

***Timor Leste
2006 Health Statistics Report***

PREFACE

We are pleased to produce and disseminate the **Timor Leste 2006 Health Statistics Report**. It is the first time ever that such a report has been prepared, and we will strive to make this a regular publication from now on.

The Health Management Information System (HMIS) of the Ministry of Health is in the early stage of development. In August last year, a new set of data collection forms were used and a software was developed for processing of the collected data. With the support of the Health Metrics Network, District Health Information Officers were also appointed to act as focal persons in data collection and processing at the CHC and district levels.

An assessment of the data generated from this new system showed some data quality problems, especially in the area of completeness, accuracy and consistency. The degree of completeness of reporting of the various HMIS forms from the CHCs varies from less than 50% for programmes like TB and Health Promotion, to at least 80% for In and Out-Patient Services, MCH and Malaria. Given these data quality problems in the data we are generating, we were faced with a decision to either not disseminate any health statistics until we are assured that we are producing high quality data, or start disseminating health statistics in spite of the problems. We chose the latter option, with the belief that producing and disseminating health information will promote its utilization, which in turn will encourage more frequent interaction between data users and data providers, eventually resulting in better quality data.

The 2006 Health Statistics Report contains information for only a limited number of variables since we included only those with the least problems. For most of the indicators, the results are presented by district, hence enabling district-level comparison of performance. We caution the data users to use the results presented with the problems of data quality in mind. The resulting figures for the different indicators for now, are more useful for describing general levels of performance (ex., whether high, moderate or low) rather than for their absolute values.

We are grateful to the National Statistics Directorate for computing for us district-level projections of the population as well as the projected number of deliveries and livebirths, thus enabling the computation of indicators at the district level. We also appreciate the financial and technical support provided by the Health Metrics network and the World Health Organization which made the publication of this report possible.

Timor Leste 2006 Health Statistics Report

1. Contents

The Timor Leste 2006 Health Statistics Report consists of 13 tables which present various indicators on the following areas:

- a. Demographic Data (Tables 1 and 2)
- b. Maternal Care (Tables 3,4 and 5)
- c. Expanded Programme on Immunization (Tables 6 and 7)
- d. Out-Patient Consultations (Table 8)
- e. Malaria Programme (Tables 9 and 10)
- f. Morbidity Data (Tables 11 and 12)

g. Mortality Data (Table 13)

For most of the statistical tables presented, indicators are computed at the district level, making possible the comparison of district performance. The following sections present a short description of the results indicated in the tables.

2. Demographic Data

One of the factors contributing to the non-utilization of data produced by the HMIS is the inavailability of data to be used as denominators for the computation of indicators, especially at the district level. To address this problem, the MOH requested the National Statistics Directorate (NSD) to compute for district level projections of the population, as well as the projected number of livebirths. Using the data on livebirths prepared by the NSD, HMIS computed for the projected number of pregnancies using a method suggested by one of the Consultants, and reviewed by the NSD. Table 1 shows the projections for the total population and for selected age-groups, together with the projected number of livebirths and pregnancies by district, for 2006. These values are the denominators used in the computation of the indicators presented in the succeeding tables.

Table 2 presents the most recent values of important health and health-related demographic, fertility and mortality indicators. Most of the values presented are derived from the projections made for 2006 by the National Statistics Directorate in their publication entitled, "Population Projections: 2004-2050". In the case of the maternal mortality ratio, the value of 660 maternal deaths per 100,000 which was estimated for the year 2000 is the one we are using, since it is the one where the method of estimation is well documented.

3. Maternal Health

The data presented on maternal health cover three areas: ante-natal care (Table 3), deliveries attended by health personnel (Table 4), and post-natal care (Table 5).

The results presented in Table 3 show that for the whole country, a total of 62827 visits for ante-natal care were made by pregnant women, resulting in an average of 1.3 ante-natal visits per pregnant woman in 2006. This is very low compared to the recommended number of 4 ante-natal visits for every pregnant woman. The highest number of ante-natal visits were made by pregnant women in Manatuto and Covalima, while Ermera and Ainaro have the lowest number of ante-natal visits per pregnant woman.

