



## Towards global equity in longevity

### 1. The ability to enjoy a long life is a fundamental aspect of human development.

- **Longer lives are often healthier lives:** life expectancy increases when morbidity and mortality are postponed to older ages.
- **Longer lives are more productive lives:** when survival prospects increase, people are more likely to invest in their futures, such as through education. Education, in turn, leads to greater health and longevity.
- Some evidence indicates that **longer lives are happier lives:** one study found that as longevity improved in the United States, increases in the number of years of happy life lived outweighed increases in the years of unhappy life.<sup>1</sup>

- Africa and developing Oceania<sup>2</sup> were the two regions with the lowest life expectancies at birth in 1950-1955, and the same is true today. The average length of life in developing Oceania had reached 64 years by 2005-2010, but in Africa it was only 55 years.
- Asia and Latin America and the Caribbean saw rapid gains in longevity over the past 60 years, but further progress is needed in order to achieve levels of life expectancy similar to those in the “more developed regions, excluding Eastern Europe”.
- Eastern Europe’s experience has differed from that in the rest of the more developed regions: progress in longevity stalled in the 1960s such that life expectancy in 2005-2010, at 70 years, was no higher than it had been 40 years earlier.

### 2. Despite substantial gains in longevity, survival prospects in some regions continue to lag far behind others.

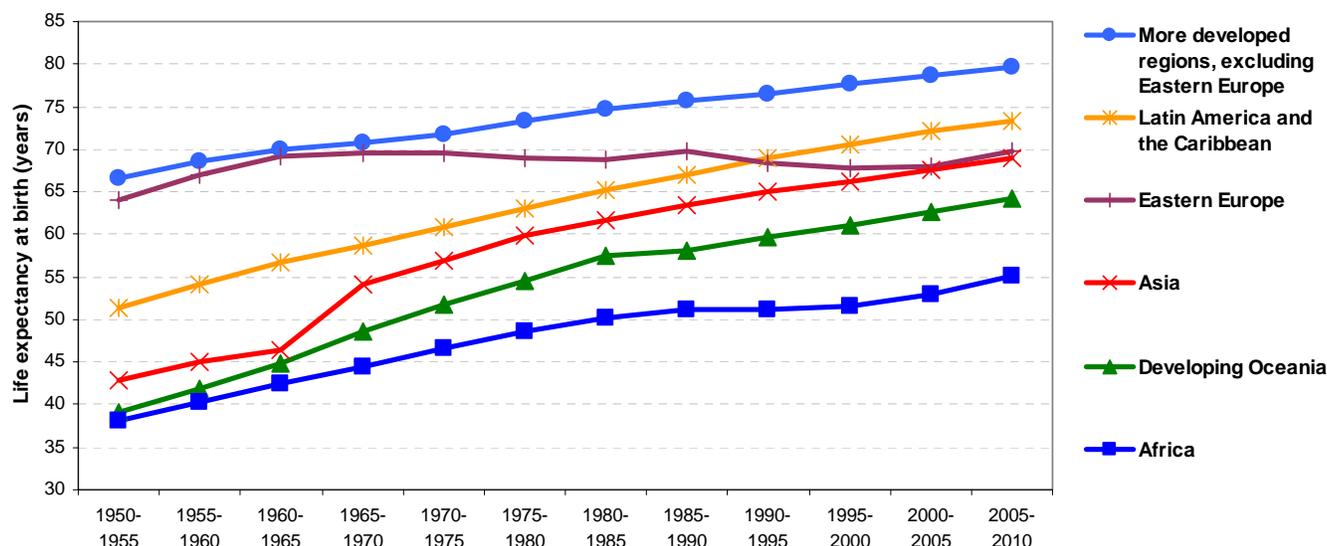
- Life expectancy at birth for the world’s population grew by 20 years between 1950-1955 and 2005-2010, from 48 years to 68 years.

#### NOTES

<sup>1</sup> Yang Yang, “Long and Happy Living: Trends and Patterns of Happy Life Expectancy in the U.S., 1970-2000,” *Social Science Research* 37, no. 4 (2008): 1235-52.

