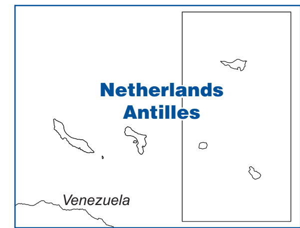
NETHERLANDS ANTILLES



0 10 20 Miles

Anguilla

Saint-Martin

Sint Maarten

Philipsburg

Saint-Barthélemy

Saba

Sint Eustatius

Saint Kitts and Nevis

Bonaire

Curaçao

Kralendijk

Klein Bonaire

Willemstad

Klein Curaçao

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.

The Netherlands Antilles are an autonomous territory of the Kingdom of the Netherlands. They consist of five islands in the Caribbean archipelago: the southern Leeward Islands of Bonaire and Curaçao, and the northern Windward Islands of Saba, Sint Eustatius, and Sint Maarten (the southern part of an island shared with France, whose northern part is known as Saint-Martin). The Leeward Islands are separated from the Windward Islands by 900 km. The Netherlands Antilles enjoy a mild tropical climate with an annual average temperature of 27–28° C. The islands are generally hilly with volcanic interiors. Bonaire and Curaçao have a more arid climate than the three Windward Islands, which are lusher and greener.

GENERAL CONTEXT AND HEALTH DETERMINANTS

Social, Political, and Economic Determinants

The Netherlands Antilles possess self-determination on all internal matters and defer to the Kingdom of the Netherlands regarding issues of defense, foreign policy, and some judicial functions.

A Governor who serves a six-year term represents the monarch of the Kingdom of the Netherlands. The Netherlands Antilles' central government is a parliamentary democracy whose seat is located in the capital (and largest city) of Willemstad on Curaçao. The office of the Governor is also based in Willemstad. Each island also has its own local government consisting of an Island Council and a Legislative Assembly. The Island Council is the local equivalent of the central-level parliament and thus each island's highest political body. Its executive council is known as the *Bestuurscollege*, and it is composed of commissioners overseeing the various government services, including the health of the population. Each of the island *Bestuurscolleges* is headed by a Lieutenant Governor. The islands are divided into administrative zones and neighborhoods.

Between 2000 and 2005, referendums were held on each of the islands to determine their future status. This process—which continues as of this writing—has, in effect, initiated the breakup of the Netherlands Antilles. The voting results have led to a series of negotiations and agreements in which Curaçao and Sint Maarten are slated to become separate autonomous entities and Bonaire, Saba, and Sint Eustatius are slated to merge with the Netherlands. Discussions by the Government of the Kingdom of the Netherlands and the island governments on structural and functional changes as regards governance and service provision are ongoing.

The Netherlands Antilles cover a combined area of 800 km^2. Saba is the smallest island, with a land area of 13 km^2, and Curaçao is the largest, with a land area of 444 km^2. In 2004, Bonaire was the least densely populated island, with 37 persons per km^2, and Sint Maarten was the most densely populated, with 1,030 persons per km^2.

The population is 85% mixed Black, with the remaining 15% being of White, Amerindian, and Asian background. The overall literacy rate for the population aged 15 and older was 96% in 2001. According to data from the latest (2001) census, 72% of the population is Roman Catholic, another 20% holds membership in other Christian denominations, 1% is Jewish, 5% reports no religion, and the remaining 2% practices another religion or did not specify religious affiliation.

Though Dutch is the official language of the Netherlands Antilles, English is the most commonly spoken language on the Windward Islands of Saba, Sint Eustatius, and Sint Maarten, and Papiamentu—a mixture of Portuguese, Spanish, English, and Dutch words—is the more predominant language spoken on the Leeward Islands of Bonaire and Curaçao. Of the combined Netherlands Antilles population in 2001, 65% primarily spoke Papiamentu, 16% primarily spoke English, 7% primarily spoke Dutch, 6% primarily spoke Spanish, 2% primarily spoke Creole, 2% spoke other languages, and the remaining 2% did not specify primary language.

