EXPERIENCE MODIFICATION: PROBLEMS AND PITFALLS

By DAVE K. SMITH

he experience modification rating (EMR) is a workers' compensation (WC) insurance rating device. Although it is increasingly relied on as a measure of safety performance, EMR is, in the author's opinion, a poor measure of a firm's true safety performance.

WHAT IS EMR?

EMR is a number that compares actual losses to expected losses in WC insurance. Experience rating is a mandatory program of individual risk rating. Different states have different systems, typically involving some rating organization (i.e., the National Council on Compensation Insurance or a state-specific group) that develops EMRs for individual employers.

A firm with a better-than-average loss experience receives an EMR of less than 1.0 (or 100 percent), which is credited to that firm's WC premium. Conversely, a debit EMR of greater than 1.0 increases the premium. For example, "an experience modifier of 0.80 means the insured will receive a 20-percent discount on its WC insurance. A contractor with a modifier of 1.20 will pay a 20-percent surcharge on its WC premium" (Farmer and O'Neill 32).

WHY EXPERIENCE RATING?

Compensate for Classification Variations

For the purpose of rating, WC plans generally assign work activities to different classifications. In any classification, some individual variations will exist—often referred to as the "light and heavy" ends of the class.

For example, a roofing supply firm that delivers materials to rooftops is often classified as a building supply dealer. However, since its actual operations are more analogous to roofing contracting, this firm would be at the heavy end of the building supply class because the roofing exposure is "heavier" than that of a typical building supply dealer.

Roofing has several well-recognized hazards, including elevated falls, burns and extensive manual material handling.

A typical building materials dealer does not have these exposures. In most states, the base rate for building supply dealers is about one-half of the roofing contracting rate. Therefore, EMR is designed to compensate for the under-rating of the roofing supply dealer.

For example, a roofing supply dealer (classified as a building supply dealer) with a 1.50 EMR might be considered excellent because the true exposure is much greater than other building supply employers with lesser injury exposures. In this case, the base rate is increased by 50 percent, but the roofing supply rate may be as much as 200 percent of the building supply rate. Thus, a 1.50 EMR would be considered "good" because of the variances in the classification system.

Provide Incentives for Safety

Although EMR is intended to promote safety measures in the workplace, some critics hold that "experience rating probably has negative influences on health and safety" (Ison 209). Other research shows no conclusive link between safety and experience rating (Jolley 227+). Yet, a new study by the National Council on Compensation Insurance concludes that the more a firm spends on workplace safety, the more its EMR declines, and that the greater amount spent on safety per dollar of premium, the greater the decline (Kahley and Somberger).

EMR AS A MEASURE OF SAFETY

Contractor Pre-Bid Qualification

EMR is often used to prequalify construction contractors. Some have stated that an "EMR of 1.0 indicates that WC is not controlled," while an "EMR of 0.5 indicates that employees are provided a safe work environment" (Roughton 33). Others recommend continued use of these rates as "they are excellent indicators of past performance" (Ryan 26). OSHA's Process Safety Management standard requires evaluation, coordination and control of contractors. As a result, many plant owners use EMR to qualify contractors to meet these requirements (Angus 5).

High-Hazard Employers

The California Div. of Occupational Safety and Health has developed a high-hazard employee (FIHE) program designed to reduce WC claims data. The legislation enables a threshold of 1.25 EMR. Employers with an EMR of 1.25 or greater are assessed a fee to support HHE and are subject to targeted compliance and consultation efforts (*Policy & Procedure Manual C-171*).

PROBLEMS WITH THE EMR SYSTEM

"Apples and Dranges"

Each state has a different system and, thus, different rules and regulations. Consequently, EMRs may not be comparable (Farmer and O'Neill 34). Furthermore, only reported injuries are measured—not all injuries (Jolley 218). Since reporting requirements often differ among these systems, an EMR developed from experience in one state may not be directly comparable to that developed in another state.

Self-Insured Employers

In some states, a large firm may qualify for self-insurance. In such a case, the employer does not purchase insurance from an insurance carrier or state fund, but rather pays for losses directly. In the case of contractor pre-qualification, a self-insured employer may create its own EMR, with no official oversight. The result: Potential discrimination against smaller insured employers that are rated by official organizations. Thus, a self-insured employer can manipulate data that the small insured employer cannot.

EMR Discriminates Against Small Employers

Small employers are subject to wider variation in EMR than are large employers. Small employers face a high degree of randomness in injury occurrence, which is more predictable in large employers. In this case, "compensation experience is not a statistically significant indicator of safety performance" (Jolley 221). This is a variation of the law of large numbers—the probability of an event occurring (such as an employee injury) depends on

a large number of separate, independent trials. Only events that may be repeated over a long period of time and that are statistically significant may be governed by probabilities (Vaughan 22).

Rated Entities

In some states, joint ventures (common in construction) are rated at 1.0 until three complete years of loss experience are collected Thus, a contractor with an EMR above 1.0 can immediately lower its EMR by starting a joint venture. Other states average the ratings of firms involved to calculate a joint venture rate. For example, "if a contractor with a 1.40 modifier enters into a joint venture with another contractor with a modifier of 0.40, the initial experience modifier for the joint venture (which is considered a separate entity) would be 0.90" (Farmer and O'Neill 32). In both cases, statistical changes in EMR occur independent of any safety efforts.

