

Puerto Rico



The Commonwealth of Puerto Rico is a self-governing territory of the United States of America. It is located in the northeast Caribbean Sea, east of the Dominican Republic and west of the Virgin Islands. The archipelago of Puerto Rico is part of the Greater Antilles, and covers a total land area of 9,105 km². It includes the largest island of Puerto Rico (which measures approximately 170 by 60 km) and a number of smaller islands, the largest of which are Mona, Vieques, and Culebra. Its climate is tropical and there are several ecosystems present on the island. The capital is San Juan, and the Commonwealth's administrative divisions encompass 78 municipalities.

Selected basic indicators, Puerto Rico, 2006–2011.

Indicator	Value
Population 2010 (millions)	3.7
Poverty rate (%) (2010)	45.0
Literacy rate (%) (2011)	90.5
Life expectancy at birth (years) (2010)	79.1
General mortality rate (per 1,000 population) (2008)	7.3
Infant mortality rate (per 1,000 live births) (2008)	8.7
Maternal mortality rate (per 100,000 live births) (2006)	4.1
Physicians per 1,000 population (2007)	2.2
Hospital beds per 1,000 population (2006)	3.1
DPT3 immunization coverage (%)	...
Births attended by trained personnel (%) (2008)	99.9

In 1952 the Constitution of the Commonwealth of Puerto Rico was approved. A system of self-government was established providing for administrative autonomy for internal affairs, but subject to United States federal laws and regulations. The delivery of services has become essentially private, with the Health Insurance Administration playing an important role. The population is covered by public or private insurance (a portion of inhabitants do not have insurance). The Department of Health safeguards the health of the population and the Government Health Plan has a model for delivery of services that contracts private insurance companies.

MAIN ACHIEVEMENTS

HEALTH DETERMINANTS AND INEQUALITIES

There was an increase in the level of education in Puerto Rico between 2006 and 2010. In 2010, 22.3% of the population aged 25 years and over had completed a bachelor’s degree and 69.5% had completed at least the fourth year of secondary education, whereas in 2006 only 20.7% had completed a bachelor’s degree and 66.1% had completed at least the fourth year of secondary education.

THE ENVIRONMENT AND HUMAN SECURITY

A project is being developed for the expansion and installation of water pumps and distribution lines in order to improve water delivery and access in different communities.

There are environmental protection measures in place such as daily inspection of water bodies and wetlands to prevent damage related to petroleum extraction. A fire in fuel tanks along the coastline in 2009 was fortunately controlled without major impacts.

There are several environmental health surveillance programs. In 2006 and 2007, the Environmental Health Program of the Department of Health conducted a total of 19,493 health inspections, the drinking water program conducted 612 inspections, and the milk hygiene program complied with 52.9% of the 1,523 planned inspections. The program for hygiene in food preparation and service establishments and the zoonosis program met 100% of the inspection goals established.

HEALTH CONDITIONS AND TRENDS

In 2006, the maternal mortality rate was estimated at 4.1 deaths per 100,000 live births. The highest rate was recorded in the 30–34-year age group (12.9 per 100,000 live births). The most common causes of death were ectopic pregnancy and presentation of placenta previa. The infant mortality rate was 8.5 per 1,000 live births in 2007 and 8.7 per 1,000 live births in 2008.

The HIV/AIDS incidence rate was 28.93 per 100,000 population in 2006, decreasing to 25.22 per 100,000 in 2007 and 23.65 per 100,000 in 2008.

Puerto Rico Observatory on Human Resources for Health

The Observatory on Human Resources for Health seeks to improve coordination and collaboration between the state and territorial health offices in order to improve the knowledge and availability of health care personnel.

There is a need to strengthen the health care workforce in order to improve health system performance. Puerto Rico does not have a centralized information system about health care personnel and there is a lack of reliable data needed for evidence-based decision making and policy making.

In order to address these issues, the Observatory on Human Resources for Health manages problems in performance and communication between health care providers, coordinates meetings, and conducts data collection and activity analysis.

The Observatory will help strengthen the human resources information system with a basic set of data and development of data collection and analysis tools.

HEALTH POLICIES, THE HEALTH SYSTEM, AND SOCIAL PROTECTION

The delivery of government health services is almost entirely privatized. The Health Insurance Administration plays an important role in the health sector, while the Department of Health safeguards the health of the population. In 2010, it was estimated that 43.8% of the population was insured by the Government Health Plan, 25.2% had private plans, 21.6% had other types of plans, and 9.4% did not have formal health insurance.

The Government Health Plan has a service delivery model known as *Mi Salud* (My Health) in which medical and hospital services are contracted with private insurance companies and provided by a primary care physician (general practitioner, family practitioner, internist, gynecologist, or pediatrician). This model provides direct access to specialists without the need for referral within a network of providers. Preventive physical and mental health services and medicines are also provided.

In December 2008 an order was issued to reduce the rising number of cesarean deliveries and promote vaginal delivery. In February 2008, public policy on administration of HIV tests in delivery rooms in Puerto Rico was approved in response to the statistics observed by the United States Centers for Disease Control and Prevention. Public policy for use of the human papillomavirus vaccine was also established. Starting in October 2008, three doses of HPV vaccine are administered routinely to girls 11–12 years of age.

