



PENNSYLVANIA
Compensation Rating Bureau

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INSIDE THE EXPERIENCE RATING PLAN UPDATE



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Introduction

The Experience Rating Plan is designed to predict whether a qualifying insured will develop a better or worse loss experience than the average risk in a particular classification.

It modifies standard premium by a factor designed to more equitably price plan participants or qualifying insureds. The Plan uses the insured's past to predict future losses.

Why, then are we changing the Experience Rating Plan?

The answer is simple; we found a better way.

The previous Plan remained intact for 20 years, functioning well. However, the PCRB took up the challenge of developing a sounder actuarial solution to make the experience rating more responsive to the specific loss experience of an insured. We found a better way, and trust this pamphlet explains why the Plan is being changed and what you can expect from it.

The revised plan has many of the same features as the original Plan. While the rating worksheets may look slightly different from previous versions, we continue using the basic formula, experience data and rules.



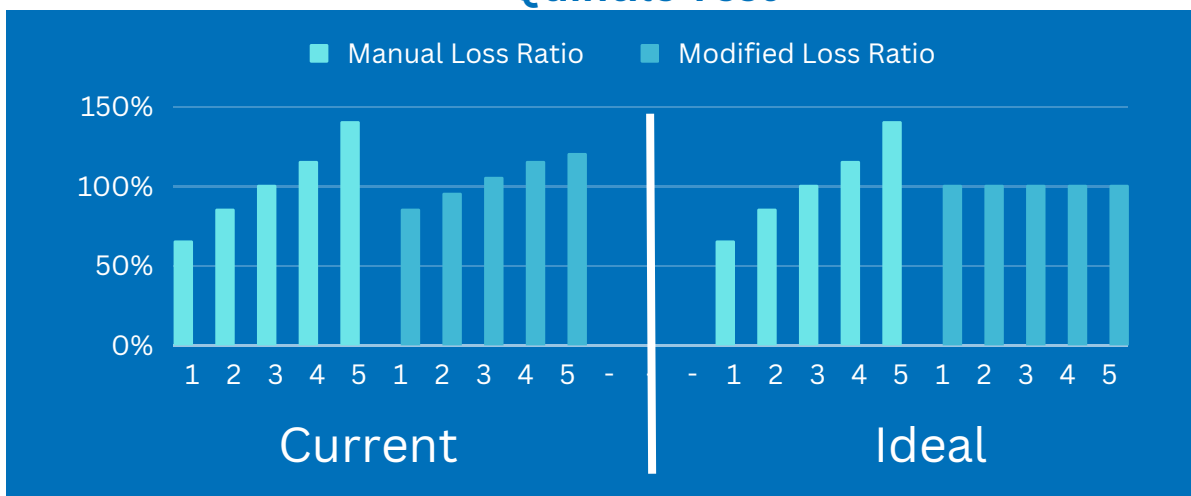
Why the Plan is Changing

There are two primary reasons for the revised Experience Rating Plan:

- ▶ **The new Plan enhances plan performance through improved predictive accuracy and promotes greater equity among insureds in the same classification.** Calculation of an experience modification under the revised Plan will more accurately reflect an insured's experience. As a result, a more equitable debit or credit modification will be produced, effectively addressing concerns that the previous Plan placed too little emphasis on the experience of small insureds and too much emphasis on the experience of large insureds. The revised Experience Rating Plan provides a suitable response for all insureds in all industries.
- ▶ **The new Plan provides increased safety incentives.** Promoting workplace safety has always been integral to the Experience Rating Plan. The revised Plan enhances this feature. Extensive actuarial research showed that the old Plan gave too little credibility to small employers. The new Plan increased the credibility for small employers along with lowering the split point to achieve a better balance based on the size of risk and actual claim experience. On the other hand, the old Plan gave too little credence to the actual claim experience for larger employers. Now, larger employers will be accountable for a larger portion of their actual loss experience that enters the Plan. The apparent rewards for controlling losses and workplace safety will be enhanced for both larger and smaller employers. In addition, revised capping rules will balance the new Plan's responsiveness with added year-to-year stability.

Why the Plan is Changing

Quintile Test



The current Plan performance test indicates that the existing rating plan falls short in accurately adjusting premiums for all risks.

The data highlights a clear pattern where risks with high modification factors are being undervalued, while risks with low modifications are being overvalued. This discrepancy calls for a reassessment of the rating plan to ensure fair and accurate premium adjustments across the board.

