

OSH Disparities in Developing Countries

The SH&E professional as an agent of change

By Michael Findley and June Gorski

THE 1970s SAW A TRANSITION from foreign production by multinational corporations (MNCs) intended principally for the host country to the outsourcing of production of goods for North American consumption. Developing countries established free-trade zones to encourage foreign investment and the increased availability of international financing contributed to a rapid growth of offshore production in the 1980s.

Foreign direct investment increased at an annual rate of 30 percent between 1985 and 1990. Annual foreign investment doubled between 1992 and the late 1990s to \$350 billion (Gilpin 169). Occupational safety and health has not kept pace with this globalization of production and trade in developing countries where the knowledge of occupational hazards is almost nonexistent amid an ever-growing informal workforce where children are increasingly at risk (Kromhout 111; Bolt 122).

Occupational safety and health laws cover less than 10 percent of the working populations in developing countries, and the working conditions for most

of these workers do not meet minimum standards (LaDou 303). A review of the global risk factors in the World Health Organization's (WHO) regions of the world found that occupational risks for fatal injuries in Southeast Asia and the western Pacific were almost 40 times that of the Americas (Ezzati, et al 1353); the estimated disease burden in lost years of life due to occupational injuries was more than 41 times that of the Americas (Ezzati, et al 1354). Lack of funds, resources and technical expertise, along with worker ignorance and apathy in developing countries, result in minimal to no pressure being

placed on governments to promulgate occupational safety and health laws or even enforce those that already exist (Joubert 119).

The large inequities between working conditions in western industrialized nations and developing countries call for a global consensus on the rights of all workers and for large MNCs to assume greater responsibility for the protection of all workers (Kromhout 501). This article reviews the extent and impact of the global inequities in occupational safety and health; describes at-risk populations; identifies measures for improving occupational safety and health in developing countries through engagement of MNCs; and recommends steps that SH&E professionals can take to expand corporate awareness of these disparities in order to help MNCs take greater responsibility for the working conditions of their overseas operations and suppliers.

OSH Disparities & Failed Efforts **Global Level**

At the second meeting of the WHO Collaborating Centers in Occupational Health in Beijing, China, in 1994, WHO estimated that 58 percent of the world's population over age 10 belong to the global workforce [WHO(a) 1]. At the same time that roughly eight of 10 workers live in developing and newly industrialized countries, only five to 10 percent of those workers have access to occupational safety and health services [WHO(a) 2].

Quantifying the global burden due to occupational injury and illness is difficult. Differences in data sources, especially between advanced industrialized countries and developing countries, lead to inconsistencies and make combining results problematic (Leigh, et al 626). Despite these inadequacies, even conservative estimates place the annual level of occupational injuries at 100 million (Leigh, et al 626).

Takala estimated the annual global burden of occupational injuries to be much higher and included the following:

Michael Findley, Ph.D., CSP, CIH, is health and safety manager with BNFL Inc. at the Dept. of Energy's Three Building Decommissioning and Demolition Project in Oak Ridge, TN. He also teaches graduate-level safety courses at the University of Tennessee, Knoxville. Findley is a member of ASSE's East Tennessee Chapter.

June Gorski, Ph.D., CHES, is a professor of public health and health education for the health and safety programs at the University of Tennessee, Knoxville. She is the graduate advisor for the community health education concentration in the accredited Master of Public Health degree program and chair of the Public Health Academic Program Committee. Gorski also teaches the required graduate course in international health and has traveled extensively to focus on safety and health needs in global populations.

- 1.1 million worker deaths;
- 250 million workers sustaining disabling injuries;
- 160 million workers developing occupational diseases;

- 12 million injuries among young workers (30).

Worldwide, the economic losses due to occupational injuries and illnesses in 1999 were estimated to be equivalent to four percent of the world's gross national product (Takala 30). These losses constitute an even greater percentage of gross national product in developing countries where occupational safety and health is not keeping pace with the globalization of production and trade [Kromhout(a) 111].

Country Level

A country's advancement in occupational safety and health is linked to income level, with those in developing countries at greatest risk for occupational injury [Kromhout(a) 112]. A review of the relationship between leading global risk factors and morbidity and mortality found that developing countries suffer the major burden of disease and mortality (Ezzati, et al 1347). Occupational risk factors only ranked 18th for mortality and 15th for burden of disease among 20 leading global risk factors (Ezzati, et al 1355), but the burden of diseases and mortality attributed to occupation differed greatly by a country's income level (Ezzati, et al 1353-1354).

