The Argentine Republic has a surface area of 3,761,274 km$^2$. In 2010 its population was 40,117,096 (an increase of 10.6% over 2001), and with a male-female ratio of 0.95, according to the final results of the 2010 Census ($^1$) (Figure 1). Its territory is divided into five geographical regions: northwest, northeast, Cuyo, central or Pampas, and Patagonia. Its political divisions include 23 provinces and one autonomous city, the city of Buenos Aires. The government is representative, republican, and federal. According to general and health indicators, the northeast and northwest are the most impoverished and backward regions.

According to a report on progress in achieving the Millennium Development Goals ($^2$), between 2003 and 2008, the economy grew steadily, at an average rate of 9%. The gross domestic product (GDP) declined in 2009, but recovered in 2010, with
a growth rate of 9.2%. According to data provided by the Ministry of Economy (3), this increase corresponded to the goods-producing sectors, namely, agriculture (10.7%), the manufacturing industry (10.4%), construction (10.2%), trade (15.9%), financial intermediation (12.9%), and transportation and communications (10.4%).

In 2008, the Ministry of Health created the National Program on Cervical Cancer. This program is being implemented successfully in the poorest provinces, where there is evidence of a gradual increase in screening, a stronger focus on higher risk strata, and the establishment of follow-up mechanisms for women with abnormal test results. In 2011, the human papillomavirus vaccine for 11-year-old girls was added to the national vaccination schedule, and the test to detect the virus was introduced in one high-risk province, with a view to progressively scaling up this service. The Office of Health Promotion and Chronic Disease Prevention and Control was established, and an interinstitutional commission was also formed to work on this issue. Strategic partnerships were forged with other sectors to reduce the salt content in breads and processed foods. Although the country has not ratified the Framework Convention on Tobacco Control, a national antismoking law was enacted in June 2011. Created in 2009, the National Vectors Office has contributed to progress in dengue prevention and control and to reestablishing control of vector-borne transmission of Chagas’ disease.

HEALTH DETERMINANTS AND INEQUALITIES

The 2011 Permanent Household Survey (4) placed the economically active population at 17 million, 34.1% of whom were working in the informal sector. The unemployment rate was 20.7% in 2003. However, that rate began a steady decline in 2004, and it had dropped to 7.4% by the first quarter of 2011. The percentage of workers earning less than US$ 1.00 per day declined from 12.9% in 2002 to 0.5% in 2009. Policies implemented beginning in 2003 targeted sectors excluded from the employment system and in vulnerable situations. These new practices resulted in a decline in poverty from 54% in 2003 to 13% in 2009. Approximately 9 million people emerged from poverty, while levels of extreme

* The population increased 25.1% between 1990 and 2010. In 1990, the population structure presented a pyramidal shape for age groups older than 15 years. By 2010, the pyramid shifts to groups older than 35 years; it highlights the increase in the percentage of women older than 80 years and the relative similarity among groups younger than 35. These changes reflect decreases in fertility and mortality in the intervening years.


* Each age group’s percentage represents its proportion of the total for each sex.
poverty declined from 27.7% in 2003 to 3.5% in 2009 (3).

According to the Complementary Survey of Indigenous Peoples 2004–2005 (5), the country is home to 23 indigenous groups and 2.8% of the country’s total population (600,329 people) are recognized as a member or first-generation descendant of an indigenous group. The native peoples with the largest populations are: Mapuche, Kolla, Toba, Wichi, Diaguita/Diaguita-Calchaquí, Guaraní, Ava Guaraní, Tupí Guaraní, Mocoví, and Huarpe. A total of 23.5% of the indigenous population has unmet basic needs, compared to the national total of 14.3%, and 16.5% of indigenous households are rural. According to Cuyul Soto (6), the overall illiteracy rate among individuals aged 10 or older was 2.6%, although this figure surpassed 20% in some communities. Because health information systems do not include “ethnic group” as a variable, the available data shed no light on the distribution of health indicators among the various indigenous groups or how they compare with those of other populations.

Literacy rates among young people ages 15 to 24 are close to 100% for both sexes. The goal that 40% of women will be working in nonagricultural jobs has been met and surpassed; the 0.4 ratio for women’s participation in public and private management positions has been reached; and the percentage of women holding seats in the National Legislature has surpassed 30% (2).

**THE ENVIRONMENT AND HUMAN SECURITY**

**Access to Clean Water and Sanitation**

In 2010, 83.9% of the population had access to running water. That figure was 79.7% in the metropolitan region and 94.3% in Patagonia. The proportion of the population with access to sewage systems rose from 47.2% in 2001 to 53.1% in 2010 (1).

**Solid Waste**

In Argentina, 0.8 kg of household solid waste is produced per inhabitant per day and 74% of municipalities have a municipal solid waste management plan. In 2009, the country participated in a program for the recovery and use of methane as a clean energy source. According to ECLAC (7), 580 million cubic meters of sanitary landfill could be available for the capture of this gas.