In terms of the percentage of pregnant women who made the 1st ante-natal visit, Manatuto has the highest proportion, with almost all (92.0%) pregnant women from that district, having made the 1st ante-natal visit. This percentage is at least 75% for only 4 out of the 13 districts in the whole country.

There is a big difference between the percentage of pregnant women who made the 1st and the 4th ante-natal visit. While for the whole country, about 7 out of every 10 pregnant women (68.3%) make a 1st ante-natal visit, the proportion drastically goes down to only 36.1% when it comes to the 4th ante-natal visit. The percentage of pregnant women who make the 4th ante-natal visits varies from only 13.3% in Ermera, to 58.9% in Dili.

Only 1 out of every 4 deliveries (27.2%) in the whole country in 2006 was attended by a health personnel. This level is just about halfway of the targeted MDG level of 60% for this indicator by the year 2015. In terms of districts, Dili (45.9%), Manatuto (45.0%) and Baucau (42.3%) attained the highest levels for this indicator. The high levels for Dili and Baucau are expected because of the presence of hospitals in these districts. In 4 out of the 13 districts (Aileu, Ainaro, Ermera and Oecussi), the percentage of deliveries attended by a health personnel is below 20%. These are shown in Table 4.

Table 5 presents 3 indicators on post-natal care. These are the percentage of post-natal women making post-natal visits within 1 week and 1-6 weeks after delivery, as well as the percentage of post-natal women given Vitamin A and iron supplementation.

There is a very large variation among districts in the percentage of women making post-natal visits within 1-week after delivery, with the values ranging from only 3.4% of the women in Ermera, to 71.4% in Manatuto.

In general, the percentage of women who made post-natal visits decreased when the time period was expanded to 1-6 weeks after delivery. For most districts, the difference between the percentage of women making post-natal visits during the two time periods is not big. However, in the case of Manatuto, the percentage greatly decreased to only 43.3% for visits made 1-6 weeks after delivery.

Manatuto once again has the highest coverage (75.7%) among the districts, when it comes to Vitamin A and iron supplementation for post natal women. As in the case of the other indicators for post-natal care, there is a huge variation in the coverage of Vitamin A and iron supplementation among districts, with two districts (Ainaro and Oecussi) having coverages below 20%.

The indicators for the EPI programme are presented in two tables. Table 6 presents the coverage of various types of immunization among children <1 year of age; Table 7 presents the coverage of tetanus toxoid (TT) immunization for pregnant women.

A look at the results presented in Table 6a and 6b shows the following:

- a. Baucau has an immunization coverage exceeding 100% for all types of vaccines. The same is true for Manatuto in 6 out of the 9 types of immunizations covered in Tables 6a and 6b. These exceedingly high coverage figures can be due to the vaccination of children who are not part of the service area like those from neighboring places or the refugees. It can also be due to an under-estimation of the target group, the inclusion of children above 1 year old at the time of vaccination, or the over-reporting of the actual number of children vaccinated. Whatever it is, the reason needs to be looked into since theoretically, coverage figures do not exceed 100%.
- b. For the whole country, the highest immunization coverage is for BCG (73.6%) while the lowest is for measles (60.5%).
- c. Among the districts, Dili seems to be the most problematic, with an immunization coverage below 50% for 3 vaccines: Polio 3 (47.4%), DPT3 (45.1%), and measles (44.9%).
- d. The best achievers are Baucau, Manatuto, Covalima and Lautem, with an immunization coverage of at least 60% for all types of immunizations.

In the case of tetanus toxoid immunization for pregnant women, the coverage for the whole country is only 44.5% for TT2; a slightly higher proportion (52.5%) received TT2+. As in the case of child immunizations, Baucau and Manatuto also have the highest coverage for TT2. Seven out of the 13 districts had a TT2 coverage below 50%, with Ermera having the lowest coverage (27.6%).

5. Out-patient Consultations

Another important indicator of access and coverage of health services is the average number of out-patient consultations per person. In the HMIS, out-patient consultations include all visits to all levels and types of health facilities (government and private), for both preventive and curative services.

Table 8 presents the mean or average number of out-patient consultations by district. The data is categorized according to type of health facility visited (HP/CHC and hospitals). Whatever data that was collected from the private sector were likewise included in the computation, although these numbers are definitely much lower than the actual value because of coverage problems.

