

**Thailand Country Report
2009**
adapted from
7th WHO ICWS on PBL, 2008
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**Phnom Penh
Cambodia**

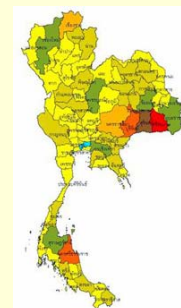
**Thailand Country Report
2009**

- **General Fact Sheet**
- **Current Situation of PBL in Thailand**
- **National Survey of Visual Impairment 2006-7**
- **SWOT analysis**

**Thailand
General Fact Sheet**

Basic country information

- Geography & Area :198,953 sq. miles
- 76 provinces
- Population 65 millions (2006)
- Socioeconomic status
 - Income per capita
 - = 362 \$ US



Government (ii)	
Type	Constitutional Monarchy
Chief of State	His Majesty King Bhumibol Adulyadej (since June 1946)
Head of Government	Prime Minister
Capital	Bangkok Metropolitan
Administrative Divisions	76 provinces

Source: CIA-The World Factbook 2005 - Thailand
(<http://www.odci.gov/cia/publications/factbook/geos/th.html>)

Demographics			
2006 Population^a (thousands)	65,064	Age Structure (2005) i	
Annual Growth Rate^b (2006)	0.7%	0 - 14 years	22.0%
Urban Population (2005) i	31.0%	15 - 64 years	70.0%
Nationality	Thai	Over 65 years	8.0%
Ethnic Group ii		Sex Ratio (2005 est.) ii	0.98 male(s)/female
Thai	75.0%	Unemployment Rate (November 2004 est.) ii	1.5%
Chinese	14.0%	Population below poverty line (2004 est.) ii	10.0%
Others	11.0%		

a: Population Change Survey 2005-2006, National Statistical Office
b: Department of Local Administration, Ministry of Interior
i: 2005 ESCAP Population Data Sheet, United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)
ii: CIA-The World Factbook 2005 - Thailand (<http://www.odci.gov/cia/publications/factbook/geos/th.html>)

Education (iii)

Adult Literacy (M) (2002/2003)	94.9%	Enrolment Ratios (2002/2003)	
Adult Literacy (F) (2002/2003)	90.5%	Primary	97.0%
Public expenditure on Education:total government expenditure (2000)	28.3%	Secondary	81.0%
		Tertiary	38.0%
		Compulsory	6-14 years

iii: UNESCO : Institution for Statistics - education sector (www.uis.unesco.org)

Health

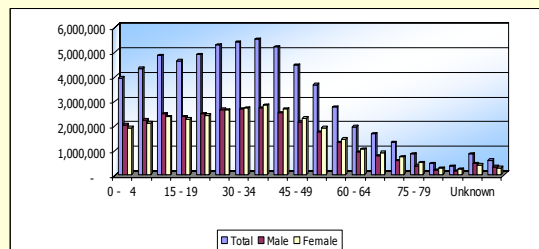
Life Expectancy (M) (2005) i	67 years	HIV/AIDS Prevalence (2003 est.) ii	1.5%
Life Expectancy (F) (2005) i	75 years	HIV/AIDS Figures (2003 est.) ii	570,000
		Infant Mortality (per 1,000) i	17

i: 2005 ESCAP Population Data Sheet, United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)

Economic (ii)

GDP - per capita (2004 est.)	\$ 8,100	Contributions to GDP (2004 est.)	
GDP Growth (2004 est.)	6.1%	Agriculture	9.0%
Budget (2004 est.)		Industry	44.3%
Revenues	\$ 30.86 billion	Services	46.7%
Expenditures	\$ 31.94 billion		

Population by Age Group and Sex 2006 :from Registration Record



Source: Department of Local Administration, Ministry of Interior

NUMBER OF POPULATION FROM REGISTRATION RECORD BY AGE GROUP AND SEX: 2006

Age Distribution	Number	%
0 -14 years	13,105,198	20.86
15 – 64 years	43,709,887	69.57
65 years and above	4,580,511	7.29
Total	62, 828,706	100

