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**PREVENTION AND CONTROL OF NONCOMMUNICABLE  
DISEASES**

Noncommunicable diseases (NCD) represent a major—and preventable—public health burden, globally and in the Western Pacific Region. Noncommunicable diseases also adversely impact national development through rising health care costs and lost productivity, contributing to the Region's burden of poverty. WHO has developed a number of strategies addressing the different risk factors for noncommunicable diseases, such as the WHO Framework Convention for Tobacco Control; the Global Strategy on Diet, Physical Activity and Health; and the Strategy to Reduce Alcohol-related Harm. Member States in resolution WPR/RC57.R4 adopted at the fifty-seventh session of the Regional Committee for the Western Pacific in September 2006 called for action to stem the growing health and economic burden from noncommunicable diseases.

In March 2007, the Pacific island ministers of health met in Vanuatu and, among other things, called for a whole-of-society and whole-of-government approach to address the growing burden of noncommunicable diseases in the Pacific. The Pacific Framework for the Prevention and Control of Noncommunicable Diseases was developed and is now providing the basis for a Pacific response to the NCD epidemic. Following that, the development of an expanded strategy to include all Member States and areas of the Region was initiated. Meanwhile at the global level, the global NCD action plan, Prevention and control of noncommunicable diseases: implementation of the global strategy, was being developed and subsequently endorsed by Member States at the Sixty-first World Health Assembly in May 2008. The expanded strategy was further revised into a regional action plan to operationalize the global action plan, with the added value of concrete and relevant guidance within the Western Pacific context.

The Western Pacific Regional Action Plan for Noncommunicable Diseases (Annex 1) is a collaborative effort by WHO and Member States and areas to establish a shared vision and strategic actions to reduce the NCD burden. Acknowledging that countries have varying capacities and are at different stages of progress in the fight against noncommunicable diseases, and building on previous work within the Region and globally, this document seeks to guide Member States as they fulfil their commitment to implement the global strategy.

The Regional Committee is asked to consider and endorse the draft Western Pacific Regional Action Plan for the Prevention and Control of Noncommunicable Diseases.

## 1. CURRENT SITUATION

Noncommunicable diseases (NCD) are a critical health and development issue for the Western Pacific. Population ageing has allowed noncommunicable diseases to overtake communicable diseases as the major cause of mortality and morbidity. Currently, about 26 500 people die every day from noncommunicable diseases in the Region, with over 20 000 of these deaths occurring in the Region's developing countries.<sup>1</sup> Close to half of NCD deaths occur in individuals under the age of 70.<sup>2</sup>

Globalization and urbanization serve as conduits for the promotion of unhealthy lifestyles (e.g. tobacco and alcohol use, unhealthy diets, and physical inactivity) and environmental changes (e.g. indoor and outdoor air pollution) that underlie noncommunicable diseases. Most of these NCD risk factors are entirely preventable, through the judicious implementation of known and cost-effective interventions. An estimated 80% of premature heart disease, stroke, and type 2 diabetes, as well as 40% of cancer, could be avoided through healthy diet, regular physical activity, and the avoidance of tobacco use. Yet, these risk factors remain highly prevalent and are increasing in many countries and areas in the Region.

The health care costs related to noncommunicable diseases are significant. Among the socio-economically disadvantaged, out-of-pocket expenditures for noncommunicable diseases can be catastrophic. On top of the direct health care costs, the economic impact of early death and disability, before age 60, is potentially devastating. For example, lost productivity due to noncommunicable diseases between 2005 and 2015 will cost China over US\$ 550 billion.<sup>3</sup> Given that in the Western Pacific Region, 75% of diabetes and 90% of new cancer cases diagnosed each year are in developing countries,<sup>4</sup> noncommunicable diseases contribute to the Region's burden of poverty, retard national development and can further widen the health inequities within and across countries. Unfortunately, investment in NCD prevention and control remains inadequate despite the growing burden and evidence for effective interventions.

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<sup>1</sup> Regional Committee document WPR/RC57/6 - Noncommunicable disease prevention and control. Discussed at the fifty-seventh session of the WHO Regional Committee for the Western Pacific, Auckland, New Zealand, 18-22 September 2006.

<sup>2</sup> Strong K, Mathers C, Leeder S and Beaglehole R. Preventing chronic disease: how many lives can we save? *Lancet*, 2005; 366:1578-82.

<sup>3</sup> *Ibid*, page 5.

<sup>4</sup> Regional Committee document WPR/RC51/8 - Prevention and Control of Noncommunicable Diseases. Discussed at the fifty-first session of the WHO Regional Committee, Manila 18-22 September 2000.

## 2. ISSUES

In reviewing the regional NCD situation, the following issues emerged:

### **2.1 Western Pacific countries and areas are at different stages in the process of NCD prevention and control.**

A good number have undertaken STEPS surveys, several have national NCD plans or strategies, and some are implementing interventions. A few countries have already begun evaluating the impact of their programmes. At the other end of the spectrum, there are countries within the Region that are just beginning to work on NCD prevention and control. The diversity in capacities and progress towards controlling and preventing noncommunicable diseases within the Region precludes a “one-size-fits all” strategy. Instead, a comprehensive but flexible strategy is needed to encompass action along the entire continuum of NCD causation, accommodating countries at different stages of progress.

### **2.2 Comprehensive approaches that include both health "whole-of-government" and "whole-of-society" interventions are needed to achieve measurable successes in controlling and preventing noncommunicable diseases.**

Noncommunicable diseases evolve from the complex interaction of multiple determinants and risk factors. Interventions need to address these determinants and risk factors simultaneously, integrating policy and public health interventions that target entire populations and communities, as well as high-risk individuals and those with early or established disease.

Multisectoral and transnational approaches are required to address the broad determinants of noncommunicable diseases. Government leadership and political commitment are essential to coordinate the multisectoral response to the regional NCD burden. For example, with the opening up of Asia and the Pacific to global trade, the importation of unhealthy commodities such as tobacco, alcohol and unhealthy food is an increasing concern. Trade agreements among countries, the rise in common markets and transnational marketing of commodities, particularly tobacco and alcohol, circumvent national efforts to reduce the demand and control the supply of these products. Urbanization is fostering an epidemic of obesity in the Region, as urban residents become increasingly sedentary. Effective NCD prevention and control require engaging and working with multiple sectors, both within and across countries. This whole-of-government approach is embedded in existing guidelines and regulatory frameworks relevant to noncommunicable diseases, such as the

WHO Framework Convention on Tobacco Control and the Global Strategy on Diet, Physical Activity and Health. Member States in the Western Pacific Region should integrate the provisions contained in these guidelines to shape the policy and programme environment at the national level for NCD control.

A whole-of-society approach should complement the whole-of-government approach to NCD prevention and control. Population-based interventions for behaviour change augment the impact of interventions that shape the regulatory environment, and vice-versa. Leadership development is crucial at all levels of society, and community mobilization must accompany political advocacy to effectively institutionalize healthy behaviours. Creative multisectoral partnerships should be explored to facilitate collaborative activities. Cultural relevance and sensitivity, as well as a people-centred perspective, will be important, as interventions need to be adapted to local cultures and traditions.

### **2.3 Strengthening health systems within the Region is fundamental for NCD prevention and control.**

As the NCD burden grows, ensuring that health systems can adequately address noncommunicable diseases becomes integral to augmenting the capacity of health systems to meet evolving health challenges. Health service delivery needs to transition from a predominantly acute-care model to one that balances prevention with disease management and palliative care. For this to occur, integrating NCD prevention and management into primary health care is essential. Building capacity within the health workforce to reflect this transition will maximize opportunities for prevention, early detection and treatment, on one hand, and chronic care, rehabilitation and palliation on the other. The shift from acute care to chronic disease management requires a people-centred approach, and the People at the Centre of Care policy framework can provide guidance.

Within the health sector, the stewardship function of the health sector – modelling healthy behaviours for the public to emulate – is paramount. Ministers of health, their staff and other health professionals play a crucial part in influencing lifestyle change. They must be positive role models, and health ministries and other health care service organizations should exemplify healthy workplaces. The “Healthy Settings” approach for NCD prevention and control, such as through health-promoting schools, workplaces and communities, should be explored further.

### **2.4 Cost-effective interventions exist, and need to be prioritized for scaling up in countries.**

Research validates the effectiveness and financial feasibility of various population-level risk factor interventions. For example, tobacco control, salt reduction and multidrug treatment for

cardiovascular disease (in high-risk and diseased individuals) are three interventions that have strong cost-effectiveness data to justify scale up, even in low- or middle-income countries.<sup>5</sup> However, because interest in NCD prevention and control is relatively recent, many interventions have not been sufficiently investigated for efficacy and cost-effectiveness. When evidence is incomplete, it should not be a reason for inaction. Instead, the decision to adopt specific interventions should be based on the best available information and rational judgement, taking into consideration the specific situation of the country or community contemplating the intervention. Evaluation should accompany implementation, so that outcomes and impact can be assessed and lessons learnt documented to guide future actions.

Numerous publications, templates and guidelines already exist, and need to be disseminated more widely. Technical assistance and sharing of existing clinical guidelines, standards and protocols will greatly help those countries that do not have the capacity to develop these materials. A repository or clearinghouse and a reliable dissemination mechanism are essential to ensure that countries and areas in the Region can access readily information and resources on chronic disease prevention and control. This Regional Action Plan intentionally incorporates and builds on existing WHO guidelines, plans of action and frameworks that address the various noncommunicable diseases and their risk factors.

## **2.5 Because noncommunicable diseases adversely impact on development, ensuring sustainable funding for NCD prevention and control is an urgent concern.**

NCD prevention and control should be regarded as investments in the development agenda for the Western Pacific Region. A number of Western Pacific countries and areas have begun to explore various financing mechanisms, such as through Health Promotion Foundations funded by earmarked tobacco and alcohol taxes, to augment domestic budgets for NCD prevention and control. Fiscal policies can act as levers for translating NCD prevention and control policies into action, and should be utilized strategically to improve the quality of care and to reduce financial barriers to access prevention and treatment services.

A considerable number of Member States within the Region also rely on external sources of funding for health programmes, whether from bilateral donors, international organizations, or through global health partnerships. Past experience highlights the limitations of narrowly focusing external aid on specific diseases or interventions, which perpetuates the dichotomy between communicable and noncommunicable diseases by favouring one over the other. Instead, as countries increasingly

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<sup>5</sup> Gaziano TA, Galea G, Reddy KS. Scaling up interventions for chronic disease prevention: the evidence. *Lancet*, 370:1939-1946; December 2007.

fall under the “double burden” of noncommunicable diseases and communicable diseases, external aid will need to correspondingly adapt to the changing nature of disease patterns and care. Re-orienting external aid will therefore require a growing focus on chronic care models that encompass the entire care continuum.

To address these issues, and encouraged by the strong support of Member States, the Regional Office for the Western Pacific developed a draft Western Pacific Regional Action Plan for the Prevention and Control of Noncommunicable Diseases (See Annex 1).

### **3. THE PROCESS FOR DEVELOPING THE REGIONAL ACTION PLAN**

At the global level, WHO Member States adopted a global strategy in 2000 for the prevention and control of noncommunicable diseases during the Fifty-third World Health Assembly. The Global Strategy on Diet, Physical Activity and Health was endorsed in 2002. In 2003, the WHO Framework Convention on Tobacco Control, developed from 1999 to 2003, was ready for signature by Member States. The treaty came into force in 2005. The Sixty-first World Health Assembly (2008) endorsed the action plan, Prevention and control of noncommunicable diseases: implementation of the global strategy.

At the regional level, Regional Committee resolutions WPR/RC51.R5 (2000) and WPR/RC57.R4 (2006) called for action to combat noncommunicable diseases and their related risk factors. Various related regional action plans (e.g. Regional Plan for Integrated Prevention and Control of Cardiovascular Diseases and Diabetes for the Western Pacific Region 1998–2003, Tobacco Free Initiative Regional Action Plans 2000–2004 and 2005–2009, Plan of Action 2006–2010 for the Western Pacific Declaration on Diabetes, and the Regional Strategy to Reduce Alcohol-related Harm) were developed over the past decade, sharing a focus on policy and planning, surveillance, health promotion and clinical prevention. As requested by the Pacific Ministers of Health in their meeting in Vanuatu in March 2007, WHO developed the Pacific Framework for the Prevention and Control of Noncommunicable Diseases to guide Pacific island countries and areas in addressing noncommunicable diseases. Subsequently, the Regional Office for the Western Pacific pursued the development of an expanded strategy document to include all Western Pacific Member States and areas. In the meantime, WHO Member States endorsed the global NCD action plan at the Sixty-first World Health Assembly in May 2008. The expanded regional strategy was further revised into a regional action plan to operationalize the global action plan within the Western Pacific context.

