

Changes to the Experience Rating Program Explained

New York Compensation Insurance Rating Board



NYCIRB

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WHY CHANGE?

The Problem

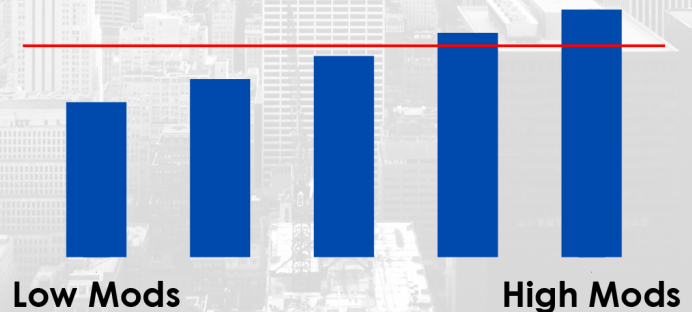
The credits and debits issued under the current experience rating program are insufficient to adequately incentivize workplace safety. Risks with better than expected experience do not receive enough credit, and risks with worse than expected experience do not receive enough debit.

The current program's deficiency is best illustrated with a **quintile test**: an analysis of loss ratios, at loss cost level, for all risks ranked by mod and grouped into quintiles. The **ideal quintile test** result yields the same loss ratios for all quintiles after the application of the mod. In other words, an ideal program produces mods that appropriately account for differences in loss experience among risks in the same classification. The first chart to the right illustrates this concept. In the chart, mods of similar values are grouped together into quintiles, ordered from left to right by lowest mod to highest mod, and all quintiles, regardless of mod value, have the same approximate loss ratio.

Quintile Test: Ideal Result



Quintile Test: Current Program



Application of a quintile test to the current program yields results demonstrating that change is needed. The loss ratios for each quintile vary significantly, indicating that the program is out of balance. While results vary year to year, generally speaking, and as illustrated in the second chart above, risks in the 1st, 2nd, and 3rd quintiles (the 1st, 2nd, and 3rd bars from the left containing the risks with lower mods) should have received a larger credit, lowering premium and resulting in higher loss ratios for those quintiles, whereas risks in the 4th and 5th quintiles (the 1st and 2nd bar from the right containing the risks with the highest mods) should have received a higher debit, increasing premium and resulting in lower loss ratios for those quintiles, to bring the loss ratios for all quintiles in line with each other.

Overview: The New Program

Applies to ratings effective on or after October 1, 2022



INCENTIVIZE WORKPLACE SAFETY

The new experience rating program will appropriately incentivize workplace safety by providing larger credits for risks with better than expected experience, increasing their loss ratios, while also providing larger debits to risks with worse than expected experience, lowering their loss ratios. Taken together, the new plan will yield quintile test results that are in line with the ideal result shown on the previous page: the loss ratios across different groups of risks, or quintiles, will be similar.



PLAN STRUCTURE

The new program will utilize a variable split point, a simplified rating formula, and a novel claim capping approach to appropriately balance accuracy, stability, and equity while also incentivizing workplace safety.

ELIGIBILITY AND ELIMINATION OF THE MERIT RATING PLAN

The merit rating plan will be discontinued, and the new experience rating formula will be applicable to all risks in New York State with exposure during the experience period.



PARTICIPATION IN THE INTERSTATE RATING PLAN

With the implementation of the new formula, New York State will withdraw from the NCCI interstate rating plan. All risks will be rated based on their New York experience only.

NOTIFICATION OF OWNERSHIP CHANGES

As a result of the withdrawal from the NCCI interstate rating plan, employers will have to submit notification of ownership changes directly to the Rating Board, via Form ERM-14, available on the Rating Board's website.

COMPONENTS OF THE NEW PROGRAM

EXPERIENCE PERIOD

The experience period refers to the timeframe in which the policies used to determine the mod were in effect. A risk's experience mod is calculated by the Rating Board after receipt of the data from the experience period policies.

EXPECTED LOSSES

The Expected Loss amount for a risk is its total anticipated loss amount during the experience period based on its classes and amount of exposure. To determine a risk's Expected Losses, multiply each classification's Expected Loss Rate ("ELR") by its payroll divided by 100. The sum of the expected losses for all classifications from all policies in the experience period represents a risk's Expected Losses.