<sup>2</sup> Includes Melanesia, Micronesia and Polynesia.

Life expectancy at birth, selected regions, 1950-1955 to 2005-2010



**3. The gap between the life expectancy at birth in a region and the life expectancy in populations that have achieved very low mortality rates describes the degree of inequity in longevity.**

- By 2005-2010, 19 countries or areas had achieved life expectancy at birth greater than 80 years.<sup>3</sup> Across these “longest-lived” populations, the average length of life is 81.4 years.
- Deficits in longevity relative to the “longest-lived” populations are largest in Middle Africa, Southern Africa, Western Africa and Eastern Africa. At just 48 years, the life expectancy at birth in Middle Africa lags 33 years behind that of the “longest-lived” populations.
- Both developing Oceania and South-central Asia have 17-year gaps in longevity relative to the “longest-lived” populations, while longevity gaps in Northern Africa and South-eastern Asia are around 12 years.
- At just under 72 years, life expectancy at birth in both Western Asia and the Caribbean lags about 10 years behind that in the “longest-lived” populations. Longevity gaps are smaller for Central America, South America and Eastern Asia, ranging from 6 to 8 years.
- With the exception of Eastern Europe, life expectancy at birth in the more developed regions is high, with an average longevity gap relative to the “longest-lived” populations of less than 2 years. Life expectancy in Eastern Europe, however, falls nearly 12 years below that in the “longest-lived” populations.

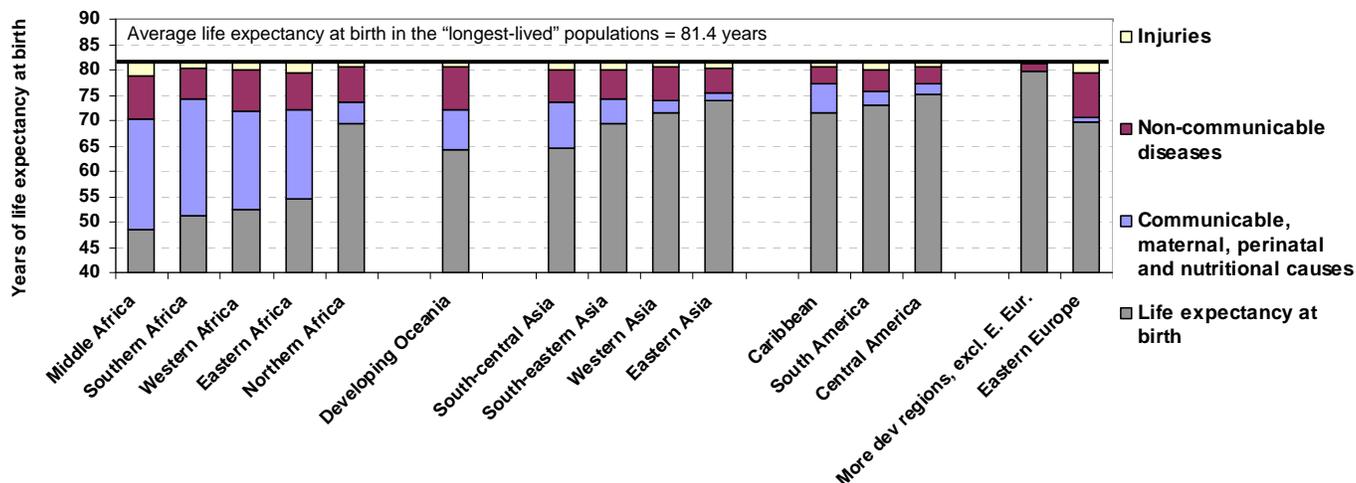
**4. As life expectancy increases, communicable diseases account for a declining share of the gaps in longevity, while the share that is due to non-communicable diseases grows.**

