



BRUNEI DARUSSALAM

BACKGROUND INFORMATION

Brunei Darussalam, the “Abode of Peace”, is situated on the north-west of the island of Borneo. The sultanate has a total area of 5,765-sq. km. with a coastline of about 161-km along the South China Sea. It is bounded on the North by the South China Sea and on all the other sides by Malaysian State of Sarawakⁱ. Brunei is strategically located close to vital sea lanes through the South China Sea, linking the Pacific and the Indian oceansⁱⁱ.

The total estimated population is 375,000. Of these, 195,000 are males, and 180,000 are females (2005)ⁱⁱⁱ. Life expectancy is 76.8 years, and infant mortality rate is 5.0 per 1000 live births (2003)^{iv}. Literacy rates are consistently over 90%. Brunei meets all of the ten global health indicators of the World Health Organization (WHO).

Brunei is multi-ethnic, with Malays comprising about 67% of its people, and the remainder comprised of Chinese, Indians, indigenous groups and other multinationals^v. About 57.6% of the total population is of working age (i.e. between the ages of 15-64)^{vi}.

Brunei’s per capita GDP, estimated at US\$12,823 (2002)^{vii} is far above most other Third World countries, and is higher than most of the countries in the Western Pacific. Crude oil and natural gas production account for nearly half of the GDP. Brunei Darussalam is the third largest oil producer in Southeast Asia. It is also the fourth largest producer of liquefied natural gas in the world^{viii}. In addition to crude oil and natural gas production, the construction and service industries, income from overseas investments and agriculture contribute to the GDP.

Occupational Statistics at a Glance

Land area: 5,765 Sq. km.
Population: 375,000 (2005 est.)
GDP per capita: US\$12,823 (2004)

Key Industries:

- Oil and natural gas production
- Forestry
- Agriculture
- Services

% Population aged 15-64: 57.6%

Unemployment rate: 4.8%

Occupational fatality rate: 10/100,000 workers

National agency primarily responsible for occupational health and safety: Occupational Health Division, Environmental Health Services, Department of Health Services

National Focal Person for occupational health:

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Key ILO conventions ratified:
None

Table 1. GDP Composition by Sector

Sector	% of GDP
Agriculture	5%
Industry	45%
Services	50%

Source: CIA Factbook, <http://www.cia.gov/cia/publications/factbook/geos/bx.html> last accessed 28 March 2006

Cognizant of the non-renewable nature of oil and gas, the government addressed economic diversification in the national development agenda. Strategies planned for future development include upgrading the labor force, reducing unemployment, strengthening the agriculture, forestry, fishing, banking and tourist sectors, and, in general, further widening the economic base beyond oil and gas^{ix}.

About 161,000 people were in the labour force in 2004. The unemployment rate is estimated at 4.8%^x. Brunei Darussalam's small population accounts for its limited labour force. With the recent implementation of ambitious development plans, the country has had to recruit both skilled and unskilled labour from abroad. Currently, about 40% of the labor force is made up of temporary residents and migrant workers.

Table 2. Employment by Economic Activity (2001)

Economic Activity (based on ISIC-Rev.3)	Number (thousands)
Agriculture, Hunting, Forestry	1.518
Fishing	0.476
Mining and Quarrying	3.954
Manufacturing	12.455
Electricity, Gas and Water Supply	2.639
Construction	12.301
Wholesale and Retail Trade	12.931
Hotels and Restaurants	7.107
Transport, Storage and Communications	4.803
Financial intermediation and Real Estate	8.190
Services	79.880
TOTAL	146.254

Source: Population Census as reported in the ILO Labour Statistics Database, 2005

Brunei's major trading partners include:

- Exports: Japan 38.1%, South Korea 14%, Australia 11.2%, US 8.6%, Thailand 7.9%, Indonesia 5.9%, China 4.5% (2004)
- Imports: Singapore 32.7%, Malaysia 21.2%, UK 8.3%, Japan 7.2% (2004)^{xi}

It is an active member of the following international organizations, which have potential influence on the state of occupational health and safety within the country:

- Asia Pacific Economic Cooperation (APEC) – Brunei served as the Chair for the 2000 APEC Forum
- Association of South East Asian Nations (ASEAN)
- G-77

- International Monetary Fund (IMF)
- United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)
- United Nations Conference on Trade and Development (UNCTAD)
- World Health Organization (WHO)
- World Trade Organization (WTO)

OCCUPATIONAL HEALTH AND SAFETY INDICATORS

Currently, Brunei's occupational health and safety surveillance focuses on three main areas: i) worker surveillance; ii) worksite surveillance; and, iii) accident notification. A Medical Records Data System was introduced in 2003, creating a comprehensive database on the health status of workers seen by the Occupational Health Division as well as the establishment of Hepatitis B and C, and HIV registries for workers. However, a comprehensive occupational disease notification system is not yet in place. It is believed that a significant number of work-related accidents and occupational diseases go unrecognized and unreported^{xii}.

