Regional Strategy on Occupational Health and Safety in SEAR Countries

World Health Organization
Regional Office for South-East Asia
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Introduction

Occupational hazards cause or contribute to the premature death of millions of people worldwide and result in the ill health or disablement of hundreds of millions more each year. The burden of disease from selected occupational risk factors amounts to 1.5% of the global burden in terms of DALY. The World Health Report 2002 places occupational risks as the tenth leading cause of morbidity and mortality. Almost 22.5 million DALY and 699 000 deaths are attributable to these risk factors. WHO reports that occupational risk factors account globally for a number of morbidity conditions including: 37% of back pains, 16% of hearing loss, 13% of chronic obstructive lungs disease, 11% of asthma, 10% of injuries, 9% of lung cancer and 2% of leukaemia. According to the Report, mortality is also due to work related injuries causing nearly 310 000 deaths each year and nearly 146 000 deaths are attributable to work related carcinogens. The dust-related deaths are placed at 243 000.

The occupational health burden in the South-East Asia Region (SEAR) remains largely uncharacterized. Member Countries have witnessed major occupational health problems highlighted by the Bhopal disaster in India and the Kader Toy Factory fire in Thailand. However, workers of the Region are exposed to a wider range of occupational hazards and risks including chemical, physical and biological hazards as well as inadequate ergonomic practice and high psychosocial stress. Most of the countries in the Region are

in the process of rapid economic development, a process that potentially amplifies the pre-existing traditional risks and introduces new occupational risks in the Region. Thus, occupational health is of major concern in the South-East Asia Region of WHO with a potential work force of about 560 million persons.

Occupational health is inextricably linked to social and economic conditions as well as governed by globalization. Therefore, attaining the goal of occupational health for all will require a strategy to secure work conditions that protect and promote occupational health, especially among the vulnerable groups. The importance of providing health for the vulnerable population has been given due recognition during the WHO Meeting of Parliamentarians held in 1999. The vulnerable population of SEA countries consisting of women, the poor, and children, are primarily employed in the informal sectors. They often lack the basic knowledge of hazards and personal protection and work for long hours in unsafe work conditions with little or no health care or insurance. Industries have to perceive occupational health as an investment for economic productivity from a healthy work-force. Thus, in this age of increased globalization where the market conditions often shift in favour of the employers and not the employees, workers' health has to be addressed in a broader context of a basic human right for bridging the gap in health inequity to alleviate poverty and achieve gender balance.

1.1 The Need for a Regional Strategy on Occupational Health

The time is ripe to develop a consolidated regional strategy to enhance the health of the vulnerable groups at the work place. These important public health components of occupational health have been ignored due in part to a lack of a strategic document at the regional and the country levels. In other WHO regions such as PAHO where strategic plans exist, considerable progress has been made in occupational health.

The regional strategy will serve as a blue-print for the development and implementation of national strategies and plan of action on occupational health by Member Countries in the Region. This regional strategy evolved out of a regional consultation and a situational analysis of occupational health in the Region. Eighteen participants from seven countries as well as experts from WHO headquarters and South-East Asia Regional Office and staff from three WHO country offices participated in the consultation. As a result of group work and plenary discussions, the participants developed a regional strategy consisting of three goals with related actions. In developing the regional strategy, the guiding principles were obtained from the WHO Strategic Directions and ILO Conventions. The regional priorities were based on the evidence of the situation analysis conducted by the Regional Office.

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Policy Basis for a Regional Strategy

2.1 WHO/ILO Joint Committee

The historical interest of the United Nations can be clearly confirmed from the definition of occupational health by the Joint Committee of WHO and ILO in 1950, which states:

"Occupational health should aim at the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations; the prevention amongst workers of departures from health caused by their working conditions; the protection of workers in their employment from risks resulting from factors adverse to health; the placing and maintenance of the worker in an occupational environment adapted to his physiological and psychological equipment and, to summarize: the adaptation of work to man and of each man to his job."

In 1985, ILO in its Supplementary Recommendation 171 again stressed a multidisciplinary approach and multisectoral collaboration in occupational health.