Using these estimates, the low-income areas of southeast Asia and the western Pacific have almost 40 times the number of mortalities for males attributed to occupational injury risk than the high- and middle-income countries of the Americas (Ezzati, et al 1353-1354). A similar difference is seen between the burden of disease with the low-income countries of southeast Asia having more than 41 times as many disability adjusted life years (DALYs) as the high and middle-income Americas. (DALYs is the sum of years of potential life lost due to premature mortality and the years of productive life lost due to disability.) The highest number of annual mortalities (79,000) and DALYs (3,517,000) attributable to occupational injury risks are found in the low-income countries in southeast Asia. The low-income countries in the western Pacific rank a close second with occupational attributed mortalities of 78,000 and 2,939,000 DALYs. Figures 1 and 2 present the mortality and burden of disease of males for occupational injury risk by global region and regional income level.

Political Influence

Many developing countries have progressive occupational safety and health standards patterned after those in the western industrialized countries, yet they lack the political will or capability to enforce these standards (Joubert 120). Developing countries welcome industries and the government agencies emphasize the advantages of economic growth—often with too little concern for occupational and environmental impacts (Shukla, et al 597).

The situation in South Africa is representative of the dichotomy prevalent in developing countries between the existence and enforcement of occupation-

WHO's Objectives for Improving Occupational Safety & Health

- 1) Strengthening international and national policies for health at work and developing the necessary policy tools.
- 2) Development of healthy work environments.
- 3) Development of healthy work practices and promotion of health at work.
- 4) Strengthening occupational health services.
- 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 education.
- 9) Strengthening research.
- 10) Development of collaboration in occupational health and with other activities and services.

Source: WHO(a).

al safety and health standards (Joubert 120). In his review, Joubert found that South Africa's occupational safety and health legislation, based on U.K. standards, are some of the most progressive in the world. These standards call for comprehensive occupational medical surveillance requiring frequent biological monitoring. However, the South African government does not enforce these standards due to a lack of funds and resources. The inadequate enforcement is also attributed to cultural taboos such as those surrounding the collection of blood and other bodily fluids.

According to Joubert, this lack of political will is also linked to what the population will accept (121). The populations in developing countries are often uneducated about occupational risks; as a result, people are not as likely to demand changes.

Contributions of Western Industrialized Countries

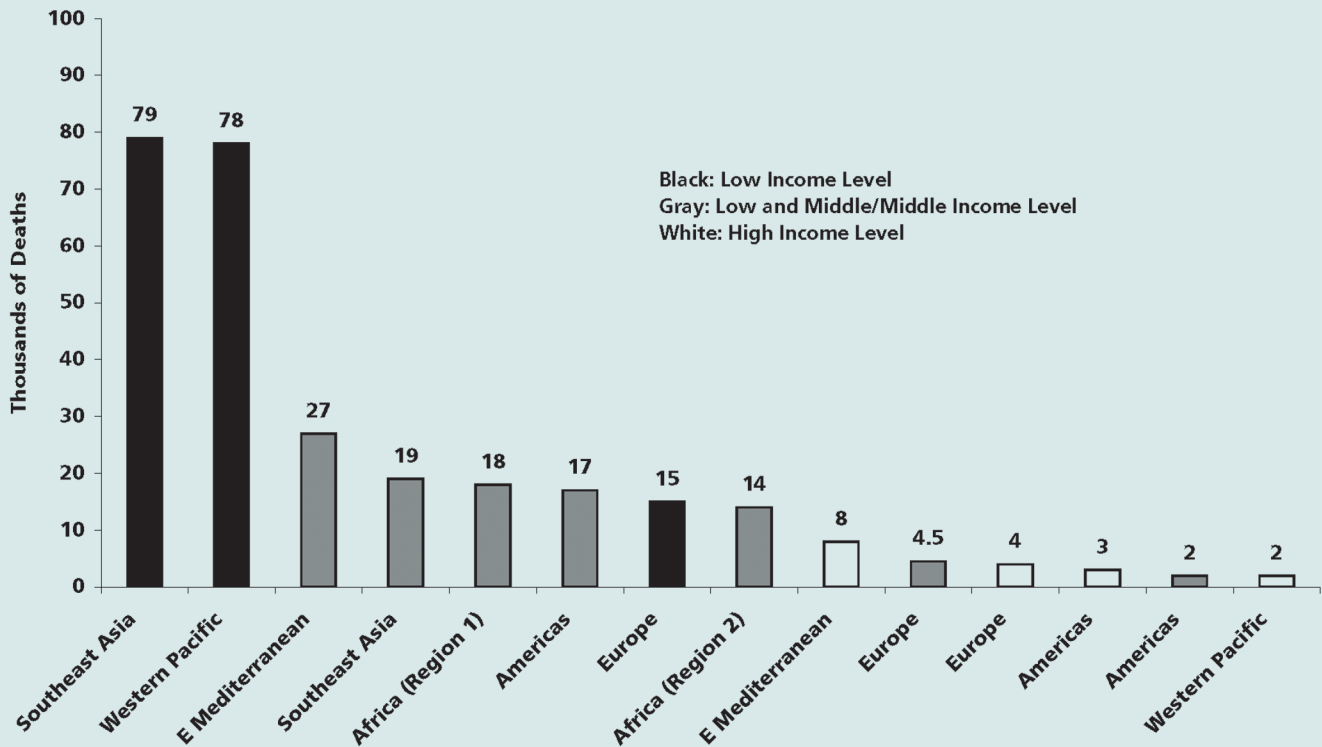
The primary way in which western governments contribute to the betterment of occupational safety and health in developing countries has been through the efforts of WHO. That group issued its Global Strategy on Occupational Health for All in 1995, in which it recognized that the well being of workers is a "crucial prerequisite for productivity and is of utmost importance for overall socioeconomic and sustainable development" [WHO(a) 1].

