

Cuba



Cuba is an archipelago that encompasses the island of Cuba, Isla de la Juventud, and some 1,600 small islands and keys, for a total territory of 110,860 km². It is located in the Caribbean Sea at the entrance to the Gulf of Mexico. Cuba has a tropical climate and is vulnerable to natural disasters, particularly hurricanes and tropical storms. It is a socialist state that is governed as a united, democratic republic. The capital is Havana, and the country is divided into 14 administrative provinces and the special municipality of Isla de la Juventud.

The Republic of Cuba is a socialist state where all citizens have free, universal access to health and education. The national health system has a network of comprehensive and integrated services based on primary care and on the family doctor and nurse model. The work of the health system is directed toward health promotion, prevention, and treatment of disease, as well as the recovery of health.

MAIN ACHIEVEMENTS

HEALTH DETERMINANTS AND INEQUALITIES

The State directs its efforts toward reducing inequalities and ensuring full and universal access to health programs. Vulnerable groups such as the disabled or those who are socioeconomically disadvantaged are protected and provided benefits. Education is guaranteed up to the ninth grade, as is access to advanced studies.

THE ENVIRONMENT AND HUMAN SECURITY

Cuba has promoted and signed agreements resulting from summits and meetings on the environment. It manages the protection of water, air, the soil, flora, fauna, and all other elements of the natural environment. The country is addressing the effects of climate change with comprehensive research and technological programs and projects in which 17 institutions participate.

Human security in the country is ensured through equal opportunity for each of its citizens. Improved water sources are available to 92% of the population. The supply of treated water increased from 96.8% in 2006 to 98.8% in 2010. The population living in households with access to adequate sanitation facilities is 96%.

HEALTH CONDITIONS AND TRENDS

Mortality among children is low and life expectancy is high. Infant mortality declined 18% during the 2006–2010 period. Mortality of children under 5 declined from 7.1 to 5.7 per 1,000 live births, with a survival rate of 99.4%. Mortality among adolescents (10–19 years old), whose care is a priority, declined from 0.4 to 0.2 deaths per 1,000 population during the period.

By and large, communicable diseases have been controlled. The National Strategy for Integrated Dengue Management has undertaken multisectoral activities, has strengthened monitoring and vector control, and has

Selected basic indicators, Cuba, 2008–2010.

Indicator	Value
Population 2010 (millions)	11.2
Literacy rate (%) (2009)	99.8
Schooling rate (%) (2009)	98.2
Life expectancy at birth (years) (2010)	78.8
General mortality rate (per 1,000 population) (2009)	7.7
Infant mortality rate (per 1,000 live births) (2010)	4.5
Maternal mortality rate (per 100,000 live births) (2009)	46.9
Physicians per 1,000 population (2008)	6.6
Hospital beds per 1,000 population (2010)	5.9
DPT3 immunization coverage (%) (2010)	96.0
Births attended by trained personnel (%) (2009)	99.9

increased the capacity and diagnostic quality of laboratories, all of which contributed significantly to reducing levels of *Aedes aegypti* infestation. In 2010, 116 imported cases of dengue were reported; 86% of municipalities are classified as negative- or low-risk for dengue.

The immunization program protects against 13 preventable diseases, and 5 of them have been eradicated (poliomyelitis, diphtheria, measles, whooping cough, and rubella). In addition, neonatal tetanus, tubercular meningitis in children under 1 year old, congenital rubella syndrome, and post-mumps meningoencephalitis were eradicated. Hepatitis B and meningococcal meningoencephalitis have been reduced. There have been no cases of human rabies reported since 2010. The number of cases of human leptospirosis has declined.

In 2010, the total number of cases of HIV infection was 12,217, and 83.2% of the infected individuals were living. The highest-risk group is men who have sex with men. From 2006 to 2010, the estimated incidence of HIV in the 15–49-year age group was 0.1%. The number of HIV tests administered increased over the period, and the lives of people who received antiretroviral therapy were prolonged. Syphilis and gonorrhea incidence rates declined in the 2006–2010 period.

