



Ohio Administrative Code

Rule 3901-3-17 New annuity mortality tables for use in determining reserve liabilities for annuities.

Effective: October 29, 2015

(A) Purpose

The purpose of this rule is to recognize new annuity mortality tables for use in determining the minimum standard of valuation for annuity and pure endowment contracts.

(B) Authority

This rule is promulgated pursuant to the authority vested in the superintendent under sections 3901.041, 3903.723 and 3903.725 of the Revised Code.

(C) Definitions

(1) The "1983 table 'A'" means the 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 (NAIC). (See appendix A to this rule).

(2) The "1983 GAM table" means the 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 NAIC. (See appendix B to this rule).

(3) The "1994 GAR table" means the mortality table developed by the society of actuaries group annuity valuation task force and adopted as a recognized mortality table for annuities in December 1996 by the NAIC. (See appendix C to this rule for males and appendix D to this rule for females).

(4) The "Annuity 2000 Mortality Table" means the mortality table 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 NAIC. (See appendix E to this rule).



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

(6) "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.

(7) "2012 IAR Table" means that generational mortality table developed by the society of actuaries committee on life insurance research and containing rates, q_x^{2012+n} , derived from a combination of the 2012 IAM period table and projection scale G2, using the methodology in paragraph (E) of this rule.

(8) "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, q_x^{2012} , developed by the society of actuaries committee on life insurance research (see appendices F and G to this rule).

(9) "Projection Scale G2 (Scale G2)" is a table of annual rates, $G2_x$, 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 (see appendices H and I to this rule).

(D) Individual annuity or pure endowment contracts

(1) Except as provided in paragraph (D)(2) of this rule, the 1983 table "A" and the annuity 2000 mortality table are recognized and approved as individual annuity mortality tables 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 January 1, 1979.

(2) Except as provided in paragraphs (D)(3) and (D)(4) of this rule, 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.

(3) Except as provided in paragraph (D)(4) of this rule, 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, 2016.

(4) 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:

(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.

(E) Application of the 2012 IAR mortality table

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

$q_x^{2012+n} = q_x^{2012} (1 - G_{2x})^n$ The resulting q_x^{2012+n} shall be rounded to three decimal places per one thousand, e.g., 0.741 deaths per one thousand. Also, the rounding shall occur according to the formula, starting at the 2012 period table rate.

For example, for a male age thirty, $q_x^{2012} = 0.741$.

$q_x^{2013} = 0.741 * (1 - 0.010)^1 = 0.73359$, 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} .

(F) Group annuity or pure endowment contracts

(1) 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 any annuity or pure endowment purchased on or after January 1, 1979 under a group annuity or pure endowment contract.

(2) 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.

(G) Application of the 1994 GAR table

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 the AA_x s are as specified in the 1994 GAR table.

(H) Severability

If any paragraph, term or provision of this rule is adjudged invalid for any reason, the judgment shall not affect, impair or invalidate any other paragraph, term or provision of this rule, but the remaining paragraphs, terms and provisions shall be and continue in full force and effect.