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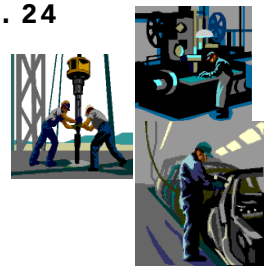

ARE OUR WORKPLACES SAFE?

(13th of a Series)

Focus on Manufacturing

This series of the LABSTAT Updates is a presentation of thirteen issues on the results of the 2000 Occupational Injuries Survey (OIS). This survey has been redesigned to better serve its objective to generate statistics on occupational injuries that are useful to labor administrators in their formulation of effective policies and decision making on the enforcement of safety and health standards and to safety practitioners of the private sector in their development and implementation of programs on accident prevention.

In 1990-1996, the OIS that has been conducted annually nationwide then followed the classification by extent of disability (fatal, permanent total disability, permanent partial disability and temporary disability) set under the Employees Compensation Program for compensation and insurance purposes.

Starting with OIS 2000, changes undertaken have been in line with the Resolution Concerning Statistics of Occupational Injuries Resulting from Occupational Accidents adopted by the 16th International Conference of Labour Statisticians in October 1998. Data coverage has been expanded to include injuries by occupation, part of body injured and cause of injury. It has also adopted the concept of incapacity for work (permanent and temporary) of the International Labor Organization (ILO) in lieu of the previous classification by extent of disability. Establishment coverage has also been changed to include only those non-agricultural establishments employing at least 20 workers.

This thirteenth issue profiles statistics on the incidences and seriousness of occupational injuries specific to ***manufacturing****. (An* ***Occupational Injury*** *is any personal injury, disease or death resulting from an occupational accident. It is distinct from an occupational disease, which is a disease contracted as a result of an exposure over a period of time to risk factors such as contact with asbestos, lead, inhaling cotton dust, carrying out repetitive movement arising from work activity).*

CASES OF OCCUPATIONAL INJURIES

A caseload of 69,208 occupational injuries affected non-agricultural establishments employing at least 20 workers in year 2000. A total of 42,742 cases or 61.8 percent did not result to lost workday but the rest (26,467 cases or 38.2%) recorded absences from work.

Manufacturing had the largest number of occupational injuries (67.8%) with 46,955 cases. Of which, 28,124 had no lost workdays and 18,831 with lost workdays.

In this sector, relatively high incidences were found in the manufacture of food products (9,882 cases) and in the manufacture of wearing apparel (7,046 cases).

- A **case of occupational injury** is the case of one worker incurring an occupational injury as a result of one occupational accident. If one person is injured in more than one occupational accident during the reference period, each case of injury to that person should be counted separately. Where more than one person is injured in a single accident, each case of occupational injury shall be counted separately.

CASES WITH LOST WORKDAYS

Manufacturing claimed the biggest share of seven (7) out of ten (10) cases of work-related injury with lost workday (18,831 out of 26,467). Its subgroups with relatively large number of cases were manufacture of food products (5,443 cases), manufacture of wearing apparel (2,113), manufacture of basic metals (1,825) and manufacture of wood, wood products and cork except furniture (1,323). Least shares were observed in the manufacture of coke, refined petroleum and other fuel products with four (4) cases and in recycling with two (2) cases .

By Employment Size

In manufacturing industries, the bulk of cases with lost workdays were found in establishments employing 200 or more workers (14,388 or 76.4%). Of which, a sizeable number occurred in establishments engaged in the manufacture of food products (5,193) and in the manufacture of wearing apparel (1,994).

Establishments with 100-199 workers reported a lower number with 2,344 cases. The least (2,099 cases) were recorded in establishments with 20-99 workers.

By Incapacity for Work

Almost all cases (18,810) or 99.9%) were non-fatal resulting mostly to temporary incapacity (18,741 cases) and only 69 cases of permanent incapacity. In particular, more than 5,000 injury cases of temporary incapacity involved workers in the manufacture of food products.

