

Nicaragua is located in Central America, bordering Honduras on the north and Costa Rica on the south. It covers an area of I 30,373.47 km² in three geographical regions: the Pacific region (15.2% of the territory and 54% of the population), the Central region (28.4% of the territory and 32% of the population), and the Atlantic region (56.4% of the territory and I 4% of the population). Nicaragua is a democratic, participatory, and representative republic with four branches of government: the legislative (unicameral), executive, judicial, and electoral. Its capital is Managua, and its political/administrative divisions include I5 departments, 2 autonomous regions, and I53 municipalities.

Selected basic indicators, Nicaragua, 2006-2010.

Indicator	Value
Population 2010 (millions)	5.9
Poverty rate (%) (2009)	44.7
Literacy rate (%) (2010)	96.6
Life expectancy at birth (years) (2010)	74.5
General mortality rate (per 1,000 population)	
(2007–2009)	4.9
Infant mortality rate (per 1,000 live births) (2006) Maternal mortality rate (per 100,000 live births)	29.0
(2010)	64.7
Physicians per 1,000 population (2010)	0.6
Hospital beds per 1,000 population (2009)	0.8
DPT3 immunization coverage (%) (2009)	98.0
Births attended by trained personnel (%) (2010)	70.8

Nicaragua's constitution established a democratic, participatory, and representative republic. The country is currently going through a process of consolidating peace, strengthening democracy and the exercise of freedom, and economic stabilization. As a young democracy, it is in the process of developing public and private institutions. It has developed a health policy that promotes the multisectoral treatment of health risks and problems, expanding coverage by providing free health care, and improving the quality of services.

MAIN ACHIEVEMENTS

HEALTH DETERMINANTS AND INEQUALITIES

Indigenous populations and ethnic communities constitute 8.6% of Nicaragua's total population. There are 10 indigenous populations: 6 in the Atlantic region and 4 in the Pacific, Central, and northern regions. The social and health indicators of these groups reveal higher levels of vulnerability and risk than are present in the rest of the population.

During the 2006–2010 period, illiteracy nationwide declined to 3.4%, although illiteracy in the indigenous population above the age of 10 was 25%. The net primary school enrollment rate increased from 86.4% in 2006 to 92.8% in 2010, and for formal

early education the rate increased from 55.3% in 2007 to 56.1% in 2010.

In 2010, the economically active population increased by 290,138 individuals over its 2009 level (women represented 65% of the increase and men 35%). Between 2005 and 2009, the extreme poverty rate dropped by 2.6%, and the general poverty rate by 5.8%. In 2009, the poor population represented 44.7% of the total population; 35% were living in poverty, and 9.7% in extreme poverty. In the country's rural areas, 67.8% of households were poor.

THE ENVIRONMENT AND HUMAN SECURITY

In 2004, drinking water services covered 95.1% of households in urban areas and 48.5% in rural areas. By 2008, these figures had risen to 98% in urban and 68% in rural areas. In 2008, 63% of urban households had access to sanitation services. In 2007, 66% of urban and 35% of rural households had waste collection coverage.

HEALTH CONDITIONS AND TRENDS

There was a reduction in infectious diseases, maternal and child health problems, and premature mortality in the 2006–2010 period. Between 2000 and 2009, 996 deaths related to pregnancy, childbirth, and the puerperium were reported. In 2010, 89 maternal deaths were reported, and between 2006 and 2010 the maternal mortality rate dropped from 90 to 64.7 deaths per 100,000 live births.

Nicaragua's National Health Plan for 2004-2015

The National Health Plan is the instrument guiding the implementation of the National Health Policy for the 2004–2015 period. The Plan is based on a set of health priorities along with certain challenges that the sector must meet. It defines the results hoped for, as well as the operational aspects of the strategies and interventions to be conducted by the institutions and organizations of the health sector and health system.

The National Health Plan establishes goals for the population's health that correspond to those of the National Development Plan, the Millennium Development Goals, and the targets of the Strengthened Growth and Poverty Reduction Strategy. The central premises behind the selection of the National Health Plan's strategies and interventions come from three specific areas: the legal framework of the health sector, the National Health Policy for 2004–2015, and a broad process of consultation with the stakeholders who have an influence on the health sector, all of which help to strengthen the sectoral and intersectoral approach that is necessary to address the health situation.

Chronic malnutrition in children under age 5 declined from 25.8% to 21.7% between 2001 and 2006. Between 1998 and 2006, mortality in children under 5 declined from 72 to 35 per 1,000 live births, while the infant mortality rate declined from 58 to 29 per 1,000 live births. Between 2007 and 2009, there was an 8% reduction in deaths of children under 5 (from 2,249 to 2,068), while deaths of children under the age of 1 declined by 9.13% (from 1,947 deaths to 1,759).

Malaria is in the pre-elimination phase, and preparations are under way to

certify qualifying municipalities as being free from transmission. The annual parasite index moved from 0.56 per 10,000 population in 2006 to 0.10 per 10,000 population in 2010. In 2010, the mortality rate from dengue was 0.15 per 100,000 population, and the case-fatality rate from severe dengue was 26%.

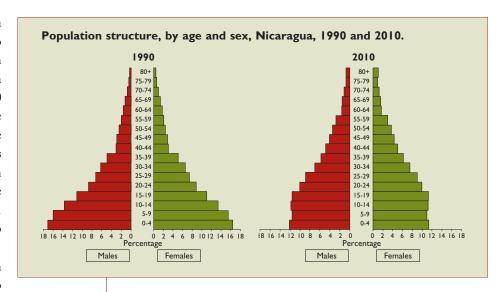
No cases of poliomyelitis, diphtheria, measles, or rubella were reported between 2006 and 2010.

