TITLE 37
INSURANCE
Part XIII. Regulations
Chapter 13 Rule Number 8

A NEW ANNUITY MORTALITY TABLE FOR USE IN DETERMINING RESERVE LIABILITIES FOR ANNUITIES

Chapter 21. Rule Number 8—A New Annuity Mortality Table for Use in Determining Reserve Liabilities for Annuities

§2100. Authority

A. This rule is promulgated by the Commissioner of Insurance pursuant to R.S. 22:~~163~~ 753 of the *Insurance Code*.

AUTHORITY NOTE: Promulgated in accordance with R.S. 22:~~163~~ 753.

HISTORICAL NOTE: Promulgated by the Department of Insurance, Commissioner of Insurance, LR 24:2281 (December 1998), amended by the Department of Insurance, Office of the Commissioner, LR xx:xxxx (Month 2014).

§2101. Purpose

A. The purpose of this rule is to recognize the following mortality tables for use in determining the minimum standard of valuation for annuity and pure endowment contracts: the 1983 Table "a," the 1983 Group Annuity Mortality (1983 GAM) Table, the Annuity 2000 Mortality Table, the 2012 Individual Annuity Reserving (2012) IAR) Table, and the 1994 Group Annuity Reserving (1994 GAR) Table.

AUTHORITY NOTE: Promulgated in accordance with R.S. 22:~~163~~ 753.

HISTORICAL NOTE: Promulgated by the Department of Insurance, Commissioner of Insurance, LR 11:1089 (November 1985), amended LR 24:2281 (December 1998), amended by the Department of Insurance, Office of the Commissioner, LR xx:xxxx (Month 2014).

§2103. Definitions

1983 GAM Table ~~(as used in this rule)~~—that mortality table developed by the Society of Actuaries Committee on Annuities and adopted as a recognized mortality table for annuities in December 1983 by the National Association of Insurance Commissioners.

1983 Table 'a' ~~(as used in this rule)~~—that mortality table 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.

1994 GAR Table ~~(as used in this rule)~~—that mortality table developed by the Society of Actuaries Group Annuity Valuation Table Task Force. The 1994 GAR Table is included in the report on pages 865-919 of Volume XLVII of the *Transactions of the Society of Actuaries* (1995).

Annuity 2000 Mortality Table ~~*(as used in this rule)*~~—that mortality table developed by the Society of Actuaries Committee on Life Insurance Research. The Annuity 2000 Table is included in the report on pages 211-249 of Volume XLVII of the *Transactions of the Society of Actuaries* (1995).

Period table—means a table of mortality rates applicable to a given calendar year (the Period).

Generational mortality table—means a mortality table containing a set of mortality rates that decrease 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.

2012 IAR Table—means that Generational mortality table developed by the Society of Actuaries Committee on Life Insurance Research and containing rates, qx 2012+n, derived from a combination of the 2012 IAM Period Table and Projection Scale G2, using the methodology stated in §2106.

2012 Individual Annuity Mortality Period Life (2012 IAM Period) Table—means the Period table containing loaded mortality rates for calendar year 2012. This table contains rates, qx2012, developed by the Society of Actuaries Committee on Life Insurance Research and is shown in §2113A and B.

Projection Scale G2 (Scale G2)—is a table of annual rates, G2x, of mortality improvement by age for projecting future mortality rates beyond calendar year 2012. This table was developed by the Society of Actuaries Committee on Life Insurance Research and is shown in §2113C and D.

AUTHORITY NOTE: Promulgated in accordance with R.S. 22:~~163~~753.

HISTORICAL NOTE: Promulgated by the Department of Insurance, Commissioner of Insurance, LR 11:1089 (November 1985), amended LR 24:2281 (December 1998), amended by the Department of Insurance, Office of the Commissioner, LR xx:xxxx (Month 2014).

§2105. Individual Annuity for Pure Endowment Contracts

A. Except as provided in Subsections B and C of this Section, the 1983 Table "a" is recognized and approved as an individual annuity mortality table for valuation and, at the option of the company, may be used for purposes of determining the minimum standard of valuation for any individual annuity or pure endowment contract issued on or after September 7, 1979.

B. Except as provided in Subsection C of this Section, either the 1983 Table "a" or the Annuity 2000 Mortality Table shall be used for determining the minimum standard of valuation for any individual annuity or pure endowment contract issued on or after January 1, 1987.

C. Except as provided in Subsection D of this Section, the Annuity 2000 Mortality Table shall be used for determining the minimum standard of valuation for any individual annuity or pure endowment contract issued on or after January 1, 1999.

D. Except as provided in Subsection E of this Section, the 2012 IAR Mortality Table shall be used for determining the minimum standard of valuation for any individual annuity or pure endowment contract issued on or after January 1, 2015.

E. The 1983 Table "a" without projection is to be used for determining the minimum standards of valuation for an individual annuity or pure endowment contract issued on or after January 1, 1999, solely when the contract is based on life contingencies and is issued to fund periodic benefits arising from:

1. settlements of various forms of claims pertaining to court settlements or out of court settlements from tort actions;

2. settlements involving similar actions such as worker's compensation claims; or

3. settlements of long term disability claims where a temporary or life annuity has been used in lieu of continuing disability payments.

