

Clearinghouse Rule 96-192



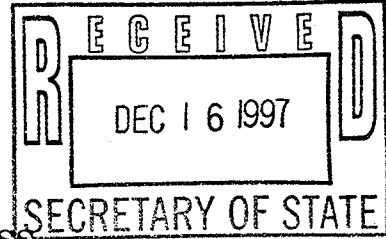
State of Wisconsin / OFFICE OF THE COMMISSIONER OF INSURANCE

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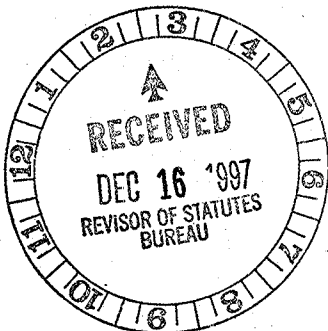


STATE OF WISCONSIN
OFFICE OF THE COMMISSIONER OF INSURANCE

I, Randy Blumer, Deputy Commissioner of Insurance and custodian of the official records, certify that the annexed rule affecting Section Ins 2.80, Wis. Adm. Code, relating to valuation of reserve liabilities for life insurance, is duly approved and adopted by this Office on 12/16/97.

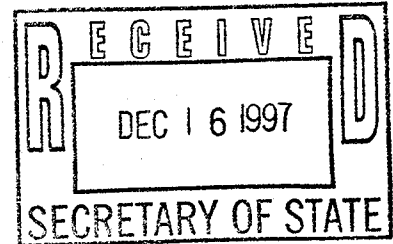
I further certify that I have compared this copy with the original on file in this Office and that it is a true copy of the original, and the whole of the original.

IN TESTIMONY WHEREOF, I have hereunto set my hand at 121 East Wilson Street, Madison, Wisconsin, on 12/16/97.



Randy Blumer
Randy Blumer
Deputy Commissioner of Insurance

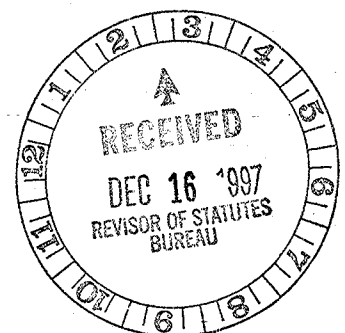
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SECTION 1. Ins 2.80 is created to read:

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 nonlevel 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 commissioners 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 the effective date of this section... [revisor inserts date], subject to the following exceptions and conditions:
- (a) This section does not apply to any individual life insurance policy issued on or after the effective date of this section... [revisor inserts date] 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 the effective date of this section... [revisor inserts date] 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.
 - (b) This section does not apply to any of the following:
 - 1. 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.



2. 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.
3. 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 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 of more than 5 years, 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, 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:

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

$$GP_{x+k+t-1}$$

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.

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

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.

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) "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.
- (e) "1980 CSO valuation table" means the commissioners' 1980 standard ordinary mortality table without 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), Stats., and variations of the 1980 CSO valuation table approved by the national association of insurance commissioners, such as the unisex and smoker and nonsmoker versions approved in December 1983 and adopted by s. Ins 2.20 and 2.35.

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.

- (f) "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 premium described in sub. (6) (d).
- (g) "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 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 unusual 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 lengths 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 for 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.

- (h) "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.
- (i) "Ten-year select factors" means the select factors adopted with the 1980 amendments to the national association of insurance commissioners standard valuation law. (see s. 623.06 (2) (am), Stats.)
- (j) "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 per year payable on the first and each subsequent anniversary of the policy on which a premium falls due. However, the net level annual premium 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 in 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 guaranteed 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 requirement 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.

(k) "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:

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. One hundred fifty percent of the base select mortality factors in Appendix 1.

Note: The select mortality factors in Appendix 1 of this section reflect the society of actuaries' data for the years 1983 through 1986, (designated as "83-86 SOA intercompany experience" in the tables), split by sex and smoking status. The experience in those years improves considerably over the experience that formed the basis for the 1980 CSO valuation table. Nevertheless, 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.

3. One hundred fifty percent of the select mortality factors in Appendix 1 to this section for the first 10 policy years; then linearly graded from the resulting tenth year factor to 100 percent at policy year 16.
- (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 the 1980 amendments to the national association of insurance commissioners standard valuation law.
 2. One hundred twenty percent of 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. Mortality improvement since that period, almost 10 years ago, is not reflected either. In light of these considerations, this section allows a lower margin for deficiency reserves.

3. One hundred twenty percent of the select mortality factors in Appendix 1 of this section for the first 10 policy years; then linearly graded from the resulting tenth year factor to 100% at policy year 16.

(c) Notwithstanding par. (b), if the length of the first segment as determined by the contract segmentation method for the basic reserves is not greater than 5 years then for that length of time measured from issue, for either the unitary method or the contract segmentation method, gross premiums need not be substituted for net premiums even if the gross premiums are less than the net premiums. For subsequent periods, gross premiums shall be substituted for net premiums if the gross premiums are less than the corresponding net premiums.

(d) For any policies for which the insurer chooses to use the method described in par. (c) the insurer shall demonstrate annually to the satisfaction of the commissioner, by submitting a statement of actuarial opinion signed by the appointed actuary, that the reserves held for all such policies are adequate.

(e) In applying percentages to the select mortality factors all of the following rules shall be followed:

1. Do not round any result.
2. Set equal to 100 any result that exceeds 100.

(f) 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 may be used thereafter through the tenth policy year from the date of issue.

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 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 within the first 10 years.

(g) In determining basic reserves or deficiency reserves, gross premiums without policy fees may be used where the calculation involves the gross premium but only if the policy fee is a level dollar amount for the entire premium-paying period of the policy. In determining deficiency reserves, policy fees may be included in gross premiums even if not included in the actual calculation of basic reserves.

(5) CALCULATION OF MINIMUM VALUATION STANDARD FOR POLICIES WITH GUARANTEED NONLEVEL PREMIUMS OR GUARANTEED 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).
- (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, select mortality factor and interest rates as that used for the calculation of both the segmented and the unitary reserves. 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 on 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), (h), and (i), 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.
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.
3. Five percent of the first policy year surrender charge, if any.

(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 all of the following apply:
 - a. The reinsurance premium rates, on both the initial current premium scale and the guaranteed maximum premium scale, for any given year are independent of both the premium rates and the plan of the original policy.
 - b. Only the mortality risk is reinsured.

