



Rules of Department of Commerce and Insurance

Division 200—Insurance Solvency and Company Regulation Chapter 1—Financial Solvency and Accounting Standards

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**Title 20—DEPARTMENT OF
COMMERCE AND INSURANCE
Division 200—Insurance Solvency and
Company Regulation
Chapter 1—Financial Solvency and
Accounting Standards**

**20 CSR 200-1.005 Materials to be Utilized
by the Director**

PURPOSE: The purpose of this rule is to effectuate or aid in the interpretation of any law of this state pertaining to the business of insurance, by providing specific information regarding certain publications utilized by the director in the furtherance of his or her statutory duties and referenced in rules in this division.

(1) The director may utilize the following publications of the National Association of Insurance Commissioners (NAIC) in the furtherance of his or her statutory duties:

(A) *Accounting Practices and Procedures Manual*, also referred to as the Accounting Practices and Procedures Manual for Fire and Casualty Insurance Companies and as the Accounting Practices and Procedures Manual for Life and Accident and Health Insurance Companies;

(B) *Annual Statement Instructions*;

(C) *Purposes and Procedures Manual of the NAIC Investment Analysis Office*, also referred to as the Valuation of Securities;

(D) *Financial Condition Examiners Handbook*, also referred to as the Examiner's Handbook; and

(E) *Financial Analysis Handbook*.

(2) The above referenced publications are updated annually or biannually by the NAIC. The director will maintain a list of the above referenced publications on the department's website, with the editions currently in use clearly specified. References in rules of this department to the above referenced publications refer to the editions listed on the department's website, unless otherwise specified.

AUTHORITY: section 374.045, RSMo 2016.* Original rule filed July 15, 2009, effective Feb. 28, 2010. Amended: Filed Feb. 14, 2011, effective Aug. 30, 2011. Amended: Filed Oct. 30, 2018, effective April 30, 2019.

*Original authority: 374.045, RSMo 1967, amended 1993, 1995, 2008.

**20 CSR 200-1.010 Financial Condition of
Insurance Companies
(Rescinded April 30, 2019)**

AUTHORITY: sections 374.040, 374.045 and 374.190, RSMo 2000 and Chapter 375, RSMo 2000 and Supp. 2001. This rule was previously filed as 4 CSR 190-11.005. Original rule filed Aug. 1, 1990, effective Dec. 31, 1990. Amended: Filed July 2, 1991, effective Dec. 9, 1991. Amended: Filed April 29, 1992, effective Dec. 3, 1992. Amended: Filed July 12, 2002, effective Jan. 30, 2003. Rescinded: Filed Oct. 30, 2018, effective April 30, 2019.

**20 CSR 200-1.020 Accounting Standards
and Principles**

PURPOSE: This rule effectuates or aids in the interpretation of sections 354.470, 375.537, 375.539, 375.881, 375.1160, 375.1165, and 375.1175, RSMo, and in the administration of sections 354.080 and 354.355, RSMo.

(1) Each insurance company shall make and file statements of its assets, liabilities, capital and surplus, income and expenses, including all schedules and exhibits used in connection with such statements, which statements the director may use to determine any of the following according to the applicable accounting guidance, standards, and principles approved by the National Association of Insurance Commissioners (NAIC), published in the *Accounting Practices and Procedures Manual, Annual Statement Instructions, Valuation of Securities, Examiner's Handbook, and Financial Analysis Handbook*, except where the applicable provisions of Chapters 374–385, RSMo or other specific rules expressly provide otherwise:

(A) Whether an insurance company is impaired under section 375.537, RSMo;

(B) Whether any standards are implicated under section 375.539.2, RSMo;

(C) Whether an insurance company is insolvent under section 375.881(1) or 375.1175.1(2), RSMo;

(D) Whether an insurance company fails to comply with the requirements for admission under section 375.881(2), RSMo;

(E) Whether an insurance company is in such a financial condition that its further transaction of business in this state would be hazardous to policyholders and creditors in this state and to the public under section 375.881(3), RSMo;

(F) Whether an insurance company's condition renders the continuance of its business hazardous to the public or to its insureds under section 375.1160.2(1)(a), RSMo;

(G) Whether an insurance company is in such condition that the further transaction of

business would be hazardous financially to its policyholders, creditors, or the public under section 375.1165(1), RSMo; and

(H) Whether an insurance company is found to be in such condition that the further transaction of business would be hazardous, financially or otherwise, to its policyholders, its creditors or the public under section 375.1175.1(3), RSMo.

(2) Each health services corporation shall make and file statements of its assets, liabilities, capital and surplus, income and expenses, including all schedules and exhibits used in connection with such statements, which statements the director may use to determine any of the following according to the applicable accounting guidance, standards, and principles approved by the NAIC, published in the *Accounting Practices and Procedures Manual, Annual Statement Instructions, Valuation of Securities, Examiner's Handbook, and Financial Analysis Handbook*, except where the applicable provisions of Chapters 354 and 374–385, RSMo or other specific rules expressly provide otherwise:

(A) Whether a health services corporation is maintaining reserves in accordance with section 354.080, RSMo;

(B) Whether a health services corporation is in such condition that its further transaction of business will be hazardous to its policyholders or to its creditors or to the public under section 354.355(3), RSMo;

(C) Whether a health services corporation is impaired under section 375.537, RSMo;

(D) Whether any standards are implicated under section 375.539.2, RSMo;

(E) Whether a health services corporation's condition renders the continuance of its business hazardous to the public or to its insureds under section 375.1160.2(1)(a), RSMo;

(F) Whether a health services corporation is in such condition that the further transaction of business would be hazardous financially to its policyholders, creditors, or the public under section 375.1165(1), RSMo;

(G) Whether a health services corporation is insolvent under section 375.1175.1(2), RSMo; and

(H) Whether a health services corporation is found to be in such condition that the further transaction of business would be hazardous, financially or otherwise, to its policyholders, its creditors, or the public under section 375.1175.1(3), RSMo.

(3) Each health maintenance organization shall make and file statements of its assets, liabilities, capital and surplus, income and



expenses, including all schedules and exhibits used in connection with such statements, which statements the director may use to determine any of the following according to the applicable accounting guidance, standards, and principles approved by the NAIC, published in the *Accounting Practices and Procedures Manual, Annual Statement Instructions, Valuation of Securities, Examiner's Handbook*, and *Financial Analysis Handbook*, except where the applicable provisions of Chapters 354 and 374-385, RSMo or other specific rules expressly provide otherwise:

(A) Whether a health maintenance organization is no longer financially responsible and may reasonably be expected to be unable to meet its obligations to enrollees or prospective enrollees under section 354.470.1(4), RSMo;

(B) Whether the continued operation of a health maintenance organization would be hazardous to its enrollees under section 354.470.1(8), RSMo;

(C) Whether a health maintenance organization is impaired under section 375.537, RSMo;

(D) Whether any standards are implicated under section 375.539.2, RSMo;

(E) Whether a health maintenance organization's condition renders the continuance of its business hazardous to the public or to its insureds under section 375.1160.2(1)(a), RSMo;

(F) Whether a health maintenance organization is in such condition that the further transaction of business would be hazardous financially to its policyholders, creditors, or the public under section 375.1165(1), RSMo;

(G) Whether a health maintenance organization is insolvent under section 375.1175.1(2), RSMo; and

(H) Whether a health maintenance organization is found to be in such condition that the further transaction of business would be hazardous, financially or otherwise, to its policyholders, its creditors, or the public under section 375.1175.1(3), RSMo.

AUTHORITY: sections 354.120, 354.485, and 374.045, RSMo 2016. This rule was previously filed as 4 CSR 190-11.230. Original rule filed Feb. 3, 1989, effective May 1, 1989. Amended: Filed Aug. 25, 1989, effective Jan. 1, 1990. Amended: Filed Dec. 14, 2000, effective July 30, 2001. Amended: Filed Dec. 4, 2001, effective June 30, 2002. Amended: Filed Oct. 30, 2018, effective April 30, 2019.*

**Original authority: 354.120, RSMo 1973, amended 1983, 1993, 1995; 354.485, RSMo 1983, 2007; and 374.045, RSMo 1967, amended 1993, 1995, 2008.*

20 CSR 200-1.025 Valuation of Invested Assets

PURPOSE: This rule effectuates or aids in the interpretation of sections 376.291-376.307 and 379.080, RSMo.

(1) Securities. Securities owned by insurance companies must be valued in accordance with those standards promulgated by the Valuation of Securities Office of the National Association of Insurance Commissioners (NAIC) as published in its *Valuation of Securities*.

(2) Other Invested Assets. Invested assets, other than securities, must be valued in accordance with the procedures published in the NAIC *Accounting Practices and Procedures Manual, Annual Statement Instructions* and *Examiner's Handbook*.

AUTHORITY: section 374.045, RSMo 2016. Original rule filed July 2, 1991, effective Dec. 9, 1991. Amended: Filed Aug. 29, 2003, effective Feb. 29, 2004. Amended: Filed Oct. 30, 2018, effective April 30, 2019.*

**Original authority: 374.045, RSMo 1967, amended 1993, 1995, 2008.*

20 CSR 200-1.030 Financial Statement and Electronic Filing

PURPOSE: This rule prescribes forms to be followed in proceedings before the Department of Commerce and Insurance regarding annual statements and effectuates or aids in the interpretation of sections 287.710, 354.105, 354.435, 354.720, 375.041, 375.786, 375.1030, 375.1037, 375.1047, 375.1082, 375.1252, 376.350, 376.370, 376.1012, 376.1092, 376.1093, 377.100, 377.380, 378.350, 379.105, 380.051, 380.482, 382.110, 383.030, and 384.021, RSMo.

(1) Each health services corporation, health maintenance organization (HMO), stock or mutual life insurance company, assessment or stipulated premium plan life insurance company, fraternal benefit society, stock or mutual insurance company other than life, Chapter 383 assessment company, reciprocal and eligible surplus lines insurer, and each accredited or qualified reinsurer shall file a sworn annual statement on or before March 1 of each year, for its business and affairs for the year ended the next previous December 31, in accordance with the National Association of Insurance Commissioners (NAIC) Annual Statement Blank and the instructions for it, or in accordance with any other form as the

director expressly permits to the entity. This statement also shall be prepared in accordance with the applicable accounting standards or principles approved by the NAIC, published in the *Accounting Practices and Procedures Manual, Valuation of Securities* or *Examiner's Handbook*, or a combination of these, except where the applicable provisions of Chapters 354 and 374-385, RSMo, or other specific rules expressly provide otherwise.

(A) For entities domiciled in Missouri, one (1) signed original and one (1) hard copy of the annual statement shall be filed with the Missouri department's office in Jefferson City and one (1) hard copy shall be filed with the NAIC's Kansas City office; provided, however, that for domiciled companies doing business in seventeen (17) or more states, for life and health insurers writing fifty (50) million dollars or more in gross premium, and for property and casualty insurers writing thirty (30) million dollars or more in gross premium, an additional hard copy also shall be filed with the NAIC's office in Kansas City, Missouri, but only upon the written request of the NAIC. The annual statements should be signed by officers of the company as required by applicable Missouri law.

(B) Each entity, whether foreign or domestic, shall file electronically all annual statement information with the NAIC's office in Kansas City, Missouri. The electronic filing shall be prepared under the NAIC's guidelines.

(2) Each health services corporation, HMO, stock or mutual life insurance company, assessment or stipulated premium plan life insurance company, fraternal benefit society, stock or mutual insurance company other than life, Chapter 383 assessment company, and reciprocal and eligible surplus lines insurer shall file, in addition to the sworn annual statement required in section (1), three (3) quarterly statements for its business and affairs for the quarters ending, respectively, the next previous March 31, June 30 and September 30, in accordance with the NAIC Quarterly Statement Blank and the instructions for it, or in accordance with any other forms as the director expressly permits to the entity.

(A) For entities domiciled in Missouri, one (1) signed original and one (1) hard copy of each quarterly statement shall be filed with the Missouri department's office in Jefferson City and one (1) hard copy shall be filed with the NAIC's Kansas City office; provided, however, that for domiciled companies doing business in seventeen (17) or more states, for life and health insurers writing fifty (50) million



dollars or more in gross premium, and for property and casualty insurers writing thirty (30) million dollars or more in gross premium, an additional hard copy also shall be filed with the NAIC's office in Kansas City, Missouri, but only upon the written request of the NAIC. The quarterly statements should be signed by three (3) officers of the company.

(B) Each entity, whether foreign or domestic, shall file electronically all quarterly statement information with the NAIC's office in Kansas City, Missouri. The electronic filing shall be prepared under the NAIC's guidelines.

(3) To the extent a hard copy is required by this rule to be filed with the Missouri Department of Commerce and Insurance, such filings for the respective quarters shall be mailed on or before May 15, August 15, and November 15 of each year.

(4) This rule will apply to filing of the annual and quarterly statements and electronic filings beginning with the year ending December 31, 1992, to be filed by March 1, 1993, as well as all future years.

AUTHORITY: sections 354.120, 354.723, and 380.561, RSMo 2000 and sections 354.485 and 374.045, RSMo Supp. 2010.* This rule was previously filed as 4 CSR 190-11.180. Original rule filed Sept. 2, 1988, effective Jan. 1, 1989. Amended: Filed Jan. 3, 1990, effective May 1, 1990. Amended: Filed May 21, 1990, effective Sept. 28, 1990. Amended: Filed Oct. 31, 1990, effective March 14, 1991. Amended: Filed April 29, 1992, effective Dec. 3, 1992. Amended: Filed Aug. 4, 1992, effective May 6, 1993. Amended: Filed June 14, 1994, effective Dec. 30, 1994. Amended: Filed June 14, 2001, effective Dec. 30, 2001. Amended: Filed Aug. 29, 2003, effective Feb. 29, 2004. Amended: Filed Dec. 15, 2005, effective June 30, 2006. Amended: Filed July 15, 2009, effective Feb. 28, 2010. Amended: Filed Feb. 14, 2011, effective Aug. 30, 2011. Non-substantive change filed Sept. 11, 2019, published Oct. 31, 2019.

*Original authority: 354.120, RSMo 1973, amended 1983, 1993, 1995; 354.485, RSMo 1983, amended 2007; 354.723, RSMo 1987; 374.045, RSMo 1967, amended 1993, 1995, 2008; and 380.561, RSMo 1984, amended 1993, 1995.

20 CSR 200-1.035 Diversity and Liquidity Requirements for Assets Portfolios of Property and Liability Insurers
(Rescinded February 26, 1993)

AUTHORITY: section 374.045.1(3), RSMo 1986. Original rule filed Oct. 11, 1991, effective May 14, 1992. Rescinded: Filed June 18, 1992, effective Feb. 26, 1993.

20 CSR 200-1.037 Supplemental Annual Filing Requirements

PURPOSE: This rule prescribes the use of supplemental forms to be filed by either fire and casualty insurers or life, accident and health insurers. These forms will take the so-called state page data currently required under the National Association of Insurance Commissioners' requirements and break this data down into more specific classes for the various different type of policies written. This rule aids in the interpretation of sections 376.350 and 379.105, RSMo.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. Therefore, the material which is so incorporated is on file with the agency who filed this rule, and with the Office of the Secretary of State. Any interested person may view this material at either agency's headquarters or the same will be made available at the Office of the Secretary of State at a cost not to exceed actual cost of copy reproduction. The entire text of the rule is printed here. This note refers only to the incorporated by reference material.

(1) In addition to the financial statement and diskette filing requirements set forth in 20 CSR 200-1.030, entities issued a Certificate of Authority with the Missouri Department of Commerce and Insurance, as part of their Annual Statement, also shall file supplemental forms as follows:

(A) Those insurers filing in accordance with the accounting standards or principles approved by the National Association of Insurance Commissioners' (NAIC) and published in the *Accounting Practices and Procedures Manual for Fire and Casualty Insurance Companies* shall also file the form set forth in Appendix A of this rule; and

(B) Those insurers filing in accordance with the accounting standards or principles approved by the NAIC and published in the *Accounting Practices and Procedures Manual for Life and Accident and Health Insurance Companies* shall also file the form set forth in Appendix B of this rule.

(2) The Supplemental Compensation Exhibit

must include all types of compensation received by top executives, including stock options. Compensation information must be reported for top executives of all companies, including non-insurance entities, within an insurance group, or in a holding company system. Compensation information should be reported on a total gross basis for each individual for whom compensation information is reported.

(3) Future modifications to these supplemental filing requirements shall be specified by the Missouri Department of Commerce and Insurance by bulletin sent to the individual insurers affected, accompanied by the appropriate forms, as modified.

AUTHORITY: sections 374.040, RSMo 1994 and 374.045, RSMo Supp 1997.* Original rule filed April 5, 1994, effective Nov. 30, 1994. Rescinded and readopted: Filed Feb. 1, 1995, effective Sept. 30, 1995. Amended: Filed Nov. 23, 1998, effective July 30, 1999. Non-substantive change filed Sept. 11, 2019, published Oct. 31, 2019.

*Original authority: 374.040, RSMo 1939, amended 1967 and 374.045, RSMo 1967, amended 1993, 1995.



