



U.S. Department of Commerce

> Economics and Statistics Administration

> > BUREAU OF THE CENSUS

Aging in the AMERICAS into the X Century



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Central America and the Caribbean 1980 2025 Male Female Male Female Age Age 80+ 80+ 75-79 75-79 70-74 70-74 65-69 65-69 60-64 60-64 55-59 55-59 50-54 50-54 45-49 45-49 40-44 40-44 35-39 35-39 30-34 30-34 25-29 25-29 20-24 20-24 15-19 15-19 10-14 10-14 5-9 5-9 0-4 0-4 5 5 20 15 10 5 0 0 10 15 20 20 15 10 0 0 5 10 15 20

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The Changing Regional Age Structure

The term "demographic transition" refers to a gradual process whereby a society moves from a situation of high rates of fertility and mortality to one of low rates. This transition is characterized first by declines in infant and childhood mortality as infectious and parasitic diseases are eradicated. Whole populations begin to age when fertility rates decline and mortality rates at all ages improve. Successive birth cohorts may eventually become smaller and smaller, as seen for North America in 1980. If projected declines in fertility and mortality throughout the hemisphere proceed as expected, regional population age structures will lose their triangular shape, and the older portion of the population will increase.



Aging Most Frequently a Women's Issue

The older population is at least as heterogeneous in most demographic and socioeconomic respects as is the younger population. One notable difference between these two broad population components is their gender composition. Because sex ratios at birth favor boys, males outnumber females in youth and young-adult age groups. However, since male mortality is higher than female mortality at practically all ages, the percent female rises with age and the numerical male advantage eventually disappears. By ages 60-64, there are only 89 men per 100 women in the Americas. This ratio declines steadily to a level of 53 at ages 80 and above.

The gender difference in absolute numbers at older ages translates into a major difference in marital status. Most older men are married.

Sex Ratio at Older Ages in the Americas: 1997

(Men per 100 women)



But because women live longer than men, marry men older than themselves, and remarry less frequently after the loss of a spouse, a majority of older women in many countries are widowed. In countries that lack a formal social safety net, elderly widows—often illiterate and without significant financial savings—represent an especially vulnerable population that must rely on younger family members for economic support.



Proportion of All Deaths Occurring Above Age 64 in 20 Čountries: **Circa 1990**

74



The Epidemiologic Transition

The prevailing disease pattern within a population changes as that population ages. As survival rates of infants and children improve during the early highrisk years of life and the average age of a population increases, individuals increasingly are exposed to risk factors linked with chronic disease and accidents. The "epidemiologic transition" refers to a long-term change in leading causes of death from infectious and acute to chronic and degenerative. There is mounting evidence that an epidemiologic transition has occurred or is occurring in many developing as well as developed countries. The Pan American Health Organization has amply documented the role of circulatory diseases as the principal cause of death in a large majority of the nations of the Americas. Most deaths from chronic and degenerative ailments occur at relatively old ages. Comparative data from the early 1990s show that more than half of all deaths in many nations now occur at ages 65 and over.



Older Population to Grow Much Faster Than Total Population

The growth rate of the older population in the Americas has been higher than that of the total population for many decades. There was a decline in the 60-and-over growth rate during the 1970s and especially during the 1980s, reflecting the low numbers of births in some countries during and after World War I. This decline is being mirrored by the 75-and-over growth rate as we move into the 21st century. As a whole, however, the older (60+) population will grow rapidly in the coming years. By the year 2010, the growth rate of the older population will be three and-a-half times as high as that of the total population, and the growth of the 75-and-over segment will be accelerating. Although the 60-and-over growth rate will decline somewhat after 2010, it is expected to remain well above that of the total population into the forseeable future.

