ISLAND OF RODRIGUES
An Analysis of the Health Situation

Rodrigues Island, administratively autonomous, is of volcanic origin, with an area of 104.0 km$^2$, and is located 560 km north-east of Mauritius. In general, the population is scattered over the island, with no dominant towns, except the administrative centre, Port Mathurin.

POPULATION AND VITAL STATISTICS

The estimated mid-year resident population of the Island of Rodrigues was 37,749 in 2009 as compared to 35,448 in 1999. The population density, at the end of 2009 was 363 inhabitants per square kilometer. During the 10-year period (1999-2009) the average annual growth rate was 0.6 %. During these years, there has been a notable positive net increase in the migration of Rodriguans to the main Island of Mauritius, mostly for economic reasons.

The proportion of population aged under 15 years slightly increased from 30.7 % in 1999 to 30.9 % in 2009, while the proportion of elderly population (aged 60 years and above) increased from 7.5 % to 10.0 %. During that period, the total dependency ratio has increased from 551.6 per 1,000 mid year population aged 15-64 years to 613.3. The young age dependency ratio increased from 475.6 to 499.0 while the old age dependency ratio increased from 76.0 to 161.0.

Life expectancy at birth, 69.1 years for males and 76.1 for females in 1999, was 70.7 years and 77.0 respectively in 2009.

The number of live births registered in 1999 and 2009 was 768 and 721 respectively, corresponding to a decrease in the crude birth rate from 21.7 per 1,000 mid-year population to 19.1. The number of deaths registered in 1999 and 2009 was 153 and 237 respectively, corresponding to an increase in the crude death rate from 4.3 per 1,000 mid-year population to 6.3.

The number of infant deaths, that is deaths among children aged under one year, registered in 1999 and 2009 was 21 and 10 respectively, corresponding to a decrease in the infant mortality rate (IMR) from 27.3 per 1,000 livebirths to 13.9. The lowest IMR, that is 12.3, was recorded in 2005 with only 11 infant deaths. However, as shown in the chart that follows, it drastically rose to 27.2 in 2006 then declined to 16.6 in 2008.

The number of still-births registered in 2009 was 5 corresponding to a still-birth rate of 6.9 per 1,000 total births. In 1999, the still-birth rate was 9.0 with six still-births. The lowest rate, that is 2.8, was recorded in 1995 and 1996 equally. As shown in the chart that follows, the still-birth rate drastically increased from 7.3 in 2002 to 17.9 in 2003 and 24.8 in 2004 then fell to 13.2 in 2005. However, it increased from 13.4 in 2006 to 17.5 in 2007 and then fell to 7.6 in 2008.
HEALTH DELIVERY SYSTEM

In the Island of Rodrigues, at the end of 2009, there were one hospital with 122 beds and two health centres with in-patient facilities equipped with 54 beds. This brought the total number of beds in government institutions providing in-patient facilities to 176 as compared to 178 in 1999. Patients in need of tertiary health care are usually referred to Mauritius.

At the end of 2009, there were 14 Community Health Centres, providing basic services including treatment of common diseases and injuries, maternal and child care and family planning. There were three dental clinics, namely at Queen Elizabeth Hospital, Mont Lubin Health Centre, and La Ferme Health Centre. There was also a Health Office at Port Mathurin.

HEALTH PERSONNEL

At the end of 2009, there were 17 doctors in the Island of Rodrigues, that is one for 2,222 inhabitants, while in 1999, there were 13 doctors with one for 2,734 inhabitants. There were 2 dentists that is one for 18,887 inhabitants at the end of 2009 while in 1999 it was one for 17,773 inhabitants. Almost all of these health professionals are employees of the Ministry of Health & Quality of Life posted to the island on tour service basis.

The number of qualified nurses and midwives was 174 at the end of 2009, that is one nurse/midwife for 218 inhabitants while in 1999 there were 116 officers in this category, that is one for 306 inhabitants.
IN-PATIENT SERVICE

The number of admissions at Queen Elizabeth Hospital and the two Health Centres (Mont Lubin and La Ferme) providing in-patient services was 10,502 in 2009, while in 2008 it was 10,842. The percentage decrease in admissions during the one-year period was about 3.1%. The highest number of admissions ever recorded was in 2006 with 13,695, probably due to the outbreak of chikungunya.