The draft regional action plan underwent a peer review process that included regional and global experts, Member States through their national NCD programme staff, and WHO staff. The review culminated in an Informal Consultation Meeting held from 30 June to 1 July 2008. The current draft reflects the collective revisions and recommendations of all those who participated in the review process.

#### **4. THE WESTERN PACIFIC REGIONAL ACTION PLAN FOR THE PREVENTION AND CONTROL OF NONCOMMUNICABLE DISEASES**

The Western Pacific Regional Action Plan for Noncommunicable Diseases is a collaborative effort by WHO and Member States to establish a shared vision and strategic actions to reduce the NCD burden. It aims to operationalize the objectives of the global plan of action within the Western Pacific context, thereby adding value through concrete and relevant guidance for Member States and areas. Acknowledging that countries have varying capacities and are at different stages of progress in the fight against noncommunicable diseases, and building on previous work within the Region and globally, this document seeks to guide Member States as they fulfil their commitment to implement the global strategy.

The Regional Action Plan envisions "a Region free of avoidable NCD deaths and disability," focusing on practical, cost-effective and evidence-based interventions that Member States and areas in the Region can adopt to achieve a reduction in NCD risk factor prevalence, and NCD mortality and morbidity. Its approach reflects and addresses the causation pathway for noncommunicable diseases, encompassing and addressing the various levels of determinants and risks.

The causation pathway provides the framework for elucidating key components of an intervention pathway that simultaneously seeks to effect change at three levels: (1) the environmental level, through policy and regulatory interventions; (2) the level of common and intermediate risk factors, through population-based lifestyle interventions; and, (3) the level of early and established disease, through clinical interventions targeted at high-risk individuals and those with disease. To reinforce change in these three levels, four additional supporting action areas are identified: (1) advocacy; (2) research, surveillance and evaluation; (3) leadership, multisectoral partnerships and community mobilization; and (4) health systems strengthening.

The Regional Action Plan emphasizes the requirement for comprehensive approaches that encompass and address the various levels of determinants and risks for noncommunicable diseases. It



highlights the importance of a balance between “healthy choices” and “healthy environments” because it recognizes that supportive environments are needed to empower healthy choices. It also redistributes responsibility across the whole of society, with government, the health sector, the private sector, nongovernmental organizations, communities, families and individuals all sharing accountability for putting in place the necessary elements that promote healthy lifestyles and quality care for noncommunicable diseases.

This Regional Action Plan is intended to fully support the Global Action Plan. The objectives and major strategic actions are, therefore, taken directly from the Global Action Plan. Related regional actions are listed as subsets of the major strategic actions.

Where additional regional actions have been identified, these are listed in a separate section following the global actions. Where appropriate, specific actions from established regional and global frameworks and plans of action are included, demonstrating that these various disease and risk factor-specific action plans can be systematically integrated into one comprehensive strategy.

Noncommunicable diseases are a critical health and development issue for the Western Pacific. Government leadership and political commitment are essential to coordinate the necessary multisectoral response to the regional NCD burden. Cost-effective interventions exist and need to be prioritized for scaling up in countries. To achieve this, health systems need to be strengthened by integrating NCD control into primary health care, using the chronic care model. Resources for noncommunicable diseases need to be enhanced and sustained to achieve measurable improvements in the health of the Region's people. This Regional Action Plan aims to assist Western Pacific Member States and areas in fulfilling their commitment to effectively address the burden of noncommunicable diseases in the Region.

## **5. ACTIONS PROPOSED**

The Regional Committee is asked to review and endorse the draft Western Pacific Regional Action Plan for the Prevention and Control of Noncommunicable Diseases.



**WESTERN PACIFIC REGIONAL ACTION PLAN FOR  
NONCOMMUNICABLE DISEASES**

*A Region free of avoidable NCD deaths and disability*

World Health Organization  
Regional Office for the Western Pacific  
July 2008

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**KEY MESSAGE**

Noncommunicable diseases (NCD) are a critical health and development issue for the Western Pacific Region. Government leadership and political commitment are essential to coordinate the necessary multisectoral response to the regional NCD burden. Cost-effective interventions exist and need to be prioritized for scaling up in countries. To achieve this, health systems need to be strengthened by integrating NCD control into primary health care, using the Chronic Care model. Resources for noncommunicable diseases need to be enhanced and sustained to achieve measurable improvements in the health of the Region's people.

## 1. INTRODUCTION

Noncommunicable diseases (NCD) represent a major public health threat in the Western Pacific Region. Currently, about 26 500 people die every day from noncommunicable diseases in the Region, with over 20 000 of these deaths occurring in the Region's developing countries.<sup>1</sup> Close to half of NCD deaths occur in individuals under the age of 70.<sup>2</sup> Already, noncommunicable diseases, notably cardiovascular disease (coronary heart disease and cerebrovascular disease), diabetes, cancer, and chronic pulmonary diseases, account for almost 8 out of every 10 deaths in the Western Pacific Region<sup>3</sup>—and the situation is expected to worsen in countries and areas in economic transition if urgent measures are not taken.

Ironically, most risk factors for these diseases (e.g. tobacco and alcohol use, unhealthy diet, physical inactivity, alcohol use, and indoor and outdoor air pollution) are preventable. The evidence base for effective interventions is growing. Yet, the prevalence of these risk factors in the Western Pacific Region remains unacceptably high, and in many countries continues to increase.

WHO's global strategy for the prevention and control of chronic noncommunicable diseases was reaffirmed by the World Health Assembly in 2000 (resolution WHA53.17). Various strategies, frameworks and action plans addressing diverse NCD risk factors were developed from 2000 to 2007, including the international WHO Framework Convention on Tobacco Control (FCTC) and the Global Strategy for Diet, Physical Activity and Health (DPAS), which provided the basis for a global action plan for the global strategy. At the recently concluded Sixty-first World Health Assembly, in resolution WHA61.14, Member States endorsed the Action Plan for the Global Strategy for the Prevention and Control of Noncommunicable Diseases. The Global Strategy and Action Plan represent the culmination of diverse efforts by WHO and its Member States to definitively address, in solidarity, the challenge of chronic diseases.

Recognizing that chronic diseases are the major contributor to preventable death and disability in the Western Pacific Region, Member States have been working collaboratively to determine how best to respond to the regional burden of noncommunicable diseases. This document contains a Regional Action Plan to operationalize the Global Action Plan for the prevention and control of noncommunicable diseases, envisioning “a Region free of avoidable NCD deaths and disability”.

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**2. THE PUBLIC HEALTH IMPACT OF NONCOMMUNICABLE DISEASES IN THE WESTERN PACIFIC**

**2.1 Changing epidemiology**

Population ageing has altered the nature of death and disease. Success in increasing life expectancy has ensured that a significant proportion of the population manage to survive the risks of dying during the perinatal period and early childhood, and has allowed chronic noncommunicable diseases to overtake communicable diseases as the major cause of mortality and morbidity. While not discounting the inevitability of death, the evidence indicates that noncommunicable diseases often cause death prematurely, usually after years of increasing disability and ill health.

In the Western Pacific Region, home to over 26% of the world's population,<sup>4</sup> noncommunicable diseases represent 92% of the burden of disease in disability-adjusted life years (DALYs) in high-income countries and approximately 63% in middle- and low-income countries and areas. Moreover, middle- and low-income countries and areas in the Region have more than a quarter of the global total burden of disease in DALYs for malignant neoplasms, and close to a third of the global total in respiratory disorders. They also have a fifth of the global total burden of disease in DALYs for diabetes and cardiovascular disease.<sup>5</sup>

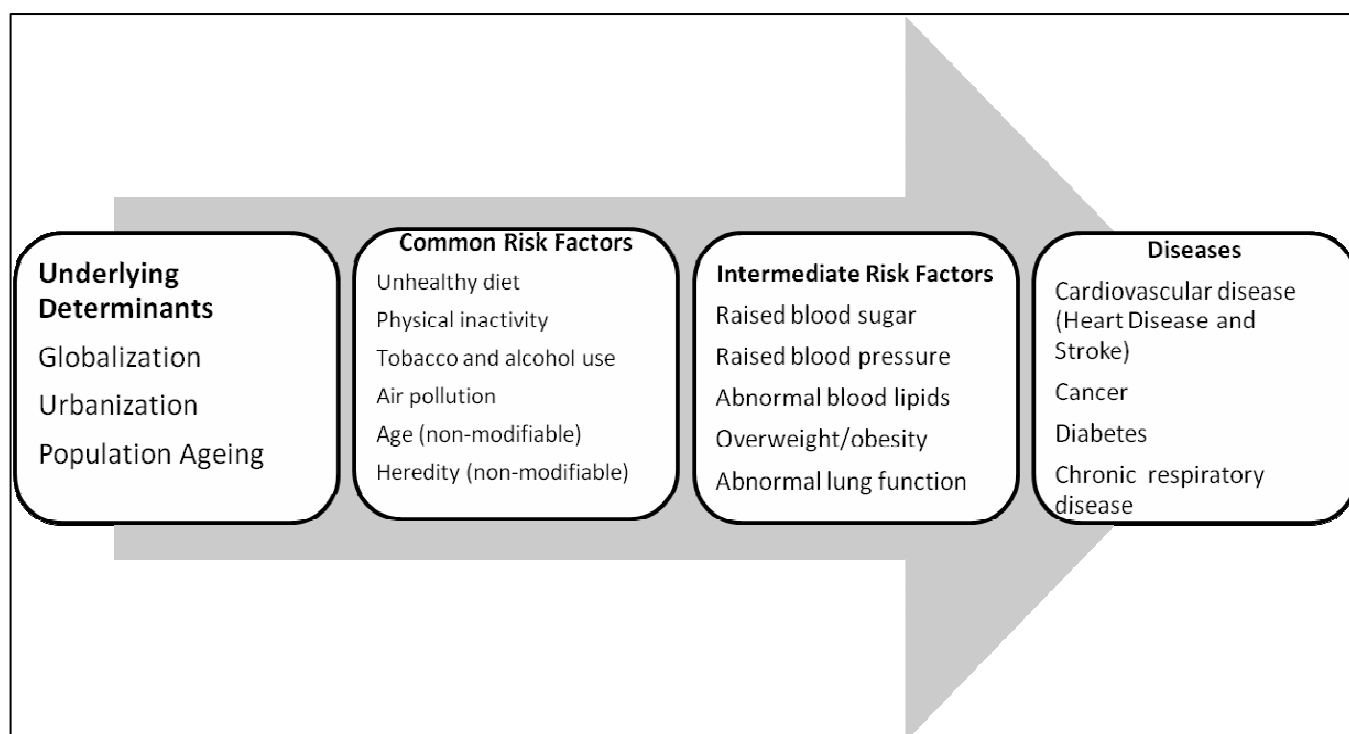
Over three fourths of deaths in the Region are attributable to noncommunicable diseases, compared to 14% of deaths caused by communicable diseases. Cardiovascular disease (coronary heart disease and cerebrovascular disease) and malignant neoplasms cause more deaths in middle- and low-income countries and areas in the Western Pacific Region than all communicable diseases combined.<sup>6</sup> Cardiovascular disease alone causes no less than 3 million deaths in the Region annually.<sup>7</sup> Pacific island countries and areas consistently have the highest rates of death from coronary heart disease, cerebrovascular disease and diabetes.<sup>8</sup>

**2.2 Increasing prevalence of NCD risk factors<sup>9</sup>**

Common risk factors underlie noncommunicable diseases. An estimated 80% of premature heart disease, stroke and type 2 diabetes, and 40% of cancer, could be avoided through healthy diet, regular physical activity, and avoidance of tobacco use. Globalization and urbanization serve as conduits for the promotion of unhealthy lifestyles (e.g. tobacco and alcohol use, unhealthy diets, and physical inactivity) and environmental changes (e.g. indoor and outdoor air pollution). These common risk factors give rise to

intermediate risk factors such as raised blood pressure, raised blood glucose, unhealthy lipid profiles, obesity and impaired lung function. In turn, the intermediate risk factors predispose individuals to the “fatal four” – cardiovascular disease (heart disease and stroke), cancer, chronic respiratory disease and diabetes (Figure 1).