For the whole country, the average number of out-patient visits per person per year in 2006 was quite low, with a value of only 1.4. Among the districts, Aileu, Covalima and Viqueque had the highest levels, with at least 2 out-patient visits per person per year. The lowest values were those of Ainaro, Ermera and Oecussi, with averages of less than 1 out-patient visit per person per year.

Of the total number of 1,294,487 recorded out-patient visits made to a health facility in the whole country in 2006, only 13.2% were hospital visits while the private sector accounted for only 1.2%.

6. Malaria Programme

Two tables are presented for the malaria programme. Table 9 presents data on the incidence of malaria by age, as well as for pregnant women; Table 10 presents data on the basis of diagnosis of malaria as well as the number of slides examined.

Table 9 shows that the top 3 districts with the highest incidence of malaria are Viqueque, Covalima and Aileu. In addition, the incidence of malaria among children <5 is so much higher compared to those 5 years and above. In the case of Covalima for example, the incidence rate of 1265.9 per 1000 children <5 years old, is 3.6x higher compared to the incidence rate of 348.7 per 1000 persons 5 years and older. It should be noted that the malaria cases reported in Table 9 include both confirmed and unconfirmed cases.

The incidence rate among pregnant women is much lower, with rates varying from 0.9 malaria cases per 1000 pregnant women in Baucau, to 67.4 cases per 1000 pregnant women in Covalima. The incidence rate of malaria among pregnant women in Covalima is at least 2.4x higher compared to those of all other districts,

Table 10 shows that of the total number of cases treated for malaria in the whole country in 2006, only 17% were actually confirmed; the rest were diagnosed based on clinical symptoms. Among the districts, those with the highest proportion of confirmed cases are Dili (36.9%), Covalima (29.9%), Manatuto (20.8%) and Oecussi (20.4%). The lowest are Baucau and Manufahi, both with an extremely low level of only 1.1% of the cases confirmed. This result is surprising in the case of Baucau, since it has a hospital with laboratory facilities

Dili tops the districts in terms of the number of slides examined for malaria (10,735 slides). This is expected, since it has the highest population among the districts. The lowest is Manufahi, which reported only 64 slides examined for malaria for the whole 2006.

7. Morbidity Data

There are only two units within the country's health information system which collect and report data on specific causes of morbidity. These are the Disease Surveillance Unit, which routinely collects data on the incidence of about 25 notifiable diseases. The other Unit is Hospital Nacional Guido Validares in Dili, which reports causes of hospital admissions monthly.

Table 11 shows the incidence rate of the top 10 notifiable diseases by age-group. The results show that for

all age-groups, upper respiratory tract infections and malaria are the two leading causes of morbidity, with incidence rates which are so much higher compared to all other diseases. The inclusion of trauma, either due to traffic accidents or to other causes in the top 10 notifiable diseases is worth noting.

In the case of hospital admissions at Hospital Nacional Guido Validares, the leading cause among infants is lower respiratory tract infections, which accounted for 28.9% of the total admissions in this age-group. For the older age-groups however, the leading cause of hospital admissions were diseases of the muscles and soft tissues. In all age-groups, the number of hospital admissions whose cause was categorized under "other diseases" is very high, pointing to the need to review the categories used in classifying causes of hospital admissions.

8. Mortality Data

At present, there is very, very limited data on mortality available in the country, especially on causes, with Hospital Nacional Guido Validares being the only unit reporting such data routinely.

In 2006, there were 389 deaths reported among patients admitted Hospital Nacional Guido Validares. The recorded causes of mortality of these 389 deaths are presented in Table 13.

One-fifth (19.8%) of the deaths in Hospital Nacional Guido Validares in 2006 had causes which were not specifically defined and were labeled merely as "Other Diseases". This finding is similar to that of the morbidity report, and reinforces the need to look into the process and methods of categorizing causes of morbidity and mortality.

Among the causes of deaths which were specifically defined, pulmonary TB was the most common, accounting for 12.9% of the total hospital deaths. Malaria, malnutrition and lower respiratory tract infections were the other diseases belonging to the top 5 leading causes of hospital mortality.