The 2005 gross domestic product (GDP) per capita was US$ 17,888, with tourism and the services industry making up 84% of GDP. The external debt of the Netherlands Antilles was US$ 2.68 billion in 2004, while the purchasing power parity GDP in the same year was estimated at US$ 2.8 billion. GDP grew almost 8% between 2001 and 2004. Fifteen percent of GDP in 2005 was industry (petroleum refining on Curaçao, petroleum transshipment facilities on Curaçao and Bonaire, and light manufacturing

on Curaçao), and 1% was agriculture (aloes, sorghum, peanuts, vegetables, and tropical fruit). The currency of the Netherlands Antilles is the Netherlands Antillean guilder (ANG), with a fixed exchange rate of 1.78 ANG = US$ 1 in 2005.

Tourism and related activities provide the largest source of employment in the Netherlands Antilles. In 2005, the three largest islands of Curaçao, Sint Maarten, and Bonaire had 222,000, 462,000, and 68,000 stay-over tourists, respectively. In that same year, tour ships docked 931 times at these three islands to deliver a total of 1.8 million day tourists.

In 2005, the estimated unemployment rate for the Netherlands Antilles as a whole was 16.3%, with the highest rate being found on Curaçao. Unemployment rates for women were consistently higher than those for men on all of the islands, and employment rates for youth were typically two to three times higher than the overall rates.

During the 2000–2005 period, various different trends and patterns in unemployment rates were noted for the three islands with 98% of the Netherlands Antilles' total population. On Curaçao, where nearly three-quarters of the total population resided during this period, the unemployment rate for the economically active population increased from 14.2% in 2000 to 18.2% in 2005. On Sint Maarten, the island with almost one-fifth of the total population, the unemployment rate remained unchanged at 13.4% during the period, whereas on Bonaire, where only 6% of the population resides, the unemployment rate for the economically active population rose from 5.5% in 2000 to 8.9% in 2005.

A poverty assessment survey conducted during the 2004–2005 period revealed that the percentage of households with a very low monthly income equivalent to approximately US$ 280 (adjusted for household size) ranged from 5% on Saba to 16% on Curaçao, with an overall average of 14% for the five Netherlands Antilles islands. Additionally, an overall average of 32% of households reported that their income was insufficient to cover all necessary expenses, with figures ranging from 27% on Bonaire to 50% on Saba.

The survey found that income inequality was lowest on Saba, the island with the highest median household income, and Bonaire. On Saba and Bonaire, the 20% of households with the highest income levels had an income six times higher than that found among the poorest 20% of households. The highest income inequality, coupled with the lowest median household income, was found on Curaçao, where the 20% of households with the highest income had an income 14 times higher than that found among the poorest 20% of households.

The 2001 census showed that 22% of the population aged 15 or older did not have an income (26% women and 19% men). Twenty-eight percent of female-headed households were living in poverty.

In 2002, secondary school enrollment was 78%. That same year, the average length of schooling for adults from both sexes was approximately 14 years. In 2001, adult literacy was reported to be 96.3%, with men and women having nearly identical rates.

Demographics, Mortality, and Morbidity

The Netherlands Antilles Central Bureau for Statistics estimated the 2005 population to have grown to 185,513 from the census-enumerated population of 175,652 in 2001, at which time 53% of the population was female and 47% was male. With an estimated 73.2% of the total population (135,822 inhabitants), Curaçao has the largest population of the five islands, followed by Sint Maarten with 18.9% (35,035), Bonaire with 5.7% (10,638), Sint Eustatius with 1.4% (2,584), and Saba with 0.8% (1,434).

Figure 1 show the population structure, by age and sex, for the Netherlands Antilles for 1990 and 2005.

The 2001 population of 175,652 was nearly 14,000 persons less than the population enumerated in the previous 1992 census. The population decline on Sint Maarten and Curaçao more than compensated for the population growth experienced on the other three islands. Of the 2001 total population, 7.5% was in the 0–4-year-old age group, 24.0% was in the 5–9-year-old age group, 55.3% was in the 20–59-year-old age group, and 13.2% was aged 60 years or older.

