

# THE DEVELOPMENT OF WORKER SAFETY AND HEALTH IN THAILAND

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## Abstract

Work-related accidents and illnesses are an unfortunate part of the industrial process, but they can be subjected to risk management at several levels: the organisation, the particular industry, and the State.

At some stage in a nation's industrial development, the government intervenes, first to legislate for a minimum set of safety standards, especially for dangerous occupations. Then it will legislate to ensure that injured workers receive quick and fair compensation, either through abolishing some of the employers' legal defences, or through a no-fault scheme with its prescribed compensation benefits. Insurers may become involved through employers liability insurance and through workers compensation insurance

This paper described how the government has intervened to legislate for worker safety and compensation. The first Factory Act, to impose safety standards and regulations, was passed in 1939 (revised in 1960, 1969, 1976, 1979, and 1992). Many other safety laws were introduced and then revised to meet new conditions. From 1982-96 more safety regulations were imposed. The 1998 Labour Protection Act includes sections on safety, occupational health, and working conditions.

Institutions have also been created. In 1974 a Safety Section was created in the Labour Protection Division of the Ministry of the Interior. In 1982 The Bureau of the National Safety Council of Thailand was founded. The National Institute for the Improvement of Working Conditions and Environment (NICE) was established in 1983 by the government. In 1987, an NGO, The Safety and Health at Work Promotion Association was established. In 2003 the government announced its intention to plan the setting up of an umbrella Institute to promote, protect, and compensate victims of occupational accidents and illnesses.

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In 1994, legislation established a revised Workmen's Compensation Fund (which originated in 1972). One issue is the list of eligible occupational diseases. Few injured workers sue under employers liability for additional compensation, as Thailand is not a litigious country. But could it become so?

## **Introduction**

Safety and health awareness has a long history. There is evidence of occupational safety and health efforts as far back as the time of the Egyptian pharaohs. The Code of Hammurabi, circa 2000 B.C., contained clauses that could be interpreted as early attempts at worker's compensation. There is also evidence of concern for safety and health during the time of the Roman Empire. As civilization progressed, so did safety and health developments. There were lots of studies about occupational diseases.

The Industrial Revolution (1760-1830) changed forever the methods of producing goods. Steam power increased markedly the potential for life-threatening injuries, as did machines. The new methods used for converting raw materials also introduced new risks of injuries and diseases. Specialization, by increasing the likelihood of boredom and inattentiveness, also made the workplace a more dangerous environment (Goetsch: 2002).

During the Industrial Revolution, child labor in factories was common. This brought the general question of regulation and protection of children in English Textile factories to the fore. A serious outbreak of fever, in 1784, in cotton mills near Manchester appears to have incited the first governmental action for safety. It drew widespread and influential public attention to the overworking of children, who labored under the terribly dangerous and unsanitary conditions which were customary in the factories at the time. In 1785, the Manchester Board of Health was formed. It advised legislation for the regulation of the hours and conditions of labor in the factories. In 1802, the Health and Morals of Apprentices Act was passed, which in effect formed the first step toward the regulated prevention of injury and protection of labor in English factories (Grimaldi and Simonds, 1984).

There were further developments in England, including The Factory & Workshops Act of 1901, the first of many Acts making it compulsory for dangerous machinery to be regularly inspected. The 1974 Health & Safety at Work Act was a substantial piece of legislation, which among other things, made it a criminal offence for managers who took no action to remedy dangerous plant and machinery. This has been followed by more legislation including, in 1989, the Electricity at Work Regulations, and the Noise at Work regulations. As a member of the European Economic Community (EEC), Britain in 2002 had to comply with even tougher new European safety legislation.



