

2002 Valuation Actuary Symposium

## **Session 18 PD: Statutory Valuation of Life Insurance Policies**

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## **A G E N D A**

- **Determination & Justification of X Factors**
- **2001 Valuation Basic Table**
- **The New CSO Mortality Table**

# **A G E N D A**

- **Justification of X Factors: Retrospective Analysis**
- **Determination of X Factors**
- **2001 Valuation Basic Table**
- **The New CSO Mortality Table**

## **Justification of X Factors**

- **Role of the Appointed Actuary**
  - ✓ **Retrospective Statistical Analysis**
  - ✓ **Annual Actuarial Opinion**
  - ✓ **Supporting Actuarial Report**

## **Justification of X Factors**

- **Role of the Product Development Actuary**
  - ✓ **Mortality / Product Expert**
  - ✓ **Outsourcing Broker**
  - ✓ **Cheerleader**

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## **Determination of X Factors**

- **Role of the Product Development Actuary**
  - ✓ **Mortality / Product Expert**
  - ✓ **Outsourcing Broker**
  - ✓ **Cheerleader**

## **Determination of X Factors**

- **Role of the Appointed Actuary**
  - ✓ **Creation of X Factor Classes**
  - ✓ **Selection of X Factors (“Anticipated Mortality”)**
  - ✓ **Prospective Analysis – The “Six Tests”**

# Determination of X Factors: Role of the Appointed Actuary

- **Creation of X Factor Classes**
  - ✓ **ASOP No. 40:** “The policies that comprise an X factor class generally should have similar underwriting or experience characteristics.”

“...should have similar underwriting...”

Age Nearest Birthday	\$0 to \$99,999	\$100,000 to \$499,000	\$500,000 to \$999,000	\$1,000,000 to \$2,999,000	\$3,000,000 & up
0 to 16	Submit as Non-Medical application through \$250,000 For higher amounts consult an Underwriter				
17 to 40	Non-Med HOS Blood	Para-Med HOS Blood	Para-Med HOS Blood	Para-Med HOS Blood ECG	Medical HOS Blood Treadmill
41 to 50	Para-Med HOS Blood	Para-Med HOS Blood	Para-Med HOS Blood	Para-Med HOS Blood ECG	Medical HOS Blood Treadmill
51 to 60	Para-Med HOS Blood	Para-Med HOS Blood	Para-Med HOS Blood ECG	Para-Med HOS Blood ECG	Medical HOS Blood Treadmill
61 to 65	Para-Med HOS Blood	Para-Med HOS Blood	Para-Med HOS Blood ECG	Para-Med HOS Blood ECG	Medical HOS Blood Treadmill
66 to 75	Para-Med HOS Blood	Para-Med HOS Blood ECG	Para-Med HOS Blood ECG	Medical HOS Blood ECG	Medical HOS Blood Treadmill
76+	Para-Med HOS Blood	Para-Med HOS Blood ECG	Medical HOS Blood ECG CXR	Medical HOS Blood ECG CXR	Medical HOS Blood ECG CXR

1. MVR required on all cases \$750,000 and above
2. Amounts include total life insurance currently applied for plus all amounts inforce with ABC Life

## **“...or experience characteristics...”**

Add mortality graph

## **“...or experience characteristics...”**

- Target Market
- Distribution Channel
- Level of Underwriting
- Underwriting Expertise
- Product Competitiveness / Open Market
- Multiple Preferred Classes / NTO
- Anti-Selection

## **Determination of X Factors: Role of the Appointed Actuary**

- **Selection of X Factors**
  - ✓ **ASOP 40: “The appointed actuary should select the X factors for each X factor class, based on anticipated mortality for each class, without recognition of mortality improvement beyond the valuation date.”**

## **Determination of X Factors: Role of the Appointed Actuary**

- **Selection of X Factors**
  - ✓ **Relevant Company Experience**
    - **Target Market**
    - **Product Competitiveness**
    - **Trends in Underwriting**

## Determination of X Factors: Role of the Appointed Actuary

- **Prospective Analysis – The “Six Tests” of X Factor Mortality**
  - ✓ May vary by any policy factor expected to affect mortality experience
  - ✓ Not less than 20%
  - ✓ Non-decreasing
  - ✓  $PVFDB_{X \text{ Factor}} \geq PVFDB_{\text{Anticipated Mortality}}$
  - ✓ X Factor Mortality  $\geq$  Anticipated Mortality in each of the first 5 years from valuation
  - ✓ Take into account adverse effects of any increase in gross premium

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## 2001 Valuation Basic Table

- **The Latest, Most Accurate View of Industry Mortality**
  - ✓ Derived from the 1990/95 SOA Experience Study
  - ✓ Experience contributed from before & during the advent of the “Super Preferred” Era
  - ✓ Several Companies contributed Experience

## 2001 Valuation Basic Table

- **Should I Use the 2001 VBT to Determine Anticipated Mortality?**
  - ✓ Contributing Companies dissimilar from your Company?
  - ✓ “Super Preferred” Era not Uniform
  - ✓ Experience reflects significant replacement activity
  - ✓ Not a “Preferred” Table

# **A G E N D A**

- **Justification of X Factors**
- **Determination of X Factors: Prospective Analysis**
- **2001 Valuation Basic Table**
  
- **The New CSO Mortality Table**

## **The New CSO Mortality Table**

- **Derived from the 2001 VBT**
- **Concept of X Factors Survives**
  - **Slope Issues “Resolved”**
- **Not designed for “Super Preferred” Valuation of Basic Reserves**
- **Ultimate Mortality for Tax Purposes**

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