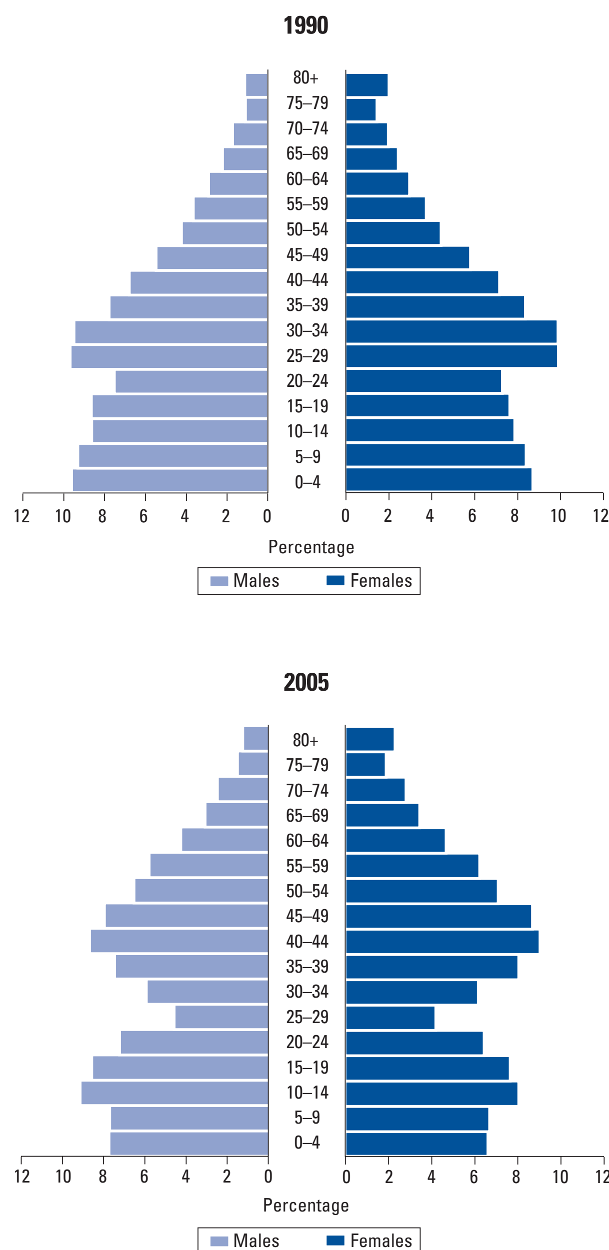
Between the 1992 and 2001 censuses, the overall population had grown older, with a 13% decrease in the population segment aged 19 and under and a 25% decrease in the 20–39-year-old age group. Groups older than 40 years of age increased in numbers over the same time period.

In 2001, one out of every four persons living on the islands was born outside of the Netherlands Antilles. Curaçao had the lowest percentage of foreign-born persons (17%), and Sint Maarten had the largest percentage (63%).

The Dominican Republic was the country of origin with the largest percentage (18.7%) of those who reported being foreign-born and represented approximately 5% of the total population of the Netherlands Antilles. Smaller proportions of the resident population born elsewhere included those born in the Netherlands (15.2% of all foreign-born residents), Aruba (7.0%), Haiti (6.9%), Colombia (5.6%), Suriname (5.2%), Jamaica (4.4%), Dominica (3.9%), Venezuela (3.2%), Guyana (2.8%), and the United States (2.5%).

In 2001, one in five inhabitants indicated that he or she had intentions of migrating from the Netherlands Antilles, and half of the total population was undecided about whether they would choose to migrate. During the 1998–2002 period, approximately 15% of Curaçao's population migrated to other countries due to faltering economic conditions, resulting in a major drain of the population's better-educated and trained segments. The majority of those who migrated were in the 20–35-year-old age group, with a median age at the time of migration of 24 years. However, since 2001, this out-migration trend has slowed and by 2005 was showing signs of reversing itself.

FIGURE 1. Population structure, by age and sex, Netherlands Antilles, 1990 and 2005.



At the time of the 2001 census, 29% of the population aged 30–59 years old reported not having a partner and another 11% reported not living with their partner. For those reporting cohabitation, the average age of the male partner was more than three years older than his female partner.

