

Safety Culture in Malaysian Workplace: An Analysis of Occupational Accidents

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ABSTRACT: The occupational accidents in Malaysia showed a continuous decline from the year 2000 to 2008. However, the statistics seemed stagnant since year 2009. Construction industry and manufacturing industry accounted for 37% and 22% of all fatal injuries investigated by the Department of Occupational Safety and Health (DOSH). Hearing and back diseases accounted for 34% of the occupational diseases. Occupational diseases caused by chemical agents were 4% of all cases. In the year of 2011, investigated accidents involving loss of life is about 7% or 176 cases out of 2,429 cases. This paper highpoints the problems in the Malaysian workplace *i.e.* the high occupational accidents which is probably due to lack of safety culture and non-compliance of the requirements of Occupational Safety and Health Act (OSHA) 1994. The aim of this study is to review the occupational accidents occurrence in the Malaysia workplace. The documentary analysis was used as a method for data collection. Malaysia aimed to reduce the fatal accidents by 20% by 2015. In order to achieve this goal, the government should continue to focus on vulnerable employee groups. This aspect helps in better analysing accidents in workplace and in identifying areas prevention efforts should be directed to prevent occurrence of accidents.

Keywords: fatalities, occupational accidents, occupational diseases, occupational safety, health.

Background

Occupational Safety and Health Act (OSHA) 1994 (Act 514) was formulated mainly referring to the British Occupational Safety and Health Act of 1970 that includes a general duty for employers. The tragedy of Sungai Buloh Bright Sparkler firework factory explosion in 1991

had claimed twenty-three lives and contributed to acceleration of new legislation. The OSHA 1994 was made considering the fact that the Factories and Machinery Act (FMA) 1967 only covered occupational safety and health in the manufacturing, mining, quarrying and construction industries, whereas the other industries were not covered. The scope of OSHA 1994 covers all persons at work in both private and public sectors except on board ships and the armed forces. The Occupational Health and Safety regulations impose an expected penalty that is positively related to the presence of unsafe working conditions for employers not in compliance with the standards.

OSHA 1994 has established the responsible self-management by business and extended duties to company decision makers. The safety and health system is based on the principle of assessing the risks and managing them sensibly, encouraging the employers to focus their energy and resources more on the significant hazards that can cause real harm. The main principles of this Act are self-regulation, tri-partite consultation and co-operation between employers and employees. The objectives of OSHA 1994 are to secure the safety, health and welfare of persons at work against risks, to protect persons at a place of work other than persons at work against risks, to promote an occupational environment for persons at work which is adapted to their physiological and psychological needs, and to provide the means whereby the associated occupational safety and health legislations may be progressively replaced by a system of regulations and approved industry codes of practice (DOSH, 2010).

On latest OSHA development, DOSH (2013) announced that the Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013 (CLASS Regulations) have been gazetted on 11th October 2013. The CLASS Regulations, promulgated under the Occupational Safety and Health Act 1994 (Act 514), have replaced the Occupational Safety and Health (Classification, Packaging and Labelling of Hazardous Chemicals) Regulations 1997 (CPL Regulations). The main objective of the CLASS Regulations is to ensure suppliers of hazardous chemicals provide sufficient information on hazards of chemicals that they supply, so as to mitigate the risk of accidents happening in the workplace, thus providing a safe and healthy working environment and condition.

Workplace accidents not only demoralise the employees and families but also affect daily production of employers. Accidents though preventable however still occur due to multiple

causes. Awareness on why an accident happens is the first step in prevention as its solution. The aim of this study is to identify sectors that contribute to the workplace accidents especially those leading to fatalities. The study was carried-out through the analysis of the reported occupational accident cases obtained from SOCSO and DOSH documents.

