

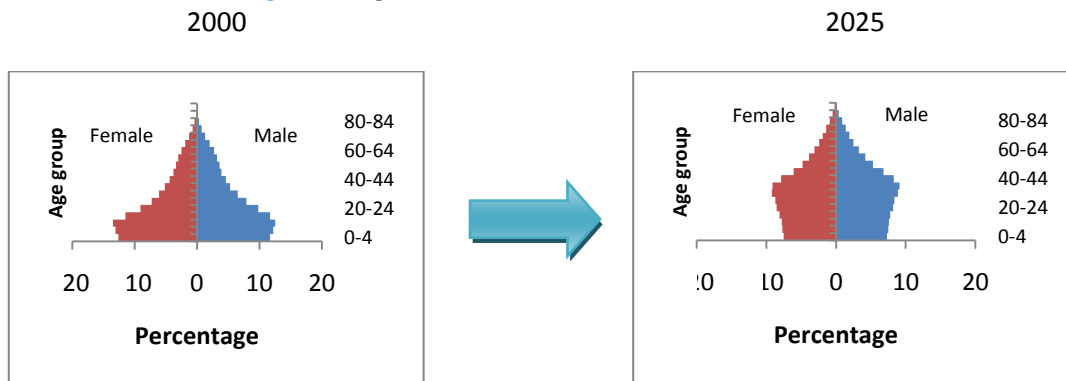


NON-COMMUNICABLE DISEASES (NCDs)¹ IN BHUTAN

This policy brief is based on the World Bank's recent publication: *Capitalizing on the Demographic Transition: Tackling Non-communicable Diseases in South Asia (2011)*. It assesses the NCD burden and develops policy options at both country and regional levels.

- ✓ **Bhutan is at an early stage of the demographic transition**, where older age groups begin to gradually make up a larger share of the population. By 2025, it is expected that the proportion of the population 65 years and older will increase from 4.4% in 2000 to 7.3% (Figure 1). The prevalence of NCDs increases with age and thus the burden of disease caused by NCDs will also rise.

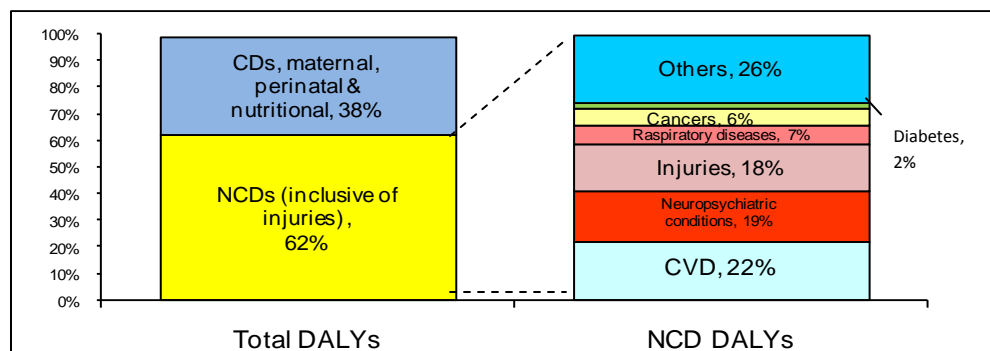
Figure 1: Age structure in Bhutan, 2000 and 2025



Source: U.S Census Bureau, www.census.gov/ipc accessed July 1, 2010

- ✓ **NCDs have become the largest health challenge in Bhutan.** In terms of the number of lives lost due to ill-health, disability, and early death (DALYs),² NCDs (inclusive of injuries) account for 62% of the total disease burden while 38% is due to Communicable Diseases, Maternal and Child health, and Nutrition all combined (Figure 2).
- ✓ **The major NCDs in Bhutan are cardiovascular diseases (CVD), Mental health (neuropsychiatric conditions), injuries**, and to a lower extent, respiratory diseases, cancer, and diabetes (Figure 2). Ministry of Health assessments, using primarily institution-based patient diagnoses, find increasing trends for hypertension, diabetes, and cancer.
- ✓ **The cost of health care due to NCDs in Bhutan is rapidly increasing.** Bhutan refers patients that cannot be treated in-country for treatment abroad. Most of these suffer from NCDs. The number of patients referred has increased by 15% annually the last 3 years.

Figure 2: Pattern of overall DALYs (age standardized) and NCD related DALYs in Bhutan, 2004



Source: WHO Global Burden of Disease http://www.who.int/healthinfo/global_burden_disease/estimates_country/en/index.html

BHUTAN'S RESPONSE TO NCDs

POLICY AND PROGRAMS

Bhutan adopted a National Policy and Strategy Framework on Prevention and Control of NCDs in December 2009. The policy takes a holistic approach of primary prevention and provision of care and treatment services. The implementation of the policy is overseen by a National Steering Committee for Lifestyle Promotion and Prevention of NCDs formed in 2010. The Ministry of Health launched the ***Life Style Related Diseases Program*** in 2008 to conduct NCD-related activities, but funding has been limited.

There has been greater success in injury prevention and monitoring with the disability prevention program. The program trains health workers to educate and motivate the public on using seatbelts, motorcycle helmets, and blood alcohol tests for drivers. School children also receive information on road safety.

