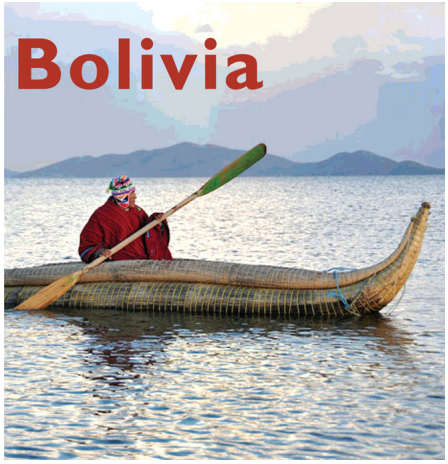

Introduction

Bolivia, located in the center of South America, has an area of 1,098,581 km^2, and a population of 10,426,154 (Figure 1). Bolivia's [illegible]
[1]
[1]

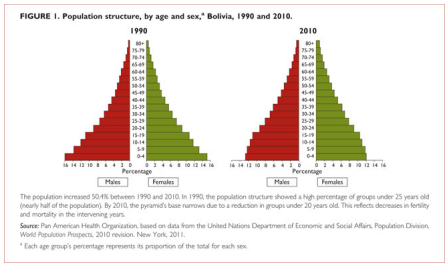
FIGURE 1. Population structure, by age and sex,[a] Bolivia, 1990 and 2010.

The population increased 50.4% between 1990 and 2010. In 1990, the population structure showed a high percentage of groups under 25 years old (nearly half of the population). By 2010, the pyramid's base narrows due to a reduction in groups under 20 years old. This reflects decreases in fertility and mortality in the intervening years.

Source: Pan American Health Organization, based on data from the United Nations Department of Economic and Social Affairs, Population Division, *World Population Prospects*, 2010 revision. New York, 2011.

[a] Each age group's percentage represents its proportion of the total for each sex.

President Evo Morales began his second term of office in 2010 [illegible]
[2]

Health Determinants and Inequalities

Distribution of the revenues from Bolivia's [illegible]
[3]

In the labor market, open urban unemployment [illegible]
[5]

The Environment and Human Security

A CCESS TO C LEAN

According to the National Basic Sanitation Plan (MDG 2008-2015, 74.5% of the population w
[7]) [8])

WATER POLLUTION

Contamination of water resources is one of various complex water manageme
[9])

CLIMATE CHANGE

In 2009, the "Country Profile: Institutional Framework and Progr
[10])

Health Conditions and Trends

HEALTH PROBLEMS OF Maternal and Reproductive Health

According to the 2008 National Demographic and Health Surve
[11]) [11])

Children (under 5 years old)

According to ENDSA 2008 results, 30% of children under 6 months
[11, 12]) [11])

Adolescents (10 to 19 years old)

The group aged 10 to 19 years old represents 23% of the country's total
[11]) [11])

Older Adults (60 years old and over)

In 2010, Bolivia had 721,039 elderly adults. Tuberculosis was the second leading cause
[13]) [14]) [15])

The Family

According to ENDSA 2008, 22.9% of the households in the cou

Workers

Occupational health has been a neglected field in recent decad

Ethnic or Racial Groups

During the 2010, the SNIS added the following ethnicity–relate

Other Groups

Disabled Persons

In 2010, the country made a preliminary estimate of 282,810 persons with dis

MORTALITY

According to the National Institute of Statistics (INE), the estimated crude mortality rate

MORBIDITY

Communicable Diseases

Vector–borne Diseases

In 2009, Bolivia experienced the worst epidemic of

TABLE 1. Cases of dengue, Bolivia, 2006–2010.

Year	Suspected cases	Confirmed cases	Deaths
2006	2,225	583	...
2007	7,332	2,186	...
2008	7,807	2,212	...
2009	84,047	7,421	25
2010	6,575	1,093	4

Source: Reference (19).

In 2006, Bolivia reported 3,374 indigenous *Trypanosoma cruzi* infections (20). Beyond dis
21
22

Between 2006 and 2010, malaria cases were reduced (23). In 2010, 77% co
24
25

Table 2

TABLE 2. Number of malaria cases, Bolivia, 2006–2010.

Year	*P. falciparum*	*P. vivax*	Total cases
2006	1,783	17,210	18,993
2007	1,622	12,962	14,584
2008	836	8,912	9,748
2009	680	9,063	9,743
2010	1,200	12,569	13,769

Source: Reference (23).

