

---

# PANAMA

## GENERAL SITUATION AND TRENDS

### Socioeconomic, Political, and Demographic Overview

Panama has an area of 75,517 km<sup>2</sup> and is divided into 9 provinces, 67 districts or municipalities, 3 indigenous regions, and 512 mayoral jurisdictions. The Panama Canal, an 80-km-long interocean waterway, connects the Atlantic with the Pacific across one of the narrowest places on the continental isthmus.

According to the last National Population and Housing Census, in 1990 the country's population was a little more than 2.3 million. The annual growth rate during the 1980s was estimated at 2.6%. The population density is 34.9 inhabitants per km<sup>2</sup>. The estimated population in 1995 was 2.63 million, 49.5% of whom were women and 50.5% men. One-third of the population is younger than 15 years of age, 2.3% are children under 1 year of age, and 9.3% are 1 to 4 years of age. A population of 2.8 to 2.9 million is projected for the year 2000, assuming an annual population growth rate of 2.1% during the 1990s. More than half the population (53%) resides in urban areas.

The estimated birth rate for 1995 was 23.1 births per 1,000 inhabitants (29.1 in rural areas and 20 in urban areas). The total fertility rate is 2.76 children per woman.

The majority of the population is made up of nonindigenous groups (91%), which include Hispanics (the majority), descendants of African slaves, and descendants of African slaves from the West Indies. The rest of the population is indigenous (9%), divided among five groups: Kuna, Emberá and Wounaan, Ngobe-Buglé (previously known as Guaymies), Bokotas, and Teribes.

In 1995 Panama's economically active population totaled about 1 million people, 61% of whom were in Panamá City. Women represent 37% of the economically active population. The employment rate for women increased from 37.7% in the late 1980s to 41.3% in 1994. Of the total number of

employees, 75% were concentrated in the Panamá City metropolitan area. The average wage for women is 87% of that for men.

The overall open unemployment rate declined from 14.7% in 1992 to 13.7% in 1995, when 10.5% of the men and 20.1% of the women were unemployed. Unemployment is higher in urban areas (15.8%) than in the countryside (10.6%).

In 1995 the gross national product (GNP) was estimated at US\$ 7,144 million, or US\$ 2,746 per capita. GNP grew at an annual rate of 7% during the 1990–1994 period. However, the annual rate of increase in employment was only 4.5%; as a result, unemployment fell only 2.4% each year.

At the end of 1995, the public debt was approximately US\$ 5,708 million, equivalent to 81% of the GNP and distributed in the following manner: 63%, the private banking sector; 13%, multilateral debt; 10%, bilateral debt; and 14%, foreign bond holders and assorted lenders.

Of the US\$ 3,789 million in public expenditures in 1995, almost half (US\$ 1,566 million) was allocated to social services. Spending on health and education was equivalent to 12.8% of the GNP or 24.4% of public spending in 1995, approximately US\$ 317 per capita.

The distribution of income is very uneven. The bottom 10% of the population receives only 0.5% of the total income of the country, while the top 10% receives 42.2%. In urban areas, the bottom 40% of lower-income households receive 6% of the total income. In rural areas the poor distribution of land and the lack of access to basic services exacerbate the situation.

In 1995 it was estimated that 40% of the population lived in poverty, which represents an improvement over 1991, when the figure was calculated at 49%. It is estimated that in 1995 18.1% of the general population and 15.9% in the metropolitan region lived in extreme poverty. In districts such as La Mesa, Sambú, Las Palmas, Las Minas, Santa Fe, and Tolé, it was estimated that more than 90% of the popu-

lation was living in poverty. Of the households headed by women, 71% live in poverty in rural areas and 48% in urban areas.

The total illiteracy rate was 10.7% in 1990. The rate was 15.0% in rural areas, 3.3% in urban areas, and 44.3% among the indigenous population. School enrollment for 1995 was 362,877 students, representing a net coverage of 91% of the school-age population.

Life expectancy at birth rose from 70.1 years in 1980 to 72.7 in 1990 and 73.4 in 1995. For urban areas it was 75.1 years and in rural areas, 71.5; for women it was 75.4 years and for men, 71.0 years.

The death rate in 1995 was 4.2 deaths per 1,000 population, with an estimated rate of 5.2 after adjusting for underreporting. Of the 11,168 deaths recorded in 1995, 89.4% had medical certification. The leading causes of death were accidental injuries and violence (15%), malignant tumors (14%), cerebrovascular disease (11%), myocardial infarction (7%), and other ischemic heart disease (5%). These five causes accounted for 52% of all deaths.

Deaths from cardiovascular disease increased by 2% annually during the 1990–1994 period. These diseases are now one of the three leading causes of death. Diabetes mellitus increased by 8% annually during that same period and, if the trend continues, it will become one of the leading causes of death in the adult population.

Among the leading causes of morbidity in 1995, influenza and acute respiratory infections were in first place, with nearly half of the total, with diarrhea and intestinal parasitic diseases following far behind.

