



World Health
Organization

Saving lives, spending less

Frequently Asked Questions

Document number: WHO/NMH/NVI/18.10

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1. What is *Saving lives, spending less: A strategic response to noncommunicable diseases*?

Saving lives, spending less: A strategic response to noncommunicable diseases (NCDs) presents a strategy for tackling NCDs in low- and lower-middle-income countries.

The document estimates the per capita financial investment needed to scale up the implementation of the WHO ‘Best Buy’ NCD interventions in low- and lower-middle-income countries, in order to move towards target 3.4 of the Sustainable Development Goals: To reduce premature deaths from noncommunicable diseases by a third by 2030. The Best Buys cover six policy areas: tobacco use, harmful use of alcohol, unhealthy diet, physical inactivity, the management of cardiovascular disease and diabetes, and the management of cancer. The document estimates the value of both the social and economic benefits of improved health that result from the increased level of intervention coverage in these countries. It also determines the return on investment that low- and lower-middle-income countries could expect from using these interventions.

2. What are the main findings?

The main findings are:

- Countries should focus their NCD funding on the most cost-effective interventions to prevent the onset of NCDs and premature death caused by NCDs.
- The per capita investment required to scale up the implementation of these key interventions to a target coverage level by 2030 in low- and lower-middle-income countries is up to an additional US\$1.27 per year, on top of what is already being spent on health.
- This growing per capita investment reaching US\$1.27 per year to implement the Best Buys will, by 2030, save over 8.2 million people from premature deaths.

With these highly effective NCD interventions in place, governments can expect an economic return of at least US\$7 for every US\$1 dollar invested. The scale-up would help low- and lower-middle-income countries move substantially closer to achieving target 3.4 of the Sustainable Development Goals.

3. Why are only low- and lower-middle income countries included in this analysis? Is this document relevant only for low- and lower-middle income countries?

Many upper-middle- and high-income countries have already begun implementing the Best Buys and are reaping the health and economic benefits. However, over 80% of all premature deaths from NCDs globally occur in low- and lower-middle-income countries, and the trend is expected to rise. Yet for a number of reasons, action to prevent the growing burden of NCD-related deaths in these countries has been slow. NCD interventions are currently implemented at very low levels and urgently need to be put in place more widely to prevent future deaths. The analysis provides governments of low- and lower-middle-income countries with information on how NCD programmes can represent ‘investments’ by generating direct or indirect funding and savings, rather than simply being costs.

Because not all low- and lower-middle-income countries have all the resources needed to scale-up the NCD interventions, the document is also relevant to those who can assist countries in this process. This includes governments in bilateral donor positions, philanthropists, global health

donors, organizations that deliver programmes in these countries in other areas of health (not just NCDs) and organizations that develop and improve methods for international financing.

4. What are the Best Buys? How were they chosen?

The Best Buys are high-priority NCD interventions for countries to implement in order to achieve the Sustainable Development Goals target 3.4.

These are interventions for which there is robust scientific evidence of an effect on either preventing the onset of NCDs or preventing premature death from NCDs. They are cost-effective, feasible and affordable, and could be implemented in all low- and lower-middle-income countries. The Best Buys are part of WHO's Global Action Plan for the Prevention and Control of NCDs. The plan has been endorsed by the World Health Assembly, and the Best Buys updated and endorsed in resolution A70.27.

5. Why were mental health disorders not included in the interventions?

Mental health is a priority for WHO under the 13th General Programme of Work. Future work will aim to include estimates of the benefits of investing in interventions to prevent and treat mental disorders.

6. How was cost estimated?

The cost is the additional financial input needed to scale the NCD interventions up to a higher level of intensity, or for individual interventions to cover a larger proportion of the people that need them. It is made up of the cost of skilled professional labour, training, programme management, communications, equipment, medicines, consumables and the facilities required to deliver the interventions. To get the cost per capita (cost per person), the total additional spending required was divided by the size of the entire population in the low- and lower-middle-income countries.

The cost was estimated using the WHO OneHealth Tool, a software platform developed together with other UN agencies and supplemented by an MS Excel-based NCD costing tool. The estimate takes into account the change in number of people protected by the interventions over time. As the populations in low- and lower-middle-income countries grow, more and more people need to be covered by treatment interventions. At the same time, as the prevention interventions start to have a positive effect on people's health, the number of new NCD diagnoses will go down. However, people who suffer from NCDs are likely to live longer and therefore require treatment for a longer period of time, representing a cost increase.