Table 1. Projected Population by Sex and Selected Age Groups, and Projected Number of Livebirths and Pregnancies: Timor Leste and Districts, 2006

District	Projected 2006 Population ¹								Projected Number of Livebirths and Pregnancies	
	Total	Male	Female	<1	1-4	5-14	≥ 15	Women 15-49	Livebirths ¹	Pregnancies
Aileu	43157	22287	20870	1946	5997	12696	22517	8944	2137	
Ainaro	58618	29681	28936	2627	8565	17340	30085	12227	2873	
Baucau	110405	55543	54862	3955	14179	31623	60648	22643	4276	
Bobonaro	90961	45293	45668	3356	12549	24000	51056	20297	3643	
Covalima	58902	29649	29253	2250	7905	17139	31608	12979	2389	
Dili	188066	100084	87983	6850	26632	44051	110533	44324	6985	
Ermera	113873	57596	56276	5088	16143	34836	57806	23525	5490	
Lautem	62554	30802	31752	2597	9087	18596	32273	12841	2773	
Liquica	62990	31951	31039	2686	8105	18050	34150	13757	2891	
Manatuto	40157	20294	19863	1322	5353	11281	22201	8528	1401	
Manutahi	50342	25645	24697	2180	6723	12118	29321	11530	2503	
Oecusse	63727	31651	32077	2547	8834	15850	36497	15890	2831	
Viqueque	71435	35202	36233	2532	9735	20356	38813	15008	2732	
TIMOR LESTE	1015187	515678	499509	39937	139806	277936	557508	222495	42923	

¹ Source: National Statistics Directorate

² Computed by multiplying the projected number of livebirths by 1.1, to account for a 10% assumed spontaneous abortion rate.

This assumption has been assessed to be generally consistent with the current conditions prevailing in Timor Leste.

Table 2. Most Recent Values of Important Health and Health-Related Indicators for Timor Leste and Corresponding Data Source

INDICATOR	VALUE	YEAR	SOURCE
Demographic Indicators			
Annual Growth Rate	3.18%	2006	Table 7 (Medium Scenario), p.28: Population Projections 2004-2050, Published by the National Statistics Directorate
Sex Ratio	103 males per100 females	2006	Table 8 (Medium Scenario), p.41: Population Projections 2004-2050, Published by the National Statistics Directorate
% of women in the reproductive age-group (15-49)	44.5%	2006	Table 8 (Medium Scenario), p.41: Population Projections 2004-2050, Published by the National Statistics Directorate
Fertility Indicators			
Crude Birth Rate	42.3 births per 1000 population	2006	Table 7 (Medium Scenario), p.28: Population Projections 2004-2050, Published by the National Statistics Directorate
Total Fertility Rate	6.7 children per woman in her whole life-bearing age	2006	Table 7 (Medium Scenario), p.28: Population Projections 2004-2050, Published by the National Statistics Directorate
Mortality Indicators			
Crude Death Rate	10.6 deaths per 1000 population	2006	Table 7 (Medium Scenario), p.28: Population Projections 2004-2050, Published by the National Statistics Directorate
Infant Mortality Rate Both sexes	88 deaths per 1000 livebirths	2006	Table 7 (Medium Scenario), p.28: Population Projections 2004-2050, Published by the National Statistics Directorate
Male	90.6 deaths per 1000 livebirths	2006	Table 7 (Medium Scenario), p.28: Population Projections 2004-2050, Published by the National Statistics Directorate
Female	85.3 deaths per 1000 livebirths	2006	Table 7 (Medium Scenario), p.28: Population Projections 2004-2050, Published by the National Statistics Directorate
Under-five mortality rate	130 deaths per 1000 livebirths	2004	Estimated from 2004 Population Census, as indicated in the Timor Leste DEVINFO database
Life expectancy at birth Both sexes	59.5 years	2006	Table 7 (Medium Scenario), p.28: Population Projections 2004-2050, Published by the National Statistics Directorate

Males	58.6 years	2006	Table 7 (Medium Scenario), p.28: Population Projections 2004-2050, Published by the National Statistics Directorate
Females	60.5 years	2006	Table 7 (Medium Scenario), p.28: Population Projections 2004-2050, Published by the National Statistics Directorate
Maternal Mortality Ratio	660 maternal deaths per 100,000 livebirths	2000	Annex Table F, p. 20 of the publication "Maternal Mortality 2000: Estimates Developed by WHO, UNICEF, UNFPA"