**Deforestation and Soil Degradation**

According to the Secretariat of the Environment and Sustainable Development (8), the surface area of native forests shrunk 4.5% from 2002 to 2006, from 30,073,385 to 28,727,147 hectares. The conversion of forest to farmland contributed to this intense deforestation (9). A total of 28.6% of the total area deforested up to 2007 underwent that alteration over the preceding seven years. Salta and Santiago del Estero were the provinces most affected, accounting for 92% of the total deforestation. According to Volante (10) (n.d.), there has been a noticeable pattern of forest clearing (5,314,925 hectares) in the semiarid and subhumid Chaco ecoregion. By law, each province is responsible for land management of its native forests.

**Road Safety**

In 2007, the Declaration of the Year of Road Safety was drafted (Decree 1724), a federal agreement on activities related to transit and road safety was signed (Decree 1232), and the National Road Safety Agency (Law 26353) and National Road Safety Observatory were established. In 2009, 52% of people over 18 years reported that they never wore a seat belt, 16.8% said that they consumed alcoholic beverages before driving, and 85.7% said that they never wore a helmet when riding a bicycle or motorcycle (11).
Disasters

Hydrometeorological phenomena are the most frequent cause of emergencies and disasters. They result in considerable harm to people, property, and the ecosystem, mainly in the northwest, northeast, and central regions. Other types of hazards occur in the regions of Cuyo (heavy snowfall, forest fires, and possible seismic activity) and Patagonia (snowfall and forest fires).

In 2007, a drought in northern Patagonia killed some 800,000 head of cattle and resulted in the loss of 15 to 20 million tons of grain. Heavy rains caused the Salado river in Santiago del Estero to overflow its banks, forcing the evacuation of 550 families.

In 2008, the Chaitén volcano in Chile erupted, spreading a cloud of ash over the city of Esquel (Chubut province) and its environs that caused losses to livestock. The Puyehue volcano, also located in Chile, erupted in June 2011, producing ash clouds that affected Villa La Angostura (Neuquén province) and Bariloche (Río Negro province). The ash layer measured 40 cm thick in the most-affected areas. Many inhabitants had to be evacuated, flights were canceled, and the region sustained considerable economic losses, especially in the fish farming, livestock, and tourism sectors.

In 2009, a tornado touched down in the area of San Pedro, Misiones province, leaving 10 people dead and 60 injured, and causing considerable property damage.

Climate Change

According to forecasts, the glaciers in Argentina will still be melting at the close of the 21st century, and coastal Atlantic areas will experience increased rainfall (5% to 10%) and runoff (10% to 30%). In 2010, an interministerial agreement on climate change entered into force, with the goal of reaching consensus on economic development policies that include carbon emission reductions.

Food Safety

In February 2011, the World Organization for Animal Health once again declared Argentina free of foot-and-mouth disease with vaccination, and it also declared the country free of Newcastle disease and avian influenza.

Health Conditions and Trends

Health Problems of Specific Population Groups

Maternal and Reproductive Health

A total of 93% of women reported having used some type of contraception at some time, and over 78% began using it prior to having their first child. Three out of four women used contraceptives, at least intermittently, while one out of 10 used ineffective methods such as rhythm or withdrawal (12).

Births among girls and adolescents ages 10 to 19 rose from 13.6% in 2003 to 15.4% in 2008 (0.4% of births are to girls and adolescents ages 10 to 14 years, and 15% to those ages 15 to 19).

The overall maternal mortality rate remained unchanged from 1990 to 2008, ranging between 40 and 42 per 100,000 live births, but with noticeable disparities among and within regions. Maternal mortality rates are highest in the northeast and the northwest, and particularly in the northeastern province of Formosa.

In 2009, 410 women died during pregnancy or within 42 days following the end of pregnancy, resulting in a maternal mortality ratio of 55 per 100,000 live births, a 38.5% increase over 2008 levels. This increase was experienced in all regions, and was due mainly to the H1N1 influenza pandemic, which particularly affected pregnant women. Direct obstetric causes were responsible for 80.1% of maternal deaths in 2008 (21.1% due to miscarriage) and for 61.5% of those deaths in 2009 (21.2% by miscarriage), while the remaining 38.5%
Children (under 5 years old)

According to data from the Ministry of Health’s National Directorate of Health Statistics, infant mortality fell from 25.6 per 1,000 in 1990 to 12.1 per 1,000 in 2009, a decline of 52.7%. The Gini coefficient for infant mortality rates among provinces improved in terms of interregional equity. In 2009, the highest infant mortality rates were registered in the northeast, at 16 per 1,000 (with the provinces of Formosa at 20.5 per 1,000, Chaco at 17.8 per 1,000, and Corrientes at 15.3 per 1,000), and the northwest region, at 13.1 per 1,000. Neonatal deaths accounted for between 63.9% and 66.4% of total deaths among children under 1 year of age between 2006 and 2009. The leading cause of death in 2009 was disorders during the perinatal period (49.3%), followed by congenital malformations, deformities, and chromosomal abnormalities (25%) and respiratory ailments (8%). While the distribution was similar over the 2006–2009 period, the number of infant deaths from respiratory causes was substantially higher in 2007. From 1990 to 2008, mortality in children under 5 years fell from 29.6 per 1,000 to 14.5 per 1,000, a 51% decrease. The three leading causes of death in children under 5 years were the same as those for children under 1 year of age, but external causes were in fourth place for children under 5.