SOCSO on Reported Occupational Accidents

According to the 2010 Social Security Organization (SOCSO) Annual Report, the transportation and storage industry had 3,642 accidents reported, 6.3% of all workplace-related accidents. Workplace-related accidents in Malaysia recorded 57,639 cases in 2010 compared to 55,186 in 2009. Industrial accidents in Malaysia have declined for the period of 2000 to 2009. In 2010, there was 3.57% increase of the number of industrial accidents to 35,603 cases compared to 34,376 cases in 2009. The number of work related commuting accidents increased by 5.89% from 22,036 cases in 2009 as compared to 20,810 cases in 2010. Industrial accidents comprised of 61.77% of accidents occurred at the workplace while 38.23% occurred during commuting. Though the accident rate has marginally increased to 1.05% in 2010 from 1.04% in 2009, 1,194 fatal cases were reported but were lower compared to 1,231 cases in 2009 (SOCSO, 2010). From 2000 to 2009, the occupational accidents in Malaysia showed a continuous decline (Figure 1).

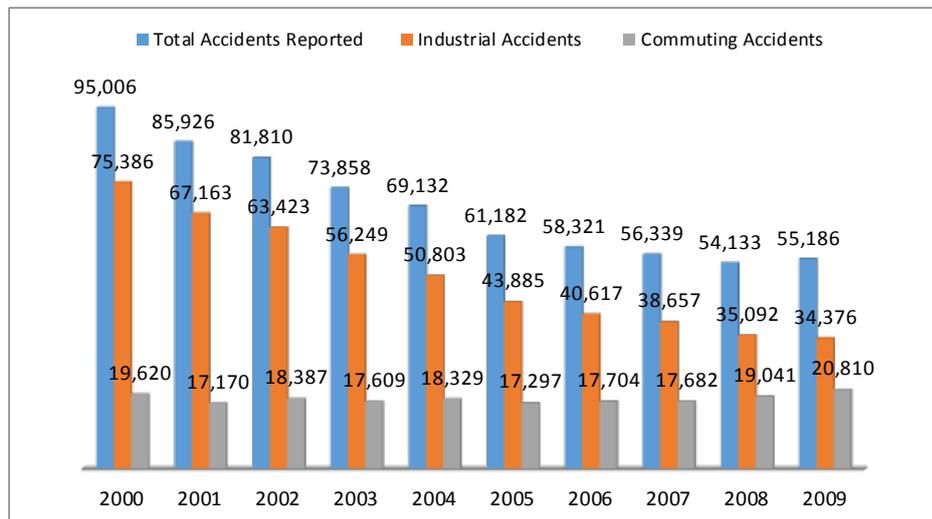


Figure 1: Number of Reported Accident 2000 – 2009

Data showed that road crashes, the common cause of work-related fatalities and injuries, were in upward trend. By industrial sectors, manufacturing recorded the (31%) highest number of accident, followed by public services and social security (18%), commercial (17%), real-

estate, rental and business (8%), construction (7%), transportation (7%) and other sectors (12%) (SOCSO, 2010). The Industrial Accident Rate declined from 165/10,000 in 2001 to 55/10,000 in 2008 (Figure 2). The Deputy Ministry of Human Resources reported that the Fatality Rate was 211 per 100,000 workers recorded in 2009 (Harian Metro, 26th May 2010). Statistics from the Ministry of Human Resources indicated that the industrial accident rate has fallen from 4.15 cases for every 1,000 workers in 2008 to 3.31 cases in 2012 while the commuting accident rate remained at 5.48 cases per 1,000 workers in 2012. National Institute of Occupational Safety and Health (NIOSH) expressed that the country need to benchmark against developed countries, which have only two to three accidents per 1,000 workers (New Straits Times, 10th August 2013).