## SPECIFIC HEALTH PROBLEMS

### Analysis by Population Group

#### *Health of Children*

According to data from the Office of the Comptroller of the Republic, the infant mortality rate per 1,000 live births was 17.2 in 1992 and 18.0 in 1994. Infant mortality in 1994, adjusted for underreporting, was estimated at 18.9 per 1,000. The regional rates of infant mortality vary greatly, ranging from 9.9 per 1,000 live births in Herrera Province to 34.6 per 1,000 in Colón Province. In a 1994 study by the Ministry of Planning and Economic Policy, the infant mortality rate among the indigenous population was 84.1 per 1,000.

Among the 1,134 deaths registered with medical certification in children under 1 year of age in 1993, the leading cause of death was disorders originating during the perinatal period (9.1 per 1,000), followed by congenital abnormalities

(4.1), pneumonia (1.3), intestinal infections (0.8), and protein-calorie malnutrition (0.6).

Neonatal mortality declined from 12.0 per 1,000 live births in 1990 to 11.2 per 1,000 in 1994. The difference in rates between urban areas (12.8 per 1,000) and rural areas (9.6 per 1,000) is undoubtedly due to underreporting. Postneonatal mortality held stable between 1990 and 1994, when a rate of 6.8 per 1,000 live births was recorded (8.4 per 1,000 in rural areas and 5.2 in urban areas).

In 1992 the death rate for children under 5 years of age was 4.9 per 1,000. The leading causes were accidental injuries, other forms of violence, intestinal disorders, and pneumonia. The Prevalence of Malnutrition Survey that health institutions conducted in 1994 showed that 5.2% of the population under 5 years of age was suffering from moderate chronic malnutrition (below normal height-for-age) and 3.4% from serious chronic malnutrition.

Coverage of growth and development monitoring for children under 1 year of age was 94%, with an average of 2.8 physician office visits. For children from 1 to 4 years of age the coverage was 40.6%, with two consultations on average.

The 5–9-year-old age group constituted 11.3% of the estimated population in 1995. According to the fourth height census, done in 1994, 17.7% of this population exhibits moderate growth retardation and 6.2% serious growth retardation. Mortality in this age group was 0.4 per 1,000 in 1994. No significant differences were observed between boys and girls.

#### *Health of Adolescents*

Persons from 10 to 19 years of age accounted for 20.3% of the country's population in 1995. In 1994 the fertility rate for adolescent women aged 10 to 14 was 3.6 per 100,000, and 87.0 per 100,000 in the group aged 15 to 19. Of the total births, 0.7% corresponded to mothers aged 10 to 14 and 18.3% to those 15 to 19 years old.

It is estimated that in 1994 0.8% of the total abortions occurred in the 10–14 age group and 17.1% in the 15–19 group. These percentages declined in 1995 to 0.6% and 15.9%, respectively.

In the 10–14 age group, mortality was 37.6 per 100,000 in 1994, with no significant differences by sex. In the 15–19 age group, however, mortality was 88.1 per 100,000, with vast difference between the sexes: 108 in males and 53 in women.

A 1996 study among high school students 12 to 18 years old in Colón Province showed that 48% of this population consumed alcohol. In Panamá Province that percentage was 45%.

### *Health of Adults and the Elderly*

The 15–60 age group represents 59.1% of the country's population. In this group the mortality rate was 2.3 per 1,000 in 1995. In the subgroup from 20 to 44 years of age, the leading causes of death in 1993–1995 were accidental injuries, suicides, homicides and other forms of violence (15%), malignant neoplasms (14%), cerebrovascular disease (11%), acute myocardial infarction (8%), and other ischemic heart disease (5%). In the group aged 45 to 59, the leading cause of death was cardiovascular disease, followed by cancer, accidental injuries and other forms of violence, and ischemic heart disease.

In 1995 the national maternal mortality rate was 5 per 10,000 live births. It was highest in the region of San Blas, of 44 per 10,000.

In 1993, 41% of women of childbearing age utilized some method of contraception (49% oral contraceptives and 37% intrauterine devices).

Persons 60 years old and over constituted 7.5% of the total estimated population in 1995. In this group the leading causes of death in 1995 were hypertension (33%), influenza (12%), the common cold (7%), gastritis (5%), and urinary tract infections (5%).

### *Workers' Health*

The occupational health program of the Social Security Fund has reported a drop in workplace accidents among active contributors to the Fund. In 1993 a rate of 3.4 accidents per 100 active contributing workers was recorded; in 1996 the rate dropped to 2.8. Mining and quarrying produced the highest rates of work-related accidents in recent years, with a rate of 15.4 occupational accidents per 100 active contributing workers in 1996.

Between 1993 and 1996, occupational illness rates declined from 2.4 per 1,000 contributing workers to 1.2 per 1,000. Construction produced the highest rate of occupational illness in 1996, with a rate of 5.0 per 1,000 active contributors. In total, men have 20 times as many work-related accidents as do women. With regard to occupational illnesses, there are 6 male cases for every female case.

