

Responding to the Challenge of Non-communicable Diseases

Organization for Economic Co-operation and Development (OECD)

1. NCDs negatively impact societies and the economy

Changes in population structure, environments and behaviours have led to rapid growth in non-communicable diseases (NCDs). NCDs include heart disease, cancer, diabetes and chronic respiratory diseases. They share the same risk factors, namely tobacco use, harmful use of alcohol, unhealthy diet, physical inactivity and air pollution.

NCDs cause approximately 70% of deaths worldwide.¹ This figure increases to just under 90% when analysing OECD member countries only.² NCDs are also a key cause of disability, and have been the main driver of disability growth over the last 20 years. As of 2017, 80% of disabilities were related to NCDs.³

Not only are NCDs a significant health burden, they are also an economic burden. The costs of NCDs are both health and non-health related. Regarding health, NCDs lead to higher service delivery costs, such as increased hospital admissions and more complex medical treatment. Treating diseases related to overweight and obesity, for example, is expected to cost OECD countries, on average, USD 200 per person per year, which equates to 8.4% of total health spending.⁴

United Nations high-level meetings have highlighted the need to scale up work on NCDs as part of the 2030 Agenda for Sustainable Development.

NCDs contribute to ill-health, poverty and inequities and slow the development of countries. Every year 15 million people die before age 70 from NCDs, with 86% of these premature deaths occurring in developing countries.

Major progress on NCDs is possible. Premature deaths from NCDs are largely caused by modifiable behavioural risk factors, such as tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol. Environmental risks (e.g. air pollution) and constrained access to basic services also contribute significantly to NCDs.

Addressing NCDs requires coordinated action, both nationally and internationally, within a broader whole-of-society response.

Non-health care costs from NCDs are also significant and include lower levels of productivity due to absenteeism (being out of work sick), presenteeism (working less effectively) and a reduced labour supply due to premature death. For example, OECD analyses found that individuals with diabetes are 15% less likely to be employed and nearly 10% more likely to intend on retiring early. Similar figures were recorded for patients with cancer and heart diseases.⁵

1 Jan S, Laba TL, Essue BM, Gheorghe A, Muhunthan J, Engelgau M, et al. Action to address the household economic burden of non-communicable diseases. Vol. 391, The Lancet. Lancet Publishing Group; 2018. p. 2

2 World Bank. Cause of death, by non-communicable diseases (% of total) [Internet]. 2019. Available from: <https://data.worldbank.org/indicator/SH.DTH.NCOM.ZS>

3 Institute for Health Metrics and Evaluation (IHME). Findings from the Global Burden of Disease Study 2017. Seattle, WA; 2018.

4 OECD. The Heavy Burden of Obesity: The Economics of Prevention. OECD Publishing, Paris; 2019.

5 Feigl AB, Goryakin Y, Devaux M, Lerouge A, Vuik S, Cecchini M. The short-term effect of BMI, alcohol use, and related chronic conditions on labour market outcomes: A time-lag panel analysis utilizing European SHARE dataset. Chen S, editor. PLoS One [Internet]. 2019 Mar 11 [cited 2020 Feb 6];14(3):e0211940. Available from: <http://dx.plos.org/10.1371/journal.pone.0211940>

These figures may increase with worsening air pollution. OECD estimates premature deaths from air pollution will grow by 21% between 2010-2060 in G7 countries if no effective action is taken, with associated costs amounting to 3.8% of their annual GDP.⁶

The United Nation's Sustainable Development Goals (SDGs) highlight the importance of tackling NCDs to ensure health and prosperity. Specifically, the SDGs include a target to reduce premature mortality from NCDs by one-third by 2030 through prevention, treatment, and the promotion of good health and well-being. Achieving this SDG target will improve population health, save households and governments significant resources and contribute to economic growth. In France, for instance, OECD modelling estimated that meeting risk factor reduction targets (e.g. for tobacco, harmful use of alcohol, and obesity) by 2025 would add 25 300 healthy life years and reduce health spending by EUR 660 million per year.⁷

Another analysis of key policy interventions for addressing obesity revealed positive returns on investments. For example, for every USD 1 invested in advertising regulation, nearly USD 6 in GDP growth is returned.⁸

Given the economic costs associated with NCDs, it is important that policy-makers use limited resources effectively. This is a 360° process beginning with the selection of interventions with a robust evidence base, such as the WHO NCD Best Buys. Selected interventions must also be adapted to the local context to meet population needs and avoid duplication of efforts to optimise cost-effectiveness.



