Health Situation Analysis

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By the end of the twentieth century, the Region of the Americas had achieved considerable improvements in the average population's health and living conditions.

Most countries in the Region have met the main goals proposed in the historic conference on primary health care held in 1978 in Alma Ata, which established the "Health for All by the Year 2000" initiative. Progress is reflected in steady improvements in such national indicators of well-being as life expectancy, easy access to safe water supply, and immunization coverage, and in reductions in health-ill outcomes, particularly the reduction of child mortality due to communicable diseases. These changes are taking place in the context of political and economic reforms, as well as an increasing decentralization of the health services. Nevertheless, the challenge of creating health systems to reduce major inequalities among populations in the Region remains a priority. Notably, health gaps between countries have not diminished, even when the analyses that measure them compare countries with similar socioeconomic conditions. Socioeconomic changes have severely inhibited the ability of the countries' health institutions to effectively and equitably deliver services to vulnerable segments of the population.

Given this, there is an urgent need to improve the empirical public health information that is used to periodically assess the health situation and analyze trends. A major challenge for the Pan American Health Organization has been to improve the comparability, validity, and reliability of the health information needed to identify and quantify the inequalities that disproportionately affect people in certain geographic areas or certain groups of society. It is equally important to recognize the factors that determine those health inequalities.

One noteworthy accomplishment is that the ministries of health of 18 countries in the Americas (listed in Table 3) have built and enhanced the availability of their core health indicators databases to disaggregate data by subnational levels based on PAHO's Regional Core Health Data/Country Profile Initiative. The availability of national information is critical for conducting the health situation analyses that will be used to adjust and redirect health policies and programs to close existing equity gaps within and among countries. PASB commends these countries for developing their national health information initiatives and for publishing their core health data.

Most countries in the Americas encompass heterogeneous space/population units and, accordingly, their national summary indicators do not provide the necessary information to document the inequalities that exist within their borders. As a result, PASB will continue to refine the methodological tools

that will permit a more precise subnational and local identification of health inequalities, as well as the selection of appropriate indicators and indices.

This chapter presents the health situation of the Member States, utilizing basic indicators of the populations' health status and its determinants. Some indicators are analyzed at different levels of geographic or population aggregation to facilitate within-country comparisons. In addition, the chapter includes a series of new methodological analyses, using for the first time distributions of available subnational core health indicators. These new methodological analyses complement other analyses presented in previous annual reports.

The health situation in the Region

The country-level analyses use the basic indicators available in PAHO's Technical Information System of Core Health Data. This system contains up-to-date information for 48 Member States and territories of the Americas. To facilitate analysis at the country level, these were divided into eight subregions according to location, population size, and certain socioeconomic criteria (Table 1).

The subnational analyses included data from 363 geographic units (states, provinces, or departments) of 18 countries. In collaboration with the PAHO/

TABLE 1. Subregions of the Region of the Americas.

Subregion	Countries included
Andean Region	Bolivia, Colombia, Ecuador, Peru, and Venezuela
Brazil	
Central American Isthmus	Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama
Latin Caribbean	Cuba, Dominican Republic, Haiti, and Puerto Rico
Mexico	
Non-Latin Caribbean	Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, British Virgin Islands, Cayman Islands, Dominica, French Guiana, Grenada, Guadeloupe, Guyana, Jamaica, Martinique, Montserrat, Netherlands Antilles, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Turks and Caicos Islands, and U.S. Virgin Islands
North America	Bermuda, Canada, and United States of America
Southern Cone	Argentina, Chile, Paraguay, and Uruguay

WHO Country Offices, several countries initiated evaluation and monitoring processes and published their health situation data and indicators for 1994–1998.

The population's health status

The end of the twentieth century saw major changes in the patterns and causes of mortality. There has been a shift in causes of death from infectious diseases to chronic non-communicable diseases. This has produced variations in the epidemiological profiles that require specific, focused responses and health policy decisions in order to modify the health-risk determinants, including environmental factors and behavioral and lifestyle choices.

The most significant changes in mortality patterns over the last 20 years in the Americas have occurred in children. The Region's mean infant mortality rate of 24.8 deaths per 1,000 live births in the 1995–2000 period is the lowest registered to date. Between 1980–1985 and 1995–2000, infant mortality fell by 12.1 deaths per 1,000 live births, or approximately 30%. In the Andean Region, Brazil, the Central American Isthmus, and the Latin Caribbean the impact of this reduction has been between 30% and 45% (Figure 1), although the mortality ratio in these areas was between five and seven times higher than in North America, and at least 40% higher than the Regional average in both periods.

At the country level, health and living conditions have also improved, although not all subnational geopolitical units benefited to the same degree. Table 2 shows various health indicators for 363 geographic units of the 18 selected countries. Although the mean and median infant mortality rates are 24.4 deaths per 1,000 live births and 19.7 deaths per 1,000 live births, respectively, the frequency distribution of the infant mortality rates (Figure 2) reveals the great variability and numerous inequalities that exist at the subnational level. Inequality also is evident in the comparison of the minimum value (3.71 deaths per 1,000 live births) and the maximum value (133 deaths per 1,000 live births, which is 35 times greater than the minimum value). The large gap among the countries also is reflected in the coefficient of

FIGURE 1. Infant mortality in the Americas, by subregion, for 1980–1985 and 1995–2000.

