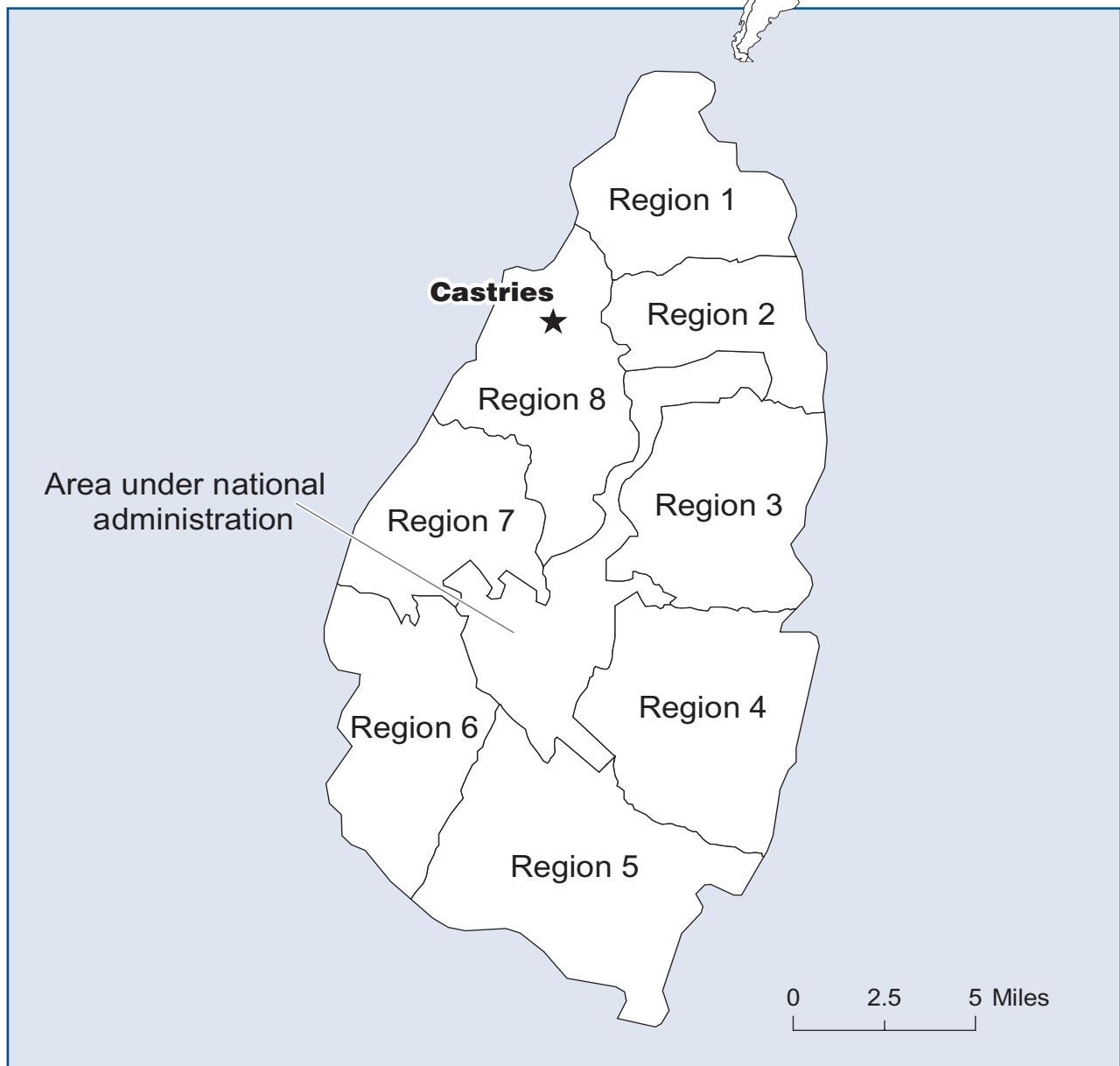
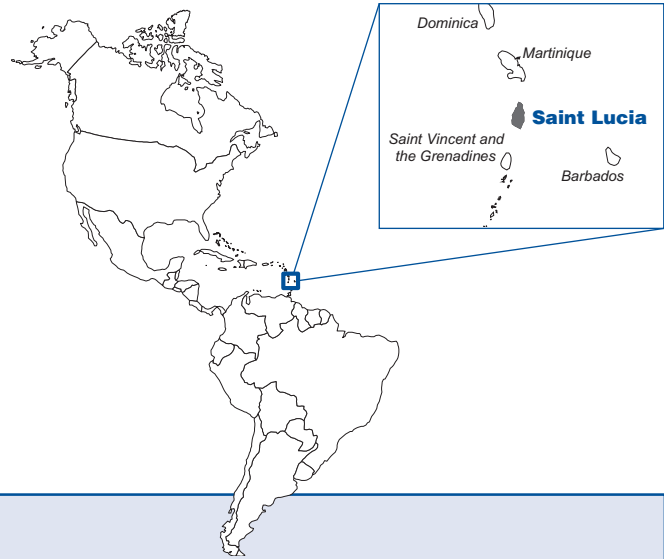


SAINT LUCIA



Sources: Second Administrative Level Boundaries Dataset (SALB), a dataset that forms part of the United Nations Geographic Database, available at: http://www.who.int/whosis/database/gis/salb/salb_home.htm, and the Digital Chart of the World (DCW) located at: <http://www.maproom.psu.edu/dcw>. The boundaries and names shown here are intended for illustration purposes only, and do not imply official endorsement or acceptance by the Pan American Health Organization.

