



**CS20: Workers' Compensation  
Experience Rating  
The NCCI ER Plan**

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## Agenda

- Experience Rating Background
- A Brief History of NCCI's Experience Rating Plans
- Increasing the Primary/Excess Split Point
- Performance Testing
- Hypothetical Examples
- Increasing the Eligibility Threshold

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## Experience Rating Background



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## Experience Rating Background

- Adjusts manual premium based on individual employer's actual loss experience as compared to the industry average benchmarks
- Benchmarks vary by state and classification
- Designed to predict whether an employer's loss experience will be better or worse than the average risk within that classification
- Mandatory for all employers that exceed a premium threshold
- The goals of the Plan are to:
  - Promote equity by modifying the class manual rate to reflect individual risk characteristics
  - Provide employers a financial incentive for safety in the workplace



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## A Brief History of NCCI's Experience Rating Plans



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## Experience Rating for Work Comp A Brief History

- Experience Rating (ER) for Workers Compensation (WC) was in use by 1915
- A high level description of ER plans over the years might be:  
“Comparing actual losses to expected losses ... *sort of*”
- The next several slides highlight some of the major features of the WC ER plans over the years and how they've changed
- The main focus of this review is on the NCCI ER plans



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## Experience Rating for Work Comp A Brief History

### Early Plans: Pre-1960

- 1916-1917: claim frequency given more weight than severity by adjusting actual losses through the use of *expected* severities
- 1918: credibility is introduced; varies by employer premium size
- 1920: expected loss begins to vary by class (as opposed to other groupings used previously)
- 1923: actual loss and expected loss split into primary vs excess (via tables)
- 1940: D-ratios and ELRs are introduced; Ws and Bs are introduced as a new way to reflect credibility; actual primary/excess split varies by size of claim



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## Experience Rating for Work Comp A Brief History

### Later Plans: 1961-2012

- 1961: current version of Mod formula adopted; actual primary/excess split changed but still varies by size of claim
- 1977: actual primary/excess split changed but still varies by size of claim
- 1991: single split point of \$5,000 implemented
- 1998: Medical-only claims reduced by 70% (after the primary/excess split applied); proposed indexing the split point as needed



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## Experience Rating for Work Comp A Brief History

### Current Plan: 2013 and subsequent

- 2013: Item E-1402 (Increase and Index of Split Point)
  - \$5,000 primary/excess split point increased to \$15,000 plus severity indexation
  - A 3-year transition utilized
    - 2013 split point: \$10K
    - 2014 split point: \$13.5K
    - 2015 split point: \$15.5K
  - 2016 and subsequent: severity-indexed value
    - 2016 split point: \$16K
    - 2017 split point: \$16.5K
  - Changes in the split point are now a part of the regular annual update of the ER values



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## Increasing the Primary/Excess Split Point



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## Experience Rating Plan Split Point Review

- The split point separates losses into primary and excess components. Prior to 2013 it had been \$5,000.
- If the split point is not indexed for claim cost "inflation," a greater proportion of losses fall into the excess category as time goes on.
- Since excess losses receive less weight than primary losses in the experience rating formula, **the plan becomes less responsive.**
- Performance testing indicated that the split point needed to be increased to \$15,000. This is not surprising since the average cost of a claim had tripled since the last split point update (20 years earlier).



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### Explanation of Quintile Performance Test

- Risks are sorted by value of mod (low to high) and divided into 5 equally sized groups called "quintiles", large enough to be credible
- "Loss ratios" are computed using the actual experience that subsequently emerges
- The loss ratios for the five groups on the left half of the exhibit use unmodified premium while the five groups on the right use modified premium




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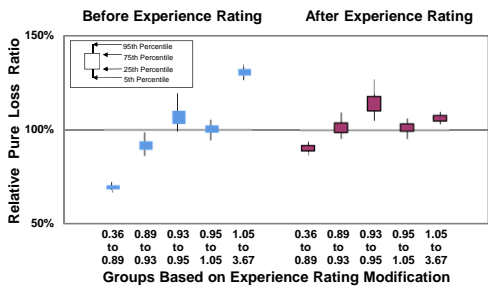
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### Quintile Analysis: Prior \$5,000 Split Point