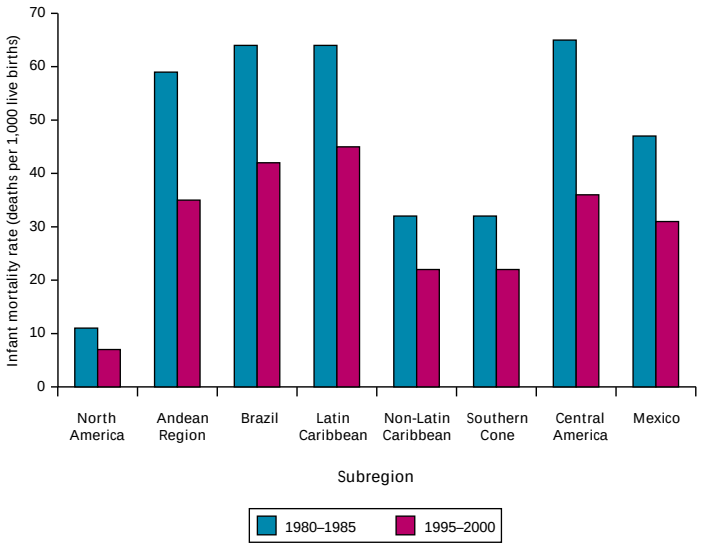


TABLE 2. Measures of the distribution of health indicators of subnational geographic units in selected countries of the Americas, 1995–1998.[a-o]

Indicator	*n*	Minimum	Maximum	Range	Mean	Median	Standard deviation	Coefficient of variation
Infant mortality rate (deaths per 1,000 live births)	363	3.7	133.0	129.3	24.4	19.7	18.9	0.8
Illiteracy (% population)	258	0.7	58.2	57.6	16.5	13.0	11.4	0.7
Total fertility rate (children per woman)	241	1.3	6.0	4.7	3.3	3.2	1.1	0.3
Urban population (%)	250	11.0	100.0	89.0	60.4	64.3	22.8	0.4
Annual population growth rate (%)	217	–3.9	8.8	12.7	2.1	2.0	1.4	0.7
Life expectancy at birth (years)	192	56.8	79.0	22.2	69.8	70.0	3.9	0.1
Access to potable water services (% population)	261	0.0	99.5	99.5	57.1	66.7	30.4	0.5
Access to excreta disposal services (% population)	244	0.0	98.3	98.3	44.9	43.5	29.8	0.7
Doctors per 10,000 population	222	0.8	99.1	98.4	13.7	9.6	14.3	1.0
Children < 1 year vaccinated against measles (%)	213	15.0	133.9	118.9	74.9	77.6	19.5	0.3
Prevalence of low birthweight (%)	203	0.0	14.3	14.3	6.6	6.6	1.6	0.2

Sources:
[a] Rede Interagencial de Informações para Saúde. Indicadores e dados básicos para a saúde. IDB 98 Brasil. Brasilia: Ministerio da Saúde; 1998.
[b] Ministerio de Salud de Costa Rica, OPS/OMS. Indicadores Básicos 1995. Situación de Salud en Costa Rica. 1995.
[c] Ministerio de Salud Pública, OPS/OMS. Indicadores Básicos 1997. Situación de Salud en Cuba. 1997.
[d] Secretaria de Salud de México, OPS. Indicadores Básicos 1997. Situación de Salud en México. 1998.
[e] Ministerio de Salud de Nicaragua, OPS/OMS. Indicadores Básicos 1997. Situación de Salud en Nicaragua. 1997.
[f] Ministerio de Salud Pública de Uruguay. La Salud de Uruguay en Cifras. 1997.
[g] Ministerio de Salud Pública de Ecuador, Instituto Nacional de Estadística y Censos, OPS/OMS. Situación de la Salud en el Ecuador. Tendencias de la natalidad y mortalidad 1987–1997. 1998.
[h] Ministerio de Salud de Guatemala, OPS/OMS. Indicadores Básicos 1998. Situación de Salud en Guatemala. 1998.
[i] Ministerio de Salud de Panamá, OPS/OMS. Indicadores Básicos 1998. Densidad por Región de Salud. 1998.
[j] Ministerio de Salud Pública y Bienestar Social de Paraguay, OPS/OMS. Indicadores Básicos de Salud—Paraguay. 1998.
[k] OPS/OMS. Situación de Salud de la Argentina. 1999.
[l] Secretaría de Salud de Honduras, OPS/OMS. Indicadores Básicos 99. Situación de Salud en Honduras. 1999.
[m] Ministerio de Salud de Perú, PAHO. Indicadores Básicos 1999. Situación de Salud en el Perú. 1999.
[n] Ministerio de Sanidad y Asistencia Social, Dirección General Sectorial de Epidemiología y Dirección de Análisis de Situación de Salud de Venezuela, OPS/OMS. Indicadores Básicos 1999. Situación de Salud en Venezuela. 1999.
[o] Ministerio de Salud de Colombia, OPS/OMS. Indicadores Básicos 2000. Situación de Salud en Colombia. 2000.

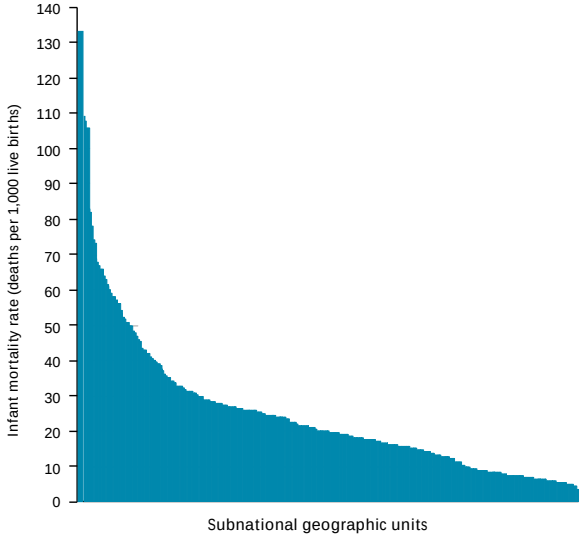
variation,[1] which has a value of 0.8. Despite the differences, approximately 5% of the geographic units have values above 60 deaths per 1,000 live births and more than half have values close to the Regional mean of 24 deaths per 1,000 live births.

