74-490 2001 CSO preferred class structure table. (1)

At the election of the company, for each calendar year of issue, for any one or more specific plans of insurance and subject to satisfying the conditions stated in this regulation, the 2001 CSO preferred class structure mortality table may be substituted in place of the 2001 CSO smoker or nonsmoker mortality table as the minimum valuation standard for policies issued on or after January 1, 2007.

(2) For policies issued on or after January 1, 2004, and prior to January 1, 2007, these tables may be substituted with the consent of the commissioner and subject to the conditions of WAC 284-74-500. In determining such consent, the commissioner may rely on the consent of the commissioner of the company's state of domicile. No such election shall be made until the company demonstrates at least twenty percent of the business to be valued on this table is in one or more of the preferred classes.

(3) A table from the 2001 CSO preferred class structure mortality table used in place of a 2001 CSO mortality table, pursuant to the requirements of this rule, will be treated as part of the 2001 CSO mortality table only for purposes of reserve valuation pursuant to the requirements of these rules, WAC 284-74-400 through 284-74-460.

[Statutory Authority: RCW 48.02.060, 48.74.030 (1)(b), and 48.02.160(1). WSR 11-15-084 (Matter No. R 2011-03), § 284-74-490, filed 7/20/11, effective 9/1/11.]

WAC 284-74-500 Conditions. (1)

For each plan of insurance with separate rates for preferred and standard nonsmoker lives, an insurer may use the super preferred nonsmoker, preferred nonsmoker, and residual standard nonsmoker tables to substitute for the nonsmoker mortality table found in the 2001 CSO mortality table to determine minimum reserves. At the time of election and annually thereafter, except for business valued under the residual standard nonsmoker table, the appointed actuary shall certify that:

(a) The present value of death benefits over the next ten years after the valuation date, using the anticipated mortality experience without recognition of mortality improvement beyond the valuation date for each class, is less than the present value of death benefits using the valuation basic table corresponding to the valuation table being used for that class.

(b) The present value of death benefits over the future life of the contracts, using anticipated mortality experience without recogni-

tion of mortality improvement beyond the valuation date for each class, is less than the present value of death benefits using the valuation basic table corresponding to the valuation table being used for that class.

(2) For each plan of insurance with separate rates for preferred and standard smoker lives, an insurer may use the preferred smoker and residual standard smoker tables to substitute for the smoker mortality table found in the 2001 CSO mortality table to determine minimum reserves. At the time of election and annually thereafter, for business valued under the preferred smoker table, the appointed actuary shall certify that:

(a) The present value of death benefits over the next ten years after the valuation date, using the anticipated mortality experience without recognition of mortality improvement beyond the valuation date for each class, is less than the present value of death benefits using the preferred smoker valuation basic table corresponding to the valuation table being used for that class.

(b) The present value of death benefits over the future life of the contracts, using anticipated mortality experience without recognition of mortality improvement beyond the valuation date for each class, is less than the present value of death benefits using the preferred smoker valuation basic table.

(3) Unless exempted by the commissioner, every authorized insurer using the 2001 CSO preferred class structure table must annually file with the commissioner, with the NAIC, or with a statistical agent designated by the NAIC and acceptable to the commissioner, statistical reports showing mortality and such other information as the commissioner may deem necessary or expedient for the administration of the provisions of this regulation. The form of the reports must be established by the commissioner or the commissioner may require the use of a form established by the NAIC or by a statistical agent designated by the NAIC and acceptable to the commissioner.

(4) The use of the 2001 CSO preferred class structure table for the valuation of policies issued prior to January 1, 2007, must not be permitted in any statutory financial statement in which a company reports, with respect to any policy or portion of a policy coinsured, either of the following:

(a) In cases where the mode of payment of the reinsurance premium is less frequent than the mode of payment of the policy premium, a reserve credit that exceeds, by more than the amount specified in this subsection as Y, the gross reserve calculated before reinsurance. Y is the amount of the gross reinsurance premium that:

(i) Provides coverage for the period from the next policy premium due date to the earlier of the end of the policy year and the next reinsurance premium due date; and

(ii) Would be refunded to the ceding entity upon the termination of the policy.

(b) In cases where the mode of payment of the reinsurance premium is more frequent than the mode of payment of the policy premium, a reserve credit that is less than the gross reserve, calculated before reinsurance, by an amount that is less than the amount specified in this subsection as Z. Z is the amount of the gross reinsurance premium that the ceding entity would need to pay the assuming company to provide reinsurance coverage from the period of the next reinsurance premium due date to the next policy premium due date minus any liability established for the proportionate amount not remitted to the reinsurer.