VARIABLE SPLIT POINT

A "split point" is a dollar value that divides losses for each claim into primary and excess components. Further, split points vary by risk and are a function of each risk's expected losses in the experience period. Split points can vary from as little as \$1,000 for the smallest risks to as high as \$170,000 for the largest risks. For example, using the abbreviated sample Variable Split Point Table to the right, a risk with \$2,700 in Expected Losses will be assigned a split point of \$1,500, whereas a risk with \$90,000 of Expected Losses will be assigned a split point of \$20,000. Under the new formula, only the primary component of actual losses is considered in the mod determination.

Sample Variable Split Point Table

Expected Loss Ranges		Split Point
From	To	
\$0	\$2,206	\$1,000
\$2,207	\$2,892	\$1,500
...		
\$84,072	\$88,814	\$19,500
\$88,815	\$93,724	\$20,000
...		
\$3,951,100	\$4,256,459	\$160,000
\$4,256,460	& Above	\$170,000

Sample Class 2041 D-Ratio Table

Split Point	D-Ratio
\$1,000	0.046
\$1,500	0.063
...	
\$19,500	0.383
\$20,000	0.389
...	
\$160,000	0.984
\$170,000	0.995

D-RATIOS

D-Ratios are the ratios of primary losses to expected losses for each class and risk size. By way of example, the abbreviated sample Class 2041 D-Ratio Table to the left contains D-Ratios for use with class code 2041 (candy, chocolate, or cocoa manufacturing).

i EXPECTED PRIMARY LOSSES

A risk's Expected Primary Losses for each classification are determined by multiplying the Expected Losses for the classification by the classification D-Ratio for the risk's split point.

i EXPECTED EXCESS LOSSES

A risk's Expected Excess Losses for each classification are the difference between the classification's Expected Losses and Expected Primary Losses.

i ACTUAL PRIMARY LOSSES

A risk's Actual Primary Losses are reported losses limited by the split point value.

**Determining
the Split Point**

Employer	Payroll	ELR	Expected Loss	Split Point
Small Town Chocolate	\$120,000	2.27	\$2,724	\$1,500
Standard Cocoa	\$4,000,000	2.27	\$90,800	\$20,000
Mammoth Chocolatiers	\$178,000,000	2.27	\$4,040,600	\$160,000

To illustrate how the concepts described above apply across different sized risks, consider the 3 chocolatier businesses set forth in the table above. The ELR per \$100 of payroll for chocolatiers (class code 2041) is 2.27. The experience period payroll for each chocolatier is divided by 100 and multiplied by the ELR to derive the Expected Loss for that business. Using the **Variable Split Point Table** on the preceding page, each employer's Expected Loss amount is used to identify the appropriate variable split point value.

**Applying the
D-Ratio**

Employer	Split Point	Expected Loss	D-Ratio	Expected Primary	Expected Excess
Small Town Chocolate	\$1,500	\$2,724	0.063	\$172	\$2,552
Standard Cocoa	\$20,000	\$90,800	0.389	\$35,321	\$55,479
Mammoth Chocolatiers	\$160,000	\$4,040,600	0.984	\$3,975,950	\$64,650

The split point value derived for each employer is used to identify each employer's corresponding D-Ratio in the D-Ratio by Classification Table. Each employer's Expected Losses, by classification, are multiplied by the appropriate D-Ratio to generate the Expected Primary Losses. The remaining losses, or the difference between the Expected Losses and the Expected Primary Losses, represent the Expected Excess Losses. These calculations for the three chocolatiers are illustrated in the table above.

NEW MOD FORMULA

$$\text{Mod} = \frac{\text{Ap} + \text{Ee}}{\text{E}}$$

Where

Ap = Actual Primary Losses

Ee = Expected Excess Losses

E = Expected Losses

MAXIMUM DEBIT MODIFICATIONS

Mods are subject to a capping methodology. The new capping procedures incentivize workplace safety and protect against overly punitive mods. The claim caps prevent a small number of claims from yielding an overly punitive mod on small risks while the formula cap prevents excessive mods from being applied to larger risks.