**Figure 1. The causation pathway for chronic diseases**



*Source: Adapted from Preventing Chronic Disease: a Vital Investment. Geneva, World Health Organization, 2005.*

In the Western Pacific Region, major common and intermediate risk factors for noncommunicable diseases are prevalent and increasing in many countries and territories. As a result, cardiovascular diseases, cancer, chronic respiratory diseases and diabetes account for the majority of the deaths in the Region.

### **2.3 Rising health care costs related to noncommunicable diseases**

The health care costs related to noncommunicable diseases are significant. For the socio-economically disadvantaged, the out-of-pocket expenditure for noncommunicable diseases can be catastrophic. On top of the direct health care costs, the economic impact of early death and disability, i.e. before age 60, is potentially devastating. For example, lost productivity due to noncommunicable diseases between 2005

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and 2015 will cost China over US\$ 550 billion.<sup>10</sup> Given that in the Western Pacific Region, 75% of diabetes cases and 90% of cancer cases are diagnosed in developing countries,<sup>11</sup> noncommunicable diseases contribute to the Region's burden of poverty, retard national development and can widen the health inequities within and across countries. Unfortunately, investment in NCD prevention and control remains inadequate despite the growing burden and evidence for effective interventions.

**2.4 The call for action**

At the global level, WHO's Member States adopted a global strategy in 2000 for the prevention and control of noncommunicable diseases during the Fifty-third World Health Assembly.<sup>12</sup> The Global Strategy on Diet, Physical Activity and Health was endorsed in 2002. In 2003, the WHO Framework Convention on Tobacco Control, developed from 1999 to 2003, was opened for signature. The treaty came into force in 2005. Member States endorsed the Action Plan for the Global Strategy for the Prevention and Control of Noncommunicable Diseases at the recently concluded Sixty-first World Health Assembly.<sup>13</sup>

At the regional level, the Regional Committee for the Western Pacific called for action to combat noncommunicable diseases and their related risk factors in two specific resolutions (WPR51.R5 in 2000 and WPR/RC57.R4 in 2006). Various regional action plans related to NCD prevention and control (e.g. Regional Plan for Integrated Prevention and Control of Cardiovascular Diseases and Diabetes for the Western Pacific Region 1998–2003, Tobacco Free Initiative Regional Action Plans 2000–2004 and 2005–2009, Plan of Action 2006–2010 for the Western Pacific Declaration on Diabetes, Regional Strategy to Reduce Alcohol-related Harm, and Reduction of Alcohol-related Harm Regional Plan of Action 2008–2013) were developed over the past decade, sharing a focus on policy and planning, surveillance, health promotion and clinical prevention. WHO developed a Pacific Framework for the Prevention and Control of Noncommunicable Diseases in 2007 to serve as a guide in addressing noncommunicable diseases among Pacific island countries and areas, and this framework was adopted by the Secretariat of the Pacific Community (SPC).

Augmenting these action plans and frameworks is a Region-wide interest and commitment to fostering health systems change, particularly in relation to the prevention and control of noncommunicable diseases. In November 2007, the WHO-supported meeting on “Strengthening Health Systems to Improve



Chronic Disease Prevention and Control” culminated in a set of recommendations for reducing the health burden from noncommunicable diseases through health systems improvements.

The Western Pacific Regional Action Plan for Noncommunicable Diseases is a collaborative effort by the WHO Regional Office for the Western Pacific and Member States to establish a shared vision and strategic actions to reduce the NCD burden. Recognizing that countries have varying capacities and are at different stages of progress in the fight against noncommunicable diseases, and building on previous work within the Region and globally, this document seeks to guide Member States as they fulfil their commitment to implement the Global Strategy. The Regional Action Plan aims to operationalize the objectives of the Global Action Plan within the Western Pacific context, thereby adding value through concrete and relevant guidance for Member States.

### **3. THE WESTERN PACIFIC REGIONAL ACTION PLAN FOR NONCOMMUNICABLE DISEASES**

#### **3.1 Vision and focus**

**Vision:** A Region free of avoidable NCD deaths and disability

**Focus:** The Western Pacific Regional Action Plan is focused on practical, cost-effective and evidence-based interventions that Member States can adopt to achieve a reduction in NCD risk factor prevalence, and NCD mortality and morbidity.

#### **3.2 Key principles**

The Western Pacific Regional Action Plan is built around eight key principles:

- (1) ***People-centred health care*** – Interventions and initiatives must adhere to the principles and values outlined in the People-centred Health Care policy framework of the Western Pacific Region (<http://www.wpro.who.int/sites/pci/>).<sup>14</sup>
- (2) ***Cultural relevance*** – Policies, programmes and services must respect and take into consideration the specific cultures and the diversity of populations within the Region.

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- (3) ***Focused on reducing inequities*** – The Regional Action Plan recognizes that the burden of chronic diseases is disproportionately borne within countries, by the poorer and less advantaged sectors, and across countries, by those at the lower stages of economic development. Other social determinants of health, such as race and gender, can also influence differential health outcomes from noncommunicable diseases. Thus, interventions must address the need to reduce inequities across and within countries by considering the social determinants of health to enable the attainment of healthy outcomes by all.
- (4) ***Encompassing the entire care continuum*** – The Regional Action Plan affirms the importance of a balanced approach to noncommunicable diseases, beginning with prevention and health promotion, lifestyle interventions to modify risk factors, screening, clinical interventions for high-risk individuals and groups, all the way through to chronic care, rehabilitation and palliation. This implies that the active participation of the entire health system is fundamental to creating impacts on population health.
- (5) ***Involving the whole of society*** – Many of the critical interventions to prevent and control chronic diseases lie outside of the direct sphere of influence of the health sector. Thus, multisectoral partnerships are essential to successful NCD prevention and control.
- (6) ***Integral to health systems strengthening*** – Noncommunicable diseases impact on the health care system not only in terms of increased service utilization and the associated costs, but also in the nature of the demands on service delivery to meet the needs of patients requiring long-term care. Health systems, in general, are designed to provide acute illness care, not chronic care.<sup>15</sup> As such, most health systems fall short in the following areas:
- (a) the patient's responsibility and role in disease management are not emphasized;
  - (b) follow-up is sporadic;
  - (c) community services tend to be ignored; and
  - (d) prevention is underutilized and underemphasized.

As the NCD burden grows, ensuring that health systems can adequately address noncommunicable diseases becomes integral to augmenting the capacity of health systems to

meet evolving health challenges. For this to occur, integrating NCD prevention and management into primary health care is essential.

- (7) ***Consistent with the Global Action Plan, and supportive of existing regional strategies and action plans*** – Recommended actions are in line with the objectives of the Global Action Plan, and with the strategies and principles of previous regional plans. This plan utilizes the best available science in selecting strategic actions while acknowledging the current limitations of research into the effectiveness of NCD interventions.
- (8) ***Flexibility through a phased approach*** – Recognizing that countries and areas are at different stages of capacity for NCD prevention and control, the Regional Action Plan aligns its strategic actions along a continuum consistent with the NCD causation pathway. This phased approach allows countries to intervene at different points along the continuum depending on their local situation, capacity and resources.

### **3.3 Strategic approach**

The Western Pacific Regional Action Plan for Noncommunicable Diseases utilizes a comprehensive approach that simultaneously seeks to effect change at three levels:

- (1) at the *environmental* level, through policy and regulatory interventions;
- (2) at the level of *common and intermediate risk factors*, through population-based lifestyle interventions; and
- (3) at the level of *early and established disease*, through clinical interventions targeted at the entire population (screening), high-risk individuals (risk factor modification) and persons with established disease (clinical management).

To support change in these three levels, additional actions are needed in the following areas:

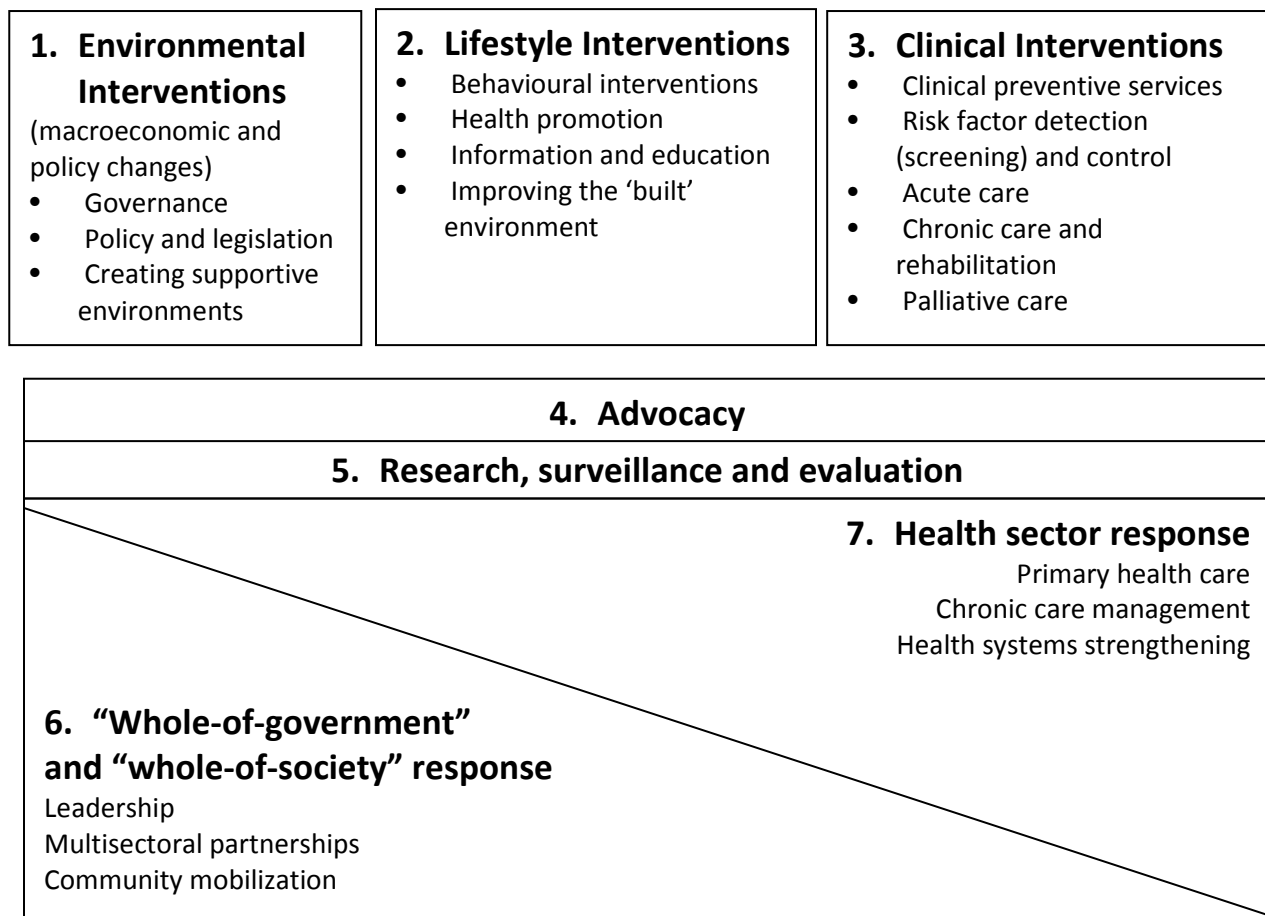
- (1) advocacy;
- (2) research, surveillance and evaluation;
- (3) leadership, multisectoral partnerships and community mobilization; and

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(4) health systems strengthening.

In summary, the approach recognizes seven strategic action areas (Figure 2) along an intervention pathway that corresponds to the NCD causation pathway (see Annex 1-A for a fuller description of the intervention pathway).

**Figure 2. Strategic approach and action areas in the Western Pacific Regional Action Plan for Noncommunicable Diseases**



Specific regional actions under each of these action areas were mapped to the Global Action Plan. Where appropriate, specific actions from established regional and global frameworks and plans of action are included, demonstrating that these various disease and risk factor-specific action plans can be systematically integrated into one comprehensive strategy. Indeed, these various frameworks should be

considered as “pieces of a puzzle”, which, when assembled, provide components of a coherent and organized response to the challenge of chronic diseases (see Annex 1-B).

The process to operationalize these actions is described in Annex 1-C. The process consists of four major steps: (1) profiling; (2) planning and priority setting; (3) putting into practice (implementation); and (4) evaluation. Using an iterative process, countries move from their baseline situation in relation to noncommunicable diseases to progressively higher levels of capacity and action.