Thirdly, an evaluation of the intervention is necessary to identify facilitators and barriers to success, which can then be mapped against those identified in other contexts. Finally, the intervention should incorporate learnings from the evaluation as well as continually evolve to account for changes such as demographics and epidemiology.

BEST BUYS

In 2017, the World Health Assembly endorsed a set of "best buys" and other recommended interventions to address NCDs.⁹ Best buy interventions address four NCD risk factors (tobacco use, harmful use of alcohol, unhealthy diet and physical inactivity) and four disease areas (cardiovascular disease, diabetes, cancer and chronic respiratory disease). There are 88 recommended interventions, including overarching/enabling policy actions.

6 OECD. Healthy people, healthy planet [Internet]. 2017. Available from: <https://www.oecd.org/health/health-systems/Healthy-people-healthy-planet.pdf>

7 Devaux M, Lerouge A, Ventelou B, Goryakin Y, Feigl A, Vuik S, et al. Assessing the potential outcomes of achieving the World Health Organization global non-communicable diseases targets for risk factors by 2025: is there also an economic dividend? Public Health. 2019 Apr 1;169:173–9.

8 OECD. The Heavy Burden of Obesity: The Economics of Prevention. OECD Publishing, Paris; 2019.

9 WHO. 2017. 'Best buys' and other recommended interventions for the prevention and control of noncommunicable diseases. Available at: <http://apps.who.int/iris/bitstream/handle/10665/259232/WHO-NMH-NVI-17.9-eng.pdf>.

2. OECD plays a leading role in supporting countries achieve ambitious global and national NCD targets

Given OECD's expertise in policy evaluation and advice, the organisation plays a leading role in supporting countries achieve their NCD targets. OECD's work on health helps countries achieve high-performing health systems by measuring health outcomes and health system resource use, as well as by analysing policies to improve access, efficiency, and quality of care. OECD's work on public health focuses on key risk factors driving NCDs such as obesity, unhealthy diet, physical inactivity and sedentary lifestyles, environmental risks, and the harmful use of alcohol and tobacco use.

OECD's policy advice on NCDs is derived from three complementary work streams: 1) evidence generation, 2) strategic advice and 3) implementation support.

Evidence generation

Policy-makers are faced with growing healthcare needs and tightening budgets. Therefore, it has become increasingly important to ensure there is robust evidence supporting whether an investment represents good 'value for money'. OECD plays a key role in this area as a global leader in undertaking sophisticated cost-effectiveness analysis using an in-house microsimulation model – OECD's Strategic Public Health Planning for NCDs (OECD SPHeP-NCDs). The model is used to measure the economic burden of risk factors and diseases affecting population health as well as the impact of policy interventions targeted at preventing and controlling NCDs.



The model does this by projecting the impact of policy interventions on population health outcomes and the associated health, non-health (e.g. labour productivity) and programme implementation costs up until 2050. Results from the model provide policy-makers with a clear understanding of the impact the intervention will have on the productivity of the labour force, GDP and ultimately long-term fiscal sustainability. Currently, the model can produce results for 52 countries, however, it is capable of extending to nearly all countries.

In 2019, OECD released a health policy study pertaining to obesity – 'The Heavy Burden of Obesity: the economics of prevention'. In the study, ten policy actions, including several WHO Best Buys, were analysed such as food and menu labelling, mass media campaigns promoting physical activity, workplace wellness programs, and the prescription of physical activity in primary care (as well as the combination of these policies). In 2021, OECD will release a second health policy study on alcohol, which will analyse the impact of policies to reduce harmful use of alcohol.

Analyses for other risk factors such as air pollution and tobacco use are under discussion and will likely be included in OECD's future work.

Strategic advice

OECD provides strategic advice through country-specific Public Health Reviews. These offer in-depth analysis and policy recommendations to strengthen priority areas within a country's public health system, highlighting best practices that allow learning from shared experiences and the spreading of innovative approaches.

The OECD Public Health Reviews appraise the public health capacity in the country, then focus on specific high priority topics. OECD's Public Health Review of Chile, for example, analysed policies related to diet and obesity and provided advice for implementing a monitoring system to evaluate the country's food labelling scheme. The OECD have also carried out Public Health Reviews for Japan and South Korea. Others are in preparation.

Implementation support

The OECD assists countries by using robust methodological techniques to systematically identify, transfer, implement and monitor best practice interventions.