2.2 World Health Organization

The first WHO programme on occupational health was designed in 1950, just two years after the Organization was established. WHO joined with ILO to form the Joint ILO/ WHO Committee on Industrial Hygiene . In the 1960s and most of the 1970s, the WHO occupational health strategy focused on the scientific and technical aspects of occupational health services, including the early diagnosis of occupational diseases, and training and education in occupational health.

A new strategy for the further development of occupational health services was adopted in 1979, with the World Health Assembly resolution WHA32.14 on the proposed comprehensive workers' health programme stressing the need to organize primary health care services "as close as possible to where people live and work".

To mitigate the adverse health impact of work-related risk factors, the WHO Programme on Occupational Health set up a new agenda in the 1990s with the adoption of a new resolution in 1996 (WHA 49.12) which led to the development of the WHO Global Strategy for Occupational Health for All . This strategy, consisting of ten objectives, shown in Box 1 below, urges Member States to devise national programmes on occupational health for all based on the Global Strategy. To facilitate the implementation of the Global Strategy on Occupational Health, extensive use is made of the Network of the WHO Collaborating Centres in Occupational Health that was created in June 1990. This network has identified 12 priority areas (shown in Box 2) for implementing the WHO Occupational Health Programme.

Box 1. The ten priority objectives proposed by the global strategy on occupational health

1. Strengthening of international and national policies for health at work and developing the necessary policy tools;
2. Development of healthy work environment;
3. Development of healthy work practices and promotion of health at work;
4. Strengthening of occupational health services (OHS);
5. Establishment of support services for occupational health;
6. Development of occupational health standards based on scientific risk assessment;
7. Development of human resources for occupational health;
8. Establishment of registration and data systems, development of information services for experts, effective transmission of data and raising of public awareness through public information;
9. Strengthening of research, and
10. Development of collaboration in occupational health and with other activities and services

Box 2. Global Occupational Health Network Work Plan 2002-2005 (February 2002)		
Task Force 1. WHA Resolution on Occupational Health	*Task Force 2.* Intensive partnership in Africa	*Task Force 3.* Child labour/ adolescent workers
Task Force 4. Elimination of silicosis	*Task Force 5.* Health care workers	*Task Force 6.* Health promotion activities
Task Force 7. Mental health and stress at work	*Task Force 8.* Promotion of OS&H in small enterprises and the informal sector	*Task Force 9.* Prevention of musculoskeletal disorders
Task Force 10. Preventive technology	*Task Force 11.* Training programmes and modules	*Task Force 12.* Internet resources and networks
Task Force 13. National profiles and indicators	*Task Force 14.* Cost-effectiveness of intervention	*Task Force 15.* Global burden of disease
Global Strategy 5. Scientific Risk Assessment		

In 1998, WHO redefined its corporate strategies and function in the formulation of four WHO Strategic Directions and six Core Functions[1]. As applied to occupational health, these are :1) reduction of burden of excess mortality and disability due to occupational exposure; 2) reduction of occupational risk factors for human health; 3) development of health systems that equitably improve human health in occupational settings, and 4) development of an enabling policy and institutional environment for occupational health.

2.3 The South-East Asia Programme on Occupational Health

Occupational health has been a focus of the WHO Regional Office since 1990. The regional programme for workers' health has so far focused its efforts on addressing the health problems of those engaged in the small-scale/unorganized sector where legislative, promotional and infrastructural measures are found to be least developed. Thus, an International Symposium on Occupational Health Research and Practical Approaches in Small-Scale Enterprises was organized during August 1995 in Thailand, which came out with research findings and experiences in dealing with policy, management and

[1]WHO Strategic Documents 2001

technologies relevant to these sectors of national economies. The meeting of SEA Regional Advisory Committee on Health Research, held in Nepal in 1996, also discussed extensively the issue of strengthening occupational health research[2]. WHO also co-supported the Fourth International Conference on Health Promotion, held in July 1999 in Jakarta, and formulated a declaration on health at the worksite[3], which is recognized as one of the important areas requiring urgent promotional and educational focus in the coming years.

