

Mortality

Gap in Life Expectancy Among World Regions Exceeds 20 Years...

Of 100 babies born this year in Sub-Saharan Africa, 9 will die before reaching age 1. In the world's more developed countries, it will take about 60 years for these 9 deaths to occur. The difference reflects a continuing gap in mortality levels faced by the populations of the world's more and less developed countries, and by the populations of the various regions of the developing world.

A child born in Sub-Saharan Africa can expect to live, on average, only about 50 years, while a child born in one of the more developed countries of the world can expect to live to age 74, or nearly 50 percent longer. Life expectancy at birth, or the average number of years a person can expect to live during his or her lifetime, is increasing in most, but not all, countries of the world. Mean levels are now over 60 years in all major regions of the world except Sub-Saharan Africa; life expectancy is 70 years in China, 68 years in Latin America and the Caribbean, and 67 years in the Near East and North Africa (table A-10). In all regions, women live longer than men (figure 21).

Countries with the lowest life expectancies are found predominantly in Sub-Saharan Africa: the 10 countries with the lowest life expectancies are in this region and 7 of these 10

countries are in HIV/AIDS-affected countries.² Their higher mortality is attributable in large part to excess deaths due to HIV/AIDS.

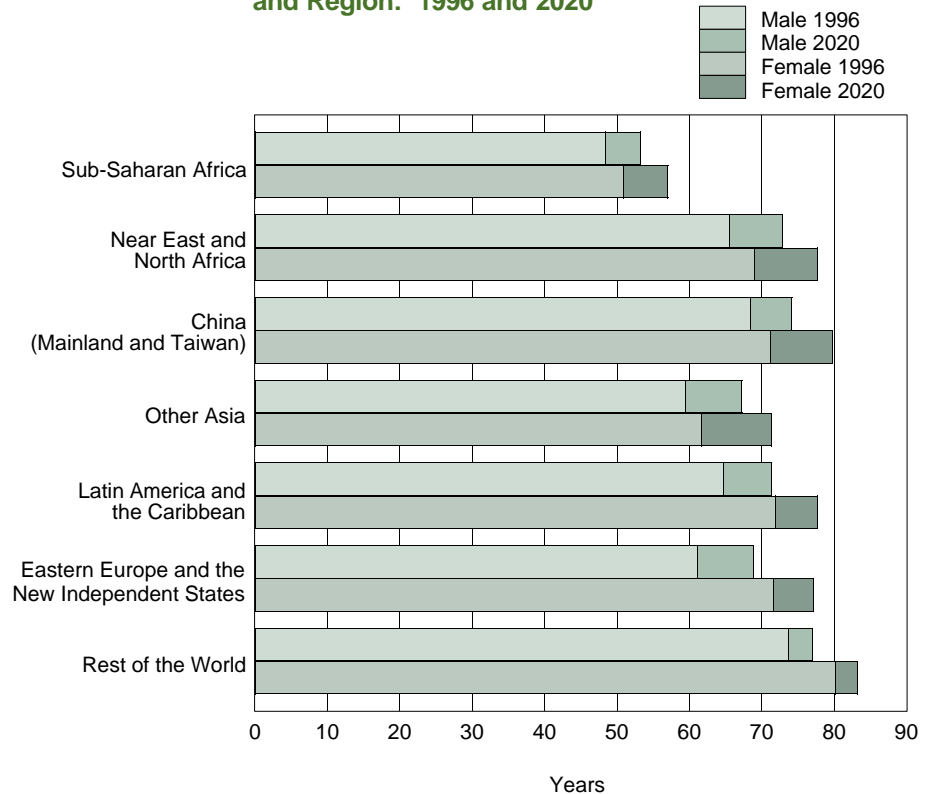
...and Is Only Slowly Narrowing

Over the course of the coming 25 years, the gap between mean life

² To be more precise, the countries are among the 23 HIV/AIDS-affected countries considered by the Bureau of the Census to have AIDS-related mortality high enough to affect projections significantly. This is not to say the other 3 countries have no AIDS-related mortality.