An ideal plan would yield equal loss ratios for all quintiles after the application of the mod. Notable findings from the performance test of the current plan include:

- Performance testing showed declines in predictive accuracy since the last major update.
- Variable Maximum Value plan outperform Single Value plan.
- Assigns too little credibility to most risks.
- Inadequately promotes workplace safety.
- Swings between Experience Rating Plan and the Merit Rating Plan are often large.

Unlocking Benefits of the new Plan

Premium Accuracy

The new experience rating plan accurately reflects an employer's past loss experience, ensuring that premiums are more closely aligned with the actual risk profile of the insured.

Loss Control Incentive

The new plan encourages employers to implement effective loss control measures and promote workplace safety to reduce accidents and minimize losses.

Market Competition

The new plan promotes competition among insurance providers. Insurers are motivated to offer competitive rates and coverage terms in order to attract employers with favorable experience modifications. This competition can lead to more options for employers, better service, and potentially lower premiums.

New Plan Optimization and Comparison

To improve the accuracy and stability of the experience mod, we have focused on optimizing four crucial components of the Plan:

- **Credibility**
- **Split Point**
- **Expected Loss Ranges**
- **L Factor (Limit Charge)**

What's new?
What hasn't changed?

The experience rating formula remains unchanged

$$\frac{A_p \times C + E \times C \times L + E(1.000 - C)}{E}$$

Ap=Actual Primary Loss
 E=Expected Loss
 C=Credibility
 L=Limit Change

Transition Period and Capping

Anytime a new plan is introduced, significant changes in modification are unavoidable. To manage this, a two-year transition rule will be implemented. For the period from 4/1/2024 to 3/31/2026, the current capping rules utilizing +/-25% swing limits and secondary capping will remain in effect.

When the existing capping rule exceeds the maximum modification allowed, the lower modification will be the final modification. After this transition period, the capping rule will be the combination of only the maximum modification and the +40% swing limit. The secondary capping will be eliminated.

Changed	Not Changed
<p>Eligibility Threshold</p> <p>The minimum premium threshold that an employer must meet in order to qualify for participation in the plan has changed from \$10,000 to \$5,000.</p>	<p>Formula</p> $\frac{A_p \times C + E \times C \times L + E(1.000 - C)}{E}$
<p>Split Point</p> <p>Threshold value that determines the maximum amount of primary losses.</p>	<p>Medical Only Claim</p> <p>Includes 100% of the amount of medical-only claims.</p>
<p>Credibility</p> <p>Statistical weight assigned to an employer's own experience data.</p>	<p>Experience Period</p> <p>Time frame during which an employer's loss and claims data is collected and analyzed to determine their experience modification factor.</p>
<p>Capping Rule</p> <p>Application of maximum limits or restrictions on the modification factor.</p>	

A New Rating Worksheet

The modification worksheet has been refreshed and enhanced. Changes in format were made to make it easier to read and more consistent with other states.

New information was added, such as:

- ▶ The Final Modification can be easily located in the header section of the worksheet.
- ▶ A listing of all individual losses rather than only the losses that were above the split point/loss limit
- ▶ Modification “Status” to show if the modification has been revised
- ▶ Other additions to the worksheet include maximum modification, loss free modification, and description of class codes, while payroll is now also listed by policy number.

Section 1 | Header section with addresses and policy information including the Split Point and Final Mod:



Experience Rating Calculation

Any Business LLC	File Number	1234567
<u>Mailing Address</u>	Policy Number	WC1234567890
123 Main St	Rating Effective Date	2/1/2023
Anytown PA 19123	Issue Date	2/1/2023
<u>Primary Address</u>	Carrier Code	65432
456 Mailing Rd	Split Point	27,000
Malltown PA 15123	Final Modification	1.062
	Revision Message	

Key Definitions

Rating Effective Date: The earliest date that a specific experience rating is applied to a policy.

Issue Date: The date that a specific experience rating modification is published.

Split Point: The specific dollar threshold used to separate primary losses from excess losses.

Final Modification: Final modification refers to the modification after the application of capping rules.