The overall average size of households was approximately three persons. Larger average sizes of households were found on Bonaire and Curaçao, with the largest share of single-person households being found on Saba, Sint Eustatius, and Sint Maarten. Census data showed a decrease in the fertility rate from 2.4 children per woman in 1992 to 2.2 in 2001. There was also a corresponding increase in mean age of the mother at first birth from 24.5 years in 1992 to 25.5 years in 2001. More than one in every five households in 2001 were single-headed households with children under 18 years of age; of these, 94% were headed by a female. Nearly 90% of the single-headed households were headed by a parent.

For the 2002–2004 period, life expectancy at birth for males was 70.6 years, and for females it was 79.0 years. The difference of more than eight years in life expectancy between males and females was at least partially attributable to differences in lifestyle and risk behaviors. For example, men in the 20–30-year-old age group were disproportionately at a higher risk for death due to accidents and violence than women in this same age group.

For the 1998–2000 period, the mean annual crude mortality rate for Curaçao was 7.5 deaths per 1,000 population, compared to a 1988 crude mortality rate of 6.5 deaths per 1,000 population.

In 2000, chronic noncommunicable diseases were among the leading causes of mortality. In this year, approximately one-third of these deaths were caused by pulmonary, cardiovascular, and cerebrovascular diseases. Malignant neoplasms, diabetes mellitus, and acute respiratory infections were also among the leading 10 causes of death. Neoplasms contributed to approximately one-fourth of all deaths; the most frequently occurring sites for neoplasms were the prostate and the digestive and respiratory tracts. The leading causes of death and corresponding mortality rates for Curaçao during the 1998–2000 period are presented in Table 1.

In the 2001 census, 5.1% of the population reported having a diagnosis of high blood pressure, 3.5% reported having a diagnosis of diabetes, 2.8% reported having a diagnosis of asthma or chronic bronchitis, and 1.7% reported having heart problems.

TABLE 1. Leading causes of mortality and associated mortality rates per 100,000 population, Curaçao, 1998–2000.

Rank	Cause	Mean annual crude mortality rate per 100,000 population
1	Pulmonary and other cardiovascular diseases	90
2	Cerebrovascular diseases	70
3	Ischemic heart diseases	60
4	Malignant neoplasms of the prostate	30
5	Diabetes mellitus	30
6	Acute respiratory infections	30
7	Malignant neoplasms of the digestive tract, excluding the stomach and colon	30
8	Malignant neoplasms of the respiratory tract	20

The prevalence rates of high blood pressure, diabetes, and heart problems increased with age, whereas the prevalence of asthma or chronic bronchitis decreased with age. For each age group after age 14, females were 1.7 times more likely to report having high blood pressure and 1.4 times more likely to report having diabetes than males.

For young adult males, the leading cause of death was homicide and intentional injury. AIDS was in the top three causes of death for both males and females in the 25–44-year-old age group. Adults over the age of 60, females, and individuals with incomes below the poverty line reported a higher frequency of chronic health problems and lower use of preventive health services.

In 2001, 15% of men aged 15–29 and 30% of men aged 30–44 reported smoking tobacco. Among women, 6% in the first age group and 13% in the second age group reported smoking. Overall prevalence of tobacco smoking for the total population was 13%.

HEALTH OF POPULATION GROUPS

Children under 5 Years Old

The estimated infant mortality rate in 2005 was 4 per 1,000 live births, a reduction from the 1990 rate of 7 per 1,000 live births. According to the Netherlands Antilles Central Bureau for Statistics, in 2005 there were 13,378 children aged 0–4, making up 7.2% of the total population. Over the past decade, there has been a steady decline in the annual number of births. In 1998, 3,111 live births were registered, compared to 2,357 in 2004. This decline has been attributed to a reduction in the number of females of reproductive age and to a reduction in the total fertility rate from 2.6 in 1990 to 2.0 in 2000.

The annual number of deaths during the 1998–2000 period for the 1–4-year-old age group was low. On Curaçao, there was an average of four deaths a year among this age group during this period, with accidents and sepsis being the leading mortality causes.

Age Group 5–14 Years Old

External causes are the principal mortality cause for this age group. During the 1998–2000 period, approximately 30% of the deaths among those in this age group were caused by traffic accidents.

According to data from the 2001 census, boys aged 5–14 years old suffered from a higher burden of chronic disease than girls in the same age group, with asthma/bronchitis being the most frequently occurring condition.