By issuing this document, WHO hoped to stimulate discussion, encourage policy development and trigger practical actions to meet occupational safety and health challenges [WHO(a) iii]. The group proposed 10 priority objectives (sidebar above) to stimulate positive improvement in occupational safety and health [WHO(a) 1].

Despite a broad worldwide membership, WHO's effectiveness in stimulating the needed improvements in developing countries has been questioned (Schulte 215; Ashford 156; Swuste and Eijkemans 1113). Schulte points to a breakdown in the transfer of occupational information from western industrialized countries to developing countries and attributes this problem to a vast amount of confusing information that is not easily adaptable to the workplace in developing countries (215).

Figure 1

Males' Annual Mortality Attributed to Occupational Injury Risk Factors by Region & Income Level



Source: Ezzati, et al.

Furthermore, many developing countries do not have access to computer databases. Workers are unable to use the information due to language, literacy and cultural barriers; at the same time, demand increases for these workers to shift from passive receivers to active users of safety and health information. Research in this area has been characterized by some as the work of academics training academics (LaDou 311). Often, occupational safety and health information has relied on quantitative methods of risk assessment that depend on monitoring equipment, expertise and analytical services. As a result, the information goes unused by those who would be better served with innovative low-tech means of worker protection (Joubert 124).

Finally, the bulk of occupational safety and health information comes from the highly structured formal sector of western industrialized countries, making it a poor fit for those who work in the informal sector in developing countries (Knave and Ennal 71).

In addition, some have questioned whether the scientific information being disseminated to developing countries has remained unbiased given the efforts of business interests (Ashford, et al 156). They warn that WHO's credibility has been compromised by its recognition of International Commission on Occupational Health (ICOH) whose members are employees of corporations or consultants with vested interests in influencing occupational safety and health policy in developing countries. Swuste and Eijkemans cite further arguments over the lack of commitment to

improving occupational safety and health in developing countries (113)—and also suggest this area has traditionally had a low profile in WHO efforts. This is evidenced by a lack of occupational safety and health incorporated into WHO's demonstration projects.