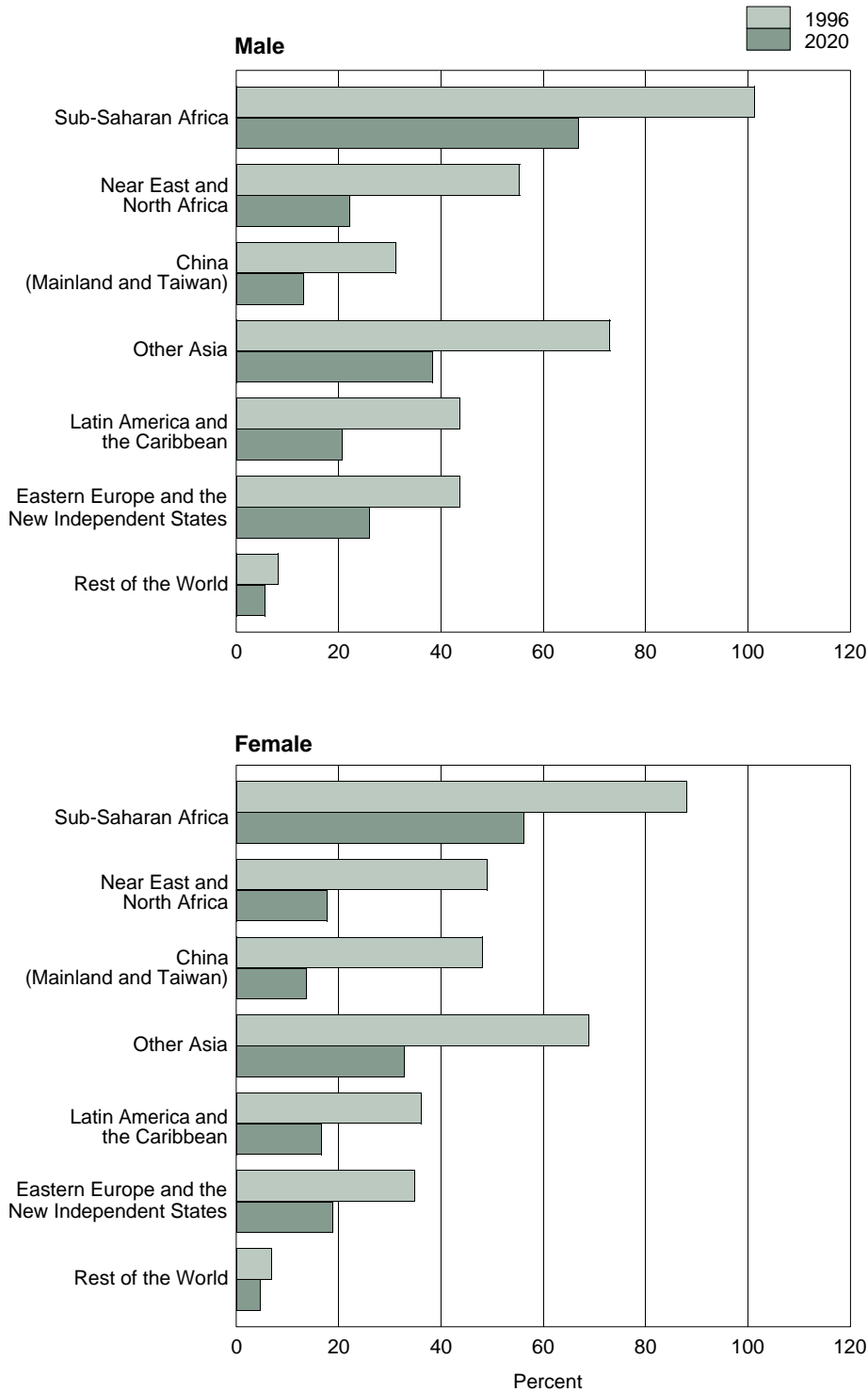
expectancy at birth for more developed countries and less developed regions will close only a little. Regional mean life expectancy at birth for less developed countries is projected to increase by about 6 years between now and the year 2020; that for more developed countries, by about 5 years. Gains in life expectancy made in some developing countries are likely to be offset by a rise in mortality (and a corresponding fall in life expectancy) in HIV/AIDS-affected countries of the region (figure 27, see below).

Figure 21. Life Expectancy at Birth by Sex and Region: 1996 and 2020



Source: Table A-10.

Figure 22.
Infant Mortality Rates by Sex and Region: 1996 and 2020



Source: Table A-9 and U.S. Bureau of the Census, International Data Base.

Sub-Saharan Africa Has the Highest Infant Mortality Rates

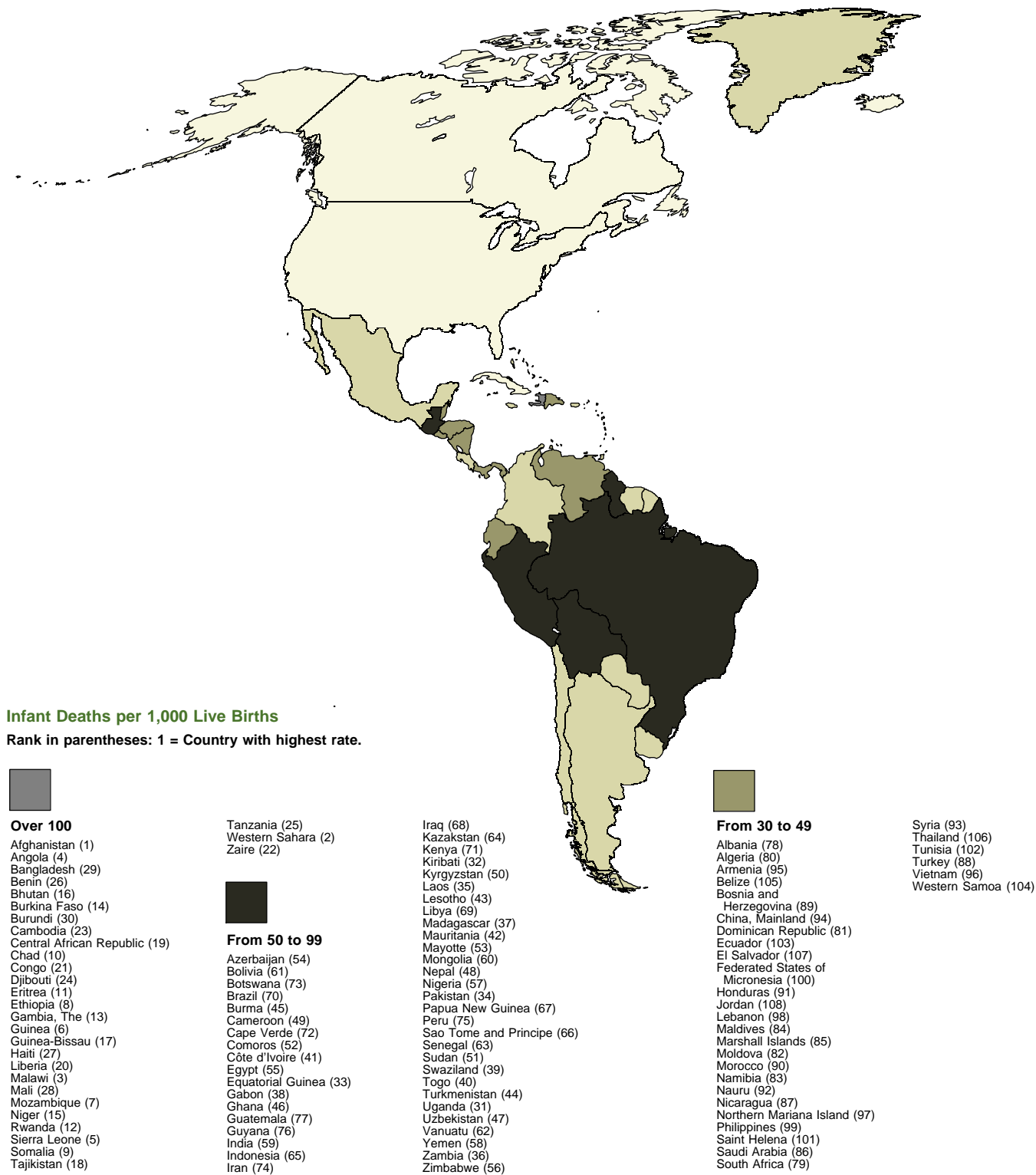
Sub-Saharan Africa, which has the lowest mean life expectancy of any world region, also has the highest infant mortality (95 infant deaths per 1,000 live births for both sexes combined (table A-9)). Figure 22 shows that infant mortality for both males and females is higher in Sub-Saharan Africa than in other world regions.