### *Health of the Disabled*

According to the 1990 Population Census, some 30,000 Panamanians are disabled. To deal with disabilities, the country has established the Center for the Rehabilitation of Handicapped Persons and the Panamanian Institute for Special Training.

### *Health of Indigenous People*

There are no specific disaggregated health indicators for the indigenous population, but the provinces with a predominantly indigenous population exhibit the worst conditions. In Bocas del Toro Province mortality from diarrhea was 34.4 per 100,000 in the last four years, some five times the national rate of 6.4. In the San Blas region the country's highest incidence of cholera was recorded in 1993. It was 14 per 10,000 population, some 80 times the nationwide level. The incidence of pneumonia in 1994 was 12 per 1,000, 6 times the nationwide rate.

Vector-borne diseases also have the highest rates in the regions populated primarily by indigenous groups. In 1996 the national rate for leishmaniasis was 0.96 per 1,000 inhabitants; in Bocas del Toro the rate was 7.75 per 1,000.

In the National Vitamin A Survey conducted in 1992, a 13% incidence of low retinol levels was found (<20 µg/dl) in the indigenous population aged 12 to 59 months. The incidence in the nonindigenous population was 5%.

## **Analysis by Type of Disease or Health Impairment**

### *Communicable Diseases*

**Vector-Borne Diseases.** Malaria in Panama is concentrated geographically, occurring mainly in rural areas and in the provinces located in the far eastern and western parts of the country. In the past three years more than 85% of the cases have occurred in the regions bordering Costa Rica and Colombia. In 1996, 25 *Plasmodium falciparum* cases and 451 *P. vivax* cases were detected. This 1996 *P. falciparum* incidence represents a 78% reduction from the 111 cases reported in 1992.

On 19 November 1993, Panama reported the first case of indigenous dengue since the 1940s. A total of 14 cases were reported in San Miguelito, a densely populated section of the Panamá City metropolitan area. The seroepidemiological survey conducted in and near the community five months after the first case showed a 5.7% incidence of antibodies for dengue, mainly in individuals more than 44 years old. Subsequently, 790 cases were recorded in 1994, 3,084 in 1995, and 812 in 1996. Dengue persists primarily in San Miguelito and in the Panamá City metropolitan area. In 1995 serotypes 1 and 3 circulated, and in 1996, serotype 1. In 1995 there were three cases and one death from dengue hemorrhagic fever.

Leishmaniasis, which was stable between 1993 and 1995 with a rate of 0.6 per 1,000, flared up in 1996, with 2,577 cases and a rate of 0.96 per 1,000. Those most affected were nursing infants and children under 5 years of age. No deaths from this disease were recorded between 1992 and 1996.

Chagas' disease began to show a clear decline in 1993. In 1996 a single case was recorded, in Herrera Province. The last deaths from this disease were recorded in 1993.

**Vaccine-Preventable Diseases.** The last cases of poliomyelitis were recorded in 1972 and of diphtheria, in 1981. The incidence of neonatal tetanus has shown a marked decline since 1993. In 1993, there were four cases; in 1994, two; in 1995, one; and in 1996, none.

Whooping cough is on the decline but outbreaks still occur in remote areas. In 1993, 209 cases were recorded. There were 44 cases in 1996, all from an outbreak in Bocas del Toro Province.

In 1993, 191 cases of measles were recorded. In 1994 and 1995, there were 19 cases each year and in 1996, none. In 1993, 8,344 cases of rubella were recorded and in 1996, 1,457. In 1993, 14 cases of congenital rubella syndrome were reported and in 1996, 11 cases. There were 1,204 cases of mumps in 1996. In 1995, 1,997 cases were recorded.

In children under 1 year of age, DTP vaccination coverage was 81.8% in 1993 and 91.6% in 1996. For polio vaccine, the rate of coverage was 83.0% in 1993 and 92.3% in 1996; for BCG, 91.6% in 1993 and 100.0% in 1996; and for measles, 82.7% in 1993 and 90.2% in 1996. The rate of coverage with tetanus toxoid for women of childbearing age remained low from 1992 to 1995, at around 24%. In the 1–4 age group, 58,956 children were vaccinated with the triple vaccine against measles, rubella, and mumps in 1993, representing a coverage rate of 24.3%. In 1996, this number increased to 100,474, for a coverage of 41.2%. Certain risk groups are vaccinated against hepatitis B and yellow fever.

**Cholera and Other Intestinal Infectious Diseases.** Cholera last occurred in the country in 1993, when 42 cases were recorded, all of them outside the Panamá City area.

The epidemiological surveillance system recorded 87,396 cases of diarrhea in 1993 and 107,661 cases in 1996. Mortality from diarrhea has remained stable, at 6 per 100,000. The most affected regions are Bocas del Toro and Veraguas, with rates of 34 and 13 per 100,000, respectively. The age groups with the highest mortality from diarrhea are those over 75 and those under 5, with rates of 57 and 29 per 100,000, respectively. There were 3,834 cases of intestinal amebiasis in 1995, with a rate of 146 per 100,000. Children under 1 year of age were the most affected, with a rate of 5.4 per 1,000.

