Experience Rating Impact – Standard Program

Calculating the benefits of eliminating time-loss injuries

About the Standard Program:
The Standard Program is based on the number of time-loss claims within the three year evaluation window. The total number of claims determines a company's discount or surcharge.

Max, Tim and John each own a restaurant in Saskatchewan of equivalent size. They each have a $400,000 annual payroll. They are classified under the rate code S22-01. For clarity in this example we will assume no payroll growth for the businesses, nor adjust for the increase in maximum assessable earnings.

Year	Premium Rate for S22-01/ $100 of payroll	Premium owing without Experience Rating
2014	$0.95	$3800
2013	$0.99	$3960
2012	$1.01	$4040
2011	$0.97	$3880
2010	$0.97	$3880

While calculating the WCB premium owing for 2010 all three have no time loss injuries on their records. However, throughout the course of 2010, Max, Tim, and John all experience an injury in their workplace of the same severity. Max and Tim experience a time-loss claim of a single day while John, who already had a modified work program in place, does not. Under the WCB's rolling three year average injuries are not included in the calculation for the year immediately following the injury but experience a one year delay. To determine the premium owing in 2011, the experience from 2007, 2008, 2009 would be used. As such, for the calculation of 2011 the discount on the premiums owing for each employer does not change.

	2011 Premium Owing without Experience Rating	Experience Rating Surcharge/Discount	Actual Premium Owing
Max	$3880	-25%	$2910
Tim	$3880	-25%	$2910
John	$3880	-25%	$2910

A single time-loss injury cost an employer nothing in the year immediately following the injury

The following year (2011) Tim follows John's example of developing a modified work program. Max however, places no emphasis on improved safety in his workplace and as a result he experiences two time-loss injuries over the course of the year. Tim and John utilize their safety programs and experience no time-loss claims. The claim for 2010 becomes realized in the 2012 premium as the years 2008, 2009, 2010 are used. This results in both Tim and Max losing their discount.

	2012 Premium Owing without Experience Rating	**Experience Rating Surcharge/Discount**	**Actual Premium Owing**
Max	$4040	0%	$4040
Tim	$4040	0%	$4040
John	$4040	-25%	$3030

For this example a single time-loss injury costs a difference of $1010 in WCB premium

Continuing the safety trends in their organizations John and Tim do not experience any time-loss claims over the course of 2012. Max continues to struggle with workplace injuries and adds another time-loss claim to his rating. The calculation for the premium owing for 2013, uses data from 2009, 2010, and 2011. As such for this calculation John has zero claims, Tim has one and Max has three.

After calculating the premium owing for 2013, each employer pays the following WCB premium.

	2013 Premium Owing without Experience Rating	**Experience Rating Surcharge/Discount**	**Actual Premium Owing**
Max	$3960	+25%	$4950
Tim	$3960	0%	$3960
John	$3960	-25%	$2970

For this example three time-loss injuries costs an annual difference of $1980 in WCB premium

In 2014, Max follows John's and Tim's experience and institute safety plans and modified work arrangement. He experiences no time-loss claims. Max will start to see benefits from his improved performance in the premium owing for 2016 but his previous poor performance means that he will not be returned into a discount position until 2018.

The calculation for the premium owing for 2014, uses data from 2010, 2011, and 2012. As such for this calculation John has zero claims, Tim has one and Max has four.

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	2014 Premium Owing without Experience Rating	Experience Rating Surcharge/Discount	Actual Premium Owing
Max	$3800	+50%	$5700
Tim	$3800	0%	$3800
John	$3800	-25%	$2850

Four time-loss injuries costs an annual difference of $2850 in WCB Premium

Analysis

Over four years (2011-2014), Max pays the WCB $17,600, Tim pays the WCB $14,710, and John pays the WCB $11,760. The single time-loss injury experienced at Tim's restaurant cost him $2950 in additional WCB premiums over four years. For the 2015 WCB premium owing Tim will return to discount position of 25%. Max's poor safety performance had an even greater impact on his bottom line, costing $5,849 over four years and, assuming no additional injuries, he will continue to pay even more until 2018.