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 all 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, and for each n-year 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 OF MORE THAN 5 YEARS.

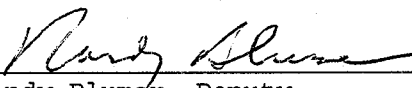
- (a) Policies with a secondary guarantee include either of the following:
1. A policy with a guarantee that the policy will remain in force at the original schedule of benefits over a period exceeding 5 years, subject only to the payment of specified premiums.
 2. A policy in which the minimum premium at any future duration beyond the end of the fifth policy year 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.
- (b) A secondary guarantee period is the longest period for which the policy is guaranteed to remain in force subject only to a secondary guarantee. Secondary guarantees that are unilaterally extended by the insurer after issue shall be considered to have been made at issue. Reserves described in pars. (f) and (g) shall be recalculated from issue to reflect the extensions.
- (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 3. and sub. (4) (b) 2. and 3. may not be used to calculate the one-year valuation premiums.

- (f) 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.
- (g) 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) with gross premiums set equal to the specified premiums, if any, or otherwise to the minimum premiums that keep the policy in force.
- (h) The minimum reserves during the secondary guarantee period are the greater of:
1. The basic reserves for the secondary guarantee plus the deficiency reserve, if any, for the secondary guarantees; or
 2. The minimum reserves required by other rules governing universal life plans.

SECTION 2. EFFECTIVE DATE. This rule will take effect on January 1, 1999 or the first day of the month after publication as provided in s. 227.22 (2) (intro), Stats. whichever is later.

Dated at Madison, Wisconsin, this 16th day of December 1997.



Randy Blumer, Deputy
Commissioner of Insurance

APPENDIX 1

SELECT MORTALITY FACTORS

Appendix 1 contains tables of select mortality factors that are the bases to which the respective percentage of sub. (4) (a) 2. and (5) (b) 2. are applied.

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

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

For sex-blended mortality tables, compute select mortality factors in the same proportion as the underlying mortality. For example, for the 1980 CSO-B Table, the calculated select mortality factors are 80% of the appropriate male table in Appendix 1, plus 20% of the appropriate female table in Appendix 1.

Note:s. Ins. 2.20 allows the use of sex-blended mortality tables for the purposes of determining nonforfeiture values, but sex-blended tables are not allowed for the purposes of valuing minimum reserve liabilities under s. Ins. 2.80 or s. 623.06, Stats.

MALE AGGREGATE - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
30	35	36	40	42	43	44	45	46	46	47	48	49	52	53	55	100
31	34	36	40	42	44	45	46	47	47	48	49	51	53	54	56	100
32	33	35	40	43	44	45	46	48	48	49	51	52	54	56	57	100
33	31	35	41	43	45	46	47	48	50	51	52	54	56	57	59	100
34	30	34	41	44	45	46	47	49	51	52	54	55	57	59	60	100
35	29	34	41	44	46	47	48	50	52	53	55	57	58	60	61	100
36	28	33	41	44	46	47	49	50	52	53	55	57	59	61	62	100
37	28	33	41	44	47	48	49	50	52	53	55	57	59	61	62	100
38	27	32	41	45	47	48	50	51	52	54	55	58	60	62	63	100
39	27	32	41	45	48	49	50	51	52	54	55	58	60	62	63	100
40	26	31	41	45	48	49	51	51	52	54	55	58	61	63	64	100
41	26	32	41	45	48	49	51	51	51	53	55	57	61	63	64	100
42	26	33	41	45	48	49	50	50	51	52	54	57	60	63	64	100
43	26	33	42	46	47	48	50	50	50	52	54	56	60	62	64	100
44	26	34	42	46	47	48	49	49	50	51	53	56	59	62	64	100
45	26	35	42	46	47	48	49	49	49	50	53	55	59	62	64	100
46	26	34	41	45	46	47	48	49	49	50	53	56	59	62	63	100
47	25	33	40	43	45	46	47	48	49	50	54	57	59	62	63	100
48	25	33	38	42	44	46	47	48	48	51	54	57	60	61	62	100
49	24	32	37	40	43	45	46	47	48	51	55	58	60	61	62	100
50	24	31	36	39	42	44	45	47	48	51	55	59	60	61	61	100
51	23	30	35	38	41	44	45	47	48	51	55	59	60	61	62	100
52	23	29	34	38	41	43	45	47	48	51	55	59	60	61	62	100
53	22	29	33	37	40	43	44	46	48	51	56	59	61	62	63	100
54	22	28	32	37	40	42	44	46	48	51	56	59	61	62	63	100
55	21	27	31	36	39	42	44	46	48	51	56	59	61	62	64	100
56	21	27	31	36	39	41	43	45	47	50	55	58	60	61	63	100
57	20	26	32	36	39	41	43	45	46	49	54	57	59	60	62	100
58	20	26	32	36	40	40	42	44	46	49	53	55	57	58	61	100
59	19	25	33	36	40	40	42	44	45	48	52	54	56	57	60	100

*Factors are a percent of the 1980 CSO Male Mortality (without 10 year select) rate of mortality for the attained age. Factors are based on the 1980 CSO Male Mortality Table and 100% of the 83-86 SOA intercompany experience.

MALE AGGREGATE - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
60	19	25	33	36	40	39	41	43	44	47	51	53	55	56	59	100
61	19	25	33	36	40	40	41	43	44	47	50	52	54	56	59	100
62	19	25	33	36	40	40	42	43	44	46	49	51	53	55	58	100
63	18	25	32	37	41	41	42	44	45	46	49	49	52	55	58	100
64	18	25	32	37	41	41	43	44	45	45	48	48	51	54	57	100
65	18	25	32	37	41	42	43	44	45	45	47	47	50	54	57	100
66	18	25	32	37	41	42	43	44	45	46	47	48	51	55	57	100
67	18	25	32	37	41	42	43	45	46	46	48	49	51	56	57	100
68	19	26	33	38	42	42	44	45	46	47	48	49	52	56	58	100
69	19	26	33	38	42	42	44	46	47	47	49	50	52	57	58	100
70	19	26	33	38	42	42	44	46	47	48	49	51	53	58	58	100
71	24	31	37	42	46	46	48	50	51	51	52	54	56	61	61	100
72	30	36	42	46	50	50	51	53	54	55	56	58	59	64	64	100
73	35	41	46	50	54	54	55	57	58	58	59	61	62	66	66	100
74	41	46	51	55	57	57	59	60	61	62	63	64	66	69	69	100
75	46	51	55	59	61	61	63	64	65	65	66	67	69	72	72	100
76	51	56	60	63	65	65	66	68	68	69	69	71	72	75	75	100
77	57	61	64	67	69	69	70	71	72	72	73	74	75	78	78	100
78	62	65	69	71	73	73	74	75	75	76	76	77	78	80	80	100
79	68	70	73	75	77	77	78	78	79	79	80	80	81	83	83	100
80	73	75	78	79	81	81	81	82	82	83	83	84	84	86	86	100
81	78	80	82	83	85	85	85	86	86	86	86	87	87	89	89	100
82	84	85	87	88	88	88	89	89	89	90	90	90	91	92	92	100
83	89	90	91	92	92	92	93	93	93	93	93	93	94	94	94	100
84	95	95	96	96	96	96	96	96	96	97	97	97	97	97	97	100
85	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
86	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
87	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
88	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
89	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