In 2009, the nationwide age-specific mortality rate in children 1 to 4 years old was 0.5 per 1,000 children. The regions with the highest rates were the northeast, with a rate of 0.7 (Formosa at 1.1 and Chaco at 0.9), and the northwest, with a rate of 0.6 (provinces of Santiago del Estero at 0.9 and Salta at 0.8).

Adolescents (10–19 years old)

The population of adolescents ages 10 to 19 was 6,868,986 in 2009 (17.1% of the total population). The age-specific mortality rate was 0.5 per 1,000, and 56.5% of registered deaths were due to external causes (accidents 49.5%, suicides 20%, and homicides 13.1%) (13).

According to the Fourth National Survey of Middle School Students, done in 2009, substance use was frequent among middle school students. For the group ages 13 to 17, the substances most frequently used were alcoholic beverages (46%) and tobacco (19.7%). In addition, 9.6% of students had used some illegal drug during the preceding year, the most prevalent being marijuana at 8.4%, followed by cocaine, at 2.3% (14). In 2007, the prevalence of current adolescent smokers was 24.5%, and with that rate being higher for women (15).

The Elderly (60 years and older)

The population age 60 and above was 5,712,153 in 2009, or 14.2% of the total population, with 91% of them living in urban areas. Forty percent of these older adults were overweight (48% of men and 34% of women) and 17% were obese. Twelve percent of older adults then smoked and 27% had previously smoked. Between 2006 and 2009, 76% of all deaths recorded in the country occurred in this age group. The leading causes of death were cardiovascular diseases (34.4%) and malignant tumors (19.3%).

Mortality

The overall age-adjusted death rate remained stable during the 2006–2009 quadrennium, but with the highest rates for both men and women being recorded in the northeast and northwest regions. The most frequent causes were diseases of the circulatory system (30%), followed by tumors (20%), infectious diseases (19.6%), and external causes (6.4%), while 8% of deaths were from ill-defined causes.

The pattern of proportional mortality during the 2006–2009 quadrennium was comparable to that of 2004, except that infectious diseases were more frequent and there was a smaller proportion of “all other causes.” Age-adjusted death rates for all causes as well as for each cause were higher in men than in women, and this disparity was even greater for external causes. During the quadrennium, mortality from diseases of the circulatory system declined by
6.2%, from neoplasms by 3.8%, and from external causes by 5.2%.

In 2009, the number of years of potential life lost (YPLL) nationwide due to all causes was 681.50 per 10,000 population. Throughout the quadrennium, this figure was higher in the northeast and the northwest regions. External causes and neoplasms were responsible for the highest number of YPLL overall in the country, while infectious diseases were the main cause in the northeast and the northwest regions, and diseases of the circulatory system and neoplasms in the central region.

**Morbidity**

**Communicable Diseases**

**Vector-borne Diseases**

Dengue is epidemic in Argentina, and outbreaks have been recorded every two or three years since 1998. The worst dengue outbreak in the country occurred during the first half of 2009, with 26,923 confirmed cases. This outbreak affected areas with no previously recorded cases of dengue, including the Andean areas of Catamarca and southern Tucumán, which are generally low-risk for transmission, and densely populated urban areas such as Buenos Aires. The dengue virus type 1 was circulating, and the case-fatality rate was 1.86 per 10,000 confirmed cases (5 out of 26,923). Total cases of malaria declined during the 2006–2010 quinquennium, and the cases were concentrated in Salta and Misiones provinces, with residual foci susceptible to short-term elimination. Jungle yellow fever reemerged in 2008, with nine human cases confirmed in Misiones province. Another transmission episode occurred in 2009, resulting in two deaths.

Of the 19 provinces at risk for vector-borne transmission of Chagas’ disease, 5 certified its elimination as of 2004 and 1 as of 2011. Reports of vector-transmitted acute Chagas’ disease have declined gradually: 26 cases were reported in 2008, 7 in 2009, and 5 in 2010 (in Santiago del Estero and Chaco).

Visceral leishmaniasis is a new phenomenon in the northeastern part of the country, with 79% of the cases being reported in Misiones province, and with 23, 22, and 21 cases reported in 2008, 2009, and 2010, respectively. In 2009, 150 cases of cutaneous leishmaniasis were reported, 64% of which occurred in the northwest and 33% in the northeast.

