HEALTH SYSTEMS PROFILE

BOLIVIA

MONITORING AND ANALYSIS
HEALTH SYSTEMS CHANGE/REFORM

Third Edition
(*December 2007*)

USAID
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Pan American Health Organization

HEALTH SYSTEM PROFILE

BOLIVIA

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LIST OF ACRONYMS

ACOBOL: Association of Bolivian Councilwomen
AECI: Spanish Agency for International Cooperation
AIDS: Acquired Immunodeficiency Syndrome
API: Annual Parasite Index
ARI: Acute Respiratory Infection
BCG: Tuberculosis Vaccine
CAN: Andean Community of Nations
CIDOB: Confederation of Bolivian Indigenous Peoples
CNIDAI: National Committee to Assist Teaching Integration
COB: Bolivian Union
CONAMAQ: National Board of Ayllus and Marks of the Qullasuyo
CONAN: National Nutrition Board
CSUTCB: Single Confederate Union of Rural Workers of Bolivia
DHS: Departmental Health Services
DILOS: Local Health Directory
DPT: Triple Vaccine (Diphtheria, Whooping Cough, Tetanus)
EAP: Economically Active Population
ECLAC: Economic Commission for Latin America and the Caribbean
EPHF: Essential Public Health Functions
EPI: Expanded Program on Immunization
FAM: Federation of Municipal Associations
GDP: Gross Domestic Product
HDI: Human Development Index
HIPC: Highly indebted Poor Countries Initiative
HIV: Human Immunodeficiency Virus
IBTEN: Bolivian Institute of Nuclear Technology
IEC: Information, Education, and Communication
IID: Intestinal Infectious Disease
IMR: Infant Mortality Rate
INASES: National Health Insurance Institute
INE: National Statistics Institute
JICA: Japan International Cooperation Agency
LINAME: National Drug List
LOPE: Organic Law of the Executive Branch
MDG: Millennium Development Goals
MERCOSUR: Southern Common Market
MSD: Ministry of Health and Sports
NGO: Nongovernmental Organization
NHA: National Health Authority
OTB: Territorial Grassroots Organization
PAHO: Pan American Health Organization
PROMES: Municipal Program for Rural Education
PRONACS: National Quality Control Program
REMSAA: Meeting of Andean Area Health Ministers
SERNAP: National Protected Areas Service
SNIS: National Health Information System
SSPAM: Senior Social Security
STI: Sexually Transmitted Infection
SUMI: Universal Insurance for Mothers and Children

TB: Tuberculosis
TCP-ALBA: Peoples' Trade Agreement
UDAPE: Economic Policy Analysis Unit
UNDP: United Nations Development Program
UNFPA: United Nations Population Fund
UNICEF: United Nations Children's Fund
USAID: United States Agency for International Development
WFP: World Food Program
WHO: World Health Organization

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EXECUTIVE SUMMARY

In 2007, Bolivia had an estimated population of 9,427,219 and an annual growth rate of 2.7% between censuses. Sixty-two point four percent of the population lives in urban areas and 50.16% of the population is female. Life expectancy at birth is 63.84 years, 38.65% of the population is under 15 years of age, and 7% is 60 or older. The total fertility rate is 3.8 and the crude birth rate is 28 per 1,000 live births.

Bolivia is experiencing an epidemiological transition, with high levels of communicable diseases combined with a gradual increase in the prevalence of chronic diseases. The crude death rate in Bolivia, estimated for the period 2000-2005, was 7.7 per 1,000 people and the maternal mortality rate was 235 per 100,000 live births.[1] During the period 1998-2003, the infant mortality rate was 75 per 1,000 live births.

In 2006, the economy was stable at a macro level with a surplus of 5.9% of GDP and a reduction of debt to 3.2 billion dollars (30.7% of GDP). Overall, 64.6% of the population is considered poor based on the national poverty line and 36.77% lives in extreme poverty. A reported 70.2% of the indigenous population and 56.3% of the non-indigenous population live in poverty. There are no significant gender differences in the poverty rate. In addition, 64.2% of those informally employed and 52.7% of those formally employed are poor (2002).

In the year 1938, the Political Constitution of the State established the “individual’s basic right to health and the state’s obligation to defend human capital.” The State is structured according to the Law of Popular Participation (1994), the Law of Administrative Decentralization (1995), and the Law of Municipalities (1999).

The health system is comprised of the public sector, social security, private sector, and traditional medicine subsector, with a predominance of direct or out-of-pocket payments. National health expenditure as a % of GDP has grown from 4.38% in 1995 to 6.95% in 2002. National per capita health expenditure increased from US$42 in 1995 to US$61.37 in 2002.

The new model of Family, Community, and Intercultural Health guides the new National Sectoral Health Policy to meet the needs and demands of the individual, the family, and the community. The policy promotes joint health management and shared decision-making between health workers, the community, and the municipal government. It also promotes a care model organized around and focused on providing comprehensive,

[1] Post-census survey of maternal mortality for the year 2002

intercultural health services that take into account not only the disease, but a person's diet, spirituality, world view, and place in the cycle of life, as well as the socioeconomic, cultural, and geographical status of the individual, the family, and the community.

The management of human resources and employment conditions is one of the health system's weak points. The lack of accurate studies hinders the identification of how many people are employed, underemployed, or hold more than one job. In addition, there are no existing studies on the availability, distribution, and flow of human resources. There is a large gap in physician's availability among municipalities by poverty level: fewer physicians are available in very poor municipalities, and more are available in municipalities with lower poverty levels. No information is available on whether patients can receive same day primary care services. In addition, the number of health facilities that have reduced functional barriers to access (e.g. language, working hours, gender) is unknown.

A review of the impact of public health insurance reveals significant benefits to pregnant women and children under five as evidenced by the increased utilization of health services. The increase, however, has not affected the poorest population, but rather has been concentrated among the population with greater economic resources. Although the availability of health insurance has benefited urban areas significantly, the impact in rural areas has been small. In addition, significant gaps remain concerning mortality, hospital births, prenatal care (four visits), and pentavalent vaccinations.

Local Health Directories (DILOS) are the instances for social participation in health. The current goals of the Ministry of Health are to recover the sovereignty and stewardship of the system, lead an intersectoral approach to health, and develop greater management capacity to ensure the financial sustainability of the sector.

1. CONTEXT OF THE HEALTH SYSTEM

1.1 Health Situation Analysis

1.1.1 Demographic Analysis

In 2007, Bolivia's population was an estimated 9,427,219 with the following characteristics:[2]

- Intercensal national annual growth rate of 2.7%
- 62.4% of the population lives in urban areas
- 50.16% of the population is female
- Life expectancy at birth is 63.84 years, 65.99 for females and 61.50 for males
- 38.65% of the population is under 15 years of age and 7% is 60 or over
- Total fertility rate is 3.8 and the crude birth rate is 28 per 1,000 live births

TABLE 1. DEMOGRAPHIC TRENDS. BOLIVIA, 1990-2005

Period/Indicators	1990-1994		1995-1999		2000-2005	
	Men	Women	Men	Women	Men	Women
Total Population (thousands)	3,303,652	3,365,074	3,716,294	3,765,414	4,698,293	4,728,926
Percentage of Population Living in Urban Areas[3]	1992: 42.45%				2001: 62.43%	
Indigenous[4] Population	1976: 64.46%		1992: 61.42%		2001: 49.95%	
Percentage of Population under 15 Years of Age[5]	1976 42.62%	40.34%	1992 42.34%	40.17%	2001 39.78%	37.53%
Percentage of Population 60 Years of Age or Over	1976 5.88%	6.83%	1992 6.11%	6.84%	2001 6.50%	7.50%
Annual Growth Rate of Population[6]	1976-1992 = 2.1				1992-2001 = 2.7	
Total Fertility Rate[7]	5.9		4.8		4.4	
Crude Birth Rate per 1000	42		35		33	
Crude Death Rate	NA		10		8.2	
Life Expectancy at Birth	55		60		61.8	66.0

Note: Information not available on migration

[2] INE. UNFPA, ECLAC. Bolivia: Estimaciones y proyecciones de población, periodo 1950-2050. La Paz.
[3] INE. El proceso de urbanización en Bolivia, 1992 – 2001. 3ra edición. Junio 2004.
[4] INE. Censo Nacional de Población y Vivienda 2001. Distribución de la Población.
[5] INE. Censo Nacional de Población y Vivienda 2001. Distribución de la Población. Elaboración propia en base al cuadro No. 1.5. Bolivia. Población total por censo y sexo, según área y grupo quinquenal de edad, Censos de 1976, 1992 y 2001.
[6] INE. Censo Nacional de Población y Vivienda 2001. Distribución de la Población.
[7] INE. Bolivia: Niveles, tendencias y diferenciales de la fecundidad. La Paz-Bolivia. Noviembre 2003.

Mortality

Crude death rate was estimated at 8.2 per 1,000 people for the period 2000-2005.[8] The maternal mortality rate, according to a post-census survey from 2002, is 235 per 100,000 live births.[9] An analysis of the infant mortality rate (IMR) identifies the following trends:

- a decrease from 116 per 1,000 live births in the period 1989-1994 to 75 per 1,000 live births for the period 1998-2003
- a significant decrease in post-infant mortality (1 to 4 years) from 44 to 23 per 1,000 live births for the same time period
- neonatal and post neonatal mortality have declined at a much lower rate during the same period
- Infant mortality (2003) is higher in rural areas (96 per 1,000 live births) than in urban areas (59 per 1,000 live births) and higher among the indigenous population (87 per 1,000 live births) than among the non-indigenous (45 per 1,000 live births)[10]

TABLE 2. CAUSES OF MORTALITY. BOLIVIA, 1990-2005

Time periods	General	Maternal	Obligatorily Reported Communicable Diseases	Circulatory System Diseases	Malignant Tumors	External Causes
1990-1994	10.2	390	NA	NA	NA	NA
1995-1999	9.1	NA	NA	NA	NA	NA
2000-2005	7.7	230	122.6	370	73.5	109.7

Information not available on ethnicity, TB, AIDS, malaria, or place of residence (urban, rural)
Source INE, DHS. National Survey of Demography and Health. 2003.
PAHO/WHO. Epidemiological Bulletin. Situational Analysis of Mortality in Bolivia. Vol. 23 No. 2. June 2002.
Ministry of Health and Sports. Health status. Bolivia 2004. La Paz. 2006.

[8] OPS/OMS. Boletín Epidemiológico. Análisis Coyuntural de la Mortalidad en Bolivia. Vol. 23 No. 2. Junio 2002.
[9] MSD. Situación de salud. Bolivia 2004. Documentos de divulgación científica. Enero 2006.
[10] UDAPE. NNUU, OIT. Pueblos Indígenas Originarios y Objetivos de Desarrollo del Milenio. Bolivia 2006.

TABLE 3. INFANT MORTALITY, BY PERIOD AND CAUSE. BOLIVIA, 1989-2003

	Neonatal (0 to 28) days)	Post Neonatal (28 days to 1 year	Infant (0 to 1 year)	Post Infant (1 to 4 years)	Total (1-5 years)
Period					
1989–1994	37	39	75	44	116
1993–1998	34	34	67	26	92
1998–2003	27	27	54	23	75
Causes (2003)					
Perinatal Disorders (Birth Trauma/Asphyxiation/ Premature)	NA	NA	NA	NA	16%
Intestinal Infectious Diseases (IID)	NA	NA	NA	NA	36%
Acute Respiratory Infections (ARI)	NA	NA	NA	NA	20%
Vaccine-Preventable Diseases	NA	NA	NA	NA	3%
Other Causes	NA	NA	NA	NA	25%
Geographical Location (2003)					
Urban	21	NA	44	NA	59
Rural	35	NA	67	NA	96
Ethnicity (2003)					
Non-Indigenous	NA	NA	33	NA	45
Indigenous	NA	NA	62	NA	87

Sources: INE, DHS National Survey of Demography and Health 2003 UDAPE, UN, THE ILO Native indigenous populations and Millennium Development Goals 2006
Note: Information not available on deaths caused by birth defects and nutritional deficiencies

1.1.2 Epidemiological Analysis

Bolivia is experiencing an epidemiological transition, with a high incidence of communicable diseases and a gradual increase in chronic diseases prevalence.