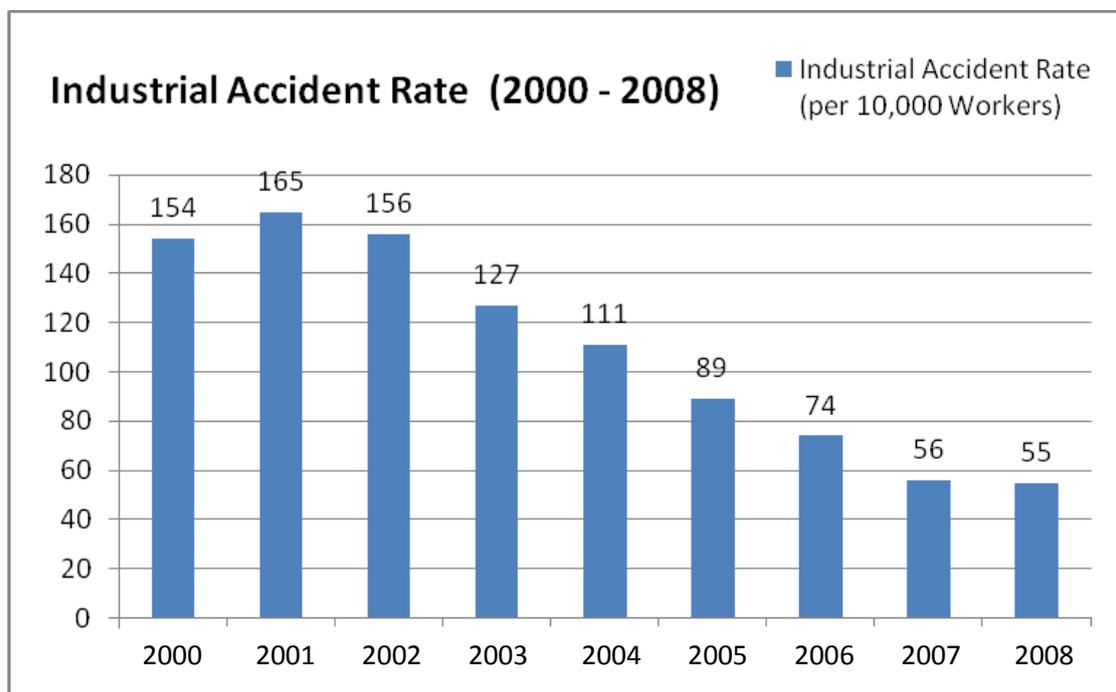


Figure 2: Industrial Accident Rate 2000 – 2008

The occurrence of occupational diseases has decreased from 1995 to 2005. However, the occurrence increased since 2006 (Figure 3). SOCSO reported 954 occupational disease cases in 2009, with most of the cases related to problems involving mainly at hearing (19%), back (15%), and lungs, skin, and musculoskeletal structure, caused by chemical and biological agents (SOCSO, 2010b). Among the 341 occupational disease cases in 2007, the main agent causes were 203 by physical agents (mainly 90 cases hearing impairment caused by noise), 60 cases diseases by target organ system (mainly 26 cases occupational musculo-skeletal disorders), 33 cases diseases caused by agents (mainly 13 diseases caused by chemical

agents), eight cases occupational cancer, and one case caused by biological agents and 35 others (SOCSCO, 2007). Figure 4 shows the number of occupational deaths for eleven years.

