



Department of Labor and Employment Manila, Philippines

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### ARE OUR WORKPLACES SAFE?

... Measures of Safety Performance (Third of a series)

This series of LABSTAT Updates presents statistical briefs on cases of occupational injuries and diseases that affected private sector establishments in 2007. The statistics were based on the results of the 2007/2008 BLES Integrated Survey (BITS) conducted in 2008 by the Bureau in coordination with the DOLE Regional Offices. As a vital supplementary source of data to administrative-based statistics on occupational safety and health in DOLE, the BITS is a nationwide survey covering 6,460 sample non-agricultural establishments with 20 or more workers. It has expanded its industry coverage from 58 industries in 2003 to 65 to include building and repairing of ships and boats (manufacturing industry); bus line operation (transport, storage and communications); accounting, bookkeeping and auditing activities, tax consultancy; architectural, engineering and related technical consultancy; call center activities; medical transcription and related outsourcing activities (real estate, renting and business activities); and animated films and cartoons production (other community, social and personal service activities) industries. The last three sub-industries are technology-based industries that have played significant roles in the Philippine economy in recent years.

The BITS also generated other labor-related statistics on employment of specific groups of workers; occupational shortages and surpluses; safety and health practices; and labor cost of employees that can be used as basis for policy and program formulation and evaluation.

Specifically, this third issue discusses the measures on safety performance - frequency, incidence, and severity rates of cases of occupational injuries with workdays lost; and average workdays lost covering the period 2007 compared with those of 2003. As these measures take into account differences in employment and hours worked which thus allow meaningful comparison between the two periods and economic activities, these statistics serve as signals on safety performance and effectiveness of accident preventive interventions in placed at work. The metadata and the statistical tables of the surveys are posted on the BLES website.

#### Highest frequency rate of injuries in hotels and restaurants

Injuries incurring days away from work recorded a Frequency Rate (FR) of 2.79 in 2007. This was 1.28 percentage points lower than the FR of 4.07 in 2003. Expectedly, this was coherent to the 12.4% reduction in the number of cases of occupational injuries to 20,386 in 2007 from 23,265 in 2003 (as presented in earlier statistical briefs on cases of occupational injuries).

Categories by incapacity for work on cases with workdays lost recorded frequency rates as follows:

Category	2003	2007	Increment
Total	4.07	2.79	-1.28
Fatal	0.03	0.02	-0.01
Non-Fatal	4.04	2.77	-1.27
Permanent			
Incapacity	0.02	0.02	-
Temporary			
Incapacity	4.02	2.75	-1.27

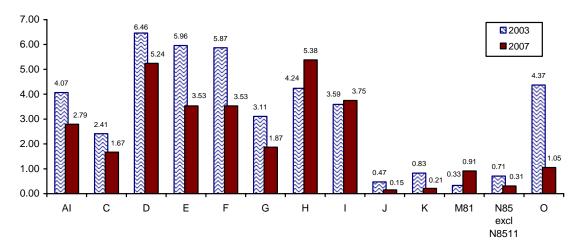
As shown among categories of incapacity, temporary incapacity cases which consistently made up almost all of cases with lost worktime accounted for the highest FR at 2.75 in 2007. This rate, however, registered a decrease of 1.27 percentage points from the 4.02 FR posted in 2003. Meanwhile, FR of permanent incapacity cases remained unchanged at 0.02 in both years under review. In contrast, death/fatal cases in 2007 sustained a slightly lower FR of 0.02 from 0.03 four years ago.

Across major industry groups, five industries reported frequency rates of injuries higher than the all-industry FR of 2.79 in 2007. Hotels and restaurants registered the highest rate at 5.38, an increase of 1.14 points from 4.24 in 2003 as its caseload of injuries workdays lost substantially increased in 2007 (from 1,195 in 2003 to 1,877 in 2007). Manufacturing posted the second highest FR at 5.24 is slightly lower by which percentage points than the 6.46 FR in 2003 despite its reduced caseload of

12,427 in 2007 from 14,403 in 2003. Third was transport, storage communications with slightly higher FR in 2007 at 3.75 than in 2003 at 3.59. This rate corresponded to the meager increase of its cases to 1,701 in 2007 over 1,558 in 2003. Next were electricity, gas and water supply; and construction both with FR of 3.53 each. With considerably fewer injury cases observed in these two industry groups in 2007 compared to 2003, their FRs dropped from 5.96 and respectively. (Figure 1)

Meanwhile, FRs lower than all-industry frequency rate of 2.79 in 2007 for the rest of the industry groups ranged from 0.15 (financial intermediation) to 1.87 (wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods). In 2003, FRs below the allindustry frequency rate of 4.07 ranged from 0.33 (private education services) to 3.59 (transport, storage and communications).

