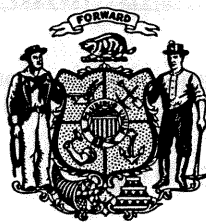


WISCONSIN LEGISLATIVE COUNCIL STAFF

LCRC
FORM 2

RULES CLEARINGHOUSE

Ronald Sklansky
Director
(608) 266-1946



David J. Stute, Director
Legislative Council Staff
(608) 266-1304

Richard Sweet
Assistant Director
(608) 266-2982

One E. Main St., Ste. 401
P.O. Box 2536
Madison, WI 53701-2536
FAX: (608) 266-3830

CLEARINGHOUSE REPORT TO AGENCY

[THIS REPORT HAS BEEN PREPARED PURSUANT TO S. 227.15, STATS. THIS IS A REPORT ON A RULE AS ORIGINALLY PROPOSED BY THE AGENCY; THE REPORT MAY NOT REFLECT THE FINAL CONTENT OF THE RULE IN FINAL DRAFT FORM AS IT WILL BE SUBMITTED TO THE LEGISLATURE. THIS REPORT CONSTITUTES A REVIEW OF, BUT NOT APPROVAL OR DISAPPROVAL OF, THE SUBSTANTIVE CONTENT AND TECHNICAL ACCURACY OF THE RULE.]

CLEARINGHOUSE RULE 99-014

AN ORDER to repeal and recreate Ins 2.80, relating to valuation of life insurance policies model regulation.

Submitted by **OFFICE OF THE COMMISSIONER OF INSURANCE**

01-29-99 RECEIVED BY LEGISLATIVE COUNCIL.

02-25-99 REPORT SENT TO AGENCY.

RNS:GAA:kjf:jal

LEGISLATIVE COUNCIL RULES CLEARINGHOUSE REPORT

This rule has been reviewed by the Rules Clearinghouse. Based on that review, comments are reported as noted below:

1. STATUTORY AUTHORITY [s. 227.15 (2) (a)]

Comment Attached YES NO

2. FORM, STYLE AND PLACEMENT IN ADMINISTRATIVE CODE [s. 227.15 (2) (c)]

Comment Attached YES NO

3. CONFLICT WITH OR DUPLICATION OF EXISTING RULES [s. 227.15 (2) (d)]

Comment Attached YES NO

4. ADEQUACY OF REFERENCES TO RELATED STATUTES, RULES AND FORMS
[s. 227.15 (2) (e)]

Comment Attached YES NO

5. CLARITY, GRAMMAR, PUNCTUATION AND USE OF PLAIN LANGUAGE [s. 227.15 (2) (f)]

Comment Attached YES NO

6. POTENTIAL CONFLICTS WITH, AND COMPARABILITY TO, RELATED FEDERAL
REGULATIONS [s. 227.15 (2) (g)]

Comment Attached YES NO

7. COMPLIANCE WITH PERMIT ACTION DEADLINE REQUIREMENTS [s. 227.15 (2) (h)]

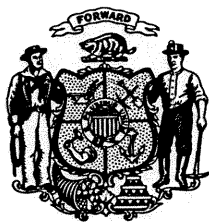
Comment Attached YES NO

WISCONSIN LEGISLATIVE COUNCIL STAFF

RULES CLEARINGHOUSE

Ronald Sklansky
Director
(608) 266-1946

Richard Sweet
Assistant Director
(608) 266-2982



David J. Stute, Director
Legislative Council Staff
(608) 266-1304

One E. Main St., Ste. 401
P.O. Box 2536
Madison, WI 53701-2536
FAX: (608) 266-3830

CLEARINGHOUSE RULE 99-014

Comments

[NOTE: All citations to "Manual" in the comments below are to the Administrative Rules Procedures Manual, prepared by the Revisor of Statutes Bureau and the Legislative Council Staff, dated September 1998.]

2. Form, Style and Placement in Administrative Code

a. In s. Ins 2.80 (3) (b), the parentheses should be eliminated and material should be set apart with commas or placed in an explanatory note. [See s. 1.01 (6), Manual.]

b. In s. Ins 2.80 (3) (f), "see s. 623.06 (2) (am), Stats." should be replaced by "as provided in s. 623.06 (2) (am), Stats." Also, "s. INS" should be replaced by "ss. Ins".

c. The definition of "segmented reserves" in s. Ins 2.80 (3) (h) appears to involve substantive provisions. Substantive provisions may not be incorporated as part of a definition. [See s. 1.01 (7) (b), Manual.]

d. In s. Ins 2.80 (3) (h) 2., "see sub. (5) (g)," should be replaced by "as provided in sub. (5) (g)." The same problem occurs in s. Ins 2.80 (3) (j).

e. In s. Ins 2.80 (4) (a) 2., reference is made to "base select mortality factors." In s. Ins 2.80 (4) (b) 2., reference is made to "select mortality factors." References should be consistent as either the select mortality factors or base select mortality factors. It appears that the tables in Appendix I are "select mortality factors."

f. In s. Ins 3.80 (4) (b) 3. b., reference is made to "twenty percent (20%)." This is inappropriate. Numbers other than one should be written in numerals unless they begin a sentence. [See s. 1.01 (5), Manual.] Moreover, it is unnecessary to provide a parenthetical explanation of a

number. For another example of this problem, see s. Ins 2.80 (4) (b) 3. e. The entire rule should be reviewed for occurrences of this problem.

g. In s. Ins 2.80 (4) (b) 3. i., "percent" should be replaced by a percent sign. Also in the sentence, "shall annually opine" should be replaced with "shall annually offer an opinion." In the next sentence, "actuarial standards of practice" and "actuarial standards board of the American academy of actuaries" should not be capitalized, except for "American." [See s. 1.01 (4) (a), Manual.]

h. In s. 2.80 (4) (c), "see s. 623.06 (2) (am)" should be replaced by "as provided in s. 623.06 (2) (am), Stats." Also, "tenth" should be replaced by "10th."

i. In s. Ins 2.80 (5) (c), "Pars." should be replaced by "Paragraphs."

j. In s. Ins 2.80 (5) (f), the acronym "NAIC" should be spelled out or defined. [See s. 1.01 (8), Manual.] Also, "standard valuation law" should be shown in lower case. [See s. 1.01 (4), Manual.]

k. In s. Ins 2.80 (6) (a) 3., "the features described in" should precede "subds. 1."

l. In s. Ins 2.80 (6) (i) (intro.), "the following" should be inserted before the colon. In subd. 1., a period should replace "; or".

4. Adequacy of References to Related Statutes, Rules and Forms

In s. Ins 2.80 (6) (h), "sub. (5) (b), (c), (d) and (e)" should replace "sub. (5) (b), 5 (c), 5 (d), and 5 (e)."