The median values for the infant mortality rate at the subnational levels show variations among countries, ranging from 5.7 deaths per 1,000 live births in Canada to 83 deaths per 1,000 live births in Bolivia (Table 3). Bolivia's infant mortality rate ratio, 15 times greater than Canada's, indicates the high degree

[1] The ratio of the standard deviation to the mean.

of inequality between these countries (Figure 3). The median values within the countries suggests four possible health inequality profiles: very low levels of infant mortality (fewer than 10 deaths per 1,000 live births); low levels (close to the Regional median of 24 deaths per 1,000 live births); high levels (20 to 40 deaths per 1,000 live births); and very high levels (40 or more deaths per 1,000 live births). In practically all the countries, the range between the maximum and minimum values reflects the degree of inequality within them. For example, the infant mortality rate ratio in Peru, which has high levels of infant mortality (nearly double the Regional level), shows great internal inequalities. The rates in areas with the highest number of infant deaths are nearly four times those in the areas with the lowest number of infant deaths. Nevertheless, it is important to note that the greatest internal infant mortality inequalities do not occur necessarily in the countries with the highest national rates. In Colombia, which has low levels of mortality, the mortality rate ratio is 6.2, higher than that of all the countries analyzed. In contrast, in Uruguay and Cuba, which have low or very low levels of mortality, the mortality rate ratio between subnational units is lower.

FIGURE 2. Infant mortality rates in selected countries of the Americas[a], 1995–1998. Distribution pattern from 363 subnational geographic units.



[a] Argentina, Belize, Bolivia, Brazil, Canada, Colombia, Costa Rica, Cuba, Ecuador, Guatemala, Mexico, Nicaragua, Panama, Paraguay, Peru, United States of America, Uruguay, and Venezuela.

Taking into account small population sizes, fairly homogeneous socioeconomic conditions, and unstable infant mortality rates, the differences among Non-Latin Caribbean countries were analyzed utilizing life expectancy at birth for subnational units as the health status indicator. The average life expectancy at birth in this subregion in the 1995–2000 period is 72.6 years, with women outliving men by 5.2 years. Greater differences between men and women also were observed at the country level: for example, women outlive men by 6.5 years in Aruba, Saint Lucia, Guyana, Guadeloupe, the Bahamas, and Martinique. In contrast, in the Virgin Islands, Saint Vincent and the Grenadines, and Montserrat, women outlive men by only three or fewer years. Guyana and Saint Kitts and Nevis ranked considerable lower than the subregional average figure for life expectancy at birth for women (Figure 4).

As is the case with life expectancy in the Non-Latin Caribbean, infant mortality rates within a country vary according to location and social group, indicating that inequalities exist regardless of a country's mean rate (Figure 5a). For example, in Washington, D.C. (USA), infant mortality is higher for minor-

TABLE 3. Measures of the distribution of the infant mortality rate for subnational geographic units of countries of the Americas, 1995–1998.[a-o]

Indicator	*n*	Minimum	Maximum	Ratio	Range	Mean	Median	Standard deviation	Coefficient of variation
Argentina	24	9.7	34.4	3.55	24.7	20.8	20.05	6.2402	0.3
Belize	6	11.4	35.2	3.09	23.8	20.4	16.55	9.3164	0.46
Bolivia	9	50	133	2.66	83	87.3	83	27.171	0.31
Brazil	27	19.66	74.07	3.77	54.41	40	35.02	15.572	0.39
Canada	11	4.6	12.2	2.65	7.6	6.43	5.7	2.2136	0.34
Colombia	27	4.5	28	6.22	23.5	14.1	14.8	5.2159	0.37
Costa Rica	7	3.71	15.68	4.23	11.97	12.3	13.69	4.0678	0.33
Cuba	15	5.4	10.3	1.91	4.9	8.09	8	1.4815	0.18
Ecuador	20	10.9	32.7	3.00	21.8	19.9	18.45	6.1882	0.31
Guatemala	22	24.02	58.03	2.42	34.01	38.1	35.52	10.457	0.27
Mexico	33	14	42.8	3.06	28.8	24	22.2	7.2612	0.3
Nicaragua	17	12.63	40.12	3.18	27.49	23.8	22.4	8.3399	0.35
Panama	10	11.1	29.8	2.68	18.7	19.2	18.1	6.1744	0.32
Paraguay	18	16.45	61.54	3.74	45.09	25.3	21.26	10.818	0.43
Peru	24	26	109	4.19	83	54.9	51.5	18.761	0.34
Uruguay	18	13.3	25.7	1.93	12.4	18.4	18.35	2.7759	0.15
United States of America	51	4.4	14.9	3.39	10.5	7.42	7.4	1.7729	0.24
Venezuela	24	8.9	42.1	4.73	33.2	24.9	24.55	7.2736	0.29

Sources: See references a-o in Table 2.

ity populations, particularly African-Americans, whose risk is at least twice that of the white population (Figure 5b).

Geographic units with infant mortality rates more than two standard deviations above the mean were identified in 11 of 18 countries in the Americas.

Measuring health inequalities and their determinants

In order to determine and understand long-term health trends, the links among health status and individual biological and social characteristics, economic and political organization, social structure, cultural background, and demographic and macroecological processes must be recognized and taken into account.

A population's demographic and socioeconomic characteristics are basic determinants of its living conditions. In the subnational units of Peru and

Brazil, there is an inverse relationship between the infant mortality rate and the proportion of the population with access to potable water, with correlations of –0.65 and –0.66, respectively. The negative correlation between these two variables suggests that, in these countries, the infant mortality rate decreases as access to potable water increases (Figures 6a and 6b).