At-Risk Populations

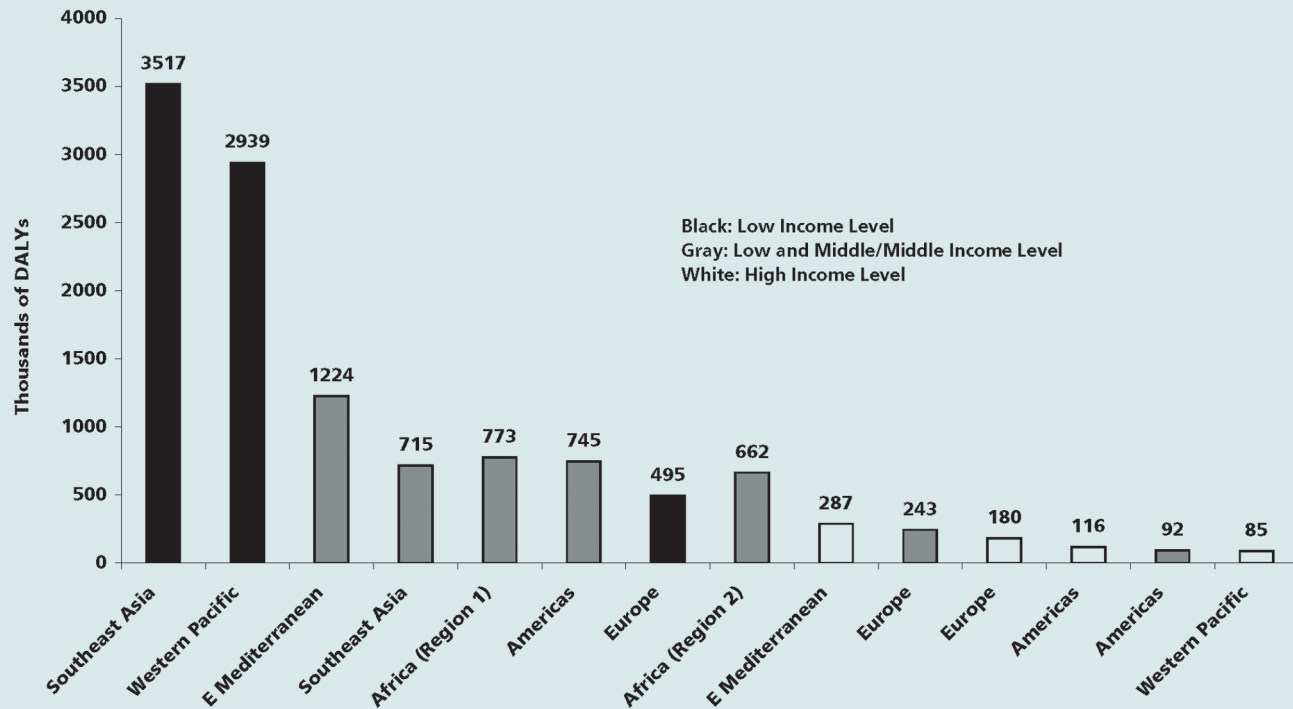
Environmental Concerns in Southeast Asia

Developing countries have experienced more than their share of environmental crises related to rapid and often uncontrolled industrialization. The southeast Asia atmospheric haze episodes in 1983, 1984, 1991, 1994 and 1997 drew worldwide attention but fell short of portraying the full extent of the damaging effect that air pollution has had in southeast Asia on human health, agricultural crops, forest species and ecosystems (Afroz, et al 71). Industrial pollution in Malaysia, once regarded as one of the least-polluted urban environments in Asia, now threatens to deplete the fisheries, pollute air and water, and degrade the urban environment.

Despite limited numbers of studies regarding the impact of pollution on health in Malaysia (Afroz, et al 75), a WHO evaluation of the health effects of the 1997 haze episode revealed that outpatient visits for respiratory problems increased two to three times during the peak haze period [WHO(b) 1]. Outpatient visits at one site increased from 250 to 800 per day. During the peak of the 1997 haze, asthma increased from 912 cases to more than 5,000 cases; acute respiratory infections increased from 6,000 to more than

Figure 2

Males' DALYs Attributed to Occupational Injury Risk Factors by Region & Income Level



Source: Ezzati, et al.

30,000 diagnosed cases; and conjunctivitis increased from 207 cases to 3,496 cases (Brauer and Jamal 404).

Informal Labor Sector

The informal labor workforce that includes unregulated small activities owned and operated by individuals who may employ one or more continuous employees along with unpaid family members (Swuste and Eijkemans 113) is the most rapidly growing workforce sector in low-income countries (Wesseling, et al 125). Workers in this largely unrecognized, unrecorded and unregulated sector have no fixed working hours or days, perform labor-intensive tasks, and often live and work at the same location (Swuste and Eijkemans 114).

The prevalence of occupational injuries and illnesses is higher for workers in the informal sector than those in the formal sector (Van Niftrik 1). A study of the labor market in the three major cities in Nicaragua reported that 76.5 percent of women and 55 percent of men worked in the informal sector (Wesseling, et al 126). This study also found a similar trend in Costa Rica where wage-earning workers represented a low proportion of the economically active workforce (Wesseling, et al 126).