Bhutan has stronger tobacco control policies than other neighboring countries. In 2004, following the adoption of the Framework Convention on Tobacco Control, a comprehensive tobacco ban (the Tobacco Control Act) including imports, sales, and all forms of advertising was put in place. However, the Act lacked the legal framework to enforce the ban and was thus ineffective. A new Act was passed by Parliament in June 2010 that more clearly specifies violations and penalties for violators. Implementation is set to begin in January 2011. The Act is an attempt to control smuggling and commercial sales. It restricts smoking in offices, monasteries, transportation facilities, and all public gathering places. Pro-tobacco messages still come through advertising by foreign television programs and print.

HEALTH SERVICE DELIVERY

Bhutan is gradually integrating NCDs prevention and treatment into its primary care system. Treatment of several NCDs is referred abroad for tertiary care. Cancers, chronic rheumatic heart disease and renal failure are the top three conditions referred abroad.

Still, the country has not developed a sustainable strategy to develop health professionals' skills in NCDs. The basic health units that deliver primary health care consist of a health assistant, an assistant nurse midwife and a basic health worker. NCD training is not included in the Village Health Worker program. More generally, ***chronic shortages of health care professionals in the country are particularly felt for NCDs.*** In 2009, fewer than 10 physicians had specialized training in NCDs (training was obtained from India and Thailand). Currently no in-country training facility for NCDs nor institutionalized international exchange programs are available to address training gaps.

The lack of data specific to NCD-related drug use makes it hard to gauge their accessibility. Although an Essential Drugs Program was established in 1987 to monitor and evaluate the use of drugs, it was not adequately implemented. In response, the National Drug Policy was revised in 2007 to address weaknesses. However, to date, a system is yet to be put in place to monitor use and stock levels of essential drugs. Key NCD drugs are included.

Pilots for treating NCDs have recently been conducted. The World Diabetes Foundation supported a ***five-year pilot project (2005–2009) for diabetes***, which seeks to strengthen knowledge on diabetes among health care staff and improve access to proper diabetes care. Also, the World Health Organization is supporting a ***six-month pilot in two districts for community and clinic-based NCD prevention and treatment*** using multiple locally adapted protocols from the Package of Essential NCD (PEN) Interventions. The protocols cover cardiovascular disease, diabetes, cancer, and chronic obstructive pulmonary disease. The pilot is to be completed in 2010.

SURVEILLANCE

Bhutan's health surveillance system presents major gaps for NCDs. The current vital registration system collects mortality

information only from those who die within health care facilities. However, no data on NCDs and their risk factors are collected systematically and there is no information on complications, quality of health care, or health expenditures for NCDs. Nevertheless some surveys collecting data on alcohol, tobacco and other drugs associated with substance abuse have been collected. These include a Mental Health Survey in 2002, participation in the

Global Youth Tobacco Survey, in 2004, a WHO STEPS survey of NCD risk factors and prevalence among Thimphu residents, in 2007, a General Population Survey in 2006, a National Knowledge, Attitudes and Practice Survey of Youth and Uniformed Services in 2009, and efforts to develop a cancer registry.

POLICY OPTIONS FOR BHUTAN

RETOOL HEALTH SERVICES DELIVERY

Bhutan should assign greater priority to the development of NCDs-related skills among its health workforce. Both the number of worker and the type of skill sets need to be expanded. Facilities need to be equipped with basic diagnostic and management infrastructure; essential NCD drugs could be made better available and accessible – especially for the poor.

ADEQUATELY RESOURCE AND IMPLEMENT THE NATIONAL NCD POLICY OF 2009

The government and major stakeholders should quickly finalize and approve the draft national NCD policy. Once approved, they will need to resource it adequately.

STRENGTHEN ENFORCEMENT OF THE TOBACCO CONTROL ACT AND LEGISLATION

REGULATING USE OF ALCOHOL

While the tobacco ban and alcohol related restrictions are commendable, the government should place greater emphasis on their enforcement.

EVALUATE PROGRAMS AND POLICY

An objective evaluation of the tobacco policy and the two NCD pilots would provide an evidence base for future efforts.

DEVELOP A NATIONAL NCD SURVEILLANCE SYSTEM

While some initial efforts are evident, little has been done towards a national system. Vital registration for mortality could be expanded beyond hospitals. Surveillance of morbidity and risk factors could also be institutionalized. Particularly, Bhutan could expand its risk factor surveillance system to cover alcohol and betel nut use. In parallel, the government could also prepare a strategy for injury surveillance. To put in place this type of more comprehensive Surveillance system, both public and private institutions will need to be tapped.

PARTICIPATING IN REGIONAL COLLABORATION

Bhutan could participate further in regional efforts to prevent and control NCDs. Actively participating in regional collaboration on NCDs prevention and control would be beneficial. Bhutan could particularly share its experience with tobacco taxes and tobacco ban with regional countries. Other promising areas for regional cooperation include:

- Strengthening tobacco anti-smuggling measures
- Standardizing and mandating food labeling policy to improve knowledge and awareness of food composition
- Collaborating on group purchasing of essential medications to increase their access and affordability
- Establishing a regional health technology assessment institution to improve the comparative effectiveness of interventions for NCDs and other conditions
- Using regional education and training capacity to complement the national needs for human resources in order to improve both staffing and skill levels

- Establishing a regional network of surveillance and burden assessment to improve national capacity through
- Knowledge sharing and experience exchange

Notes

¹ Non-communicable Diseases (NCDs) are defined by World Health Organization to include chronic diseases, principally cardiovascular disease, diabetes, cancer, and asthma/chronic pulmonary disease (COPD), in addition to injuries and mental illness.

² Disability Adjusted Life Years (DALYs) are defined by World Health Organization as “the sum of years of potential life lost due to premature mortality and the years of productive life lost due to disability.”