*Factors are a percent of the 1980 CSO Male Mortality (without 10 year select) rate of mortality for the attained age. Factors are based on the 1980 CSO Male Mortality Table and 100% of the 83-86 SOA intercompany experience.

MALE AGGREGATE - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
90	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
91	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
92	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
93	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
94	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
95	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
96	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
97	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
98	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
99	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

*Factors are a percent of the 1980 CSO Male Mortality (without 10 year select) rate of mortality for the attained age. Factors are based on the 1980 CSO Male Mortality Table and 100% of the 83-86 SOA intercompany experience.

MALE NONSMOKER - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
2	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
3	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
4	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
5	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
6	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
7	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
8	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
9	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
10	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
11	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
12	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
13	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
14	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
15	91	91	91	91	92	92	92	92	92	92	92	92	92	92	92	100
16	81	82	82	83	83	83	83	83	83	84	84	84	84	84	85	100
17	72	73	73	74	75	75	75	75	75	76	76	76	76	76	77	100
18	62	63	64	65	66	67	67	66	67	67	67	67	68	68	69	100
19	53	54	55	57	58	58	58	58	58	59	59	59	60	60	62	100
20	43	45	46	48	49	50	50	49	50	51	51	51	52	52	54	100
21	42	44	45	47	48	48	49	48	49	50	50	50	51	51	53	100
22	41	43	44	45	46	47	47	47	48	49	49	49	50	51	53	100
23	40	41	42	44	45	45	46	45	46	48	49	49	49	50	52	100
24	39	40	41	42	43	44	44	44	45	47	48	48	48	50	52	100
25	38	39	40	41	42	42	43	43	44	46	47	47	47	49	51	100
26	37	39	40	41	42	43	44	44	44	46	47	47	48	50	52	100
27	37	38	40	42	43	43	44	44	45	46	47	48	49	51	52	100
28	36	38	41	42	43	44	45	45	45	47	48	48	49	51	53	100
29	36	37	41	43	44	44	45	45	46	47	48	49	50	52	53	100

*Factors are a percent of the 1980 CSO Male Nonsmoker Mortality (without 10 year select) rate of mortality for the attained age. Factors are based on the 1980 CSO Male Nonsmoker Mortality Table and 100% of the 83-86 SOA intercompany experience.

MALE NONSMOKER - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
30	35	37	41	43	44	45	46	46	46	47	48	49	51	53	54	100
31	34	36	41	43	44	45	46	47	47	48	49	50	52	54	55	100
32	33	36	41	44	45	46	47	47	48	49	50	51	53	55	56	100
33	32	35	41	44	45	46	47	48	49	50	51	53	55	57	58	100
34	31	35	41	45	46	47	48	48	50	51	52	54	56	58	59	100
35	30	34	41	45	46	47	48	49	51	52	53	55	57	59	60	100
36	29	34	41	45	46	47	48	49	51	52	53	55	57	59	60	100
37	28	33	41	45	46	47	48	49	51	52	53	55	57	59	60	100
38	28	33	41	45	47	48	49	50	51	53	54	56	58	60	60	100
39	27	32	41	45	47	48	49	50	51	53	54	56	58	60	60	100
40	26	32	41	45	47	48	49	50	51	53	54	56	58	60	60	100
41	26	32	41	45	47	48	49	49	50	52	53	55	57	59	59	100
42	26	33	41	45	47	48	49	49	49	51	52	54	56	58	59	100
43	25	33	41	45	47	48	48	48	49	49	51	53	55	57	58	100
44	25	34	41	45	47	48	48	48	48	48	50	52	54	56	58	100
45	25	34	41	45	47	48	48	47	47	47	49	51	53	55	57	100
46	25	33	40	43	45	46	47	46	46	47	49	51	53	54	56	100
47	24	32	38	42	44	45	45	45	45	46	49	51	52	53	55	100
48	24	32	37	40	42	43	44	44	45	46	48	51	52	53	53	100
49	23	31	35	39	41	42	42	43	44	45	48	51	51	52	52	100
50	23	30	34	37	39	40	41	42	43	45	48	51	51	51	51	100
51	22	29	33	36	38	39	40	42	43	44	48	50	51	51	51	100
52	22	28	32	35	37	38	40	41	42	44	47	50	50	51	51	100
53	21	26	31	34	37	38	39	41	42	43	47	49	50	50	51	100
54	21	25	30	33	36	37	39	40	41	43	46	49	49	50	51	100
55	20	24	29	32	35	36	38	40	41	42	46	48	49	50	51	100
56	19	24	29	32	35	35	37	39	40	41	45	47	48	49	50	100
57	19	23	29	32	35	35	36	38	39	40	44	45	46	47	49	100
58	18	23	28	31	34	34	36	37	37	39	42	44	45	46	47	100
59	18	22	28	31	34	34	35	36	36	38	41	42	43	44	46	100

*Factors are a percent of the 1980 CSO Male Nonsmoker Mortality (without ten year select) rate of mortality for the attained age. Factors are based on the 1980 CSO Male Nonsmoker Mortality Table and 100% of the 83-86 SOA intercompany experience.