SASKATCHEWAN CHAMBER *of* COMMERCE

Experience Rating Impact – Advanced Program

Calculating the benefits of reducing claim costs

About the Advanced Program:
The Advanced Program is based on claim costs within the three-year evaluation window. The program also uses several other elements to determine the applicable discounts or surcharges including a weighted loss ratio (WLR), a program participation factor and an eligibility factor.

Net Discount or Surcharge = Base Discount or Surcharge (established by Employer WLR verses Industry WLR) X Eligibility Factor X Participation Factor

Let's assume Bill has a Plumbing, Heating and Air-Conditioning company that has been in business for more than 3 years and has a payroll of $1.5 million. . He is classified under the WCB rate code B11-01. For clarity in this example we will assume no payroll growth for the businesses, nor adjust for the increase in maximum assessable earnings.

Year	Premium Rate for B11-01/ $100 of payroll	Premium owing without Experience Rating
2014	$1.67	$25,050
2013	$1.83	$27,450
2012	$2.03	$30,450
2011	$2.24	$33,600
2010	$2.41	$36,150
2009	$2.57	$38,550
2008	$3.05	$45,750
2007	$3.51	$52,650

In the Advance program the maximum discount is 30% and the maximum surcharge is 200% (the extent to which these discounts or surcharges are applied is dependent on the eligibility and participation factors). To better reflect emerging trends for the establishment of discounts and surcharges the Advance program uses a Weighted Loss Ratio. This is the *ratio of costs to premiums* weighted by year. The weighting is calculated using the most recent year at 50%, the 2nd most recent year at 33% and the third most recent year at 17%. As with most WCB calculations, when calculating the Weighted Loss Ratio there is a lapse year due to data completeness (e.g. for the 2014 premium owing calculation the years 2010, 2011 and 2012 are used).

For Bill (industry rate code B11 - the Construction Trades) the Industry Weighted Loss Ratios are as follows:

	2011	2012	2013	2014
Industry Weighted Loss Ratio	0.34	0.34	0.32	0.32
This is the ratio of costs to premium per industry weighted by year. The weighted loss ratio weights the most recent year at 50%, the 2nd most recent year at 33% and the third most recent year at 17%.				

For Rate Code B-11 the average cost for a new Loss Time Injury claim in 2012 was $3,970. Let's assume Bill had claim costs starting at $10,000 in 2007, since Bill has not taken a proactive approach to safety, he incurs increasing costs that escalate annually at +$1000 per year. While not impacting this example it is important to note that for the purposes of experience rating, the costs of any single claim are capped at the maximum assessable wage for each year ($59,000 for 2014).

Year	**Premium Rate for B11-01/ $100 of payroll**	**Premium owing without Experience Rating**	**Bill's claim costs**
2014	$1.67	$25,050	N/A
2013	$1.83	$27,450	N/A
2012	$2.03	$30,450	$15,000
2011	$2.24	$33,600	$14,000
2010	$2.41	$36,150	$13,000
2009	$2.57	$38,550	$12,000
2008	$3.05	$45,750	$11,000
2007	$3.51	$52,650	$10,000

Using the data from the above chart it is possible to calculate the Weighted Loss Ratio (WLR) for Bill's firm.

	2011	2012	2013	2014
Weighted Costs	($10,000×0.17)+($11,000×0.33) +(12,000×0.50)= $11,330.00	($11,000×0.17)+($12,000×0.33) +(13,000×0.50)= $12,330.00	($12,000×0.17)+($13,000×0.33) +(14,000×0.50)= $13,330.00	($13,000×0.17)+($14,000×0.33) +(15,000×0.50)= $14,330.00
Weighted Premium	($52,650×0.17)+($48,750×0.33) +($38,550×0.50)= $43,323.00	($45,750×0.17)+($38,550×0.33) +($36,150×0.50)= $38,574.00	($38,550×0.17)+($36,150×0.33) +($33,600×0.50)= $35,283.00	($36,159×0.17)+($33,600×0.33) +($30,450×0.50)= $32,460.03
Bill's Firms Weighted Loss Ratio	0.26	0.32	0.38	0.44

For every 3.33% better a firm`s WLR is than the industry`s, they receive a potential discount of up to 1%. For every 1.5% worse than the industry, up to a 1% surcharge is applied. The extent to which these discounts or surcharges are applied is dependent on the eligibility and participation factors.