General Death Rate

In 2006, the 10 leading causes of death at hospitals were injuries, wounds, poisoning, and other external factors (15.4%); respiratory diseases (13.4%); infectious and parasitic diseases (12.7%); gastrointestinal diseases (11.5%); urogenital diseases (9.1%); skin and subcutaneous cellular diseases (7.6%); pregnancy, childbirth and puerperium (6.5%); spinal disease (6.1%); sensation disorders (5.8%); and circulatory diseases (5.5%).[11]

[11] SNIS-VE. Perfil de morbilidad de enfermedades no transmisibles de La Paz, Cochabamba y Santa Cruz. Octubre 2007.

TABLE 4. MORBIDITY AND RISK FACTORS. BOLIVIA, 1990-2005

Period/Indicator	1990-1994		1995-1999		2000-2005	
	Urban	**Rural**	**Urban**	**Rural**	**Urban**	**Rural**
Fertility Rate in Adolescent Women (15-19 years)[12]	1976: 94.6 Urban: 85.1 Rural: 107.5		1992: 85.9 Urban: 73.7 Rural: 110.7		2001: 95.7 Urban: 80.6 Rural: 132.5	
Annual Rate of Moderate and Severe Malnutrition in Children under 5[13]	**1994** Malnutrition Rate Height/Age 28.3% Weight/Height 4.4% Weight/Age 15.7% Severe Malnutrition Rate Height/Age 10.0% Weight/Height 0.8% Weight/Age 3.7%		**1998** Malnutrition Rate Height/Age 25.5% Weight/Height 1.8% Weight/Age 9.5% Severe Malnutrition Rate Height/Age 8.9% Weight/Height 0.5 Weight/Age 1.7%		**2003** Malnutrition rate Height/Age 26.5% Weight/Height 1.3% Weight/Age 7.5% Severe Malnutrition Rate Height/Age 8.0% Weight/Height 0.3% Weight/Age 1.3%	
Rate of Mothers Exclusively Breast-feeding (first 120 days)[14]		1994 27.3%		1998 35.6%	2003 39.5%	
% of births assisted by skilled health professional[15]	1994: 25%		1995: 27% 1999: 48%		2000: 54% 2005: 62%	
Annual Influenza Infection Rate (ARI)[16]	1994 18.6%	1994 17.4%	1998 24.4%	1998 27.7%	2003 22.8%	2003 21.4%
Confirmed Dengue Cases per Year	NA	NA	1997 54	1999 49	2000 278	2004 682
Confirmed Malaria Cases per Year[17]	1990 19,031	1994 34,915	1995 46,911	1999 50,037	2000 31,468	2004 14,125
Annual TB Rate (per 100,000 People)	1991 164	1994 130	1996 132	1999 113.1	2000 111.4	2004 100.3
Annual Rate of TB with Positive Sputum-Smear Microscopy (per 100,000)[18]	1991 121	1994 95	1996 92	1999 83.1	2000 76.9	2004 67.3
Annual Rate of HIV/AIDS (per 100,000 people)[19]	1990: 1.8		1995: 2.0 1999: 4.0		2000: 5.0 2005: 17.1	
Ratio of HIV/AIDS Cases (Male/Female)	NA	NA	NA	NA	72% of the cases are male	
Annual Incidence of Malignant Lung Tumors (Respiratory or Intrathoracic Organs)	NA	NA	NA	NA	2002 0.7 per 100,000	
Annual Incidence of Malignant Breast Tumors in Women	NA	NA	NA	NA	2002 2.9 per 100,000	
Annual Incidence of Malignant Cervical Tumors	NA	NA	NA	NA	2002 75.5 per 100,000	

Note: No information available on low birth weight prevalence and annual number of confirmed cases of vaccine-preventable diseases.

[12] INE. Bolivia: Niveles, tendencias y diferenciales de la fecundidad. La Paz-Bolivia. Noviembre 2003. Cuadro 2.4. Pág. 37.
[13] INE, DHS. Encuesta Nacional de Demografía y Salud. 1994, 1.998, 2.003.
[14] INE, DHS. Encuesta Nacional de Demografía y Salud. 1994, 1.998, 2.003.
[15] UDAPE. Progreso de los Objetivos de Desarrollo del Milenio asociados al desarrollo humano. Bolivia. 2006.
[16] INE, DHS. Encuesta Nacional de Demografía y Salud. 1994, 1.998, 2.003.
[17] Ministerio de Salud y Previsión Social. Anuario Epidemiológico 2.000. La Paz. Junio 2001.
[18] OPS/OMS. Análisis del Sector Salud. Informe Final de Consultoría. Mayo 2004.
[19] UDAPE. Progreso de los Objetivos de Desarrollo del Milenio. Cuarto Informe. Bolivia 2006.

In 2004, 7,390 suspected cases of dengue were reported in Santa Cruz, Beni, Pando, and Tarija, of which 682 (19%) were confirmed. Those 60 years and older comprised the highest percentage of cases (48.2%), followed by the 15 to 59 year old age group, with 41.3%. The malaria rate decreased from 31,469 cases to 14,125 cases between 2000 and 2004. The annual rate of malaria parasitosis for the same period fell from 8.8 to 4.7 per 1,000 people.

In 2005, 100.3 cases of tuberculosis per 100,000 people were reported. The rate for lung tuberculosis with positive sputum-smear microscopy was 67.3 per 100,000 people in 2004, with a rate of cure of 80.3% in that year. Since 1984, 1,062 AIDS cases and 1,695 HIV cases have been reported. Overall, 72% of reported cases were among males, and more than 40% were among males between the ages of 25 and 34. Reported cases of AIDS reached 19.22 per million during the year 2006.

In 2002, the incidence of malignant cervical tumors was 75.5 per 100,000. In 2002, malignant breast tumor incidence among females was 2.9 per 100,000. Malignant lung tumor (respiratory and intrathoracic organs) incidence was 0.7 per 100,000 in 2002.[20]

In 2003, malnutrition rate was 26.5% based on height/age, 1.3% based on weight/height, and 7.5% based on weight/age. Overall, 67% of children under the age of 3 were anemic and 19% were vitamin A deficient. Exclusive breast-feeding up to 120 days of age has increased from 35.6% (1998) to 39.5% (2003).

Although the percentage of births assisted by trained health professionals increased from 54% in 2000 to 64.6% in 2006, there are still gaps based on ethnicity[21] and poverty level.[22]

- 47.2% of women belonging to an ethnic group were assisted by a physician during childbirth, compared to 72.7% who are not from an ethnic group.
- 47.8% of poor women and 82.0% of non-poor women were assisted by a physician during childbirth.

[20] Información de morbilidad de los tumores, por grandes grupos de cáncer y por departamentos gestión 2.002. SNIS.
[21] Ethnicity: a sense of belonging or identification by household members 12 years of age or older with any of the country's native or indigenous peoples. Thirty-six ethnicities have been identified, the main ones being: Quechua, Aymara, Guaranie, Afro-Bolivian, etc. Whites or mestizos are categorized as NON-ETHNIC.
[22] MSD.OPS-OMS. Enfoque de género en servicios de atención primaria de salud. Diagnóstico cuantitativo en establecimientos de salud. Mimeo.

1.1.3 Millennium Development Goals (MDG)

Within the framework of the Millennium Summit, Bolivia made a commitment to work on the eight areas essential to the achievement of its economic and social development objectives. Bolivia is now in the process of implementing the National Development Plan.

TABLE 5. MILLENNIUM DEVELOPMENT GOALS PROGRESS. BOLIVIA, 2006[23]

MDG	Institution(s) Responsible	Standardized Databases	Current Information	Identification of Actions
1. Eradicate extreme poverty and hunger	Ministry of Development Planning	Reduce extreme poverty Reduce malnutrition among children under 3	2005: 38.2% Extreme Poverty 2003: 24.2% Malnutrition Severe 7.6% (Height/Age Indicator)	The National Development Plan supports micro enterprises and microfinance, rural development, and infrastructure Universal Insurance for Mothers and Children (SUMI) distributes full doses of micronutrients and iron syrup to children 6 months to 2 years On August 2nd, 2006, the Law for the Protection of Maternal Lactation was enacted Program Zero Malnutrition Inter-sectoral measures to improve nutrition
2. Achieve universal elementary education	Ministry of Education and Cultures	Universal primary school coverage Percentage of population having finished 8th year of primary school Illiteracy rate for population between 15 and 44 years of age	2005: 94% 2005: 77.8% 2001: 13.3%	The National Development Plan aims to improve education through a decentralized and productive approach National Literacy Program “Yes I Can” aims to eliminate illiteracy within three years The National Program for the Professionalization of Substitute Teachers The National Program for New Information and Communications Technology Municipal Education Programs (PROMES) for rural areas The Access and Stay in School Program for girls in rural areas

[23] UDAPE. Progreso de los Objetivos de Desarrollo del Milenio. Cuarto Informe. Bolivia 2006.

3. Promote gender equality and empower women	Ministry of Education and Cultures	Gender gap in rate of those finishing 8th year of primary school? Gender gap in rate of those finishing 4th year of secondary school Gender gap in illiteracy rate of those between 15 and 44 years of age Percentage of women with paid employment in the non-agricultural sector	2004: 2.8% 2005: 0.3% 2004: 0.8% 93.8% 31.5%	Vice-Ministry of Gender and Generational Affairs proposes "Reduction of Socio-Economic, Political, and Cultural Gaps based on Gender, Generation, and Different Capabilities" Policy The Access and Stay in School Program for girls in rural areas The National Development Plan provides for projects i) to create jobs for women, youth, seniors, and people with different capabilities and ii) to train 3,000 male and female leaders
4. Reduce child mortality	Ministry of Health and Sports	Infant mortality rate per 1,000 live births Pentavalent vaccine coverage in children under 1 year of age	2003: 54 per 1,000 live births Urban 44 Rural 67 2005: 85%	Universal Insurance for Mothers and Children Regularly Scheduled Extended Program on Immunizations
5. Improve maternal health	Ministry of Health and Sports	Maternal death rate per 100,000 live births Hospital births	2003: 229 2005: 63%	Universal Insurance for Mothers and Children
6. Combat HIV/AIDS, malaria, and other diseases	Ministry of Health and Sports	Incidence of AIDS cases per million Percentage of municipalities with a Chagas' disease infestation rate greater than 3% Annual rate of malaria parasitosis (API) per 1,000 people Percentage of tuberculosis cases cured of all reported	2005: 17.1 2005:19% 2005: 5.5% 1995: 52.6% 2004: 80.3%	National STI/HIV/AIDS Program National Chagas' Disease Control Program National Program for Monitoring and Controlloing Malaria National Tuberculosis Control Program
7. Ensure environmental sustainability		Percentage of forest-covered land Percentage of national protected areas Chlorofluorocarbon (CFC) consumption MT ODP % national population with access to drinking water National sanitation coverage (% population)	47.5% 17.2 million hectares NA 71.7% 43.5%	The National Development Plan promotes productive, sustainable development in the forestry sector The National Protected Areas Service (SERNAP) is in charge of the conservation of 22 national protected areas National Plan "Water for All" 10-Year Basic Sanitation Plan

8. Develop a global partnership for development	NA	Further develop a commercial and financial system that is based on policies and that is predictable and non-discriminatory Serve the special needs of least developed countries Fully address the debt problems of developing countries using national and international measures to ensure that the debt is sustainable in the long-term In collaboration with developing countries, create and implement strategies that provide youth with decent and productive work In cooperation with the pharmaceutical industry, provide access to essential drugs	NA	NA

Source: UDAPE Progress of Millennium Development Goals Fourth Report Bolivia 2006.

