Australian Government

Preventative Health Taskforce

# A rapid review of chronic disease prevention strategies and programs in selected OECD countries

Sally Fawkes, Barb Mouy,
Brian Oldenburg, Rebecca Watson &Asnawi Abdullah

16 June 2008

ISBN: 1-74186-683-9

Online ISBN: 1-74186-684-7

Publications Approval Number: P3-4207

**SUGGESTED CITATION**

Fawkes, Sally, Mouy, Barbara, Oldenburg, Brian, Watson, Rebecca and Abdullah, Asnawi (2008), *A Rapid Review of Chronic Disease Prevention Strategies and Programs in Selected OECD Countries,* Preventative Health Taskforce, Canberra

**DISCLAIMER**

This report has been published by the Australian Government through the Preventative Health Taskforce. The views expressed are those of the authors, and do not necessarily reflect those of the Australian Government.

# TABLE OF CONTENTS

## Part A



## Part B: Stocktake Documentation

# ACKNOWLEDGEMENTS

The Project Team wishes to acknowledge a number of individuals who provided very helpful advice and feedback during this project. These included (in alphabetical order): Dr. Maximilian de Courten, Dr. Gauden Galea, Mr Todd Harper, Professor Vivian Lin and Dr Anna Peeters.

**For communication about this report, please contact:**

Rebecca Watson
School of Public Health and Preventive Medicine,
Monash University
info@aihps.org
Phone: 03 9903 0564

# ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| ABHI | Australian Better Health Initiative |
| AIHPS | Australian Institute of Health Policy Studies |
| AIHW | Australian Institute of Health and Welfare |
| CCDPC | Centre for Chronic Disease Prevention and Control |
| CDC | Centres for Disease Control (USA) |
| CHSRF | Canadian Health Service Research Foundation |
| COAG | Council of Australian Governments |
| CVD | Cardiovascular disease |
| DOHA | Department of Health and Ageing (Australian Government) |
| KTL | National Public Health Institute (Finland) |
| NICE | National Institute for Health and Clinical Evidence |
| NIHR | National Institute for Public Health Research |
| NPHT | National Preventive Health Taskforce |
| OECD | Organisation for Economic Cooperation and Development |
| VicHealth | Victorian Health Promotion Foundation |
| WHO | World Health Organisation |

# SECTION 1. EXECUTIVE SUMMARY

## *Background*

The incidence and prevalence of chronic disease such as diabetes and cardiovascular diseases (CVD) are accelerating worldwide and they now make a significant contribution to the burden of disease in almost all countries in the world. In Australia, these conditions not only have significant adverse effects on individuals and their families, but also on the economy, society and the health system as it is currently organised. The current Australian government has recognised the importance of these issues and the ways in which a more nationally coordinated and organised approach to primary and secondary prevention might assist. Germane to this new approach is the need to consider new approaches to prevention and to learn from the experience of other countries.

This report provides a rapid review of the approaches that some other OECD countries have adopted for primary prevention and identifies some of the key features of the systems that underpin these approaches. The major countries selected for the review were: Canada, England, New Zealand, USA and Finland. Prevention policy and some related issues in Thailand were also considered in accordance with the Statement of Requirements for this project. The report identifies a range of issues and emerging themes in relation to the primary prevention efforts of the countries included in this rapid review.

## *Review findings*

While the health ministries or departments in each of the OECD countries reviewed have the overall mandate for population health and prevention, in England, there is also a higher-level cross-government committee in place (Sub-Committee on Health and Wellbeing). This signals the increasing strategic, social and economic importance of prevention and serves to establish ongoing cross-portfolio engagement in the prevention agenda at a national level.

In four countries, a national institute or agency was in place that played a major role in leadership and coordination of the primary prevention and health promotion effort in their respective jurisdictions. The functions of these entities included some or all of the following elements in relation to prevention: coordination and strategic policy development; knowledge development and exchange; oversight and support for national campaigns and other initiatives at a population and/or regional level; monitoring and evaluation of program implementation; surveillance and monitoring of outcomes; and finally, communications and public information. Some of these functions were carried out through formalised partnerships, including government, non-government agencies and/or other organisations.

All of the countries reviewed had a comprehensive, overarching policy for health that incorporated a national framework and strategies which were more specifically relevant to the prevention of chronic disease and the promotion of the health and wellbeing of the whole population. Most of these polices were also well integrated both horizontally and vertically.