The relationship between the infant mortality rate and the proportion of the population with access to excreta disposal services in the subnational units of Panama and Peru also is inverse, with correlations of –0.80 and –0.67, respectively. In most of Panama's provinces, more than 70% of the population has access to excreta disposal services and infant mortality rates are lower than 20 deaths per 1,000 live births. However, the provinces with the least access also have the highest infant mortality rates. As in the case of access to potable water, this suggests that as access to excreta disposal increases in these countries, the infant mortality rate decreases (Figures 7a and 7b).

It is important to note that a negative correlation was also found in Uruguay, even though the country has a low infant mortality rate and good access to water (corr = –0.49) and excreta disposal (corr = –0.44) in comparison to other countries in the Region. This correlation was not as strong as in the other countries, but the inverse relationship between the infant mortality rate and environmental factors is still evident.

In the analysis of the relationship between the infant mortality rate and the proportion of illiterate population in several countries in the Region, Brazil showed an almost perfect positive correlation (corr = 0.94) (Figure 8a). This suggests a very strong association between this socioeconomic factor and infant mortality in this country, where infant mortality increases as illiteracy increases. A strong positive correlation between these two indicators (corr. = 0.75) also is seen in Peru (Figure 8b).

FIGURE 3. Infant mortality rates in selected countries of the Americas, 1995–1998. Country distribution according to subnational geographic units.

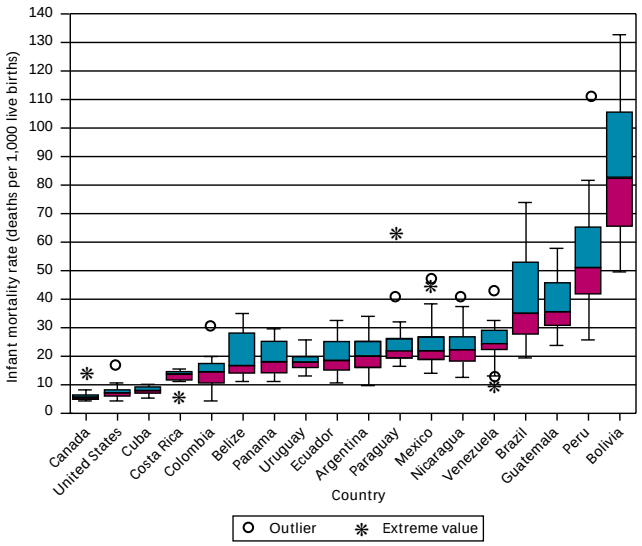


FIGURE 4. Differences in life expectancy at birth among females from Non-Latin Caribbean countries, 1995–2000.

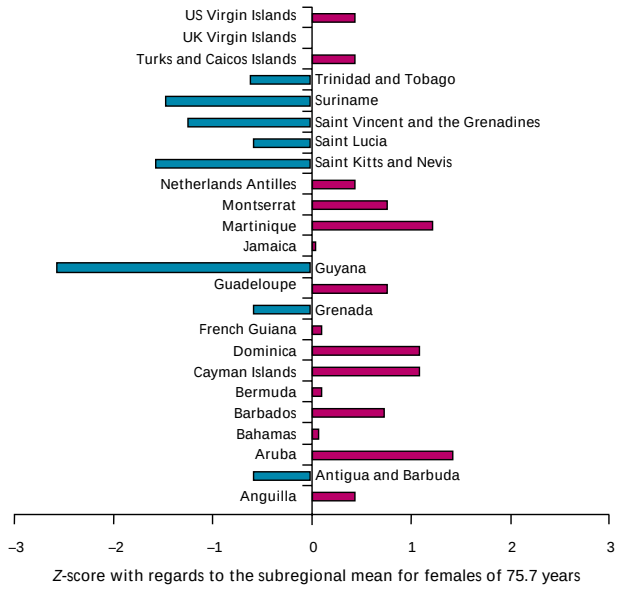
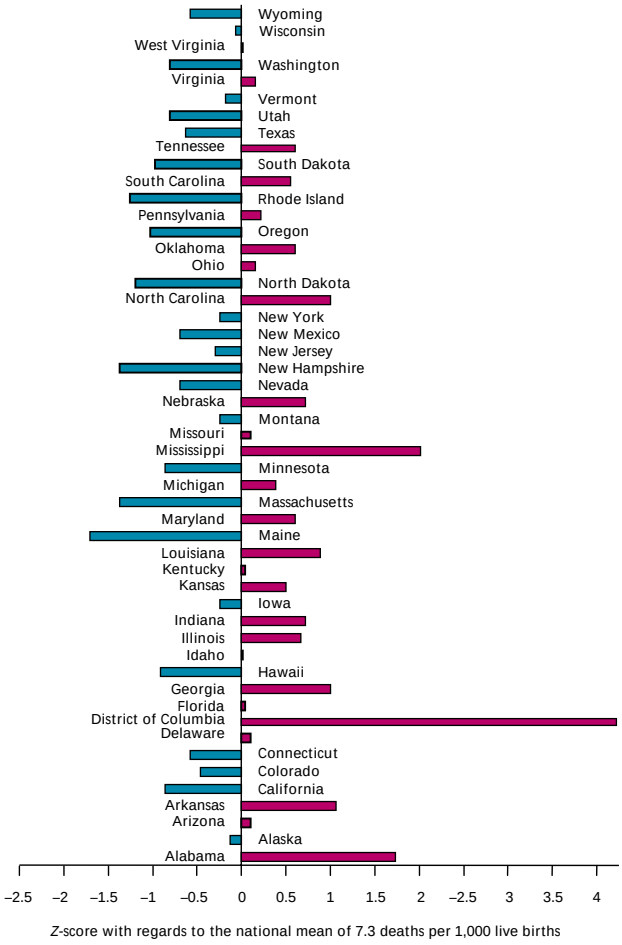


FIGURE 5a. Infant mortality in the United States of America, by state, 1996.