1.2 Health Determinants

1.2.1 Political Determinants

Bolivia participates in the following subregional initiatives:

- Through the TCP-ALBA, 700 health care professionals, including physicians, nurses, and other personnel, are available to support health care activities.
- By July 2007, through the Cuban program "Operation Miracle," 100,000 patients received eye surgery. Treatments are available in 12 ophthalmological centers that have 266 physicians, surgeons, and health technicians.
- Bolivia participates in the Meeting of Andean Health Ministers (REMSAA), a forum for political decision-making to review and establish agreements, through resolutions, in an effort to promote regional policies of mutual interest and maximize common benefits.
- Bolivia is part of the Andean Community of Nations (CAN) and an associate member of MERCOSUR (Southern Common Market), both of which seek to promote regional integration.

The need for State reform was addressed during the Constitutional Assembly. The main elements of State transformation are the definition of a multinational state, with a state,

private, and community economy, and the implementation of departmental, municipal, and indigenous autonomy. Within that framework, the health sector developed a series of pre-constitutional health assemblies in an effort to develop a proposal. The proposal, presented at the Constitutional Assembly, includes: a) the right to health and universal access, b) intersectoralism, c) interculturalism, d) social participation and mobilization, e) decentralization and autonomy, and f) health financing.

The National Development Plan[24] aims to be a starting point in the establishment of a new society and a pluralistic community-oriented State. It proposes a State that promotes and leads development, and distributes wealth and opportunities. In some cases, this State is a producer and in others, a major partner that encourages the peaceful coexistence of the private and community economies. The proposed strategies are:

- Economic Strategy: **Producer Bolivia**, based on the production sectors and those that support it.
- Partner-Community Strategy: **Dignified Bolivia**, which includes the sectors that distribute social services and means and factors of production.
- International Relations Strategy: **Sovereign Bolivia**, which includes economic, political, and cultural relations and the sectors linked to trade and the exchange of goods, services, and capital.
- Social Power Strategy: **Democratic Bolivia**, which includes the sectors that promote territorial social power.

The country's macroeconomic stability and new state institutional management will help in the implementation of these strategies. The process is led by the regions, with the territory and its components–nature, water, human beings—being the essential element of a culture's worldview. Thus, innovation, social, cultural and gender equity, and appropriate environmental management cut across all of the strategies.

The Ministry of Health and Sports (MSD), by delegation of the President of the Republic, chairs the Inter-Institutional Council for Safe Motherhood, the National Nutrition Board, and the Superior Council of Sports. The Zero Malnutrition Project proposes broad intersectoral actions, in which the MSD becomes the Technical Secretariat of the National Nutrition

[24] REPÚBLICA DE BOLIVIA. Plan Nacional de Desarrollo. "Bolivia Digna, Soberana, Productiva y Democrática para Vivir Bien. 2006-2010.

Board (CONAN), chaired by the President of the Republic and comprised of:

- Ministers of Presidency; Development Planning; Treasury; Production and Microenterprise; Rural, Livestock, and Environmental Development; Education and Cultures; Health and Sports; Justice; and Water Ministers
- Civil society representatives from the CONAN; Federation of Municipal Associations (FAM); Association of Bolivian Councilwomen (ACOBOL); Water Coordinator from the National Water Board; the Bolivian Union (COB); Single Confederate Union of Rural Workers of Bolivia (CSUTCB); Bartolina Sisa National Confederation of Rural Bolivian Women; National Council of Ayllus and Marks of the Qullasuyo (CONAMAQ); Confederation of Bolivian Private Entrepreneurs; Chamber of Commerce; Chamber of Industry; Liaison Committee for Small Producer Organizations; Confederation of Bolivian Indigenous Peoples (CIDOB); Union Confederation of Bolivian Colonizers; National Confederation of Neighborhood Councils; Federation of Associations of Bolivian Monitoring Committees; Federation of Professionals; Medical Association; Board of Nutritionists; Board of Agronomists; and public and private universities. Each one of these organizations is to appoint one representative.

1.2.2 Economic Determinants

The economy has been stable at a macro level during fiscal year 2006:[25]

- A surplus of 5.9% of GDP (4.971 billion bolivianos), unseen in the Bolivian economy for the last 40 years.
- A $650 million (7% of GDP) increase in income from taxes imposed directly on hydrocarbons.
- The national general budget increased from 54 million bolivianos to 71 million in 2006 and to 77 million bolivianos in 2007.
- Government investment reached 629 million in 2005 and 762 million in 2006 and was scheduled to reach 1.104 billion bolivianos in 2007.
- Debt has been reduced to $3.2 billion (30.7% of GDP).
- Remittances .have been estimated at $500 million (5.6% of GDP).

[25] UDAPE. Economía y Política Económica 2006.

TABLE 6. SOME ECONOMIC INDICATORS. BOLIVIA. 1980-2006

Indicator	Time Period		
Per Capita GDP in US$, in Constant Prices According to Base Year[26]	1980: 570	1997: 970	2005: 987
Per Capita Government Spending Annual Per Capita Product (US$)	NA	NA	2002: 884
Open unemployment rate	NA	2001: 8.5	2002: 8.7%
Government Spending on Health as Percentage of GDP	NA	1998: 4.93%	2000: 5.77%
Annual Inflation Rate	1980-1989: 392	1985-1994: 20	2005: 4.9%
Remittances as % of GDP ([27])	NA	2000: 1.1%	2006: 5.6%

Source INE. Economic Indicators.www.ine.gov.bo.
Andean Community. Remittance statistics in the countries of the Andean Community. 2000-2006. October 2007.

The economically active population (EAP)[28] includes 3,131,183 people, 62% of which live in urban areas and 60.07% are male. The Dependency Index[29] is 1.73. The Economic Burden Index[30] is 0.92. Between 2001 and 2002, the open unemployment rate grew from 8.5% to 8.7% in urban areas.

TABLE 7. POVERTY LEVELS. BOLIVIA, 2005

Area	POVERTY	
	POOR	**EXTREME POVERTY**
Total	64.60%	36.77%
Urban	53.94%	25.71%
Rural	81.99%	54.78%
Ethnicity		
Indigenous	70.2%	49.2%
Afro-Descendent	NA	NA
Other (Non-Indigenous)	56.3%	24.1%
Gender		
Male	64.5%	NA
Female	64.7%	NA

Source UDAPE, Indicators selected for the follow-up of the achievement of the Objectives of Development of the Millennium (ODM's), La Paz, April 2005.

[26] INE. Indicadores Económicos. www.ine.gov.bo.
[27] Comunidad Andina. Estadísticas de remesas en los países de la Comunidad Andina. 2000-2006. Octubre 2007.
[28] Economically Active Population (EAP) includes all people 10 years of age or older who are working or actively looking for work. It is used as a synonym for Work Force or Labor Force.
[29] Dependency Index: shows the number of people not working (population not of work age, unemployed, or inactive) for every person that works. It is calculated by subtracting the active population from the entire population and dividing that number by the active population.
[30] Economic Burden Index: shows the number of working-age people that is not working or looking for work in relation to the work force. It is calculated by dividing the economically inactive population by the economically active population.

Overall, 64.6% of Bolivia's population is poor according to the poverty line and 36.77% live in extreme poverty. Seventy point two percent of the indigenous population and 56.3% of the non-indigenous are poor. There are no significant gender differences with regards to the incidence of poverty.

TABLE 8 EMPLOYMENT BY GENDER AND POVERTY LEVEL, 2002

SECTOR/OCCUPATION	POVERTY LEVEL	
	POOR	NON-POOR
Formal	**52.7%**	**47.3%**
Informal	64.2%	35.8%
Men		
Formal	56.6%	43.4%
Informal	67.3%	32.7%
Women		
Formal	44.9%	55.1%
Informal	58.9%	41.1%

Source: Created by Dr. Colque, special processing of the database of the MECOVI Survey 2002.

Overall, 64.2% of the informally employed population lives in poverty, while 52.7% of those with formal employment are poor. Data collected in 2002 reveals that 67.3% of men and 58.9% of women informally employed are poor.

1.2.3 Social Determinants

Bolivia is ranked 104th out of 162 countries, with medium human development according to the United Nations Development Program (UNDP) and its Human Development Index (HDI). Bolivia's HDI increased steadily between 1975 and 1999, from 0.512 to 0.648, which represents a 28% reduction in the human development lag in a period of 24 years.[31]

In 2001, 62.27% of Bolivian homes reported that they have access to drinking water through a plumbing system, 83% in urban areas and 29.63% in rural areas. Overall, 63.28% of households have sewage services. A national average estimates about 13% of the population is illiterate with considerable gender differences. From the total population, 6.94% of men and 19.35% of women are illiterate.[32]

[31] Informe de Desarrollo Humano en Bolivia 2002.
[32] INE. Resultados Censo de Población y Vivienda.

TABLE 9. SOME SOCIAL INDICATORS. BOLIVIA, 1990-2005

	HDI Ranking	Population with Access to Drinking Water (%)	Population with Sewage Services (%)	Illiterate Population (%)	Crude School Attendance Rate	20% Highest and 20% Lowest Income Earned	Domestic Violence Prevalence
Period							
1990-1999 (census 1992)		53.90%	42.82%	20.01%	72.32%	12 (1998)	NA
2000-2005 (census 2001)	104	62.27%	63.28%	2001: 13.28% 2005: 5.0%	79.71%	NA	2003: Psychological Violence Women 54% Men 39%
Gender (2001)							
Men	NA			6.94%	81.05%	NA	54%
Women	NA			19.35%	78.32%	NA	39%
Total (2001)	NA	62.27%	63.28%	13.28%	79.71%	NA	NA
Geographical Area (2001)							
Urban		82.93%	89.49%	6.44%	82.68%	NA	NA
Rural		29.63%	24.72%	25.77%	74.73%	NA	NA
Ethnicity (2001)							
Indigenous Population		55.4%	53.7%	8.7%	NA	NA	NA
Non-Indigenous		80.1%	61.3%	2.1%	NA	NA	NA

Source UDAPE. Progress of Millennium Development Goals. Fourth Report. Bolivia 2006. INE. Distribution of the Population. National Census of Population and Housing 2001. INE. Poverty map. National Census of Population and Housing 2001. PAHO. UNFPA. UNIFEM. Gender, health, and development in the Americas. Basic indicators. 2005. INE. Bolivia. National Survey of Demography and Health. ENASA. 2003.
Information on dropout, child labor, and depression rates not available.

1.2.4 Environmental Determinants

The Ministry of Rural, Agricultural, and Environmental Development, through the Vice-Ministry of Biodiversity, Forest Resources, and Environment regulates environmental issues, according to Law 3351 (Organic Law of the Executive Branch - LOPE) enacted on February 21, 2006. The country does not monitor environmental indicators that may affect the population's health. The Ministry of Development Planning regulates and oversees air pollution problems such as dangerous gas emissions. No legal mechanisms exist to regulate and oversee sewage and waste disposal problems. The Bolivian Institute of Science and Nuclear Technology (IBTEN) has legal mechanisms to regulate and oversee problems related to the elimination of toxic and radioactive substances. The Basic Services

Administration regulates and oversees water pollution problems. The Water Ministry guarantees access to drinking water.

