Occupational Safety and Health Management among Five ASEAN Countries: Thailand, Indonesia, Malaysia, Philippines, and Singapore

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Occupational safety and health is one of important issues for workforce movement among ASEAN countries. The objective was to study laws, main agencies, and law enforcement regarding occupational safety and health in Thailand, Indonesia, Malaysia, Philippines, and Singapore. This documentary research covered laws, main agencies' duties, and occupational safety and health law enforcement in Thailand, Indonesia, Malaysia, Philippines, and Singapore. Thailand has its Occupational Safety, Health, and Work Environment Act 2011. Its main agency was Department of Labor Protection and Welfare. Indonesia had Work Safety Act (Law No. 1, 1970). Its main agency was Department of Manpower and Transmigration. Malaysia had Occupational Safety and Health Act (OSHA) 1994. Its main agency is the Department of Occupational Safety and Health. The Philippines has its Occupational Safety and Health Standards. Its main agency was Department of Labor and Employment. Singapore has its Workplace Safety and Health Act 2006. Its main agency is Occupational Safety and Health Division. Occupational safety and health law enforcement among each country covers work environment surveillance, workers' health surveillance, advice about prevention and control of occupational health hazards, training and education of employers and employees, data systems, and research. Further in-depth surveys of occupational safety and health among each ASEAN country are needed to develop frameworks for occupational safety and health management for all ASEAN countries.

Keywords: Occupational health, Safety, ASEAN, Thailand, Indonesia, Malaysia, Philippines, Singapore

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Occupational safety and health (OSH) is one of important issues for workforce movement among ASEAN countries after establishment of ASEAN community 2015. In 2011, occupational injury rates among Thailand, Malaysia, Philippines, and Singapore were 15.41, 3.4, 5.65, and 3.87 cases per 1,000 workers, respectively. Occupational fatality rates among Thailand, Malaysia, Philippines, and Singapore were 6.7, 6.2, 4.0, and 2.3 cases per 100,000 workers, respectively in the same year⁽¹⁾. There are differences of occupational safety and health management among ASEAN countries. The objective was to study laws, main agencies, and law enforcement regarding occupational safety and health in Thailand, Indonesia, Malaysia, Philippines, and Singapore.

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Results Occupational safety and health law Thailand⁽²⁾

Occupational Safety, Health, and Work Environment Act 2011 indicates that it is employer's duty to manage and maintain safe and healthy work conditions and environment including preventing employees from occupational health and safety hazards of all forms. It is also an employee's duty to cooperate with the employer in managing and maintaining safe and healthy work conditions and environment.

Material and Method

A documentary research was conducted covering laws and policies, main agencies' duties, and implementation under law about occupational safety and health in Thailand, Indonesia, Malaysia, Philippines, and Singapore. Sources of documentary review were from internet access. Only government documents or journal-published articles were used in this research.

Indonesia(3)

The Work Safety Act (Law No. 1, 1970) is the main occupational safety and health law. It involves all kinds of workplaces and focuses on primary prevention. Article 23 of the Health Act (Law No. 23, 1992) indicates that occupational health need to be done to protect health of all workers and their community from workplace hazards and to achieve balance between productivity and workers' health and safety.

Malaysia(4)

The Occupational Safety and Health Act 1994, enforced in February 1994, is the main law involving occupational safety and health in the manufacturing industries. The major objectives of this law are establishing workers' health, safety, and welfare against health and safety hazards from work activities, protecting persons' health and safety in the workplace against health and safety hazards in the workplace, adapting an appropriate work environment to meet workers' physical and mental needs, and offering the measures to develop regulations and codes related to this law to set up and improve occupational health and safety standards.

Philippines⁽⁵⁾

The main occupational safety and health law is the Occupational Safety and Health Standards (OSHS) 1978. It provides guidance and enforcement for workplaces involving personnel training for health and safety, safety and health committee, occupational illness and accidents records, control of occupational and environmental hazards, personal protective equipments, safe use of materials and machines, fire protection, and occupational health services.

Singapore⁽⁶⁾

The Workplace Safety and Health Act (WSHA) is the main law for occupational safety and health. It focuses on occupational safety and health management. It requires all parties to be involved proactively in providing and maintaining occupational safety and health measures to protect workers. The main principles under this act are minimizing occupational safety and health hazards at source, persuading industry to adapt occupational safety and health culture, and using penalties to prevent occupational accidents. This act places the responsibility for workplace safety on all stakeholders, focuses on work place safety and health systems and outcomes, facilitates effective enforcement through the

issuance of remedial orders, and imposes higher penalties for non-compliance and risky behavior.