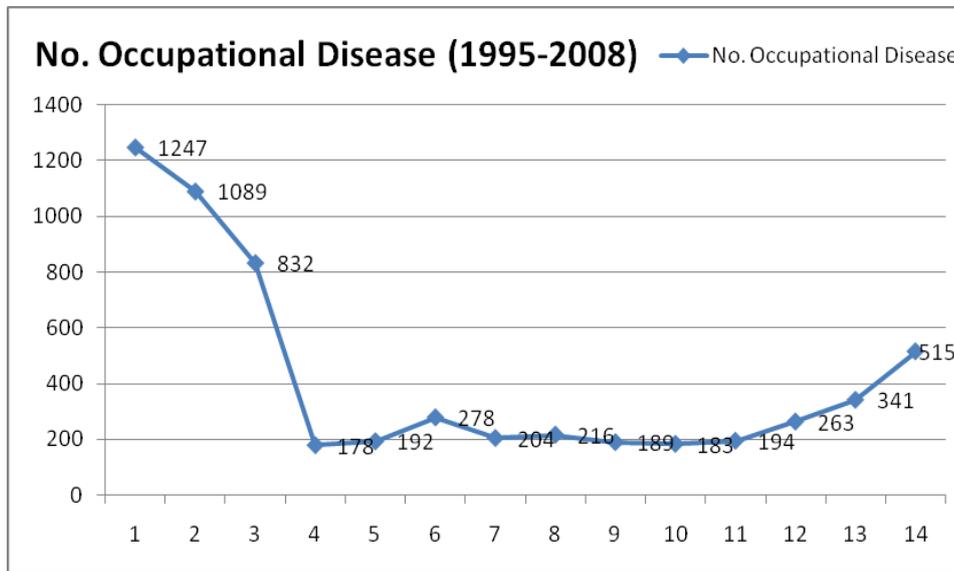


Figure 3: Number of Occupational Disease 1995 – 2008

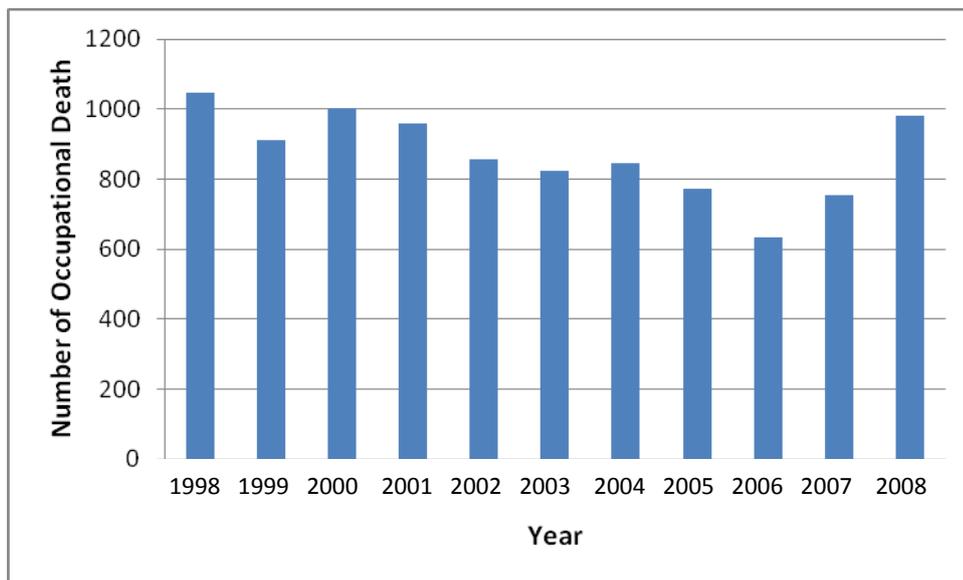


Figure 4: Number of Occupational Deaths 1998 – 2008

Figure 5 illustrates the un-proportionately high occupation death in the transportation industry in contrast of the construction industry. This can be explained by the better OSH management and programmes by the construction industry such as the specific Building Operations and Work of Engineering Construction (BOWEC) Regulation, and effective authority such as Construction Industry Development Board (CIDB) Fragmented authorities in the transportation industry may cause regulation on safety more difficult. One of the importance

factors in implementing internal control to ensure that companies comply with the OSH legislation is management's motivation, where high consequences of severe accidents have played vital parts as they are associated downtime and compensation costs.