As overall health conditions improve, reductions in infant (and child) mortality can be precipitous. In the Near East and North Africa, infant mortality rates (IMR's) have declined by a third during the past 10 years (from 78 per 1,000 births in 1986 to 52 in 1996). In Asia (excluding China and Japan), infant mortality was cut by 25 percent (falling from 95 per 1,000 to 71 per 1,000 live births during the same period). In the other major developing regions, the decline has been less steep but substantial nonetheless. Between 1996 and the year 2020, the largest reductions in infant mortality are expected in Asia (where IMR is projected to decrease from 71 to 36 infant deaths per 1,000 live births), Sub-Saharan Africa, and the Near East and North Africa (both projected to decline by more than 30 per 1,000).

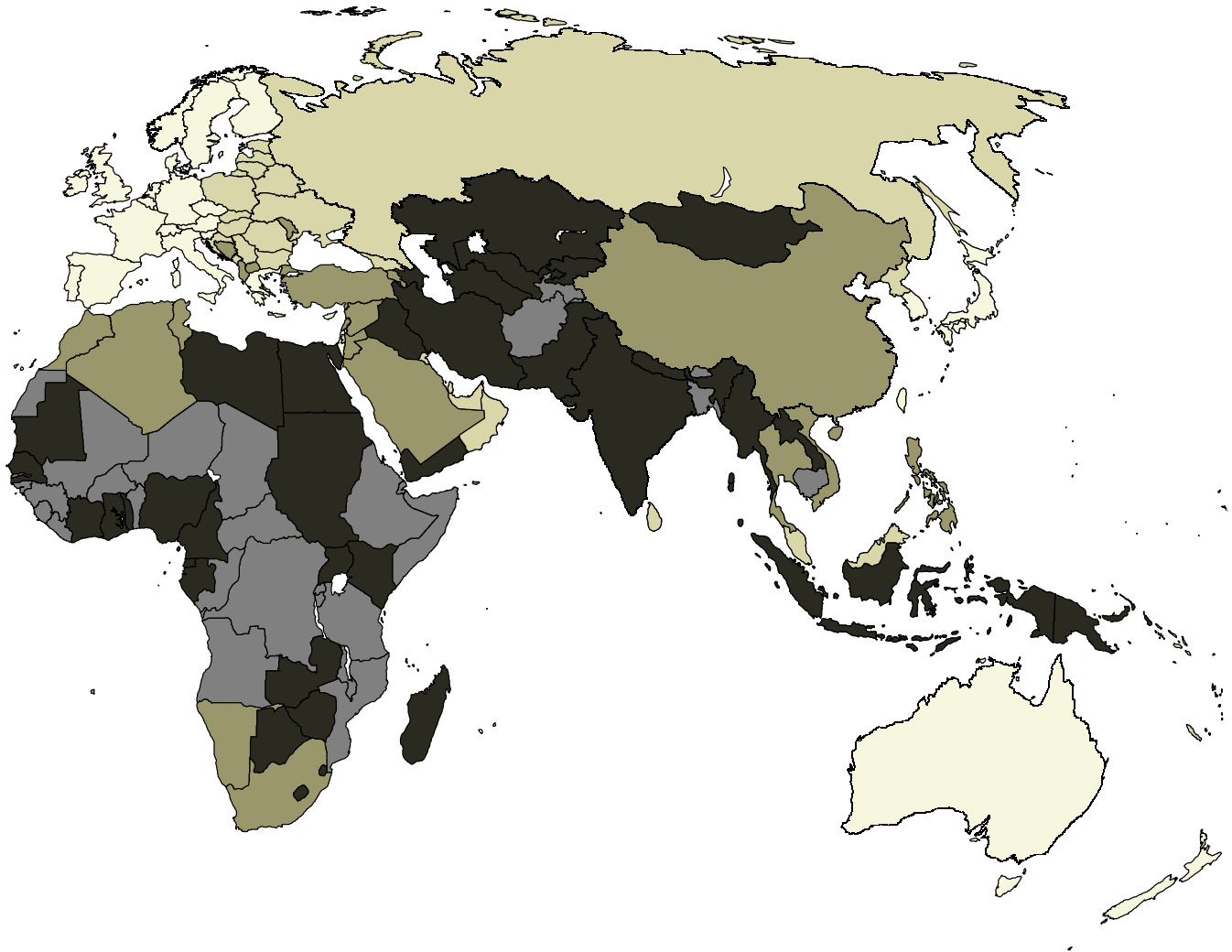
Of Every 1,000 Infants Born in 30 Countries, 100 Die Before First Birthday

Regional averages mask country-to-country variations in infant mortality rates (figure 23). While there are more high infant mortality countries in Sub-Saharan Africa than in any other world region, 23 countries in that region are joined by 7 countries from other regions in having at least 1 in every 10 infants dying before its first birthday.