7. How were the estimates on health impact calculated?

The number of lives saved is the difference between the number of deaths that would occur if the implementation of NCD interventions in low- and lower-middle-income countries was kept at the current level, and the number of deaths that would occur if the coverage level of interventions was scaled up.

The number of deaths if implementation were to remain at current levels was estimated based on current NCD mortality and exposure to NCD risk factors such as tobacco use, physical inactivity or overconsumption of salt. Each intervention has an effect on reducing this risk. Previous studies have determined how big these effects are, and the reduction in NCD deaths has been modelled based on the results of implementing these interventions.

The disease, death and risk factor data used in this analysis is from the Global Burden of Disease study and from the WHO Global Health Estimates database. The analysis takes into account that people may develop or die from causes other than NCDs, and that some interventions will affect the same risk factors.

8. How were the economic benefits estimated?

The economic benefits of implementing the NCD interventions come from the employment, productivity and income of the population that all increase when the disability and deaths from NCDs are avoided.

The effect of scaling up the NCD interventions on the level of employment was calculated by counting the numbers of deaths that will be avoided by men and women at different ages between 2018 and 2030. The number of these people expected to be working was then calculated for each year using country-specific employment data from the International Labour Organization (STAT database).

The contribution to economic output (GDP) by the increased workforce then was calculated by multiplying the number of people expected to be working by a productivity rate. This productivity was expected to vary between people of different ages and from year to year. People who were healthy were estimated to contribute slightly more to the economic output than people with NCDs.

9. How was the return on investment estimated?

The return of investment was calculated by dividing the combined value of economic benefits and social benefits by the value of the costs of scaling up the interventions. The resulting ratio is called the benefit-cost ratio. The benefit-cost ratio for scaling up the interventions is 7. This means that for every US\$1 investment in NCD interventions, governments can expect to gain US\$7 in economic and social benefits between now and 2030. This calculation took into account that it will take time from when the investments are made to when the benefits materialize. For every year that passed since investments were made, the value of the associated benefits was considered 3% lower.

10. How does the return on investment compare to investments in other areas of health?

The return on investment in NCDs interventions compares well to returns on investing in other areas of health. Previous analyses using similar methodology have, over a similar period of time, shown average returns of US\$4.9 (mental health), US\$5.7 (adolescent health) and US\$8.7 (reproductive, maternal, newborn and child health) for every US\$1 invested.¹

¹ **References:**

11. What does “spending less” mean?

Spending less does not mean that governments can expect to see a decline in health spending in the immediate future as a result of these investments. It means that because the additional spending that is needed is focused on increasing the health and productivity of the population, the economic and social benefits that can be expected in return more than outweigh the costs of scaling up the interventions. In addition, putting in place prevention actions now can slow the growth in health spending on NCDs in the future.

12. Can you simply add up the individual Best Buy intervention impacts and benefits?

No. This is because the level of effect each intervention has on reducing the NCD risk factors is affected if other interventions are used at the same time. When these interventions are implemented simultaneously, their ‘compound’ effect may not equal the sum of their individual effects. Factors affected include the number of people needing the interventions (cost), the number of lives saved, the number of productive years people live and consequently the return on investment.

13. How fast do countries need to act to follow the investment plan?

To prevent and manage cancer and to manage cardiovascular disease, countries are expected to scale up the clinical interventions linearly from current actual levels (or estimated 5% level if data on current levels not available) to achieve 50% coverage level in 2030.

To reduce tobacco use, the expectation is that educational mass media campaigns can be implemented immediately and so will be in full use by 2019. It is expected that the preparation of laws to create smoke-free public places, ban tobacco advertising and change tobacco packaging will take one year. The implementation of the smoke-free public places and tobacco advertising ban is then expected to take another year to be fully scaled up by 2020. Packaging modifications are expected to be in place by 2021. For taxes on tobacco products, it is expected that countries increase taxes every three years and reach the highest level of implementation (tobacco tax accounting for at least 75% of retail price) between 2028-2030.