Use of the distributions of subnational-level basic health data

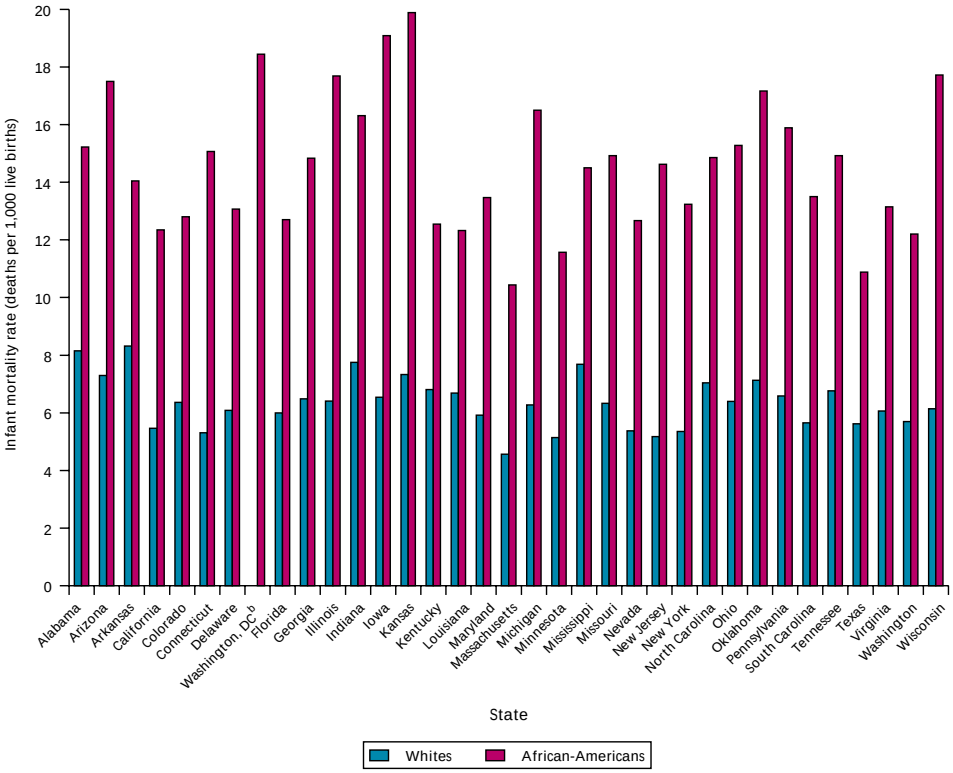
The graphs and maps presented in this chapter identify population groups in geopolitical units that show the greatest inequalities in health and that require the greatest health care interventions.

The availability of core health data disaggregated at subnational levels permits the exploration of the magnitude of within-country distributional inequalities in health. The exploratory analysis of health inequalities was done using the Lorenz curve[2] and the Gini coefficient.[3] Using data from Guatemala's 27 health areas and Uruguay's 18 departments, figures 9a and 9b show the magnitude and distribution of inequalities in infant mortality in these two countries. In a situation of "perfect equality," each population quintile should account for only 20% of the total deaths. However, these Lorenz curves show that almost 35% of Guatemala's and 25% of Uruguay's infant deaths occur in the highest infant mortality rate quintile. Looking at the opposite extreme of the distribution, Guatemala's lowest infant mortality rate quintile accounts for only 10% of infant deaths, and Uruguay's accounts for 15%. These internal disparities are also expressed as a ratio between extreme quintiles (the ratio of the 20% highest/the 20% lowest): Guatemala's is 3.5 and Uruguay's is 1.6. The Gini coefficient is a summary measure of these inequalities. The Gini values for Guatemala are 0.22 and 0.09 for Uruguay. However, the Gini coefficient does not account for socioeconomic factors in the assessment of health inequalities, and therefore it is not possible to determine if the highest infant mortality rate quintile is indeed the poorest quintile in the population.

In contrast, core health data, disaggregated at subnational levels, facilitated the exploration of the degree of internal distributional inequalities in health, taking into account important socioeconomic variables. The population was broken down into a socioeconomic hierarchy according to the values

[2] The Lorenz curve shows the difference between two distributions. When the proportion in each quintile for the y-axis variable is equal to the proportion in each quintile for the x-axis variable, the values plot a 45-degree line. The degree of curvature reflects the degree of difference (inequality) between the two proportions.
[3] The Gini coefficient, a summary measure of the deviation in the Lorenz curve, is the ratio of the area between the Lorenz curve and the 45-degree line to the whole area above or below the 45-degree line. If the Lorenz curve lies on the 45-degree line, the value of the Gini coefficient is zero. As the deviation increases, so does the Gini Coefficient; the maximum possible value of the Gini coefficient is 1.
[4] The concentration curve plots the cumulative proportions of health against the cumulative proportions of the population, ranking the population by socioeconomic status, from the most disadvantaged to the least disadvantaged. If health is equally distributed across socioeconomic groups, then the concentration curve will

FIGURE 5b. Comparison of infant mortality rates between Whites and African-Americans in the United States of America, by state, 1996.[a]



[a] Only states with rates > 0.0 or with reliable estimates are shown.
[b] Infant mortality rate for Whites in Washington, DC is zero.

of one of the three health determinants: poverty, access to potable water, and the social development index. This socioeconomic hierarchy was then related to the observed distribution of the infant mortality rate, a key health outcome variable. This analytical approach is expressed by the concentration curve[4] and its associated concentration index.[5] Figures 10a and 10b illustrate this approach using national core health data from Brazil's 27 states and Costa Rica's 81 cantons to explore socioeconomic inequalities in infant mortality within these countries. The negative value of both concentration indexes indicates that the infant mortality is highest among the poorest members of the population. The graphs show that the concentration index is more than twice as great in Brazil as in Costa Rica. In Brazil, the poorest quintile accounts for almost 35% of all infant deaths, whereas the richest quintile accounts for

coincide with the 45-degree diagonal. The farther the concentration curve lies from the diagonal, the greater the degree of inequality in health (Wagstaff A, Paci P, Van Doorslaer E. On the measurement of inequalities in Health. *Soc Sci Med* 1991;33(5):545–57).

