
TURKS AND CAICOS ISLANDS

GENERAL SITUATION AND TRENDS

Socioeconomic, Political, and Demographic Overview

The Turks and Caicos Islands, a British dependent territory, is located at the southeastern end of the Bahamas chain. The two island groups—the Turks Islands to the east and the Caicos to the west—extend for approximately 193 mi².

The Turks and Caicos Islands received its first constitution in 1976, which gave the territory significant internal autonomy and a ministerial system of government; a new constitution was drafted in 1987. A Governor, who acts as the Queen's representative, shares executive power with an elected House of nine seats that is headed by a Chief Minister. As does the Cabinet in independent Caribbean countries, the Executive Council functions as the supreme executive body; the Governor presides over it.

Tourism earnings outdistanced those from fishing and financial services; the latter two sectors now rank behind tourism in the economy. During the decade of the 1980s and in the early 1990s, most tourism development took place in Providenciales. The fishing industry was endangered by over-exploitation, until the Government instituted seasonal harvesting regulations. Export revenues have been slowly increasing, but the trade deficit remains sizable.

The tourism boom in Providenciales brought with it a rapid population growth, which, in turn, has been accompanied by social problems: young people who are drawn by this highly seasonal work are left idle and frustrated for prolonged periods of time. In addition, many illegal immigrants, mainly Haitians and Dominican Republic nationals, also have also been drawn by the economic boom in Providenciales. Both trends have led to an increase in antisocial behavior and other behavioral problems manifested by an increase in accidents, intentional injuries, and other crimes, as well as the

doubling of the prison population between 1990 and 1996. A memorandum of understanding signed between the governments of Haiti and the Turks and Caicos Islands in 1996 agrees to a phased repatriation program.

The total resident population, based on the 1990 census, was 11,465; 50.9% of whom were males. Approximately one-third of the population was under 15 years of age, with another 5% aged 65 years or above, for a dependency ratio of 37.2%. The most populated island was Providenciales, the business hub for the territory; its 4,821 residents accounted for 42% of the total resident population. The administrative seat of the Government is located on Grand Turk, the second most populated island, with 32.2% of the population.

The resident population grew exponentially between 1980 and 1990, exceeding the expected population of 8,913 by an additional 28.6%. An analysis reveals that during this period the only two inhabited islands with positive percentage increases were Providenciales (493%) and Grand Turk (19%). The percentage increase in the population of "belongers" (citizens by parentage, birth, or naturalization) was only 16%, compared to an increase of 494% in the expatriate population.

Given the rapid development in Providenciales, estimates had to be made in order to arrive at realistic population figures for calculating rates for the post-census years. Unfortunately, because there were no universally accepted post-census estimates from the territory, figures from external sources such as the United Nations Population Division and the Caribbean Epidemiology Center (CAREC), in Trinidad, had to suffice. CAREC's figures were somewhat lower than the UN estimates, but the former were used for post-census years, because CAREC gave estimates for various age groups, as well as total population estimates. For census years, the actual census count of residents was used as a denominator. Because the Turks and Caicos population is so small, data should be interpreted with caution.

Fertility Patterns

The data reported here reflect only those births registered in the territory's Registrar General's Office. It is assumed that these are underestimates, because birth registration has been shown to be incomplete and because residents routinely travel abroad for health care, including for obstetrics and gynecology services.

Data from the 1990 census showed the population of women in childbearing age (16–49 years old) was 3,050, 54.2% of the total female population. This percentage varied greatly across islands, however, from a low of 32.7% in Salt Cay to a high of 64.4% in Providenciales. The high percentage in Providenciales reflects the number of immigrants to that island, who contribute significantly to the fertility rate.

Since the 1970s, the crude birth rate in the Turks and Caicos decreased from 33.3 per 1,000 population in 1970, to 23.5 in 1980, and to 20.9 in 1990. In 1995, there were 234 registered births, for a crude birth rate of 18.6 per 1,000. Although these estimated birth rates may well be underestimates, it is believed that they are indicative of the true birth trend, particularly among “*belongers*.”

The pregnancy rate, particularly among teenagers, has been on the rise. Teenage pregnancies pose potential health risks to both mothers and children, and many of these children become wards of the State or an added burden to the community. The number of abortions also has grown. Hospital admissions data for 1996 show abortions as one of the leading causes of admissions, 5.9% of all admissions for that year. Because of the social stigma and secrecy that surrounds abortion, these figures almost certainly are underestimates; moreover, many women have abortions done abroad in an effort to seek confidentiality.

Estimates of the age distribution of pregnant women are obtained from records of women seeking care at the community health clinics in Providenciales and Grand Turk. During 1996, there were 116 births in Providenciales and 86 in Grand Turk. Five of the births in Providenciales (4.3%) were to teenage mothers between the ages of 15 and 19 years, and 7 (6%) were to mothers older than 35 years old, two age groups at greater risk for complications.

