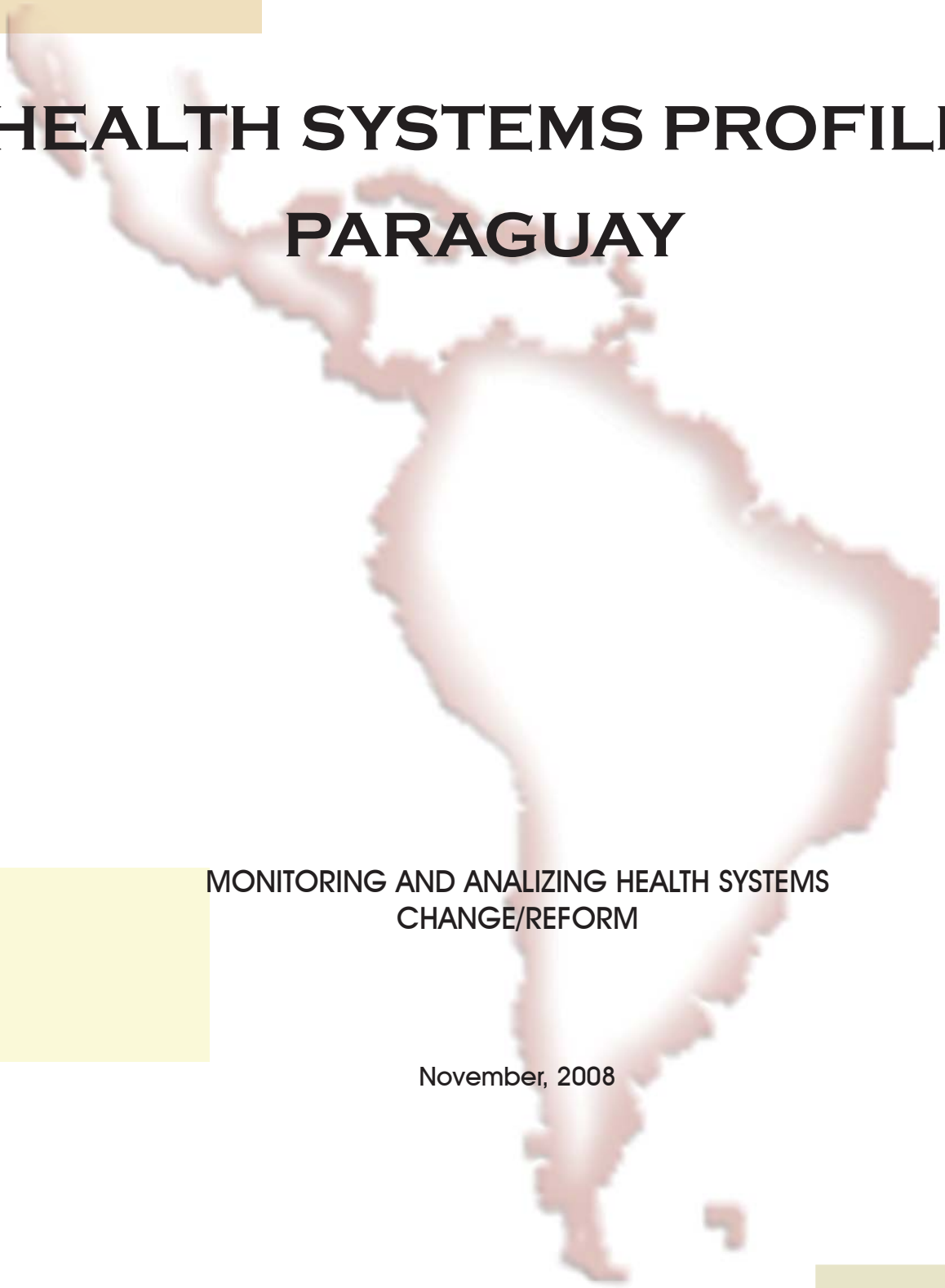
HEALTH SYSTEMS PROFILE

PARAGUAY



MONITORING AND ANALIZING HEALTH SYSTEMS CHANGE/REFORM

November, 2008

USAID
FROM THE AMERICAN PEOPLE

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PANAMERICAN HEALTH ORGANIZATION/
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PARAGUAY

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LIST OF ACRONYMS

BCG	Tuberculosis Vaccine
CCA	Common Country Assessment
CEMIT	Center for Multidisciplinary Studies and Technological Research
CHS	Comprehensive Household Survey
CONACYT	National Board of Science and Technology
EONC	Essential Obstetric and Neonatal Care
DGDSS	Bureau of Health Services Development (MPHSW)
DGEEC	Bureau of Statistics, Surveys, and Censuses
DNVS	National Bureau of Health Surveillance
DPT	Diphtheria/Pertussis/Tetanus Vaccine
EAP	Economically-Active Population
ENRPD	National Strategy to Reduce Poverty and Inequality
EPI	Expanded Program on Immunization
EPHF	Essential Public Health Functions
EPSS	Extension of Social Protection in Health
FONARESS	National Fund of Collective Resources for Health
ESSAP	Paraguay Health Service Corporation
GDP	Gross Domestic Product
IICS	Institute of Health Science Research
INCOSUR	Southern Cone Initiative to Control/Eliminate Chagas Disease
INTN	National Institute of Technology and Standardization
INS	National Health Institute
IPS	Social Welfare Institute
ITRI	International Cooperation Technical Unit (MPHSW)
MEC	Ministry of Education and Culture
MDGs	Millennium Development Goals
MPHSW	Ministry of Public Health and Social Welfare
NHA	National Health Authority
NHS	National Health System
NSSRH	National Survey on Sexual and Reproductive Health
PAHO	Pan American Health Organization
PHS	Periodic Household Survey
PGGN	General Budget of National Expenditures
SEAM	Secretariat of the Environment
SENASA	National Environmental Sanitation Service
SENEPA	National Malaria Eradication Service
SICO	Integrated System of State Accounting
SINARH	National System of Human Resources
UBN	Unmet Basic Needs
UTRI	International Relations Technical Unit
WHO	World Health Organization

EXECUTIVE SUMMARY

The Republic of Paraguay is a land-locked country located in the center of South America. The Paraguay River divides the country into two well-defined regions: the Western or "Chaco" Region, with its three departments, and the Eastern Region with 14 departments. The country has a total surface area of 406,752 km^2. In 2006, Paraguay had a population of 5,946,471 inhabitants,[1] with 58.1% living in urban areas and 41.9% in rural areas; 49.6% were male and were 50.4% female.

The country's epidemiological profile is that of a developing country, with several intervening factors making the transition toward sustainable human and social development a slow one. These factors have an important impact on communicable diseases, especially among the infant population, the majority of which are preventable: infectious, parasitic, diarrheal, and acute respiratory diseases account for the leading causes of morbidity and mortality.

The fertility rate has declined in recent years, from 6.5 children per woman in the period 1950-1955 to 2.9 children in the period 2001-2004.[2] Between the period 1995-1998 and 2001-2004, the total fertility rate (TFR) declined by 22% in urban areas and by 34% in rural areas. During the same time periods, fertility among adolescents aged 15 to 19 years fell from 90 to 67 births per 1,000 women or by 26%. The average number of children born to indigenous women is 6.3, a figure much higher than the national average.

The total death rate has declined over the last fifteen years (from 6.01 in the period 1990-1994 down to 3.52 in the period 2000-2004). In 2005, the mortality rate was 3.7 deaths per 1,000 with a slightly upward trend. The leading causes of death in 2005 were: cardiovascular diseases (24.3%); tumors (14.1%); diabetes mellitus (6.8%); respiratory diseases (6.0%); accidents (5.8%); and perinatal diseases (4.6%).

The National Health System (NHS) of Paraguay is regulated by Law No 1032/96, Article 4 of which states that the NHS should provide health services through the public, private, and mixed subsectors, health insurance programs, and universities. The Ministry of Public Health and Social Welfare (MPHSW) is responsible for the steering role of the sector.

The health system is highly segmented and lacks coordination among the various subsectors. The lack of institutional coordination results in the duplication of efforts, which is reflected in the concentration of local health facilities in some geographical areas and their absence in others. There is no separation of functions within the health system. The MPHSW carries out the steering, service delivery, and financing functions. The IPS and the private sector carry out assurance, service delivery, and financing functions.

Between 2003 and 2004,[3] the public sector health care coverage increased from 38.2% to 44.9%. Social security coverage and private sector care decreased slightly over the same period, from 12.2% to 10.6% and from 49.6% to 44.5%, respectively. While in 2003 the public subsector primarily covered the population of the 2nd and 4th income quintiles, in 2004 it increased its coverage of the population in the lower income quintiles (1st and 3rd). In 2003, social security provided coverage mostly to the 3rd income quintile in addition to 4th and 5th income quintiles, but in 2004 was mainly covering the higher income quintiles.

On average, the health sector accounted for 7.2% of gross domestic product (GDP) during the period 1997-2004. Over this period, public sector health expenditures as a percentage of GDP ranged from 6.3% in 1997 to 8.4% in 2001, and then fell to 6.5% in 2004. During the period 1997-2004, the health sector spending grew from 1.3 to 2.7 billion guaranís at current prices. In terms of the per capita health expenditure, public sector spending during the period 2000-2004 averaged 152,569 guaranís at current prices, while the corresponding

1 Periodic Household Survey (PHS) 2006.
2 NSSRH (2001-2004).
3 Periodic Household Survey (PHS) 2006.

private sector expenditures were 277,108 guaranís. During the same period, the average per capita U.S. dollar values were 31 dollars for public spending and 55 for private spending.

The National Health Authority (NHA) is facing significant challenges in the medium- (2011 Bicentennial celebration) and long-term in order to strengthen its steering role within the health system and move forward with the renewal of Primary Health Care (PHC), which it must do to improve health service access and quality.

1.CONTEXT OF THE HEALTH SYSTEM

The Republic of Paraguay is a land-locked country located in the heart of South America. The country's water resources include two major rivers, the Paraná and Paraguay, in addition to numerous rivers and streams. The Paraguay River divides the country into two well-defined regions: the Western or "Chaco" Region, with 3 departments, and the Eastern Region with 14 departments. Paraguay has a total surface area of 406,752 km2.

Although Paraguay's Constitution recognizes health as a basic right of the population and health sector legislation guarantees health promotion and protection to all citizens, in 2005 a significant portion of the population (35.1%) remained excluded[4] from these rights due to a series of shortcomings in the current mechanisms that should facilitate such protection.[5]

Paraguay's National Health System (NHS) is regulated by Law No. 1032/96. Its Article 4 states that the NHS' role is to supply health services through the public, private, and mixed subsectors, health insurance programs, and universities.

1.1 HEALTH SITUATION ANALYSIS

1.1.1 DEMOGRAPHIC ANALYSIS

In 2006, Paraguay had a population of 5,946,471 inhabitants,[6] 58.1% living in urban areas and 41.9% in rural areas; 49.6% were male and 50.4% were female.

Overall, Paraguay has a low population density (12.7 inhab./km2) with a very irregular distribution: 31.5 inhab./km2 in the Eastern Region, and 0.5 inhab./km2 in the Western or "Chaco" Region. Although the Chaco accounts for 60% of the country's land area, it is home to barely 2.6% of the total population. Thirty-six percent (36.3%) of the population is concentrated in the capital city of Asunción and the Central Department, which represent less than 1% of the national territory (4,377 inhab./km2 in Asunción and 552.9 inhab./km2 in the Central Department).[7]

The population is young, with 37.1% under age 15 (41.5% in 1992). This situation is more extreme in rural Paraguay (41.3%) than in urban areas (33.9%), due to the country's late entry into the demographic transition process. Fifty-eight percent of the population is in the 15 to 64 age group representing a very large economically-active group, 73.4% are male and 35% are female. The population aged 60 and older makes up 7.1% of the total population.[8]

4 According to the PHS-DGEEC, the excluded population comprises people either significantly ill or injured who do not seek out medical care.
5 MPHSW-DGEEC-PAHO/WHO. Social Exclusion in Health: Analysis at the National and Regional Levels [Exclusión Social en Salud: Análisis a nivel Nacional y Regional]. Paraguay, December 2007.
6 Permanent Household Survey 2006. DGEEC.
7 2002 National Population and Household Census. DGEEC.
8 National Population Estimate by Sex and Age, 2000-2050. DGEEC.

TABLE 1: DEMOGRAPHIC TRENDS- PARAGUAY, 1990-2005

PERIOD/INDICATOR	1990-1995		1995-2000		2000-2005	
	Male	Female	Male	Female	Male	Female
Total population (thousands)	2.258.446	2.209.513	2.538.252	2.479.668	2.603.242	2.559.956
% urban population	44,6	49,0	ND	ND	54,6	58,8
Indigenous population	25.636	23.851	ND	ND	44 651	41 889
% pop. < age 15	19,8	20,1	19,9	19,3	18,8	18,2
% population age 60+	2,9	3,2	3,0	3,3	3,2	3,5
Annual population growth rate	2,2%		2,3%		2,1%	
Total fertility rate	4,31		3,88		3,48	
Crude birth rate per 1,000 pop.	31,97		29,27		26,94	
Crude death rate	6,24		5,98		5,71	
Life expectancy at birth	66,30	70,80	67,20	71,72	68,70	72,92
Migratory balance	-15.486		-8.594		-44.556	

Source: DGEEC. National Population Estimate by Sex and Age, 2000-2050; Population Estimate by Sex and Age Groups in Urban and Rural Areas, 2000-2030; Population and Housing Census 1992/2002; II National Census of Indigenous Populations and Households, 2002.

The indigenous population census (2002) accounted for 87,099 people, representing 1.7% of the country's population. Thirty one percent live in the Chaco region and 91.5% in rural areas. Twenty different ethnic groups were identified, divided into five linguistic families: Guaraní, Maskoy, Matako, Guaicurú, and Zamuco. The Guaraní, with its six ethnic groups, is the largest, with a growth rate of 3.9%, which is higher than the rate for the total population (2.2%). The population structure for the indigenous people of Paraguay is younger than that of the general population due to high fertility rates. Almost half of the indigenous population is under age 15 (47.1%), and only 2.6% is age 65 and older. For the general population, there is a slightly higher percentage of males (51.7%). Among specific ethnic groups, this percentage is even higher.

In 2002, the total number of interdepartmental migrants (338,418 people) was 24,100 more than in 1992 (314,308 people); however, as a percentage of total inhabitants, the migrant population age 5 and older decreased (8.9% in 1992 versus 7.4% in 2002). Most immigrants come from Brazil and Argentina. People from these countries accounted for 77.4% of all foreigners in 1972, reaching 83.6% in 2002. The Brazilian immigrant population in Paraguay is larger (47.1%) than the one from Argentina (36.5%).

TABLE 2: ESTIMATED DEMOGRAPHIC INDICATORS BY 5-YEAR PERIOD AND YEAR, PARAGUAY, 1995-2005

INDICATOR	5-Year Period			5-Year Period				Year				
	95-00	00-05	Average.	00-05	05-10	Average.	Difference.	2001	2002	2003	2004	2005
FERTILITY												
Annual births (B) in thousands	148.49	151.45	150	151.45	152.86	152.16	2.19	150,407	150,844	151,281	151,718	152,155
Crude birth rate (b) per 1,000 pop.	29.27	26.94	28.11	26.94	24.75	25.85	-2.26	27,653	27,201	26,749	26,297	25,845
Total fertility rate	3.88	3.48	3.68	3.48	3.08	3.28	-0.40	3,600	3,520	3,440	3,360	3,280
Crude reproduction rate	1.89	1.7	1.80	1.7	1.5	1.60	-0.20	1,756	1,717	1,678	1,639	1,600
MORTALITY												
Annual deaths (D) in thousands	30.25	32.	31.13	32.	34.59	33.30	2.17	31,559	31,993	32,427	32,861	33,295
Crude death rate (d) per 1,000 pop.	5.98	5.71	5.85	5.71	5.62	5.67	-0.18	5,809	5,773	5,737	5,701	5,665
LIFE EXPECTANCY AT BIRTH (IN YEARS)												
Both sexes	69.40	70.76	70.08	70.76	71.76	71.26	1.18	70,316	70,552	70,788	71,024	71,260
Men	67.20	68.70	67.95	68.70	69.70	69.2	1.25	68,200	68,450	68,700	68,950	69,200
Women	71.72	72.92	72.32	72.92	73.92	73.42	1.10	72,540	72,760	72,980	73,200	73,420
Infant mortality rate (per 1,000 pop.)	39.20	35.50	37.35	35.50	32.00	33.75	-3.60	36,630	35,910	35,190	34,470	33,750
NATURAL GROWTH												
Annual growth (B-D) per 1,000 pop.	118.24	119.46	118.85	119.46	118.27	118.87	0.02	118,853	118,856	118,859	118,862	118,865
Natural Growth rate: (per 1,000 pop.)	23.29	21.23	22.26	21.23	19.13	20.18	-2.08	21,844	21,428	21.012	20.596	20,180
Net reproduction rate	1.766	1.595	1.68	1.595	1.421	1.508	-0.17	1,646	1,612	1,577	1,543	1,508
MIGRATION												
Annual migration (M) in thousands	-9	-9	-9.00	-9	-8	-8.5	0.50	-8,900	-8,800	-8,700	-8,600	-8,500
Rate of migration (m) per 1,000 pop.	-1.7	-1.59	-1.65	-1.59	-1.26	-1.43	0.22	-1,601	-1,557	-1,513	-1,469	-1,425
TOTAL GROWTH												
Annual growth (B-D+(-)M) in thousands	110	111	110.50	111	111	111	0.50	110,600	110,700	110,800	110,900	111,000
Growth rate (r) per 1,000	21.84	19.86	20.85	19.86	18.07	18.97	-1.89	20,473	20,096	19,719	19,342	18,965

Source: Paraguay, National Population Estimate by Sex and Age (1950-2005), DGEEC.
Prepared in the Biostatistics Department, MPHSW.

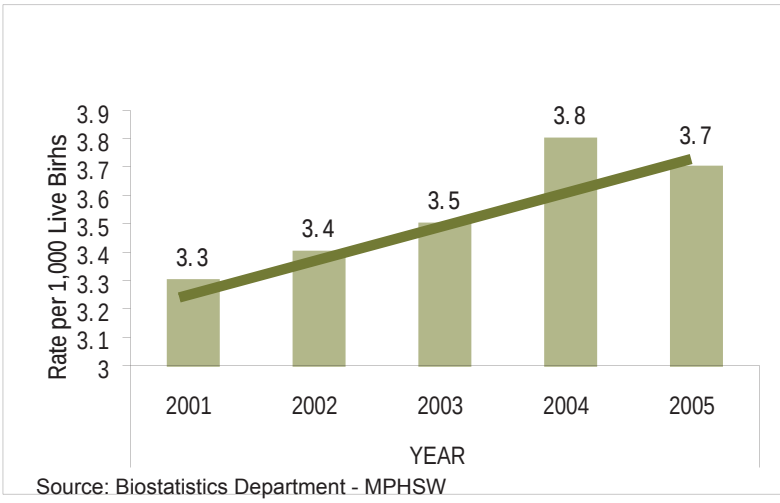
The total fertility rate (TFR) has been declining in recent years. According to comparative data, in the period 1950-1955, the number of children per woman was 6.5.[9] According to the NSSRH, for the period 2001-2004, this number decreased to 2.9 children per women .[10] The TFR decreased by 22% in the urban area and by 34% in the rural, between the periods 1995-1998 and 2001-2004. During the same periods, the fertility rate among adolescents aged 15-19 decreased 26%, from 90 to 67 births per 1,000 women, respectively. The average number of children for indigenous women is 6.3, much higher than the national average .[11]

1.1.2 EPIDEMIOLOGICAL ANALYSIS

General Mortality

The average total death rate has declined over the last 15 years (from 6.01 in the period 1990-94 to 3.52 the period 2000-2004). In 2005, the average total death rate was 3.7 per 1,000, with a slightly upward trend. The leading causes of death in 2005 were: cardiovascular diseases (24.3%, of which 9.1% were due to stroke); tumors (14.1%); diabetes mellitus (6.8%); respiratory diseases (6.0%); accidents (5.8%), and perinatal diseases (4.6%). In addition, mortality due to symptoms, signs, and abnormal clinical findings, not elsewhere classified accounted for 16.8% of deaths.

FIGURE 1: GENERAL MORTALITY, PARAGUAY, 2001-2005



Source: Biostatistics Department - MPHSW

Over the last five years, a 33 to 42% decline (-12%) in the underreporting of deaths has been observed. Medical certification of death is mandatory, but in less than half of the cases health professionals directly certify these deaths (Paraguay, 2001-2005). In 2005, medical care was provided in 58.9% cases of registered deaths. The percentage of ill-defined causes of death increased from 18.1 to 21.4 in the period 2003-2005. For deaths in which medical care was provided, this percentage ranged from 3.0 to 4.5.