PLACE BAR CODE HERE		STATE OF MISSOURI DEPARTMENT OF INSURANCE ANNUAL STATEMENT SUPPLEMENT FOR MISSOURI FOR YEAR ENDING				
DUE DATE: MARCH 1		SEE INSTRUCTIONS ON REVERSE SIDE				
NAIC GROUP #	NAIC COMPANY #	COMPANY				
PERSON COMPLETING FORM					TELEPHONE NUMBER	
LIFE INSURANCE						
	I NUMBER OF INSURED	II DIRECT PREMIUM & ANNUITY CONSIDERATIONS	III DIRECT DIVIDENDS TO POLICYHOLDER	IV DIRECT CLAIMS, BENEFITS & SURRENDER VALUES PAID	V LIFE INSURANCE IN FORCE (000) DECEMBER 31	VI
INDIVIDUAL BUSINESS						
1.1) Whole						
1.2) Term						
1.3) Universal						
1.4) Graded Death Benefits						
1.5) Credit						
1.6) Variable Life						
1.7) Annuities						
a) Ordinary Allocated						
b) Unallocated						
c) Variable Excluding 'b' Above						
d) Modified Guaranteed						
1.8) Deposit-Type Funds (line 4.1)						
1.9) Aggregate write-ins (line 3)						
1.10) TOTAL INDIVIDUAL						
GROUP BUSINESS						
2.1) Whole						
2.2) Term						
2.3) Universal						
2.4) Graded Death Benefits						
2.5) Credit						
2.6) Variable Life						
2.7) Annuities						
a) Ordinary Allocated						
b) Unallocated						
c) Variable Excluding 'b' Above						
d) Modified Guaranteed						
2.8) Deposit-Type Funds (line 4.1)						
2.9) Aggregate write-ins (line 3)						
2.10) TOTAL GROUP						
3) TOTAL LIFE						
ACCIDENT & HEALTH						
	I NUMBER OF INSURED	II DIRECT PREMIUMS WRITTEN	III DIRECT PREMIUMS EARNED	IV DIVIDENDS PAID OR CREDITED ON DIRECT BUSINESS	V DIRECT LOSSES PAID	VI DIRECT LOSSES INCLUDED
INDIVIDUAL BUSINESS						
4.1) All Other Medical Expense (excluding lines listed below)						
4.2) Medicare Supplement						
4.3) Long Term Care						
4.4) Specified Disease						
4.5) Accident Only						
4.6) Disability Income						
4.7) Dental						
4.8) Limited Benefit						
4.9) Short Term Credit Disability (10 years or less)						
4.10) Long Term Credit Disability (Mortgage)						
4.11) Credit Unemployment						
4.12) Stop Loss						
4.13) TOTAL INDIVIDUAL						
GROUP BUSINESS						
5.1) Medical Expense						
a) Small employer (25 or less)						
b) Large employer/union						
c) Association						
d) Other/other						
e) Federal Employees (line 23.1)						
5.2) Medicare Supplement						
5.3) Long Term Care						
5.4) Specified Disease						
5.5) Accident Only						
5.6) Disability Income						
5.7) Dental						
5.8) Limited Benefit						
5.9) Short Term Credit Disability (10 years or less)						
5.10) Long Term Credit Disability (Mortgage)						
5.11) Credit Unemployment						
5.12) Stop Loss						
5.13) TOTAL GROUP						
HEALTH						
7.1) Number of certificate holders under contracts issued in Missouri:						
				a) Missouri Residents		
				b) Non-Missouri Residents		
7.2) Number of certificate holders under contracts issued in other jurisdictions:						
				a) Missouri Residents		
				b) Non-Missouri Residents		

MO 575-1802



INSTRUCTIONS FOR COMPLETING ANNUAL STATEMENT SUPPLEMENT FOR MISSOURI:

This form is used to collect data in greater detail than that reported on the State Page (Page 21). All Life&Accident&Health, Health Service Corporations, and Fraternal companies are required to submit an accurate and complete report of their business in all of the lines specified per 20 CSR 200-1.037.

All amounts EXCEPT for Life Insurance in Force must be reported in whole dollars. Life Insurance in Force should be reported in thousands.

Totals must equal amounts reported on the Missouri State Page in the Annual Statement. The following are cross-checks your company should perform before submitting your supplement. If any of the following amounts between your state page and supplement do not agree your company is subject to \$1,000 fine for reporting faulty data per Section 374.215, RSMo.

STATE PAGE

<u>LIFE&ACCIDENT&HEALTH</u>	<u>FRATERNALS</u>	<u>SUPPLEMENT</u>
column 6, line 4 + line 4.1	column 1, line 4 =	column II, line 3
column 6, line 7	column 1, line 7 =	column III, line 3
column 6, line 14	column 1, line 14 =	column IV, line 3
column 2, line 23.1	=	column II, line 5.1e
column 3, line 23.1	=	column III, line 5.1e
column 4, line 23.1	=	column IV, line 5.1e
column 5, line 23.1	=	column V, line 5.1e
column 6, line 23.1	=	column VI, line 5.1e
column 2, line 25	column 2, line 25 =	column II, line 6
column 3, line 25	column 3, line 25 =	column III, line 6
column 4, line 25	column 4, line 25 =	column IV, line 6
column 5, line 25	column 5, line 25 =	column V, line 6
column 6, line 25	column 6, line 25 =	column VI, line 6

NUMBER OF INSURED AS OF DECEMBER 31 OF REPORT YEAR:

For individual policies, the number of insured must include dependents.
 For group policies, the number of insureds must equal the number of certificate holders plus all dependents.

MEDICAL EXPENSES: This category includes major medical, comprehensive medical and other hospital-surgical-medical coverage.

LIMITED BENEFITS: Includes vision, nursing care, hospital indemnity and any other single service plan or program.

STOP LOSS: Include all premium for excess loss coverage including any such coverage issued or provided through minimum premium plans or other self funded health benefit plans.

If additional definitions are needed for detail lines of business, please send a self-addressed stamped envelope to the address below (no phone calls please). Any other questions regarding the completion of this form should be addressed to the Statistics Section of the Missouri Department of Insurance, 314-751-0794.

Please mail to : Missouri Department of Insurance
 ATTN: Statistics Section
 PO Box 690
 Jefferson City MO 65102-0690



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STATE OF MISSOURI
DEPARTMENT OF INSURANCE
**SUPPLEMENT TO PAGE 14 OF
ANNUAL STATEMENT FOR YEAR ENDING
DECEMBER 31, 1994**

MAIL TO: STATE OF MISSOURI
DEPARTMENT OF INSURANCE
STATISTICS SECTION
P.O. BOX 690
JEFFERSON CITY, MISSOURI 65107-0690

DUE DATE - MARCH 1		SEE INSTRUCTIONS ON REVERSE SIDE			
COMPANY NAME		NAIC GROUP NO.	NAIC COMPANY NO.		
MISSOURI BUSINESS ONLY (ROUND TO NEAREST DOLLAR)					
(1) LINE OF BUSINESS	(2) DIRECT PREMIUMS WRITTEN	(3) DIRECT PREMIUMS EARNED	(4) DIRECT ALLOCATED LOSS ADJUSTMENT EXPENSE INCURRED	(5) DIRECT LOSSES PAID	(6) DIRECT LOSSES INCURRED
1. & 2. Fire & Allied Lines					
(a) Dwelling					
(b) Commercial					
(c) Farm					
3. Farmowners Multi-Peril					
4. (a) Home Owners Multi-Peril					
(b) Dwelling Owners Multi-Peril (ACV)					
5. Commercial Multi-Peril					
6. Mobile Homes					
7. Growing Crops					
8. Ocean Marine					
9. Inland Marine (Including Auto Cargo)					
10. Financial Guaranty					
11. Medical Malpractice Liability					
(a) Physicians and Surgeons					
(b) Dentists					
(c) Nurses					
(d) Hospitals					
(e) Other					
12. Earthquake					
14. All Accident & Health					
16. Workers Compensation					
(a) Direct					
(b) Excess					
17. Other Liability					
(a) Bodily Injury & Property Damage					
(b) Warranty Programs/Service Contracts					
18. Product Liability					
Bodily Injury & Property Damage					
19. (a) (1) Priv. Pass. Auto Lia. Bodily Injury					
(2) Priv. Pass. Auto Lia. Property Damage					
(3) Priv. Pass. Auto Medical Payments					
(4) Priv. Pass. Uninsured Motorist					
(5) Priv. Pass. Underinsured Motorist					
(6) Priv. Pass. Acc. Death & Disability/Dismemberment					
(b) (1) Comm. Auto Liability Bodily Injury					
(2) Comm. Auto Liability Property Damage					
(3) Comm. Auto Medical Payments					
(4) Comm. Auto Uninsured/Underinsured Motorist					
21. (a) (1) Priv. Pass. Auto Comprehensive					
(2) Priv. Pass. Auto Collision					
(b) (1) Comm. Auto Comprehensive					
(2) Comm. Auto Collision					
22. Aircraft					
23. Fidelity					
24. Surety					
25. Glass					
26. Burglary & Theft					
27. Boiler & Machinery					
28. (a) Credit Property (excluding V.S.I.)					
(b) Credit Casualty (Collateral Prot., etc.)					
(c) Credit Unemployment					
(d) V.S.I.					
29. Mortgage Guaranty					
30. Title					
31. Lawyers Malpractice					
32. Real Estate Malpractice					
33. Nuclear Energy Liability & Property					
34. Umbrella					
35. OTHER SPECIFIC (SPECIFY)					
36. Federal Crop Insurance Corporation					
TOTALS ALL BUSINESS IN MISSOURI					

MO 375-5381 (10-94)

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Instructions for SUPPLEMENT TO PAGE 14 OF ANNUAL STATEMENT

This form is used to collect data in greater detail than that of the Page 14 in the Annual Statement per Regulation 20 CSR 200-1.037. Therefore, please review the entire form to make sure your company is identifying specific lines. For example; companies writing Lawyer's Malpractice experience, insert the data on line 31 and exclude the data from line 17 (Other Liability).

All companies are required to submit an accurate and complete report of their business in all of the lines specified or the line of business your company writes. A NONE report is required for companies with no Missouri business.

All amounts are to be reported in whole dollars.

Business reinsured with the Federal Crop Insurance Corporation which are exempt from state premium taxes/ guaranty fund assessment is to be reported on Line 36.

No National Flood Insurance Program business should be reported.

If any company reports a discrepancy between the amount reported from their state page and their supplement, your company will be fined \$1,000 for reporting faulty data per Section 374.215 RSMo.

This form must be completed and stamped received by the Missouri Department of Insurance by March 1, 1995.



20 CSR 200-1.039 Supplemental Filing Requirements for Material Transactions
(Rescinded April 30, 2019)

AUTHORITY: sections 354.120, 354.485, 354.723, 374.045, 375.013 and 381.231, RSMo 1994. Original rule filed Aug. 1, 1995, effective March 30, 1996. Rescinded: Filed Oct. 30, 2018, effective April 30, 2019.

20 CSR 200-1.040 Financial Standards for Health Maintenance Organizations

PURPOSE: This rule implements sections 354.410, 354.415, 354.450, 354.455, 354.470.1(4) and 354.480, RSMo as this rule is necessary and proper to carry out the provisions of sections 354.400–354.550, RSMo.

(1) A health maintenance organization (HMO) must maintain a capital account pursuant to section 354.410.6, RSMo. The capital account is the equivalent of net worth and shall be equal to the assets of the HMO less its liabilities, which is also the equivalent of “net of any accrued liabilities” as used in section 354.410.6, RSMo. Assets and liabilities will be admitted and determined under the provisions of this rule.

(2) Assets of an HMO will be admitted and included in determining the financial condition of the HMO only if included within one (1) or more of the following list of admissible assets:

(A) Investable funds under section 354.450, RSMo are as follows:

1. Any asset or investment described in and limited by sections 376.291–376.307, RSMo; and

2. Any asset or investment described in and limited by section 354.415.1(1), RSMo. The requirements of section 354.415.2, RSMo apply as detailed in the statute; and

(B) Other assets as follows:

1. Reinsurance recoverables pursuant to section 375.246, RSMo;

2. Data processing system pursuant to section 375.325, RSMo;

3. Premium receivable from any agency of this state, of any political subdivision of this state or of the United States;

4. Accrued interest receivable, if according to statements of statutory accounting principles for HMOs such interest is probably collectible;

5. Inventory of medical, pharmaceutical and optical supplies, furniture, equipment and fixtures, but only if according to statements of statutory accounting principles for HMOs such supplies, furniture, equipment and fixtures are used by the HMO in connection with the direct provision of health care services;

tion with the direct provision of health care services;

6. Funds paid by the HMO into escrow for the purpose of purchasing or building offices or medical facilities but only if according to statements of statutory accounting principles for HMOs such offices or facilities are for use by the HMO in connection with the direct provision of health care services;

7. Goodwill and other intangible assets. Any goodwill or intangible asset must be amortized on a straight-line basis over a period of five (5) years or less. Any goodwill or intangible asset accrued after September 1, 1989 will be admissible only with the prior consent of the director;

8. Amounts receivable from HMOs, health service corporations, insurance companies, self-insurance plans, and third-party tortfeasors on account of coordination of benefits or subrogation, limited to the less of the actual amounts receivable or the amounts received during the prior year;

9. Any other asset expressly approved in writing by the director.

(3) No asset shall be admissible except as stated in section (2) and in accordance with the statements of statutory accounting principles.

(4) Liabilities shall be determined in accordance with the statements of statutory accounting principles.

(5) In determining whether an HMO is financially responsible and may reasonably be expected to meet its obligations to enrollees and prospective enrollees under sections 354.410.1(3) and 354.470.1(4), RSMo and whether the continued operation of the HMO would be hazardous either to the enrollees or to the people of this state under section 354.480, RSMo, the director will consider compliance with the standards of sections 354.410, 375.539, and 375.1250–375.1275, RSMo.

(6) On any policy of insolvency insurance, the named insured must include the director of the department and his/her successor(s) in office.

*AUTHORITY: section 354.485, RSMo 2016. * This rule was previously filed as 4 CSR 190-11.125. Original rule filed April 19, 1989, effective Sept. 1, 1989. Amended: Filed Sept. 15, 1992, effective June 7, 1993. Amended: Filed Nov. 23, 1998, effective July 30, 1999. Amended: Filed Dec. 14, 2000, effective July 30, 2001. Amended: Filed Oct. 30, 2018, effective April 30, 2019.*

**Original authority: 354.485, RSMo 1983, 2007.*

20 CSR 200-1.050 Financial Standards for Prepaid Dental Plans

PURPOSE: This rule implements sections 354.705, 354.707, 354.710, 354.717, 354.720 and 354.722, RSMo relating to the financial requirements for the operation of prepaid dental plans. This rule is authorized under the provisions of section 354.723, RSMo.

(1) Assets of a prepaid dental plan will be admitted and included in determining the financial condition of the prepaid dental plan only if included within one (1) or more of the following list of admissible assets:

(A) Investable funds invested as follows:

1. Any asset or investment described in and limited by sections 376.291–376.307, RSMo; and

2. Any asset or investment representing the purchase, lease, construction, renovation, operation or maintenance of facilities from which dental benefits under the plan will be performed or property as may reasonably be needed for the principal office of the prepaid dental plan or for other purposes as may be necessary in the transaction of the business of the plan; and

(B) Other assets as follows:

1. Reinsurance recoverables;

2. Data processing system;

3. Premium receivable from any agency of this state, of any political subdivision of this state or of the United States;

4. Accrued interest receivable, if according to statements of statutory accounting principles for prepaid dental plans such interest is probably collectable;

5. Inventory of dental supplies, but only if according to statements of statutory accounting principles for prepaid dental plans such supplies are used by the prepaid dental plan in connection with the direct provision of dental services;

6. Funds paid by the prepaid dental plan into escrow for the purpose of purchasing or building offices or facilities from which dental benefits under the plan will be performed, but only if according to statements of statutory accounting principles for prepaid dental plans such offices or facilities are for use by the prepaid dental plan in connection with the direct provision of health care services;

7. Goodwill and other intangible assets. Any goodwill or intangible asset must be amortized on a straight-line basis over a period of five (5) years or less. Any goodwill or intangible asset accrued after April 1, 1990 will be admissible only with the prior consent



of the director;

8. Amounts receivable on account of coordination of benefits or subrogation, limited to the actual amounts receivable or the amounts received during the prior year, whichever is less;

9. Any other asset expressly approved in writing by the director.

(2) No asset shall be admissible except as stated in section (1) and in accordance with the statements of statutory accounting principles.

(3) Liabilities shall be determined in accordance with the statements.

(4) The director will consider compliance with the standards of section 375.539, RSMo when evaluating a prepaid dental plan under section 354.722, RSMo.

AUTHORITY: section 354.723, RSMo 2016. This rule was previously filed as 4 CSR 190-II.280. Original rule filed Dec. 12, 1989, effective April 1, 1990. Amended: Filed Dec. 14, 2000, effective July 30, 2001. Amended: Filed Oct. 30, 2018, effective April 30, 2019.*

**Original authority: 354.723, RSMo 1987.*

20 CSR 200-1.060 Chapter 383 Malpractice Associations and Financial Condition
(Rescinded May 6, 1993)

AUTHORITY: 374.045 and 383.010–383.500, RSMo 1986. This rule previously filed as 4 CSR 190-II.320. Original rule filed Sept. 19, 1990, effective March 14, 1991. Rescinded: Filed Sept. 2, 1992, effective May 6, 1993.

20 CSR 200-1.070 Subordinated Indebtedness

PURPOSE: This rule specifies information to be submitted to the director for prior approval of subordinated indebtedness agreements, the form of consideration for these agreements and the accounting procedures to be followed. This rule implements sections 354.355, 354.480, 375.535, 375.539, and 381.075, RSMo.

(1) Application. This rule applies to all health service corporations, health maintenance organizations (HMOs), insurance companies, and reciprocal interinsurance exchanges organized under the laws of this state and is applicable to any debts other than those shown as a legal liability of the company. Notwithstanding any other provision to the

contrary, no company or other entity which has the power to assess its members may issue any subordinated indebtedness unless it is a mutual company organized under Chapter 379, RSMo.

(2) Definition, Subordinated Indebtedness (Surplus Notes). Subordinated indebtedness, for the purposes of this rule includes any contingent obligation for the repayment of a sum of money upon a written agreement that the loan or advance with interest shall be repaid only out of surplus profits of the company, as defined at 20 CSR 200-11.150(2), or as deemed necessary by the director of insurance to secure the interests of the policyholders and creditors of this company.

(3) Approval by the Director.

(A) The following shall be submitted to the director for prior approval:

1. Duplicate copies of the entire subordinated indebtedness agreement; and

2. Certified copy of the resolution of the board of directors or committee which is empowered to authorize these agreements. The resolution shall stipulate the maximum amount of subordinated indebtedness authorized and the purpose for which it is incurred. It also shall limit the application of the proceeds to the specific purpose for which the subordinated indebtedness is incurred.

(B) After submission of the documents and approval, the director may authorize the execution of the subordinated indebtedness agreement. All agreements shall be executed and the consideration received immediately after the approval unless otherwise stated in the approval order.

(C) Any amendment to or cancellation of an approved subordinated indebtedness agreement is to be submitted to the director for prior approval in accordance with subsection (3)(A) of this rule.

(4) Consideration. The consideration tendered to the company in exchange for the agreement shall be in the form of cash or other admitted assets having readily determinable values and liquidity acceptable to and approved by the director.

(5) Reporting and Accounting of Subordinated Indebtedness.

(A) The director shall be notified immediately in writing upon the execution of any subordinated indebtedness agreement as to the amount and to whom payable.

(B) All outstanding subordinated indebtedness and interest accruing shall be reported at face value in the annual statement on page 3

and in other financial statements of the company as a special surplus account. Accrued interest that has not been approved for payment should be accounted for by debiting unassigned funds and crediting the special surplus account.

(6) Approval of Repayment by Director. Repayment of principal or payment of interest may be made only with the approval of the director when s/he is satisfied that the financial condition of the company warrants this action. Repayment of surplus note interest should first reverse any unapproved accrued interest accounting by debiting the special surplus account and crediting unassigned funds. The interest payment should then be recorded by debiting interest expense and crediting cash. Repayment of principal should follow the guidance set forth in the National Association of Insurance Commissioners' *Accounting Practices and Procedures Manual*.