Available data also show an increasing number of pregnant women of other nationalities: 97 of the 116 births in Providenciales in 1996 were to citizens of other nationalities, with 93 (80.2%) to Haitian nationals alone. In Grand Turk, the percentage was not as high (52.3%), but high enough to cause concern. This trend is expected to continue, as it was observed not only among women who gave birth, but also among prenatal care attendees. In Providenciales, there were 283 new prenatal clients, 168 (59.4%) of whom were Haitian nationals, with another 9.1% of other nationalities.

Prenatal services used to be offered for free or at a minimal cost. To offset the burden that this represented on the health budget, Ministry of Health officials revised the payment schedule for prenatal and childbirth services. This change may already have resulted in a reduction in demand, and its overall impact on the health of pregnant women and infants remains to be seen.

Mortality Profile

Cause of death coding in the Turks and Caicos Islands is not systematized. Although all deaths must be certified, many, particularly those that occur on less populated islands, are certified by nurses. Access to and use of diagnostic facilities to confirm clinical diagnosis are limited, and the autopsy rate is not very high.

In an attempt to identify the underlying cause of death, CAREC conducted a detailed review of all registered and unregistered deaths in the Turks and Caicos from 1980 through 1995. Unregistered cases were identified through records kept by the Ministry of Health. Results indicated that from 1990 through 1994, underregistration—estimated by comparing deaths identified in the study with the number of registered events—was 12.1%, a similar figure to that for the 1985–1989 period, which was estimated at 12.2%, and to that for 1990–1994, which was 12%. All mortality data reported here is based on the CAREC study.

Since the 1970s, mortality trends indicate an overall increase in both the number of deaths and the death rates, with periodic decreases. In 1970, there were 47 deaths, which decreased to 30 by 1980. In the 1980s, the number of deaths increased again, peaking in 1985 at 65, before dropping again to 45 in 1990. In 1995, 80 deaths were recorded in the Turks and Caicos Islands, the largest number recorded in recent times. The crude death rate was 636.4 per 100,000 population, up from the 1990 figure of 392.5.

In terms of distribution by gender, most deaths in 1995 were among males (51.3%), in contrast to the previous year, when there were more deaths among women (54.9%). This inconsistent pattern, which was evident throughout the 1980s, may be expected wherever the population is relatively small.

Between 1990 and 1995, the highest age specific death rates were observed in the population aged 65 years old and older, followed by those in the age group under 1 year old. The lowest rates were in the school-age population, children aged 5–14 years.

The number of infant deaths between 1991 and 1995 ranged from a low of 1 in 1991 to a high of 10 in 1995. The highest infant mortality rate for this period was 42.7 infant deaths per 1,000 live births observed in 1995; it is not known

whether this increase is indicative of a change in the quality of care. Between 1992 and 1994, the infant mortality rate averaged 23.2 per 1,000 live births. Registered births were used in the calculations.

Between 1993 and 1996, the highest neonatal mortality rate was 34.2 deaths per 1,000 live births; estimates of stillbirth rates were obtained using hospital based statistics. During 1996, the estimated stillbirth rate per 1,000 deliveries was 16.7, compared to 13.5, 14.9, and 33.7 for 1995, 1994, and 1993, respectively. The highest number of stillbirths recorded at the hospital during this period was 6 in 1993.

Among adults, the leading cause of death in 1995 was diseases of the circulatory system, accounting for just over one-quarter (26.3%) of all deaths, followed by deaths due to communicable diseases and external causes, both at 16.3%. Neoplasms accounted for 10% and conditions originating in the perinatal period, for 7.5%.

Of the 362 deaths for the 1990–1995 period, one of every four deaths (27.3%) was due to diseases of circulatory system, most of them resulting from strokes and heart attacks. Communicable diseases ranked second, primarily due to the rise in the number of deaths from AIDS, and accounted for 18%; deaths due to external causes ranked third, accounting for 13%. Of these deaths, 7.5% were the result of neoplasms, and another 5.2% were due to conditions originating in the perinatal period. Deaths due to symptoms, signs, and ill-defined conditions, which is often an indicator of the quality of diagnostic capabilities, accounted for 14.4%.

Morbidity

Reasonably accurate figures on the number of hospital admissions are readily available from ward records. The current system, however, does not allow for an in-depth analysis of these data, and data on admissions and discharge diagnoses are insufficient to allow for an accurate coding according to the principles of the International Classification of Diseases.

In order to determine the main causes of hospital admissions, this report attempts to group available admission diagnosis data for 1996 into selected categories. Data were taken from the general ward that houses both adult and pediatric patients admitted for medical or surgical services. Information from the maternity and geriatric wards was excluded.

During the five-year period ending in 1996, the number of hospital inpatients steadily increased, but bed capacity did not. In 1996, there were 705 admissions to the general ward of Turks and Caicos General Hospital, up 14% from the 619 admissions recorded in 1995. Of these, 58.5% were female and 41.5%, male. Approximately one of every two inpatients (53.1%) admitted that year were between the ages of 15–44 years, one-fifth (20.4%) were patients under the age of 15

years, and 12.7% were 65 years old and older. Whereas approximately 70% of inpatients under the age of 5 years were males, two-thirds of patients 15 years old and older were females.