9 Bureau of Statistics Surveys, and Censuses (1950 – 1955).
10 National Survey on Sexual and Reproductive Health, Paraguay 2004.
11 II National Census of the Indigenous Populations and Households.

TABLE 3: ESTIMATED AND REGISTERED DEATHS, AND % OF UNDERREPORTING, PARAGUAY, 2001-2005

Year	2001	2002	2003	2004	2005
Estimated deaths	31,559	31,993	32,427	32,861	33,295
Registered deaths	18,400	18,934	19,779	21,788	22,109
% underreporting	42%	41%	39%	34%	33%

Source: Biostatistics Department, Bureau of Planning and Evaluation, MPHSW

TABLE 4: MORBIDITY AND RISK FACTOR INDICATORS- PARAGUAY 1990-2005

Periods/Indicators	1990 – 1994	1995 – 1999	2000 – 2005
Prevalence of low birth weight	5.1	5.2	5.8
Adolescent fertility rate (ages 15-19)	107	87	65
Annual prevalence of moderate/severe malnutrition in children under age 5	N.D.	N.D.	6.6
Prevalence of exclusive breast-feeding through the first 120 days of life	7.6*	20.9	22.9
Percentage of deliveries attended by skilled health workers	79.7	83.2	83.7
Annual cases of vaccine-preventable diseases:			
- Diphtheria	27	1	57
- Whooping Cough	937	160	223
- Mumps	N.D.	N.D.	2,610
- Neonatal tetanus	136	69	34
- Tetanus (other ages)	N.D.	42	108
- Measles	N.D.	272	0
- Rubella	0	132	122
Annual confirmed cases of dengue	N.D.	1,164	24,635
Annual confirmed cases of malaria	1,641	2,828	2,499
Annual incidence of tuberculosis (all forms)	10,160	9,709	10,356
Annual incidence of sputum-smear microscopy for tuberculosis (+)	931	878	1,079
Annual incidence of lung cancer	35	73	110
Annual incidence of breast cancer	181	211	361
Annual incidence of cervical cancer	243	421	537

Sources: MPHSW, National Program of Vaccine-Preventable Diseases, and EPI; Tuberculosis Control Program, Biostatistics Department; Bureau of Epidemiological Surveillance; National AIDS Control Program; National Malaria Eradication Program (SENEPA); National Population and Sexual and Reproductive Health Survey 2004 (CEPEP).
*Note: For the period 1993-1994 only.

TABLE 5: MORTALITY, PARAGUAY, 1990-2005

PERIOD/ INDICATOR	General	Mater-nal	Child	TBC	AIDS	Malaria	Cardio-vascular Diseases	Malignant neoplasms	External causes
Period									
1990-1994	3,3	134,8	24,2	2,8	0,2	0,02	11,1	3,8	3,0
1995-1999	3,4	115,9	19,8	3,2	0,6	0,0	9,4	3,5	3,8
2000-2005	3,5	159,4	18,8	2,7	2,1	0,0	8,2	4,8	4,0
Gender									
Male									
1990-1994	4,2	-	ND	3,8	0,3	0,04	11,8	3,5	4,8
1995-1999	4,5	-	22,4	4,5	0,9	0,0	9,8	4,3	6,1
2000-2005	3,9	-	20,7	3,9	3,0	0,01	8,5	4,9	6,4
Female									
1990-1994	3,6	134,8	ND	1,7	0,1	0,0	10,9	3,9	1,5
1995-1999	3,7	115,9	17,1	2,0	0,3	0,0	9,4	4,3	1,6
2000-2005	3,2	159,4	16,8	1,5	1,2	0,0	7,9	4,8	1,5
Geographical Area									
Urban									
1995-1999	ND	ND	18,5	ND	ND	ND	ND	ND	ND
2000-2005	ND	131,1	20,4	ND	ND	ND	ND	ND	ND
Rural									
1995-1999	ND	ND	21,0	ND	ND	ND	ND	ND	ND
2000-2005	ND	213,2	15,8	ND	ND	ND	ND	ND	ND

Source: Biostatistics Department, Bureau of Planning and Evaluation, MPHSW.
* No mortality data available by ethnic group. - Not applicable.

Analysis of Morbidity

Chronic noncommunicable diseases.

During the period 2000–2005, the reported incidence of cardiovascular diseases was 61% in the 70 years and older age group; 18.1% in the 60-69 age group; and 10.9% in the 50-59 age group. However, the increased incidence of these diseases in younger people (age 49 and younger) is cause for concern. Three percent of people under age 30 have hypertension, diabetes, and dyslipidemias, which are predisposing factors for heart attack and stroke.[12]

Accidents and violence. In 2005, 5,279 people received treatment for injuries related to traffic accidents, down from 9,536 in 2001. Traffic accidents are the most frequent cause of injuries, followed by accidents in the workplace and in the home.

12 MPHSW. Biostatistics Department. Bureau of Planning and Evaluation. Bureau of Health Surveillance.

Communicable diseases

Vaccine-preventable diseases. In the period 2001-2005, there were 7 cases of neonatal tetanus nationwide. In 2001, 1 confirmed case of diphtheria was detected, while an outbreak of 50 cases was recorded in 2002, primarily concentrated in 9 districts of the Central Department. Cases were most frequent among children ages 1-5, with greater incidence among children under the age of 1. Two cases were recorded in 2003, and another 4 cases were reported in 2004.

Dengue. In 2000, the whole country but mainly Asunción, the Central Department, and the border region with Brazil were affected by an epidemic caused by the DEN-1 virus[13]. Since then, small outbreaks or sporadic cases have been observed each year related to the circulation of DEN-1, DEN-2, and DEN-3 viruses in different parts of the country, especially in the metropolitan area and the border with Brazil. Between February and May 2006, there was an outbreak in Asunción and the Central Department, with 1,937 suspicious and 1,213 confirmed cases (814 by laboratory and 29 by epidemiological nexus). The *Aedes aegypti* mosquito can be found throughout the country, and vector density is persistently high. The Integrated Management Strategy for Dengue Prevention in Paraguay was adopted in 2005 strengthening actions in border areas considered most vulnerable. During the first 40 weeks of 2007 there were a total of 28,181 confirmed cases. [14]

Visceral leishmaniasis. Between 2000 and September 2005, a total of 52 cases of human visceral leishmaniasis (VL) were detected. Most cases of human VL were found in the Central Department due to a high proportion of dogs infected with canine VL and the presence of leishmaniasis vectors.

Chagas' disease. Paraguay has a National Program to Control Chagas' Disease.[15] The Program seeks to break vector-borne transmission of Chagas, which in Paraguay is only transmitted by *Triatoma infestans*. The Program was implemented in 1992, with the goal of fumigating 250,000 dwellings within ten years. Blood tests administered over the last 25 years have showed a 60% drop in infection rates (9% to 3.9%). In July 1995, a Chagas' prenatal screening program was launched in the departments of Cordillera and Paraguarí. By 2002, it had detected 7,230 women who tested positive for *Trypanosoma Cruzi*, with prevalence rates of 15.5% and 13%, respectively. This Program has now been expanded to the departments of Paraná and Canindeyú. Quality assurance measures implemented in the country's blood banks have provided effective screening of blood donations, with coverage rates near 98% of some 40,810 donors. In 2002, the program implemented field activities in the departments of Cordillera, Paraguarí, and San Pedro, where it evaluated a total of 41,303, 53,575, and 73,376 households, respectively. Infestation rates at the departmental level were between 0.4% and 2%. A Chagas' surveillance system is in place in the indigenous communities of the Chaco, where after general fumigation of *Triatoma infestans* in areas with average infestation rates of 50%, coverage of 72% has been achieved. Between 1996 and 2000, the prevalence of blood donations testing positive for *T. Cruzi* in the country's blood banks ranged between 3.8% and 4.7% and between 2.8% and 4.5% during the period 2000-2005.[16]

Hantavirus. Between 1987 and 2005, 128 cases of hantavirus pulmonary syndrome were detected, with a case-fatality rate of 26.0%. Males were most affected (73.0%), and the mean age was 32 years. The Boquerón Health Region was the most affected by the virus. While the situation is currently under control it is still cause for concern, given the severity of this disease.

13 Epidemic described in Health in the Americas 2002, PAHO.
14 Mandatory weekly notification report, Biostatistics Department, Bureau of Health Surveillance, MPHSW.
15 National Program for the Control of Chagas' Disease, MPHSW/National Malaria Eradication Service (SENEPA). Report 54, XI Meeting of the Southern Cone Initiative to Control/Eliminate Chagas' Disease. Report 54XI (INCOSUR), Asunción, Paraguay, March 2002.
16 Paraguay, MPHSW, National Blood Transfusion Center. Unpublished data. Asunción, 2006.

Zoonosis.[17] Between 1990 and 2003, 48 cases of human rabies were diagnosed in Paraguay; 41 of which were transmitted by dogs (85.4%). Cases of human rabies transmitted by dogs were reported every year except in 2001 and 2003. Most deaths (9) occurred in 1998. In 2002, there were 5 cases of human rabies, 4 of which were transmitted by dogs in the department of Paraná, with 1 case transmitted by an infected bat in the department of Guairá. In the period 2001-2003, 98% of human rabies cases were diagnosed clinically, without laboratory confirmation. Autopsy procedures for suspected cases of rabies are not mandatory. Between 1990 and 2003, a total of 3,772 cases of canine rabies were recorded. Canine rabies cases have been declining since 1997, when 582 cases were reported, down to only six cases in 2003.

Paraguay obtained foot-and-mouth disease-free certification with vaccination from the World Organization for Animal Health (OIE) in 1997, and has maintained this certification in 1998 and 1999.[18]

1.1.3 MILLENNIUM DEVELOPMENT GOALS (MDGS)[19]

The second MDG progress report (2005) for Paraguay is based on available statistical data, primarily from household surveys conducted since 2003. The report recognizes the difficulties in meeting the MDGs. It analyzes targets and goals and takes into account what the country must do to achieve them. According to the report, Paraguay is making progress toward achieving some of the goals but not others. In order to achieve these, policy makers need to prioritize them and funding needs to be provided to finance adequate public policies. The Government of Paraguay has been giving special consideration to the goals with insufficient progress as identified by the report. For this reason, Paraguay has set intermediate goals for 2008 and/or 2011, as an indication of its commitment.

The following table summarizes the progress made toward achieving the MDGs as of 2005.[20]

17 Elimination of Human Rabies Transmitted by Dogs in Latin America: A Situation Analysis [Eliminación de la Rabia Humana transmitida por perros en América Latina: Análisis de la Situación]. Report on Paraguay. PAHO 2005. http://www.paho.org/spanish/ad/dpc/vp/rabia-sit-par.pdf.

18 Pan American Health Organization, Pan American Foot-and-Mouth Disease Center. Situation of national foot-and-mouth disease eradication programs: South America; 1999–2003.

19 United Nations Development Program (UNDP). Millennium Development Objectives: Report on Paraguay 2005. Asunción, 2005. http://www.undp.org.py/rc/ODMPY2005.pdf.

20 Ibid.

TABLE 5: PROGRESS TOWARD ACHIEVING MDGs, PARAGUAY

GOAL		TARGET	Progress	
			Targets	Goal
1	Eradicate extreme poverty and hunger	**1:** Reduce by half the proportion of people living on less than a dollar a day	Insufficient progress	Insufficient progress
		2: Reduce by half the proportion of people who suffer from hunger.	Compatible progress	
2	Achieve universal primary education	**3:** Ensure that all boys and girls complete primary school.	Compatible progress	Compatible progress
3	Promote gender equality and empower women	**4:** Eliminate gender disparity in primary and secondary education preferably by 2005, and at all levels by 2015.	Compatible progress	Compatible progress
4	Reduce child mortality	**5:** Reduce by two thirds the mortality rate among children under five.	Insufficient progress	Insufficient progress
5	Improve maternal health	**6:** Reduce by three quarters the maternal mortality ratio.	Insufficient progress	Insufficient progress
6	Combat HIV/ AIDS, malaria, and other diseases	**7:** Halt and begin to reverse the spread of HIV/AIDS.	Insufficient progress	Insufficient progress
		8: Halt and begin to reverse the incidence of malaria and other major diseases.	Rapid progress on malaria and insufficient progress on tuberculosis	
7	Ensure environmental sustainability	**9:** Integrate the principles of sustainable development into country policies and programs; reverse loss of environmental resources.	Insufficient progress	Insufficient progress
		10: Reduce by half the proportion of people without sustainable access to safe drinking water and basic sanitation services.	Insufficient progress	

Notes:
Targets cover the period 1990-2015, unless otherwise indicated.
Does not include MDG No. 8 due to a lack of quantifiable targets and time to achieve them.

According to the definitions used by the Economic Commission on Latin America and the Caribbean (ECLAC) to identify the progress and timeframe for attaining the MDGs in Paraguay, only Goals 2 and 3 are on track, while progress on the remaining goals is insufficient.

According to ECLAC, the capacity to monitor and evaluate the different goals varies in Paraguay. Overall, the country has good quality data collection, although there are shortcomings in the areas of health and the environment. However, the country lacks capacity to incorporate its statistical data into political decision making, and monitoring and evaluation mechanisms are insufficient.

Data regarding achieving the MDGs in Paraguay shows that stronger and continuous efforts will be needed—both with respect to the goals in which progress is compatible with achievement and those in which progress is insufficient. If Paraguay is to achieve the MDGs, it will need quality economic growth, a higher and more efficient social spending, medium- and long-term state policies, and the participation of civil society, in all its diversity. Meeting the Goals will improve the quality of life of all Paraguayans, which is a necessary condition to move towards superior human development.

1.2 DETERMINANTS OF HEALTH

1.2.1 POLITICAL DETERMINANTS

Following 35 years of dictatorship—the country is well into its second decade as a budding democracy—efforts are under way toward consolidating an effective rule of law. The country's first municipal elections were held in 1991. The last presidential and parliamentary elections in 2003 were considered fair and democratic by international observers. The current administration will govern until 2008.

According to the report "*Tranparencia Paraguay*," the country's public administration has significant shortcomings with respect to transparency, integrity, and efficiency, despite important attempts to reverse the situation.[21]

The Constitution states that Paraguay is as a unitary, indivisible, and decentralized Republic. Within this context, efforts to decentralize the State have been limited, given the absence of a legal framework and defined regulations, resulting in poor decision-making autonomy and management capacity of the country's governments and municipalities.

1.2.2 ECONOMIC DETERMINANTS

A deep recession befell the country beginning in 1997. By the end of 2003, per capita GDP was 30.0% less than in 1991. Between 2002 and 2003, the national currency depreciated by 54.0% and inflation soared to 14.6% in 2002, following several years of single-digit inflation.[22] A 9.3% additional increase in prices further decreased purchasing power.[23] The economic crisis and stagnated GDP growth triggered rising unemployment, underemployment and structural poverty. Efforts to increase social spending are restricted by the eroding productive base further exacerbated by tax evasion and the country's regressive tax structure.

Table 6 shows that, for the period 1997-2004, average public spending in health was 6.5% of total public expenditure while total spending in health as a percentage of GDP was 7.2%. The total per capita health expenditure was around US$93.

Table 7 shows public spending in health (in US$ thousands) by subsector and function in 2004: in the public sector, 34.5% was spent on medical supplies, instruments, and equipment; 26.9% on hospital services; and 18.6% on outpatient medical services. In the private sector, 67.7% was spent on medical supplies, instruments, and equipment, and 26.3% on hospital services.

21 Transparencia Paraguay [Transparency in Paraguay]. 2005 Transparency, Integrity, and Efficiency Index; a measurement of public administration based on objective factors. Asunción, 2006.
22 Paraguay, Central Bank of Paraguay. National Accounts No. 40. Asunción, 2004.
23 Paraguay, Central Bank of Paraguay. Economic Performance Report, April 2005. Asunción.

TABLE 6: TRENDS OF KEY ECONOMIC INDICATORS- PARAGUAY, 1995-2005

INDICATOR	5-YEAR AVERAGE	
	1995-1999	2000-2005
Per capita GDP at constant prices (in US$)	1.490	1.362
Per capita public spending (in US$)	296.4	238.7
Total public spending as a percentage of current GDP	21.0	40.5
Public spending in health as a percentage of current GDP	2.9	2.7
Public spending in health services as a percentage of current GDP	1.9	3.5
Private expenditure in health (in US$)	186,242,336.9	258,694,603.1
Out-of-pocket expenditure in health (% total health expenditure)	49.4	56.6
Annual inflation rate	9.0	9.0
Foreign debt as a percentage of GDP	19.0	37.4
Foreign debt service as a percentage of GDP	2.1	3.8

Source: "Health Accounts 2002-2004" [Cuentas de Salud 2002-2004], MPHSW-PAHO/WHO. Economic Performance Report, Central Bank of Paraguay.
Prepared by: Bureau of Planning and Evaluation, MPHSW.

TABLE 7: PUBLIC SPENDING BY SUBSECTOR AND FUNCTION- PARAGUAY, 2004

FUNCTION	Medical supplies, instruments, and equipment	Outpatient medical services	Hospital services	Public health services	Health research	Health (unspecified)
Public subsector	35,829	19,307	27,912	9,100	813	10,939
Private subsector	154,646	494	60,023	0	0	13,161
Total	190,475	19,801	87,935	9,100	813	24,100

Source: Accounts of Health 2002/2004. October 2006. Bureau of Planning and Evaluation. MPHSW.

Table 8 shows the total population by poverty classification, area of residence, and sex. The Paraguayan government has three initiatives to confront poverty;[24] all three incorporate a focus on gender and excluded groups such as indigenous groups, but no significant progress has been made on their implementation.

24 Plan of Economic Growth with Equity; the National Strategy to Reduce Poverty and Inequalities (ENREPD); and the National Strategy to Fight Poverty, Inequality, and Social Exclusion, prepared by the Coordination Unit of the Strategy to Fight Poverty.

TABLE 8: TOTAL POPULATION BY POVERTY LEVEL, BY SELECTED INDICATORS. PARAGUAY, 2005

INDICATORS	POVERTY LEVEL			
	Total	Extremely Poor	Poor	Not Poor
Area of residence				
Total	**5,837,253**	**902,294**	**1,327,908**	**3,607,051**
Urban	3,383,873	392,158	940,414	2,051,301
Rural	2,453,380	510,136	387,494	1,555,750
Sex				
Male	2,916,060	461,658	652,982	1,801,420
Female	2,921,193	440,636	674,926	1,805,631

Source: DGEEC: Continuous of Households 2005.

Table 9 shows the employed population aged 10 and older by sex and poverty level for 2005. According to the 2006 Permanent Household Survey (PHS),[25] the "open unemployment rate," which indicates the percentage of the labor force currently unemployed but that are able to work and are actively looking for a job, reveals that 6.7% of the country's labor force is unemployed (8.9% in urban areas and 3.6% in rural areas). With regard to open unemployment by sex, the impact is greater on women—both in urban and rural areas—at 8.8 and 5.3% respectively.

"Hidden unemployment" refers to people who are not employed and are not actively looking for work, but would be willing to work if offered a job. This group is considered part of the nonworking population. According to data from the 2006 PHS, hidden unemployment is 4.7%, with no significant differences in rural and urban areas. Hidden unemployment is almost four times higher for women (8.1%) than men (2.4%).

TABLE 9: EMPLOYED POPULATION1 BY POVERTY LEVEL, SEX, AND SECTOR.2 PARAGUAY, 2005

SEX AND EMPLOYMENT SECTOR	POVERTY LEVEL			
	Total	Extremely Poor	Poor	Not Poor
Both Sexes	**2,617,708**	**306,592**	**489,991**	**1,821,125**
Informal sector	613,781	61,266	175,341	377,174
Remainder	2,003,927	245,326	314,650	1,443,951
Male	**1,598,232**	**213,224**	**300,751**	**1,084,257**
Informal sector	369,306	40,977	110,495	217,834
Remainder	1,228,926	172,247	190,256	866,423
Female	**1,019,476**	**93,368**	**189,240**	**736,868**
Informal sector	244,475	20,289	64,846	159,340
Remainder	775,001	73,079	124,394	577,528

Source: DGEEC: 2005 Periodic Household Survey
1 Aged 10 and older. Does not include persons employed in the categories day labor, civil servant, or domestic worker.
2 Persons employed in the informal sector: includes persons employed in the categories of day laborer, private-sector employee, or self-employed (proprietor or employer, self-employed persons, or unpaid family worker) who work in companies employing 5 or fewer persons, excluding formal sector employees, such as managers, professionals, technicians, and similar workers, public-sector employees, and domestic workers.

