

COMMENTARY

A Report Card for Occupational Injuries and Illnesses

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KEY WORDS: *regulations; policy; job-related injuries; occupational medicine*

In recent years, government policies have proliferated that require sellers, hospitals, firms, and employers to reveal information pertaining to the health consequences of products and services. In 1996, national legislation was passed that required that public water utilities provide information to consumers regarding the chemicals present in tap water. Hospitals now routinely provide mortality data to government authorities who, in turn, make them available to print and broadcast media [Mennemeyer et al., 1997]. Canned, packaged, and bottled food and beverages now have labels revealing ingredients and nutritional content. Tobacco and toy firms are required to inform consumers of the health and safety aspects of their products. Drug companies must inform consumers of possible side effects of their drugs. Recently, a panel of scientists at the National Research Council has called for requiring auto companies to provide to consumers information and numerical rankings on the crashworthiness of new cars [Morgan et al., 1996]. As a result of the Valujet crash in May 1996, the Federal Aviation Administration (FAA) now provides crash statistics on airlines via the Internet [Wire Service, 1997]. Home sellers must now reveal to potential buyers what sellers know about the lead content of the paint in the house. California now requires day care centers to reveal safety and health records to potential customers [Johnson, 1996]. The state of Massa-

chusetts now prepares report cards on physicians that include information on malpractice awards [Green, 1996]. Report cards are also being used by many health plans to inform consumers [Hibbard and Jewett, 1997]. Finally, although not sponsored by government, *Consumer Reports* magazine frequently has stories on the health and safety aspects of a variety of products, services, and firms, including HMOs.

The Information Age is transforming buying and selling transactions throughout our economy. This is especially true for health and safety information. Moreover, the information and government policies enjoy widespread political support. The water utility legislation alluded to above was overwhelmingly passed by the Republican-controlled House in the summer of 1996. A recent Harris poll indicated that 66% of people surveyed would like to see report cards for hospitals, and 58% would like to see consumer ratings of physicians [Wire Service, 1996].

POLICY PROPOSAL

The Occupational Safety and Health Administration (OSHA) has also embraced this policy of providing information. The original 1970 OSH Act contains a standard pertaining to access to injury and illness records (Title 29, Code of Federal Regulations, Part 1904). This Injury and Illness Recording Standard gives employees the right to examine and copy the injury and illness log. A standard from the 1980s pertained to access to medical and exposure records (Title 29, Code of Federal Regulations, Part 1910.20). This Access-to-Records Standard requires employers to inform employees of the availability of medical records information on an annual basis. The point of this editorial is to suggest that these standards ought to be broadened to include national data on injuries and illnesses, that the

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Contract grant sponsor: National Institute for Occupational Safety and Health; Contract grant number: R01 OH12179-01

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Accepted 19 November 1997

national data ought to be provided to prospective employees, and that the national data ought to be presented so that they are intelligible to the average American. These suggestions could be carried out by simply amending the Recording Standard (29 CFR 1904). One approach would require that some abbreviated version of these data be included in a report card and be attached to every job application form. Another approach would require that this report card be circulated among employees each year.

The report card should contain national death, injury, and illness rates for specific occupations corresponding to the industry in which the firm operates. Information on the most frequent causes of these deaths, injuries, and illnesses should also be included. Experts could be consulted on how the rankings, rates and report cards would be presented so that the average employee and employer would find them useful [Morgan et al., 1996]. Percentiles rather than rates, for example, might be most useful.

DATA

The report card would not be expensive. The Bureau of Labor Statistics (BLS) annually collects and publishes extensive information on job-related injuries and illnesses. Information on injury deaths is available in the Census of Fatal Occupational Injuries (Census) [Toscano et al., 1995]. Information on nonfatal injuries and illnesses is available in the Annual Survey of Occupational Injuries and Illnesses (Annual Survey). The Annual Survey data are derived from the logs required by the Recording Standard.

Whereas the BLS publications using the Census and the Annual Survey are extensive, they do not yet publish the data that would be most useful for the employee and employer: the death rates, the nonfatal injury and illness rates, as well as the causes of these deaths, injuries, and illnesses for as many specific occupations and industries as possible [Leigh, 1995a].

LIMITATIONS OF THE PROPOSAL

There are a number of problems associated with these data and this recommendation to provide injury and illness information. First, there are data problems. Whereas the Census appears thorough, the Annual Survey is not. Small firms, self-employed people, and government workers are omitted. Moreover, economic incentives encourage firms to underreport [Ruser, 1994], and this proposal would likely encourage more falsification and underreporting. Each of these problems could be minimized with more resources devoted to BLS data-gathering efforts and with a more aggressive OSHA that imposes fines on firms that underreport. Moreover, the BLS Annual Survey data are not terribly biased if the goal is to compare injury and illness rates across occupations and industries; that is, if firms underreport by

similar percentage amounts, relative rankings will still be valid.