FIGURE 1 - Frequency Rates of Cases of Occupational Injuries with Workdays Lost by Major Industry Group, Philippines: 2003 and 2007



Al-All Industries

C-Mining and Quarrying

D-Manufacturing

E-Electricity, Gas & Water Supply

F-Construction

G-Wholesale & Retail Trade; Repair of Motor Vehicles, Motorcycles & Personal & Household Goods

H-Hotels & Restaurants

I-Transport, Storage & Communications J-Financial Intermediation

K-Real Estate, Renting & Business Activities M81-Private Education Services

N85 excl. N8511-Health & Social Work except Public Medical, Dental & Other Health Activities

O-Other Social & Personal Services Activities

Source of data: Bureau of Labor and Employment Statistics, BLES Integrated Survey (2003/2004 and 2007/2008).

### Manufacturing sustained highest double-digit incidence rate of injuries with absences from work

The national or all-industry incidence rate (IR) was pegged at 6.99 in 2007 which simply means that there were 7 cases of occupational injuries with workdays lost for every 1,000 workers. These cases declined from the 10 cases per 1,000 workers or 9.75 IR reported in 2003.

In terms of incapacity for work, incidence rates were noted as follows:

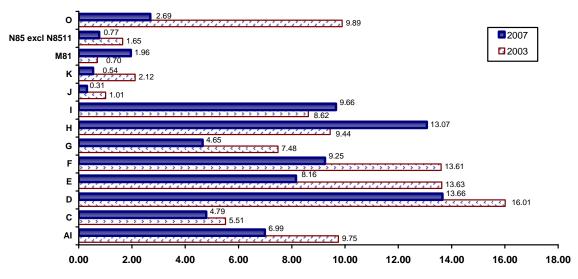
Category	2003	2007	Increment
Total	9.75	6.99	-2.76
Fatal	0.07	0.04	-0.03
Non-fatal	9.68	6.95	-2.73
Permanent Incapacity Temporary	0.05	0.06	0.01
Incapacity	9.63	6.89	-2.74

As expected, most incidences were temporary incapacity cases but with a notably lower rate of 6.89 in 2007 from 9.63 in 2003. Likewise, fatal incidences were lower at 0.04 in 2007 against 0.07 in 2003. In contrast, nonfatal permanent incapacity incidences negligibly increased to 0.06 in 2007 compared to 0.05 in 2003.

The survey revealed that two major industry groups posted doubledigit incidence rates surpassing the 6.89 IR for all industries in Manufacturing led all other industries by posting an incidence rate of 13.66 in 2007. This rate, however, dropped by 2.35 percentage points against 16.01 in 2003. Hotels and restaurants followed with 13.07, a 3.63 increase from 2003 IR of 9.44. Other industries with IRs higher than that of all-industry figure were transport, storage communications (9.66);construction (9.25); and electricity, gas and water supply (8.16). (Figure 2)

Incidence rates below that of the national IR in 2007 varied from 0.31 (financial intermediation) 4.79 (mining and quarrying).

FIGURE 2 - Incidence Rates of Cases of Occupational Injuries with Workdays Lost by Major Industry Group, Philippines: 2003 and 2007



AI-AII Industries

C-Mining and Quarrying

D-Manufacturing

E-Electricity, Gas & Water Supply

F-Construction

G-Wholesale & Retail Trade; Repair of Motor Vehicles, Motorcycles & Personal & Household Goods

H-Hotels & Restaurants

I-Transport, Storage & Communications J-Financial Intermediation

K-Real Estate, Renting & Business Activities

M81-Private Education Services

N85 excl. N8511-Health & Social Work except Public Medical, Dental & Other Health Activities

O-Other Social & Personal Services Activities

Source of data: Bureau of Labor and Employment Statistics, BLES Integrated Survey (2003/2004 and 2007/2008).

## Highest severity rate of injuries in electricity, gas and water supply

Temporary incapacitating injuries characterized almost all cases of occupational injuries with workdays lost. In both years under review, these cases reached 22,964 (out of 23,265) in 2003 which then decreased to 20,109 (out of 20,386) in 2007.

