

Workplace Accidents in Brazil Are Significantly Underreported

Inspection issues and informal workplaces make it difficult to determine true safety levels

Key findings:

- Nonfatal workplace accidents in Brazil are severely underreported.
- Work fatalities are also underreported, but the magnitude of the gap, though smaller, is not well understood.
- Changes to health and safety inspections can help promote safer workplaces.

The first national household survey in Brazil that has asked about accidents at work generally confirms what smaller-scale studies have been indicating: that reports to the social security system (INSS) greatly underestimate—perhaps by a factor of six to eight times—the total annual number of work injuries. These findings should support efforts to improve the effectiveness of occupational safety and health prevention programs.

About the Study

Occupational Safety and Health in Brazil: Risk and Policies examines safety and health conditions in Brazilian workplaces and considers how public policies might foster improvements. The report’s focus is primarily on acute traumatic injuries, both fatal and nonfatal, although the report does touch on toxic exposures. It does not address forced labor and some other critical workplace issues.

The study is based on reviews of relevant published literature; analysis of the Brazilian social security database; and interviews with epidemiologists, government officials, and business and labor officials.

Why Are Workplace Accidents Underreported?

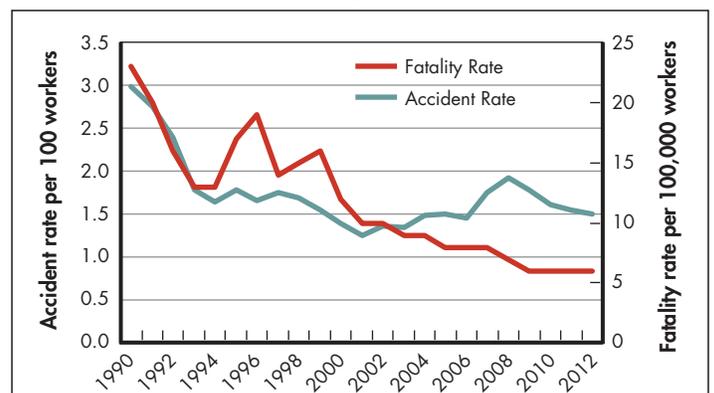
Brazil’s job market is a jumble of formal and informal firms and workers. About half of workers and firms are informal in that they are not registered with the government for social security benefits, and even fewer are eligible for compensa-

tion for injuries. Only formal employers are required to report workplace accidents to the social security system. Risky jobs in agriculture (which employs about 20 percent of Brazilian workers) and construction are less likely to be formalized, so their injuries are less likely to be reported. As a result, the average level of risk for the overall workforce appears lower than it really is. In addition, as in other countries, there are many reasons workers may be reluctant to report injuries to their employers or to take time off from work if they lack a form of compensation.

Fatal Injuries in the Workplace

The official number of reported deaths peaked in 1987 at 5,738, about twice the number in 2012. The rate per 100,000 formal workers has not exceeded 20 per 100,000 covered workers since 1991, dropped to 12 in 2000, and has remained at about six fatalities per 100,000 workers since 2009. However, this tally includes commuting deaths, which most countries do not consider workplace accidents. Excluding commuting deaths brings formal workplace fatalities in 2012 to 1,468 among 40.5 million covered workers, for a rate of 3.6 deaths per 100,000 workers.

Workplace Accident and Fatality Rates in Brazil (1990–2012)



SOURCES: Ministry of Work and Employment (Ministério do Trabalho e Emprego)/Relação Anual de Informações Sociais; Ministry of Social Security (Ministério da Previdência Social)/Anuário Estatístico da Previdência Social; Anuário Brasileiro de Proteção 2015.

If we assumed that all formal deaths were currently reported and that the rate were no higher for informal than for formal workers in each industry, we would estimate that about 3,300 noncommuting workplace deaths occurred in 2012. Since both assumptions are probably not true, and since the riskiest industries are the least formalized, the actual number is likely to be larger.

How Does Brazil Compare?

The U.S. rate in 2012, based on 4,628 deaths, was 3.4 fatalities per 100,000 full-time equivalent workers—very similar to Brazil’s noncommuting rate of 3.6. However, the U.S. rate includes the self-employed, which Brazil excludes, so the comparable rate for U.S. employees was only 2.8. If the U.S. rates are any guide, including the self-employed in Brazil could cause a major jump in deaths. Other changes would widen the gap further; although the United States does not count commuting deaths, a considerably higher proportion of its deaths are due to transportation accidents than is true in Brazil, so the gap in nontransportation deaths is wider.