(7) Other Loans. Nothing in this section is to be construed to mean that a company cannot otherwise borrow money, but the amount so borrowed with accrued interest shall be carried by the company as a liability.

AUTHORITY: sections 354.120, 354.485, and 374.045, RSMo 2016. This rule was previously filed as 4 CSR 190-II.010. Original rule filed June 12, 1970, effective July 1, 1970. Amended: Filed Aug. 5, 1974, effective Aug. 15, 1974. Amended: Filed July 18, 1989, effective Nov. 1, 1989. Amended: Filed Oct. 30, 2018, effective April 30, 2019.*

**Original authority: 354.120, RSMo 1973, amended 1983, 1993, 1995; 354.485, RSMo 1983, 2007; and 374.045, RSMo 1967, 1993, 1995, 2008.*

20 CSR 200-1.080 Salvage and Subrogation Recovered
(Rescinded May 6, 1993)

AUTHORITY: sections 374.045 and 379.105, RSMo 1986. This rule was previously filed as 4 CSR 190-II.020. Original rule filed Dec. 23, 1975, effective Jan. 2, 1976. Rescinded: Filed Aug. 4, 1992, effective May 6, 1993.

20 CSR 200-1.090 Mortgage Loans as Admissible Assets
(Moved to 20 CSR 200-13.200)

20 CSR 200-1.100 Real Estate Held After Ten Years
(Moved to 20 CSR 200-13.300)



20 CSR 200-1.105 Property and Casualty Actuarial Opinions

PURPOSE: This rule prescribes forms and procedures to be followed by insurance companies other than life obtaining the certification of an actuary and to effectuate or aid in the interpretation of the provisions of section 375.1060, RSMo, by providing guidance as to the actuarial opinion to be obtained by an insurance company other than life.

(1) Statement of Actuarial Opinion. Every property and casualty insurance company doing business in this state, unless otherwise exempted by its domiciliary commissioner, shall file with its annual statement the actuarial certification required by section 375.1060, RSMo. This certification shall consist of the opinion of an appointed actuary entitled a “Statement of Actuarial Opinion.” This opinion shall be filed in accordance with the appropriate property and casualty annual statement instructions of the National Association of Insurance Commissioners (NAIC).

(2) In support of the Statement of Actuarial Opinion, each property and casualty company shall prepare or cause to be prepared, and if required, retain and file with the director, each of the following:

(A) Actuarial Opinion Summary.

1. Every property and casualty insurance company domiciled in this state that is required to submit a Statement of Actuarial Opinion shall annually submit an Actuarial Opinion Summary, written by the company’s appointed actuary. This Actuarial Opinion Summary shall be filed in accordance with the appropriate NAIC property and casualty annual statement instructions and shall be considered as a document supporting the Statement of Actuarial Opinion required in section (1).

2. An insurance company licensed but not domiciled in this state shall provide the Actuarial Opinion Summary upon request; and

(B) Actuarial Report and Workpapers.

1. An Actuarial Report and underlying workpapers, as required by the appropriate NAIC property and casualty annual statement instructions, shall be prepared to support each Statement of Actuarial Opinion.

2. If the insurance company fails to provide a supporting Actuarial Report and/or workpapers at the request of the director or the director determines that the supporting Actuarial Report or workpapers provided by the insurance company is otherwise unacceptable to the director, the director may

engage a qualified actuary at the expense of the insurance company to review the opinion and the basis for the opinion and prepare the supporting Actuarial Report or workpapers.

(3) Confidentiality.

(A) The Statement of Actuarial Opinion shall be provided with the annual statement in accordance with the appropriate NAIC property and casualty annual statement instructions and shall be treated as a public document.

(B) While the Statement of Actuarial Opinion is a public document, all documents, materials, or other information in the possession or control of the Department of Commerce and Insurance that are considered an Actuarial Report, workpapers, or Actuarial Opinion Summary provided in support of the opinion, and any other material provided by the insurance company to the director in connection with the Actuarial Report, workpapers, or Actuarial Opinion Summary, shall be confidential by law and privileged, shall not be subject to subpoena, and shall not be subject to discovery or admissible in evidence in any private civil action, to the same extent as the audit workpapers of an accountant under section 375.1050, RSMo.

(C) This section shall not be construed to limit the director’s authority to release the documents to the Actuarial Board for Counseling and Discipline (ABCD) so long as the material is required for the purpose of professional disciplinary proceedings and that the ABCD establishes procedures satisfactory to the director for preserving the confidentiality of the documents, nor shall this section be construed to limit the director’s authority to use the documents, materials, or other information in furtherance of any regulatory or legal action brought as part of the director’s official duties.

AUTHORITY: sections 374.045 and 374.071, RSMo Supp. 2009 and sections 375.1050 and 375.1060, RSMo 2000.* *Original rule filed Aug. 27, 2009, effective March 30, 2010. Non-substantive change filed Sept. 11, 2019, published Oct. 31, 2019.*

**Original authority: 374.045, RSMo 1967, amended 1993, 1995, 2008; 374.071, RSMo 2005; 375.1050, RSMo 1991, amended 1992, 1993, 2009; and 375.1060, RSMo 1991, amended 1993.*

20 CSR 200-1.110 Qualifications of Actuary or Consulting Actuary

PURPOSE: This rule describes the necessary qualifications of an actuary signing and cer-

tifying the life and accident and health annual statement of an insurer. This rule was adopted pursuant to the provisions of section 374.045, RSMo and implements section 376.350, RSMo.

(1) Every life insurance company authorized to do business in this state files an annual statement. Missouri instructions for completing the life and accident and health annual statement blank require that these forms be signed and certified by a qualified actuary.

(2) For this purpose, a “qualified actuary” means a member in good standing of the American Academy of Actuaries.

(3) Scope. This rule applies to all reports, statements and other documents filed with the director or issued to the public in relation to the business of insurance.

(4) Restriction of Signing as an Actuary. No report, statement or document shall be filed with the director or issued to the public in relation to the business of insurance if it is signed by a person who represents him/herself in the instrument to be an actuary unless the person signing as an actuary is a qualified actuary.

(5) Actuarial Representation. No person in any representation made to the public or to the director in respect to any matter subject to this rule shall use the word actuary or actuarial to indicate a degree of professional competence unless the representation was prepared or approved by a qualified actuary.

(6) Annual Statements of Domestic Life Insurance Companies. Section 376.350, RSMo prescribes the general form of the annual statement which must be filed with the director each year. The form which is required by the director is that which has been developed by the National Association of Insurance Commissioners. This form now includes a requirement relating to policy reserves and other actuarial items. The instructions for completion of the blank describe the content of this requirement. The items on which actuarial opinion is required are—

(A) Aggregate reserve for life policies and contracts (Exhibit 8);

(B) Aggregate reserve for accident and health policies (Exhibit 9);

(C) Net deferred and uncollected premiums; and

(D) Policy and Contract Claims—Liability End of Current Year (Exhibit 11, Part 1). The expanded actuarial opinion requirements with respect to life insurance company reserves



has been designed with the intent to provide greater assurance that policyholders' benefits and shareholders' interests are being properly protected through adequate reserve practices. If the company does not employ an actuary on a staff or consulting basis, the department will use the verification made by the department's actuary or the consulting actuary to the department in lieu of that called for in the instructions. The necessary information and data to render an opinion must be provided by the company and the individual of the company responsible for this compilation must submit a statement to the department that the listings and summaries of policies in force and other information necessary to comply with these rules are complete and accurate to the best of his/her knowledge and belief. If the company intends to rely upon the verification by the department's actuary or consultant, it should so indicate in the space provided for certification.

(7) Qualified Opinions. A qualified opinion is usually an indication that some corrective action is indicated. The director will question any company, foreign or domestic, about which the opinion is received, whether that opinion is rendered by its own staff, its consultant or the department, as to its plans for correcting the indicated problem. It is recommended that in any situation in which an actuary finds it necessary to give a qualified opinion, s/he notify both the company and the department. If the department's actuary or consultant is unable to render an unqualified opinion, the department may require the company to obtain a separate opinion from another qualified actuary, which may be limited to the subject matter in question.

(8) Special Provisions for Certain Domestic Companies. The department is aware of the existence of some business in force on which there is no statutory basis for reserves. Lack of a statute, however, does not imply that no liability exists. The actuary valuing the business is not limited to statutory requirements for comparable business, but should use any appropriate assumptions and methods to establish the true liability. S/he, of course, must be prepared to justify to the director his/her choice of assumptions and methods.

AUTHORITY: sections 374.045 and 376.350, RSMo 2016. This rule was previously filed as 4 CSR 190-II.080. Original rule filed Aug. 5, 1974, effective Aug. 15, 1974. Amended: Filed Aug. 16, 1977, effective Dec. 11, 1977. Amended: Filed Dec. 14, 2000, effective July 30, 2001. Amended: Filed Oct. 30, 2018, effective April 30, 2019.*

*Original authority: 374.045, RSMo 1967, amended

1993, 1995, 2008 and 376.350, RSMo 1939, amended 2000.

20 CSR 200-1.115 Actuarial Opinions of Reserves of Life and Health Insurance Policies, Annuities and Pure Endowment Contracts

PURPOSE: This rule effectuates or aids in the interpretation of sections 376.370, 376.380 and 376.390, RSMo.

(1) Actuarial Opinion Required.

(A) Every life insurance company doing business in this state annually shall submit the opinion of a qualified actuary as to whether the reserves and related actuarial items held in support of the company's policies and contracts are computed appropriately, are based on assumptions which satisfy contractual provisions, are consistent with prior reported amounts and comply with applicable laws of this state.

(B) The opinion shall be submitted with the annual statement reflecting the valuation of those reserve liabilities for each year ending on or after December 31, 1992.

(C) The opinion shall apply to all business in force including individual and group health insurance plans.

(D) The opinion shall be based on standards adopted from time-to-time by the Actuarial Standards Board.

(E) In the case of an opinion required to be submitted by a foreign or alien company, the director may accept the opinion filed by that company with the insurance supervisory official of another state if the director determines that the opinion reasonably meets the requirements applicable to a company domiciled in this state.

(F) For the purposes of this section, qualified actuary means a member in good standing of the American Academy of Actuaries who meets the requirements set forth in those rules.

(G) Except in cases of fraud or willful misconduct, the qualified actuary shall not be liable for damages to any person (other than the insurance company and the director) for any act, error, omission, decision or conduct with respect to the actuary's opinion.

(H) Disciplinary action by the director against the company or the qualified actuary shall include any actions authorized by the insurance laws of this state and as to the qualified actuary, refusal to accept future opinions.

(I) A memorandum, in form and substance acceptable to the director, shall be prepared to support each actuarial opinion.

(J) If the insurance company fails to pro-

vide a supporting memorandum at the request of the director within thirty (30) days of that request, or the director determines that the supporting memorandum provided by the insurance company fails to meet the standards prescribed by this rule, or is otherwise unacceptable to the director, the director may engage a qualified actuary at the expense of the company to review the opinion and the basis for the opinion and prepare the supporting memorandum as is required by the director.

(K) Any memorandum in support of the opinion, and any other material provided by the company to the director in connection with the opinion shall be kept confidential by the director and shall not be made public and shall not be subject to subpoena, other than for the purpose of defending an action seeking damages from any person by reason of any action required by this rule; provided, that the memorandum or other material may otherwise be released by the director—a) with the written consent of the company or b) to the American Academy of Actuaries upon request stating that the memorandum or other material is required for the purpose of professional disciplinary proceedings and setting forth procedures satisfactory to the director for preserving the confidentiality of the memorandum or other material. Once any portion of the confidential memorandum is cited by the company in its marketing, or is cited before any governmental agency other than a state insurance department, or is released by the company to the news media, all portions of the confidential memorandum shall no longer be confidential.

(2) Matching Assets to Liabilities.

(A) Annually every life insurance company, except as may be exempted by or pursuant to this rule, also shall include in the opinion required by subsection (1)(A) of this rule, an opinion of the same qualified actuary as to whether the reserves and related actuarial items held in support of the policies and contracts specified by the director by this rule, when considered in light of the assets held by the company with respect to the reserves and related actuarial items, including, but not limited to, the investment earnings on the assets and the considerations anticipated to be received and retained under the policies and contracts, make adequate provision for the company's obligations under the policies and contracts including, but not limited to, the benefits under and expenses associated with the policies and contracts.

(B) The director, on a case-by-case basis, may provide for a transition period for establishing any higher reserves which the qualified



actuary may deem necessary in order to render the opinion required by this section.

AUTHORITY: section 374.045.1(3), RSMo Supp. 1993. Original rule filed July 2, 1991, effective Dec. 9, 1991.*

**Original authority: 374.045.1(3), RSMo 1967, amended 1993.*

20 CSR 200-1.116 Actuarial Opinion and Memorandum Regulation

PURPOSE: This rule prescribes: a) requirements for statements of actuarial opinion which are to be submitted in accordance with sections 376.370 and 376.380, RSMo, and 20 CSR 200-1.115 and for memoranda in support thereof; b) guidance as to the meaning of "adequacy of reserves"; and c) rules applicable to the appointment of an appointed actuary.

(1) Scope. This rule shall apply to all life insurance companies and fraternal benefit societies doing business in this state and to all life insurance companies and fraternal benefit societies which are authorized to reinsure life insurance, annuities, or accident and health insurance business in this state. This regulation shall be applied in a manner that allows the appointed actuary to utilize his or her professional judgment in performing the asset analysis and developing the actuarial opinion and supporting memoranda, consistent with relevant actuarial standards of practice. However, the director shall have the authority to specify methods of actuarial analysis and actuarial assumptions when, in the director's judgment, these specifications are necessary for an acceptable opinion to be rendered relative to the adequacy of reserves and related items. This rule shall be applicable to all annual statements filed with the director after the effective date of this rule. A statement of opinion on the adequacy of the reserves and related actuarial items based on an asset adequacy analysis in accordance with section (4) of this rule, and a memorandum in support thereof in accordance with section (5) of this rule, shall be required each year.

(2) Definitions.

(A) "Actuarial opinion" means the opinion of an appointed actuary regarding the adequacy of the reserves and related actuarial items based on an asset adequacy analysis in accordance with section (4) of this rule and with applicable Actuarial Standards of Practice.

(B) "Actuarial Standards Board" means the board established by the American Academy

of Actuaries to develop and promulgate standards of actuarial practice.

(C) "Annual statement" means that statement required by sections 375.041 and 376.350, RSMo, to be filed by the company with the director annually.

(D) "Appointed actuary" means an individual who is appointed or retained in accordance with the requirements set forth in subsection (3)(C) of this rule to provide the actuarial opinion and supporting memorandum as required by 20 CSR 200-1.115 and section 376.380, RSMo.

(E) "Asset adequacy analysis" means an analysis that meets the standards and other requirements referred to in subsection (3)(D) of this rule.

(F) "Company" means a life insurance company, fraternal benefit society, or reinsurer subject to the provisions of this rule.

(G) "Director" means the director of the Missouri Department of Commerce and Insurance.

(H) "Qualified actuary" means an individual who meets the requirements set forth in subsection (3)(B) of this rule.

(3) General Requirements.

(A) Submission of Statement of Actuarial Opinion.

1. There is to be included on or attached to page 1 of the annual statement for each year beginning with the year in which this rule becomes effective the statement of an appointed actuary, entitled "Statement of Actuarial Opinion," setting forth an opinion relating to reserves and related actuarial items held in support of policies and contracts, in accordance with section (4) of this rule.

2. Upon written request by the company, the director may grant an extension of the date for submission of the statement of actuarial opinion.

(B) Qualified actuary. A "qualified actuary" is an individual who—

1. Is a member of the American Academy of Actuaries;

2. Is qualified to sign statements of actuarial opinion for life and health insurance company annual statements in accordance with the American Academy of Actuaries qualification standards for actuaries signing those statements;

3. Is familiar with the valuation requirements applicable to life and health insurance companies;

4. Has not been found by the director (or, if so found, has subsequently been reinstated as a qualified actuary), following appropriate notice and hearing to have:

A. Violated any provision of, or any

obligation imposed by, the insurance law or other law in the course of his/her dealings as a qualified actuary;

B. Been found guilty of fraudulent or dishonest practices;

C. Demonstrated his/her incompetency, lack of cooperation, or untrustworthiness to act as a qualified actuary;

D. Submitted to the director during the past five (5) years, pursuant to this rule, an actuarial opinion or memorandum that the director rejected because it did not meet the provisions of this rule including standards set by the Actuarial Standards Board; or

E. Resigned or been removed as an actuary within the past five (5) years as a result of acts or omissions indicated in any adverse report on examination or as a result of failure to adhere to generally acceptable actuarial standards; and

5. Has not failed to notify the director of any action taken by any director of any other state similar to that under paragraph (3)(B)4.

(C) Appointed actuary. An appointed actuary is a qualified actuary who is appointed or retained to prepare the Statement of Actuarial Opinion required by this rule; either directly or by the authority of the board of directors through an executive officer of the company. The company shall give the director timely written notice of the name, title (and in the case of a consulting actuary, the name of the firm) and manner of appointment or retention of each person appointed or retained by the company as an appointed actuary and shall state in that notice that the person meets the requirements set forth in subsection (3)(B). Once notice is furnished, no further notice is required with respect to this person, provided that the company shall give the director timely written notice in the event the actuary ceases to be appointed or retained as an appointed actuary or to meet the requirements set forth in subsection (3)(B). If any person appointed or retained as an appointed actuary replaces a previously appointed actuary, the notice shall so state and give the reasons for replacement.

(D) Standards for Asset Adequacy Analysis. The asset adequacy analysis required by this rule:

1. Shall conform to the Standards of Practice as promulgated from time-to-time by the Actuarial Standards Board and on any additional standards under this rule, which standards are to form the basis of the statement of actuarial opinion in accordance with this rule; and

2. Shall be based on methods of analysis as are deemed appropriate for such purposes by the Actuarial Standards Board.

(E) Liabilities to Be Covered.



1. Under authority of 20 CSR 200-1.115 and sections 376.370 and 376.380, RSMo, the statement of actuarial opinion shall apply to all in force business on the statement date, whether directly issued or assumed, regardless of when or where issued, for example, reserves of Exhibits 8, 9, and 10, and claim liabilities in Exhibit 11, Part 1 and equivalent items in the separate account statement(s).