The following chart calculates the potential surcharges/discounts Bill could be eligible for:

	2011	2012	2013	2014
Percentage Different in Ratios =	(Ind WLR - Firm WLR)/ Ind WLR (34%-26%)/34% = 23.53%	(Ind WLR - Firm WLR)/ Ind WLR (34%-32%)/34% = 6.88%	(Firm WLR – Ind WLR)/ Ind WLR (38%-32%)/32% = 18.75%	(Firm WLR – Ind WLR)/ Ind WLR (44%-32%)/32% = 37.5%
Base Surcharge -(% diff/1.5)	N/A	N/A	18.75% / 1.5 = 12.5%	37.5% / 1.5 = 25%
Base Discount (%diff/3.33)	23.53% / 3.33 = 7.06%	6.88% / 3.33 = 2.06%	N/A	N/A

With regard to the eligibility factor, any employer in the program for 3 or more years has a 100% eligibility factor (1 year is 33% and two years is 67%). Since Bill has been in the program for more than three years his eligibility factor will be 100%.

The participation factor is calculated based on the amount of premium an employer pays, starting with a base participation amount of 37.5%. For every $1500 an employer pays over the $15,000 advance program threshold their participation factor increases by 1%.

	2011	2012	2013	2014
Participation Factor = 37.5% + (Firm Premium over three yrs – $15,000)/ $15,000	37.5% + ($136,950-$15,000) / $15,000 = 100%	37.5% + ($120,450-$15,000) / $15,000 = 100%	37.5% + ($108,300-$15,000) / $15,000 = 99.5%	37.5% + ($100,200-$15,000) / $15,000 = 93.5%

The Net Discount/Surcharge is generated by the following calculation

Base Discount or Surcharge (established by Employer WLR verses Industry WLR) X Eligibility Factor X Participation Factor

For Bill this works out to:

		Net Surcharge / Discount
2011	7.06% X 100% X 100%	- 7.06%
2012	2.06% X 100% X 100%	- 2.06%
2013	12.5% X 99.5% X 100%	+12.44%
2014	25% X 93.5% X 100%	+23.38%

	Premium owing without Experience Rating	Value of Bill's Surcharge/Discount	Amount Bill Paid
Premium owing for 2011	$33,600	-$2372.16	$31,227.84
Premium owing for 2012	$30,450	-$627.27	$29,822.73
Premium owing for 2013	$27,450	+$3,414.78	$30,864.78
Premium owing for 2014	$25,050	+$5,856.69	$30,906.69
Total	**$116,550**		**$122,822.04**

Analysis

From a solely cash flow perspective Bill probably thinks little about his WCB premium amount as it has remained relatively stable (perhaps the reason he has not taken a more proactive approach to safety). However, Bill's annual cash flow amount does not tell the full story. His claim costs, which rose by $5000 from 2007-2012, have resulted in a compounded difference of $8228 in his experience rating value. This is money being directly pulled out of his business. More dramatically, had Bill retained a 7% discount for the 2014 premium owing calculation (all other things being equal) his premium would have been $7,509 lower this year alone.

The cash flow neutrality of Bill's WCB premium cost is being driven by the successful cost controlling activities of his peers in industry rate code B11. This is what created the lower premium rate overall and hid Bill poor performance from his pocketbook. Their improved performance was also a contributing factor in moving Bill from a discount to a surcharge position. If Bill does not start taking a more direct approach to controlling his WCB costs the gap between what he could be paying and what he is paying will continue to widen.