Bolivia reduced malaria cases by 56% between 200

These good results were due mainly to the introduct
26

In 2010, a total of 1,870 cases of *Leishmania* were reported (21). Unofficial reports indicate that the prese

Vaccine–preventable Diseases

Since 2006, the number of measles, rubella, *Haemophilus influenzae* type b, and tem

In addition, the human papillomavirus vaccine was i
27

Whooping cough surveillance has not been impleme

Zoonoses

A rabies control program was developed by the Ministry of Health and C
28). However, the Ministry of Health and C

In 2010, a study of Antibiotic Resistance in Bolivia
29). A total of 30 isolates were tested
30). The results were published in
31).

Neglected Diseases and Other Infections Related to I

Bolivian hemorrhagic fever, *Brucella*, *Leishmania*, *Trypanosoma*, *Echinococcus*, *Taenia solium*, *Toxoplasma*, *Trichinella*, *Cysticercosis*, food
32). A study of *Brucella* infection
33

HIV/AIDS and Other Sexually–transmitted Infections

The HIV/AIDS epidemic in Bolivia is relatively recent. In 2000, there were approximately 12,000 ip
34). There were approximately 12,000 ip
34).

In 2008, the service for sexually transmitted infection
35). Results for sexually transmitted infecti
36).

Tuberculosis

Tuberculosis control has been a public health problem
37). This section focuses on the problem
37).

Intestinal Diseases

In 2006, a pilot program was developed to treat fasc
38). program was developed to treat fasc

Food–borne Illnesses

In 2010, the presence of *Escherichia coli* O157:H7 was reported in Bolivia
39). Source for he

Chronic, Noncommunicable Diseases

According to data from the SNIS for 2010 ([16]), 60% of the services delivered by th

Cardiovascular Diseases

Of persons over 20 years of age seen in urban and ([40]).

Malignant Neoplasms

According to ENDSA 2008 ([41]), the most frequent malignant neoplasms

Diabetes

With regard to diabetes in this group, the prevalence ([40]).

Nutritional Diseases

In 2008, the prevalence of chronic malnutrition in ch ([11, 12]).

Between 2003 and 2008, the overall prevalence of chronic malnutrition ([13]). In 2008, the equivalent figure for Nearly half (48.7 ([11, 12]) ([1]).

Accidents and Violence

The frequency of accidents has been on the rise in r ([42]).

Violence in all its forms is a serious public health pro[43]. There is a lack of reliable data on the pro[44]. **Disasters**

During the 2006–2011 period, Bolivia experienced [44]. The February 2011 earthquake, which **Mental Disorders**

Bolivia lacks a mental health policy and specific ar[45]. In 2008, the [45]. **Other Health Problems**
Oral Health

Preventive actions, including fluoridation and applica[46]. **Risk and Protection Factors**

According to studies, alcohol use is a serious proble[47]. For 35% of the general population, [48]. **Illegal Drugs**

Mental health disorders due to substance abuse affe[49]. **Health Policies, The Health System, and S**
THE HEALTH S

In 2008, the social security and health system reso[50]. The security and health system reso

The health system is in the process of decentralization (50). In the mid-1990s, the proposed Le

H EALTH L EGISLATION

Universal Maternal and Child Health (51). In 2006, the Ministry of Health (52) launched the Sub

2 (52,53). In 2006, the Ministry of Health (52) launched the Sub (54).

In this context, *Bolivia Digna* is an integrated health system (55) (56).

H EALTH E XPENDITURES AND

In management, the SUS is a total expenditure (50). The SUS is a total expenditure (58) and

In 2007, the department of health (57) (58). Within health, the

H UMAN R ESOURCE D

According to the SNIS, there were a tot (32).