**Vaccine-preventable Diseases**

The last cases of measles due to indigenous transmission were detected in 2000 in Córdoba province. Several cases of imported or import-related measles were reported in 2009 and 2010. Indigenous rubella transmission was successfully interrupted in 2009. The last two cases reported in Argentina occurred during the first five weeks of 2009 and were the last cases of indigenous rubella transmission in the Americas. The last case of congenital rubella syndrome occurred in July 2009, and the last neonatal tetanus case was reported in 2002. Only two, sporadic cases of diphtheria were reported for the 2000–2010 period, one in 2000 (Santa Fe province) and the other in 2003 (Misiones province). The number of reported cases of *Haemophilus influenzae* type b infection remained at between 15 and 35 per year over the 2000–2010 period.

Whooping-cough control is still a challenge. The number of reported cases rose throughout the country, and with substantial differences among the regions and the provinces.

The hepatitis A vaccine was introduced into the national vaccination schedule in 2005. This measure led to a reduction in the national rate beginning in 2005 and to the virtual disappearance of the burden of acute liver failure associated with hepatitis A virus in children and adolescents. Between 2004 and 2007, 61 cases of acute liver failure were reported, 41 of which required a liver transplant. In contrast, just one case of acute liver failure was reported between 2008 and 2010. The hepatitis B vaccine is part of the national vaccination schedule for newborns and infants, for adolescents age 11 years, and for special population groups. The rate of hepatitis B cases reported declined progressively beginning in 2000 and remained steady during the 2006–2010 quinquennium.
The rate of reported mumps cases fell 40% over the 2006–2010 quinquennium. Chickenpox was the most prevalent of the vaccine-preventable diseases, with a national rate of 449.43 per 100,000 population in 2010. Despite differences observed among the provinces, they all reported rates above 200 per 100,000 population.

In 2009, coverage of the third dose of the quadruple bacterial or pentavalent vaccine, the third dose of Sabin vaccine (oral polio vaccine), and the triple viral vaccine administered at 1 year of age was 94%, 95%, and 99%, respectively, with substantial differences among municipalities. Coverage of the hepatitis B vaccination during the first 24 hours of life was 81.5% in 2009, and 90.4% of newborns were given the BCG vaccination in the first seven days of life.

Zoonoses

The last case of human rabies in the country was recorded in 2008. Reports of canine rabies showed a downward trend (28 cases in 2006, 42 cases in 2007, 26 cases in 2008, and 6 cases in 2009, the majority in Jujuy province). Vaccination coverage was 75% overall, with a higher percentage in higher-risk areas. An average 384 cases of hydatidosis were reported annually in the 2006–2009 quadrennium; the highest rates (1.12 per 100,000 population) were reported in 2006 in the Patagonia region. Trichinosis showed an upward trend, with a rate of 0.26 per 100,000 population in 2006 and 1.6 per 100,000 population in 2010.

Neglected Diseases and Other Infections Related to Poverty

Leprosy continues to be a public health problem, but the national program for this disease is very weak. The number of new cases reported went from 421 in 2006 to 333 in 2009, but then rose to 354 in 2010. Nineteen jurisdictions, primarily in the northeast and the northwest, reported cases during one of those years. The national detection rate in 2010 was 0.9 per 100,000, while the detection rates in Formosa, Misiones, and Chaco provinces were 10.4, 4.2, and 3.6 per 100,000, respectively. Although the national prevalence rate was 0.16 per 10,000 population (Formosa, with 2.3, and Chaco, with 1.1). Estimates point to the presence of hidden endemic disease and, at the same time, an apparent prevalence rate that exceeds actual prevalence due to treatment of cases for a longer period than that prescribed by the standards.

HIV/AIDS and Other Sexually-transmitted Infections

Studies conducted between 2006 and 2009 suggest that HIV is a concentrated epidemic, with an estimated prevalence of 0.4% in people over 15 years of age. Estimated prevalence is 12% among men who have sex with other men, 6.1% among drug users, 5% among sex workers, and from 24% to 34% among transsexuals. An estimated 110,000 people are living with HIV in the country, but only 50% of them are aware of their serological status (16). Reported HIV rates remained stable between 2006 and 2009; in 2009, they were 16.4 per 100,000 for men and 9.6 per 100,000 for women. During the same four-year period, 70% of known cases were concentrated in the city of Buenos Aires and in the provinces of Buenos Aires, Santa Fe, and Córdoba. The male-to-female ratio for HIV infection has remained stable since 2001, with it being 1.7 during the 2007–2009 period. Unprotected sexual relations continue to be the main mode of transmission. Ninety percent of pregnant women are screened for HIV during pregnancy or labor, and 80% of pregnant women infected with HIV have received antiretrovirals to prevent vertical transmission. The rate of vertical transmission to the children of HIV-positive mothers is estimated at 6%.