**Chronic Communicable Diseases.** Pulmonary tuberculosis is clearly on the rise. In 1990 an incidence of 33 cases per 100,000 was recorded, increasing to 39 per 100,000 in 1994, and to 49.6 in 1996. The most affected group were people 65 and older, with an incidence of 102 per 100,000. Of the 1,017 cases of pulmonary tuberculosis recorded in 1995, 62.1%

were among men and 37.9% among women. The region most affected was Bocas del Toro, with an incidence of 139.9 per 100,000 population. Mortality from pulmonary tuberculosis remained relatively stable between 1992 and 1996, with 4.5 deaths per 100,000 population. Of the 137 deaths from tuberculosis recorded in 1996, 88% were due to pulmonary tuberculosis and 4% each to miliary tuberculosis and tubercular meningitis.

In 1992 a total of 133 cases of leprosy were recorded in Panamá, representing 0.5 cases per 10,000. Multibacillary forms made up 61% of the cases and paucibacillary strains, 39%. In 1996, 36 cases were detected.

**Acute Respiratory Infections.** Among communicable diseases, acute respiratory infections are the most frequent cause of morbidity in children under the age of 5, responsible for 10% of their recorded deaths in 1994. Pneumonia was the second cause of mortality among communicable diseases, with an incidence of 200 per 100,000 in 1994 and 156 per 100,000 in 1995. Mortality was 9.8 per 100,000 in 1995. Most affected are people from 65 to 74 years of age, with an incidence of 27 per 100,000, and those aged 75 and older, with a rate of 235 per 100,000.

**Rabies and Other Zoonoses.** Cases of sylvatic rabies are still reported, transmitted mainly by vampire bats (especially *Desmodus rotundus*). In 1995, 71 cases were recorded in cattle and horses, 19 of them laboratory-confirmed. In 1996, 28 cases were laboratory-confirmed. In 1995, there were two cases of human rabies in gold prospectors in Darién Province, transmitted by vampire bats.

In 1995, after an eight-year absence, Eastern equine encephalitis re-emerged (serological diagnosis). In 1996, 12 cases were clinically diagnosed.

**AIDS and Other STDs.** The first case of AIDS was diagnosed in Panamá in 1984. As of 1995, 1,044 cases had been recorded, with a case-fatality rate of 59.1%. In the 1984–1994 period, the greatest proportion of cases (74%) were found in the 20–44 age group, with a significant percentage (4%) also occurring in children under 5 years of age. Sexual transmission remains the most frequent route of infection (84%), with heterosexual exposure in 44% of the cases and homosexual/bisexual exposure in 40%. Blood-borne transmission from transfusions accounts for 1% of cases and perinatal exposure for 5%. Panamá Province is the most affected, with 77% of the cases.

Recorded cases of other sexually transmitted diseases declined between 1993 and 1996. Soft chancre went from 4.8 cases per 10,000 in 1993 to 2.9 in 1996. Symptomatic early syphilis fell from 5.8 to 2.0 per 10,000. Congenital syphilis exhibited rates of 0.5 and 0.2 per 1,000 live births in 1992 and

1996, respectively. In 1996, the rate for cases of gonorrhoea was 88 per 100,000.

### *Noncommunicable Diseases and Other Health-Related Problems*

**Nutritional Diseases and Diseases of Metabolism.** In 1994, a nutritional assessment was conducted that included a random sampling of 945 children under the age of 5 seen at health centers during a particular week, also chosen at random. At the end of the assessment, children who were 2 standard deviations below the average weight or height were categorized as malnourished. A 5.2% incidence of malnutrition was found for this age group according to weight-for-age, 3.4% according to weight-for-height, and 5.2% according to height-for-age.

Studies of the indigenous population indicate that approximately one-quarter of the children under 5 years of age are malnourished.

The National Survey of Multiple Indicators, conducted in 1996 with a sample of 1,569 children under 5, showed that 91.5% of the children studied had been breast-fed at some time and that 86% of infants under 6 months of age were then being breast-fed. The proportion of babies under 4 months of age fed exclusively by breast was 32% and for those under 6 months, 25%.

In 1991, a 23.2% incidence of goiter was found in 1,603 schoolchildren from the Azuero region. In the rest of the country the incidence in a sample of 1,459 schoolchildren was 12.3%.

A Maternal and Child Survey was conducted in 1992 in Bocas del Toro, Chiriquí, Veraguas, San Miguelito, the Panamá City metropolitan area, San Blas, Herrera, and Los Santos. It found anemia (hemoglobin <11 µg/dl) in 43.4% of children under 1 year of age, 38.4% of children 1 to 4 years of age, 20.2% of schoolchildren, and 38.9% of pregnant women. In another 1992 survey using the same criterion, conducted with a sample of 929 children 12 to 59 months old, 18% had anemia.