[2] Report of ACHR 1996

[3] ICOH, Bali

3

Current Status of Occupational Health in the Region

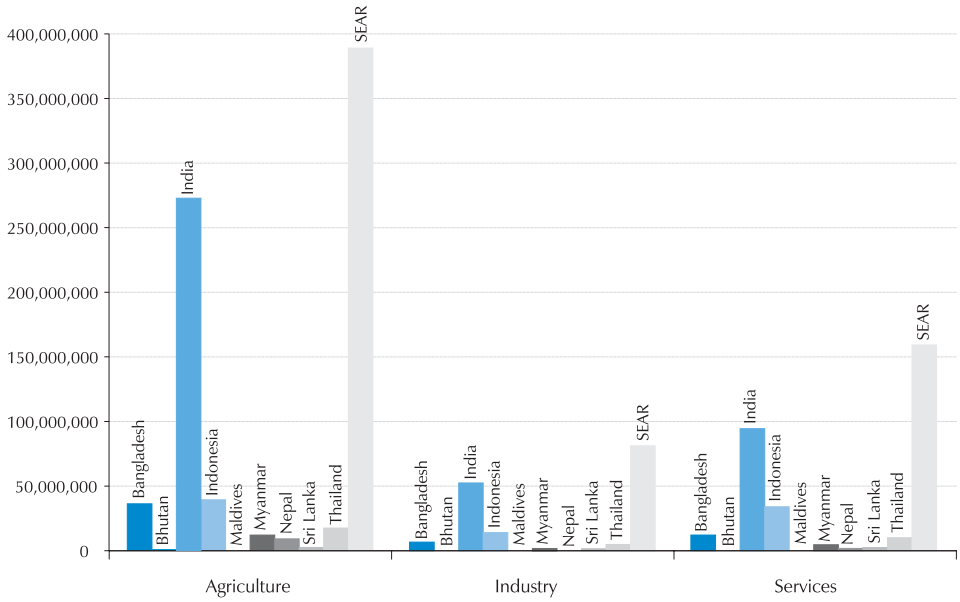
In order to provide evidence-based information for priority setting and planning of occupational health, the Regional Office assessed the regional situation over the last five years. A series of surveys were conducted on existing occupational hazards, infrastructure and capacity for occupational health in the countries of the Region.

3.1 Characteristics of Work-force and Sectors

The active work-force comprises approximately 630 million employed work-population in the Region. Out of this active population, about 60% are males and 40% females. Overall, both the male and female work populations tend to be concentrated in rural areas where most of the agricultural sectors are located. The age distribution of the total work-force in the Region shows bimodal values of less than 24 and 24-34 age. The work-force according to the three major economic sectors of agriculture, industry and services is shown in Figure 1.

Agriculture, which also includes forestry and fishing, is the major sector providing employment to 65% of active workforce in the Region. However, considerable variability

Figure 1: Workforce distribution in major economic sectors in the SEA Region



exists: for example, Nepal with 85%, Bhutan with 75%, Myanmar with 69%, and India with 58% employment in agriculture and fisheries show the significance and contribution of agriculture towards the national economies. The lowest employment in this sector is in Maldives, which has only 7 per cent employed in agriculture.

Approximately 20% of the active workforce is employed in the service sector comprising community, social and personal activities, electricity, gas and water supply, transport, storage and communication, wholesale and retail trade, financing, insurance, real estate and business service community, social and personal services and other categories referred to as services not adequately described. On the other hand, Maldives with 47%, Sri Lanka with 40%, and Indonesia with 38%, have a relatively higher employment in service sector, which is the lowest in Nepal with 4%. The employment in service sector is also low in case of India (22%), and Bhutan 16%. Maldives has a major proportion of population (47%) working in service sector.

Around 15% of the work-force is regionally employed in industries, such as mining and quarrying, construction, repair and demolition, commerce and manufacturing. However, a variation is seen in the distribution in this sector, Maldives with 46%, Thailand with 31%, Sri Lanka with 19%, India with 14%, and Indonesia with 17%, have a relatively higher employment in industrial sector. Bhutan with 9%, Myanmar with 10%, and Bangladesh with 10% are at the lower end, having fewer employed in the industrial sector.

These data suggest that there is a need to develop occupational health and safety services for the agriculture sector on priority basis. Traditionally, the thrust of occupational health and safety in the Region has been towards the manufacturing sector.