5. Clarity, Grammar, Punctuation and Use of Plain Language

a. The emergency rule adopted by the Commissioner of Insurance delays the effective date for the model regulation from January 1, 1999 to July 1, 1999. However, this rule provides that the proposed rule will be effective January 1, 2000. What rule will be effective in the interim?

b. Section Ins 2.80 (2) (b) 1. a. and b. should start with "The."

**PROPOSED ORDER OF THE OFFICE OF THE COMMISSIONER OF INSURANCE REPEALING
AND CREATING A RULE**

To repeal and recreate INS 2.80, Wis. Adm. Code, relating to valuation of life insurance policies model regulation.

ANALYSIS PREPARED BY THE OFFICE OF THE COMMISSIONER OF INSURANCE

Statutory authority: ss. 601.41(3), ~~CH.~~ 623, Stats.

Statutes interpreted: ~~CH.~~ 623, Stats.

On December 16, 1997 the Commissioner created Ins 2.80, Wis. Adm. Code adopting the 1995 National Association of Insurance Commissioners ("NAIC") valuation of life insurance policies model regulation, or "XXX" and tables of select mortality factors. This rule concerning requirements for determining the valuation of reserve liabilities for life insurance policies was to take effect on January 1, 1999. However by emergency rule the Commissioner delayed effectiveness of the 1995 NAIC XXX model regulation in Wisconsin until July 1, 1999.

Few states adopted the 1995 NAIC XXX model regulation and in 1998 a consortium of NAIC and insurance industry representatives endeavored to establish a set of valuation mortality standards more in line with current experience, thereby making uniform adoption by the states more likely. As a result of this effort on December 5, 1998 the NAIC Life and Health Actuarial Task Force adopted revisions to XXX (the 1998 NAIC XXX model regulation) which the full NAIC is expected to approve at its March 1999 meeting. This proposed rule would substitute the 1998 NAIC XXX model regulation and tables of select mortality factors for the 1995 version and make it effective January 1, 2000.

This rule results from a revision of a current rule. However due to it's highly technical nature OCI has elected to repeal and recreate the rule in order to keep it in a form as similar as possible to the NAIC model yet comply with Wisconsin rule-drafting requirements. The current rule has not yet been put into effect so showing changes to that rule is not informative. However a "line and strike" version is available showing the differences between the 1995 and 1998 NAIC model regulations and will be available at the hearing. The new tables of select mortality factors are attached and are incorporated as an appendix to the rule. OCI may request approval from the

attorney general and revisor to incorporate the tables by reference to the appropriate NAIC or other publication.

The American Academy of Actuaries, their Actuarial Standards Board and the Society of Actuaries have given the opinion that this rule and attached tables of select mortality factors meet the requirements of the standard evaluation law (Ch. 623 Stats.). OCI's actuary has stated that adoption of this rule meets the actuarial opinion requirement s. 623.06 (1m) c., Stats. and the revised tables comply with s. 623.06 (2) (am) 3., Stats.

SECTION 1. Section Ins 2.80 is repealed and recreated to read:

Ins 2.80 Valuation of life insurance policies

(1) PURPOSE. (a) This section establishes minimum standards under ch. 623, Stats., for life insurance policy reserves by providing tables of select mortality factors, establishing rules concerning a minimum standard for the valuation of plans with non-level premiums or benefits, and establishing rules concerning a minimum standard for the valuation of plans with secondary guarantees.

(b) The method for calculating basic reserves defined in this section constitutes the commissioner's reserve valuation method for policies to which this section is applicable.

(2) SCOPE. This section applies to all life insurance policies, wherever sold, with or without nonforfeiture values, issued on or after January 1, 2000, subject to the following exceptions and conditions:

(a) This section does not apply to any individual life insurance policy issued on or after January 1, 2000, 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 that was issued before January 1, 2000 that guarantees the premium rates of the new policy. This section also does not apply to subsequent policies issued as a result of the exercise of such a provision in the new policy.

(b) This section does not apply to any of the following:

1. Any universal life policy that meets all the following requirements:

- JDe*
- a. Secondary guarantee period, if any, is five (5) years or less.
- JDe*
- 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 sub. (3) (f) and the applicable valuation interest rate.

c. The initial surrender charge is not less than 100 percent of the first year annualized specified premium for the secondary guarantee period.

2. 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.

3. 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.

4. Group life insurance certificates, unless the certificates provide 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 year.

(c) 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 sub. (5).

(d) 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 sub. (6).

(3) DEFINITIONS. In this section:

(a) "Basic reserves" means reserves calculated in accordance with the principles of s. 623.06(3), Stats.

(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, or 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 table and, if elected, the optional minimum mortality standard for deficiency reserves in sub. (4)(b). The length of a particular contract segment shall be set 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 = the number of years from the beginning of the segment = 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, ignoring policy fees only if level for the premium paying period of the policy, for year t of the segment.

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.

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

however, R_t may be increased or decreased by one percent in any policy year, at the insurer's option, but R_t may 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 sub. 4 (b) 2. if sub. 4 (b) 3. is elected for deficiency reserves.

Note: The purpose of the one percent tolerance in the R factor is to prevent irrational segment lengths due to such things as premium rounding. For example, consider a plan in which gross premiums are designed at some point to be a ratio times the underlying ultimate mortality rates, where the ratio varies by issue age. The resulting segments may be greater than one year, because the gross premiums are not expressed in fractional cents. The tolerance factor allows the creation of one-year segments for a plan in which premiums parallel the underlying valuation mortality table.

(c) "Deficiency reserves" means the excess, if greater than zero, of minimum reserves calculated in accordance with the principles of s. 623.06(7) Stats., over basic reserves.

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

(e) "Maximum valuation interest rates" means the interest rates defined in s. 623.06(2m), Stats. that are to be used in determining the minimum standard for the valuation of life insurance policies.

(f) "1980 CSO valuation table" means the commissioner's' 1980 standard ordinary mortality table without 10-year select mortality factors, incorporated into the 1980 amendments to the national association of insurance commissioner's standard valuation law see s. 623.06(2)(am), Stats. and variations of the 1980 CSO valuation table approved by the national association of insurance commissioners, such as the unisex and smoker and non-smoker versions approved in December 1983 and adopted by s. ~~IM~~ 2.20 and 2.35. 611

Note: This paragraph defines the 1980 CSO valuation table without the existing ten-year select mortality factors to assure that, if select mortality factors are elected, only one set of factors may be applied to the base valuation mortality table.

(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 sub. (6)(c), if any, or else the minimum prescribed in sub. (6)(d).