(c) For purposes of this condition, the reserve:

(i) For the mean reserve method must be defined as the mean reserve minus the deferred premium asset; and

(ii) For the midterminal reserve method must include the unearned premium reserve. A company may estimate and adjust its accounting on an aggregate basis in order to meet the conditions to use the 2001 CSO preferred class structure table.

[Statutory Authority: RCW 48.02.060, 48.74.030 (1)(b), and 48.02.160(1). WSR 11-15-084 (Matter No. R 2011-03), § 284-74-500, filed 7/20/11, effective 9/1/11.]

WAC 284-74-510 Effective date. The effective date of this regulation is September 1, 2011.

[Statutory Authority: RCW 48.02.060, 48.74.030 (1)(b), and 48.02.160(1). WSR 11-15-084 (Matter No. R 2011-03), § 284-74-510, filed 7/20/11, effective 9/1/11.]

WAC 284-74-525 Purpose. The purpose of this regulation, WAC 284-74-525 through 284-74-555, is to recognize and prescribe the use of the 2017 commissioners standard ordinary (CSO) mortality table in compliance with RCW 48.74.030 (1)(a)(iii), 48.76.050 (4)(h)(vi), and WAC 284-74-340 (1) and (2).

[Statutory Authority: RCW 48.02.060, 48.74.030, 48.76.050, and 48.02.160. WSR 17-03-074 (Matter No. R 2016-24), § 284-74-525, filed 1/11/17, effective 2/11/17.]

WAC 284-74-530 Definitions. (1) "2017 CSO mortality table" means that mortality table, consisting of separate rates of mortality for male and female lives, adopted by the National Association of Insurance Commissioners (NAIC) in April of 2016. The 2017 CSO mortality table is included in the *2015 Proceedings of the NAIC (Fall Volume I)*. Unless the context indicates otherwise, the "2017 CSO mortality table" includes both the ultimate form and the select and ultimate form of that table and includes both the smoker and nonsmoker mortality tables and the composite mortality tables. It also includes both the age-nearest-birthday and age-last-birthday bases of the mortality tables.

(2) "2017 CSO mortality table (F)" means that mortality table consisting of the rates of mortality for female lives from the 2017 CSO mortality table.

(3) "2017 CSO mortality table (M)" means that mortality table consisting of the rates of mortality for male lives from the 2017 CSO mortality table.

(4) "Composite mortality tables" means mortality tables with rates of mortality that do not distinguish between smokers and nonsmokers.

(5) "Smoker and nonsmoker mortality tables" means mortality tables with separate rates of mortality for smokers and nonsmokers.

[Statutory Authority: RCW 48.02.060, 48.74.030, 48.76.050, and 48.02.160. WSR 17-03-074 (Matter No. R 2016-24), § 284-74-530, filed 1/11/17, effective 2/11/17.]

WAC 284-74-535 2017 CSO mortality table. (1) The 2017 commissioners standard ordinary (CSO) mortality table may be used as allowed in RCW 48.74.030 (1)(a)(iii), 48.76.050 (4)(h)(vi), and WAC 284-74-340 (1) and (2), subject to the conditions in this regulation.

(2) An insurer may elect to use the 2017 CSO mortality table as the minimum standard for policies issued on or after January 1, 2017, until January 1, 2020. This table may be used for any one or more specified plans of insurance subject to the conditions in this regulation. If the insurer elects to use the 2017 CSO mortality table, it must do so for both valuation and nonforfeiture purposes.

(3) An insurer must use the 2017 CSO mortality table as the minimum standard for policies issued on or after January 1, 2020.

[Statutory Authority: RCW 48.02.060, 48.74.030, 48.76.050, and 48.02.160. WSR 17-03-074 (Matter No. R 2016-24), § 284-74-535, filed 1/11/17, effective 2/11/17.]

WAC 284-74-540 Conditions. (1) For each plan of insurance with separate rates for smokers and nonsmokers an insurer may use:

(a) Composite mortality tables to determine minimum reserve liabilities and minimum cash surrender values and amounts of paid-up nonforfeiture benefits;

(b) Smoker and nonsmoker mortality tables to determine the valuation net premiums and additional minimum reserves, if any, required by RCW 48.74.070 and use composite mortality tables to determine the basic minimum reserves, minimum cash surrender values and amounts of paid-up nonforfeiture benefits; or

(c) Smoker and nonsmoker mortality to determine minimum reserve liabilities and minimum cash surrender values and amounts of paid-up nonforfeiture benefits.