3.2 Prevalence of Hazardous Conditions and Risk Factors

Exposure to occupational hazards increases the risk for morbidity and mortality. The most common hazards are: 1) Physical such as poor ventilation, poor illumination, noise, extreme temperatures, humidity and radiation; 2) Biological such as variety of pathogenic bacteria, fungi and parasites; 3) Chemical due to hazardous gases and dusts, and 4) ergonomic. The most prevalent occupational practices that increase the risks for morbidity and mortality are: Lack of training in occupational health safety, lack of personal protective devices, inadequate training in the proper use of machinery and long hours of work. The situation is further compounded by overcrowding and poor sanitary conditions.

There is an urgent need to introduce safe industrial hygiene practices based on accurate knowledge of existing national hazards and job-exposure matrix for reducing the risks associated with occupational hazards.

3.3 Prevalence of Occupational Morbidity and Mortality

There is considerable underreporting of occupational morbidity, both injury or disease and mortality.

According to the 2002 ILO estimates for Asia, the expected rates of fatal injuries per 100 000 was about 35 in the agriculture sector; 13 in the industry sector and 7 in the service sector. Thus for Bangladesh ILO projects, 12 576 fatal deaths in agriculture; 878 in industry and 949 in the service sector were reported. However, the total number of fatal accidents reported to ILO was 12 or only 0.08% of the expected numbers. Similarly, for India, of the total number 48 176 of expected occupational fatal injuries, only 211 were reported; thus, representing only 0.43% of the fatalities being reported to ILO. This trend was seen with the remaining Member Countries, with Indonesia reporting 6%; Sri Lanka 2%; Thailand 8%, and Myanmar 0% of the expected figure with no reports from Nepal.

The prevalence of non-fatal injuries as indexed by the country report of three days' absence due to accident, converted as a rate per 100 000 were as follows: 8.2 for Bangladesh, 0 for India, 8.9 for Indonesia, 36 for Sri Lanka and 153 for Thailand. The higher injuries reported from Bangladesh, Thailand and Indonesia might be a consequence of better reporting systems rather than due to a poor state of occupational health and safety. In contrast, other countries with fewer injuries may not have good reporting systems.

During the country survey conducted by the Regional Office, it was observed that in Bangladesh, physical injuries were a major problem in mining, transport, mills and dockyards. The most common diseases that were reported in the Region included: pneumoconiosis, silicosis, byssinosis, heavy metal poisoning, pesticide toxicity, hearing loss, musculo-skeletal disorders and occupational dermatoses. It is interesting to note that these conditions are directly related to national legislation, to diseases that are recognized as occupational diseases, and that are compensated for under the workman compensation scheme. Other prevalent conditions included malnutrition, malaria and snake-bites, the last two mostly among agricultural workers. Given the size of the active work-force in each country, the disease burden of occupational nature is expected to be high. While occupational injuries are reported to some extent, the reporting of occupational diseases per se is considerable even in countries with a reporting system in place.

The inability to track down the prevalent or changing pattern of occupational diseases and injuries makes it impossible to convince policy-makers of the hidden burden of occupational diseases. Thus, there is an urgent need to improve reporting by strengthening national registries of occupational diseases and establishing sentinel surveillance.

3.4 Existing Policy for Occupational Health

The parameters on existing policy and procedures were assessed by the following criteria: 1) the presence of legal provision or policy that comprehensively addressed occupational health; 2) surveillance mechanism for mandatory reporting of occupational morbidity and mortality, and 3) the role played by trade unions in implementing occupational health.

The legislation on occupational health, consisting of laws and acts, evolved over a period of time depending on the needs of the prevailing economic sectors and the perception of occupational risks at that time. Thus, for the most parts, the parliamentary acts in many instances are primarily focused on welfare and other benefits. As an adjunct, these include provisions on occupational health and safety for workers principally in the manufacturing sector and are virtually absent in the agriculture sector. As a consequence, they appear to be fragmented and sometimes overlapping and redundant in functions. For instance, in many countries of the Region, different acts cover specific economic sectors like manufacturing, mining etc. In some Member States like Bhutan and Maldives, the legislation is still in the process of formulation. There does not seem to be comprehensive legislation for occupational health and safety in the states.

With the exception of Bhutan which does not have a reporting system in place, nearly all countries have legislation for compulsory reporting of work-related injuries and illness. However, the utilization of this reporting system is variable and is at the most under-utilized.

There are trade unions in informal sectors in the Region, but their role has been generally limited in occupational health and safety.