Saint Lucia is a small, Caribbean island nation with a total land area of 616 km² located between the islands of Martinique and St. Vincent and the Grenadines. Castries is the capital city, and the twin pitons in Soufrière represent the island's most impressive landmark.

GENERAL CONTEXT AND HEALTH DETERMINANTS

Social, Political, and Economic Determinants

The country experiences both dry and rainy seasons, the latter spanning from June to November, and is prone to hurricanes that pose a continuous threat to its agriculture and physical infrastructure.

Saint Lucia attained political independence from the United Kingdom in 1979 and now has a democratic system of government based on the Westminster model; parliamentary elections are held every five years. The country is a member of the Commonwealth of Nations, the Organization of Eastern Caribbean States (OECS), and the Caribbean Community (CARICOM).

The official language is English, but a French patois is commonly spoken, particularly among most of the rural population. Roman Catholicism is the dominant religion (practiced by 67% of the population), followed by the Seventh-day Adventist (9%) and the Pentecostal (6%) religions; other religions are practiced by the remaining population (18%).

According to the 2001 population census, 83% of the population is of African descent, 3% is of East Indian descent, 1% is Caucasian, and 12% are of mixed ancestry (1). Most of the population inhabits the coastal areas and less mountainous regions of the north and south, and approximately 41% lives in the district of Castries. The city of Castries is the hub of the country's economic activity and political life.

Saint Lucia experienced an economic recession in 2001 due to a decline in tourism, the principal engine of economic growth, resulting in a growth rate of -3.8%. After 2001, however, the growth rate rose from 0.8% in 2002 to 5.4% in 2005. Gross domestic product (GDP) per capita increased from US\$ 2,928 in 2001 to US\$ 3,070 in 2005. Tourism accounted for 13.6% of real GDP in 2005, and real growth in the sector was further reflected by a 6.3% expansion of the hotel and restaurant subsectors. During 2005, output of the agriculture sector, with the exception of the livestock subsector, recorded contractions of varying magnitudes—the largest (36.2%) in the banana subsector (2); real output in the sector fell by 22% in 2005, following marginal growth of 1.8% in 2004, and, in keeping with this decline, the contribution of the

agriculture sector to real GDP fell to 3.4%. Throughout the period under review, the exchange rate remained constant at ECD\$ 2.70.

The 1995 poverty assessment, conducted by the Caribbean Development Bank and based on expenditures on food and non-food items, revealed that 25.1% of the population was poor. In rural areas, 29.6% were poor, compared to 17.4% of those living in urban areas. Poverty was slightly higher among males (25.5%) than females (24.7%).

According to the 2004 core welfare indicators questionnaire survey (CWIQ), the unemployment rate was 18.8%—a slight increase from the 2001 rate of 17%. Data for 2004 indicated a significant gender difference, with a 14% unemployment rate for males compared to a 25% rate for females. Youth unemployment was markedly higher at 39% and that of female youth was especially high at 44%. Lower unemployment among females could prove to be a major constraint to the country's achieving the MDG of gender equality and empowerment of women. The overall rate of underemployment was 8%—6% in urban and 11% in rural areas. Disaggregated by gender, the rates of underemployment were 10% for males and 6% for females (3).

According to the CWIQ, the adult literacy rate in 2004 was 89%, a significant increase over the 54% rate of 1990. Females had a higher literacy rate (90%) than males (87%), and the literacy rate of youth (persons 15–24 years of age) was high at 98.1%—in line with an indicator of the MDG pertaining to attainment of universal primary education. The primary school enrollment rate (children 6–11 years old) was 93%—91% for males and 94% for females; the secondary school enrollment rate was 79%—72% for males and 86% for females. Enrollment rates were similar for urban and rural areas, but secondary school enrollment was lower for the poorest households, especially in rural areas (67%). Although the school dropout rate was low (1% of the school population), females were more likely to be in school than their male counterparts (3).

Safe drinking water is accessible to 98% of the population—to 99% in urban areas and 96.7% in rural areas; among urban households 95% had safe water compared with 88% among rural households. Two-thirds of households had flush toilets or ventilated improved pit latrines, and 95% had access to public waste disposal services.

For the period 1999–2004, 1,048 cases of child abuse were reported to the Division of Human Services and Family Affairs. The most prevalent forms of abuse are child neglect and abandonment (34% of all reported cases), physical abuse (31%), and sexual abuse (29%). For the period 2000–2004, 2,165 cases of domestic violence were reported, but it is known that many cases go unreported. Ministry of Health interventions targeted alleviating the suffering of victims of domestic violence and interrupting the cycle of abuse. The Women's Support Center provided a temporary haven for women and their children in domestic abuse situations.

For the period 2000–2004, 228 deaths due to accidents and homicides were reported; of those deaths, 116 were homicides, most of them (108) in the 20–59-year age group; males accounted for 106 homicides, females for 10. Of the 112 deaths due to accidents, motor vehicle accidents accounted for 106; of those, 81 (76%) were males and 25 females (24%); 96 of the deaths (91%) occurred in the 20–59-year age group, while 10 deaths (9%) occurred in the 15–19-year age group. During this same period, 39 suicides occurred in the 20–59-year age group, 32 of them males (82%) and 7 (18%) females (4).

