

Chile



Chile is located in the extreme southwest portion of South America and borders Argentina, Bolivia, and Peru. It is a long (4,329 km) and narrow (average width, 177 km) country: its continental and insular territory stretches for 756,626 km² and its antarctic territory, for 1,250,000 km². The country has a rugged terrain, and is vulnerable to disasters such as earthquakes and tidal waves. Chile functions as a unitary republic with a stable, democratic political system. The State encompasses three independent powers: the executive, the legislative, and the judicial. The capital is Santiago, and the country is divided into 15 regions, 53 provinces, and 346 communes.

Chile is a middle-income country whose economic development progressed over the 2006–2010 period. The population's state of health is consistent with this gradual improvement in the social and economic situation, the country's social safety net, and social and health policies that favor promotion, access, and coverage. The public health system has encouraged equity through measures to prevent maternal and child mortality, premature mortality, communicable diseases, and malnutrition, as well as by improving sanitation conditions.

MAIN ACHIEVEMENTS

HEALTH DETERMINANTS AND INEQUALITIES

In 2009, average autonomous monthly household income was close to US\$ 1,500. Redistributive social policies and monetary subsidies targeting the vulnerable population have reduced the income gap between the highest and lowest quintile income groups. Unemployment has declined progressively in the last decade, and it was 8.1% in 2010. The poor constituted 15.1% of the population in 2009, with 3.4% of the population living in extreme poverty. Literacy in the over-15 population is 98.6%, and average schooling is 10.4 years. Those defining themselves as indigenous or of indigenous descent are 6.9% of the population. In 2006, the communes in the lowest decile of household income experienced 51.2% more years of potential life lost (YPLL) per 1,000 population than did the communes in the highest household income decile.

THE ENVIRONMENT AND HUMAN SECURITY

In 2009, access to potable water was universal in urban areas, and coverage was over 95% in rural areas. In addition, 82% of households had a sewerage connection, and 83% had wastewater treatment.

HEALTH CONDITIONS AND TRENDS

Health conditions continued to improve in the 2006–2010 period. There was a reduction in infectious diseases, maternal and child health problems, and preventable and premature mortality. Life expectancy rose, and infant mortality declined (to 7.9 per 1,000 live births in 2008).

No cases of yellow fever, schistosomiasis, diphtheria, or indigenous cases of malaria were reported. In 2010, the

Selected basic indicators, Chile, 2008–2010.

Indicator	Value
Population 2010 (millions)	17.1
Poverty rate (%) (2009)	15.1
Literacy rate (%) (2010)	98.6
Schooling (years) (2009)	10.4
Life expectancy at birth (years) (2010)	79.0
General mortality rate (per 1,000 population) (2008)	5.4
Infant mortality rate (per 1,000 live births) (2008)	7.9
Maternal mortality rate (per 100,000 live births) (2008)	16.9
Physicians per 1,000 population (2010)	1.6
Beds per 1,000 population (2009)	2.1
DPT3 immunization coverage (%) (2009)	92.0
Births attended by trained personnel (%) (2008)	99.9

incidence of hantavirus was 0.35 cases per 100,000 population (with a case-fatality rate of 18%). The incidence of hepatitis B and C, respectively, was 3.3 and 3.5 cases per 100,000. The incidence of tuberculosis was 13.8 per 100,000 population in 2008.

The prevalence of HIV carriers is estimated at 0.4% (12 carriers per 100,000 population), with a male/female ratio of 3.6 for HIV and 5.6 for AIDS. The case-fatality rate has fallen as the survival rate has improved with guaranteed access to antiretroviral therapy.

Between 1999 and 2008, age-adjusted total mortality from cervical cancer dropped 37%.

HEALTH POLICIES, THE HEALTH SYSTEM, AND SOCIAL PROTECTION

Chile's Health Objectives for the Decade 2001–2010 and a series of specific reforms shaped the sector's development. The focus was on social protection, as reflected in the health element of the *Chile Crece Contigo* ("Chile Grows with You") program. Although the health system has achieved a high degree of coverage and access, improvements are still needed in management, efficiency, and equity.

The 2006–2010 governmental term featured the creation of the General System of Health Guarantees (Law 19,966) as well as the strengthening of the health authority and creation of conditions of greater flexibility for autonomous hospital management (Law 19,937). In 2009, total health spending represented 8.3% of the gross domestic product (GDP) (47.4% of this being public expenditure) and consumed 16% of the government budget. Of the private spending, 64.6% was direct or

Explicit Health Guarantees and Strengthening Chile's Health Authority

Policies and planning during the 2006–2010 term of government promoted health sector reform, with legislation passed by the parliament putting key components into place that: (1) established a plan of universal access with explicit health guarantees, and (2) strengthened the health authority at the national and regional levels. That legislation also created administrative conditions that facilitate more flexible hospital management within a context that separates the functions of regulatory entities and those of health service providers.