Hence, there is a need for formulation of more progressive and protective legislation covering all economic activities. To overcome the fragmentary nature of the existing policies at the national and regional levels, consultation with all stakeholders should be held to ensure intersectoral coordination. Since agriculture remains a major employer with limited coverage of the workers, this disparity has to be addressed during formulation of policy. Furthermore, with increasing globalization, it is important to include a safety clause in international trade and technology transfer.

3.5 Existing Infrastructure for Occupational Health Delivery and Safety Practice

The parameters of existing institutional infrastructure for the delivery of occupational health and safety was assessed on the following criteria: 1) the existence of specifically designated ministries for the administration of occupational health programmes; 2) the role of different implementing agencies in delivering occupational health safety practices at national, regional and local levels; and 3) the funding mechanism for implementation of occupational health in the country.

As a direct consequence of fragmented policy, different ministries and affiliated divisions or departments are responsible for administration of occupational health services in the country. The principal ministries are: Labour, health and family welfare; environment and forests; trade and industry; home affairs; manpower; industry and agriculture. However, the overall responsibility for health and safety at work rests with the ministries of labour and health in most countries of the Region. In many countries, the responsibility is divided in the sense that the ministry of labour is involved in formulating legal instruments and enforcing these, while the ministry of health is involved in education and training. Both the ministries of health and labour often have affiliated institutes as arms for carrying out environmental monitoring of the work-place, biological monitoring and providing laboratory facilities for diagnosis and confirmation of occupational diseases. In some countries like Thailand, both public and private hospitals are also involved in delivery of occupational health and safety; whereas in other Member Countries like Maldives and Bhutan, the delivery of occupational safety and health of the workers needs to be improved.

Most of the countries, like India, Indonesia and Sri Lanka have a decentralized system for the delivery of occupational health safety and practices at the various administrative levels of the country. The policy decisions and setting of standards with regard to occupational health generally takes place at the national level. Regional centres, often consisting of specialized Institutes, link up the national and plant-level occupational health services. Tertiary care hospitals, hospitals attached to medical schools, and other

specialized hospitals offer national-level services in occupational health. Medical centres, dispensaries and factory medical facilities provide occupational health service at the plant or work place level. Occupational health services at the plant or enterprise levels are also usually available in large enterprises. However, in small enterprises, occupational health services in most instances are not provided.

A variety of mechanisms is used for funding occupational health activities in the countries. When occupational health is included in the national action plan in a country, funds are usually provided either by the national government or supplemented from WHO and donor agencies. In some countries like India and Thailand, the International Labour Office is also involved in promoting occupational safety and health. While countries like Bangladesh and Indonesia have sought and utilized WHO funds for organizing conferences on occupational health, no country budget funds are specifically allocated for occupational health programmes in most countries.

It is clear that the infrastructure should be strengthened to provide occupational health services in accordance with the joint WHO/ILO convention 161, emphasizing prevention and health promotion to the workers. To achieve these goals, inter-sectoral coordination, at all administrative levels of health services and with other sectors, is crucial for avoiding duplication of scarce resources and maximizing the outputs.

3.6 Capacity for Development of Human Resources for Occupational Health

The parameter of capacity to develop human resources for occupational health was assessed on the following criteria: 1) the spectrum of occupational health training programme; 2) the type of certification that is awarded; 3) the length of the training programme; and 4) the type of activities that are carried out by trained occupational health specialists.

A number of universities and institutions in the Region offer training opportunities in the field of occupational health, safety, industrial hygiene and ergonomics. These training and educational courses are for physicians, nurses, para-medical staff, safety professionals and regulatory staff such as factory inspectors. In some countries, short courses in hygiene and safe work practices are also offered to the workers.

The type of certificate or diploma depends on the length of the training. Thus, Thailand offers both a four-year degree in occupational health as well as a post-graduate degree up to doctorate level. In other countries like India, the concentration has been on either short certificate courses or post-graduate degree, with no provision for training at the undergraduate levels.