### **3.4 Scope and considerations**

Research indicates that four noncommunicable diseases are responsible for the majority of mortality and disease burden in developing countries. These four are cardiovascular disease (coronary heart disease and stroke), cancer, chronic respiratory disease and diabetes. Because these four diseases, and their shared risk factors, make the largest contribution to the Region’s mortality, they are the major focus of this Regional Action Plan.

However, other noncommunicable diseases, including blindness, deafness, oral diseases, certain genetic diseases and a number of infectious diseases that have a chronic nature, such as HIV/AIDS and tuberculosis, remain priority health problems in the Western Pacific Region. Noncommunicable diseases also include injuries that have an acute onset but are followed by prolonged convalescence and impaired function, as well as chronic mental diseases and substance abuse disorders. This Regional Action Plan recognizes that Member States must assess, and health systems must respond to, the health burden specific to each country’s situation, realizing that many of the interventions specified in this strategy have broad application and utility.

### **3.5. Objectives and actions**

#### **Consistency with the Global Action Plan**

This Regional Action Plan is intended to fully support the Global Action Plan. The objectives and major strategic actions are, therefore, taken directly from the Global Action Plan. Specific regional actions are listed as subsets of the major strategic actions, and are indicated in *italics*. Global actions that have lesser relevance or applicability at the regional level are indicated in brackets. Where additional regional actions have been identified, these are listed in a separate section following the global actions. Discussion in the Western Pacific Region strongly emphasized the importance of health system strengthening as a

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fundamental aspect of an effective approach to noncommunicable diseases in the Region. However, for consistency, recommended strategic actions for health systems strengthening are situated under Objective 2 of the Global Action Plan.

**OBJECTIVE 1:** To raise the priority accorded to noncommunicable disease in development work at global and national levels, and to integrate prevention and control of such diseases into policies across all government departments.

**Recommended actions for Member States**

- (1) Assess and monitor the public-health burden imposed by noncommunicable diseases and their determinants, with special reference to poor and marginalized populations.
- (2) Incorporate the prevention and control of noncommunicable diseases explicitly in poverty-reduction strategies and in relevant social and economic policies.
  - (a) *Increase awareness among regional, national and community leaders and other partners of the magnitude of the NCD burden, and the wider societal benefits of addressing it in terms of economic and social development, and advocate for their commitment to whole-of-government and whole-of-society approaches to control noncommunicable diseases and their risk factors.*
  - (b) *Engage with other Member States and relevant regional and international bodies to address NCD risk factors and disease issues that cross national borders. As examples, consider the public health impact on respiratory health during cross-country discussions on haze control, and incorporate health impacts of unhealthy products in trade agreements, such as those arising from the Association of South East Asian Nations (ASEAN) and the Pacific Island Countries Trade Agreement (PICTA).*
- (3) Adopt approaches to policy development that involve all government departments, ensuring that public-health issues receive an appropriate cross-sectoral response.
- (4) Implement programmes that tackle the social determinants of noncommunicable diseases with particular reference to the following: health in early childhood, the health of the urban poor, fair financing and equitable access to primary health care services.

- (a) *Identify and utilize opportunities to merge NCD prevention and control into related health and non-health policy areas relevant to the Western Pacific Region, such as those that address urban development (e.g. Healthy Cities), poverty alleviation, gender and health, workers' health (e.g. Healthy Workplaces) and sustainable development (e.g. Healthy Islands).*

### **Recommended actions for WHO**

- (1) Raise the priority given to the prevention and control of noncommunicable diseases on the agendas of relevant high-level forums and meetings of national and international leaders.

- (a) *Actively advocate for governments and other regional stakeholders to support efforts to integrate NCD prevention and control into the global development agenda, and to allocate resources for the expansion of the implementation of chronic disease prevention and control strategies regionally at forums such as the Pacific Islands Forum and the annual meeting of ASEAN heads of state and government.*

- (b) *Coordinate and expedite efforts by Member States to reduce the burden of noncommunicable diseases in the Region.*

- (c) *Develop regional leadership programmes to support country-level leadership initiatives that promote political champions for NCD prevention and control, building on existing models such as Pro-Lead<sup>i</sup>, and using existing venues such as the annual Saitama NCD training course.*

- (2) Work with countries in building and disseminating information about the necessary evidence base and surveillance data in order to inform policy-makers, with special emphasis on the relationship between noncommunicable diseases, poverty and development.

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<sup>i</sup> Pro-Lead (<http://www.prolead.org>) is a leadership development programme that focuses on applied leadership and management in health promotion intended for advocates, practitioners and partners in the health sector, government and private sector and civil society, for the promotion of health.

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- (d) *Facilitate dialogue among relevant stakeholders at the regional level to ensure that regional, multilateral and bilateral policies and other regulatory agreements are consistent with the evidence base for NCD prevention and control.*
- (3) Develop and disseminate tools that enable decision-makers to assess the impact of policies on the determinants of, risk factors for, and consequences of noncommunicable diseases; and provide models of effective, evidence-based policy-making.
  - (a) *Provide countries with technical assistance in the development, implementation and assessment of effective advocacy campaigns for the prevention and control of noncommunicable diseases.*
  - (b) *Work with WHO collaborating centres and other partner institutions and agencies to establish and maintain a repository or clearinghouse of best practices and successful strategies for policies to reduce prevalence of NCD risk factors and to promote the adoption of healthier lifestyles.*
  - (c) *Provide technical guidance to countries in formulating and implementing policy and regulatory interventions designed to create supportive environments for NCD prevention and control based on existing guidance documents.*

**Recommended actions for international partners and WHO collaborating centres**

- (1) Include the prevention and control of noncommunicable diseases as an integral part of work on global development and in related investment decisions.
  - (a) *Work with WHO to facilitate regional collaborative partnerships among countries, WHO collaborating centres and relevant partners to advocate for investments in regional NCD prevention and control initiatives as part of the regional development agenda. For example, consider the model used by the Western Pacific Declaration on Diabetes as a partnership model for WHO, International Diabetes Federation Western Pacific Region, Secretariat of the Pacific Community (SPC) and Member States.*



(2) As appropriate, work with WHO to involve all stakeholders in advocacy in order to raise awareness of the increasing magnitude of the public-health problems posed by noncommunicable diseases, and of the fact that tackling the determinants of and risk factors for such diseases has the potential to be a significant method of prevention.

(a) *Provide technical assistance to countries and areas through a regional clearinghouse of best practices and successful strategies for NCD advocacy.*

(3) Support WHO in creating forums where key stakeholders – including nongovernmental organizations, professional associations, academia, research institutions and the private sector – can contribute and take concerted action against noncommunicable diseases.

**OBJECTIVE 2:** To establish and strengthen national policies and plans for the prevention and control of noncommunicable diseases.

### **Recommended actions for Member States**

National multisectoral framework for the prevention and control of noncommunicable diseases

(1) Develop and implement a comprehensive policy and plan for the prevention and control of major noncommunicable diseases, and for the reduction of modifiable risk factors.

(a) *Design and implement an advocacy campaign to mobilize political and grassroots support for the national action plan for NCD prevention and control.*

(b) *Support the integrated approach to NCD prevention and control through policy statements and official guidelines. As an example, consider Japan's "People's Health Promotion Campaign for the 21st Century (Health Japan 21)," which endorses a comprehensive approach to NCD as a core element of Japan's national public health agenda.*

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- (2) Establish a high-level national multisectoral mechanism for planning, guiding, monitoring and evaluating enactment of the national policy with the effective involvement of sectors outside health.
- (3) Conduct a comprehensive assessment of the characteristics of noncommunicable diseases and the scale of the problems they pose, including an analysis of the impact on such diseases of the policies of the different government sectors.
- (4) Review and strengthen, when necessary, evidence-based legislation, together with fiscal and other relevant policies, which are effective in reducing modifiable risk factors and their determinants.
  - (a) *Establish fiscal policies that reinforce healthy lifestyle choices through pricing, taxation, subsidies and other market incentives.*
  - (b) *Regulate, to the fullest extent possible, the sale, marketing, advertising and promotion of unhealthy commodities to create a social and media environment supportive of healthy lifestyles.*<sup>ii</sup>
  - (c) *Regulate the built environment to promote physical activity and social interaction and to protect people from hazardous exposures such as second-hand smoke.*

Integration of the prevention and control of noncommunicable diseases into the national health development plan

- (1) Establish an adequately staffed and funded noncommunicable disease and health promotion unit within the ministry of health or other comparable government health authority.
- (2) Establish a high-quality surveillance and monitoring system that should provide, as minimum standards, reliable population-based mortality statistics and standardized data on noncommunicable diseases, key risk factors and behavioural patterns, based on the WHO STEPwise approach to risk factor surveillance.

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<sup>ii</sup> NOTE: "Regulate" refers to a variety of social and legal instruments to govern behaviour, and is not intended to refer exclusively to legislation.

- (3) Incorporate evidence-based, cost-effective primary and secondary prevention interventions into the health system with emphasis on primary health care.

#### Reorientation and strengthening of health systems

- (1) Ensure that provision of health care for chronic diseases is dealt with in the context of overall health system strengthening and that the infrastructure of the system, in both the public and private sectors, has the elements necessary for the effective management of and care for chronic conditions. Such elements include appropriate policies, trained human resources, adequate access to essential medicines and basic technologies, standards for primary health care, and well-functioning referral mechanisms.
  - (a) *Reorient and reinforce health systems, using the six “building blocks”,<sup>16</sup> to enhance responsiveness and capacity to address the challenges of NCD prevention and control, guided by the recommendations of the 2007 WHO Regional Meeting on Strengthening Health Systems to Improve Chronic Disease Prevention and Control. One example is Mongolia's "Master Plan for Health System Development 2006–2015", which uses an integrated approach to NCD prevention and control as an anchor for health systems strengthening. Another is the Republic of Korea's "Comprehensive Preventive National Health Management System", which incorporates lifecycle-specific services for health promotion and NCD prevention into the national health-service delivery system.*
  - (b) *Strengthen primary health care to respond to all chronic diseases regardless of aetiology, using the Chronic Care model.*
  - (c) *Explore innovative service delivery models that encompass both population-based preventive and behavioural services and clinical services for chronic disease management. For example, consider the Sentrong Sigla model of the Philippines.<sup>iii</sup>*

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<sup>iii</sup> *Sentrong Sigla is a quality improvement programme of the Philippines Department of Health that confers recognition to health centres and hospitals for excellence in health service delivery, including the use of an integrated approach to disease management.*

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- (2) Adopt, implement and monitor the use of evidence-based guidelines and establish standards of health care for common conditions like cardiovascular diseases, cancers, diabetes and chronic respiratory diseases, integrating, whenever feasible, their management into primary health care.
  - (a) *Disseminate health service frameworks, clinical practice guidelines and evidence-based decision-making support tools to health care providers to ensure timely screening, diagnosis, and treatment of noncommunicable diseases, consistent with country-specific burden and taking into account the health infrastructure and capacity.*
  - (b) *Implement and scale up proven cost-effective NCD interventions, beginning with:*
    - (i) *tobacco control,*
    - (ii) *salt reduction,*
    - (iii) *multidrug treatment for individuals with high risk for cardiovascular disease.*
  - (c) *Promote clinical practice guidelines that use the integrated disease model, such as those issued by the International Diabetes Federation (IDF) Western Pacific Region.*
- (3) Implement and monitor cost-effective approaches for the early detection of breast and cervical cancers, diabetes, hypertension and other cardiovascular risk factors.
- (4) Strengthen human resources capacity, improve training of physicians, nurses and other health personnel and establish a continuing education programme at all levels of the health care system, with a special focus on primary health care.
  - (a) *Use innovative approaches to health workforce development to equip health care providers with the necessary skills, knowledge and attributes to deliver effective, people-centred care for chronic diseases regardless of aetiology.*
  - (b) *Foster leadership for noncommunicable diseases within the health care sector by building on existing models such as Pro-Lead, and using existing venues such as the annual Saitama NCD training course.*

(5) Take action to help people with noncommunicable diseases to manage their own conditions better, and provide education, incentives and tools for self-management and care.

(a) *Promote the people-centred approach to health care, as outlined in the recent WHO publication, People at the Centre of Health Care: Harmonizing Body and Mind, People and Systems.*<sup>17</sup>

(b) *Establish programmes to empower individuals and communities to develop health literacy, to take on self-care responsibilities and to become resources for themselves and others in disease management and prevention.*

(c) *Adopt interventions to improve the quality of life of individuals with noncommunicable diseases.*

(6) Develop mechanisms for sustainable health financing in order to reduce inequities in accessing health care.

