

# Premature deaths could be reduced by 40% over next 20 years

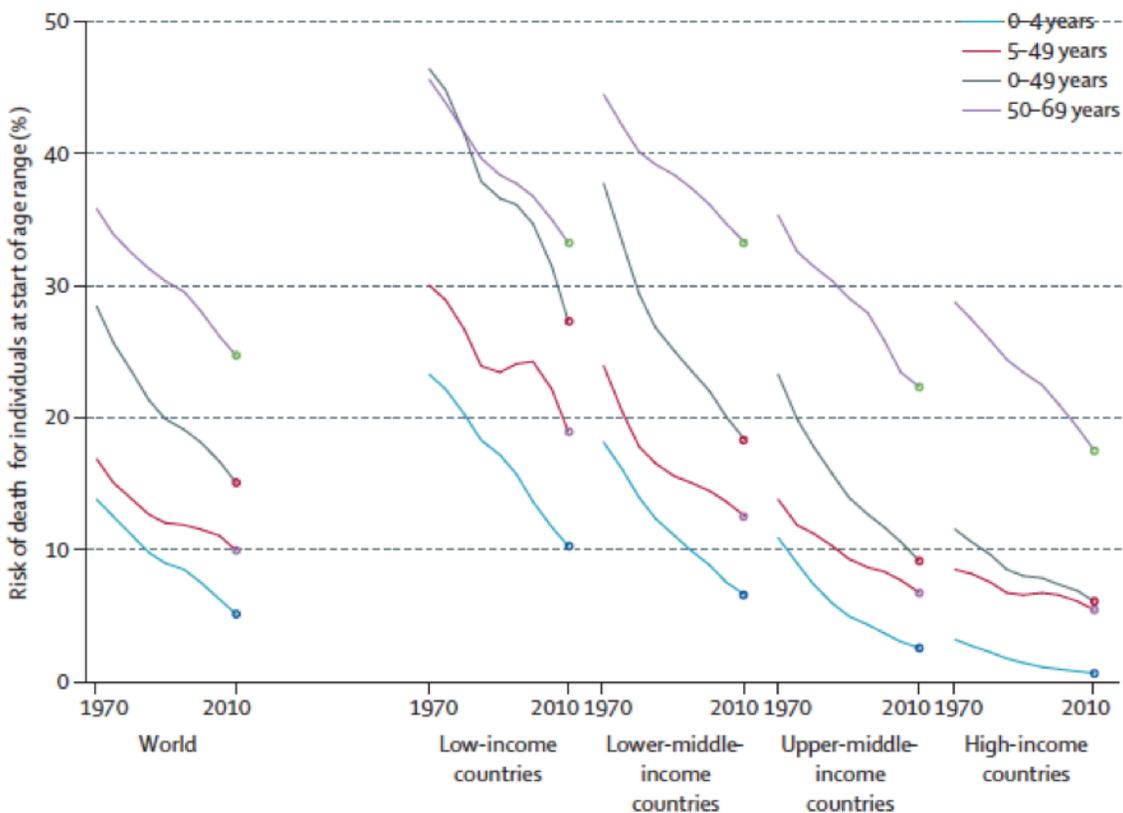
New research published by Ole Norheim and colleagues in *The Lancet* on September 19, 2014 suggests that, with sustained international efforts, the number of premature deaths could be reduced by 40% over the next two decades (2010–2030), halving under-50 mortality and preventing a third of the deaths at ages 50–69 years.

The findings reveal that, between 2000 and 2010, child deaths fell by one-third worldwide, helped by the fourth Millennium Development Goal (MDG) to reduce child deaths by two-thirds; and premature deaths among adults

fell by one-sixth, helped by MDG 5 to reduce maternal mortality and MDG 6 to fight AIDS, malaria and other diseases. With expanded international efforts against a wider range of causes, these rates of decrease could accelerate, say the authors.

The most striking change during 2000–2010 was a two-thirds reduction in childhood deaths from the diseases now controlled by vaccination (diphtheria, pertussis, tetanus, polio, and measles), highlighting what targeted international efforts can achieve.

40-year trends, 1970–2010, in risks of dying in selected age ranges for the world (left), and (right) four World Bank groupings of countries (low-income to high-income)



“Death in old age is inevitable, but death before old age is not,” said co-author Richard Peto, Professor of medical statistics at the University of Oxford, UK. “In all major countries, except where the effects of HIV or political disturbances predominated, the risk of premature death has been decreasing in recent decades, and it will fall even faster over the next few decades if the new UN Sustainable Development Goals get the big causes of death taken even more seriously.”

The international group of 16 authors, writing in *The Lancet*, call for this new health sustainable development goal to be accompanied by a specific target to avoid in each country 40% of all premature deaths (of the deaths that would occur in the 2030 population of that country, if its 2010 death rates continued).

The 40% reduction from 2010 to 2030 in deaths before age 70 would involve reductions of two-thirds in the causes already being targeted by the MDGs, and a one-third reduction in other causes of premature death, such as non-communicable diseases and injuries.

Lead author Ole Norheim, Professor of global public health at the University of Bergen, Norway, explained, “Based on realistically moderate improvements in current trends, our proposed targets are a two-thirds reduction in child and maternal deaths and in HIV, tuberculosis, and malaria, and a one-third reduction in deaths from non-communicable diseases and injuries. For this, we are going to need improved healthcare, intensified interna-

tional efforts to control communicable diseases, and more effective prevention and treatment of non-communicable diseases and injuries.”

“The most important cause of non-communicable disease is tobacco use, and one of the key determinants of smoking is the price of cigarettes,” said co-author Prabhat Jha, Director of the Centre for Global Health Research in St Michael’s Hospital, Toronto. “WHO is calling for a 30% reduction in smoking by 2025, and in many countries major increases in excise taxes that double the price of cigarettes are still possible. Such an increase would reduce smoking by about a third, but would increase the total Government tax yield from smoking by about a third.”

With political commitment and sustained efforts to improve health, the current rate of decline in premature death can be further accelerated. “We conclude that a 40% reduction in premature deaths is realistic in each country where mortality in 2030 is not dominated by new epidemics, political disturbances or disasters,” added Professor Norheim.

Writing in a linked Comment, the Norwegian Ministers of Foreign Affairs and of Health and Care say, “[This] study shows what an important part science could play in the negotiations at the 69<sup>th</sup> Session of the UN General Assembly. We strongly urge the medical community to develop a common position that can enable the international community to arrive at a single health SDG with a limited number of simple, understandable and measurable targets.”

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Source: Norheim OF, Jha P, Admasu K, Godal T, Hum TJ, Kruk M, Gómez-Dantés O, Mathers CD, Pan H, Sepúlveda J, Suraweera W, Verguet S, Woldemariam AT, Yamey G, Jamison DT, Peto R. Avoiding 40% of the premature deaths in each country, 2010–30: review of national mortality trends to help quantify the UN Sustainable Development Goal for health. *Lancet* 2014; published online Sept. 19.

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