2. If the appointed actuary determines as the result of asset adequacy analysis that a reserve should be held in addition to the aggregate reserve held by the company and calculated in accordance with methods set forth in sections 376.370 and 376.380, RSMo, the company shall establish the additional reserve.

3. Additional reserves established under paragraph (3)(E)2. and deemed not necessary in subsequent years may be released. Any amounts released must be disclosed in the actuarial opinion for the applicable year. The release of these reserves would not be deemed an adoption of a lower standard of valuation.

(4) Statement of Actuarial Opinion Based On an Asset Adequacy Analysis.

(A) General Description. The statement of actuarial opinion submitted in accordance with this section shall consist of:

1. A paragraph identifying the appointed actuary and his/her qualifications (see paragraph (4)(B)1.);

2. A scope paragraph identifying the subjects on which an opinion is to be expressed and describing the scope of the appointed actuary's work, including a tabulation delineating the reserves and related actuarial items which have been analyzed for asset adequacy and the method of analysis, (see paragraph (4)(B)2.) and identifying the reserves and related actuarial items covered by the opinion which have not been so analyzed;

3. A reliance paragraph describing those areas, if any, where the appointed actuary has deferred to other experts in developing data, procedures, or assumptions (for example, anticipated cash flows from currently owned assets, including variation in cash flows according to economic scenarios (see paragraph (4)(B)3.) supported by a statement of each expert in the form prescribed by subsection (4)(E);

4. An opinion paragraph expressing the appointed actuary's opinion with respect to the adequacy of the supporting assets to mature the liabilities (see paragraph (4)(B)6.); and

5. One (1) or more additional paragraphs will be needed in individual company

cases as follows:

A. If the appointed actuary considers it necessary to state a qualification of his/her opinion;

B. If the appointed actuary must disclose an inconsistency in the method of analysis or basis of asset allocation used at the prior opinion date with that used for this opinion;

C. If the appointed actuary must disclose whether additional reserves of the prior opinion date are released as of this opinion date and the extent of the release; and

D. If the appointed actuary chooses to add a paragraph briefly describing the assumptions which form the basis for the actuarial opinion.

(B) Recommended Language. The following paragraphs are to be included in the statement of actuarial opinion in accordance with this section. Language is that which in typical circumstances should be included in a statement of actuarial opinion. The language may be modified as needed to meet the circumstances of a particular case, but the appointed actuary should use language which clearly expresses his/her professional judgment. However, in any event the opinion shall retain all pertinent aspects of the language provided in this section.

1. The opening paragraph should generally indicate the appointed actuary's relationship to the company and his/her qualifications to sign the opinion. For a company actuary, the opening paragraph of the actuarial opinion should include a statement such as: "I, (name), am (title) of (insurance company name) and a member of the American Academy of Actuaries. I was appointed by, or by the authority of, the board of directors of said insurer to render this opinion as stated in the letter to the director dated (insert date). I meet the Academy qualification standards for rendering the opinion and am familiar with the valuation requirements applicable to life and health insurance companies." For a consulting actuary, the opening paragraph should contain a statement such as: "I, (name), a member of the American Academy of Actuaries, am associated with the firm of (name of consulting firm). I have been appointed by, or by the authority of, the board of directors of (name of company) to render this opinion as stated in the letter to the director dated (insert date). I meet the Academy qualification standards for rendering this opinion and am familiar with the valuation requirements, relating to life and health companies."

2. The scope paragraph should include a statement such as: "I have examined the actuarial assumptions and actuarial methods used

in determining reserves and related actuarial items listed below, as shown in the annual statement of the company, as prepared for filing with state regulatory officials, as of December 31, 20(). Tabulated as follows are those reserves and related actuarial items which have been subjected to asset adequacy analysis."



Reserves And Liabilities Asset Adequacy Tested Amounts

Table with 6 columns: Statement Item (c), Formula Reserves (1), Additional Actuarial Reserves (a) (2), Analysis Method (b) (3), Other Amount (3), Total Amount (1)+(2)+(3) (4)

TOTAL RESERVES IMR (Page Line) _____

AVR (Page Line) _____ (d)

- (a) The additional actuarial reserves are the reserves established under paragraph (3)(E)2.
(b) The appointed actuary should indicate the method of analysis, determined in accordance with the standards for asset adequacy analysis referred to in subsection (3)(D) of this regulation, by means of symbols which should be defined in footnotes to the table.
(c) Statement Items should describe lines of business subjected to asset adequacy analysis and contain appropriate references to the exhibits, pages, and lines of the insurer's annual statement filed with the director to which the amounts listed reconcile.
(d) Allocated amount of Asset Valuation Reserve (AVR).

3. If the appointed actuary has relied on other experts to develop certain portions of the analysis, the reliance paragraph should include a statement such as:

"I have relied on (name), (title) for (for example, anticipated cash flows from currently owned assets, including variations in cash flows according to economic scenarios) and, as certified in the attached statement I have reviewed the information relied upon for reasonableness."

A statement of reliance on other experts should be accompanied by a statement by each of these experts in the form prescribed by subsection (4)(E).

4. If the appointed actuary has examined the underlying asset and liability records, the reliance paragraph should include a statement such as: "My examination included a review of the actuarial assumptions and actuarial methods and of the underlying basic asset and liability records and tests of the actuarial calculations as I considered necessary. I also reconciled the underlying basic asset and liability records to (exhibits and schedules listed as applicable) of the company's current annual statement."

5. If the appointed actuary has not examined the underlying records, but has relied upon data (e.g., listings and summaries of policies in force or asset records), prepared by the company, the reliance paragraph should include a sentence such as: "In forming my opinion on (specify types of reserves), I relied upon data prepared by (name and title of company officer certifying in-force records or other data) as certified in the attached statements. I also reconciled that data to (exhibits and schedules to be listed as applicable) of the company's current annual statement. In other respects, my examination included review of the actuarial assumptions

and actuarial methods and tests of the calculations I considered necessary." This section shall be accompanied by a statement by each person relied upon in the form prescribed by subsection (4)(E).

6. The opinion paragraph should include a statement such as: "In my opinion the reserves and related actuarial values concerning the statement items identified above:

A. "Are computed in accordance with presently accepted actuarial standards consistently applied and are fairly stated, in accordance with sound actuarial principles;

B. "Are based on actuarial assumptions which produce reserves at least as great as those called for in any contract provision as to reserve basis and method, and are in accordance with all other contract provisions;

C. "Meet the requirements of the insurance law and regulation of the state of (state of domicile) and are at least as great as the minimum aggregate amounts required by the state in which this statement is filed;

D. "Are computed on the basis of assumptions consistent with those used in computing the corresponding items in the annual statement of the preceding year-end (with any exceptions noted here);

E. "Include provision for all actuarial reserves and related statement items which ought to be established.

"The reserves and related items, when considered in light of the assets held by the company with respect to such reserves and related actuarial items including, but not limited to, the investment earnings on the assets, and the considerations anticipated to be received and retained under the policies and contracts, make adequate provision, according to presently accepted actuarial standards of practice, for the anticipated cash flows

required by the contractual obligations and related expenses of the company. (At the discretion of the director, this language may be omitted for an opinion filed on behalf of a company doing business only in this state and in no other state.)

"The actuarial methods, considerations, and analyses used in forming my opinion conform to the appropriate Standards of Practice as promulgated by the Actuarial Standards Board, which standards form the basis of this statement of opinion.

"This opinion is updated annually as required by statute. To the best of my knowledge, there have been no material changes from the applicable date of the annual statement to the date of the rendering of this opinion which should be considered in reviewing this opinion"; or

"The following material change(s) which occurred between the date of the statement for which this opinion is applicable and the date of this opinion should be considered in reviewing this opinion: (Describe the change(s).)" (Note: Choose one of the preceding two (2) paragraphs, whichever is applicable.)

"The impact of unanticipated events subsequent to the date of this opinion is beyond the scope of this opinion. The analysis of asset adequacy portion of this opinion should be viewed recognizing that the company's future experience may not follow all the assumptions used in the analysis.

(Signature of Appointed Actuary)

(Address of Appointed Actuary)



(Telephone Number of Appointed Actuary)

(Date)”

(C) Assumptions for New Issues. The adoption for new issues or new claims or other new liabilities of an actuarial assumption which differs from a corresponding assumption used for prior new issues or new claims or other new liabilities is not a change in actuarial assumptions within the meaning of this section.

(D) Adverse Opinions. If the appointed actuary is unable to form an opinion, then s/he shall refuse to issue a statement of actuarial opinion. If the appointed actuary’s opinion is adverse or qualified, then s/he shall issue an adverse or qualified actuarial opinion explicitly stating the reason(s) for that opinion. This statement should follow the scope paragraph and precede the opinion paragraph.

(E) Reliance on Information Furnished by Other Persons. If the appointed actuary relies on the certification of others on matters concerning the accuracy or completeness of any data underlying the actuarial opinion, or the appropriateness of any other information used by the appointed actuary in forming the actuarial opinion, the actuarial opinion should so indicate the persons the actuary is relying upon and a precise identification of the items subject to reliance. In addition, the persons on whom the appointed actuary relies shall provide a certification that precisely identifies the items on which the person is providing information and a statement as to the accuracy, completeness, or reasonableness, as applicable, of the items. This certification shall include the signature, title, company, address, and telephone number of the person rendering the certification, as well as the date on which it is signed.

(F) Alternate Option.

1. Section 376.380.4(4)(d), RSMo 2000, gives the director broad authority to accept the valuation of a foreign insurer when that valuation meets the requirements applicable to a company domiciled in this state in the aggregate. As an alternative to the requirements of subparagraph (4)(B)6.C., the director may make one (1) or more of the following additional approaches available to the opening actuary:

A. A statement that the reserves “meet the requirements of the insurance laws and regulations of the state of (state of domicile) and the formal written standards and

conditions of this state for filing an opinion based on the law of the state of domicile.” If the director chooses to allow this alternative, a formal written list of standards and conditions shall be made available. If a company chooses to use this alternative, the standards and conditions in effect on July 1 of a calendar year shall apply to statements for that calendar year, and they shall remain in effect until they are revised or revoked. If no list is available, this alternative is not available;

B. A statement that the reserves “meet the requirements of the insurance laws and regulations of the state of (state of domicile) and I have verified that the company’s request to file an opinion based on the law of the state of domicile has been approved and that any conditions required by the director for approval of that request have been met.” If the director chooses to allow this alternative, a formal written statement of such allowance shall be issued no later than March 31 of the year it is first effective. It shall remain valid until rescinded or modified by the director. The rescission or modifications shall be issued no later than March 31 of the year they are first effective. Subsequent to that statement being issued, if a company chooses to use this alternative, the company shall file a request to do so, along with justification for its use, no later than April 30 of the year of the opinion to be filed. The request shall be deemed approved on October 1 of that year if the director has not denied the request by that date; and/or

C. A statement that the reserves “meet the requirements of the insurance laws and regulations of the state of (state of domicile) and I have submitted the required comparison as specified by this state.”

(I) If the director chooses to allow this alternative, a formal written list of products (to be added to the table in Part (II) below) for which the required comparison shall be provided will be published. If a company chooses to use this alternative, the list in effect on July 1 of a calendar year shall apply to statements for that calendar year, and it shall remain in effect until it is revised or revoked. If no list is available, this alternative is not available.

(II) If a company desires to use this alternative, the appointed actuary shall provide a comparison of the gross nationwide reserves held to the gross nationwide reserves that would be held under National Association of Insurance Commissioners (NAIC) codification standards. Gross nationwide reserves are the total reserves calculated for the total company in force business directly sold and assumed, indifferent to the

state in which the risk resides, without reduction for reinsurance ceded. The information provided shall be at least:



(1)	(2)	(3)	(4)	(5)
Product Type	Death Benefit or Account Value	Reserves Held	Codification Reserves	Codification Standard

(III) The information listed shall include all products identified by either the state of filing or any other states subscribing to this alternative.

(IV) If there is no codification standard for the type of product or risk in force or if the codification standard does not directly address the type of product or risk in force, the appointed actuary shall provide detailed disclosure of the specific method and assumptions used in determining the reserves held.

(V) The comparison provided by the company is to be kept confidential to the same extent and under the same conditions as the actuarial memorandum.

2. Notwithstanding the above, the director may reject an opinion based on the laws and regulations of the state of domicile and require an opinion based on the laws of this state. If a company is unable to provide the opinion within sixty (60) days of the request or such other period of time determined by the director after consultation with the company, the director may contract with an independent actuary at the company's expense to prepare and file the opinion.

(5) Description of Actuarial Memorandum Including an Asset Adequacy Analysis and Regulator Asset Adequacy Issues Summary.

(A) General.

1. In accordance with 20 CSR 200-1.115 and sections 376.370 and 376.380, RSMo, the appointed actuary shall prepare a memorandum to the company describing the analysis done in support of his/her opinion regarding the reserves. The memorandum shall be made available for examination by the director upon his/her request but shall be returned to the company after such examination and shall not be considered a record of the insurance department or subject to automatic filing with the director.

2. In preparing the memorandum, the appointed actuary may rely on, and include as a part of his/her own memorandum, memoranda prepared and signed by other actuaries who are qualified within the meaning of subsection (3)(B) of this rule, with respect to

the areas covered in such memoranda, and so state in their memoranda.

3. If the director requests a memorandum and no memorandum exists or if the director finds that the analysis described in the memorandum fails to meet the standards of the Actuarial Standards Board or the standards and requirements of this rule, the director may designate a qualified actuary to review the opinion and prepare the supporting memorandum as is required for review. The reasonable and necessary expense of the independent review shall be paid by the company but shall be directed and controlled by the director.

4. The reviewing actuary shall have the same status as an examiner for purposes of obtaining data from the company and the work papers and documentation of the reviewing actuary shall be retained by the director; provided, however, that any information provided by the company to the reviewing actuary and included in the work papers shall be considered as material provided by the company to the director and shall be kept confidential to the same extent as is prescribed by law with respect to other material provided by the company to the director pursuant to the statute governing this rule. The reviewing actuary shall not be an employee of a consulting firm involved with the preparation of any prior memorandum or opinion for the insurer pursuant to this rule for any one (1) of the current year or the preceding three (3) years.

5. In accordance with 20 CSR 200-1.115 and section 376.380, RSMo, the appointed actuary shall prepare a regulatory asset adequacy issues summary, the contents of which are specified in subsection (5)(C). The regulatory asset adequacy issues summary will be submitted no later than March 15 of the year following the year for which a statement of actuarial opinion based on asset adequacy is required. The regulatory asset adequacy issues summary is to be kept confidential to the same extent and under the same conditions as the actuarial memorandum.

(B) Details of the Memorandum Section Documenting Asset Adequacy Analysis.

When an actuarial opinion is provided, the memorandum shall demonstrate that the analysis has been done in accordance with the standards for asset adequacy referred to in subsection (3)(D) of this rule and any additional standards under this rule. It shall specify—

1. For reserves—

A. Product descriptions including market description, underwriting, and other aspects of a risk profile and the specific risks the appointed actuary deems significant;

B. Source of liability in force;

C. Reserve method and basis;

D. Investment reserves;

E. Reinsurance arrangements;

F. Identification of any explicit or implied guarantees made by the general account in support of benefits provided through a separate account or under a separate account policy or contract and the methods used by the appointed actuary to provide for the guarantees in the asset adequacy analysis; and

G. Documentation of assumptions to test reserves for the following:

(I) Lapse rates (both base and excess);

(II) Interest crediting rate strategy;

(III) Mortality;

(IV) Policyholder dividend strategy;

(V) Competitor or market interest rate;

(VI) Annuitization rates;

(VII) Commissions and expenses;

and

(VIII) Morbidity;

2. For assets—

A. Portfolio descriptions, including a risk profile disclosing the quality, distribution, and types of assets;

B. Investment and disinvestment assumptions;

C. Source of asset data;

D. Asset valuation bases; and

E. Documentation of assumptions made for:

(I) Default costs;

(II) Bond call function;



(III) Mortgage prepayment function;

(IV) Determining market value for assets sold due to disinvestment strategy; and

(V) Determining yield on assets acquired through the investment strategy. The documentation of the assumptions shall be such that an actuary reviewing the actuarial memorandum could form a conclusion as to the reasonableness of the assumptions;

3. For the analysis basis—

A. Methodology;

B. Rationale for inclusion/exclusion of different blocks of business and how pertinent risks were analyzed;

C. Rationale for degree of rigor in analyzing different blocks of business (include in the rationale the level of materiality that was used in determining how rigorously to analyze different blocks of business);

D. Criteria for determining asset adequacy (include in the criteria the precise basis for determining if assets are adequate to cover reserves under moderately adverse conditions or other conditions as specified in relevant actuarial standards of practice); and

E. Whether the impact of federal income taxes was considered, and the method of treating reinsurance in the asset adequacy analysis;

4. Summary of material changes in methods, procedures, or assumptions from prior year's asset adequacy analysis;

5. Summary of results; and

6. Conclusion(s).

(C) Details of the Regulatory Asset Adequacy Issues Summary.

1. The regulatory asset adequacy issues summary shall include:

A. Descriptions of the scenarios tested (including whether those scenarios are stochastic or deterministic) and the sensitivity testing done relative to those scenarios. If negative ending surplus results under certain tests in the aggregate, the actuary should describe those tests and the amount of additional reserve as of the valuation date which, if held, would eliminate the negative aggregate surplus values. Ending surplus values shall be determined by either extending the projection period until the in force and associated assets and liabilities at the end of the projection period are immaterial or by adjusting the surplus amount at the end of the projection period by an amount that appropriately estimates the value that can reasonably be expected to arise from the assets and liabilities remaining in force;

B. The extent to which the appointed actuary uses assumptions in the asset adequacy analysis that are materially different than

the assumptions used in the previous asset adequacy analysis;

C. The amount of reserves and the identity of the product lines that had been subjected to asset adequacy analysis in the prior opinion but were not subject to analysis for the current opinion;

D. Comments on any interim results that may be of significant concern to the appointed actuary;

E. The methods used by the actuary to recognize the impact of reinsurance on the company's cash flows, including both assets and liabilities, under each of the scenarios tested; and

F. Whether the actuary has been satisfied that all options whether explicit or embedded, in any asset or liability (including, but not limited to, those affecting cash flows embedded in fixed income securities) and equity-like features in any investments have been appropriately considered in the asset adequacy analysis.

2. The regulatory asset adequacy issues summary shall contain the name of the company for which the regulatory asset adequacy issues summary is being supplied and shall be signed and dated by the appointed actuary rendering the actuarial opinion.

(D) Conformity to Standards of Practice. The memorandum shall include a statement: "Actuarial methods, considerations and analyses used in the preparation of this memorandum conform to the appropriate Standards of Practice as promulgated by the Actuarial Standards Board, which standards form the basis for this memorandum."