A study of the prevalence of occupational injuries and illnesses among the informal work sector in South Africa found that the rate of occupational injuries which resulted in days away from work for informal workers (83 per 1,000 workers) was 2.5 times higher than for the formal sector (Van Niftrik 1). This research

also reported that only 25 percent of interviewed workers in the informal sector were aware that work placed them at risk for ill health; crime was cited most often as these workers' major concern (Van Niftrik).

Children

Child labor is most prevalent in low-income countries (Tanaka 93) where children may provide 25 percent or more of a family's total income (Woolf 478). The pressure on children to leave school and enter the labor market increases as labor market opportunities improve (Duryea and Arends-Kuennin 1165). International Labor Organization (ILO) has estimated that 250 million children age five to 14 work worldwide, with almost half of them employed full time (ILO 32). The overwhelming majority of children employed full time are found in low-income countries, with 61 percent located in Asian countries, 32 percent in Africa and seven percent in Latin America (ILO 33).

Occupational injuries are more frequent among children in developing countries than in industrialized countries (Fischer, et al 351). A cross-sectional study conducted in public schools in Brazil found that among 731 students interviewed, 604 (86 percent) previously or currently had jobs and 47 percent reported previous occupational injuries (Fischer, et al 351). Significant risk factors for injury included attending evening school, working as a housekeeper, waiter or brick-maker, and working with machines.

Child labor poses a special risk to children's health and development (Woolf 481). Exposure of

Nike's Initiatives: Accepting Greater Responsibility for Labor Activities of Suppliers

1) Increase the minimum age of new footwear factory workers to 18, and the minimum age for all other new light-manufacturing workers to 16.

2) Adopt the personal exposure limits of OSHA as the standards for indoor air quality for all footwear factories.

3) Fund university research and open forums to explore issues related to global manufacturing and responsible business practices such as independent monitoring and air quality standards.

4) Expand worker education programs, including middle- and high-school equivalency courses, for workers in all Nike footwear factories.

5) Increase support of the current microenterprise loan program to 1,000 families each in Vietnam, Indonesia, Pakistan and Thailand; expand current independent monitoring programs to include nongovernmental agencies (NGOs), foundations and educational institutions; and make summaries of the findings public.

6) Involve NGOs in the process of factory monitoring, with summaries released to the public.

Source: *Arnold and Hartman, 437.*

working children to occupational health hazards varies significantly between developed and underdeveloped countries (Bolt 121). Child labor in the European Union is strictly regulated. For example, children under age 16 cannot be exposed to hazardous chemicals and any exposure to children age 16 to 18 is closely regulated (Bolt 122).

In contrast, the exposure of children in developing countries to hazardous chemicals is evident in case studies from Ecuador. There, children were found to be exposed to mercury from gold washing; to organophosphates and carbamates in the fruit-growing industry; and to solvents in the shoe-cleaning sector (Harari, et al 185). Child labor in developing countries contributes not only to elevated numbers of occupational injuries and illnesses, but also to diminished learning achievement that is attributed to physical exhaustion and diversion of interest (Heady 385).

Measures for Improving Occupational Safety & Health Codes of Conduct

Amid growing concern over inconsistencies in international labor practices, the 1990s saw MNCs issuing an increased numbers of codes of conduct that established voluntary commitments to specific norms and values (OECD). The international sporting goods industry has been at the forefront of this movement that strives to define universal moral norms and fundamental rights and duties of MNCs (Van Tulder and Kolk 267).

Six companies dominate the international sporting goods industry: Nike and Reebok from the U.S.; Adidas and Puma from Europe/Germany; and Asics and Mizuno from Japan (Van Tulder and Kolk 268). Subcontractors in southeast Asia produce most of the footwear marketed by Nike, Reebok and Puma. The contrast between these companies large-scale publicity campaigns featuring famous athletes and the child labor employed to produce their products endangered their company and brand images (Van Tulder and Kolk 278). While progress in the estab-

lishment of codes of business conduct for overseas operations by this industry can be attributed to the unique sensitivity to company and brand image, their successes indicate that international nongovernmental organizations are far more effective in this arena than the many governments which turn away from a clear position on codes of conduct by their home-based companies (Van Tulder and Kolk 280).

Nike was one of the first international sporting goods firms to establish a code of conduct that bound all manufacturing partners to post the code in the native language in all workspaces as well to train workers regarding their rights (Arnold and Hartman 435). Despite Nike's establishment of this code in 1992, the company came under harsh criticism for not accepting responsibility for wage-related concerns in Vietnam (Herbert) until Nike CEO Phillip Knight publicly accepted responsibility for the company's suppliers (Arnold and Hartman 436).