Law 19,966 created the General System of Health Guarantees (known as GES or AUGÉ). This component of the reform emphasizes the citizen as a holder of rights who can demand them from the State. For a defined set of health problems, GES establishes four basic guarantees: access, timeliness, quality, and financial protection. The implementation of GES began gradually in 2004 by addressing some problems through pilot plans. As of 2010, the health problems covered by GES numbered 69.

Also, Law 19,937, pertaining to the health authority and the Network of Autonomous Hospitals, strengthened the health authority and created more flexible conditions for hospital management.

out-of-pocket. Per capita health spending increased from US\$ 841 to US\$ 1,185 during the period, with private expenditure remaining dominant.

Chile's drug policy attempts to ensure the availability of, and universal access to, indispensable drugs included in the National Formulary. The country's extensive domestic production of generic drugs leads to drug prices 5.8 times less expensive than their proprietary equivalents. Three pharmaceutical chains control 90% of sales.

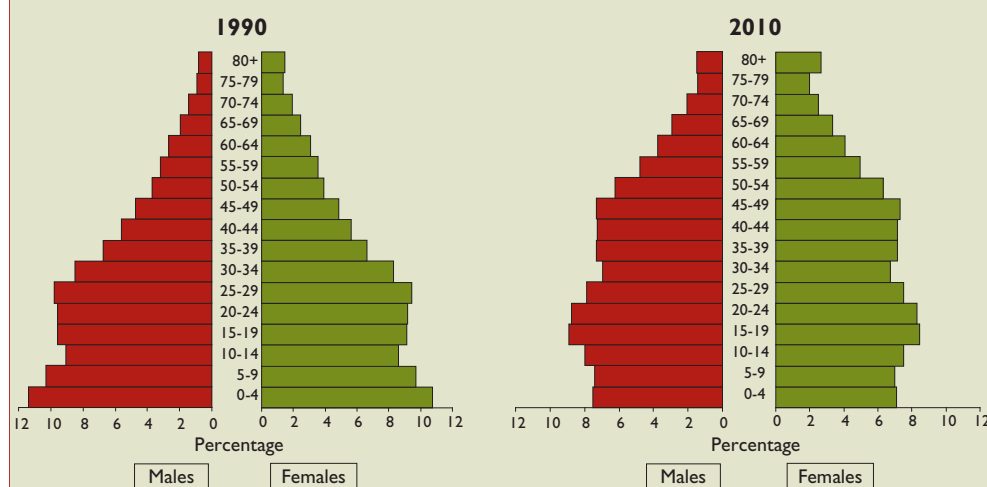
A National Health Strategy (ENS) 2011–2020 has been created. It is designed to maintain the health progress already achieved, address the challenges of aging and changing lifestyles, reduce health inequities, and improve the quality of services. In 2010, a presidential health commission proposed adjusting the country's health funding, insurance, and delivery of services in order to increase equity in access, as well as to respond more satisfactorily to the population's priority health needs. Necessary steps include improving the management, quality, and safety of care; strengthening integrated health networks; enhancing communications technologies; and improving drug access. To help achieve the National Health Strategy objectives, intersectoral policy is in place to promote the *Elige Vivir Sano* ("Choose to Live Healthy") program.

KNOWLEDGE, TECHNOLOGY, AND INFORMATION

In 2008, science and technology spending was estimated at US\$ 673.58 million. In 2010, 41% of the population actively used the Internet, at an average of 3.6 hours per day. The health sector has modern systems of electronic records for both health and administrative purposes. The Ministry of Health coordinates an interinstitutional group that participates in the international Evidence-Informed Policy Network (EVIPNet). Chile has consolidated its national Virtual Health Library network, as well as the Chilean node of the Virtual Public Health Campus.

The National Board of Science and Technology (CONY CIT) encourages research in the basic and clinical sciences. The National Health Research and Development Fund (FONIS) finances projects designed to improve decision-making in health, from the health policy design stage to the clinical decision-making level.

Population structure, by age and sex, Chile, 1990 and 2010.