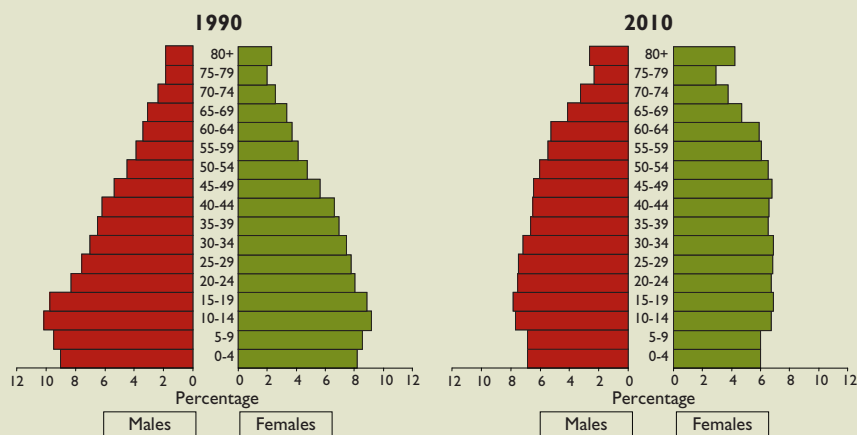
In 2007, there were 22.0 physicians, 65.9 professional nurses, and 3.9 dentists per 10,000 population. The majority of professionals (34.1%) worked in the San Juan metropolitan region.

In order to face the current challenges with regard to human resources, Puerto Rico is working on creation of the Observatory on Human Resources for Health, which is sponsored by the United States Office of Minority Health. Its purpose is to identify discrepancies with regard to the supply and demand of human resources in health.

KNOWLEDGE, TECHNOLOGY, AND INFORMATION

A Virtual Health Library was organized through the joint efforts of the Medical Sciences Campus Library and the

Population structure, by age and sex, Puerto Rico, 1990 and 2010.



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A technical cooperation agreement between PAHO and the Department of Health has allowed the development of a geospatial analysis tool using geographic information systems. The aim of this work is to strengthen national epidemiological capability (i.e., situation analysis, health surveillance, monitoring and evaluation of disease prevention and health promotion activities) and to improve the analytical and epidemiological capacity of managers and persons in charge of the health decision-making process in the PAHO Secretariat. This will assist in orienting technical cooperation toward increased monitoring of health inequalities and inequities and evaluation of the impact of population-based interventions.

MAIN CHALLENGES AND PROSPECTS

According to the 2010 census, there has been a 2.2% reduction in the population compared to 2000. The main factors that influenced this change were emigration (especially to the United States) and a 26% reduction in births from 2000 to 2010. In 2010, 14.5% of the population was 65 years or older.

Since the first quarter of 2006, the economy of Puerto Rico has been in a critical situation. It experienced recession and then depression, with a decline in economic activity, especially in 2009 and 2010.

The poverty level of the population has remained at about 45%. According to 2010 data, poverty levels are

higher for women who are heads of household (57.7%) and persons under 18 years of age (56.3%). Similarly, the poverty level of persons living in rural areas (56%) is higher than that of the population in urban areas (44%).

Urban and industrial development has led to deterioration of environmental conditions. In 2006 and 2007, respectively, there were 14.3 and 14.6 metric tons per capita of carbon dioxide emissions.

In 2010, dengue reached historically high levels in Puerto Rico, with 21,298 cases recorded. In 2009, 638 cases of influenza A(H1N1) were reported, with a case fatality of 5.8%.

Chronic diseases were the main cause of death for the 2006–2008 period, with the three leading causes of death being heart disease, malignant neoplasms, and diabetes. In 2008, mortality from heart disease (135.4 per 100,000 population) was less prevalent in women (120.2 per 100,000) than in men (151.9 per 100,000). There was a similar pattern for deaths associated with malignant neoplasms (126.6 per 100,000), with mortality of 105.3 per 100,000 women and 149.8 per 100,000 men. Diabetes was the third leading cause of death (72.1 per 100,000 population), with mortality of 73.8 per 100,000 men and 70.5 per 100,000 women.

Chronic diseases are a growing problem. The prevalence of coronary disease increased from 6.7% in 2007 to 7.0% in 2009. In 2009 the prevalence of coronary disease was higher in women (7.7%) than in men (6.2%). In 2006 the incidence rate for cancer was 232.9 per 100,000 population. The three leading forms of cancer in 2006 were prostate cancer (62.3 per 100,000 population), breast cancer (33.9 per 100,000), and colorectal cancer (32.8 per 100,000).

The prevalence of diabetes in adults has been increasing. In 2006 it was 11.9%, rising to 12.8% in 2010. The prevalence of hypertension in persons 18 years of age and older has also increased (32.7% in 2007 and 34.0% in 2009). The prevalence of these diseases will continue to rise unless changes occur in people's lifestyles.

Risk behaviors of adolescents and schoolchildren also pose a challenge. In 2007, 34.6% of elementary school students (fifth and sixth grades) consumed alcohol, whereas 2.9% used inhalants and 1.5% smoked cigarettes. In 2008, 201 deaths occurred in adolescents (68.9 per 100,000 population). The leading cause of death was homicide, with a rate of 30.2 per 100,000 adolescents, representing 43% of the total deaths in this age group.

In 2010, approximately 350,000 people did not have insurance. Because they earned an income, they did not qualify for the government insurance plan, but their income was insufficient to purchase a private plan. Because of the complexity of the system of insurance and services delivery, the challenge of monitoring and supporting access to health care for these groups remains.

The aging of the population poses an important challenge for health in Puerto Rico. Chronic diseases are common and there has been a progressive increase in some of the primary risk factors such as obesity, which will have to be addressed in the future.

The information and follow-up provided by the Observatory on Human Resources for Health will improve knowledge about existing gaps between supply and demand and the distribution of health professionals.