TARGETS TO MONITOR PROGRESS IN REDUCING THE BURDEN OF NONCOMMUNICABLE DISEASES

Recommendations from a WHO Technical Working Group on Noncommunicable Disease Targets

(version dated 15 July 2011 for a web-based consultation with Member States)

Introduction

Noncommunicable diseases are the leading global cause of death, responsible for an estimated 36 million deaths, with 80% of these deaths occurring in low- and middle-income countries (LMICs). NCDs, mainly cardiovascular diseases, cancers, diabetes and chronic lung diseases, are largely preventable. These NCDs share modifiable behavioural risk factors like tobacco use, unhealthy diet, lack of physical activity, and the harmful use of alcohol which in turn lead to overweight and obesity, raised blood pressure, and raised cholesterol. Feasible and cost-effective interventions exist to reduce the burden and impact of NCDs now and in the future. Sustained action to prevent risk factors and improve health care will avert millions of preventable premature deaths.

The Global Strategy for the Prevention and Control of NCDs has three key objectives which serve as basic components of any global or national programme to address NCDs: surveillance, prevention by reducing risk factors levels, and management by improved access to essential health care.

Surveillance and monitoring NCDs and their determinants provides the foundation for advocacy, policy development, as well as assessing national and global action. An effective surveillance system requires systematic collection, analysis, and presentation of data on NCD mortality, morbidity, risk factors, and interventions over time.

A comprehensive framework for NCD surveillance includes three major components at the global and national level: a) monitoring exposures (risk factors); b) monitoring outcomes (morbidity and disease-specific mortality; and c) health system response, which includes assessment of national capacity to prevent and control NCDs.

The 2008-2013 Action Plan for the Global Strategy for the Prevention and Control of Noncommunicable Diseases, which was endorsed by the World Health Assembly in 2008, recommends critical actions for Member States to strengthen surveillance and standardize data collection on NCD risk factors, disease incidence and cause-specific mortality. The plan also calls on Member States to contribute, on a routine basis, data and information on trends related to NCDs and their risk factors stratified by age, sex and socioeconomic groups, and to provide information on progress made in implementation of national strategies and plans.
In the Moscow Declaration, endorsed during the First Global Ministerial Conference on Healthy Lifestyles and Noncommunicable Disease Control, held in Moscow, 28-29 April 2011, delegates committed to supporting WHO in developing a comprehensive global monitoring framework on NCDs. This call to develop the monitoring framework, along with the other recommendations included in the Moscow Declaration, was then endorsed by the World Health Assembly in May 2011.

A technical working group, composed of international experts in NCD surveillance and WHO staff members, recommended through several technical meetings the proposed targets and indicators presented in this document. The proposed targets and indicators are consistent with the recommendations of the WHO Reference Epidemiology Group established in 2009 on the framework and components of national NCD surveillance schemes and also the outcome of two WHO consultations on NCD surveillance conducted in 2009 and 2010.¹

**Proposed NCD Targets and Indicators**

The targets have been set to achieve major reductions in NCDs and their risk factors by 2025. Table 1 summarizes each target, indicator, and main data source.

The "target" represents the specific goal to be achieved by 2025. The baseline for all targets is 2010. Interim targets for 2015 and 2020 will be set at a later date for all indicators. The "indicator" is used to assess progress and achievement towards the target. The "data source" describes the origins of information for the indicator.

Targets were established following scientific review of the current situation and trends, combined with a critical assessment of feasibility based upon demonstrated country achievement. Mortality and prevalence targets are age-standardized.

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Table 1: Targets for achievements by 2025\textsuperscript{2,3}

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<tr>
<th>Outcome targets</th>
<th>Indicator</th>
<th>Data Source(s)</th>
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<tbody>
<tr>
<td>1 Premature mortality from NCDs</td>
<td>25% relative reduction in overall mortality from cardiovascular disease\textsuperscript{4}, cancer, diabetes, and chronic respiratory disease</td>
<td>Probability of dying between ages 30-70 from, cardiovascular disease, cancer, diabetes, and chronic respiratory disease</td>
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<tr>
<td>2 Diabetes</td>
<td>10% relative reduction in prevalence of diabetes\textsuperscript{5}</td>
<td>Prevalence of diabetes among persons aged 25+ years</td>
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| Exposure targets | | |
|-----------------|----------------|
| 3 Tobacco smoking | 40% relative reduction in prevalence of current daily tobacco smoking | Prevalence of current daily tobacco smoking among persons aged 15+ years\textsuperscript{6} | Survey |
| 4 Alcohol | 10% relative reduction in per capita consumption of alcohol; and 10% relative reduction in prevalence of heavy episodic drinking | Per capita consumption of pure litres of alcohol among persons aged 15+ years; and prevalence of heavy episodic drinking among persons aged 15+ years | Official statistics and reporting systems for production, import, export, and sales or taxation data; and survey |
| 5 Dietary salt intake | Reduction of mean population intake of salt to < than 5 grams per day | Mean population intake of salt per day | Survey (with measurement) |
| 6 Obesity | Halt the rise in obesity\textsuperscript{7} prevalence | Prevalence of obesity among persons aged 25+ years; and prevalence of physical inactivity among persons aged 25+ years\textsuperscript{8} | Survey (with measurement) |