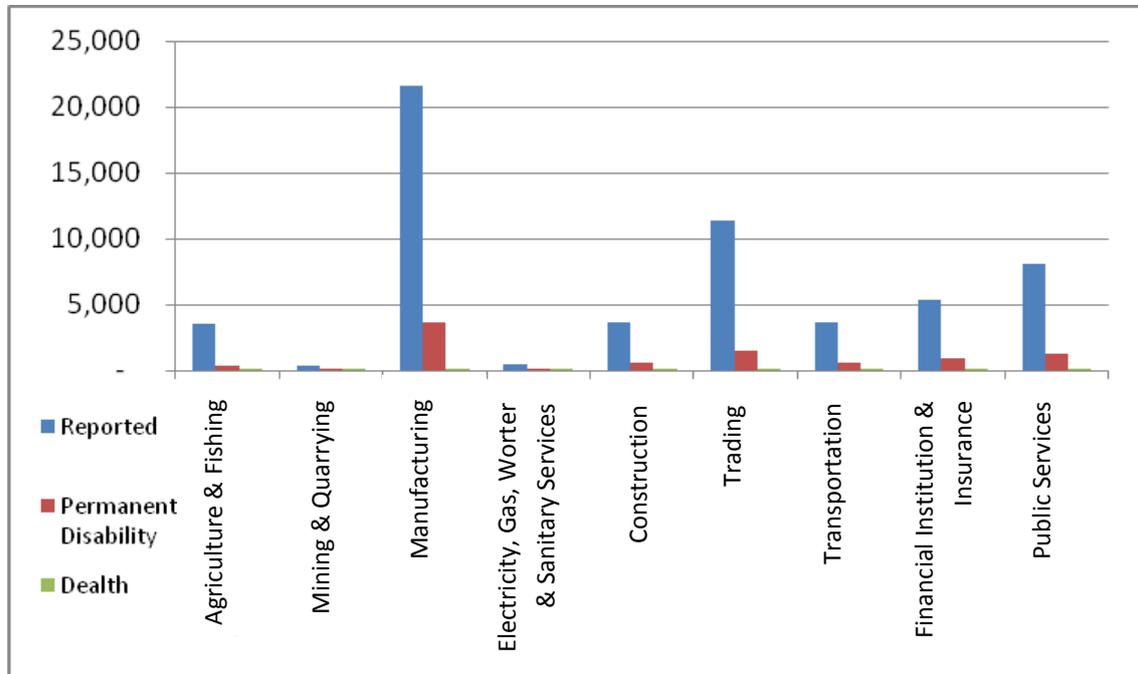


Figure 5: Reported, Permanent Disability and Death Accidents 2006

DOSH on fatal occupational accidents

From the statistics by DOSH (2013) which investigated fatal occupational accidents classified according to sectors, the manufacturing sector stands as the second highest sector after construction for the year 2007 and 2009 to 2012. The statistics actually took a deep plunge in 2008 during Lehman Shock and (10 months) 2013 during Europe Debt Crisis when occupational accidents in the manufacturing sector scored 33% and 34% as the highest rate of fatality (Table 1). It was suspected that in order to survive during challenging period of export uncertainty, the mainly export-oriented Malaysian manufacturers might not put occupational safety and health as their top priority.

Table 1: Occupational Accidents Statistics by Sector for 2013

Sector	Death (D)	Non- Permanent Disability (NPD)	Permanent Disability (PD)	Total	%
Manufacturing	58	1, 469	128	1,655	58.6%
Mining, Quarrying, Logging & Fishing	5	30	-	35	1.2%
Construction	69	83	12	164	5.4%
Agriculture, Forestry,	33	488	14	535	18.0%
Utility	7	100	-	107	3.9%
Transport, Storage & Communication	8	84	1	93	3.0%
Wholesale & retail trade	5	66	7	78	3.0%
Hotel & Restaurant	-	19	-	19	0.7%
Financial, insurance, real estate & business	-	70	-	70	2.4%
Public services & statutory bodies	-	67	-	67	2.6%

Table 2 illustrates the rate of fatality has reduced from 43% in 2007 to 37% in construction sector in 2013. However, the rate remained high, probably due to the fact that, the employers of mainly foreign labour dominated construction might not place sufficient priority to occupational safety and health of their workers.