Common elements of these frameworks include:

- A population health or whole-of-society approach that also includes some identification of high-risk population sub-groups.
- A life-course approach that also highlight the needs of different groups across the lifecourse, with an increasing focus on the needs of children during the 'early years'.
- A special focus on health disparities, socially disadvantaged population subgroups and the need to 'close the health gap' between different groups.

- An emphasis not only on the 'classical' risk factors but also on the more upstream determinants of health and ill-health or what have referred to as the social determinants of health or the 'causes of the causes'.
- A significant commitment to improve the exchange processes between research, policy and practice.

While there is already considerable evidence that can be used to guide and inform action in relation to the primary prevention of chronic diseases and the promotion of well-being across the life-course, it is well recognised that there is still a lot to be learned about how to improve the overall prevention effort. More emphasis needs to be given to the production of evidence necessary to inform primary prevention strategies as well as the dissemination of evidence at an international level.

Many different kinds of partnerships – across government departments, at different levels of government, and between government, non-government, community and private sector organisations – are being employed in these countries to develop and implement new approaches to prevention and health promotion. The available evidence suggests that strategic partnerships are very important in the development and successful implementation of system-wide efforts related to prevention.

The national ministry of health in each country, together with national public health institutes or agencies, play the key roles in funding strategies and programs. Information on the actual investment levels in programs was not easily ascertained within the timeframe of this review; however, there were certainly new investments being made in relation to research and evaluation in order to support further evidence development and the implementation of strategies. While recent reviews have stressed the importance of governments giving high priority to financing prevention and health promotion, the level of investment from the health budget in primary prevention is still quite low in most countries, accounting for up to only 3-4 percent of health expenditure.

## *Lessons for Australia*

The report identifies a number of findings and lessons arising from this rapid stocktake which require further consideration and analysis with respect to building and enabling sustainable systems for prevention in Australia in the future. Selective examples are used to illustrate some of these potential lessons for Australia. These lessons are presented in two groupings (1) systems underpinning the strategies and programs and (2) strategies and programs for primary prevention and health promotion.

**The systems underpinning the strategies and programs:**

*1. Establishment of a high-level government or equivalent committee with appropriate inter-sectoral partners is necessary to champion primary prevention of chronic disease and ensure high-level political commitment and accountability.*

*2. New approaches to long-term funding for primary prevention of chronic disease need to be developed and recognise the limited approaches of the past and the need for more innovative and sustainable financing models.*

*3. Strengthened system components are needed for developing and implementing an effective chronic disease primary prevention strategy and programs.*

*4. Establishment of measurable targets for primary prevention and health promotion is critical for long term monitoring and evaluation of implementation and outcomes.*

*5. Establishment of sustainable infrastructure that facilitates the production, dissemination and use of evidence and learning is essential if strategies and programs are to be effective.*

**Strategies and programs:**

*6. Strategies and programs should incorporate an integrated approach and a life-course perspective.*

*7. Strategies and programs need to be adequately supported and funded tp demonstrate their effectiveness.*

*8. Strategies and programs need to be designed using the best available evidence and implemented using multi-level and multi-sectoral approaches.*

*9. Addressing inequalities and the health gap between different population subgroups needs to be a critical dimension of all strategies and programs.*

# SECTION 2. BACKGROUND

## *Introduction*

The incidence and prevalence of chronic disease such as diabetes and cardiovascular disease are accelerating worldwide and they now make the major contribution to the burden of disease in Australia and other countries in the world. The management and prevention of chronic disease will have increasingly important implications for the social and economic fabric of countries like Australia, including the structure and organisation of our health system. Consequently, the health agencies of all countries have to grapple with these issues and to consider new ways of reducing the societal and economic burden associated with chronic disease. However, action to prevent chronic disease and strategies to promote the health and well-being of the whole population, poses major challenges because of the complexity of their causes and the gaps in our knowledge about what to do in order to prevent them. Notwithstanding the fact that there are still many important knowledge gaps, there is already much that we do know, so this remains an implementation challenge for now.

Australia has already put some considerable effort into developing appropriate and contemporary frameworks for chronic disease prevention and health promotion[1]. However, there is still much to be done in order to build a really sustainable and integrated system for prevention in Australia that leads to the implementation of effective strategies and programs with appropriate levels of investment. Key elements for developing such a platform must include the following: engaging all levels of society, strengthening leadership and coordination, creating sustainable funding, building the appropriate infrastructure and resources for action, integrating evidence into policy and practice, and improving the fairness and equity of this response. These were the 6 interlocking strategies that were identified in the lead up to and during the recent Australian Institute of Health Policy Studies (AIHPS) and VicHealth National Prevention Summit (AIHPS & VicHealth 2008; Lin et al 2008).