Frequency, Severity & Data Manipulation

Other things being equal, an employer with more frequency (small losses) will receive a higher EMR than an employer with a single large loss. "In the rating formula, frequency counts against a contractor more heavily than severity does. Loss frequency is presumed to reflect management's loss control ability and attitude more than loss severity, which is considered less controlled by the contractor. Bear in mind, however, that contractor B may be paying small claims out of its own pocket and might actually be operating less safely than contractor A" (Farmer and O'Neill 34). Some states allow this practice, others do not.

Past May Not Predict Future

EMR is based on at least three full years of payroll and loss data, ending one year before the effective date of the rate. An employer that has improved safety performance may still suffer the impact of previous bad years, while a good-experience employer that has let safety decline will have a lower EMR until losses enter the formula. In other words, EMR today does not necessarily reflect what is occurring today, but rather what occurred two to four years ago. Thus, as a "trailing" indicator, EMR may-or may not-predict future safety performance.

Insurance Factors Beyond Employer Control

Insurance carriers report various data to rating organizations, which are then used to calculate EMR. In many cases, employers have no control over what information is reported.

Claims Reserves, Management Issues

Losses that comprise the "actual loss" portion of the EMR formula are the actual paid amounts plus the open claim reserves set up to fund future payments.

TABLE 1 EMR Increase

<u>Condition</u>	<u>emr</u>
1995 (Actual)	1.05
1995 (Based on 1994 Expected Loss Rates)	0.88

When a claim occurs, the insurer establishes a reserve, which may equal the maximum probable loss from that injury. However, claims-reserving practices differ among insurance carriers. Some insurers set aside lower amounts than others. As a result, a firm with a lower-reserving insurer will have a lower EMR than it would if its carrier set high reserves.

Another factor is the carrier's aggressiveness in closing claims. If a claim is open, then the actual loss reported includes the open reserve. A carrier that allows claims to languish will cause a policyholder to have a higher EMR.

Payroll Auditing

The expected losses component of the EMR formula generally takes reported payroll and multiplies it by an expected loss rate for that employer's classification. If the insurer makes a payroll auditing error, this could decrease expected losses, thus increasing EMR.

In either case, the insurance carrier's action or inaction impacts EMR-regardless of a firm's safety performance.

Other insurance system factors can cause EMR variations independent of safety performance as well. For example, an expected positive relationship has been found between claims incidence and benefit levels (Butler 13). In other words, when benefits increase, more claims are filed.

Political and Regulatory Factors

In many states, WC and EMR are often the subject of political action. For example, comprehensive reform in California produced many changes. Because various claims (i.e., post-termination claims, certain psychiatric stress injuries) were disallowed under reform, current expected loss rates declined. Yet, actual loss data reported by carriers was based on previous periods, when these claims were accepted and paid. As a result, 1995 EMRs increased from 10 to 40 percent because of the decrease in expected loss rates. Table 1 illustrates this change for a contractor.

Political activity continues in California. The state's rating organization has proposed a major change in EMR calculation, which would reduce high EMRs while potentially increasing low modifiers ("Frequency-Based Xmods May Be Coming"). Once again, a rate change could occur regardless of an employer's safety performance.

CONCLUSION

If EMR is an inadequate measure of safety performance, how should safety performance be evaluated? EMR should be reviewed, but it should not be used as a "go, no-go switch." The best course of action: Evaluate both results and activities occurring now to determine the firm's current safety performance.

REFERENCES

Angus, Raymond F. "A Sample Contractor Safety Evaluation/Review Policy." ASSE Construction Division Newsletter. Fall 1996: 5-10.

Butler, R.J. "Safety Incentives in Workers' Compensation." John Burton's Workers' Compensation Monitor. Sept./Oct. 1994.

Farmer, Mark and Mike O'Neill. "The Experience Modifier in Perspective." Constructor. May 1994: 32-36.

"Frequency-Based Xmods May Be Coming." Cal-OSHA Reporter. Sept. 25, 1995.

Ison, Terence G. "Compensation and Prevention." In Insurance and Prevention, Tore J. Larsson and Alan Clayton, eds. Stockholm: IPSO, 1994.

Jolley, Linda. "Shortcomings in Workers" Compensation Systems." In Insurance and Prevention, Tore J. Larsson and Alan Clayton, eds. Stockholm: IPSO, 1994.

Kahley, William J. and G. Clinton Somberger. "NCCI Experience Rating Workplace Safety Survey." NCCI Research Brief. April 1995.

Policy and Procedure Manual, California Div. of Occupational Safety and Health,

Roughton, James E. "Contractor Safety." Professional Safety. Jan. 1995: 31-34.

Ryan, Neil J. "Contractor Safety." Occupational Health and Safety. Oct. 1995: 26-27.

Vaughan, E. Fundamentals of Risk and Insurance. New York: John Wiley & Sons, 1982.

Dave K. Smith, CSP, ARM, REA, is director, risk management, for CareAmerica Compensation and Liability Insurance, San Francisco. In this position, he provides environmental health and safety consulting to a wide range of clients in the service, manufacturing and construction industries. Smith is a professional member of ASSE's Greater San Jose Chapter. In addition, he helps coordinate the chapter's CSP Technology Review class.

