

**State of Rhode Island and Providence Plantations**  
**DEPARTMENT OF BUSINESS REGULATION**  
*Division of Insurance*  
**233 Richmond Street**  
**Providence, RI 02903**

**INSURANCE REGULATION 104**

**RECOGNITION OF THE 2001 CSO MORTALITY TABLE  
FOR USE IN DETERMINING MINIMUM RESERVE LIABILITIES  
AND NONFORFEITURE BENEFITS MODEL REGULATION**

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**Section 1. Authority**

This Regulation is promulgated in accordance with R.I. Gen. Laws §§ 27-4-17(d)(3), 27-4.3-5(h)(6) and 42-14-17 and Insurance Regulation 93, Section 5(A) and (B).

**Section 2. Purpose**

The purpose of this Regulation is to recognize, permit and prescribe the use of the 2001 Commissioners Standard Ordinary (CSO) Mortality Table in accordance with R.I. Gen. Laws §§ 27-4-17(d)(3), 27-4.3-5(h)(6) and Insurance Regulation 93, Section 5(A) and (B).

**Section 3. Definitions**

As used in this Regulation:

- A. “2001 CSO Mortality Table” shall mean 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 NAIC in

December 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 of that table 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.

- B. “2001 CSO Mortality Table (F)” shall mean that mortality table consisting of the rates of mortality for female lives from the 2001 CSO Mortality Table.
- C. “2001 CSO Mortality Table (M)” shall mean that mortality table consisting of the rates of mortality for male lives from the 2001 CSO Mortality Table.
- D. “Composite mortality tables” shall mean mortality tables with rates of mortality that do not distinguish between smokers and nonsmokers.
- E. “Smoker and nonsmoker mortality tables” shall mean mortality tables with separate rates of mortality for smokers and nonsmokers.

**Section 4. 2001 CSO Mortality Table**

- A. At the election of the company for any one or more specified plans of insurance and subject to the conditions stated in this regulation, the 2001 CSO Mortality Table may be used as the minimum standard for policies issued after January 1, 2004 and before the date specified in Subsection B to which R.I. Gen. Laws §§ 27-4-17(d)(3), 27-4.3-5(h)(6) and Insurance Regulation 93, Section 5(A) and (B) are applicable. If the company elects to use the 2001 CSO Mortality Table, it shall do so for both valuation and nonforfeiture purposes.
- B. Subject to the conditions stated in this regulation, the 2001 CSO Mortality Table shall be used in determining minimum standards for policies issued on and after January 1, 2009, to which R.I. Gen. Laws §§ 27-4-17(d)(3), 27-4.3-5(h)(6) and Insurance Regulation 93, Section 5(A) and (B) are applicable.

**Section 5. Conditions**

- A. For each plan of insurance with separate rates for smokers and nonsmokers an insurer may use:

- (1) Composite mortality tables to determine minimum reserve liabilities and minimum cash surrender values and amounts of paid-up nonforfeiture benefits;
  - (2) Smoker and nonsmoker mortality tables to determine the valuation net premiums and additional minimum reserves, if any, required by R.I. Gen. Laws § 27-4.5-8 and use composite mortality tables to determine the basic minimum reserves, minimum cash surrender values and amounts of paid-up nonforfeiture benefits; or
  - (3) Smoker and nonsmoker mortality to determine minimum reserve liabilities and minimum cash surrender values and amounts of paid-up nonforfeiture benefits.
- B. For plans of insurance without separate rates for smokers and nonsmokers the composite mortality tables shall be used.
- C. For the purpose of determining minimum reserve liabilities and minimum cash surrender values and amounts of paid-up nonforfeiture benefits, the 2001 CSO Mortality Table may, at the option of the company for each plan of insurance, be used in its ultimate or select and ultimate form, subject to the restrictions of Section 6 and Insurance Regulation 93 relative to use of the select and ultimate form.
- D. When the 2001 CSO Mortality Table is the minimum reserve standard for any plan for a company, the actuarial opinion in the annual statement filed with the commissioner shall be based on an asset adequacy analysis as specified in Insurance Regulation 89, Section 5A. A commissioner may exempt a company from this requirement if it only does business in this state and in no other state.

**Section 6. Applicability of the 2001 CSO Mortality Table to Insurance Regulation 93**

- A. The 2001 CSO Mortality Table may be used in applying Insurance Regulation 93 in the following manner, subject to the transition dates for use of the 2001 CSO Mortality Table in Section 4 of this regulation (unless otherwise noted, the references in this section are to Insurance Regulation 93:
- (1) Section 3A(2)(b): The net level reserve premium is based on the ultimate mortality rates in the 2001 CSO Mortality Table.
  - (2) Section 4B: All calculations are made using the 2001 CSO Mortality Rate, and, if elected, the optional minimum mortality standard for deficiency reserves stipulated in Section 6A(4) of this regulation. 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.

- (3) Section 5A: The 2001 CSO Mortality Table is the minimum standard for basic reserves.
  - (4) Section 5B: 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 Sections 5B(3)(a) to (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.
  - (5) Section 6C: The valuation mortality table used in determining the tabular cost of insurance shall be the ultimate mortality rates in the 2001 CSO Mortality Table.
  - (6) Section 6E(4): The calculations specified in Section 6E shall use the ultimate mortality rates in the 2001 CSO Mortality Table.
  - (7) Section 6F(4): The calculations specified in Section 6F shall use the ultimate mortality rates in the 2001 CSO Mortality Table.
  - (8) Section 6G(2): The calculations specified in Section 6G shall use the ultimate mortality rates in the 2001 CSO Mortality Table.
  - (9) Section 7A(1)(b): The one-year valuation premium shall be calculated using the ultimate mortality rates in the 2001 CSO Mortality Table.
- B. Nothing in this section shall be construed to expand the applicability of Insurance Regulation 93 to include life insurance policies exempted under Section 3A of Insurance Regulation 93.

## **Section 7. Gender-Blended Tables**

- A. For any ordinary life insurance policy delivered or issued for delivery in this state on and after January 1, 2004, that utilizes the same premium rates and charges for male and female lives or is issued in circumstances where applicable law does not permit distinctions on the basis of gender, a mortality table that is a blend of the 2001 CSO Mortality Table (M) and the 2001 CSO Mortality Table (F) may, at the option of the company for each plan of insurance, be substituted for the 2001 CSO Mortality Table for use in determining minimum cash surrender values and amounts of paid-up nonforfeiture benefits. No change in minimum valuation standards is implied by this subsection of the regulation.

- B. The company may choose from among the blended tables developed by the American Academy of Actuaries CSO Task Force and adopted by the NAIC in December 2002.
- C. It shall not, in and of itself, be a violation of R.I. Gen. Laws §§ 27-29-1 *et seq.* for an insurer to issue the same kind of policy of life insurance on both a sex-distinct and sex-neutral basis.

**Section 8. Severability**

If any provision of this Regulation or the application thereof to any person or circumstance is held invalid or unconstitutional, the invalidity or unconstitutionality shall not affect other provisions or applications of this Regulation which can be given effect without the invalid or unconstitutional provision or application, and to this end the provisions of this Regulation are severable.

**Section 9. Effective Date**

This Regulation shall be effective twenty (20) days from the date of filing with the Secretary of State, however, its provisions shall be applied to any applicable policy delivered or issued for delivery in this state after January 1, 2004.

EFFECTIVE DATE: September 21, 2004  
AMENDED: April 14, 2005