Average Annual Percent Growth of Total and Older Population in the Americas





Aging Index in Major Countries of the Americas: 1997 and 2025



An Aging Index

1176

An easily understood indicator of the changes in age structure is the aging index, defined here as the ratio of the number of persons aged 60 and over to the number of youths under age 15. Among major countries in the Americas in 1997, this ratio ranged from a high of 82 in Canada to a low of 9 in Nicaragua. Over the next 3 decades, the aging index is expected to double or triple in most nations. By 2025, several nations will have a smaller youth population than they have persons in the 60and-over category. In both relative and absolute terms, notably high ratios will be observed in Cuba, Puerto Rico, Chile, and Trinidad and Tobago.



Within a nation's older population, different age groups may have different growth rates because of the effect of past fertility fluctuations, wars and natural disasters, epidemics, and migration. The fastest-growing portion of many older populations is the oldest old, defined here as persons aged 75 years and over. While this group typically constitutes only 1 to 2 percent of the total population in Latin American countries, many Caribbean nations have proportions of 3 to 4 percent, and the aggregate level in North America exceeds 5.5 percent.

The region's oldest old are projected to grow significantly during the coming decades, more than doubling between 1990 and 2020. Brazil will likely see more than a tripling of its oldest old during this period, from 1.9 million to 7.1 million. After 2020, the growth of the oldest old will further accelerate as the large baby-boom cohorts born after World War II begin to reach age 75. Because the oldest old consume proportionally greater amounts of health care than do younger population groups, the rapid growth of this population segment will force nations to grapple with issues of long-term care. 8.4 institutionalization, and 5.9 pension reform.

1950





Life Expectancy at Age 60

(Years of life remaining for those who reach age 60)



Life Expectancy at Age 60 Continues to Rise

Regional life expectancy at birth, especially in Latin America and the Caribbean, rose dramatically in the two decades following World War II. The rate Female of increase slowed after the mid-1960s, although the vast majority of nations continue to experience improvement in overall mortality. The data matrix on the other side of this wallchart demonstrates that life expectancy for women has reached or exceeded 78 years in at least 17 nations in the Americas, similar to the levels in various European countries. Levels for men are invariably lower, although the gender difference in life expectancy varies considerably (e.g., 3 years in Paraguay versus 9 years in Brazil and Puerto Rico).

When infant and childhood mortality reach relatively low levels, improvements in average life expectancy are achieved primarily by declines in mortality among older segments of the population. In Costa Rica, for example, the proportional increase in life expectancy at age 55 has surpassed the proportional increase in life expectancy at birth. Consequently, life expectancy at older

ages increases. In Canada, for example, life expectancy at age 60 rose 3 years for men and 4 years for women during the period 1970-1995. The average Canadian woman aged 60 years in 1995 could expect at least another 25 years of life, and the average Canadian man, another 20 years.

Male

Sources and Quality of Data

The vast majority of statistics in this wallchart are compiled in an International Data Base (IDB) maintained and updated by the International Programs Center (IPC), U.S. Bureau of the Census, and are available on the World Wide Web (http://www.census.gov/ipc/www/idbnew.html). Information for 43 of the Western Hemisphere's 48 countries is shown in the data matrix; these 43 countries are home to approximately 99.8 percent of the total regional population aged 60 and over. Because the IPC has not generated component population projections for 5 countries with relatively small populations (Bermuda, British Virgin Islands, Cayman Islands, Montserrat, and Turks & Caicos), comparable demographic information is unavailable.

Population numbers, proportions, median ages, and life expectancies at birth are as estimated and projected by the IPC based on empirical countryspecific patterns of fertility, mortality, and migration. These data have been evaluated by IPC analysts and judged to be as representative as possible of the actual demographic situation in a given country. Most of the statistics on socioeconomic characteristics are as reported by the countries themselves and represent the latest available information from the period 1985-1997. Because countries may not have collected or published certain data during the past decade, some figures from 1980-84 are included. Data on the percent of GDP spent on health are as reported by the Pan American Health Organization.

Missing columnar values (designated NA) indicate either that data are unavailable or that the latest available information is for a point prior to 1980. Wherever possible, percents widowed, economically active, and literate have been calculated for the age group 60 and over. Because nations differ in their statistical tabulation and publication procedures, some data refer to a slightly wider or narrower age grouping and are footnoted accordingly. The user should bear in mind that nations have varying definitions of concepts such as "economically active" and "literacy," and that strict comparisons are not always warranted.