The safety movement in the United States traces its roots to England. When the industrial sector began to grow in the United States, hazardous working conditions were commonplace. Following the Civil War, the seeds of the safety movement were sown in that country. Factory Inspection was introduced in Massachusetts in 1867. Slow progress in safety movement was seen in the following decade. One of the most important developments in the history of the safety movement occurred in 1908 when an early form of worker's compensation was introduced in the United States (Dorfman, 1998). This is the earliest example in USA of no-fault compensation, but there is no federal uniformity, each state having its own system (Skipper, 1998).

In 1970, the passage of the Occupational Safety and Health Act of 1970 (OSHA) was enacted; this federal law represents the most significant legislation to date in the history of the safety movement. Today, numerous professional organizations and government agencies are devoted in full, or at least in part, to the promotion of safety and health in the workplace (Goetsch, 2002).

### **An Overview of the Situation in Thailand**

Work-related accidents and illnesses are an unfortunate part of the industrial process, causing suffering, disability, dismemberment and death to individuals and an economic loss to society (Dorfman, 1998). Like other industrial countries, the safety and health movement in Thailand emerged as a consequence of the dangers of industrial development. Occupational safety and health problems also became matters of public concern in a democratic society. But development was slow to occur because of a lack of collaboration between the public sectors. The overlapping of responsibilities and a lack of unity caused confusion not only to those working for the government but also those in industry.

A major issue for the advancement of safety and health springs from party political systems. Without clear policies and plans, if the issue is not seen as a priority, it becomes a long process to improve or amend safety and health legislation and regulations. Another set of problems comes from business owners who do not take safety and health as a serious matter. In addition, workers themselves are often not safety-minded, which is why many accidents are caused by the carelessness of workers. Workers in any country are often careless over their own health and safety, finding it easier to ignore rules and remove machine guards and safety belts (Pillai, 1993).

Many of the better managed companies are aware of this and make strong efforts to make the organization, managers, supervisors, and workers aware of the risks: and also have training sessions in safe practices and skills. An example is that of Toyota. It produces booklets (in addition to training courses), one of which is 'Safety for New Comers' (Toyota, 1993). It also applies various safety activities such as 5S, KYT, and a



Safety Calendar. For its 'Safety Promotion Campaign', it has a zero accident target, a safety slogan contest, a bulletin board contest, etc. In addition to the safety training and fire training, it has a program to inspect, identify and improve unsafe acts and conditions. Fire prevention equipment is checked regularly. Toyota's safety and health and environmental group act as a promoter of awareness and improvement within the company.

Indeed, there are other public and private sectors in Thailand which strive to promote and solve the safety problem at work. Every year a National Safety Week is organized. In 2003 the theme is '(B.E.) 2546: The Year of Accident at Work Reduction'. Although parliamentary Acts and regulations are steadily produced or implemented, especially whenever there is a public outcry after a serious accident, legal stipulation and enforcement is not a total solution. It is how to create safety awareness and collaboration among those parties concern that really can have a significant effect.

### **Developments in Thailand 1919 - 1955**

Thailand has been an organizing member of the International Labour Organization since it was formed in 1919. It is an inescapable responsibility for the government to support the movement for safety at work. In 1927 the government set up a committee to consider the possibility of an industrial law aiming to promote safety for the worker. However, no draft legislation was produced at that time. Then, in 1928 the Commercial Control Affecting Public Safety Act was enacted. In 1934, the Public Health Act (B.E. 2477) was enacted.

After a change of regime in 1932, there was greater consciousness of labor and safety issues in the factory. This resulted in the 1939 Factory Act (B.E. 2482), which set the industrial work standard for the safety and health of workers. This act set conditions: those requesting the establishment of a factory had to abide by the Act's regulations for cleanliness and safety in the workplace; safety in the erection of machines, tools, electricity system; safety from hazardous substances and from other hazards such as explosion. The Act forced the factory owner to make a report on every accident and submit it to the Ministry of Industry.

In 1941, the Public Health Act was made effective. It was concerned with lighting, air ventilation, drinking water, toilets and sanitary ware, waste disposal, and protection from toxic substances. However, in enforcing rules and regulations there is an overlap between two ministries (Ministry of Public Health and Ministry of Industry). The Public Health Ministry does not have the power to close down a factory, while Ministry of Industry has that power but they rarely use it.