Age Group 15–24 Years Old

From age 16, a marked increase in the mortality rate has been shown among males, while for their female counterparts the mortality rate has remained stable. Homicide is the leading cause of death in this age group, followed by traffic accidents. On Curaçao, 40 males and no females in this age group died as a result of homicide during the 1998–2000 period. Youth between the ages of 18 and 25 are three times more likely to be involved in a serious traffic accident than older drivers.

Among the population aged 15–24, females are more frequently hospitalized than males, primarily for pregnancies and deliveries. According to 2001 census data, approximately 10% of all children in the Netherlands Antilles were born to adolescent mothers. The primary reason for hospitalization of males in this age group was due to fractures. Asthma/bronchitis was the most frequently occurring chronic disease.

According to a 2002–2003 study conducted by the Youth Directorate of the Netherlands Antilles, 18% of all youth were facing serious social problems (e.g., drug and alcohol use, parents' gambling addictions, lack of parental guidance and/or involvement, family conflicts) and another 14% were at risk for developing these same social problems. Youth-related risk factors included peer pressure and tolerance toward and/or early exposure to negative social behavior. One-third of the girls in the same study said they knew a victim of sexual abuse, and 21% of the boys reported that they had had sex with an unwilling partner.

In a 2002–2003 public school survey carried out on Curaçao among students aged 13–18, 43% of the boys and 28% of the girls reported being sexually active, with 51% of the boys and 25% of the girls reporting always using a condom.

Adults 25–59 Years Old

During the 1998–2000 period among the 25–44-year-old age group, mortality rates due to traffic accidents and homicides were higher for males than females. Among external causes for death, the third major cause among those in this age group was suicide. Among females in the 25–44-year-old age group and the 45–59-year-old age group, the leading cause of mortality is malignant neoplasms of the breast. The principal cause of death for males aged 45–59 is ischemic heart diseases. For both females and males in the 25–45-year-old age group, AIDS is among the top three leading causes of mortality. In this age group, females are also more frequently hospitalized than males, with the leading reasons for hospitalization being pregnancy and delivery.

In 2002, the leading reasons for hospitalization of males were fractures and other injuries. In the 25–44-year-old age group, migraines and chronic headaches, psychological problems, and dizziness were the most commonly treated chronic conditions, and for those over age 45, hypertension and diabetes were the most common of these conditions.

In the 2001 census, 11% of the population between the ages of 45 and 64 reported having a diagnosis of hypertension and 8% reported having a diagnosis of diabetes, with more women than men reporting these conditions.

Older Adults 60 Years Old and Older

The overall population in the 2001 census was older in comparison with the overall population in the 1992 census. The older age groups increased in both numbers and percentage during this period. The number of hospital admissions was the highest among the elderly. The primary reasons for hospital admissions in this age group were eye diseases, diseases of the kidney and urinary tract, and malignant neoplasms.

The Family

Approximately 85%–90% of all deliveries in the Netherlands Antilles took place in hospitals during the 2001–2005 period. During the 1998–2000 period, 17 late fetal deaths per 1,000 deliveries were reported.

The average number of deaths among children aged 0–12 months remained stable at around 10 deaths per year during the 1998–2003 period. Major causes of death for children under age 1 were respiratory conditions and congenital deformations. During the 1998–2000 period, Curaçao reported a perinatal mortality rate of 23.5 per 1,000 deliveries.

In 1996 and 1997, Curaçao registered 130 and 150 maternal deaths, respectively. In 1998, the number of maternal deaths on Curaçao dropped to 43, then increased to 47 in 2000.

Persons with Disabilities

According to 2001 census data, the number of persons with disabilities (including visual, hearing, physical, mental, and other types of impairments) represented 8.5% of the population. Disabilities disproportionately impacted those over 60 years of age. Among the non-institutionalized persons with disabilities, the most frequently reported disability was visual impairment, followed by limited ability to perform activities of daily living and hearing impairment.