(h) "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 is calculated in the following manner:

1. The present value of the death benefits within the segment, plus
2. The present value of any unusual guaranteed cash value, see sub. (5)(g), occurring at the end of the segment, less

3. Any usual guaranteed cash value occurring at the start of the segment, plus

4. For the first segment only, the excess of subdivision paragraph a. over subdivision paragraph b., as follows:

a. 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 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 may not exceed the net level annual premium on the 19-year premium whole life plan of insurance of the same renewal year equivalent level amount at an age one year higher than the age at issue of the policy.

b. A net one-year term premium for the benefits provided for in the first policy year.

5. The length of each segment is determined by the contract segmentation method.

6. 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 length of all segments of the policy.

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

Note: The segmentation requirement should not be limited to plans with no cash surrender values; otherwise companies could avoid segmentation entirely by designing policies with minimal (positive) cash values. Segmentation for plans with cash surrender values should be based solely upon gross premium levels. Basing segmentation upon the level of cash surrender values introduces complications because of the interrelationship between minimum cash surrender values and gross premium patterns. The requirements of this section relating to reserves or plans with unusual cash values and to reserves if cash values exceed calculated reserves serve to link required reserves and cash surrender values. The calculation of segmented reserves shall not be

linked to the occurrence of a positive unitary terminal reserve at the end of a segment. The requirement of this section to hold the greater of the segmented reserve or the unitary reserve eliminates the need for any linkage.

(i) "Tabular cost of insurance" means the net single premium at the beginning of a policy year for one-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 the 1980 amendments to the national association of insurance commissioner's standard valuation law. (see s. 623.06 (2)(am), Stats.) 1

(k) "Unitary reserves" means the present value of all future guaranteed benefits less the present value of all future modified net premiums, where all of the following occur:

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

2. 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:

a. 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 year payable on the first and each subsequent anniversary of the policy on which a premium falls due. However, the net level annual premium may not exceed the net level annual premium on the 19-year premium whole life plan of insurance of the same renewal year equivalent level amount at an age one year higher than the age at issue of the policy, over

b. A net one-year term premium for the benefits provided for the first policy year.

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 length from issue to the mandatory expiration of the policy.

Note: The purpose of this paragraph is to define as specifically as possible what has become commonly called the unitary method. The national association of insurance commissioners standard valuation law does not define the term "unitary" for policies with nonlevel premiums or benefits; its requirements for reserves "computed by a method that is consistent with the principles of the national association of insurance commissioners standard valuation law" has not been uniformly interpreted.

(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.

(4) GENERAL CALCULATION REQUIREMENTS FOR BASIC RESERVES AND PREMIUM DEFICIENCY RESERVES. (a) At the election of the insurer for any one or more specified plans of life insurance, the minimum mortality standard for basic reserves may be calculated using the 1980 CSO valuation table with select mortality factors. If select mortality factors are elected, they may be any of the following:

UIC
deprind

1. The 10-year select mortality factors incorporated into the 1980 amendments to the national association of insurance commissioners standard valuation law, as provided in s. 623.06(2)(am), Stats.

2. The base select mortality factors in Appendix 1.

Note: The select mortality factors for durations 1 through 15 in Appendix 1 of this section reflect the society-of-actuaries' data for the years 1983 through 1986 (designated as "83-86 SOA inter-company experience" in the tables), split by sex and smoking status, with fifteen years of select mortality improvement, based on the Society of Actuaries' Projection Scale A applied. A 50% margin was added. The factors were then graded to the 1980 CSO valuation table over the next five durations. A 50% margin was deemed appropriate to provide a reasonable margin, with little likelihood that actual experience for significant blocks of business would exceed it.

USE
no OIC

(b) Deficiency reserves, if any, are calculated 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 insurer for any one 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 table with select mortality factors. If select mortality factors are elected, they may be any of the following:

1. The 10-year select mortality factors incorporated into 1980 amendments to the national association of insurance commissioners standard valuation law.

2. The select mortality factors in Appendix 1.

Note: The select mortality factors in Appendix 1 of this section do not reflect the underwriting risk classes that have evolved since the period of the underlying experience. In light of this consideration, and the recent recognition of the regulatory value of actuarial opinions, this section allows actuarial judgement to be used for deficiency reserves.

3. For durations in the first segment, X percent of the select mortality factors in Appendix 1 of this section, subject to all of 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 shall not be less than twenty percent (20%).

(r)

c. X shall not decrease in any successive policy years.

d. X is such that, when using the valuation interest rate used for basic reserves, the actuarial present value of future death benefits calculated using the mortality rates resulting from the application of X is greater than or equal the actuarial present value of future death benefits calculated using anticipated mortality experience without recognition of mortality improvement beyond the valuation date.

e. 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.

f. The appointed actuary shall increase X at any valuation date where it is necessary to continue to meet all the requirements of this subdivision.

g. The appointed actuary may decrease X at any valuation date as long as X does not decrease in any successive policy years and as long as it continues to meet all the requirements of this subdivision.

h. 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.

i. If X is less than 100 percent at any duration for any policy, the appointed actuary shall annually prepare an actuarial opinion and memorandum for the company in conformance with the requirements of s. Ins. 50.78 and the appointed actuary shall annually opine for all policies subject to this section as to whether the mortality rates resulting from the application of X meet the requirements of this subdivision. 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. It shall reflect anticipated future mortality, without recognition of mortality improvement beyond the valuation date, taking into account relevant emerging experience.

X
1.04(4)(a)

(c) This paragraph 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 10 years, the appropriate 10-year select mortality factors incorporated into the 1980 amendments to the national association of insurance commissioners standard valuation law, see s. 623.06(2)(am), may be used thereafter through the tenth policy year from the date of issue.

as provided 13

Note: This section does not allow the use of the select mortality factors beyond the first segment. The rationale is that the result of a premium increase that is sufficient to require a new segment will be increased lapsation, leading to mortality deterioration after the increase. However, this section allows the use of the ten-year select mortality factors incorporated into the 1980 amendments to the national association of insurance commissioners standard valuation law, see s. 623.06(2)(am), beyond the first segment (but in no case beyond the tenth policy year) in recognition that the mortality deterioration is unlikely to occur to a significant degree with the first 10 years.

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

(f) The commissioner 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 regulation. 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 s. Ins. 50.78.

(5) CALCULATION OF MINIMUM VALUATION STANDARD FOR POLICIES WITH GUARANTEED NONLEVEL GROSS PREMIUMS OR GUARANTEE NONLEVEL BENEFITS, OTHER THAN UNIVERSAL LIFE POLICIES. (a) 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 1980 CSO valuation table and the same select mortality factors. At the option of the insurer, in calculating segmented reserves and net premiums, either of the following adjustments 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) The deficiency reserve at any duration shall be calculated as follows:
1. Using unitary reserves if the corresponding basic reserve determined by par. (a) is unitary.