2. HEALTH SYSTEM FUNCTIONS

2.1 Steering Role

2.1.1 Mapping of the National Health Authority

The National Health System is comprised of agencies, institutions, and public and private organizations that provide health services and are regulated by the Ministry of Health and Sports (Supreme Decree 26875 established December 21, 2002). The system includes:

- The public subsector, headed by the Ministry of Health and Sports, responsible for regulating and managing national policies and strategies. At the regional level, through the Departmental Health Services (SEDES), prefectures are responsible for managing human resources. At the local level, municipal governments manage health facilities through Local Health Directories (DILOS).
- The social security subsector serves organized, salaried workers in the areas of disease, maternity, pediatrics, and occupational hazards. This subsector is comprised of nine managing bodies (Health Funds) and delegate insurance companies and is overseen by the National Health Insurance Institute (INASES).
- The private subsector includes insurance companies, prepaid medicine companies, and nongovernmental organizations (NGOs).
- The traditional medicine subsector: on March 8, 2006, the Vice-Ministry of Traditional Medicine and Interculturalism was created to improve access to health programs and projects among the indigenous, native, rural, and Afro-Bolivian populations. This subsector utilizes a network of basic health facilities adapted to and focused on interculturalism in order to provide equitable health care as part of the basic right to a decent life. It serves approximately 10% of the population, especially in rural areas. It includes traditional healers, Kallawayas, and others. The main Native Indigenous Organizations that comprise this subsector are: CONAMAQ, in the Manco Kapac provinces; Omasuyos, Pacajes, and Ingavi from the La Paz Department; and Challapata, Jacha Carangas, Jatun Killacas, and Soras in the Oruro Department; the Council of Ayllus Native of

Potosí and the Council of Ayllus of the Qullasuyu in the Department of Potosí; and Kirkiawi, Tapacró, Arque, the Cochabamba Council of Ayllus in the Cochabamba Department.

2.1.2 Conduct/Lead

The MSD is the steering agency in the health sector and does not share that responsibility with any other actor. It coordinates intersectoral actions with other ministries, as well as with professional associations, NGOs, and multilateral cooperation agencies. Each administration has proposed some type of National Health Policy document. The following table lists some of the main proposals:

TABLE 10. HEALTH POLICY BY ADMINISTRATION. BOLIVIA, 1938–2006

PERIOD	HEALTH POLICY	RESULTS
1938-1951	1938 State Political Constitution recognizes health protection as state responsibility	August 31, 1938, the Ministry of Sanitation and Health created, Social Security Code
1952-1969	Constitution of 1967 recognizes individual and collective right to health	Ministry of Public Health created
1970-1981	National Health Plan 1971-1975, Operational Action Plan 1972, National Plan 1973–1978, and National Health Plan 1977–1980	1978, Health Code approved
1982–1985	Fast action development programs for mothers and children, workers, and environmental cleanup are established to increase institutional coverage by regionalizing service programs	Peoples' Health Leaders Strategy, massive citizen turnout in vaccination campaigns, Comprehensive Health Areas Activities Plan (PIAAS), strengthening of vertical programs
1985-1989	Comprehensive Health Plan (1985-1989), Immediate Action Plan (1986), Three-Year Health Plan (1987-1989)	Model of regionalization May 1, 1986, 16 centers opened in Free Perinatal Care Program
1989-1993	1989, National Child Development and Maternal Health Survival Plan created (1989–1993)	Sanitary Model, health districts as expression of Local Health Systems (SILOS), program launched
1993-1997	"Change for All" General Economic and Social Development Plan, Human Development Ministry, by which National Health Secretariat is created	Law of Popular Participation, Law of Decentralization, shared management model with popular participation, Mother and Child Health Insurance
1997–2002	Strategic Health Plan created	Basic health coverage enforced, epidemiological shield
2003	Ministry of Health and Sports created	Universal Insurance for Mothers and Children Law passed
2006	Foundation for Strategic Health Plan 2006-2010	Proposes health paradigm shift from aid model to model based on health determinants, promotion, and prevention

Source: Created by Dr. Calque

As set forth in the Organic Law of the Executive Branch (LOPE, 2006), the functions of the MSD are the following:

- Formulate, execute, and evaluate health programs' implementation within the framework of the country's development policies
- Regulate, plan, oversee, and manage the National Health System
- Monitor compliance with public health standards
- Guarantee the health of the population through promotion, prevention, treatment, and rehabilitation
- Lead, regulate, and manage health matters, especially the health system
- Formulate, develop, oversee, and evaluate the implementation of the health care and management model
- Promote traditional medicine in coordination with Western medicine, within a framework of interculturalism and cultural adaptation of services
- Formulate nutrition and food safety policies, strategies, and plans within the framework of national sovereignty
- Formulate policies, strategies, and plans for preventing disability and rehabilitating and reintegrating disabled persons
- Formulate policies, strategies, and plans for preventing, rehabilitating, and reintegrating people addicted to legal and illegal psychoactive substances
- Promote the creation of national, departmental, municipal, and community agencies for social control and revision of preventive health policies and strategies
- Bring health policies, priorities, and standards established by the national government in line with the international community
- Regulate the agencies that provide education and training in the health sector, with the exception of public universities, in coordination with the Ministry of Education and Cultures
- Formulate policies and implement programs that promote physical activity, sports, and training, competitive, professional, and recreational activities in order to promote physical and mental health
- Create and implement programs that provide infrastructure and equipment for sports and the development of a national culture of physical activity.

These functions are set forth in the 2006–2010 Strategic Health Plan and in the vision of the MSD:

> In 2010, a unified health system will be fully implemented. It will provide universal access that is respectful of native cultures and enriched by traditional medicine. It will be inclusive, equitable, population-based, of high quality, and decentralized, managed and administered by the Ministry of Health and Sports. It will take action on health determinants, with the participation of a healthy population, a population with a good life, a population that is committed to physical activity and sports and that is organized and motivated by the full exercise of its right to health.[33]

The policies and strategies proposed in order to meet these objectives include:

- **A Single, Intercultural, Community Health System** with universal access. The Family, Community, and Intercultural Health Model is to be implemented as well as quality management focused on gender, generational issues, and coverage expansion.
- **Steering role** to restore the management capacity to ensure financial sustainability of the sector and provide the system with a legal, regulatory, administrative, and financial framework independent of external conditions. The proposed programs and/or projects include: Universal Health Insurance, the strengthening of management capacity, and research and technology management.
- **Social Mobilization** to promote citizens that are active, participatory, and responsible for their own health matters through the creation of national, departmental, and municipal health councils. The social management, mobilization and control program will be implemented.
- **Health promotion** to restore State responsibility for quality of life and a culture of comprehensive health, in an effort to coordinate between the health sector and other State sectors regarding factors that determine social health exclusion. The Health Promotion, Health-Sport, and Healthy Municipalities projects will be implemented.
- **Solidarity** to develop a national partnership to eradicate malnutrition and violence and include the most vulnerable groups living in extreme poverty with the goal to eliminate social exclusion in health.

[33] Ministerio de Salud y Deportes. Bases para el Plan Estratégico de Salud 2006-2010. Bolivia. 2006.

There are recent and periodic publications with health situation analysis. The National Health Information System (SNIS) provides information on services offered and morbidity subject to intervention and surveillance. The information is organized by Departmental Health Service, health network, municipality, health facility, subsector, institution, level of care, year, and month.

TABLE 11. ACCESS TO HEALTH SERVICES. BOLIVIA, 2002

Organization of Information	Access	
Time Period	**Men**	**Women**
1990-1994	NA	NA
1995-1999	NA	NA
2000-2005	53.81%	54.65%
Population group		
Children under 5	57.8%	59.9%
People 5-17	44.6%	44.8%
People 17-45	51.4%	53.6%
People 45-65	62.0%	57.01%
People 65 or Older	63.9%	64.6%
Geographical area		
Urban	58.25%	62.12%
Rural	47.98%	44.92%
Ethnicity		
Indigenous	51.2%	50.4%
Non-Indigenous	60.7%	62.8%
Economic Status		
Population Living in Extreme Poverty	NA	NA
Poor	48.2%	46.6%
Non-Poor	65.1%	68.6%
Level of Care		
First Tier	41.42%	43.63%
Second Tier	58.58%	56.37%

Access to health services is understood as the probability of obtaining health care when it is needed.
Source: Special processing of the database MECOVI (SURVEY OF IMPROVEMENT OF LIVING CONAITIONS. 2002. mvc02-Individuos, obtained at:www.ine.gov.bo

International cooperation resources include:

TABLE 12. INTERNATIONAL FINANCIAL RESOURCES (IN BOLIVIANOS)

Period/Resources	1990-1994	1995-1999	2000-2005
Reimbursable	NA	NA	211,613,728
Non-reimbursable	NA	NA	84,439,305
TOTAL	NA	NA	296,053,033

Source: PAHO/WHO. Analysis of the Health Sector. 2003.

International cooperation efforts are carried out according to the following areas of action:

Agency	Area of Cooperation	Project/Program	Area of Action
MULTILATERAL AGENCIES			
United Nations Population Fund (UNFPA)	▪ Strengthen institutional capacity of Sexual and Reproductive Health Program, Improve quality of sexual and reproductive health services	Sexual and Reproductive Health Program	National
European Commission Delegation	▪ Strengthening of institutions, infrastructure, and equipment	Basic Health and Hygiene Program, PROHISABA	Tarija and Potosí
Inter-American Development Bank	▪ Vector control of Chagas' disease and treatment for children under 5 ▪ Blood quality control at blood banks and transfusion centers ▪ Epidemiological monitoring system and network of laboratories	National Chagas' Disease Program Expanded Program on Immunization National Blood Banks Program - SINAVIS/INLASA	Central Bolivia and at national level
Pan American Health Organization and World Health Organization (PAHO/WHO)	▪ Development of health systems, support for health policy development, environmental health ▪ Essential drugs, health status and trends analysis ▪ Disaster preparedness and response ▪ Dissemination of technical scientific information, technical cooperation among countries	Ministry of Health and Sports	Central Bolivia and at national level
World Food Program (WFP)	▪ Nutrition; national micronutrient program ▪ Food safety support, human capital development among preschool-aged boys and girls through nutrition, education, and training	National Nutrition Program	La Paz, Cochabamba, Oruro, Chuquisaca, Potosí, and Tarija
United Nations Children's Fund (UNICEF)	▪ Defining policies focused on health and nutrition among children, adolescents, and mothers ▪ Institutional and community training, IEC, mass communication, essential inputs, decentralized planning	National Nutrition Program -HIV/ AIDS	Central Bolivia and at a national level

BILATERAL AGENCIES			
Belgium	▪ Strengthening institutional capacity ▪ Blood banks ▪ Tropical disease research ▪ Rationed supply system for essential drugs, integrated approach to development	SILOS Project Ichilo-Sara Rural Development Project (PSRIS) Tropical Medicine University Center (CUMETROP) – National Center for Tropical Disease (CENETROP) El Alto Hospital Project, Chayanta Fellowship Project	Santa Cruz, Cochabamba, Chuquisaca, and Potosí departments; El Alto municipality
Spanish Agency for International Cooperation (AECI)	▪ Improving mother-child health ▪ Human resources education	Human Resources Management and Training Unit-MSD National Health Information System (SNIS)	La Paz, Potosí, Chuquisaca, and Chiquitania
Japanese Cooperation (JICA)	▪ Strengthening health networks through management, biomedical equipment maintenance, and quality of care ▪ Human resources training support ▪ Support in developing primary health care strategies	Ministry of Health and Sports Departmental Health Services	Santa Cruz, La Paz, Cochabamba, and Beni
U.S. Agency for International Development (USAID)	▪ Sexual and reproductive health ▪ TS/HIV/AIDS ▪ Children's health ▪ Infectious disease (malaria, tuberculosis, leishmaniasis)	Comprehensive Health Coordination Program (PROCOSI) PROSALUD Center for Research, Education, and Services CIES Commercial Cooperation Program (PCC)	Central Bolivia and at a national level