Based on admissions diagnoses, conditions associated with the gastrointestinal tract accounted for 12.3% of all inpatient stays in 1996; accidents and violence, primarily poisonings, stab wounds, and burns, were responsible for another 10.5%. Other conditions frequently recorded included hypertension (5.4%) and abortions (5.9%). During 1995, there were 402 surgical procedures performed at the hospital and the overall average length of stay was 3.4 days.

The 1,755 outpatients recorded in 1995 represented an increase of 10.2% over the 1,593 visits recorded for 1994, and up 57.4% over the total visits for 1992.

SPECIFIC HEALTH PROBLEMS

Analysis by Population Group

Health of Children

During 1995, 10 deaths in infants (0 to 4 years old) occurred in the Turks and Caicos Islands, and most of them (7 deaths) occurred during the first 7 days of life. Causes of death were listed as prematurity, respiratory distress syndrome, septicemia, acute gastroenteritis, and other conditions originating in the perinatal period. The infant mortality rate for that year was estimated at 42.7 deaths per 1,000 live births, which represents an underestimate given that registered births were used as the denominator.

Prematurity is closely tied to the risk of infant death, and the percentage of deliveries <2,500 g is an indicator of prematurity. The most reliable estimate, based on 1995 data abstracted from the maternity ward book at Grand Turk Hospital, places this figure at 10.8% of deliveries.

Mortality in children between the ages 1–4 years is not a problem in the territory, but acute respiratory infections and diarrheal diseases are. For example, there was only one recorded death resulting from an accident in 1995, but between 1993 and 1996, there were 2,674 acute respiratory infections reported. The 465 cases reported in 1994 represents the lowest annual figure for the period, and the 830 cases reported during 1995, the highest. There were 707 cases of gastroenteritis reported, most of them (209) reported in 1995.

Child health services, in terms of preventive care, immunization, and growth monitoring, as well as curative care are considered priorities. Vaccines are given for DTP, OPV, and MMR, and in 1996 coverage for all neared 100%. Of 552 growth monitoring visits carried out in 1995, 18.3% were considered obese. Based on 1995 data from Grand Turk, the

percentage of mothers breast-feeding exclusively at 3 months was below 2%. This figure would improve if mothers were better prepared for breast-feeding after giving birth.

During the 1994–1995 school year, 1,625 primary and 1,058 secondary schoolchildren enrolled in the territory's 10 primary and 4 secondary schools. Grand Turk had the largest proportion of secondary students and Providenciales had the highest number of primary schoolchildren, which reflects the large number of women of childbearing age on the latter island. The school health program offers booster shots, revaccinations, vision and ear screening, and general health education; vision problems are referred to an ophthalmologist.

Data from the Department of Social Welfare indicates a considerable number of orphaned, unsupported, and abandoned children. Many families are single-parent units, and neglect by fathers is common. Drug abuse and AIDS also have affected many families, resulting in even more children being placed on welfare. During 1994–1995, of the 262 persons receiving benefits from the department, 35.4% received such assistance as financial support for the families, placement of children in foster homes or up for adoption, and support for children of delinquent parents. It has been observed recently that school-aged children are being encouraged to work to help supplement household incomes.

The Turks and Caicos Islands currently has no comprehensive program addressing the health of adolescents.

Health of Adults

According to the 1990 census, persons between the ages of 15 and 64 account for approximately 63% of the total population. The percentage of males between 15 and 49 years old is greater than that of females in that age group, but the percentage of females between 50 and 64 years old surpasses that of males in that age group. The unusual preponderance of males between 15 and 64 may very well reflect the gender distribution of the resident migrant population, most of whom are male in the productive age groups.

The leading causes of death to persons in this group are similar to those for the entire population, and include diseases of the heart, cancer, AIDS, accidents, and violence.

The prenatal program aims at having every pregnant woman in for a first visit as early as possible. This is especially important given the many high-risk pregnancies in teenage women and in women aged 35 years old or older. During 1996, only 25.1% of the 283 new prenatal clients in Providenciales made their first visit within the first 16 weeks of gestation and 17% did not make their first visit until after the 28th week. Calculated stillbirth rates of 4.2% and 2.3% in Providenciales and Grand Turk, respectively, only add to the concern.

Observed low hemoglobin levels during pregnancy have raised concern about women's health. Overall, 16.6% of 283 prenatal clients in Providenciales in 1996 were found to have low hemoglobin levels (<10 g) and 24.4% of 98 tests performed in Grand Turk were low. However, not all national groups were equally at risk, as observed in Providenciales—whereas only 4.5% of the Turks and Caicos Islanders were found to have low hemoglobin levels, 23.8% of Haitians and 11.5% of other nationalities had low levels. Similarly, whereas 2 (0.7%) of 89 nationals tested positive for HIV in Providenciales, 9 of 168 (3.1%) Haitians did. HIV-testing with informed consent is conducted on each prenatal client. Nationality specific data from Grand Turk was unavailable.

Health of Women

Data for 1996 from the Female Health Maintenance Clinic in Grand Turk revealed that of 38 Pap tests performed, 30 were on nationals, and 8 (21%) were on non-nationals. The figure for non-nationals is much lower than utilization figures observed for other services; it is known, however, that current health education efforts do not adequately reach this population group. Cervical cancer screening services are available for all women, but women of childbearing age are specifically targeted. Clinics also offer breast examinations.

