

# Reporting & Recordkeeping Requirements

## Their Influence on Safety Management in the U.S. & the U.K.

By Vladimir Ivensky

### IN BRIEF

•Regulations on reporting and recording of occupational incidents influence safety management programs designed to comply with those regulations.  
•Two regulatory incident reporting and recordkeeping systems are compared in this article: OSHA's 29 CFR 1904 Recording and Reporting Occupational Injuries and Illnesses and U.K.'s Reporting of Injuries, Diseases and Dangerous Occurrences Regulations. The article also compares data on incident underreporting in both countries.  
•OSHA's standard does not include "dangerous occurrences," which constitutes the major difference between the two regulations, potentially contributing to the superior safety performance in the U.K. construction industry.

In 2012, the U.S. construction industry fatality rate was 9.9 per 100,000 full-time equivalent employees (BLS, 2013); the U.K.'s 2013 rate of fatal injuries in construction was 1.9 per 100,000 full-time equivalent employees, with a 5-year average of 2.3 (HSE, 2013).

The U.S. rate is approximately 5 times higher than that in the U.K. This significant gap calls for a comparative analysis of safety regulations, cultures and practices in both countries, including safety management systems, incident reporting systems, safety and health regulations and their enforcement, legal systems and technical safety aspects in construction in both countries, as well as a review of overall safety management priorities in both countries.

This article compares OSHA's recordkeeping regulation for the U.S. and Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) in the U.K. As a

starting point, consider these primary differences (Table 1):

- OSHA does not require reporting or recording of near-hits and property damages (dangerous occurrences). Serious injuries or fatalities are reportable to OSHA (the incident reporting mandate was expanded Jan. 1, 2015). Incidents that result in injury must be recorded (starting from relatively minor medical treatments).

- RIDDOR requires reporting and recording of high-potential near-hits and property damage events (dangerous occurrences) in addition to incidents that cause injury. Both injury categories (actual and potential) are given equal priority under RIDDOR. The standard's severity recording requirement is higher than in the U.S. An employer need only record occupational incidents that result in a person being away from work for more than 3 consecutive days, and an employer need only report an incident to RIDDOR's Incident Contact Center if it results in a person being away from work for more than 7 consecutive days.

The regulatory attention to higher potential dangerous occurrences in RIDDOR, which makes eliminating those events a priority, as well as the U.K.'s Construction (Design and Management) (CDM) regulations, which establish clear safety roles and responsibilities for multiemployer construction projects, likely play a positive role in the U.K.'s superior safety performance in the construction industry.

Mendeloff and Staetsky (2014) offer the following potential explanations for the disparity between the U.S. and U.K. rates:

- The type of construction activity in the U.K. may pose fewer safety risks.

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- There could be more underreporting of fatalities in the U.K.
- U.K. employers may make greater and more successful efforts to reduce risks, perhaps partly due to HSE enforcement or its other programs, or employers may increase their safety efforts because of the greater role of lawsuits against employers due to the employer liability laws.
- The U.K. workforce may be more stable with lower turnover.
- U.K. workers may be less likely to take risks.

Mendeloff and Staetsky (2014) also mention the 2007 CDM regulations as a potential contributor to better safety performance in the U.K. Those regulations were first introduced in 1994, so their potential positive contribution to safety in the U.K. construction industry should be further studied as it may be significant. The latest CDM regulations were enacted April 6, 2015.

### Comparing the Regulations

OSHA's reporting and recordkeeping system is often used as a global standard and is perhaps the most commonly used system of its kind in the world, while RIDDOR is utilized predominantly in the U.K. OSHA's standard resides in the U.S. Code of Federal Regulations and was revised in 2015. RIDDOR was last revised in 2013 and is commonly referred to as RIDDOR 2013.

Figure 1 (p. 36) presents an illustration comparing the two systems. As shown, RIDDOR concentrates predominantly on higher severity events, encompassing both actual injuries and dangerous occurrences (near misses). The regulation includes a list of 27 specific reportable types of dangerous occurrences.

Until the 2015 revisions to OSHA requirements, only work-site catastrophes (fatalities or multiple hospitalizations with three or more victims) were reportable. Now, employers must report all work-related fatalities; all work-related inpatient hospitalizations of one or more employees; all work-related amputations; and all work-related losses of an eye. In the U.S., employers must only report incidents that produced an actual occupational injury or illness, not high-potential dangerous occurrences that produce no injuries, which are a significant interest under RIDDOR. Therefore, the U.K. system appears to better capture high-potential events.

OSHA's system is dedicated to actual injury events across a wide severity spectrum (from reasonably low to very high). As the frequency of low-to-moderate severity events is significantly higher than the frequency of high-severity events, OSH professionals in the U.S. (and anyone utilizing OSHA's system as its global recordkeeping standard) are

busy dealing with events on the lower end of the severity spectrum. This is because OSHA recordable rates are used as a key safety performance indicator and are typically requested in the project bidding or prequalification process. The need to maintain competitively low OSHA recordable rates creates a need to manage the outcomes of workplace injuries. As a result, the occupational injury case management practice in the U.S. is well developed, especially at the lower severity end of an injury spectrum. In the author's opinion, this practice may distract some practitioners from their primary duty to recognize, evaluate and prevent high-potential hazards.