25 Source: DGEEC. PHS 2006.

1.2.3 SOCIAL DETERMINANTS

Preschool net enrollment increased from 27.0% in 1990 to 81.0% in 2001; enrollment for the first and second cycles of primary education remained steady at approximately 100%; and third cycle primary education enrollment increased from 27.0% to 53.0% over the same period, while the net enrollment rate for secondary education increased from 22.0% in 1990 to 44.0% in 2001.[26]

The illiteracy rate in Paraguay has been declining. According to data from the Bureau of Statistics, Surveys, and Censuses (DGEEC) and PHS, the rate in 2005 was 5.1%, down from 9.7% in 1992. The main gap can be observed among indigenous populations, where the illiteracy rate is 51%. In 2002, the average years of schooling for the population aged 15 and older was 7.1 years, without significant differences between sexes, and slightly higher than the 1992 figure of 6.4 years. The indigenous population barely average 2.2 years of schooling. Marked differences exist in this indicator between urban and rural areas, although the gap is closing: from 8.1 to 8.4 years for the last two censuses in urban areas, respectively, and 4.5 and 5.3 years, respectively, for rural areas.

The illiteracy rate for urban areas was 5.8% in 1992 and 3.2% in 2005, and the one for rural areas was 14.3% and 8.0%, respectively. By sex, the illiteracy rate is higher among women (11.4% in 1992, and 7.5% for 2003) than men (8.0% in 1992, and 5.6% in 2003).

1.2.4 ENVIRONMENTAL DETERMINANTS

Despite progress in recent years, coverage of water and basic sanitation remains low, with a high urban-rural gap, especially among the indigenous population. Over the period 1992-2002, the total percentage of the population covered with residential water connection increased from 29.8% to 63.4% (84.4% of the urban population, and 35.5% of the rural population).[27] The Asunción metropolitan area has the highest percentages of residential water connection coverage in the country with 97.2%,[28] while the Central Department has the highest coverage at the departmental level with 86.4%. Among the 46.4% of the total population with residential water connection service, 60% are households of the highest-income quintile of the population, while only 30.3% of households of the poorest 20% of the population have such service. The increase in coverage levels has not been related to an improvement in water quality. For the most part, the disinfection of drinking water for small communities and rural areas is either carried out irregularly or not at all.

Sewer system coverage in the country is low and little progress has been made in this area. Coverage increased slightly from 7.2% in 1992 to 9.4% in 2002,[29] primarily in urban areas (16.0% coverage). Asunción, with 70.5% coverage, has the country's highest level of sewer system coverage, while coverage is lower than 5% in 10 departments. In fact, 49.2% of all households use dry wells to eliminate excreta (62.5% of the total population in urban areas, and 30.0% in rural areas). Overall, 35.5% of all households use latrines for excreta disposal (15.2% of urban dwellings, and 64.8% of rural dwellings). About 2.8% of the population uses a different type of excreta disposal system and 1.1% of the population has no bathroom at all.[30] Only 10% of wastewater collected in the country is subject to treatment in stabilization ponds.

26 Paraguay, Ministry of Education and Culture MEC/DGPEC, 2004. Quantitative Analysis of Educational Development, 1990-2001. Asunción, 2004.

27 Paraguay, Presidential Planning Secretariat [Secretaría Técnica de Planificación de la Presidencia], DGEEC. National Population and Housing Census 2002: Final Results. Fernando de la Mora, 2004.

28 Paraguay, Presidential Planning Secretariat, DGEEC. PHS: main results PHS 2003, 2004.

29 Paraguay, Presidential Planning Secretariat, DGEEC. National Population and Housing Census 2002: Final Results. Fernando de la Mora, 2004.

30 Paraguay, Presidential Planning Secretariat, DGEEC. PHS: Primary results, PHS (2003, 2004).

The average urban solid waste generation rate is approximately 1.0 kg/person/day, and ranges between 0.5 and 1.8 Kg./person/day; some 3,700 tons per day are generated by urban populations.[31] Only 33.6% of the country's waste is collected (55.6% in urban areas, and 2.5% in rural areas); 54.5% of the country's total population burns their refuse (35.9% in urban areas, and 80.1% in rural areas).[32] Seventy-two percent of final waste disposal occurs in open-air dumps, and 28% in controlled disposal,[33] primarily in metropolitan-area landfills.

Since 2004, Law 2524 banning forest conversion and alteration in the Eastern Region has been in force. In 2005, Paraguay's National Environmental Policy (PAN) was approved. Moreover, the country has developed a national strategy and action plan for preserving the country's biodiversity (2004-2009).

The country is subject to periodic flooding, primarily as a result of the swelling of the Paraguay River and its tributaries, the Paraná River and others, affecting low-income and marginal neighborhoods along river banks. Chronic droughts in the Chaco also have disastrous consequences.

31 Paraguay, Presidential Planning Secretariat. Regional Assessment of Municipal Solid Waste Management: Report on Paraguay. PAHO/WHO, 2004.

32 Paraguay, Presidential Planning Secretariat, DGEEC. National Population and Housing Census 2002: Final results. Fernando de la Mora, 2004.

33 Paraguay, Presidential Planning Secretariat. Regional Assessment of Municipal Solid Waste Management: Report on Paraguay. PAHO/WHO, 2004.

2.FUNCTIONS OF THE HEALTH SYSTEM

2.1 STEERING ROLE

Article 68 of Paraguay's 1992 Constitution establishes the right to health and the State's responsibility, on behalf of the public interest, to protect and promote health as a basic citizen right. The basic values assumed by the health sector are universal coverage, the comprehensiveness and equality of benefits, solidarity, and social responsibility.

The National Health System (NHS) of Paraguay is regulated by Law No. 1032/96[34]. Its Article 4 establishes the scope of action through the supply of health services by the public, private, or mixed subsector, the health insurance programs, and universities.

The Ministry of Public Health and Social Welfare (MPHSW), through Decree No. 21376/98, is responsible for the steering role of the health sector, with a view to guiding and regulating public and private action that impacts personal and public health.

The health system is highly segmented at the provider level, and lacks coordination among the various subsectors. There is overlapping of actions between the MPHSW and the Social Welfare Institute (IPS), and between the IPS and the private sector. The lack of institutional coordination results in duplication, which is reflected in the distribution of local health facilities in the same geographical areas of the country and their absence in others. There is no separation of functions within the health system. The MPHSW carries out the steering, service delivery, and financing functions. The IPS and the private sector carry out assurance, service delivery, and financing functions.

Law No. 1032/96 provides guidelines for decentralizing health care in Paraguay. These are regulated by Decree No. 19966/98. In 1998, 23 municipalities signed agreements as part of a pilot program to decentralize health care. However, only 10 were able to effectively implement this management model. According to national sources, the pilot program usually lasts for about 3 months and generally lacks support; it dies out with each change of Minister. In 1999, 17 municipalities renewed the decentralization agreement without any results.[35] Another program was launched in 2000; 15 pilot programs were implemented in 2004, and another 16 in 2005. The impact assessment for the programs is still pending. These programs are legally framed within "decentralization agreements" established between the MPHSW and the institutions that make up its services network, since the country has not legally, administratively, or financially implemented actions for decentralizing the health sector. According to the institutional level responsible for implementation, the results are based on 11 health centers, 9 district hospitals, and 12 regional hospitals.[36]

2.1.1 MAPPING OF THE HEALTH AUTHORITY

A performance evaluation of the steering role of the National Health Authority (NHA) that could facilitate the mapping of the NHA has not been yet carried out in Paraguay. Table 10 provides a mapping of the NHA, drafted by the team responsible for preparing the health profile, which should not be considered as an official version.

34 Law No. 1032/96, creating the National Health System.
35 CIRD (Resources and Information Development Center)/USAID. Health Bulletin [El Informativo de la Salud]. July/August 2005.
36 This is possibly the most significant national decentralization program, inasmuch as it covers 65% of national hospitals (11 of the 17 national hospitals have signed agreements). Seven of these agreements were signed during the first half of 2005, and the remainder since July 2004.

2.1.2 LEADERSHIP OF THE GENERAL HEALTH POLICY

The legal framework for the National Health Policy is the Decree-Law No. 2001 of 1936, which created the Ministry of Health, ensured its status as a State Ministry and defined the organization and administration of health services in the Republic of Paraguay, with a view to promoting general health and providing health care to the entire population; the 1992 Constitution of the Republic of Paraguay; the Organic Law of the Ministry of Public Health and Social Welfare; the Health Code, Law No. 836/80; as well as respective decrees, laws, and resolutions.

As a regulatory agency, the MPHSW establishes health policy and certifies health programs in accordance with the health needs of the population. Program coverage is nationwide and the country's health services, both public and private, participate actively.
de la Autoridad Sanitaria Nacional (ASN), que permita la elaboración del respectivo mapeo. En el Cuadro 10 se presenta un mapeo de la ASN que ha sido elaborado por el equipo responsable de elaborar el perfil de salud, y no ha de considerarse como una versión oficial.

TABLE 10. MAPPING OF THE HEALTH AUTHORITY IN PARAGUAY, 2007*

Dimensions	Legal Framework	Responsible Institution	Executing Institution
Conduct/Lead	Organic Law on the MPHSW, Decree-Law No. 2001/1936, "Establishing the organization and administration of health services of the Republic of Paraguay, with a view to promoting general health and providing health care to the entire population." Law No. 836/80, "Creating the Health Code." Law No. 1032 of 30 December 1996, "Creating the National Health System." Decree No. 21376/98, "Establishing the steering role of health sector programs and activities, with a view to orienting and regulating public and private actions that impact individual and collective health. Decree No. 4674/99, Reorganizing the MPHSW.	MPHSW	MPHSW
Regulation	Law No. 2319 "establishing the functions and areas of responsibility of the Health Authority."	Health Authority	Health Authority
Orientation of Financing	National Health Fund. Established by Law No. 1032 (Article 40), as the executive financing bureau in charge of carrying out health system financing, upon approval of the National Health Council. Health system financing is based on the budgetary resources allocated for each subsystem or entity (Article 41). To date, the National Health Fund has not initiated operations.	MPHSW Not implemented	MPHSW

Development of EPHF	National Measurement, February 2002.	MPHSW	MPHSW
Guarantee of Assurance	Decree-Law No.1860/50. Insurance coverage is expanded, and the IPS is created as an independent, autonomous entity.	IPS	IPS
Harmonization of Health Services	Decree No. 19966/98[1] Decree No. 22369/98. Functions of the National Medical Authority	MPHSW MPHSW Not implemented	MPHSW MPHSW Not implemented

Drafted by the team that prepared the health system profile of Paraguay.
* Unofficial version; not validated by national authorities.

The National Health Policy 2005-2008, "Building a State Policy Together: Health for All with Equity," is based on: (a) health reforms; (b) health promotion; (c) social protection in health through collective financing and insurance; (d) environmental health and basic sanitation; and (e) human resources development and continuing education.

International cooperation in health is administrated under the technical coordination of the MPHSW's International Relations Technical Unit (UTRI).[37] Table 11 provides a break down of international cooperation in health during the last two 5-year periods.

TABLE 11: FINANCIAL RESOURCES OF INTERNATIONAL COOPERATION, PARAGUAY, 1995-2005

Resource	**Period Average**	
	1995-1999	**2000-2005**
Reimbursable aid (in US$)	12,180,935	11,068,036
Non-reimbursable aid (in US$)	2,440,374	52,205
Total	**14,621,308**	**11,120,241**

Source: "Health Accounts 2002-2004." MPHSW-PAHO/WHO. Economic Report, Central Bank of Paraguay.
Prepared by: Bureau of Planning and Evaluation, MPHSW.

2.1.3 REGULATION

Both the MPHSW and the Superintendence of Health regulate the health sector. The main legal instruments that provide the basis for health sector reform include: Law No. 1032/96, responsible for creating the National Health System (NHS); Decree No. 19996/98, responsible for regulating health-sector decentralization at the local level; Decree No. 20553/98, responsible for regulating the Superintendence of Health; Decree No. 21376/98, responsible for reorganizing the structure of the MPHSW; and Decree No. 22369/98, responsible for establishing the functions of the National Medical Directorate, which has yet to be formed. Moreover, Article 8 of Decree No. 19966/98 defines equity as "allocating the available resources at all levels of care to provide the population with comprehensive health care without political, economic, or social discrimination."

37 The UTRI is a cabinet agency of MPHSW, whose main purpose is to coordinate international technical cooperation agreements signed by the MPHSW on behalf of the public interest. Source: Resolution S.G. No.638/2006, on the "International Relations-Technical Unit Structure and Manual of Operations/Functions."

Several paragraphs of this Decree mention inter-agency coordination within the health sector, but do not have references to intersectoral coordination. **Decree No. 20553/98 regulates Articles 31 and 33 of Law No. 1032/96, which establishes the Health Authority as the agency responsible for technical control and national supervision of the health system, and** Decree No. 4674/99 reorganizes the structure of the MPHSW.

The Superintendence of Health was established by Law No. 1032 of 30 December 1996, which "creates the National Health System." It is an executive agency of the NHS. It has been officially operating since May 10th 1999, the year that marked the beginning of the consolidation process. Its institutional mission is to support the National Health Council to ensure maximum efficiency in the allocation and use of health care resources and services. Accordingly, it is responsible for the supervision, auditing, and technical control of health service providers. Since September 13th 2006, the date Law No. 2319 was enacted, establishing the functions and responsibilities of the Superintendence of Health, the latter has been converted into a technical agency that controls the health service providers operating in the NHS.

2.1.4 DEVELOPMENT OF THE ESSENTIAL PUBLIC HEALTH FUNCTIONS (EPHF)[38]

Evaluating the performance of the EPHF in Paraguay in 2001 was a complex process, which influenced measurement results. The general analysis of the results revealed that "it is important to take into account the potential for bias from the different groups analyzing each of the EPHF. The ample participation observed by the various management levels of the MPHSW and National Health System has helped to balance the differences in the results, owing to the respondents' representativeness. Performance of the EPHF is somewhat weak, given the country's historical disease-oriented approach instead of a prevention-based approach. The country should strive to implement the new public health paradigm, which is still new in Paraguay, and the Ministry of Health is both a regulatory agency and a health service provider. There is a significant lag between EPHF 7 and 9; where Function 7 is concerned with equitable access to services and Function 9 with their quality."

According to the evaluation, the country's lowest performing EPHF were:

- EPHF 9 "Quality Assurance in Personal and Population-based Health Services" (17%)
- EPHF 10 "Research for the Development and Implementation of Innovative Public Health Solutions" (28%)
- EPHF 6 "Strengthening of Institutional Capacity for Regulation and Enforcement in Public Health" (43%)

The highest performing EPHF included:

- EPHF 3 "Health promotion" (77%)
- EPHF 8 "Human Resources Development and Training in Public Health" (67%)
- EPHF 7 "Evaluation of and Access to Necessary Health Services" (66%)

A detailed summary of the highest and lowest performing EPHF is presented below:[39]

Lowest performing EPHFs. With regard to the lowest performing EPHFs, Functions 9, 10, and 6, according to the results of the EPHF performance evaluation, it was concluded that:

38 Evaluation of EPHF performance by the Paraguayan Health Authority. Findings of the workshop to implement the EPHF evaluation instrument, held in Asunción from 13-15 February 2002. MPHSW-PAHO/WHO.

39 Evaluation of EPHF performance by the Paraguayan Health Authority. Findings of the workshop to implement the EPHF evaluation instrument, held in Asunción from 13-15 February 2002. MPHSW-PAHO/WHO.

EPHF 9 “Quality Assurance in Personal and Population-based Health Services.” Scores for this function was among the lowest of the 11 EPHF analyzed in the exercise. Its overall average was 17%, and it scored “0” or “near 0” in user satisfaction with service quality. Several tools are available to measure customer satisfaction such as the “Client Oriented Efficient Provider” (COPE), and the EPI (Expanded Program on Immunization) hospital accreditation manual by level of complexity and system of referral and counter referral. However, these tools have shortcomings in issues such as safety, effectiveness, utility, and costs vs. benefits. Few resources are available in terms of services and support at the subnational level for developing programs to improve quality.

Although the MPHSW recently created the Technological Management Unit, not much else has been done to develop the technology management area at the health services level.

In terms of developing standards, much work remains to be done. Some prominent NHS institutions have programs that include standards (i.e., reference laboratories). However, these should be extended and systematized in all institutions of the system to ensure ongoing evaluation.

EPHF 10 “Essential Research for the Development and Implementation of Innovative Public Health Solutions.” The performance evaluation of this function averaged 28% of the standard. The National Health Authority has developed a priority health research agenda to provide guidance to the scientific community and to the national and international technical cooperation agencies that fund health research; however, it has yet to be distributed or implemented.

Although the country scored higher on the development of institutional research capacity indicator than on EPHF 9, the absence of standards and procedures to regulate research carried out by MPHSW facilities resulted in a negative evaluation, as did the deliberate concern for disseminating research results for decision-making within the NHA. Some shortcomings, such as deficient computer resources for population health research, were also noted.

Finally, there is very limited support to research at the subnational level.

EPHF 6. “Strengthening of Institutional Capacity for Regulation and Enforcement in Public Health.” Evaluation of this function averaged 43%; however this fact masks uneven performance, with lower scores for indicator 2, which measures enforcement capacity, and indicator 4, which measures the capacity to provide assistance to subnational levels for the elaboration and enforcement of regulations.

The health system received low marks for its monitoring activities due to insufficient supervision, lack of incentives for enforcement personnel and the absence of an explicit policy to prevent corruption and abuses of authority.

The results regarding the capacity to review standards at the national level were positive, however lack of community participation in the elaboration of norms and in the evaluation of the impact of new regulations was identified as a weakness.

Finally, despite receiving an overall positive evaluation for human resources capacity, deficiencies were identified in the quantity and training of enforcement personnel and the institutional and financial resources required to support their work.

Highest performing EPHFs. With respect to the highest performing EPHF, which were Functions 3, 8, and 7, the performance evaluation concluded:

EPHF 3 “Health Promotion.” This function received an overall evaluation of 77%. Performance was lowest for indicator 1 (evaluation of the results of interventions designed to promote healthy behaviors), indicator 2 (evaluation and adjustment of the promotion plan), and indicator 3 (evaluation of the results of media campaigns, educational materials, information hotlines, and information offices).

The participants noted political support for the health promotion strategy, but identified as significant shortcomings the absence of competitive funds for community organizations to carry out promotion programs and the lack of a formal system of incentives to reward health teams for health promotion efforts.

Low performance was also observed for questions related to the specific allocation of resources for health promotion and activities aimed at ensuring a coherent nationwide promotion strategy.

A relatively high score was observed for indicator 4 that refers to shifting the orientation of health services toward health promotion activities, which international forums on this topic consider the most difficult recommendation to implement. Responses of the group surveyed were negative to the idea of introducing economic incentives and payment mechanisms to facilitate the inclusion of health promotion activities at the primary level of care, despite the vital importance of this idea to the sustainability of reorientation efforts at the health services level. There is a clear lack of specific procedures for the accreditation of professionals trained in health promotion.

Support for subnational levels in health promotion was given high marks by the respondents, revealing that this is a strong area for the MSPBS.

Most of these examples of activities related to health promotion concerned specific or nonspecific preventive actions along the conceptual line of the model developed by Leavell and Clark. Accordingly, it would perhaps be advisable to further develop the conceptualization of promotion as a strategy, as disseminated following the Jakarta International Conference on Health Promotion and ratified by the Ottawa Charter and the Global Conference on Health Promotion (Mexico City).

EPHF 8 “Human Resources Development and Training in Public Health.” This function received a performance evaluation of 67%. Respondents emphasized that there is an abundance of evaluation efforts regarding the quantity and quality of the public health workforce, but an absence of criteria for closing existing gaps.
Also noteworthy is the absence of an information system for human resources management in the MPHSW, as well as the lack of input from other government agencies and communities on the National Health System’s evaluation of the quality of the health workforce. Although continuing education and graduate level programs are in place, respondents highlighted the absence of formal agreements with human resources training centers at the university level. There are no policies to identify and retain health or management team leaders. Moreover, performance evaluation systems require periodic assessment.

It was also noted that there is a lack of systematic evaluation following health care professionals capacity building (CME programs, graduate programs).

Finally, although specific programs are in place to train human resources to work in culturally diverse communities, respondents noted a lack of policies aimed at including members of these cultural and ethnic groups on the health teams of these communities.