	▪ Child survival ▪ Sexual and reproductive health ▪ STI/HIV/AIDS ▪ Infectious diseases, support for National Health Information System ▪ Support for community participation strategies	Comprehensive Health Program (PROSIN) Departmental Health Services Sentinel Program National Sexual and Reproductive Health Program National HIV/ AIDS Program	La Paz, Beni, Pando, Chuquisaca, Potosí, Tarija, and Cochabamba
French Cooperation (IRD)	▪ Research on congenital transmission of Chagas' disease ▪ Research on effects of malaria during pregnancy ▪ Vector population study and control	National Health Laboratory Institute (INLASA)	Yacuiba, Bermejo, Carapar, and Guaramerin municipalities; La Paz and Beni departments

2.1.3 Regulation

Pursuant to the LOPE Law, Law 3351 from February 21, 2006, the Executive Branch legal provisions hierarchy is as follows: Supreme Decree and Presidential Decree, Supreme Resolution, Multi-Ministerial Resolution, Bi-Ministerial Resolution, Ministerial Resolution, and Administrative Resolution. At a departmental level, prefectures issue resolutions. The current regulatory framework is comprised of:

- **HEALTH CODE.** Law 15629 from July 18, 1978,[34] appoints the Ministry of Social Welfare and Public Health to act as the "Health Authority," giving the Ministry the responsibility for "defining national health policy and regulating, planning, overseeing, and coordinating all activities throughout national territory by public and private institutions, without exception." Furthermore, it made the "legal enforcement of health maintenance, improvement, and restoration among the population" one of its functions.
- **LAW 1551 OF POPULAR PARTICIPATION (1994)**[35] divides the country into municipalities and redistributes economic resources proportionally to the number of inhabitants. The law legalized the Territorial Grassroots Organizations

[34] Pantoja Ruiz M. Actualización complementación del Código de Salud de la República de Bolivia. Informe de Consultaría. 2001.
[35] Ministerio de Desarrollo Humano. 3 leyes para el cambio. 1997

(OTB),[36] represented by the Monitoring Committees, whose duties include oversight, participatory planning, and implementation of actions depending on the individual needs of each region. The property rights to public health services infrastructure, along with maintenance duties, are the responsibility of the municipal governments.

- **LAW 1654 OF ADMINISTRATIVE DECENTRALIZATION (1994)** transfers technical and administrative duties to departments. Prefectures have the following duties in the health sector: a) formulate and carry out departmental plans for economic and social development, in accordance with National Planning System standards and in coordination with municipal governments; b) administer, monitor, and oversee, by order of the National Government, the human resources and budget allocated for personal education, health, and social welfare services within the framework of specific policies and standards.
- **SOCIAL SECURITY CODE.** Approved on December 14, 1956, the Social Security Code is based on the principles of solidarity, universality, economy, and managerial and legislative unity. It serves workers through the "Labor Thesis" that is, "The protection of the workers who are subject to a schedule and, above all, depend on wages."
- **MUNICIPALITIES LAW 2028 (1999).**[37] This law states that municipal governments must absorb part of the cost of health care services for children, women, seniors, the disabled, and the general population, using public and private mechanisms to provide coverage and assume collective risks. Furthermore, it must provide and maintain health facilities' infrastructure and equipment, and supply and monitor the use of drugs and other supplies.

2.1.4 Development of Essential Public Health Functions (EPHF)

In 2001, health authorities measured the performance of the eleven EPHF.[38] In general, performance of the following EPHF ranked between average and excellent:

- EPHF 1: Monitoring, evaluation, and analysis of health status;
- EPHF 2: Surveillance, research, and control of the risks and threats to public health;

[36] Como ser comunidades indígenas, campesinas y originarias y juntas vecinales.
[37] Desarrollo democrático participación ciudadana. Marco Legal para la gestión municipal participativa en salud. Vol. 4 Tomo I. 1ª. Edición. 2002.
[38] OPS/OMS, CDC, CLAISS: Instrumento para la Medición del Desempeño de las Funciones Esenciales de Salud Pública, mayo 2001.

- EPHF 3: Health promotion;
- EPHF 4: Social participation in health;
- EPHF 5: Development of policies and institutional capacity for public health planning and management;
- EPHF 6: Strengthening of public health regulation and enforcement capacity;
- EPHF 8: Human resources development and training in public health;

Performance of the following functions ranked between average and poor:

- EPHF 7: Evaluation and promotion of equitable access to necessary health services;
- EPHF 9: Quality assurance and improvement in personal and population-based health services;
- EPHF 10: Research in public health;
- EPHF 11: Reduction of the impact of emergencies and disasters on health.

2.1.5 Orientation of Financing

Currently, the goal of the MSD is to recover the sovereignty and the steering of the system, leading an intersectoral approach to health, and to develop greater management capacity to ensure the financial sustainability of the sector. In response, the MSD has proposed the Law of Universal Health Insurance, which proposes the creation of the Single National Solidarity Fund that would equitably redistribute resources from the Direct Tax on Hydrocarbons (IDH). Financing for the insurance is as follows: 10% from municipal taxes; 14% from the total IDH collected by prefectures; and the National Solidarity Fund. The last study of national health accounts was conducted in 2002.

2.1.6 Guarantee of Insurance

The Ministry of Health and Sports informs the population about the guaranteed benefit plan, which provides the right to access to health goods and services. Information about the services offered under the Universal Insurance for Mothers and Children is disseminated through mass written media, radio, and television. Law 3131, Law of the Medical Profession, requires the implementation of quality control programs and sets forth the rights and duties of patients.

In the event of problems, the People's Advocate, created by Law 1818 on December 20, 2007, is responsible for channeling claims and processing complaints. Furthermore, the National Quality Control Program (PRONACS) is under implementation. It will be responsible for applying standards for accreditation and quality control.

The INASES regulates and oversees the managing agencies responsible for providing short-term health services (National Health Funds). Departmental Health Services are in charge of public and private services. Standards of care for all specialties are under development.

2.1.7 Harmonization of Health Services Provision

The new Family, Community, and Intercultural Health model guides the National Sectoral Health Policy in meeting the needs and demands of the individual, the family, and the community. It establishes:

- **LEVEL OF JOINT MANAGEMENT -** promotes joint decision-making among health professionals, the community, and the municipal government in health management matters; establishes the following: local health authority, local health committee, social network, municipal social council, departmental social council, national social council, and National Health Assembly.
- **CARE MODEL -** organized and managed to provide comprehensive and intercultural health services with an emphasis not on disease, but on the individual's stage in the life cycle, diet, spirituality, and world view in terms of the socioeconomic, cultural, and geographical origin of the individual, the family, and the community. The principles of care in health facilities are universality, solidarity, equity, comprehensiveness, continuity, respect and acceptance of cultural health practices, consideration of the individual's decisions and desires, fulfillment of commitments to the community, and recognition of the family in its environment as the core for interventions.

2.2 Financing and Assurance

2.2.1 Financing

The health system is fragmented and direct payments (out-of-pocket) are the predominant financing mechanism. Therefore, short-term assurance mechanisms only benefit middle class

wage earners. Higher and lower (mostly informal workers) income groups seek care through private and informal or traditional services, respectively.

TABLE 12. HEALTH EXPENDITURE INDICATORS BY SUBSECTOR. BOLIVIA 1995-2002

INDICATOR	1995	1996	1997	1998	1999	2000	2001	2002
National Health Expenditure (US$ thousands)	**293,460**	**342,962**	**373,246**	**421,655**	**512,405**	**509,467**	**513,055**	**541,546**
- Public Health Expenditure	81,345	83,554	82,756	97,430	116,604	116,389	105,765	113,416
- Social Security Health Expenditure	109,841	148,450	155,656	179,089	195,318	202,643	210,586	222,410
- Private Health Expenditure	102,274	110,958	134,835	145,136	200,482	190,435	196,705	205,720
GDP (US$ thousands) per year	6,706,710	7,385,288	7,921,075	8,489,662	8,269,521	8,377,353	8,011,335	7,790,132
Exchange Rate	4.8064	5.0826	5.2574	5.5152	5.8233	6.1933	6.6169	7.1800
Population	6,987,201	7,186,898	7,392,302	7,603,576	7,820,889	8,044,413	8,624,268	8,823,743
National Health Expenditure as % of GDP	**4.38%**	**4.64%**	**4.71%**	**4.97%**	**6.20%**	**6.08%**	**6.40%**	**6.95%**
- Public Health Expenditure as % of GDP	1.21%	1.13%	1.04%	1.15%	1.41%	1.39%	1.32%	1.46%
- Social Security Health Expenditure as % of GDP	1.64%	2.01%	1.97%	2.11%	2.36%	2.42%	2.63%	2.86%
- Private Health Expenditure as % of GDP	1.52%	1.50%	1.70%	1.71%	2.42%	2.27%	2.46%	2.64%
National Health Expenditure per Capita (US$)	**42.00**	**47.72**	**50.49**	**55.45**	**65.52**	**63.33**	**59.49**	**61.37**

Source: Estudio CNFGS. a/ Preliminar gestiones 2001 y 2002. * GDP, Exchange Rate, and Population have been adjusted according to current data fuentes de información, INE y UDAPE.

National Health Expenditure as a % of GDP increased from 4.38% in 1995 to 6.95% in 2002. National per capita health expenditure increased from $US42 in 1995 to $US 61.37 in 2002.

TABLE 13. MINISTRY OF HEALTH AND SPORTS FINANCING. BOLIVIA, 1998 - 2004 (in US thousands)

SOURCE	1998	1999	2000	2001	2002	2003	2004
National General Treasury	7,182	6,999	5,761	8,146	8,534	9,079	11,977
Internal Resources	413	1,315	1,946	1,308	3,131	2,335	1,724
Insurance Fund Transfers	0	1,615	11,708	9,016	6,584	5,999	5,027
Credit	5,585	4,931	9,548	11,836	8,841	12,075	11,724
Donations	4,445	9,011	9,552	8,682	7,162	9,487	12,193
T OTAL	17,625	23,871	38,515	38,988	34,252	38,975	42,645

Source: PAHO/WHO. Health Sector Analysis. 2003

2.2.2 Assurance

Two systems provide health services: social security and public insurance. Social Security underwent a significant change with the implementation of the “Retirement Law,” Law 1732 established November 1996, which separates the administration into short and long-term divisions. Short-term health insurance is administered by the different health funds, and, in 2006, covered 2,796,842 beneficiaries, or 29.1% of population. The insurance is financed with 10% of all wages subject to tax deduction, which is the exclusive responsibility of the employer. Social Security is administered in the health sector by the Ministry of Health and Sports and is supervised and overseen by the INASES.

Public insurance was implemented in the 1990s with the creation of Community Health Funds in the Tupiza, Patacamaya, Capinota, and Viacha municipalities. In July 1996, Supreme Decree 24303 created the National Mother and Child Insurance, which was free and available for pregnant women, newborns, and children under the age of 5, and aimed to reduce maternal and neonatal mortality rates. It brought an increase in assisted births, prenatal care, and pediatric care for ARI and IID.

Basic Health Insurance was created with the passing of Supreme Decree 25265, on December 31, 1998, and was in effect until December 31, 2002. This insurance was a public service that provided universal access to the target population and aimed to provide quality, culturally sensitive essential health services. It provided 102 benefits, including national programs, also covering populations living in endemic areas. Its focus was to reduce mortality rates among infants, children under 5, and mothers.

Law of the Republic 2426, established on November 21, 2002, made **Universal Insurance for Mothers and Children (SUMI)** a state policy. The insurance began on January 1, 2003, and is universal, comprehensive, and free for its target group. It provides obligatory, enforceable health benefits at all levels of care in the public sector, through short-term social security, and at other agreed upon establishments.