MALE NONSMOKER - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
60	17	22	28	31	34	33	34	35	35	37	40	41	42	43	45	100
61	17	22	28	31	34	33	34	35	35	36	39	40	41	43	45	100
62	16	21	27	31	33	33	34	35	35	36	38	39	41	43	45	100
63	16	21	27	30	33	33	34	34	34	35	37	38	40	43	45	100
64	15	20	26	30	32	33	34	34	34	35	36	37	40	43	45	100
65	15	20	26	30	32	33	34	34	34	34	35	36	39	43	45	100
66	15	20	26	30	32	33	34	34	35	35	36	37	40	44	46	100
67	15	20	26	30	32	33	34	34	35	36	37	38	41	45	47	100
68	15	20	25	29	32	32	34	35	36	36	37	39	42	46	47	100
69	15	20	25	29	32	32	34	35	36	37	38	40	43	47	48	100
70	15	20	25	29	32	32	34	35	37	38	39	41	44	48	49	100
71	21	25	30	34	37	37	38	39	41	42	43	45	48	51	52	100
72	26	31	35	38	41	41	43	44	45	46	47	49	51	55	56	100
73	32	36	40	43	46	46	47	48	50	50	51	53	55	58	59	100
74	38	41	45	48	50	50	52	52	54	55	55	57	59	62	63	100
75	43	47	50	53	55	55	56	57	58	59	59	61	63	65	66	100
76	49	52	55	57	59	59	60	61	62	63	63	65	66	69	69	100
77	55	57	60	62	64	64	65	65	66	67	67	69	70	72	73	100
78	60	63	65	67	68	68	69	70	71	71	72	72	74	76	76	100
79	66	68	70	72	73	73	74	74	75	75	76	76	78	79	80	100
80	72	73	75	76	77	77	78	78	79	79	80	80	81	83	83	100
81	77	79	80	81	82	82	82	83	83	83	84	84	85	86	86	100
82	83	84	85	86	86	86	87	87	87	88	88	88	89	90	90	100
83	89	89	90	91	91	91	91	91	92	92	92	92	93	93	93	100
84	94	95	95	95	95	95	96	96	96	96	96	96	96	97	97	100
85	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
86	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
87	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
88	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
89	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

*Factors are a percent of the 1980 CSO Male Nonsmoker Mortality (without 10 year select) rate of mortality for the attained age. Factors are based on the 1980 CSO Male Nonsmoker Mortality Table and 100% of the 83-86 SOA intercompany experience.

MALE NONSMOKER - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
90	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
91	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
92	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
93	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
94	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
95	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
96	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
97	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
98	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
99	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

*Factors are a percent of the 1980 CSO Male Nonsmoker Mortality (without 10 year select) rate of mortality for the attained age. Factors are based on the 1980 CSO Male Nonsmoker Mortality Table and 100% of the 83-86 SOA intercompany experience.

MALE SMOKER - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
2	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
3	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
4	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
5	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
6	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
7	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
8	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
9	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
10	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
11	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
12	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
13	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
14	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
15	94	95	95	95	95	96	96	95	95	95	95	95	95	95	95	100
16	88	89	89	90	90	91	91	91	91	91	91	90	90	90	91	100
17	83	84	84	85	86	87	87	86	86	86	86	86	86	86	86	100
18	77	78	79	80	81	82	82	81	81	81	81	81	81	81	81	100
19	71	73	73	75	76	78	78	77	77	77	77	76	76	76	77	100
20	65	67	68	70	71	73	73	72	72	72	72	71	71	71	72	100
21	63	65	66	68	69	70	70	69	70	70	70	69	69	69	70	100
22	61	63	64	66	66	68	68	67	67	68	68	67	67	67	68	100
23	60	61	62	64	64	65	65	64	65	65	65	65	65	66	67	100
24	58	59	60	62	61	63	63	62	62	63	63	63	63	64	65	100
25	56	57	58	60	59	60	60	59	60	61	61	61	61	62	63	100
26	55	56	58	60	59	60	60	59	60	61	61	61	61	62	63	100
27	53	55	57	59	59	60	60	59	60	60	60	61	61	62	63	100
28	52	53	57	59	58	59	60	59	59	60	60	60	62	62	63	100
29	50	52	56	58	58	59	60	59	59	59	59	60	62	62	63	100

*Factors are a percentage of the 1980 CSO Male Smoker Mortality (without 10 year select) rate of mortality for the attained age. Factors are based on the 1980 CSO Male Smoker Mortality Table and 100% of the 83-86 SOA intercompany experience.

MALE SMOKER - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
30	49	51	56	58	58	59	60	59	59	59	59	60	62	62	63	100
31	47	50	55	58	58	59	60	59	59	59	60	61	63	63	64	100
32	45	48	55	57	58	59	59	59	59	60	60	62	64	64	66	100
33	43	47	54	57	58	58	59	59	60	60	61	62	64	64	66	100
34	41	45	54	56	58	58	58	59	60	61	61	63	65	67	69	100
36	38	43	52	55	57	58	58	59	60	61	62	64	66	68	70	100
35	39	44	53	56	58	58	58	59	60	61	62	64	66	68	70	100
37	36	42	51	55	57	57	58	59	60	61	62	64	67	69	70	100
38	35	40	51	54	56	57	57	58	59	61	63	65	67	69	71	100
39	33	39	50	54	56	56	57	58	59	61	63	65	68	70	71	100
40	32	38	49	53	55	56	57	58	59	61	63	65	68	70	71	100
41	31	38	49	53	55	56	57	57	58	60	62	64	67	70	71	100
42	31	38	48	53	55	56	56	57	57	59	61	63	67	69	71	100
43	30	39	48	52	54	55	56	56	57	58	60	63	66	69	71	100
44	30	39	47	52	54	55	55	56	56	57	59	62	66	68	71	100
45	29	39	47	52	54	55	55	55	55	56	58	61	65	68	71	100
46	29	38	46	50	52	54	54	54	55	56	59	62	65	68	70	100
47	28	37	44	49	51	52	53	53	54	56	59	63	66	68	70	100
48	28	37	43	47	49	51	52	53	54	56	60	63	66	68	69	100
49	27	36	41	46	48	49	51	52	53	56	60	64	67	68	69	100
50	27	35	40	44	46	48	50	51	53	56	61	65	67	68	68	100
51	26	34	39	43	46	48	50	51	53	56	61	65	67	69	69	100
52	26	33	38	42	45	47	50	51	53	56	61	65	68	69	70	100
53	25	31	37	41	45	47	49	51	54	56	62	66	68	70	72	100
54	25	30	36	40	44	46	49	51	54	56	62	66	69	70	73	100
55	24	29	35	39	44	46	49	51	54	56	62	66	69	71	74	100
56	23	29	35	39	44	46	48	50	53	56	61	65	68	70	74	100
57	23	29	35	39	44	45	48	50	53	55	61	64	67	69	73	100
58	22	28	36	40	45	45	47	49	52	55	60	64	67	69	73	100
59	22	28	36	40	45	44	47	49	52	54	60	63	66	68	72	100

*Factors are a percent of the 1980 CSO Male Smoker Mortality (without 10 year select) rate of mortality for the attained age. Factors are based on the 1980 CSO Male Smoker Mortality Table and 100% of the 83-86 SOA intercompany experience.