This period 1919 - 1955 is the very early stage of safety development, which is why there are few milestones or statistics during this time.

### **Developments 1956 - 1971**

More concern for the safety of construction worker brought about the Building Construction Control Act in 1956. From the statistics of occupational injuries or diseases classified by type of business 1998-2000, the construction business has the highest number of injuries. It is dangerous work.

In 1958, the Department of Health in the Ministry of Public Health developed a keen interest in health in the workplace. They sent a representative to the International Health Meeting at Calcutta, India. Although it was a good sign that health activities were now their concern, the health issue was not really taken seriously until 1964 when accidents at a battery factory led to the establishment of an Occupational Health Division.

During 1959-1964, the Department of Health sent officials to study and observe health and hygiene practices in India, England, and various countries in Europe. A course in health and hygiene was then offered to students in public and medical universities. The Faculty of Public Health at Mahidol University in Bangkok had foreseen this significant development and included an occupational health course as an elective course for those studying for Master's degrees in Public Health, Sanitary Science, Public Health Science, and Health Education, at the Faculty of Medicine at Siriraj Hospital. In addition, the Faculty of Medicine at Chulalongkorn University provided lectures on occupational health to the senior students.

In 1960, the Factory Act (No. 2) B.E. 2503 had replaced the Factory Act B.E. 2482. These two acts have now been repealed by the Factory Act B.E. 2512, Factory Act (No. 2) B.E. 2518, Factory Act (No. 3) B.E. 2522, and the Factory Act B.E. 2535. These were the result of the growth of industry as Thailand's economy grew.

In 1964, the Department of Health reported the occurrence of an allergy caused by manganese in workers at a battery factory. Forty-one workers developed this allergy, in varying degrees. This led the Department of Health to propose a draft revision in 1965 of the Public Health Act. Its intention was to authorize officials to give advice to factories. The cabinet passed a resolution that the Ministry of Public Health should find ways to equip its officials with the right to inspect factories and to give operational advice to the factories. This was aimed at protecting the good health of workers.

In 1966, the Second National Economic and Social Development Plan (1967-1971) included an occupational health project. In 1967, the Poisonous Substance Act (B.E.



2510) was enacted. This Act provides the basic framework for the regulation of poisonous substances needed for agriculture, industry and public health. The Ministry of Agriculture and Cooperatives, the Ministry of Industry, and the Ministry of Public Health are empowered to issue Ministerial Regulations governing the storage, transportation, manufacture, labeling, and disposal of poisonous substances and their containers (Ono and Enmoto, 1990).

In 1968, the cabinet passed a resolution to set up a National Cooperative Committee for Occupational Health. This was intended to facilitate cross-ministry cooperation by the Ministry of Industry, the Ministry of the Interior, the Ministry of Public Health, the Ministry of Agriculture, and the Ministry of University Affairs. However, their efforts did not work as intended, because collaborative problems occurred. In addition, the government did not take a serious enough stand on this non-collaboration. There was no unity among the ministries, which caused overlapping work and difficulties in dealing with these problems along the way. (Chavalitnithikul, 2002)

In 1969, there was the enactment of the Factory Act (B.E. 2512) under the Ministry of Industry. This governs accident reports, accident prevention, duties of persons engaging in a factory business, safety standards in working with machines, electricity, lighting, plant, workplace, ventilation, water disposal, fire prevention, and personal protective devices. This law was updated in 1975, 1979, and 1992 as conditions changed. In the academic field, the Ministry of University Affairs approved an Occupational Health curriculum for a Bachelor degree at the Faculty of Public Health, at Mahidol University.