Figure 23.
Infant Mortality Rates: 1996



Source: Table A-9.



From 10 to 29

American Samoa (144)
 Anguilla (151)
 Antigua and Barbuda (150)
 Argentina (113)
 Bahamas, The (130)
 Bahrain (152)
 Barbados (145)
 Belarus (164)
 Bermuda (165)
 British Virgin Islands (142)
 Brunei (126)
 Bulgaria (155)
 Chile (162)
 Colombia (121)
 Cook Islands (124)
 Costa Rica (163)
 Croatia (176)
 Estonia (148)
 Fiji (147)
 French Guiana (159)
 French Polynesia (160)
 Gaza Strip (114)
 Georgia (135)
 Greenland (128)
 Grenada (172)
 Guam (158)
 Hungary (171)

Jamaica (156)
 Kuwait (174)
 Latvia (136)
 Lithuania (153)
 Macedonia, The Former Yugoslav Rep. of (109)
 Malaysia (127)
 Mauritius (149)
 Mexico (123)
 Montenegro (116)
 Montserrat (173)
 New Caledonia (161)
 North Korea (119)
 Oman (117)
 Palau (122)
 Panama (110)
 Paraguay (131)
 Poland (170)
 Puerto Rico (169)
 Qatar (141)
 Romania (132)
 Russia (125)
 Saint Kitts and Nevis (143)
 Saint Lucia (139)
 Saint Pierre and Miquelon (177)
 Saint Vincent and the Grenadines (154)
 Serbia (133)

Seychelles (168)
 Slovakia (175)
 Solomon Islands (120)
 Sri Lanka (137)
 Suriname (112)
 Tonga (140)
 Trinidad and Tobago (146)
 Turks and Caicos Is. (166)
 Tuvalu (115)
 Ukraine (134)
 United Arab Emirates (138)
 Uruguay (157)
 Venezuela (111)
 Virgin Islands (167)
 Wallis and Futuna (129)
 West Bank (118)



Under 10

Andorra (194)
 Aruba (185)
 Australia (217)
 Austria (205)
 Belgium (204)
 Canada (212)
 Cayman Islands (180)
 China, Taiwan (199)
 Cuba (188)
 Cyprus (181)
 Czech Republic (182)
 Denmark (207)
 Dominica (178)
 Faroe Islands (191)
 Finland (222)
 France (219)
 Germany (214)
 Gibraltar (190)
 Greece (187)
 Guadeloupe (183)
 Guernsey (210)
 Hong Kong (223)
 Iceland (227)
 Ireland (200)
 Isle of Man (189)

Israel (186)
 Italy (201)
 Japan (226)
 Jersey (225)
 Liechtenstein (220)
 Luxembourg (208)
 Macau (221)
 Malta (195)
 Martinique (198)
 Monaco (202)
 Netherlands (215)
 Netherlands Antilles (179)
 New Zealand (206)
 Norway (213)
 Portugal (192)
 Reunion (196)
 San Marino (216)
 Singapore (224)
 Slovenia (197)
 South Korea (184)
 Spain (203)
 Sweden (218)
 Switzerland (211)
 United Kingdom (209)
 United States (193)

Afghanistan, Western Sahara, Malawi, Angola, and Sierra Leone — all with infant deaths over 135 per 1,000 live births — have the highest infant mortality rates in 1996.

Greatest Reductions in Infant Mortality Taking Place in the Near East and North Africa

All nations are working to reduce infant mortality, and mortality overall, in keeping with goals set out in Cairo. During the decade of the 1990's the greatest gains are being made in the Near East and North Africa, where the IMR is expected to decline from a regional average of about 66 infant deaths per 1,000 live births in 1990 to 44 infant deaths per 1,000 births in the year 2000. Five of the ten countries with the largest IMR declines during the 1990 to 2000 period are from this region.

In general, the less developed regions of the world are expected to make substantial gains in reducing infant mortality over the next 25 years (figure 22).

In addition to the Near East and North Africa, major gains during the 1990's are underway in China (a projected decrease by year 2000 of 20 infant deaths per 1,000 live births from 51.6 in 1990) and the rest of Asia (a decrease of 17 from the 1990 regional mean of 81 per 1,000). Infant mortality actually appears to be rising in one region — Eastern Europe and the New Independent States — during the 1990's.