Source: Department of Local Administration, Ministry of Interior

Disability (iv)

Major Legislation	Rehabilitation of Disabled Persons Act A.D. 1991		
No. of Persons with Disabilities	1,100,762 (1.8%)	Disability by Type	
Persons with Disabilities Living in Rural Areas	842,216 (76.5%)	Visual	123,157 (11.2%)
National Coordination Committee on Disability	N/A	Hearing and Communication	240,904 (21.9%)
Age Structure		Physical	512,989 (46.6%)
0 - 14 Years	96,469 (8.7%)	mentals/behavior	81,262 (7.4%)
15 - 24 Years	143,638 (13.0%)	Intellectual and learning	222,004 (20.2%)
25 - 59 Years	520,576 (47.3%)		
Over 60 Years	340,079 (31.0%)		

iv: Report of Disabled Persons Survey 2001, National Statistic Office

Basic healthcare infrastructures & facilities

- Number & distribution of hospitals
 - Gov. : Private hospital = 907: 95
- Number of health center
 - Health center = 9758
- Public: private = 2,188 :1,000 (hospital eye bed)
- Government budget on health
 - 92,319 million bath/yr. (35 \$US /person)

Basic healthcare infrastructures & facilities

- Important facilities, equipment
 - Provincial hospital has equipped with necessary instrument for cataract surgery , Glaucoma surgery (secondary + tertiary care)
 - Ophthalmologist in 92 hospitals
- Healthcare system
 - Health center – community hospital – provincial hospital – regional hospital + university hospital

Human resource in healthcare (2005)

- **Ratio of ...per population**
 - Doctors = 1:3305
 - Nurses = 1: 652
 - Technical Nurse = 1: 3085
 - Pharmacists = 1:8432
 - Dentists = 1 :15143
 - **Number of... per population**
 - Ophthalmologist = 793
 - ophthalmologist per population ratio = 1: 85,000
 - Oph. Nurses = 707
 - Ratio 1: 95,000
- Subspecialty training
- Cornea
 - Glaucoma
 - Retina
 - Pediatric strabismus
 - Orbit and Oculo-plastic

Human Resources Development

Human Resources Development

- Current Situation
 - Eye Doctor and Population Ratio
 - 1: 85,255
- National Target
 - Eye doctor and Population ratio
 - 1: 100, 000

Human Resources in Eye Care

Category	Number	Health workers/population ratio
Ophthalmologists	793	1:85,255
Certified Ophthalmic Nurses (MLP/EC)	707	1:95,626

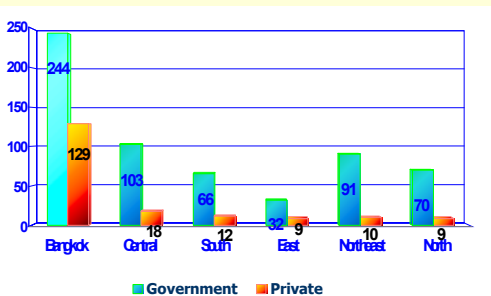
Distribution of Ophthalmologists in Thailand

Distribution of Ophthalmologists by region

Ophthalmologist	Government Sector	Private Sector	Total	Percentage
Bangkok	244	129	374	47.03
Central	103	18	121	15.26
South	66	12	78	9.84
East	32	9	41	5.17
Northeast	91	10	101	12.74
North	70	9	79	9.96
Total	606	187	793	100

ข้อมูลสืบจากรายงานวิชาการของวิทยาลัยแพทย

Distribution of Ophthalmologist in Thailand



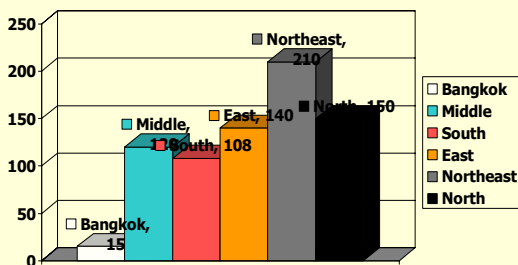
Ratio of Ophthalmologist to population

Region	Ratio	
Bangkok	1: 15,064	15
Central	1: 122,289	120
South	1: 108,111	108
East	1: 137,417	140
Northeast	1: 210,568	210
North	1: 149,902	150
Total	1: 85,255	85