Main agencies responsible for occupational safety and health

Thailand⁽²⁾

The Department of Labor Protection and Welfare (DLPW) has been authorized for OSH promotion, including research and study and capacity development. Under the DLPW, the direct responsible agency is the Occupational Safety and Health Inspection Division with its support to facilitate all works carried out by the provincial and the Bangkok Metropolitan Area (BMA) labor protection and welfare offices on legal enforcement. Required OSH services have been provided through twelve Regional Centers. The Ministry of Public Health is responsible to provide occupational health services covering occupational disease surveillance, health promotion, prevent and control factors causing sickness and injury at works and to provide medical care through the technical department in the central region and the public health systems of all levels in other regions. The occupational health programs are responsible by the Bureau of Occupational and Environmental Diseases under the Diseases Control Department.

The Ministry of Industry is responsible for issuing permission for factory setting up and operation, order laws on safety in industrial settings, inspection to ensure legal compliance and to renew the business permit. The concerned agency is the Department of Industrial Works (DIW). Through factory inspection, the DIW is authorized to ensure that industrial operations do no harm people's health. Environmental impacts must be eliminated. The DIW plays vital roles to ensure safety practices at the factory level because it has the power to consider renewal of the business permit. The responsible agencies for these affairs are the Office of Safety Technology, the Office of Hazardous Substances Control and the Industrial Cluster Bureau.

Indonesia(3)

Directorate General of OSH Standards in DEPNAKER:

Since 1984, the provincial Governments have been responsible for work safety inspection. At the Directorate General of Labor, there are 1,400 inspectors involving in labor inspection around the nation. Directorate General of OSH Standards (PNKK) has 400 qualified OSH inspectors. PNKK also have duty for

accident investigation, personnel training, implementing OSH programs, and certification of machine operators. In 2011, there were 3,848 companies violated the OSH regulations, 7,468 companies received verbal warnings and 1,472 companies received strong warning letters⁽⁷⁾.

The Center for Development of Occupational Safety and Health (HIPERKES):

The center for development of occupational safety and health (HIPERKES), formerly called the National Institute of Occupational Health and Safety, is the research part of DEPNAKER. It is in the Directorate General of Manpower Planning and Developments. The HIPERKES is responsible for identification and control of occupational health and safety hazards in factory, personnel training and education, research in occupational health and safety, pre-placement and periodical medical examination, and consultation on environmental impact assessment. It also makes recommendations for occupational safety and health standards.

Occupational Health Centre of the Department of Health:

Occupational Health Centre, under the Secretariat General of the Department of Health, provides occupational health services. It makes national occupational health program strategy.

National Tripartite Occupational Safety and Health Council (DK3N):

The National OSH Council (DK3N) is a tripartite body to provide recommendations and advice to the Government at the national level. Its members consist of main OSH organizations, including the employers' and workers' representatives. Its duties are to collect and analyze OSH data at the national and provincial level, help DEPNAKER to supervise the provincial OSH councils, conduct research, and provide training and education programs.

Malaysia(4)

National Council of Occupational Safety and Health (NCOSH):

The National Council of Occupational Safety and Health (NCOSH) is the main body for occupational health and safety. It is a tripartite council. It provides basic guides and direction on occupational health and safety standards and activities. It focuses on the improvement of the administration and enforcement of

occupational safety and health legislation.

Department of Occupational Safety and Health (DOSH):

The Department of Occupational Safety and Health (DOSH) is the main agency responsible for national OSH regulation and enforcement.

National Institute of Occupational Safety and Health (NIOSH):

Main function of the National Institute of Occupational Safety and Health (NIOSH) is OSH training and education, OSH promotion and OSH research.

Ministry of Health:

The Ministry of Health is responsible for prevention and management of occupational diseases.

Philippines⁽⁵⁾

Department of Labor and Employment (DOLE):

DOLE, a main OSH agency, is responsible for occupational illnesses and accidents prevention, enforcement, rehabilitation and compensation. The Occupational Safety and Health Center (OSHC) is responsible for occupational health and safety research, training and information dissemination and technical services.

The Department of Local Government (DILG):

The DILG is responsible for building standard and fire safety of Local Government Units (LGUs) around the country. It has 3,000 sanitary inspectors nationwide who are under the supervision of LGUs. It also has building officials or municipal engineers who conduct inspection.

Department of Health (DOH):

The DOH leads the interagency on Environmental Health (IACEH). IACEH is responsible for protecting everyone from exposure to all kinds of occupational and environmental hazards by implementing public health and environmental interventions.