Table 2: Fatality Accidents (Investigated) Statistics by Sector 2007-2013

Sector	2007	%	2008	%	2009	%	2010	%	2011	%	2012	%	2013	%
Manufacturing	63	29%	76	33%	63	28%	59	32%	45	26%	40	22%	58	31%
Mining, Quarrying, Logging & Fishing	9	4%	6	3%	3	1%	1	1%	7	4%	7	4%	5	3%
Construction	95	43%	72	31%	71	32%	66	36%	51	29%	67	37%	69	37%
Agriculture, Forestry, Logging and Fishing	30	14%	42	18%	44	20%	30	16%	41	23%	38	21%	33	18%
Utility	10	5%	19	8%	23	10%	11	6%	5	3%	5	3%	7	4%
Transport, Storage & Communication	2	1%	8	3%	18	8%	14	8%	11	6%	22	12%	8	4%
Wholesale & retail trade	3	1%	-	0%	-	0%	-	0%	1	1%	-	0%	5	3%
Hotel & Restaurant	-	0%	1	0%	-	0%	-	0%	2	1%	-	0%	-	0%
Financial, insurance, real estate & business	4	2%	4	2%	1	0%	1	1%	6	3%	-	0%	-	0%
Public services & statutory bodies	3	1%	2	1%	1	0%	3	2%	7	4%	-	0%	-	0%

The agriculture, forestry, logging and fishing sector is the third highest rate of fatality sector. The increased rate of fatality from 14% in 2007 to 23% in 2011 was probably due to increased participation of foreign labour and lack of focus by the employers in terms of the worker’s occupational safety and health.

From 2010, the transport, storage and communication sector has overtook utility sector as the sector with the fourth highest rate of fatality. The fatality rate increased from 1% in 2007 to 12% in 2012, probably due to increase use of heavy machinery such as forklift however operated by incompetent operators.

From the occupational accidents statistics in Malaysia, it may be deduced that the highest mortality industrial sector is the construction sector. The statistics of occupational accidents by sector in 2007 to 2012 also showed that though construction sector accounted for only 5% of occupational accidents, most of them have ended as fatality for the work-at-high nature of job.

Figure 6 shows the fatality accidents by sectors from 2007 to 2012. The numbers of fatality in manufacturing have declined while transport, storage and communication experienced an increasing trend between 2007 and 2012.