EPHF 7 “Evaluation and Access to Necessary Health Services.” The average score for this function was 66%; however, results were not higher due to the low performance of indicator 1. According to respondents, this is due to the fact that the national evaluation of access to health services does not include a definition of which services are guaranteed to the population, does not include those who pay for services and insurance, and does not aim to identify inequalities or promote equity in health. The subnational levels did not participate in this evaluation, which can detect barriers to access due to several factors.

Another area of concern is the need to improve the Social Welfare Institute (IPS) participation in the evaluation on the population’s access to individual and collective services, and the need to have the universities identify gaps in the coverage of human resources, which can be essential for improving access to these services. Finally, respondents believe that health service suppliers have no incentives to reduce existing inequalities in access to services.

2.1.5 ORIENTATION OF FINANCING

To date, the orientation of sectoral financing continues to be heavily influenced by historical allocations and by the Legislative Branch with regard to distributing and increasing available resources for the sector.

The MPHSW has been making efforts to strengthen its surveillance and analysis of sectoral financing through the national health accounts.[40] Moreover, a process to facilitate the analysis of public spending in health associated with the life cycle and care functions is currently in place.[41]

2.1.6 GUARANTEE OF INSURANCE

The NHA has been working on extending access to a guaranteed package of services, primarily in the area of maternal and child health. However, lack of knowledge about benefits prevents most of the population to exercise their right to free access to this package of services.

The Superintendence of Health has been working to guarantee insurance benefits offered by the private sector to its members, but full coverage is still not available.

2.1.7 HARMONIZATION OF HEALTH SERVICES

To date, the NHA has not taken action to promote the complementarity among the various health service providers and extend coverage.

40 MPHSW-PAHO/WHO. National Health Accounts, Paraguay 2002/2004. October 2006.
41 MPHSW-PAHO/WHO. Financing and Expenditure by Care Function and Life Cycle, 2005/2006, MPHSW. December 2007.

2.2. FINANCING AND ASSURANCE

2.2.1 FINANCING

TABLE 12: FINANCING OF THE HEALTH SYSTEM, PARAGUAY, 1995-2005 (in US$ thousands)

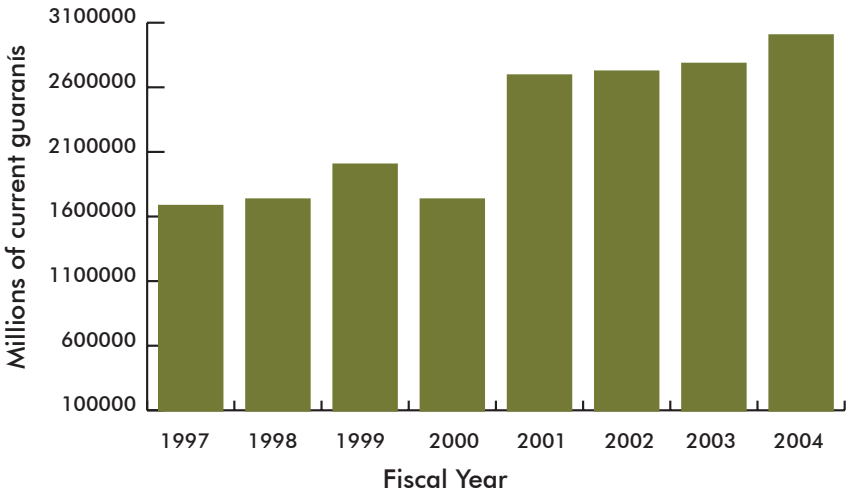
INDICATORS	5-YEAR AVERAGE	
	1995-1999	2000-2005
Total National Budget (Total Public Expenditure)	3,813,453	2,744,304
National Budget Allocated to Health Sector (Total Health Expenditure)	575,996	455,750
Public Subsector (Total)	**249,278**	**179,607**
Ministry of Health	102,419	81,993
Social Security	120,027	82,613
Others (Clinics, Maternal, Health Departments, Governments, Municipalities)	26,833	15,001
Private Subsector (Total)	**326,717**	**276,142**
Private Insurers (Prepaid Medicine)	49,600	47,495
Private Suppliers (Private Clinics/Sanatoriums)	143,202	98,980
Out-of-pocket Expenditure (Healers, Pharmacies, Orthopedics, Glasses)	133,916	129,668

Source: "National Health Accounts, 2002-2004." MPHSW-PAHO/WHO. Economic Report. Central Bank of Paraguay.
Prepared by: Bureau of Planning and Evaluation. MPHSW.

During the period 1997-2004, health sector spending in Paraguay grew from 1.3 to 2.7 billion guaranís at current prices, as observed in Figure 2 below.

This development is due to two main factors: real growth in the amount of resources used by the sector, and the increase in inflation due to the price increase of these resources. In current terms, this variation represents a cumulative growth of approximately 85% of the health expenditure for the analyzed period.

FIGURE 2. ESTIMATE OF THE TOTAL HEALTH SECTOR SPENDING- PARAGUAY, 1997–2004



During the period 1997-2004, health sector spending as a percentage of total gross domestic product (GDP) was 7.2%. However, this percentage has fluctuated over time. It has increased steadily from 6.3% (1997) up to 8.4% in 2001, when it began declining until it reached 6.5% in 2004, as shown in Table 13.

TABLE 13: TREND OF THE HEALTH EXPENDITURE- PARAGUAY 1977-2004

EXECUTED EXPENDITURE	1997	1998	1999	2000	2001	2002	2003	2004
Per capita public expenditure in health (in US$)	45,2	46,2	44,4	45,1	34,3	25,8	23,1	26,7
Public expenditure in health/total public expenditure	5,3	6,8	8,0	8,1	7,2	5,8	5,1	5,4
Per capita total expenditure in health (in US$)	113,7	101,7	98,9	112,3	97,3	76,4	68,6	75,7
Total expenditure in health as a percentage of GDP	6,3	6,5	7,2	8,4	8,4	7,8	6,6	6,5

Source: "Accounts of 2002-2004 Health." MPHSW-PAHO/WHO.

During the period 2000-2004, the public expenditure in health was 35.6% of the total health expenditure while private health expenditure was to 64.4%. In terms of the per capita health expenditure in guaranís, public spending averaged 152,569 guaranís and private expenditure 277,108 guaranís (US$31 and US$ 55, respectively).

Table 15 shows the sources of financing for public health expenditure, both with and without the IPS. During the period 2002-2004, when IPS was not included, 70.8% of the public expenditure in health was financed with state resources; 16.8% with institutional resources, and 12.4% with foreign resources. During the same period, state financing grew by 19.2%; institutional resources by 8.1%, while external financing decreased by 19.4%.

TABLE 14: HEALTH EXPENDITURE BY SUBSECTOR AND FUNCTION, PARAGUAY, 2004 (IN US$)

Function	Medical Products, Instruments, and Equipment	Outpatient Services	Hospital Services	Public Health Services	Health Research	Health (not elsewhere classified)
Sectors						
Public Subsector	35,828,944.8	19,307,194.7	27,912,348.1	9,099,702.4	812,605.4	10,939,424.9
Private Subsector	154,646,040.6	494,196.4	60,023,106.9	0,0	0,0	13,160,831.7
Total	**190,474,985.4**	**19,801,391.1**	**87,935,455.1**	**9,099,702.4**	**812,605.4**	**24,100,256.6**

Source: "National Health Accounts, 2002-2004." MPHSW-PAHO/WHO.
Prepared by: Bureau of Planning and Evaluation. MPHSW.

Including the IPS, 41.9% of the public expenditure in health was financed with state resources; 50.7% with institutional resources, and 7.4% with external resources. The main difference from the previous classification is that all resources received by the IPS are considered institutional resources, since they come from mandatory contributions of employees and employers. In terms of changes over time no differences were found compared to the previous classification for state and institutional resources, although a 21.1% increase was found in external resources. This information is also summarized in Table 15.

TABLE 14. FINANCING OF THE PUBLIC HEALTH SECTOR- PARAGUAY, 2002-2004

Source of Financing	Without IPS		With IPS	
	2002-2004		2002-2004	
	% Structure (Average)	Change	% Structure (Average)	Change
State Resources	70.8	19.2	41.9	19.2
Institutional Resources	16.8	8.1	50.7	21.1
External Resources	12.4	-19.4	7.4	-19.4

Source: "National Health Accounts, 2002-2004." MPHSW-PAHO/WHO.
Prepared by: Bureau of Planning and Evaluation. MPHSW.

Figure 3 shows expenditure by purpose—i.e., the goods and services used by the public sector to meet the health needs of the population. On average, during the period analyzed (2002-2004), personal services accounted for the most significant public sector expense (60.9%), followed by medicines (20.9%) and investment (5.6%).

FIGURE 3: PUBLIC SECTOR EXPENDITURE BY PURPOSE- PARAGUAY, 2002-2004

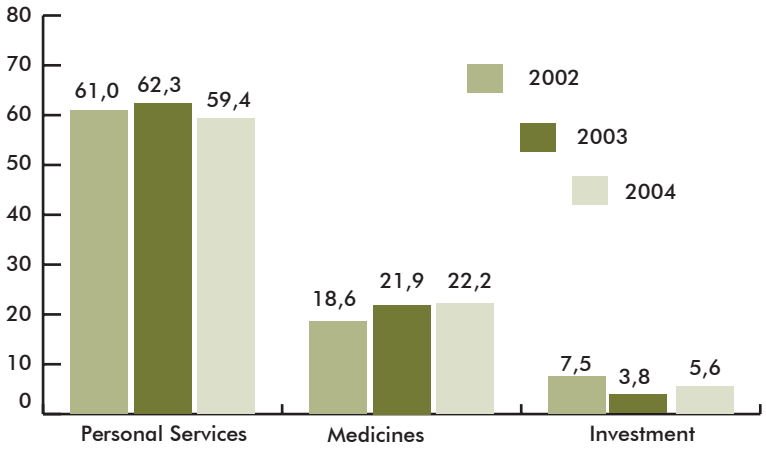


Table 16 shows the type of services provided by the public health sector. The main services provided are hospital care (35%) and outpatient care (24.1%). When adding these two figures together, care accounts for approximately 59%, while prevention and public health services account for 11.3%, and health management and insurance programs for 13.7%.

TABLE 16. MPHSW EXPENDITURE BY FUNCTION- PARAGUAY, 2002-2004

Function	% Structure (average)	Change (growth)
	2002-2004	2002-2004
Hospital care	35.0	27.5
Outpatient care	24.1	28.0
Emergency care	4.8	65.9
Prevention and public health services	11.3	38.8
Health management and insurance programs	13.7	21.3
Health worker training	0.9	40.0

Source: "National Health Accounts, 2002-2004." MPHSW-PAHO/WHO.
Prepared by: Bureau of Planning and Evaluation. MPHSW.

Therefore, during the period 2002-2004 expenditure in hospital and outpatient care increased by 27.5%; in emergency care by 65.9% and in prevention and public health services by 38.8%.

Table 17 summarizes public and private per capita expenditure in guaranís and dollars from 2000 to 2004.

Table 18 shows that between the periods 1995-1999 and 2000-2005, the total national budget of Paraguay grew by 20%, while the health budget increased by 31.9%. The health budget for the public and private sectors during the same period grew by 20% and 41%, respectively.

TABLE 17. PER CAPITA SPENDING IN CURRENT GUARANÍS AND DOLLARS- PARAGUAY, 2000-2004

Indicators	2000	2001	2002	2003	2004
Total per capita expenditure in health (in guaranís)	**393,107**	**401,715**	**441,193**	**439,983**	**472,390**
Per capita public expenditure in health (in guaranís)	157,907	141,430	148,857	147,955	166,697
Per capita private expenditure in health (in guaranís)	235,200	260,284	292,337	292,028	305,692
Total per capita expenditure in health (in dollars)	**112,3**	**97,3**	**76,4**	**68,6**	**75,7**
Per capita public spending in health (in dollars)	45,1	34,3	25,8	23,1	26,7
Per capita private expenditure in health (in dollars)	67,2	63,1	50,6	45,5	49,0

Source: "National Health Accounts, 2002-2004." MPHSW-PAHO/WHO.
Prepared by: Bureau of Planning and Evaluation. MPHSW.

TABLE 18: HEALTH SYSTEM FINANCING, PARAGUAY, 1995-2005
(in US$ thousands)

INDICATORS	1995-1999	2000-2005
Total National Budget (Total Public Expenditure)	11,440,359	13,721,520
National Budget Allocated to the Health Sector (Total Health Expenditure)	1,727,987	2,278,748
Public Subsector (Total)	747,835	898,036
Social Security	307,256	409,967
Ministry of Health	360,080	413,066
Others (Clinics, Maternal, Health Departments, Governments, Municipalities)	80,499	75,003
Private Subsector (Total)	980,152	1,380,712
Private Insurers (Prepaid Medicine)	148,800	237,473
Private providers (Private Clinics/Sanatoriums)	429,606	494,901
Fee-for-Service	0	0
Out-of-pocket Expenditures (Healers, Pharmacies, Orthopedics, Glasses	401,747	648,338
Private Companies	0	0
Donations	0	0
International Organizations	0	0
Others	0	0

Two binational entities contribute resources to the health sector through two different contribution systems: direct intervention in infrastructure and equipment in the health facilities of the MPHSW network; and the other, through direct care to the population via mobile clinics, physician's offices, and laboratories.

2.2.2 ASSURANCE

In December 1996, Law No. 1032 was enacted, creating the National Health System as part of the health sector reform strategy whose purpose is to provide health care to the entire population on an equitable, timely, efficient and nondiscriminatory basis, through promotion, recovery, and rehabilitation actions. The NHS seeks to: (a) improve effective access to health care; (b) avoid duplication in the supply of services; (c) promote intra- and intersectoral coordination and decentralization; (d) improve resource efficiency; (e) promote social and community participation; and (f) improve coordination of all technical cooperation efforts within the health reform process. Upon the entry into force of Law No. 1032/96, the objective was to harmonize services delivery, but it failed to meet expectations and the health system continues to be highly segmented and fragmented.

Paraguay's social security programs are a relatively recent development and are related to the establishment of two funds: the Fiscal Fund which provides insurance coverage to the employees of the central government; and the IPS Fund (created in 1943), providing insurance coverage to salaried workers of the private sector and those employed by former state companies that were privatized, against the risks associated with old age, disability, and death.[42]

2.2.2.1 Legal Framework

The legal framework for the IPS is provided by Decree-Law No.1860/50, approved by Law No. 375/56. Regulation of the retirement system in Paraguay is done through Law No. 2345/2003 on the reform and sustainability of the Fiscal Fund and the public sector retirement and pension system. The retirement and pension system in Paraguay is made up of 8 regulated entities and 6 unregulated private entities. Between the IPS with nearly 50% of members actively contributing and the Fiscal Fund with more than 50% of members retired or receiving pensions, the two main regulated entities cover around 94% of the total population under some type of retirement or pension program. The 6 programs of the regulated sector cover 9% of the beneficiary population, while another 4% are covered under programs of the unregulated sector. There are three categories of affiliation. The regular affiliation category, which includes all state workers and their dependent family members, provides benefits for accidents, illness, maternity, and the elderly. The special affiliation category includes household workers in Asunción and the Central Department and public teachers nationwide, whereas coverage of the latter group is limited to illness and maternity benefits. The final category is for veterans of the Chaco War and their beneficiaries and only provides health benefits. There are no affiliation contributions for this category. Retirement plans cover disability due to common diseases, and disability due to work-related accidents or occupational disease.

2.2.2.2 Benefits

The MPHSW, striving to comply with the constitutional mandate of providing public health services to the entire population, provides care to the population through its services network and benefits defined at the programmatic level, the most comprehensive target maternal and child health. Many of these benefits are offered free of charge;[43] however many users are unaware of their rights to these services. The country does not have a public insurance system defined as such, although some studies on creating such a system have been conducted, primarily to cover the population with maternal and child health benefits.

IPS benefits for government employees cover non-work-related disease, maternity, occupational injuries and diseases,[44] disability, and include old age and death benefits. The legal framework is provided by Decree-Law No.1860/50 of the IPS, approved by Law No. 375/56, and amended by Laws 1085/65, 427/73, and 98/92. Benefits include:

- Illness. (Article 30 of Decree-Law No. 1860/50, amended by Laws 1085/65, 427/73, and 98/92) For non-work-related diseases or injuries, the IPS covers medical-surgical and dental care, medicines, and hospitalization according to existing standards;

42 Source: IPS Planning Office.

43 A series of resolutions have been enacted to provide specific health services free of charge, although their implementation has met with limited success. These include the following by specialty area: reproductive health – free IUD services, colposcopy, cervix biopsy services, postpartum and transcearean application of IUD, cervical cancer screening (Resolution 500/01); pregnancy care and care of children under 5 (Res. 198/03); medical consultations and hospitalization of children under 10 (Resolution 19/05); laboratory diagnosis of pathologies affecting public health (measles, rubella, dengue, yellow fever, hantavirus, respiratory viruses, diarrhea, diphtheria, whooping cough, tuberculosis, bacterial strains, leptosporosis, leishmaniasis, malaria, thick blood film examination for Plasmodium falciparummalaria (Resolution No. 456/03); testing for BAAR (causal agents of tuberculosis) (Res. 945/04); regarding medications: EPI Program immunizations (Law No. 2310/03 on childhood protection), insulin (Law No. 2035 on diabetes), essential drugs, children under age 10 and the vulnerable adult population (Resolution. No. 277/05, Resolution No. 374/05); basic supplies for delivery care (Resolution No.305/04).

44 http://www.ips.gov.py/principal/trabajadores.html.

- Maternity. Beneficiaries who are current on their contributions will receive, during pregnancy, delivery, and puerperium, the benefits established under Article 30(a) of Decree-Law No. 1860/50;
- Occupational injuries. Article 41 of Decree-Law No. 1860/50, amended by Law No. 427/73, establishes that in the event of occupational injury, beneficiaries will receive the following benefits:
    - Medical-surgical and dental care, medicines, and hospitalization;
    - Prosthetic devices necessary to restore functionality to normal physical activity.
- Occupational diseases. Defined as all disease associated with repeated exposure over time due to the type of work performed by the worker or attributable to the workplace environment and that causes an injury or functional disability, whether permanent or temporary, where such occupational disease or injury can be traced to physical, chemical, or biological agents (Article 40 of Decree-Law No. 1860/50). For the effects of this Law, occupational diseases will be regarded as occupational injuries; in each case a panel of 3 IPS physicians will determine whether or not the condition is work-related (Article 52 of Decree-Law No. 1860/50).

The benefits to which the covered party is entitled vary by the type of service provider.

2.2.2.3 Structure and Management

The IPS organizes and supervises the Health Insurance Fund covering illness, maternity, disability, and occupational injury (Article 13, Decree-Law No. 17071). The Health Insurance Fund is managed by an Administrative Council comprised of representatives of the State and contributors.

Private insurance is provided by prepaid-medicine companies. Most private hospitals offer care through their health centers and prepayment plans as secondary activity, offering closed plans (members get services through the hospital's exclusive network), open plans (members can get services from any provider), and mixed plans (a combination of both).

2.2.2.4 Population Covered

According to data from the 2005 Household Survey, the IPS health component covers 729,657 people or 12.5% of the total population. Overall, 80% of beneficiaries live in urban areas which points to a significant urbanization in the demand for social security services.

As of September 2007, 26,701 beneficiaries were receiving retirement or pension benefits.

TABLE 19: TOTAL POPULATION BY RESIDENCE AND HEALTH INSURANCE COVERAGE PARAGUAY, 2005

Medical Insurance Coverage	Residence								
	Total	Urban	Rural	Asunción	San Pedro	Caaguazú	Itapúa	Alto Paraná	Central
Country Totals	5,837,253	3,383,873	2,453,380	515,662	346,330	469,147	504,043	669,221	1,739,074
IPS	12.5	17.2	6.0	20.3	6.6	6.6	7.3	10.0	16.5
Other Insurance (*)	9.0	13.5	2.8	27.7	3.2	1.7	6.6	6.6	12.3
Insured Abroad	0.1	0.1	0.1	---	---	---	0.2	0.5	0.1
Uninsured	78.3	69.1	91.0	52.0	90.2	91.7	85.9	82.9	71.0

(*) Includes personal, employee, family, military, and police insurance, as well as insurance coverage abroad. Source: Periodic Household Survey

2.2.2.5 Common Fund or Pooling

The IPS is financed with worker and employer contributions, state contributions, investment income, surcharges, fines, donations, and other extraordinary income. The main sources of financing are worker and employer contributions, which are determined on the basis of the worker's affiliation. Under the regular system, employees contribute 23% of their wages (9% direct employee contribution and 14% employer contribution). These contributions are distributed in three funds: a retirement and pension fund; a fund covering illness and maternity; and a general administration fund. According to law, retirement and pension programs are separate from illness and maternity programs, while both share the general administration fund.