Also in 2009, social security had 1.1 ph

T HE H EALTH S

Intersectoral Action

The Zero Malnutrition program was la[56]
Pharmaceuticals and Health Techn

Article 41 of the new Constitution est
Knowledge, Technology, Inform
S CIENTIFIC P RODUCTION

The Ministry of Health, the Spanish [59]
H EALTH I NFORMATION M

A program is the result of a joint [60]

In addition, the Ministry of Health

Creation of the Vice–Ministry of S
Health and International Co

Bolivia is going through a proces

A group of United Nations agenc

The country lasted reaches a peo

61) United Nations agen

Synthesis and Prospects

Bolivia is a country immersed in a

Another recently initiated elemen

Another priority are measures to

Finally, financing for health shoul

References

1. Bolivia, Instituto Nacional de Estadística. Indicadores demográficos

2. Bolivia. Constitución Política del Estado [Internet]. 2009. Accessed on 20 d
3. Fundación Jubileo. Análisis del presupuesto general del Estado 2010 [Internet]. 2010. Accessed o
4. Unidad de Análisis de Políticas Sociales y Económicas. Database [Internet]. Accessed on 20 d
5. Bolivia. Ministerio de Economía y Finanzas. Base de datos [Internet]. Accesso
6. Bolivia. Unidad de Análisis de Políticas Sociales y Económicas. Comité Interinstitucional. Metas de Desarrollo del Milenio. Sexto informe de progreso de los Objetivos de Desarrollo del Milenio en Bolivia. Accesse
7. Bolivia. Ministerio de Medio
8. Organización Mundial de la
9. Gaceta Oficial de Bolivia. Decreto Supremo 0335. Estrategia para la recuperación integral de la cuenca Tuanni. Línea estratégica No. 5. Acceso [Internet].
10. Organización Mundial de la Salud. Evaluación de la vulnerabilidad sanitaria nacional y subnacional al cambio climático como base para el diseño e implementación de medidas de adaptación [Internet].

11. Bolivia, Ministerio de Salud y Deportes, Instituto Nacional de Estadística. Encuesta Demográfica y de Salud 2008 Internet. 2009. Accessed on 20 Oc
12. Bolivia, Ministerio de Salud y Deportes, Instituto Nacional de Estadística. Encuesta Demográfica y de Salud 2003 Internet. 2004. Accessed
13. Instituto Nacional de Estadística. Base de datos Internet. Accessed
14. Comisión Económica para América Latina y El Caribe. El envejecimiento y las personas de edad: indicadores sociodemográficos para América Latina y el Caribe Internet. Accessed on 20
15. Bolivia, Ministerio de Salud y Deportes. Protocolos de atención del sistema único de salud. Seguro de salud para el adulto mayor Internet. 2009. Accessed on 20
16. Bolivia, Ministerio de Salud y Deportes. Base de datos Internet. Accessed
17. Bolivia, Ministerio de Salud. Accessed
18. Bolivia, Ministerio de Salud y Deportes. Datos Estadísticos del Programa de Registro Único Nacional de Personas con Discapacidad Internet. Accessed on 20
19. Bolivia, Ministerio de Salud y Deportes. Casos de dengue Internet. 2010. Accessed on 20 Se
20. Bolivia, Ministerio de Salud

21. Gobierno Autónomo Departamental de La Paz. La Enfermedad de Chagas [Internet]. 2011. Accessed on 20 Oc
22. Misión Internacional de Evaluación de la Situación Epidemiológica y de Control de la Enfermedad de Chagas en Bolivia [Internet]. 2011.
23. Bolivia. Ministerio de Salud y Deportes. Programa de Malaria [Internet]. Access
24. Organización Panamericana de la Salud. Organización Mundial de la Salud. Índice parasitario anual. Mapa [Internet]. 2010.
25. Organización Panamericana de la Salud. Organización Mundial de la Salud. Informe de la situación del paludismo en las Américas [Internet]. 2010.
26. Organización Panamericana de la Salud. Informe de la situación de los programas regionales de malaria en las Américas [Internet]. 2011.
27. Pezzoli L, Pineda S, Halkyer P, Cluster-sample surveys and lot quality assurance sampling to evaluate yellow fever immunization coverage following a national campaign, Bolivia [Internet]. Accessed on 20 Oc
28. Bolivia. Ministerio de Salud y Deportes. Casos de rabia humana en Bolivia desde 2003-2011. Access
29. Villena F. Fortalecimiento de la cooperación técnica para

