Brazil

Brazil, one of the world's five largest countries, lies at South America's center-east; it has a land area of 8,514,877 km^2. The country is divided into 26 states and a Federal District—where Brasilia, the federal capital, is located—and 5,561 municipalities. The states are organized into five geographic regions that have significant economic, cultural, and demographic differences—North, Northeast, Southeast, South, and Center-West.

Brazil is one of the Region's middle-income countries. Life expectancy at birth is 73.2 years (77.0 years for women and 69.4 years for men). Twenty-one percent of the population lives below the poverty line.

Immunization and institutional delivery care coverage are good, as is Unified Health System (UHS) coverage, which can meet the needs of 75% of the population to a satisfactory standard. In 2010, public health expenditure as a percentage of gross domestic product (GDP) was 3.6%, and private expenditure was 3.7%.

Selected basic indicators, Brazil, 2007–2010.

Indicator	Value
Population 2010 (millions)	190.7
Poverty rate (%) (2009)	21.4
Literacy rate (%) (2010)	90.0
Life expectancy at birth (years) (2010)	73.2
General mortality rate (per 1,000 population) (2009)	6.6
Infant mortality rate (per 1,000 live births) (2009)	17.1
Maternal mortality rate (per 100,000 live births) (2009)	72.3
Physicians per 1,000 population (2007)	1.6
Hospital beds per 1,000 population (2010)	2.4
DTP3 immunization coverage (%) (2010)	96.0
Births attended by trained personnel (%) (2009)	98.9

MAIN ACHIEVEMENTS

Health Determinants and Inequalities

Over the last decade, Brazil has experienced major economic growth. Ten million jobs were created in the formal sector, and an income transfer program geared to families (*Programa Bolsa Família*, PBF) helped improve living conditions for the poorest sectors of society.

Between 2000 and 2010, illiteracy declined from 13.6% to 9.6%. The Gini coefficient of income distribution, which had remained stable around 0.60 (reflecting one of the greatest levels of inequality in the world), has systematically declined since 2001, reaching 0.54 in 2009.

Under-5 mortality decreased from 24.8 per 1,000 live births in 2006 to 20.4 in 2009. Therefore, Brazil is expected to reach the target for Millennium Development Goal (MDG) 4 before 2015. Infant mortality has followed a similar downward trend; it was 17.1 per 1,000 live births as of 2009. Control of vaccine-preventable diseases contributed substantially to this reduction.

In 2010, 57.4% of all deaths occurred in men. Male life expectancy increased from 63.2 years in 1991 to 69.7 years in 2010. However, that 2010 figure was still 7.6 years less than the one for women, which was 77.3 years.

The Environment and Human Security

In 2008, 92.8% of the urban population but only 31.5% of the rural population had access to adequate-quality drinking water sources. Furthermore, only 24.2% of the rural population had access to the sewerage system or septic tanks. The treated wastewater rate reached 32%. Waste collection services were available to 90% of urban households but just 30% of rural households. In 51% of municipalities, solid waste was discarded in irregular open-air dumps.

Between 2003 and 2009, 9,583 public emergency situations were recorded, of which 64.1% were due to drought and 30.2% to floods. Landslides were frequent and intense, and more than 90% of those occurring in highland regions were associated with some type of human activity, such as deforestation or road construction.

The area of Brazil recognized as free of foot-and-mouth disease has been gradually expanded. And although reintroduction of the virus led to suspension of the recognition of the disease-free area in 11 states and the Federal District in 2005, that disease-free recognition was restored in 2008.

Health Conditions and Trends

Brazil exhibits significant differences in infant mortality by region and by population group. While the indigenous population experienced a major decline in infant mortality between 2000 and 2009 (from 74.6 to 41.9 per 1,000 live births), their rate more than doubled the national average.

In 2006, Brazil was certified as having interrupted the transmission of Chagas disease by *Triatoma infestans*. Twenty-one states report cases of visceral leishmaniasis; in 2010, there were 22,397 cases of tegumentary leishmaniasis reported. Although the prevalence of leprosy has decreased, Brazil is the only country in the Americas that has yet to completely eliminate the disease.