To the extent that this was possible in the time available, this report documents and reviews prominent strategies and programs that are being undertaken internationally to prevent major chronic diseases and to promote the health and wellbeing of populations (**Appendix 1**). The review focuses on the experiences of 5 OECD countries, that is, Canada, UK, New Zealand, USA and Finland. The review also considers the experiences of some other countries, in particular, Thailand, where this was considered to be particularly pertinent to the terms of reference for this report. The report draws some preliminary lessons and recommendations from this rapid review of these countries. However, a more detailed comparative analysis between these countries and Australia is required before any formal recommendations can be made. The review has focused particularly on the organised systems and elements of system governance, policy and infrastructure that underpin the strategies and programs described, and which appear to be critical to the effective development, implementation and evaluation of these.

## *Key concepts and themes*

### 2.1 Characteristics of chronic disease

The term chronic disease, also known as non-communicable disease (NCD), refers to an array of conditions and diseases that share common characteristics. They:

- are complex and have multiple causes.

[1] For example, the National Chronic Disease Strategy released by the Department of Health and Ageing in 2006 (DOHA, 2006)

- usually have a long and gradual onset, although clinical diagnosis and identification is often only made following an acute event.
- occur across the lifecycle and become more prevalent with older age.
- can severely compromise quality of life and work performance as a result of accumulating limitations and disability.
- are long term and persistent, leading to gradual deterioration of physical, psychological and social health.
- often occur together, known as co-morbidity.

While usually not immediately life threatening, these conditions are now the most common and leading cause of premature mortality in Australia and most other countries in the world (AIHW, 2006).

## 2.2 Burden of chronic disease in Australia

Recent Australian data indicate that the most common chronic diseases include cancer, cardiovascular diseases (CVD) such as ischaemic heart disease and stroke, injuries, chronic respiratory disease and diabetes (AIHW 2006).

**Figure 2.1 Burden of disease by broad cause group - Australia, 2003**

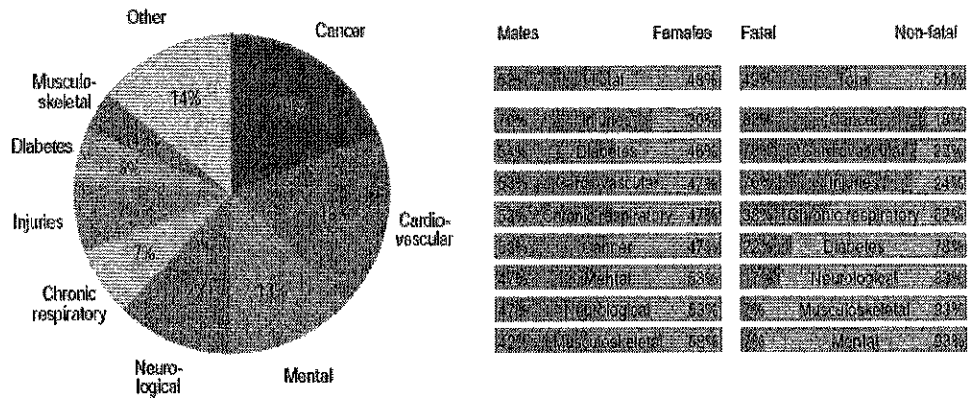
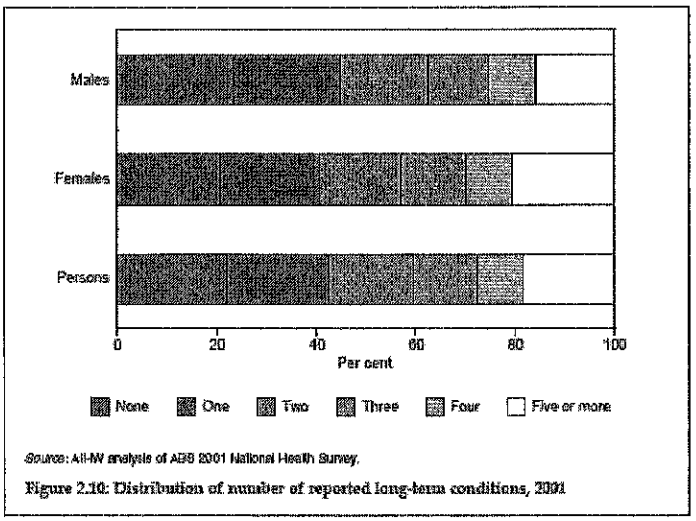