- Middle Africa, Southern Africa, Western Africa and Eastern Africa would gain up to 22 years of added life expectancy at birth by reducing mortality rates due to communicable, maternal, perinatal and nutritional causes of death to equal the low rates in the “longest-lived” populations. In developing Oceania and South-central Asia, these causes are responsible for between 8 and 9 years of the total deficit in life expectancy.
- Despite a common perception of NCDs as diseases associated with development, the longevity gaps caused by NCDs tend to be largest in less developed regions. NCDs account for more than 8 years of the longevity gap in Middle Africa, Western Africa and developing Oceania. In the Caribbean, South America and Central America, NCDs cause between 3 and 4 years of the deficits.
- NCDs are responsible for most of the gaps in longevity between the more developed regions and the “longest-lived” populations. About 9 years of Eastern Europe’s 12-year shortfall in longevity is due to excess NCD mortality.

NOTES

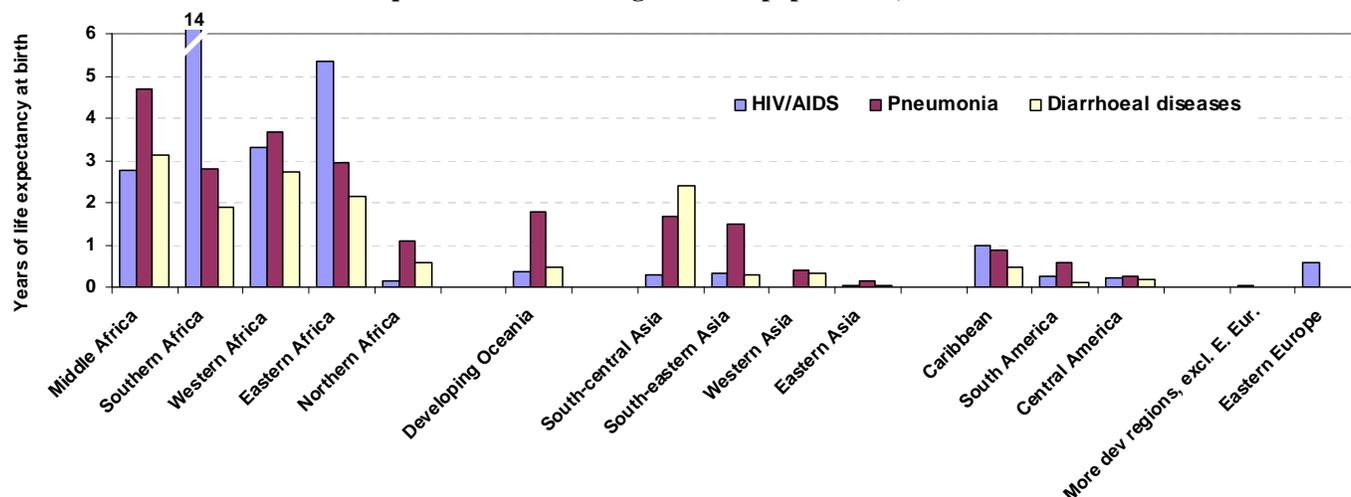
<sup>3</sup> Including Australia, Austria, Canada, China-Hong Kong SAR, China-Macao SAR, France, Iceland, Israel, Italy, Japan, Martinique, the Netherlands, New Zealand, Norway, Republic of Korea, Singapore, Spain, Sweden and Switzerland.

**Years of life expectancy at birth to be gained by reducing cause group-specific death rates to equal those in the “longest-lived” populations, 2005-2010**



Source: *Changing Levels and Trends in Mortality: the role of patterns of death by cause* (United Nations publication, ST/ESA/SER.A/318).

**Years of life expectancy at birth to be gained by reducing death rates due to selected communicable diseases to equal those in the “longest-lived” populations, 2005-2010**



Source: *Changing Levels and Trends in Mortality: the role of patterns of death by cause* (United Nations publication, ST/ESA/SER.A/318).