Between 1980 and June 2011, 608,230 cases of AIDS were diagnosed. A total of 34,212 new cases and 11,965 deaths were recorded in 2010. Between 1996 and

Unified Health System

The Unified Health System (UHS) recognizes health as a right and responsibility of the State and considers the universal and equitable access to health; the inseparability of promotion, protection, and recovery of health; and the establishment of a regionalized and hierarchical network for delivery of health care services as a shared responsibility of the three levels of government (federal, state, and municipal). Furthermore, the UHS recognizes the complementary role of the private sector in health care delivery. The UHS has as its guiding principles the decentralization of management, the comprehensive nature of health care, and community involvement.

Twenty years after its creation, the UHS is part of a social policy of the State that has transcended successive administrations. In 1988, the resources required for the political project of the system to achieve sustainability were estimated, and this objective has since been accomplished: the health of 75% of the Brazilian population relies on the UHS.

2010, mortality declined from 9.6 to 6.3 per 100,000 population.

Between 1996 and 2010, the proportion of deaths due to infectious and parasitic diseases declined from 5.8% to 4.3%.

Health Policies, the Health System, and Social Protection

The health sector includes care providers and financial entities from both the public sector and the private sector, and involving both for-profit and nonprofit institutions. The public sector provides universal access through the UHS and covers 75% of the population. The private insurance sector covers the remaining 25% of the population.

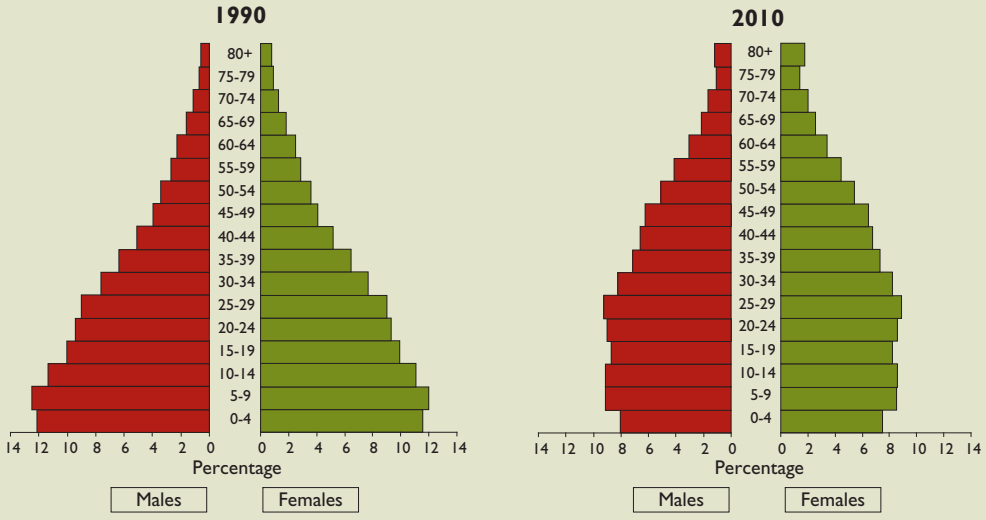
The UHS recognizes health as a right and responsibility of the State. UHS planning takes into consideration four objectives: (1) to prevent and control disease, trauma, and health hazards; (2) to expand access to health services with high-quality, comprehensive, equitable, and person-centered care; (3) to promote activities directed to prevention and to the control of health determinants; and (4) to strengthen management of the UHS at the three levels of government (federal, state, and municipal). The UHS has a network of over 6,000 hospitals (400,000 beds) and more than 60,000 outpatient centers. In 2010, its primary care strategy reached 94% of Brazilian municipalities, with 30,996 family health teams, 19,609 oral health teams, and 238,304 community health agents.

The country has made great strides toward ensuring universal access to health services, including the provision of drugs. Despite its brief existence, the UHS has become a solid system that provides satisfactory outcomes.

Knowledge, Technology, and Information

The UHS ensures free access to drugs and health technology to the vast majority of the population. The National Health Surveillance Agency is another key institution at the federal, state, and municipal levels, whose purpose is to ensure the performance of essential regulatory functions such as registration and marketing authorization, regulation of drug advertising, health technology assessment, and drug surveillance. In 2011, the Agency was prequalified by PAHO/WHO as a reference national authority for drug regulation.