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HISTORICAL NOTE: Promulgated by the Department of Insurance, Commissioner of Insurance, LR 11:1089 (November 1985), amended LR 24:2281 (December 1998), amended by Department of Insurance, Office of the Commissioner, LR xx:xxxx (Month 2014).

§2106. Application of the 2012 IAR Mortality Table

A. In using the 2012 IAR Mortality 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. For example, for a male age 30, q_x^{2012}= 0.741. q_x^{2013}= 0.741 * (1 – 0.010) ^ 1 = 0.73359, which is rounded to 0.734. q_x^{2014}= 0.741 * (1 – 0.010) ^ 2 = 0.7262541, which is rounded to 0.726. A method leading to incorrect rounding would be to calculate q_x^{2014} as q_x^{2013} * (1 – 0.010), or 0.734 * 0.99 = 0.727. It is incorrect to use the already rounded q_x^{2013} to calculate q_x^{2014}.

AUTHORITY NOTE: Promulgated in accordance with R.S. 22:753.

HISTORICAL NOTE: Promulgated by the Department of Insurance, Commissioner of Insurance, LR xx:xxxx (Month 2014).

§2107. Group Annuity or Pure Endowment Contracts

A. Except as provided in Subsections B and C of this Section, the 1983 GAM Table, the 1983 Table "a" and the 1994 GAR Table are recognized and approved as group annuity mortality tables for valuation and, at the option of the company, any one of these tables may be used for purposes of valuation for an annuity or pure endowment purchased on or after September 7, 1979 under a group annuity or pure endowment contract.

B. Except as provided in Subsection C of this Section, either the 1983 GAM Table or the 1994 GAR Table shall be used for determining the minimum standard of valuation for any annuity or pure endowment purchased on or after January 1, 1987 under a group annuity or pure endowment contract.

C. The 1994 GAR Table shall be used for determining the minimum standard of valuation for any annuity or pure endowment purchased on or after January 1, 1999 under a group annuity or pure endowment contract.

AUTHORITY NOTE: Promulgated in accordance with R.S. 22:~~163~~753.

HISTORICAL NOTE: Promulgated by the Department of Insurance, Commissioner of Insurance, LR 11:1089 (November 1985), amended LR 24:2281 (December 1998), amended by the Department of Insurance, Office of the Commissioner, LR xx:xxxx (Month 2014).

§2108. Application of the 1994 GAR Table

A. 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}s and AA_xs are as specified in the 1994 GAR Table.

AUTHORITY NOTE: Promulgated in accordance with R.S. 22:~~163~~753.

HISTORICAL NOTE: Promulgated by the Department of Insurance, Commissioner of Insurance, LR 24:2281 (December 1998), amended by the Department of Insurance, Office of the Commissioner, LR xx:xxxx (Month 2014).

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§2109. Separability

A. If any provision of this rule or its application to any person or circumstances is for any reason held to be invalid, the remainder of the regulation and the application of its provisions to other persons or circumstances shall not be affected.

AUTHORITY NOTE: Promulgated in accordance with R.S. 22:~~163~~753.

HISTORICAL NOTE: Promulgated by the Department of Insurance, Commissioner of Insurance, LR 11:1089 (November 1985), amended LR 24:2281 (December 1998), amended by the Department of Insurance, Office of the Commissioner, LR xx:xxxx (Month 2014).

§2111. Effective Date

A. The effective date of this rule is January 1, 2015.

AUTHORITY NOTE: Promulgated in accordance with R.S. 22:~~163~~753.

HISTORICAL NOTE: Promulgated by the Department of Insurance, Commissioner of Insurance, LR 11:1089 (November 1985), amended LR 24:2281 (December 1998), amended by Department of Insurance, Office of the Commissioner, LR xx:xxxx (Month 2014).

§2113. Tables

A. 2012 IAM Period Table, Female, Age Nearest Birthday

AGE	$1000 \cdot q_x^{2012}$	AGE	$1000 \cdot q_x^{2012}$	AGE	$1000 \cdot q_x^{2012}$	AGE	$1000 \cdot q_x^{2012}$
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**
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**

B. 2012 IAM Period Table, Male, Age Nearest Birthday

AGE	$1000 \cdot q_x^{2012}$	AGE	$1000 \cdot q_x^{2012}$	AGE	$1000 \cdot q_x^{2012}$	AGE	$1000 \cdot q_x^{2012}$
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**

C. Projection Scale G2, Female, Age Nearest Birthday

AGE	$G2_x$	AGE	$G2_x$	AGE	$G2_x$	AGE	$G2_x$
0	**0.010**	30	**0.010**	60	**0.013**	90	**0.006**
1	**0.010**	31	**0.010**	61	**0.013**	91	**0.006**
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**

D. Projection Scale G2, Male, Age Nearest Birthday

AGE	$G2_x$	AGE	$G2_x$	AGE	$G2_x$	AGE	$G2_x$
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**
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**

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