TABLE. 14. HISTORY OF PUBLIC INSURANCE

FEATURE	NATIONAL MOTHER AND CHILD INSURANCE	BASIC HEALTH INSURANCE	UNIVERSAL INSURANCE FOR MOTHERS AND CHILDREN
TARGET POPULATION	Pregnant women and children under 5	Pregnant women and children under 5, general population for certain benefits	Pregnant women through 6 months post-delivery and children under 5
BENEFITS PROVIDED	32 services in the fist and second levels of care	92 interventions at the first and second level of care, including benefits for general population	Universal, with few exceptions
FINANCING	3.2% of 85% of tax contributions	6.4% of 85% of tax contributions	10% of tax contributions, 10% of national solidarity fund
ORIGIN OF RESOURCES	Per capita to municipalities	Per capita to municipalities	Per capita to municipalities + national solidarity fund
FORM OF PAYMENT	Payment by service provided	Payment by service provided	Payment by service provided

Source: Created by Dr. Colque

Supreme Decree 24448, passed on May 24, 1996, created the **Retirement Insurance**, now called Senior Social Security (SSPAM). Since February 2007, this insurance covers 650,000 seniors and is administered by municipalities.

2.3 Provision of Health Services

2.3.1 Health Services Supply and Demand

The supply of health services includes the supply of resources, technology, standards, and logistics that make up the entire health system. It comprises all of the country's health facilities in different locations, levels of specialization, including number of beds, and human resources.

The national health system is comprised of a set of health services and facilities organized into networks by level of care and specialization. These services and facilities include the public health system, social security, church-based health facilities, private for-profit or nonprofit health facilities, and traditional medicine facilities in specific cases. The following types of networks are recognized:[39]

- **Departmental** comprised of municipal health services networks, tertiary care hospitals, and facilities located in each department's capital city. It includes all individuals and institutions that provide health services within the departmental jurisdiction.
- **Municipal** comprised of one or more primary care facilities and a higher-level health facility that offers health services in accordance with the degree of specialization. It includes all individuals and institutions that provide health services within the municipal jurisdiction.

The current Management Model includes four areas:[40] a) **National**, under the Ministry of Health and Sports; b) **Departmental**, under the Departmental Health Services (DHS), dependent on the prefecture; c) **Municipal**, under the Local Health Directory (DILOS); and (d) **Local**, under the local health facility and, at an operational level, under the mobile brigade.

Access to the National Health System begins at the primary care facilities and mobile brigades, which provide care in accordance with their capacity. If necessary, they refer patients to

[39] DS 26875. Modelo de Gestión y Directorio Local de Salud. 21-12-2002.
[40] PARDO E, RAMOS E. Implementación del modelo de gestión, redes de salud, DILOS, SUMI y SNUS. Modulo de Induccion. 2003.

secondary and tertiary care facilities in accordance with the network structure and treatment standards and protocol as established by the Ministry of Health and Sports. To access secondary and tertiary care facilities, patients must have a referral from a primary care facility that is part of the network, except in case of an emergency. The different levels of care offer the following:

- **Primary care.** This level predominantly focuses on self-care, outpatient visits, and transit hospitalizations. It includes Mobile Health Brigades, Health Posts, Health Centers with or without beds, General Hospitals, and General Clinics, whether public, private, church-based, part of Social Security or NGOs, or traditional and/or alternative medicine.
- **Secondary care.** Available at more specialized outpatient institutions and through hospitalization for four basic specialties (internal medicine, surgery, pediatrics, and gynecology/obstetrics, with anesthesiological support and traumatology options) and their diagnosis and treatment complements. This level includes secondary care hospitals.
- **Tertiary Care.** This level includes highly specialized outpatient care and hospitalization for specialties and subspecialties. It is comprised of general hospitals and specialized institutes and hospitals.

Overall, in 2006, there were 2,983 health facilities countrywide (91.8% of primary care and 1.94% of tertiary care).[41] The supply of outpatient health centers is relatively high (0.33 for primary care centers with non-professional resident personnel and 0.14 for general medicine). Supply from the private subsector is low considering the population it covers. However, availability of hospital beds is concentrated in highly specialized hospitals, with 1.56 beds per 1000 people.

TABLE 15. NUMBER AND CAPACITY OF HEALTH CARE FACILITIES. BOLIVIA, 2006

PUBLIC SECTOR	Nº Centers per 1,000 People	Nº Beds per 1,000 People
Hospitals		
▪ Highly Specialized	0.01	1.56
▪ Medium (Basic Specializations)	0.01	0.4
▪ Low (General Medicine)	NA	NA
Total Hospitals	149	NA
Outpatient Centers		
▪ Specialized	NA	NA

[41] SNIS. Página web www.sns.gov.bo.

▪ First-Tier General Medical Centers	0.14	0.38
▪ First-Tier Centers with Non-Professional Resident Personnel	0.33	0.34
Total Outpatient Centers	1,377	NA
PRIVATE SECTOR		
Hospitals		
▪ Highly Specialized	0.01	NA
▪ Medium (Basic Specializations)	0.08	NA
▪ Low (General Medicine)	NA	NA
Total Hospitals	93	NA
Outpatient Centers		
▪ Specialized Centers	NA	NA
▪ First-Tier General Medical Centers	0.08	NA
▪ First-Tier Centers with Non-Professional Resident Personnel	NA	NA
Total Outpatient Centers	77	NA

Source: SNIS, www.sns.gov.bo.

2.3.2 Human Resources Development

2.3.2.1 Human Resources Training

There are 28 universities offering some form of an undergraduate degree in health sciences, 56% of which are private.[42] Overall, 81 health sciences degrees are offered throughout the country with the following breakdown by type:

TABLE 16. HEALTH SCIENCES UNIVERSITY DEGREES. BOLIVIA, 2003

Degree	N	%
Medicine	20	24.7
Dentistry	19	23.5
Nursing	17	21.0
Biochemical-Pharmacy	14	17.3
Nutrition and Dietetics	3	3.7
Physiotherapy	8	9.9
TOTAL	**81**	**100.0**

The most commonly offered degrees are in medicine (24.7%), dentistry (23.5%), and nursing (21.0%). Between 1995 and 2003, 20,326 people received degrees in health sciences. Over 85%

[42] MSD, OPS/OMS. PERFIL NACIONAL DE DESARROLLO DE RECURSOS HUMANOS, BOLIVIA. 2005. Mimeo.

of graduates chose one of four tracks: medicine (37.8%), dentistry (19.7%), biochemistry-pharmacy (18.0%), and nursing (17.2%). There are 16 universities, 68.7% of which are public, that offer graduate courses. Of the 110 courses, 83.6% were specialization courses and the remainder were master's degree programs.

2.3.2.2 Management of Human Resources and Employment Conditions

Management of human resources and employment conditions is one of the weaknesses of the health system. There are no reliable and accurate indicators in regards to how many people are employed, underemployed, or hold more than one job, nor are there studies on the availability, distribution, and flow of human resources. Professional regulation is as follows:

- The MSD licenses health professionals. It issues professional licenses nationwide. At the national and departmental level, professional associations certify professionals by registering them and issuing membership cards.
- There are no mechanisms in place to certify technical skills.
- Scientific associations regulate training and continuing education for nursing, medicine, dentistry, pharmacy, biochemistry, and other professional specialties.

Health professionals are governed by codes of ethics from the respective professional associations and national and departmental honor courts that determine appropriate sanctions when malpractice or immoral conduct is reported.

The National Committee to Assist Teaching Integration (CNIDAI) is the agency that brings together universities and state planning bodies to define human resources needs and plan specialization courses accordingly. The Executive Committee of the Bolivian University is responsible for doing the same for university courses.

2.3.2.3 Human Resources Supply and Distribution[43]

In 2004, the country's 45,189 human resources in health were divided as follows:

- The public sector was the largest employer, with 15,916 employees (35.22%)
- The social security subsector accounted for 27.55% and NGOs for 2.37%
- The private sector employed 15,752 health workers, or 34.86% of the health

[43] MSD, OPS/OMS. Perfil nacional de Desarrollo de Recursos Humanos, Bolivia. 2005. Mimeo.

sector workforce

- Of 18,369 professionals, physicians were the largest group (24.13%) followed by those with a university degree in nursing (10.51%)
- Nurses' aides represented 22.23% of the entire health sector workforce

Physicians are concentrated at tertiary care facilities (43.7%), and only 18.7% of them work in secondary care facilities. Those with a university degree in nursing are also concentrated in tertiary care (49.9%) and primary care (26%). Most nurses' aides work on primary care (56.1%), however, 13.9% work on secondary care and 30% in tertiary care.

In the public system, there are 6.5 physicians per 10,000 people, 2.5 university graduates in nursing per 10,000 people and 7.6 nurses' aides per 10,000 people. Physicians and university graduates in nursing are highly available in municipalities with lower poverty rates, while their availability decreases in municipalities with poverty rates over 98%. The availability of nurses' aides is similar among all types of municipalities.

2.3.3 Medicines and Other Health Products

Overall, 11,931 pharmaceuticals are registered, 54.91% brand name and 16.46% generic.

TABLE 17. PHARMACEUTICAL PRODUCTS REGISTERED WITH NATIONAL BUREAU OF MEDICINE. BOLIVIA, 1995-2005

INDICATOR	1995 -1999	2000-2005
N^{o} of Pharmaceuticals Registered	6,470	11,931
% Brand Name	38.23%	54.91%
% Generic	13.41%	16.46%

Source: www.sns.gov.bo. National Bureau of Medicine

Bolivia has implemented a national essential drug policy and updates the National Essential Drug List (LINAME) every two years. There is no policy on drug pricing. Private and public pharmacies are required to employ a pharmaceutical professional.

Information on equipment availability in the health sector is not available. Information on the operational budget and maintenance is not available.

2.3.4 Quality of Service

Diagnosis and treatment standards were enforced in the following basic specialties: pediatrics, gynecology/obstetrics, surgery, internal medicine, and anesthesiology. Quality standards were established for accreditation, certification, and user satisfaction evaluation. There is no independent accreditation body outside the MSD. No tools are available to measure health services performance and compliance with established health care quality standards. Mechanisms are also lacking for assessing human resources training, availability of human and financial resources, availability of supplies and appropriate technology, or the frequency of monitoring.

3. MONITORING CHANGE/REFORM PROCESSES

3.1 Effect on Health System Functions

The “individual’s basic right to health and the state’s obligation to protect human capital” was established in the Political Constitution of the State in 1938 and subsequent amendments in 1961, 1967, and 2004.

State reform processes began with the passing of the Law of Popular Participation (Law 1551 of 1994); followed by the Law of Administrative Decentralization (1995) and the Law of Municipalities (1999). The new legal framework fragmented the health system. It gave municipalities the authority to manage health system infrastructure and equipment and it transferred the responsibility for managing, monitoring and controlling human resources and budgets to mayors, which generated conflict in the management of the health system.

3.2 Effect on Reform Guiding Principles

Although health expenditure as a percentage of GDP has increased from 4.38% in 1995 to 6.95% in 2002, that increase did not result in increased government expenditure on health. While in 1995, government spending accounted for 27.6% of total health expenditure; from 1996 to 2000, government spending accounted for an average of 23%, rising slightly to 23.3% between 2001 and 2002. The effects of this change can be seen in the main vertical

programs of the MSD,[44] such as control of Chagas' disease, malaria, and tuberculosis and the Expanded Program on Immunization. All of the programs depend heavily on international financing, including loans and donations that account for 50.5%. The National General Treasury only provides 8.2%.

Hospital births increased from 32.6% in 1996, to 54.0% in 2000, and then to 61.5% in 2006. During the same period, appropriate prenatal care (four visits) increased from 26.0%, to 33.0%, to 53.6%, respectively. However, gender and cultural barriers to access persist, as do differences in the quality of care.[45] Application of the third dose of the DPT/Pentavalent vaccine in children less than a year old increased from 70.6% in 1996 to 84% in 2005.