[5] The concentration index is a summary measure of the distance between the concentration curve and the diagonal of perfect equality and, hence, it measures the extent of health inequality that is systematically associated with socioeconomic status. It is defined as twice the area between the concentration curve and the diagonal. Its values range from –1 (health inequality concentrated in the most socioeconomically disadvantaged population group) to +1 (health inequality concentrated in the least socioeconomically disadvantaged population group) (Wagstaff A, Paci P, Van Doorslaer E. On the measurement of inequalities in Health. *Soc Sci Med* 1991;33(5):545–57).

FIGURE 6a. Correlation between infant mortality rate and level of access to potable water services, Peru, 1996.

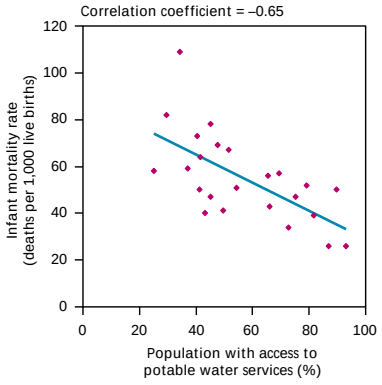


FIGURE 6b. Correlation between infant mortality rate and level of access to potable water services, Brazil, 1997.

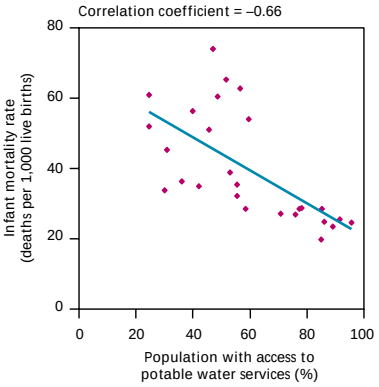
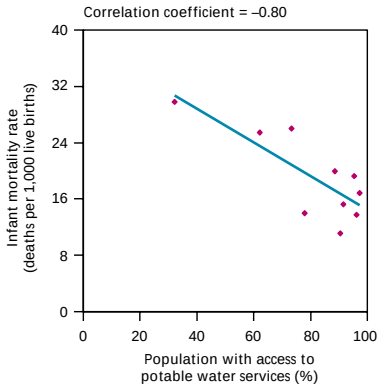


FIGURE 7a. Correlation between infant mortality rate and level of access to excreta disposal services, Panama, 1996.



10%. In contrast, Costa Rica's poorest quintile accounts for almost 25% of all infant deaths, whereas the richest quintile accounts for 15%. Using data from Peru's 24 departments, figure 10c shows the inequalities in infant mortality due to acute diarrheal diseases among the cumulative population of live births, ranked by socioeconomic level and level of access to potable water. This particular situation is also corroborated by the strong negative correlation between infant mortality and levels of access to potable water, as shown in Figure 6a. The information derived from these analyses can help decision-makers to identify priority areas for health interventions as well as to direct the allocation of resources to address national equity goals.

In planning intervention strategies it is useful to base health analyses on the patterns and degree of spatial distribution. To determine levels of unmet health needs utilizing various basic indicators, PASB proposes the analysis of multiple variables with linear combinations of *Z*-scores[6] to identify health needs in critical areas. By analyzing specific determinants, interventions can be targeted to reduce specific health risks and existing health inequalities. Figures 11a–c, which are thematic mappings that can be used in health analysis and program interventions, show the distribution of health needs at subnational levels in Brazil, Mexico, and Peru.[7] These epidemiological maps make it possible to locate the areas and populations with the highest level of unmet health needs in these countries.

The standardization of the indicators makes it possible to establish a hierarchical order of inequality between units, as well as to combine different indicators with different units of measurement in a single index. The health needs index presented here is a standardized linear combination of the values of three basic indicators at the subnational level: infant mortality rate, proportion of the population with access of potable water, and literacy rates. The health needs index provides an operational application of the results of the inequality assessments that identify the areas with higher degrees of

[6] Scores expressed as standard deviations from the mean value.
[7] These maps were prepared with ArcView CHALK 3.2 Geographic Information System, using the standard deviation from the means of the selected indicators (expressed as a *Z*-scores) to classify geographic units. These *Z*-scores represent a given indicator's relative distance from the national mean; as such, it constitutes a minimum attainable goal.

needs and inequalities and facilitates the targeting of health interventions.

Directing health interventions to achieve health equity

In order to guide rational, effective, and equitable decision-making, it is imperative that health situation analyses measure health inequalities with greater specificity and make use of available national and subnational basic information. The health analyses presented in this report reveal the unequal rates in the basic health indicators at subregional, national, and subnational levels and the extent of current health equality gaps between and within countries. To identify areas or population groups with the greatest health care needs, the countries in the Region can use the simple statistical measures and methodological procedures presented here (absolute frequency distribution and the range of selected basic indicators and measures of distribution and dispersion of indicators).

