

Antigua and Barbuda is located north of the Leeward Islands in the eastern Caribbean. It comprises three islands: Antigua (280 km²), Barbuda (160 km²), and Redonda, a small, uninhabited island (1.6 km²). The islands are of volcanic origin, with mostly flat terrain. Antigua and Barbuda gained its independence from the United Kingdom in 1981, and is a member of the Commonwealth of Nations and the Organization of Eastern Caribbean States. The capital is Saint John's and its political and administrative divisions include six parishes and two dependencies (the islands of Barbuda and Redonda).

Between 2006 and 2010, Antigua and Barbuda made progress in health outcomes in various areas, despite experiencing a decline in gross domestic product (GDP) that resulted from the 2008 global economic crisis.

During this period, there was a reduction in the crude, maternal, and infant mortality rates and an increase in life expectancy. Moreover, the burden of communicable diseases declined owing to prevention policies as well as an expansion of immunization coverage.

The country has significant challenges in terms of reducing inequities, addressing the increase in cardiovascular diseases, and ensuring the quality of health services.

MAIN ACHIEVEMENTS

HEALTH DETERMINANTS AND INEQUALITIES

Gross national income (GNI) per capita in 2009 was US\$ 17,670 (adjusted in accordance with purchasing power parity). According to a 2007 survey on living conditions, 18.3% of the population was living in poverty (14.6% non-indigent poor and 3.7% indigent). In addition, 10% of the population was in vulnerable economic conditions. The poverty level on the island of Barbuda declined to 10.5% in 2007.

Access to education has improved and the country has achieved universal primary education, thus meeting Millennium Development Goal 2. For the period 2009–2010, net enrollment at the country's primary schools was 80.1% and the adult literacy rate reached 99%.

In terms of gender equity and women's rights, several initiatives have been carried out to reduce genderbased violence.

THE ENVIRONMENT AND HUMAN SECURITY

The country's vulnerability as a small island state has led authorities to take steps to adapt to environmental changes. Among these measures are improving response capacity to natural disasters, establishing an institutional basis for managing the effects of climate change, and executing a comprehensive plan for water utilization.

HEALTH CONDITIONS AND TRENDS

Life expectancy at birth increased, reaching 77.4 years for women and 73.3 years for men in 2010. The crude death

Selected basic indicators, Antigua and Barbuda, 2007–2011.

Indicator	Value
Population 2011 (thousands)	88.0
Poverty rate (%) (2007)	18.3
Literacy rate (%) (2009)	99.0
Life expectancy at birth (years) (2011)	75.5
General mortality rate (per 1,000 population)	
(2010)	4.9
Infant mortality rate (per 1,000 live births)	
(2008)	17.4
Physicians per 1,000 population (2010)	1.2
Hospital beds per 1,000 population (2010)	2.2
DTP3 immunization coverage (%) (2010)	98
Births attended by trained personnel (%) (2009)	100

rate declined from 5.82 per 1,000 population in 2006 to 4.86 in 2010. Likewise, infant mortality has continued to decline (17.4 per 1,000 live births in 2008).

With regard to maternal health, considerable progress has been achieved in prenatal care services, which covered 100% of pregnant women during this period.

The Expanded Program on Immunization (EPI) achieved 100% coverage of the country's infants.

The aforementioned achievements have been accompanied by sanitation and environmental health improvements, which have led to a decrease in the burden of communicable diseases. Vector-borne diseases, such as dengue and leptospirosis, have remained at endemic levels.

Free antiretroviral drugs are provided to patients with HIV and to pregnant women who are HIV-positive as a part of the national program for the prevention of mother-to-child transmission of HIV.

HEALTH POLICIES, THE HEALTH SYSTEM, AND SOCIAL PROTECTION

Although no structural reforms have been made to the health system in recent years, significant progress has been made in terms of public-sector planning. In 2007 an institutional plan was prepared covering the period 2008–2010, which established the priorities for the health sector.

Available resources to finance the sector have increased in recent years, although health expenditure as a percentage of GDP has fluctuated, representing 8.8% in 2008, 10.2% in 2009, and 7% in 2010. Financing for the sector was obtained from various donor agencies and international organizations.

Study of Adolescent Eating Habits

A cross-sectional survey on nutritional knowledge, practices, and iron intake among adolescents was carried out in 2006 among the country's secondary school student population. Prior to this study, such information was only available for young children and pregnant women.

The survey, which was conducted by the Ministry of Health in collaboration with the Caribbean Food and Nutrition Institute and the Brescia University College (affiliated with the University of Western Ontario, Canada), made it possible to identify the percentage of these students who were overweight, to collect information on adolescent eating habits, and to evaluate the students' basic knowledge about nutrition.

