Suriname

Suriname is located along the northeastern coast of South America is bordered to its north by the Atlantic Ocean and to its east, south, and west by French Guiana, Brazil, and Guyana, respectively. It has a surface area of 163,820 km^2, with a small coastal plain, where most of the population lives, and a large interior tropical rainforest. Its political system is a democracy, in which the National Assembly exercises legislative authority and chooses the president, who heads the executive branch. The capital is Paramaribo. The country is divided into 10 political/administrative districts, which in turn are divided into a total of 62 resorts (*ressorten*).

Suriname is a South American country whose official language is Dutch, although 15 other languages are spoken. There are a variety of ethnic groups: Hindustanis, of Indian ancestry (27.4%); Creoles, a mixture of white and black races (17.7%); Maroons, descendants of African slaves (14.7%); Javanese, of Indonesian ancestry (14.6%); mixed (12.5%); Amerindians (3.7%); descendants of Chinese (1.8%); whites (0.8%); and other ethnic groups (0.5%).

Its income has increased to a per capita gross national income of US$ 6,300, helped by industrial activity, mining, trade, and unstructured gold mining.

In 2006, total health expenditures were US$ 163.5 million, representing 8.5% of the gross domestic product (GDP). As a percentage of total health expenditures, public spending was 42.6% and private spending was 53.8%, with 3.6% other. The per capita health expenditure was US$ 324.

Selected basic indicators, Suriname, 2008–2010.

Indicator	Value
Population 2009 (millions)	0.5
Poverty rate (%)	…
Literacy rate (%) (2008)	94.6
Life expectancy at birth (years) (2010)	70.4
General mortality rate (per 1,000 population) (2009)	6.3
Infant mortality rate (per 1,000 live births) (2009)	20.3
Maternal mortality rate (per 100,000 live births) (2009)	122.5
Physicians per 1,000 population (2000–2010)	0.5
Hospital beds per 1,000 population (2010)	2.6
DPT3 immunization coverage (%) (2010)	96.0
Births attended by trained personnel (%) (2010)	90.0

MAIN ACHIEVEMENTS

Health Determinants and Inequalities

Overall unemployment fell from 12% in 2006 to 9% in 2009. The country's 2004 census had found an unemployment rate of 8.4% in urban areas but of 16.7% in rural interior areas.

Education is compulsory for children from ages 7 to 12 years. In 2006, the level of enrollment in preschool education (from ages 3 to 5 years) was 49.4% in urban communities, 29.5% in rural coastal areas, and 7.3% in the rural interior. In the same year, it was 63.1% for children of high-income homes and 17.4% for those in poor families. In 2008, 92% of children 6 years old attended first grade. In urban and rural coastal areas, 4% of registered children did not attend, versus 14% in interior rural areas. Also in 2008, the rates of primary study completion reached 39.1% for men and 53% for women. In interior rural areas, 30% of the teaching staff is not qualified.

In 2008–2009, 49% of the young persons between the ages of 12 and 17 were registered in secondary education, although with gender disparities (44% of boys and 54% of girls) and also ones of place of residence (only 3% in the rural interior).

The Environment and Human Security

In 2010, 93% of the population had access to improved drinking water sources: 97.1% in urban areas, 97.9% in coastal rural areas, and 44.8% in interior rural areas. Furthermore, 84% overall had access to improved sanitation facilities: 90% in urban and coastal areas and 33% in interior rural areas.

The Office of Public Health and the Ministry of Agriculture, Livestock, and Fishing train people who handle food and also periodically inspect establishments that produce and sell food.

Health Conditions and Trends

Maternal mortality fell from 153 deaths per 100,000 live births in 2000 to 122.5 per 100,000 live births in 2009. Given the small number of births each year, the absolute number of maternal deaths is also small.

In 2009, there were nine deaths in children under age 5, with a crude mortality rate of 1.8 per 100,000 population, down from 3.2 per 100,000 in 2005. Infant mortality has remained stable: 20.2 per 1,000 live births in 2000 and 20.3 in 2009.

The country has moved forward considerably in the fight against communicable diseases, eliminating many of them or bringing them close to levels of elimination.

Dengue affects coastal areas and is the predominant vector-borne disease. The changes in incidence have been attributed to climate characteristics and increased areas with environments that are favorable for *Aedes aegypti*.