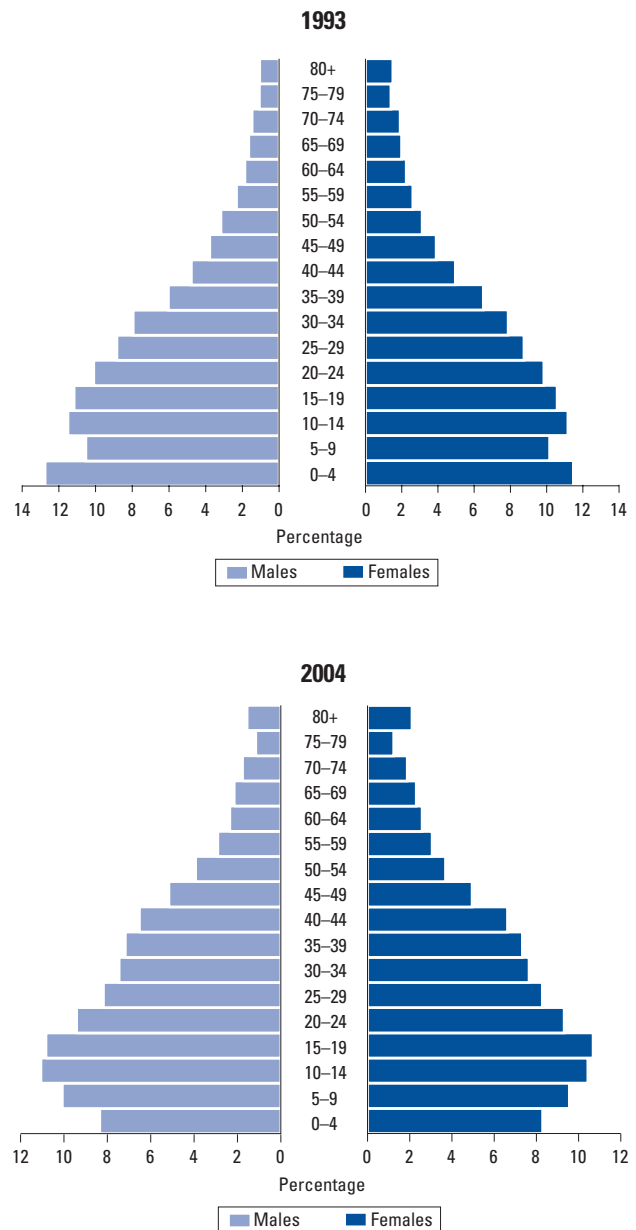
In 2002, tropical storm Lili forced 125 persons to seek shelter and resulted in an estimated EC\$ 20.3 million in damages to the island, and destroyed over half of the banana crop. Another tropical storm in 2003 and Hurricane Ivan in 2004 together accounted for EC\$ 9.9 million in damages. No lives were lost, however, as a result of these three disasters (5).

Demographics, Mortality, and Morbidity

The total mid-year population of Saint Lucia was estimated at 162,434 in 2004, reflecting an increase of 1,814 persons (1.1%) over the 2003 figure of 160,620 (6). Females accounted for 51% of the population, with women of childbearing age (15–49 years of age) representing 32.8% of the population. The population is still relatively young, with 28.8% below 15 years of age, while the elderly account for 7.1% of the total population (Figure 1). The dependency ratio in 2005 was 56.3% (7). In 2004, 2,322 births were registered and the crude birth rate was 14.3 live births per 1,000 population, as compared to 2,486 registered births and a crude birth rate of 15.5 in 2003. The number of births in 2004 is the lowest to date, a trend expected to continue as women delay pregnancies and use prescribed contraceptives and other methods of birth control. The decrease in total number of live births was reflected in the steady decline in total fertility rate, from 2.1 children per woman in 2001 to 1.7 in 2004. In 2004 teen births accounted for 18% of total live births, compared to 20% in 1991. Average life expectancy at birth in 2005 was 72.8 years—71.3 years for males and 74.3 years for females (7).

During the period 2000–2004, 4,860 deaths occurred, including 1,046 deaths in 2003 and 1,114 in 2004—a 6.5% increase from one year to the next. The crude death rate was 6.5 in 2003 and 6.9 per 1,000 population in 2004. Leading causes of death for

FIGURE 1. Population distribution, by age and sex, Saint Lucia, 1993 and 2004.



2004 are shown in Table 1 and were consistent throughout the period 2000–2004, although two other disease groups were also noteworthy: conditions originating in the perinatal period showed 92 deaths with a rate of 38.8 deaths per 100,000 population over the three-year period 2000–2002; and hypertensive diseases recorded 83 deaths and comprised 3.3% of total deaths by cause during that same period. The mortality rate of children under 1 year of age was 14.9 per 1,000 live births in 2003 and 19.4 in 2004 (6).

TABLE 1. Number of deaths and rate per 100,000 population for the leading causes of death, Saint Lucia, 2004.