In the National Vitamin A Survey of 1992, no concentrations of plasma retinol lower than 10 µg/dl were found among children from 12 to 59 months of age, but in 6% of this group low levels were found, below 20 µg/dl. In 1992, in the hospitals of Chiriquí and Changuinola in Bocas del Toro Province, 24 children with eye damage from vitamin A deficiency were identified.

In 1993, diabetes mellitus was the eighth most common cause of death, with a rate of 13.8 per 100,000 of population.

**Cardiovascular Disease.** Hypertension is the third leading cause of morbidity in the 20–59 age group and leading

cause in the group aged 60 and older. In general morbidity, it occupies sixth place.

**Malignant Neoplasms.** In 1993, 3,128 malignant neoplasms were recorded (42.9% in men and 57.1% in women), with a rate of 123 per 100,000 inhabitants. The most affected group were people over 70 years of age, who accounted for 34.5% of the total cases. In women, cervical cancer occupies first place, with a rate of 72 per 100,000 women over the age of 15; this is followed by breast cancer, with a rate of 27.2 per 100,000 women over 15. In men, the most common tumor is of the prostate, with a rate of 27.2 per 100,000 men over 15; men over 70 account for 67% of the total cases.

**External Causes.** Accidental injuries or accidents, along with suicides, homicides, and other forms of violence were the second leading cause of death in 1993, with a rate of 54.4 per 100,000 inhabitants. In the provinces of Colón, Bocas del Toro, Darién, and Veraguas, these external causes ranked first among the causes of death. Of the total deaths recorded in 1993 from external causes, 81.9% occurred in males.

Deaths from external causes are increasing, with a rate of 54.0 per 100,000 in 1992 and 58.3 per 100,000 in 1994. Deaths related to traffic accidents ranked first among deaths from external causes in 1993, with a rate of 16.3 per 100,000.

## RESPONSE OF THE HEALTH SYSTEM

### National Health Plans and Policies

Health is the heart of the Government's policies, as set forth in the document "Social Development with Economic Efficiency." The political goals of the Ministry of Health for the 1994–1999 five-year period are as follows:

- Strengthening the leadership of the Ministry
- Promoting primary care, consolidating a comprehensive and decentralized health system organized by levels of care
- Establishing environmental health programs aimed at sustainable development
- Promoting health programs for specific demographic groups
- Developing individual abilities and responsibility for a better quality of life
- Strengthening societal participation in health promotion, disease prevention, care, and management of health
- Improving the use of regular and extrabudgetary sources and seeking other sources of financing to increase funding for the health sector
- Training individuals in the areas required to strengthen national and local health plans and programs

- Promoting health research and the dissemination of information and scientific and technical knowledge to develop the health system

Decentralization with active societal participation is one of the mechanisms for achieving efficiency in public administration. This process of adjustment, however, should make it possible for the provincial, municipal and local levels of government to assume responsibility for the planning, execution, monitoring, and evaluation of the programs and projects transferred to them.

The mission of the Social Security Fund is to guarantee comprehensive health services that deal with the biopsychosocial, environmental, and labor risks and injuries incurred by beneficiaries. This mission is based on the principles of universality, solidarity, integrity, and fairness, with quality and efficiency, within the framework of a philosophy of social enterprise.

Reformulating the public management strategy, including health policies, is an integral part of the reform and modernization of the State, which seeks to improve the efficiency and quality of the services provided by the public sector. In the health sector, decentralization is a top priority, oriented basically to primary care; this involves giving priority to neglected groups, developing the first level of care, and improving the operating and managerial capacity of the health services. The reform and modernization that the Ministry of Health promotes includes expanding comprehensive health services coverage to the entire population, financing care for the most vulnerable groups, strengthening the service network of the National Health System, developing financing mechanisms for the health system, and strengthening the role of the national health authority.

The new model for the financing, management, and delivery of health services was introduced in the San Miguelito health region in 1997. This new model seeks to provide universal coverage for the health needs and health problems affecting both people and the environment, with efficiency, quality and fairness, by integrating all the resources and potential of the public sector, the private sector, and the community. The object is to separate the financing of services from the Social Security Fund and the delivery of services from the Ministry of Health. To this end, an agency will be established to manage hospital and outpatient services.

The Social Security Fund has proposed a new model for care that guarantees fulfillment of the principles of fairness, efficiency, effectiveness, solidarity, and universality. The activities to follow through on this proposal are defined according to levels of care. At the first level, the plan is to decentralize and disperse services, operate the referral system, strengthen the response capacity of the local primary care units, prevent domestic violence and substance abuse, and promote home

care. At the second level of care, one goal is to strengthen the response capacity of the polyclinics. Other objectives are to institute outpatient surgery and to establish simple rehabilitation units; short-stay units; hospitals for one-day, intermediate, and chronic care cases; and a second-level general hospital in the Panamá City metropolitan area. At the third level, the goal is to divide the management of the Hospital Medical Complex into two units, each with a different level of complexity, as well as to create a unit for transplants and another for burn patients, and to establish a hospital-home extension.