MALE SMOKER - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
60	21	28	36	40	45	44	46	48	51	54	59	62	65	67	72	100
61	21	28	36	41	45	45	47	49	52	54	59	61	64	67	71	100
62	21	28	36	41	46	46	48	50	52	54	59	60	63	66	70	100
63	20	28	37	42	46	46	49	50	53	55	58	60	63	66	69	100
64	20	28	37	42	47	47	50	51	53	55	58	59	62	65	68	100
65	20	28	37	43	47	48	51	52	54	55	58	58	61	65	67	100
66	20	29	37	44	48	49	52	53	54	55	58	58	61	65	67	100
67	21	29	37	44	49	50	52	53	55	55	58	58	61	65	67	100
68	21	30	38	45	49	50	53	54	55	56	57	58	61	65	66	100
69	22	30	38	45	50	51	53	54	56	56	57	58	61	65	66	100
70	22	31	38	46	51	52	54	55	56	56	57	58	61	65	66	100
71	27	36	42	50	54	55	57	58	59	59	60	61	64	67	68	100
72	32	40	46	53	58	58	60	61	62	62	63	64	66	70	71	100
73	38	45	50	57	61	62	63	64	65	65	66	66	69	72	73	100
74	43	49	55	60	64	65	66	67	68	68	68	69	71	74	75	100
75	48	54	59	64	67	68	69	70	71	71	71	72	74	77	77	100
76	53	59	63	68	71	71	72	73	74	74	74	75	77	79	80	100
77	58	63	67	71	74	74	75	76	77	77	77	78	79	81	82	100
78	64	68	71	75	77	78	79	79	79	79	80	80	82	84	84	100
79	69	72	75	78	80	81	82	82	82	82	83	83	84	86	86	100
80	74	77	79	82	84	84	85	85	85	85	86	86	87	88	89	100
81	79	82	83	86	87	87	88	88	88	88	89	89	90	91	91	100
82	84	86	88	89	90	90	91	91	91	91	91	92	92	93	93	100
83	90	91	92	93	93	94	94	94	94	94	94	94	95	95	95	100
84	95	95	96	96	97	97	97	97	97	97	97	97	97	98	98	100
85	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
86	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
87	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
88	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
89	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

*Factors are a percent of the 1980 CSO Male Smoker Mortality (without 10 year select) rate of mortality for the attained age. Factors are based on the 1980 CSO Male Smoker Mortality Table and 100% of the 83-86 SOA intercompany experience.

MALE SMOKER - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
90	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
91	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
92	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
93	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
94	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
95	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
96	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
97	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
98	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
99	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

*Factors are a percent of the 1980 CSO Male Smoker Mortality (without 10 year select) rate of mortality for the attained age. Factors are based on the 1980 CSO Male Smoker Mortality Table and 100% of the 83-86 SOA intercompany experience.

FEMALE AGGREGATE - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
2	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
3	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
4	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
5	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
6	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
7	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
8	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
9	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
10	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
11	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
12	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
13	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
14	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
15	89	89	89	89	89	89	89	89	89	90	90	90	90	91	91	100
16	77	78	78	78	78	78	78	78	79	79	80	80	81	81	82	100
17	66	67	67	67	67	67	68	68	68	69	70	71	71	72	73	100
18	55	55	56	56	56	56	57	57	57	58	60	61	61	63	63	100
19	43	44	45	45	45	45	46	46	47	48	50	51	52	53	54	100
20	32	33	34	34	34	34	35	35	36	37	40	41	42	44	45	100
21	31	32	33	34	34	34	35	36	37	38	41	43	44	46	47	100
22	29	31	32	33	34	34	35	36	38	39	43	44	45	47	48	100
23	28	30	32	33	34	34	36	37	38	39	44	46	47	49	50	100
24	26	29	31	32	34	34	36	37	39	40	46	47	48	50	51	100
25	25	28	30	32	34	34	36	38	40	41	47	49	50	52	53	100
26	25	28	30	33	35	35	37	40	42	43	48	50	51	53	54	100
27	25	28	30	34	36	37	39	41	43	44	50	51	53	54	55	100
28	25	27	31	34	38	38	40	43	45	46	51	53	54	56	57	100
29	25	27	31	35	39	40	42	44	46	47	53	54	56	57	58	100

*Factors are a percent of the 1980 CSO Female Mortality (without 10 year select) rate of mortality for the attained age. Factors are based on the 1980 CSO Female Mortality Table and 100% of the 83-86 SOA intercompany experience.