Causes	Rank	No.	Rate
Diabetes mellitus	1	133	81.9
Cerebrovascular diseases	2	116	71.4
Ischemic heart disease	3	61	37.6
Pulmonary heart disease, diseases of pulmonary circulation, and other forms of heart disease	4	51	31.4
Malignant neoplasms of other and unspecified sites	5	45	27.7
Acute respiratory infections	6	43	26.5
Homicides	7	38	23.4
Malignant neoplasms of the digestive organs and peritoneum, except stomach and colon	8	37	22.8
Malignant neoplasm of the prostate	9	36	22.2
Chronic lower respiratory diseases	10	32	19.7

HEALTH OF POPULATION GROUPS

Children under 5 Years Old

In the period 2000–2004, 699 deaths occurred in the 0–4 age group; of those, 601 were due to premature births, 52 were due to slow fetal growth and fetal malnutrition, and 30 deaths were attributed to congenital anomalies.

In 2004, there were 45 infant deaths and an infant mortality rate of 18.5 per 1,000 live births—higher than the 2003 rate of 14.9 and the 2002 rate of 13.5. In 2004, 10.9% of births were low birthweight (< 2,500 g) compared to 9.5% in 2003. Of all births in 2004, 83.7% were of average weight (2,500–4,000 g), compared to 85.1% in 2003. In 2004, 5.4% of infants were overweight (> 4,000 g), and the average birthweight for all babies was 3,155 g—3,218 g for males and 3,081 g for females (6). In 2004, 95% of children in the under 5 year age group participated in three standard development assessment programs—at 6 weeks, 8 months, and 3 years of age. Vaccination coverage was high at over 90% for DPT 1, 2, and 3; BCG; and polio 1, 2, and 3; 7.5% of children under 5 were reported to have had no vaccinations.

Children 5–9 Years Old

During the period 2000–2004, 16 deaths occurred among children 5–9 years of age; 14 were due to accidents and adverse effects, and two to congenital anomalies. Five cases of HIV/AIDS have been reported in this age group since the beginning of the epidemic; of those, two have died (8).

Adolescents 10–14 and 15–19 Years Old

The number of births to mothers under 20 years of age was 443 in 2003 and 444 in 2004. Of those births, 1.8% were to mothers 12–14 years of age in 2004, and 1.4% to mothers in that age group in 2003. In an effort to postpone childbearing and reduce fertility among teens, they have been the target of special programs by the Population Policy Unit, the Ministry of Health, the Ministry of Education, and the Family Planning Unit (6).

During the period 2000–2004, seven deaths occurred among adolescents 10–14 years of age; four were due to land transport accidents, two were suicides, and one was a homicide; males accounted for six of the deaths. In the same period, 24 deaths occurred among 15–19-year-olds; 10 were due to land transport accidents, eight were homicides, and six were due to accidental drowning; males accounted for 22 deaths in this age group. Since the beginning of the HIV/AIDS epidemic, there have been 22 cases: three were 10–14 years of age; 19 were 15–19-years of age; of those 22 cases, five have died—one in the 10–14-year age group, and four in the 15–19-year age group. Among adolescents the preferred measures of preventing HIV/AIDS were condom use (83%) and abstinence (71%); 54% of adolescents indicated that they were sexually active.

Adults 20–59 Years Old

In 2004, there were 2,436 live births; 96% of the respective mothers had prenatal care; births to women in the 20–24-year age group accounted for 25% of all live births.

In 2002–2004, 773 deaths occurred among adults 20–59 years of age. The three leading causes of death were malignant neoplasms, heart disease, and homicides. In the same period, among males aged 20–59 years, the leading causes of mortality were malignant neoplasms (prostate, stomach, lung), homicides, and heart disease. The leading causes of death among females were malignant neoplasms of the breast and cervix, leukemia, diabetes, and heart disease. AIDS accounted for 5% of deaths in this age group, in which 195 AIDS deaths have occurred since the beginning of the epidemic.

Older Adults 60 Years Old and Older

During the period 2002–2004, 2,093 deaths occurred among adults 60 years and older. The leading causes of death were malignant neoplasms (29% of total deaths in this age group), diabetes mellitus (24%), cerebrovascular disease (24%), and heart disease (24%). The leading causes of death among males were

malignant neoplasms (365), heart disease (252), and cerebrovascular disease (215). Among females, the leading causes of death were diabetes mellitus (304), cerebrovascular disease (285), and heart disease (248). Since the beginning of the HIV/AIDS epidemic, six persons in this age group have died of AIDS.

A 2002 report on care of the elderly in the country revealed that the main problems facing older persons were abandonment by family, inadequate preparation for retirement, isolation, and poverty. Many older persons were unable to access health and other support services due to geographic location, lack of transportation, and the cost of drugs and medical services (9).

The Family

The mean household size in 2004 was 3.4 persons; urban areas had a household size of 3.3, and rural areas of 3.5. Of those households, 43% were headed by females; and 25% of all female-headed households fell into the poorest quintile, compared to 18% of male-headed households. In addition, female-headed households were less likely to own assets such as land, housing, or vehicles, and half of the females who headed households were unemployed (3). During the period 2001–2004, only 2% of babies were not delivered at a hospital or maternity home (3); approximately 85% of live births were born to women out of wedlock.

Persons with Disabilities

The 2001 census revealed that 9,313 persons (6.2% of the total population) had disabilities; 39.1% of disabilities occurred in persons 65 years and older, and 25.1% in persons 15–64 years of age. The most noted disabilities were locomotor and sight disabilities, accounting for 63.4% of all disabilities.

HEALTH CONDITIONS AND PROBLEMS

COMMUNICABLE DISEASES

Vector-borne Diseases

From 2000 to 2002, five imported cases of **malaria** were reported; no cases were reported in 2003 or 2004. In the 2000–2004 period, 80 cases of **dengue** were confirmed, including an outbreak of 60 cases in 2001; dengue virus types 1, 2, 3, and 4 have been identified in the country.