Pursuant to the General Appropriation Act, which was enacted in 1997, the State provides a subsidy of 75,000 guaranís (US$18) to each civil servant contracted under the national human resources system, SINARH, an agency of the Ministry of Finance, to purchase private health insurance. The employer transfers this amount to a prepaid health insurer chosen by the employee.[45]

The Legislative Branch is currently in the process of considering a bill that would create the "National Fund of Collective Resources for Health" (FONARESS), to assist the health system in the provision of free treatment for high-cost chronic diseases: (1) cardiovascular disease (hemodynamic studies, pacemaker, transplants, surgeries, angioplasty, cardio defibrillator implants); (2) kidney disease (hemodialysis, peritoneal dialysis, and transplants); (3) orthopedic surgery and trauma (hip and knee replacement); 4. urology (percutaneous/ endoscopic lithotripsy); (5) bone marrow transplants; and (6) treatment of severely burned patients.

2.2.2.6 Provider Payment Mechanisms

In the public sector, the MPHSW allocates a permanent budget to pay its employees´ salaries. Most employees of the network are hired on fixed-term contracts, which are ordinarily renewable. The central level also guarantees the supply of medical equipment and supplies, according to availability. In exceptional cases, such as health emergencies, the public sector will contract with private companies to provide individual services.

In the private sector, payment mechanisms are established by insurers, who set rates in coordination with the providing institutions and physicians.

2.3 SERVICE PROVISION

Heath care for the Paraguayan population is the responsibility of the following subsectors:

The public subsector is responsible for providing universal health care throughout the country. It includes the MPHSW, the National University of Asunción, Military Health Care, Police Health Care, and health care for the municipalities, governments, and the IPS, the latter of which is an independent entity. The binational entities of Itaipú and Yacyreta offer health services and additional health insurance to staff members, former staff members, and family members within their own health facilities network, usually for outpatient care. They also offer prevention programs and medical care to the entire population residing in the area of influence of the dams.

The MPHSW is in charge of regulating programs in the areas of health promotion, prevention, treatment, and environmental sanitation. The MPHSW has several tasks including regulation and control activities and direct services delivery. It is the only provider that complies with health policy associated with the implementation of health promotion and disease prevention programs.

45 Paraguay study of social exclusion in health. MPHSW, DGEEC, and PAHO/WHO, 2003.

The Paraguayan Red Cross, a mixed institution has a 125-bed maternal hospital. It is financed by contributions from a private nonprofit foundation. The wages of physicians, paramedics, and administrative employees are financed by the MPHSW.

Private subsector. The private sector includes for-profit institutions (hospitals, sanatoriums,[46] clinics,[47] and private physicians' offices);[48] medicine production laboratories, pharmacies, and other private health services. It includes the country's 57 prepaid medicine companies, primarily in metropolitan Asunción and the Central Department; and nonprofit institutions (private universities and university hospitals[49] and the approximately 30 NGOs providing health services in Paraguay). The former are self-financed through user payments and contributions.

In 1998, the document entitled "The Organization of Health Services within the Framework of the Sectoral Reform" defined the provision of health services for the different subsectors of the health system. Table 20 describes the responsibilities of the different providers.[50]

TABLE 20. HEALTH SERVICE PROVIDER RESPONSIBILITIES IN PARAGUAY[51]

SUBSYSTEM	STATE		QUASI-OFFICIAL ENTITIES	PRIVATE	
Operational Aspect	**MPHSW and University Hospitals.**	**Military & Police Health**	**Social Welfare Institute**	**Private Insurance**	**Private Services**
Covered Population	General, indigent, and unemployed population and their family members	Military and police personnel and their family members; self-employed persons and their dependents who pay their contributions directly into the IPS	Active employees, independent workers and their dependent family members, and self-employed persons who pay their independent workers who pay their contributions directly into the IPS and their dependent family members	Active employees and their dependent family members, and self-employed persons and their dependents who pay their health insurance contribution	Liabilities

46 Decree No. 16649 of 23 December 1970 provides the definitions of the different types of existing medical institutions; it defines a sanatorium as a medical institution for providing curative medical care to the sick through hygienic or drug therapy or by surgical intervention.

47 Said Decree defines a clinic has a health establishment staffed with a team of physicians who provide outpatient care.

48 This Decree defines a physician's office as an establishment staffed with only one doctor who provides patients with outpatient treatment.

49 Decree No. 16649 of 23 December 1970 defines a hospital as an institution that provides the same services as a sanatorium but in addition carries out prevention activities and health worker training. By definition, a hospital must contain at least 30 hospital beds. Hospitals may be general (offering the four basic services) or specialized (offering only one service or one specialized service according to disease or the kind of patients it treats.

50 Source: Health Services Organization in the Framework of Sectoral Reform. National Health System. MPHSW/Pan American Health Organization. Paraguay, August 1998.

51 Source: Health Services Organization in the Framework of Sectoral Reform. National Health System. MSPSW/Pan American Health Organization. Paraguay, August 1998.

Financing Amount and Source	Fiscal contribution, user copayment for services	Fiscal contribution and user copayment for services	Mandatory social security contribution health care contribution made by workers; user copayment for services	Contribution for workers' health; user copayment for services; paid directly by user	Private contribution, paid by user
Administration of Financing	State	State	Quasi-official entity, Social Welfare Institute	Private	Private
Provided Benefits	Health promotion and protection services for the entire population; recovery and rehabilitation services	Heath promotion and protection services limited to military and police personnel; recovery and rehabilitation services	Rehabilitation, health care, and recovery services; subsidy for accidents, medical leave; prescription drugs	Recovery and rehabilitation services	Recovery and rehabilitation services
Provision of Health Services Delivery	State, through the health services of the MPHSW	State, through military and police health services	Quasi-official entity, in IPS installations and in some cases in public and private services of the MPHSW	Private, through professional services and private health institutions	Private, primarily through provider's own network

Table 21 provides data from the Periodic Household Survey (PHS) regarding people who sought medical consultations in the period 2003-2004.

TABLE 21: POPULATION IN NEED OF CARE OR INJURED BY ESTABLISHMENT CONSULTED, PARAGUAY 2003-2004

Entity	2003			2004		
	Patients Attended		Income Quintile	Patients Attended		Income Quintile
	No.	%		No.	%	
Public Subsector	353,494	38.2	2nd, 3rd, and 4th	457,520	44.9	1st, 2nd, and 3rd
Social Security (IPS)	112,432	12.2	3rd, 4th, and 5th	107,592	10.6	4th, and 5th
Private*	458,861	49.6	4th and 5th	453,889	44.5	4th and 5th
Total	924,787	100.0		1,019,001	100.0	

* Includes the population that consulted establishments such as pharmacies, healers, etc.
Source: Periodic Household Survey 2003 and 2004. Bureau of Statistics, Surveys, and Censuses.

As observed in Table 21, between 2003 and 2004, the public-subsector coverage increased while social security and private-sector coverage decreased, especially the latter, from 49.6% in 2003 to 44.5% in 2004.

The public subsector primarily covered the population of the 2nd and 4th income quintiles in 2003, but in 2004 was covering more of the population in the lower income quintiles (1st and 3rd). Social security provided more coverage to the 3rd income quintile in 2003, in addition to the higher-income quintiles (4th and 5th), but in 2004 was mainly covering the higher income quintiles.

2.3.1 SUPPLY AND DEMAND OF HEALTH SERVICES

The IPS network includes 93 health service establishments[52] organized in three levels of care and eight levels of complexity. The primary care level includes health posts (48), peripheral clinics (5) and type-A health units (25); the secondary level has regional hospitals (10) and type-B health units (2); while the specialized or tertiary level includes the Central Hospital and the Center of Physical Medicine and Rehabilitation. The IPS network has signed cooperation agreements with other institutional health service providers and human resources health institutions. It covers members and their dependents through age 18, as well as dependent parents.

The police and military health programs cover less than 1% of the population. Most complex care is provided at the Police Polyclinic of Asunción, which has 80 beds. The National University of Asunción Medical School has a teaching hospital which primarily serves the population with limited resources.

The MPHSW, through the Bureau of Health Services Development, conducted a national survey of the services network during the first semester of 2007, which showed that the public system has 984 health institutions.[53] According to the survey, the primary care level includes 117 health centers (11.86%); 730 health posts (74.03%), one indigenous settlement (0.10%); 21 rural settlements (2.12%); and 58 dispensaries (5.88%). To date, the network has 47 closed establishments (44 health posts and 3 dispensaries), accounting for 4.76% of the network's total infrastructure.

Despite its large structure, the network is hindered by operational problems. Several institutions lack human resources and/or have limited equipment and supplies. The growth of the network has not been planned. Significant functional weaknesses are seen at the first level of care (health posts and health centers) that interferes with the operation of the services network, which is based on hospital care.

In 2007, the public sector had 8 specialized hospitals[54] and 7 maternal and child hospitals.[55] In Asunción there are 6 specialized hospitals, 3 maternal and child hospitals, and 1 general hospital,[56] while the Central Department had 1 regional hospital,[57] 4 district hospitals,[58] 1 general hospital,[59] and 2 specialized centers.[60] The public network[61] has 77 Intensive Care Unit (ICU) beds; 27 for adults, 24 for pediatrics, and 26 for neonatal care. There are 101 beds available for intermediate therapy, 37 for adults, 26 for pediatrics, and 38 for neonatal care.

The public health services network has 3,569 available beds, 3,383 are occupied and 186 are available for new patients. The country has 2,585 beds for adult care and 798 beds for pediatric care. In Asunción, MPHSW

52 Source: IPS Planning Office. 2007..
53 Includes seven establishments identified as health post or dispensary located in indigenous (5) or campesino communities (2). A distinction is drawn between campesino community and indigenous community, inasmuch as their institutional viability within the network in the future still remains uncertain.
54 Indigenous Hospital, Neuropsychiatric Hospital, National Burn Center, National Institute of Respiratory and Environmental Diseases INERAM, Juan Max Boettner Institute of Tropical Medicine (ITM), National Cancer Institute, Medical Emergency Center, and the General Pediatric Hospital. Source: Database: Hospital Coordination Office, DGDSS-MSPBS. 2007.
55 Capiatá, San Pablo, Loma Pytá, Fernando de la Mora, Limpio, Santísima Trinidad. Source: D.C.H. 2007.
56 Barrio Obrero General Hospital.
57 Luque. Source: Database: D.C.H. 2007.
58 Hospital de Villa Elisa, Mariano Roque Alonso, Lambaré, Ñemby. Source: Database: D.C.H. 2007.
59 Itaugua National Hospital.
60 National Rabies Control Center and the Rehabilitation Surgery Center.
61 Source: Hospital Coordination Office/DGDSS-MSPBS, August 2007.

facilities have 1,579 beds, whereas the Central Region has 411 beds, only 4 of them unoccupied. The IPS has 1,350 hospital beds, most in the metropolitan Asunción and in the Central Department.[62] As of July 2007, the Health Authority had 133 registered health service providers: 76 health establishments and 57 prepaid medicine companies.

According to the MPHSW,63 the private sector in Paraguay has 1126 institutions. Table 22 shows them by establishment type and location.

TABLE 22. HEALTH SERVICE PROVIDERS OF THE PRIVATE SECTOR, PARAGUAY

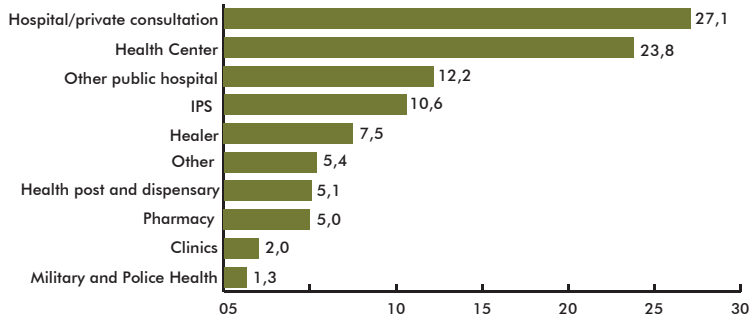
Facilities	Asunción	Central	Interior	Total Country
Hospital-Sanatorium	32	37	74	143
Clinic w/ hospitalization	22	41	74	127
Clinic w/o hospitalization	148	47	45	240
Physician's Office	138	66	36	240
Physician's Office and Clinic (Odontological)	164	60	43	267
Prepayment	50	16	19	85
Hemodialysis	6	1	2	9
Diagnostic imaging	15	0	0	15
Total	**575**	**268**	**283**	**1126**

Source: list of the health facilities, whose files are found in the file, from the year 1989 until March 2007, according to geographical location. The Director of Professions and Health Facilities, Department of Health Facilities and Related.

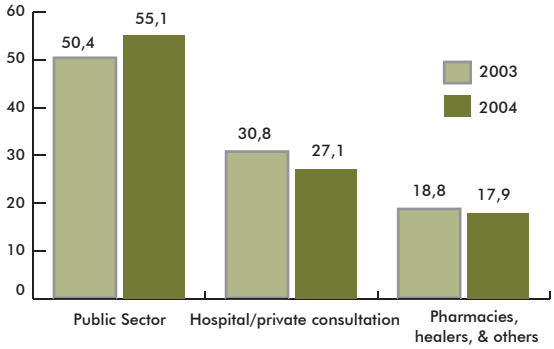
Paraguay has 49 public and private blood banks or hemotherapy centers (23 MPHSW facilities, 6 of the IPS, and another 20 in the rest of the system). The current blood procurement system is based on replacement. The MPHSW ambulance network has 196 ambulances throughout the country, 28 of them do not operate.

GRAPH NO. 4: ASSISTED DEMAND, PARAGUAY, 2004

Paraguay: % of the population involved in accidents by establishment consulted. PHS 2004



Paraguay: % of the population in need of care due to illness or injury by sector consulted



Source: Comprehensive Household Survey 2003, 2004. DGEEC.

62 Source: IPS Planning Office.

63 Source: List of health establishments by location whose patient records since 1989 through March 2007 are on file. Office of Health Professions and Establishments, Department of Health and Related Establishments.

According to the 2003 PHS, 50.4% of the people who needed care used a public establishment, while in 2004 the percentage increased to 55.1%. In contrast, consultations in a private hospital or physician's office declined from 30.8% in 2003 to 27% in 2004. The remaining people seeking treatment consulted pharmacies, healers, and others. Figure 4 shows the patterns of demand for these services.

TABLE 23. SERVICE, RESOURCE, AND COVERAGE INDICATORS- PARAGUAY, 2000-2005

INDICATORS	2000	2001	2002	2003	2004	2005
Total No. of MPHSW Health Facilities	849	857	900	900	917	917
Total No of MPHSW Health Establishments w/ Hospitalization	399	418	406	406	359	366
Total No. of IPS Health Facilities	83	83	83(2001)	83(2001)	78	78
Total No. of IPS Health Facilities w/ Hospitalization	38	38	38(2001)	38(2001)	34	34
No of Beds (MPHSW)	0,7***	4035	4385	4323	4228	4459
No of Beds (IPS)	0,2***	1291	1291(2001)	1321(2001)	1263	1263
No. of Beds per 1,000 Population (IPS + MPHSW)	N.D.	0.9	0.9(2001)	1	0.9	1
All Types of Outpatient Care per Year (MPHSW)	0.6	0.6	0.6	0.5	0.6	0.6
No of Hospital Discharges per 1,000 population (MPHSW)	24.2	24.2	24.6	28.4	26.8	28.3
% of Deliveries Attended in Health Establishments/total Live Births Registered	84.5	85.6	85	85	81.2	84.2
% of Pregnant Women Seen Before the 4th Month/Pregnant Women	70.3****	64.8****	20	18.9	23.3	21.4
Vaccination Coverage with PENTA Vaccine in children < 1 (%)	80.1*****	88.9*****	85.6*****	85.7	89.6	87.7
OPV 3 Vaccination Coverage in children < 1 (%)	72.7	90.4	85.9	86.3	89.7	86.9
BCG-ID Vaccination Coverage in children < 1 (%)	79	86	82.5	88.2	93.9	87.7
MMR Vaccination Coverage in children > 1 (%)	91.6	90.3	85.2	91.4	90.8	87.8

(***) No. of beds per 1,000 population; (****) Pregnant women who consulted/total pregnant women (*****); Vaccination coverage with DPT 3 in children < 1 (%); N.D. (no data available).

In Asunción, 68% of the population in need of care made a medical consultation. In rural areas, however, only 42% the population consulted. With the exception of some differences between 2003 and 2004, the population in the highest income strata (5th quintile) in need of care consulted twice as much as the population in the lowest income stratum (1st quintile).

2.3.2 HUMAN RESOURCES DEVELOPMENT

Paraguay's regulations governing human resources management in health are fragmented and incomplete. Despite the numerous standards regulating human resources management for the health work force, some essential aspects are neglected. For example, there is little mention of a salary scale or promotion system; the starting salary for health professionals or how it is determined is not known; and regulations do not include an employee evaluation mechanism to reward good performance. Health worker management is highly centralized, inasmuch as contracting and dismissals are handled directly by the Ministry of Health. Moreover, the only way new staff can be hired is if a job is left vacant, thus creating disparities between the "positions" and the work that is actually being done.

Personnel are classified by category (medical or administrator), and contractual status (permanent or contracted). There are a large number of different health worker categories, some of which require very little technical training or experience (such as nursing auxiliaries). Contract personnel are hired by the regional levels through agreements with the Ministry of Health and these contracts are reviewed on an annual basis. It is easier to simply hire staff on contract and then terminate them when they are not needed. Contract hires do not receive pension benefits, while regular staff is appointed by ministerial decree, sign contracts for an indefinite period, and enjoy greater job security.[64]

2.3.2.1 Human Resources Training

Human resources education faces several problems. The model used to train health workers is inconsistent with the requirements of health services, there is a shortage of public health training programs, and efforts aimed at improving health service management and the regulation of professional practices are below standard. In 2005, work resumed on a process of consensus-building for public health careers in order to improve the structure of positions and wages.

There is no adequate system in place for planning or regulating the quality of medical resident internships. Efforts are being made to standardize the selection and admission of resident interns as well as the curriculum content. There are five new private medical schools and there is currently an excess of doctors. Each year 300 physicians graduate but only 60% will be admitted to resident internships. It is estimated that 40% of the physicians working in public health institutions are general practitioners.

2.3.2.2 Human Resources Management and Employment Conditions

The public sector is regulated by the Civil Service Act, Law No. 1626, which sets the rules for all persons "appointed by administrative act" as civil servants. This category of personnel is hired for permanent positions which are financed through the State's general budget. The legal relations are governed by the Civil Code.

2.3.2.3 Supply and Distribution of Human Resources

In Paraguay, many health establishments are not staffed with permanent full-time doctors and instead recruit part-time physicians. It is common for physicians to have several jobs. Nearly 38% of establishments do not

64 World Bank. Health Services Delivery in Paraguay. An Evaluation of Health Care Quality, Human Resources Policy, and User Fees. May 2005.

have full-time physicians. Higher complexity facilities, such as hospitals, usually have more skilled personnel. On the other hand, health posts and health centers are primarily staffed by nurses and nursing auxiliaries who have very little training. IPS institutions employ a greater number of physicians compared to Ministry of Health establishments and in relation to the average number of nurses. Current staffing levels at health centers and health posts is generally superior than in 1998, as the average number of physicians and nurses employed has increased slightly. This also holds true for nursing staff.[65]

With regard to MPHSW facilities, the physician ratio per 10,000 population increased from 5.6 in 2002 (59) to 6.3 in 2005,[66] ranging from 19.6 in Asunción to 1.2 in Caazapá.[67] The ratio of MPHSW professional nurses in 2003 was of 2.2[68] per 10,000 and 2.8 per 10,000 in 2005,[69] ranging from 7.2 in Asunción to 1.0 in Caazapá.[70] In MPHSW 40% of personnel is administrative, 26% is auxiliary, 23% is administrative, and 11% is technical. Of them, 56% are permanent and 44% are contract employees. These indicators clearly reflect disparities in health access and quality.
Table 24 shows the regional distribution of human resources in health (medical workers).[71] Analysis of this data reveals that:

- Category of personnel: nearly 39% of positions at the Ministry of Health are administrative (7,904 of 20,522), while the corresponding figure for the IPS is 51% (3,864 of 7593).
- Distribution by gender: women account for 64% of the workforce of the Ministry of Health and 60% of the IPS. However, as a percentage of all MPHSW physicians, women account for 41%.
- Qualifications: There appears to be a bimodal distribution of health workers (professional) by qualifications: a relatively high number of physicians and auxiliary personnel, and a relatively low number of technical personnel. This situation is particularly troubling at basic outpatient centers and health posts, or facilities located far from urban centers, where medical staff is absent and health care is provided by personnel with few qualifications.
- Wages: According to IPS and Ministry of Health databases, the average wages paid by IPS are significantly higher that those of the Ministry of Health. On average, men earn more, which could be due to their more frequent access to higher level positions than female personnel. On average, personnel earn more at that the national level than in more remote areas.
- Contract/permanent staff: the Ministry of Health relies heavily on contract personnel. Approximately 46% of the Ministry's positions nationwide are filled with contract employees, compared to only 8% in the IPS. Both institutions have more regular staff than contract employees. Nearly 58% of the nonmedical positions at the Ministry are permanent, while 51% of medical staff positions are permanent. The number of contract positions at the Ministry has been increasing; between 2001 and 2004 they increased nearly 32%.