2. Using segmented reserves if the corresponding basic reserve determined by par. (a) is segmented.

3. Using segmented reserves if the corresponding basic reserve determined by par. (a) is equal to both the segmented reserve and the unitary reserve.

(c) Pars. (b), (d), and (e) 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 sub. (4)(b) and rate of interest.

(d) 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 sub. (4)(b). *Provision*

(e) For deficiency reserves determined on a contract segmentation method, the quantity A is determined using segment lengths equal to those determined for segmented basic reserves.

(f) 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-year select factors incorporated into the 1980 amendments of the NAIC Standard Valuation Law. 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 policyowner would receive (including the cash surrender value of the supplemental benefits, if any) exclusive of any deduction for policy loans, upon termination of the policy.

(g) 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 may 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.

Note: This requirement is independent of both the segmentation process and the unitary process. After the greater of the segmented or the unitary reserve has been determined, then pars. (g), (h), and (i) impose an additional floor of the ultimate reserve. The purpose of pars. (g), (h) and (i) is to assure adequate funding of significant increases in guaranteed cash surrender values.

(h) The reserves actually held subsequent to any unusual guaranteed cash surrender value may 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 all of the following apply:

1. 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 the date of the next unusual guaranteed cash surrender value, if any, that is scheduled after the valuation date or the mandatory expiration date of the policy.

2. 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.

3. The net-to-gross ratio is equal to 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 divided by the present value, at the beginning of the n-year period, of the scheduled gross premiums payable during the n-year period.

(i) For purposes of pars. (g) and (h), 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 all of the following:

1. One hundred ten percent of the scheduled gross premium for that year. OK - 1.01(5)

2. One hundred ten percent of one 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. OK

3. Five percent of the first policy year surrender charge, if any. OK

(j) At the option of the insurer, the following approach for reserves on yearly renewable term 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 may not be less than the tabular cost of insurance for the appropriate period, as defined in par. (f).

3. For deficiency reserves for each policy year, calculate the excess, if greater than zero, of the valuation net premium over the respective maximum guaranteed gross premium. Deficiency reserves may not be less than the sum of the present values, at the date of valuation, of the excesses determined in accordance with this subdivision.

4. For purposes of this paragraph, the calculations use the maximum valuation interest rate and the 1980 CSO valuation table with or without 10-year select mortality factors.

5. A reinsurance agreement shall be considered yearly renewable term reinsurance for purposes of this paragraph if only the mortality risk is reinsured.

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

Note: Traditional reserves for yearly renewable term reinsurance, the calculations of which par. (j) describes, are already adequate and sufficient. However, without this option, yearly renewable term reinsurance would be subject to the more complex segmentation calculations.

(k) At the option of the insurer, the following approach for reserves for attained-age-based yearly renewable term 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 may not be less than the tabular cost of insurance for the appropriate period, as defined in par. (f).

3. For deficiency reserves for each policy year, calculate the excess, if greater than zero, of the valuation net premium over the respective maximum guaranteed gross premium. Deficiency reserves may not be less than the sum of the present values, at the date of valuation, of the excesses determined in accordance with this subdivision.

4. For purposes of this paragraph, the calculations use the maximum valuation interest rate and the 1980 CSO valuation table with or without 10-year select mortality factors.

5. A policy shall be considered an attained-age-based yearly renewable term life insurance policy for purposes of this paragraph if both of the following apply:

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.

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 insureds of the same sex, risk class, plan of insurance and attained age.

6. For policies that become attained-age-based yearly renewable term policies after an initial period of coverage, the approach of this paragraph may be used after the initial period if both the following apply:

a. The initial period is either constant or runs to a common attained age for all insureds of the same sex, risk class and plan of insurance.

b. After the initial period of coverage, the policy meets the conditions of subd. 5.

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

Note: Traditional reserves for attained-age-based yearly renewable term policies, the calculations of which this paragraph describes, are already adequate and sufficient. However, without this option, these policies would be subject to the more complex segmentation calculations.

(l) Unitary basic reserves and unitary deficiency reserves need not be calculated for a policy if all of 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 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 valuation table with or without the 10-year select mortality factors.

3. There is no cash surrender value in any policy year.

Note: Without this exemption, companies issuing certain n-year renewable term policies could be forced to hold reserves higher than n-year term reserves, even though in many cases gross premiums are well above valuation mortality rates.

(m) Unitary basic reserves and unitary deficiency reserves need not be calculated for a juvenile policy if, based upon the initial current premium scale at issue, all of the following conditions are met:

1. At issue, the insured is age 24 or younger.

2. Until the insured reaches the end of the juvenile period, which shall occur at or before age 25, the gross premiums and death benefits are level, and there are no cash surrender values.

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.

Note: The jumping juvenile policy described has traditionally been valued in two segments. This exemption will allow that practice to continue without requiring the calculation of reserves on a unitary basis. However, within each segment, both basic and deficiency reserves shall comply with the segmented reserve requirements.

(6) 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) Policies with a secondary guarantee include any of the following:

1. 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.

2. A policy in which the minimum premium at any duration is less than the corresponding one-year valuation premium, calculated using the maximum valuation interest rate and the 1980 CSO valuation table with or without 10-year select mortality factors.

3. A policy with any combination of subds. 1. ~~and~~ 2. *or*

(b) 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 subds. pars. (g) and (h) shall be recalculated from issue to reflect these changes.

(c) 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.

(d) For purposes of this subsection, 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.

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

(f) The one-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.

(g) 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 shall be determined according to the contract segmentation method.

(h) Deficiency reserves, if any, for the secondary guarantees shall be calculated for the secondary guarantee period in the same manner as described in sub. (5)(b), 5(c), 5(d), and 5(e) with gross premiums set equal to the specified premiums, if any, or otherwise to the minimum premiums that keep the policy in force.

(i) The minimum reserves during the secondary guarantee period are the greater of: *the following*

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 governing universal life plans

This rule will take effect on the first day of the first month after publication in the Wisconsin Administrative Register as provided in s. 227.22(2)(intro.), Stats.

Dated at Madison, Wisconsin, this _____ day of _____, 1999.