The Millennium Development Goal (MDG) 6 target for malaria was achieved, with the coastal area free of the disease, and the remaining transmission is connected to gold mining in the interior.

The incidence of Chagas' disease is low, and the Ministry of Health plans to establish a diagnostic screening system for all blood donations. There have been no

Suriname's Changing Interior

Suriname's interior is home to indigenous tribal communities and a population descended from runaway slaves. The area had been isolated only, accessible by air or waterways, but now, with high prices for gold and technological changes in its mining, the region is a "labor magnet." Among those arriving have been many workers who enter the country illegally and migrate to the area in search of employment and income.

As men leave their home communities in search of gold, the social structure changes drastically. Women remain alone with their children and the land, with few income options other than subsistence farming. And, as the mobility of men increases, the acceptance of multiple sex partners grows, increasing the incidence of HIV and other sexually-transmitted infections. Health conditions for sex workers and miners are poor. Nor do they have social protections.

The unregulated and non-industrial mining of gold damages the environment, contaminates the watershed, and deforests the region. Without regulations for redevelopment, the abandoned mine sites continue to damage the environment.

reported cases of yellow fever, and residents of rural areas bordering French Guiana and Brazil have been vaccinated.

Basic vaccines are administered to infants and children under age 5, schoolchildren, and pregnant women. Despite public awareness of the benefits of vaccination, some foci of low coverage still persist.

HEALTH POLICIES, THE HEALTH SYSTEM, AND SOCIAL PROTECTION

Leadership and governance of the sector are the responsibility of the Ministry of Health, which promotes health-related aspects in public policies and advocates for their application. The Office of Public Health of the Ministry prepares disease prevention and control programs, which are carried out by the services networks.

Health coverage is achieved through various insurance plans. The main ones are the State Health Insurance Fund, which covers civil servants and family dependents (21% of the population); programs administered by the Ministry of Social Affairs (24%); company health insurance plans (10%); and sales to the public by insurance companies.

There is consensus on strengthening disease prevention and health promotion, as well as on considering action on social determinants in primary care.

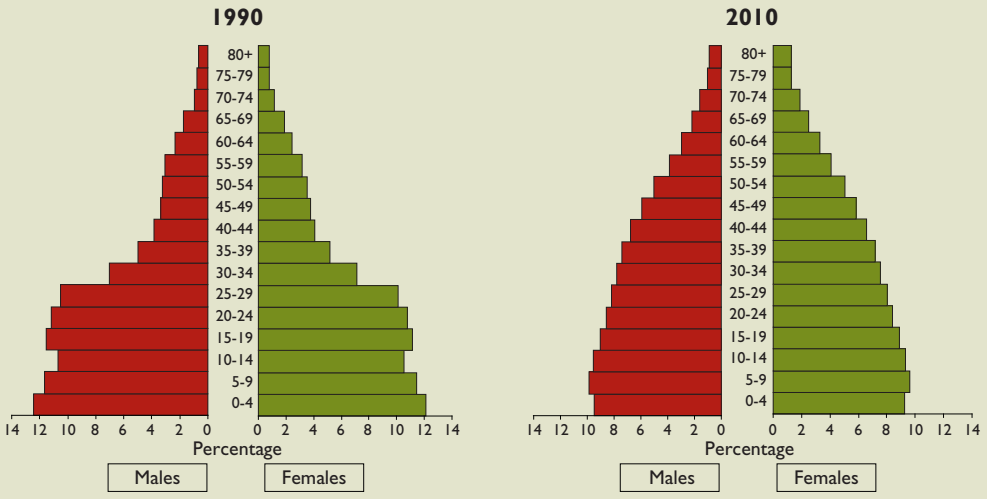
There are three health care networks: the Medical Mission, Regional Health Services, and the services of large companies. These have different forms of financing, membership, and approach. Each network specializes in different population segments, according to geographical location, employment, income level, ability to pay, and social position.

The established assistance capacity includes 56 Medical Mission dispensaries and health posts, 43 Regional Health Services establishments, 146 private physician's offices, 5 hospitals (2 private and 3 public), 1 psychiatric hospital, 40 dental care units, 3 private laboratories, and laboratories in each hospital.