**Table 3. Selected Variables Related to Ante-natal Care:
Timor Leste, 2006**

District	Total Number of ANC Visits	Mean No. of ANC visits/PW	No. PW Who Made 1st ANC Visit	% PW Who Made 1st ANC Visit	No. PW Who Made 4th ANC Visit	% PW Who Made 4th ANC Visit
Aileu	4085	1.7	1468	62.4	700	21.5
Ainaro	1861	0.6	1570	49.7	914	21.5
Baucau	5787	1.2	3442	73.2	1860	30.4
Bobonaro	4758	1.2	3185	79.5	1448	30.4
Covalima	5571	2.1	1933	73.6	1358	50.0
Dili	14815	1.9	6372	82.9	4523	50.0
Ermera	4434	0.7	2765	45.8	803	11.3
Lautem	5276	1.7	1951	64.0	981	30.0
Liquica	4494	1.4	2025	63.7	904	22.3
Manatuto	3315	2.2	1417	92.0	693	42.0
Manufahi	2712	1.0	1916	69.6	867	32.0
Oecussi	4365	1.4	2325	74.7	837	21.5
Viqueque	1354	0.9	1866	62.1	1152	30.4
Timor Leste	62827	1.3	32235	68.3	17040	30.4

Notes: 1. The denominator used in the computation of the mean and percentages (cols. 3,5,and 7) is the projected number of pregnancies

2. The mean number of ANC visits/PW for Viqueque covers only the first 2 quarters of 2006 since no data was available for the 3rd and 4th quarters.

The denominator used in computing the mean was 1503, which is one-half of the projected number of 3005 pregnant women for Viqueque in 2006.

Table 4. Number and Percentage of Deliveries Attended by Health Personnel by District: Timor Leste, 2006

District	Projected Number of Livebirths	No. of Deliveries at:		Total	% of Deliveries Attended by Health Personnel
		Home/CHC	Hospital		
Aileu	2137	412	0	412	19.3
Ainaro	2873	256	0	256	8.9
Baucau	4276	911	897	1808	42.3
Bobonaro	3643	520	196	716	19.7
Covalima	2389	682	254	936	39.2
Dili	6985	1014	2193	3207	45.9
Ermera	5490	801	0	801	14.6
Lautem	2773	664	0	664	23.9
Liquica	2891	717	0	717	24.8
Manatuto	1401	631	0	631	45.0
Manufahi	2503	542	0	542	21.7
Oecussi	2831	229	133	362	12.8
Viqueque	2732	629	0	629	23.0
Timor Leste	42923	8008	3673	11681	27.2

**Table 5 . Selected Variables Related to Post-Natal Care:
Timor Leste, 2006**

District	No. of Women Making Post-Natal Visits Within 1 Week After Delivery	% of Women Making Post-Natal Visits Within 1 Week After Delivery	No. of Women Making Post-Natal Visits 1-6 Weeks After Delivery	% of Women Making Post-Natal Visits 1-6 Weeks After Delivery	Iror
Aileu	772	36.1	494	23.1	
Ainara	137	4.8	197	6.9	
Baucau	1365	31.9	1050	24.6	
Bobonaro	452	12.4	296	8.1	
Covalima	362	15.2	250	10.5	
Dili	658	9.4	1120	16.0	
Ermera	189	3.4	114	2.1	
Lautem	895	32.3	736	26.5	
Liquica	951	32.9	1054	36.5	
Manatuto	1000	71.4	607	43.3	
Manufahi	450	18.0	248	9.9	
Oecussi	356	12.6	329	11.6	
Viqueque	863	31.6	796	29.1	
Timor Leste	8450	19.7	7291	17.0	

Note: The denominator used in the computation of percentages (cols. 3, 5 and 7) is the projected number of livebirths per district for 2006, which was used as a proxy variable for the total number of post-natal women in each district.