Connie L. O'Connell
Commissioner of Insurance

Ins. 2.80 Appendix I

SELECT MORTALITY FACTORS

(attached and marked pages 21-38)

(the fiscal estimate for this rule and a copy of the emergency rule delaying effectiveness of the 1995 NAIC model regulation follow the appendix)

Appendix

SELECT MORTALITY FACTORS

| Issue | Male, Aggregate | | | | | | | | | | | | | | | | | | | |
|-------|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 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 | 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 |
| 19 | 83 | 84 | 84 | 87 | 87 | 87 | 79 | 79 | 79 | 81 | 81 | 82 | 82 | 82 | 85 | 88 | 91 | 94 | 97 | 100 |
| 20 | 69 | 71 | 71 | 74 | 74 | 69 | 69 | 67 | 69 | 70 | 71 | 71 | 71 | 71 | 74 | 79 | 84 | 90 | 95 | 100 |
| 21 | 66 | 68 | 69 | 71 | 66 | 66 | 67 | 66 | 67 | 70 | 70 | 70 | 70 | 71 | 71 | 77 | 83 | 88 | 94 | 100 |
| 22 | 65 | 66 | 66 | 63 | 63 | 64 | 64 | 64 | 65 | 68 | 68 | 68 | 68 | 69 | 71 | 77 | 83 | 88 | 94 | 100 |
| 23 | 62 | 63 | 59 | 60 | 62 | 62 | 63 | 63 | 64 | 65 | 65 | 67 | 67 | 69 | 70 | 76 | 82 | 88 | 94 | 100 |
| 24 | 60 | 56 | 56 | 59 | 59 | 60 | 61 | 61 | 61 | 64 | 64 | 64 | 66 | 67 | 70 | 76 | 82 | 88 | 94 | 100 |
| 25 | 52 | 53 | 55 | 56 | 58 | 58 | 60 | 60 | 60 | 63 | 62 | 63 | 64 | 67 | 69 | 75 | 81 | 88 | 94 | 100 |
| 26 | 51 | 52 | 55 | 56 | 58 | 58 | 57 | 61 | 61 | 62 | 63 | 64 | 66 | 69 | 66 | 73 | 80 | 86 | 93 | 100 |
| 27 | 51 | 52 | 55 | 57 | 58 | 60 | 61 | 61 | 60 | 63 | 63 | 64 | 67 | 66 | 67 | 74 | 80 | 87 | 93 | 100 |
| 28 | 49 | 51 | 56 | 58 | 60 | 60 | 61 | 62 | 62 | 63 | 64 | 66 | 65 | 66 | 68 | 74 | 81 | 87 | 94 | 100 |
| 29 | 49 | 51 | 56 | 58 | 60 | 61 | 62 | 62 | 62 | 64 | 64 | 62 | 66 | 67 | 70 | 76 | 82 | 88 | 94 | 100 |
| 30 | 49 | 50 | 56 | 58 | 60 | 60 | 62 | 63 | 63 | 64 | 62 | 63 | 67 | 68 | 71 | 77 | 83 | 88 | 94 | 100 |
| 31 | 47 | 50 | 56 | 58 | 60 | 62 | 63 | 64 | 64 | 62 | 63 | 66 | 68 | 70 | 72 | 78 | 83 | 89 | 94 | 100 |
| 32 | 46 | 49 | 56 | 59 | 60 | 62 | 63 | 66 | 62 | 63 | 66 | 67 | 70 | 72 | 73 | 78 | 84 | 89 | 95 | 100 |
| 33 | 43 | 49 | 56 | 59 | 62 | 63 | 64 | 62 | 65 | 66 | 67 | 70 | 72 | 73 | 75 | 80 | 85 | 90 | 95 | 100 |
| 34 | 42 | 47 | 56 | 60 | 62 | 63 | 61 | 63 | 66 | 67 | 70 | 71 | 73 | 75 | 76 | 81 | 86 | 90 | 95 | 100 |
| 35 | 40 | 47 | 56 | 60 | 63 | 61 | 62 | 65 | 67 | 68 | 71 | 73 | 74 | 76 | 76 | 81 | 86 | 90 | 95 | 100 |
| 36 | 38 | 42 | 56 | 60 | 59 | 61 | 63 | 65 | 67 | 68 | 70 | 72 | 74 | 76 | 77 | 82 | 86 | 91 | 95 | 100 |
| 37 | 38 | 45 | 56 | 57 | 61 | 62 | 63 | 65 | 67 | 68 | 70 | 72 | 74 | 76 | 76 | 81 | 86 | 90 | 95 | 100 |
| 38 | 37 | 44 | 53 | 58 | 61 | 62 | 65 | 66 | 67 | 69 | 69 | 73 | 75 | 76 | 77 | 82 | 86 | 91 | 95 | 100 |
| 39 | 37 | 41 | 53 | 58 | 62 | 63 | 65 | 65 | 66 | 68 | 69 | 72 | 74 | 76 | 76 | 81 | 86 | 90 | 95 | 100 |
| 40 | 34 | 40 | 53 | 58 | 62 | 63 | 65 | 65 | 66 | 68 | 68 | 71 | 75 | 76 | 77 | 82 | 86 | 91 | 95 | 100 |

Issue

Male, Aggregate
Duration

| Age | 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

Male, Aggregate
Duration

| Age | 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 | 70 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 77 | 48 | 52 | 55 | 60 | 60 | 65 | 70 | 70 | 70 | 70 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 78 | 48 | 52 | 55 | 60 | 60 | 65 | 70 | 70 | 70 | 70 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 79 | 48 | 52 | 55 | 60 | 60 | 65 | 70 | 70 | 70 | 70 | 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 |

Male, Non-Smoker

| 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 | 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 | 90 | 92 | 92 | 92 | 92 | 95 | 95 | 96 | 97 | 98 | 98 | 99 | 100 |
| 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 | 66 | 67 | 74 | 80 | 87 | 93 | 100 |
| 27 | 51 | 52 | 55 | 58 | 60 | 60 | 61 | 61 | 61 | 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 | 66 | 63 | 65 | 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 |

Male, Non-Smoker

| 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 | 41 | 45 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 64 | 18 | 24 | 32 | 36 | 39 | 40 | 40 | 41 | 41 | 45 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 65 | 18 | 24 | 32 | 36 | 39 | 40 | 40 | 41 | 41 | 45 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 66 | 18 | 24 | 32 | 36 | 40 | 40 | 41 | 41 | 41 | 45 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 67 | 18 | 24 | 32 | 36 | 40 | 40 | 41 | 41 | 41 | 45 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 68 | 18 | 24 | 32 | 36 | 40 | 40 | 41 | 41 | 41 | 45 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 69 | 18 | 24 | 32 | 36 | 40 | 40 | 41 | 41 | 41 | 45 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 70 | 18 | 24 | 32 | 36 | 40 | 40 | 41 | 41 | 41 | 45 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Male, Non-Smoker
Duration