What followed Knight's admission was the establishment of six initiatives (sidebar, left) that profoundly changed Nike and moved the apparel and footwear industry toward accepting greater responsibility for the workers and working conditions of suppliers (Arnold and Hartman 437). Pronouncement of these six initiatives has led Nike to establish a health management and safety audit program that includes both internal and external auditors. In addition, the company's groundbreaking requirement for an education program in contract factories has led to partnerships such as that established with the Vietnamese Ministry of Education which makes the equivalent of a GED available to workers (Arnold and Hartman 440).

MNCs are pulled between the adoption of universal ethical codes of conduct and those adapted to the human resource management practices of the supplier countries (Kolk and Van Tulder 49). Review of corporate codes of conduct in the area of child labor among 50 leading MNCs revealed that 22 percent had no code of conduct and only 26 percent had adopted a universal code of conduct for child labor; a majority (52 percent) relied solely on host country laws (Kolk and Van Tulder 53). It was also found that the codes of conduct never referred to home country laws that in the case of the U.S. and Europe are much stricter than the host countries (Kolk and Van Tulder 52).

Integrating SH&E into International Business Practices

The 1990s saw the proliferation of many tools aimed at integrating social responsibility across national borders (Oxford Research 4). These tools, many of which are based on international labor conventions, provide a road map for companies to follow in integrating SH&E standards into business practices.

A review of 40 international tools identified five general groups (Oxford Research 5). "Labels" are linked to products and provide social, environmental and ethical information about the product and the conditions under which it was produced. One such label is "fair trade" that aims to improve the living conditions of producers in developing countries (Oxford Research 9). "Principles and guidelines" are

a company's formal commitment to follow ethical business practices and include codes of conduct (Oxford Research 12).

"Management and certification systems" establish guidelines for the development and integration of management systems and processes (Oxford Research 14). Two such systems gaining prominence are ISO 14001 and OHSAS 18001 due in part to a company's ability to obtain certification through external verification. "Accounts and reporting" provide guidelines for the preparation of reports that indicate more than just financial status (Oxford Research 17). Global reporting initiative (GRI) is one of the most recognized international guidelines for viewing an organization's behavior and influence. "Screening/index" introduced on the international stock exchanges are based on the assumption that companies with a higher sustainability profile will do better than ordinary shares (Oxford Research 21).

MNC Social Responsibility

One could argue that MNCs have ethical obligations to their host countries despite the lack of international authority or host country requirements. Stakeholder perceptions of unethical business practices in the international arena are bad for business (Cordeiro 327).

Host countries that are transitioning toward more capitalist decentralized economic systems often focus on productivity at the expense of safe working conditions and environmental protection (Cordeiro 330). Therefore, MNCs should go beyond the minimum requirements (Wederspahn 29).

Historically, MNCs have accepted little responsibility for labor abuses by their contractors in developing countries. These corporations have contractually separated themselves from responsibility for their contractors' unfair labor practices. In contrast, the comprehensive legal system in the U.S. and western Europe requires that MNCs take responsibility for their subcontractors.

Fueled by a belief that regulations unfairly diminished their ability to compete, MNCs were initially attracted by the lower costs of overseas contracts due in part to fewer legal requirements. This perception has changed as MNCs have grown more aware of the working conditions and lack of legal protection of workers in their contractors' overseas operations (Arnold and Hartman 432).

In the continuing efforts to gain competitive advantage, MNCs' ability to create and sustain ethical capability can be a significant source of sustainable advantage (Buller and McEvoy 326). To realize this advantage, MNCs must increase their sensitivity to cross-cultural ethical differences between home and host countries; be more sophisticated in applying appropriate ethics; and lead by example (Buller and McEvoy 341). As the ethical capability of MNCs grows—evidenced by greater respect for the basic rights of workers in host countries—stakeholders become less tolerant of failures viewed as morally unacceptable (Arnold and Hartman 425).

Learning from Mistakes: What Will Work to Improve OSH?

The failure of occupational safety and health to keep pace with the rapid globalization of production is evident in developing countries. The lack of fair labor practices is particularly severe in middle- and low-income countries in southeast Asia and the western Pacific where on-the-job mortality rates are almost 40 times higher than in the U.S. (Ezzati, et al 1353). Although many countries have comprehensive regulations patterned after the occupational safety and health laws in industrialized countries, their governments often lack the political will to demand enforcement of these regulations at the expense of slower growth and less profit.