**Table 6a. Coverage of BCG and Polio Immunization Among Children <1 by District:
Timor Leste, 2006**

District	BCG		Polio 0		Polio 1		Polio 2		Polio 3	
	Number	%	Number	%	Number	%	Number	%	Number	%
Aileu	1,087	55.9	810	41.6	1038	53.3	1009	51.8	1000	50.0
Ainaro	1,296	49.3	1287	49.0	1643	62.5	1491	56.8	1452	55.0
Baucau	4,280	108.2	4053	102.5	4410	111.5	4244	107.3	4416	111.0
Bobonaro	2,060	61.4	1562	46.5	1924	57.3	1707	50.9	1796	55.0
Covalima	1,922	85.4	1880	83.6	1740	77.3	1573	69.9	1459	66.0
Dili	4,981	72.7	3713	54.2	3903	57.0	3475	50.7	3248	47.0
Ermera	2,886	56.7	2695	53.0	3199	62.9	2677	52.6	2372	46.0
Lautem	2,454	94.5	2275	87.6	2064	79.5	1876	72.2	2046	79.0
Liquica	1,964	73.1	1433	53.4	1737	64.7	1510	56.2	1517	55.0
Manatuto	1,334	100.9	1309	99.0	1441	109.0	1387	104.9	1325	101.0
Manufahi	1,325	60.8	1201	55.1	1236	56.7	1261	57.8	1322	60.0
Oecussi	1,895	74.4	1631	64.0	1806	70.9	1339	52.6	1309	50.0
Viqueque	1,898	75.0	1852	73.1	1702	67.2	1259	49.7	1490	55.0
Timor Leste	29,382	73.6	25701	64.4	27843	69.7	24808	62.1	24752	62.0

Note: The denominator used in the computation of coverage for each type of immunization is the projected number of children <1 per district

**Table 6b. Coverage of DPT and Measles Immunization Among Children <1 by District:
Timor Leste, 2006**

District	DPT1		DPT2		DPT3		M
	Number	%	Number	%	Number	%	Number
Aileu	1,113	57.2	994	51.1	1,033	53.1	1055
Ainaro	1,471	56.0	1491	56.8	1,477	56.2	1695
Baucau	4,417	111.7	4304	108.8	4,624	116.9	4404
Bobonaro	2,153	64.2	1827	54.4	1,863	55.5	1404
Covalima	1,735	77.1	1564	69.5	1,474	65.5	1496
Dili	3,780	55.2	3460	50.5	3,092	45.1	3079
Ermera	3,192	62.7	2842	55.9	2,393	47.0	2728
Lautem	2,042	78.6	1882	72.5	2,014	77.6	1651
Liquica	1,706	63.5	1557	58.0	1,519	56.6	1318
Manatuto	1,461	110.5	1399	105.8	1,317	99.6	1240
Manufahi	1,417	65.0	1374	63.0	1,452	66.6	1163
Oecussi	1,866	73.3	1427	56.0	1,349	53.0	1208
Viqueque	1,840	72.7	1314	51.9	1,636	64.6	1739
Timor Leste	28,193	70.6	25435	63.7	25,243	63.2	24180

Note: The denominator used in the computation of coverage for each type of immunization is the projected number of children <1 per district

Table 7. Coverage of Immunization for Pregnant Women by District: Timor Leste, 2006

District	Projected Number of Pregnant Women	TT1		TT2		TT2+	
		No.	%	No.	%	No.	%
Aileu	2351	932	39.6	695	29.6	834	
Ainaro	3160	1,281	40.5	1,063	33.6	1,063	
Baucau	4703	3,634	77.3	3,153	67.0	3,192	
Bobonaro	4007	1,988	49.6	1,652	41.2	2,035	
Covalima	2628	1,617	61.5	1,453	55.3	3,061	
Dili	7683	4,226	55.0	3,238	42.1	3,870	
Ermera	6039	2,108	34.9	1,666	27.6	1,858	
Lautem	3050	2,064	67.7	1,855	60.8	1,910	
Liquica	3180	1,733	54.5	1,342	42.2	1,557	
Manatuto	1541	1,066	69.2	1,026	66.6	1,431	
Manufahi	2753	1,263	45.9	799	29.0	890	
Oecussi	3114	2,030	65.2	1,594	51.2	1,507	
Viqueque	3005	1,821	60.6	1,492	49.7	1,566	
Timor Leste	47215	25,763	54.6	21,028	44.5	24,774	