(a) *Establish financing mechanisms to channel sustainable funding to NCD prevention and control initiatives, such as through earmarking tobacco and alcohol taxes for health promotion, as was done in Australia by the Victorian Health Promotion Foundation (VicHealth) and in the Republic of Korea, and was initiated in Malaysia, Mongolia and Tonga.*

(b) *Promote equitable access to and rational use of cost-effective medical products and commodities related to NCD disease management.*

### **Recommended actions for WHO**

National multisectoral framework for the prevention and control of noncommunicable diseases

(1) Conduct a review of international experience in the prevention and control of noncommunicable diseases, including community-based programmes, and identify and disseminate lessons learnt.

[Action to be led by WHO Headquarters.]

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(2) Recommend, based on a review of international experience, successful approaches for intersectoral action against noncommunicable diseases.

(a) *Build on previous intersectoral initiatives in the Region, such as the WHO/FAO Meeting on Food Standards to Promote Health and Fair Trade in the Pacific (December 2007) and the WHO Healthy Cities and Healthy Islands Initiative.*

(b) *Highlight successful national examples of intersectoral strategies that address noncommunicable diseases and their risk factors, such as New Zealand's "Healthy Eating – Healthy Action".<sup>iv</sup>*

(3) Provide guidance for the development of national policy frameworks, including evidence-based public health policies for the reduction of risk factors, and provide technical support to countries in adapting these policies to their national context.

Integration of the prevention and control of noncommunicable diseases into the national health development plan

(1) Expand, over the time frame of this plan, the technical capacity of WHO's regional and country offices and develop networks of experts and collaborating or reference centres for the prevention and control of noncommunicable diseases in support of national programmes.

(2) Develop norms for surveillance and guidelines for primary and secondary prevention, based on the best available scientific knowledge, public-health principles and existing WHO tools. [*Action to be led by WHO Headquarters.*]

(a) *Disseminate to Member States existing surveillance standards and clinical practice guidelines, such as WHO's "Prevention of Cardiovascular Disease: Guidelines for Assessment and Management of Cardiovascular Risk" and the International Agency for Research on Cancer's "Handbooks of Cancer Prevention".*

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<sup>iv</sup>“Healthy Eating – Healthy Action” is the New Zealand Ministry of Health’s strategic approach to improving nutrition, increasing physical activity and achieving healthy weight for all New Zealanders. It uses a "whole-of-society" approach to address NCD risk factors in the population ([www.moh.govt.nz/healthyeatinghealthyaction](http://www.moh.govt.nz/healthyeatinghealthyaction)).

- (3) Review and update diagnostic criteria, classifications and, where needed, management guidelines for common noncommunicable diseases. [*Action to be led by WHO Headquarters.*]
- (4) Provide support to countries, in collaboration with international partners, in strengthening opportunities for training and capacity-building with regard to the public-health aspects of the major noncommunicable diseases.
  - (a) *Support countries and areas with periodic technical assistance and training at the national and regional level, including training in the selection of appropriate clinical interventions that are feasible to implement even within a developing country setting, and in the people-centred approach to noncommunicable diseases.*

#### Reorientation and strengthening of health systems

- (1) Ensure that the response to noncommunicable diseases is placed at the forefront of efforts to strengthen health systems.
  - (a) *Promote a regional framework for health systems strengthening in relation to noncommunicable diseases (building on the Chronic Care model and similar concepts) that is relevant to and adaptable for the Region.*
  - (b) *Support Member States in their efforts to strengthen their health systems and re-orient their systems of care to address chronic diseases, as guided by the “Strategic Plan for Strengthening Health Systems in the WHO Western Pacific Region”.*
  - (c) *Reinforce the integrated approach to noncommunicable diseases by articulating this in policy statements and guidelines.*
- (2) Provide technical guidance to countries in integrating cost-effective interventions against major noncommunicable diseases into their health systems.
  - (a) *Provide countries with technical assistance regarding service delivery models for chronic disease, with an emphasis on integrating NCD prevention and control interventions into*

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*primary health care. For example, consider integration of brief interventions for tobacco cessation into all clinical encounters.*

- (b) *Encourage and assist Member States to develop appropriate national health care guidelines that incorporate noncommunicable diseases and other chronic disease care into the overall health care package.*
- (3) Provide support to countries in enhancing access to essential medicines and affordable medical technology, building on the continuing WHO programmes promoting both good-quality generic products, and the improvement of procurement, efficiency and management of medicine supplies [2008–2009].
  - (a) *Disseminate guidelines for rational use of medicines and technology for NCD prevention and control, as an integral part of health systems.*
- (4) Assess existing models for self-examination and self-care, and design improved affordable versions where necessary, with a special focus on populations with low health awareness and/or literacy.

**Recommended actions for international partners and WHO collaborating centres**

- (1) Support the development and strengthening of international, regional, and national alliances, networks and partnerships in order to support countries in mobilizing resources, building effective national programmes and strengthening health systems so that they can meet the growing challenges posed by noncommunicable diseases.
  - (a) *Expand and build upon regional (e.g. Western Pacific Declaration on Diabetes, Framework Convention Alliance Asia-Pacific) and national alliances for NCD capacity-building (e.g. Singapore's Civic Committee on Healthy Lifestyle).*
  - (b) *Disseminate technical resources relevant to noncommunicable diseases to countries and areas. For example, ensure that all countries and areas have the publication, “Acting on*



*Noncommunicable Diseases: An Advocacy Guide for the Western Pacific”, developed by La Trobe University, Australia.*

- (2) Support implementation of intervention projects, exchange of experience among stakeholders, and regional and international capacity-building programmes.

**OBJECTIVE 3:** To promote interventions to reduce the main shared modifiable risk factors for noncommunicable diseases: tobacco use, unhealthy diets, physical inactivity and harmful use of alcohol.

### **Recommended actions for Member States**

#### Tobacco control

- (1) Consider implementing the following package of six cost-effective policy interventions (the MPOWER package), which builds on the measures for reducing demand contained in the WHO Framework Convention for Tobacco Control:

- monitor tobacco use and tobacco prevention policies;
- protect people from tobacco smoke in public places and workplaces;
- offer help to people who want to stop using tobacco;
- warn people about the dangers of tobacco;
- enforce bans on tobacco advertising, promotion and sponsorship; and
- raise tobacco taxes and prices.

#### *In particular:*

- (a) *Delineate and implement interventions to reduce the demand for and limit the supply of tobacco, including chewing tobacco with betel nut.*
- (b) *Introduce interventions to facilitate and increase access to smoke-free facilities.*

#### Promoting healthy diet

- (1) Implement the actions recommended in, but not limited to, the Global Strategy on Diet, Physical Activity and Health.

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*In particular:*

- (a) *Delineate and implement interventions to reduce the demand for and limit the supply of unhealthy foods.*
- (b) *Promote the consumption of healthy local foods, as is happening in some Pacific island countries (e.g. promotion of local bananas rich in vitamin A in the Federated States of Micronesia).*

Promoting physical activity

- (1) Implement the actions recommended in, but not limited to, the Global Strategy on Diet, Physical Activity and Health.
  - (a) *Increase access of communities to exercise facilities (e.g. Tonga's "Walking Path", Malaysia's "ProActive Scheme"<sup>v</sup>).*

Reducing the harmful use of alcohol

- (1) Respond effectively to the public-health challenges posed by harmful use of alcohol – in accordance with existing regional strategies and guided by the outcome of current and future WHO global activities to reduce harmful use of alcohol.
  - (a) *Adopt and begin implementation of the Western Pacific Regional Strategy and Regional Action Plan to Reduce Alcohol-related Harm.*

***Additional recommended regional actions***

- (1) *Utilize media and social marketing to promote healthy choices and to increase knowledge and awareness of NCD risk factors. Apply lessons learnt from previous initiatives, such as the WHO Regional Office's "It's OK to Say You Mind" campaign on second-hand smoke, using culturally relevant messages.*

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<sup>v</sup> Malaysia's ProActive scheme engages sports organizations and communities to develop community-based physical activities and active recreational projects, making physical activities attractive and accessible to community members who do not normally participate or are currently inactive ([www.healthpromo.gov.my/healthpromo.asp?val=scheme2](http://www.healthpromo.gov.my/healthpromo.asp?val=scheme2)).

- (2) *Incorporate NCD prevention and control interventions into the “Healthy Settings” approach. As an example, consider Papua New Guinea's pilot obesity and physical activity programme for workplaces, conducted jointly by the Ministry of Health and the Papua New Guinea’s Sports Federation.*

### **Recommended actions for WHO**

- (1) Use existing strategies such as the WHO Framework Convention on Tobacco Control, the Global Strategy on Diet, Physical Activity and Health, and the Global Strategy for Infant and Young Child Feeding, which have been the subject of resolutions adopted by the World Health Assembly, in order to provide technical support to countries in implementing or strengthening nationwide action to reduce risk factors for noncommunicable diseases and their determinants.
- (a) *Develop and disseminate appropriate technical guidelines on population-based strategies to motivate behaviour change, when none currently exist.*
- (2) Guide the development of pilot or demonstration community-based programmes of intervention.
- (a) *Consider support to countries for pilot or demonstration projects for promising interventions that have not been extensively studied for applicability and relevance to the Region.*
- (b) *Document and disseminate lessons learnt and assist countries to replicate and scale up proven interventions. For example, share lessons learnt from community-based interventions for salt reduction as implemented in the Tianjin Study, China with other Member States.*
- (3) Support the development of networks of community-based programmes at the regional and global levels.
- (4) Provide support to countries in implementing the MPOWER package and provide technical support to implement other measures contained in the WHO Framework Convention on Tobacco Control in response to specific national needs.

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- (a) *Support countries and areas with periodic technical assistance and training at the national and regional level, including training in the use of evidence to guide the selection, development and implementation of population-based lifestyle interventions.*
  
- (5) Ensure synergy with the work of the Convention Secretariat and the implementation of the WHO Framework Convention on Tobacco Control in applying the tobacco-control component of this plan. [*Action to be led by WHO Headquarters.*]

**Recommended actions for international partners and WHO collaborating centres**

- (1) Provide support for and participate in the development and implementation of technical guidance and tools in order to reduce the main shared modifiable risk factors for noncommunicable diseases.
  - (a) *For funders: Invest in national programmes to reduce modifiable risk factors, such as what Bloomberg Philanthropies is undertaking with tobacco control in China, Viet Nam and the Philippines.*

**OBJECTIVE 4:** To promote research for the prevention and control of noncommunicable diseases

**Recommended actions for Member States**

- (1) Invest in epidemiological, behavioural, and health-system research as part of national programmes for the prevention of noncommunicable diseases and develop – jointly with academic and research institutions – a shared agenda for research, based on national priorities.
  - (a) *Establish or strengthen and expand national research infrastructure and capacity to enable robust data collection for NCD prevention and control.*
  
  - (b) *Consider designating a lead agency or designated lead within the ministry or department of health to oversee and manage national research initiatives for noncommunicable diseases.*

- (c) *Work with partners and academic institutions to prioritize implementation research for noncommunicable diseases.*
  - (d) *Consider innovative approaches to behavioural research, such as community-based participatory research methods, for shifting population behaviour towards healthier choices*
- (2) Encourage the establishment of national reference centres and networks to conduct research on socioeconomic determinants, gender, cost-effectiveness of interventions, affordable technology, health system reorientation and workforce development.

***Additional recommended regional action***

- (1) *Disseminate research findings through participation in existing information dissemination venues such as the Mobilization of Allies on Noncommunicable Disease Action (MOANA)<sup>vi</sup> and ProCOR.<sup>vii</sup>*

**Recommended actions for WHO**

- (1) Develop a research agenda for noncommunicable diseases in line with WHO's global research strategy, collaborate with partners and the research community and involve major relevant constituencies in prioritizing, implementing, and funding research projects. A prioritized research agenda for noncommunicable diseases should generate knowledge and help to translate knowledge into action through innovative approaches in the context of low- and middle-income countries. [*Action to be led by WHO Headquarters.*]
  - (a) *Assist Member States to develop relevant and practical research agendas to support NCD prevention and control.*

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<sup>vi</sup> MOANA is an NCD network in the Western Pacific Region, with an active web-based information dissemination and discussion group.

<sup>vii</sup> ProCOR ([www.procor.org](http://www.procor.org)), a programme of the Lown Cardiovascular Research Foundation, is an ongoing, e-mail and web-based electronic conference aimed at addressing the epidemic of cardiovascular diseases in the developing world.