RIDDOR's recordable classification threshold captures cases with 3 or more days away from work and with serious injuries (e.g., amputations). Employers are not expected to manage the classification of minor cases and instead engage medical practitioners to maintain them within the first-aid bracket.

Since high-severity dangerous occurrences are reportable under RIDDOR, they typically receive top priority in investigations and corrective actions. Their mandatory reporting may also result in a regulatory inspection and related enforcement actions. In the U.S. construction industry, dangerous occurrences may be partially or completely disregarded by some companies, especially by smaller contractors, since no injury occurred.

### Injury Underreporting

While comparing occupational fatality rates in the construction industry to identify causes of superior performance in the U.K., it is important to review the available data on the statistical validity of those rates, including studies on incident underreporting.

The more sophisticated the reporting system and the more data or interpretation and classification of data required, the more likely that some data might be underreported, misinterpreted or misclassified. It is always possible that some occupational injury or illness cases would not be reported or recorded for various reasons. Alternatively, some recorded cases might be misclassified (e.g., OSHA first-aid cases may be classified as medical treatment and vice versa).

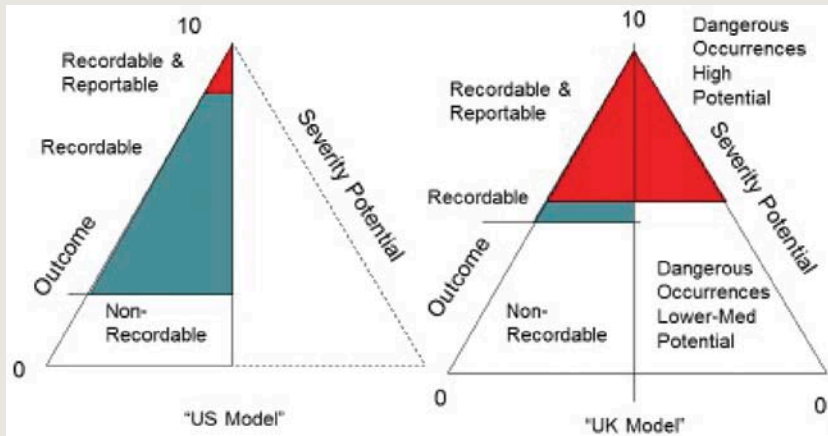
**Table 1**

## Comparison of U.S. OSHA to U.K. RIDDOR Incident Reporting & Recording Requirements

|                   |               | U.K. RIDDOR    |                   | U.S. OSHA      |                   |
|-------------------|---------------|----------------|-------------------|----------------|-------------------|
|                   |               | Actual outcome | Potential outcome | Actual outcome | Potential outcome |
| <b>Reportable</b> | <b>High</b>   | Yes            | Yes               | Yes            | No                |
| <b>Recordable</b> | <b>High</b>   | Yes            | Yes               | Yes            | No                |
|                   | <b>Medium</b> | Maybe          | No                | Yes            | No                |
|                   | <b>Low</b>    | No             | No                | Maybe          | No                |

Figure 1

## Comparison of U.S. to U.K. Occupational Incident Reporting & Recording Systems



Underreporting is significant, as it distorts the reality regarding OSH in a particular country, state or company. This inhibits the ability to recognize trends, identify priorities, develop strategies or allocate resources. Both the OSHA and RIDDOR systems suffer from chronic underreporting.

### OSHA Underreporting Studies

According to the 2008 congressional report, "Hidden Tragedy: Underreporting of Workplace Injuries and Illnesses":

[A]s much as 69% of occupational injuries and illnesses may never make it into the Survey of Occupational Injuries and Illnesses (SOII), the nation's annual workplace safety and health "report card" generated by the Bureau of Labor Statistics (BLS). If these estimates are accurate, the nation's workers may be suffering three times as many injuries and illnesses as official reports indicate. (Committee on Education and Labor, U.S. House of Representatives, 2008)

Pransky, Snyder, Dembe, et al. (1999), cite various causes and influences that contribute to underreporting of workplace injuries and illnesses in the U.S. To assess them, those researchers administered a questionnaire and interviewed 110 workers performing similar tasks, several managers and OSH professionals at three industrial facilities. Although less than 5% of workers had officially reported a work-related injury or illness during the past year, more than 85% reported experiencing work-related symptoms, 50% had persistent work-related problems, and 30% reported either lost-time from work or work restrictions because of their ailment.