(2) The composite mortality tables must be used for plans of insurance without separate rates for smokers and nonsmokers.

(3) The insurer for each plan of insurance may use the 2017 CSO mortality table in its ultimate or select and ultimate form to determine minimum reserve liabilities and minimum cash surrender values and amounts of paid-up nonforfeiture benefits. This is subject to the restrictions of WAC 284-74-545 and 284-74-300 through 284-74-380 regarding the use of the select and ultimate form.

(4) When the 2017 CSO mortality table is the minimum reserve standard for any plan for an insurer, the actuarial opinion in the annual statement filed with the commissioner must be based on an asset adequacy analysis as specified in WAC 284-07-380. The commissioner may exempt an insurer from this requirement if it only does business in Washington.

[Statutory Authority: RCW 48.02.060, 48.74.030, 48.76.050, and 48.02.160. WSR 17-03-074 (Matter No. R 2016-24), § 284-74-540, filed 1/11/17, effective 2/11/17.]

WAC 284-74-545 Applicability to WAC 284-74-300 through 284-74-380. (1) The 2017 CSO mortality table may be used in applying WAC 284-74-300 through 284-74-380 in the following manner, subject to the transition dates for use of the 2017 CSO mortality table in WAC 284-74-535 of this regulation (unless otherwise noted, the references in this section are to WAC 284-74-300 through 284-74-380):

(a) WAC 284-74-320 (1)(b)(ii): The net level reserve premium is based on the ultimate mortality rates in the 2017 CSO mortality table.

(b) WAC 284-74-330(2): All calculations are made using the 2017 CSO mortality rate, and, if elected, the optional minimum mortality standard for deficiency reserves stipulated in (d) of this subsection. The value of " $q_{x+k+t-1}$ " is the valuation mortality rate for deficiency reserves in policy year $k+t$, but using the unmodified select mortality rates if modified select mortality rates are used in the computation of deficiency reserves.

(c) WAC 284-74-340(1): The 2017 CSO mortality table is the minimum standard for basic reserves.

(d) WAC 284-74-340(2): The 2017 CSO mortality table is the minimum standard for deficiency reserves. If select mortality rates are used, they may be multiplied by X percent for durations in the first segment, subject to the conditions specified in WAC 284-74-340 (3)(a) through (i). In demonstrating compliance with those conditions, the demonstrations may not combine either: (i) The results of tests that utilize the 1980 CSO mortality table with those tests that utilize the 2017 CSO mortality table; or (ii) the results of tests that utilize the 2001 CSO mortality table with those tests that utilize the 2017 CSO mortality table, unless the combination is explicitly required by regulation or necessary to be in compliance with relevant actuarial standards of practice.

(e) WAC 284-74-350(3): The valuation mortality table used in determining the tabular cost of insurance is the ultimate mortality rates in the 2017 CSO mortality table.

(f) WAC 284-74-350 (5)(e): The calculations specified in WAC 284-74-350(5) must use the ultimate mortality rates in the 2017 CSO mortality table.

(g) WAC 284-74-350 (6)(e): The calculations specified in WAC 284-74-350(6) must use the ultimate mortality rates in the 2017 CSO mortality table.

(h) WAC 284-74-350 (7)(b): The calculations specified in WAC 284-74-350(7) must use the ultimate mortality rates in the 2017 CSO mortality table.

(i) WAC 284-74-360 (1)(a)(ii): The one-year valuation premium must be calculated using the ultimate mortality rates in the 2017 CSO mortality table.

(2) Nothing in this section expands the applicability of WAC 284-74-300 through 284-74-380 to include life insurance policies exempted under WAC 284-74-320(1).

[Statutory Authority: RCW 48.02.060, 48.74.030, 48.76.050, and 48.02.160. WSR 17-03-074 (Matter No. R 2016-24), § 284-74-545, filed 1/11/17, effective 2/11/17.]

