employee-hours of work

A rate of 20 0 means that disabling injuries were incurred at the rate of 20 for each 1,000,000 employee-hours worked Occasionally, this interpretation may be difficult to understand, particularly when a company does not work 1,000,000 employee-hours during the period for which the rate is determined However, as with a vehicle which can travel 60 miles per hour without being operated for an entire hour, a plant can have a rate of 20 injuries per 1,000,000 employee-hours without actually working this number of hours

On the average an employee works about 2000 hours per year (in the United States) One million employee-hours, then, represents a year's work for about 500 employees In general terms, therefore, a rate of 20 0 may be interpreted as 20 disabling injuries per year for each 500 employees, or 1 disabling injury for each 25 employees Expressed in another way, if a plant has an injury rate of 20 0 during the year, 1 of every 25 employees was injured to the extent that he lost at least one full day of work or suffered some permanent impairment.

Severity rate This rate shows the rate at which days are lost or charged in relation to 1,000,000 employee-hours of work

A severity rate of 500 means that 500 days were lost or charged for every 1,000,000 employee-hours worked As with the frequency rate, the base may be interpreted more generally in terms of employees, and since 1,000,000 employee-hours represents the yearly experience of about 500 employees, a severity rate of 500 may be interpreted as 500 days lost or charged for each 500 employees, or about one day lost or charged for each employee

Included in the severity rate are both actual days lost and scheduled charges, with the total heavily weighted by the latter In most cases in which scheduled charges are assessed, these charges exceed the actual days lost

For example, amputation of the index finger carries a scheduled charge of 400 days, which is used in place of the actual days lost It is improbable, that a disability of this type will cause the worker to lose 400 days

The severity rate, then, must not be interpreted as showing the number of days *lost* because of injuries Actually, it shows the number of days lost or charged, and the charges which represent potential losses of production outweigh the actual days lost at the time of the injury

Average days charged per disabling injury This measure shows how serious the injuries were, on the average, and thus may reveal conditions not readily apparent from a review of frequency or severity rates alone It thus makes possible a more complete evaluation of injury experience

To illustrate how this measure may be used, in one year, forty-four large meat packing plants which reported their experience to the National Safety Council were classified in the "large plants" group, and the ranks of their frequency and severity rates were determined from 1 to 44

In the plant with the second lowest frequency and severity rates, the injuries, *on the average*, were more serious than those which occurred in 15 of the other 43 plants This fact clearly showed the need for directing additional attention toward the more serious cases

On the other hand, the plant which ranked 40th in frequency and 29th in severity had an average charge per disabling injury that ranked only 11th In other words, in this plant whose frequency and severity rates were among the highest, the injuries, on the average, were less serious than those which occurred in 33 of the other plants The low average charge per disabling injury in this plant indicated that the less serious injuries accounted principally for the high plant rates, and that improvement in the injury rates depended primarily on more effective control over minor cases

Since the average charge per disabling injury can be computed quickly for any plant, group, or industry for which frequency and severity rates are known (merely by dividing the frequency rate into the severity rate), the average charge per disabling injury for a plant may be compared directly with a similar figure computed for the entire industry of which the plant is a part For example, the plant with the high frequency and severity rates discussed above had an average charge per disabling