### **Developments 1972-1981**

In 1972, an Occupational Health Division was established under the Department of Health in the Ministry of Public Health. It provides educational services to promote the health and hygiene of all workers. It also provides administration, cooperation, services, technology and education, human resource development, involvement of workers and organizations, along with the usage of law and local regulations. ([http://www.anamai.moph.go.th/occ/History/History\\_Index.htm](http://www.anamai.moph.go.th/occ/History/History_Index.htm))

During the same period, the Notification of the Revolutionary Committee No. 103, dated 16 March 1972 was enacted. It aimed to protect workers' health. This notification was concerned with Safety in Construction Work, Safety in Working with Machinery, Working Safety in respect to Environmental Conditions, Safety in Connection with Electricity, etc. These forced employers to define work periods, workers' welfare, identification of hazardous work that could affect a worker's body and health; and there were also provisions for a law on Worker Compensation.



The next event was that a Safety Section under the Labour Protection Division was established by the Department of Labour in the Ministry of the Interior in 1974. Its duty was to find facts and solve problems. It also set work standards for critical aspects of work, undertook analyses of jobs, and commissioned research into unsafe work. The Safety Section was later upgraded to the Labour Standard Division.

Also in 1974, the Department of Labour set up the Workmen's Compensation Fund to cover work-related injuries of workers. Parsons (2002) identifies three main phases in the development of compensation schemes: the initial common-law period, a period of employers' liability statutory legislation, followed by workers compensation law, in place of or in addition to statutory legislation. In practice, workers had little success in obtaining redress under the first period, and not much more under the second, which is why social and trades-union pressure led to the third, no-fault, compensation, development (Germany being the first country in Europe to do this in 1884, the USA beginning in 1911). Initially the employer had to pay the compensation, and could choose whether or not to insure this risk. Later, insurance became compulsory, as in England with the Employers Liability (Compulsory Insurance) Act, 1969.

In 1979, the Department of Labour in Thailand, in cooperation with International Labour Organisation, organized a seminar on the Safety and Health of Workers. The meeting proposed the establishment of a National Safety and Occupational Health Institute. This was a good start for the development of an organization to regulate and oversee this issue. However, there was a continuation of the previous lack of unity because the new sectors were under different departments, causing confusion between different Ministries.

In this period there was more concern with safety and health in the public sector, manifested by the establishment of various safety and health divisions, as well as the enforcement and amendment of various Acts. However, non-collaboration among ministries was still an obstacle to the advancement of safety and health in the country.

### **Developments 1982 - 1996**

In 1982, the Bureau of the National Safety Council of Thailand was founded, under the Office of the Prime Minister, due to recognition by the government of the severity of accidents, which was causing loss of life and property. The Prime Minister and the top executives of other Ministerial departments chaired this committee. The main objective was to establish a national policy for safety protection, and a center for cooperation with related agencies.

Also, the Department of Labour (which was later upgraded to the Ministry of Labour and Social Welfare), enacted more safety legislation in the form of 17 Notifications. In



addition, the law requires every factory, according to its size to set up a Committee on Occupational Safety, Health and the Working Environment, and also to appoint safety officer at various levels.

The National Institute for the Improvement of Working Conditions and Environment (NICE) was established in 1983 by the Royal Thai Government with the assistance of the United Nations Development Program (UNDP) and the International Labour Organisation (ILO). It is responsible for the protection of workers against occupational injuries and diseases, and for the provision of better working conditions and living standards for workers. The main activities of this institute are:

- Enhancing the occupational safety and health knowledge of employers and workers through activities such as training, seminars, public relations activity and safety exhibitions;
- Investigating causes of unsafe working environments and unsatisfactory working conditions, and recommending preventive and improvement measures;
- Major hazard control;
- Testing of work physiology and improving workplace ergonomics;
- Designing and testing safety machinery and safety equipment;
- Developing occupational safety and health in small-scale enterprises;
- Collecting, processing and disseminating occupational safety and health information;
- Surveying, researching and studying occupational safety and health preventive measures;
- Assisting implementation of occupational safety and health activities in workplaces ([www.nice.labour.go.th/Organization/nicebackground.htm](http://www.nice.labour.go.th/Organization/nicebackground.htm)).