A New Rating Worksheet

Section 2 | The formula that calculates the indicated mod, experience period totals and other factors:

Ap: Actual Primary Losses	C: Credibility	E: Expected Losses	L: Limit Charge	C: Credibility	E: Expected Losses	C: Credibility	Indicated Mod
35,795	0.715	78,589	0.6316	0.715	78,589	0.715	1.062
$\frac{(35,795 * 0.715 + 78,589 * (0.6316 * 0.715)) + 78,589 * (1 - 0.715)}{78,589}$							=
all divided by		E: Expected Losses	78,589				
Experience Period Totals							
Number of Claims	Actual Losses	Loss Free Mod	Maximum Mod				
7	35,795	0.773	4.244				

Key Definitions

Actual Losses: Total reported losses from all claims (indemnity and medical) as of the valuation data.

Actual Primary Losses (Ap): Total reported losses from all claims that are limited by the split point for individual claims exceeding this amount. Previously, it was referred to as "Losses As Used" in the current worksheet.

Credibility (C): Credibility refers to the statistical weight or level of confidence assigned to an employer's own loss experience.

Expected Losses (E): Expected losses are determined by multiplying total payroll (per \$100) for each classification (with a few exceptions) by the Expected Loss Rate factors.

Limit Charge (L): Limit charge is used to divide Expected Loss into primary and excess loss portions. Previously, it was referred to as "L x C" in the current worksheet.

Loss Free Mod: Modification factor assigned to an employer who have had no losses during the experience rating period.

Maximum Mod: Highest modification factor that can be assigned to an employer based on a formula specified in the experience rating plan. It serves as a cap on the modification factor calculation.

Section 3 | Authorized Classes Section:

Authorized Classes	Description	Loss Cost
0651	Carpentry - Commercial	3.60
0652	Carpentry - Residential	5.27
0951	Salesperson - Outside	0.14
0953	Office	0.07
Premium Adjustment Classes	Description	Adjustment Rate
9890	Safety Committee Credit (5%)	0.05

Key Definitions

Authorized Classes: Only the classifications shown on a Data Card issued by the PCRB shall be used in auditing the payroll for that employer. Previously, it was included in Part III, Exhibit of Payrolls, Expected Losses, Authorized Classes and Rating Values.

Premium Adjustment Classes: Premium for the policy may be adjusted by a Pennsylvania Construction Classification Premium Adjustment factor or Certified Safety Committee Credit.

A New Rating Worksheet

Section 4 | Exposure and Expected Losses:

Exhibit of Exposure and Expected Losses

Policy Period 2/1/2019 - 1/31/2020 Policy: WC02112402 Carrier: 11789				
Class Code	Cov	Exposure	Expected Loss Rate	Expected Losses
0651	01	1,049,754	3.19	33,487
0951	01	610,926	0.15	916
0953	01	382,868	0.08	306
TOTAL		2,043,548		34,709

Key Definitions

Coverage (Cov): The code indicates the Act (Law) under which the exposure for the record's class code is associated.

Expected Loss Rate: Expected Loss Rate Reflects the anticipated average cost of benefits, per \$100 of payroll, for a classification during the experience period. Previously, it was referred to as "Expected Loss Factor" in the current worksheet.

Expected Losses (E): Expected losses are determined by multiplying total payroll (per \$100) for each classification by the Expected Loss Rate factors.

Exposure: Amount of risk or potential liability an employer has for workers' compensation claims based on factors such as the number of employees, their job classifications, and payroll.

Section 5 | Claims and Losses:

Exhibit of Claims and Actual Losses

Policy Period 2/1/2019 - 1/31/2020 Actual Losses							
Claim Number	Cat. Nbr	Inj. Type*	Open/Closed	Indemnity	Medical	Actual Losses	Actual Primary Losses
201900088532		5	CLOSED	2,856	10,659	13,515	13,515
201900091010		6	CLOSED	0	168	168	168
202000094800		6	CLOSED	0	3,735	3,735	3,735
3 TOTAL				2,856	14,562	17,418	17,418

Key Definitions

Catastrophe Number (Cat. Nbr): Any accident resulting in two or more reported claims must be reported as a catastrophe.

Injury Type: 1 - Death, 2 - Permanent Total, 3 - Major, 4 - Minor, 5 - Temporary.

Open: Indicates the status of the claim that is currently active and ongoing.

Closed: Indicates the status of the claim that has been resolved and no longer requires ongoing treatment or benefits.

Treatment of Subrogation: Losses that enter the plan formula will be reduced by the subrogated amounts and then limited by the split point if applicable.