The problems of comparability that affect all crossnational data compilations are to some extent compounded when contrasting elderly populations. Until recently, many national statistical agencies grouped all persons over a certain age (often age 60) into an open-ended category for purposes of tabulation, thereby obscuring important differences between cohorts within and across older populations. The meaning and measurement of concepts (e.g., health, disability, instrumental activities of daily living, economic activity and assets, and sometimes age itself) especially relevant to older individuals are often difficult to quantify and vary widely across cultures. Other important policy-related measures, such as income, living arrangements, and retirement decisions, have received relatively little attention in most countries, and the underlying dynamics remain poorly understood. The IPC, the Pan American Health Organization, and the National Institute on Aging strongly encourage expanded national data collection and additional comparative research that will shed light on similarities in the process of aging worldwide.





This wallchart was produced by the Aging Studies Branch of the International Programs Center, Population Division, U.S. Bureau of the Census, with the support of the Aging and Health Unit of the Family Health and Population Program, Pan American Health Organization (PAHO), and the Office of the Demography of Aging, Behavioral and Social Research Program, U.S. National Institute on Aging (NIA). The Aging and Health Unit of PAHO provides technical collaboration to countries in the region in the areas of research, aging and health information dissemination, design of programs promoting healthy aging, training of primary health care workers, and advocacy. The NIA, one of 18 institutes of the U.S. National Institutes of Health, is responsible for the conduct and support of biomedical, social, and behavioral research, training, health information dissemination, and other programs related to the aging process and the special needs of the aged. Because unique research opportunities are afforded by investigations of the health of different populations, both the PAHO and NIA support and engage in crossnational comparative studies.

The Hemisphere's Oldest Countries: 1997 (Percent of population 60+)



As we approach the 21st century, continued worldwide trends toward lower fertility and extended life expectancy have elevated the phenomenon of population aging to a level of prominence never before seen. Population aging usually has been associated with the more industrialized countries of Europe and North America, where a fifth or more of the entire population typically is aged 60 or over. What is not as widely appreciated is the fact that population aging has occurred and is occurring in less industrialized countries as well. Uruguay, for example, currently has a higher percentage of older (60+) population than does Canada and the United States. Outside of Europe and North America, the Caribbean is the "oldest" region of the world, with 10 percent of its aggregate population aged 60 years and over.

In spite of such figures, population aging has not been a prominent issue in much of the Western Hemisphere. Concern in most nations has focused on reducing levels of fertility and infant mortality and creating educational and employment opportunities for growing numbers of young adults. As a result of successes in these areas. however, the region now faces new challenges stemming from a rapidly changing population age structure. Some nations already have experienced intense public debates over issues—the nature and provision of social security; health care costs; appropriate levels of educational investment—that are directly linked to their changing demographic and health profiles.

The statistics in this wallchart are intended to highlight the present and future dimensions of population aging in the Americas and to portray similarities and diversities among nations. Comments and cautions on specific indicators are presented on the reverse.