The Census Bureau's projections show infant mortality declining in all major world regions during the next decade (years 2000 to 2010). The largest absolute reductions in IMR after the turn of the century are likely to occur in the less developed countries of Asia (excluding China),

Countries With Largest Projected Infant Mortality Declines

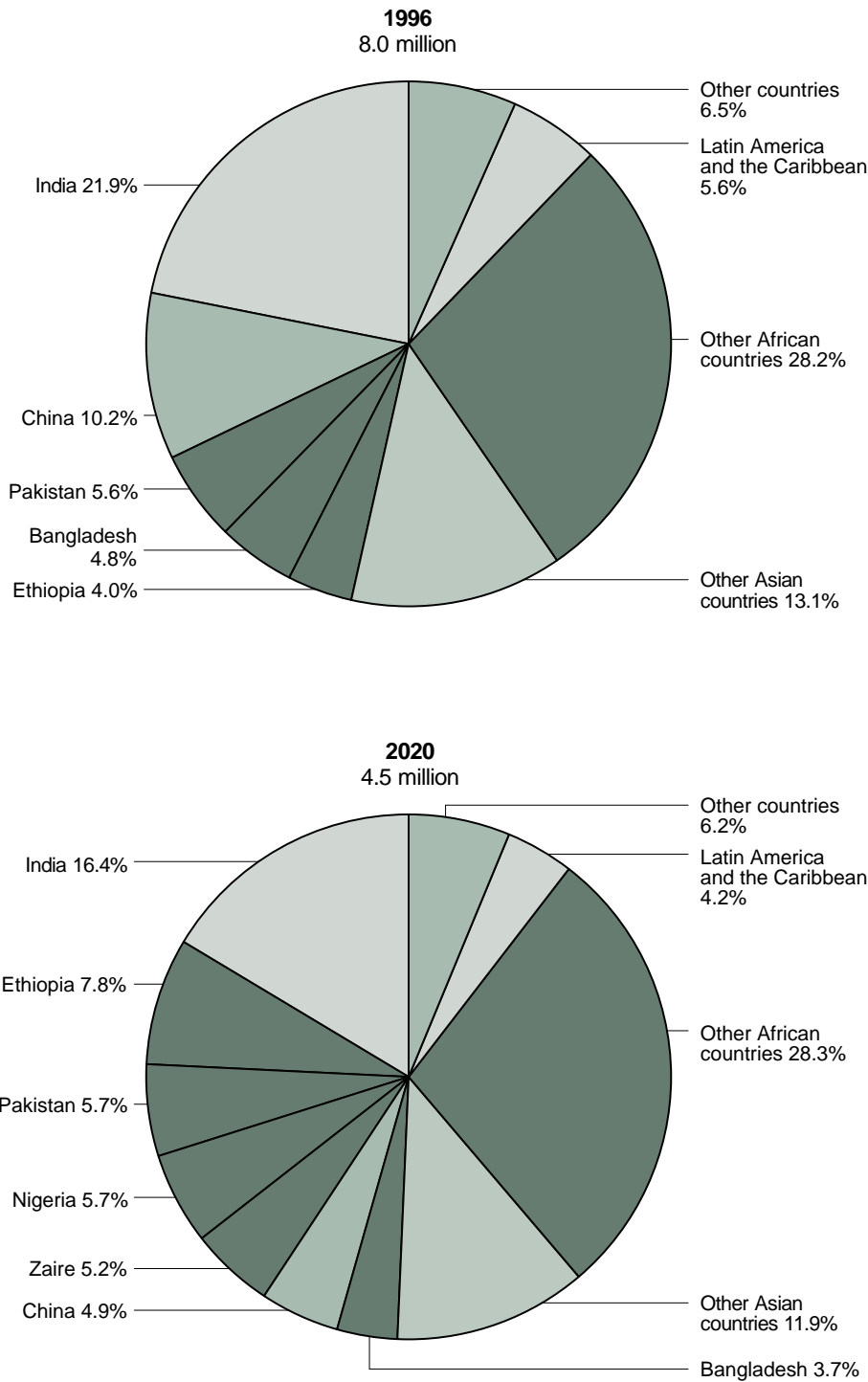
Male

1990 to 2000	Infant mortality rate	
	1990	2000
Yemen	99	61
Maldives	68	35
Morocco	70	37
Angola	171	138
Sierra Leone	171	139
Afghanistan	173	142
Western Sahara	171	139
Mozambique	152	123
Turkey	66	37
Laos	124	95
2000 to 2010	2000	2010
Angola	138	106
Sierra Leone	139	107
Afghanistan	142	111
Mozambique	123	93
Guinea	135	109
Yemen	61	35
Gambia, The	119	93
Laos	95	69
Somalia	120	96
Tajikistan	124	100

Female

1990 to 2000	Infant mortality rate	
	1990	2000
Yemen	89	55
Maldives	70	35
Western Sahara	159	127
Angola	145	114
Sierra Leone	138	107
Morocco	59	29
Iran	73	44
Afghanistan	162	133
Saudi Arabia	63	34
Turkey	57	30
2000 to 2010	2000	2010
Angola	114	84
Afghanistan	133	103
Sierra Leone	107	78
Guinea	112	87
Yemen	55	30
Gambia, The	96	71
Mozambique	107	83
Benin	86	64
Liberia	90	68
Bhutan	110	88

Figure 24.
Distribution of World Infant Deaths by Country: 1996 and 2020



Sub-Saharan Africa, and the Near East and North Africa, where IMR's are now the highest and the potential for reduction is greatest.

Eight Million Infants to Die This Year...

About 8 million infant deaths will occur in 1996, and more than 90 percent of these will be in the developing countries of Africa, Asia, and Latin America. One out of every three of these deaths will occur in China or India (figure 24).

...but Number Likely to Be Cut in Half in Coming 25 Years

If present trends continue, however, the total number of infant deaths worldwide will drop by about half, to 4.5 million, by the year 2020. The drop reflects decreases in infant mortality rates as well as a leveling off in the number of births (and hence the number of infants at risk).

Note: China includes Mainland China and Taiwan.
 Source: U.S. Bureau of the Census, International Data Base.