(E) Use of Assets Supporting the Interest Maintenance Reserve and the Asset Valuation Reserve. An appropriate allocation of assets in the amount of the interest maintenance reserve (IMR), whether positive or negative, shall be used in any asset adequacy analysis. Analysis of risks regarding asset default may include an appropriate allocation of assets supporting the asset valuation reserve (AVR); these AVR assets may not be applied for any other risks with respect to reserve adequacy. Analysis of these and other risks may include assets supporting other mandatory or voluntary reserves available to the extent not used for risk analysis and reserve support. The amount of the assets used for the AVR must be disclosed in the Table of Reserves and Liabilities of the opinion and in the memorandum. The method used for selecting particular assets or allocated portions of assets must be disclosed in the memorandum.

(F) Documentation. The appointed actuary shall retain on file, for at least seven (7) years, sufficient documentation so that it will be possible to determine the procedures fol-

lowed, the analyses performed, the bases for assumptions and the results obtained.

AUTHORITY: sections 376.370 and 376.380, RSMo 2000 and section 374.045, RSMo Supp. 2008. Original rule filed Dec. 28, 1992, effective Sept. 9, 1993. Amended: Filed Oct. 30, 2008, effective May 30, 2009. Non-substantive change filed Sept. 11, 2019, published Oct. 31, 2019.*

**Original authority: 374.045 RSMo 1967, amended 1993, 1995, 2008; 376.370, RSMo 1939, amended 1943, 1947, 1961, 1993; and 376.380, RSMo 1939, amended 1943, 1947, 1959, 1961, 1965, 1971, 1975, 1979, 1982, 1993.*

20 CSR 200-1.120 Take-Out Letters

(Rescinded April 30, 2019)

AUTHORITY: sections 374.045 and 379.080, RSMo Supp. 1993 and 376.300, RSMo 1986. This rule was previously filed as 4 CSR 190-II.100. Original rule filed Dec. 20, 1974, effective Dec. 30, 1974. Rescinded: Filed Oct. 30, 2018, effective April 30, 2019.

20 CSR 200-1.130 Letters of Credit

(Rescinded May 6, 1993)

AUTHORITY: section 379.080.3(2)(d), RSMo 1986. This rule was previously filed as 4 CSR 190-II.240. Original rule filed July 20, 1989, effective Nov. 11, 1989. Rescinded: Filed Sept. 2, 1992, effective May 6, 1993.

20 CSR 200-1.140 Minimum Valuation Standards for Life, Accident and Health and Annuity Contracts

PURPOSE: This rule specifies standards for valuation of specifically identified life insurance, health and accident insurance policies. This rule was adopted pursuant to the provisions of section 374.045, RSMo and implements sections 376.380, 376.390, 376.405, 376.410 and 376.670, RSMo.

(1) Life Insurance.

(A) Group Insurance.

1. Yearly renewable term life insurance (including waiver of premium and accidental death benefits).

A. Gross *pro rata* unearned premium method.

B. The Commissioners 1960 Standards Group Mortality Table with interest as specified in section 376.380, RSMo.

C. Any other valuation basis producing higher reserves.

2. Inasmuch as the Federal Employees



Group Life Insurance Act of 1954, 5 U.S.C.A. Section 8701, provides that appointive or elective officers or employees of the United States government, at a time and under conditions of eligibility as the Civil Service Commission by regulation may prescribe, shall be eligible to be insured for specified amounts of group life insurance and specified amounts of group accidental death and dismemberment insurance, as provided in the Act; and since as the Act requires the maintenance of a special contingency reserve upon group insurance issued or reinsured in accordance with its provisions, the provisions of this rule shall not be applicable to any group insurance issued or reinsured by a life insurance company in accordance with the provision of the Act.

3. Inasmuch as the Servicemen's Group Life Insurance Act of 1965, 38 U.S.C.A. section 765, provides that members of the uniformed services on active duty shall be eligible to be insured for specified amounts of group life insurance, as provided in the Act; and inasmuch as the Act requires that maintenance of a special contingency reserve upon group insurance issued or reinsured in accordance with its provisions, the provisions of this rule shall not be applicable to any group insurance issued or reinsured by any life insurance company in accordance with the provisions of the Act.

(B) Credit Life Insurance. All credit life insurance shall be valued on the 1958 Commissioners Standards Ordinary Mortality Table with interest assumption of three and one-half percent (3 1/2%) or any other valuation basis producing higher reserves.

(C) Other Standards.

1. Extra or additional reserves, calculated according to the previously mentioned standards, will be required in all cases to cover the nondeduction of deferred fractional premiums or return of premiums, in the event of death. No extra reserve is required when the basic policy reserve makes a provision for this, for example, when continuous functions are used.

2. Other valuation standards may be used so long as the reserves computed on those standards for each of the previously mentioned categories are greater in the aggregate than the reserves computed according to minimum standards.

3. Reserves for annuity and pure endowment contracts, for disability and accidental death benefits in all policies and contracts, for life insurance policies providing for a varying amount of insurance or requiring the payment of varying premiums, and for all other benefits, except life insurance and endowment benefits in life insurance policies,

shall be calculated by a method consistent with the principles of the commissioner's reserve valuation method, as defined in section 376.380.2(b), RSMo. In the calculation of reserves for life policies containing coupon or annual pure endowment benefits, each benefit shall be treated as a pure endowment maturing for its cash value on the date it becomes due. This coupon or annual pure endowment benefit shall be considered to be a part of the guaranteed benefits provided for by the policies.

(2) Policies of Accident or Health Insurance, or Combination Policies of Accident and Health Insurance.

(A) On all such policies actually written there shall be maintained an unearned gross premium reserve computed according to the provisions of sections 376.410(1), RSMo.

(B) On all such policies written on a noncancellable plan and under the terms of which the company is obligated to renew or continue for a stated period, or to a stated age or for life, there shall be maintained active life reserves and reserves for losses in amounts not less than active life and loss reserves determined in accordance with the applicable minimum reserve standards prescribed by the National Association of Insurance Commissioners (NAIC) in its *Accounting Practices and Procedures Manual*.

(C) On all such policies other than those written on a noncancellable plan there shall be maintained reserves for losses in amounts not less than loss reserves determined in accordance with the applicable minimum reserve standards prescribed by the NAIC in its *Accounting Practices and Procedures Manual*.

(D) In addition to the minimum reserves mentioned in section 376.410, RSMo, and elsewhere in this section, companies shall maintain reserves for extraordinary losses in amounts not less than extraordinary loss reserves determined in accordance with the applicable minimum reserve standards prescribed by the NAIC in its *Accounting Practices and Procedures Manual*.

(E) Credit Accident and Health Insurance. All credit accident and health insurance (both individual and group) shall be established and maintained on the basis of not less than the unearned gross premium computed on the basis of the sum of digits formula, commonly known as the Rule of 78.

(F) This section shall not apply to total and permanent disability benefits, or to accidental death benefits, contained in or supplemental to life insurance policies or other contracts and for which benefits the standard of valua-

tion is prescribed by section 376.380, RSMo, or other sections of this or other rules of the Department of Commerce and Insurance.

(3) The new operative date with respect to this rule, means the date on or before January 1, 1989 when the company files a written notice with the director of its election to comply with the provisions of section 376.380(3), RSMo or if no election is filed, the date is January 1, 1989.

AUTHORITY: sections 374.045, 376.380, 376.390, 376.405, 376.410 and 376.670, RSMo 2000.* This rule was previously filed as 4 CSR 190-II.090. This version of rule filed Dec. 5, 1969, effective Dec. 15, 1969. Amended: Filed Aug. 5, 1974, effective Aug. 15, 1974. Amended: Filed July 9, 1976, effective Feb. 20, 1977. Amended: Filed Aug. 16, 1977, effective Dec. 11, 1977. Rescinded and readopted: Filed May 11, 1984, effective Nov. 13, 1984. Amended: Filed Dec. 14, 2000, effective July 30, 2001. Non-substantive change filed Sept. 11, 2019, published Oct. 31, 2019.

**Original authority:* 374.045, RSMo 1967 amended 1993, 1995; 376.380, RSMo 1939, amended 1943, 1947, 1959, 1961, 1965, 1971, 1975, 1979, 1982, 1993; 376.390, RSMo 1939, amended 1943; 376.405, RSMo 1959, amended 1984; 376.410, RSMo 1945; and 376.670, RSMo 1943, amended 1959, 1961, 1965, 1975, 1979, 1982.

Survivors Ben. Ins. Co. v. Farmer, 514 SW2d 565 (Mo. 1974). Superintendent of insurance has the duty to approve or disapprove life insurance contracts and forms and no contract or form may be used in Missouri without the approval of the superintendent.

20 CSR 200-1.150 General Standards Applicable to Audited Financial Reports (Rescinded April 30, 2019)

AUTHORITY: sections 374.045, 375.1032, 375.1037, 375.1045, 375.013, and 375.1060, RSMo 1994. Original rule filed Aug. 11, 1992, effective May 6, 1993. Amended: Filed July 3, 1995, effective Feb. 25, 1996. Rescinded: Filed Oct. 30, 2018, effective April 30, 2019.

20 CSR 200-1.160 Valuation of Life Insurance Policies

PURPOSE: The purpose of this regulation is to provide: 1) tables of select mortality factors and rules for their use; 2) rules concerning a minimum standard for the valuation of plans with nonlevel premiums or benefits; and 3) rules concerning a minimum standard for the



valuation of plans with secondary guarantees. The method for calculating basic reserves defined in this regulation will constitute the Commissioners' Reserve Valuation Method for policies to which this regulation is applicable.

(1) Applicability. This rule shall apply to all life insurance policies, with or without non-forfeiture values, issued on or after the effective date of this rule, subject to the following exceptions and conditions:

(A) Exceptions.

1. This rule shall not apply to any individual life insurance policy issued on or after the effective date of this rule if the policy is issued in accordance with and as a result of the exercise of a reentry provision contained in the original life insurance policy of the same or greater face amount, issued before the effective date of this rule, that guarantees the premium rates of the new policy. This rule also shall not apply to subsequent policies issued as a result of the exercise of such a provision, or a derivation of the provision, in the new policy.

2. This rule shall not apply to any universal life policy that meets all the following requirements:

A. Secondary guarantee period, if any, is five (5) years or less;

B. Specified premium for the secondary guarantee period is not less than the net level reserve premium for the secondary guarantee period based on the CSO valuation tables as defined in subsection (2)(F) and the applicable valuation interest rate; and

C. The initial surrender charge is not less than one hundred percent (100%) of the first year annualized specified premium for the secondary guarantee period.

3. This rule shall not apply to any variable life insurance policy that provides for life insurance, the amount or duration of which varies according to the investment experience of any separate account or accounts.

4. This rule shall not apply to any variable universal life insurance policy that provides for life insurance, the amount or duration of which varies according to the investment experience of any separate account or accounts.

5. This rule shall not apply to a group life insurance certificate unless the certificate provides for a stated or implied schedule of maximum gross premiums required in order to continue coverage in force for a period in excess of one (1) year.

(B) Conditions.

1. Calculation of the minimum valuation standard for policies with guaranteed nonlevel gross premiums or guaranteed nonlevel

benefits (other than universal life policies), or both, shall be in accordance with the provisions of section (4).

2. Calculation of the minimum valuation standard for flexible premium and fixed premium universal life insurance policies that contain provisions resulting in the ability of a policyholder to keep a policy in force over a secondary guarantee period shall be in accordance with the provisions of section (5).

(2) Definitions. For purposes of this rule:

(A) "Basic reserves" means reserves calculated pursuant to section 376.380.1(2)(b), RSMo.

(B) "Contract segmentation method" means the method of dividing the period from issue to mandatory expiration of a policy into successive segments, with the length of each segment being defined as the period from the end of the prior segment (from policy inception, for the first segment) to the end of the latest policy year as determined below. All calculations are made using the 1980 CSO valuation tables, as defined in subsection (F) of this section (or any other valuation mortality table adopted by the National Association of Insurance Commissioners (NAIC), after the effective date of this rule and promulgated by rule by the director for this purpose) and, if elected, the optional minimum mortality standard for deficiency reserves stipulated in subsection (3)(B) of this rule. The length of a particular contract segment shall be equal to the minimum of the value t for which G_t is greater than R_t (if G_t never exceeds R_t the segment length is deemed to be the number of years from the beginning of the segment to the mandatory expiration date of the policy), where G_t and R_t are defined as follows:

$$G_t = \frac{GP_{x+k+t}}{GP_{x+k+t-1}}$$

where:

- x = original issue age;
- k = the number of years from the date of issue to the beginning of the segment;
- t = 1, 2, ...; t is reset to 1 at the beginning of each segment;
- $GP_{x+k+t-1}$ = Guaranteed gross premium per thousand of face amount for year t of the segment, ignoring policy fees only if level for the premium paying period of the policy.

$$R_t = \frac{q_{x+k+t}}{q_{x+k+t-1}}$$

However, R_t may be increased or decreased by one percent in any policy year, at the company's option, but R_t shall not be less than one;

where:

- x, k and t are as defined above, and
- $q_{x+k+t-1}$ = valuation mortality rate for deficiency reserves in policy year $k+t$ but using the mortality of paragraph (3)(B)2. if paragraph (3)(B)3. is elected for deficiency reserves.

However, if GP_{x+k+t} is greater than 0 and $GP_{x+k+t-1}$ is equal to 0, G_t shall be deemed to be 1000. If GP_{x+k+t} and $GP_{x+k+t-1}$ are both equal to 0, G_t shall be deemed to be 0.

(C) "Deficiency reserves" means the excess, if greater than zero, of—

1. Minimum reserves calculated pursuant to section 376.380.1(2)(h), RSMo, over

2. Basic reserves.

(D) "Guaranteed gross premiums" means the premiums under a policy of life that are insurance guaranteed and determined at issue.

(E) "Maximum valuation interest rates" means the interest rates defined in section 376.380.2, RSMo, that are to be used in determining the minimum standard for the valuation of life insurance policies.

(F) "1980 CSO valuation tables" means the Commissioners' 1980 Standard Ordinary Mortality Table (1980 CSO Table) without ten-year selection factors, incorporated into section 376.380, RSMo, and 20 CSR 400-1.110, 20 CSR 400-1.120, and 20 CSR 400-1.130.

(G) "Scheduled gross premium" means the smallest illustrated gross premium at issue for other than universal life insurance policies. For universal life insurance policies, scheduled gross premium means the smallest specified premium described in paragraph (5)(A)3., if any, or else the minimum premium described in paragraph (5)(A)4.;

(H) Segmented Reserves.

1. "Segmented reserves" means reserves, calculated using segments produced by the contract segmentation method, equal to the present value of all future guaranteed benefits less the present value of all future net premiums to the mandatory expiration of a policy, where the net premiums within each segment are a uniform percentage of the respective guaranteed gross premiums within



the segment. The uniform percentage for each segment is such that, at the beginning of the segment, the present value of the net premiums within the segment equals:

A. The present value of the death benefits within the segment, plus

B. The present value of any unusual guaranteed cash value (see subsection (4)(D)) occurring at the end of the segment, less

C. Any unusual guaranteed cash value occurring at the start of the segment, plus

D. For the first segment only, the excess of part (I) over part (II) as follows:

(I) A net level annual premium equal to the present value, at the date of issue, of the benefits provided for in the first segment after the first policy year, divided by the present value, at the date of issue, of an annuity of one (1) per year payable on the first and each subsequent anniversary within the first segment on which a premium falls due. However, the net level annual premium shall not exceed the net level annual premium on the nineteen (19)-year premium whole life plan of insurance of the same renewal year equivalent level amount at an age one (1)-year higher than the age at issue of the policy.

(II) A net one (1)-year term premium for the benefits provided for in the first policy year.

2. The length of each segment is determined by the “contract segmentation method,” as defined in this section.

3. The interest rates used in the present value calculations for any policy may not exceed the maximum valuation interest rate, determined with a guarantee duration equal to the sum of the lengths of all segments of the policy.

4. For both basic reserves and deficiency reserves computed by the segmented method, present values shall include future benefits and net premiums in the current segment and in all subsequent segments.

(I) “Tabular cost of insurance,” means the net single premium at the beginning of a policy year for one (1)-year term insurance in the amount of the guaranteed death benefit in that policy year.

(J) “Ten-year select factors,” means the select factors adopted with section 376.380, RSMo and 20 CSR 400-1.110, 20 CSR 400-1.120, and 20 CSR 400-1.130.

(K) Unitary Reserves.

1. “Unitary reserves” means the present value of all future guaranteed benefits less the present value of all future modified net premiums, where:

A. Guaranteed benefits and modified net premiums are considered to the mandatory expiration of the policy; and

B. Modified net premiums are a uniform percentage of the respective guaranteed

gross premiums, where the uniform percentage is such that, at issue, the present value of the net premiums equals the present value of all death benefits and pure endowments, plus the excess of part (I) over part (II), as follows:

(I) A net level annual premium equal to the present value, at the date of issue, of the benefits provided for after the first policy year, divided by the present value, at the date of issue, of an annuity of one (1) per year payable on the first and each subsequent anniversary of the policy on which a premium falls due. However, the net level annual premium shall not exceed the net level annual premium on the nineteen (19)-year premium whole life plan of insurance of the same renewal year equivalent level amount at an age one (1) year higher than the age at issue of the policy.

(II) A net one (1)-year term premium for the benefits provided for in the first policy year.

2. The interest rates used in the present value calculations for any policy may not exceed the maximum valuation interest rate, determined with a guarantee duration equal to the length from issue to the mandatory expiration of the policy.

(L) “Universal life insurance policy” means any individual life insurance policy under the provisions of which separately identified interest credits (other than in connection with dividend accumulations, premium deposit funds, or other supplementary accounts) and mortality or expense charges are made to the policy.

(3) General Calculation Requirements for Basic Reserves and Premium Deficiency Reserves.

(A) At the election of the company for any one (1) or more specified plans of life insurance, the minimum mortality standard for basic reserves may be calculated using the 1980 CSO valuation tables with select mortality factors (or any other valuation mortality table adopted by the NAIC after the effective date of this rule and promulgated by rule by the director for this purpose). If select mortality factors are elected, they may be:

1. The ten (10)-year select mortality factors incorporated into section 376.380, RSMo, and 20 CSR 400-1.100, 20 CSR 400-1.120, and 20 CSR 400-1.130;

2. The select mortality factors in the Appendix, included herein; or

3. Any other table of select mortality factors adopted by the NAIC after the effective date of this rule and promulgated by rule by the director for the purpose of calculating basic reserves.