Country	Population age 60 and over		Percent age 60 and over		Percent age 75 and over		Percent female in population age 75 and over		Median age (years)	
	1997	2025	1997	2025	1997	2025	1997	2025	1997	2025
Anguilla	1,052	3,229	9.8	19.9	3.7	4.9	61	57	27	38
Antigua and Barbuda	4,693	13,938	7.4	21.3	2.1	2.3	54	64	28	40
Argentina	4,946,759	8,303,040	13.8	17.2	4.0	5.7	62	62	28	33
Aruba	8,916	21,079	13.1	28.6	3.4	8.5	64	65	34	43
Bahamas	21,999	65,265	8.0	17.7	2.2	4.6	62	60	26	35
Barbados	34,047	67,718	13.2	24.3	4.9	6.3	64	63	31	41
Belize	11,909	32,109	5.3	8.4	1.2	1.5	55	55	18	28
Bolivia	488,412	1,202,703	6.4	10.0	1.7	2.6	56	59	20	28
Brazil	12,471,740	32,738,784	7.4	15.6	1.6	4.2	64	63	25	34
Canada	4,947,621	10,521,953	16.3	27.7	5.3	9.1	63	59	36	43
Chile	1,443,223	3,666,275	9.9	20.4	2.4	5.8	63	61	28	38
Colombia	2,522,595	8,089,985	6.7	13.9	1.3	3.1	56	63	24	30
Costa Rica	252,448	773,972	7.1	14.5	1.8	3.4	56	58	24	32
Cuba	1,417,555	2,842,476	12.9	24.3	4.2	7.6	54	59	31	43
Dominica	8,096	12,771	12.2	19.1	4.3	5.3	61	63	26	39
Dominican Republic	508,599	1,456,291	6.5	12.4	1.3	2.9	54	57	22	29
Ecuador	768,147	2,281,085	6.3	12.8	1.7	3.2	56	58	21	3
El Salvador	413,586	934,288	7.3	11.1	1.9	3.1	55	59	21	29
French Guiana	11,953	46,439	7.6	17.4	1.8	4.7	56	52	27	31
Grenada	5,997	11,572	6.3	7.5	1.8	1.1	58	49	18	27
Guadeloupe	47,857	103,328	11.6	20.7	3.6	6.2	60	62	28	40
Guatemala	621,804	1,672,921	5.3	7.5	1.0	1.8	56	58	18	23
Guyana	46,796	95,957	6.6	13.5	1.7	3.1	60	66	23	33
Haiti	418,916	721,246	6.3	7.1	1.5	1.6	54	60	18	25
Honduras	293,703	715,495	5.1	8.3	1.2	2.1	52	60	18	26
Jamaica	238,863	502,256	9.1	15.0	2.8	3.8	59	60	24	35
Martinique	53,670	106,926	13.3	22.2	4.3	6.7	61	63	30	41
Mexico	5,948,491	17,491,716	6.1	12.4	1.3	3.1	58	61	21	31
Netherlands Antilles	23,013	57,902	10.9	23.2	2.9	6.9	62	62	30	40
Nicaragua	184,598	607,172	4.1	7.5	0.7	1.5	59	60	17	26
Panama	216,429	566,295	8.0	14.9	2.2	4.2	53	57	24	33
Paraguay	341,976	984,356	6.6	9.9	1.6	2.3	57	55	20	24
Peru	1,710,218	4,792,645	6.7	12.2	1.4	3.1	57	57	22	30
Puerto Rico	526,307	975,438	13.8	23.1	4.5	8.1	57	61	30	40
St. Kitts and Nevis	3,453	6,525	8.3	10.9	3.4	1.6	60	64	22	32
St. Lucia	10,976	24,667	7.3	12.2	2.2	2.5	65	70	22	34
St. Vincent & Grenadines	9,024	22,186	7.6	14.7	2.4	3.0	60	59	23	37
Suriname	32,698	71,219	7.7	15.5	1.5	3.3	55	60	24	34
Trinidad and Tobago	112,060	231,412	9.9	21.4	2.7	5.0	57	57	27	38
United States	44,158,531	82,501,033	16.5	24.6	5.8	7.9	63	58	35	38
Uruguay	564,878	805,507	17.3	20.6	5.0	7.4	62	62	31	36
Venezuela	1,456,905	4,606,436	6.5	14.2	1.6	3.5	57	58	23	33
Virgin Islands (US)	13,273	36,164	11.4	25.2	2.7	9.4	60	63	29	39

Note: Component population projections are unavailable for the following countries: Bermuda, British Virgin Islands, Cayman Islands, Montserrat, Turks and Caicos.

Source: U.S. Bureau of the Census, International Programs Center, International Data Base, March 1997.