As Many As One of Every Four Who Die Is an Infant

About 15 percent of all deaths worldwide are infant deaths. Where overall mortality levels are still relatively high, infant deaths typically constitute a high proportion of all deaths. The highest proportions are in Sub-Saharan Africa and the Near East and North Africa, where about a fourth of all deaths occur to children under 1 year of age, followed by the developing nations of Asia (excluding China), where about 1 in 5 deaths is that of an infant (figure 25). In Europe and North America, where deaths tend to be concentrated in the older ages, only 1 of every 100 persons dying is under 1 year of age.

As infant mortality rates fall, the proportions of all deaths that occur under the age of one will also fall, to 17 percent in Sub-Saharan Africa, and to less than 10 percent of all deaths in other world regions by the year 2020.

Child Mortality in Sub-Saharan Africa Is More Than Double That in Other Regions

The proportion of children who die before their fifth birthday is a frequently used indicator of the prevailing childhood health risks in a population. Under-5 mortality may be considered an index for the overall climate governing healthy child development and, together with infant mortality rates, provides evidence of the impact of child health services over time.

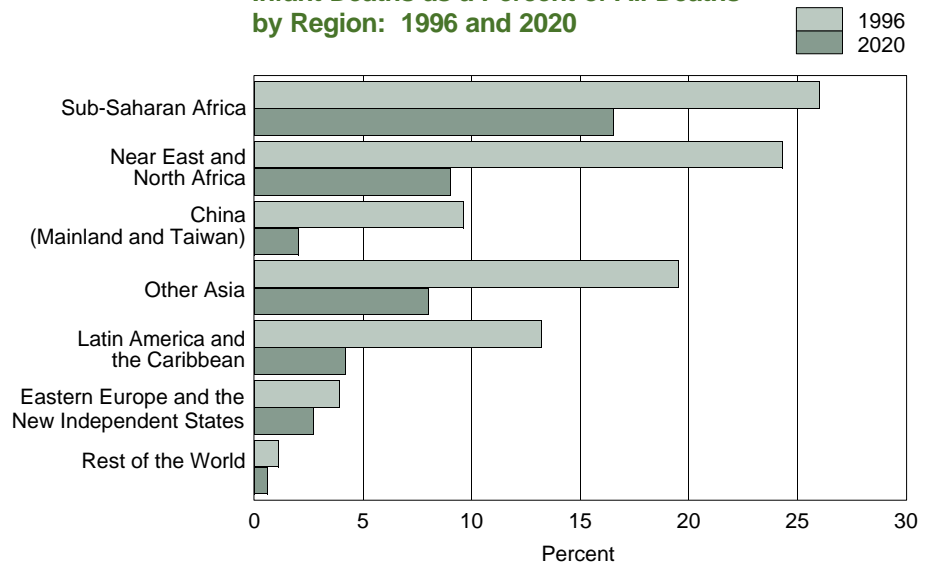
Regional values of under-5 mortality range from nearly 160 per 1,000 live births in Sub-Saharan Africa to 9 per 1,000 for Western Europe, North America, Japan and Oceania (Rest of World). Sub-Saharan Africa's under-5 mortality rate is more than double that of the rest of the world combined and

at least 40 percent higher than that of any other major world region in 1996 (figure 26 and table A-9). The disparity between Sub-Saharan Africa and the other world regions in under-5 mortality exceeds that for infant mortality, suggesting major differences in environmental and infectious disease risks faced by children in the 1 to 4 age group, health services

availability, or both. The Sub-Saharan African under-5 mortality rate is more than ten times higher than that of the world's more developed countries in 1996.

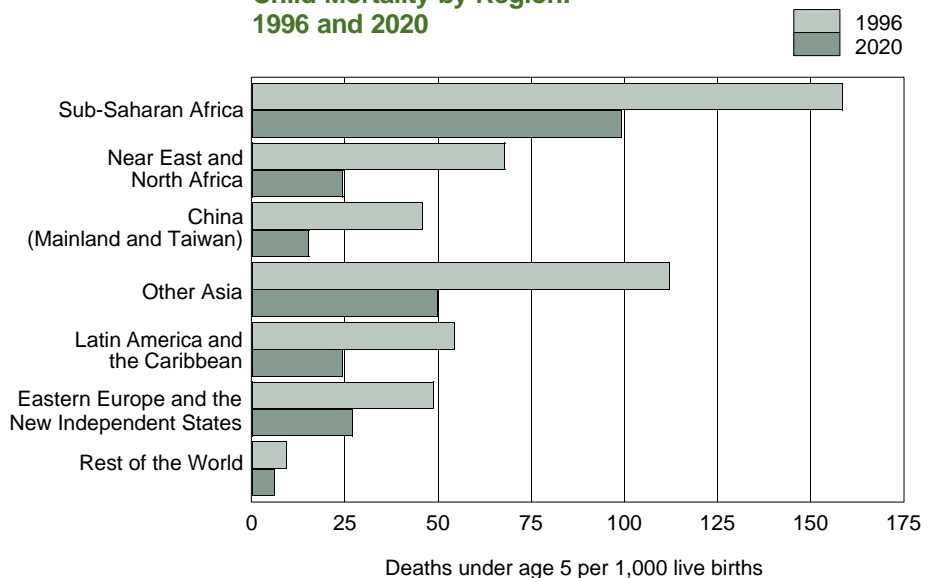
Under-5 mortality is projected to decline in all world regions during the coming 25 years, and the absolute gap in child mortality between

Figure 25. Infant Deaths as a Percent of All Deaths by Region: 1996 and 2020



Source: U.S. Bureau of the Census, International Data Base.

Figure 26. Child Mortality by Region: 1996 and 2020



Source: Table A-9 and U.S. Bureau of the Census, International Data Base.

Sub-Saharan Africa and other regions should shrink during this period.