Family planning services also are offered through the Community Health Clinics. In 1996, 75 new family planning clients were seen at the clinic in Providenciales, 35 for oral contraceptives and 40 for injectibles. Total clients seen for the year was 677, 63.4% of them between the ages of 25–34 years; 13 were under age 20. In 1966, 177 packets of condoms were distributed as a part of the AIDS prevention strategy.

Health of the Elderly

Based on the 1990 census, 574 residents in the Turks and Caicos Islands were aged 65 years old and older, representing 5% of the total population—322 (56.1%) were females and 252 (43.9%) were males.

The Government requires that employees retire at age 55, but National Insurance benefits do not begin until age 65, and noncontributory pensions do not start until age 68. Government services are channeled through the Department of Social Welfare, with welfare benefits provided for most persons starting at age 60.

Over the years, the social and economic burden carried by this age group has increased dramatically, and many of them must provide for themselves and for grandchildren left in their care. The Government, acknowledging that this population groups requires special attention, in 1994 conducted a

study on services for the elderly as part of the health sector adjustment project. Study results pointed to the need to better integrate the delivery of health and welfare services to this group.

The geriatric ward at Grand Turk Hospital provides institutional care for the elderly. The ward can only accommodate about 12 patients, all of whom are referred by the welfare department, primarily with diagnoses of senility and fractures. Given the ward's low bed capacity and the absence of any homes for the elderly, social welfare services are provided for elderly persons who live alone, including financial support and payments to home helpers. In the fiscal year 1994–1995, 73 elderly persons received monthly welfare payments. Some churches also provide assistance for their elderly members, as do other, mostly church-affiliated, community groups. Home visits are included as part of the services offered by the staff of the Community Health Department.

Chronic diseases rank as the leading causes of death and hospitalization in this age group.

Analysis By Type of Disease or Health Impairment

Communicable Diseases

Data on communicable diseases are based on case reports that the Community Health Department forwards to CAREC every month. Between 1993 and 1996, the most frequently reported communicable diseases in children under 5 years old were influenza (3,361 cases), acute respiratory infections (2,674), and gastroenteritis (707).

There were no reported cases of vector-borne diseases during this period and very few vaccine-preventable diseases. Seven cases of the mumps were reported in 1993, followed by three in 1994; the last known cases of measles were four cases reported in 1993. After several years with no reported cases of tuberculosis, three cases were reported in 1996.

Sexually transmitted diseases, particularly gonorrhea, continue to be a problem. There were 30 reported cases of gonorrhea between 1993 and 1996, with 16 cases reported in 1996 alone. The number of syphilis cases during the period was 21, with 6 reported in 1996. One case of hepatitis was reported in 1996.

Over this four-year period, 74 cases of foodborne illnesses were reported, with 28 in 1996 alone. Many required hospitalization.

AIDS. AIDS continues to be a major public health problem as a cause of death and as a contributor to years of life lost, as well as in terms of its socioeconomic impact on the community.

From 1985, when HIV testing first began in the Turks and Caicos, through December, 1996, there were a total of 94 AIDS

cases diagnosed in the territory—53 (56.4%) of them were males and the predominant mode of transmission was heterosexual contact. Persons aged 20–44 accounted for 63.8% of all cases, with the age group 30–34 years old alone responsible for one-fourth (25.6%). Only three pediatric cases (under 5 years old) were identified. Most of the cases (38.3%) were from Providenciales, followed by those in Grand Turk and South Caicos with 27.7% and 24.5%, respectively. Through December 1996, 75.5% of all cases were known to have died.

The male:female ratio was 1:1 on Providenciales, 1.8:1 on Grand Turk, and 1:1 on South Caicos. Seventy-nine (84%) of all cases were Turks and Caicos Islanders, with persons of other nationalities accounting for the remaining 16%. In Providenciales, which has a higher percentage of immigrants, the percentage of cases among non-nationals was 33.3%; in Grand Turk it was 15.4%; and in the other islands combined it was 3.1%.

Annual HIV-infection tests are performed on applicants for resident and work permits, pregnant women, and blood donors. Because there are no reliable statistics, prevalence estimates must be derived from the testing of prenatal clients on Grand Turk and Providenciales. In 1995, of 101 prenatal clients tested on Grand Turk, 8 (7.9%) tested positive. In 1996, of 283 tests of prenatal clients performed in Providenciales, 11 (3.9%) were found to be HIV-positive.

Statistics show a steady increase in the percentage of non-nationals among new cases of AIDS diagnosed between 1993 and 1996, from 13.3% to 33.3%. These full-blown AIDS cases, however, reflect the infection rate of 5 to 10 years earlier. A more appropriate indicator for the current infection rate would be one based on HIV statistics. Of the 8 HIV-positive cases positive in Grand Turk in 1995 and the 11 in Providenciales in 1996, 87.5% and 81.8%, respectively, were non-nationals. Whether or not this is indicative of a higher prevalence of HIV infection among non-nationals is unknown, although evidence based on prenatal testing in Providenciales tends to suggest this. During 1996, the percentage of national prenatal clients who tested positive was 2.2%, as compared to 4.6% for non-nationals.