Country	Years of life expectancy at birth, 1997		Percent age 60 a	widowed and over	Per econo active and	cent mically age 60 over	Percent literate age 60 and over		Percent GDP spent
	Male	Female	Male	Female	Male	Female	Male	Female	1990
Anguilla	77	82	14	32	33	9	(NA)	(NA)	(NA)
Antigua and Barbuda	71	77	13	28	51	23	(NA)	(NA)	6
Argentina	74	79	12	46	39	13	93	91	9
Aruba	77	80	13	37	23	6	(NA)	(NA)	(NA)
Bahamas	74	79	14	44	47	26	(NA)	(NA)	5
Barbados	75	79	14	31	19	9	(NA)	(NA)	6
Belize	69	74	13	33	60	13	¹ 45	¹ 45	5
Bolivia	60	73	18	44	50	27	59	32	5
Brazil	65	72	13	47	51	21	59	54	6
Canada	79	82	10	40	20	8	(NA)	(NA)	9
Chile	75	80	13	39	40	11	83	82	6
Colombia	70	78	15	46	45	11	73	64	6
Costa Rica	76	78	12	34	41	6	¹ 79	¹ 78	9
Cuba	75	79	11	36	¹ 21	¹ 3	(NA)	(NA)	(NA)
Dominica	78	82	15	31	41	14	(NA)	(NA)	6
Dominican Republic	69	77	(NA)	(NA)	¹ 79	¹ 22	¹ 42	¹ 37	5
Ecuador	71	79	12	33	71	16	72	61	6
El Salvador	69	78	13	35	62	20	(NA)	(NA)	5
French Guiana	76	81	7	25	26	13	¹ 69	¹ 73	(NA)
Grenada	71	77	13	31	36	12	(NA)	(NA)	6
Guadeloupe	78	82	11	33	15	8	¹ 66	¹ 63	(NA)
Guatemala	66	75	12	46	¹ 62	¹ 7	¹ 43	¹ 31	3
Guyana	63	58	17	45	46	16	(NA)	(NA)	6
Haiti	51	59	8	27	¹ 64	¹ 35	¹ 21	¹ 15	3
Honduras	65	66	9	29	72	19	39	33	6
Jamaica	75	80	13	38	¹ 49	¹ 23	62	73	4
Martinique	79	82	11	30	14	8	¹ 69	¹ 72	(NA)
Mexico	71	79	12	37	60	18	71	59	4
Netherlands Antilles	77	80	13	34	20	3	(NA)	(NA)	(NA)
Nicaragua	66	76	² 10	² 33	¹ 58	¹ 11	51	46	5
Panama	74	79	11	32	42	8	72	71	9
Paraguay	72	77	11	30	54	20	79	68	3
Peru	70	78	17	43	60	24	¹ 76	¹ 49	3
Puerto Rico	74	78	13	40	20	6	¹ 75	¹ 67	(NA)
St. Kitts and Nevis	67	75	14	25	56	16	93	94	6
St. Lucia	71	77	(NA)	(NA)	47	15	(NA)	(NA)	5
St. Vincent & Grenadines	73	79	14	25	41	12	(NA)	(NA)	6
Suriname	70	77	(NA)	(NA)	15	5	(NA)	(NA)	4
Trinidad and Tobago	70	74	16	41	23	10	90	78	4
United States	76	79	13	47	26	15	91	93	13
Uruguay	75	81	11	43	31	11	¹ 85	¹ 87	6
Venezuela	72	79	10	35	¹ 48	¹ 11	¹ 75	¹ 66	7
Virgin Islands (US)	78	82	11	30	27	¹ 12	(NA)	(NA)	(NA)

NA Data not available. ¹Refers to age 65 and over. ²Refers to age 50 and over.

Note: Component population projections are unavailable for the following countries: Bermuda, British Virgin Islands, Cayman Islands, Montserrat, Turks and Caicos.

Source: U.S. Bureau of the Census, International Programs Center, International Data Base, March 1997.



Projected Percent Increase in the Population 60+: 1997 to 2025