However, the ratio of Sub-Saharan African under-5 mortality to that of MDC's will remain about the same through the year 2020, and the ratio of Sub-Saharan African under-5 mortality to that of other LDC's will increase substantially. By the year 2020, Sub-Saharan Africa's average under-5 mortality, which is currently 60 percent higher than all developing countries taken together, will be 80 percent higher than the composite LDC level if present trends continue.

AIDS Mortality Projected to Cause 50 Million Excess Deaths by 2010

Since the outbreak of the AIDS pandemic in the early 1980's, the age-specific mortality schedules of at least some countries in every world region have been adversely affected.

Age-specific death rates, particularly young adult (ages 15 to 44) death rates, have been shifted upward, in some nations many times over. The projections of the Bureau of the Census incorporate estimates of the mortality impact of the current and future AIDS epidemics in developing countries particularly hard hit by the pandemic. The projections assume that the epidemic will peak in 2010 and that AIDS mortality will decline from the level reached in that year to a negligible level in 2050 (methodology is described in more detail in appendix B).

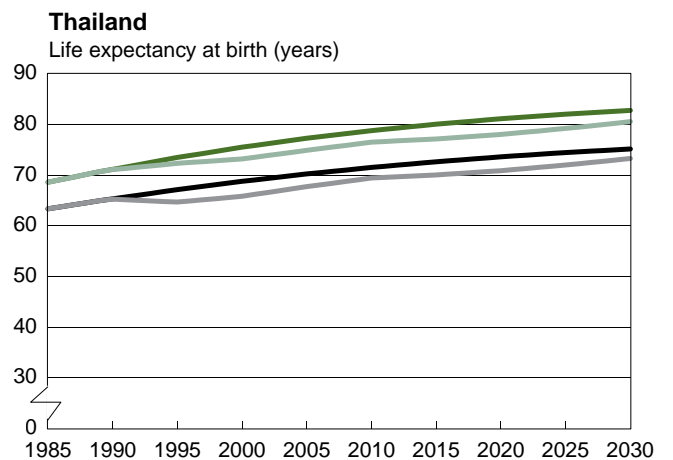
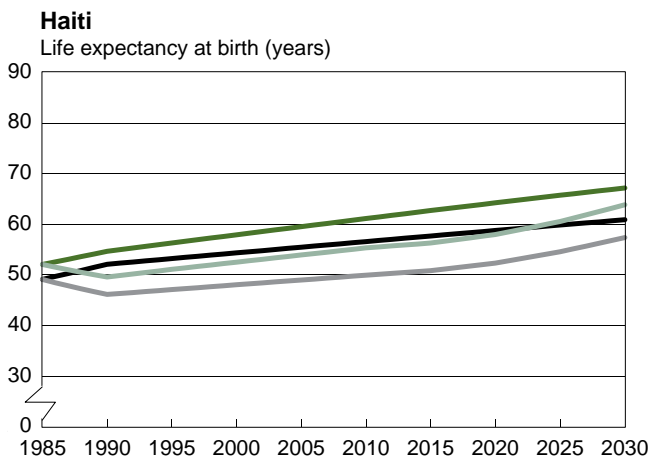
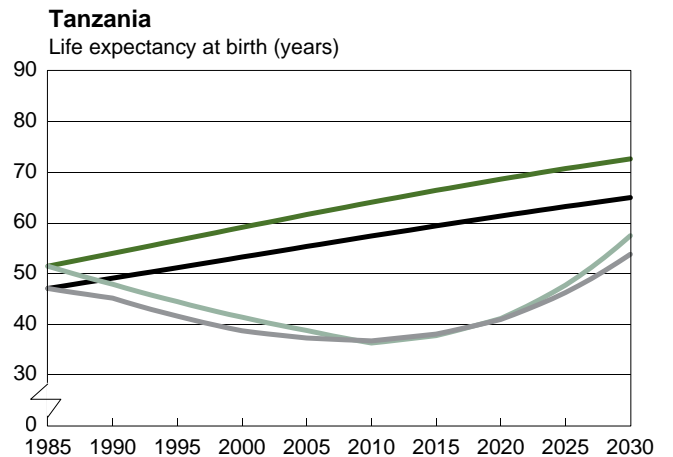
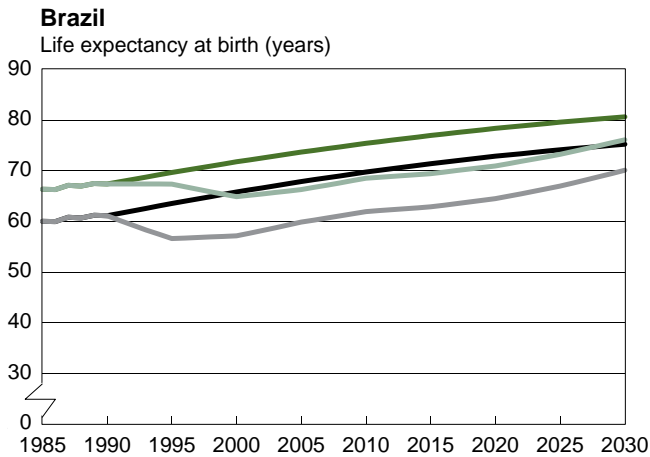
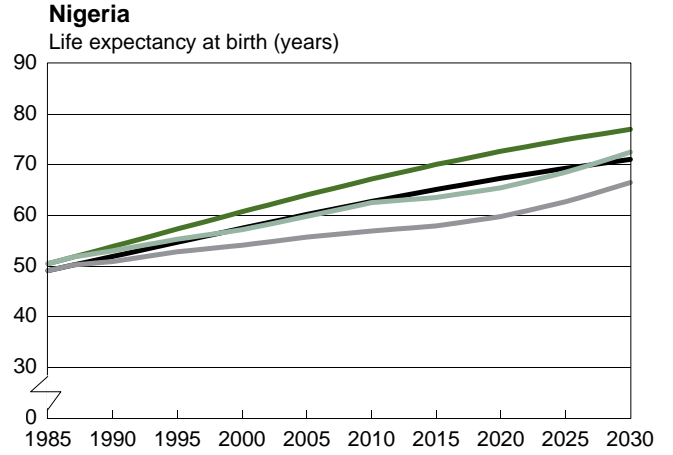
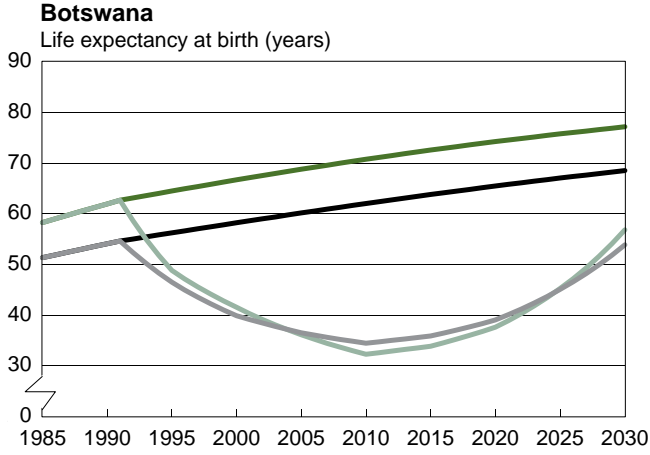
The impact of HIV/AIDS in the 23 countries with substantial AIDS-related mortality currently being tracked by the Bureau of the Census is dramatic: nearly 2 million additional deaths attributable to AIDS in 1996, rising to 2.8 million in the year 2000 and to about 4.5 million in the year 2010. AIDS-related deaths account for about 22 percent of all deaths