WAC 284-74-550 Gender blended tables. (1) On or after January 1, 2017, an insurer may substitute a blended mortality table for the 2017 CSO mortality table for any ordinary life insurance policy delivered or issued for delivery in this state. The ordinary life policy must have (a) utilized the same premium rates and charges for male and female lives and (b) been issued in circumstances where applicable law does not permit distinctions on the basis of gender. The substituted table may blend the 2017 CSO mortality table (M) and the 2017 CSO mortality table (F) for use in determining minimum cash surrender values

and amounts of paid-up nonforfeiture benefits. The table may be used for any one or more specified plans of insurance subject to the conditions in this regulation. No change in minimum valuation standards is implied by this subsection.

(2) The insurer may choose from among the blended tables developed by the American Academy of Actuaries CSO task force and adopted by the NAIC in April of 2016. The mortality table chosen must be based on the blend of lives by gender expected for the policies to be issued. The 2017 CSO mortality table (M) and 2017 CSO mortality table (F) may only be used where the proportion of individuals insured is anticipated to be ninety percent or more of one gender or the other.

(3) An insurer shall not use gender blended mortality tables unless:

(a) The Norris decision (Arizona Governing Committee v. Norris, 463 U.S. 1073, 103 S. Ct. 3492, 77 1. Ed 2d 1236 (1983)) or other federal law is known to apply to the policies involved; or

(b) The insurer has a bona fide concern that the Norris decision or other federal law might reasonably be construed to apply by a court having jurisdiction.

(4) It is not a violation of RCW 48.30.300 for an insurer to issue the same kind of policy of life insurance on both a gender distinct and gender neutral basis.

[Statutory Authority: RCW 48.02.060, 48.74.030, 48.76.050, and 48.02.160. WSR 17-03-074 (Matter No. R 2016-24), § 284-74-550, filed 1/11/17, effective 2/11/17.]

WAC 284-74-555 Effective date. The effective date of this regulation is January 1, 2017.

[Statutory Authority: RCW 48.02.060, 48.74.030, 48.76.050, and 48.02.160. WSR 17-03-074 (Matter No. R 2016-24), § 284-74-555, filed 1/11/17, effective 2/11/17.]

WAC 284-74-560 Purpose. The purpose of these rules, WAC 284-74-560 through 284-74-580, is to recognize, permit and prescribe the use of mortality tables that reflect differences in mortality between preferred and standard lives in determining minimum reserve liabilities in accordance with RCW 48.74.030 (1)(a)(iii), and WAC 284-74-340 (1) and (2).

[Statutory Authority: RCW 48.02.060, 48.74.030, 48.76.050, and 48.02.160. WSR 17-03-074 (Matter No. R 2016-24), § 284-74-560, filed 1/11/17, effective 2/11/17.]

WAC 284-74-565 Definitions. (1) "2017 CSO mortality table" means that mortality table, consisting of separate rates of mortality for male and female lives, developed by the American Academy of Actuaries CSO task force from the Valuation Basic Mortality Table developed by the Society of Actuaries individual life insurance valuation mortality task force, and adopted by the National Association of Insurance Commissioners (NAIC) in April of 2016. The 2017 CSO mortality table is included in the *2015 Proceedings of the NAIC (Fall Volume I)* and supplemented by the 2017 CSO preferred class structure mortality

table defined in subsection (2) of this section. Unless the context indicates otherwise, the 2017 CSO mortality table includes both the ultimate form and the select and ultimate form of that table and includes both the smoker and nonsmoker mortality tables and the composite mortality tables. It also includes both the age-nearest-birthday and age-last-birthday bases of the mortality tables. Mortality tables in the 2017 CSO mortality table include the following:

(a) "2017 CSO mortality table (F)" means that mortality table consisting of the rates of mortality for female lives from the 2017 CSO mortality table.

(b) "2017 CSO mortality table (M)" means that mortality table consisting of the rates of mortality for male lives from the 2017 CSO mortality table.

(c) "Composite mortality tables" means mortality tables with rates of mortality that do not distinguish between smokers and nonsmokers.

(d) "Smoker and nonsmoker mortality tables" means mortality tables with separate rates of mortality for smokers and nonsmokers.

(2) "2017 CSO preferred class structure mortality table" means mortality tables with separate rates of mortality for super preferred nonsmokers, preferred nonsmokers, residual standard nonsmokers, preferred smokers, and residual standard smoker splits of the 2017 CSO nonsmoker and smoker tables, as adopted by the NAIC at the April, 2016 national meeting and published in the *2015 Proceedings of the NAIC (Fall Volume I)*. Unless the context indicates otherwise, the 2017 CSO preferred class structure mortality table includes both the ultimate form of that table and the select and ultimate form of that table. It includes both the smoker and nonsmoker mortality tables. It includes both the male and female mortality tables and the gender composite mortality tables. It also includes both the age-nearest-birthday and age-last-birthday bases of the mortality table.