In summary, since a country's health indicators expressed as national means do not reflect that nation's heterogeneity, a new strategy is required to geographically disaggregate information for health analyses. High inequality patterns were observed at both Regional and subregional levels and were replicated with greater intensity at the subnational and local levels. Some countries in the Region of the Americas have major internal health differences and inequalities, as shown by large ranges of distribution and the extent of the dispersion of indicators, as well as high Gini coefficients, concentration indices, and coefficients of variation. Subnational analyses facilitate rational decision-making to determine priorities and health policies, and the planning and eval-

FIGURE 7b. Correlation between infant mortality rate and level of access to excreta disposal services, Peru, 1996.

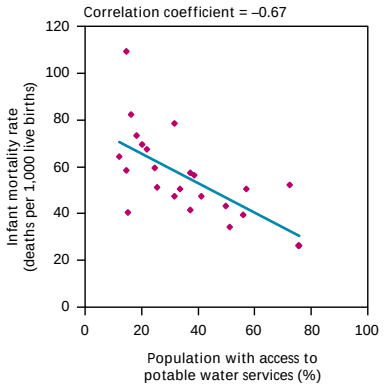


FIGURE 8a. Correlation between infant mortality rate and level of illiteracy in the population, Brazil, 1997.

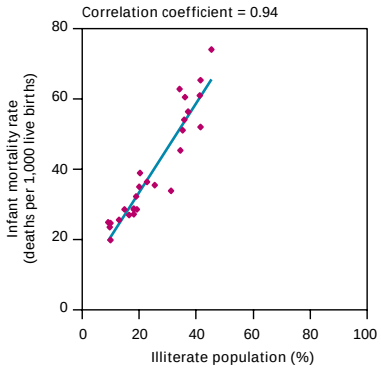


FIGURE 8b. Correlation between infant mortality rate and level of illiteracy in the population, Peru, 1996.

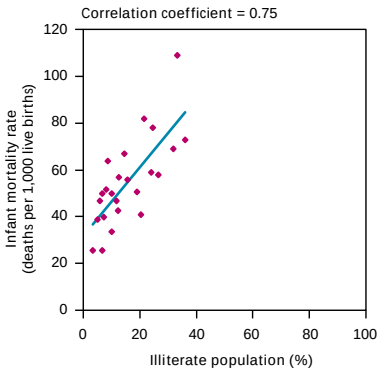


FIGURE 9a. Inequalities in infant mortality: cumulative distribution of deaths under age 1 among the cumulative population of live births, ranked by magnitude of infant mortality rate, Guatemala, 1997.

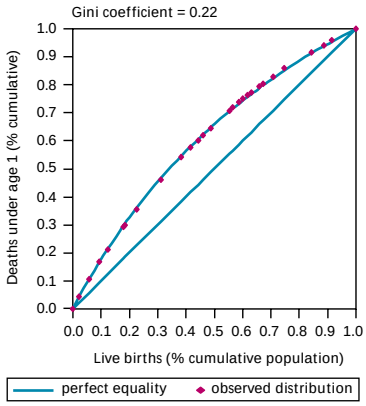


FIGURE 9b. Inequalities in infant mortality: cumulative distribution of deaths under age 1 among the cumulative population of live births, ranked by magnitude of infant mortality rate, Uruguay, 1997.

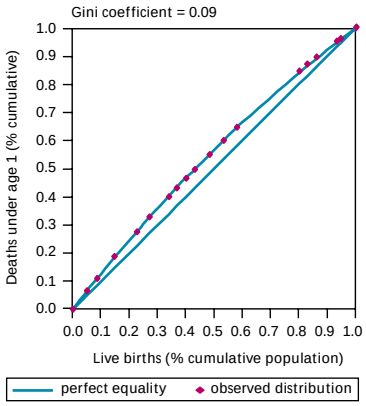
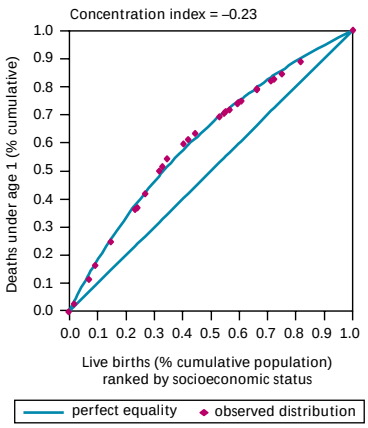


FIGURE 10a. Inequalities in infant mortality: cumulative distribution of deaths under age 1 among the cumulative population of live births, ranked by socioeconomic status, according to the proportion of households below the national poverty line, Brazil, 1997.



uation of those health interventions that affect the detected health inequities.

The great variability in the levels of needs and health inequalities within the countries has been shown in this report through the analysis of such basic indicators as infant mortality, poverty, illiteracy, and access to potable water. The rates in some countries tend to be more homogeneous, as the dispersion indicators indicate, while in others they are very heterogeneous, due to the persistence of major differences in the population's health and living conditions.

The analysis of the health situation and its trends based on distributions of the basic indicators at subnational and local levels will show both the magnitude and the distribution of health inequalities. It will identify the areas and the population groups that need specific policies, sustained intervention programs, and health services. In addition, it facilitates the recognition of the basic determinants that interact to affect individuals, population groups, and their environment. This information is fundamental to the reorientation of PASB's technical cooperation.

The development of the capacity to amass reliable health information will facilitate equity-based analyses as well as a more precise definition of sectoral priorities and improved health program planning, monitoring, and evaluation.

It is critical for Member States to target health interventions to those geographic areas and populations that have the highest levels of inequality and unmet health needs. Health situation analyses will assist countries in establishing priorities for their health programs and interventions and determining any national and local adjustments that may need to be made. This type of situation analysis, together with the consolidation of the Regional and national core health data initiatives, will support the formulation of equitable health policies and effective, quality programs that can improve the well-being of the entire population of the Americas, especially those most in need.