Ubonratchathani 1: 864,262

Korat 1: 365,049 [1: 2,555,346]

Ratio of Ophthalmologists by region



Training Facilities in the Country

Category	Number of Institutions	Number of Trained/year
Ophthalmologists	8	30 - 40
Refraction /Strabismus & low vision nurses	1	10 -30
Ophthalmic nurses	3	30
Community eye care nurses	1	60 -100
Optometrists/ Opticians	1-2 (private section)	5-10
PHC workers trained in eye care	80	800 -1000

The Expense of Training Eye Care Personnels

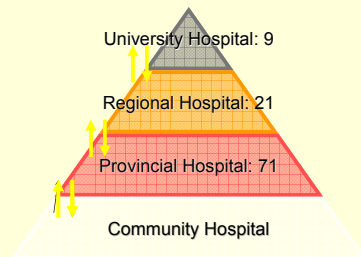
Category	Possible Number	Training cost/person
Ophthalmologist	40	\$ 12,000
Refraction Nurses	10	\$ 1000
Ophthalmic Nurses	20	\$ 2000
Community Eye Care Nurses	60	\$ 45
PHC worker trained in eye care	100	\$10

Health System Infrastructure

Health System Infrastructure : Health Care Network and Referral System

- Each District (50,000 -100,000): One District (community) Hospital
- 71 Provincial Hospitals
- 21 Regional Hospitals
- 9 University Hospitals

Health Care Network & Referral System



Infrastructures in Eye Beds

Facilities	Number of Eye Beds
Government Hospitals	2,188
NGOs Private Hospitals	approx. 1,000

National Survey of Blindness, Low vision, and Visual Impairment in Thailand 2006 – 2007

National Survey of Blindness, Low vision, and Visual Impairment in Thailand 2006 – 2007

W. Jenchitr, P. Harnutsaha, S. Rayawa, A. Nitiapinyasakul, S. Iamsirithawon, et al. Thai J PBL Hlth Ophthalmol 2007; 21; 5 - 61

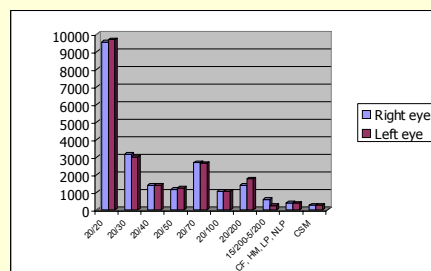
National Survey of Blindness in Thailand

Blindness Survey	Prevalence of Blindness	Most common cause	Prevalence of cataract
1 st Survey (1983)	1.14%	Cataract	47%
2 nd Survey (1987)	0.58%	Cataract	73%
3 rd Survey (1994)	0.31%	Cataract	74%
4 th Survey (2006)	0.59% (LV = 1.57%)	Cataract	52%

National Survey of Visual Impairment 2006-7

- Stratified, Cluster Random Sampling
- Probability Proportional to Size (PPS)
- Age and sex specific adjusted prevalence of blindness and low vision
- Total Population: 61,395,496 from 76 provinces
- Samples: 21,709
 - 52 districts in 21 provinces and Bangkok

Visual acuity of right and left eye of samples in TVIP



Weighted prevalence and estimated number of visual impairment in 2006

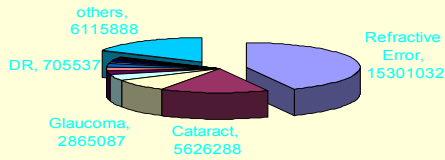
Visual impairment	Prevalence (%)	Estimated total numbers
Low Vision one eye	2.18%	1,369,362
Low Vision both eyes	1.57%	987,993
Blindness one eye	1.59%	996,040
Blindness both eyes	0.59%	369,013
Blindness one eye, low vision one eye	0.39%	242,562
Total	6.32%	3,964,970

