

Appendix C. How to Compute Your Firm's Incidence Rate for Safety Management

Incidence rates show the relative level of injuries and illnesses among different industries, firms, or operations within a single firm. Because a common base and a specific period are involved, these rates help determine both problem areas and progress in preventing work-related injuries and illnesses. Employers can use a new web-based tool to compute their own injury and illness incidence rate for safety management purposes and compare their rate to their industry rate by visiting <http://data.bls.gov/IIRC/>.

How to compute incidence rates

An incidence rate of occupational injuries and illnesses can be calculated quickly and easily. The formula requires two pieces of information:

(a) *The number of nonfatal injuries and illnesses.* Count the number of OSHA recordable cases for the year from the "Log of Work-Related Injuries and Illnesses," OSHA's Form 300; or obtain the number of injuries and illnesses from the survey questionnaire if your company was surveyed for the calendar year for which incidence rates are desired.

(b) *The number of hours all employees actually worked.* Use payroll or other time records. "Hours worked" should not include any nonwork time, even though paid, such as vacation, sick leave, holidays, and so forth. (If actual hours worked are not available for employees paid on commission, by salary, by the mile, and so on, hours worked may be estimated on the basis of scheduled hours or 8 hours per workday.)

An incidence rate of injuries and illness may be computed from the following formula:

(a) $\frac{\text{Number of injuries and illnesses} \times 200,000}{\text{Employee hours worked}} = \text{incidence rate}$

(b) Employee hours worked

(The 200,000 in the formula represents the equivalent of 100 employees working 40 hours per week, 50 weeks per year, and provides the standard base for the incidence rates.)

An example:

The ABC Company had 11 recordable injuries and illness during the year. The total hours worked by all employees was 130,000.

$$\frac{11 \times 200,000}{130,000} = 16.9$$

Therefore, the ABC Company experienced a rate of 16.9 injuries and illnesses per 100 full-time employees. The company used the same formula to compute incidence rates for its more serious nonfatal cases, those involving days away from work. Of the 11 injuries and illnesses, 5 involved days away from work. Thus, it experienced a rate of 7.7 days away from work injuries and illnesses per 100 full-time workers.

$$\frac{5 \times 200,000}{130,000} = 7.7$$

Note: The aforementioned formula applies for injuries and illnesses combined and for injuries only. For illnesses alone, use 20,000,000 hours instead of 200,000 hours to get a rate per 10,000 equivalent full-time workers, which then can be compared with illness rates per 10,000 workers shown by detailed industry in table 5.