With regard to other sexually transmitted infections, reported cases of congenital syphilis remained stable, at approximately 1 per 1,000 live births during the 2006–2010 quinquennium. During this period, the highest rates were reported in the northeast and in the city of Buenos Aires.

Tuberculosis

In 2006, 11,068 new cases of tuberculosis were reported, with a rate of 28.4 per 100,000 population, and in 2009, 10,657 cases were reported, with a rate of 26.6 per 100,000. The highest rates were reported
in the north of the country (17, 18). Reported cases of the pulmonary form declined between 2006 and 2009, and bacteriological confirmation fluctuated around 65%. The highest rate was observed in people ages 20 to 24 years, and 60% of the cases occurred in males. Mortality overall was approximately two per 100,000 population, with the highest rates reported by the poorer provinces in the north.

**Intestinal Diseases**

The rates of acute diarrheal diseases reported during the 2006–2010 period remained stable. The national rate was 3,034.07 per 100,000 population in 2010, with the highest rates recorded in two regions: the northwest (6,370.26 per 100,000) and Cuyo (3,962.93 per 100,000). Botulism rates remained stable in the 2006–2009 quadrennium, with values below 0.05 per 100,000 population. An average of 380 cases of hemolytic-uremic syndrome were reported annually from 2006 to 2009, with the highest rate of 1.27 per 100,000 population reported in 2006.

**Chronic, Noncommunicable Diseases**

**Cardiovascular Diseases**

Cardiovascular diseases were the leading cause of death, accounting for 30% of overall deaths between 2006 and 2009. In 2009, diseases of the circulatory system caused 89,916 deaths, with a rate of 224.2 per 100,000 population overall for men and women. Of these deaths, 20.7% were attributed to cerebrovascular diseases and 20.6% to ischemic heart disease, with a rate of 46.3 per 100,000 population. Mortality from heart diseases ranked first among well-defined causes of death (24.4%), with an overall rate of 169.4 per 100,000 population, and with a higher rate for men. Cerebrovascular diseases ranked fourth (6.7%). The number of deaths increased starting at age 45 for all diseases of the circulatory system, although 2% occur prior to reaching that age.

**Malignant Neoplasms**

In 2008, 104,859 new cases of malignant neoplasms (excluding those of the skin and with a nonmelanoma histology) occurred, with an overall incidence rate of 206 per 100,000 for men and women (19). The most prevalent type of cancer in women was breast cancer, with a rate of 74 per 100,000 women, followed by cervical and uterine cancers and colorectal cancers, with an approximate rate of 17 per 100,000 women for each type. The most prevalent cancers among men were prostate cancer (58.4 per 100,000 men), lung cancer (33.7 per 100,000), and colorectal cancer (25.0 per 100,000). According to Moreno (20) (n.d.) the annual incidence rate of malignant neoplasms in children under the age of 15 was 2.4 cases per 100,000, and, between 2000 and 2007, the most frequent types of these neoplasms were leukemia (30%–40%), brain tumors (20%), and lymphomas (13%).

Malignant tumors caused 20.7% of all deaths in 2009, with a mortality rate of 143.5 per 100,000 population. Over time, this rate has gone down, especially in men. Tumors of the windpipe, bronchia, and lungs were the most frequent type for both sexes together and also for just men, but these types have shown a downward trend in men and an upward trend in women. Breast tumors were the most frequent type as a cause of death among women.

According to the National Cancer Institute (21), there are marked inequalities in mortality rates from cervical and uterine cancer among the provinces, with incidence rates being higher in the poorer northern regions of the country. Cervical cancer accounted for 6.4% of deaths from neoplasms in women between 2005 and 2009. The highest rates occurred in the northeast, with 14.73 deaths per 100,000 women (18 per 100,000 women in Formosa). The highest proportion of mortality from cervical and uterine cancer was found among women ages 45 to 64 years, while the highest mortality rates were observed in the group aged 65 and older.

**Diabetes**

Blood-glucose control increased from 69.3% to 75.7% between 2005 and 2009, while self-reported diabetes prevalence rose from 8.4% to 9.6%. According to the Second National Survey of Risk
Factors for Noncommunicable Diseases (11), the prevalence of diabetes differed according to income level (low income, 9.6%; middle, 7.8%; and high, 7.0%), and it was higher among women (10.1%) than men (8.9%). In 2009, mortality from diabetes ranked ninth among well-defined causes of death (2.8%), accounting for a total of 7,701 deaths and a mortality rate of 19.2 per 100,000 population; 91% of these deaths corresponded to people over the age of 55 (and 44.6% to people over 75). The distribution by sex was very similar.

**Chronic Respiratory Diseases**

In 2008, respiratory diseases were the fourth leading cause of death in the population ages 20 to 64 years (with chronic respiratory diseases accounting for 15.2%), according to ANLIS (22). A total of 45,541 deaths from respiratory diseases were registered in 2009, a rate of 113.5 per 100,000 population, and acute respiratory infections accounted for 42.5% of these deaths.