65 Health Services Delivery in Paraguay. World Bank. March 2005.
66 Paraguay, MPHSW, Bureau of Human Resources. Database. Asunción, 2005.
67 Paraguay, MPHSW, Bureau of Human Resources. Comprehensive personnel census, MPHSW 2003.
68 Paraguay, MPHSW, Bureau of Human Resources. Internal document. Asunción, 2002.
69 Paraguay, MPHSW, Bureau of Human Resources. Database. Asunción, 2005.
70 Paraguay, MPHSW, Bureau of Human Resources. Comprehensive personnel census, MPHSW 2003.
71 National Forum of Human Resources in Health. Paraguay 2004.

TABLE 24: REGIONAL DISTRIBUTION OF HUMAN RESOURCES IN HEALTH
MPHSW- PARAGUAY, 2003

REGION	PHYSICIANS	BIOQ.	DENTISTS	LICENSED NURSES/ OBS.	AUXILIARY STAFF	TECHNICIANS	TOTAL
1	32	4	6	6	161	22	231
2	46	6	9	41	244	49	395
3	53	5	20	31	258	63	430
4	57	6	7	34	212	29	345
5	59	6	9	55	212	70	411
6	17	2	7	14	155	13	208
7	101	9	14	55	202	23	404
8	31	7	10	17	150	20	235
9	65	9	18	27	213	34	366
10	100	15	20	53	277	40	505
11	599	86	100	388	971	236	2380
12	25	2	10	9	199	27	272
13	45	4	7	16	81	11	164
14	24	2	5	10	158	21	220
15	23	2	9	8	84	16	142
16	6	0	3	2	26	3	40
17	11	1	2	7	34	9	64
18	999	151	156	367	1106	311	3090
Total	**2,293**	**317**	**412**	**1,140**	**4,743**	**997**	**9,902**

Paraguay, MPHSW, Bureau of Human Resources. Database. Asunción, 2005

The number of full-time employees from the Ministry of Health and the IPS is 887. Over 2,000 of the permanent and contract human resources within the IPS and the Ministry of Health (8%) have more than one job. The problem of having more than one job or “moonlighting” is significant as: (i) it may be the reason many establishments do not have a full-time professional on staff; and (ii) it may affect employee performance. (In a subsequent section, this profile examines the evidence that workers with more than one job perform lower than average.)

In 2005, the IPS employed 8,824 people nationwide, and this trend has not changed significantly in recent years. Table 25 shows that IPS has 4,531 employees: 51% are administrative staff and 49% are medical workers. Coverage of the insured population is 2.4 physicians per 1,000 insured people and 2.3 nurses per 1,000 insured people.

TABLE 25: EVOLUTION OF IPS PERSONNEL, PARAGUAY, 2003-2005

STAFF CATEGORY	PERMANENT STAFF			CONTRACT STAFF			TOTAL		
	2003	2004	2005	2003	2004	2005	2003	2004	2005
PHYSICIANS	1.266	1.404	1.267	169	157	436	1.435	1.561	1.703
DENTISTS	162	157	165	11	24	19	163	181	184
NURSING	1.138	1.191	1.283	158	221	314	1.296	1.412	1.597
TECHNICIANS	654	666	719	63	65	90	717	731	809
GENERAL SERV.	2.457	2.412	2.343	473	416	228	2.930	2.828	2.571
ADMINISTRATIVE	1.611	1.701	1.781	79	52	179	1.690	1.753	1.960
TOTAL	7.278	7.531	7.558	953	935	1.266	8.231	8.466	8.824

Source: Bureau of Planning, using IPS human resources data.

2.3.2.4 Health Sector Governance and Conflict

Human Resources Management in the Public Sector

With regard to human resources management, there are strong obstacles for autonomy in the public-sector, social security, and university levels. The provisions of the Civil Service Act, job security protections for staff members, the absence of dynamic evaluation mechanisms, and the lack of a system of employee award and punishment, stand as strong deterrents and leave little opportunity for regulating and achieving a balance of health service personnel. The importance of human resources as a key element for achieving health goals is often neglected.[72]

2.3.3 MEDICINES AND OTHER HEALTH PRODUCTS

The National Bureau of Health Surveillance (DNVS), an agency of the MPHSW, is the institution in charge of regulating the pharmaceutical products. The DNVS is regulated by Law No. 1991/97. It is responsible for monitoring the quality control of pharmaceutical products across the production and marketing chain and in a randomized manner. This is done with the collaboration of National Laboratories, through agreements signed with the Ministry of Health, including those with the National Institute of Technology and Standards (INTN), an agency of the Ministry of Industry and Trade, and the Center for Multidisciplinary Studies and Technological Research (CEMIT), an agency of the National University of Asunción.

The MPHSW, through the DNVS, is responsible for periodically listing the medicines that can be commercialized and for fixing a top price. The prices are established through different coefficients based on whether a product is made locally, imported in bulk, or finished and market-ready. Drug prices are set uniformly for the entire country. Representatives from the private sector, such as drug manufacturers participate in decision making on how to set prices. Drug prices are set by the MPHSW, in accordance with an application submitted by the interested parties. The prices of drugs manufactured in Paraguay can be updated in the short-term (approximately 30 days), while more time is required to update prices for imported drugs (approximately 60 days). For medications produced in Paraguay, price adjustments cannot exceed 60% of the price of the drug in a given year, whereas the parameter used for adjusting the prices of imported products are the official prices in the country of origin.

In 2001, the document entitled “The National Drug Policy” was adopted by Resolution No. 360. This document embodies and builds on established constitutional and legal principles, with the objective of securing

72 National Forum of Human Resources in Health. Paraguay 2004.

equitable access for the entire population to essential drugs that are safe, effective, and of good quality. It also promotes the rational use and production of such drugs within both the public and private sectors. The main developments have included the creation of a nationwide registry of drugs and pharmaceutical establishments; implementation of inspection procedures to oversee these establishments, closure of those that fail to meet manufacturing and marketing regulations; and implementation of a drug quality assurance program.

As of 2006,[73] the country had 172 authorized production laboratories; 1,529 authorized external pharmacies in the capital, and 2,034 elsewhere; a total of 13,400 registered brand name drugs; 137 drug distributors; and 127 drug importers. In addition, there were 113 authorized drug packaging and bottling establishments. Between 2003 and 2005, a total of 174 pharmaceutical products were examined, of which 5% did not meet requirements; 23 pharmacies and 27 non-pharmaceutical businesses were closed down; and 31 inspection visits were made to drug manufacturing laboratories, drug packaging and bottling establishments, and drug distributors.

There is no domestic vaccine or human hyperimmune serum production. These are obtained through the PAHO Revolving Fund for Vaccine Procurement. In 2005, the Bureau of Health Surveillance created the National Vaccine Regulatory Authority, which is responsible for registering and dispensing the various lots of immunobiologicals, both for the public and private sectors.

Since 1988, the Health Sciences Research Institute of the National University of Asunción has produced ELISA diagnostic kits for canine visceral leishmaniosis, Chagas' disease, and toxoplasmosis; the last two are also exported to other countries.

2.3.4 EQUIPMENT AND TECHNOLOGY

MPHSW diagnostic equipment includes:[74]

- 76 Rx systems, of which 58 are in good operating condition; 10 are in satisfactory condition; and 8 are out of order;
- 57 Sonography systems, of which 48 are in good operating condition; 5 are in satisfactory condition; and 4 are not being used.
- 66 health services only perform clinical analysis, while 26 perform bacteriological analysis;
- 159 ambulances, of which 118 are in good operating condition; 32 in satisfactory condition; and 9 are in poor condition.

The MPHSW carried out a nationwide study on Essential Obstetric and Neonatal Care (EONC). Since 2005, the ENOC study has provided systematized information on installed capacity, medical equipment, and radio-diagnosis throughout the country. Some studies funded by international technical cooperation have been able to shed light on the quality of infrastructure and equipment and its deterioration. The Superintendence of Health has complete study data on private services, but this information has yet to be systematized.

The principal conclusions of the EONC study include:[75]

1. The MPHSW provides complete EONC in 11.7% of its regional hospital network, located in the regions bordering the nation's capital. Overall, 65% of MPHSW provide incomplete coverage of EONC services or none at all.
2. Gaps in the availability of EONC services at hospitals are due to two main factors: the lack of skilled human resources and the necessary equipment to perform, for example, a caesarian section or provide immediate newborn care. The gap is above 50% for performing c-sections and above 70% for providing immediate newborn care.

73 Paraguay, MPHSW, Bureau of Health Surveillance. Internal document. Asunción, 2006.
74 Source: Bureau of Health Services Development, Office of Health Regions. August 2007.
75 Monitoring of the availability and use of health services with Essential Neonatal and Obstetric Care (ENOC) in Paraguayan health establishments, 2005.

3. Less than 50% of the hospitals have the necessary infrastructure and the minimum equipment required to provide basic neonatal care.
4. This study helped to show that the public hospital network needs to ensure that hospitals have similar conditions with respect to infrastructure; equipment for child delivery and caesarean sections; immediate newborn care; and equipment and materials for deliveries and surgical procedures.

Scientific and technological entities in Paraguay include the National Board of Science and Technology; the National Secretariat of Technology, which is an agency of the National Institute of Technology and Standards; the legally mandated System of Science, Technology, and Innovation; the National Board of Science and Technology (CONACYT), which is the lead regulatory agency for science and technology policy; and even the National Fund of Science and Technology (FONACYT), created for the purpose of financing science and technology activities. In 1998, the National Accreditation Organization (ONA) was created as an agency under CONACYT. However, a lack of clear policies, coordination, prioritization, and understanding of financing mechanisms are obstacles to accessing these financial resources.

In general terms, the state of technology management at the country's health care institutions has not kept pace with the demands of international hospital management standards. However, significant progress has been made in the regulation of medical devices and in the training of qualified human resources needed for technology management in health establishments. Among advances in this regard, since 2005, the MPHSW has developed and implemented a regulatory system for medical devices based on MERCOSUR Resolution GMC No. 40/00, and has adapted it to the international standards of the Global Harmonization Task Force (GHTF), which is also responsible for regulating donations and imports of used medical devices.

This regulatory system is responsible for maintaining a registry of medical equipment manufacturers, importers, and distributors, and also maintains a registry of each of the medical devices. The MPHSW has also developed its Medical Device Information System (MEDISYS), which is currently being implemented at the Bureau of Monitoring of Health Professions, Health Facilities, and Medical Devices, to systematize the registration of technical information, trained human resources and health facilities where these devices are used. Building on MEDISYS, Paraguay plans to implement a system of technology surveillance for emergencies and health sector contingencies.

In 2000, the National University of Asunción, with support from the Health Sciences Research Institute's Department of Biomedical Engineering (IICS-ONE), launched a degree program in medical electronics, which is equivalent to clinical engineering at the international level.

2.3.5 SERVICES QUALITY

In Paraguay, projects targeting the quality of services have been infrequent, and usually within the context of specific projects.

Technical quality: Few health establishments have service quality programs and/or hospital-borne infection committees. Moreover, there are no data available on the rates of hospital-borne infections. The same is true regarding hospital ethics committees and/or monitoring of professional behavior. During 2006, MPHSW establishments received basic medical equipment from a project implemented by the same, funded with international technical cooperation.[76] To date, this project has strengthened some 300 health establishments, including health posts, health centers, and hospitals. According to estimates, the project will facilitate a substantial improvement in the care provided at these establishments.

76 Program of Primary Health Care Reform; project financed by the Inter-American Development Bank (IDB).

Perceived quality: No data are available on the percentage of health establishments with programs in place to improve the quality of care and treatment received by users. The same is true regarding specific procedures implemented to provide guidance to users, or functioning arbitration commissions (or their equivalents). This is also the case with respect to establishments that may be conducting studies or surveys on user satisfaction with services.

2.4. INSTITUTIONAL MAPPING OF THE HEALTH SYSTEM

TABLE 26: INSTITUTIONAL MAPPING OF THE HEALTH SYSTEM- PARAGUAY 2007

FUNCTIONS / ORGANIZATIONS	Leadership		Financing	Insurance	Provision
	Management	Regulation and Control			
Central Government					
• Legislative branch		X			
• MPHSW	X	X	X		
• Superintendence of Health	X	X	X		X
Social Welfare Institute			X	X	X
Regional Government			X		X
Local Government			X		X
Private Insurers				X	X
Private Service Providers			X		X

3. MONITORING HEALTH SYSTEMS CHANGE/ REFORM

Important components of the health reform have not been able to move forward as expected. These include community participation (specified in Law No. 1032, through the creation of national, regional and local health councils); quality of care; decentralization;[77] health promotion; and improving the efficient use of the sector's available resources. This situation may be due to the fact that within the MPHSW there is no separation of the functions of leadership, financing, insurance, and service delivery. Moreover, the National Superintendence of Health, which was created to help improve the sector's performance, continues to face technical and budgetary limitations affecting the performance of its functions.

Efforts have been made to increase and improve the available health services infrastructure, but the system still faces serious administrative challenges regarding information management—collection, processing, and analysis; equitable allocation of human resources within the country, and implementation of human resources policies; modernization of hospital equipment; and development of preventive/corrective maintenance.

These weaknesses have a direct impact on the management capacity of the steering entity, as was evidenced during the EPHF performance evaluation. This evaluation identified as critical functions those associated with guaranteeing and improving the quality of individual and collective health care services, public health surveillance, public health research and controlling risks and threats to public health, the development of human resources and training in public health, and reducing the impact of health emergencies and disasters.

The MPHSW has been working to implement a public health insurance system, but has had difficulties following through. The Executive branch enacted Decree No. 10540 of July 3rd 2007, which provides free health care to pregnant women and newborns at all establishments of the MPHSW network, as well as Resolution No. 305/2007, providing free health care to adolescents nationwide.

In regard to sectoral reform, the National Health Policy 2005-2008 includes as one of its basic tenets the "health reform as a gradual and participatory process, generating changes including decentralization and strengthening of the National Health System of Paraguay." Its strategies include: 1) structuring of the legal, regulatory, and organizational framework; 2) strengthening of the leadership role of the Ministry of Health; 3) development of the National Health System of Paraguay; 4) decentralization of health system functions; 5) development of the EPHF.

In addition, the national government developed the "National Plan for Economic Growth with Equity (2003-2008)," which recognizes the importance of the health sector, and the need to increase coverage and impact, inasmuch as low performance of the health sector has been identified as one of the factors that prevents national development and hinders competitive integration in the context of MERCOSUR.

77 MPHSW. Decree-Law No. 19966/1998.

3.1 IMPACT ON "HEALTH SYSTEMS FUNCTIONS"[78]

TABLE 27. KEY MOMENTS IN THE HEALTH REFORM PROCESS AND THEIR IMPACT ON HEALTH SYSTEM FUNCTIONS, PARAGUAY, 1990-2005

PERIOD	PUBLIC SECTOR	SOCIAL SECURITY
1990-1994	**Steering Role:** − Paraguay's Constitution (1992) establishes in Articles 68 and 69 that "the State will protect and promote the right to health as a basic right, providing the necessary conditions to this end within the National System of Health, as well as comprehensive development resources, plans, and policies."	**Financing:** - Approval of the IPS charter in 1992.
1995-1999	**Steering Role:** − Law No. 1032, creating the National Health System. − Decree-Law No. 21376/98, establishing the steering role of the MPHSW over sector programs and activities, to orient and regulate public and private actions that impact individual and collective health. − In 1998, Decree-Law No. 19966 established regulations for the decentralization of the health sector, citizen participation, and self-management in health as strategies for developing the NHS, and authorized the municipalities and local health councils to administer funds provided from the central and regional level to develop local health plans. − Decree No. 22369/1998, establishing the functions of the National Medical Bureau (DMN). − Decree No. 22385/1998, regulating the operation of the National, regional, and local health councils. − Decree No. 4674/1999, establishing the reorganization of the MPHSW. − Decree No. 20553/98, regulating the National Health Authority. − Decree No. 22369/98, establishing the functions of the National Medical Bureau.	**Financing:** −Amendment of the IPS charter in 1998.

78 Proposal to address the impact: 0 zero; 1 low; 2 medium; 3 high.

2000-2005	**Financing:** − The legal framework regulating the administration, distribution, percentage, and type of resources and compensation expenditures is provided by Law No. 1309/98: it establishes the percentage of resources and compensations to distribute to the central administration and to the municipal and departmental governments. It also establishes the responsible entities, terms, and conditions for depositing such resources.	**Services Delivery:** A series of resolutions have been enacted to provide specific health services free of charge, although their implementation has met with limited success. These include the following by specialty area: *reproductive health* – free IUD services, colposcopy, cervix biopsy services, postpartum tubal ligation, and transcaesarean tubal ligations, cervical cancer screening (Resolution No. 500/01); pregnancy care and care of children under 5 (Resolution No. 198/03); medical consultations and hospitalization of children under 10 (Resolution No. 19/05); laboratory diagnosis of pathologies affecting public health (Resolution No. 456/03); testing for BAAR (Resolution No. 945/04); *regarding medications*: EPI Program immunizations (Law No. 2310/03 on childhood protection), insulin (Law No. 2035 on diabetes), essential drugs, children under age 10 and the vulnerable adult population (Resolution. No. 277/05, Resolution No. 374/05); basic supplies for delivery care (Resolution No.305/04).

- **Conduct/Lead**

Law No. 1032/96 created the National Health System of Paraguay, and provides the current legal framework for the health sector. Law No. 1032/96 establishes the MPHSW as the steering entity of the health sector, and identifies participatory mechanisms through the health councils and interinstitutional coordination entities for the sector's systemic operation. To date, substantial progress has not been made, and the system continues to lack coordination, and is still segmented and fragmented. There is not a financing model as each institutional component of the system continues to show budgetary rigidity, preparing and executing their budgets individually.

In terms of management, one structural weakness is the problem of monitoring decentralized entities—regions or districts—. This is exacerbated by a lack of clear policies to improve management capacity and make the best use of the sector's human resources ensuring the technical continuity of the management process, regardless of political changes. The country does not have a current legislation to decentralize the health sector. This is why the implementation of "decentralization agreements" is unable to develop a structured health plan, despite the impact of Law 1032 /96, which created the National Health System and its amendment by Law 3007/2006.

- **Regulation**

This function of sectoral leadership, aside from the other limitations that the MPHSW must overcome has two considerable obstacles that further hinder its performance: the high turnover of staff members in charge of structuring sectoral regulation processes in the medium- and long-term; and the lack of an up-to-date Health Code (in effect since 1980),[79] both of which must be resolved to facilitate the regulation of the health sector in accordance with current realities.

79 Law No. 836/80. Health Code.

- **Orientation of Financing**

It is evident that Paraguay's structural problems associated with its centralized management of resources also affect the health sector. Moreover, within the State agenda there are investments related directly with the health sector that, in many cases, have failed to achieve the appropriate level of coordination. The 2005 and 2006 budgets have increased significantly, particularly the resources to cover operational commitments in the area of human resources.

Despite efforts to increase sectoral budgets, there are (as mentioned earlier) a series of structural problems that prevent the effective and efficient budget execution. Out-of-pocket expenditures represent a significant concern within the context of sectoral financing. The implementation of "decentralization agreements" did little to reduce the impact of out-of-pocket expenditures, since these agreements give priority to the management of district hospital and health center resources, and guide their actions toward achieving immediate care goals. Moreover, this approach has proven unsuccessful with regard to comprehensive health promotion and disease prevention actions, as well as joint interventions targeting health determinants at the community level. Many establishments included in the services network of districts with decentralization agreements have witnessed notable improvements in their infrastructure and the quality of care provided to users, but most of all, these agreements have helped to increase community participation.

To date, it has not been possible to implement measures or regulations aimed at improving this type of financing toward more optimal use, for example, through contributions to solidarity-based insurance plans.

- **Guarantee of Insurance**

The MPHSW does not perform this function within the health system. This imposes serious obstacles for identifying and planning interventions, primarily in public health, to avoid the duplication of efforts among the system's different subsectors.