Vaccine-preventable Diseases

Under the Expanded Program on Immunization (EPI), children under 5 years of age are immunized against **diphtheria**, **whooping cough**, **tetanus**, **Hib**, **hepatitis B**, **poliomyelitis**, **measles**, **mumps**, **rubella**, and **tuberculosis**. In 2004, vaccination coverage for polio was 91% and for BCG 99%. Only one case of tetanus has been reported in the past five years, in a two-

year-old male in 2001. The near absence of vaccine-preventable diseases attests to the high immunization coverage over the last 10 years.

Intestinal Infectious Diseases

During the period 2000–2005 no case of **cholera** was reported. During the same period, 36 cases of **salmonella** were reported, and 20 cases of **typhoid fever** were confirmed. Gastroenteritis was the first cause of visits by persons to clinics and the cause of 47% of outpatients seeking medical attention.

Chronic Communicable Diseases

There were 73 reported cases of **tuberculosis** for the period 2000–2004, an increase due in part to improved detection of clinical and laboratory diagnoses; of those cases, 53 were new and 20 were relapses. There was an average of 11 new infections per year and an average of four relapses per year. For the period 2000–2004, 53 cases of leprosy were reported—an increase attributable to successful education and awareness programs in schools and media since 2000.

HIV/AIDS and Other Sexually Transmitted Infections

Between 1985 and 2004, 469 persons tested positive for HIV infection; children under 15 years of age accounted for 10% of cases, and adults aged 15–49 for 77%; 251 (53%) have developed AIDS-related diseases, and 230 (49%) of these have died. Males represent 53% of AIDS deaths among adults 15–49 years old and 64% among the 50+ age group. The male-to-female ratio of AIDS deaths in 1995–1999 was 1.4:1. Unprotected heterosexual sex remains the main mode of transmission.

Zoonoses

No cases of **rabies** have been reported in the country for the past two decades. For the period 2000–2004, 18 cases of leptospirosis were confirmed; all cases investigated suggested a link with rodent infestation in homes and workplaces.

Schistosomiasis was still present in the country, especially in the south, with 30 cases confirmed in the 2000–2005 period.

NONCOMMUNICABLE DISEASES

Nutritional and Metabolic Diseases

Between 1998 and 2002, **diabetes** accounted for 518 deaths, with 62% occurring among females. About 23% of all reported deaths from diabetes were in the 45–64-year age group, and 75% were in the 65 year and older age group.

Cardiovascular Diseases

Deaths by **cardiovascular diseases** (heart disease, cerebrovascular disease, and hypertension) totaled 1,577 (32% of all deaths) for the period 1998–2002, with an average of 315 deaths per year.

Heart disease and cerebrovascular diseases represented 85% of cerebrovascular mortality in the country. In 2001, there were 298 deaths from cardiovascular diseases (30% of all deaths) and, in 2002, there were 296 deaths from cardiovascular diseases (31% of all deaths). Deaths due to cardiac arrest accounted for 16% of all cardiovascular deaths for 1998–2002, ranging from 15% to 23% per year. Ischemic heart disease represented about 10% of all deaths due to cardiovascular diseases for 1998–2002 (10).

Malignant Neoplasms

Between 1998 and 2002, 763 deaths occurred due to malignant neoplasms—an annual average of 153 deaths—and represented about 16% of all deaths. Males accounted for 56% of all deaths due to malignant neoplasms, and among males the three sites most frequently reported for these deaths were prostate (36% of all male deaths due to malignant neoplasms), stomach (11%), and the trachea/bronchus/lung (8%). Among females, the leading sites of malignant neoplasms were breast (17% of all female deaths due to malignant neoplasms), cervix (17%), and leukemia (8.8%). Mortality due to malignant neoplasms was higher for women than for men in the 15–44-year age group, but was similar in the 45–64-year age group. In the 65 year and older age group, mortality from malignant neoplasms was twice as high among men than women, with the exception of colon cancer for which rates were higher among women (10).

OTHER HEALTH PROBLEMS OR ISSUES

Mental Health and Addictions

The Golden Hope Hospital, a 162-bed mental institution, had an occupancy rate of 72–74%, with an average length of stay of 50 days and 43 days for 2003 and 2004, respectively. According to hospital records, schizophrenia was the most frequent diagnosis, accounting for approximately 60% of all diagnoses in 2003 and 58% in 2004. In 2005, 62 patients had resided at the hospital for more than one year. The models of care most commonly used were physiotherapy, occupational therapy, and other forms of therapy.

In 2005, the Substance Abuse Advisory Council sent survey questionnaires to primary (5–16-year-olds) and secondary (11–16-year-olds) schools; of the 11 schools that responded, 10 indicated that abuse of drugs—crack, cocaine, and marijuana—was a problem in the communities surrounding their schools. Six of the 11 schools reported that students had been caught with drugs in their possession.

Oral Health

In 1997 a community dental survey was carried out, and the results showed an average of six decayed, missing, and filled teeth among children 12 years old, which is considered high. In 2003–2004, the most common activities carried out by the public health dental program were preventive (education, fluoride

treatments, and sealants), restorative (fillings and root canal treatment), and emergency (extractions); the most common procedures performed were periodic examinations and extractions.