**Hypertension**

According to the Second National Survey of Risk Factors (11), in 2009, 81.4% of the adult population reported having had their blood pressure checked in the preceding two years and, of this percentage, 34.5% had presented with high blood pressure during at least one medical visit. There were no changes in prevalence relative to 2005 levels. Hypertensive disease was responsible for 6.1% of total deaths from diseases of the circulatory system in 2009, with a specific mortality rate of 13.8 per 100,000 population.

**Nutritional Diseases**

**Malnutrition**

According to the National Survey of Nutrition and Health (12), low height-for-age and excess weight were the major concerns among boys and girls under the age of 5. Overall, 8% of boys and girls ages 6 to 60 months had low height-for-age according to the curves established by WHO, with the highest

prevalences recorded in the northeast and northwest regions. Based on the population, the prevalence of emaciation (acute malnutrition) was minimal.

**Obesity**

According to the Second National Survey of Risk Factors (11), in 2009, 53.4% of the population was overweight or obese. The prevalence of obesity had increased substantially over 2005 levels, rising from 14.6% to 18.0%. However, there was no change in the prevalence of excess weight, which was 35.4%. This increase in the prevalence of obesity relative to 2005 occurred in all three income classifications used in the research. The prevalence was higher among women (19%) than among men (17%), and even more so among people ages 50 to 64 years (27%).

**Accidents and Violence**

The mortality rate from external causes was 47.04 per 100,000 population in 2009. Accidents accounted for 55.0% of the total deaths from external causes (18,868), suicides for 15.8%, and assaults for 9.7%. Accidents and their sequelae were the sixth leading cause of death (3.7%). They occurred at an overall rate of 25.8 per 100,000 population, with a higher rate among men. Traffic accidents accounted for 45.1% of all accidents and 24.6% of all external causes. The group ages 15 to 34 was the most affected by the eight leading causes of death. External causes were the leading cause of death among those ages 5 to 44 years.

**Mental Disorders**

According to Ministry of Health estimates (23), more than 6 million people over the age of 15 suffered from mental disorders in 2010 (46% of them female); 1.6 million people experienced major depression (68% of them female); and 1.7 million (85% of them male) abused or were dependent on alcohol. It is also estimated that just 59.9% of those suffering from major depression and 71.4% of those who abused or were dependent on alcohol received treatment in 2010.
The National Office of Mental Health and Addictions was reestablished under the Ministry of Health in 2010. National Mental Health Law 26657 was enacted to promote psychiatric reforms that incorporate the most recent international standards on the human rights of people with mental illness, and that mandate ranking mental health on par with other health concerns.

**Risk and Protection Factors**

Two national surveys of risk factors have been conducted in Argentina, the first in 2005 and the second in 2009. According to the Second National Survey of Risk Factors (11), 19.2% of the survey population evaluated their health as poor or fair. Physical inactivity increased substantially, rising from 46.2% in 2005 to 54.9% in 2009. Also, 25.4% of the population always added salt to their foods, while only 4.8% consumed at least five servings of fruits and vegetables per day. Of those who had had their cholesterol level checked, 29.1% reported that it was high. Tobacco use was reported by 27.1% of the population over 18 years of age, representing a 2.6% decline relative to 2005. Exposure to second-hand smoke was reduced to 40.4%, due mainly to the enactment of provincial laws establishing 100% smoke-free areas. Moreover, 56.3% of women over 40 reported having had a mammogram in the preceding two years. Also during that time period, 60.5% of women over 18 said they had had a Pap smear.

**Occupational Accidents and Diseases**

According to the Ministry of Labor, Employment, and Social Security (24), the historical average of workers covered by occupational hazards insurance has been 5,791,329, while the 2006–2010 average was 7,501,043. According to Schleser (25), 31% to 38% of workers were not registered, did not make retirement contributions, and were not covered by the occupational hazard insurance system. An average of 661,294 occupational accidents per year were reported in the 2006–2009 period, with approximately 10% variation from year to year. Most accidents were reported in the municipal services (servicios comunales) sector (26%), followed by the trade sector (15%) and the construction sector (12%).

**Disability**

The Ministry of Health’s National Rehabilitation Service maintains an administrative registry of disabilities that draws from the Single Disability Certificate (Certificado Único de Discapacidad). In 2010, 54% of those holding such a certificate were men and 46% were women; 37% had a motor disability, 36% a mental disability, 12% visceral, 9% auditory, and 6% visual. Between 2007 and 2010, rehabilitation services were strengthened, a community-based rehabilitation strategy was implemented, and the Federal Program of Recreation and Sports for People with Disabilities was launched.