A variety of occupational health activities have been undertaken in the last five years in the countries of the Region. Capacity building and short and long-term training of health and safety professionals have been used in Bangladesh and Sri Lanka by study tours overseas to centres of excellence with WHO sponsorship. Some countries, like India, Indonesia and Sri Lanka have received assistance from WHO and ILO in organizing conferences and training in occupational health and safety. Similarly, national and regional activities and training have been held frequently. Posters, pamphlets, booklets and even books have been produced to spread the message of occupational health and safety in Bangladesh and Indonesia.

Trained occupational health specialists undertake limited research studies. In a country like India, some very basic research in occupational health has been carried by various institutes. However, by and large, in India as elsewhere in the Region, there is lack of real operation research from public health perspectives that could be used to address prevalent occupational conditions.

There is a plethora of training courses of varying duration, contents and methods of teaching for health care-givers and factory inspectors in the Region. Hence, there is a need to assess, strengthen and consolidate the existing training modules in terms of contents and modality of teaching as well as towards the eventual goal of accreditation of such courses by the national authorities.

4

Current Priorities, Challenges and Opportunities in Occupational Health in SEAR Countries

It is clear from the foregoing situation analysis that occupational health is of major concern in the Region and current priorities and constraints vary from country to country.

Thus, developing national policy on occupational health is one of the priorities for strengthening occupational health in Bhutan and Maldives. In India, Indonesia and Thailand, where policy already exists, the priority is intersectoral coordination for bringing clarity among all stakeholders about obligations, responsibility and authority to strengthen the occupational health programme. Unified criteria for programming and evaluation, social participation, and coordination will reduce overlapping activities and competition for and under-utilization of resources. Intersectoral coordination will turn these problems into opportunities for intervention.

The biggest challenges and constraints for improving the occupational health programme in all the countries of the Region, however, remain weak infrastructure and insufficient trained staff for performing risk assessment and risk management. Thus, strengthening and promoting strategies for risk assessment and risk management remain

an immediate priority for action for all countries. These can be achieved via development of standard protocols in these areas and capacity building for undertaking these activities.

Another area of concern is the monitoring and surveillance of occupational disease and injuries. The current magnitude and trend of occupational health disease and injuries are insufficient for policy-makers to monitor the performance of the occupational health programmes or strategize intervention measures. The lack of reporting highlights that legislation per se may not be sufficient for reporting to take place: infrastructure for reporting must be strengthened and the capacity for undertaking reporting must be enhanced through human resource development.

5

Essential Elements of the Regional Strategy on Occupational Health

This regional strategy was developed to comprehensively address the issues and needs of occupational health of the Region as a whole and of each Member Country in particular. Therefore, it is deliberately generic in nature to enable Member Countries the flexibility of choosing the areas of focus based on national priorities. It consists of three goals: (1) establishing a regional occupational health network; (2) promoting the use of a health risk paradigm, and (3) capacity building. Each of the goals has related products and means to achieve them as discussed below and summarized in Box 3.

5.1 Strategic Goal 1: Establishment of a Regional Occupational Health Network

The Region offers many opportunities for strengthening occupational health. Member Countries are at varying stages of development with regard to occupational health and safety: some countries have stronger infrastructure and system based on solid experience in the field, while others are in the process of developing such facilities. Thus, there is a real need and opportunity for creation of an occupational health network in the Region,

Box 3: Summary of Regional Strategy on Occupational Health

Strategic Direction		Product	Means of Achievement/Activity
1. Establishment of a regional occupational health network		1. Functioning network established	1. Strengthen, link and expand national and regional occupational health network. 2. Share information on norms, standards, guidelines, modules and research methods. 3. Partnership with key-stake holders including ILO and other UN agencies; ASEAN/SAARC; donor communities, and international centers of excellence. 4. Promote Intersectoral collaboration with all relevant implementing Ministries
2. Promotion of health paradigm	2.1 Health risk assessment	1. Standardized methods and guidelines for occupational exposure assessment	1. Develop and promulgate standard protocols for exposure assessment 2. Support occupational health hazard assessment through environmental and exposure monitoring at work place 3. Establish national data-base of occupational hazards profiles
		2. Standardized methods and guidelines for occupational risk characterization	1. Support standardized protocol for burden of disease estimates in major economic sectors. 2. Develop regional guidelines and national protocols for establishing data-bases on occupational disease and injury surveillance 3. Establish sentinel surveillance for monitoring trends of occupational hazards, risks, diseases and injuries
	2.2 Health risk management	1. Protective policies, and legislation Promoted	1. Support countries in the formulation of policies and legislation 2. Provide technical support for formulation of national plan based on regional strategy and national situation analysis
		2. Protective practices promoted	1. Promote preventive and control measures for reducing occupational risks at work-place 2. Enhance health promotion at work-place 3. Strengthen health surveillance of workers through regular medical examination
3. Capacity building		1. Curriculum development and training	1. Review existing short course curriculum in each country and regionally 2. Standardize course contents and teaching methods in nationally relevant areas including industrial hygiene, basic medical surveillance, and occupational health and safety management 3. Establish and strengthen occupational health teaching in the region
		2. Capacity to respond to specific occupational health hazards	1. Demonstration projects for improving the work conditions of vulnerable population in priority-hazardous occupations especially in the informal sector. 2. Support joint WHO-ILO initiatives including silicosis elimination. 3. Support training in the areas of research and surveillance of occupational diseases.

