

### POLICY BRIEF #3: CURBING NON-COMMUNICABLE DISEASES AND INJURIES

One paradox of success in global health is that when low- and middle-income countries successfully reduce deaths from infections and maternal and child conditions, they then accelerate the shift in their disease burden to non-communicable diseases (NCDs) and injuries in adults. *Global Health 2035: A World Converging within a Generation* lays out the steps that all low- and middle-income countries could take now to delay the onset of NCDs to as late as possible in life and thus reduce premature morbidity and mortality.

#### The crisis of NCDs and injuries

The transition to NCDs and injuries is occurring because of factors such as ageing of the population and the global spread of NCD risk factors, including smoking and harmful use of alcohol. Rates of cardiovascular disease, once they are adjusted for age, are now higher in low- and middle-income countries than in high-income countries (see figure 1). On top of the growing burden of NCDs, many low- and middle-income countries are also experiencing a rise in deaths from road traffic injuries, linked with increasing rates of urbanisation and motorisation. Such injuries are the world's leading cause of death among people aged 15–29 years.

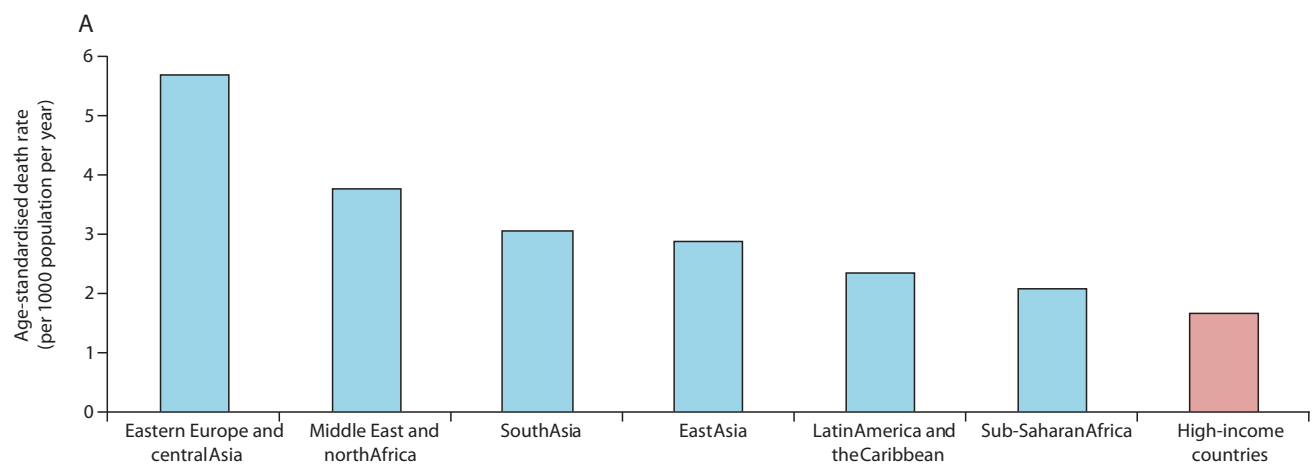


Figure 1: Age-standardised death rates for cardiovascular diseases in men by world regions, 2010

#### Tackling the crisis with cost-effective interventions

Global Health 2035 lays out a set of cost-effective population-based and clinical interventions that could sharply reduce the burden of NCDs and injuries in low- and middle-income countries by 2035. In particular, it argues that taxes are a very powerful, yet under-used, lever for reducing the worldwide incidence of these conditions.

Over 100 studies, including those done in low- and middle-income countries, have shown that taxation has a major impact on rates of smoking, one of the world's most important NCD risk factors. There is also increasing evidence of the benefits of taxing other harmful substances, such as alcohol. Such taxes can be a significant source of government revenue (see box 1). Taxes and price increases need to be substantial in order to achieve the desired fall in consumption.

Removing or reducing subsidies on items such as fossil fuels and unhealthy food constituents can also help to curb NCDs. Energy subsidies on coal, gasoline and diesel are widespread and are harmful to public health.

They encourage excessive energy consumption and the production of ambient particulate matter pollution and other pollutants that cause lower respiratory infections in children, and cancers, heart diseases and chronic lung disease in adults. Subsidies also divert public resources away from spending on health, education and social protection programs.

Legislation and regulation can also play an important role. Bans on tobacco and alcohol advertising, the elimination of trans fats in the diet, the designation of smoke-free public places, restrictions on access to retail alcohol and the establishment and enforcement of drink-driving laws are important elements of comprehensive efforts to reduce the risks from tobacco smoking and alcohol use. Transportation-related deaths can be curtailed through legislation, such as enforcement of speed limits, motorcycle helmet use and drink-driving laws. Regulation and legislation can also help to curb suicide deaths (the second largest cause of injury deaths after traffic injuries); examples of proven interventions include pesticide restrictions and firearm control laws.

In addition to these population-based approaches, the burden of illness and deaths from NCDs and injuries can be reduced substantially by increasing the availability of drugs, technologies and clinical procedures. However, when resources are constrained, explicit choices must be made about how best to target funding. In countries with weak infrastructure for delivery of clinical tools, scale-up should start with highly effective interventions that are cost effective and appropriate to the available amount of resources. Many of these interventions—such as drugs for treating or preventing cardiovascular disease—can be delivered in primary care by community health workers. However, some essential, highly cost-effective interventions, such as treating thigh bone fractures or giving intravenous treatment for heart attacks, require delivery via a district hospital platform.

**Box 1: The impact of a 50% price increase in cigarettes from adding a tax in China**

- 20 million deaths would be averted over the next 50 years
- An extra US \$20 billion in revenue would be generated annually in the next 50 years; while this additional tax revenue would fall over time as smoking rates fall, revenue is expected to remain higher than existing levels even after 50 years
- The poorest people will gain the most in terms of additional life years gained, given their higher sensitivity to price increases

### The role for international collective action

The international community can help to support NCD and injury control through:

- Sharing its experiences and expertise on taxation, subsidies, regulation and legislation, especially related to targets that cut across several sectors (e.g., alcohol and road injury deaths);
- Cooperating internationally to tackle tobacco tax avoidance (through loopholes) and tax evasion (through smuggling and bootlegging);
- Providing targeted financing in the poorest countries to help introduce NCD interventions, such as hepatitis B vaccine to prevent liver cancer and HPV vaccine to prevent cervical cancer;
- Helping build the evidence base for other cost-effective, population-wide measures to address NCDs and injuries; and
- Supporting research on the population factors, policies and delivery systems that work best for scaling up interventions for NCDs and injuries in low-income and middle-income countries.

***Global Health 2035: A World Converging within a Generation* was written by *The Lancet Commission on Investing in Health* – an international multi-disciplinary group of 25 commissioners, chaired by Lawrence H. Summers and co-chaired by Dean Jamison.**

**The full report was published in *The Lancet* on 3 December 2013 and can be found at [www.lancet.com](http://www.lancet.com).**