Using ILO data, Hamalainen et. al^{xiii} calculated Brunei's work-related fatality rate at 10.0 per 100,000 workers. The work-related accident rate was estimated at 7,658 per 100,000 workers. These rates are low compared to the regional average for Asia (except for China and India) and the Pacific Islands, with an estimated regional occupational fatality rate of 21.5 per 100,000 workers and an occupational accident rate of over 21,000 per 100,000 workers.

A total of 143 work accidents, including one fatality, were reported by various health facilities throughout the country to the Occupational Health Division in 2004---an increase of 2.7% from the previous year. Over 60% were in non-health care settings. Majority of these accidents occurred at construction sites. Almost half-46%- occurred among younger workers aged 20-29. Lack of worker safety training and experience, lack of safety policies and lack of worker supervision were the major contributory factors identified. Within the healthcare sector, all of the injuries reported in 2004 involved needlestick injuries.

Table 3. Work Accidents Reported to the Occupational Health Division, 2003-2004

Sector	Number Reported	
	2004	2003
Healthcare sector	55	19
Non-health care related	88	120
TOTAL	143	139

Source: Country Report, Occupational Health and Safety in Brunei Darussalam, WHO/ILO Meeting on Strengthening Occupational Health and Safety, 23-25 November 2005, Kuala Lumpur, Malaysia

CAPACITY, INFRASTRUCTURE AND SERVICES

Health care in Brunei is fully subsidized by the Government. Health care expenditure per capita was approximately US\$334 in 2004, comprising 5.8% of the national budget, and 2.7% of the GDP.

The petroleum and natural gas industry has its own Occupational Health Service. The armed forces also have their own medical service. Workers in these sectors are not covered by the Ministry of Health's Occupational Health Division.

In 1993, the Occupational Health Division was established under the Environmental Health Unit within the Department of Health. At that time, the division was staffed by 1 physician and 1 health inspector; its services were limited to the surveillance of pesticide and cement factory workers, and post-incident worksite evaluations. By 1999, the addition of trained occupational health and safety staff enabled the division to expand its scope of services and by 2004, it began functioning independently of the Environmental Health Division. Currently, the Occupational Health Division has a total of 14 staff.

Table 4. Staffing Pattern, Occupational Health Division, Brunei Darussalam

Category	Number	Comments
Physicians	5	All trained in Occupational Medicine
Nurses	4	1 nurse trained in Occupational Health
Safety officer/ Health inspector	2	1 qualified as a Health and Safety Officer
Support staff	3	
TOTAL	14	

Source: Country Report, Occupational Health and Safety in Brunei Darussalam, WHO/ILO Meeting on Strengthening Occupational Health and Safety, 23-25 November 2005, Kuala Lumpur, Malaysia

Workplace surveillance visits increased by 22.4% from 2003 to 2004. Majority of these visits were occupational health and safety inspections; only three resulted directly from a workplace accident or complaint. Inspections of private workplaces are often jointly conducted together with the Department of Labor. Construction sector workplace inspections, however, are handled by the Safety Unit of the Ministry of Development.

Table 5. Workplace Surveillance Visits, 2002-2004

Purpose	2004	2003	2002
Occupational health and safety inspection	85	74	81
Workplace survey	41	18	14
Complaints	1	5	2
Others – accidents, etc.	2	3	15
TOTAL	129	100	112

Source: Country Report, Occupational Health and Safety in Brunei Darussalam, WHO/ILO Meeting on Strengthening Occupational Health and Safety, 23-25 November 2005, Kuala Lumpur, Malaysia

Employment-related medical examinations increased by 4.8% between 2003 and 2004. Voluntary periodic medical surveillance of high risk workers also increased in 2004, by 53.2%.

Table 6. Employment-related Medical Examinations, 2002-2004

Type of Medical Exam	2004	2003	2002
Pre-employment (Gov't sector)	3521	3020	929
Pre-employment (private sector)	456	764	---
Periodic medical exams	1512	662	515
Driving license exams	106	95	24
TOTAL	5595	4541	1468

Source: Country Report, Occupational Health and Safety in Brunei Darussalam, WHO/ILO Meeting on Strengthening Occupational Health and Safety, 23-25 November 2005, Kuala Lumpur, Malaysia

Additional services offered by the Occupational Health Division include:

- Healthcare-related policy development for occupational/work-related issues
- Worker education and training in safe work practices
- Classroom and field training of workers (e.g. health care workers, including student nurses and doctors on rotation; Department of Labor staff)
- Participation at various health promotion and outreach activities
- Production and dissemination of occupational health and safety educational and advocacy materials

There is no national institute outside of the Occupational Health Division that is responsible for occupational health. Neither is there a programme or institute for post-graduate training on occupational health^{xiv}.