FEMALE AGGREGATE - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
30	25	27	31	36	40	41	43	46	48	49	54	55	57	58	59	100
31	25	27	31	37	41	42	44	47	49	50	55	56	57	58	59	100
32	25	28	32	37	41	43	46	48	50	51	56	56	58	59	59	100
33	26	28	32	38	42	45	47	50	51	52	56	57	58	59	60	100
34	26	29	33	38	42	46	49	51	52	53	57	57	59	60	60	100
35	26	29	33	39	43	47	50	52	53	54	58	58	59	60	60	100
36	26	29	33	39	43	48	50	52	53	54	58	58	59	60	60	100
37	26	30	34	40	44	48	50	52	53	54	57	57	58	60	60	100
38	25	30	34	40	44	49	51	53	54	55	57	57	58	60	61	100
39	25	31	35	41	45	49	51	53	54	55	56	56	57	60	61	100
40	25	31	35	41	45	50	51	53	54	55	56	56	57	60	61	100
41	25	31	35	41	44	49	50	53	54	55	56	56	57	61	62	100
42	25	31	35	40	44	48	50	52	53	55	56	56	58	62	63	100
43	24	30	35	40	43	47	49	52	53	54	56	57	58	62	64	100
44	24	30	35	39	43	46	49	51	52	54	56	57	59	63	65	100
45	24	30	35	39	42	45	48	51	52	54	56	57	59	64	66	100
46	23	29	34	38	41	44	48	51	52	54	56	58	59	64	65	100
47	22	28	33	37	40	44	47	51	52	55	57	58	59	64	64	100
48	22	28	33	36	40	43	47	51	53	55	57	59	60	63	64	100
49	21	27	32	35	39	43	46	51	53	56	58	59	60	63	63	100
50	20	26	31	34	38	42	46	51	53	56	58	60	60	63	62	100
51	20	26	31	34	38	42	46	51	53	55	57	58	59	62	61	100
52	19	25	30	34	38	43	47	51	52	54	55	57	57	60	60	100
53	19	25	30	34	39	43	47	51	52	53	54	55	56	59	59	100
54	18	24	29	34	39	44	48	51	51	52	52	54	54	57	58	100
55	18	24	29	34	39	44	48	51	51	51	51	52	53	56	57	100
56	18	24	29	34	38	43	47	49	50	50	51	52	53	55	56	100
57	18	24	29	34	38	42	45	47	48	49	50	51	52	55	55	100
58	18	25	30	34	37	41	44	46	47	47	50	51	52	54	55	100
59	18	25	30	34	37	40	42	44	45	46	49	50	51	54	54	100

*Factors are a percent of the 1980 CSO Female Mortality (without 10 year select) rate of mortality for the attained age. Factors are based on the 1980 CSO Female Mortality Table and 100% of the 83-86 SOA intercompany experience.

FEMALE AGGREGATE - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
60	18	25	30	34	36	39	41	42	44	45	49	50	51	53	53	100
61	18	24	29	33	35	38	40	41	43	44	48	49	50	52	52	100
62	17	23	28	32	34	37	39	40	42	43	47	48	49	51	51	100
63	17	23	27	31	34	36	38	40	41	42	46	46	47	50	50	100
64	16	22	26	30	33	35	37	39	40	41	45	45	46	49	49	100
65	16	21	25	29	32	34	36	38	39	40	44	44	45	48	48	100
66	16	21	25	29	31	33	35	37	39	40	44	44	45	48	48	100
67	16	21	25	28	31	33	35	37	38	40	44	44	45	48	47	100
68	16	21	24	28	30	32	34	36	38	40	44	45	45	47	47	100
69	16	21	24	27	30	32	34	36	37	40	44	45	45	47	46	100
70	16	21	24	27	29	31	33	35	37	40	44	45	45	47	46	100
71	22	26	29	32	34	36	37	39	41	44	48	49	49	51	50	100
72	27	32	34	37	38	40	42	44	45	48	51	52	52	54	53	100
73	33	37	39	42	43	45	46	48	50	52	55	56	56	58	57	100
74	38	42	44	46	48	49	51	52	54	56	59	60	60	61	60	100
75	44	47	49	51	53	54	55	57	58	60	63	63	63	65	64	100
76	50	53	54	56	57	59	60	61	62	64	66	67	67	68	68	100
77	55	58	59	61	62	63	64	65	66	68	70	71	71	72	71	100
78	61	63	65	66	67	68	69	70	71	72	74	74	74	75	75	100
79	66	68	70	71	72	72	73	74	75	76	78	78	78	79	78	100
80	72	74	75	76	76	77	78	78	79	80	81	82	82	82	82	100
81	78	79	80	81	81	82	82	83	83	84	85	85	85	86	86	100
82	83	84	85	85	86	86	87	87	87	88	89	89	89	89	89	100
83	89	89	90	90	91	91	91	91	92	92	93	93	93	93	93	100
84	94	95	95	95	95	95	96	96	96	96	96	96	96	96	96	100
85	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
86	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
87	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
88	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
89	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

*Factors are a percent of the 1980 CSO Female Mortality (without ten year select) rate of mortality for the attained age. Factors are based on the 1980 CSO Female Mortality Table and 100% of the 83-86 SOA intercompany experience.

FEMALE AGGREGATE - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
90	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
91	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
92	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
93	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
94	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
95	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
96	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
97	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
98	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
99	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

*Factors are a percent of the 1980 CSO Female Mortality (without ten year select) rate of mortality for the attained age. Factors are based on the 1980 CSO Female Mortality Table and 100% of the 83-86 SOA intercompany experience.

FEMALE NONSMOKER - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
2	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
3	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
4	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
5	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
6	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
7	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
8	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
9	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
10	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
11	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
12	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
13	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
14	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
15	88	88	88	88	88	89	89	89	89	89	89	90	90	90	90	100
16	76	76	77	77	77	77	77	77	78	78	79	79	79	80	81	100
17	64	65	65	65	65	66	66	66	67	67	68	69	69	70	71	100
18	52	53	53	53	53	54	54	54	55	55	57	58	59	60	61	100
19	40	41	42	42	42	43	43	43	44	44	47	48	48	50	52	100
20	28	29	30	30	30	31	31	31	33	33	36	37	38	40	42	100
21	27	28	29	30	30	31	31	32	34	34	37	38	39	41	43	100
22	26	27	29	30	30	31	32	33	35	35	39	40	41	42	44	100
23	25	27	28	29	30	31	32	33	35	36	40	41	42	44	45	100
24	24	26	28	29	30	31	33	34	36	37	42	43	44	45	46	100
25	23	25	27	29	30	31	33	35	37	38	43	44	45	46	47	100
26	23	25	27	30	31	32	34	36	38	39	44	45	46	47	48	100
27	23	25	28	31	33	34	35	37	39	40	45	46	47	48	48	100
28	22	25	28	31	34	35	37	39	41	42	46	46	47	48	49	100
29	22	25	29	32	36	37	38	40	42	43	47	47	48	49	49	100

*Factors are a percent of the 1980 CSO Female Nonsmoker Mortality (without 10 year select) rate of mortality for the attained age. Factors are based on the 1980 CSO Female Nonsmoker Mortality Table and 100% of the 83-86 SOA intercompany experience.