At this time, the Labour Standard Division changed its name to the Safety Inspection Division. There was also established the Regional Center for the Improvement of Working Conditions and Environment (RICE) under the National Institute for the Improvement of Working Conditions and Environment, in dense industrial zones and in the Provincial Labour Offices around the country. It provides technical services on safety and health to enterprises as well as technical support to the Provincial Labour Offices.

In 1987, the Safety and Health At Work Promotion Association (Thailand): SHAWPAT was established with the cabinet's approval as proposed by the Department of Labour. This is a non-governmental organization (NGO) whose aim is to promote safety at work. It plays a cooperative role in organizing the National Safety Week Campaign, and technical seminars and workshops, working with the Department of Labour. It publishes books



and brochures, undertakes safety and health activities, provides a center for safety officers, and promotes cooperation and coordination between government and enterprises.

In 1992, the Ministry of Industry repealed the Factory Act B.E. 2522 (1979) by the Factory Act B.E. 2535, and the Poisonous Substance Act B.E. 2510 (1967) by the Hazardous Substance Act B.E. 2535. The Public Health Act B.E. 2535 specified the Ministry of Public Health's responsibility for the safety of workers. Occupational Health Division and Environmental Health Centres in many counties are responsible for this issue.

On 1 July 1994, the Workmen's Compensation Fund B.E. 2537 (1994) was enacted to replace the previous Workmen's Compensation Fund (which had been established by the Notification of Revolutionary Committee No. 103). This is a no-fault State workers compensation scheme. Organisations with more than 10 employees must contribute a percentage of the payroll to a Fund managed by the Department of Labour, the rate varying according to the type of industry. The rate is between 0.2% and 2.0% with an averages of less than 1%. The contribution is paid annually, in January, based on the estimated payroll. Firms with less than 10 employees may take out a voluntary insurance policy with private insurers for the same level of benefits as the Fund. Employers in the state scheme may also buy insurance for extra benefits.

In No-fault Schemes the worker does not have to prove negligence or a breach of duty by the employer, and the affected worker's contributory negligence is ignored. These schemes usually provide benefits on a fixed scale for a menu of injuries, and include medical costs, loss of wages, rehabilitation and retraining costs (and, in the case of death, funeral expenses, and dependants' benefits). Non-economic losses (pain and suffering) are rarely covered. In the Thai scheme, there are six types of benefit: Death, Total & Permanent Disability, Dismemberment, Temporary Disability, Medical Costs, and Industrial Retraining. There is a formula for calculating each benefit, either a specified amount, or based on the national minimum agreed daily wage.

The causes of the safety and compensation systems which develop in a country are a blend of that country's social, economic and political history, and its culture. Even in Europe no two countries have the same systems for protecting and compensating workers. Automatic, no-fault, compensation, should be swift, especially where the injury is serious, for the worker is reliant on it to maintain the quality of family life. It is often suggested that no-fault compensation schemes discourage employers from being serious about safety protection, because a no-fault scheme does not distinguish between negligent and non-negligent employers, and accident-prone employers do not pay greater contributions to state funds than employers with good safety records (Parsons, 2002).



Employers' Liability systems are often criticised for their inefficiency, high administrative costs, slow settlements, and for their adversarial nature (Parsons, 2002). This is why in many countries with no-fault workers' compensation schemes, the right to claim in tort has been abolished (but not in Thailand). A consequence of this in USA is that workers, unable to sue their employers, sue other parties such as manufacturers and suppliers of defective equipment, thus pushing the financing of this risk onto product liability insurers (Parsons, 2002). Britain is considering abolishing the state no-fault system of Worker's Compensation, leaving it to the general state security system (or commercial insurers) to cope.