30. Bolivia, Ministerio de Salud y Deportes. Hantavirus. Internet. 2010. Accessed
31. Bolivia, Ministerio de Salud y Deportes. Anuario estadístico de salud 2009. Internet. 2010. Accessed
32. Bolivia, Ministerio de Salud y Deportes. Anuario Normativos Nº 192) Técnicos
33. Universidad Autónoma Gabriel René Moreno. Diagnóstico de malaria determinantes sociales en la comunidad de Kuakrenda. Internet. 2010. Accessed
34. Bolivia, Ministerio de Salud y Deportes. Informe nacional sobre los progresos en la aplicación de UNGASS. Internet. 2010. Ac
35. Bolivia, Ministerio de Salud y Deportes. Anuario estadístico en salud 2009. Internet. 2009.
36. Revollo R, Grijalva G, Zegarra F, Hilari C, García SG, Zegarra S, Díaz L, Grayanira G, Cabal Acc
37. Bolivia, Ministerio de Salud y Deportes. Plan estratégico para el control de tuberculosis en Bolivia 2008 – 2015. Internet. 2008. Accessed on 20
38. Bolivia, Prefectura del Departamento de La Paz. Informe estudio piloto del uso ricabendazol en la comunidad de Huacullacani.

39. Organización Panamericana de la Salud/Organización Mundial de la Salud. Informe final del proyecto CLI. Internet. Accessed
40. Navia MO, Caballero D, F
41. Bolivia. Ministerio de Salud y Deportes. Análisis de situación de salud, Bolivia 2004. Internet. 2006. Acc
42. Bolivia, Ministerio de Gob
43. Bolivia, Organización Pana
44. Federación Internacional de la Cruz Roja; Organización Panamericana de la Salud/Organización Mundial de la Salud. Sexto plan de acción. Brazzaville: CHO 2009. Internet. 2009. Acc
45. Organización Panamericana de la Salud/Organización Mundial de la Salud. Informe sobre el sistema de salud mental en Bolivia (ESMOMS). Internet. 2008. Accessed
46. Bolivia. Ministerio de Salud y Deportes. Cobertura de los 5 últimos años de acciones preventivas en salud oral en la comunidad. Internet. 2007. Accessed
47. Alcaraz del CF, Zuazo YJ, Martínez MG. Encuesta mundial de profesionales de la salud: el uso de tabaco en estudiantes de tercer año de medicina y enfermería. Internet. 2007. Accessed
48. Alcaraz del CF, Zuazo YJ, Martínez MG. Consumo de drogas en Bolivia 1992–2010. Internet. 2010.
49. Alcaraz del CF, Campero N, del Prado JC,

50. Carvajal B.JL. Los mercados financieros legales en Bolivia [Internet]. 2009 [Accessed
51. Bolivia. Ministerio de Economía y Finanzas Públicas. Memoria de la economía boliviana 2010 [Internet]; Accessed on 20 Se
52. Bolivia. Asamblea Legislativa Plurinacional. Proyecto de Ley del Sistema Único de Salud. 21 de septiembre de 2010 [Internet]. 2010; Accessed
53. Bolivia. Gaceta Oficial de Bolivia. Se amplían las coberturas del Seguro Universal Materno Infantil Ley No. 3250 [Internet]. 2005; Accessed on 20 Oc
54. Bolivia. Honorable Congreso Nacional. Ley del Seguro Universal Materno Infantil (Ley No. 2426) [Internet]. 2002; Accessed
55. Bolivia. Ministerio de Planificación del Desarrollo; Instituto Nacional de Estadística. Plan Nacional de desarrollo: Bolivia digna, soberana, productiva y democrática para vivir bien [Internet]. 2006; Accessed
56. Bolivia. Constitución Política del Estado. Nuevo modelo sanitario de Bolivia: comunitario intercultural [Internet]. 2006; A
57. Bolivia. Ministerio de Salud y Deportes. Plan sectorial de desarrollo 2010–2020 "Salud Hacia la salud universal" [Internet]. 2009; Accessed

57. Bolivia. Prefectura y Comandancia General del Departamento del Beni. Resolución No. 005/07. [Internet]. Accessed on 20
58. Bolivia. Ministerio de Salud y Deportes. Gobierno Autónomo Departamental de Tarija. Informe resumen ejecutivo S.U.S.A. [Internet]. 20 Accessed on 20 Se
59. Bolivia. Ministerio de Salud y Deportes. Agenda nacional de prioridades de investigación en salud. Serie Documentos de Investigación No. 9) [Internet]. 2009. Ac
60. Bolivia. Scientific Electronic Library Online [Internet]. Accessed on 20
61. El Fondo Mundial de Lucha contra el SIDA la Tuberculosis y la Malaria. Bolivia [Internet]. 2011. Ac

Notes

1 This reduction was due to