\textsuperscript{2} The baseline level for all targets is 2010. Interim targets will be set for 2015 and 2020  
\textsuperscript{3} Mortality and prevalence targets are age-standardized  
\textsuperscript{4} Cardiovascular disease includes coronary heart disease (heart attack), cerebrovascular disease (stroke), peripheral artery disease, rheumatic heart disease, congenital heart disease and heart failure  
\textsuperscript{5} Diabetes is defined as fasting plasma glucose $\geq$ 7.0 mmol/L (126, g/dl) or on treatment for diabetes  
\textsuperscript{6} Achieved through full implementation of the WHO Framework Convention on Tobacco Control (WHO FCTC), and in particular demand reduction measures  
\textsuperscript{7} Obesity is defined as Body Mass Index (BMI) equal or greater than 30kg/m\textsuperscript{2}  
\textsuperscript{8} Physical inactivity is defined as < 150 minutes of moderate physical activity or its equivalent per week
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<th><strong>Health system targets</strong></th>
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| 7 | **Blood pressure/Hypertension**  
25% relative reduction in prevalence of raised blood pressure\(^9\) | Prevalence of raised blood pressure among persons aged 25+ years | Survey (with measurement) |
| 8 | **Prevention of heart attack and stroke in primary care**  
80% coverage of multidrug therapy for people aged 30+ years with a 10 year risk of heart attack or stroke ≥ 30%, or existing cardiovascular disease | Multidrug therapy for people aged 30+ years with a 10 year risk of heart attack or stroke ≥ 30%, or existing cardiovascular disease | Survey; health facility data |
| 9 | **Cancer prevention in primary care**  
Cancer prevention and early detection scaled up to achieve:  
   a) 70% of women between ages 30-49 screened for cervical cancer at least once;  
   b) 25% increase in the proportion of breast cancers diagnosed in early stages;  
   c) <1% prevalence of HBsAg carriers among children aged ≤ 5 years (a risk factor for liver cancer) | a) Prevalence of women between ages 30-49 screened for cervical cancer at least once;  
b) Proportion of breast cancers diagnosed in early stages (I & II);  
c) Prevalence of HBsAg carriers among children aged ≤ 5 years | Survey (with measurement); health facility data; population based cancer registry |
| 10 | **Policy approaches to dietary risk reduction**  
Total elimination of partially hydrogenated vegetable oil (PHVO) from the food supply by 2020; and no marketing of foods high in saturated fats, trans-fatty acids, free sugars, or salt to children | Policies that eliminate PHVO in food; and policies with enforcement mechanisms that restrict marketing foods high in saturated fats, trans-fatty acids, free sugars, or salt to children | Policy review |

### Measurement needs

To monitor progress, a robust monitoring system is needed in all countries. Main components include:

- Death registration, with a reliable cause of death.

High-quality mortality data can best be generated by long-term investment in civil registration. Recording all deaths and their cause on a country level is a critical

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\(^9\) Raised blood pressure is defined as systolic blood pressure ≥ 140 and/or diastolic blood pressure ≥ 90
requirement. Accurate reporting of the cause-of-death on the death certificate is a challenge, even in high-income countries. Only about two thirds of countries have vital registration systems that capture the total number of deaths reasonably well. Although total all-cause mortality may be reported reasonably well, accuracy problems exist for cause-specific certification and coding in a large number of countries. In these countries, national initiatives to strengthen vital registration systems and cause-specific mortality is a key priority. In settings where many deaths are not attended by a physician, alternate methods, such as verbal autopsy, may be used to complement data collected from death certificates until vital registration systems are adequately strengthened.

- Health surveys, with measurement

All countries will need to collect data from the general population through representative household surveys conducted at least once every five years. Information is collected through interviews, physical measurement, and biological testing. A survey that includes an interview and measurement is called a health examination survey – the WHO STEPs survey is an example of this type of survey for NCD as are a number of nationally coordinated surveys.

- Policy reviews

Assessment of policy indicators will require a regular, systematic, and independent review of national policies to determine if they are in place, implemented and enforced.

**Reporting and review**

Measurement of the indicators would be reported every five years, in 2015, 2020 and 2025. Reporting must balance country ownership and application, with comparability and transparency so that lessons can be shared and progress measured. This will require close coordination of country reporting with global analyses. The responsibility for compiling and interpreting the data and additional analyses lies with WHO, supported by an expert group of independent institutions. The reports will be presented and discussed at the World Health Assembly and the UN General Assembly.
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