| Issue Age | 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 |

Male, Smoker
Duration

| Issue | 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 | 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 |
| 19 | 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 | 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 | 100 |
| 22 | 92 | 95 | 96 | 90 | 90 | 93 | 93 | 92 | 93 | 95 | 95 | 93 | 93 | 92 | 93 | 94 | 96 | 97 | 99 | 100 |
| 23 | 90 | 92 | 85 | 88 | 88 | 89 | 89 | 89 | 90 | 90 | 90 | 90 | 89 | 90 | 92 | 94 | 95 | 97 | 98 | 100 |
| 24 | 87 | 81 | 82 | 85 | 84 | 86 | 88 | 86 | 86 | 88 | 88 | 86 | 86 | 88 | 89 | 91 | 93 | 96 | 98 | 100 |
| 25 | 77 | 78 | 79 | 82 | 81 | 83 | 83 | 82 | 83 | 85 | 84 | 84 | 84 | 85 | 86 | 89 | 92 | 94 | 97 | 100 |
| 26 | 75 | 77 | 79 | 82 | 82 | 83 | 83 | 82 | 83 | 84 | 84 | 84 | 84 | 85 | 81 | 85 | 89 | 92 | 96 | 100 |
| 27 | 73 | 75 | 78 | 82 | 82 | 83 | 83 | 82 | 82 | 82 | 82 | 84 | 84 | 80 | 81 | 85 | 89 | 92 | 96 | 100 |
| 28 | 71 | 73 | 79 | 82 | 81 | 82 | 83 | 81 | 81 | 82 | 82 | 82 | 80 | 80 | 81 | 85 | 89 | 92 | 96 | 100 |
| 29 | 69 | 72 | 78 | 81 | 81 | 82 | 82 | 81 | 81 | 81 | 81 | 77 | 80 | 80 | 81 | 85 | 89 | 92 | 96 | 100 |
| 30 | 68 | 71 | 78 | 81 | 81 | 81 | 82 | 81 | 81 | 81 | 76 | 77 | 80 | 80 | 81 | 85 | 89 | 92 | 96 | 100 |
| 31 | 65 | 70 | 77 | 81 | 79 | 81 | 82 | 81 | 81 | 76 | 77 | 79 | 81 | 81 | 83 | 86 | 90 | 93 | 97 | 100 |
| 32 | 63 | 67 | 77 | 78 | 79 | 81 | 81 | 81 | 76 | 77 | 77 | 80 | 83 | 83 | 85 | 88 | 91 | 94 | 97 | 100 |
| 33 | 60 | 65 | 74 | 78 | 79 | 79 | 81 | 76 | 77 | 77 | 79 | 80 | 83 | 85 | 85 | 88 | 91 | 94 | 97 | 100 |
| 34 | 57 | 62 | 74 | 77 | 79 | 79 | 75 | 76 | 77 | 79 | 79 | 81 | 83 | 85 | 87 | 90 | 92 | 95 | 97 | 100 |
| 35 | 53 | 60 | 73 | 77 | 79 | 75 | 75 | 76 | 77 | 79 | 80 | 82 | 84 | 86 | 88 | 90 | 93 | 95 | 98 | 100 |
| 36 | 52 | 59 | 71 | 75 | 74 | 75 | 75 | 76 | 77 | 79 | 79 | 81 | 83 | 85 | 87 | 90 | 92 | 95 | 97 | 100 |
| 37 | 49 | 58 | 70 | 71 | 74 | 74 | 75 | 76 | 77 | 78 | 79 | 81 | 84 | 86 | 86 | 89 | 92 | 94 | 97 | 100 |
| 38 | 48 | 55 | 66 | 70 | 72 | 74 | 74 | 75 | 76 | 78 | 79 | 81 | 83 | 85 | 87 | 90 | 92 | 95 | 97 | 100 |
| 39 | 45 | 50 | 65 | 70 | 72 | 72 | 74 | 74 | 75 | 77 | 79 | 81 | 84 | 86 | 86 | 89 | 92 | 94 | 97 | 100 |
| 40 | 41 | 49 | 63 | 68 | 71 | 72 | 73 | 74 | 74 | 76 | 78 | 80 | 83 | 85 | 86 | 89 | 92 | 94 | 97 | 100 |

Female, Aggregate

| Issue | Duration | | | | | | | | | | | | | | | | | | | |
|-------|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20+ |
| 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 | 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 | 86 | 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

Female, Aggregate
Duration

| Age | 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 | 62 | 63 | 64 | 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 | 42 | 75 | 75 | 80 | 80 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 66 | 19 | 25 | 30 | 35 | 42 | 46 | 75 | 75 | 80 | 80 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 67 | 19 | 25 | 30 | 35 | 42 | 46 | 75 | 75 | 80 | 80 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 68 | 19 | 25 | 30 | 35 | 42 | 46 | 75 | 75 | 80 | 80 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 69 | 19 | 25 | 30 | 35 | 42 | 46 | 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, Aggregate
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 |

Female, Non-Smoker
Duration

| Issue | 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

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+ |
|-----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 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