Governments in the western industrialized countries have been equally ineffective in influencing the protection of workers and rely primarily on WHO to stimulate improvements in occupational safety and health. Although WHO has made strides, some claim it has been ineffective in transferring safety and health information; question the agency's independence due to its membership being comprised of industry representatives with vested interests; and point to the overall low profile that OSH has played in WHO's demonstration projects.

The lack of occupational safety and health in developing countries contributes to the pollution of the work environment and the community. It also fuels the rapid growth of a largely unregulated informal work sector among which on-the-job injuries resulting in days away from work have been estimated to be 2.5 times that of the formal sector (Van Niftrik 1). Furthermore, unregulated child labor practices permit an estimated 250 million children age five to 14 to be employed (ILO 32) in potentially high-risk jobs (Fischer, et al 351).

Despite these facts, some progress has been made through the establishment of codes of conduct by MNCs. The cited efforts of the sporting goods industry indicates that the adoption of universal codes of conduct can be successfully adapted to the human resource management practices of developing countries. Stakeholders increasingly believe that MNCs have an ethical obligation to their host countries and see the exercise of this obligation as means to gain competitive advantage.

Rapid globalization of the marketplace over the last 30 years has brought both prosperity and hardship. It is unrealistic to believe that developing countries have the political will or resources to sacrifice industrial growth to ensure a safe working environment when their citizens are struggling to feed, clothe and house their families. Given the intricacies of world politics and trade, it is equally unrealistic to expect that the governments of industrialized nations will force their labor requirements on host countries. Rather, the best prospect for ensuring safe working conditions in developing countries is for MNCs and nonprofit industry trade organizations to develop codes of conduct and implement them through contractual agreements with overseas producers.

SH&E Professionals as Agents of Change

SH&E professionals share the responsibility to advocate—not only on behalf of workers in their home operations but also for those who work in the often undesirable conditions found in developing countries. What is needed is enlightened management that not only acknowledges but also actively addresses its responsibility for suppliers' working conditions.

SH&E professionals can contribute to this process by building corporate awareness of these occupational safety and health disparities and encouraging corporate responsibility. Progress made in this country toward increased awareness of and responsibility for subcontractor activities must be expanded to corporate activities in developing countries.

SH&E professionals should facilitate this transformation through a planned and well-conceived strategy. SH&E professionals must become knowledgeable about the working conditions of the corporation's overseas operations and suppliers. They should also have or work to attain a seat at the corporate table where they can advocate on behalf of workers in developing countries. This advocacy should include documented facts regarding the corporation's impact in developing countries and must convey concrete steps the corporation can take to improve the overall working conditions. SH&E professionals should readily point to the business advantage that can be realized by implementing these strategies as well.

The challenge of identifying occupational safety and health strategies that work in developing countries requires attention. SH&E professionals need to continuously devise measures which fit that environment by recognizing that high-tech solutions used in the western industrialized countries are often ineffective and culturally inappropriate. ■

References

- Afroz, R., et al. "Review of Air Pollution and Health Impacts in Malaysia." *Environmental Research*. 92(2003): 71-77.
- Arnold, D. and L. Hartman. "Moral Obligation and the Future of Sweatshops." *Business and Society Review*. 108(2003): 425-461.
- Ashford, N. "The International Commission on Occupational Health (ICOH) and Its Influence on International Organizations." *International Journal of Occupational Environmental Health*. 8(2002): 156-162.
- Bolt, H. "Occupational Versus Environmental and Lifestyle Exposures of Children and Adolescents in the European Union." *Toxicology Letters*. 127(2002): 121-126.
- Brauer, M. and H. Jamal. "Fires in Indonesia: Crisis and Reaction." *Environmental Science and Technology*. 1998: 404-407.
- Buller, P. and G. McEvoy. "Creating and Sustaining Ethical Capability in the Multinational Corporation." *Journal of World Business*. 34(1999): 326-343.
- Cordeiro, W. "Should Business Ethics be Different in Transitional Economies?" *Journal of Business Ethics*. 47(2003): 327-334.
- Duryea, S. and M. Arends-Kuening. "School Attendance, Child Labor and Local Labor Market Fluctuations in Urban Brazil." *World Development*. 31(2003): 1165-1178.
- Ezzati, M., et al. "Selected Major Risk Factors and Global and Regional Burden of Disease." *Lancet*. 360(2002): 1347-1360.
- Fischer, F., et al. "Occupational Accidents Among Middle and High School Students of the State of Sao Paulo, Brazil." *Revista De Saude Publica*. 37(2003): 351-356.
- Gilpin, R. *The Challenge of Global Capitalism: The World Economy in the 21st Century*. Princeton, NJ: Princeton University Press, 2000.
- International Labor Organization. "African Newsletter of Occupational Health and Safety." 10(2000): 32-35.