In 1997, the 21st Century Panamanian Municipalities Network was formed. Its goal was to foster mutual support and share experiences, while promoting solidarity, cooperation, and communication between the municipalities participating in a health promotion program in their jurisdictions.

Within the framework of the Central American Health Initiative and the "Fronteras Solidarias" (Shared Borders) Program, activities are under way in the municipalities of Changuinola, Barú, and Renacimiento, in the region bordering Costa Rica, to promote health and prevent diarrheal diseases, cholera, malaria, dengue, and AIDS.

Panamanian health authorities have categorized violence as a public health problem, and an institutional plan for its prevention and control has been formulated. A multisectoral national commission is in charge of coordinating activities, and the Ministry of Health has instituted mandatory recording in the health units of suspected domestic violence.

## Organization of the Health Sector

The Constitution of Panama establishes that safeguarding the health of the population of the Republic is an essential function of the State and affirms that, as part of the community, an individual is entitled to the promotion, protection, preservation, restoration, and rehabilitation of health, and also has an obligation to preserve it. In order to meet these responsibilities, the State has created a number of institutions to provide health services. Principal among them are the Ministry of Health, the Social Security Fund, the Institute of National Water Supply and Sewerage Systems, and the Metropolitan Department of Hygiene.

The health services of the Social Security Fund are under the National Bureau of Services and Medical Benefits. The insured beneficiaries of the Fund receive two types of benefits: medical benefits, aimed at comprehensive protection of the work force and provided by the national health services network of the Fund, and economic benefits for workers who are permanently or temporarily off the job for any reason (old age, disability, maternity, disease, etc.). Private institutions participate in the Social Security Fund as health service providers.

### *Health Legislation*

The provisional draft of the General Health Act is in the analysis and consultation phase at the internal and institutional level. With regard to the Health Code currently in force, the General Health Act outlines the organization of the national health system, establishes the norms governing health—not just those having to do with disease—includes elements related to the rights and responsibilities of the population with respect to health, and establishes a frame of reference for the responsibilities of the Government, society, and individuals.

In recent legislation, domestic violence and child abuse have been defined and the creation of specialized agencies to help the victims of these crimes has been ordered.

### **Health Services and Resources**

#### *Organization of Services for Care of the Population*

**Epidemiological Surveillance Systems.** The epidemiological monitoring system is organized at the local, regional, and central level. Depending on their priority, there are diseases requiring immediate notification, weekly notification by telephone, and routine weekly reporting. The diseases monitored are those included in the International Health Regulations, as well as outbreaks and epidemics, especially measles, rubella, botulism, encephalitis, viral meningitis, food poisoning, and other types of poisoning. Vector-borne diseases are the responsibility of a specific surveillance subsystem. For surveillance in border areas, there is a binational committee that meets periodically and monitors basic sanitation activities, vector control, immunization, and emerging and re-emerging diseases.

Epidemiological surveillance of nosocomial infections has been conducted since 1995. Its objective is to formulate suitable strategies to control specific hospital problems, and thus facilitate changes in detrimental behavior by staff, the application of preventive measures in patient care, and the development of programs for in-service training.

**Water Supply, Sewerage Systems, and Solid Waste Disposal.** Management of water resources is the responsibility of the Institute for Water Resources and Electrification and the Institute of National Water Supply and Sewerage Systems, which have initiated the preparation of comprehensive integrated plans for joint surveillance. In 1996, water quality standards were drafted, and the preparation of wastewater quality standards was also begun. The Institute of National Water Supply and Sewerage Systems and the Ministry of Health are responsible for enforcing the quality control standards for drinking water.

It has not been possible to control the sanitary handling of solid waste despite there being a plan to manage, collect, transport, and dispose of it. Dealing with solid waste is the responsibility of the municipalities, with the exception of the districts of Panamá, San Miguelito, and Colón, which have an autonomous institution, the Metropolitan Department of Hygiene, that is responsible for handling solid wastes. In 1996, the municipalities of Panamá and San Miguelito produced 845 tons of waste daily. It is transported to the Cerro Patacón sanitary landfill, where it is disposed of properly.

Hospital waste is mixed with common waste, constituting a health and safety hazard for the general population. Only sharp objects are removed and then deposited in rigid containers. In 1996, a regulation was issued establishing minimum requirements for handling hazardous waste in hospitals.

**Environmental Risks.** The risks generated by the use of growing quantities of chemical substances are ever-increasing. In response, the Environmental Planning Unit and the Environmental Health Bureau of the Ministry of Health were established in 1995. The priority is to conduct research and training projects that will make it possible to reduce or eliminate environmental health risks. High mortality from malignant neoplasms and congenital abnormalities could be related to the carcinogenic and teratogenic nature of the chemical substances used in agroindustrial and household activities. At the moment, measures to prevent, correct, control, and monitor these risks are very limited. A project is under way to form a national network to control the manufacture, transport, and elimination of chemical products. A national response plan for chemical emergencies is also being developed.