A second data problem is more serious: the Census ignores diseases altogether and the Annual Survey is widely acknowledged as providing inadequate illness data [Landrigan and Markowitz, 1989; Leigh et al., 1997]. For example, no pneumoconiosis cases that begin after the worker retires are included in the Annual Survey. Clearly, more BLS resources need to address this gap in our knowledge. A Census of Fatal Occupational Diseases would have to be designed.

There may be legal issues associated with the release of these BLS data. The persons and firms supplying the raw data to the Census and the Annual Survey are guaranteed confidentiality by the BLS. One way to minimize the risk of breaching confidentiality agreements is to keep the data at a sufficiently aggregated level; for example, at the 3-digit occupation and 1-digit industry levels.

Some readers might envision a limitation involving additional record-keeping by individual firms. However, the specific proposal involves occupation/industry cells aggregated from nationwide data. The data would be provided by the U.S. Department of Labor to firms and workers. As a result, individual firms would not be burdened with generating their own data for all occupations. A related problem concerns effectiveness. It might be argued that the most effective statistics for policy purposes would be firm-specific. But firm-specific data from new or small firms, or firms experiencing wide employment swings, would be especially problematic. Rate data may not be reliable due to small numbers or rapidly changing numbers in the denominator. Numerator data may also be unreliable. Injury deaths are relatively rare and may not have occurred for a new or small firm. That fact alone might lull the manager or owner of the firm into a sense of complacency. But small firms, in general, have especially high injury death rates [Toscano et al., 1995]. Moreover, as mentioned above, there might be legal problems associated with releasing these firm-specific data directly to the public. Finally, calculations of rates and rankings by individual firms would impose an additional burden on businesses. For these reasons, the provision of national occupation and industry-specific data would have some effectiveness not available with firm-specific data and might be more practical than firm-specific data.

BENEFITS OF THE PROPOSAL

An extension of the Recording Standard would set in motion a number of forces that would improve working conditions, especially for jobs heretofore not widely recognized by the public as hazardous, such as nursing home work. First, news media attention will be directed toward those jobs at the top of the list. Responsible employers will seek to improve their image by offering safer workplaces.

This heightened public awareness will be perhaps the most significant effect of the provision of information. Public support for additional OSHA regulations is likely to grow.

For example, the Census data have been used to focus attention on homicide in the workplace. Newspaper articles [Kilborn, 1991] and television programs have addressed the hazards of employment in convenience stores. One program presented the response of the Gainesville, Florida, Police Department to convenience store crimes. The response ultimately resulted in a sharp drop in crimes in convenience stores. This increased media attention may already have had some effect. The latest Census data indicate that for the first time since records have been kept, national work homicides decreased from 1993 to 1994 [Toscano, 1996].

Second, employees and employers will be alerted to the most probable injuries and illnesses in their line-of-work. This will be especially important for new, small companies with little history of occupational safety and health problems; it will also be important for employees in all jobs. A firm with no history of deaths would become aware of how these are likely to occur and could take preventive measures to avoid them.

Finally, the provision of information will help "the market" reduce injuries and illnesses [Schroeder and Shapiro, 1984]. There is a "free market" force, an invisible hand, that works to reduce injuries and illnesses without government intervention. That force is referred to as the *compensation wage hypothesis* by economists. The idea is simple. In general, most employees do not like jobs involving risks, especially fatal risks. For employers to attract employees to high-risk jobs, the hypothesis suggests that employers must pay a high wage. This high wage compensates the employee who is willing to gamble. Employers who offer jobs that do not involve high risks do not have to pay the high compensating wage to attract similar employees who do not want to gamble. Prospective employees thus penalize employers who offer jobs that are not safe.

Empirical evidence for the existence of compensating wages is mixed. Some economic studies find evidence for compensating wages [Viscusi, 1992], while others do not [Dorman, 1996; Leigh, 1995b]. The most highly regarded advocate of the hypothesis, Kip Viscusi [1992], asserts that the "free market" force has been more effective than all of OSHA's efforts to reduce injuries and illnesses. All economists will agree, however, that if the "free market" force is to work, employees must know the risks they face.

CONCLUSION

The Recording Standard should be extended to include national summary statistics on injuries and illnesses that would be useful for the average American. These statistics should be placed on job application forms. There are several reasons for providing this information. There is considerable

legal precedent. The policy would not be costly since the data are already available. Finally, the provision of information would set in motion strong political and economic forces that would reduce injuries and illnesses.

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