In compensation schemes, almost all European countries distinguish between accidents at work, and occupational diseases. Only diseases which have been clearly identified as being work-caused are included under compensation schemes. In Britain, there are 67 such diseases, 40 in Spain, over 80 in France. The tort system, and commercial insurance, do not function effectively where occupational diseases are concerned, and they are best left to a state system. (Parsons, 2002).

In Singapore, Noise Induced Deafness (NID) was made a notifiable occupational disease (under the Factories Act) as long ago as 1975. From 1985 workers exposed to excessive noise were required to undergo pre-employment and annual medical examinations (under the Factories [Medical Examination] Regulations). In 1996 a special set of regulations was introduced relating to noise in the workplace. NID is still the leading occupational disease in Singapore. It is a compensatable disease under the Workmens Compensation Act, but only for severe case because in early cases of NID there is no overt disability (NTUC, 1992).

During 1982-1996, the Thai economic prosperity was at its peak. There was massive expansion in the manufacturing sector, an establishment on the Eastern Seaboard of a petrochemical industry, constructions of infrastructure facilities, and high-rise buildings for shops, offices and residences. However, there was a lack of safety management from those who should have been responsible, and this resulted in many accidents and much illness of workers. Hazardous occupations, such as construction jobs, obviously have greater risks of accidents, and although the existence and enforcement of safety legislation should control the risk, the extent of the reduction is difficult to measure.

### **Developments Since 1997**

The economic crisis which began in 1997 caused changes and developments in both politics and public sectors. Parliament passed legislation, the Labour Protection Act B.E. 2541 (1998). The safety, occupational health, and working condition issues were included in Chapter 8 of this Act. It contained provisions for committees on occupational safety,



health and working environment; and the authority and duties of such committees. As a result of the crisis, the government decided to introduce some reforms into the government system. These reforms were included in the Eighth National Economic and Social Development Plan. Various governmental divisions pushed for effort for better operation by enterprises, intended to support the work of many other divisions.

The Thai Industrial Standards Institute (TISI) under The Ministry of Industry, introduced Occupational Health and Safety Management Systems: Specification TIS 18000-2540 (1997) which was later revised and replaced by OHSMS: Specification TIS 18001-2542 (1999). This is a voluntary standard established for use as a guideline for continual development of the occupational health and safety system of an organization. It aims to decrease and control hazardous risks to employees and others, improve the efficiency of the organization, and promote a responsible image of an organization to society. (TISI: 2000)

The Labour and Social Welfare Ministry announced in March 2000 that it would conduct stricter inspections of workplaces to ensure that they comply with labour protection laws. This was prompted by the discovery that 45% of the 100,000 premises recently inspected were in contravention of safety laws. Workplaces with 1-49 employees ranked highest for violations. The Director-General of the Ministry's Labour Protection & Welfare Dept instructed his team of inspectors to inspect more carefully and to pay special attention to both quality and quantity of safety measures. Violators would be given the chance to correct their mistakes before a set deadline, or face legal action (Charoensuthipan, 2000). The Ministry had been criticised a week earlier for consistent inefficiency by the Labour Advisory Council, a tripartite body representing government, employers and employees.

A women's labour group called for the government to set up a national work safety institute which would look after all work safety management including prevention, medical treatment, rehabilitation and compensation (Charoensuthipan, 2002). This followed a serious explosion in a Bangkok factory followed by a leakage of Cobalt-60 radiation from illegal canisters: there were many employee victims. The issue of exposure to chemicals in the workplace had been raised in 2000 following a sharp rise in illnesses caused by this. A hospital director estimated that 3.6% of the total workforce were at risk. An occupational health expert at the same hospital called for an institution to monitor health and environmental safety standards at workplaces (Bhatiasevi, 2000).

