

Global Burden of Disease: Generating Evidence, Guiding Policy Main Findings from the Europe and Central Asia 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 Turkey demonstrating the greatest gain (35.7 years) and Belarus showing the smallest improvement (5.4 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 about 80% between 1970 and 2010. Women 55 to 59 saw the least improvement (a decrease of 5%), while men between 45 and 59 experienced about a 10% rise.

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

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 and preterm birth complications; however, these conditions are still among the top five causes of disease burden for Azerbaijan, Kazakhstan, and Uzbekistan.

HIV/AIDS is rapidly rising in the region

HIV/AIDS caused 7,339% more healthy years lost in 2010 than in 1990, reflecting how the epidemic is taking hold of the region. In the Ukraine, HIV/AIDS is now the third-leading cause of premature death and disability, up from 161st.

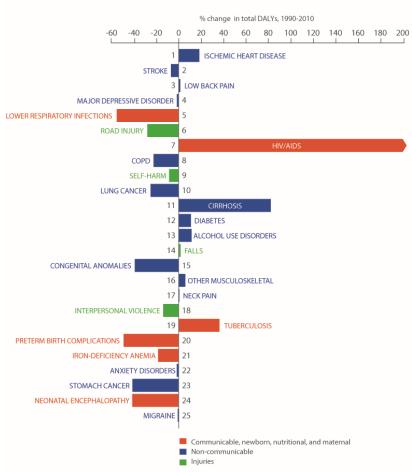
Non-communicable diseases are now the leading causes of premature death and disability in Europe and Central Asia

Between 1990 and 2010, healthy years lost from causes like ischemic heart disease and cirrhosis increased in the region. Russia experienced a 176% increase in cirrhosis.

Road injuries result in fewer healthy years lost for most countries in the region

Healthy years lost from road injuries
decreased by 28% between 1990 and
2010; however, progress was not universal
across countries in the region (ranging from a
62% decrease in Latvia to a 26% rise in Montenegro).





Note: The leading 25 causes of DALYs are ranked from top to bottom in order of the number of DALYs they contributed in 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. Pointed arrows indicate causes that have increased by a greater amount than shown on the x-axis.

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

Much progress has been made for potentially avoidable risk factors like ambient particulate matter pollution and household air pollution, such that their burdens declined between 40% and 70% from 1990 to 2010. Nonetheless, these risk factors remain among some of the leading contributors of disease burden in Kyrgyzstan and Tajikistan.

Potentially preventable behavioral risk factors are rapidly contributing to greater disease burden over time

Risk factors associated with lifestyles, such as alcohol use and high body mass index, contributed to far more healthy years lost in 2010 than in 1990. During this time, Turkmenistan saw a 366% rise in disease burden from alcohol use.

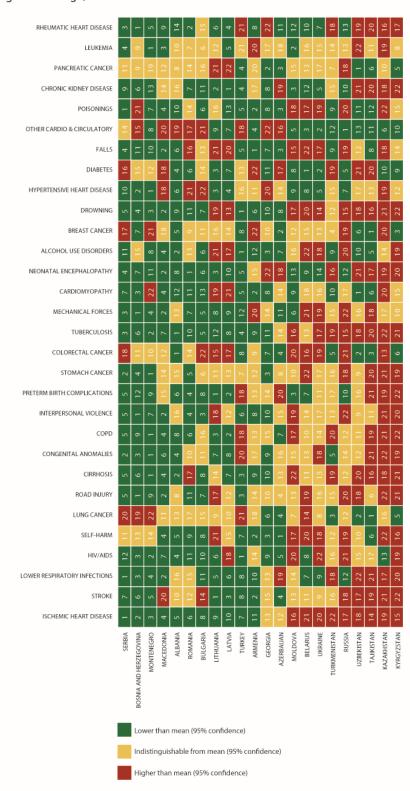
GBD results allow countries to explore areas of success and identify areas of improvement relative to other countries within the region

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, Serbia, Bosnia and Herzegovina, and Montenegro generally performed the best. Kazakhstan and Kyrgyzstan had the most conditions for which they performed significantly worse.

For most communicable diseases, countries such as Tajikistan consistently performed worse than the rest of the region. However, more variation took place for non-communicable diseases. Countries like Russia and Moldova had significantly higher rates of premature mortality from ischemic heart disease, while several countries, such as Romania, experienced significantly greater rates of premature mortality from cirrhosis than the rest of the region.

Causes of leading years of life lost, Europe and Central Asia 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 22 as the worst.