RESPONSE OF THE HEALTH SECTOR

Health Policies and Plans

The Ministry of Health completed its National Strategic Plan for Health for the period 2006–2011 (11). The plan envisions: strengthening the organization and management of health and social services; improving and sustaining health gains and residents' well-being; achieving greater equity, cost effectiveness, and efficiency in the allocation and use of health resources; ensuring a cadre of well-trained and motivated staff; developing an effective health information system to support evidence-based planning; implementing a quality improvement system; and improving health infrastructure to support the reform process.

In 2005, a draft protocol for the prevention and management of child abuse was developed that is to provide relevant information to facilitate rapid and effective response to all suspected cases of abuse. Also, the country is a part of a domestic violence and family law reform project of the Organization of Eastern Caribbean States that aims to ensure that laws are responsive to the needs of clients. Some of the relevant bills under review relate to the status of children, child care and protection, and adoption. A draft policy for older persons was completed that prescribes various mechanisms to enhance the quality of life of the elderly. The WHO framework convention on tobacco control was ratified by Saint Lucia in 2005. The Disaster Preparedness and Response Act was enacted in 2000 to provide for more effective disaster and emergency mitigation, preparedness, response, and recovery.

Organization of the Health System

The Ministry of Health focuses on providing maximum quality of life for all the country's citizens. Among other priorities, health policies and plans continue to target poor at-risk populations, children, and older adults and to assure gender equity. The Ministry has two main divisions: an administrative arm headed by a permanent secretary and a technical arm headed by the chief medical officer, who is responsible for the health of the nation. The Ministry of Health is the sole provider of primary and secondary health care services in the public sector. The country seeks to strengthen the health sector within the national, regional, social, political, and economic contexts and to position it as a major driver of social and economic development (12).

Outpatient services are provided at medical clinics at health centers and district hospitals and through the casualty or emergency departments of acute general hospitals. Secondary and specialized services are provided by three institutions: Victoria Hospital, the main hospital, located in the city of Castries and

managed by the Ministry of Health; St. Jude's Hospital, located in the south of the island, a quasi-public institution that receives an annual subvention from the Government and many of whose specialists come from overseas and serve on a voluntary basis; and Tapion Hospital, a privately owned facility in the city of Castries. Two specialized institutions operate on the island: the psychiatric facility, Golden Hope Hospital, which offers inpatient and outpatient mental health services; and Turning Point, a drug rehabilitation center.

Most tertiary care services are provided through health facilities abroad, primarily in Martinique, Barbados, and Trinidad and Tobago. The national insurance scheme provides assistance to older persons, the disabled, and the indigent, whether or not they are contributors to the scheme. The cost of care for indigent persons is partially funded by the Ministry of Health, while the rest is funded out-of-pocket; private health insurance covers the insured.

Both the Division of Human Services and Family Affairs and the Division of Gender Relations respond to vulnerable and at-risk groups by implementing appropriate social protection programs. The elderly home refurbishment project aims to refurbish the homes of older persons in difficult circumstances, and the Government has committed to build a new home for older persons. Services to vulnerable children are to be increased through establishment of a transit home for children, foster care, and family intervention programs. The Division has implemented a foster care and recruitment program that promotes public involvement in caring and protecting children in need, and the public assistance program likewise targets helping those in need. The Division of Gender Relations is responsible for implementing gender mainstreaming and has developed a program to combat gender-based violence.

Public Health Services

Primary health care services are provided at 34 health centers, a polyclinic, and two district hospitals. These facilities routinely offer medical and pharmaceutical services, maternal and child health care (antenatal and postnatal care as well as immunization of children), prevention and control of sexually transmitted infections, mental health clinics, and services related to diabetes, hypertension, cancer screening, dental care, and food and nutrition.

In the Ministry of Health, the Bureau of Health Education is responsible for health education and promotion; it focuses on control and reduction of noncommunicable diseases such as cancer, diabetes, hypertension, arthritis, and lupus, and promotes good dietary habits and guidelines for treatment and care of those diseases. Community sensitization meetings are held to foster community participation and disseminate information on vector management.

Programs are executed for disease prevention and control, specifically of tuberculosis, leprosy, HIV/AIDS, and other sexually transmitted infections (STI), dengue fever, measles, and some cancers. Activities include surveillance, management, and treatment of cases, and special clinics for STI. A cancer registry was established in 1995, a national tuberculosis register in 1996, and a national diabetes register in 2001. Since 2000, a national tuberculosis management committee meets monthly and follows up on all cases of the disease. The Expanded Program on Immunization (EPI) has maintained high vaccination coverage for many years, and the incidence of vaccine-preventable diseases is very low. High-risk pregnancies are monitored, and all pregnant mothers are provided with folate and iron supplements and counseling services. Screening programs are offered for cervical, breast, and prostate cancer, although few men are being screened for prostate cancer. Preventive services are free except for contraceptives, yellow fever vaccinations, and vaccinations required for college entry. Nutrition protocols and guidelines have been established to manage HIV/AIDS, and the distribution of antiretroviral drugs, through the Global Fund, has commenced.

The communicable disease surveillance system, which was revised in 2001, bolsters the Caribbean Cooperation in Health initiative and aims to improve surveillance, prioritize response to outbreak-prone communicable diseases including emerging and reemerging infectious diseases, and increase sensitivity, preparedness, timeliness, and laboratory diagnosis; the major changes to the system include expansion of syndromic surveillance, discontinuation of suspected cases of diseases, quarterly-basis reporting of tuberculosis, and systematic and standardized outbreak reporting. Data for this system are collected from sentinel sites at the emergency and accident departments of Victoria Hospital, St. Jude's Hospital, and Gros Islet Polyclinic.