Health authorities are actively addressing the AIDS/HIV situation, but gaps remain in prevention efforts. First, a more systematic and data driven approach needs to be taken with regard to the routine testing for HIV and to the collection, analysis, interpretation, and dissemination of this information. Policies must be established that determine who should be tested, so that this effort can become more cost-effective and can be useful for planning. Strategic approaches to the reduction in the numbers of HIV-infected individuals cannot be based exclusively on AIDS statistics. Given the long delay between infection and the onset of symptoms and the fact that in a territory with such a small population such as the Turks and Caicos the epidemiology of the disease may change

very rapidly, programs that do not take into account HIV-infection statistics as well as AIDS statistics may be misdirected even before they are put in place. The decision to implement more targeted education campaigns renders the use of HIV statistics even more important. Recent trends in HIV infection—such as rates in pregnant women—indicate a higher prevalence among legal and illegal immigrants who speak a different language and come from a different culture. Since 1995, ODA discontinued its assistance to the AIDS program; currently the program is totally funded through the recurrent national budget, which raises some concern as to whether the program can be sustained at the previous level.

Noncommunicable Diseases and Other Health-Related Problems

Accidents and Violence. External causes have gathered importance as a cause of death. Deaths due to accidents and violence have risen from a single case in 1980 to 2 in 1985, representing 3.1% of all deaths. In the 1990s, the impact of accidents and violence increased further, to 5 cases in 1990 and 13 in 1995, representing 11.1% and 16.3% of all deaths, respectively.

Data for the 1992–1995 period were combined. During this period, there were 36 deaths due to either intentional or unintentional injuries, accounting for 13.7% of all deaths. Twenty-six, or approximately three of every four of these deaths (72.2%), were males. The age group with both the highest actual number of deaths and death rate per 100,000 population was the 25–44-year-old age group, accounting for 13 (36.1%) of the 36 deaths for a rate of 87.8 per 100,000. This was followed by persons aged 15–24 years, with 8 deaths (22.2%) and a death rate of 80/100,000.

The major causes of death due to external causes in the Turks and Caicos Islands are motor vehicle accidents, drowning, and homicides. Between 1992 and 1995, these three causes accounted for two of every three such deaths. Motor vehicle accidents were responsible for 10 deaths, 27.8% of all deaths due to external causes during this period; 7 of the 10 were males. There were 9 drowning deaths; 8 (88.9%) were males. Homicides and injuries purposely inflicted by others accounted for 5 deaths, two of whom were female. Three deaths were the result of accidental falls and two were due to suicide.

Injuries that result from acts of violence or accidents are among the leading causes for hospitalization, accounting for approximately 10.5% of all admissions in 1996. In addition to those causes that result in death, namely motor vehicle accidents, drownings, and acts that result in homicides, other common causes of admission include poisonings and burns; fish poisonings are by far the most common.

Not reflected in the mortality statistics but of increasing public health concern is the escalating incidence of violence against women. Cultural patterns leave many episodes unreported, or, when reported, unpunished. Efforts to curb this trend must be incorporated into the existing family health program.

Malignant Tumors. From 1992 through 1995 there were 23 deaths attributed to malignant neoplasms; 3 in 1992, 9 in 1993, 3 in 1994, and 8 in 1995. Of the total, 13 (56.5%) were male and 10 (43.5%) female. Cancer remained a disease predominantly of the elderly, with 65.2% of all deaths occurring in persons 65 years old and older.

During this same period, 7 deaths (30.4%) were due to cancer of the genitourinary organs, 4 of which were males who died from prostate cancer. Cancers of the digestive organs and the peritoneum were the cause of six (26.1%) deaths, four of them males; stomach cancer accounted for four of these six deaths. In addition, there were two deaths due to cancer of the larynx, two due to leukemia, and two females who died as a result of breast cancer.

Although no detailed data are available on the specific causes, cancer also has been cited as one of the leading of admission to the hospital.

Cardiovascular Diseases. Cardiovascular diseases or diseases of the circulatory system are the leading causes of death in the Turks and Caicos. In 1995, these conditions were responsible for 29% of all deaths, disproportionately affecting females (among whom cardiovascular diseases were responsible for 38.5% of all deaths), compared to males (19.5% of all male deaths). When data for the 1992–1995 period were combined, results were similar, though not as obvious. Of the 263 total deaths occurring during this period, 76 (29%) were due to these conditions, with the percentage in females (33.3%) again greater than that in males (24.4%).

For the 1992–1995 period, leading causes within this group were cerebrovascular diseases (31.6%) and myocardial infarctions (25%). Of the 76 deaths, 58% were female. Mortality rose significantly with age, with persons 65 years old and older exhibiting the highest death rates. Almost 9 of every 10 deaths (87.5%) were to persons 45 years old or older.