bringing together all the stake-holders: national government, NGOs, academia, industries and UN agencies. This network will provide a forum for members to exchange scientific experience in norms, standards, protocols, guidelines and modules; standardization of occupational practices, prioritization of occupation health services in the Region; conduct of operational research and increase in the capacity for training. The common strategies to be used will consist of a health risk assessment paradigm linked through web-page and network publications.

5.2 Strategic Goal 2: Promotion of the Use of a Health Risk Paradigm of Risk Assessment and Management

Standard protocols for risk assessment and management provide the foundation for reducing the risk of occupational disease and injuries. They play an essential role in guiding factory inspectors and health care personnel involved in their work. A unified approach to these activities is through promotion of a two-step health risk paradigm consisting of risk assessment and risk management. The risk assessment step consist of three sub-steps namely, hazard identification, dose-response characterization and exposure assessment. Application of risk assessment enables Member Countries to address occupational health in a standardized manner. The main areas to be addressed will be the development and use of protocols and guidelines for characterization of national profiles on work hazards and job-exposure assessment including environmental monitoring and routine reporting of occupational hazards. Risk management strategies will focus on supporting the development and promotion of protective policy and practices through both engineering controls and biological monitoring. Sentinel surveillance will also be instituted for monitoring the trend of injuries and illnesses in order to provide information for action to policy-makers.

5.3 Strategic Goal 3: Capacity Building

The need for human resource development has been consistently identified in all the priority areas. Education and training are the cornerstones for strengthening the capacity of factory inspectors and health care workers alike in the assessment and management of risks to occupational health. However, in the Region, the level of training varies by virtue of the plethora of training courses, length of training and modules that exist. Thus, a first priority in capacity building is to assess and strengthen these modules and develop appropriate ones.

In this direction, a first step would be to support the development of training institutes using standard teaching curriculum. The pedagogic approach of the universities and the specific needs of the ministries of health must be balanced for designing curricula, teaching methods and courses that are of immediate use in occupational health. The initial focus should be on short courses for professionals in key areas including industrial hygiene,

ergonomics and safety, basic medical surveillance, occupational health and safety management, chemical exposure, agricultural hygiene and other priority areas identified nationally.

A critical mass of health professionals involved in environmental monitoring, surveillance and management of occupational health must be reached to maintain a healthy ratio of occupational health care worker to employees. The training of programme managers at the sub-district, district and provincial levels must also be supported. The training component must also address the need for researchers to undertake operational research in occupational health.

5.4 Key Components and Strategies

The actions to be taken to implement the regional strategy are shown below.

Strategic Goal 1: Establishment of a Regional Occupational Health Network in SEAR

Related Actions

(1) The regional network should be expanded to include new membership.

(2) The objectives of the network should be defined within the domain of the regional strategy in areas of standardization, information, service, research, training and coordination.

(3) One elected centre should coordinate the activities of the network on a rotation basis.

(4) New collaborating centres and centres of excellence should be designated. Expert panels should be constituted on new areas in occupational health.

(5) WHO should facilitate a forum for sharing experiences in implementation of the occupational health programme.

Strategic Goal 2: Promoting the Use of a Health Risk Paradigm

(1) Technical assistance and tools should be provided to countries to conduct situation analysis of occupational health.

(2) Priority areas to be addressed at the country level must be identified.