HEALTH CONDITIONS AND PROBLEMS

COMMUNICABLE DISEASES

Vector-borne Diseases

Dengue is endemic on the island of Curaçao. During the past 10 years, all four dengue serotypes have been identified. During the 2001–2005 period, dengue virus types 1 and 3 predominated; type 4 had not been seen since 2000. Circulation patterns of the various serotypes have been associated with patterns of high tourist traffic from neighboring countries, such as Venezuela and Panama. The annual number of laboratory-confirmed dengue cases between 2001 and 2005 was 85, 280, 26, 163, and 132, respectively. Two dengue outbreaks were recorded during the review period, during December 2001–February 2002, with 231 cases, and during December 2004–February 2005, with 121 cases. During the 2001–2003 period, there were no cases of **dengue hemorrhagic fever**. However, during the 2004–2005 period, five cases were reported.

Vaccine-preventable Diseases

In 2004, overall vaccine coverage in the Netherlands Antilles was 88% for DPT, Hib, and OPV/IPV. Reported MMR vaccine coverage on the individual islands ranged from 75% on Sint Maarten to 95% on Bonaire and Curaçao. Reported individual island coverage for DPT, OPV/IPV, and Hib vaccines ranged from 72% on Sint Maarten to 100% on Saba. Hepatitis B vaccine coverage was 71% on Sint Maarten and 95% on Bonaire.

Chronic Communicable Diseases

In the Netherlands Antilles, the estimated **tuberculosis** incidence rate was 9 per 100,000 population for the 2001–2004 period, a reduction from the estimated 1990 rate of 11 per 100,000 population. The last TB case was reported on Bonaire in 1999. Sint Maarten reported one to four TB cases annually over the 2001–2005 period. The majority of the TB cases in the Netherlands Antilles were recorded on Curaçao. During the 2001–2005 period, a mean of 10 new TB cases were reported annually on this island. INH-resistant strains were isolated in 2004. The mean age at time of TB diagnosis was 40 to 50 years, with close to two-thirds of these cases being among males. An estimated one-half of the annual cases on Curaçao are imported cases. HIV infection and drug addiction are common comorbidities in TB cases.

Hansen's disease remains at a low endemic level in the Netherlands Antilles. Between 2001 and 2004, a total of 11 cases were recorded on Curaçao and one on Bonaire. One of the cases was originally from Guyana. The annual number of new leprosy cases remained between two and four during this period.

Intestinal Infectious Diseases

The most frequently isolated gastrointestinal pathogens were *Campylobacter* and *salmonella*. Between 2001 and 2005, a cumulative number of 331 cases of ***Campylobacter jejune* infection** were laboratory-confirmed and a total of 559 ***salmonella* infections** were laboratory-confirmed. ***Shigella* infection** was also common during this period, with a cumulative number of 168 isolated cases. ***Yersinia* and *E. coli* infection**s were rare, with one isolated case each during the 2001–2005 period. Around one-third of the campylobacteriosis cases, almost half of the salmonellosis cases, and half of the shigellosis cases were found in children under 5 years old.

HIV/AIDS and Other Sexually Transmitted Diseases

The registration system for HIV infection is limited in scope, capturing HIV cases in voluntary testing at Sint Elisabeth Hospital and the Analytic Diagnostic Center, the leading laboratory in the Netherlands Antilles. Between 1985 and 2005, a cumulative

number of 1,623 HIV-positive cases were registered, with 56.9% being males and 43.1% being females. The majority of these cases are from Curaçao (65.5%) and Sint Maarten (31.8%). Of the registered HIV-positive persons, 65.7% were in the 15–24-year-old age group. The main mode of HIV transmission is through sexual contact. As a result of the prevention of mother-to-child transmission program, vertical HIV transmission is very low. Intravenous drug use is rare in the Netherlands Antilles, and a very strict blood donor policy and screening of all donated blood have contributed to a high blood safety level.

Noncommunicable Diseases

Metabolic and Nutritional Diseases

In 1996, 63% of the adult population on Curaçao was overweight (body mass index > 25 and < 30) or obese (body mass index ≥ 30), with the highest prevalences of **overweight** and **obesity** occurring in females in the 45–64-year-old age group and among women of lower socioeconomic status. In a 2002 health study conducted on all of the Netherlands Antilles islands except Curaçao, over 70% of the adult population was found to be overweight or obese. Women on the five different islands were 32%–93% more likely to be obese than men, depending on the island. In 2002, one out of every four adults in the Netherlands Antilles reported exercising regularly.