The study has already proven beneficial for the young people of Antigua and Barbuda. Targeted interventions have been carried out to address problems detected in the survey and some schools are using teaching materials promoting an iron-rich diet and healthy lifestyles. An evaluation of this intervention shows that the students have improved their knowledge of nutrition and that eating habits are beginning to improve.

With regard to the organization of service delivery, the country focused on primary care as the core strategy to ensure that the population had adequate and equitable access to health care. In 2009, the Mount Saint John Medical Centre was inaugurated; it provides a wide range of both secondary- and tertiary-level services.

As part of the strategies aimed at preventing cardiovascular diseases, in 2008 a program was launched to improve the health of school-age children through exercise and better eating habits. Moreover, since 31 May

2010, smoking is prohibited in all civil service offices, vehicles, and facilities.

Knowledge, Technology, and Information

Noteworthy research conducted over the reporting period includes the Global School-based Student Health Survey (GSHS) and nutrition studies conducted in collaboration with the Caribbean Food and Nutrition Institute. Moreover, projects were carried out with PAHO/WHO technical assistance to create a mental health information system for the country and a system to monitor patients with HIV/AIDS.

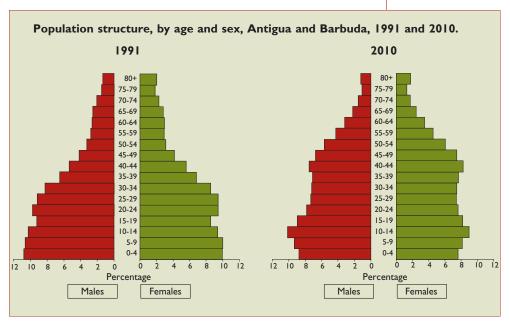
MAIN CHALLENGES AND PROSPECTS

In Antigua and Barbuda, there are disparities in the distribution of poverty by geographic region and age group. In 2007, poverty in Saint John's—the country's most urbanized city—reached 22.3%, while poverty in the parish of Saint Philip—located at the extreme eastern end of the island of Antigua—reached 25.9%. One complex problem concerns the percentage of indigent children and young people. While children from 0 to 14 years old made up 26.6% of the country's population, they accounted for 32.5% of indigents and 36.2% of the non-indigent poor.

In spite of progress with regard to sanitation, challenges persist. In 2007, the population without access to drinking water was 10.7%. In addition, 22.7% of the population resided in substandard dwellings and used pit latrines or other more rudimentary installations for excreta disposal.

Environmental conditions are unfavorable in several areas of the country. Sources of drinking water are scarce, meaning that the country primarily depends on water desalination systems and wells for its drinking water. In addition, soil erosion is a significant problem for the country.

The country was impacted by two major hurricanes between 2006 and 2010. Hurricane Omar damaged and destroyed homes and caused flooding in 2008. Hurricane Earl struck in 2010 and costs of reconstruction and other tasks associated with that event were estimated at US\$ 12.8 million.



The 2009 influenza A(H1N1) pandemic served as a warning for the country's health system. It underscored the importance of continuing to improve response capacity for this type of event, as well as implementing the International Health Regulations of WHO.

Although the disease burden in terms of communicable diseases has improved, in the 2006–2010 period mortality was mainly due to chronic, noncommunicable diseases, and this continues to be one of the main challenges facing the country. The three leading causes of death were heart disease, cancer, and diabetes. The survey on living conditions carried out in 2007 showed a high prevalence of cardiovascular disease. The results show that 37% of the sample presented with diabetes and 69.4% with hypertension.

With regard to the availability of human resources, the country has staff shortages in areas such as nursing, laboratory personnel, radiology, and environmental health. The country should take steps to strengthen the quality of individual and collective health services in areas where deficiencies have been identified.

According to the Assessment Instrument for Mental Health Systems (AIMS-WHO, 2007), the country faces various challenges with regard to legislation and developing health policy in this area.

Antigua and Barbuda relies on facilities outside the country to cover certain medical treatments. The greatest

number of resources was allocated to radiation therapy for cancer, cardiopulmonary surgical interventions, and limb prostheses. Most of these procedures were carried out in the Caribbean.

A crucial challenge for the country is the need to address the unfinished health agenda. In addition, the country needs to continue to strengthen its health system, especially primary care, using strategies for equity, social participation, and health promotion.

There are several challenges related to limitations of the health information system. These include the need to formulate and disseminate an information policy that regulates and improves procedures for the flow and coverage of data, that protects and respects confidentiality, and includes training for staff that work in these areas. The country has scant research on public health issues.

The country's institutional health plan points to specific challenges with regard to the retention, availability, and distribution of health care professionals. The plan also considers the need to increase the financing of primary care services, to expand disease surveillance, to formulate policies for quality assurance, and to improve health information systems. The epidemiological situation of the country underscores the need for policies to address the growing burden of chronic diseases.