A law has been passed establishing automobile emission limits, and there are also norms aimed at reducing exposure to tobacco smoke in public buildings, as well as in hospitals and other health institutions.

In 1992, the Regulations for Radiation Protection were established, which control the use of devices that generate ionizing radiation.

**Pharmaceutical Regulation.** The Ministry of Health has drawn up a National Formulary of Essential Drugs and is currently working on a proposal for production of the basic drugs. The Social Security Fund uses the Official Drug List, which is reviewed every year by representatives from all the health professions and their corresponding professional associations.

The Ministry of Health maintains a registry of the drugs and biologicals that can be marketed in the country. The use of generic drugs is promoted.

There is only one specialized laboratory that conducts ongoing monitoring of the physical, chemical, and biological quality of drugs.

**Food Safety.** In 1996, the law and the norms and regulations governing meat and dairy products, seafood, flours, and the registry of foodstuffs were updated. The 1994–1999 Plan of the Ministry of Health includes a policy and plan of action concerning food safety. To monitor and control food safety, the National Commission for Food Protection was established; its representatives are from the Ministry of Health and other public and private institutions, as well as consumers.

Food handlers receive training so that they can carry out their activities with minimum risk to the population. In 1996 a surveillance system for foodborne diseases was established, for which a specific handbook has been developed. This system recorded 10 outbreaks of foodborne disease in 1995.

To carry out food testing and control, there are five regional laboratories, the central laboratory, the laboratories of the School of Medicine of the University of Panama and the Ministry of Agricultural and Livestock Development, and four private laboratories.

#### *Organization and Operation of Personal Health Care Services*

At the primary care level, Panama has 155 health centers, 112 subcenters, 376 health posts, 34 polyclinics, and 6 dispensaries. At the second and third level, there are 37 hospitals, 5 of them located in Panamá City, that offer third-level services. In total, there are 720 sites providing services of varying degrees of complexity, 19.6% of which are concentrated in Panamá Province. The Social Security Fund has 10 hospitals and 27 polyclinics.

In 1995, the Ministry of Health carried out 5.6 million health service activities, 71.2% of which were medical services, 14.8% oral health services, 10.2% nursing services, and 3.8% services provided by technical personnel. Of this total, 10.7% were provided in the five national hospitals. Of the 3.98 million outpatient consultations (38% more than in 1993), 15.7% were classified as emergencies and 5.9% were performed by specialists.

The Social Security Fund provided 4.65 million consultations in 1996 (31% more than in 1992). Of the total consultations in 1996, 12.5% were for uninsured individuals. The Fund handled 15,946 births, 18.7% of them by cesarean section.

According to the records of the Social Security Fund, it covered more than 1.6 million people in 1996, or 61.4% of the Panamanian population. Of the persons insured, 40.3% are contributors and 59.7%, dependents. Since 1992, the total number of covered individuals has risen by 19.9%, while the number of contributors has increased by 12.5%. In 1996, there were approximately five active contributors (545,500) for each pensioner (116,000).

In 1995, the nation had a total of 7,138 hospital beds, 86.5% of which belonged to the public sector and 13.5% to the private. There are 2.7 beds available for each 1,000 persons, but with a very unequal distribution. There are 7.5 beds per 1,000 inhabitants in Panamá City and only 1.7 in Veraguas and 1.4 in Coclé. The national occupancy rate for hospital beds is 61.6%, with a higher percentage in public health centers (66.3%) than in private facilities (33.1%). The national average hospital stay is 5.5 days (7.7 days in public institutions and 4.0 in private facilities). The 2,090 beds of the Social Security Fund had 77,256 patient stays in 1995.

Of the total visits for prenatal check-ups in 1994, 1.6% corresponded to pregnant women 10 to 14 years of age and 19.4% to pregnant women 15 to 19. Prenatal check-up coverage in 1995 was 89.1% of pregnant women, with an average of 3.1 consultations per expectant mother. Of total deliveries, 86.5% were done in institutions; of these, 16.6% were by cesarean section.

An important institution is the laboratory at the Gorgas Memorial Center, which conducts serological and virological analysis for dengue and functions as a reference laboratory for the Central American countries in the diagnosis of measles and poliomyelitis. This institution participates in research projects related to the re-emergence of dengue, leishmaniasis, retrovirus, anti-malarial drugs, recombinant DNA vaccines, and epilepsy.

#### *Health Inputs*

There is a procedure for registering drugs prior to marketing them, and drug control committees have been formed at the institutional level to ensure the use of high-quality, safe, and effective drugs.

The majority of the drugs purchased institutionally are imported. For their procurement, there is a national formulary of essential drugs and an official list of drugs from the Social Security Fund.

The Social Security Fund spent approximately 11% of its budget for pharmaceuticals in 1993 and 1997. In 1993 this percentage represented US\$ 22.5 million and in 1997, US\$ 36.2 million.

Vaccines for the Expanded Program on Immunization (EPI) are provided to the country through the Revolving Fund of the EPI.