Although the public sector has closely monitored two local insurance initiatives (Fram and Caazapá), to date the MPHSW has not performed an official comprehensive evaluation.

The Superintendence of Health is gradually carrying out this function within the health system, primarily among the private insurance companies under the Association of Medical Assistance Institutions of Paraguay (CIMAP), with emphasis on accreditation.

- **Development of the EPHF**

To date the MPHSW has not launched initiatives to incorporate the EPHF as a tool to facilitate the exercise of sectoral leadership. Most of the health sector reforms have been primarily aimed at implementing structural, financial, and organizational changes in the delivery of services, while neglecting the concept of health as a social and state responsibility in terms of building healthy environments, generating health information, and guaranteeing insurance coverage and interventions targeting risks and threats to public health. The strengthening of the national health authority's capacity to fully exercise the EPHF has not been successfully implemented in a continuous manner.

- **Harmonization of Service Delivery**

In addition to the weaknesses identified in the previous section, the historical structure of the health system in Paraguay, organized among the system's various actors—i.e., public and private sectors, social security, military health—, has prevented appropriate harmonization of service delivery. There is no officially defined set of individual and collective health services that should be offered by all providers in the system.

The health system is highly segmented at the provider level and significant fragmentation occurs among providers of the different subsectors. Several institutions make up the subsystems, and there is little or no integration among them. There is an overlapping of actions between the MPHSW and the IPS, as well as between the IPS and the private sector. This lack of institutional coordination results in duplication of services and in a situation in which some health establishments are located within the same geographical area, while other areas have none at all.

Since 2006, the IPS has introduced a model of care based on agreements with the MPHSW (17 implemented), private entities (2 implemented), as well as contracts with private health institutions (7 signed), [80] to extend its coverage to rural areas of the country.

3.2 IMPACT ON THE "GUIDING PRINCIPLES OF THE REFORMS"[81]

3.2.1 EQUITY

Historically, there were no significant developments in the area of primary health care in the country. In 2005, the National Health Authority conducted a broad interinstitutional analysis to develop strategies for restructuring primary health care.

Although some progress has been made on coverage provided by the national immunization program, serious obstacles remain to guarantee access to safe delivery care and health promotion actions at the departmental level.

3.2.1.1 Coverage

Care provided by the services network is not comprehensive, highly fragmented, lacks coordination among the different levels of care, and has a low resolution capacity at the first level. According to a study to determine the current status of social exclusion in health in the country,[82] 18.4% of the population has health insurance (27% in urban areas and 7% in rural areas) either through the IPS or through another provider (individual, employer, family, military, police, local, or insurance acquired abroad), while 81.6% has no health insurance.

80 Source: IPS Planning Office.
81 Proposal to address the impact: 0 zero; 1 low; 2 medium; 3 high.
82 MPHSW. Bureau of Statistics, Surveys, and Censuses. PAHO/WHO. Unpublished version. 2007.

TABLE 28. KEY MOMENTS IN THE REFORM PROCESS AND THIER IMPACT ON THE GUIDING PRINCIPLES OF HEALTH SECTOR REFORM, PARAGUAY 1995-2005

1995–1999	2000–2005
Equity: Decree No. 19966/1998, Article 8 defines equity as "orienting the available resources at all levels of care to provide comprehensive health care to the population, without political, economic, or social discrimination."	**Equity:** In 1995, the Social Action Secretariat (SAS) was created through Executive Order No. 9235/95, with the mandate of performing an interinstitutional role as the coordinator of the actions of the State, the political parties and civil society regarding a social policy that was fundamentally aimed at combating poverty and promoting greater social equity, encouraging the development of social capital and a more just economic order, and the creation of a system of social protection and health promotion. The institutional action of the SAS is framed in directives of the National Strategy of Poverty Reduction, approved by Presidential Decree No. 8152 of 8 September 2006, whose main lines of intervention in terms of specific health care policies for the population affected by poverty and extreme poverty are based on the three dimensions of poverty defined in analytical terms: social vulnerability, social exclusion, and economic exclusion.

With regard to the percentage of coverage provided by the health network:[83]

- This indicator was calculated on the basis of respondents who indicated they had been ill or injured in the last three months, by the establishment consulted. The 2004 PHS indicates that 52.2% of the population that was ill or injured visited some type of health facility, a similar percentage to that in 2003.
- In 2003 and 2004, 50.4% and 55.1% of respondents visited a public facility, respectively. In contrast, consultations in hospitals or private physician's office decreased from 30.8% in 2003 to 27% in 2004, while the remainder of the population sought care in pharmacies, healers, and others.
- While 68% of the sick population in Asunción had some type of consultation, only 42% of those living in rural areas did. By income strata, with some variation between 2003 and 2004, the percentage of the population in the highest-income stratum (quintile 5) that was ill or injured and had a consultation was twice as high as the percentage of the population in the lowest-income stratum (quintile 1).

After analyzing coverage from the perspective of social exclusion in health, Table 29 shows the behavior of indicators used for this analysis in Paraguay:

83 Social Exclusion in Health in Paraguay 2007: Analysis at the National and Regional Levels. MPHSW-DGEEC-PAHO/WHO. December 2007.

TABLE 29. LEVELS OF EXCLUSION IN HEALTH BY COVERAGE- PARAGUAY, 1977-2005

COVERAGE INDICATORS	ESTIMATE OF THE EXCLUDED POPULATION (%)					
	1997/98	1999	2000/01	2003	2004	2005
Population that does not consult when ill or injured	43.3	51.6	51.4	47.8	47.7	41.0
Population in need of care or injured for a serious condition that does not consult	32.0	42.8	38.6	43.5	43.5	35.1
Population without health insurance	81.8	80.1	81.1	80.7	81.6	78.3
Total	100	100	100	100	100	100

DGEEC-PAHO/WHO. December 2007.

Despite the progress made in recent years, water and basic sanitation coverage is low, with an enormous urban-rural gap, especially among the indigenous population. From 1992 to 2002, the total population with residential water connection coverage increased from 29.8% to 63.4% (84.4% of the urban population and 35.5% of the rural population).[84] The highest residential water connection coverage in the country is in Asunción,[85] with 97.2% coverage, and in the Central Department, with 86.4% coverage.

Among the 46.4% of the population with residential water connection coverage, 60% live in households of the highest-income quintile; coverage is only 30.3% among the poorest 20% of the population. This increase in coverage has not been accompanied by improved water quality. For the most part, in small communities and rural areas, drinking water is either disinfected sporadically or not at all.

Sewage system coverage is low and no significant progress has been observed. Accordingly, sewage system coverage increased from 7.2% in 1992 to 9.4% in 2002,[86] and is concentrated in urban areas (16% of coverage). Asunción has the country's greatest sewerage system coverage (70.5%), while in 10 departments coverage is lower than 5%. Some 49.2% of the country's households use a dry well to eliminate excreta (62.5% of households in urban areas and 30% in rural areas). Moreover, 35.5% of all households use common latrines (15.2% of households in urban areas and 64.8% in rural area). Some 2.8% of households use another type of excreta disposal system, and 1.1% of the population has no bathroom.[87] Only 10% of wastewater collected in the country is subject to treatment in stabilization ponds.

3.2.1.2 Distribution of Resources

The distribution of financial resources (obligated budget) for 2005 and 2006, presents an equitable distribution by life cycle, as observed in Table 30.

After analyzing the allocation of resources by health care function, the allocation of resources is largely inequitable for some functions, such as health promotion and disease prevention.

84 Paraguay, Presidential Planning Secretariat, DGEEC. National Population and Housing Census 2002: Final results. Fernando de la Mora, 2004.
85 Paraguay, Presidential Planning Secretariat, DGEEC. PHS: Main findings, PHS/2003, 2004.
86 Paraguay, Presidential Planning Secretariat, DGEEC. National Population and Housing Census 2002: Final results. Fernando de la Mora, 2004.
87 Paraguay, Presidential Planning Secretariat, DGEEC. PHS: Main findings, PHS/2003, 2004.

TABLE 30: OBLIGATED BUDGET RESOUCES BY STAGE OF THE LIFE CYCLE 2005–2006.
MINISTRY OF PUBLIC HEALTH AND SOCIAL WELFARE, PARAGUAY, 2007

OBLIGATED BUDGET	Comprehensive care of children under age 15	Women of childbearing age	Comprehensive care of men age 15 and older, and of women age 50 and older	Total
2005	259,049	205,920	194,228	659,197
2006	340,210	267,221	257,530	864,961
Structure (%) stage of life cycle 2005	39.3	31.2	29.5	
Structure (%) stage of life cycle 2006	39.3	30.9	29.8	
Average 2005/2006	39.3	31.1	29.6	
Difference 2005/2006	0.0	-0.3	0.3	

Source: Financing and Expenditure by Care Function and Stage in the Life Cycle 2005/2006, MPHSW. MPHSW-PAHO/WHO December 2007.

TABLE 31: OBLIGATE BUDGET RESOURCES BY HEALTH CARE FUNCTION.
MINISTRY OF PUBLIC HEALTH AND SOCIAL WELFARE, PARAGUAY, 2005-2006

OBLIGATED BUDGET	F1 Promotion	F2 Prevention	F3 Recovery	F4 Emergency	F5 Rehabilitation	Totals
2005	27,709	99,009	310,020	1643.22	58,138	659,197
2006	42,546	128,258	410,379	208,431	75,347	864,961
% Care Function 2005	4.2	15.0	47.0	24.9	8.8	
% Care Function 2006	4.9	14.8	47.4	24.1	8.7	
Average 2005/2006	4.6	14.9	47.2	24.5	8.8	
Difference 2005/2006	0.7	-0.2	0.4	-0.8	-0.1	

Source: Financing and Expenditure by Care Function and Stage in the Life Cycle 2005/2006, MPHSW. MPHSW-PAHO/WHO December 2007.

3.2.1.3 Access[88]

Considering "the population in need of care or injured with serious condition," we find that in 2003 and 2004, 43.5% did not consult, while that percentage decreased to 35.1% in 2005. The reasons why the population did not consult remained relatively consistent, with some differences between the years analyzed. The most frequently given reason for not consulting was self-medication, which accounted for approximately 76%.

With respect to the "people who do have not access to the health services due to geographical reasons," this indicator was similar to the percentage indicated for "people in need of care or injured with a serious condition" who did not consult for lack of a health facility nearby. This percentage reached 3.4% at the national level in 2003; 2.6% in 2004; and 1.8% in 2005, accounting for nearly a 50% reduction from 2003.

In rural areas these percentages are greater; however, an improvement was also observed during the three years analyzed: a constant reduction in the percentage of the population in need of care or injured with a serious condition that did not consult, which fell from 5.3% in 2003, to 3.1% in 2005.

Upon analyzing access from the perspective of social exclusion in health, Table 32 shows the behavior of the indicators used for this assessment in Paraguay:

TABLE 32. EXCLUSION IN HEALTH BY ACCESS- PARAGUAY, 1997-2005

ACCESS INDICATORS	Estimate of the excluded population (%)					
	1997/98	1999	2000/01	2003	2004	2005
Inaccessibility due to financial reasons (poverty)	32.1	33.7	33.9	41.4	39.2	38.2
Population with a serious condition that did not consult due to financial reasons	15.0	15.2	33.2	19.5	18.2	20.0
Geographic inaccessibility Population with a serious condition that did not consult due to geographical reasons	4.1	2.8	6.9	3.4	2.6	1.8
Cultural inaccessibility Population that habitually speaks Guaraní	56.3	49.4	50.6	45.9	47.8	48.2
Labor inaccessibility Total unemployment rate	14.3	15.9	15.3	13.0	10.9	-
Population employed in the informal sector/ Population employed in the formal sector	-	63.8	63.4	64.6	66.3	63.2

Source: Social Exclusion in Health in Paraguay 2007: Analysis at the National and Regional Levels. MPHSW-DGEEC-PAHO/WHO. December 2007.

The National Health Authority has been making efforts to increase access, primarily focusing on maternal and child health. Table 34 shows access of pregnant women to delivery care provided by skilled personnel.

In 2003, about 39.2% of the population was supplied with non-drinking water, meaning access to water from a well, with or without a pump; stream; river; spring, water carrier; and others. Water supplied from these sources reached 67.2% among the rural population and 2.8% of urban dwellers in Asunción. Among the poor segments of the population and those in which Guaraní is the dominant language, these percentages

88 Social Exclusion in Health in Paraguay 2007: Analysis at the National and Regional Levels. MPHSW-DGEEC-PAHO/WHO. December 2007.

are relatively high (approximately 56%). The population from rural areas has less access to drinking water. In 2005, the percentage of households without a drinking water supply (36.8%) decreased; however, this problem is still greater in rural areas, where this indicator reaches 64.5%, in contrast to Asunción where 3.9% of households were supplied with water from sources other than public or private water supply networks.

The 2003 survey shows that 38.3% of all households in the country have sewage service without a toilet. This percentage was 67.4% in rural areas and 6.5% in Asunción. This indicator showed a slight improvement in 2004 (38.3%) and improved even more in 2005 (34.2%). This improvement was primarily seen in Asunción and the urban areas of the Central Department.

3.2.2 EFFECTIVENESS

3.2.2.1 Infant and Maternal Mortality

Infant Mortality

In 2005, the infant mortality rate was 17.8 per 1,000 live births for births registered on a timely basis, although total infant mortality is estimated at 33.8 per 1,000 live births (corrected for underreporting). The infant mortality rates have declined by 21.5% between 1993 and 1999.

In the eastern region of the country, the registered infant mortality rate per 1,000 live births was 19.7 in 2001 and 17.5 in 2005, following a downward trend of 11.2%, similar to total infant mortality in the country. However, infant mortality was highest in the western region: 20.6 in 2001 and 27.0 in 2005, following a rising trend of 30.1%. In 2005, the leading cause of infant mortality was perinatal and neonatal causes (66%), followed by diarrheal diseases and acute respiratory infections during the postneonatal period. Table 33 includes the figures for infant, neonatal, and postneonatal mortality.

TABLE 33. INFANT, NEONATAL, AND POSTNEONATAL MORTALITY- PARAGUAY, 1960– 2005

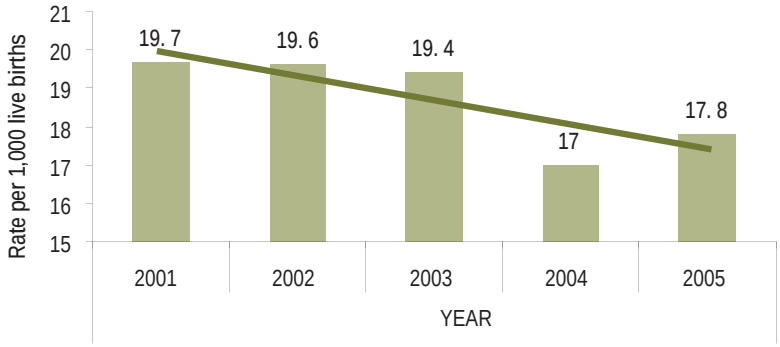
Years	Infant Mortality	Neonatal Mortality	Postneonatal Mortality
1960	92.7	48.8	49.2
1965	88	43.3	44.8
1970	93.5	41.1	52.4
1975	84.8	34.4	50.5
1980	63.2	32.6	30.6
1985	46	19.8	26.2
1990	30.4	14.3	16.1
1995	19.7	9.8	9.9
2000	20.2	10.9	6.5
2004	16.9	10.72	6.25
2005	17.8	11.7	6.1

Source: Mortality indicators. Biostatistics Department. MPHSW through 2004.

Of the childhood deaths registered between 1999 and 2003, 58% occurred during the neonatal period including 36.2% that were due to injuries during childbirth. Among deaths during the postneonatal period, 16.2% were due to pneumonia and influenza, and 15.8% to diarrhea. Registered mortality among children in the 1-4 years age group decreased from 78.4 per 100,000 in 1998 to 62.5 per 100,000 in 2003. The leading

causes of attended deaths with defined causes for this group were communicable diseases (48%), especially pneumonia, diarrheal disease, and septicemia; and external causes (12.4%). In 2003, the registered mortality rate for the 5-9 year age group was 24.2 per 100,000. Of these, 32.7% were due to infectious diseases (acute respiratory infections and septicemia), and 29.1% due to external causes (accidents).[89] Figure 5 shows the trend in infant mortality rates.

FIGURE 5: TREND IN INFANT MORTALITY RATES- PARAGUAY, 2001-2005



Source: Biostatistics Department - MPHSW

TABLE 34: DELIVERY CARE BY SKILLED HEALTH PROFESSIONAL OVER THE LAST THREE 5-YEAR PERIODS- PARAGUAY 1990-2005

Period 1990-1994								
	1990	**1991**	**1992**	**1993**	**1994**	**Total**	**Average**	
Physician	N.D.	N.D.	N.D.	N.D.	28,682	28,682	5,736.4	
Obstetrician	N.D.	N.D.	N.D.	N.D.	34,724	34,724	6,944.8	
Total	N.D.	N.D.	N.D.	N.D.	63,406	63,406	12,681.2	17.2
RLV	65,313	70,554	75,376	77,991	79,575	368,809	7.376,.8	
Period 1995-1999								
	1995	**1996**	**1997**	**1998**	**1999**	**Total**	**Average**	
Physician	31,791	35,705	36,682	35277	36,734	176,189	35.237.8	
Obstetrician	3.1571	37,186	38,238	36762	40,273	184,030	36.806.0	
Total	63,362	72,891	74,920	72039	77,007	360,219	72.043.8	83.2
RLV	79,591	88,438	88,422	86596	9.0007	433,054	86.610.8	
Period 2000-2005								
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**Total**	
Physician	36,663	36,379	38,441	37,500	45,315	51,203	245,501	
Obstetrician	36,424	35,740	38,872	37,044	35,380	33,896	217,356	
Total	73,087	72,119	77,313	74,544	80,695	85,099	462,857	83.7
RLV	86,000	83,919	90,085	86,739	101,000	105,109	552,852	

RLV (registered live births), * Average rate
Source: Biostatistics Department. Bureau of Planning and Evaluation. MPHSW.

89 Paraguay, MPHSW, Bureau of Planning and Evaluation, Biostatistics Department, 2006.

Maternal Mortality

The registered maternal mortality rate is 128.5 per 100,000 live births (2005), while the estimate considering the high degree of underreporting is 336 per 100,000 live births, which puts Paraguay among the high maternal mortality rate countries (WHO). Moreover, maternal mortality ranges from 189 to 519.9 among the indigenous, rural, and poor segments of the population, while also relevant is the high incidence of abortion as a cause of death, together with hemorrhages, sepsis, toxemias, and other complications of pregnancy, childbirth, and puerperium.

More than two-thirds of maternal deaths occur in rural and periurban areas (69%). Also, most maternal deaths occur in women who did not have prenatal check-ups or had too few check-ups (65%). Table 35 includes data on registered maternal mortality.

In 1999, the registered maternal mortality ratio in Paraguay was 114.4 per 100,000 live births, a 23.8% decrease from 1990; moreover, adolescents accounted for 20% of these deaths. Beginning in 2000, surveillance of maternal deaths was implemented and rates began to rise again, due to better registration, reaching 174.1 per 100,000 live births in 2003.[90]

TABLE 35. REGISTERED MATERNAL MORTALITY. MPHSW, PARAGUAY, 1990-2004

Year	Annual registered births (thousands)	Registered maternal mortality	Registered maternal mortality rate per 100,000 live births.
1990	65,313	98	150.0
1991	70,554	117	165.8
1992	75,376	75	99.5
1993	77,991	96	123.1
1994	79,575	111	139.5
1995	79,591	104	130.7
1996	88,438	109	123.3
1997	88,422	90	101.8
1998	86,596	96	110.9
1999	90,007	103	114.4
2000	86,000	141	164.0
2001	83,919	134	159.7
2002	90,085	164	182.1
2003	86,739	151	174.1
2004	101,000	155	153.5
2005	105,808	136	128.5

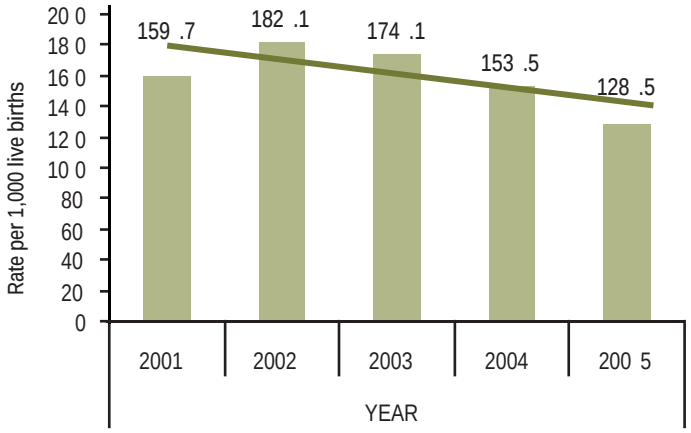
Source: Biostatistics Department. Bureau of Planning. MPHSW

Based on current trends for this indicator, it will be impossible for Paraguay to reach MDG 5 – Reduce the maternal mortality ratio by three quarters - by 2015. Maternal mortality rates vary significantly between regions. This is due to the quality and timeliness of care and to the greater or lesser degree of underreporting of deaths.