The issue of chemicals rose again in 2002, when officials from the Ministry of the Interior found that one in three factories checked at random in Bangkok and five adjacent provinces were found to have a high risk of causing a major civilian disaster (including to employees) from the use of toxic chemicals and poor safety measures. In 2002, many factories in the north of Thailand were found to be exposing their employees to health risks as there were



no proper safety measures: some had no safety standards at all, even though they were using gas as a fuel (Suksai, 2002). It is not surprising that this happens in Thailand: it happens in every country. Some British insurers complain that some British employers show a total disregard for health and safety rules, even though these rules have been in force for over thirty years (Brown, 2001). There is also a continuing indifference by some employers to potentially hazardous working conditions in USA (Dorfman, 1998).

In 2002, a Draft Institute for Safety, Occupational Health, and Working Condition Promotion was passed to the Ministry Secretariat, and comments were requested from related agencies. The intention was then to put an agreed draft to the cabinet. To date, the draft is still open for public opinion. This proposed draft has had a long history, beginning in 1994 and passing through the desks and drawers of various governments since then. The intention of the draft is to set up an Institute to promote, protect, maintain, recover, and compensate the victims of occupational accidents and illnesses. In addition, it will transfer the National Institute for Improvement of Working Condition and Environment (NICE) and Worker's Compensation Office of Social Security Office to this new institute. It is hoped that the establishment of this autonomous institute will create the more effective operation of safety at work. This institute will provide technical services and technical support, training and educational services. It is hoped that this will improve worker's quality of life, and reduce work accidents and illnesses. (Safety Management Magazine, SHAWPAT, Issue 22, May-June 2002, & materials from seminar organized by Voluntary Safety Officer Project Working Group on 16 November 2002).

At present, there is a move to improve safety legislation now contained in the Labour Protection Act. This intends to reduce the 17 Notifications to only 9, make it user-friendlier and more suited to current working conditions.

This paper provides no statistics, because they can be very misleading. Official statistics in any country have to be treated with caution, because of the quality of the legal criteria for reporting such incidents, by whom and to whom the reports have to be made, and the thoroughness in which such cases are actually reported (although under-reporting is less of a problem in no-fault compensation accidents). Increases or decreases in the number of accidents may be real or may be due to a change in any of these factors. Parsons (2000) lists fatality rates and injury rates for 16 countries, and for different sectors of the economy. Comparisons between countries is difficult, because of the different levels of economic development, the different mix of sectors and their proportions, as well as the extent of safety legislation and compensation entitlements.



## Conclusion

A justification for employment safety legislation is that employment usually implies control by the management over workers, i.e the employee is not a free agent but has to obey whatever systems of work, including machinery, are ordered by the management (Parsons, 2000).

Economic theory implies that firms have an incentive to minimise hazards, even without government intervention, to reduce the costs to the firm of accidents, but only up to the point where the marginal cost of an accident is equal to the marginal cost of prevention: thus the level of accidents should stabilise at an optimum which will vary between industries (Parsons, 2002). This economic incentive is reinforced by the incentive to comply with legislation.

In theory all that is so, but the real world of human beings is so complex that other factors operate, including worker's often deliberate carelessness, the likelihood of errant managers being exposed, and the law enforced.

The ways in which employment and safety legislation develop in a country are a blend of that country's social, economic, and political history, and its culture (Parsons, 2000). The description of the evolution of legislation and other issues in Thailand demonstrates that point. As nations increasingly find that their ways of doing things converge, under the pressure of globalisation and information technology, so their practices in regard to safety legislation and compensation schemes will become similar, but never identical.

As an example of possible convergence, few Thai workers sue under employers liability for additional compensation as Thailand is not a litigious country (AXCO, 2000). USA and Britain have a strong 'blame and claim' culture (Booth, 2001). This can be good news for insurers in USA and Britain because it makes employer's liability insurance essential, although the under-pricing of risks has often caused insurers losses rather than profits, and even insolvency. In Britain, this culture is a relatively new development, boosted by lawyers being freed to advertise their services which include a 'no win no fee' system (McCarthy, 2001). Could Thailand follow? This is certainly happening in Singapore which also used to be a non-litigious society.



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