Although no reliable hospital data were available, hypertension or conditions resulting from hypertensive diseases are recognized as one of the leading causes of hospital admissions. In 1996, approximately 5% of all persons admitted to the general ward of the hospital in Grand Turk had hypertension specifically recorded as the cause of admission, with considerably more having it mentioned as a contributing factor.

Oral Health. Oral health services in the territory suffer from a serious personnel shortage. A single government den-

tist, assisted by a dental nurse, works out of Grand Turk's main dental clinic, and there is one private dentist in Providenciales. The government dentist and dental nurse schedule visits to the other islands, but a full-time government dentist is needed in Providenciales, where the bulk of the population resides.

The main clinic on Grand Turk offers most dental services, including radiology, periodontics, endodontics, oral surgery, minor prosthetic services, and restorative dentistry. Dental care elsewhere in the territory depends on facilities available on each island. Preventive care, which is mainly carried out through an active school dental health program, also is a priority. Along with educational lectures provided by the department's professional staff, this program also includes screening schoolchildren every five years for decayed, missing, and filled teeth (DMFT) and to assess periodontal index; administering fluoride treatment to every child; and applying sealants for the children's primary and permanent teeth. In addition, approximately 200 talks on dental hygiene were given by the staff in 1995. During 1995, there were 2,550 patient visits made to the main clinic. The average cost per patient visit was estimated at \$ 20.00, but the average fee charged was \$ 4.00.

Certain oral health problems have raised concern and will have to be addressed in the future, either through services or education. For example, there is a fair amount of fluorosis, which is thought to be partly due to excessive intake of fluoride that occurs naturally in well water. In addition, residents of Providenciales and Grand Turk, particularly children, are presenting with an increasing number of caries, which is thought to be associated with a dietary shift toward less nutritious foods. Finally, there are far too many extractions performed on foreign nationals, because they wait too long to seek dental care.

Behavioral Disorders. The National Drug Council coordinates efforts to curb the impact of illegal drugs in the Turks and Caicos Islands. Originally established in 1989 as a branch of the Ministry of Health, the Council has now been placed under the portfolio of the Minister for Local Government Affairs. Given the unit's growing role, its transformation into a statutory body with more autonomy is currently under consideration.

Council staff supports such activities as an after-care program, drug support groups on most of the islands, a project with the prison, and an anti-drug program in the schools. The Council also was responsible for the ratification of the 1996–2000 National Drug Strategy Master Plan, which calls for institutional strengthening, data collection, drug-traffic reduction, drug-demand reduction, and the development of legislative and judicial frameworks in the battle against drugs.

Statistics on the scope of the drug problem in the territory are not available, but informed opinion holds that it is relatively serious. During the first half of the 1990s, the prison population in the Turks and Caicos doubled. Estimates based on counseling sessions placed the percentage of prisoners who were involved in drug use at 98%. Many cite boredom and peer pressure as the reason for their drug use, which validates the view that offering more community activities for youth will lower the demand for drugs.

Many addicts have sought help through local support groups who, in turn, appeal to the National Drug Council. With no treatment facilities available in the territory, persons are sent to Sandilands Rehabilitation Center in Nassau, the Bahamas, for treatment. Results for 1996 revealed that three clients had successfully completed the six-month treatment at Sandilands and were now in after-care and two were still under treatment; one former client had relapsed. In addition, four clients were admitted.

As part of the after-care program, all clients returning from Sandilands attend weekly sessions for 18 months. Several high-school students who had used marijuana joined the sessions. Fifteen men with drug abuse problems received treatment as part of the prison rehabilitation program, which will seek to enroll parolees in its after-care.

Disaster Preparedness. As a result of efforts of the National Disaster Committee, disaster preparedness has become better structured. The committee is a comprehensive, multidisciplinary body with representatives from government institutions and nongovernmental organizations whose responsibilities include disasters. A National Disaster Coordinator coordinates all committee and subcommittee activities. Education and training through simulation exercises, the dissemination of information, procurement of equipment and supplies, treatment and referrals, data collection and needs assessment; epidemiological surveillance and the control of communicable diseases, and psychological support are areas that have been emphasized.

Within the National Disaster Management Plan, the Primary Health Care Disaster Management Plan serves as the health sector's blueprint of action following a disaster. It provides clearly defined activities to be undertaken by health personnel and the community throughout a disaster's preparedness, response, and recovery stages. The nine government and two private health centers/clinics located throughout the islands are the focal points for the health response to disasters.

The main threats to the Turks and Caicos Islands are hurricanes, floods, fires, and massive transportation accidents such as airplane crashes. Recently, no hurricane has left any significant damage in the territory. Starting in June when the hurricane season begins, however, every committee is mobi-

lized and on alert. During the summer of 1995, severe floods caused extensive damage and property destruction, particularly on North Caicos and Providenciales. Considerable financial and human resources were used in the clean-up.

RESPONSE OF THE HEALTH SYSTEM

National Health Plans and Policies

The Government, which is the main provider of health care, has long had a policy that holds that health care should be available, accessible, and affordable to all residents of the islands. It also acknowledges that nongovernmental organizations and individuals must share in this responsibility if optimal health for the majority is to be a reality. The medical and the dental departments aim to provide efficient, high-quality preventive and curative care to all sectors of the population, working with the community and with private and overseas health care providers. The Environmental Health Department ensures that hotels, restaurants, shops, and private homes adhere to sanitation and health standards as established by law.

