

# Global Burden of Disease: Generating Evidence, Guiding Policy Main Findings from the Latin America and Caribbean Regional Edition



# Substantial progress has been made in postponing death between 1970 and 2010

Across the region, each country increased its average age of death. Great variation exists, however, with El Salvador demonstrating the greatest gain (about 40 years) and Uruguay showing the least improvement (about nine years).

# Declines in mortality rates largely varied by age, with greatest improvements for young children

Death rates for children between 1 and 4 years old declined by more than 85% between 1970 and 2010. Women 80 and older saw the least improvement (a decrease of 11%), while men between 15 and 19 saw a 1% rise in mortality rate.

#### Premature death and disability caused by most communicable diseases and newborn conditions have greatly declined

Between 1990 and 2010, the region has succeeded in decreasing premature death and disability, also known as healthy years lost, from lower respiratory infections, diarrheal diseases, and preterm birth complications; however, these conditions are still among the top causes of disease burden for Bolivia, Haiti, and Guatemala.

### HIV/AIDS is rapidly rising for some countries in the region

HIV/AIDS caused 94% more healthy years lost in 2010 than in 1990; however, several countries, such as Ecuador and Colombia, have seen increases exceeding 1,000%. In Belize, HIV/AIDS is now the leading cause of premature death and disability, up from 28th.

#### Non-communicable diseases are now the leading causes of premature death and disability in Latin America and Caribbean

From 1990 to 2010, healthy years lost from causes like ischemic heart disease, diabetes, and chronic kidney disease increased between 36% and 140% in the region. Mexico experienced a 284% increase in chronic kidney disease.

# Interpersonal violence has taken a growing toll on health in many countries

Interpersonal violence is now the third-

increase in chronic kidney disease.

Note: The leading 25 causes of DALYs are ranked from top to bottom in order of the number of DALYs they contributed in 2010.

#### **Key terms**

**Years of life lost (YLLs):** years of life lost due to premature mortality.

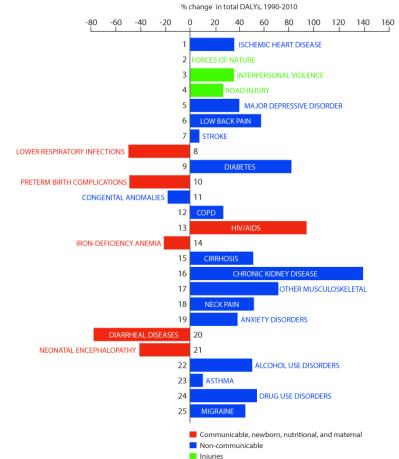
**Years lived with disability (YLDs):** years of life lived with any short-term or long-term health loss.

**Disability-adjusted life years (DALYs):** the sum of years lost due to premature death (YLLs) and years lived with disability (YLDs). DALYs are also defined as years of healthy life lost.

Risk factors: potentially modifiable causes of disease and injury.

To learn more about the Global Burden of Disease (GBD), visit www.ihmeuw.org/gbd

Shifts in leading causes of DALYs in Latin America and Caribbean, 1990-2010



Bars to the right of the vertical line show the percent by which DALYs have increased since 1990. Bars on the left show the percent by which DALYs have decreased. DALYs were not quantified for forces of nature in 1990.

leading cause of premature mortality and disability in the region, increasing 35% between 1990 and 2010. Several countries, including Belize, Jamaica, and Venezuela, experienced a sharper escalation of 200% or more during this time.

#### Disease burden driven by risk factors for communicable diseases has substantially declined

Much progress has been made for potentially avoidable risk factors like household air pollution, suboptimal breastfeeding, and iron deficiency, such that their burdens declined between about 20% and 80% from 1990 to 2010. Nonetheless, these risk factors remain among the top five contributors of disease burden in Bolivia and Nicaragua.

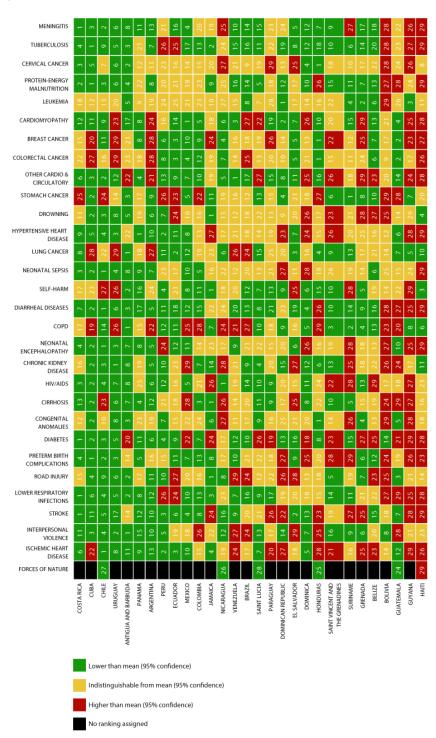
Potentially preventable behavioral risk factors are rapidly contributing to greater disease burden over time Risk factors associated with lifestyles, such as high body mass index and high fasting plasma glucose, contributed to far more healthy years lost in 2010 than in 1990. The Dominican Republic saw a 225% rise in disease burden from high body mass index.

GBD results allow countries to explore areas of success and identify areas of improvement relative to other countries within the region Benchmarking exercises (like the one to the right) can show rates of premature mortality ranked relative to the region's average and highlight the best (green) and worst (red) performers across the conditions that cause the most premature mortality in the region.

Across all countries and diseases, Chile, Cuba, and Uruguay performed the best. Guyana and Haiti had the most conditions for which they performed significantly worse.

For communicable diseases, countries such as Bolivia and Guatemala consistently performed worse than the rest of the region. However, more variation took place

Causes of leading years of life lost, Latin America and Caribbean countries relative to regional average, 2010



Note: The columns are ordered by the absolute number of YLLs for that particular year. The numbers indicate the rank across countries for each cause in terms of age-standardized YLL rates, with 1 as the best performance and 29 as the worst.

for non-communicable diseases and injuries. Countries like Brazil and Venezuela had significantly higher rates of premature mortality from road injury, while several countries, such as Honduras, experienced significantly greater rates of premature mortality from ischemic heart disease than the rest of the region.