(3) "Statistical agent" means an entity with proven systems for protecting the confidentiality of individual insured and insurer information; demonstrated resources for and history of ongoing electronic communications and data transfer ensuring data integrity with insurers, which are its members or subscribers; and a history of and means for aggregation of data and accurate promulgation of the experience modifications in a timely manner.

[Statutory Authority: RCW 48.02.060, 48.74.030, 48.76.050, and 48.02.160. WSR 17-03-074 (Matter No. R 2016-24), § 284-74-565, filed 1/11/17, effective 2/11/17.]

WAC 284-74-570 2017 CSO preferred class structure table. (1) At the election of the company, for each calendar year of issue, for any one or more specific plans of insurance and subject to satisfying the conditions stated in this regulation, the 2017 CSO preferred class structure mortality table may be substituted in place of the 2017 CSO smoker or nonsmoker mortality table as the minimum valuation standard for policies issued on or after January 1, 2017.

(2) For policies issued on or after January 1, 2017, and prior to January 1, 2020, these tables may be substituted with the consent of the commissioner and subject to the conditions of WAC 284-74-575. In determining such consent, the commissioner may rely on the consent of the commissioner of the company's state of domicile. No such election shall be made until the company demonstrates at least twenty percent

of the business to be valued on this table is in one or more of the preferred classes.

(3) A table from the 2017 CSO preferred class structure mortality table used in place of a 2017 CSO mortality table, pursuant to the requirements of this rule, will be treated as part of the 2017 CSO mortality table only for purposes of reserve valuation pursuant to the requirements of these rules, WAC 284-74-525 through 284-74-555.

[Statutory Authority: RCW 48.02.060, 48.74.030, 48.76.050, and 48.02.160. WSR 17-03-074 (Matter No. R 2016-24), § 284-74-570, filed 1/11/17, effective 2/11/17.]

WAC 284-74-575 Conditions. (1) For each plan of insurance with separate rates for preferred and standard nonsmoker lives, an insurer may use the super preferred nonsmoker, preferred nonsmoker, and residual standard nonsmoker tables to substitute for the nonsmoker mortality table found in the 2017 CSO mortality table to determine minimum reserves. At the time of election and annually thereafter, except for business valued under the residual standard nonsmoker table, the appointed actuary shall certify that:

(a) The present value of death benefits over the next ten years after the valuation date, using the anticipated mortality experience without recognition of mortality improvement beyond the valuation date for each class, is less than the present value of death benefits using the valuation basic table corresponding to the valuation table being used for that class.

(b) The present value of death benefits over the future life of the contracts, using anticipated mortality experience without recognition of mortality improvement beyond the valuation date for each class, is less than the present value of death benefits using the valuation basic table corresponding to the valuation table being used for that class.

(2) For each plan of insurance with separate rates for preferred and standard smoker lives, an insurer may use the preferred smoker and residual standard smoker tables to substitute for the smoker mortality table found in the 2017 CSO mortality table to determine minimum reserves. At the time of election and annually thereafter, for business valued under the preferred smoker table, the appointed actuary shall certify that:

(a) The present value of death benefits over the next ten years after the valuation date, using the anticipated mortality experience without recognition of mortality improvement beyond the valuation date for each class, is less than the present value of death benefits using the preferred smoker valuation basic table corresponding to the valuation table being used for that class.

(b) The present value of death benefits over the future life of the contracts, using anticipated mortality experience without recognition of mortality improvement beyond the valuation date for each class, is less than the present value of death benefits using the preferred smoker valuation basic table.

(3) Unless exempted by the commissioner, every authorized insurer using the 2017 CSO preferred class structure table must annually file with the commissioner, with the NAIC, or with a statistical agent designated by the NAIC and acceptable to the commissioner, statistical reports showing mortality and such other information as the commissioner may deem necessary or expedient for the administration of the

provisions of this regulation. The form of the reports must be established by the commissioner or the commissioner may require the use of a form established by the NAIC or by a statistical agent designated by the NAIC and acceptable to the commissioner.

