

Title 23. Public Utilities and Regulated Industries
Chapter I. State Insurance Department, Department of Commerce
Subchapter B. Life, Health, and Accident
Part 97. An Annuity Mortality Table for Use in Determining Reserve Liabilities for Annuities

Codification Notes. This part as promulgated prior to codification into the Code of Arkansas Rules provided as follows:

"Section 2. Authority

This rule is promulgated pursuant to the authority granted to the Arkansas Insurance Commissioner ("Commissioner") by Ark. Code Ann. §§ 23-84-101, et seq., 23-61-108, and 25-15-201, et seq."

"Section 8. Separability

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."

"Section 9. Effective Date

The provisions of this rule shall be effective January 1, 2015, upon statutory filing per Arkansas law."

Subpart 1. Generally

23 CAR § 97-101. Purpose.

The purpose of this part is to recognize the following mortality tables for use in determining the minimum standard of valuation for annuity and pure endowment contracts:

- (1) The 1983 Table "a";

- (2) The 1983 Group Annuity Mortality (1983 GAM) Table;
- (3) The Annuity 2000 Mortality Table;
- (4) The 2012 Individual Annuity Reserving (2012 IAR) Table; and
- (5) The 1994 Group Annuity Reserving (1994 GAR) Table.

Authority. Arkansas Code §§ 23-61-108, 23-84-104.

23 CAR § 97-102. Definitions.

As used in this part:

(1) "1983 GAM Table" means 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;

(2) "1983 Table 'a'" means 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;

(3) "1994 GAR Table" means that mortality table developed by the Society of Actuaries Group Annuity Valuation Task Force and shown on pages 866-867 of Volume XLVII of the Transactions of the Society of Actuaries (1995);

(4) "2012 IAR Mortality 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 stated in 23 CAR § 97-104;

(5)(A) "2012 Individual Annuity Mortality Period Life (2012 IAM Period) Table" means the period table containing loaded mortality rates for calendar year 2012.

(B) This table contains rates, q_x^{2012} , developed by the Society of Actuaries Committee on Life Insurance Research and is shown in Appendices 1-2;

(6) "Annuity 2000 Mortality Table" means that mortality table developed by the Society of Actuaries Committee on Life Insurance Research and shown on page 240 of Volume XLVII of the Transactions of the Society of Actuaries (1995);

(7) "Generational mortality table" means a mortality table containing a set of mortality rates that decrease for a given age from one (1) year to the next based on a combination of a period table and a projection scale containing rates of mortality improvement;

(8) "Period table" means a table of mortality rates applicable to a given calendar year (the period); and

(9)(A) "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.

(B) This table was developed by the Society of Actuaries Committee on Life Insurance Research and is shown in Appendices 3-4.

Authority. Arkansas Code §§ 23-61-108, 23-84-104.

23 CAR § 97-103. Individual annuity or pure endowment contracts.

(a) Except as provided in subsections (b) and (c) of this section, the 1983 Table "a":

(1) Is recognized and approved as an individual annuity mortality table for valuation; and

(2) 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 March 18, 1977.

(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 December 16, 1985.

(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 workers' 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.

Authority. Arkansas Code §§ 23-61-108, 23-84-104.

23 CAR § 97-104. 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:

(b) The resulting q_x^{2012+n} shall be rounded to three (3) decimal places per one thousand (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.

(c) For example, for a male age thirty (30), $q_x^{2012} = 0.741$.

$$q_x^{2013} = 0.741 * (1 - 0.010) ^ 1 = 0.73359, \text{ which is rounded to } 0.734.$$

$$q_x^{2014} = 0.741 * (1 - 0.010)^2 = 0.7262541, \text{ which is rounded to } 0.726.$$

(d) 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. Arkansas Code §§ 23-61-108, 23-84-104.

23 CAR § 97-105. 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 (1) of these tables may be used for purposes of valuation for any annuity or pure endowment purchased on or after March 18, 1977, 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 October 1, 1985, 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. Arkansas Code §§ 23-61-108, 23-84-104.

23 CAR § 97-106. 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:

Where the and are as specified in the 1994 GAR Table.

Authority. Arkansas Code §§ 23-61-108, 23-84-104.

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

Link:

<https://CodeOfARRules.arkansas.gov/docs/CARCodeAppendices/Appendices/192/23CARpt.97AppendixI.pdf>

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

Link:

<https://CodeOfARRules.arkansas.gov/docs/CARCodeAppendices/Appendices/193/23CARpt.97AppendixII.pdf>

Appendix C. Projection Scale G2 – Female, Age Nearest Birthday

Link:

<https://CodeOfARRules.arkansas.gov/docs/CARCodeAppendices/Appendices/194/23CARpt.97AppendixIII.pdf>

Appendix D. Projection Scale G2 – Male, Age Nearest Birthday

Link:

<https://CodeOfARRules.arkansas.gov/docs/CARCodeAppendices/Appendices/195/23CARpt.97AppendixIV.pdf>