Number of Claims	Maximum Mod
1	1.12
2	1.40
3	1.75
4 or more	$2 + 0.000003 \times \text{Expected Losses}$

TRANSITIONAL MODIFICATION FACTOR

During the first year of the new program (*i.e.*, for mods with effective dates between October 1, 2022 and September 30, 2023), if the mod under the new program exceeds the mod that would have been generated by the old formula (with updated experience) by more than 0.30, an employer's mod will be capped at the mod derived by the old formula + 0.30.

SAMPLE MOD CALCULATION AND RATING WORKSHEET

RE-DESIGN

The Rating Worksheet has been redesigned to reflect the new experience rating program. The sample mod calculation that follows illustrates the procedures described in this pamphlet, and the steps identified below correspond to the annexed sample Rating Worksheet.

Consider an employer with two class codes:

2041 - Candy, Chocolate or Cocoa Manufacturing

8810 - Office and Clerical

STEP 1

Determine the risk's Expected Losses for each policy during the experience period ($\text{payroll}/100 \times \text{ELR}$), and sum the expected losses from all policies in the experience period to obtain the total Expected Losses.

Policy #1 (Policy Period 04/01/21–04/01/22)

Class Code	Payroll	ELR	Expected Losses
2041	\$39,900	2.27	\$906
8810	\$50,000	0.10	\$50
Total			\$956

Policy #2 (Policy Period 04/01/20–04/01/21)

Class Code	Payroll	ELR	Expected Losses
2041	\$39,900	2.27	\$906
8810	\$50,000	0.10	\$50
Total			\$956

Policy #3 (Policy Period 04/01/19–04/01/20)

Class Code	Payroll	ELR	Expected Losses
2041	\$39,900	2.27	\$906
8810	\$50,000	0.10	\$50
Total			\$956

Total Expected Losses	\$2,868
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STEP 2

Expected Loss Ranges		Split Point
From	To	
\$0	\$2,206	\$1,000
\$2,207	\$2,892	\$1,500
...		
\$84,072	\$88,814	\$19,500
\$88,815	\$93,724	\$20,000
...		
\$3,951,100	\$4,256,459	\$160,000
\$4,256,460	& Above	\$170,000

Use a risk's Expected Losses to identify the appropriate split point.

A risk with \$2,868 in Expected Losses has a split point of \$1,500.



STEP 3

Utilize the split point to identify the appropriate D-ratio for each class code:

D-Ratio Table				
Class Code	Split Point			
	\$1,000	\$1,500	...	\$170,000
2041	.046	.063995
8810	.050	.070996

STEP 4

Multiply each class code's Expected Losses by its corresponding D-Ratio to derive the Expected Primary Losses by class code. The difference between the Expected Losses and the Expected Primary Losses is the Expected Excess Losses. The sum of the policies' Expected Excess Losses is the total Expected Excess Losses.

Policy #1				
Class Code	Expected Losses	D-Ratio	Expected Primary Losses	Expected Excess Losses
2041	\$906	0.063	\$57	\$849
8810	\$50	0.070	\$4	\$46
Total				\$895

Policy #2				
Class Code	Expected Losses	D-Ratio	Expected Primary Losses	Expected Excess Losses
2041	\$906	0.063	\$57	\$849
8810	\$50	0.070	\$4	\$46
Total				\$895

Policy #3				
Class Code	Expected Losses	D-Ratio	Expected Primary Losses	Expected Excess Losses
2041	\$906	0.063	\$57	\$849
8810	\$50	0.070	\$4	\$46
Total				\$895

Total Expected Excess Losses	\$2,685
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STEP 5

Calculate the Actual Primary Losses to be used in the rating. For each claim, the Actual Primary Losses are the lesser of the actual loss amount and the split point.