Table 8. Absolute and Mean Number of Out-Patient Consultations by District and Place of Consultation: Timor Leste, 2006

Districts	Population 2006	No. Of Out-Patient Consultations			Mean Number of Out-Patient Consultations	
		District (HP/CHC)	Hospitals	Total	District (HP/CHC)	Hospitals
Aileu	43157	112403	0	112403	2.6	
Ainaro	58618	51231	0	51231	0.9	
Baucau	110405	133783	31574	165357	1.2	
Bobonaro	90961	91283	48884	140167	1.0	
Covalima	58902	99609	17022	116631	1.7	
Dili	188066	239136	49950	289086	1.3	
Ermera	113873	70885	0	70885	0.6	

Lautem	62554	105039	0	105039	1.7	
Liquica	62990	86452	0	86452	1.4	
Manatuto	40157	56068	0	56068	1.4	
Maunfahe	50342	62981	0	62981	1.3	
Oecusse	63727	28110	23586	51696	0.4	
Viqueque	71435	141355	0	141355	2.0	
Timor Leste	1015187	1278335	171016	1449351	1.3	
Total Government		1278335	171016	1449351	1.3	
Private Sector		16152	0	16152	0.0159	
Grand Total		1294487	171016	1465503	1.3	(

Table 9. Incidence Rate of Malaria (Confirmed and Unconfirmed) for Different Age-Group and for Pregnant Women by District: Timor Leste, 2006

District	<5			5+			Total		
	Cases	Popn	Rate/1000	Cases	Popn	Rate/1000	Cases	Popn	Rate/
Aileu	7705	7943.0	970.0	13041	35214	370.3	20746	43157	480
Ainaro	2043	11192.0	182.5	3037	47426	64.0	5080	58618	86
Baucau	4425	18134.0	244.0	6789	92271	73.6	11214	110405	101
Bobonaro	2839	15905.0	178.5	4695	75056	62.6	7534	90961	82
Covalima	12855	10155.0	1265.9	16996	48747	348.7	29851	58902	506
Dili	13136	33482.0	392.3	15853	154584	102.6	28989	188066	154
Ermera	4624	21231.0	217.8	8002	92642	86.4	12626	113873	110
Lautem	10673	11684.0	913.5	18525	50870	364.2	29198	62554	466
Liquica	3245	10791.0	300.7	6076	52199	116.4	9321	62990	148
Manatuto	2854	6675.0	427.6	6936	33482	207.2	9790	40157	243
Manufahi	2431	8903.0	273.1	6177	41439	149.1	8608	50342	171
Oecussi	2338	11381.0	205.4	4914	52346	93.9	7252	63727	113
Viqueque	13018	12267.0	1061.2	29775	59168	503.2	42793	71435	599
Timor Leste	82186	179743.0	457.2	140816	835444	168.6	223002	1015187	219

Table 10. Distribution of Malaria Cases According to Basis of Diagnosis (Clinical/Confirmed), and Number of Slides Examined by District: Timor Leste, 2006

District	Total No. of Cases	Clinical Cases		Confirmed Cases		No. of Slides Examined
		No.	%	No.	%	
Aileu	20746	17170	82.8	3576	17.2	4259
Ainaro	5080	4813	94.7	267	5.3	267
Baucau	11214	11089	98.9	125	1.1	125
Bobonaro	7534	6806	90.3	728	9.7	728
Covalima	29851	20939	70.1	8912	29.9	8912
Dili	28989	18283	63.1	10706	36.9	10735
Ermera	12626	11143	88.3	1483	11.7	1583
Lautem	29198	24657	84.4	4541	15.6	4541
Liquica	9321	8480	91.0	841	9.0	884
Manatuto	9790	7750	79.2	2040	20.8	2039
Manufahi	8608	8511	98.9	97	1.1	64
Decussi	7252	5770	79.6	1482	20.4	1482
Viqueque	42793	39695	92.8	3098	7.2	3951
Timor Leste	223002	185106	83.0	37896	17.0	39570

Table 11. Incidence of Top 10 Notifiable Diseases By Age-Group: Timor Leste 2006¹