**HEALTH POLICIES, THE HEALTH SYSTEM, AND SOCIAL PROTECTION**

**The Health System’s Stewardship Role**

The National Health Authority is responsible for health planning and coordination, in conjunction with the health authorities of the provincial jurisdictions. These activities are tantamount to a federal health system, with guidelines for it set out in the Federal Health Plan 2010–2016, which was formulated by the Ministry of Health. These guidelines serve as indicators, since the provinces have autonomy in setting their health policies and, consequently, in protecting and caring for the health of their population. The Federal Health Council, which is made up of the ministers of health of all jurisdictions in the country, facilitates improved coordination between the National Health Authority and the provinces, builds consensus, and sets goals. The Superintendence of Health Services, a decentralized Ministry of Health entity with administrative, economic, and financial autonomy, oversees implementation of the Compulsory Health Plan (Programa Médico Obligatorio) and the National Program for Quality Assurance in Medical Care in the social security agencies.
THE HEALTH SYSTEM’S PERFORMANCE

Argentina’s public health system offers basic services coverage to all of its inhabitants, even if they also are covered by social security or private insurance. In 2011, the public sector provided coverage to the entire population (100%); the national health plans (obras sociales) covered formal sector employees and their dependents (38.8%); the National Institute of Social Services for Retirees and Pensioners (better known by the Spanish acronym PAMI) covered retirees and pensioners and their spouse and children (8.3%); the provincial health plans covered civil servants and provincial retirees and their dependents (13.7%); and the private subsector covered volunteer associates (9.0%). This coverage is set out in a list of goods and services for prevention, diagnosis, and medical and dental care that is included in the Compulsory Health Plan. The National Health Authority is responsible for ensuring people’s access to the Compulsory Health Plan and also for regulating and overseeing the duties and quality of services of the health plans (social security) and prepaid medicine plans (private sector). The public subsector also guarantees that the population has insurance through specific plans, programs, and laws, such as the program that provides public health insurance for uninsured mothers and children (Plan Nacer) and the program that ensures access to essential medicines (Programa Remediarn). The Compulsory Health Plan covers high-cost, low-incidence benefits through the Special Programs Administration, financed by the Collective Redistribution Fund (Fondo Solidario de Redistribución).

HEALTH LEGISLATION

The Federal Legislative Health Council, the coordinating body of the legislative branch, is made up of the members of the health commissions of the different legislatures (national, provincial, and of the city of Buenos Aires). Its objective is to define and develop a legislative framework that harmonizes the legislation of the various jurisdictions in order to achieve equity for the entire population of the country.

HEALTH EXPENDITURES AND FINANCING

Financial allocations to this sector have increased in recent years. Some 10% of the GDP was allocated for overall health spending in 2008, divided among direct private expenditures (4.92%), social security outlays (3.08%), and public subsector spending (2.19%). In the latter case, the main outlays were from the provinces, since they are primarily responsible for health services delivery.

HUMAN RESOURCES DEVELOPMENT POLICIES

The main achievements in this area include funded fellowships from the National Health Care Team Residencies System and the restructuring of the Human Resources Observatory. The latter was created in 2007 and has an information area to support decision-making and monitoring of human resource policy. Created to regulate professional practice, the Integrated Health Information System had registered 510,110 health professionals as of 2010. A community physician and health promoters program was implemented under a covenant signed with 20 universities in the country as well as a co-management agreement for strengthening primary care throughout the country. According to Abramzón (26), there are 32.1 physicians, 9.3 dentists, and 3.8 nursing professionals (in all categories) per 10,000 population in Argentina.

There are three nursing categories: licensed nurses (bachelor’s degree), nurses, and nursing aides. In 2007, nurses with a bachelor’s degree comprised 7% of the total; other nurses, 30%; and nursing aides, 63% (this figure ranged from 35.2% to 92.5% in the various provinces). With respect to graduates with a health sciences major, the number of physicians rose by 11% between 2002 and 2009, and university-educated nurses, by 561.1%. Graduates from postsecondary nonuniversity nursing programs also rose during the same period, by 332.1%. In spite of
these changes, the gap between physicians and nurses has not been overcome.

The Health Services

The health sector is made up of: (1) the public subsector, consisting of 24 provincial systems that vary greatly; (2) the health plans (social security) subsector, which includes more than 280 national and 24 provincial health plans as well as those specifically for the Armed Forces, the Judiciary, the Legislative Branch, the Security Forces, and the universities; and (3) PAMI. The private subsector includes numerous prepaid health service providers and several mutual entities. These institutions are neither integrated nor coordinated in the national, provincial, and municipal jurisdictions. This leaves the health sector segmented, fragmented, and heterogeneous in terms of organization, financing, and accessibility.

There are 18,000 health facilities, of which 9,000 are private and 9,000 are public. Of these public facilities, 1,373 are hospitalization services, and the rest are outpatient facilities that offer different levels of services and that are not part of integrated networks. While these facilities ensure basic coverage, access levels vary considerably among the jurisdictions and also vary depending on a user’s geographic location within a jurisdiction.