The twenty-one (21) fatal injuries translated to a negligible share of 0.1 percent to overall cases with lost workdays in this sector. However, in terms of all-industry fatalities (178), these cases contributed 11.8 percent.

By Major Occupation Group

Across major occupations more than half (51.6%) of the cases affected laborers and unskilled workers particularly those in the manufacture of food products (43.1%). Plant and machine operators and assemblers followed with 7,285 injuries (38.7%) of which, 22.5 percent were in the manufacture of wearing apparel. The professional group recorded lowest with 84 injuries.

By Type of Injury

Superficial injuries and open wounds were the most common type of injury with six (6) for every ten injury cases in manufacturing (61.7%). High proportions of this type of injury were reported in the manufacture of food products (28.8%) and in manufacture of wearing apparel (15.0%).

Other types of injuries with less than ten percent shares range from 107 (acute poisoning and infections) to 1,705 (dislocations, sprains and strains).

By Part of Body Injured

Notably, upper extremities were more susceptible to injury than any other parts of the body. It accounted for 11,051 or 58.7 percent of the caseload in the sector. These cases also accounted for about eighty percent (80.8%) of total injuries on upper extremities for all non-agricultural industries during the period. A total of 3,577 of such injuries affected in particular workers in food products manufacturing.

Injuries affecting other body parts followed with extensively lesser shares, i.e. injuries of lower extremities (4,023 cases 21.4%), head injuries with 2,170 cases (11.5%), etc. Neck injuries posted the least number with 72 cases (0.4%).

By Cause of Injury

The 6,336 injuries caused by stepping on, striking against or struck by objects excluding falling objects represented around one-third (33.6%) of total injuries in manufacturing. These accounted for almost three-fourths (72.6%) of such injuries in all non-agricultural industries. Relatively large incidences particularly affected workers in the manufacture of wearing apparel (1,252 cases) and in the manufacture of food products (1,243 cases).

On other causes, caught in or between objects yielded 3,588 injuries (19.1%) while exposure to or contact with electric current had the least with 196 injuries (1.0%)

SAFETY PERFORMANCE

Frequency Rate

Across non-agricultural sectors, manufacturing accounted for the highest frequency rate of occupational injuries with lost workdays at 10.08 per 500 full-time workers or one (1) injury case for every 50 workers. This is higher than the all-industry frequency rate of 5.70 or about six (6) injury cases per 500 full-time workers or one (1) injury case for every 88 workers.

Within minor manufacturing industries, injury incidences were noted more frequent in the manufacture of wood, wood products and cork except furniture at one (1) injury case per 13 workers (with frequency rate of 38.60 per 500 full-time workers) and in the manufacture of basic metals at one (1) injury case per 14 workers (with frequency rate of 35.37 per 500 full-time workers).

Frequency Rate of Cases of Occupational Injuries With Lost Workdays in Selected Specific Manufacturing Industries, Philippines: 2000 (per 500 full-time workers)

Industry	Frequency Rate
All Industries	***5.70***
Manufacturing	**10.08**
Food Products	18.46
Textiles	13.23
Wearing Apparel	7.86
Wood, Wood Products & Cork Except Furniture	38.60
Coke, Refined Petroleum & Other Fuel Products	0.70
Basic Metals	35.37
Office, Accounting & Computing Machinery	0.51
Recycling	21.09

In contrast, less frequent incidences of injury were reported in the manufacture of office, accounting and computing machinery at one (1) injury case in every 980 workers (with frequency rate of 0.51 per 500 full-time workers) and in the manufacture of coke, refined petroleum and other

fuel products at one (1) injury case in every 714 workers (with frequency rate of 0.70 per 500 full-time workers).

Fatalities in manufacturing translated to one death case for every 50,000 workers. However, as the recycling subgroup reported only fatal injuries, death occurrence particular to this subgroup rated quite high at one (1) fatality out of every 24 workers (with frequency rate of 21.09 per 500 full-time workers).

On non-fatalities, temporary incapacity cases were the most prevalent at one (1) case for every 50 workers as compared to one (1) permanent incapacity case for every 12,500 workers.