OUT-PATIENT SERVICE

The total number of attendances at the out-patient departments, that is the Accident & Emergency and the Sorted/Unsorted Unit at Queen Elizabeth Hospital, Mont Lubin and La Ferme Health Centres was 189,572 in 2009, while in 1999 it was 118,796, representing an average annual increase of about 6.0%.

In 2009, the number of attendances for the treatment of common diseases and injuries at Community Health Centres was 45,462 as compared to 49,518 in 2008.

MATERNAL AND CHILD HEALTH

In 2009, a total of 701 births (3 stillbirths and 698 live births) occurred at Queen Elizabeth Hospital, Mont Lubin HC and La Ferme HC. Out of the 698 livebirths attended by trained personnel, 70 were with a low birth weight (less than 2500 grammes) representing 10.0% of live births as compared to 12.7% in 2008; it was 9.5% in 1999.

A total of 702 livebirths were reported by the MCH services in 2009. The number of babies immunized against Tuberculosis (BCG) by MCH staff was 833. 874 babies were immunized against Diphtheria, Haemophilus influenza type B, hepatitis B and oral Polio Vaccine (3rd dose) and 836 against Measles/mumps/rubella (MMR). The number of vaccinations performed in 2009 exceeded that of livebirths registered in the same year probably due to either (a) the return to Rodrigues of babies born in Mauritius or (b) the changes in vaccination schedules.

DENTAL HEALTH

The total number of attendances at the three dental clinics in 2009 was 15,323 while in 1999 it was 12,497. This represented a percentage increase of 22.6% during the 10-year period.

MORBIDITY

The number of discharged patients in 2009 was 10,253 of whom 689 (6.7%) were treated for Complications of pregnancy, childbirth and the puerperium (excluding Normal deliveries and Complications following abortions), 673 (6.6%) for Delivery without mention of complications and 535 (5.2%) for Injuries (crushing & superficial injuries, fractures, open wounds, dislocation, sprain and strains).

In 2009, the diseases responsible for the highest number of first attendances at the 14 Community Health Centres for the treatment of common diseases and injuries were
ISLAND OF RODRIGUES

Cough, pain in throat, chest pain, wheezing, hiccup and sneezing with 3,088 attendances (17.1%) followed by tonsilitis, laryngitis, nasopharyngitis (common cold), sore throat and URTI with 2,401 attendances (13.3%). Fever/pain all over with 1,336 attendances (7.4%) stood in the third position.

Diseases grouped by ICD chapters indicate that Diseases of respiratory system which was 23.6% of total first attendances in 1999 decreased to 20.5% in 2009. During the same period, Infectious and parasitic diseases decreased from 9.3% to 6.1%. Diseases of the musculoskeletal and connective tissue were 6.1% of first attendances in 1999 as compared to 8.7% in 2009; in 2006, they represented 14.7% probably due to the outbreak of chikungunya.

CAUSE OF DEATH

In 2009, 237 deaths were registered. The distribution of deaths by the chapters of the International Classification of Diseases (ICD-10), as shown in the pie-chart below, indicates that Heart and other diseases of the circulatory system were responsible for 41.4% of the deaths. Diabetes and other endocrine, nutritional & metabolic disorders with 18.6% were in the second place followed by Cancer and other Neoplasms with 13.1%, Diseases of the respiratory system (7.6%) and Accidents and other consequences of external causes (5.1%)

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<tr>
<th>Underlying causes of deaths by ICD-10 Chapter - 2009</th>
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<td>Diseases of the respiratory system, 7.6%</td>
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<td>Other causes, 14.2%</td>
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In 2009, Diabetes Mellitus and Heart diseases were the two principal causes of death with 18.1% and 18.6% respectively. In 2008, when there were 206 deaths, they represented 18.9% and 14.0% respectively.

No Maternal deaths have been registered in the island since 2003. During the period 1993-2002, four Maternal deaths were registered: one in 2000, one in 2001 and 2 in 2002.