HEALTH POLICIES, THE HEALTH SYSTEM, AND SOCIAL PROTECTION

Nicaragua's national health policy promotes the multisectoral treatment of health risks and problems. The policy also supports expanding free coverage and improving the quality of services through the use of the Family and Community Health Model and the Citizen Model. National Participation The Human Development Plan for 2008-2012 and the National Health Policy for 2007-2011 call for expanding coverage and improving the quality of health services. The National Health Plan for 2004-2015 endeavors to guarantee the right to health by providing equitable, universal, and free access to public health services.

The annual health budget was US\$ 186.8 million in 2010, an increase of 33.5% over 2006. It should be noted that 64.2% of this amount was treasury income, 11.8% was donations, 9.2% was from the World Bank, 7.8% was from the Paris Club, and 2.2% was from the Inter-American Development Bank.

In 2010, the Ministry of Health had 27,294 employees, and there were 5.6 physicians, 4.4 nurses, and 6.4 nursing assistants per 10,000 inhabitants. The



number of openings for the education of specialized physicians increased from 50 in 2006 to 300 in 2010.

The national drug policy promotes free access to essential drugs and the use of generics, in accordance with the National Strategic Plan for the rational use of drugs. In 2010, the country had 1,563 pharmacies.

Knowledge, Technology, and Information

Currently, the National Health Library is the principal source of health information. Advances have been made in strengthening the Virtual Health Library in order to enhance information access.

In 2007–2008, a center for advanced technology was established, and in 2010, 6 new primary care hospitals and 14 hospitals at the departmental or national reference level were equipped.

A pilot project was launched to connect 45 sites (departmental headquarters, hospitals, and municipal health centers) in remote areas.

MAIN CHALLENGES AND PROSPECTS

There are inequalities associated with health determinants that particularly affect Nicaragua's ethnic communities. Poor housing conditions exist for 71% of the Miskito and 82% of the Sumo populations, as compared with 65% of the general population. Overcrowding affects 62% of the Miskito compared to 38% for the country as a whole. Electrical service is lacking for 62% of the Miskito, 90% of the Mayagnas, and 100% of the Rama, as compared with

28% for the country as a whole. Moreover, 47% of the Miskito do not have accessible roads in the rainy season, as compared with 27.3% for the nation.

Annual deforestation is estimated to amount to 70,000 hectares annually. Firewood is used for cooking by 59% of households, which represents annual consumption of 2 million cubic meters of wood. Bosawas, the country's largest forest and biodiversity preserve, lost 32% of its forest cover between 1987 and 2010 due to the lack of a land use policy that would fund agricultural production alternatives and limit the migration of subsistence farmers in search of fertile land.

Nicaragua is subject to natural disasters that represent major financial and material costs, as well as taking human lives. Between 1990 and 2009, economic damage from natural disasters totaled US\$ 2.746 billion. During that period, 61 events were recorded that affected 3.5 million people and caused 17,000 deaths.

Malignant neoplasms, ischemic heart disease, cerebrovascular disease, diabetes, and chronic renal failure are the principal causes of death in Nicaragua. These are diseases with high mortality rates and are responsible for premature deaths. Between 2007 and 2010, these health problems were responsible for 44% of the 72,862 reported deaths (51% of male deaths). During this period, morbidity from ischemic heart disease increased by 11%, cerebrovascular disease by 15%, hypertensive disease by 13%, and heart failure by 3%. There were 18,090 deaths from cardiovascular disease between 2007 and 2010. Also during this period, 5,673 deaths from diabetes were reported, of which 69% were in those 60 years and older, 57% were women, and 79% lived in urban areas. There were 9,042 reported cancer deaths, also in the 2007-2010 period. Fifty-three percent of these deaths were women, 57% were over age 60, and 38% were in the 20-59-year age group.

Chronic malnutrition in children under age 5 persists in rural areas and is twice that of children in urban areas. The risk of malnutrition is 3.4 times greater

for children of mothers who have three or fewer years of education, and 6 times greater in the poorest quintile of the population compared to the wealthiest.

The incidence of HIV infection increased from 7.6 per 100,000 population in 2006 to 16.2 per 100,000 in 2010. The number of HIV tests administered increased from 59,995 to 123,547 between 2005 and 2009, and the proportion of children and adults with HIV who were undergoing antiretroviral treatment rose from 44% in 2007 to 65% in 2009.

Accidents and violence continue to be an important public health problem. There were 107,587 traffic accidents in the 2006–2010 period, with 2,680 deaths and 24,678 injuries. The number of traffic accidents increased 55% during this period, while injuries from traffic accidents rose by 56% and deaths by 21%.

Morbidity and mortality associated with pregnancy, childbirth, and the puerperium, as well as neonatal and infant mortality, should be given high priority. External causes including violence, suicide, and traffic accidents merit special attention. The epidemiological profile of the country is highly complex, and will require effective multisectoral interventions.

The health sector's organization and operation are currently highly fragmented. The network of facilities has major limitations in terms of structure and process, and underreporting in the information system is a constant. All of this affects the capacity of the Ministry of Health to provide effective leadership.

Difficulties in accessing virtual health information and communication persist in several areas of the country.

The main challenge that the country faces is to consolidate and strengthen a participatory democracy that supports the current economic productive model. This will make it possible to maintain political and financial backing for activities that target social sectors where development is lagging, particularly as regards education and health.