## 5. HIV/AIDS

- Excess mortality due to HIV/AIDS was the leading cause of the longevity gaps in both Southern Africa and Eastern Africa. Southern Africa would gain more than 14 years of life expectancy at birth by reducing AIDS mortality rates to equal those in the “longest-lived” populations, while Eastern Africa would add more than 5 years to its average length of life.
- Outside of Africa, the impact of HIV/AIDS on the disparities in longevity is largest in the Caribbean and in Eastern Europe, accounting for shortfalls in the life expectancy at birth relative to the “longest-lived” populations of 1.0 years and 0.6 years, respectively.
- To close the gap in longevity due to HIV/AIDS continued progress is needed to prevent HIV transmission and to increase access to life-saving antiretroviral treatment (ART) among those who need it.
- In many countries highly affected by HIV/AIDS, HIV incidence is declining as a result of efforts to prevent the sexual transmission of HIV and to reduce HIV transmission from mother to child during pregnancy, delivery and breastfeeding. Ensuring access to ART remains a challenge: by the end of 2010, less than half of the estimated 10 million people in need of ART in sub-Saharan Africa were receiving it.<sup>4</sup>
- Eastern Europe and Central Asia are the only regions of the world where HIV prevalence is clearly increasing.<sup>5</sup> Key groups are most affected by the epidemic in these regions, including people who inject drugs, sex workers, their sexual partners, and men who have sex with men.

## 6. Pneumonia and diarrhoeal diseases

- Excess mortality due to pneumonia and diarrhoeal diseases produce large inequities in longevity in many of the less developed regions both because of the large burdens of mortality they cause and because those deaths are concentrated among children.
- In developing Oceania, South-central Asia and South-eastern Asia, as well as in all five regions of Africa, the longevity gap caused by pneumonia is greater than one year. Middle Africa and Western Africa, in particular, would advance life expectancy by reducing pneumonia death rates to equal those in the “longest-lived” populations: adding 4.7 years and 3.7 years, respectively.
- Several strategies have proven effective in reducing death rates due to pneumonia: vaccination; exclusive breastfeeding in the first six months of life; improvement of nutrition; control of indoor air pollution and provision of a healthy environment; prevention and management of HIV infection; and case management of pneumonia in the community, health centres and hospitals.<sup>6</sup>
- Reducing diarrhoeal disease mortality rates to equal those in the “longest-lived” populations would advance life expectancy at birth by more than 3 years in Middle Africa and by between 2 and 3 years in Western Africa, Eastern Africa, and South-central Asia.
- Interventions to reduce mortality from diarrhoeal diseases include promoting breastfeeding, improving access to safe water and improved sanitation, vaccinating children against rotavirus, and delivering prompt and appropriate treatment to those who become ill.<sup>7</sup>

## 7. Cardiovascular diseases, chronic obstructive pulmonary disease (COPD), diabetes and cancer

- Cardiovascular diseases (including heart diseases and stroke), are the leading cause of the longevity gap due to NCDs in all regions except Central America.
- Across Africa's five regions, the life expectancy to be gained by reducing death rates due to cardiovascular diseases to equal those in the "longest-lived" populations ranges from 3.3 years in Southern Africa to 5.7 years in Northern Africa.
- In developing Oceania, cardiovascular diseases are the leading cause of the longevity gap, accounting for 35 per cent of the total 17-year deficit in life expectancy at birth relative to the "longest-lived" populations.
- At 6.1 years, the longevity gap due to cardiovascular diseases in Western Asia is larger than in any other developing region. Large deficits in life expectancy due to cardiovascular diseases are observed in the other three regions of Asia as well, ranging from 3.2 years in Eastern Asia to 4.2 years in South-central Asia.
- In the Caribbean, the longevity gap caused by cardiovascular diseases is close to three times as large as that due to HIV/AIDS or pneumonia.
- Excess mortality due to cardiovascular diseases accounts for just over half of the 1.7-year longevity gap for the "more developed regions, excluding Eastern Europe". These causes are also responsible for more than 71 per cent of Eastern Europe's 12-year deficit in life expectancy relative to the "longest-lived" populations.
- In both South-central Asia and Eastern Asia, the

longevity gaps due to COPD are sizable. These regions would gain close to two additional years of life expectancy at birth by reducing COPD mortality rates to equal those in the "longest-lived" populations.