There is a program to prevent oral diseases; 91.2% of people kept all of their teeth up to age 18.

HEALTH POLICIES, THE HEALTH SYSTEM, AND SOCIAL PROTECTION

Social policy aims to increase the level of development and social welfare, eliminate inequities, and enforce the rights

Challenges for the Health System

Population aging, stagnant growth, and increased life expectancy present major challenges for the Cuban health system.

Health programs and the services network deliver what is needed to support good health indicators for the Cuban population. Sufficient and specialized human resources, continuous research, and access to medical, diagnostic, and therapeutic equipment and supplies that are produced nationally together contribute to a solid national health system. The sector's main challenges are the sustainability and efficiency of the system, which can be achieved through health promotion, disease prevention and surveillance, strengthening of the decentralized, streamlined, and regionalized services network, and improving economic efficiency.

Cuba has used various strategies to protect and benefit the elderly population, setting up community centers known as Grandparent Circles, as well as expanding the medical geriatric specialty and other professions. Under this system, family doctors provide comprehensive home and institutional care with the support of multidisciplinary geriatric care teams.

of all citizens to basic nutrition, health, education, and income. Free and universal access to health services is guaranteed, including the most complex and expensive medical treatments. The Ministry of Public Health is the regulatory entity for health policies, regulation, and management of health programs and services.

The health system is structured at three territorial levels (national, provincial, and municipal) and three levels of care in a network of specialized, decentralized, and regionalized services, starting with primary health care,

which covers the entire population. The Regulatory Bureau for the Protection of Public Health establishes and guarantees compliance with regulations in terms of medical supplies and equipment, monitors practices, and accredits and certifies the health units.

Total health expenditure as a percentage of the gross domestic product (GDP) increased from 7.7% to 11.9% in the period from 2006 to 2010. Annual per capita health expenditure increased from 321.79 pesos to 439.47 pesos over the same period.

The country contributes to the training of human resources and the organization of programs and health services in several regions, especially the Region of the Americas.

KNOWLEDGE, TECHNOLOGY, AND INFORMATION

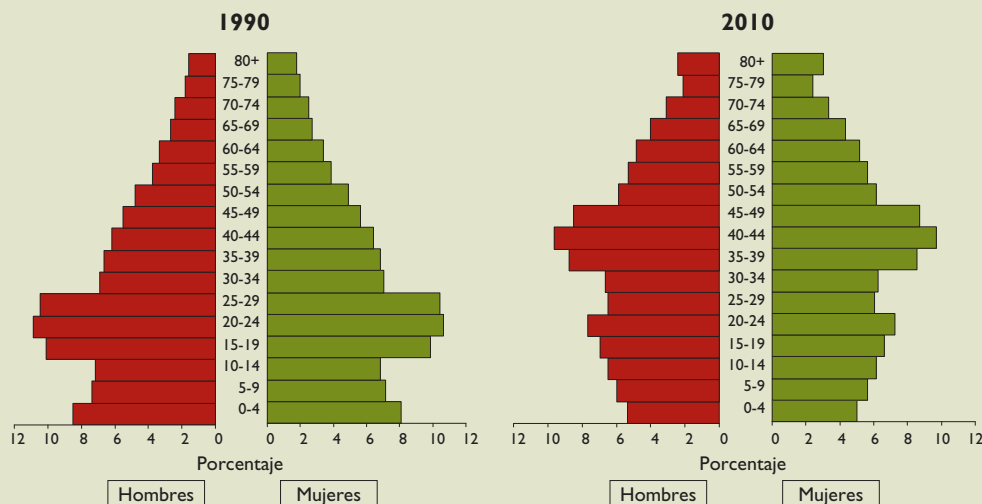
Cuba has science, technology, and innovation agencies, as well as research institutes and centers. There are programs for international collaboration and assistance with regard to health under normal conditions and for disasters. The national health system continues to move forward with information technology and with strengthening the connectivity between institutions, with a patient-based emphasis.