FEMALE NONSMOKER - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
30	22	25	29	33	37	38	39	41	43	44	48	48	49	50	50	100
31	22	25	29	33	37	39	40	42	44	45	48	48	49	50	50	100
32	23	25	29	33	37	39	41	43	44	45	48	49	49	50	50	100
33	23	26	30	34	38	40	42	43	45	46	49	49	50	51	51	100
34	24	26	30	34	38	40	43	44	45	46	49	50	50	51	51	100
35	24	26	30	34	38	41	44	45	46	47	49	50	50	51	51	100
36	24	26	30	34	38	41	44	45	46	47	49	50	50	51	51	100
37	23	26	30	34	38	41	44	45	46	47	49	49	49	50	51	100
38	23	27	30	35	39	42	44	45	47	47	48	49	49	50	50	100
39	22	27	30	35	39	42	44	45	47	47	48	48	48	49	50	100
40	22	27	30	35	39	42	44	45	47	47	48	48	48	49	50	100
41	22	27	30	35	38	41	43	44	46	46	47	48	48	49	50	100
42	21	27	30	34	38	41	43	44	45	46	47	47	48	50	51	100
43	21	26	30	34	37	40	42	43	45	45	46	47	47	50	51	100
44	20	26	30	33	37	40	42	43	44	45	46	46	47	51	52	100
45	20	26	30	33	36	39	41	42	43	44	45	46	47	51	52	100
46	19	25	29	32	35	38	40	42	43	44	45	46	47	50	51	100
47	19	24	28	31	34	37	39	41	43	44	45	46	47	49	50	100
48	18	24	28	30	33	36	39	41	42	44	45	46	46	49	48	100
49	18	23	27	29	32	35	38	40	42	44	45	46	46	48	47	100
50	17	22	26	28	31	34	37	40	42	44	45	46	46	47	46	100
51	17	21	25	28	31	34	37	40	41	43	44	44	45	46	45	100
52	16	21	25	28	31	34	37	39	40	42	42	43	43	45	44	100
53	16	20	24	27	31	34	36	39	40	40	41	41	42	43	43	100
54	15	20	24	27	31	34	36	38	39	39	39	40	40	42	42	100
55	15	19	23	27	31	34	36	38	38	38	38	38	39	41	41	100
56	15	19	23	27	30	33	35	37	37	37	38	38	38	40	40	100
57	15	19	23	26	29	32	34	35	36	36	37	37	38	39	39	100
58	14	19	22	26	29	30	32	34	34	35	37	37	37	39	39	100
59	14	19	22	25	28	29	31	32	33	34	36	36	37	38	38	100

*Factors are a percent of the 1980 CSO Female Nonsmoker Mortality (without 10 year select) rate of mortality for the attained age. Factors are based on the 1980 CSO Female Nonsmoker Mortality Table and 100% of the 83-86 SOA intercompany experience.

FEMALE NONSMOKER - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
60	14	19	22	25	27	28	30	31	32	33	36	36	36	37	37	100
61	14	18	21	24	26	27	29	30	31	32	35	35	35	37	37	100
62	13	18	21	23	25	26	28	29	30	31	34	34	35	36	37	100
63	13	17	20	23	25	26	28	28	29	30	33	34	34	36	36	100
64	12	17	20	22	24	25	27	27	28	29	32	33	34	35	36	100
65	12	16	19	21	23	24	26	26	27	28	31	32	33	35	36	100
66	12	16	19	21	22	23	25	26	27	28	32	33	33	35	36	100
67	12	16	18	20	22	23	25	26	27	29	32	33	34	36	37	100
68	11	15	18	20	21	22	24	25	28	29	33	34	34	36	37	100
69	11	15	17	19	21	22	24	25	28	30	33	34	35	37	38	100
70	11	15	17	19	20	21	23	25	28	30	34	35	35	37	38	100
71	17	21	23	24	25	26	28	30	33	35	38	39	39	41	42	100
72	23	26	28	30	31	32	33	35	38	39	43	44	44	45	46	100
73	29	32	34	35	36	37	38	40	42	44	47	48	48	50	50	100
74	35	38	39	41	41	42	44	45	47	49	52	52	52	54	55	100
75	41	43	45	46	47	47	49	50	52	53	56	57	57	58	59	100
76	47	49	50	51	52	53	54	55	57	58	60	61	61	62	63	100
77	53	55	56	57	57	58	59	60	62	63	65	65	65	66	67	100
78	58	60	61	62	63	63	64	65	66	67	69	70	70	71	71	100
79	64	66	67	68	68	68	69	70	71	72	74	74	74	75	75	100
80	70	72	72	73	73	74	74	75	76	77	78	78	78	79	79	100
81	76	77	78	78	79	79	79	80	81	81	82	83	83	83	83	100
82	82	83	83	84	84	84	85	85	86	86	87	87	87	87	88	100
83	88	89	89	89	89	89	90	90	90	91	91	91	91	92	92	100
84	94	94	94	95	95	95	95	95	95	95	96	96	96	96	96	100
85	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
86	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
87	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
88	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
89	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

*Factors are a percent of the 1980 CSO Female Nonsmoker Mortality (without 10 year select) rate of mortality for the attained age. Factors are based on the 1980 CSO Female Nonsmoker Mortality Table and 100% of the 83-86 SOA intercompany experience.

FEMALE NONSMOKER - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
90	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
91	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
92	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
93	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
94	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
95	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
96	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
97	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
98	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
99	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

*Factors are a percent of the 1980 CSO Female Nonsmoker Mortality (without 10 year select) rate of mortality for the attained age. Factors are based on the 1980 CSO Female Nonsmoker Mortality Table and 100% of the 83-86 SOA intercompany experience.

FEMALE SMOKER - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
2	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
3	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
4	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
5	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
6	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
7	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
8	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
9	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
10	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
11	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
12	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
13	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
14	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
15	92	92	92	92	92	92	92	92	93	93	93	93	94	94	94	100
16	83	84	84	84	84	84	84	84	85	85	87	87	87	88	88	100
17	75	76	77	77	77	77	77	77	78	78	80	80	81	82	83	100
18	66	67	69	69	69	69	69	69	70	71	73	73	75	75	77	100
19	58	59	61	61	61	61	61	61	63	63	67	67	68	69	71	100
20	49	51	53	53	53	53	53	53	55	56	60	60	62	63	65	100
21	47	49	52	52	52	52	53	54	56	57	61	62	63	64	66	100
22	45	47	50	51	52	52	53	54	56	57	63	63	64	65	67	100
23	43	46	49	51	51	51	53	55	57	58	64	65	66	67	67	100
24	41	44	47	50	51	51	53	55	57	58	66	66	67	68	68	100
25	39	42	46	49	50	50	53	56	58	59	67	68	68	69	69	100
26	39	42	46	50	51	52	54	57	59	60	68	68	69	70	70	100
27	38	41	46	50	53	53	56	58	60	61	68	69	69	70	70	100
28	38	41	46	51	54	55	57	60	62	63	69	69	70	71	71	100
29	37	40	46	51	56	56	59	61	63	64	69	70	70	71	71	100

*Factors are a percent of the 1980 CSO Female Smoker Mortality (without 10 year select) rate of mortality for the attained age. Factors are based on the 1980 CSO Female Smoker Mortality Table and 100% of the 83-86 SOA intercompany experience.