Harari, R., et al. "Unacceptable Occupational Exposure to Toxic Agents Among Children in Ecuador." *American Journal of Industrial Medicine*. 32(1997): 185-189.

Heady, C. "The Effect of Child Labor on Learning Achievement." *World Development*. 31(2003): 385-398.

Herbert, B. "Brutality in Viet Nam." *The New York Times*. March 28, 1997.

Joubert, D. "Occupational Health Challenges and Success in Developing Countries: A South African Perspective." *International Journal of Occupational and Environmental Health*. 8(2002): 119-124.

Knave, B. and R. Ennals. "International Trends in Occupational Health Research and Practice." *Industrial Health*. 40(2002): 69-73.

Kolk, A. and R. Van Tulder. "Ethics in International Business: Multinational Approaches to Child Labor." *Journal of World Business*. 39(2004): 49-60.

Kromhout, H.(a). "Introduction: An International Perspective on Occupational Health and Hygiene." *International Journal of Occupational and Environmental Health*. 8(2002): 111-112.

Kromhout, H.(b). "Occupational Hygiene in Developing Countries: Something to Talk About?" *Annals of Occupational Hygiene*. 43(1999): 501-503.

LaDou, J. "International Occupational Health." *International Journal of Hygiene and Environmental Health*. 206(2003): 303-313.

Leigh, J., et al. "Global Burden of Disease and Injury Due to Occupational Factors." *Epidemiology*. 10(1999): 626-631.

OECD. *Codes of Corporate Conduct: An Inventory*. Paris: Trade Directorate, 1999.

Oxford Research. *Survey and Analysis of Tools in Connection with Corporate Social Responsibility and Sustainability*. Copenhagen: Denmark, 2003.

Schulte, P. "Approaches to Sharing Occupational Safety and Health Information on a Global Scale." *American Journal of Industrial Medicine*. 41(2002): 210-216.

Shukla, A., et al. "Occupational Health and the Environment in an Urban Slum in India." *Social Science Medicine*. 33(1991): 597-603.

Swuste, P. and G. Eijkemans. "An Application of the Prevention and Control Exchange (PACE) Program to the Informal Sector Workers in Healthy City Projects." *International Journal of Occupational Environmental Health*. 8(2002): 113-118.

Takala, A. "International Agency Efforts to Protect Workers and the Environment." *International Journal of Occupational Environmental Health*. 5(1999): 30-37.

Tanaka, R. "Inequality as a Determinant of Child Labor." *Economic Letters*. 80(2003): 93-97.

Van Niftrik, M. "Occupational Health and Safety in the Informal Sector of South Africa: A Pilot Study on the Prevalence of Occupational Injuries, Illnesses and Hazards in the Work Environment of Informal Workers in Delft, Cape Town." Report of Peninsula Technikon, Utrecht, The Netherlands: Dept. of Health Sciences and Institute for Risk Assessment Sciences, Utrecht University, 2001.

Van Tulder, R. and A. Kolk. "Multinationality and Corporate Ethics: Codes of Conduct in the Sporting Goods Industry." *Journal of International Business Studies*. 32(2001): 267-283.

Wederspahn, G. "Exporting Corporate Ethics." *Workforce*. 2(1997): 29-30.

Wesseling, C., et al. "Occupational Health in Central America." *International Journal of Occupational and Environmental Health*. 8(2002): 125-136.

World Health Organization (WHO)(a). "Global Strategy on Occupational Health for All: Recommendations of the Second Meeting of the WHO Collaborating Centres in Occupational Health." Geneva: Switzerland, WHO, 1995.

WHO(b). "Report of the Bioregional Workshop on Health Impacts of Haze-Related Air Pollution." Manila, Philippines: WHO, 1998.

Woolf, A. "Health Hazards for Children at Work." *Clinical Toxicology*. 40(2002): 477-482.

Your Feedback

Did you find this article interesting and useful? Circle the corresponding number on the reader service card.

RSC#	Feedback
25	Yes
26	Somewhat
27	No