The technical department of the General Bureau of Infrastructure and Maintenance, which is responsible for maintaining biomedical equipment and controlling the introduction of new technologies, is in the process of consolidation.

Of the total budget allocated in 1995 for investments in the Ministry of Health, only 7.1% was used for equipment for health facilities. In absolute and relative terms, this represents

a significant reduction over 1994, when 49.6% of the investment budget went for equipment. In 1996, the Social Security Fund spent US\$ 38.2 million for equipment, 12.2% of its health budget; US\$ 5.9 million, or 1.9%, went for maintenance.

#### *Health Activities and Professional Accreditation*

The Technical Health Council is made up of representatives from the health institutions and the various health-employee associations. It accredits hospitals, clinics, and laboratories and authorizes the use of restricted medications. A draft law to establish the eligibility requirements for the accreditation of health professionals and technicians and to create a National Human Resources Accreditation Board is currently in the analysis and public comment phase.

As recommended by the Commission on Medical Specialties, 95 medical specialties were officially recognized.

#### *Human Resources*

In 1995, the Ministry of Health had a staff of 21,899 employees and the Social Security Fund had 12,344. The personnel of the Ministry of Health consisted of 3,702 physicians and dentists, 2,566 nurses, 2,704 nurse's aides, 107 veterinarians and agronomists, 944 laboratory workers, 79 nutritionists, 1,012 pharmacy workers, 471 environmental health inspectors, 541 health assistants and aides, 125 administrators, and 39 legal advisers. The remaining staff are other health management professionals and technicians. Physicians, nurses, and dentists make up 28.6% of the total staff; administrative personnel, 34.3%; and the rest, 37.1%.

In 1995, the personnel of the Social Security Fund consisted of 1,936 physicians, 227 dentists, 1,410 nurses, 1,450 nurse's aides, 316 pharmacists, 202 X-ray technicians, 343 laboratory workers, 806 professionals in other health categories, and 1,794 support staff.

In 1995, there was one physician in Panama for every 841 inhabitants, one dentist for every 4,576 inhabitants, and one nurse for every 1,025. The health regions with the fewest health workers per inhabitant are San Blas, San Miguelito, and Darién.

Every year more than 250 students enter medical school at the University of Panama, and about 60 physicians graduate. In 1994, two private medical schools were established. Their enrollment has increased rapidly, with 138 first-year students in 1996.

In 1994, a total of 85 nurses, 28 pharmacists, and 28 dentists graduated from the University of Panama.

In 1997, the country had 4,434 physicians, 1,397 dentists, 3,923 registered nurses, 756 pharmacists, and 213 public health specialists.

#### *Expenditures and Sectoral Financing*

It is impossible to estimate total health expenditures. That is because there is no information on the private sector or on individuals' direct purchases of ancillary drugs, supplies, and examinations.

In 1995, public expenditures in health totaled US\$ 547 million, or 6.9% of the gross national product and 14.5% of total public expenditure. In the allocation of public expenditures for health in 1995, the Social Security Fund ranked first, with 55%. The Ministry of Health was allocated 37%, and other institutions in the social field received the remaining 8%. The total budget of the Ministry of Health was US\$ 150.1 million, US\$ 132.6 million of which went for operating expenses and the remainder for investment. The total operating budget of the Ministry in 1995 was almost half a million dollars lower than in 1994. Per capita public spending on health in 1995 was estimated at US\$ 210.

The Social Security Fund had a total budget of US\$ 868.6 million in 1996, of which it allocated US\$ 313.1 million to health, or 36.1% of its budget. Of the total allocated to health, 72.9% was used for operating expenses and 27.1% for investment.

Public services for promotion, prevention, cure, and rehabilitation are financed primarily by the Ministry of Health and the Social Security Fund. The principal sources of financing for the state health system are the current revenues of the Government, workers' and employers' contributions to the Social Security Fund, and special funds received through loans and donations from international public and private agencies. Payments for community health services are also a source of revenue. Uninsured persons who receive services from the Ministry of Health at first-level care facilities are charged US\$ 0.50 per consultation. That is a donation by the user to the facility, not a payment based on the true cost of the services. For cost recovery for hospitalization, surgery, and auxiliary or intermediate services, the amount charged is based on a series of tables and collected according to the user's ability to pay.

In 1995, the budget of the Ministry of Health consisted of the following sources of financing: 74.4%, public funds; 12.1%, loans from the IDB and the World Bank; and 13.5%, foreign funds from the European Union and Japan, among others.

#### *External Technical Financial and Cooperation*

External financial assistance is erratic, due in general to the country's positive health indicators. Standing out among the international cooperation agencies that have provided technical support to Panama in recent years are PAHO/WHO,

UNICEF, the United Nations Development Program, the European Union, the Japan International Cooperation Agency, and the Spanish International Cooperation Agency. All these agencies provide technical cooperation and nonreimbursable fi-

nancial assistance. The IDB and the World Bank grant “soft” and long-term loans. Both support the development of the new care model and the reform and modernization of the health sector.