The proportion of physicians per 10,000 people increased from 4.7 to 6.5 following the implementation of the HIPC. However, more than half of the physicians went to work at the tertiary level of care. Physician's availability in municipalities varies greatly in accordance with poverty levels. For example, fewer physicians practice in very poor municipalities, leaving more physicians to be located in municipalities with lower poverty rates. Availability of health facilities has increased from:

- 775 health centers in 1996 to 1,234 in 2006
- 1,135 health posts in 1996 to 1,430 in 2006
- 8,503 total beds in 1996 to 24,631 in 2006

No information is available on the number of patients who receive same-day primary care or the number of health facilities that has reduced barriers to access based on gender, language, or working hours.

Public insurance has had the following effects:[46]

- Increased benefits granted to pregnant women and children under 5.
- Increased use of health services. The increase, however, is concentrated among the population with greater economic resources.
- Infant mortality has fallen considerably in urban areas, while no significant decrease has been noted in rural areas.

[44] UDAPE. Financiamiento de Programas Públicos de Salud en Bolivia. Casos: Chagas, Malaria, Tuberculosis e Inmunización. 1999-2005. Dic. 2005.
[45] Gobierno Municipal de La Paz. Prefectura de La Paz. OPS/OMS. Servicios de Salud con Enfoque de Género en el marco de la Atención Primaria de Salud. Bolivia. 2004.
[46] MSD, UNICEF, UDAPE. Bolivia: Evaluación de impacto de los Seguros de Maternidad y Niñez en Bolivia 1989-2003. Diciembre 2.006.

- Its impact on the indicators evaluated has been slight in rural areas, and significant differences persist between urban and rural areas in terms of mortality, hospital births, prenatal care, and immunization.

Because of lack of information, no changes can be evaluated in female mortality caused by tumors of the breast or cervix. Between 2000 and 2005, API fell from 8.8 per 1,000 to 4.7 per 1,000. The incidence of TB in all its forms went from 111 per 100,000 people in the year 2000 to 100.3 per 100,000 people in 2005. The incidence of HIV/AIDS has increased.

Social participation in health is structured around the creation of DILOS. A study[47] carried out by the La Paz Health Department in 2004 yielded the following conclusions:

- Network Managers take on an active role because they guide problem solving and the DILOS depend heavily on their actions
- Representatives from local governments, the Monitoring Committee, and the DHS are not familiar with and do not fulfill their mandates
- DILOS do not provide specific orientation to Network Managers.

3.3 Effect on Health System

TABLE 18. EVOLUTION OF MANAGEMENT MODEL. BOLIVIA 2007

GOVERNMENTAL ADMINISTRATION			
1994-1997	**1997-2002**	**2003-2004**	**2006**
3 LEVELS	**4 LEVELS**	**4 AREAS**	**SHARED HEALTH MANAGEMENT**
	Health Area	Local Health Facility	Local Community, Health Facility
Health District	District		
		Municipal Local Health Directory (DILOS)	Municipal Local Health Directory (DILOS)
Regional Health Secretariat (Departmental)	Departmental Health Service	Departmental Health Service	Departmental Health Service (DHS)
National Health Secretariat	Ministry of Health and Social Welfare	Ministry of Health and Sports	Ministry of Health and Sports

Source: Created by Dr. Colque

The management model has always included at least two levels: national and departmental. The municipal district disappeared and the municipality took its place, including the DILOS (2003), which are the highest authority in the joint management of social participation in

[47] Prefectura del Departamento de La Paz. Servicio Departamental de Salud. Directorios Locales de Salud. Propuesta de Implementación renovada de gestión compartida, concurrente con participación popular. La Paz, Enero 2.005.

health, in compliance with National Health Policy.

TABLE 19. HISTORY OF CARE MODEL. BOLIVIA, 2006

1994-1997	1997-2002	2003-2004	2006
4 LEVELS	**4 LEVELS**	**3 LEVELS**	**3 LEVELS**
PRIMARY Health Post Local Clinic Local Health Center	PRIMARY Health Post Family Health Center	PRIMARY Traditional Medicine Mobile Health Brigade Health Post Medical Clinic Health Center with or without Beds General Hospitals and General Clinics	PRIMARY Health Post Health Center
SECONDARY District Hospital	SECONDARY General Clinic District Hospital	SECONDARY Basic Hospital	SECONDARY Basic Hospital
TERTIARY Regional Hospital Maternity Pediatric Hospitals	TERTIARY General and Specialized Hospitals	TERTIARY General Hospitals Institutes Specialized Hospitals	TERTIARY General Hospitals and Specialized Institutes
QUATERNARY Research Institutes	QUATERNARY National Institutes		

Source: Created by Dr. Calque.

The care model has not seen profound changes. The current administration is in the process of implementing the Family, Community, and Intercultural Health Model, which is aimed at “guaranteeing the right to health and life, as a social right, through the promotion and consolidation of a single, intercultural, community health system.” The principles that guide all aspects of this model are social participation, intersectorality, interculturalism, and comprehensiveness. One hundred and twenty physicians specializing in Family, Community, and Intercultural Health are currently in training. Plans to incorporate other health components into this program are under development.

3.4 Analysis of Actors

TABLE 20. NATIONAL AND DEPARTMENTAL HEALTH SECTOR STRUCTURE. BOLIVIA 2003

REGULATORY TOOLS	INSTITUTIONAL ACTORS	SOCIAL ACTORS
Political Constitution of the State Health Code Social Security Code Law 1551 Popular Participation Law 1654 Decentralization Law LOPE Law 2426 SUMI Law 2028 Municipalities Law 1178 Auditing and Financial Administration System (SAFCO) OTHER BASIC SECTORS FOR ACHIEVING HEALTH SECTOR OBJECTIVES Ministry of Education Ministry of Housing Ministry of Indigenous Affairs Ministry of Labor Ministry of Finance Environment	Ministry of Health and Sports National Funds (9) National Social Security Institute, INASES Church National Armed Forces NGOs Police Traditional Medicine Private Subsector University Institutions that Train Human Resources for Health International Cooperation	Professional Associations • Medical Association • Nursing Association • Dentistry Association • Association of Nutritionists • Association of Social Workers • Association of Biochemists/Pharmacists Confederation of Health Workers Neighborhood Associations Monitoring Committee COB CSUTCB CIDOB Bolivian Colonizers' Confederation Bartolina Sisa National Confederation of Rural Bolivian Women CONAMAQ Federation of Tropical Coca Producers Council of Rural Federations of Yunga from La Paz (COFECAY) AMB Bolivian Municipalities Association SOBOMETRA- Bolivian Society of Traditional Medicine Social Control Mechanism

Source: PAHO/WHO. Health Sector Analysis. 2003.

HEALTH AUTHORITY DIAGRAM

FUNCTIONAL AREA: CONDUCT/LEAD									
	NATIONAL LEVEL			INTERMEDIATE/REGIONAL LEVEL			LOCAL LEVEL		
ACTIVITY	LEGAL FRAMEWORK	LEGALLY RESPONSIBLE INSTITUTION	EXECUTING INSTITUTION	LEGAL FRAMEWORK	LEGALLY RESPONSIBLE INSTITUTION	EXECUTING INSTITUTION	LEGAL FRAMEWORK	LEGALLY RESPONSIBLE INSTITUTION	EXECUTING INSTITUTION
Health situation analysis	Supreme Decree 26875	Ministry of Health and Sports	National Health Information System (SNIS)	Supreme Decree 26875	Departmental Health Service	National Health Information System (SNIS)	Supreme Decree 26875	Local Health Directory (DILOS)	Network Management
Identification of health priorities and objectives	Organic Law of the Executive Branch Law 3351 Supreme Decree 28631 from March 8, 2006 Article 87 paragraph a)	Ministry of Health and Sports	Vice Ministry of Health	Law 1654 of Administrative Decentralizatio n from July 28, 1995 Article 5 Prefecture Functions Supreme Decree 25060 Prefecture Structuring	Prefecture of Health Department	Departmental Health Service	Supreme Decree 26875	Local Health Directory (DILOS)	Network Management
Formulation of health policy, plans, programs, and strategies	Organic Law of the Executive Branch Law 3351 Supreme Decree 28631 from March 8, 2006 Article 87 paragraph c)	Ministry of Health and Sports	Vice Ministry of Health	Law 1654 of Administrative Decentralizatio n from July 28, 1995 Article 5 Prefecture Functions Supreme Decree 25060 Prefecture Structuring	Prefecture of Health Department	Departmental Health Service	Supreme Decree 26875	Local Health Directory (DILOS)	Network Management
Management, coordination, mobilization of actors and resources	Organic Law of the Executive Branch Law 3351 Supreme Decree 28631 from March 8, 2006 Article 87 paragraph e)	Ministry of Health and Sports	Vice Ministry of Health	Law 1654 of Administrative Decentralizatio n from July 28, 1995 Article 5 Functions of Prefectures Supreme Decree 25060 Prefecture Structuring	Prefecture of the Health Department	Departmental Health Service	Supreme Decree 26875	Local Health Directory (DILOS)	Network Management
Health Promotion and social participation in health	Organic Law of the Executive Branch Law 3351 Supreme Decree 28631 from March 8, 2006 Article 87	Ministry of Health and Sports	Vice Ministry for the Promotion of Health and Sports	Law 1654 of Administrative Decentralizatio n from July 28, 1995 Article 5 Prefecture Functions	Prefecture of the Health Department	Departmental Health Service	Supreme Decree 26875	Social Health Network	Network Management

Technical and political coordination of economic integration agencies at a regional and subregional level	----	-------	-------	-------	-------	-------	-------	-------	-------
Health system performance evaluation (sectoral functioning of institutions)	Organic Law of the Executive Branch Law 3351 Supreme Decree 28631 from March 8, 2006 Article 87	Ministry of Health and Sports	Vice Ministry of Health	Law 1654 of Administrative Decentralization from July 28, 1995 Article 5 Prefecture Functions	Prefecture of the Health Department	Bureau of Social Development	Supreme Decree 26875	Local Health Directory (DILOS)	Network Management
Monitoring and evaluation	Organic Law of the Executive Branch Law 3351 Supreme Decree 28631 from March 8, 2006 Article 87	Ministry of Health and Sports	Vice Ministry of Health	Law No. 1654 of Administrative Decentralization from July 28, 1995 Article 5 Prefecture Functions	Prefecture of the Health Department	Bureau of Social Development	Supreme Decree 26875	Local Health Directory (DILOS)	Network Management

FUNCTIONAL AREA: REGULATION									
ACTIVITY	**NATIONAL LEVEL**			**INTERMEDIATE/REGIONAL LEVEL**			**LOCAL LEVEL**		
	LEGAL FRAMEWORK	**LEGALLY RESPONSIBLE INSTITUTION**	**EXECUTING INSTITUTION**	**LEGAL FRAMEWORK**	**LEGALLY RESPONSIBLE INSTITUTION**	**EXECUTING INSTITUTION**	**LEGAL FRAMEWORK**	**LEGALLY RESPONSIBLE INSTITUTION**	**EXECUTING INSTITUTION**
Development and improvement of national health legislation	------	-------	-------	-------	-------	-------	-------	-------	-------
Regulation of public health insurance	Law of Universal Insurance for Mothers and Children Law 2426 from November 21, 2002	Ministry of Health and Sports	Vice Ministry of Health	Supreme Decree 26875	Departmental Health Service	National Health Information System (SNIS)	Supreme Decree 26875	Municipality	Local Health Directory (DILOS)
Regulation of private health insurance	Law of Insurance of the Republic of Bolivia Law 1883 from June 25, 1998	Pensions, Prices, and Insurance Authority	Insurance Authority	-------	-------	-------	-------	-------	-------
Regulation and oversight of medical sector inputs	Ministerial Resolution 0735 Single National Supply System Regulation	Ministry of Health and Sports	National Bureau of Medicine Supply Warehousing Headquarters	▪ Ministerial Resolution 0735 ▪ Single National Supply System Regulation	Departmental Health Service	Regional Supply Warehousing Headquarters	Ministerial Resolution 0735 Single National Supply System Regulation	Local Health Directory	Network Management
Regulation and oversight of health technology	Organic Law of the Executive	Ministry of Health and	Vice Minister of Health	------	-------	-------	-------	-------	-------