A New Rating Worksheet

Overview | Full view of rating worksheet



Experience Rating Calculation

Any Business LLC

Mailing Address

123 Main St
Anytown PA 19123

Primary Address

456 Mailing Rd
Mailtown PA 15123

File Number 1234567
Policy Number WC1234567890
Rating Effective Date 2/1/2023
Issue Date 2/1/2023
Carrier Code 65432
Split Point 27,000
Final Modification 1.062

Revision Message

$$\begin{aligned}
 & \text{A: Actual Primary Losses} \quad \text{C: Credibility} \quad \text{E: Expected Losses} \quad \text{L: Limit Charge} \quad \text{C: Credibility} \quad \text{E: Expected Losses} \quad \text{C: Credibility} \\
 & 35,795 \quad * \quad 0.715 \quad + \quad 78,589 \quad * \quad (\quad 0.6316 \quad * \quad 0.715 \quad) \quad + \quad 78,589 \quad * \quad (1 - \quad 0.715 \quad) \\
 & \text{all divided by} \quad \text{E: Expected Losses} \quad 78,589 \quad = \quad \text{Indicated Mod} \quad 1.062
 \end{aligned}$$

Experience Period Totals

Number of Claims	Actual Losses	Loss Free Mod	Maximum Mod
7	35,795	0.773	4.244

Authorized Classes	Description	Loss Cost
0651	Carpentry - Commercial	3.60
0652	Carpentry - Residential	5.27
0951	Salesperson - Outside	0.14
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Premium Adjustment Classes	Description	Adjustment Rate
9890	Safety Committee Credit (5%)	0.05

Exhibit of Exposure and Expected Losses

Class Code	Cov	Exposure	Expected Loss Rate	Expected Losses
0651	01	1,049,754	3.19	33,487
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TOTAL		2,043,548		34,709

Exhibit of Claims and Actual Losses

Claim Number	Cat. Nbr	Inj. Type*	Open/Closed	Indemnity	Medical	Actual Losses	Actual Primary Losses
201900000001		5	CLOSED	2,856	10,659	13,515	13,515
201900000002		6	CLOSED	0	168	168	168
202000000001		6	CLOSED	0	3,735	3,735	3,735
3 TOTAL				2,856	14,562	17,418	17,418

Class Code	Cov	Exposure	Expected Loss Rate	Expected Losses
0651	01	848,570	2.93	24,863
0951	01	625,704	0.14	876
0953	01	411,808	0.07	288
TOTAL		1,886,082		26,027

* 1=Death, 2=Permanent Total, 3=Major, 4=Minor, 5=Temporary, 6=Medical Only

Claim Number	Cat. Nbr	Inj. Type*	Open/Closed	Indemnity	Medical	Actual Losses	Actual Primary Losses
202000000002		5	CLOSED	2,291	14,050	16,341	16,341
202000000003		6	CLOSED	0	110	110	110
202100000001		6	CLOSED	0	1,709	1,709	1,709
3 TOTAL				2,291	15,869	18,160	18,160

Class Code	Cov	Exposure	Expected Loss Rate	Expected Losses
0651	01	726,794	2.33	16,934
0951	01	646,180	0.11	711
0953	01	415,432	0.05	208
TOTAL		1,788,406		17,853

Claim Number	Cat. Nbr	Inj. Type*	Open/Closed	Indemnity	Medical	Actual Losses	Actual Primary Losses
202100000002		6	CLOSED	0	217	217	217
1 TOTAL				0	217	217	217

* If the final mod differs from the indicated mod, capping has been applied.

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About



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The updated Experience Rating Plan is the result of five years of diligent work led by PCRB's Actuarial Research team. PCRB would also like to recognize various stakeholders that helped contribute to the development of the new plan. This includes, but is not limited to, the Governing Board and Board Committee members, member carriers, Pennsylvania regulators, agent and broker representatives, and other industry groups.

Founded in 1915, the Pennsylvania Compensation Rating Bureau (PCRB) is a nonprofit data collection organization serving as a trusted, essential, and objective resource that supports a healthy workers' compensation system for Pennsylvania. PCRB provides data-driven products and services that anticipate and respond to marketplace conditions and identify emerging trends, including accurate and valuable statistical and actuarially-based information, marketplace knowledge, and rating plans. PCRB also conducts innovative research, provides educational services, and engages in outreach that delivers knowledge to empower actionable decisions.

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