- Central America is the only region of the world where diabetes leads the other causes of death in terms of the contribution to the longevity gap. Excess mortality due to diabetes alone causes life expectancy in Central America to trail 1.5 years behind that in the "longest-lived" populations.
- The impact of cancers on deficits in life expectancy relative to the "longest-lived" populations varies by the site of the cancer. In general, death rates due to lung cancer, which is linked closely to tobacco use, are lower in developing regions than in the "longest-lived" populations. However, excess mortality due to cancers of the cervix, mouth and oesophagus contribute importantly to the longevity gaps in many regions.
- The 2011 Political Declaration on the NCDs<sup>8</sup> emphasizes the role of multi-sectoral policies to reduce the prevalence of smoking, moderate alcohol and salt consumption, and promote healthy diets and physical activity in preventing the onset of and reducing mortality rates from many NCDs.

### NOTES

<sup>4</sup> WHO, UNICEF and UNAIDS. 2011. Progress Report 2011: Global HIV/AIDS Response. Geneva.

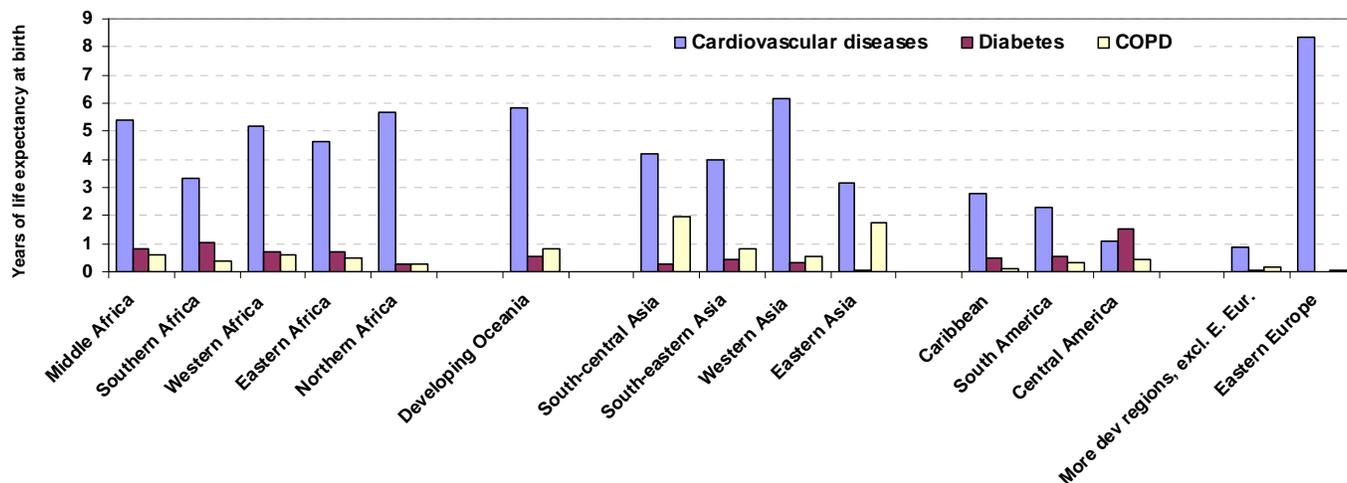
<sup>5</sup> UNAIDS. 2010. Global Report: UNAIDS Report on the Global AIDS Epidemic 2010. Geneva.

<sup>6</sup> WHO. 2010. Treatment and Prevention of Pneumonia. Geneva.

<sup>7</sup> UNICEF and WHO. 2009. Diarrhoea: Why Children Are Still Dying and What Can Be Done. Geneva.

<sup>8</sup> United Nations General Assembly resolution A/66/L.1

**Years of life expectancy at birth to be gained by reducing death rates due to selected non-communicable diseases to equal those in the "longest-lived" populations, 2005-2010**



Source: *Changing Levels and Trends in Mortality: the role of patterns of death by cause* (United Nations publication, ST/ESA/SER.A/318).