MAIN CHALLENGES AND PROSPECTS

The health determinants in Chile reveal inequality. Family income varies by a factor of 15.7 between the highest and lowest income quintiles. The average level of schooling in urban areas is 10.8 years, but 7.8 years in rural areas. The proportion of the population living in poverty was 15.1% in 2009. Poverty was more prevalent in family

groups headed by women, in rural areas, and among indigenous populations.

The labor participation rate is 40.3% for women and 71.4% for men, so that patterns of division of labor in the traditional home persist, even though many women are the head of the household, which makes women's workload excessive. Only 11.9% of the indigenous population has studied at the tertiary level, and income levels among the indigenous are 48% lower than they are in the non-indigenous population.

Urban and industrial development has produced a set of side effects, such as a worsening of some environmental conditions (most notably in the capital, Santiago), including pollution of air, water, and soil, as well as solid waste disposal problems. Chile's mountainous, volcanic geography produces frequent seismic activity. The country should prepare to address some anthropogenic problems, particularly ones involving water pollution, chemical pollution, and environmental contamination.

In 2010, Chile experienced a severe earthquake and tsunami. There were 800,000 people affected, with 512 deaths and 16 other persons missing. Eighteen hospitals and hundreds of ambulatory health centers were unusable following the disaster. Nevertheless, the country's development characteristics and the antiseismic infrastructure of its buildings, as well as its degree of national disaster preparedness, prevented even more serious consequences. The country is gradually rebuilding its infrastructure.

According to 2009 figures, mortality from accidents was 48.2 per 100,000 population. However, the rate was 3.5 times higher among men than in women. Similarly, while overall traffic accident mortality was 12.8 per 100,000, the rate was five times higher among men. The prevalence of depression is 17.2% and the annual incidence of schizophrenia in adults is 12.0 per 100,000 population.

The principal morbidity and mortality burdens come from chronic, noncommunicable diseases. Diseases of the circulatory system are responsible for 27.5% of deaths, tumors for 25.0%, and external causes for 9.2%. In indigenous populations, overall mortality is higher (by amounts ranging from 30% to 80%), as is child mortality (between 90% and 250% higher). These patterns clearly show that there are inequalities between the indigenous and non-indigenous populations.

Over 30,000 new cases of cancer are diagnosed annually. Men are the primary victims of stomach cancer (24.4 per 100,000), prostate cancer (20.2 per 100,000), and lung cancer (18.3 per 100,000), while the principal cancers

among women are of the gallbladder (15.6 per 100,000), breast (14.5 per 100,000), and stomach (12.9 per 100,000).

In 2010, mortality due to ischemic heart disease was 48.9 per 100,000 population, and mortality from cerebrovascular diseases 49.0 per 100,000.

Also in 2010, the prevalence of diabetes mellitus was estimated at 9.4%. The estimated prevalence of hypertension in adults was 26.9%, and 38.5% had high total cholesterol. More than half of adults had at least two of the principal risk factors for cardiovascular disease (smoking, family history, high cholesterol, and hypertension).

The prevalence of risk factors is also high among children under 6 served by the public health system according to 2009 figures, when 21.6% were overweight and nearly 10% obese. Among adults, 64.5% were overweight (body mass index ≥ 25) and 25.1% were obese.

Among adults, 17.7% are at risk of becoming problem drinkers. The average number of permanent teeth damaged by caries is 2.60 at 12 years of age. Among the over-17 population, 13.3% of those persons are missing some teeth, and 5.5% have lost all their teeth.

Many health care staff have moved from the public sector to the private sector, and they have also been congregating more in urban areas. Of the country's physicians, 44% work in the public sector. Although the number of physicians working in primary care almost doubled between 2004 and 2008, there still is a shortage of doctors, and in particular a shortage of specialists trained to work at the primary care level.

There are good health information and administration systems. However, improvements are needed if information is to be sufficiently systematized and coordinated for policy-making and decision-making at various levels, as well as for monitoring and evaluating performance and equity in the health sector.

The achievements made by Chile and its health system pose the challenge of continuing to improve the population's state of health, while further reducing inequity and strengthening the structure and functioning of the health system.

For the next 5 to 10 years, the public health problems that will most stand out include environmental contamination, obesity, chronic disease, and occupational and traffic accidents. The health system boasts solid policies on health, coverage, and social protection. Geographical, economic, ethnic, and educational differences that lead to health inequalities persist. Thus, there must be progress toward greater equity in the allocation of human and financial resources, so as to promote access to quality care and to respond appropriately to the needs of the various population groups. The National Health Strategy 2011–2020 has taken these issues into consideration.