POLICY AND LEGISLATIVE ENVIRONMENT

At present, Brunei does not have a separate national Occupational Health and Safety Act. Relevant national legislation addressing compensation for occupational and work-related injuries and workplace safety can be found in the Workmen's Compensation Act (revised 1984) and certain provisions of the Labour Act. Brunei has not ratified any of the relevant ILO Occupational Health and Safety Conventions

Table 7. Status of Brunei's Participation in Selected ILO OSH Treaties

ILO OHS Treaty	Ratification Status
ILO 81 Labour Inspection Convention	NO
ILO 121 Employment Injury Benefits Convention	NO
ILO 139 Occupational Cancer Convention	NO
ILO 148 Occupational Hazards and Working Environment Convention	NO
ILO 144 Tripartite Consultation	NO
ILO 155 Occupational Safety /Health Convention	NO
ILO 161 Occupational Health Services Convention	NO
ILO 162 Asbestos at Work Convention	NO
ILO 170 Chemicals at Work Convention	NO
ILO 182 Worst Forms of Child Labour Convention	NO

Source: www.ilo.org last accessed 28 March 2006

The Ministry of Health is primarily responsible for occupational health services, surveillance and risk assessment, development of exposure standards, training and research, and information dissemination and health promotion. The Ministry of Labour is primarily responsible for maintaining the registry of work-related accidents (for purposes of compensation) and development of occupational health and safety legislation. Unlike the Ministry of Health, the Ministry of Labour does not have staff dedicated to occupational health and safety issues.

KEY ISSUES AND CHALLENGES

Brunei's wealth, primarily derived from its petroleum and natural gas resources, has made it one of the most progressive and healthy nations in the Western Pacific. As it seeks to expand its economic base beyond the petroleum and natural gas industries, by introducing new industries, the nature and frequency of hazardous occupational exposures is likely to alter and increase.

Brunei's key challenge will revolve around its ability to modify, update and enforce the legislative and policy environment, and to strengthen its occupational health and safety capacity and infrastructure, to prevent new and emerging work-related hazards from adversely affecting its workforce as the mix of its industries changes. Improving its surveillance network/capacity will be critical for the early detection of novel occupational diseases.

Presently, the occupational surveillance system predominantly picks up work-related accidents and occupational diseases from workplace exposures through notification and worker surveillance from specific workplaces (where surveillance is mandatory) as well as those work sites that voluntarily participate in surveillance activities. Interagency cooperation from all relevant stakeholders in the public and private sectors to enhance the occupational health and safety surveillance programme will ensure comprehensive coverage of occupational and work-related diseases and accidents in all workplaces. Building the system's capacity so that it is equally able to detect the acute as well as the chronic consequences of work-related hazardous exposures will be essential, given the improved life expectancy of its population.

Brunei's national development plan encourages the expansion of small and medium scale industries (SME) particularly in the manufacturing and service sectors. Augmenting the current capacity of the Occupational Health Division, and enhancing the roster of trained occupational health professionals (to include industrial hygienists and ergonomists) within the country, will be critical for increasing OHS coverage and improving OHS service delivery to workers in SMEs. This encompasses preventive and health promoting services as well as diagnostic and curative services.

Adequate coverage of migrant workers, particularly those working in small establishments and private residences, is also a challenge. Extending coverage of

occupational health and safety services to include this growing class of workers will be vital to attaining a high standard of health and safety in all workplaces in Brunei.

ⁱ Official Government website at <http://www.brunei.gov.bn/> last accessed 28 March 2006

ⁱⁱ Central Intelligence Agency, The World Factbook – Brunei at

<http://www.cia.gov/cia/publications/factbook/geos/bx.html> last accessed 28 March 2006

ⁱⁱⁱ WHO WPRO Regional Database

^{iv} World Development Indicators database, August 2005, The World Bank Group

^v Country Report, Occupational Health and Safety in Brunei Darussalam , WHO/ILO Meeting on Strengthening Occupational Health and Safety, 23-25 November 2005, Kuala Lumpur, Malaysia

^{vi} WHO WPRO Regional Database at <http://www.who.wpro.int/> last accessed 28 March 2006

^{vii} Ibid

^{viii} Official Government website

^{ix} Official Government website

^x ASEAN Statistical Yearbook 2005

^{xi} CIA World Factbook

^{xii} Country Report, Occupational Health and Safety in Brunei Darussalam, WHO/ILO Meeting on Strengthening Occupational Health and Safety, 23-25 November 2005, Kuala Lumpur, Malaysia

^{xiii} Hamalainen P, Takala J, Saarela KL. Global estimates of occupational accidents. *Safety Science*, 2005. (Article in press).

^{xiv} Country questionnaire on WHO Global Strategy for occupational health for all, 2005.