Title 210 -- NEBRASKA DEPARTMENT OF INSURANCE

Chapter 71 -- VALUATION OF LIFE INSURANCE POLICIES REGULATION

001. Purpose.

001.01 The purpose of this regulation is to provide:

001.01(1)   Tables of select mortality factors and rules for their use;

001.01(2)   Rules concerning a minimum standard for the valuation of plans with nonlevel premiums or benefits; and

001.01(3)   Rules concerning a minimum standard for the valuation of plans with secondary guarantees.

001.02 The method for calculating basic reserves defined in this regulation will constitute the Commissioner's Reserve Valuation Method for policies to which this regulation is applicable.

002. Authority.
This regulation is issued under the authority of Neb.Rev.Stat. §44-101.01 of the Insurance Laws of Nebraska.

003. Applicability.
This regulation shall apply to all life insurance policies, with or without nonforfeiture values, issued on or after January 1, 2000, subject to the following exceptions and conditions.

003.01 Exceptions

003.01(1)   This regulation shall 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, issued before January 1, 2000, that guarantees the premium rates of the new policy. This regulation also shall not apply to subsequent policies issued as a result of the exercise of such a provision, or a derivation of the provision, in the new policy.

003.01(2)   This regulation shall not apply to any universal life policy that meets all the following requirements:

003.01(2)(a) Secondary   guarantee period, if any, is five (5) years or less;

003.01(2)(b) Specified   premium for the secondary guarantee

004. Definitions.

For purposes of this regulation:

004.01   "Basic reserves" means reserves calculated in accordance with Neb.Rev.Stat. §44-404(d).

004.02   "Contract segmentation method" means the method of dividing the period from issue to mandatory expiration of a policy into successive segments, with the length of each segment being defined as the period from the end of the prior segment (from policy inception, for the first segment) to the end of the latest policy year as determined below. All calculations are made using the 1980 CSO valuation tables, as defined in Subsection 004.06 of this section, (or any other valuation mortality table adopted by the National Association of Insurance Commissioners (NAIC) after the operative date of this regulation and promulgated by regulation by the director for this purpose), and, if elected, the optional minimum mortality standard for deficiency reserves stipulated in Section 005.02 of this regulation.

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 =   1, 2, ...; t is reset to 1 at the beginning of each segment;

$GP_{x+k+t-1}$ =   Guaranteed gross premium per thousand of face amount for year t of the segment, ignoring policy fees only if level for the premium paying period of the policy.

$$R_t = \frac{q_{x+k+t}}{q_{x+k+t-1}},$$ However, R_t may be increased or decreased by one percent in any policy year, at the company's option, but R_t shall not be less than one;

where:

premium described in 007.01(3), if any, or else the minimum premium described in Section 007.01(4).

004.08 (1)   "Segmented reserves" means reserves, calculated using segments produced by the contract segmentation method, equal to the present value of all future guaranteed benefits less the present value of all future net premiums to the mandatory expiration of a policy, where the net premiums within each segment are a uniform percentage of the respective guaranteed gross premiums within the segment. The uniform percentage for each segment is such that, at the beginning of the segment, the present value of the net premiums within the segment equals:

004.08(1)(a) The   present value of the death benefits within the segment, plus

004.08(1)(b) The   present value of any unusual guaranteed cash value (see section 006.04) occurring at the end of the segment, less

004.08(1)(c) Any   unusual guaranteed cash value occurring at the start of the segment, plus

004.08(1)(d) For   the first segment only, the excess of 004.08(1)(d)(i) over 004.08(1)(d)(ii), as follows:

004.08(1)(d)(i) A   net level annual premium equal to the present value, at the date of issue, of the benefits provided for in the first segment after the first policy year, divided by the present value, at the date of issue, of an annuity of one per year payable on the first and each subsequent anniversary within the first segment on which a premium falls due. However, the net level annual premium shall not exceed the net level annual premium on the nineteen-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.

004.08(1)(d)(ii) A   net one year term premium for the benefits provided for in the first policy year.

004.08(2)   The length of each segment is determined by the "contract segmentation method," as defined in this section.

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 shall not exceed the net level annual premium on the nineteen-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.

004.11(1)(b)(ii) A   net one year term premium for the benefits provided for in the first policy year.

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

004.12   "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.

005. General Calculation Requirements for Basic Reserves and Premium Deficiency Reserves.

005.01   At the election of the company 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 tables with select mortality factors (or any other valuation mortality table adopted by the NAIC after January 1, 2000 and promulgated by regulation by the director for this purpose). If select mortality factors are elected, they may be:

005.01(1)   The ten-year select mortality factors incorporated into the 1980 amendments to the NAIC Standard Valuation Law;

005.01(2)   The select mortality factors in the Appendix; or

005.01(3)   Any other table of select mortality factors adopted by the NAIC after the effective date of this regulation and

promulgated by regulation by the director for the purpose of calculating basic reserves.

