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## Global burden of cancer in 2008: a systematic analysis of disability-adjusted life-years in 12 world regions

The burden of cancer is high in every world region, concludes a study led by scientists of the International Agency for Research on Cancer (IARC) and published in *The Lancet* today [Tuesday, October 16].

In the study, Dr Isabelle Soerjomataram and colleagues derived the disability-adjusted life years (DALYs) for 27 cancers in 184 countries in 12 world regions. DALYs is an indicator that integrates the commonly used measures of cancer burden (incidence, mortality, and survival) with measures of disability due to cancer. DALYs is calculated by adding the time lost due to premature mortality (years of life lost, or YLL) and the duration lived with disability in survivors (years lived with a disability, or YLD).

The authors estimate that worldwide, more than 169 million years of healthy life were lost due to cancer in 2008<sup>1</sup>. This DALY figure indicates that an individual loses on average about 2 years of healthy life after cancer diagnosis. Colorectal, lung, breast, and prostate cancers were the main contributors to the total DALYs in most world regions, accounting for 18–50% of the total burden from cancer. In sub-Saharan Africa and East Asia, an additional large burden from infection-related cancers (liver, stomach, and cervix) was estimated at 25% and 27%, respectively.

Marked global differences were observed in the cancer profile of DALYs by country and by world region. Irrespective of a country's human development index, the number of years of healthy life lost due to cancer is large, with the highest relative contribution of premature mortality (or YLL) to the total DALYs estimated in low resource countries (97%).

The authors note the consistently poorer prognosis after cancer diagnosis in low resource countries highlights the need for global public health actions to be increasingly directed towards such settings, with more emphasis placed on implementing preventive interventions and targeted screening programmes for early detection of cancer.

Soerjomataram I, Lortet-Tieulent J, Parkin DM, Ferlay J, Mathers C, Forman D, Bray F. Global burden of cancer in 2008: a systematic analysis of disability-adjusted life-years in 12 world regions. *Lancet* 2012, doi: 10.1016/S0140-6736(12)61688-2

See also: Soerjomataram I, Lortet-Tieulent J, Ferlay J, Forman D, Mathers C, Parkin DM, Bray F. Estimating and validating disability-adjusted life years at the global level: a methodological framework for cancer. *BMC Med Res Methodol* 2012, 12:125 doi:10.1186/1471-2288-12-125. Published: 17 August 2012. [PubMed](#)

<sup>1</sup> Country- and sex-specific estimates are available at <http://globocan.iarc.fr>