In 2007, the severity rates (SRs) of these injuries showed substantial improvement at 19.05 in 2007 as against 27.31 in 2003. (*Table 1*)

TABLE 1 – Severity Rates of Temporary Incapacity Cases of Occupational Injuries with Workdays Lost by Major Industry Group, Philippines: 2003 and 2007

Major Industry Group	2003	2007	Difference
All Industries	27.31	19.05	-8.26
Mining & Quarrying	42.88	8.65	-34.23
Manufacturing	38.63	33.87	-4.76
Electricity, Gas & Water Supply	63.22	64.35	1.13
Construction	31.79	30.74	-1.05
Wholesale & Retail Trade	13.82	8.17	-5.65
Hotels & Restaurants	26.16	13.48	-12.68
Transport, Storage & Communications	45.13	36.62	-8.51
Financial Intermediation	6.36	1.50	-4.86
Real Estate, Renting & Business Activities	14.95	1.68	-13.27
Private Education Services	3.53	10.08	6.55
Private Health & Social Work Services	8.43	2.27	-6.16
Other Community, Social & Personal Service Activities	9.75	4.35	-5.40

Industry-wise, electricity, gas and water supply accounted for the highest severity rates of 64.35 in 2007 and 63.22 in 2003. Transport, storage and communications recorded the next highest at 36.62 in 2007 which was considerably lower compared to 2003 at 45.13. Manufacturing followed at 33.87 in 2007 down from 38.63 in 2003.

Relative to decreases in severity rates between the two periods reviewed, mining and quarrying showed the most improvement as its SR went down by 34.23 percentage points to 8.65 in 2007 from 42.88 in 2003. In contrast, private education services recorded the highest increase of 6.55 percentage points as its SR in 2007 went up to 10.08 from only 3.53 in 2003.

Source of data: Bureau of Labor and Employment Statistics, BLES Integrated Survey (2003/2004 and 2007/2008).

# Longest recuperation span from injury in electricity, gas and water supply

In 2007, each case of temporary incapacity averaged to 6.92 or 7 workdays lost. The decline in severity rate noted earlier did not translate to shorter span of days away from work to recuperate compared to that of 2003 which averaged to 6.79 corresponding to a similar duration of 7 workdays lost. (*Table 2*)

Longest duration of days away from work due to temporary injury at 19.13 days in 2007 affected workers in electricity, gas and water supply, thus, complementing its record of having the highest severity rate of cases over other industries. In 2003, its average workdays lost was lower at 11.01 days.

TABLE 2 – Average Workdays Lost of Temporary Incapacity Cases of Occupational Injuries with Workdays Lost by Major Industry Group, Philippines: 2003 and 2007

Major Industry Group	2003	2007	Difference
All Industries	6.79	6.92	0.13
Mining & Quarrying	19.49	5.31	-14.18
Manufacturing	6.02	6.56	0.54
Electricity, Gas & Water Supply	11.01	19.13	8.12
Construction	5.44	8.88	3.44
Wholesale & Retail Trade	4.56	4.41	-0.15
Hotels & Restaurants	6.22	2.50	-3.72
Transport, Storage & Communications	12.98	9.87	-3.11
Financial Intermediation	13.79	10.65	-3.14
Real Estate, Renting & Business Activities	18.76	8.39	-10.37
Private Education Services	11.48	11.08	-0.40
Private Health & Social Work Services	11.85	7.48	-4.37
Other Community, Social & Personal Service Activities	2.23	4.20	1.97

Source of data: Bureau of Labor and Employment Statistics, BLES Integrated Survey (2003/2004 and 2007/2008). Private education services which posted the highest increase in severity rates (from SR 3.53 in 2003 to 10.08) had the second longest average workdays lost per injury at 11.08. In 2003, its cases incurred 11.48 average workdays lost.

Despite posting the lowest rates of frequency (0.15), incidence (0.31) and severity (1.50) in 2007, financial intermediation came in third as its workdays lost averaged to 10.65. This

was, however, a little better as against the 13.79 days away from work per injury it posted in 2003.

Notably, hotels and restaurants which previously accounted for the highest frequency of cases with workdays lost, recorded the least serious cases of temporary incapacity with a 2.50 average workdays lost in 2007. This fared much better over its 6.22 record in 2003.

#### **Definition of Terms:**

**Frequency Rate (FR)** – refers to cases of occupational injuries with workdays lost per 1,000,000 employee-hours of exposure.

**Incidence Rate (IR)** – refers to cases of occupational injuries with workdays lost per 1,000 workers.

**Severity Rate (SR)** – refers to workdays lost of cases of occupational injuries resulting to temporary incapacity per 1,000,000 employee-hours of exposure.

**Average Workdays Lost** – refer to workdays lost for every case of occupational injury resulting to temporary incapacity.