005.02   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

005.02(3)(c) X is such that the mortality rates resulting from the application of X are at least as great as the anticipated mortality experience, without recognition of mortality improvement beyond the valuation date, in each of the first five (5) years after the valuation date;

005.02(3)(d) The appointed actuary shall increase X at any valuation date where it is necessary to continue to meet all the requirements of Subsection 005.02(3);

005.02(3)(e) The appointed actuary may decrease X at any valuation date as long as X continues to meet all the requirements of Subsection 005.02(3); and

005.02(3)(f) The appointed actuary shall specifically take into account the adverse effect on expected mortality and lapsation of any anticipated or actual increase in gross premiums.

005.02(3)(g) If X is less than 100 percent at any duration for any policy, the following requirements shall be met:

  005.02(3)(g)(i) The appointed actuary shall annually prepare an actuarial opinion and memorandum for the company in conformance with the requirements of Section 006 of Chapter 69 of the Nebraska Department of Insurance Regulations;

  005.02(3)(g)(ii) The appointed actuary shall disclose, in the Regulatory Asset Adequacy Issues Summary, the impact of the insufficiency of assets to support the payment of benefits and expenses and the establishment of statutory reserves during one or more interim periods; and

  005.02(3)(g)(iii) The appointed actuary shall annually opine for all policies subject to this regulation as to whether the mortality rates resulting from the application of X

meet the requirements of Subsection 005.02(3). This opinion shall be supported by an actuarial report, subject to appropriate Actuarial Standards of Practice promulgated by the Actuarial Standards Board of the American Academy of Actuaries. The X factors

specified blocks of business is relied upon in the formation of the appointed actuary opinion pursuant to and consistent with the requirements of Section 006 of Chapter 69 of the Nebraska Department of Insurance Regulations.

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

006.01　　　Basic Reserves

Basic reserves shall be calculated as the greater of the segmented reserves and the unitary reserves. Both the segmented reserves and the unitary reserves for any policy shall use the same valuation mortality table and selection factors. At the option of the insurer, in calculating segmented reserves and net premiums, either of the adjustments described in Subsections 006.01(1) or 006.01(2) below may be made:

006.01(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.

006.01(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.

006.02　　　Deficiency Reserves

006.02(1) The deficiency reserve at any duration shall be calculated:

006.02(1)(a) On a unitary basis if the corresponding basic reserve determined by Subsection 006.01 is unitary;

006.02(1)(b) On a segmented basis if the corresponding basic reserve determined by Subsection 006.01 is segmented; or

006.02(1)(c) On the segmented basis if the corresponding basic reserve determined by Subsection 006.01 is equal to both the segmented reserve and the unitary reserve.

006.02(2)　　This subsection shall apply to any policy for which the guaranteed gross premium at any duration is less than the corresponding modified net premium calculated by the method used in determining the basic reserves, but using the minimum valuation standards of mortality (specified in Section 005.02) and rate of interest.

years from the date of issue to the date the unusual cash surrender value is scheduled.

006.04(2)   The reserves actually held subsequent to any unusual guaranteed cash surrender value shall not be less than the reserves calculated by treating the policy as an n year policy providing term insurance plus a pure endowment equal to the next unusual guaranteed cash surrender value, and treating any unusual guaranteed cash surrender value at the end of the prior segment as a net single premium, where

006.04(2)(a)   n is the number of years from the date of the last unusual guaranteed cash surrender value prior to the valuation date to the earlier of:

006.04(2)(a)(i)   The date of the next unusual guaranteed cash surrender value, if any, that is scheduled after the valuation date; or

006.04(2)(a)(ii) The   mandatory expiration date of the policy; and

006.04(2)(b) The   net premium for a given year during the n year period is equal to the product of the net to gross ratio and the respective gross premium; and

006.04(2)(c) The   net to gross ratio is equal to 006.04(2)(c)(i) divided by 006.04(2)(c)(ii) as follows:

006.04(2)(c)(i)   The present value, at the beginning of the n year period, of death benefits payable during the n year period plus the present value, at the beginning of the n year period, of the next unusual guaranteed cash surrender value, if any, minus the amount of the last unusual guaranteed cash surrender value, if any, scheduled at the beginning of the n year period.

006.04(2)(c)(ii) The   present value, at the beginning of the n year period, of the scheduled gross premiums payable during the n year period.