90 Paraguay, MPHSW, Bureau of Planning and Evaluation, Biostatistics Department, 2006.

The causes of maternal deaths are related to obstacles that hinder access to health services. Accordingly, 46% of such deaths are attributable to delays in seeking care; 23% are due to the low resolution capacity of health services; and the remaining 31% die at home without receiving care.[91] The leading causes of maternal death are all preventable: hemorrhages, abortion, toxemia, and septicemia. In 2004, mothers had at least one prenatal check-up in 94.2% of births, and 68.6% had a prenatal check-up during the first trimester; however, differences persist between regions.

FIGURE 6: REGISTERED MATERNAL MORTALITY RATE, PARAGUAY 2001-2005



Source: Biostatistics Department - MPHSW

3.2.2.2 Mortality from Malignant Neoplasms

Registered rates of cervical, breast, and lung cancer have increased. The average rate was 2.8 per 100,000 during the period 1995-99 and 3.39 per 100,000 during the period 2000-2004.[92] On average, tumors of the cervix account for 59% of total malignant neoplasms, while tumors of the breast account for an annual average of 28.8%.

Tumors are the second leading cause of death, accounting for 14-15% of registered deaths with defined cause and medical care between 2001 and 2003. Of these, no significant differences are seen between males and females, although there are important differences between urban and rural areas, with 3.9 to 4.4 times more deaths in the former, suggesting significant underreporting, very low coverage of medical care, and ill-defined causes reported on death certificates. Regarding female deaths from tumors with a defined cause and medical care, the leading cause was uterine cancer, followed by breast cancer, and GI and peritoneum tumors, excluding the stomach and colon. Among males, the leading cause was tumors of the trachea, bronchia, and lung, followed by GI and peritoneum tumors, excluding stomach and colon, while the third leading cause was tumors of the prostate.[93]

In the period 2001-2003, taking into account all registered deaths except for those due to ill-defined causes, and analyzing the specific causes of mortality, tumors of the uterus represent the fifth leading cause of death among women, at a rate of 12.4 per 100,000. Unfortunately, in half of the cases registered no information was available regarding site. Among those cases for whic h this information was available, the proportion uterine cancer/corpus cancer accounted for 12.5 per 100,000.[94]

91 Paraguay, MPHSW, Bureau of Health Programs. National Commission of Epidemiological Surveillance on Maternal and Neonatal Health. Internal report. Asunción, 2005.
92 MPHSW. Biostatistics Department. Bureau of Planning and Evaluation. Bureau of Health Surveillance.
93 Paraguay, MPHSW, Office of Planning and Evaluation, Biostatistics Department, 2006.
94 Paraguay, MPHSW, Office of Planning and Evaluation, Biostatistics Department, 2006.

3.2.2.3 Incidence of Malaria, Tuberculosis, and HIV/AIDS

Malaria. Following the 1999-2000 epidemic involving 16,799 cases, sustained surveillance and control activities have achieved a 97% reduction in the annual number of cases, with only 376 cases in 2005. In 99.8 to 99.9% of cases, *P. vivax* was the cause.[95] There were no registered deaths from malaria. Some 75% of cases are concentrated in rural areas of three endemic departments (Paraná, Caaguazú, and Canindeyú). In 2005, the national malaria program developed a strategic plan to eliminate malaria as a public health problem, enlisting the assistance of the health services in the diagnosis and treatment, and local governments in environmental management.

Tuberculosis.[96] No national studies have been conducted in Paraguay regarding the annual prevalence and risk of tuberculosis infection (ARTI). According to WHO estimates for 2004, the rate for all forms of tuberculosis in Paraguay was 71 per 100,000.[97] Case-finding on all forms of tuberculosis was consistently regular over the last 10 years until 2004, when sputum smear-positive pulmonary cases experienced a slight increase that could be attributed to an expansion of detection activities in 2003 and 2004. In 2004, 2,300 new cases were reported, accounting for 54% of estimated cases (rate of 38 per 100,000). A total of 2,097 of these cases were pulmonary (91%), of which 57% were sputum smear-positive. Of the 203 cases of extrapulmonary tuberculosis (9% of the total), 36 (18%) were tubercular meningitis. The Chaco region has the highest reporting rate, while the highest number of cases is recorded in the metropolitan area. Mortality is high (4.7 per 100,000 population) and is associated with late diagnosis of HIV co-infection.[98]

The tuberculosis control program adopted the DOTS strategy in 2000 for two pilot demonstration areas, and by 2004 reported that 27% of the population of the country inhabits DOTS areas. The 2004 cohort analysis for new BK+ cases (744 cases) in non-DOTS areas demonstrated a 71.4% treatment success rate; 1.5% transferred out with unknown outcome; a 14.2% treatment abandonment rate; a 0.1% treatment failure rate; and a 5.5% death rate. Of the 361 BK+ cases in DOTS areas, the treatment success rate was 84.8%, and the treatment abandonment rate was 6.1%. The percentage of deaths continues to be high (5.8%).

Primary drug resistance rate is 6.9%, and the primary multi-drug resistance (MDR) rate is 2.1%.[99] Secondary resistance rate to a single drug is 13.7%,[100] and the secondary MDR rate is 4%. The high percentage of primary MDR may be due to self-administered treatment that includes rifampicin.

AIDS. The HIV/AIDS incidence rate in 2005 was 3.9 per 100,000; 3,071 people were infected, and 4,449 were living with the disease. In 56.35% of cases the patient died. Disease trends show expansion into smaller urban centers and among poorer populations, and transmission through heterosexual contact. Most reported AIDS cases are among the 30-34 years age group. Infection through sexual contact was reported in 80% of cases; 7% through blood transmission, most of which were intravenous drug users, but also through transfusions with contaminated blood; vertical transmission accounts for 5% of cases; and the method of infection is unknown in 8% of cases. Most cases are reported in urban areas, although reporting is growing in the interior of the country. The highest prevalence rates are in Asunción, followed by the Central Department, and departments on the border with Argentina and Brazil (such as Itapúa, Paraná and Amambay). Increasing border flows could cause an expansion of the epidemic in coming years unless appropriate measures of surveillance and control are adopted.

The HIV/AIDS epidemic continues to be concentrated, and it is estimated that as of October 2004, 16,000 to 18,000 people in the 15-49 years age group were HIV positive. Comparison of this estimate with the number

95 OPS. Malaria in Paraguay: Time Series Epidemiological Data from 1998 to 2004.
96 Paraguay, MPHSW, Bureau of Health Surveillance, National Tuberculosis Control Program. Various technical reports. Asunción, 2006.
97 WHO Report 2006, Global Tuberculosis Control. Surveillance, Planning, Financing.
98 WHO Report 2006, Global Tuberculosis Control. Surveillance, Planning, Financing.
99 PAHO-Paraguay, MPHSW, Bureau of Health Surveillance, National Tuberculosis Control Program. Study on Multidrug Resistance. Washington D.C., PAHO; 2003.
100 The sample used in the analysis of secondary drug resistance was insufficient.

of registered cases for this same age group and date indicates 80% of underreporting. The prevalence of HIV/AIDS among pregnant women has increased from 0.2% in 2000 to 0.8% in 2002; and, in sex workers from 0.6% in 2000 to 2.6% in 2002,[101] which could indicate a notable expansion and possible dispersion of the epidemic. Still with this level of underreporting, progression of the epidemic among the female population[102] and people in the 15-24 years age group deserves special mention. Equally striking is the increasing number of cases reported outside of the metropolitan area. In the period 1999-2004, the prevalence of HIV in blood donors ranged between 0.16 and 0.34%.[103]

The prevalence rate of condom use among women continues to be low (10.5% in 2004 compared with 1.9% in 1990). Among young women in the 15-24 years age group, the prevalence rate of condom use during sexual relations over the last three months was 31.8% in 2004, which was higher than the 15.7% registered in 1996. However, among this same group, only 2.2% of women knew how to prevent HIV/AIDS.[104]

In 2005, the National Program for HIV/AIDS/STIs Control provided 582 adults and 92 children with free antiretroviral therapy (ART) (19% based on estimates of those who need ART). Medication is not available for opportunistic infection prophylaxis. Decentralization of care and ART distribution has begun at MPHSW services located in border areas with Brazil and Argentina. The prevention of vertical HIV transmission started in 2005, with the distribution of rapid HIV tests in maternal-child hospitals of the MPHSW in 17 of the country's 18 Health Regions.

During 2000-2004, *syphilis* prevalence among pregnant women ranged from 5.3% to 6.2%. Over the same period, the incidence of congenital syphilis increased from 1.1 to 4.9.[105] The prevalence of the syphilis in blood donors during 1999-2004 ranged from 0.2% to 0.3%.[106]

3.3 IMPACT ON THE "HEALTH SYSTEM"

TABLE 36: KEY PROCESSES OF CHANGE AND IMPACT ON HEALTH SYSTEM

PERIOD	1990–1994	1995–1999	2000–2005
IMPLICATIONS OF THE CHANGES			
Citizens' right to health	Paraguayan Constitution of 1992	Through the General Appropriation Law of the Nation, since 1997 the State grants a subsidy of 75,000 guaranís to pay for health insurance for each civil servant under the National System of Human Resources, an agency of the Office of the Presidency.	

101 Epidemiological surveys on HIV/AIDS infection among pregnant women and sex workers administered by PRONASIDA in 2000 and 2002. It bears mentioning that the sample size was not adequate in either survey.
102 In 1992, for every women infected there were 28 men infected; in 2004, for every woman infected there were 2.8 men infected with HIV/AIDS.
103 Paraguay, MPHSW, National Blood Transfusion Center. Unpublished information. Asunción, 2006.
104 Paraguayan Population Studies Center (CEPEP). National Survey on Population and Sexual and Reproductive Health 2004. Asunción, 2005.
105 Data provided by the Biostatistics Departments of the MPHSW, based on prenatal service records, the coverage of which is limited and not uniformly distributed throughout the country.
106 Paraguay, MPHSW, National Blood Transfusion Center. Unpublished information. Asunción, 2006.

Impact on the steering role		Law No. 1032 created the National Health System Decree No. 19966/1998 regulates the decentralization of health at the local level. Decree No. 20553/1998 regulates the National Health Authority. Decree No. 21376/1998 establishes the new functional structure of the MPHSW.	
Separation of health system functions		The National Health Authority is an Executive Bureau of the National Health System, regulated by Decree No. 20553 of 6 April 1998.	
Deconcentration and/or Decentralization	Departments were created (pursuant to the Constitution of 1992 and Law No. 426/94), and the municipalities were reorganized (Law No. 1/90). Resolution No. 368 (1992), and Resolution No. 49 (1993) set the geographic boundaries of the health regions to follow the political and administrative divisions of the country. In 1994, Law No. 426, "the Organic Law on Departmental Government," was enacted, which created the departmental governments and health secretariats.	In 1998, Decree-law No. 19966 regulated the decentralization of health, citizen participation, and self-management in health as strategies for developing the NHS, and authorized the municipalities and the local health councils to administer funds of the central and regional levels for the development of local health plans. At the end of the 1993-1998 government administration, the first management agreements were signed between the MPHSW, the central government, and the municipalities of the Central Department. Between August 1998 and February 1999 these agreements were renewed, with the cession in usufruct of the district sanitary units, the commissioning of human resources, and the appointment of directors and administrators on the basis of merit.	
Changes in the management model		Organization of the health services within the sectoral reform framework. National System of Health. Ministry of Public Health and Social Welfare /Pan American Health Organization. Paraguay, August 1998.	

Barriers of access to individual services and public health			Social exclusion in health Paraguay 2003.
Changes in the labor market and in human resources for health	Resolution S.G. No. 333/1993, "Authorizing the Office of Medical and Related Professions to temporarily issue professional records to Paraguayan professionals with degrees issued abroad." Resolution S.G. Nº 218/1994, "Approving the registration and professional practice requirements for university, technical, and health auxiliary personnel."	Resolution S.G. No. 233/1995, "updating the regulations for the registry and qualification of professionals with degrees issued abroad." Resolution S.G. No. 64 of 14 February 1997, "updating the regulations for the registry and qualification of health science professionals with degrees issued by Paraguayan and foreign universities." Decree No. 22439/1997, "regulating the exercise of dentistry throughout the national territory." Resolution S.G. No. 384 of 16 August 1999, "amending Resolution S.G. No. 218 of 26 April 1994, approving the records for the registration and professional practice requirements of university, technical, and health auxiliary personnel who have earned degrees from Paraguayan institutions."	Resolution S.G. No. 147 of 20 March 2000, "amending Resolution S.G. No. 233/95, updating the regulations for the registration and qualification requirements of professionals with degrees issued abroad."

3.4 ANALYSIS OF ACTORS

PUBLIC SECTOR

National Health Council. Regulated in Chapter IV of Law No. 1032, defined in Article 19 thereof as: The National Health Council is an entity of coordination, consensus, and interinstitutional participation of the public and private health sectors.

The National Health Council has (Art. 21) one representative from each of the following institutions: the Ministry of Public Health and Social Welfare; the Ministry of Finance; the Ministry of Education and Worship; the Public Health Commission of Chamber of Representatives; the Health commission of the Senate; the Technical Secretariat of Planning; the School of Medicine; the School of Dentistry; the School of Nursing; the School of Chemical Sciences; the Social Welfare Institute; the Association of Sanatoriums and Private Hospitals; the Council of Governors; the Paraguayan Organization of Intermunicipal Cooperation; the Association of Departmental Councils; the Association of Paraguayan Physicians; the Association of Paraguayan Dentists; the Paraguayan Federation of Chemists; the National Association of Nurses; Unions; Employer Associations; Association of Health Workers; SENASA; CORPOSANA; Military Health; Police Health; NGOs; and the national rural organizations.

The National Health Council holds regular meetings every two months and special meetings as necessary (**Article 22, Law No. 1032).**

Its role within the sector has been marginal, given the limited frequency of its meetings and marginal technical approach for the strengthening of the health sector.

National Medical Bureau. This is a technical agency in charge of standardization and management of the Health Services System. The National Health Fund will be the agency in charge of formulating the sector's financing policy, as well as the organization and administration of the national health insurance. The National Health Authority will be responsible for the accreditation and quality control of services offered by the health system (Article 33, Law No. 1032). To date, it does not perform its functions since it has yet to be institutionalized.

National Health Fund. Established by Law No. 1032 (Article 40), as the executive financing bureau in charge of formulating health system financing policy, following approval of the National Health Council.

The financing of the health system is based on the budgetary resources allocated for each subsystem or entity within the health system (Article 41). To date, it is not operating. It does not fulfill its functions within the system, since it has yet to be institutionalized.

National Health Authority. In order to implement Law No. 1032 (Chapter VII), the Executive Bureaus of the System were created, within which the creation of the National Health Authority is foreseen through **Article 31.**[107] **Article 33 states that "**The National Health Authority will be responsible for the accreditation and quality control of the services offered by the system." Since the enactment of Law No. 2319 of 13 September 2006, "which establishes the functions and responsibilities of the National Health Authority," a new institutional process begun, with a view to strengthening its regulatory role within the system.

Regional Health Councils. These councils bring representatives from the different health institutions of the health sector together for meetings. The Regional Health Councils will meet in regular sessions every two months and, as necessary, in special sessions. The officials will include a chairman and vice-chairman, appointed by the departmental ministry of health, and three additional representatives, appointed at the first general meeting. These officials will meet, at least, every two weeks thereafter. All institutions interested in joining a Regional Health Council, should send a written request to the Council's Executive Board. The request should describe the institution's affiliation with the health sector. The officers of the Executive Board should respond to such request within no more than 15 days. If no response has been received within this time period, the institution will automatically be admitted (Article 23, Law No.1032).
Councils are not operating in all 18 health regions, and where they are operating limitations continue to hinder compliance with their functions.

Local Health Councils. These councils bring representatives from the different health institutions of the health sector together for meetings. The Local Health Councils will meet in regular sessions every two months and, as necessary, in special sessions. The officers will include a chairman and vice-chairman, appointed by the Office of Hygiene and Health of the municipality, and three members to be elected at the first general meeting. These officials will meet, at least, every 15 days thereafter. All institutions interested in joining a Local Health Council, should send a written request to the Council's Executive Board. The request should describe the institution's affiliation with the health sector. The officers of the Executive Board should respond to such request within no more than 15 days. If no response has been received within this time period, the institution will automatically be admitted (Article 24, Law No.1032).

Operation of the Local Health Councils has been marginal, even in regions where Regional Health Councils operate. In practice, their function to control and manage the health sector and to guarantee the users' rights to health has been replaced by managing the financial resources of the sector.

107 The Executive Committee will form a national medical office, and another for both the National Health Fund and National Health Authority.

Government and Municipal Health Secretariats. These secretariats are agencies from the subnational governments and are financed with resources of these governments and city halls or, in special cases, with royalties.

There is a lack of coordination with the territorial representative of the MPHSW, which interferes with the exercise of the functions of these secretariats, and consequently, gives rise to sectoral inefficiencies.

PRIVATE SECTOR

The Association of Paraguayan Health Care Institutions [*Cámara de Instituciones Médicas Asistenciales del Paraguay* – CIMAP) was created in 1987; that same year CIMAP joined the Latin American Association of Comprehensive Medicine (ALAMI), and some years later the Paraguayan Federation of Production, Industry and Commerce (FEPRINCO). CIMAP includes all the companies that provide direct or indirect services to the prepaid medicine system (currently 16 companies).

Its role as sectoral actor contributes to the fragmentation of health services offered in the country.

Civil society involvement in the health sector (trade associations, workers' associations, unions, etc.). The country[108] has five main unions, the most significant are the CUT, the CNT, and the CESITEP. This movement is very fragmented due to a legislation that allows to form a union with only 20 workers from a single company; another contributing factor is union political orientation. The CUT is a class-based, autonomous, and democratic institution, which originated with the Independent Worker's Movement and was officially formed in 1992. Its authorities are elected every 4 years by secret ballot in a general election of all union members. Affiliated grassroots organizations include the trade, health, banking, foodstuff, social security, transportation, water, textile, and chemical sectors.

The most active civil society organizations within the health system are the Association of Paraguayan Physicians [*Círculo Paraguayo de Médicos* – CPM), and the Paraguayan Association of Nurses (APE). Participation in the health sector of these organizations is primarily focused on the union demands of their memberships. The Paraguayan Association of Nurses has representation at the subnational level.

Moreover, MPHSW workers may join the Ministry of Health Workers' Union (SITRAMIS).

FIGURE 7: Social Cabinet – Executive Team

Source: III National "Investing in People" Forum. Blanca Ovelar, Minister of Education and Culture and Coordinator of the Executive Team of the Social Cabinet. 29 August 2006.

108 Arias, Mirtha. National report on the status of social security. CUT Paraguay. 2005.

Main Objectives

- Improve communication between social policy programs and poverty reduction programs;
- Interinstitutional cooperation and coordination to implement programs;
- Develop a shared strategic agenda between public institutions (national and local levels), NGOs, and other civil society organizations;
- Identify priorities for international cooperation support;
- Coordinate social and economic policies.

Elites (entrepreneurs, academics). Entrepreneurs have a role in providing supplies to the State. The participation of academic groups in the health system is limited, with the exception of some scientific societies that consult on medical issues. In recent years, these groups have gradually begun to sponsor academic events to review public health issues.

Organized civil society. These groups do not openly participate in the health system; however; social mobilization efforts are beginning to form, primarily around maternal and child health rights.

International cooperation agencies and organizations. The country has no strategic cooperation agenda for the health sector. The regulatory authority´ weaknesses hinder its ability to coordinate efforts with these agencies and organizations to develop this sectoral component.

International cooperation agencies ordinarily carry out actions through the MPHSW; recently, however, these agencies are beginning to carry out projects directly with the regional governments and municipalities.

In Paraguay, cooperation agencies have a role:

- Providing technical cooperation, primarily to the public subsector through the MPHSW (UNICEF, UNFPA, PAHO, UNAIDS, etc.); or
- Facilitating the mobilization of international resources through loans (World Bank, Inter-American Development Bank).

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