To the Editor:

This refers to the article titled "An international analysis of workplace injuries," by Al-Amin Ussif that appeared in the March 2004 issue of the Monthly Labor Review (http://www.bls. gov/opub/mlr/2004/03/art3full.pdf).

In the article, the author discusses occupational injury data for the United States, Canada, Finland, France, and Sweden and draws cross-country comparisons. On page 44, he gives both the BLS and ILO as sources (see end of Chart 1) and states that "the sources of the data are different, but are comparable." Our analysis indicates that these are false statements. We believe that fundamental inconsistencies in the data preclude meaningful comparisons, not only of levels but also of trends in the data. At a minimum, the author should have discussed limitations of the data. Furthermore, the U.S. data series is presented incorrectly. (Jeffery Brown, an Economist in the BLS Office of Compensation and Working Conditions, Division of Safety and Health Statistics, provided the information about the U.S. data series.) Below is a more detailed analysis of these and other points.

Source data cited incorrectly. All data are from ILO; BLS is listed as a source incorrectly on Chart 1. BLS does not publish international data on occupational injuries; therefore, data for Canada, Finland, France, and Sweden are clearly from ILO. The U.S. data are not directly from BLS; the series graphed by the author shows an unusual trend not characteristic of the occupational injury series published by BLS. The ILO series on U.S. occupational injuries data, however, shows the same unusual trend (as discussed further below), so we conclude that the U.S. data were taken from ILO rather than directly from BLS. In fact, footnote 8 of the article states that "The data employed in this analysis are obtained from the International Labor Office Web site: www.laborsta. ilo.org." This contradicts the author's source note on Chart 1, which sources BLS directly.

International data are not comparable. ILO metadata show that occupational injury data are not strictly comparable across the five countries. For example, type of injuries-whether reported or compensated-has a significant impact on comparisons across countries. Thus, data for the U.S. and Sweden, which are based on reported injuries, should not be compared with those of Canada, Finland, and France, since these are based on insurance claims. Table 1 provides an overview of the various differences in coverage for the five countries.

Furthermore, the ILO provides the following caveats about the statistics on occupational injuries:

- "Care should be taken when using the data provided in these tables, particularly when making international comparisons. The sources, methods of data collection, coverage and classifications used differ between countries. For example, coverage may be limited to certain types of workers (employees, insured persons, full-time workers, etc.), certain economic activities, establishments employing more than a given number of workers, cases of injury losing more than a certain number of days of work, etc."
- "It should be borne in mind that a rise or fall in the number of cases of occupational injury or in the rates of injury over a period of time may reflect not only changes in

conditions of work and the work environment, but also modifications in reporting procedures or data collection methods, or revisions to laws or regulations governing the reporting or compensation of occupational injuries in the country concerned."

These caveats appear online at http://laborsta.ilo.org/applv8/data/c8e.html and in the ILO Yearbook of Labor Statistics publications.

Coverage	United States	Canada	Finland	France	Sweden
Source	Establishment survey for non-fatal and cen- sus for fatal injuries	Insurance claims	Insurance claims	Insurance claims	Insurance claims
Type of injuries	Reported injuries	Compensated injuries	Compensated injuries	Compensated injuries	Reported injuries
Persons	Paid employees	Paid employees and self-employed if covered by workers' compensation board	Paid employees and trainees	Paid employees	All (employees, self- employed, family workers); also includes trainees
Economic activities	All except public sector and private household services	All except defense	All	All except public administration and services	All
Establishments	All except farms with fewer than 11 employees	All	All	All	All
Injuries out- side country	Not included	Included if covered by workers' compen- sation board	Included if employer registered in Finland	Not included	Included if claim filed to Swedish company
Metadata source	http://laborsta.ilo. org/applv8/data/ SSM8/E/US.html	http://laborsta.ilo. org/applv8/data/ SSM8/E/FI.html	http://laborsta.ilo. org/applv8/data/ SSM8/E/FR.html	http://laborsta.ilo. org/applv8/data/ SSM8/E/SE.html	http://laborsta.ilo. org/applv8/data/ SSM8/E/SE.html

Data series identified incorrectly. The author incorrectly identifies the type of occupational injury data series used. The ILO provides three data series on occupational injuries: fatal injuries, nonfatal injuries, and total injuries. Based on the data discussed in the article, the author appears to have used the series on total injuries, which includes both fatal and non-fatal cases. However, on page 41, the author states "the injury counts are cases with lost workdays, that is, injuries resulting in days away from work." Thus the author is implying that he is using the series on non-fatal injuries, which is not true based on the data shown in the article.

Misuse of data. As briefly discussed above, the U.S. data presented show an unusual trend. Chart 1 on page 43 shows U.S. injuries falling from above 5 million in 1977 to about 2.5 million in 1978. Although this trend is consistent with the ILO data series on total reported injuries in the United States, the author does not reproduce the break in series for 1977 indicated by the ILO, resulting in a misleading graph. In addition, he makes no attempt to explain the sharp drop from one year to the other in the U.S. data series.

The underlying problem, however, is the ILO's inaccurate presentation of the U.S. data from BLS. The ILO series on total reported occupational injuries for the United States is actually a combination of two separate BLS data series: total injuries for 1976–77 and counts of cases resulting in days away from work for 1978 onward. Thus, the classification of this dataset as total reported injuries is incorrect, since only the first two years of data reflect total injuries. The majority of the data presented (i.e., data for 1978 onward) are days away from work cases, a subset of total injuries.

Also note that the 1977 break in series for the U.S. data is inaccurately described by the ILO, and, more importantly, it is inappropriate. Although it is placed at the seam of the two different data series, it incorrectly characterizes the difference between the two series. The ILO's explanation for the break is that the figures for 1976–77 include non-fatal cases without lost workdays, implying that the figures are larger because they are based on a broader definition for non-fatal cases. As discussed above, this is incorrect; the difference is in fact due to the exclusion of fatal cases for all years after 1977. However, the error in the explanation of the break is moot since the two BLS series should not be combined into one.

Missing breaks in series. The author does not reproduce the breaks in series given in the ILO metadata for four of the five countries studied in the article. Table 2 provides an overview of the omitted breaks.

Table 2. ILO metadata on breaks in series					
Country	Year	Explanation			
United States	1992	Establishment of Census of Fatal Occupational Injuries. Previously, fatal injuries figures were estimations based on survey data.			
Canada	1991	Geographic coverage expanded to include the Yukon.			
Finland	1992	Revisions to definitions of establishment, occupation and branch of industry.			
Sweden	1993	Revisions to definition of economic activities and work injuries.			
	1990	Revisions to definition of occupation.			
	1997	Further revisions to definition of occupation.			

Other comments. Footnote 2 on Chart 1 is incorrectly placed after the United States. This footnote relates only to France.

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