(3) Tools and guidelines for biological and ambient monitoring; surveillance and reporting of occupational diseases and promotion of health work-place should be provided.

(4) Support should be given to the formulation of evidence-based national plans.

(5) Assistance should be provided in implementing key components of the national work plan.

Strategic Goal 3: Capacity Building

(1) Teaching Institutes and universities with expertise in occupational health at country level should be identified.

(2) Development of standard teaching curricula and teaching methods should be facilitated.

(3) Changes in educational curricula to include occupational health teaching in the course of formal learning process should be promoted.

(4) Support should be given to the strengthen the capacities of universities and teaching centres in research, training and human resource development.

(5) Intercountry exchange of teaching materials should be supported.

(6) Development of researchers in occupational health should be facilitated.

6

Role of Key Partners

To achieve the above components, support is required from Member Countries, partners and WHO as a whole to strengthen the regional strategy.

6.1 Role of WHO

The role of WHO is guided by core functions to achieve the strategic directions in occupational health and will consist of the following.

At the global and regional levels

(1) Formulation of a regional strategy as a basis for countries to formulate their national strategies and plans of actions;

(2) Provision of strategic support and technical assistance to Member Countries in the formulation and implementation of their national plan;

(3) Facilitation in the development of a regional and national occupational health network for linking with the global occupational health network, and

(4) Monitoring and evaluation of the output of the regional network.

At the country level

(1) Advocate for the adoption of the regional strategy to plan and identify of priority areas;

(2) Advocate for allocation of WHO country budget for occupational health and designation of a focal point for the programme, and

(3) Mobilization of extra-budgetary resources through networking with development partners to support occupational health activities.

6.2 Role of Member Countries

The national governments of Member Countries have a critical role to play in the implementation of the regional strategy on occupational health. The principal roles are as follows.

(1) Adoption of the regional strategy during planning and identification of priority areas;

(2) Agreement to utilize the country budget for occupational health and designation of a programme officer;

(3) Contribution to the development and endorsement of the regional strategy on occupational health;

(4) Development of a national strategic plan for occupational health;

(5) Establishment of a national occupational health network;

(6) Promotion of intersectoral coordination among relevant ministries for the implementation of occupational health at all levels of services;

(7) Allocation of a appropriate resources for occupational health;

(8) Generation of a national information database on the risk and burden of occupational diseases and injuries, and

(9) Contribution to the implementation of the objectives and activities of the WHO Network of Collaborating Centres on Occupational health.

6.3 Role of the Occupational Health Network

The occupational health network consists of: the Network of WHO Collaborating Centres in Occupational Health, currently numbering 65 globally and only represented by two centres in the SEA Region. Other networks that can contribute to occupational health include centres of excellence, nongovernmental organizations, civil society, private institutes and universities. They have a critical role to play in assisting the occupational

health network for the implementation of the regional and national strategies. In particular the principal roles are as follows:

(1) Contribution to the development and endorsement of the regional strategy;

(2) Assistance in the implementation of the regional and national strategy on occupational health, and

(3) Facilitation of flow and sharing of information through regular meetings.

6.4 Role of Partners

Partners in occupational health include UN organizations, donor agencies and nongovernmental organizations. ILO, UNIDO and FAO are the UN organizations active in occupational health whereas donor communities and organizations working in this field include ASEAN, USAID, SIDA, CIDA, DFID and JICA. Their role is critical to the success of the regional and national strategies and includes the following:

(1) Contribution to the development and endorsement of the regional and national strategies;

(2) Assistance in the implementation of the regional and national strategies, and

(3) Promotion of intersectoral coordination in the implementation of joint activities in occupational health.

7

Time Frame for the Implementation of the Regional Strategy

The regional strategy is expected to be fully implemented over a time frame of five years. The first step will be focus on the strategic goal of establishing the network and building capacity in the Region over a period of two to three years. Once the network is functional and a critical mass of trained personnel is produced, the focus will shift to applying a health risk paradigm for the reduction of occupational risk and diseases.

8

Budgetary Considerations

The main budgetary expenses will be for infrastructure, capacity building and the development and implementation of tools, guidelines and technologies. Member Countries are encouraged to make effective use of the occupational health budget in the country and network with bilateral agencies and donors.

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