Estimated number and prevalence of visual impairment by sex

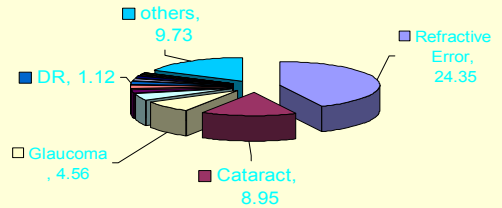
Sex	Low Vision one eye	Low Vision both eyes	Blindness one eye	Blindness Both eyes	Blindness One eye, Low Vision one eye	Total No. of visual impairment
No. of males	500,419	252,396	467,324	266,827	107,311	1,594,277
% Male	2.08%	0.93%	2.09%	1.03%	0.39%	
No. of females	868,943	735,596	528,716	102,186	135,251	2,370,692
% Female	2.33%	1.93%	1.41%	0.29%	0.39%	

Estimated number of eye disease

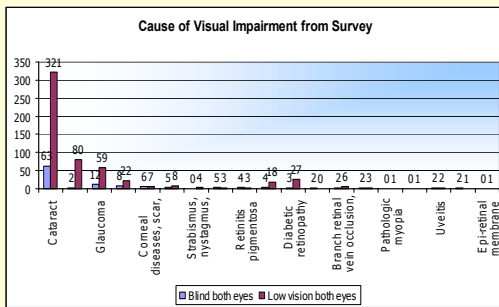
Estimated Number of Eye Disease



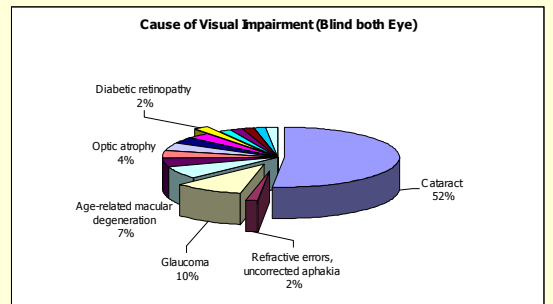
Prevalence of eye disease 2006



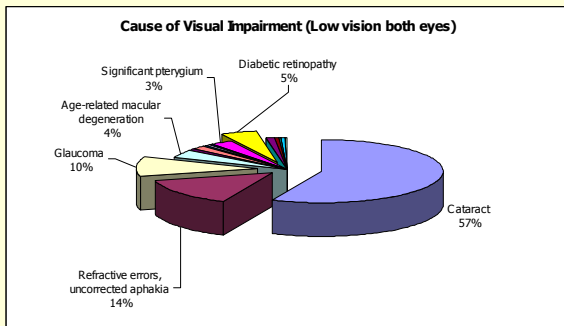
Cause of Visual Impairment from Survey



Causes of Visual Impairment (Blind both eyes)



Causes of Visual Impairment (Low vision both eyes)



SWOT Analysis

Strength

- Qualified ophthalmologist
- Ophthalmic nurses
- PHC workers
- Optometrist
- Royal college of ophthalmologist
- Tertiary care facilities
- Institute of PHD

Weakness

- National policy inconsistent
- Collaborations
- Research
- Information system

Opportunities

- National Institute of Ophthalmology
- Greater community orientation
- More equity in service provision

Threats

- Political changes
- Economic situation

Evolution of PBL in Thailand

- **Campaign Approach**
- **Primary Eye Care as part of PHC**
- **Integrated Eye Care System/HS**
- **Integrated with NCD**
- **Healthy City projects**
- **“Eye Health across the life spectrum”**

Pre- conception to after Death

- Genetic testing
 - Ante natal care
 - Intra natal care
 - Post natal and neonatal care
 - Childhood and adolescent care
 - Working age
 - Post retirement and Elderly
 - At death

Reasons for Success

- Government commitment and Policies
- Professional Commitment and Team work
- Enlightened Leadership
- Community awareness and involvement
- Strong Primary Health Care approach
- Appropriate Work force development
- Good Referral system
- Monitoring and evaluation