Public Policies for Prevention

Brazil has an array of public policies—some of them enshrined in its constitution—aimed at reducing workplace injuries and illnesses, though the effectiveness of these prevention policies is often unclear:

- Larger workplaces, especially those in riskier industries, must employ in-house safety and health professionals. However, there is no requirement for establishments with fewer than 50 workers, which account for about 98 percent of firms and roughly half the nation’s workforce.
- Experience rating in workers’ compensation was recently adopted. As a result, employers’ premiums can be raised up to 100 percent above the average industry rate or reduced up to 50 percent below the industry rate depending on their loss experience. In recent years, more than 80 percent of the employers have received a refund, about 8 percent have paid more, and the rest had no change.
- Joint labor-management safety committees are required at formal workplaces, and members are protected against retaliation.
- Formal workplaces must enroll workers in unions. Recent data indicate that working conditions are themes in about one-third of strikes, but it is not clear whether safety and health issues are prominent among them.
- Public prosecutors are allowed to seek significant fines in labor court for serious work accidents involving negligence or consistent lack of safety efforts. Labor courts also help resolve disputes, including those involving health and safety.

- Employees engaged in certain “dangerous activities and operations” receive a 30 percent compensatory wage increase. However, the list of jobs included seems fairly arbitrary and incomplete, and some question whether the 30 percent premium has any impact on safety or prevention.

Brazil relies on a generalist system of labor inspection, in which inspectors are expected to enforce not only safety and health regulations but also other labor standards dealing with hours of work, minimum wages, and forced labor. Health and safety inspectors do not monitor toxic exposures at workplaces, but they may order firms to hire someone to do so.

Although the overall labor inspectorate employs close to 3,000, fewer than 500 have formal training in safety and health. In 2012, a total of 304,000 inspections were conducted. Safety and health were issues in more than 45 percent of them, labor standards were an issue in over 80 percent, and both types were cited in about 100,000 inspections. The large number of safety and health inspections relative to the number of trained inspectors suggests that their workplace visits are often fairly superficial. The high number of visits may partly reflect that 40 percent of safety and health inspections occur at small, easier-to-inspect workplaces with ten or fewer workers, which has limited benefits in terms of the number of injuries prevented because of the small number of workers.

Labor unions and safety and health professionals criticize the shortage of well-trained inspectors and a decline in that department’s autonomy and budget; a lack of consistency in enforcement; and inspections that focus on industries where fatalities are less concentrated. Industry critics cite an increasingly aggressive style of enforcement by government inspectors.

Conclusion and Recommendations

Brazilians both inside and outside government are actively working to improve public policies and social practices. For example, *Health and Safety at Work in Brazil* (2011) reflects an impressive collaboration among ministries and think tanks to reflect on safety and health problems and to map out strategies to address them. In addition, the Ministry of Health, working with university public health programs, has been designing new ways to carry out surveillance.

However, shrinking resources—not only among inspectors but also at Fundacentro, the chief Ministry of Work and Employment think tank on safety—will make it difficult to address accident prevention. In addition, the existence of the informal economy makes it difficult to obtain data to identify problems and to use many of the tools for prevention for close to half the workforce. While firms are under pressure to formalize, there are countervailing economic trends (e.g., greater contracting out) at work.

To build on the work Brazilians are already performing, the following are worth considering:

- *Divide inspectors into generalists and specialists and deploy them strategically.* The greatest value of the generalist inspection system appears to be ensuring that a larger number of workplaces will see someone with at least a modicum of knowledge about labor standards. This value is greatest when inspections are especially rare, because of either isolation and long distances or the small size of the establishments. Brazil could deploy generalists primarily in rural areas and at very small workplaces, and use specialists in urban areas and larger workplaces to make better use of the different skill sets and improve inconsistent enforcement.
- *Allow inspectors to monitor and collect data on toxic exposures.* Collecting information about exposures to toxic chemicals and harmful physical agents is key to understanding whether these risks are being addressed. The Ministry of Labor and the Ministry of Health should seek to jointly develop and apply this capacity.
- *Improve data collection and reporting methods.* Future assessments and planning efforts would benefit from the ability to identify which inspections are for safety and health as opposed to general labor standards.

This brief describes work done in RAND Labor and Population and documented in *Occupational Safety and Health in Brazil: Risks and Policies* by John Mendeloff, WR-1105-ALCF, 2015 (available at www.rand.org/t/WR1105). To view this brief online, visit www.rand.org/t/RB9851. This brief is designed to communicate emerging research to policymakers and the public. Although the working paper on which this is based has undergone peer review, the research should be treated as work in progress. Conclusions are preliminary and subject to change. The RAND Corporation is a research organization that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous. RAND is nonprofit, nonpartisan, and committed to the public interest. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. RAND® is a registered trademark. © RAND 2015

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