Malignant Neoplasms

Based on preliminary tabulations from the Cancer Registry for the Netherlands Antilles (located at the Pathology Laboratory on Curaçao), the five leading sites of new cancer cases (excluding non-melanoma skin cancer) for men during the 1999–2003 period were prostate (40% of all male cases), colon/rectum (10%), lung (8%), stomach (4%), and oral cavity/pharynx (3%). For women, the five leading sites of new cases (excluding non-melanoma skin cancer) were breast (36% of all female cases), colon/rectum (13%), corpus uteri (8%), cervix uteri (6%), and stomach (3%). Ovarian cancer followed stomach cancer closely for women, also at 3%. Non-melanoma skin cancer represented 14% of all cancers for men and 13% for women. A total of 1,646 new cases of male cancers and 1,198 of female cancers were registered during the 1999–2003 period.

Other Health Problems or Issues

Disasters

Bonaire and Curaçao are south of the Caribbean hurricane belt and are rarely threatened by hurricanes. However, Saba, Sint Eustatius, and Sint Maarten are regularly subjected to hurricanes. In August of 2000, Hurricane Debby passed through all three islands, causing minimum damage. In July 2005, the center of Hurricane Emily moved through the southeastern Caribbean islands and passed about 180 km north of Bonaire and Curaçao. In the wake of Hurricane Emily, heavy rains caused flooding in the St. Peter basin on Sint Maarten, resulting in two deaths. The estimated damage was US$ 700,000.

RESPONSE OF THE HEALTH SECTOR

Health Policies and Plans

Between 1998 and 2000, the Netherlands Antilles central government implemented a reform plan entitled the "Governing Accord on the Program for Economic and Financial Recovery." The plan called for urgent action to revive the economy, create jobs, reduce poverty, improve social conditions and public finances, and develop a comprehensive program to reduce unemployment, drug use, and crime among young people through both preventive and law enforcement measures. Strengthening public administration at the central level and on each of the islands was an overarching priority.

As a result of this reform process, the Netherlands Antilles central government identified four core government responsibilities: general policy development, legislation, international affairs, and law enforcement and control.

Under these reforms, health care experienced cuts in expenditures and in administrative personnel. The plan led to the restructuring of the Department of Public Health and Environmental Hygiene in 2001. From 1977 to 2001, the Ministry of Public Health and Environment oversaw the Department of Public Health and Environmental Hygiene, the Inspectorate of Pharmaceutical Affairs, the Psychiatric Hospital, and the National Laboratory. As part of the reform process, the central government dissolved the Ministry of Public Health and Environment and replaced it with a new Ministry of Public Health and Social Development. The legislation for this change was ratified on 4 January 2002. The new Ministry of Public Health and Social Development was reorganized to include a Directorate of Public Health, a Directorate of Social Development, a Support Bureau, and an Inspectorate of Public Health. This latter includes separate divisions overseeing health care, health protection, and pharmaceutical affairs.

Organization of the Health System

The activities of the Directorate of Public Health are administered by the Director of Public Health. By legislative decree, the areas of responsibilities under this Directorate include population health; personal health care; veterinary health; the environment; epidemiological surveillance; monitoring of health status, mortality data, and selected diseases; and research for policy-

A New Future for Public Health Services

The Netherlands Antilles are facing a diversity of major public health problems ranging from dengue and obesity epidemics to high rates of traffic accidents. The newly created Ministry of Health and Social Development, through the Directorate of Public Health, oversees disease surveillance and health status monitoring systems; the resulting data provides input for policy formulation and the development of effective responses to these challenges. In addition to the provision of basic health services throughout the five islands, the Ministry of Health and Social Development also provides a variety of specialized medical services, which are principally located on the most populated island of Curaçao. However, the Ministry currently is in a state of flux. With the break-up of the Netherlands Antilles initiated by earlier referendums on the islands, public infrastructure for the delivery of preventive and curative health services in these newly autonomous territories will require transformation and adaptation to the inevitable uncertainties that lie ahead.

making. The tasks assigned to meet these responsibilities include conducting research and surveillance, the development of partnerships with other governmental and nongovernmental organizations, promotion of international collaboration, policy and regulations formation, implementation of cost-cutting measures, and the promotion of equitable access to health care and of health services' effectiveness and efficiency.