The Environmental Health Department within the Ministry of Health is responsible for the delivery of environmental health services including food and water safety, vector control, and sanitation and for monitoring and regulating the disposal of solid waste. Efforts have focused on surveillance and treatment of mosquito breeding sites; conduct of monitoring exercises for dengue, schistosomiasis, and leptospirosis; and port inspection for *Aedes aegypti* at Marigot, Rodney Bay, and Castries harbors. The Department developed and implemented effective mechanisms and strategies for monitoring and enforcing the quality of potable water; in 2005, 29 municipal distribution systems were monitored weekly. The Food Unit of the Department is responsible for food protection, control, and safety and conducts inspections of food service establishments and wholesalers at least three times a year; in 2004, 1,696 food handling establishments were inspected, and follow-up inspections were carried out in 204 to ensure compliance with guidelines. In 2004–2005, the unit trained some 300 farmers in basic food hygiene principles. The draft food and animal health acts were reviewed and circulated for comments.

Government Targets the Well-being of the Youngest Saint Lucians

Saint Lucia's is a young population—more than one in four inhabitants is younger than 15 years old. Given this age distribution, the Ministry of Health considers the country's children as a priority. Over the past decade, efforts to immunize children under 5 years old against diphtheria, whooping cough, tetanus, *Haemophilus influenzae* type b, hepatitis B, poliomyelitis, measles, mumps, rubella, and tuberculosis have resulted in the near-absence of vaccine-preventable diseases. The Government also has established a transitional home for foster care and family intervention services that will protect at-risk and abused children. Among other initiatives, development and guidance services are now being offered to children under 16 years of age, monthly clinics have begun to serve children with handicaps, and several years ago the ministries of Health and of Education collaborated in setting up a school dental health program. Concern for youths' use of drugs—marijuana, crack, and cocaine mainly—and exposure to HIV/AIDS have prompted an array of national efforts to combat these health threats.

Response to disasters caused by human activity centers on training personnel—firefighters, emergency medical technicians, and first responders; in addition, eight ambulances are available on a fee-for-use basis.

Individual Care Services

In addition to the above-mentioned secondary and specialized hospitals, two district hospitals (in Soufrière and Dennery) provide outpatient, hospitalization, and emergency services, as well as inpatient care for minor medical, surgical, and pediatric problems and maternity care for low-risk deliveries. The psychiatric hospital provides inpatient care and some primary care to outpatients through community psychiatric clinics at the hospital and in seven other locations.

Two public and three private laboratories operate on the island. The one at Victoria Hospital serves as the national reference laboratory and employs the country's only pathologist. Blood collection and transfusion services are done at the blood bank unit of Victoria Hospital; there is also a mobile blood bank unit. Blood donors are interviewed about lifestyle and other risk factors before blood is drawn and tested for HIV, VDRL, hepatitis B and C, HTLV-1 and -2, blood group, and antibody screening.

Among specialty services, one of the Ministry of Health's current areas of concern is mental health. The mental health reform initiative articulates a shift from institutional to community-based mental health care that is expected to result in decentralization of, and increased access to, mental health care. The reform process entails mental health policy and legislative reform; human resource development and training; mental health promotion and illness prevention; and community mental health services. In addition, plans were finalized for construction of a new mental health facility, to be opened in 2007–2008; estimates

of personnel needs and the corresponding job descriptions were prepared.

In support of family planning, the Saint Lucia Planned Parenthood Association targets reduction of the incidence of unwanted pregnancies, particularly among adolescents, through a strengthened family life education program and comprehensive reproductive health care services. The Association provides counseling as well as contraceptive and other reproductive health services in clinical settings.

The National Strategic Plan for Health includes the provision of portable public dental health services, many of which are not currently available on a daily basis, to nine community health centers. In collaboration with the Ministry of Education, a school dental program was launched in 2003. Dental services are provided through a number of health facilities as well as the private sector.

Specialist ear, nose, and throat services were available, but those of speech therapists and audiologists were only periodically offered by short-term volunteers. A team of health professionals conducted monthly clinics for children with multiple handicaps. The Child Development and Guidance Center and the Ministry of Education offered services to children from birth to 16 years; their multidisciplinary team of professionals—a volunteer pediatrician, a physiotherapist employed by the Ministry of Education, visiting speech and language therapists, and visiting occupational therapists—provides comprehensive, ongoing assessment and diagnosis of children with physical, mental, emotional, and behavioral problems.

Human Resources

The most recent assessment of public health professionals in the country is summarized in Table 2. The total health sector human resource cost is estimated at US\$ 15.2 million, which represented 70% of the latest total national budget.

The country experienced a shortage of health workers, as many of its nurses and other staff obtained more lucrative positions abroad. Approximately half of all nurses and midwives left the service within a year of graduating. The Nursing Council received 170 requests for transcripts in 2004, suggesting the departure of substantial numbers of trained nurses (13). The National Strategic Plan for Health emphasizes the development of measures to retain trained health workers.