To reduce harmful alcohol use, the expectation is that to draft, adopt and implement the laws to reduce alcohol availability and ban alcohol advertising and to move ahead with implementation will take countries two years and be fully in place by 2020. For taxes on alcohol products, the expectation is that countries will increase taxes every three years and reach the highest level of implementation (alcohol tax accounting at least 50 % of retail price) by 2030.

To reduce unhealthy diets, the expectation is that it will take three years to create supportive environments for salt reduction policy implementation. Educational mass media campaigns can

a. Mental health – Chisholm D, Sweeny K, Sheehan P, et al. Scaling-up treatment of depression and anxiety: a global return on investment analysis. *Lancet Psychiatry* 2016; 3: 415-24.

b. Adolescent health – Sheehan P, Sweeny K, Rasmussen B, et al. Building the foundations for sustainable development: a case for global investment in the capabilities of adolescents. *Lancet* 2017; 390: 1792-806.

c. Women and children's health – Stenberg K, Axelson H, Sheehan P, et al. Advancing social and economic development by investing in women's and children's health: a new Global Investment Framework. *Lancet* 2014; 383: 1333-54.

be then implemented immediately and so will be in full use by 2021. It is expected that scaling up food reformulation and changes in food packaging is implemented linearly to achieve 50% coverage level by 2030.

To reduce physical inactivity, it is expected that it will take countries one to two years to develop educational mass media campaigns. The campaigns should be fully implemented by 2020.

14. What does this mean for an individual country?

Although the published findings are for all the low- and lower-middle-income countries, the analysis is based on data from each of the low- and lower-middle-income country. Individual countries can request access to this country-level data to plan their own activities.

15. What does this mean for a global health donor?

The document provides all the necessary information on the health and economic impact of highly effective NCD interventions in low- and lower-middle-income countries. With this information, global health donors can plan their investments in NCD interventions and integrate NCD interventions into existing programmes in other areas of health and development.

16. If all the low- and lower-middle income countries invest in the Best Buys, will we reach the NCD target (target 3.4) of the Sustainable Development Goals?

For cardiovascular disease – targeted by the majority of the Best Buy interventions and which would consequently see the biggest impact from this investment – the target of reducing premature mortality by 2030 would be reached by using the Best Buys alone. For other NCDs, we will achieve substantial progress towards the Sustainable Development Goals.

The findings are aspirational and encouraging. By taking strategic action now, the Sustainable Development Goals can be reached.

Additional reading material and implementation tools for the Best Buys are available via the following links:

“Best Buys” and other recommended interventions for the prevention and control of noncommunicable diseases. Geneva: World Health Organization, 2017.
http://www.who.int/ncds/management/WHO_Appendix_BestBuys.pdf

WHO OneHealth Tool: <http://www.who.int/choice/onehealthtool/en/>

Global Health Estimates: http://www.who.int/healthinfo/global_burden_disease/en/

“Methods for Saving Lives, spending Less”. Geneva: World Health Organization 2018

Bertram et al. Investing in non-communicable diseases: an estimation of the return on investment for prevention and treatment services. The Lancet 2018. [https://doi.org/10.1016/S0140-6736\(18\)30665-2](https://doi.org/10.1016/S0140-6736(18)30665-2)

World Health Organization, MPOWER: <http://www.who.int/tobacco/mpower/en/>

World Health Organization 2016. *SHAKE the salt habit: The SHAKE technical package for salt reduction* <http://www.who.int/dietphysicalactivity/publications/shake-salt-habit/en/>

World Health Organization, 2016. *HEARTS technical package for cardiovascular disease management in primary health care*. http://www.who.int/cardiovascular_diseases/heart/en/

World Health Organization, 2013. *Package of essential noncommunicable (PEN) disease interventions for primary health care in low-resource settings*.
http://www.who.int/cardiovascular_diseases/publications/implementation_tools_WHO_PEN/en/

World Health Organization, December 2014. *Comprehensive cervical cancer control: a guide to essential practice* – 2nd ed. <http://www.who.int/reproductivehealth/publications/cancers/cervical-cancer-guide/en/>

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<http://documents.worldbank.org/curated/en/196871468336643958/The-growing-danger-of-non-communicable-diseases-acting-now-to-reverse-course>

World Bank. 2012. *The growing burden of non-communicable diseases in the Eastern Caribbean* (English). Human development unit. Washington, DC: World Bank.

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