Due to the results of voter referendums held at the beginning of the decade signaling the breakup of the Netherland Antilles, discussions continue between government authorities at all levels on how best to minimize the impact on local populations of major structural and functional changes to health care, public health services, and other public services.

Several different health insurance systems exist in the Netherlands Antilles. The government-sponsored Social Insurance/ Security Bank (SVB), which is located on all five islands and is headquartered on Curaçao, provides health insurance coverage for employees of nongovernmental organizations and the private sector. Pro-Pauper Insurance is health coverage provided by the individual local island governments for the unemployed, the population living in poverty, and the retired who lack insurance. Civil Servant Health Insurance is provided by the island territorial governments for government civil servants. Private health insurance is purchased by the population earning an annual salary which exceeds the maximum salary enabling eligibility for SVB insurance.

Health care insurance coverage reported in the 2001 census included SVB (36% of the population covered), Pro-Pauper Insurance (16%), other government-subsidized insurance (15%), private insurance (11%), coverage by employer (7%), and other (3%). Eleven percent of the population reported being uninsured. This segment was disproportionately distributed among the islands and ranged from 3% of Bonaire's population to 30% of Sint Maarten's population.

Public Health Services

Based on the 2001 census, in the three most populated islands of San Maarten, Curaçao, and Bonaire, 89%–98% of household dwellings relied on water supplied by desalination plants, whereas 94% and 97% of the household dwellings on Sint Eustatius and Sint Maarten, respectively, relied on water from cisterns or groundwater. Curaçao and Sint Maarten have wastewater plants, while the other islands rely heavily on septic tanks.

Pesticide contamination is not an issue in the Netherlands Antilles due to low agricultural production. Oil spills in the port areas remain a public health concern.

Individual Care Services

In October 2001, there were a total of 1,343 hospital beds in the Netherlands Antilles. Of these, 729 were located in medical centers and general hospitals. The remainder of the beds were designated for specified needs in specialized institutions: 200 were in the Psychiatric Hospital, 160 were in a chronic care facility, 117 were for handicapped children, 75 were for drug rehabilitation, 45 were in a surgical clinic, and 17 were in a maternity clinic. In October 2001, a disproportionate 88% of these hospital beds and medical services were located on Curaçao, where 73% of the population resides. As of this same date, there were 44 pharmacies and 11 geriatric homes with 700 beds evenly distributed throughout the five islands.

Sint Elisabeth Hospital in Curaçao is the largest of all the islands' hospitals and is supported by a private foundation owned by the Catholic Church; more than 80% of its income is provided directly or indirectly by the government. Among other services, it has a decompression unit to assist scuba divers suffering from decompression sickness. Various private clinics on Curaçao provide satisfactory to excellent medical services. In Bonaire, the 35-bed San Francisco Hospital also provides decompression

facilities for divers in addition to an air ambulance service to transport patients to Curaçao and Aruba. The Sint Maarten Medical Center, with 79 beds, provides for general surgery. Complex cases are sent to Curaçao. The 20-bed Queen Beatrix Medical Center on Sint Eustatius and the 14-bed Saba Clinic on Saba are both well-equipped first aid facilities. Surgery cases are transported to Sint Maarten. The Saba Marine Park also has a decompression chamber.

Human Resources

As of October 2001, there were 333 physicians practicing on the five islands. The distribution of the 138 general practitioners was reasonably proportionate throughout the islands, as was the distribution of the 216 paramedics, the 47 pharmacists, and the 9 midwives. However, out of the 143 specialized physicians practicing in the Netherlands Antilles, a disproportionate 88% were practicing on Curaçao. Likewise, out of the 60 practicing dentists, 88% were located on Curaçao; out of 676 registered nurses, 87% were on Curaçao; out of 467 practical nurses, 93% were on Curaçao; and out of 41 operating assistants and 14 anesthetist assistants, 85% and 86%, respectively, were based on Curaçao.

Technical Cooperation and External Financing

Leading international collaboration partners with the Ministry of Public Health and Social Development include various entities of the Pan American Health Organization and World Health Organization, such as the Caribbean Epidemiology Center and the International Agency for Cancer Research.

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