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- (2) Encourage WHO collaborating centres to incorporate the research agenda into their plans and facilitate collaborative research through bilateral and multilateral collaboration and multicentre projects.

**Recommended actions for international partners and WHO collaborating centres**

- (1) Include the prevention and control of noncommunicable diseases as an integral part of work on global development and in related investment decisions.
- (2) As appropriate, work with WHO to involve all stakeholders in advocacy in order to raise awareness of the increasing magnitude of the public-health problems posed by noncommunicable diseases, and of the fact that tackling the determinants of and risk factors for such diseases has the potential to be a significant method of prevention.
- (3) Support WHO in creating forums where key stakeholders – including nongovernmental organizations, professional associations, academia, research institutions and the private sector – can contribute and take concerted action against noncommunicable diseases.

**OBJECTIVE 5:** To promote partnerships for the prevention and control of noncommunicable diseases.

**Recommended actions for Member States**

- (1) Participate actively in regional and subregional networks for the prevention and control of noncommunicable diseases
- (2) Establish effective partnerships for the prevention and control of noncommunicable diseases, and develop collaborative networks, involving key stakeholders, as appropriate.
  - (a) *Encourage and promote community participation and grassroots mobilization to establish a broad base of support for the prevention and control of chronic diseases and to ensure acceptability and effectiveness of policy and population-based interventions. For example, promote the growth of community coalitions for noncommunicable diseases, such as the Philippine Coalition for the Prevention and Control of NCD.*

- (b) *Explore working with appropriate partners, such as the food industry, to establish public health interventions for NCD prevention and control. For example, consider Singapore's Nutrition Labelling programme<sup>viii</sup> and New Zealand's Food Industry Group (FIG).<sup>ix</sup>*

### Recommended actions for WHO

- (1) Establish an advisory group in 2008 in order to provide strategic and technical input and conduct external reviews of the progress made by WHO and its partners in the prevention and control of noncommunicable diseases. [Action to be led by WHO Headquarters.]
- (2) Encourage the active involvement of existing regional and global initiatives in the implementation and monitoring of the global strategy for the prevention and control of noncommunicable diseases, and of related strategies.
  - (a) *Actively promote collaborative relationships with international stakeholders and regional funders of health programmes to support the work in NCD prevention and control within the Region, commensurate with the burden.*
  - (b) *Assist Member States to establish and use cross-country alliances, networks and partnerships for NCD capacity-building, advocacy, research and surveillance (e.g. Alliance for Healthy Cities, MOANA). Cross-country alliances can also facilitate unified responses to transnational issues that affect noncommunicable diseases, such as trade issues and global marketing of unhealthy lifestyles. For example, follow up on the conclusions of the Meeting of the Ministers of Health of the Pacific Island Countries in Vanuatu, which call for engagement with the food and trade sectors to ensure that the health impact of trade agreements on diet is minimized.*
- (3) Support and strengthen the role of WHO collaborating centres by linking their plans to the implementation of specific interventions in the global strategy.

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<sup>viii</sup> Singapore's Nutrition Labelling Programme ([www.hpb.gov.sg/hpb](http://www.hpb.gov.sg/hpb)) is a programme whereby the Ministry of Health works with the food industry to provide nutrition information on food packaging at the point of sale.

<sup>ix</sup> The Food Industry Group of New Zealand ([www.fig.org.nz](http://www.fig.org.nz)) was formed to encourage food companies to work with the Government and the community to solve the problem of obesity.

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- (4) Facilitate and support, in collaboration with international partners, a global network of national, regional, and international networks and programmes such as the WHO regional networks for noncommunicable disease prevention and control. [*Action to be led by WHO Headquarters.*]

***Additional recommended regional actions for WHO***

- (1) *Advise Member States on ways of engaging constructively with appropriate industries.*
- (2) *Provide technical assistance and other support to countries to promote social mobilization and community participation in NCD prevention and control.*

**Recommended actions for international partners and WHO collaborating centres**

- (1) Collaborate closely with and provide support to Member States and the Secretariat in implementing the various components of the global strategy for the prevention and control of noncommunicable diseases.
  - (a) *Actively encourage international and appropriate private partners to support NCD prevention and control in the Region.*
- (2) Give priority to noncommunicable diseases in international and regional initiatives to strengthen health systems based on primary health care.

**OBJECTIVE 6:** To monitor noncommunicable diseases and their determinants, and evaluate progress at the national, regional and global levels

**Recommended actions for Member States**

- (1) Strengthen surveillance systems and standardized data collection on risk factors, disease incidence and mortality by cause, using existing WHO tools.



- (a) *Regularly participate and implement standard global and regional surveys, such as the WHO STEPS survey and the various surveys comprising the Global Tobacco Surveillance System, and use the data to guide NCD policy and programme development.*
- (2) Contribute, on a routine basis, data and information on trends in respect of noncommunicable diseases and their risk factors disaggregated by age, gender, and socioeconomic groups; and provide information on progress made in implementation of national strategies and plans

### **Recommended actions for WHO**

- (1) Develop and maintain an information system to collect, analyse and disseminate data and information on trends in respect of mortality, disease burden, risk factors, policies, plans and programmes using currently available data sources like the WHO Global InfoBase and other existing global information systems. This database will be expanded to handle new information on subjects such as health services coverage, related costs, and quality of care. [*Action to be led by WHO Headquarters.*]
- (a) *At the regional level, maintain a STEPS survey database, including use of STEPS data for policy.*
- (b) *Make use of existing global databases and inform Member States of the availability of these databases. For example, promote the global cancer database of the International Agency for Research on Cancer (IARC).*
- (2) Establish a reference group for noncommunicable diseases and risk factors, made up of experts in epidemiology, in order to support the work of the Secretariat and advise countries on data collection and analysis. [*Action to be led by WHO Headquarters.*]
- (3) Strengthen technical support to Member States in improving their collection of data and statistics on risk factors, determinants and mortality.
- (a) *Continue to support STEPS training within the Region.*

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(4) Convene a representative group of stakeholders, including Member States and international partners, in order to evaluate progress on implementation of this action plan. The group will set realistic and evidence-based targets and indicators for use in both the mid-term and final evaluations.

(a) *Promote existing evaluation frameworks for Member States to utilize, such as the Diet and Physical Activity Strategy (DPAS) Framework to Monitor and Evaluate Implementation.*

(b) *Develop relevant indicators and milestones for the Region, where none currently exist, and encourage countries to develop and monitor indicators and milestones at the national level.*

(5) Prepare progress reports in 2010 and 2013 on the global status of prevention and control of noncommunicable diseases. [*Action to be led by WHO Headquarters.*]

(a) *Within existing frameworks and mechanisms, contribute to global NCD progress reports by collating data on pertinent indicators at a regional level.*

**Recommended actions for international partners and WHO collaborating centres**

(1) Work collaboratively and provide support for the actions set out for Member States and the Secretariat in monitoring and evaluating, at the regional and global levels, progress in prevention and control of noncommunicable diseases.

(2) Mobilize resources to support the system for regional and global monitoring and evaluation of progress in the prevention and control of noncommunicable diseases.

**4. FINAL WORD**

This Regional Action Plan presents a way to operationalize the reduction of the burden of chronic disease in the Western Pacific Region. It integrates various frameworks, strategies and action plans addressing specific risk factors and particular diseases into a holistic and definitive approach to NCD prevention and control (see Annex 1-D).

The NCD burden within the Western Pacific is largely an avoidable burden. Current evidence indicates that a significant proportion of NCD morbidity, disability and premature deaths within the Region can be averted through prevention, lifestyle modification and the judicious control of a few common risk factors that underlie the major categories of chronic disease (see Annex 1-E).

Member States are requested to seriously consider the strategic actions put forward in the Regional Action Plan in light of their particular situation and national context. Member States are also urged to use this guide in creating and implementing locally relevant policy and regulatory interventions, population-based lifestyle interventions, targeted clinical interventions and supporting strategic actions to build healthy populations and communities living in environments that support healthy choices.

The Regional Action Plan is a work in progress. Its success will depend on the applications in this document, and on the collective ability of the countries and partners in the Region to learn from each other and share expertise, knowledge and resources, and demonstrate political commitment and leadership in effecting change for better health.

**Annex 1**

**Annexes**

Annex 1-A      A Conceptual Framework for NCD Prevention and Control in the Western Pacific: Basis for the Regional Action Plan to Operationalize the Global Action Plan for NCD Prevention and Control

Annex 1-B      Official WHO documents that guided the development of this Regional Action Plan

Annex 1-C      Process for Operationalizing the Regional Action Plan for NCD Prevention and Control

Annex 1-D      Current WHO and other selected tools for NCD Prevention and Control

Annex 1-E:\     Affordability of Selected Interventions

**Annex 1-A. A conceptual framework for noncommunicable disease prevention and control: basis for the Western Pacific Regional Action Plan**

The causation pathway for chronic diseases provides the framework for elucidating key components of a Regional Action Plan to operationalizing the Global Action Plan.

This framework, as depicted in Figure 2, delineates seven action areas that address various points along the NCD causation pathway:

- (1) environmental interventions;
- (2) lifestyle interventions;
- (3) clinical interventions;
- (4) advocacy;
- (5) research, surveillance and evaluation;
- (6) leadership, multisectoral partnerships and community mobilization; and
- (7) health systems strengthening.

Environmental interventions (macroeconomic, structural and policy) address the broad determinants of NCD risk. Lifestyle interventions impact on the common modifiable risk factors, and, to a certain extent, the intermediate risk factors for chronic disease. Clinical interventions bring about change at the level of intermediate risk factors and overt disease. Environmental and lifestyle interventions target the entire population, while clinical interventions target mostly high-risk individuals. Surveillance, research and advocacy are needed throughout the risk continuum, as they fulfil an essential supporting function to the other action areas.

Action on the broad determinants largely fall outside of the direct reach of the health sector, but the health sector plays a role in advocacy and partnering with other sectors to effect change. Thus, the set of interventions on the left side of the intervention pathway requires a predominantly “whole-of-government” and “whole-of-society” approach. On the other end of the intervention pathway, clinical interventions rely heavily on the health system for service delivery. Population-based lifestyle interventions represent an area of overlap, requiring both a whole-of-government and whole-of-society approach and health system involvement.

In reality, governmental and societal action at the macro level has impacts on clinical practices, and, correspondingly, the health sector plays a role in determining policies at the macro level; the diagram attempts to portray the relational dynamics of these two approaches. Hence, to address the entire spectrum of chronic disease causation, political/community leadership, intersectoral partnerships, community mobilization and health systems strengthening are critical.

**Annex 1-A**

This framework emphasizes the requirement for comprehensive approaches that encompass and address the various levels of determinants and risks for noncommunicable diseases. It highlights the importance of a balance between “healthy choices” and “healthy environments” because it recognizes that supportive environments are needed to empower healthy choices. It also re-distributes responsibility across the whole of society, with government, health sector, the private sector, nongovernmental organizations, communities, families and individuals all sharing accountability for putting in place the necessary elements that promote healthy lifestyles and quality care for noncommunicable diseases.

The framework is sufficiently flexible in that interventions for a country can be tailored or concentrated along the specific area of work that is most relevant for the local situation at a given point in time. For instance, in a country where the risk factors are rising, but overt disease is not yet prevalent, actions should be directed primarily towards environmental and lifestyle change. On the other hand, in a country where health expenditures are heavily skewed towards off-island referrals for tertiary-level care, immediate interventions need to focus on improving clinical services. Over the long term, however, it will be necessary to allocate resources for all areas of work to achieve measurable and sustained reductions in prevalence of both risks and disease, and the attendant consequences of disability and death.