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+ |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 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, 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 | 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 |
| 19 | 87 | 89 | 92 | 92 | 92 | 92 | 84 | 84 | 86 | 86 | 92 | 93 | 95 | 96 | 99 | 99 | 99 | 100 | 100 | 100 |
| 20 | 74 | 77 | 80 | 80 | 80 | 73 | 73 | 73 | 75 | 77 | 83 | 83 | 86 | 88 | 90 | 92 | 94 | 96 | 98 | 100 |
| 21 | 71 | 74 | 78 | 78 | 71 | 71 | 73 | 74 | 77 | 79 | 85 | 86 | 88 | 89 | 90 | 92 | 94 | 96 | 98 | 100 |
| 22 | 68 | 71 | 75 | 70 | 71 | 71 | 73 | 74 | 78 | 79 | 88 | 90 | 89 | 89 | 92 | 94 | 95 | 97 | 98 | 100 |
| 23 | 65 | 69 | 67 | 70 | 70 | 70 | 73 | 77 | 79 | 81 | 89 | 90 | 90 | 92 | 92 | 94 | 95 | 97 | 98 | 100 |
| 24 | 62 | 60 | 64 | 69 | 70 | 70 | 74 | 77 | 79 | 81 | 92 | 90 | 92 | 93 | 93 | 94 | 96 | 97 | 99 | 100 |
| 25 | 53 | 58 | 63 | 67 | 69 | 70 | 74 | 78 | 81 | 82 | 92 | 93 | 93 | 95 | 95 | 96 | 97 | 98 | 99 | 100 |
| 26 | 53 | 58 | 63 | 69 | 71 | 72 | 75 | 79 | 82 | 82 | 93 | 93 | 95 | 96 | 90 | 92 | 94 | 96 | 98 | 100 |
| 27 | 52 | 56 | 63 | 70 | 74 | 74 | 78 | 81 | 82 | 84 | 93 | 95 | 95 | 90 | 90 | 92 | 94 | 96 | 98 | 100 |
| 28 | 52 | 56 | 64 | 71 | 75 | 77 | 79 | 82 | 85 | 86 | 95 | 95 | 90 | 92 | 92 | 94 | 95 | 97 | 98 | 100 |
| 29 | 51 | 56 | 64 | 71 | 78 | 78 | 81 | 84 | 86 | 88 | 95 | 90 | 90 | 92 | 92 | 94 | 95 | 97 | 98 | 100 |
| 30 | 51 | 56 | 64 | 72 | 79 | 79 | 82 | 85 | 88 | 89 | 90 | 90 | 92 | 93 | 93 | 94 | 96 | 97 | 99 | 100 |
| 31 | 51 | 56 | 64 | 72 | 78 | 81 | 84 | 84 | 88 | 84 | 90 | 90 | 92 | 93 | 93 | 94 | 96 | 97 | 99 | 100 |
| 32 | 51 | 56 | 64 | 71 | 78 | 81 | 85 | 86 | 84 | 85 | 90 | 90 | 92 | 94 | 93 | 94 | 96 | 97 | 99 | 100 |
| 33 | 51 | 57 | 62 | 71 | 78 | 82 | 85 | 83 | 84 | 85 | 90 | 92 | 93 | 93 | 93 | 94 | 96 | 97 | 99 | 100 |
| 34 | 51 | 56 | 62 | 71 | 78 | 82 | 81 | 83 | 85 | 86 | 90 | 92 | 92 | 94 | 93 | 94 | 96 | 97 | 99 | 100 |
| 35 | 51 | 56 | 62 | 71 | 78 | 79 | 83 | 84 | 85 | 86 | 90 | 91 | 91 | 93 | 93 | 94 | 96 | 97 | 99 | 100 |
| 36 | 49 | 56 | 62 | 71 | 74 | 79 | 83 | 84 | 85 | 86 | 90 | 90 | 91 | 93 | 92 | 94 | 95 | 97 | 98 | 100 |
| 37 | 48 | 55 | 62 | 67 | 74 | 79 | 83 | 84 | 85 | 86 | 89 | 90 | 89 | 92 | 91 | 93 | 95 | 96 | 98 | 100 |
| 38 | 47 | 55 | 57 | 66 | 72 | 77 | 81 | 84 | 86 | 86 | 87 | 88 | 88 | 90 | 91 | 93 | 95 | 96 | 98 | 100 |
| 39 | 45 | 50 | 57 | 66 | 72 | 77 | 81 | 83 | 85 | 86 | 86 | 87 | 86 | 89 | 90 | 92 | 94 | 96 | 98 | 100 |
| 40 | 41 | 50 | 57 | 66 | 72 | 77 | 81 | 83 | 84 | 85 | 86 | 86 | 86 | 89 | 89 | 91 | 93 | 96 | 98 | 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+ | |
|-----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 41 | 40 | 50 | 57 | 65 | 71 | 76 | 79 | 81 | 83 | 84 | 85 | 86 | 85 | 89 | 90 | 92 | 94 | 94 | 96 | 98 | 100 |
| 42 | 40 | 49 | 57 | 65 | 69 | 74 | 77 | 80 | 82 | 83 | 84 | 85 | 86 | 90 | 92 | 94 | 95 | 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 | 100 |
| 44 | 39 | 48 | 55 | 62 | 67 | 71 | 75 | 78 | 80 | 80 | 82 | 84 | 86 | 93 | 96 | 97 | 98 | 98 | 99 | 100 | 100 |
| 45 | 37 | 47 | 55 | 61 | 65 | 70 | 73 | 76 | 78 | 80 | 81 | 84 | 86 | 94 | 97 | 98 | 98 | 99 | 99 | 100 | 100 |
| 46 | 36 | 46 | 53 | 59 | 63 | 68 | 71 | 75 | 77 | 79 | 83 | 85 | 86 | 93 | 96 | 97 | 98 | 98 | 99 | 100 | 100 |
| 47 | 34 | 44 | 51 | 57 | 62 | 66 | 70 | 75 | 77 | 80 | 83 | 85 | 86 | 93 | 94 | 95 | 96 | 98 | 99 | 100 | 100 |
| 48 | 34 | 44 | 50 | 54 | 60 | 64 | 69 | 74 | 77 | 80 | 84 | 86 | 87 | 92 | 92 | 94 | 95 | 97 | 98 | 100 | 100 |
| 49 | 33 | 42 | 48 | 53 | 58 | 63 | 68 | 74 | 77 | 81 | 84 | 86 | 87 | 92 | 91 | 93 | 95 | 96 | 98 | 100 | 100 |
| 50 | 31 | 41 | 46 | 51 | 57 | 61 | 67 | 74 | 77 | 81 | 85 | 87 | 87 | 91 | 90 | 92 | 94 | 96 | 98 | 100 | 100 |
| 51 | 30 | 39 | 45 | 51 | 56 | 61 | 67 | 74 | 75 | 80 | 83 | 85 | 85 | 90 | 90 | 92 | 94 | 96 | 98 | 100 | 100 |
| 52 | 29 | 38 | 45 | 50 | 56 | 62 | 68 | 74 | 75 | 79 | 81 | 83 | 84 | 90 | 90 | 92 | 94 | 96 | 100 | 100 | 100 |
| 53 | 28 | 37 | 43 | 49 | 57 | 62 | 68 | 73 | 74 | 77 | 79 | 81 | 83 | 89 | 89 | 91 | 93 | 100 | 100 | 100 | 100 |
| 54 | 28 | 36 | 43 | 49 | 57 | 63 | 69 | 73 | 74 | 75 | 78 | 80 | 81 | 87 | 89 | 91 | 100 | 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 | 100 |
| 56 | 26 | 35 | 42 | 49 | 56 | 62 | 67 | 71 | 72 | 74 | 76 | 78 | 79 | 85 | 100 | 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 | 100 |
| 58 | 28 | 36 | 43 | 49 | 55 | 59 | 63 | 68 | 69 | 72 | 76 | 78 | 100 | 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 | 100 |
| 60 | 28 | 36 | 43 | 49 | 53 | 57 | 61 | 64 | 67 | 69 | 100 | 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 | 100 |
| 62 | 26 | 33 | 41 | 47 | 51 | 55 | 58 | 62 | 80 | 80 | 100 | 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 | 100 |
| 64 | 25 | 33 | 40 | 45 | 50 | 53 | 80 | 80 | 80 | 80 | 100 | 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 | 100 |
| 66 | 24 | 32 | 39 | 44 | 72 | 72 | 75 | 75 | 80 | 80 | 100 | 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 | 100 |
| 68 | 24 | 32 | 68 | 72 | 72 | 72 | 75 | 75 | 80 | 80 | 100 | 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 | 100 |
| 70 | 60 | 60 | 64 | 68 | 68 | 72 | 75 | 75 | 80 | 80 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

| Age | Female, 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 |

w:\dratals\misc\U3xc2

FISCAL ESTIMATE WORKSHEET

1999 Session

| | | | |
|--|---|--|---------------|
| Detailed Estimate of Annual Fiscal Effect DOA-2047 (R10/94) | <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> UPDATED <input type="checkbox"/> CORRECTED <input type="checkbox"/> SUPPLEMENTAL | LRB or Bill No./Adm. Rule No. Ins. 2.80 | Amendment No. |
|--|---|--|---------------|