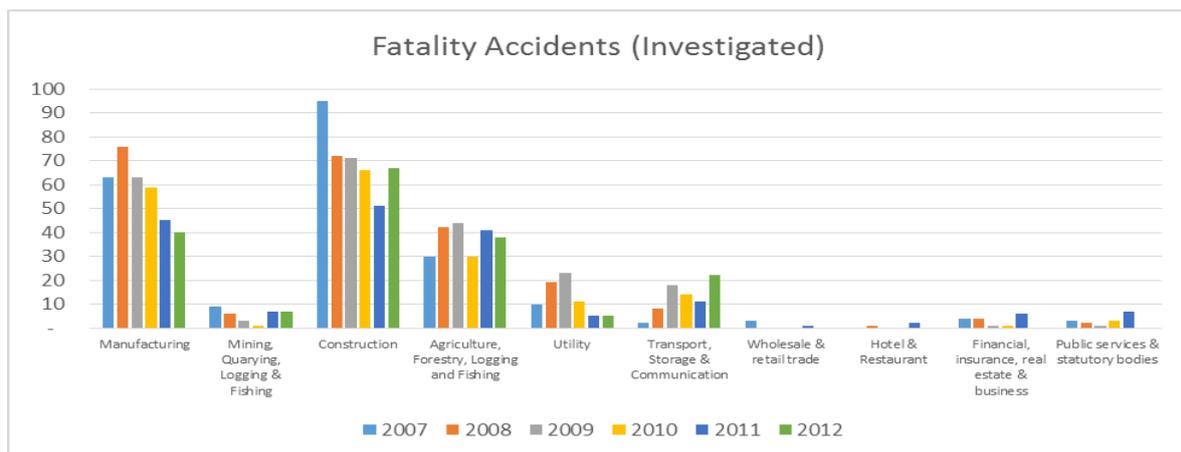


Figure 6: Fatality Accidents (Investigated) by Sector 2007-2012

It may be deduced that occupational safety is yet to be incorporated as a culture amongst the Malaysian manufacturers. The statistic of investigated occupational accidents by sector in 2013 (Table 1) also shows that manufacturing sector recorded the highest rate of non-

permanent disabilities (NPD) and permanent disabilities (PD) due to occupational accidents with the total of 1,469 workers having NPD and 128 workers having PD compared to other sectors.

As stated by Sarawak State DOSH director, about 80% of fatalities occurred due to the weakness in the implementation of occupational safety and health management policy (Borneo Post, 2013). Many challenges have to be overcome for better occupational safety and health.

Solutions in Developing Safety Culture to Manage OSH Hazards

Non-compliance of OSHA's requirement will lead to lacking of safety culture. In a study on OSH in logistics by Au Yong *et al.* (2014), among others, technology support dimension including safety inspection and government support dimension such as inspection were found significant in improving safety performance (Au Yong *et al.*, 2014).

Self-Regulation

There are several provisions in OSHA 1994. Among them, the main provisions are the General duties of the Employer (Section 15, Section 17 and Section 18), OSH Policy (Section 16), General Duties of Designers, Manufacturers and Suppliers (Section 20 and Section 21), General duties of the Employee (Section 24), Medical Surveillance (Section 28), Safety and health Officer (Section 29), Safety and health committee (Section 30 and Section 31), and Reporting of accident, dangerous occurrence, occupational poisoning, and disease and Prohibition of the use of plant or substance (Section 32).

Enforcement and Promotion

DOSH has initiated action plans for implementation to improve OSH. Among them, special consideration has to be given to the construction and transportation industries where fatalities are common. The organisation structures of front-line agencies were engaged from a functional-based one to sectorial-based one such as Construction Industry Development Board (CIDB) for accredited green card training in construction sector. DOSH has also published the Code of Practice for Road Transport Activities in 2010. OSH service is provided to workers in small and medium enterprises (SMEs) via DOSH SME Unit. The Occupational Safety and Health Master Plan 2011-2015 (OSH-MP15) was being enforced to

reduce workplace accidents by 30% (from 6.1 injuries per 1,000 workers) and fatal accidents by 20% (from 12.4 fatalities per 100,000 workers) by 2015.

DOSH conducted health and safety legislation compliance audit and carried out 177,000 enforcement checks in all sectors of industry in the first five months of 2013. DOSH has been carrying out promotions and conducting training to help raise occupational safety and health awareness among employees and employers (Bernama, 2013).

Conclusion

Despite close to two decades since OSHA 1994 was first implemented in Malaysia, there has been not much revision done on OSHA in last five years except gazette of the CLASS Regulation end of last year. Much more can be achieved with concerted effort from the government (DOSH and CIDB) on occupational safety and health. Improvement in occupational safety and health requires actions from all parties namely workers, employers and the government. Accidents at the workplace should be prevented with the cooperation from both employers and employees on top of regular enforcement from the government. Occupational accidents are preventable and safety measures could help reduce the severity of occupational injuries. Occupational fatalities and permanent disabilities were more likely to be severe compared to non-permanent disabilities. Safety measures to improve performance in management of occupational safety and health should be emphasised to overcome this problem. The best practices among industrial players, especially with respect to occupational safety and health, should be shared within the industry. The employer, employees and DOSH must combine forces and try to prevent future occupational accidents by addressing the root cause of accidents. It is undeniable that a combination of rules from the government, attitudes from the workers and good practices initiated by the employers will create positive safety culture at workplace.

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