PASB is committed to providing leadership and support to its Member States so that they may generate objective information for the analysis, monitoring, evaluation of health conditions that will contribute to the reduction of unjust health inequalities. Health situation analysis requires an equity approach, which has important policy and operational implications: it will provide the framework needed for monitoring the health conditions of the countries of the Americas as well as assist in the achievement of health equity.

FIGURE 10b. Inequalities in infant mortality: cumulative distribution of deaths under age 1 among the cumulative population of live births, ranked by socioeconomic status, according to the magnitude of the national social development index, Costa Rica, 1998.

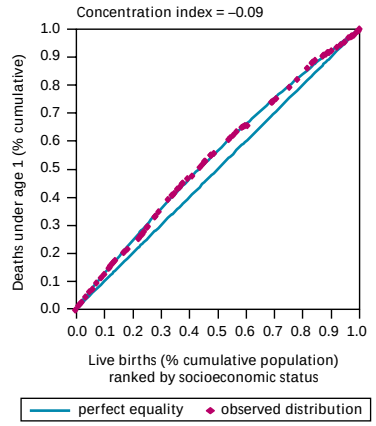


FIGURE 10c. Inequalities in infant mortality due to acute diarrheal diseases (ADD): cumulative distribution of deaths under age 1 due to ADD among the cumulative population of live births, ranked by socioeconomic status, according to the level of access to potable water, Peru, 1996.

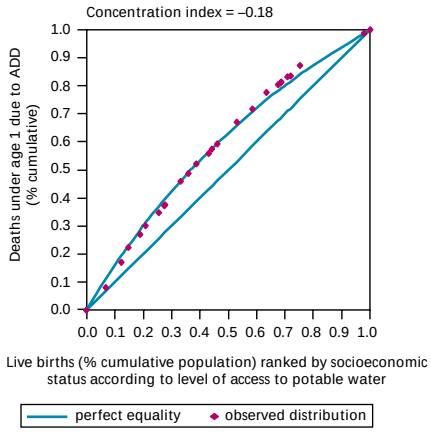


FIGURE 11a. Health needs index, Brazil, 1997.

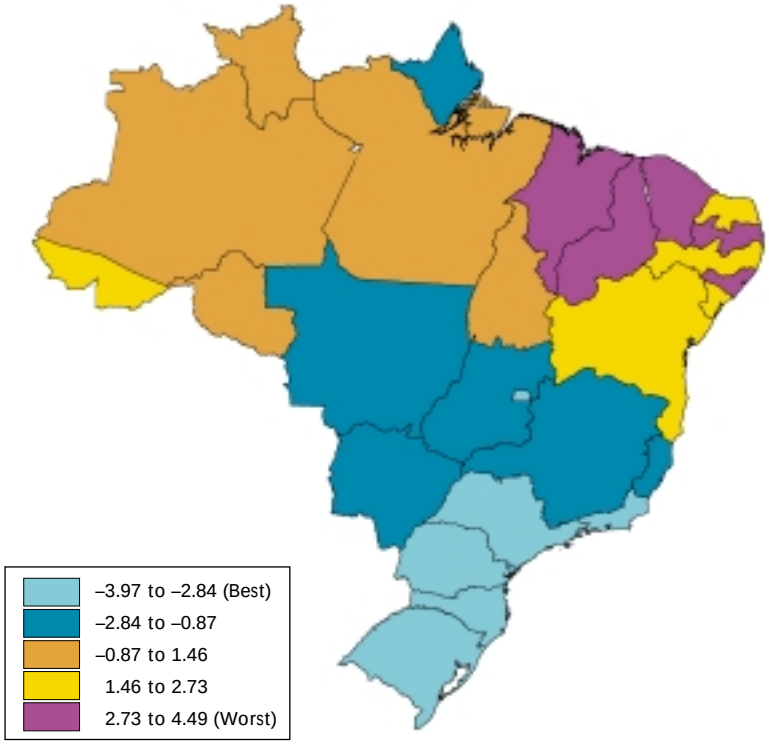


FIGURE 11b. Health needs index, Mexico, 1997.

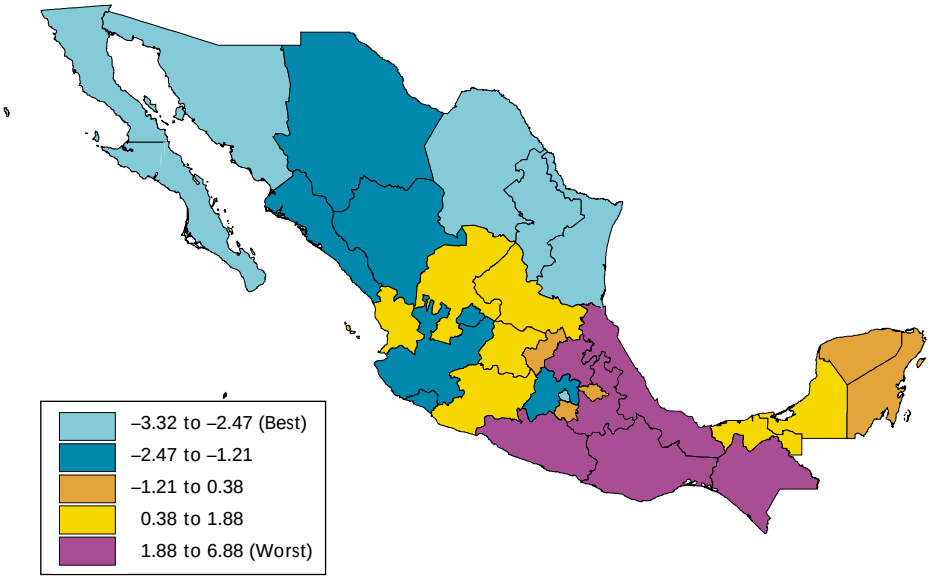


FIGURE 11c. Health needs index, Peru, 1996.