(B) Deficiency reserves, if any, are calcu-

lated for each policy as the excess, if greater than zero, of the quantity A over the basic reserve. The quantity A is obtained by recalculating the basic reserve for the policy using guaranteed gross premiums instead of net premiums when the guaranteed gross premiums are less than the corresponding net premiums. At the election of the company for any one (1) or more specified plans of insurance, the quantity A and the corresponding net premiums used in the determination of quantity A may be based upon the 1980 CSO valuation tables with select mortality factors (or any other valuation mortality table adopted by the NAIC after the effective date of this rule and promulgated by rule by the director). If select mortality factors are elected, they may be—

1. The ten (10)-year select mortality factors incorporated into section 376.380, RSMo, and 20 CSR 400-1.110, 20 CSR 400-1.120, and 20 CSR 400-1.130;

2. The select mortality factors in the Appendix, included herein;

3. For durations in the first segment, X percent of the select mortality factors in the Appendix, subject to the following:

A. X may vary by policy year, policy form, underwriting classification, issue age, or any other policy factor expected to affect mortality experience;

B. X is such that, when using the valuation interest rate used for basic reserves, part (I) is greater than or equal to part (II):

(I) The actuarial present value of future death benefits, calculated using the mortality rates resulting from the application of X;

(II) The actuarial present value of future death benefits calculated using anticipated mortality experience without recognition of mortality improvement beyond the valuation date;

C. X is such that the mortality rates resulting from the application of X are at least as great as the anticipated mortality experience, without recognition of mortality improvement beyond the valuation date, in each of the first five (5) years after the valuation date;

D. The appointed actuary shall increase X at any valuation date where it is necessary to continue to meet all the requirements of paragraph (3)(B)3.;

E. The appointed actuary may decrease X at any valuation date as long as X continues to meet all the requirements of paragraph (3)(B)3.;

F. The appointed actuary shall specifically take into account the adverse effect on expected mortality and lapsation of any anticipated or actual increase in gross premiums;



and

G. If X is less than one hundred percent (100%) at any duration for any policy, the following requirements shall be met:

(I) The appointed actuary shall annually prepare an actuarial opinion and memorandum for the company in conformance with the requirements of section 20 CSR 200-1.116(6);

(II) The appointed actuary shall annually opine for all policies subject to this rule as to whether the mortality rates resulting from the application of X meet the requirements of paragraph (3)(B)3. This opinion shall be supported by an actuarial report, subject to appropriate Actuarial Standards of Practice promulgated by the Actuarial Standards Board of the American Academy of Actuaries. The X factors shall reflect anticipated future mortality, without recognition of mortality improvement beyond the valuation date, taking into account relevant emerging experience;

(III) The appointed actuary shall disclose, in the regulatory asset adequacy issues summary, the impact of the insufficiency of assets to support the payment of benefits and expenses and the establishment of statutory reserves during one (1) or more interim periods; and

(IV) The company shall file any opinion(s) required by parts (I), (II), or (III) of this subparagraph with the director of the Department of Commerce and Insurance as an attachment or attachments to and at the same time as the company's annual statement to which such opinion(s) relate; and

4. Any other table of select mortality factors adopted by the NAIC after the effective date of this rule and promulgated by rule by the director for the purpose of calculating deficiency reserves.

(C) This subsection applies to both basic reserves and deficiency reserves. Any set of select mortality factors may be used only for the first segment. However, if the first segment is less than ten (10) years, the appropriate ten-year select mortality factors incorporated into section 376.380, RSMo, and 20 CSR 400-1.110, 20 CSR 400-1.120, and 20 CSR 400-1.130 may be used thereafter through the tenth policy year from the date of issue.

(D) In determining basic reserves or deficiency reserves, guaranteed gross premiums without policy fees may be used where the calculation involves the guaranteed gross premium, but only if the policy fee is a level dollar amount after the first policy year. In determining deficiency reserves, policy fees may be included in guaranteed gross premiums, even if not included in the actual calculation

of basic reserves.

(E) Reserves for policies that have changes to guaranteed gross premiums, guaranteed benefits, guaranteed charges, or guaranteed credits that are unilaterally made by the insurer after issue and that are effective for more than one (1) year after the date of the change shall be the greatest of the following:

1. Reserves calculated ignoring the guarantee;

2. Reserves assuming the guarantee was made at issue; and

3. Reserves assuming that the policy was issued on the date of the guarantee.

(F) The director may require that the company document the extent of the adequacy of reserves for specified blocks, including, but not limited to policies issued prior to the effective date of this rule. This documentation may include a demonstration of the extent to which aggregation with other non-specified blocks of business is relied upon in the formation of the appointed actuary opinion pursuant to and consistent with the requirements of section 20 CSR 200-1.116(6).

(4) Calculation of Minimum Valuation Standard for Policies with Guaranteed Nonlevel Gross Premiums or Guaranteed Nonlevel Benefits (Other than Universal Life Policies).

(A) Basic Reserves. Basic reserves shall be calculated as the greater of the segmented reserves and the unitary reserves. Both the segmented reserves and the unitary reserves for any policy shall use the same valuation mortality table and selection factors. At the option of the insurer, in calculating segmented reserves and net premiums, either of the adjustments described in paragraph 1. or 2. of this subsection may be made:

1. Treat the unitary reserve, if greater than zero, applicable at the end of each segment as a pure endowment and subtract the unitary reserve, if greater than zero, applicable at the beginning of each segment from the present value of guaranteed life insurance and endowment benefits for each segment;

2. Treat the guaranteed cash surrender value, if greater than zero, applicable at the end of each segment as a pure endowment; and subtract the guaranteed cash surrender value, if greater than zero, applicable at the beginning of each segment from the present value of guaranteed life insurance and endowment benefits for each segment.

(B) Deficiency Reserves.

1. The deficiency reserve at any duration shall be calculated:

A. On a unitary basis if the corresponding basic reserve determined by subsection (A) of this section is unitary;

tion (A) of this section is unitary;

B. On a segmented basis if the corresponding basic reserve determined by subsection (A) of this section is segmented; or

C. On the segmented basis if the corresponding basic reserve determined by subsection (A) of this section is equal to both the segmented reserve and the unitary reserve.

2. This subsection shall apply to any policy for which the guaranteed gross premium at any duration is less than the corresponding modified net premium calculated by the method used in determining the basic reserves, but using the minimum valuation standards of mortality (specified in subsection (3)(B)) and rate of interest.

3. Deficiency reserves, if any, shall be calculated for each policy as the excess if greater than zero, for the current and all remaining periods, of the quantity A over the basic reserve, where A is obtained as indicated in subsection (3)(B).

4. For deficiency reserves determined on a segmented basis, the quantity A is determined using segment lengths equal to those determined for segmented basic reserves.

(C) Minimum Value. Basic reserves may not be less than the tabular cost of insurance for the balance of the policy year, if mean reserves are used. Basic reserves may not be less than the tabular cost of insurance for the balance of the current modal period or to the paid to date, if later, but not beyond the next policy anniversary, if mid-terminal reserves are used. The tabular cost of insurance shall use the same valuation mortality table and interest rates as that used for the calculation of the segmented reserves. However, if select mortality factors are used, they shall be the ten (10)-year select factors incorporated into section 376.380, RSMo, and 20 CSR 400-1.110, 20 CSR 400-1.120, and 20 CSR 400-1.130. In no case may total reserves (including basic reserves, deficiency reserves, and any reserves held for supplemental benefits that would expire upon contract termination) be less than the amount that the policy owner would receive (including the cash surrender value of the supplemental benefits, if any, referred to above), exclusive of any deduction for policy loans, upon termination of the policy.

(D) Unusual Pattern of Guaranteed Cash Surrender Values.

1. For any policy with an unusual pattern of guaranteed cash surrender values, the reserves actually held prior to the first unusual guaranteed cash surrender value shall not be less than the reserves calculated by treating the first unusual guaranteed cash surrender value as a pure endowment and treating the policy as an *n* year policy providing term



insurance plus a pure endowment equal to the unusual cash surrender value, where n is the number of years from the date of issue to the date the unusual cash surrender value is scheduled.

2. The reserves actually held subsequent to any unusual guaranteed cash surrender value shall not be less than the reserves calculated by treating the policy as an n year policy providing term insurance plus a pure endowment equal to the next unusual guaranteed cash surrender value, and treating any unusual guaranteed cash surrender value at the end of the prior segment as a net single premium, where:

A. n is the number of years from the date of the last unusual guaranteed cash surrender value prior to the valuation date to the earlier of:

(I) The date of the next unusual guaranteed cash surrender value, if any, that is scheduled after the valuation date; or

(II) The mandatory expiration date of the policy; and

B. The net premium for a given year during the n year period is equal to the product of the net to gross ratio and the respective gross premium; and

C. The net to gross ratio is equal to part (I) divided by part (II) as follows:

(I) The present value, at the beginning of the n year period, of death benefits payable during the n year period plus the present value, at the beginning of the n year period, of the next unusual guaranteed cash surrender value, if any, minus the amount of the last unusual guaranteed cash surrender value, if any, scheduled at the beginning of the n year period.

(II) The present value, at the beginning of the n year period, of the scheduled gross premiums payable during the n year period.

3. For purposes of this subsection, a policy is considered to have an unusual pattern of guaranteed cash surrender values if any future guaranteed cash surrender value exceeds the prior year's guaranteed cash surrender value by more than the sum of:

A. One hundred ten percent (110%) of the scheduled gross premium for that year;

B. One hundred ten percent (110%) of one (1)-year's accrued interest on the sum of the prior year's guaranteed cash surrender value and the scheduled gross premium using the nonforfeiture interest rate used for calculating policy guaranteed cash surrender values; and

C. Five percent (5%) of the first policy year surrender charge, if any.

(E) Optional Exemption for Yearly Renewable Term Reinsurance (YRT). At the

option of the company, the following approach for reserves on YRT reinsurance may be used:

1. Calculate the valuation net premium for each future policy year as the tabular cost of insurance for that future year;

2. Basic reserves shall never be less than the tabular cost of insurance for the appropriate period, as defined in subsection (4)(C);

3. Deficiency reserves.

A. For each policy year, calculate the excess, if greater than zero, of the valuation net premium over the respective maximum guaranteed gross premium.

B. Deficiency reserves shall never be less than the sum of the present values, at the date of valuation, of the excesses determined in accordance with subparagraph A. of this paragraph.

4. For purposes of this subsection, the calculations use the maximum valuation interest rate and the 1980 CSO mortality tables with or without ten (10)-year select mortality factors, or any other table adopted by the NAIC after the effective date of this rule and promulgated by rule of the director for this purpose.

5. A reinsurance agreement shall be considered YRT reinsurance for purposes of this subsection if only the mortality risk is reinsured.

6. If the assuming company chooses this optional exemption, the ceding company's reinsurance reserve credit shall be limited to the amount of reserve held by the assuming company for the affected policies.

(F) Optional Exemption for Attained-Age-Based Yearly Renewable Term Life Insurance Policies. At the option of the company, the following approach for reserves for attained-age-based YRT life insurance policies may be used:

1. Calculate the valuation net premium for each future policy year as the tabular cost of insurance for that future year.

2. Basic reserves shall never be less than the tabular cost of insurance for the appropriate period, as defined in subsection (4)(C);

3. Deficiency reserves.

A. For each policy year, calculate the excess, if greater than zero, of the valuation net premium over the respective maximum guaranteed gross premium.

B. Deficiency reserves shall never be less than the sum of the present values, at the date of valuation, of the excesses determined in accordance with subparagraph A. of this paragraph.

4. For purposes of this subsection, the calculations use the maximum valuation interest rate and the 1980 CSO valuation tables with or without ten (10)-year select

mortality factors, or any other table adopted by the NAIC after the effective date of this rule and promulgated by rule by the director for this purpose.

5. A policy shall be considered an attained-age-based YRT life insurance policy for purposes of this subsection if:

A. The premium rates (on both the initial current premium scale and the guaranteed maximum premium scale) are based upon the attained age of the insured such that the rate for any given policy at a given attained age of the insured is independent of the year the policy was issued; and

B. The premium rates (on both the initial current premium scale and the guaranteed maximum premium scale) are the same as the premium rates for policies covering all insured persons of the same sex, risk class, plan of insurance and attained age.

6. For policies that become attained-age-based YRT policies after an initial period of coverage, the approach of this subsection may be used after the initial period if:

A. The initial period is constant for all insured persons of the same sex, risk class, and plan of insurance; or

B. The initial period runs to a common attained age for all insureds of the same sex, risk class, and plan of insurance; and

C. After the initial period of coverage, the policy meets the conditions of paragraph 5. of this subsection.

7. If this election is made, this approach shall be applied in determining reserves for all attained-age-based YRT life insurance policies issued on or after the effective date of this rule.

(G) Exemption for Unitary Reserves for Certain n -Year Renewable Term Life Insurance Policies. Unitary basic reserves and unitary deficiency reserves need not be calculated for a policy if the following conditions are met:

1. The policy consists of a series of n -year periods, including the first period and all renewal periods, where n is the same for each period, except that for the final renewal period, n may be truncated or extended to reach the expiry age, provided that this final renewal period is less than ten (10) years and less than twice the size of the earlier n -year periods, and for each period, the premium rates on both the initial current premium scale and the guaranteed maximum premium scale are level;

2. The guaranteed gross premiums in all n -year periods are not less than the corresponding net premiums based upon the 1980 CSO Table with or without the ten (10)-year select mortality factors; and

3. There are no cash surrender values in



any policy year.

(H) Exemption from Unitary Reserves for Certain Juvenile Policies. Unitary basic reserves and unitary deficiency reserves need not be calculated for a policy if the following conditions are met, based upon the initial current premium scale at issue:

1. At issue, the insured is age twenty-four (24) or younger;
2. Until the insured reaches the end of the juvenile period, which shall occur at or before age twenty-five (25), the gross premiums and death benefits are level, and there are no cash surrender values; and
3. After the end of the juvenile period, gross premiums are level for the remainder of the premium paying period, and death benefits are level for the remainder of the life of the policy.

(5) Calculation of Minimum Valuation Standard for Flexible Premium and Fixed Premium Universal Life Insurance Policies That Contain Provisions Resulting in the Ability of a Policyowner to Keep a Policy in Force Over a Secondary Guarantee Period.

(A) General.

1. Policies with a secondary guarantee include:

A. A policy with a guarantee that the policy will remain in force at the original schedule of benefits, subject only to the payment of specified premiums;

B. A policy in which the minimum premium at any duration is less than the corresponding one (1)-year valuation premium, calculated using the maximum valuation interest rate and the 1980 CSO valuation tables with or without ten (10)-year select mortality factors, or any other table adopted after the effective date of this rule by the NAIC and promulgated by regulation by the director for this purpose; or

C. A policy with any combination of subparagraphs A. and B. of this paragraph.

2. A secondary guarantee period is the period for which the policy is guaranteed to remain in force subject only to a secondary guarantee. When a policy contains more than one secondary guarantee, the minimum reserve shall be the greatest of the respective minimum reserves at that valuation date of each unexpired secondary guarantee, ignoring all other secondary guarantees. Secondary guarantees that are unilaterally changed by the insurer after issue shall be considered to have been made at issue. Reserves described in subsections (B) and (C) below shall be recalculated from issue to reflect these changes.

3. Specified premiums mean the premiums specified in the policy, the payment of

which guarantees that the policy will remain in force at the original schedule of benefits, but which otherwise would be insufficient to keep the policy in force in the absence of the guarantee if maximum mortality and expense charges and minimum interest credits were made and any applicable surrender charges were assessed.

4. For purposes of this section, the minimum premium for any policy year is the premium that, when paid into a policy with a zero account value at the beginning of the policy year, produces a zero account value at the end of the policy year. The minimum premium calculation shall use the policy cost factors (including mortality charges, loads and expense charges) and the interest crediting rate which are all guaranteed at issue.

5. The one (1)-year valuation premium means the net one (1) year premium based upon the original schedule of benefits for a given policy year. The one (1)-year valuation premiums for all policy years are calculated at issue. The select mortality factors defined in paragraphs (3)(B)2., 3., and 4. may not be used to calculate the one (1)-year valuation premiums.

6. The one (1)-year valuation premium should reflect the frequency of fund processing, as well as the distribution of deaths assumption employed in the calculation of the monthly mortality charges to the fund.

(B) Basic Reserves for the Secondary Guarantees. Basic reserves for the secondary guarantees shall be the segmented reserves for the secondary guarantee period. In calculating the segments and the segmented reserves, the gross premiums shall be set equal to the specified premiums, if any, or otherwise to the minimum premiums, that keep the policy in force and the segments will be determined according to the contract segmentation method as defined in subsection (2)(B).

(C) Deficiency Reserves for the Secondary Guarantees. Deficiency reserves, if any, for the secondary guarantees shall be calculated for the secondary guarantee period in the same manner as described in subsection (4)(B) with gross premiums set equal to the specified premiums, if any, or otherwise to the minimum premiums that keep the policy in force.

(D) Minimum Reserves. The minimum reserves during the secondary guarantee period are the greater of:

1. The basic reserves for the secondary guarantee plus the deficiency reserve, if any, for the secondary guarantees; or

2. The minimum reserves required by other rules or regulations governing universal life plans.

(6) This rule includes herein the Appendix containing tables of select mortality factors.

(7) Effective Date. This rule shall become effective thirty (30) days after publication in the *Code of State Regulations* or on January 1, 2001, whichever later occurs.



Appendix to Rule 20 CSR 200-1.160 Valuation of Life Insurance Policies

SELECT MORTALITY FACTORS

This appendix contains tables of select mortality factors that are the bases to which the respective percentage of paragraphs (3)(A)2., (3)(B)2., and (3)(B)3. are applied.

The six tables of select mortality factors contained herein include: (1) male aggregate, (2) male nonsmoker, (3) male smoker, (4) female aggregate, (5) female nonsmoker, and (6) female smoker.

These tables apply to both age last birthday and age nearest birthday mortality tables.

For sex-blended mortality tables, compute select mortality factors in the same proportion as the underlying mortality. For example, for the 1980 CSO-B Table, the calculated select mortality factors are eighty percent (80%) of the appropriate male table in this Appendix, plus twenty percent (20%) of the appropriate female table in this Appendix.