Programa Remediar ensures access to essential medicines for the entire population through the delivery of emergency kits to more than 6,600 primary health care centers. The eleventh edition of the National Therapeutic Formulary of the Medical Confederation of the Argentine Republic, which was adopted by the Ministry of Health, was disseminated in 2010. Law 26.688/2011, on the public production of medicines, is in the regulatory phase. This law, which defines medicines as a social good, seeks to promote access to medicines, vaccines, and medical products as well as to foster scientific and technological development through public production laboratories. Resolution 435/2011 mandates the creation of a medicine-tracking system that covers all individuals and companies involved in the chain of marketing, distribution, and dispensing. In 2009 the National Administration of Drugs, Foods, and Medical Devices became the first regulatory authority in Latin America to be accredited by PAHO as a national regulatory authority and a regional reference laboratory.

Knowledge, Technology, Information, and Human Resource Management

Scientific Production in Health

Between 2002 and 2009, the Ministry of Health granted more than 2,000 individual fellowships to carry out multicenter studies and to assess the status of health research in the country, and then compiled the resulting reports in a single publication. The Ministry of Health also passed Resolution 102/2009, which established the Registry of Clinical Trials on Human Beings.

Since 2009, the Ministry of Public Health has published the Revista Argentina de Salud Pública (Argentine Journal of Public Health), which is indexed in the LILACS database of the BIREME/PAHO/WHO system as well as in BINACIS. The journal can be accessed through the Argentina portal of the Virtual Health Library. In 2008, Argentine institutions produced 7,928 documents that were registered in the Science Citation Index, an increase of more than 20% over the previous year. The “Legisalud Argentina” portal, operated by the Ministry of Health, was a noteworthy step in the process of constructing the Virtual Health Library of Argentina. Finally, the Ministry of Science, Technology, and Productive Innovation created the National System of Digital Repositories by means of Resolution 469/2011.

Health Information Management

In 2011, the Health and Planning ministries signed a joint agreement for the interconnectivity of hospitals, primary health care centers, integrated community centers, and other health institutions of the country through the National Fiber Optics Network.
HEALTH AND INTERNATIONAL COOPERATION

Argentina belongs to the group of middle-income countries. Multilateral health cooperation is provided through bodies such as the World Bank, the Inter-American Development Bank, the European Union, the United Nations system, and the Global Fund to Fight AIDS, Tuberculosis and Malaria. In recent years, bilateral cooperation has targeted sectoral programs, scientific and technological cooperation, and emergencies.

Argentina has participated in particular in South-South and triangular cooperation, which is carried out through the Argentine Fund for South-South and Triangular Cooperation. The government’s three programmatic priorities are administration and governance, human rights, and sustainable development. Activities have focused on stepping up South-South cooperation with bordering countries based on integration in MERCOSUR and reducing asymmetries; promoting ties with Haiti; and strategic cooperation with the countries of the English-speaking Caribbean, Africa (especially Sub-Saharan Africa), and Asia. In 2008, the Argentine Republic, through its Ministry of Foreign Affairs, International Trade, and Worship, and PAHO/WHO signed a memorandum of understanding in order to provide cooperation to third countries.

Argentina has also spearheaded several projects within the framework of PAHO/WHO technical cooperation among countries. From 2008 until mid-2011, Argentina participated in 20 technical cooperation projects among countries to address problems that included disease control and epidemiological surveillance, mental health, local development, environmental health, and road safety. A total of US$ 447,292 was allocated to these projects. Argentina cooperated mainly with South American countries but also with Canada and Cuba.

The country participated actively in various subregional forums that have specific entities in place for health and integration issues, including the Summits of Heads of State and Government of Ibero-America and the Summits of the Americas, and those of MERCOSUR and UNASUR.

SYNTHESIS AND PROSPECTS

Argentina is a middle-income country, with considerable natural wealth, a solid infrastructure, enormous technological capacity, and highly skilled human resources. Following a serious political and economic crisis, the concerted efforts of recent years have resulted in the social inclusion of millions of Argentines. The country has enormous capacity in the health field and has made considerable progress. Despite these advances and the substantial financial allocations for health, inefficiency and inequity persist at high levels. The primary challenge is to obtain more uniform results and to decrease persistent disparities, particularly between the north and low-income areas of the metropolitan area and the rest of the country. Although present in the political and social spheres, these differences are most pronounced in the economic arena, with the attendant consequences for health. One of the most visible and resistant areas of inequity relates to maternal mortality, which has not shown a decline at the national level since 1990. The two northern regions and Cuyo region consistently present rates that are two or three times higher than the national average.

Some of the diseases requiring specific and feasible interventions include congenital syphilis, leprosy, vector-borne Chagas’ disease, and cervical cancer. Moreover, Argentina is facing such new health problems as visceral leishmaniasis, endemic dengue, and growing epidemics of chronic disease and violence.

Given its enormous capacity as described earlier, with coordinated efforts between the federal government and the provinces—which are ultimately responsible for health care—and intersectoral coordination, Argentina will be able to solve these problems in the medium term.

REFERENCES