**Annex 1-B: Official WHO documents that guided the development of this Regional Action Plan**

	Global guidance	Regional guidance
<b>General framework, strategy and/or plan of action</b>	<ol style="list-style-type: none"> <li>1. Prevention and control of noncommunicable diseases (World Health Assembly Resolution WHA53.17, 2000)</li> <li>2. Prevention and control of noncommunicable diseases: implementation of the global strategy (World Health Assembly Resolutions WHA60.23, 2007 and WHA61.14, 2008)</li> <li>3. Action Plan for the Global Strategy for the Prevention and Control of Noncommunicable Diseases (2008)</li> <li>4. Preventing Chronic Disease: A Vital Investment (2005)</li> <li>5. Stop the Global Epidemic of Chronic Disease: Advocacy Toolkit (2007)</li> </ol>	<ol style="list-style-type: none"> <li>1. Prevention and control of noncommunicable diseases (Regional Committee for the Western Pacific Region Resolution WPR/RC51.R5, 2000)</li> <li>2. Noncommunicable disease prevention and control (Regional Committee for the Western Pacific Resolution WPR/RC57.R4, 2006)</li> <li>3. A Proposal for a Pacific Regional Framework for the Prevention and Control of Noncommunicable Diseases (2007)</li> </ol>
<b>Specific to social determinants of noncommunicable diseases</b>		<ol style="list-style-type: none"> <li>1. Noncommunicable Disease and Poverty: The Need for Pro-poor Strategies in the Western Pacific Region: A Review (2007)</li> <li>2. Integrating Poverty and Gender into Health Programmes: A Sourcebook for Health Professionals (Module on Noncommunicable Diseases) (2007)</li> </ol>
<b>Specific to NCD risk factors</b>	<ol style="list-style-type: none"> <li>1. WHO Framework Convention on Tobacco Control</li> <li>2. Global Strategy on Diet, Physical Activity and Health</li> <li>3. Strategies to Reduce the Harmful Use of Alcohol (World Health Assembly Resolution WHA61.4)</li> </ol>	<ol style="list-style-type: none"> <li>1. Tobacco Free Initiative Regional Action Plan 2005–2009</li> <li>2. Regional Strategy to Reduce Alcohol-related Harm (2006)</li> <li>3. Reduction of Alcohol-related Harm Regional Plan of Action 2008–2013 (2008)</li> </ol>

Annex 1-B

	Global guidance	Regional guidance
Specific to particular noncommunicable diseases	<ol style="list-style-type: none"> <li>1. Prevention of Cardiovascular Disease: Pocket Guidelines for Assessment And Management of Cardiovascular Risk (2007)</li> <li>2. Prevention of Cardiovascular Disease: Guidelines for Assessment and Management of Cardiovascular Risk (2007)</li> <li>3. Cancer Control: Knowledge into Action, WHO Guide for Effective Programmes (2006)</li> </ol>	<ol style="list-style-type: none"> <li>1. Regional Plan for the Integrated Prevention and Control of Cardiovascular Diseases and Diabetes for the Western Pacific Region 1998–2003</li> <li>2. Plan of Action (2006–2010) for the Western Pacific Declaration on Diabetes: from Evidence to Action</li> </ol>
Specific to health systems and noncommunicable diseases	<ol style="list-style-type: none"> <li>1. Strengthening Health Systems to Improve Health Outcomes: WHO’s Framework for Action (2007)</li> </ol>	<ol style="list-style-type: none"> <li>1. Making Health Systems Work for Chronic Disease (2006)</li> <li>2. People-Centred Health Care: A Policy Framework (2007)</li> <li>3. Strategic Plan for Strengthening Health Systems in the WHO Western Pacific Region (2008)</li> </ol>
Specific to NCD surveillance	<ol style="list-style-type: none"> <li>1. WHO STEPwise approach to Surveillance of NCD Risk Factors (STEPS)</li> </ol>	



### Annex 1-C: Process for operationalizing the global action plan for NCD prevention and control

The process for operationalizing the Global Action Plan in the Western Pacific Region, and for systematically achieving progress in NCD prevention and control, incorporates four major steps: (1) profiling, (2) planning and priority setting, (3) putting into practice (implementation), and (4) evaluation (Figure 3.1). Acknowledging that countries are in different steps of the process, and on different levels, the aim is to move countries from their baseline situation to the next highest level in an iterative process of learning and applying lessons learnt so that successive phases move countries closer to effectively preventing and controlling noncommunicable diseases (Figure 3.2). Countries can enter the process at different steps, corresponding to their existing situation and level of progress in stemming the burden of chronic diseases. However, regardless of the country's point of entry, the process consistently incorporates eight key principles for action: (1) a people-centred perspective; (2) cultural relevance; (3) focused on reducing inequities; (4) encompassing the entire care continuum; (5) involving the whole of society; (6) integral to health systems strengthening; (7) consistent with the global action plan, and supportive of existing regional strategies; and (8) flexible, using a phased approach.

**Figure 3.1 Process for systematically achieving progress in NCD prevention and control in the Western Pacific Region**



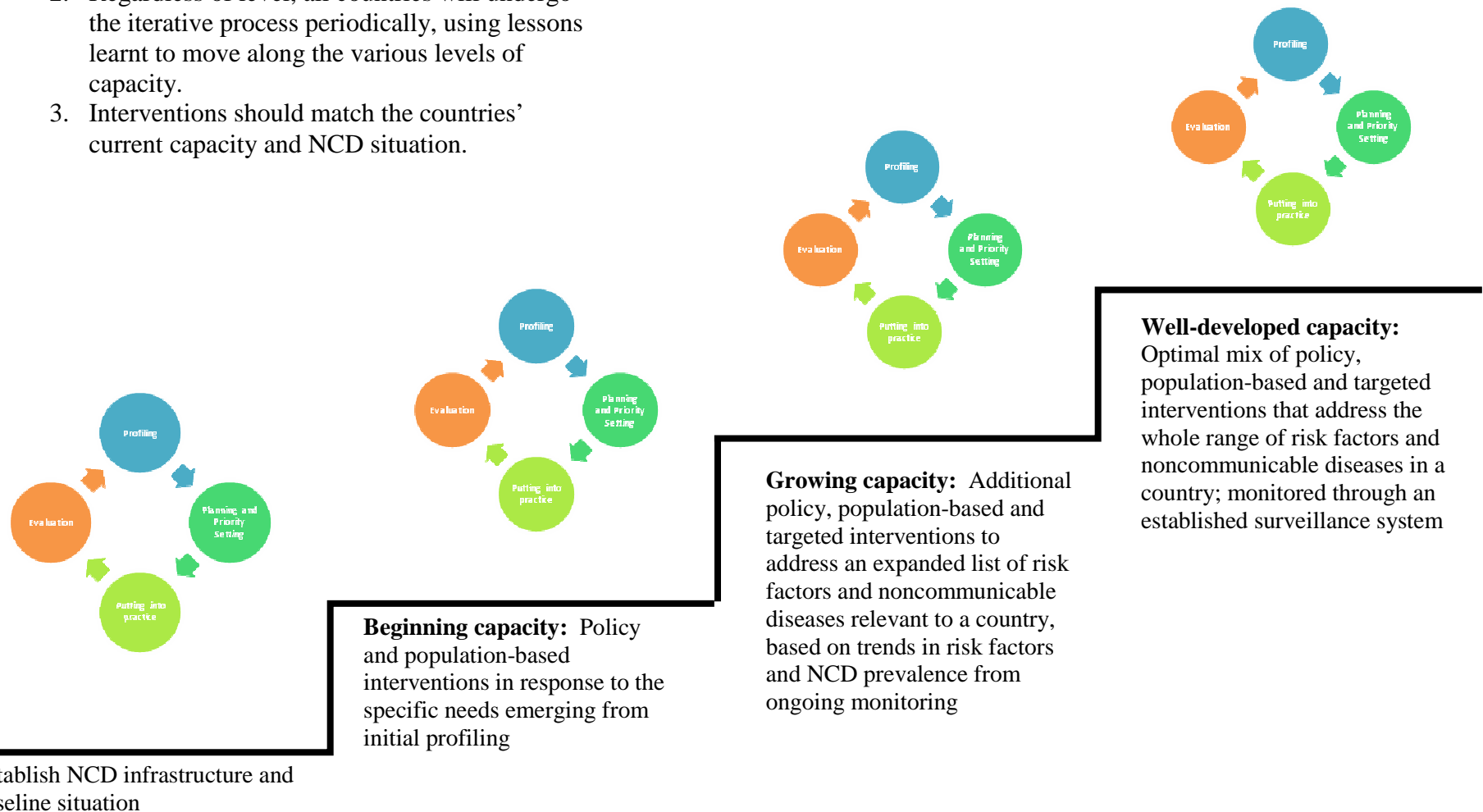
*Source:* Adapted from *A Proposal for a Pacific Regional Framework for the Prevention and Control of Noncommunicable Diseases*. Manila, World Health Organization, 2007.

Annex 1-C

Figure 3.2 Overall schematic for the process model for NCD prevention and control in the Western Pacific Region

**Assumptions:**

1. Countries are at differing levels of capacity for NCD prevention and control.
2. Regardless of level, all countries will undergo the iterative process periodically, using lessons learnt to move along the various levels of capacity.
3. Interventions should match the countries' current capacity and NCD situation.



Establish NCD infrastructure and baseline situation

**Annex 1-D: Current WHO and other selected tools and resources for NCD prevention and control**

Current tools and guides	
<b>STEP 1: Profiling</b>	
<b>ACTION AREA: <i>Surveillance</i></b>	
Determine profile of risk factors and disease	<ol style="list-style-type: none"> <li>1. STEPS (WHO)</li> <li>2. Stroke STEPS (WHO)</li> <li>3. Surveillance of Risk Factors Report Series (SuRF 2) and WHO Global InfoBase: Newly available data on major risk factors, obesity, tobacco use (WHO)</li> <li>4. Cancer Epidemiology Database (International Agency for Research on Cancer [IARC])</li> <li>5. Cardiovascular Survey Methods (WHO)</li> </ol>
Determine strengths, needs and capacities	<ol style="list-style-type: none"> <li>1. Capacity mapping guide (WHO, Manila)</li> </ol>

<b>STEP 2: Planning and priority setting</b>	
Translate data and information from Step 1 into decisions on priorities, strategies and resource allocation	<ol style="list-style-type: none"> <li>1. Preventing Chronic Disease: A Vital Investment (WHO)</li> <li>2. Cancer Control: Knowledge into Action, WHO Guide for Effective Programmes (WHO)</li> </ol>
Establish priorities and create a plan of work	<ol style="list-style-type: none"> <li>1. STEPwise Framework to NCD Intervention (WHO)</li> <li>2. Action Plan for the Global Strategy for the Prevention and Control of Noncommunicable Diseases (WHO)</li> <li>3. WHO Framework Convention on Tobacco Control</li> <li>4. Global Strategy on Diet, Physical Activity and Health (WHO)</li> <li>5. Strategies to Reduce the Harmful Use of Alcohol (WHO)</li> <li>6. WHO Strategy for the Prevention and Control of Chronic Respiratory Diseases (WHO)</li> <li>7. Western Pacific Declaration on Diabetes (WHO, Manila)</li> <li>8. Plan of Action 2006–2010 for the Western Pacific Declaration on Diabetes (WHO, Manila)</li> <li>9. Regional Strategy to Reduce Alcohol-related Harm in the Western Pacific (WHO, Manila)</li> <li>10. Reduction of Alcohol-related Harm Regional Plan of Action 2008–2013 (WHO, Manila)</li> <li>11. Tobacco Free Initiative Regional Action Plan 2005–2009 (WHO, Manila)</li> </ol>

## Annex 1-D

Select interventions based on cost-effectiveness data	<ol style="list-style-type: none"> <li>1. Choosing Interventions that are Cost Effective (WHO-CHOICE Interventions) (WHO)</li> <li>2. Asaria P et al. Chronic disease prevention: health effects and financial costs of strategies to reduce salt intake and control tobacco use. <i>Lancet</i>, 370:2044–2053.</li> </ol>
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<b>STEP 3: Putting into practice (Implementation)</b>	
<b>ACTION AREA: <i>Environmental and/or macro interventions</i></b>	
Create sustainable funding for NCD prevention and control	<ol style="list-style-type: none"> <li>1. The Establishment and Use of Dedicated Taxes for Health (WHO, Manila)</li> <li>2. Health Promotion Financing Opportunities in the Western Pacific Region (WHO, Manila)</li> <li>3. Strategy on Health Care Financing (WHO, Manila and New Delhi)</li> </ol>
Develop policies to create healthy environments and to support healthy lifestyles	<ol style="list-style-type: none"> <li>1. Enhancing Health Policy Development: A Practical Guide To Understanding The Legislative Process (WHO, Manila)</li> <li>2. Health Policy Development: A Handbook for Pacific Islands Practitioners (WHO, Manila)</li> <li>3. Tobacco Control Legislation: An Introductory Guide (2nd Edition) (WHO)</li> <li>4. Protection from Exposure to Second-hand Smoke (WHO)</li> <li>5. A study on regulatory requirements for food fortification in the Pacific (WHO, Manila)</li> <li>6. Using Domestic Law in the Fight against Obesity: An Introductory Guide for the Pacific (WHO, Manila)</li> </ol>
<b>ACTION AREA: <i>Lifestyle change</i></b>	
Increasing physical activity	<ol style="list-style-type: none"> <li>1. Global Strategy on Diet, Physical Activity and Health (WHO)</li> <li>2. A Guide for Population-based Approaches for Increasing Levels of Physical Activity (WHO)</li> <li>3. Promoting Physical Activity and Active Living in Urban Environments (WHO)</li> <li>4. Regional Guideline on Physical Activity (WHO and Secretariat for the Pacific Community [SPC], forthcoming)</li> <li>5. NCD Exercise: Pacific Fitness videocassette (SPC)</li> <li>6. Promoting Physical Activity: A Guide for Community Action (United States Department of Health and Human Services)</li> </ol>