Health Sector Reform

In 1989, the Government of the United Kingdom financed a comprehensive health sector adjustment program in order to identify and address the many shortcomings in the health care industry in all British dependent territories in the Caribbean. The program targeted the following five areas for improvements: management structures and processes, planning approaches, financial strategies, quality of care, and health outcomes. Now in its second phase, the program has established operational plans for the Turks and Caicos through the year 2000.

Recommendations from the adjustment program have led to several changes. For example, the fee schedule for medical and dental services has been revised, and an improved financial management system, including a system for revenue collection, will soon be put in place. In addition, the large number of referrals abroad and the need for in-country follow-up care are being examined and the feasibility of establishing a national health insurance system is being explored.

The new management structure established by the health sector adjustment project led to the appointment of a Health Services Manager charged with the administrative aspect of the health services, an area traditionally under the responsibility of the Chief Medical Officer. A Primary Health Care Manager position also was created. Duties from existing posts have been reallocated as a way to fill the new positions.

Policies continue to address infrastructure and personnel deficits that must be dealt with if the quality of services is to improve, as well as the control over health care costs. Priorities are human resource development; access to financial resources; development of an effective health information system that will lead to better program planning and monitoring; improvement to the health infrastructure, particularly at Grand Turk Hospital; the consolidation of ties with nongovernmental organizations; environmental health; drug procurement; health promotion; nutrition; prevention and control of noncommunicable diseases; and the control of HIV and AIDS.

A legislative package also is being explored as part of the health sector adjustment project, which includes provisions for recovery of charges and accident reduction legislation, such as laws on drunk driving or the mandatory use of seatbelts and helmets. A comprehensive review of environmental legislation was completed in 1992.

Because practices such as dietary patterns and food choices play important roles in the etiology of many noncommunicable diseases, a National Nutrition Policy was developed in conjunction with the Caribbean Food and Nutrition Institute (CFNI) and PAHO's nutrition consultant in the Bahamas. The plan will become an important element in the fight against such diet-related conditions as obesity, heart disease, diabetes, and various forms of cancer, which are among the leading causes of morbidity and mortality in adults.

Organization of the Health Sector

Institutional Organization

Health services in the Turks and Caicos Islands comes under the aegis of the Ministry of Health, Education, Youth, and Sports. The services are under the direct responsibility of the Permanent Secretary for Health Services, who is responsible to the Minister. There is some degree of decentralization, and services are categorized into three general areas—medical, dental, and environmental—each with its own budget.

Medical services are further divided into hospital services and community health services. The Chief Medical Officer, who also functions as the medical director of the Turks and Caicos's single hospital located in Grand Turk, is the chief technical officer responsible for all medical and health services. Each section head is administratively responsible to the Permanent Secretary.

The hospital located in Grand Turk is a 36-bed secondary care institution that serves as a referral center for all of the islands; it has a maternity ward; a geriatrics ward; and a general ward that handles all other inpatients. In 1995, the hospital added a hemodialysis unit that can treat up to three

patients simultaneously. Before hemodialysis was available, patients had to be transferred abroad for the procedure, at a very high cost.

There are nine community health clinics on six islands: a maternal and child health complex, offering maternal and child health services, female health maintenance, family planning; and school health services on Grand Turk; a general clinic, offering preventive, curative, and rehabilitation services to all age groups, also on Grand Turk; a 10-bed government clinic, providing 24-hour service for general and maternal and child health care on Providenciales; two clinics each on Middle Caicos and North Caicos; and one each on South Caicos and Salt Cay. Depending on demand, clinics are staffed with public health nurses, registered nurse midwives, clinical nurses, and/or community health aides; physicians make scheduled visits.

Maternal and child health services offered by government clinics generally include prenatal and postnatal care, family planning, and child health services.

There are two private clinics located on Providenciales. Many Turks and Caicos residents also regularly travel abroad to the Bahamas or elsewhere for medical care. Private insurance companies offer coverage for medical care to those who can pay. Because the cost for this insurance tends to be exorbitant, the Government is exploring ways of extending locally available services through an arrangement with a visiting specialist. Private physicians also have proposed an arrangement to jointly use and manage the secondary care facility in Providenciales; their proposal is being carefully considered.

Organization of Health Regulatory Activities

The certification and practice of health professionals in Turks and Caicos is governed by the 1978 Health Practitioners Ordinance, which has established a Health Practitioners Board chaired by the Minister responsible for health or his delegate.

The 1992 Public and Environmental Health Ordinance governs the work of the Department of Environmental Health, which is responsible for safeguarding environmental quality—including the preservation of water, air, and soil; housing quality; and chemical safety—and for food protection and safety.

Health Services and Resources

Organization of Services for Care of the Population

Health Promotion. Acknowledging the importance of health promotion to the attainment of health for all, the Gov-

ernment of the Turks and Caicos Islands has embraced the Caribbean Health Promotion Charter and is working to incorporate health promotion activities throughout its programs. The Community Health Department is directly responsible for implementing these programs and activities, many conducted in collaboration with the education and communications sectors. There is, however, a recognized need for a more comprehensive health promotion strategy.