Policy #1		
Claim Number	Actual Losses	Actual Primary Losses
WCXYZ001	\$12,000	\$1,500

Policy #2		
Claim Number	Actual Losses	Actual Primary Losses
No Claims Reported		

Policy #3		
Claim Number	Actual Losses	Actual Primary Losses
WCXYZ002	\$35,000	\$1,500
Total Primary Losses		\$3,000

STEP 6

Apply Mod Formula

$$\text{Mod} = \frac{A_p + E_e}{E}$$

$$\text{Mod} = \frac{\$3,000 + \$2,685}{\$2,868} = 1.98$$



STEP 7

Apply Capping Procedure: Since this risk had only two claims, the mod is capped at 1.40.

The Experience Rating Worksheet that follows illustrates the example described above.

EXPERIENCE RATING WORKSHEET SAMPLE



[Click here to see the interactive version of this worksheet](#)



NYCIRB

Small Town Chocolate
123 Main Street
New York, NY, 10017

Workers' Compensation Rating Worksheet

Page 1 of 1

Combinable Group ID 023884384
Rating Effective Date 04/01/2023
Issue Date 10/13/2022
Primary/Excess Split Point \$1,500
Experience Modification 1.40
Status 1st Revision

Revision Message
Payrolls and Losses Changed

Actual Primary Losses	Expected Excess Losses	Expected Losses	Calculated Experience Modification	Capped Debit Modification	Transitional Modification Factor
[Ap \$3,000]	+ [Ee \$2,685]	/ [E \$2,868]	= 1.98	1.40	Not Applicable

Experience Period Totals	Expected Losses	Expected Primary Losses	Expected Excess Losses	Number of Claims	Actual Losses	Actual Primary Losses
	E \$2,868	\$183	Ee \$2,685	2	\$47,000	Ap \$3,000

Coverage ID: YYYYYY Carrier ID: MMMMM Carrier Name: Example Inc.

Policy Number: 123456890 Policy Period: 04/01/21 to 04/01/22

Exposure and Expected Losses						
Class Code	Exposure	Expected Loss Rate	Expected Losses	D-Ratio	Expected Primary Losses	Expected Excess Losses
2041	\$39,900	2.27	\$906	0.063	\$57	\$849
8810	\$50,000	0.10	\$50	0.070	\$4	\$46
Totals	\$89,900		\$956		\$61	\$895

Claims and Actual Losses					
Claim Number	Notes	Injury Type	Open/Closed	Actual Losses	Actual Primary Losses
WCXYZ001	BB	05	Closed	\$12,000	\$1,500
Totals			1	\$12,000	\$1,500

Coverage ID: YYYYYY Carrier ID: MMMMM Carrier Name: Example Inc.

Policy Number: 123456890 Policy Period: 04/01/20 to 04/01/21

Exposure and Expected Losses						
Class Code	Exposure	Expected Loss Rate	Expected Losses	D-Ratio	Expected Primary Losses	Expected Excess Losses
2041	\$39,900	2.27	\$906	0.063	\$57	\$849
8810	\$50,000	0.10	\$50	0.070	\$4	\$46
Totals	\$89,900		\$956		\$61	\$895

Claims and Actual Losses					
Claim Number	Notes	Injury Type	Open/Closed	Actual Losses	Actual Primary Losses
Totals					

Coverage ID: YYYYYY Carrier ID: MMMMM Carrier Name: Example Inc.

Policy Number: 123456890 Policy Period: 04/01/19 to 04/01/20

Exposure and Expected Losses						
Class Code	Exposure	Expected Loss Rate	Expected Losses	D-Ratio	Expected Primary Losses	Expected Excess Losses
2041	\$39,900	2.27	\$906	0.063	\$57	\$849
8810	\$50,000	0.10	\$50	0.070	\$4	\$46
Totals	\$89,900		\$956		\$61	\$895

Claims and Actual Losses					
Claim Number	Notes	Injury Type	Open/Closed	Actual Losses	Actual Primary Losses
WCXYZ002	BB	05	Open	\$35,000	\$1,500
Totals			1	\$35,000	\$1,500

Authorized Classifications

2041 Candy, Chocolate or Cocoa Mfg.

Risk Name Small Town Chocolate **Address** 123 Main Street **City** New York **State** New York **Zip Code** 10017

BB - Claim limited by split point

[Take me to the interactive version of this worksheet >>>](#)