FEMALE SMOKER - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
30	37	40	46	52	57	58	60	62	64	65	70	70	71	72	72	100
31	37	40	46	52	57	59	61	63	64	65	70	70	71	72	72	100
32	37	40	46	52	57	59	62	63	65	66	70	70	71	73	73	100
33	37	41	45	52	57	60	62	64	65	66	70	71	72	73	73	100
34	37	41	45	52	57	60	63	64	66	67	70	71	72	74	74	100
35	37	41	45	52	57	61	64	65	66	67	70	71	72	74	74	100
36	36	41	45	52	57	61	64	65	66	67	70	71	72	74	74	100
37	35	40	45	52	57	61	64	65	66	67	70	71	71	74	74	100
38	34	40	44	51	56	60	63	65	67	68	69	70	71	73	74	100
39	33	39	44	51	56	60	63	65	67	68	69	70	70	73	74	100
40	32	39	44	51	56	60	63	65	67	68	69	70	70	73	74	100
41	31	39	44	50	55	59	62	64	66	68	69	70	70	74	75	100
42	31	38	44	50	54	58	61	64	66	67	69	70	71	75	77	100
43	30	38	43	49	54	58	61	63	65	67	68	70	71	77	78	100
44	30	37	43	49	53	57	60	63	65	66	68	70	72	78	80	100
45	29	37	43	48	52	56	59	62	64	66	68	70	72	79	81	100
46	28	36	42	47	51	55	58	62	64	66	69	71	72	78	80	100
47	27	35	41	46	50	54	58	62	64	67	69	71	72	78	79	100
48	27	35	40	44	49	53	57	62	64	67	70	72	73	77	77	100
49	26	34	39	43	48	52	57	62	64	68	70	72	73	77	76	100
50	25	33	38	42	47	51	56	62	64	68	71	73	73	76	75	100
51	24	32	37	42	47	51	56	62	63	67	69	71	71	75	74	100
52	24	31	37	42	47	52	57	62	63	66	68	69	70	74	74	100
53	23	31	36	41	48	52	57	61	62	64	66	68	68	73	73	100
54	23	30	36	41	48	53	58	61	62	63	65	66	67	72	73	100
55	22	29	35	41	48	53	58	61	61	62	63	64	65	71	72	100
56	22	29	35	41	47	52	56	59	60	61	63	64	65	70	71	100
57	22	29	35	41	46	51	55	58	59	60	63	64	65	69	70	100
58	23	30	36	41	46	49	53	56	57	59	63	64	64	69	69	100
59	23	30	36	41	45	48	52	55	56	58	63	64	64	68	68	100

*Factors are a percent of the 1980 CSO Female Smoker Mortality (without 10 year select) rates of mortality for the attained age. Factors are based on the 1980 CSO Female Smoker Mortality Table and 100% of the 83-86 SOA intercompany experience.

FEMALE SMOKER - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
60	23	30	36	41	44	47	50	53	55	57	63	64	64	67	67	100
61	22	29	35	40	43	46	49	52	54	56	62	63	63	66	66	100
62	22	28	34	39	42	45	48	51	53	55	61	61	61	64	64	100
63	21	28	34	38	42	45	47	50	51	53	59	60	60	63	63	100
64	21	27	33	37	41	44	46	49	50	52	58	58	58	61	61	100
65	20	26	32	36	40	43	45	48	49	51	57	57	57	60	60	100
66	20	26	32	36	39	42	44	47	49	51	56	56	56	59	59	100
67	20	26	32	35	39	42	44	46	48	50	56	56	56	58	58	100
68	20	26	31	35	38	41	43	46	48	50	55	55	55	57	56	100
69	20	26	31	34	38	41	43	45	47	49	55	55	55	56	55	100
70	20	26	31	34	37	40	42	44	47	49	54	54	54	55	54	100
71	25	31	36	38	41	44	46	48	51	52	57	57	57	58	57	100
72	31	36	40	43	45	48	50	51	54	56	60	60	60	61	60	100
73	36	41	45	47	50	52	54	55	58	59	63	63	63	64	63	100
74	41	46	49	52	54	56	57	59	61	63	66	66	66	67	66	100
75	47	51	54	56	58	60	61	63	65	66	69	69	69	70	69	100
76	52	56	59	60	62	64	65	66	68	69	72	72	72	73	72	100
77	57	61	63	65	66	68	69	70	72	73	75	75	75	76	75	100
78	63	65	68	69	71	72	73	74	75	76	79	79	79	79	79	100
79	68	70	72	74	75	76	77	78	79	80	82	82	82	82	82	100
80	73	75	77	78	79	80	81	81	82	83	85	85	85	85	85	100
81	79	80	82	82	83	84	85	85	86	86	88	88	88	88	88	100
82	84	85	86	87	87	88	88	89	89	90	91	91	91	91	91	100
83	89	90	91	91	92	92	92	93	93	93	94	94	94	94	94	100
84	95	95	95	96	96	96	96	96	96	97	97	97	97	97	97	100
85	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
86	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
87	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
88	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
89	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

*Factors are a percent of the 1980 CSO Female Smoker (without 10 year select) rate of mortality for the attained age. Factors are based on the 1980 CSO Female Smoker Mortality Table and 100% of the 83-86 SOA intercompany experience.

FEMALE SMOKER - BASE VALUATION SELECT MORTALITY FACTORS*

ISSUE AGE	DURATION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+
90	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
91	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
92	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
93	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
94	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
95	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
96	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
97	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
98	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
99	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

*Factors are a percent of the 1980 CSO Female Smoker (without 10 year select) rate of mortality for the attained age. Factors are based on the 1980 CSO Female Smoker Mortality Table and 100% of the 83-86 SOA intercompany experience.