006.04(3)   For purposes of this subsection, a policy is considered to have an unusual pattern of guaranteed cash surrender values if any future

guaranteed cash surrender value exceeds the prior year's guaranteed cash surrender value by more than the sum of:

006.04(3)(a) One   hundred ten percent (110%) of the scheduled gross premium for that year;

006.04(3)(b) One   hundred ten percent (110%) of one year's accrued

006.05(6)   If the assuming company chooses this optional exemption, the ceding company's reinsurance reserve credit shall be limited to the amount of reserve held by the assuming company for the affected policies.

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

006.06(1)   Calculate the valuation net premium for each future policy year as the tabular cost of insurance for that future year.

006.06(2)   Basic reserves shall never be less than the tabular cost of insurance for the appropriate period, as defined in Subsection 006.03.

006.06(3)   Deficiency reserves.

006.06(3)(a) For each policy year, calculate the excess, if greater than zero, of the valuation net premium over the respective maximum guaranteed gross premium.

006.06(3)(b) Deficiency reserves shall never be less than the sum of the present values, at the date of valuation, of the excesses determined in accordance with Subparagraph 006.06(3)(a) above.

006.06(4)   For purposes of this subsection, the calculations use the maximum valuation interest rate and the 1980 CSO valuation tables with or without ten-year select mortality factors, or any other table adopted after January 1, 2000 by the NAIC and promulgated by regulation by the director for this purpose.

006.06(5)   A policy shall be considered an attained-age-based YRT life insurance policy for purposes of this subsection if:

006.06(5)(a) The premium rates (on both the initial current premium scale and the guaranteed maximum premium scale) are based upon the attained age of the insured such that the rate for any given policy at a given attained age of the insured is independent of the year the policy was issued; and

006.06(5)(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.

006.06(6)   For policies that become attained-age-based YRT policies after an

006.08   Exemption from Unitary Reserves for Certain Juvenile Policies

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

006.08(1)   At issue, the insured is age twenty-four (24) or younger;

006.08(2)   Until the insured reaches the end of the juvenile period, which shall occur at or before age twenty-five (25), the gross premiums and death benefits are level, and there are no cash surrender values; and

006.08(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.

007. 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.

007.01   General

007.01(1) Policies   with a secondary guarantee include:

007.01(1)(a) A   policy with a guarantee that the policy will remain in force at the original schedule of benefits, subject only to the payment of specified premiums;

007.01(1)(b) 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 tables with or without ten-year select mortality factors, or any other table adopted after January 1, 2000 by the NAIC and promulgated by regulation by the director for this purpose; or

007.01(1)(c) A   policy with any combination of Subparagraph 007.01(1)(a) and 007.01(1)(b).

007.01(2)   A secondary guarantee period is the period for which the policy is guaranteed to remain in force subject only to a secondary guarantee. When a policy contains more than one secondary guarantee, the minimum reserve shall be the greatest of the

respective minimum reserves at that valuation date of each unexpired secondary guarantee, ignoring all other secondary guarantees. Secondary guarantees that are unilaterally changed by the insurer after issue shall be considered to have been made at issue. Reserves described in Subsections 007.02 and 007.03 below shall be recalculated from issue to reflect these changes.

007.03   Deficiency Reserves for the Secondary Guarantees

Deficiency reserves, if any, for the secondary guarantees shall be calculated for the secondary guarantee period in the same manner as described in Section 006.02 with gross premiums set equal to the specified premiums, if any, or otherwise to the minimum premiums that keep the policy in force.

007.04   Minimum Reserves

The minimum reserves during the secondary guarantee period are the greater of:

007.04(1)   The basic reserves for the secondary guarantee plus the deficiency reserve, if any, for the secondary guarantees; or

007.04(2)   The minimum reserves required by other rules or regulations governing universal life plans.

Appendix A
SELECT MORTALITY FACTORS

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

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

For sex-blended mortality tables, compute select mortality factors in the same proportion as the

Appendix

SELECT MORTALITY FACTORS

Male, Aggregate
Duration

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

Male, Aggregate
Duration

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

Male, Aggregate

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

Male, Non-Smoker

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

Male, Non-Smoker

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

Male, Non-Smoker

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

Male, Smoker

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

Male, Smoker

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

Male, Smoker

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

Female, Aggregate

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

Female, Aggregate
Duration

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

Female, Aggregate
Duration

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

Female, Non-Smoker
Duration

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

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

Female, Non-Smoker

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

Female, Smoker

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

Female, Smoker
Duration

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

Female, Smoker
Duration

Issue Age	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
71	60	60	64	68	68	72	75	75	80	80	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	
73	60	60	64	68	68	72	75	75	80	80	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	
75	60	60	64	68	68	72	75	75	80	80	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	
77	60	60	64	68	68	72	75	75	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	
79	60	60	64	68	68	72	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	
81	60	60	64	68	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	
83	60	60	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	
85+	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100		