

Information Bulletin

NUMBER 42

Allocating Workers' Compensation Insurance Costs

Allocating insurance costs for each of a company's locations is an effective way to hold managers accountable for insurance costs and educate them on the importance of accident prevention. Under this system, insurance expenses become a direct part of each manager's budget, as opposed to an overall number handled by the CFO each year. This system can also be used for single location businesses by spreading insurance costs among key departments.

The most equitable way to allocate insurance costs is to use a formula that includes both loss exposures (number of employees, payroll, etc) and a fair way to factor in individual loss experience for each location. On the following page is an example of a chart that can be used to set up these variables.

Table 1 shows that the total insurance premium allocated for these five locations is \$500,000. Management at XYZ Corporation uses three factors to calculate the insurance premium allocations:

- Exposure Base
- Accident Frequency
- Accident Severity.

They have also decided that in splitting up the premium, 60% will be based on Exposure Base, 25% will be based on Accident Frequency, and 15% will be based on Accident Severity. This means the total premium of \$500,000 will be divided initially as follows:

60% Exposure Base x \$500,000 Premium = \$300,000
25% Accident Frequency x \$500,000 Premium = \$125,000
15% Accident Severity x \$500,000 Premium = \$ 75,000

Once these three basic premium subgroups have been established, the next task is to calculate the appropriate premium allocations for each of the five locations.

Exposure Base

The first column used is the Exposure Base, which in this case is total units sold but could also be payroll, number of employees, number of vehicles, etc. This approach levels the playing field for smaller locations, which should have correspondingly lower risk factors than the larger locations. In the table, location #1 is the largest operation with 64,000 units sold annually. The sales volume represents 42% (64,000 units/153,000 units) of the total sales for the five locations combined. Using this approach, location #1 would pay 42% of the premium set aside for the Exposure Base.

$$42\% \times \$300,000 = \$126,000$$

Accident Frequency

For the second premium allocation factor, XYZ Corporation has determined that 25% of the total premium should be based on their previous year's accident frequency. Out of 70 total accidents at the five locations, location #1 has 30 claims, or 43% of the total frequency. For this reason, location #1 will be assessed 43% of the \$125,000 of premium that has been allocated for Accident Frequency.

$$43\% \times \$125,000 = \$53,750$$

Accident Severity

Finally, XYZ Corporation has decided that the remaining 15% of the total \$500,000 premium will be charged to each location based on their previous year's accident costs for the year. In this case, location #1 has had 45% of the accident expenses for all locations (\$128,000/\$282,000), and will be charged with that portion of the \$75,000 set aside for Accident Severity.

$$45\% \times \$75,000 = \$33,750$$

Important: To keep large shock losses from skewing the severity numbers, a company can use a predetermined limit per individual claim or set an aggregate total loss limit per location (example: If a location has one unusual claim with reserves of \$250,000, this would put most of the cost of the severity category on that one location. Instead, it may be better to set a maximum limit (Cap) per claim of \$50,000, \$25,000, \$10,000, or whatever number fits your company best.

Table 1 Allocating Insurance Premiums for XYZ Corp

Loc	Exposure Base (60%)			Accident Frequency (25%)			Accident Severity (15%)			Final Premium
	No. of Units	% of Base	Premium Load	No. of Claims	% of Base	Premium Load	Claim Dollars	% of Base	Premium Load	
1	64,000	42%	\$126,000	30	43%	\$53,750	\$128,000	45%	\$33,750	\$213,500
2	40,000	26%	\$78,000	17	24%	\$30,000	\$75,000	26%	\$19,500	\$127,500
3	20,000	13%	\$39,000	12	17%	\$21,250	\$47,000	17%	\$12,750	\$73,000
4	15,000	10%	\$30,000	7	10%	\$12,500	\$24,000	9%	\$6,750	\$49,250
5	14,000	9%	\$27,000	4	6%	\$7,500	\$8,000	3%	\$2,250	\$36,750
Total	153,000	100%	\$300,000	70	100%	\$125,000	\$282,000	100%	\$75,000	\$500,000

This bulletin is intended only as a reminder and is offered solely as a guide to assist management in its responsibility of providing a safer working environment. This bulletin is not intended to cover all possible hazardous conditions or unsafe acts that may exist. Other unsafe acts or hazardous conditions should also be noted and corrective action taken.