Singapore⁽⁶⁾

The Occupational Safety and Health Division (OSHD) is the main national OSH agency. OSHD's strategies are reducing occupational death and injury

rates, integrating OSH as part of business, making Singapore as a Centre of Excellence for occupational health and safety, and building occupational health and safety culture for Singapore.

There are four departments within OSHD which are OSH Policy, Information and Corporate Services Department responsible for making policies and strategies, effective information systems, personnel training and education; OSH Inspectorate responsible for workplace inspection, surveillance, and law enforcement; OSH Specialist Department offering specialist support in the development of OSH standards and best practices, investigation of complex accidents and occupational diseases, and doing research; and Work Injury Compensation Department administering the Work Injury Compensation system and Incident Reporting system.

The Workplace Safety and Health (WSH) Council consists of 18 industry leaders, the government, unions and professionals. It helps government to develop national strategies for occupational health and safety. Its main functions are improving industry OSH capabilities, promoting workplace safety and health and recognizing best practice among industries, and setting acceptable OSH practices.

Occupational safety and health law enforcement Thailand⁽²⁾

The Third National Master Plan on Occupational Safety, Health and Environment (2012-2016) integrated the OSH Master Plan of the Ministry of Labor with the Action Plan for the National Agenda "Decent Safety and Health for Workers". This 3rd Master Plan covers five strategies which are promoting labor protection with effective OSH standards, promoting and strengthening the capacity of OSH networks, developing and managing OSH knowledge, developing OSH information system, and developing effective mechanism for OSH administration. The plan contains goals including developing and enforcing OSH standards in consistent with socioeconomic and OSH situation, strengthening active participation of existing OSH networks, establishing OSH learning center accessible to all age groups of population, developing database and networks to support OSH administration and services, and establishing policy, administrative structure, plans, measures, work processes, procedures, tools and necessary resources for the development of effective OSH administration.

Main function of the Bureau of Occupational

and Environmental Diseases is to set up and develop occupational health and safety surveillance systems. Objectives of the surveillance system are to identify high-risk groups, describe occupational disease situation, and lead to further disease control and prevention. The system focuses on eight groups of diseases such as silicosis, byssinosis, asbestosis, lead poisoning, noise induced hearing loss, solvent poisoning, pesticide poisoning, and occupational injuries⁽⁸⁾.

In 2000, "Healthy Workplace" project was developed to promote workers' safety and health in every workplace around the nation. This integrated project is based on WHO Healthy Work Approach. The aims of the project are increasing awareness about health promotion in all types of workplaces, developing continuous workplace improvement, and developing safe and healthy working environments. Ultimate goal of this project is developing clean, safe, non-hazardous, and lively workplace⁽⁸⁾.

Indonesia(3)

Indonesia obliges large or high-risk enterprises to have an OSH management system (OSH-MS) in place. Workplaces with employees of 100 or more, or have high risk of developing occupational illnesses or injuries need to implement an OSH-MS. Articles 86 and 87 of Manpower Act (Law No. 13, 2003) also states about OSH-MS. First, every worker has the right to get protection from safety and health hazards, improper conditions, and appropriate treatment. Second, every workplace must integrate an OSH-MS into its general management system. The OSH-MS application rules are now being determined and specified for forthcoming Government Regulations. All workplace with more than 50 employees must have an OSH committee and register it at the local DEPNAKER office. Large workplaces must have a medical doctor, either permanently, full-time or on a part-time basis. Periodical and pre-placement medical examinations of employees must be performed by the doctors recognized by DEPNAKER. All workplaces must have first-aid kits.

Malaysia(9)

OSHA requires both employer and selfemployed person to have occupational health and safety policy to protect employees. Some workplaces are required to hire a qualified person to work as a safety and health officer (SHO) to make sure that workplace meet all occupational health and safety regulations. Every workplace with more than 40 employees or those stated by laws must have a safety and health committee in workplace. The committee comprises of a chairperson, a secretary and representatives of both the employer and the employees. The employer or manager shall act as the chairperson and the safety and health officer shall act as the secretary.

Philippines⁽⁵⁾

The Philippine national OSH system is working under cooperation between DOLE, employers and employees' organizations and other governmental agencies. Prevention programs are the main concern of the DOLE through the Occupational Safety and Health Center (OSHC), in collaboration with the Regional Offices, the Employees' Compensation Commission (ECC) and the Bureau of Working Conditions (BWC). They work closely with employers and employees' organizations. About 12,000 safety officers would be needed for the next five years in construction industry. In addition, they would be needed for other kinds of high-risk workplace.