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



MAIN CHALLENGES AND PROSPECTS

Major inequalities in health indicators remain between rich and poor persons, black and white and indigenous populations, urban and rural areas, and men and women.

The Brazilian Amazon region has experienced significant changes in patterns of land use due to the process of human occupation. It is estimated that 17% of its native forests have been lost due to deforestation, slash-and-burn clearing, and expansion of livestock production.

In 2002, 22% of municipalities reported high rates of air pollution, the leading causes of which were forest fires, industrial activities, and heavy vehicular traffic.

Brazil is the world's leading consumer of pesticides. Acute pesticide poisoning is the second leading cause of exogenous toxicity; 137,089 cases were reported between 1999 and 2008.

These situations, as well as a delay in compliance with environmental agreements and with implementation of sanitation improvements, constitute the foremost challenges in environmental and human safety.

Although the rates for the leading causes of maternal death declined between 1990 and 2007, forecasts indicate that meeting the MDG 5 maternal mortality target will be difficult. The proportion of deaths from cancer has increased (from 11.4% in 1996 to 15.7% in 2010), as has mortality due to endocrine, nutritional, and metabolic diseases (from 0.4% to 6.2%) and diseases of the circulatory system (from 27.5% to 28.7%).

In 2010, 1,011,647 new cases of dengue were reported (17,489 serious and 656 leading to death), as well as 332,329 cases of malaria (8% more than in 2009). Urban yellow fever has not been recorded since 1942, but the yellow fever virus transmission cycle persists in the wild, leading to sporadic outbreaks.

Brazil is among the 22 countries with the highest burden of tuberculosis. In 2010, 71,000 new cases were reported, for a rate of 37.2 per 100,000 population—30% less than in 1990.

The leading external causes of death are homicide and motor vehicle accidents. In 2010, there were 51,880 deaths from homicide, the majority occurring among young black or brown men with limited schooling.

Between 2006 and 2009, the prevalence of hypertension, obesity, sedentary lifestyle, and alcohol abuse increased in the population aged 18 years or older in the Brazilian state capitals.

Chronic, noncommunicable diseases (CNCDs) pose a greater challenge. In 2009, CNCDs accounted for 72.4% of all deaths. Cardiovascular diseases, external causes, and neoplasms explained 59% of overall male mortality. In women, cardiovascular diseases, neoplasms, and diseases of the respiratory system accounted for 61% of deaths.

Policies on worker health have encompassed the creation of centers of reference and a national network of care. Workers' health constitutes a leading challenge due to the impact of working conditions on the morbidity and mortality of reproductive-aged populations and differences in access to health services associated with the type and quality of employment.

In December 2010, the Ministry of Health established guidelines for the structuring of health care networks to overcome the fragmentation of care, improve the operation of the health system, and ensure access to it in an effective and efficient manner. To promote equity, networks would give priority to the most economically vulnerable populations. This is a challenge of inclusion that has recently begun to be addressed.

Brazil has made an effort to expand the volume of human resources with technical capability to meet demands. However, major challenges remain, including the need to train, attract, and retain health care providers; to correct their poor geographical distribution; to prevent overspecialization; and to upgrade management.

One of the challenges for the UHS is to continue to ensure, with public funds, access to health services and health technology for the entire population.

After a period of sustained decline, domestic manufacturing of pharmaceuticals increased 20.1% between 2002 and 2009. The Constitution of 1988 provides that all registered drugs must be available to Brazilian citizens, who can pursue legal action against public administrators if medicines are unavailable. This situation, known as the "judicialization" of health care, is increasingly common.

There is a growing demand for innovative drugs and technology and for medicines for the treatment of chronic diseases such as diabetes and hypertension. This has created new challenges for public administrators, including an expansion of the range of services provided by the Government's *Farmácia Popular* program.

In recent decades, Brazil has made important strides in living conditions and in the state of health of the population, related to political and socioeconomic changes. The positive impact of successful policies, such as with the UHS and the PBF, is noteworthy. This trend is expected to continue. The debate on how successful these policies have actually been in terms of improving living conditions and reducing social inequality should spur efforts to take on current and future challenges in the health sector.