Disease	<1		1-4		5-14		15+
	Cases	Rate/1000	Cases	Rate/1000	Cases	Rate/1000	Cases
Upper respiratory tract infections	41730	1044.9	66438	475.2	67152	241.6	122776
Malaria ²			82186	457.2			140816
Acute watery diarrhea	12644	316.6	18452	132.0	9629	34.6	11854
Pneumonia	10180	254.9	14081	100.7	8069	29.0	13362
Trauma due to causes other than traffic accidents	483	12.1	1830	13.1	3634	13.1	8384
Scabies	888	22.2	3100	22.2	3854	13.9	5369
Bloody diarrhea	1843	46.1	3846	27.5	2729	9.8	4357
Dengue hemorrhagic fever	595	14.9	888	6.4	531	1.9	775
Traffic Accidents	22	0.6	265	1.9	530	1.9	773
Urethral discharge ³	0	0.0	2	0.0	80	0.3	689

¹ Source: Disease Surveillance Unit

² The age-groups used for reporting malaria data in 2006 was <5 and 5+ hence the incidence of 457.2/1000 population actually refer the age-group 0-4 while the incidence of 168.6 per 1000 population refers to the age-group 5 years and older

³ The reported number of cases of urethral discharge are not all new cases, hence the computed rate for this disease is more of a prevalence rather than an incidence figure

Table 12. Causes of Hospital Admissions By Age of Patient: Hospital Nacional Guido Validares, 2006

Cause of Hospital Admission	<1			1 - 14			15 - 49		
	No.	% of total admissions	Rank	No.	% of total admissions	Rank	No.	% of total admissions	Rank
Dengue	75	2.6	9	13	0.5	15	0	0.0	18.5
Cardiovascular diseases	12	0.4	16	81	2.9	9	92	8.4	4.5
Cerebrovascular diseases	18	0.6	14.5	33	1.2	13	44	4.0	10
Diseases of the skin and sub-cutaneous Tissue	41	1.4	11	55	2.0	12	19	1.7	12
Urinary tract Infection	21	0.7	13	143	5.2	7	77	7.1	7
Sexually transmitted infections	1	0.03	18.5	1	0.04	19	0	0.0	18.5
Diseases of the pharynx, larynx and salivary glands	82	2.8	8	161	5.9	6	23	2.1	11
Diseases of the muscles and soft tissues	346	11.9	4	728	26.5	1	214	19.6	1
Gastro-intestinal diseases	478	16.5	2	252	9.2	4	86	7.9	6
Diseases of the liver	17	0.6	14.5	58	2.1	11	15	1.4	13
Ophthalmologic diseases	1	0.03	18.5	14	0.5	14	10	0.9	14

Lower respiratory tract infections	836	28.9	1	92	3.3	8	92	8.4	4.5
Upper respiratory tract infections	304	10.5	5	80	2.9	10	49	4.5	8
Malaria	125	4.3	6	205	7.5	6	48	4.4	9
Malnutrition	86	3.0	7	7	0.3	17	1	0.1	17
Meningitis and encephalitis	9	0.3	17	4	0.1	16	4	0.4	15.5
Other diseases	379	13.1	3	491	17.9	2	166	15.2	2
Intestinal parasites	23	0.8	12	11	0.4	16	4	0.4	15.5
Pulmonary tuberculosis	42	1.5	10	318	11.6	3	147	13.5	3
TOTAL	2896	100.0		2747	100.0		1091	100.0	

Table 13. Ten Leading Causes of Mortality Among Patients Admitted to Hospital Nacional Guido Validares: 2006

Rank	Cause of Death	No. of Deaths	% of Total Hospital Deaths ¹
1	Other causes	77	19.8
2	Pulmonary Tuberculosis	50	12.9
3	Malaria	30	7.7
4	Malnutrition	27	6.9
5	Lower respiratory tract infections	18	4.6
6	Cardiovascular diseases	17	4.4
7	Gastro-intestinal diseases	10	2.6
8	Meningitis and encephalitis	10	2.6
9	Prematurity	9	2.3
10	Acute asphyxia	8	2.1

¹ There were 389 reported hospital deaths at HNGV in 2006