in these countries in 1996; about 38 percent in 2010. Altogether, nearly 50 million excess deaths attributable to AIDS are projected for the 1996-2010 period.

Figure 27 illustrates variability in the effect of AIDS-related mortality on life expectancy at birth for males and females in 6 of the 23 countries being followed by the Bureau of the Census. These data suggest that the impact of the epidemic will be severe in Botswana, moderately severe in Tanzania, and somewhat less severe in Nigeria, Thailand, Brazil, and Haiti. Life expectancy at birth in Botswana is now projected to be about 33 years in the year 2010, or just half of what it would be in the absence of AIDS. The average loss in life expectancy is approximately 20 percent in the year 2010 for the group of 23 countries taken together. Years of life expectancy lost are about the same for males and females.

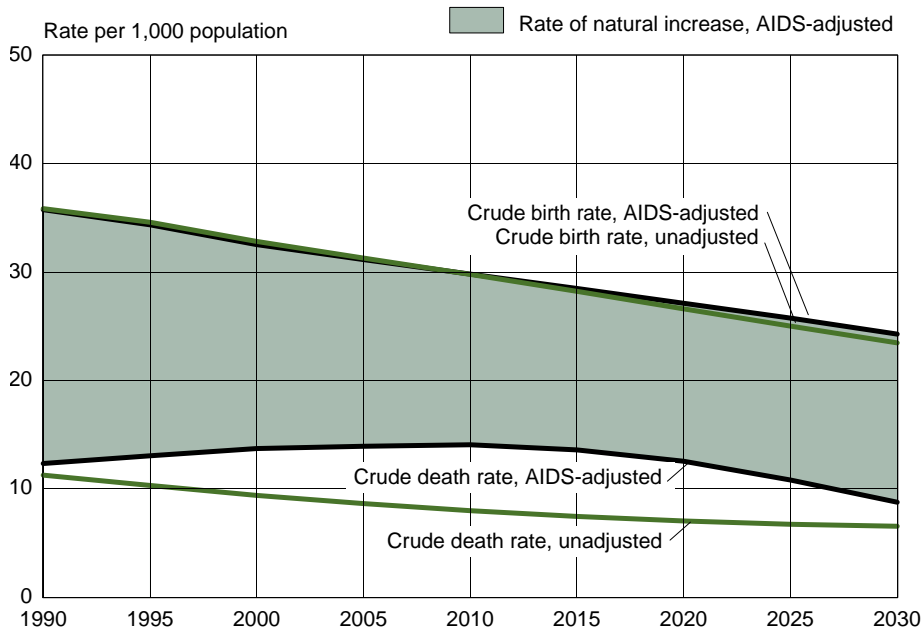
Figure 27.
Effect of AIDS Mortality on Life Expectancy at Birth, Selected Countries: 1985 to 2030

- Female unadjusted
- Female AIDS-adjusted
- Male unadjusted
- Male AIDS-adjusted



Source: U.S. Bureau of the Census, International Programs Center.

Figure 28.
**Vital Rates, With and Without AIDS, for
 23 Countries: 1990 to 2030**



Source: U.S. Bureau of the Census, International Programs Center.

AIDS Will Slow, but Not Halt, Population Growth in Affected Countries

Because HIV/AIDS affects the numbers of births in a population less than it affects the number of deaths — most AIDS mortality occurs **after** the average age of childbearing — the crude birth rate in AIDS-affected populations is altered little by the disease. As a result, natural increase remains positive but is significantly smaller than it would be in the absence of AIDS (figure 28). The net difference in population size between the AIDS-adjusted and non-adjusted projections for the 23 countries is about 3 percent in the year 2000, and about 8 percent in the year 2010.