



## CALCULATION OF DEMOGRAPHIC FACTOR

Step (1) -- For policy/contract # 1, assign the appropriate age/sex factors from Regulation 146.

Policy/Contract Number	Family Unit	Claim Factor	Premium Factor
1	John A.	2.10	2.80

Step (2) -- Add the claim and premium factors for all family units covered by the policy/contract. (N.B. Since this is an individual health insurance policy, it covers only one family unit -- that of John A.)

Policy/Contract Number	Total Claim Factor	Total Premium Factor
1	2.10	2.80

Step (3) -- Divide the total claim factor by the total premium factor to obtain the average factor for that policy/contract.

$$\text{Average Factor for Policy \# 1} = 2.10/2.80 = 0.75$$

Step (4) -- Multiply the average factor by the annualized premium for the policy/contract.

$$0.75 \times 3600 = 2700$$

Step (5) -- Repeat the calculations in steps 1-4 for each policy/contract in force, and sum the results of Step 4 for all policies/contracts.

Policy/ Contract Number	Claim Factor	Premium Factor	Total Claim Factor	Total Premium Factor	Average Factor	Annualized Premium	Average Factor x Annualized Premium
1	2.10	2.80	2.10	2.80	0.750	\$ 3,600	\$ 2,700
2	1.60	1.14	1.60	1.14	1.404	\$ 1,300	\$ 1,825
3	2.70	2.80	2.70	2.80	0.964	\$ 3,400	\$ 3,278
4	2.60	2.80	2.60	2.80	0.929	\$ 3,600	\$ 3,344
TOTAL						\$ 11,900	\$ 11,147

Step (6) -- Divide the sum from Step (5) by the total annualized premium for all policies/contracts in force to yield the average demographic factor.

$$\text{Average demographic factor for this policy form in Pool Area A} = \$ 11,147/\$ 11,900 = .937$$

## EXAMPLE 2 -- SMALL GROUP HEALTH INSURANCE POLICY FORM IN POOL AREA A

Data: Three policies of this form are in force in Pool Area A, as follows:

Policy/ Contract Number	Subscriber/ Contractholder/ Certificateholder	Sex	Age	Single (S) or Family (F)
11	Alan A.	M	60	S
11	Bertha B.	F	25	F
11	Clara C.	F	37	S
12	David D.	M	22	S
12	Earl E.	M	25	F
12	Frieda F.	F	25	S
12	George G.	M	45	F
13	Harriet H.	F	62	F
13	Irene I.	F	27	S

Policy/ Contract Number	Premium Payment Mode	Community Rated Premium	Community Rated Annualized Premium
11	Monthly	\$ 550	\$ 6,600
12	Monthly	\$ 850	\$ 10,200
13	Quarterly	\$ 1,250	\$ 5,000
			\$ 21,800

#### CALCULATION OF DEMOGRAPHIC FACTORS

Step (1) -- For policy/contract # 11, assign the appropriate age/sex factors from Regulation 146.

Policy/ Contract Number	Family Unit	Claim Factor	Premium Factor
11	Alan A.	2.36	1.14
11	Bertha B.	2.10	2.80
11	Clara C.	1.21	1.14

Step (2) -- Add the claim and premium factors for all family units covered by the policy/contract.

Policy/Contract Number	Total Claim Factor	Total Premium Factor
11	5.67	5.08

Step (3) -- Divide the total claim factor by the total premium factor to obtain the average for that policy/contract.

Average Factor for policy No. 11 =  $5.67/5.08 = 1.116$

Step (4) -- Multiply the average factor by the annualized premium for the policy/contract.

$$1.116 \times \$ 6,600 = \$ 7,366$$

Step (5) -- Repeat the calculations in steps (1) - (4) for each policy/contract in force, and sum the results of step 4 for all policies/contracts.

Policy/ Contract Number		Claim Factor	Premium Factor	Total Claim Factor	Total Premium Factor
11	Alan A.	2.36	1.14		
	Bertha B.	2.10	2.80		
	Clara C.	1.21	1.14		
				5.67	5.08
12	David D.	0.54	1.14		
	Earl E.	2.10	2.80		
	Frieda F.	1.06	1.14		
	George G.	2.70	2.80		
				6.40	7.88
13	Harriet H.	4.20	2.80		
	Irene I.	1.06	1.14		
				5.26	3.94

#### TOTAL

Policy/ Contract Number		Average Factor	Annualized Premium	Average Factor x Annualized Premium
11	Alan A.			
	Bertha B.			
	Clara C.			
		1.116	\$ 6,600	\$ 7,366
12	David D.			
	Earl E.			
	Frieda F.			
	George G.			

Policy/ Contract Number	Average Factor	Annualized Premium	Average Factor x Annualized Premium
	0.812	\$ 10,200	\$ 8,282
13	Harriet H. Irene I.		
	1.335	\$ 5,000	\$ 6,675
	TOTAL	\$ 21,800	\$ 22,323

Step (6) -- Divide the sum from step (5) by the total annualized premium for all policies/contracts in force to yield the average demographic factor.

Average demographic factor for this policy form in Pool Area A =  $\$ 22,323 / 21,800 = 1.024$