Regarding identification, OECD is developing a multi-criteria decision analysis (MCDA) framework incorporating criteria to assess whether an intervention can be considered a best practice. The OECD Framework will be applied to all forms of NCD interventions, including actions to prevent and manage NCDs and, potentially, other areas of public health such as communicable diseases.



To assist countries with transferring and implementing best practice interventions, OECD provides advice on how to adapt the intervention to local context, for example to account for specific population health needs as well as health system infrastructure and financing arrangements. To determine whether the intervention should be expanded, amended or removed, OECD assists countries by outlining the necessary steps for undertaking a comprehensive evaluation.

3. OECD has formed key partnerships to more effectively address NCDs

Addressing NCDs is complex and requires multi-sectoral support from national and international stakeholders. OECD has formed key partnerships allowing it to more effectively address NCDs. Examples include:

- **World Health Organization and its Regional Offices:** OECD and WHO formally entered into a co-operative working relationship in 1999, which was later revised in 2005. Together, OECD and WHO aim to strengthen their co-operation in key areas of work including the measurement, monitoring and assessment of health systems, which covers public health. OECD and WHO continue to collaborate on projects related to NCDs.

- **World Bank:** the World Bank is a key partner for OECD's co-operation with non-member countries. A Joint Statement on Co-operation between the two organisations highlights the growing importance of working together on issues related to health.
- **European Commission:** OECD provides the European Commission with technical and strategic advice on a range public health issues, including NCDs. OECD's collaboration with the Commission supports efforts by EU Member States to achieve the voluntary global targets on NCDs of the United Nations and World Health Organization, as well as the relevant SDGs.
- **EU Joint Actions:** OECD is a frequent member of EU Joint Actions, which represent a collaboration between the European Commission and Member States. OECD provides participating countries with technical support to achieve the objective of the Joint Action. For example, as part of the CHRODIS+ Joint Action on Chronic Diseases, OECD is undertaking cost-effectiveness analyses of interventions targeted at reducing the chronic disease burden.



Analytic work and knowledge management: OECD produces high-quality evidence to inform policy-making:

The Heavy Burden of Obesity: The Economics of Prevention (2019). In 2019, OECD released a report detailing the economic impact overweight and obesity will have on population health, health budgets and the overall economy. Based on OECD analysis, between 2020 and 2050, overweight and related diseases will reduce life expectancy by three years across OECD, EU28 and G20 countries, and will cost USD 425 billion per year to the healthcare systems of this group of countries.

Upcoming report on harmful alcohol consumption (expected release in 2021). OECD is finalizing an analogous report to the Heavy Burden of Obesity, which examines the health and economic impact of harmful alcohol consumption and of policy options to address this key risk factor to population health.

Identification, transfer and monitoring of NCD best practice (BP) interventions (2019-2022). OECD is supporting countries to promote the implementation of BP NCD interventions. OECD is also developing a guidebook to assist countries transfer BP interventions to their local context.

Stemming the Superbug Tide: Just a Few Dollars More (2018). This report analysed the health and economic impact of anti-microbial resistance (AMR), including one of the first empirical analyses of the potential effect of AMR on the risk of infection and death associated with surgical procedures and blood cancer chemotherapy.

Healthy People, healthy planet (2017). This report for the G7 Ministers of Health outlined the key policy issues and associated policy actions to improve population health while concurrently reducing human footprint on the environment.

Public health reviews (ongoing). OECD's Reviews of Public Health provide in-depth analyses and recommendations to strengthen key public health priority areas, often with a focus on NCDs. The reviews also highlight best practice examples thereby spreading innovative practices which countries can learn from.

4. Mobilizing resources to deliver

Evaluating the economic burden of NCDs and analysing the economic benefit of best practice interventions is a key work stream for OECD's team working on health. Findings from the analysis provide governments with robust evidence to 'make the case' for investing in interventions which prevent, manage and control NCDs and help mobilise resources across the different parts of the government.



The United Nations Inter-Agency Task Force on the Prevention and Control of Non-communicable Diseases was established in 2013 by the Secretary General and placed under the leadership of WHO to coordinate the activities of the UN System to support the realization of the commitments made by Heads of State and Government in the 2011 Political Declaration on NCDs. Joint activities included in the work plan of the Task Force are additive to various, more comprehensive efforts conducted by the UN agencies to prevent and control NCDs. These joint activities offer important opportunities to address cross-cutting issues and to advance capacity and learning in countries.



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