PY 2006 Experience Under the ER Plan, Indexed for Severity Inflation



Relative Pure Loss Ratio = Loss Ratio for Quintile / Loss Ratio for All Quintiles Combined




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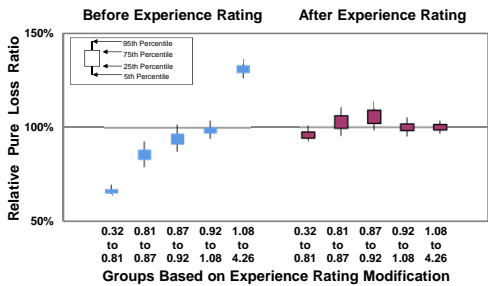
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### Quintile Analysis: Indicated \$15,000 Split Point

PY 2006 Experience Under the ER Plan, Indexed for Severity Inflation



Relative Pure Loss Ratio = Loss Ratio for Quintile / Loss Ratio for All Quintiles Combined




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## Hypothetical Examples




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## Hypothetical Examples

- Although the split point itself does not vary by employer size under the NCCI Plan, the impact of a claim does vary significantly by employer size
  - Weight (W) values temper the excess portion of a claim much more for smaller employers
  - Ballast (B) values effectively temper claims much more for smaller employers
- The following examples help illustrate this




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## Hypothetical Examples: Impacts by Claim Size and by Employer Size

Hypothetical impacts from a single claim of either \$10K or \$100K for two employer sizes: 10K in expected loss and 100K in expected loss  
Impacts assume a split point of 15K and the W and B values shown below

(1) Employer Size (Expec Loss or E)	10,000	100,000	10,000	100,000
(2) W (Weight)	0.05	0.10	0.05	0.10
(3) B (Ballast)	40,000	50,000	40,000	50,000
(4) Claim	10,000	10,000	100,000	100,000
(5) Primary Amnt	10,000	10,000	15,000	15,000
(6) Excess Amnt x W	-	-	4,250	8,500
(7) Total Claim \$ Used (5)+(6)	10,000	10,000	19,250	23,500
(8) Total Claim \$ Normalized to E*	2,000	6,667	3,850	15,667
(9) Mod Impact	0.200	0.067	0.385	0.157

\* This represents the Total Claim \$ Used relative to a denominator of E, rather than (E+B).  
The adjustment factor is: E/(E+B)




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## Increasing the Eligibility Threshold




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## Increasing the Eligibility Threshold

Item E-1404: Establishment of a Methodology to Calculate ER Premium Eligibility Amounts

- Establishes an indexing methodology and a process for continued annual updates
- State-specific premium eligibility amounts will be calculated annually and indexed based on the year-to-year change in a state's Average Weekly Wage
- Effective six months and later after a state's loss cost/rate effective date, beginning with loss cost/rate effective dates on and after January 1, 2017




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## Increasing the Eligibility Threshold

**EXPERIENCE RATING PLAN MANUAL—2003 EDITION  
RULE 2—EXPERIENCE RATING ELEMENTS AND FORMULA  
A. PREMIUM ELIGIBILITY**

State	Rating Effective Date	Column A (\$)	Column B (\$)
AK	7/1/17 and after	5,000	2,500
	6/30/17 and before	5,000	2,500
AL	9/1/17 and after	10,000	5,000
	8/31/17 and before	10,000	5,000
AR	11/1/18 and after	8,000	4,000
	12/31/17 and before	8,000	4,000
AZ	7/1/17 and after	6,000	3,000
	6/30/17 and before	6,000	3,000
CO	7/1/17 and after	8,500	4,250
	6/30/17 and before	8,000	4,000
CT	7/1/17 and after	11,500	5,750
	6/30/17 and before	11,000	5,500
DC	5/1/18 and after	7,000	3,500
	4/30/18 and before	7,000	3,500
FL	7/1/17 and after	10,500	5,250
	6/30/17 and before	10,000	5,000

Note: Col A refers to most recent 24 mos subject premium; Col B refers to avg annual subject premium




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