External assistance provides funds for several ongoing health promotion programs, most of them targeting AIDS and drug abuse. Much more can be achieved, however, by developing programs and activities aimed at the reduction of other priority health problems such as accidents and violence.

Disease Prevention and Control Programs. Most communicable diseases are reportable by law, and with most of the population routinely attending government clinics, reporting coverage is believed to be quite good. The Community Health Department is responsible for disease prevention, including epidemiological surveillance. Programs such as immunization for mothers, infants, and children; health education activities; cancer screening for adults; screening of schoolchildren; and health education activities are the cornerstones of the Department's prevention activities. The Department's frequent collaboration with other departments, particularly the Environmental Health Department, is essential for the success of such programs as vector control and efforts to control waterborne diseases, foodborne diseases, and diseases that result from biological or chemical contamination.

The integrated vector control project is noteworthy for its efforts to engage the community in the control of mosquitoes and mosquito-borne diseases, especially *Aedes aegypti* and dengue fever. Initially sponsored by the Government of Italy and subsequently funded by the Government of the United Kingdom, the project led to significant reductions in the household index for all mosquitoes, including *Aedes aegypti*, and it was particularly important to those islands near Haiti, where dengue fever is endemic.

Water Supply, Sewerage Systems, and Solid Waste Disposal. Potable water in the Turks and Caicos Islands is mainly obtained through reverse osmosis process, then is distributed from public issue points or via trucks, and finally is stored in water tanks. The public water supply is chlorinated and regularly checked for chemical and bacterial contamination. Many households also rely on well water, a practice that can only be encouraged if the supply is properly treated against bacterial contamination. The current Planning Ordinance requires all new construction to provide for water supply, but many households remain without water storage tanks.

The availability of wastewater and sewage treatment facilities is mandatory. Based on the 1990 census, most households

(52.6%) use septic tank systems, but many (43.6%) still use pit latrines. Large facilities such as hotels have mechanical treatment plants. Because the islands face a chronic water shortage, many hotels, government buildings, and private dwellings use saltwater for flushing systems.

The Environmental Health Department is responsible for the collection and disposal of all waste in the territory. It handled approximately 1,500 tons of solid waste in 1996. On some islands, residential and business collection is handled by private contractors for a small fee. Independent private haulers also provide the service for a fee. Waste is disposed in landfills.

Food Protection and Safety. Food protection and control is important for consumer health and for the economy of the Turks and Caicos Islands, particularly because of the reliance on tourism and fishing. Department of Environmental Health officers trained in food inspection methodologies periodically inspect food preparation, food service, and food dispensing facilities for compliance with sanitation and safety policies and procedures. The Department also is responsible for educating the public on food protection and safety.

Human Resources

Because many health sector areas have shortages of qualified health professionals, the Government must continually recruit foreign nationals. Many of them are hired through short-term contracts, which severely hinders long-term planning efforts.

Recent data indicate that the Ministry of Health employs 5 doctors, 1 dentist, and 34 nurses at various levels; 22 of the nurses had received training as registered nurses or higher. In addition, an allied health staff comprised of eight community health aides, eight geriatric aides, two laboratory technicians, five environmental health officers, and nine vector control officers form part of the public health sector. As of December 1996, only one doctor was a Turks and Caicos national, and almost 50% of nurses, which constitute the largest cadre of

health workers, were foreign nationals; similar situations exist in the support services and environmental health sectors.

The Chief Nursing Officer is responsible for providing leadership to the nursing profession throughout the territory. The Officer also manages nurses and nursing support staff at the hospital and offers educational programs and guidance on career development to all nursing staff. The Chief Nursing Officer reports to the Chief Medical Officer on all technical matters. To assist this professional, a consultant was commissioned to undertake a study analyzing the skill-mix and human resource allocation of nurses; the study's report is under review.

Expenditures and Sectoral Financing

The Government's recurrent expenditure for the 1991–1996 period reveals the rising cost of health care in the Turks and Caicos. The actual cost of health care services to the Government for the 1995–1996 period was 42.3% higher than that for the 1991–1992 period. Health infrastructure development in Providenciales, particularly the new health center that became operational in 1994, is largely responsible for the increase. During the 1995–1996 period, the total amount of the budget allocated to health care was US\$ 4,340,652, almost \$US 1 million over the 1994–1995 figure and representing 14.3% of the total Government expenditure. For the same period, total revenue was \$US 179,100, 72% of which came from medical fees and charges.

In terms of operational expenses, most funds were allocated for medical care services, including the hospital and all clinic services, followed by environmental health. With the cost of services provided at the health center in Providenciales included, the operational budget for medical services for 1995–1996 was \$US 1,619,674, a 27% increase over that for 1994–1995. Again, this was due mainly to the increase allocated to the health center in Providenciales, whose range of services were expanded. For the same fiscal year, the operational budget for environmental health services was \$US 323,543, 21.6% over that of the previous year.