Improving nutrition choices	<ol style="list-style-type: none"> <li>1. Reducing Salt Intake in Populations (WHO)</li> <li>2. Diet, Nutrition and Prevention of Chronic Diseases (WHO)</li> <li>3. Guidelines in Food Fortification and Micronutrients (WHO)</li> <li>4. Development of Food Based Dietary Guidelines for the Western Pacific Region (WHO, Manila)</li> <li>5. Towards Healthier Mothers, Children and Families: A Nutrition Guide for Community Health Workers (WHO, Manila)</li> <li>6. Diet, Food Supply and Obesity in the Pacific (WHO, Manila)</li> <li>7. Obesity in the Pacific: Too Big to Ignore (WHO, Manila)</li> <li>8. NCD: Keep Healthy the Pacific Way flipchart (SPC)</li> <li>9. Healthy Eating videocassette series (SPC)</li> <li>10. Teaching and Learning about Food and Nutrition (SPC)</li> </ol>
Combating obesity	<ol style="list-style-type: none"> <li>1. Obesity: Preventing and Managing the Global Epidemic (WHO)</li> <li>2. Obesity in the Pacific: Too Big to Ignore (WHO, Manila)</li> <li>3. Redefining Obesity and Its Treatment (WHO, Manila)</li> </ol>
Reducing alcohol use	<ol style="list-style-type: none"> <li>1. Prevention of Psychoactive Substance Use: A Selected Review of What Works in the Area of Prevention (WHO)</li> <li>2. Primary Prevention of Substance Abuse: A Workbook for Project Operators (WHO)</li> <li>3. Primary Prevention of Substance Abuse: A Facilitator's Guide (WHO)</li> <li>4. Regional Strategy to Reduce Alcohol-related Harm in the Western Pacific (WHO, Manila)</li> <li>5. Reduction of Alcohol-related Harm Regional Plan of Action 2008–2013 (WHO, Manila)</li> <li>6. Alcohol or Life: The Choice is Yours videocassette (SPC)</li> </ol>
Reducing tobacco use	<ol style="list-style-type: none"> <li>1. Building Blocks for Tobacco Control: A Handbook (WHO)</li> <li>2. Policy Recommendations for Smoking Cessation and Treatment of Tobacco Dependence (WHO)</li> <li>3. WHO Report on the Global Tobacco Epidemic 2009 – the MPOWER Package (WHO)</li> <li>4. Regional Action Plan 2005–2009 for the Tobacco Free Initiative</li> </ol>
<b>ACTION AREA: <i>Clinical services</i></b>	
Use of clinical guidelines for screening, acute and chronic care and rehabilitation	<ol style="list-style-type: none"> <li>1. Innovative Care for Chronic Conditions: Building Blocks for Action (WHO)</li> <li>2. Secondary Prevention of Noncommunicable Diseases in Low- and Middle-Income Countries through Community-based and Health Service Interventions (WHO)</li> </ol>

## Annex 1-D

a. Diabetes	<ol style="list-style-type: none"> <li>1. Guidelines for the Prevention, Management and Care of Diabetes Mellitus (WHO)</li> <li>2. Prevention of Diabetes and its Complications (WHO, forthcoming)</li> <li>3. Screening for Type 2 Diabetes (WHO)</li> <li>4. Prevention of Blindness from Diabetes Mellitus (WHO)</li> <li>5. Health Care Decision-Making in the Western Pacific Region: Diabetes and the Care Continuum in the Pacific Island Countries (WHO, Manila)</li> <li>6. Type 2 Diabetes Practical Targets and Treatments (International Diabetes Federation [IDF] Western Pacific)</li> <li>7. Consensus on Type 2 Diabetes Prevention (IDF)</li> <li>8. Global Guidelines for Type 2 Diabetes (IDF)</li> <li>9. Ten Steps to Better Glucose Control: A Practical Guide (IDF)</li> <li>10. Guidelines for Management of Post-meal Glucose (IDF)</li> <li>11. International Consensus on the Diabetic Foot (IDF)</li> <li>12. Diabetes flipchart (SPC)</li> </ol>
b. Cancer	<ol style="list-style-type: none"> <li>1. Cancer Control: Knowledge into Action, WHO Guide For Effective Programmes (WHO)</li> <li>2. Cancer Pain Relief (WHO)</li> <li>3. Cancer Pain Relief and Palliative Care (WHO)</li> <li>4. Comprehensive Cervical Cancer Control: A Guide to Essential Practice (WHO)</li> <li>5. National Cancer Control Programmes Policies and Managerial Guidelines, 2<sup>nd</sup> edition (WHO)</li> <li>6. Guidelines for the Early Detection and Screening of Breast Cancer (WHO)</li> <li>7. Guidelines for the Management of Breast Cancer (WHO)</li> <li>8. Manual on the prevention and control of common cancers (WHO, Manila)</li> <li>9. Cancer Monographs (IARC)</li> <li>10. Handbooks on Cancer Prevention (IARC)</li> </ol>
c. Cardiovascular diseases	<ol style="list-style-type: none"> <li>1. Prevention of Cardiovascular Disease Guidelines for Assessment and Management of Cardiovascular Risk (WHO)</li> <li>2. Prevention of Cardiovascular Disease Pocket Guides for Assessment and Management of Cardiovascular Risk</li> <li>3. Prevention of recurrent heart attacks and strokes in low and middle income populations (WHO)</li> <li>4. WHO CVD-risk management package for low- and medium-resource settings (WHO)</li> </ol>

d. Chronic respiratory diseases	<ol style="list-style-type: none"> <li>1. WHO Strategy for the Prevention and Control of Chronic Respiratory Diseases (WHO)</li> <li>2. Global Surveillance, Prevention and Control of Chronic Respiratory Disease (WHO)</li> <li>3. Implementation of the WHO Strategy for the Prevention and Control of Chronic Respiratory Diseases (WHO)</li> <li>4. Prevention and Control of Chronic Respiratory Diseases at Country Level (WHO)</li> </ol>
Incorporating evidence-based interventions into various settings – the WHO Healthy Settings approach	<ol style="list-style-type: none"> <li>1. Health Promoting Schools: <ol style="list-style-type: none"> <li>a. Guidelines for Health Promoting Schools (WHO, Manila)</li> <li>b. Nutrition-friendly School Initiative (NFSI) (WHO, Manila)</li> <li>c. Food in Schools (SPC)</li> <li>d. Urbani School Health Kit (WHO)</li> </ol> </li> <li>2. Regional Guidelines for Developing a Healthy Cities Project (WHO, Manila)</li> <li>3. Regional Guidelines for the Development of Healthy Workplaces (WHO, Manila)</li> <li>4. Health Promoting Communities: <ol style="list-style-type: none"> <li>a. Healthy Marketplaces in the Western Pacific Region: Guiding Future Action. Applying a Settings Approach to the Promotion of Health in Marketplaces (WHO, Manila)</li> </ol> </li> </ol>
<b>STEP 4: Evaluation</b>	
Assess programme implementation process, outcomes and impact	<ol style="list-style-type: none"> <li>1. Global Strategy on Diet and Physical Activity for Health Framework to Monitor and Evaluate Implementation (WHO)</li> <li>2. Manual on Monitoring Cardiovascular Diseases (WHO, Manila)</li> <li>3. Teaching and Learning about Food and Nutrition (SPC) – contains a section on evaluating nutrition programmes</li> </ol>
<b>ACTION AREA : <i>Advocacy</i></b>	<ol style="list-style-type: none"> <li>1. Stop the Global Epidemic of Chronic Disease: Advocacy Toolkit (WHO)</li> <li>2. Acting on Noncommunicable Diseases: An Advocacy Guide for the Western Pacific (WHO, Manila)</li> <li>3. Diabetes Education Modules (IDF)</li> </ol>
<b>ACTION AREA: <i>Leadership, partnerships and community mobilization</i></b>	<ol style="list-style-type: none"> <li>1. Training Manual for Community-based Initiatives (WHO)</li> <li>2. Social Mobilization for Health Promotion (WHO, Manila)</li> </ol>
<b>ACTION AREA: <i>Health Systems Strengthening</i></b>	<ol style="list-style-type: none"> <li>1. Managing Systems for Better Health (WHO)</li> <li>2. People-centred Health Care: A Policy Framework (WHO, Manila)</li> <li>3. Making Health Systems Work for Chronic Disease (draft discussion paper) (WHO, Manila)</li> </ol>





### Annex 1-E. Affordability of selected interventions

A series of articles published in December 2007 in the journal *Lancet* examined the cost–benefit profiles of three selected interventions to prevent and control noncommunicable diseases: (1) tobacco control, (2) salt reduction, and (3) multidrug treatment of individuals at high risk of cardiovascular disease.<sup>18,19,20</sup> The authors estimated that the three interventions would result in about 31.7 million lives saved (Table 5.1) at a combined cost of about US\$ 1.44 per capita per year over the period 2005–2015 (Table 5.2). The health benefits in terms of lives saved would account for about 88% of the global goal of saving 36 million lives from noncommunicable diseases.

Table 5.3 compares the total cost per capita of these three interventions to the average per capita health expenditure for a selected group of countries in the Western Pacific Region. Among the least developed countries, this package of interventions would account for, at most, 8% of the per capita health expenditure per year, highlighting their affordability.

**Table 5.1 Lives saved from noncommunicable diseases resulting from a package of interventions over a 10-year period**

Intervention	Deaths averted over a 10-year period
Salt reduction	8.3 million
Tobacco control	5.5 million
Multidrug treatment	17.9 million
<b>TOTAL</b>	<b>31.7 million</b>

Sources: Gaziano TA et al. *Lancet*, 2007, 370:1939–1946; Asaria P et al. *Lancet*, 2007, 370:2044–2053; Lim S et al. *Lancet*, 2007, 370:2054–2061.

Annex 1-E

**Table 5.2. Estimated cost per capita per year for selected interventions**

Intervention	Cost per head (US\$)
Salt reduction plus tobacco control	0.36 (0.14–0.38 in low- to middle-income countries) (0.52–1.04 in middle- to high-income countries)
Multidrug treatment	1.08 (0.75-1.40)
<b>TOTAL</b>	<b>1.44</b> <b>(0.89-1.78 in low- to middle-income countries)</b> <b>(1.27-2.88 in middle- to high-income countries)</b>

Sources: Gaziano TA et al. *Lancet*, 2007, 370:1939–1946; Asaria P et al. *Lancet*, 2007, 370:2044–2053; Lim S et al. *Lancet*, 2007, 370:2054–2061.

**Table 5.3 Comparison of cost per capita of selected interventions with annual per capita health expenditure in selected Western Pacific Region countries**

Country	Annual per capita health expenditure (US\$, 2005)	Cost of intervention package per capita per year (US\$)	Cost of interventions as a percentage of per capita health expenditure (%)
Cambodia	27.90	1.44	5.2
China	80.87	1.44	1.8
Fiji	158.40	1.44	0.91
Lao People's Democratic Republic	17.46	1.44	8.3
Malaysia	179.37	1.44	0.80
Mongolia	35.00	1.44	4.1
Papua New Guinea	35.72	1.44	4.0
Philippines	38.75	1.44	3.7
Viet Nam	31.78	1.44	4.5

Sources: Gaziano TA et al. *Lancet*, 2007, 370:1939–1946; Asaria P et al. *Lancet*, 2007, 370:2044–2053; Lim S et al. *Lancet*, 2007, 370:2054–2061. Per capita health expenditure taken from *Country Health Information Profiles (CHIPS)* at [www.wpro.who.int](http://www.wpro.who.int).

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- <sup>10</sup> *Ibid*, page 5.
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<sup>20</sup> Lim S et al. Prevention of cardiovascular disease in high-risk individuals in low-income and middle-income countries: health effects and costs. *Lancet*, 2007, 370:2054–2061.