Workers described several reasons for not reporting their injuries, including fear of reprisal; a belief that pain was an ordinary consequence of work activity or aging; lack of management responsiveness

after prior reports; and a desire not to lose their usual job. Interviews with managers revealed administrative and other barriers to reporting, stemming from their desire to attain a goal of no reported injuries, and misconceptions about recordability requirements. Thus, corporate and facility safety incentives appeared to have an indirect, yet significant negative influence on the proper reporting of workplace injuries.

Probst, Brubaker and Barsotti (2008) assess the extent to which construction industry workplace injuries and illnesses are underreported, and whether safety climate predicts the extent of such underreporting. They collected data from 1,390 employees of 38 companies contracted to work at a large construction site in the northwestern U.S. The contractors' OSHA logs were used to calculate each company's OSHA reportable rate, whereas medical claims data from an owner-controlled insurance program (OCIP) provided the actual experienced rate of injuries for those same companies.

While the annual OSHA rate was 3.11 injuries per 100 workers, the rate of eligible injuries that were not reported to OSHA was 10.90 injuries per 100 employees. Further, organizations with a poor safety climate had significantly higher rates of underreporting (81% of eligible injuries unreported) compared with organizations with a positive safety climate (47% of eligible injuries unreported).

Glazner, Borgerding, Lowery, et al. (1998), studied occupational injuries that occurred during construction of Denver International Airport (DIA). They found that DIA's overall total injury rate was twice the BLS rate for the construction industry for each year of construction. Differences in lost-time injury rates were more modest. Complete project-wide workers' compensation loss run reporting, facilitated by the existence of a single OCIP plan, an on-site medical clinic and designated medical providers yielded injury rates significantly higher than previously reported.

Glazner, et al. (1998), concluded that the burden of on-site work-related construction injury might be higher and more costly than is evident from national data. The fact that the differences in lost-time injury rates were more modest than in lower-severity injury cases may indicate that more severe injuries tend to be better reported.

### RIDDOR Underreporting Studies

In 2007, Health and Safety Executive (HSE) funded a study to investigate underreporting under RIDDOR by matching patients visiting the Royal Liverpool University Hospital with cases reported to HSE (Davies, Kemp & Frostick 2007). Researchers followed up patients to establish time lost from work; these data, together with injury severity, established which cases should be reported to HSE. The largest number of reportable incidents involved construction occupations.



The comparison with cases actually reported suggests that the main reason incidents were reported was time lost from work and that other factors were ancillary. Major reportable injury and reduced duties on their own were largely ignored; however major injury in conjunction with time lost increased the likelihood that incidents were reported. Overall, only 30% of reportable incidents identified in the study were reported to HSE. The researchers also found that self-employed workers were poor at reporting incidents, with a reporting rate of only 12%, compared with 32% for employed workers (Davies, Kemp & Frostick, 2007).

HSE (2015) now posts this caveat on its website:

Because of underreporting, the following caveats apply:

- 1) Counts of nonfatal injuries reported under RIDDOR will almost always underestimate by a considerable amount the total that would have been recorded if there had been 100% reporting.
- 2) Any comparisons between different subsets within RIDDOR data (e.g., comparisons between one industrial sector and another) need to take account of the possibility of there being markedly different reporting levels in the subsets being compared.

The HSE Statistics 2012/2013 report states:

For the latest year 2012/13, early indications based on self-reported results, suggest that the reporting level of nonfatal injuries to employees recorded under the new RIDDOR requirement . . . has now fallen below half. Further work is ongoing to quantify and understand the impact of this change. No estimates are available on reporting levels of RIDDOR dangerous occurrences.

## Conclusion

Recordkeeping regulations influence safety management. Since occupational injury and illness record (or dangerous occurrences record) are a key performance indicator, companies typically strive to improve that specific indicator. Such a regulatory-driven emphasis can cause a company to concentrate on specific priorities such as, for example, actual injuries in a wide spectrum of severity outcomes, or actual and potential high-risk events regardless of whether they resulted in injuries.

While the ultimate standard of care is to prevent occupational injuries and illnesses of any kind, a company should never ignore high-potential mishaps while placing disproportionate attention on low-potential and low-severity events, even if they produce minor injuries. Thus, based on the brief comparison presented, the U.K.'s RIDDOR regulations provide the optimal balance of risk management priorities. As shown, the recordkeeping systems in both countries suffer from chronic underreporting on a comparable scale.

However, this factor alone cannot explain the five-time disparity in occupational fatality rates between the U.S. and U.K. construction industries. It appears that RIDDOR's emphasis on reporting and investigating dangerous occurrences and its emphasis on high-hazard risk management may con-

tribute to the U.K.'s superior safety performance. Both RIDDOR and the country's CDM regulations should be further studied to better understand their influence on construction safety. In addition, a thorough comparative study is needed on worker demographics, type of work performed, contract type, job size, management practices and other potential differentiators to further understand the U.K.'s better performance. **PS**

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**The U.K.'s regulatory emphasis on reporting and investigating dangerous occurrences and the emphasis on high-hazard risk management may contribute to that country's superior safety performance.**