	Branch Law 3351 Supreme Decree 28631 from March 8, 2006 Article 87	Sports							
Regulation and oversight of consumer goods and basic supplies	Organic Law of the Executive Branch Law 3351 Supreme Decree 28631 from March 8, 2006 Article 87	Ministry of Health and Sports	Vice Minister of Health	Law 1654 of Administrative Decentralization from July 28, 1995 Article 5 Prefecture Functions	Prefecture of the Health Department	Bureau of Social Development	Law 2028 of Municipalities from October 28, 1999	Municipality	Municipal Mayor
Regulation and oversight of sanitation in public establishments	Organic Law of the Executive Branch Law 3351 Supreme Decree 28631 from March 8, 2006	Ministry of Health and Sports	Vice Minister of Health	Law 1654 of Administrative Decentralization from July 28, 1995 Article 5 Prefecture Functions	Prefecture of the Health Department	Bureau of Social Development	Law 2028 of Municipalities from October 28, 1999	Municipality	Municipal Mayor
Regulation and oversight of environmental cleanup	Organic Law of the Executive Branch Law 3351 Supreme Decree 28631 from March 8, 2006	Ministry of Health and Sports	Vice Minister of Health	Law 1654 of Administrative Decentralization from July 28, 1995 Article 5 Prefecture Functions	Prefecture of the Health Department	Bureau of Social Development	Law 2028 of Municipalities from October 28, 1999	Municipality	Municipal Mayor
Regulation and certification of human resources in health sector	Organic Law of the Executive Branch Law 3351 Supreme Decree 28631 from March 8, 2006 Article 87 Law 3131 Law of the Medical Profession from August 8th 2005	Ministry of health and Sports; Ministry of Education and Cultures; Medical Association	Vice Minister of Health; National Committee to Assist Teaching Integration	Law 1654 of Administrative Decentralization from July 28, 1995 Article 5 Prefecture Functions	Departmental Health Service	Regional Committee to Assist Teaching Integration	-----	-----	-----
Regulation and oversight of training and continuing education programs in the health sciences	Organic Law of the Executive Branch Law 3351 Supreme Decree 28631 from March 8th 2006 Article 87	Ministry of Health and Sports; Ministry of Education and Cultures	Vice Minister of Health; Vice Minister of Higher Education	-----	-----	-----	-----	-----	-----
Bringing health legislation in line with that of countries participating in regional integration initiatives	-----	-----	-----	-----	-----	-----	-----	-----	-----

FUNCTIONAL AREA: ESSENTIAL PUBLIC HEALTH FUNCTIONS									
ACTIVITY	NATIONAL LEVEL			INTERMEDIATE/REGIONAL LEVEL			LOCAL LEVEL		
	LEGAL FRAMEWORK	LEGALLY REPONSIBLE INSTITUTION	EXECUTING INSTITUTION	LEGAL FRAMEWORK	LEGALLY RESPONSIBLE INSTITUTION	EXECUTING INSTITUTION	LEGAL FRAMEWORK	LEGALLY RESPONSIBLE INSTITUATION	EXECUTING INSTITUTION
EPHF 1: Monitoring, evaluation, and analysis of health status	-----	-----	-----	-----	-----	-----	-----	-----	-----
EPHF 2: Surveillance, research, and control of the risks and threats to public health	Organic Law of the Executive Branch Law 3351 Supreme Decree 28631 from March 8, 2006	Ministry of Health and Sports	Vice Minister of Health	Law 1654 of Administrative Decentralization from July 28, 1995 Article 5 Prefecture Functions	Prefecture of the Health Department	Bureau of Social Development	Law 2028 of Municipalities from October 28, 1999	Municipality	Municipal Mayor
EPHF 3: Health promotion	Organic Law of the Executive Branch Law 3351 Supreme Decree 28631 from March 8, 2006 Article 87	Ministry of Health and Sports	Vice Ministry of Health and Sports Promotion	Law 1654 of Administrative Decentralization from July 28, 1995 Article 5 Prefecture Functions	Prefecture of the Health Department	Departmental Health Service	Supreme Decree 26875	Social Health Network	Network Management
EPHF 4: Social participation in health	Organic Law of the Executive Branch Law 3351 Supreme Decree 28631 from March 8, 2006 Article 87	Ministry of Health and Sports	Vice Ministry of Health and Sports Promotion	Law 1654 of Administrative Decentralization from July 28, 1995 Article 5 Prefecture Functions	Prefecture of the Health Department	Departmental Health Service	Supreme Decree 26875	Social Health Network	Network Management
EPHF 5: Development of policies and institutional capacity for public health planning and management	-----	-----	-----	-----	-----	-----	-----	-----	-----
EPHF 6: Strengthening of public health regulation and enforcement capacity among institutions	-----	-----	-----	-----	-----	-----	-----	-----	-----
EPHF 7: Evaluation and promotion of equitable access to necessary health services	-----	-----	-----	-----	-----	-----	-----	-----	-----
EPHF 8: Human resources development and training in public health	Organic Law of the Executive Branch Law 3351 Supreme Decree 28631 from March 8, 2006 Article 87 Law 3131 Law of the Medical	Ministry of Health and Sports; Ministry of Education and Cultures; Medical Association	Vice Minister of Health; National Committee to Assist Teaching Integration	Law 1654 of Administrative Decentralization from July 28, 1995 Article 5 Prefecture Functions	Departmental Health Service	Regional Committee to Assist Teaching Integration	-----	-----	-----

	Profession from August 8, 2005								
EPHF 9: Quality assurance in personal and population-based health services	-----	-----	-----	-----	-----	-----	-----	-----	-----
EPHF 10: Research in public health	-----	-----	-----	-----	-----	-----	-----	-----	-----
EPHF 11: Reduction of the impact of emergencies and disasters on health	-----	-----	-----	-----	-----	-----	-----	-----	-----

FUNCTIONAL AREA: ORIENTATION OF FINANCING									
ACTIVITY	**NATIONAL LEVEL**			**INTERMEDIATE/REGIONAL LEVEL**			**LOCAL LEVEL**		
	LEGAL FRAMEWORK	**LEGALLY RESPONSIBLE INSTITUTION**	**EXECUTING INSTITUTION**	**LEGAL FRAMEWORK**	**LEGALLY RESPONSIBLE INSTITUTION**	**EXECUTING INSTITUTION**	**LEGAL FRAMEWORK**	**LEGALLY RESPONSIBLE INSTITUTION**	**EXECUTING INSTITUTION**
Formulate policies to adapt and correct problems in sectoral financing	▪ Supreme Decree 29272 from September 12, 2007 ▪ National Developme nt Plan	Ministry of Health and Sports	Vice Ministry of Health	Law 1654 of Administrative Decentralizatio n from July 28, 1995 Article 5 Prefecture Functions	Prefecture of the Health Department	Departmental Health Service	Supreme Decree 26875	Social Health Network	Network Management
Monitor the process of sectoral financing	-----	-----	-----	-----	-----	-----	-----	-----	-----
Devise mechanisms that redistribute current spending and investment in order to compensate for inequalities that can be generated by decentralization	-----	-----	-----	-----	-----	-----	-----	-----	-----
Impact budget allocations	▪ Supreme Decree 29272 from September 12, 2007 ▪ National Developme nt Plan	Ministry of Health and Sports	Vice Ministry of Health	Law 1654 of Administrative Decentralizatio n from July 28, 1995 Article 5 Prefecture Functions	Prefecture of the Health Department	Departmental Health Service	Supreme Decree 26875	Social Health Network	Network Management

FUNCTIONAL AREA: GUARANTEE OF INSURANCE									
ACTIVITY	**NATIONAL LEVEL**			**INTERMEDIATE/REGIONAL LEVEL**			**LOCAL LEVEL**		
	LEGAL FRAMEWORK	**LEGALLY RESPONSIBLE INSTITUATION**	**EXECUTING INSTITUTION**	**LEGAL FRAMEWORK**	**LEGALLY RESPONSIBLE INSTITUTION**	**EXECUTING INSTITUTION**	**LEGAL FRAMEWORK**	**LEGALLY RESPONSIBLE INSTITUTION**	**EXECUTING INSTITUTION**
Define the content of guaranteed benefits packages	Law of Universal Insurance for Mothers	Ministry of Health and Sports	Vice Ministry of Health	Supreme Decree 26875	Departmental Health Service	National Health Information System (SNIS)	Supreme Decree 26875	Municipality	Local Health Directory (DILOS)

	and Children ▪ Law 2426 from November 21, 2002								
Monitor compliance with plan coverage, ensuring that no citizen is excluded	Law of Universal Insurance for Mothers and Children ▪ Law 2426 from November 21, 2002	Ministry of Health and Sports	Vice Ministry of Health	Supreme Decree 26875	Departmental Health Service	National Health Information System (SNIS)	Supreme Decree 26875	Municipality	Local Health Directory (DILOS)
Define population groups, territorial boundaries, and monitoring systems that will ensure coverage for the population	▪ Law of Universal Insurance for Mothers and Children ▪ Law 2426 from November 21, 2002	Ministry of Health and Sports	Vice Ministry of Health	Supreme Decree 26875	Departmental Health Services	National Health Information System (SNIS)	Supreme Decree 26875	Municipality	Local Health Directory (DILOS)

FUNCTIONAL AREA: PROVISION OF SERVICES									
ACTIVITY	**NATIONAL LEVEL**			**INTERMEDIATE/REGIONAL LEVEL**			**LOCAL LEVEL**		
	LEGAL FRAMEWORK	**LEGALLY RESPONSIBLE INSTITUTION**	**EXECUTING INSTITUTION**	**LEGAL FRAMEWORK**	**LEGALLY RESPONSIBLE INSTITUTION**	**EXECUTING INSTITUTION**	**LEGAL FRAMEWORK**	**LEGALLY RESPONSIBLE INSTITUTION**	**EXECUTING INSTITUTION**
Organize action plans and service networks for public and private institutions in order to avoid duplication of health services around the country	Organic Law of the Executive Branch Law 3351 Supreme Decree 28631 from March 8, 2006	Ministry of Health and Sports	Vice Minister of Health	Law 1654 of Administrative Decentralization from July 28, 1995 Article 5 Prefecture Functions	Prefecture of the Health Department	Departmental Health Services	Supreme Decree 26875	Municipality	Local Health Directory (DILOS)
Establish criteria for service management contracts that serve as a basis for allocating resources using a series of mechanisms that measure performance actions as well as results	Organic Law of the Executive Branch Law 3351 Supreme Decree 28631 from March 8, 2006	Ministry of Health and Sports	Vice Minister of Health	Law 1654 of Administrative Decentralization from July 28, 1995 Article 5 Prefecture Functions	Prefecture of the Health Department	Departmental Health Services	Supreme Decree 26875	Municipality	Local Health Directory (DILOS)
Define quality health care criteria	Organic Law of the Executive Branch Law 3351 Supreme Decree 28631 from March 8,	Ministry of Health and Sports	Vice Minister of Health	Law 1654 of Administrative Decentralization from July 28, 1995 Article 5 Prefecture	Prefecture of the Health Department	Departmental Health Services	Supreme Decree 26875	Municipality	Local Health Directory (DILOS)

	2006			Functions					
Define accreditation criteria for institutions providing services	Organic Law of the Executive Branch Law 3351 Supreme Decree 28631 from March 8, 2006	Ministry of Health and Sports	Vice Minister of Health	Law 1654 of Administrative Decentralizatio n from July 28, 1995 Article 5 Prefecture Functions	Prefecture of the Health Department	Departmental Health Service	Supreme Decree 26875	Municipality	Local Health Directory (DILOS)
Establish criteria for incorporating technology into health	-----	-----	-----	-----	-----	-----	-----	-----	-----

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