Under a 2007 agreement, a Cuban medical brigade is working in Suriname, in collaboration with the Medical Mission and the Regional Health Services. The 200 professionals in the brigade include nurses, general practitioners, anesthesiologists, pediatricians, pharmacologists, and epidemiologists.

Cancer health care services have been expanded. Previously, there were no secondary and tertiary oncology services in the country. Patients sought these services in the Netherlands (paying out-of-pocket or with private insurance) or in Colombia (through an agreement between governments). Since 2011, a new facility has been providing palliative and therapeutic cancer care, thereby beginning to strengthen early detection and to increase the proportion of patients who receive treatment.

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



The Ministry of Health, the Pharmaceutical Inspectorate, and the Office of Public Health are responsible for pharmaceutical policies, standards, inspection, surveillance, and program preparation. Drugs on the Essential Medicines List are provided to patients on a fixed copayment basis.

Knowledge, Technology, and Information

While some progress has been made in health system information technologies, there have been no significant achievements. First, organizational and institutional communication in the health sector must improve. That will make it possible to standardize the information systems of the various service providers and to functionally integrate, for example, electronic medical records.

MAIN CHALLENGES AND PROSPECTS

In 2009, occupational accidents caused 1% of deaths. However, few occupational or work-related illnesses are diagnosed and reported and, as a result, the nature and magnitude of the problem are unclear.

Some districts collect 70% of the solid waste that is produced. Others collect less than 30%, which is mainly placed in open-air dumps.

While pesticide imports per capita are high, there is little control of their use. In the mining sector, especially in small-scale gold mining, there is concern about mercury exposure. In May 2006 floods affected 30,000 km^2, with 157 villages, and thousands of people lost their homes and livelihoods. The damage reached US$ 41 million. The need for urban planning and for flood preparation are huge challenges yet to be resolved.

Climate change is a concern, due to the vulnerability of the coastal region and changing rainfall patterns. Both of those factors can affect the environment and the health of those who live along the coast (who comprise 80% of the population).

The burden of noncommunicable diseases and their related risk factors has increased. Noncommunicable diseases accounted for 60.5% of the 3,035 deaths in 2009. Cardiovascular diseases caused 26.9% of total deaths; external causes, 13.9%; neoplasms, 11.6%; and diabetes, 5.7%. Meanwhile, the leading causes of death from communicable diseases were HIV/AIDS (3.5%), acute respiratory infections (2.9%), and septicemia (1.4%).

In 2009, the prevalence of HIV was 1.1% in adults from 15 to 49 years. The crude death rate for HIV/AIDS in 2009 was 20.2 per 100,000 (21.5 in men and 18.9 in women). As the epidemic grew, tuberculosis cases increased from 82 (20 per 100,000) in 1990 to 177 (34 per 100,000) in 2009.

The Government is preparing a health insurance plan to reduce inequalities in access. The plan, however, faces challenges in covering sparsely populated and scattered areas and in overcoming a fragmented system. There is also a need to examine the relationship that service delivery has with the health and well-being of older adults.

Health spending is concentrated on hospitals, and primary care receives the smallest allocations. Furthermore, the growing participation of the private sector generates concern over increased out-of-pocket expenses.

A shortage of health care workers and specialists persists. Geographical distribution is unequal. Specialized physicians and nurses are concentrated in the capital and too few in number in rural areas and the interior of the country. Staff attrition through emigration is significant, with the mainland Netherlands being the preferred destination.

There is no monitoring of patient satisfaction with services, although two of five hospitals have suggestion boxes. Patient safety programs are incipient, and the Academic Hospital is still working on hospital safety protocols.

For those who live in the interior, access to specialized care is limited, so they must travel to the capital. Emergency care is a special problem, particularly obstetric and neonatal attention, which involves expensive air transport that is unavailable at night.

Health legislation has not identified information and communications technologies as a priority for the Ministry of Health. Without a mandate, challenges related to standardizing service provider systems and electronic medical records will persist.

Information systems need to go beyond information management based on vertical programs against diseases. Data on comprehensive approaches to health services delivery, disease prevention, and the health of the population must be compiled and disseminated. This will help to link health-related issues to the environment and will increase knowledge of basic health determinants and equity in health.

Improving health equity continues to be a great challenge, despite the partial reduction in inequalities that has been achieved through better availability, access, and relevance of services.