Singapore⁽⁶⁾

The main role of government is to oversee the general direction of occupational health and safety, to regulate and ensure compliance, and also set good example for good occupational health and safety culture as the biggest employer in Singapore. The Government should also seek to influence occupational health and safety standards of its contractors and suppliers. The Workplace Safety and Health Council, which are tripartite body acts as industry leader to promote occupational health and safety by following standards, improving capabilities, and developing a culture for occupational health and safety. Trade and labor unions proactively promote occupational health and safety awareness by training and setting culture for employees. Employers have an important role in increasing occupational health and safety capabilities by developing framework, training employees, and allocating resources. Employees are responsible for their own safety by realizing the value and relevance of occupational health and safety. They should understand occupational health and safety risks in their workplace and follow all measures to reduce those risks.

There are four strategic outcomes under Workplace safety and health 2018 including reduction in workplace injury and fatality rate, integration of safety

and health as part of business, making Singapore to be Centre of Excellence for occupational health and safety, and developing sustainable safety and health culture in workplace.

Discussion

There are major laws and regulatory agencies responsible for occupational safety and health among five ASEAN countries. Occupational safety and health law enforcement among each country covers work environment surveillance, workers' health surveillance, advice about prevention and control of occupational health hazards, training and education to employers and employees, data system, and research. At the present, there is an ASEAN Occupational Safety and Health network (ASEAN OSHNET) establishing as an network for all ASEAN countries to share good practice regarding occupational safety and health among each ASEAN country⁽¹⁾.

Limitations of the present study were very few data available on-line and different format of occupational safety and health profile among each country. Further in-depth survey of occupational safety and health among each ASEAN country is needed to develop frameworks for occupational safety and health management for all ASEAN countries.

Potential conflicts of interest

None.

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การจัดการอาชีวอนามัยและความปลอดภัย กรณีศึกษา 5 ประเทศภูมิภาคอาเซียน: ไทย อินโดนีเซีย มาเลเซีย ฟิลิปปินส์ และสิงคโปร์

สุรศักดิ์ บูรณตรีเวทย์

การจัดการอาชีวอนามัยและความปลอดกัยเป็นประเด็นสำคัญ วัตถุประสงค์เพื่อศึกษาถึงกฎหมาย บทบาทหน้าที่ของหน่วยงานหลักการบังคับใช้
กฎหมายเกี่ยวกับอาชีวอนามัยและความปลอดกัย ในประเทศไทยอินโดนีเซีย มาเลเซีย ฟิลิปปินส์ และสิงคโปร์ วิธีการศึกษาเป็นการศึกษาเงิงเอกสาร
ที่ครอบคลุม นโยบายในด้านกฎหมาย บทบาทหน้าที่ของหน่วยงาน และการบังคับใช้กฎหมายค้านอาชีวอนามัยและความปลอดกัย
ในประเทศไทยอินโดนีเซีย มาเลเซีย ฟิลิปปินส์ และสิงคโปร์ผลการศึกษาพบว่า ไทยมีกฎหมายหลัก คือ พระราชบัญญัติความปลอดกัย
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และสภาพแวดล้อมในการทำงาน พ.ศ. 2554 หน่วยงานรับผิดชอบหลัก คือ สำนักความปลอดกัยแรงงาน กรมสวัสดิการและคุ้มครองแรงงาน
กระทรวงแรงงานกันเดินเซียมีกฎหมายหลัก คือ Work Safety Act (Law No. 1, 1970) หน่วยงานหลัก คือ Department of Manpower and
Transmigration (DEPNAKER) มาเลเซียมีกฎหมายหลัก คือ Occupational Safety and Health Act (OSHA) 1994 หน่วยงานหลัก คือ
Department of Occupational Safety and Health (DOSH) สังกัด Ministry of Human Resources ฟิลิปปินส์มีกฎหมายหลัก คือ Occupational Safety and Health Division
(OSHD), Ministry of Manpower การดำเนินการภายใต้กฎหมายการคุ้มครองสุขภาพแรงงานค้านอาชีวอนามัยและความปลอดกัยในแค่ละประเทศ
ครอบคลุมกิจกรรมต่างๆ คือ เฝาระวังสิ่งแกลล้อมในสถานประกอบการ เฝาระวังสุขภาพของพนักงาน แนะนำมาตรการการป้องกันและควบคุมสิ่งคุกคาม
ต่อสุขภาพฝึกอบรมและการให้ข้อมูลความรู้แก่นายจางและลูกจางระบบการจัดเก็บข้อมูลและการวิจัย การสำรวจเชิงลึกถึงการจัดการดา้นอาชีวอนามัย
และความปลอดกัยในกลุมประเทศอาเซียนทั้งหมดมีความจำเป็นเพื่อนำไปสู่การรางแผนจัดทำกรอบการจัดการดา้นอาชีวอนามัย
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