Severity Rate

Temporary incapacity cases in manufacturing posted a severity rate of 70.52 per 500 full-time workers or an equivalent 0.14 lost workday per worker. This was slightly higher than 0.09 lost workday for every worker noted in all non-agricultural industries during the period.

Within this sector, most serious of these cases involved 0.60 workday lost per worker in the manufacture of basic metals while those least severe stood at 0.01 lost workday per worker in the manufacture of office, accounting and computing machinery.

Severity Rate of Temporary Incapacity Cases of Occupational Injuries With Lost Workdays in Selected Specific Manufacturing Industries, Philippines: 2000 (per 500 full-time workers)

Industry	Severity Rate
All Industries	***43.69***
Manufacturing	**70.52**
Food Products	105.64
Textiles	74.30
Wearing Apparel	30.19
Wood, Wood Products & Cork Except Furniture	253.36
Coke, Refined Petroleum & Other Fuel Products	12.51
Basic Metals	301.73
Office, Accounting & Computing Machinery	4.53

Average Days Lost

In all non-agricultural sectors, each injury resulting to temporary incapacity incurred, on the average, eight (8) lost workdays in year 2000.

Average Days Lost of Temporary Incapacity Cases of Occupational Injuries With Lost Workdays in Selected Specific Manufacturing Industries, Philippines: 2000

Industry	Average Days Lost
All Industries	***8***
Manufacturing	**7**
Food Products	6
Textiles	6
Wearing Apparel	4
Wood, Wood Products & Cork Except Furniture	7
Coke, Refined Petroleum & Other Fuel Products	18
Basic Metals	9
Office, Accounting & Computing Machinery	9

For manufacturing sector, absences from work due to temporary incapacity cases of injuries averaged seven (7) lost workdays per injury. Amongst its component industries, the longest average duration of 18 lost workdays per injury case affected workers in the manufacture of coke, refined petroleum and other fuel products while the shortest average period with only four (4) lost workdays per injury involved workers in the manufacture of wearing apparel.

DEFINITION OF TERMS	
Incapacity for Work	inability of the victim due to an occupational injury to perform the normal duties of work in the job or position occupied *at the time* of the occupational accident.
Case of Permanent Incapacity for Work	refers to an injured person who was unable to work from the day after the day of the accident and: • was *never* able to perform again the normal duties of work in the job or position occupied at the time of the occupational accident causing injury; • will be able to perform the same job but his/her total absence from work is expected to *exceed a year* from the day of the accident.
Case of Temporary Incapacity for Work	refers to an injured person who was unable to work from the day after the day of the accident but: • was able to perform again the normal duties of work in the job or position occupied at the time of the occupational accident causing the injury; • will be able to perform the same job but his/her total absence from work is expected *not to exceed a year* from the day of the accident; • did not return to the same job but the reason for changing the job is not related to his/her inability to perform the job at the time of the occupational accident.
1,000,000 Employee-Hours of Exposure	the number of hours worked of 500 full-time workers, each exposed to 2,000 hours per year.

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FAX **527-93-25** E mail: lssd@manila-online.net or bleslssd@bles.dole.gov.ph or visit our
Website at http://www.manila-online.net/bles or http://www.bles.dole.gov.ph for other statistical information

TABLE 1 - Cases of Occupational Injuries in Non-Agricultural Establishments Employing 20 or More Workers by Selected Specific Manufacturing Industry, Philippines: 2000