SELECT MORTALITY FACTORS

Appendix (continued)

Issue Age	Male, Aggregate																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+	
0-15	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
16	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
17	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
18	96	98	98	99	99	100	100	90	92	92	92	92	93	93	96	97	98	98	99	100	100
19	83	84	84	87	87	87	79	79	79	81	81	82	82	82	85	88	91	94	97	100	100
20	69	71	71	74	74	69	69	67	69	70	71	71	71	71	74	79	84	90	95	100	100
21	66	68	69	71	66	66	67	66	67	70	70	70	70	71	71	77	83	88	94	100	100
22	65	66	66	63	63	64	64	64	65	68	68	68	68	69	71	77	83	88	94	100	100
23	62	63	59	60	62	62	63	63	64	65	65	67	67	69	70	76	82	88	94	100	100
24	60	56	56	59	59	60	61	61	61	64	64	64	66	67	70	76	82	88	94	100	100
25	52	53	55	56	58	58	60	60	60	63	62	63	64	67	69	75	81	88	94	100	100
26	51	52	55	56	58	58	57	61	61	62	63	64	66	69	66	73	80	86	93	100	100
27	51	52	55	57	58	60	61	61	60	63	63	64	67	66	67	74	80	87	93	100	100
28	49	51	56	58	60	60	61	62	62	63	64	66	65	66	68	74	81	87	94	100	100
29	49	51	56	58	60	61	62	62	62	64	64	62	66	67	70	76	82	88	94	100	100
30	49	50	56	58	60	60	62	63	63	64	62	63	67	68	71	77	83	88	94	100	100
31	47	50	56	58	60	62	63	64	64	62	63	66	68	70	72	78	83	89	94	100	100
32	46	49	56	59	60	62	63	66	62	63	66	67	70	72	73	78	84	89	95	100	100
33	43	49	56	59	62	63	64	62	65	66	67	70	72	73	75	80	85	90	95	100	100
34	42	47	56	60	62	63	61	63	66	67	70	71	73	75	76	81	86	90	95	100	100
35	40	47	56	60	63	61	62	65	67	68	71	73	74	76	76	81	86	90	95	100	100
36	38	42	56	60	59	61	63	65	67	68	70	72	74	76	77	82	86	91	95	100	100
37	38	45	56	57	61	62	63	65	67	68	70	72	74	76	76	81	86	90	95	100	100
38	37	44	53	58	61	62	65	66	67	69	69	73	75	76	77	82	86	91	95	100	100
39	37	41	53	58	62	63	65	65	66	68	69	72	74	76	76	81	86	90	95	100	100
40	34	40	53	58	62	63	65	65	66	68	68	71	75	76	77	82	86	91	95	100	100



Issue Age	Duration																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
41	34	41	53	58	62	63	65	64	64	66	68	70	74	76	77	82	86	91	95	100
42	34	43	53	58	61	62	63	63	63	64	66	69	72	75	77	82	86	91	95	100
43	34	43	54	59	60	61	63	62	62	64	66	67	72	74	77	82	86	91	95	100
44	34	44	54	58	59	60	61	60	61	62	64	67	71	74	77	82	86	91	95	100
45	34	45	53	58	59	60	60	60	59	60	63	66	71	74	77	82	86	91	95	100
46	31	43	52	56	57	58	59	59	59	60	63	67	71	74	75	80	85	90	95	100
47	32	42	50	53	55	56	57	58	59	60	65	68	71	74	75	80	85	90	95	100
48	32	41	47	52	54	56	57	57	57	61	65	68	72	73	74	79	84	90	95	100
49	30	40	46	49	52	54	55	56	57	61	66	69	72	73	74	79	84	90	95	100
50	30	38	44	47	51	53	54	56	57	61	66	71	72	73	75	80	85	90	95	100
51	28	37	42	46	49	53	54	56	57	61	66	71	72	73	75	80	85	90	95	100
52	28	35	41	45	49	51	54	56	57	61	66	71	72	74	75	80	85	90	100	100
53	27	35	39	44	48	51	53	55	57	61	67	71	74	75	76	81	86	100	100	100
54	27	33	38	44	48	50	53	55	57	61	67	72	74	75	76	81	100	100	100	100
55	25	32	37	43	47	50	53	55	57	61	68	72	74	75	78	100	100	100	100	100
56	25	32	37	43	47	49	51	54	56	61	67	70	73	74	100	100	100	100	100	100
57	24	31	38	43	47	49	51	54	56	59	66	69	72	100	100	100	100	100	100	100
58	24	31	38	43	48	48	50	53	56	59	64	67	100	100	100	100	100	100	100	100
59	23	30	39	43	48	48	51	53	55	58	63	100	100	100	100	100	100	100	100	100
60	23	30	39	43	48	47	50	52	53	57	100	100	100	100	100	100	100	100	100	100
61	23	30	39	43	49	49	50	52	53	75	100	100	100	100	100	100	100	100	100	100
62	23	30	39	44	49	49	51	52	75	75	100	100	100	100	100	100	100	100	100	100
63	22	30	39	45	50	50	52	75	75	75	100	100	100	100	100	100	100	100	100	100
64	22	30	39	45	50	51	75	75	75	75	100	100	100	100	100	100	100	100	100	100
65	22	30	39	45	50	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
66	22	30	39	45	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
67	22	30	39	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
68	23	32	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
69	23	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
70	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100



Issue Age	Male, Aggregate																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
71	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
72	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
73	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
74	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
75	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
76	48	52	55	60	60	65	70	70	70	100	100	100	100	100	100	100	100	100	100	100
77	48	52	55	60	60	65	70	70	100	100	100	100	100	100	100	100	100	100	100	100
78	48	52	55	60	60	65	70	100	100	100	100	100	100	100	100	100	100	100	100	100
79	48	52	55	60	60	65	100	100	100	100	100	100	100	100	100	100	100	100	100	100
80	48	52	55	60	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
81	48	52	55	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
82	48	52	55	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
83	48	52	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
84	48	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
85+	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100



Issue	Duration																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
Age	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
0-15	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
16	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
17	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
18	93	95	96	98	99	100	100	100	90	92	92	92	92	95	95	96	97	98	98	99
19	80	81	83	86	87	87	79	79	79	81	81	82	83	83	86	89	92	94	97	100
20	65	68	69	72	74	69	69	67	69	70	71	71	72	72	75	80	85	90	95	100
21	63	66	68	71	66	66	67	66	67	70	70	70	71	71	73	78	84	89	95	100
22	62	65	66	62	63	64	64	64	67	68	68	68	70	70	73	78	84	89	95	100
23	60	62	58	60	62	62	63	63	64	67	68	68	67	69	71	77	83	88	94	100
24	59	55	56	58	59	60	61	61	63	65	67	66	66	69	71	77	83	88	94	100
25	52	53	55	56	58	58	60	60	61	64	64	64	64	67	70	76	82	88	94	100
26	51	53	55	56	58	60	61	61	61	63	64	64	66	69	67	74	80	87	93	100
27	51	52	55	58	60	60	61	61	62	63	64	66	67	66	67	74	80	87	93	100
28	49	52	57	58	60	61	63	62	62	64	66	66	66	66	68	74	81	87	94	100
29	49	51	57	60	61	61	62	62	63	64	66	63	65	67	68	74	81	87	94	100
30	49	51	57	60	61	62	63	63	63	64	62	63	66	68	70	76	82	88	94	100
31	47	50	57	60	60	62	63	64	64	62	63	65	67	70	71	77	83	88	94	100
32	46	50	57	60	62	63	64	64	62	63	65	66	68	71	72	78	83	89	94	100
33	45	49	56	60	62	63	64	62	63	65	66	68	71	73	74	79	84	90	95	100
34	43	48	56	62	63	64	62	62	65	66	67	70	72	74	74	79	84	90	95	100
35	41	47	56	62	63	61	62	63	66	67	68	70	72	74	75	80	85	90	95	100
36	40	47	56	62	59	61	62	63	66	67	68	70	72	74	75	80	85	90	95	100
37	38	45	56	58	59	61	62	63	66	67	67	69	71	73	74	79	84	90	95	100
38	38	45	53	58	61	62	63	65	65	67	68	70	72	74	73	78	84	89	95	100
39	37	41	53	58	61	62	63	64	65	67	68	70	71	73	73	78	84	89	95	100
40	34	41	53	58	61	62	63	64	64	66	67	69	71	73	72	78	83	89	94	100



Issue Age	Duration																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
41	34	41	53	58	61	61	62	62	63	65	65	67	69	71	71	77	83	88	94	100
42	34	43	53	58	60	61	62	61	61	63	64	66	67	69	71	77	83	88	94	100
43	32	43	53	58	60	61	60	60	60	60	62	64	66	68	69	75	81	88	94	100
44	32	44	52	57	59	60	60	59	59	58	60	62	65	67	69	75	81	88	94	100
45	32	44	52	57	59	60	59	57	57	57	59	61	63	66	68	74	81	87	94	100
46	32	42	50	54	56	57	57	56	55	56	59	61	63	65	67	74	80	87	93	100
47	30	40	48	52	54	55	55	54	54	55	59	61	62	63	66	73	80	86	93	100
48	30	40	46	49	51	52	53	53	54	55	57	61	62	63	63	70	78	85	93	100
49	29	39	43	48	50	51	50	51	53	54	57	61	61	62	62	70	77	85	92	100
50	29	37	42	45	47	48	49	50	51	54	57	61	61	61	61	69	77	84	92	100
51	27	35	40	43	45	47	48	50	51	53	57	60	61	61	62	70	77	85	92	100
52	27	34	39	42	44	45	48	49	50	53	56	60	60	62	62	70	77	85	100	100
53	25	31	37	41	44	45	47	49	50	51	56	59	61	61	62	70	77	100	100	100
54	25	30	36	39	43	44	47	48	49	51	55	59	59	61	62	70	100	100	100	100
55	24	29	35	38	42	43	45	48	49	50	56	58	59	61	62	100	100	100	100	100
56	23	29	35	38	42	42	44	47	48	50	55	57	58	59	100	100	100	100	100	100
57	23	28	35	38	42	42	43	45	47	49	53	55	56	100	100	100	100	100	100	100
58	22	28	33	37	41	41	43	45	45	47	51	53	100	100	100	100	100	100	100	100
59	22	26	33	37	41	41	42	44	44	46	50	100	100	100	100	100	100	100	100	100
60	20	26	33	37	41	40	41	42	42	45	100	100	100	100	100	100	100	100	100	100
61	20	26	33	37	41	40	41	42	42	45	100	100	100	100	100	100	100	100	100	100
62	19	25	32	38	40	40	41	42	42	45	100	100	100	100	100	100	100	100	100	100
63	19	25	33	36	40	40	41	41	75	75	100	100	100	100	100	100	100	100	100	100
64	18	24	32	36	39	40	40	75	75	75	100	100	100	100	100	100	100	100	100	100
65	18	24	32	36	39	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
66	18	24	32	36	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
67	18	24	32	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
68	18	24	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
69	18	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
70	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100



Issue Age	Male, Non-Smoker																			
	Duration																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
71	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
72	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
73	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
74	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
75	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
76	48	52	55	60	60	65	70	70	70	100	100	100	100	100	100	100	100	100	100	100
77	48	52	55	60	60	65	70	70	100	100	100	100	100	100	100	100	100	100	100	100
78	48	52	55	60	60	65	70	100	100	100	100	100	100	100	100	100	100	100	100	100
79	48	52	55	60	60	65	100	100	100	100	100	100	100	100	100	100	100	100	100	100
80	48	52	55	60	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
81	48	52	55	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
82	48	52	55	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
83	48	52	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
84	48	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
85+	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Issue	Male, Smoker																				
	Duration																				
Age	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+	
0-15	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
16	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
17	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
18	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
19	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
20	98	100	100	100	100	100	100	99	99	99	100	99	99	99	99	100	100	100	100	100	100
21	95	98	99	100	95	96	96	95	96	97	97	96	96	96	96	97	98	98	99	99	100
22	92	95	96	90	90	93	93	92	93	95	95	93	93	92	93	94	96	97	99	99	100
23	90	92	85	88	88	89	89	89	90	90	90	90	89	90	92	94	95	97	98	100	100
24	87	81	82	85	84	86	88	86	86	88	88	86	86	88	89	91	93	96	98	100	100
25	77	78	79	82	81	83	83	82	83	85	84	84	84	85	86	89	92	94	97	97	100
26	75	77	79	82	82	83	83	82	83	84	84	84	84	85	81	85	89	92	96	96	100
27	73	75	78	82	82	83	83	82	82	82	82	84	84	80	81	85	89	92	96	96	100
28	71	73	79	82	81	82	83	81	81	82	82	82	80	80	81	85	89	92	96	96	100
29	69	72	78	81	81	82	82	81	81	81	81	77	80	80	81	85	89	92	96	96	100
30	68	71	78	81	81	81	82	81	81	81	76	77	80	80	81	85	89	92	96	96	100
31	65	70	77	81	79	81	82	81	81	76	77	79	81	81	83	86	90	93	97	97	100
32	63	67	77	78	79	81	81	81	76	77	77	80	83	83	85	88	91	94	97	97	100
33	60	65	74	78	79	79	81	76	77	77	79	80	83	85	85	88	91	94	97	97	100
34	57	62	74	77	79	79	75	76	77	79	79	81	83	85	87	90	92	95	97	97	100
35	53	60	73	77	79	75	75	76	77	79	80	82	84	86	88	90	93	95	98	98	100
36	52	59	71	75	74	75	75	76	77	79	79	81	83	85	87	90	92	95	97	97	100
37	49	58	70	71	74	74	75	76	77	78	79	81	84	86	86	89	92	94	97	97	100
38	48	55	66	70	72	74	74	75	76	78	79	81	83	85	87	90	92	95	97	97	100
39	45	50	65	70	72	72	74	74	75	77	79	81	84	86	86	89	92	94	97	97	100
40	41	49	63	68	71	72	73	74	74	76	78	80	83	85	86	89	92	94	97	97	100



Issue Age	Duration																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
41	40	49	63	68	71	72	72	72	73	75	76	78	81	84	85	88	91	94	97	100
42	40	49	62	68	70	71	71	71	71	73	75	76	81	83	85	88	91	94	97	100
43	39	50	62	67	69	69	70	70	70	71	73	76	79	83	85	88	91	94	97	100
44	39	50	60	66	68	69	68	69	69	69	71	74	79	81	85	88	91	94	97	100
45	37	50	60	66	68	68	68	67	67	67	69	73	78	81	85	88	91	94	97	100
46	37	48	58	63	65	67	66	66	66	67	71	74	78	81	84	87	90	94	97	100
47	36	47	55	61	63	64	64	64	65	67	71	75	79	81	84	87	90	94	97	100
48	35	46	53	58	60	62	63	63	65	67	72	75	79	81	83	86	90	93	97	100
49	34	45	51	56	58	59	61	62	63	67	72	77	80	81	83	86	90	93	97	100
50	34	43	49	53	55	57	60	61	63	67	73	78	80	81	81	85	89	92	96	100
51	32	42	47	52	55	57	60	61	63	67	73	78	80	83	84	87	90	94	97	100
52	32	40	46	50	54	56	60	61	63	67	73	78	81	84	85	88	91	94	100	100
53	30	37	44	49	54	56	59	61	65	67	74	79	83	85	87	90	92	100	100	100
54	30	36	43	48	53	55	59	61	65	67	74	80	84	85	89	91	100	100	100	100
55	29	35	42	47	53	55	59	61	65	67	75	80	84	86	90	100	100	100	100	100
56	28	35	42	47	53	55	57	60	63	68	74	79	83	85	100	100	100	100	100	100
57	28	35	42	47	53	54	57	60	64	67	74	78	81	100	100	100	100	100	100	100
58	26	33	43	48	54	54	56	59	63	67	73	78	100	100	100	100	100	100	100	100
59	26	33	43	48	54	53	57	59	63	66	73	100	100	100	100	100	100	100	100	100
60	25	33	43	48	54	53	56	58	62	66	100	100	100	100	100	100	100	100	100	100
61	25	33	43	49	55	55	57	59	63	75	100	100	100	100	100	100	100	100	100	100
62	25	33	43	50	56	56	58	61	75	75	100	100	100	100	100	100	100	100	100	100
63	24	33	45	51	56	56	59	75	75	75	100	100	100	100	100	100	100	100	100	100
64	24	34	45	51	57	57	75	75	75	75	100	100	100	100	100	100	100	100	100	100
65	24	34	45	52	57	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
66	24	35	45	53	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
67	25	35	45	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
68	25	36	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
69	27	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
70	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100



Issue Age	Male, Smoker																			
	Duration																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
71	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
72	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
73	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
74	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
75	48	52	55	60	60	65	70	70	70	70	100	100	100	100	100	100	100	100	100	100
76	48	52	55	60	60	65	70	70	70	100	100	100	100	100	100	100	100	100	100	100
77	48	52	55	60	60	65	70	70	100	100	100	100	100	100	100	100	100	100	100	100
78	48	52	55	60	60	65	70	100	100	100	100	100	100	100	100	100	100	100	100	100
79	48	52	55	60	60	65	100	100	100	100	100	100	100	100	100	100	100	100	100	100
80	48	52	55	60	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
81	48	52	55	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
82	48	52	55	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
83	48	52	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
84	48	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
85+	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100



Issue Age	Duration																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
0-15	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
16	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
17	99	100	100	100	100	100	100	100	93	95	96	97	97	100	100	100	100	100	100	100
18	83	83	84	84	84	84	86	78	78	79	82	84	85	88	88	90	93	95	98	100
19	65	66	68	68	68	68	63	63	64	66	69	71	72	74	75	80	85	90	95	100
20	48	50	51	51	51	47	48	48	49	51	56	57	58	61	63	70	78	85	93	100
21	47	48	50	51	47	47	48	49	51	53	57	60	61	64	64	71	78	86	93	100
22	44	47	48	45	47	47	48	49	53	54	60	61	63	64	66	73	80	86	93	100
23	42	45	44	45	47	47	49	51	53	54	61	64	64	67	69	75	81	88	94	100
24	39	40	42	44	47	47	50	51	54	56	64	64	66	69	70	76	82	88	94	100
25	34	38	41	44	47	47	50	53	56	57	64	67	69	71	73	78	84	89	95	100
26	34	38	41	45	49	49	51	56	58	59	66	69	70	73	70	76	82	88	94	100
27	34	38	41	47	50	51	54	57	59	60	69	70	73	70	71	77	83	88	94	100
28	34	37	43	47	53	53	56	59	62	63	70	73	70	72	74	79	84	90	95	100
29	34	38	43	49	54	56	58	60	63	64	73	70	72	74	75	80	85	90	95	100
30	35	38	43	50	56	56	59	63	66	67	70	71	74	75	76	81	86	90	95	100
31	35	38	43	51	56	58	60	64	67	65	71	72	74	75	76	81	86	90	95	100
32	35	39	45	51	56	59	63	66	65	66	72	72	75	76	76	81	86	90	95	100
33	36	39	44	52	58	62	64	65	66	67	72	74	75	76	76	81	86	90	95	100
34	36	40	45	52	58	63	63	66	67	68	74	74	76	76	76	81	86	90	95	100
35	36	40	45	53	59	61	65	67	68	70	75	74	75	76	75	80	85	90	95	100
36	36	40	45	53	55	62	65	67	68	70	74	74	74	75	75	80	85	90	95	100
37	36	41	47	52	57	62	65	67	68	69	72	72	73	75	74	79	84	90	95	100
38	34	41	44	52	57	63	66	68	69	70	72	71	72	74	75	80	85	90	95	100
39	34	40	45	53	58	63	66	68	69	69	70	70	70	73	74	79	84	90	95	100
40	32	40	45	53	58	65	65	67	68	69	70	69	70	73	73	78	84	89	95	100