Subject: Valuation of Life Insurance Policies Model Regulation

I. One-time Costs or Revenue Impacts for State and/or Local Government (do not include in annualized fiscal effect):

| II. Annualized Costs: | Annualized Fiscal impact on State funds from: | |
|---|---|-----------------|
| A. State Costs by Category | Increased Costs | Decreased Costs |
| State Operations – Salaries and Fringes | \$ 0 | \$ - 0 |
| (FTE Position Changes) | (FTE) | (- FTE) |
| State Operations – Other Costs | | - |
| Local Assistance | | - |
| Aids to Individuals or Organizations | | - |
| TOTAL State Costs by Category | \$ 0 | \$ - 0 |
| B. State Costs by Source of Funds | Increased Costs | Decreased Costs |
| GPR | \$ 0 | \$ - 0 |
| FED | | - |
| PRO/PRS | | - |
| SEG/SEG-S | | - |
| III. State Revenues – | Increased Rev. | Decreased Rev. |
| Complete this only when proposal will increase or decrease state revenues (e.g., tax increase, decrease in license fee, etc.) | | |
| GPR Taxes | \$ 0 | \$ - 0 |
| GPR Earned | | - |
| FED | | - |
| PRO/PRS | | - |
| SEG/SEG-S | | - |
| TOTAL State Revenues | \$ 0 | \$ - 0 |

NET ANNUALIZED FISCAL IMPACT

| | | |
|------------------------|--------------|----------------|
| | <u>STATE</u> | <u>FEDERAL</u> |
| NET CHANGE IN COSTS | \$ 0 | \$ 0 |
| NET CHANGE IN REVENUES | \$ 0 | \$ 0 |

| | | |
|---|---|-----------------|
| Agency Prepared by: Name & Phone No. Office of the Commissioner of Insurance Steve Mueller 267-2833 | Authorized Signature (Telephone No.) <i>Conrad O'Connell</i> | Date 1/29/99 |
|---|---|-----------------|

1999 Session

LRB or Bill No./Adm. Rule No.

Ins. 2.80

Amendment No. if Applicable

FISCALESTIMATE

DOA-2048 NR10/98

- ORIGINAL
- UPDATED
- CORRECTED
- SUPPLEMENTAL

Subject

Valuation of Life Insurance Policies Model Regulation

Fiscal Effect

State: No State Fiscal Effect

Check columns below only if bill makes a direct appropriation or affects a sum sufficient appropriation.

- Increase Existing Appropriation
- Decrease Existing Appropriation
- Create New Appropriation
- Increase Existing Revenues
- Decrease Existing Revenues

- Increase Costs - May be possible to Absorb Within Agency's Budget Yes No
- Decrease Costs

Local: No local government costs

- 1. Increase Costs
 - Permissive
 - Mandatory
- 2. Decrease Costs
 - Permissive
 - Mandatory

- 3. Increase Revenues
 - Permissive
 - Mandatory
- 4. Decrease Revenues
 - Permissive
 - Mandatory

5. Types of Local Governmental Units Affected:

- Towns
- Villages
- Cities
- Counties
- Others _____
- School Districts
- WTCS Districts

Fund Sources Affected

- GPR
- FED
- PRO
- PRS
- SEG
- SEG-S

Affected Ch. 20 Appropriations

Assumptions Used in Arriving at Fiscal Estimate

This rule will change the way insurance companies set aside reserves for life policies, therefore there will be no state or local government fiscal impact.

Long-Range Fiscal Implications

Agency Prepared by: Name & Phone No.

Authorized Signature/Telephone No.

Date

Office of the Commissioner of Insurance
Steve Mueller 267-2833

Connie J. O'Connell

1/29/99

ORDER OF THE OFFICE OF THE COMMISSIONER OF INSURANCE AMENDING A RULE

To amend Ins 2.80 (2) (intro) and (2) (a) , Wis. Adm. Code, relating to delaying effective date for NAIC valuation of life insurance policies model regulation, ("XXX"), from January 1, 1999 to July 1, 1999.

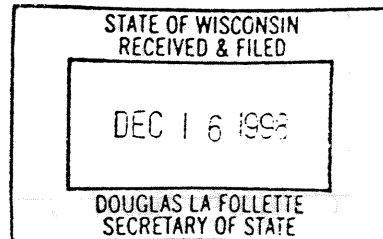
FINDING OF EMERGENCY & ANALYSIS PREPARED BY THE OFFICE OF THE COMMISSIONER OF INSURANCE

The Commissioner of Insurance finds that an emergency exists and that the attached rule is necessary for the immediate preservation of the public peace, health, safety, or welfare. Facts constituting the emergency are as follows:

On December 16, 1997 the Commissioner created Ins 2.80, Wis. Adm. Code in order to adopt the 1995 National Association of Insurance Commissioners ("NAIC") valuation of life insurance policies model regulation, or "XXX". This new rule concerning requirements for determining the valuation of reserve liabilities for life insurance policies is currently to take effect on January 1, 1999. Recently the NAIC agreed to consider a revised model regulation and the NAIC is expected to formally approve such a model early in 1999. Wisconsin is the only state that has set January 1, 1999 as an effective date for the 1995 model regulation. This emergency order is necessary to allow time to consider implementation of the revised model regulation once it is adopted by the NAIC.

Statutory authority: ss. 601.41(3), 227.24, Stats.

Statutes interpreted: none



SECTION 1. Amend s. Ins 2.80 (2) (intro) to read:

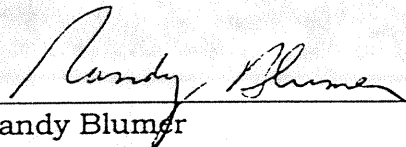
Ins 2.80 (2) SCOPE. This section applies to all life insurance policies, wherever sold, with or without nonforfeiture values, issued on or after ~~January 1, 1999~~ July 1, 1999, subject to the following exceptions and conditions:

SECTION 2 . Amend s. Ins 2.80 (2) (a) to read:

Ins 2.80 (2) (a) This section does not apply to any individual life insurance policy issued on or after ~~January 1, 1999~~ July 1, 1999 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 that was issued before ~~January 1, 1999~~ July 1, 1999 and that guarantees the premium rates of the new policy. This section also does 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.

SECTION 3 . These changes will take effect on January 1, 1999.

Dated at Madison, Wisconsin, this 14th day of December, 1998.



Randy Blumer

Commissioner of Insurance