Industry	Cases of Occupational Injuries		
	Total	With Lost Workdays	Without Lost Workdays
ALL INDUSTRIES	***69,208***	***26,467***	***42,742***
MANUFACTURING	**46,955**	**18,831**	**28,124**
Manufacture of Food Products	9,882	5,443	4,438
Manufacture of Beverages	3,863	999	2,864
Manufacture of Tobacco Products	440	251	189
Manufacture of Textiles	2,894	1,126	1,768
Manufacture of Wearing Apparel	7,046	2,113	4,993
Tanning and Dressing of Leather	84	34	50
Manufacture of Footwear	179	95	84
Manufacture of Articles of Bamboo, Cane, Rattan and the LIke	93	58	35
Manufacture of Wood, Wood Products and Cork except Furniture	1,902	1,323	578
Manufacture of Paper and Paper Products	685	354	331
Publishing, Printing and Reprodution of Recorded Media	149	89	60
Manufacture of Coke, Refined Petroleum & Other Fuel Products	4	4	0
Manufacture of Chemicals and Chemical Products	1,274	459	815
Manufacture of Rubber Products	227	73	154
Manufacture of Plastic Products	3,014	676	2,338
Manufacture of Glass and Glass Products	416	187	229
Manufacture of Cement	149	61	88
Manufacture of Other Non-Mettalic Mineral Products	1,102	449	653
Manufacture of Basic Metals	2,533	1,825	708
Manufacture of Fabricated Metal Products	1,229	737	493
Manufacture of Machinery and Equipment	1,006	431	575
Manufacture of Office, Accounting & Computing Machinery	257	47	210
Manufacture of Electrical Machinery and Apparatus	1,679	269	1,411
Manufacture of Radio, TV and Communication Equipment	2,912	400	2,512
Manufacture of Medical, Precision and Optical Instruments	406	61	345
Manufacture of Motor Vehicles, Trailers and Semi-Trailers	696	328	368
Manufacture of Other Transport Equipment	500	240	260
Manufacture and Repair of Furniture	1,490	602	888
Recycling	2	2	0
Manufacturing, N.E.C.	841	94	747

Note: Details will not add up to totals due to rounding of figures.
Source of data: Bureau of Labor and Employment Statistics, 2000 Occupational Injuries Survey.

TABLE 2 - Cases of Occupational Injuries With Lost Workdays in Non-Agricultural Establishments Employing 20 or More Workers by Selected Specific Manufacturing Industry, Philippines: 2000

INDICATOR	*ALL INDUSTRIES*	MANUFACTURING	Food Products	Textiles	Wearing Apparel	Wood, Wood Products & Cork except Furniture	Basic Metals	Others[1]
Cases With Lost Workdays	***26,467***	**18,831**	**5,443**	**1,126**	**2,113**	**1,323**	**1,825**	**7,001**
By Employment Size								
20 to 99 workers	*4,236*	2,099	56	49	54	98	583	1,260
100 to 199 workers	*3,465*	2,344	195	153	65	41	787	1,103
200 or more workers	*18,766*	14,388	5,193	925	1,994	1,184	455	4,636
By Incapacity for Work								
Fatal	*178*	21	2	0	1	0	4	13
Non - Fatal	*26,289*	18,810	5,441	1,126	2,112	1,323	1,821	6,988
Permanent	*179*	69	6	0	0	2	1	58
Temporary	*26,110*	18,741	5,435	1,126	2,112	1,321	1,820	6,926
By Major Occupation Group								
Corporate Executives, Managers, Managing Proprietors and Supervisors	*470*	249	45	5	2	31	36	130
Professionals	*389*	84	26	5	6	1	8	37
Technicians and Associate Professionals	*1,007*	472	57	22	23	54	33	282
Clerks	*472*	127	13	52	6	6	4	45
Service Workers and Shop and Market Sales Workers	*2,330*	418	53	5	19	15	2	322
Farmers, Forestry Workers and Fishermen	*0*	0	0	0	0	0	0	0
Trades and Related Workers	*969*	476	83	6	9	15	29	334
Plant and Machine Operators and Assemblers	*7,972*	7,285	976	916	1,642	324	263	3,165
Laborers and Unskilled Workers	*12,858*	9,720	4,189	116	406	878	1,450	2,680
By Type of Injury								
Superficial Injuries and Open Wounds	*14,925*	11,611	3,349	718	1,737	891	864	4,053
Fractures	*1,151*	673	131	49	33	43	80	335
Dislocations, Sprains and Strains	*2,789*	1,705	609	98	143	74	108	671
Amputations	*354*	276	43	31	2	7	6	187
Concussion, Internal Injuries	*1,963*	1,280	549	121	12	130	45	425
Burns, Corrossions, Scalds, Frostbite	*1,944*	1,347	431	53	72	46	291	455
Acute Poisoning and Infections	*347*	107	20	1	52	3	4	27
Foreign Body in the Eye	*1,793*	1,127	240	50	30	126	148	532
Other Injury	*1,202*	705	71	4	33	3	278	315
By Part of Body Injured								
Head	*3,486*	2,170	508	136	71	223	242	989
Neck	*137*	72	30	1	1	5	6	29
Back	*651*	335	94	6	29	17	37	150
Trunk or Internal Organs	*354*	198	59	11	33	1	10	81
Upper Extremities	*13,678*	11,051	3,577	560	1,462	552	894	4,005
Lower Extremities	*6,256*	4,023	982	377	461	451	450	1,302
Whole Body or Multiple Sites Equally Injured	*969*	438	55	34	44	74	24	207
Others	*934*	544	138	1	13	0	162	230