MAIN CHALLENGES AND PROSPECTS

The State directs its efforts toward reducing inequalities and ensuring full and universal access to health programs and actions in order to improve the quality of life and well-being of the Cuban people. In provinces, municipalities, people's councils, and districts, inequalities are identified and strategies are applied to address them at the community, family, and individual levels. Addressing excess male mortality is a priority.

Mitigation of and adaptation to climate change is addressed from the perspective of an island nation, and although the environmental situation is favorable, problems have been identified such as soil degradation,

Population structure, by age and sex, Cuba, 1990 and 2010.



reduction of forest coverage, pollution, loss of biodiversity, and water scarcity.

The country has a road safety code and a program for accident prevention. Road accidents increased from 9,710 in 2006 to 10,371 in 2009. The number of related injuries did not change, but deaths declined. Between 2006 and 2010, mortality from self-inflicted injuries rose from 12.2 to 13.7 per 100,000 population, while mortality due to assault declined from 5.1 to 4.5 per 100,000 population.

The population 60 years old and older represents 17.6% of the total population. As a result of the demographic shift toward more advanced ages, 80% of mortality is concentrated in the population group older than 60.

Chronic, noncommunicable diseases are responsible for 84% of deaths. Accidents, self-inflicted injuries, and assaults represent 8% of deaths, while the remainder (8%) are due to communicable diseases, maternal causes, conditions stemming from the perinatal period, and nutritional diseases.

Cardiovascular diseases, which are the leading cause of death, increased 10% between 2006 and 2010, with a mortality rate of 211.8 per 100,000 population in 2010. Malignant neoplasms, the second leading cause of death, increased 11% in the period from 2006 to 2010 and are the leading cause of years of potential life lost. Cerebrovascular diseases are the third leading cause of death, accounting for 11% of total deaths; the rate of these diseases increased from 74.2 per 100,000 population in 2006 to 86.9 in 2010. Mortality from dementia and Alzheimer's disease increased during the same period, from 22.3 to 33.0 per 100,000. Problems that generate the most demand for mental health care are depression, anxiety, sleep disorders, delusional disorders, and behavioral problems.

The three leading locations for cancer are the trachea, bronchia, and lung for both sexes. Mortality from lower respiratory disease increased by 13% in the 2006–2010 period, with a greater share among older adults.

Mortality from accidents increased by 12% in the same period (although it declined at the end of the period).

The incidence of hypertension is 30.9% in the population over 15 years of age. The proportion of the population that is overweight is 30% for both sexes; 14% of the population is classified as obese. The incidence of diabetes was estimated at 40.4 per 1,000 population in 2010, an increase of 18% compared to 2006. Mortality from this disease also increased.

With respect to communicable diseases, the incidence of leprosy continues to be stable, with an average of 240 cases annually, for a rate of 2.2 new cases per 100,000 population. There has been intensified surveillance and monitoring of contacts of leprosy patients. Surveillance of acute respiratory infections intensified as a result of the influenza A(H1N1) pandemic. The influenza vaccine is administered to vulnerable groups (14% of the population).

Communicable diseases have been controlled, although environmental conditions and the risk behaviors that contribute to them persist. Chronic, noncommunicable diseases and other health disorders are the principal causes of morbidity, disability, and death; they are associated with the population structure as well as with lifestyles and living conditions (tobacco consumption, alcohol, diet, accidents, and sexual relations without protection).

Among the most important challenges facing the health sector are teenage and unwanted pregnancies, maternal mortality, morbidity and mortality due to cancer, and the need for sustainability and efficiency of the health system.

In 2010, a process of reform and reorganization of services began in order to increase their effectiveness, efficiency, sustainability, and quality. The process is directed toward improving the health status of the population and satisfaction with services, supporting strategies for education and training of professionals and technical personnel, and meeting commitments for international collaboration, among others.