In the reporting period, 14 persons participated in the PAHO/WHO environmental health three-step program, the main objective of which is to enhance the skills of environmental health officers. Two nurses were trained in the care and management of diabetic patients and subsequently assisted in developing protocols for the effective management of diabetics. The Ministry of Health implemented an internship program to ensure the quality of new doctors by affording them the opportunity to apply their skills in a supportive learning environment. In 2004–2005, 37 doctors were trained at a cost of almost US\$ 400,000. In 2005, a family case worker was trained in Israel, and two welfare officers were trained in social gerontology in Malta.

Health Supplies

The country obtains drugs through the Eastern Caribbean Drug Services, while all vaccines used in the public sector are procured through the PAHO Revolving Fund. The pharmaceutical procurement service of the Organization of Eastern Caribbean States expanded its medical product portfolio from 470 to 680 items to increase economies of scale by international tendering of a diverse range of essential health care products; the 25% increase in tendered medical supplies included a wide assortment of sutures, which previously consumed a significant portion of the health budgets of OECS countries.

Research and Technological Development in Health

In 2004, the Government conducted a knowledge, attitude, and practice survey (KAPS) of young persons (10–30 years of age) regarding HIV/AIDS in Gros Islet, Vieux Fort, Canaries, and Denery, as part of a joint effort with the Organization of Petroleum Exporting Countries and UNFPA; the survey revealed the need for a deliberate strategy to arrest and control the HIV/AIDS epidemic among Saint Lucian youth (14). In 2004, the above-mentioned core welfare indicators survey included the monitoring of poverty and household welfare, covering a sufficiently large and representative sample to provide reliable welfare indicators for planning and policy formulation. In 2005, a UNICEF-sponsored child vulnerability study provided the Government pertinent findings and recommended priorities for action. That same year, a survey conducted by the Substance Abuse Advisory Council Secretariat to determine the level of drug abuse and drug education activities among the secondary school population found that the drugs most commonly used were marijuana, crack, and cocaine.

TABLE 2. Public sector health professionals, by specialty and population covered per specialty, Saint Lucia, 2002.

Category	No.	Population/ specialty
General practitioners	60	2,669
General surgeons	4	40,036
Anesthetists	5	32,029
Pediatricians	3	53,382
Obstetricians/gynecologists	5	32,029
Psychiatrists	5	32,029
Physicians	8	20,018
Accident and emergency	4	40,036
Epidemiologists	1	160,145
Cardiologists	1	160,145
Dermatologists	1	160,145
Internists	2	80,073
Ophthalmologists	1	160,145
Pathologists	1	160,145
Radiologists	2	80,073
Orthopedic surgeons	3	53,382

Health Sector Expenditures and Financing

Health services are funded from four main sources: the consolidated fund, out-of-pocket payments, private insurance schemes, and donor contributions. The total annual health budget in 2000–2001 was the highest for the decade, at US\$ 20.2 million; in 2001–2002 it was US\$ 19.5 million, representing 6.2% of the total national budget; and in 2002–2003 it was US\$ 19.3 million, representing 6.7% of the national budget.

In terms of distribution of the total health budget, secondary care services accounted for 53% in 2001–2002 and 54% for 2002–2003; primary care services were the second major portion of the total health budget, accounting for 22% in 2001–2002 and 23% in 2002–2003, and community services consumed about half of the primary care services budget; Golden Hope Hospital accounted for 5% each year of the total budget for 2001–2003; and the Ministry of Health's administration, policy, and planning services accounted for 9% of the total budget in 2001–2002 and 10% in 2002–2003 (10, 15).

The National Insurance Scheme made an annual contribution to the consolidated fund to cover inpatient hospital expenses for its members. Health expenditures grew by 40% over the period 2000–2006, from US\$ 22.6 million to US\$ 31.9 million. This upward trend is a reflection of the demand placed on the public health system by the demographic and epidemiological health profile. As a result, the resources allocated to the public health sector were insufficient to adequately respond to the increasing health needs of the population. The universal health care program was developed as the mechanism to improve national health sector financing; universal health care is scheduled to be implemented in 2006–2007.

Technical Cooperation and External Financing

Given the limited resources of the health system, resource mobilization is a major public sector thrust. The country received technical and financial cooperation from several external agencies and foreign governments. The European Union provided support in the form of loans and grants for the new general hospital, the development of the National Strategic Plan for Health, the integrated child protection and development program, the care of the elderly project, and the Women's Support Center. The Government received partial financing from the Caribbean Development Bank to undertake rehabilitation of primary schools and community health centers. It also secured funding to repair and refurbish 24 health facilities—15 through the Central Bank economic reconstruction project, five through the Basic Needs Trust Fund, and four through the World Bank. The World Bank also provided both loan and grant funding to implement the HIV/AIDS prevention and control project. A grant from the Government of Ireland targeted improvement of HIV/AIDS services, and UNFPA funded a project for HIV/AIDS prevention among youth. PAHO provided cooperation through training, scholarships, and direct technical services. The Government of China began construction of the new mental health facility, and the Government of Cuba contributed to improving the national eye care program, by providing free eye care for Saint Lucians in Cuba and technical assistance for development of an ophthalmology center at Victoria Hospital.

Nongovernment organizations such as the Saint Lucia Blind Welfare Association (SLBWA) and the National Council for Persons with Disabilities are critical in their response to eye health and physical disability problems. The SLBWA, through its link with the Hilton-Perkins International funding agency, provides limited, predominantly home and community-based care to a small number of multidisabled and vision-impaired children.

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