Note: Details will not add-up to totals due to rounding of figures.

1 Refer to other specific manufacturing industries, each with less than one-thousand cases of occupational injuries with lost workdays.

TABLE 2 - Cases of Occupational Injuries With Lost Workdays in Non-Agricultural Establishments Employing 20 or More Workers by Selected Specific Manufacturing Industry, Philippines: 2000 (cont'd.)

INDICATOR	*ALL INDUSTRIES*	MANUFACTURING	Food Products	Textiles	Wearing Apparel	Wood, Wood Products & Cork except Furniture	Basic Metals	Others[1]
By Cause of Injury								
Falls of persons	*1,606*	902	256	30	85	75	91	364
Struck by falling objects	*2,566*	1,752	474	130	150	141	221	637
Stepping on, striking against or struck by objects, excluding falling objects	*8,726*	6,336	1,243	399	1,252	782	318	2,343
Caught in or between objects	*4,366*	3,588	707	196	377	264	147	1,894
Over-exertion or strenuous movements	*2,112*	1,303	568	54	55	14	125	487
Exposure to or contact with extreme temperatures	*1,401*	916	284	72	15	31	241	272
Exposure to or contact with electric current	*370*	196	22	52	5	6	11	101
Exposure to or contact with harmful substances or radiations	*782*	404	81	23	34	1	21	243
Others	*4,538*	3,435	1,807	170	141	9	650	658
Frequency Rate per 500 Workers [2]	***5.70***	**10.08**	**18.46**	**13.23**	**7.86**	**38.60**	**35.37**	**6.18**
Fatal	*0.04*	0.01	0.01	0.00	a	0.00	0.08	0.01
Non-Fatal	*5.66*	10.07	18.46	13.23	7.85	38.60	35.29	6.16
Permanent incapacity	*0.04*	0.04	0.02	0.00	0.00	0.07	0.03	0.05
Temporary Incapacity	*5.62*	10.03	18.44	13.23	7.85	38.53	35.27	6.11
Severity Rate per 500 Workers [3] *(Temporary incapacity cases)*	***43.69***	**70.52**	**105.64**	**74.30**	**30.19**	**253.36**	**301.73**	**54.61**
Average Days Lost ***(Temporary incapacity cases)***	***8***	**7**	**6**	**6**	**4**	**7**	**9**	**9**

Note: Details will not add-up to totals due to rounding of figures.

a Less than 0.05.

1. Refer to other specific manufacturing industries, each with less than one-thousand cases of occupational injuries with lost workdays.

2 Number of cases of occupational injuries with lost workdays per 1,000,000 employee-hours of exposure (number of hours worked of 500 full-time workers, each exposed to 2,000 hours per year).

3 Number of lost workdays of temporary incapacity cases of occupational injuries per 1,000,000 employee-hours of exposure.

Source of data: Bureau of Labor and Employment Statistics, 2000 Occupational Injuries Survey.