Issue Age	Female, Aggregate Duration																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
41	32	40	45	53	57	63	64	67	68	68	69	69	69	73	74	79	84	90	95	100
42	32	40	45	52	56	61	63	65	66	68	69	68	70	74	75	80	85	90	95	100
43	31	39	45	51	55	59	61	65	65	66	68	69	69	74	77	82	86	91	95	100
44	31	39	45	50	54	58	61	63	64	66	67	68	71	75	78	82	87	91	96	100
45	31	38	44	49	53	56	59	62	63	65	67	68	71	77	79	83	87	92	96	100
46	29	37	43	48	51	54	59	62	63	65	67	69	71	77	78	82	87	91	96	100
47	28	35	41	46	49	54	57	61	62	66	68	69	71	77	77	82	86	91	95	100
48	28	35	41	44	49	52	57	61	63	66	68	71	72	75	77	82	86	91	95	100
49	26	34	39	43	47	52	55	61	63	67	69	71	72	75	75	80	85	90	95	100
50	25	32	38	41	46	50	55	61	63	67	69	72	72	75	74	79	84	90	95	100
51	25	32	38	41	45	50	55	61	63	66	68	69	71	74	74	79	84	90	95	100
52	23	30	36	41	45	51	56	61	62	65	66	68	68	73	73	78	84	89	100	100
53	23	30	36	41	47	51	56	61	62	63	65	66	68	72	72	78	83	100	100	100
54	22	29	35	41	47	53	57	61	61	62	62	66	66	69	70	76	100	100	100	100
55	22	29	35	41	47	53	57	61	61	61	62	63	64	68	69	100	100	100	100	100
56	22	29	35	41	45	51	56	59	60	61	62	63	64	67	100	100	100	100	100	100
57	22	29	35	41	45	50	54	56	58	59	61	62	63	100	100	100	100	100	100	100
58	22	30	36	41	44	49	53	56	57	57	61	62	100	100	100	100	100	100	100	100
59	22	30	36	41	44	48	51	53	55	56	59	100	100	100	100	100	100	100	100	100
60	22	30	36	41	43	47	50	51	53	55	100	100	100	100	100	100	100	100	100	100
61	22	29	35	39	42	46	49	50	52	80	100	100	100	100	100	100	100	100	100	100
62	20	28	33	39	41	45	47	49	80	80	100	100	100	100	100	100	100	100	100	100
63	20	28	33	38	41	44	46	80	80	80	100	100	100	100	100	100	100	100	100	100
64	19	27	32	36	40	42	80	80	80	80	100	100	100	100	100	100	100	100	100	100
65	19	25	30	35	39	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
66	19	25	30	35	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
67	19	25	30	72	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
68	19	25	68	72	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
69	19	64	68	72	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
70	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100



Issue Age	Female, Aggregate Duration																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
71	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
72	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
73	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
74	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
75	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
76	60	60	64	68	68	72	75	75	80	100	100	100	100	100	100	100	100	100	100	100
77	60	60	64	68	68	72	75	75	100	100	100	100	100	100	100	100	100	100	100	100
78	60	60	64	68	68	72	75	100	100	100	100	100	100	100	100	100	100	100	100	100
79	60	60	64	68	68	72	100	100	100	100	100	100	100	100	100	100	100	100	100	100
80	60	60	64	68	68	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
81	60	60	64	68	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
82	60	60	64	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
83	60	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
84	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
85+	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100



Issue	Female, Non-Smoker																			
	Duration																			
Age	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
0-15	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
16	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
17	96	98	98	98	98	99	99	99	92	92	93	95	95	97	99	99	99	100	100	100
18	78	80	80	80	80	81	81	74	75	75	78	79	82	83	85	88	91	94	97	100
19	60	62	63	63	63	65	59	59	60	60	64	67	67	70	72	78	83	89	94	100
20	42	44	45	45	45	42	42	42	45	45	50	51	53	56	58	66	75	83	92	100
21	41	42	44	45	41	42	42	44	47	47	51	53	54	57	59	67	75	84	92	100
22	39	41	44	41	41	42	44	45	49	49	54	56	57	58	60	68	76	84	92	100
23	38	41	38	40	41	42	44	46	49	50	56	57	58	60	62	70	77	85	92	100
24	36	36	38	40	41	42	46	47	50	51	58	59	60	62	63	70	78	85	93	100
25	32	34	37	40	41	43	46	49	51	53	59	60	62	63	64	71	78	86	93	100
26	32	34	37	41	43	45	47	50	53	53	60	62	63	64	62	70	77	85	92	100
27	32	34	38	43	46	47	49	51	53	55	62	63	64	62	62	70	77	85	92	100
28	30	34	39	43	47	49	51	53	56	58	63	63	61	62	63	70	78	85	93	100
29	30	35	40	45	50	51	52	55	58	59	64	61	62	63	63	70	78	85	93	100
30	31	35	40	46	51	52	53	56	59	60	62	62	63	65	65	72	79	86	93	100
31	31	35	40	46	51	53	55	58	60	58	62	62	63	65	65	72	79	86	93	100
32	32	35	40	45	51	53	56	59	57	58	62	63	63	65	64	71	78	86	93	100
33	32	36	41	47	52	55	58	55	58	59	63	63	65	65	65	72	79	86	93	100
34	33	36	41	47	52	55	55	57	58	59	63	65	64	65	64	71	78	86	93	100
35	33	36	41	47	52	53	57	58	59	61	63	64	64	64	64	71	78	86	93	100
36	33	36	41	47	49	53	57	58	59	61	63	64	63	64	63	70	78	85	93	100
37	32	36	41	44	49	53	57	58	59	60	62	62	61	62	63	70	78	85	93	100
38	32	37	39	45	50	54	57	58	60	60	61	61	61	62	61	69	77	84	92	100
39	30	35	39	45	50	54	57	58	60	59	60	60	59	60	61	69	77	84	92	100
40	28	35	39	45	50	54	56	57	59	59	60	59	59	59	60	68	76	84	92	100



Issue Age	Female, Non-Smoker																			
	Duration																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
41	28	35	39	45	49	52	55	55	58	57	58	59	58	59	60	68	76	84	92	100
42	27	35	39	44	49	52	54	55	56	57	57	57	58	60	61	69	77	84	92	100
43	27	34	39	44	47	50	53	53	55	55	56	57	56	60	61	69	77	84	92	100
44	26	34	38	42	47	50	52	53	54	55	55	55	56	61	62	70	77	85	92	100
45	26	33	38	42	45	48	51	51	52	53	54	55	56	61	62	70	77	85	92	100
46	24	32	37	40	43	47	49	51	52	53	54	55	56	60	61	69	77	84	92	100
47	24	30	35	39	42	45	47	49	51	53	54	55	56	59	60	68	76	84	92	100
48	23	30	35	37	40	44	47	49	50	53	54	55	55	59	57	66	74	83	91	100
49	23	29	33	35	39	42	45	48	50	53	54	55	55	57	56	65	74	82	91	100
50	21	27	32	34	37	41	44	48	50	53	54	55	55	56	55	64	73	82	91	100
51	21	26	30	34	37	41	44	48	49	51	53	53	54	55	55	64	73	82	91	100
52	20	25	30	33	37	41	44	47	48	50	50	51	51	55	53	62	72	81	100	100
53	19	24	29	32	37	41	43	47	48	48	49	49	51	52	52	62	71	100	100	100
54	18	24	29	32	37	41	43	45	47	47	47	49	49	51	51	61	100	100	100	100
55	18	23	28	32	37	41	43	45	45	45	46	46	47	50	50	100	100	100	100	100
56	18	23	28	32	36	39	42	44	44	45	46	46	46	49	100	100	100	100	100	100
57	18	23	28	31	35	38	41	42	44	44	45	45	46	100	100	100	100	100	100	100
58	17	23	26	31	35	36	38	41	41	42	45	45	100	100	100	100	100	100	100	100
59	17	23	26	30	33	35	38	39	40	41	44	100	100	100	100	100	100	100	100	100
60	17	23	26	30	32	34	36	38	39	40	100	100	100	100	100	100	100	100	100	100
61	17	22	25	29	32	33	35	36	38	80	100	100	100	100	100	100	100	100	100	100
62	16	22	25	28	30	32	34	35	80	80	100	100	100	100	100	100	100	100	100	100
63	16	20	24	28	30	32	34	80	80	80	100	100	100	100	100	100	100	100	100	100
64	14	21	24	27	29	30	80	80	80	80	100	100	100	100	100	100	100	100	100	100
65	15	19	23	25	28	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
66	15	19	23	25	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
67	15	19	22	72	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
68	13	18	68	72	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
69	13	64	68	72	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
70	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100



Issue Age	Female, Non-Smoker																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
71	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
72	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
73	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
74	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
75	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
76	60	60	64	68	68	72	75	75	80	100	100	100	100	100	100	100	100	100	100	100
77	60	60	64	68	68	72	75	75	100	100	100	100	100	100	100	100	100	100	100	100
78	60	60	64	68	68	72	75	100	100	100	100	100	100	100	100	100	100	100	100	100
79	60	60	64	68	68	72	100	100	100	100	100	100	100	100	100	100	100	100	100	100
80	60	60	64	68	68	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
81	60	60	64	68	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
82	60	60	64	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
83	60	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
84	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
85+	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100



Issue Age	Duration																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+	
0-15	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
16	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
17	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
18	99	100	100	100	100	100	100	95	96	97	100	100	100	100	100	100	100	100	100	100	100
19	87	89	92	92	92	92	84	84	86	86	92	93	95	96	99	99	99	100	100	100	100
20	74	77	80	80	80	73	73	73	75	77	83	83	86	88	90	92	94	96	98	98	100
21	71	74	78	78	71	71	73	74	77	79	85	86	88	89	90	92	94	96	98	98	100
22	68	71	75	70	71	71	73	74	78	79	88	90	89	89	92	94	95	97	98	98	100
23	65	69	67	70	70	70	73	77	79	81	89	90	90	92	92	94	95	97	98	98	100
24	62	60	64	69	70	70	74	77	79	81	92	90	92	93	93	94	96	97	99	99	100
25	53	58	63	67	69	70	74	78	81	82	92	93	93	95	95	96	97	98	99	99	100
26	53	58	63	69	71	72	75	79	82	82	93	93	95	96	90	92	94	96	98	98	100
27	52	56	63	70	74	74	78	81	82	84	93	95	95	90	90	92	94	96	98	98	100
28	52	56	64	71	75	77	79	82	85	86	95	95	90	92	92	94	95	97	98	98	100
29	51	56	64	71	78	78	81	84	86	88	95	90	90	92	92	94	95	97	98	98	100
30	51	56	64	72	79	79	82	85	88	89	90	90	92	93	93	94	96	97	99	99	100
31	51	56	64	72	78	81	84	84	88	84	90	90	92	93	93	94	96	97	99	99	100
32	51	56	64	71	78	81	85	86	84	85	90	90	92	94	93	94	96	97	99	99	100
33	51	57	62	71	78	82	85	83	84	85	90	92	93	93	93	94	96	97	99	99	100
34	51	56	62	71	78	82	81	83	85	86	90	92	92	94	93	94	96	97	99	99	100
35	51	56	62	71	78	79	83	84	85	86	90	91	91	93	93	94	96	97	99	99	100
36	49	56	62	71	74	79	83	84	85	86	90	90	91	93	92	94	95	97	98	98	100
37	48	55	62	67	74	79	83	84	85	86	89	90	89	92	91	93	95	96	98	98	100
38	47	55	57	66	72	77	81	84	86	86	87	88	88	90	91	93	95	96	98	98	100
39	45	50	57	66	72	77	81	83	85	86	86	86	87	89	90	92	94	96	98	98	100
40	41	50	57	66	72	77	81	83	84	85	86	86	86	89	89	91	93	96	98	98	100



Issue Age	Female, Smoker																			
	Duration																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
41	40	50	57	65	71	76	79	81	83	84	85	86	85	89	90	92	94	96	98	100
42	40	49	57	65	69	74	77	80	82	83	84	85	86	90	92	94	95	97	98	100
43	39	49	55	63	69	73	76	78	80	82	83	84	85	92	93	94	96	97	99	100
44	39	48	55	62	67	71	75	78	80	80	82	84	86	93	96	97	98	98	99	100
45	37	47	55	61	65	70	73	76	78	80	81	84	86	94	97	98	98	99	99	100
46	36	46	53	59	63	68	71	75	77	79	83	85	86	93	96	97	98	98	99	100
47	34	44	51	57	62	66	70	75	77	80	83	85	86	93	94	95	96	98	99	100
48	34	44	50	54	60	64	69	74	77	80	84	86	87	92	92	94	95	97	98	100
49	33	42	48	53	58	63	68	74	77	81	84	86	87	92	91	93	95	96	98	100
50	31	41	46	51	57	61	67	74	77	81	85	87	87	91	90	92	94	96	98	100
51	30	39	45	51	56	61	67	74	75	80	83	85	85	90	90	92	94	96	98	100
52	29	38	45	50	56	62	68	74	75	79	81	83	84	90	90	92	94	96	100	100
53	28	37	43	49	57	62	68	73	74	77	79	81	83	89	89	91	93	100	100	100
54	28	36	43	49	57	63	69	73	74	75	78	80	81	87	89	91	100	100	100	100
55	26	35	42	49	57	63	69	73	73	74	76	78	79	86	87	100	100	100	100	100
56	26	35	42	49	56	62	67	71	72	74	76	78	79	85	100	100	100	100	100	100
57	26	35	42	49	55	61	66	69	72	73	76	78	79	100	100	100	100	100	100	100
58	28	36	43	49	55	59	63	68	69	72	76	78	100	100	100	100	100	100	100	100
59	28	36	43	49	54	57	63	67	68	70	76	100	100	100	100	100	100	100	100	100
60	28	36	43	49	53	57	61	64	67	69	100	100	100	100	100	100	100	100	100	100
61	26	35	42	48	52	56	59	63	66	80	100	100	100	100	100	100	100	100	100	100
62	26	33	41	47	51	55	58	62	80	80	100	100	100	100	100	100	100	100	100	100
63	25	33	41	46	51	55	57	80	80	80	100	100	100	100	100	100	100	100	100	100
64	25	33	40	45	50	53	80	80	80	80	100	100	100	100	100	100	100	100	100	100
65	24	32	39	44	49	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
66	24	32	39	44	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
67	24	32	39	72	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
68	24	32	68	72	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
69	24	64	68	72	72	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
70	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100



Issue	Female, Smoker																			
	Duration																			
Age	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
71	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
72	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
73	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
74	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
75	60	60	64	68	68	72	75	75	80	80	100	100	100	100	100	100	100	100	100	100
76	60	60	64	68	68	72	75	75	80	100	100	100	100	100	100	100	100	100	100	100
77	60	60	64	68	68	72	75	75	100	100	100	100	100	100	100	100	100	100	100	100
78	60	60	64	68	68	72	75	100	100	100	100	100	100	100	100	100	100	100	100	100
79	60	60	64	68	68	72	100	100	100	100	100	100	100	100	100	100	100	100	100	100
80	60	60	64	68	68	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
81	60	60	64	68	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
82	60	60	64	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
83	60	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
84	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
85+	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100



AUTHORITY: section 374.045, RSMo Supp. 2010 and sections 376.380, 376.670, and 376.676, RSMo 2000.* *Original rule filed June 15, 2000, effective Jan. 1, 2001. Amended: Filed Sept. 5, 2001, effective March 30, 2002. Amended: Filed Feb. 14, 2011, effective Aug. 30, 2011. Non-substantive change filed Sept. 11, 2019, published Oct. 31, 2019.*

**Original authority: 374.045, RSMo 1967, amended 1993, 1995, 2008; 376.380, RSMo 1939, amended 1943, 1947, 1959, 1961, 1965, 1971, 1975, 1979, 1982, 1993; 376.670, RSMo 1943, amended 1959, 1961, 1965, 1975, 1979, 1982; and 376.676, RSMo 2000.*

20 CSR 200-1.170 Derivatives for Replication Transactions

PURPOSE: This rule sets forth methods of disclosure, reserving for risk-based capital and determining the asset valuation reserve for derivative instruments used for replication transactions.

(1) An insurer may use derivatives for replication transactions as permitted pursuant to section 375.345, RSMo. An insurer engaging in replication transactions shall:

(A) Comply with the following requirements:

1. The disclosure and annual and quarterly statement reporting of such replication transactions;

2. The inclusion of such transaction in the insurer's Risk Based Capital (RBC) Report (as required by sections 375.1250–375.1275, RSMo); and

3. If applicable, the calculation and reporting of the asset valuation reserve for such transaction;

(B) Comply with the filing requirements for Replication Synthetic Asset Transactions (RSATs) contained in the *Purposes and Procedures Manual* of the Securities Valuation Office of the National Association of Insurance Commissioners;

(C) File with the director of the Department of Commerce and Insurance a duplicate copy of all RSAT filings made with the Securities Valuation Office of the National Association of Insurance Commissioners; after June 1, 2004, the director may waive this duplicate filing requirement;

(D) Have a system for determining whether a replication transaction has been effective in replicating the intended investment position; and

(E) Include all replicated investment positions in calculating compliance with the limitations on investments contained in sections

376.300–376.305 and 379.080–379.082, RSMo; provided, that no replicated investment position shall be held pursuant to the additional investment authority contained in sections 376.307 and 379.080.1(2)(m) and (o), RSMo.

(2) Notwithstanding any provision of this regulation to the contrary, an insurer which is not required to file an RBC Report shall not use derivatives for replication transactions.

AUTHORITY: sections 374.045, RSMo 2000 and 375.345, RSMo Supp. 2005.* *Original rule filed Dec. 15, 2005, effective June 30, 2006. Non-substantive change filed Sept. 11, 2019, published Oct. 31, 2019.*

**Original authority: 374.045, RSMo 1967, amended 1993, 1995 and 375.345, RSMo 1985, amended 2002.*