(4) The use of the 2017 CSO preferred class structure table for the valuation of policies issued prior to January 1, 2017, must not be permitted in any statutory financial statement in which a company reports, with respect to any policy or portion of a policy coinsured, either of the following:

(a) In cases where the mode of payment of the reinsurance premium is less frequent than the mode of payment of the policy premium, a reserve credit that exceeds, by more than the amount specified in this subsection as Y, the gross reserve calculated before reinsurance. Y is the amount of the gross reinsurance premium that:

(i) Provides coverage for the period from the next policy premium due date to the earlier of the end of the policy year and the next reinsurance premium due date; and

(ii) Would be refunded to the ceding entity upon the termination of the policy.

(b) In cases where the mode of payment of the reinsurance premium is more frequent than the mode of payment of the policy premium, a reserve credit that is less than the gross reserve, calculated before reinsurance, by an amount that is less than the amount specified in this subsection as Z. Z is the amount of the gross reinsurance premium that the ceding entity would need to pay the assuming company to provide reinsurance coverage from the period of the next reinsurance premium due date to the next policy premium due date minus any liability established for the proportionate amount not remitted to the reinsurer.

(c) For purposes of this condition, the reserve:

(i) For the mean reserve method must be defined as the mean reserve minus the deferred premium asset; and

(ii) For the midterminal reserve method must include the unearned premium reserve. A company may estimate and adjust its accounting on an aggregate basis in order to meet the conditions to use the 2017 CSO preferred class structure table.

[Statutory Authority: RCW 48.02.060, 48.74.030, 48.76.050, and 48.02.160. WSR 17-03-074 (Matter No. R 2016-24), § 284-74-575, filed 1/11/17, effective 2/11/17.]

WAC 284-74-580 Effective date. The effective date of this regulation is January 1, 2017.

[Statutory Authority: RCW 48.02.060, 48.74.030, 48.76.050, and 48.02.160. WSR 17-03-074 (Matter No. R 2016-24), § 284-74-580, filed 1/11/17, effective 2/11/17.]

SUBCHAPTER A: ADOPTION OF VALUATION MANUAL

WAC 284-74-600 Authority, purpose, and definition. (1) The purpose of this subchapter is to formally adopt the valuation manual adopted by the National Association of Insurance Commissioners as specified in chapter 48.74 RCW.

(2) "Valuation manual" has the meaning set forth in RCW 48.74.015.

[Statutory Authority: RCW 48.02.060, 48.74.090, 48.74.100(5), and 48.74.100. WSR 16-23-163 (Matter No. R 2016-14), § 284-74-600, filed 11/23/16, effective 12/24/16.]

WAC 284-74-610 Determination of operative date of valuation manual. (1) The insurance commissioner hereby makes the following determination:

(a) The valuation manual was adopted by the National Association of Insurance Commissioners on December 2, 2012, by an affirmative vote of forty-three members, representing over three-fourths of the members voting.

(b) The standard valuation law, as amended by the National Association of Insurance Commissioners in 2009, or legislation including substantially similar terms and conditions, has been enacted by states representing over eighty-five percent of the direct premiums written as reported in the following annual statements submitted in 2008: Life, accident and health annual statements; health annual statements; or fraternal annual statements.

(c) The standard valuation law, as amended by the NAIC in 2009, or legislation including substantially similar terms and conditions, has been enacted by forty-six states.

(2) Therefore, the operative date of the valuation manual for this state is January 1, 2017.

[Statutory Authority: RCW 48.02.060, 48.74.090, 48.74.100(5), and 48.74.100. WSR 16-23-163 (Matter No. R 2016-14), § 284-74-610, filed 11/23/16, effective 12/24/16.]

SUBCHAPTER B: ALTERNATIVE USES OF INTEREST RATE TABLES

WAC 284-74-700 Acquiring irrigation district lands. The local government investment pool (LGIP) daily yield, as calculated by the state treasurer, is the proper interest rate to be used as the annual rate of interest for the purpose of calculating a lump sum payment to irrigation districts for lands acquired by the Washington state department of transportation per RCW 87.03.810. The last published daily yield prior to the official transfer of property should be used for the calculation. The last published daily yield means the day prior to the day that the deed is recorded.

[Statutory Authority: RCW 48.02.060 and 87.03.810. WSR 17-18-099 (Matter No. R 2017-03), § 284-74-700, filed 9/6/17, effective 10/7/17.]