**Figure 3.1: Burden (DALYs) by broad cause group expressed as: (a) proportions of total, (b) proportions by sex, and (c) proportions due to fatal and non-fatal outcomes, Australia, 2003**

Burden of disease research show that these diseases will persist well into the next decades as sources of ill health among Australians and some are expected to increase in prevalence, such as Type 2 diabetes. The burden of chronic disease disproportionately affects: socially and economically disadvantaged population sub-groups, most particularly Indigenous Australians; older Australians, especially the frail aged; and people with mental illness and physical and intellectual disabilities.

Co-morbidity is common, and of increasing significance in Australian as the population ages (**Figure 2.2**).

**Figure 2.2. Distribution of number of reported long term conditions**




Source: AIHW, 2004 p 34

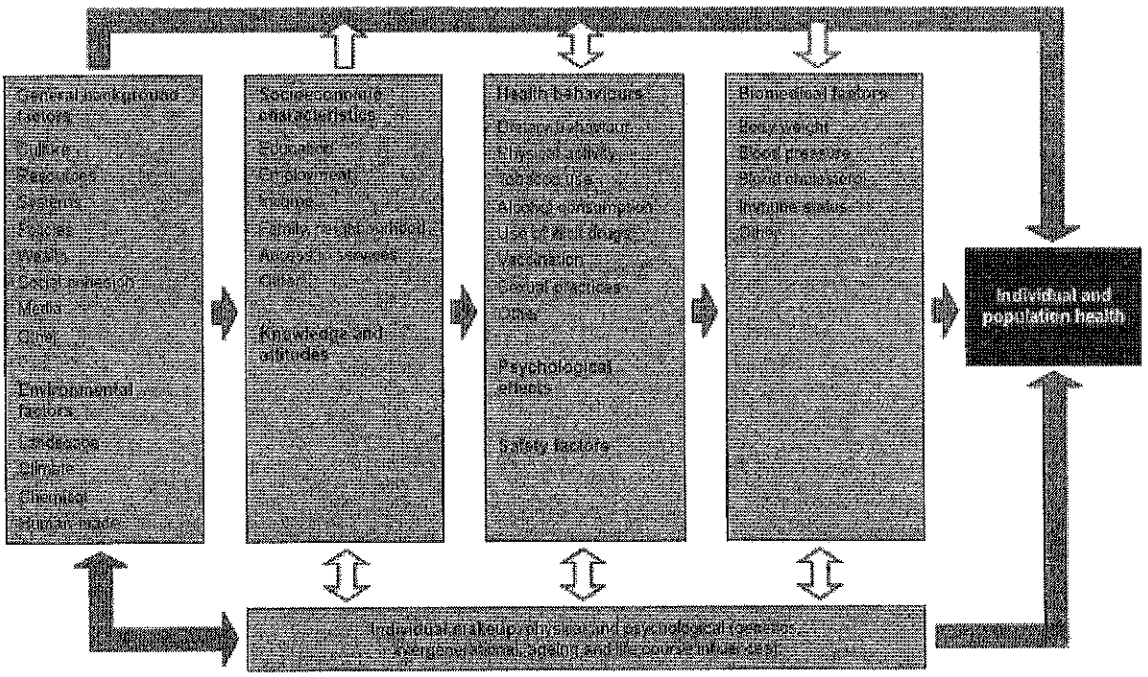
## 2.3 Causes of chronic disease

While both communicable and non-communicable diseases can become chronic in their effects, this report primarily focuses on the **prevention of chronic diseases** associated with key **risk behavioural factors or causes** that epidemiologic studies have demonstrated can be modified, namely:

- Unhealthy nutrition and diet
- Physical inactivity or sedentary lifestyles
- Overweight and obesity
- Tobacco smoking
- Harmful use of alcohol.

However, it is very important to consider the more upstream determinants of health or what have been called, the determinants of health, or more recently, the 'causes of the causes', as these are both directly and indirectly linked to the behavioural risk factors already identified. These are summarised in **Figure 2.3**. What also must be taken into consideration are those more upstream influences, including socioeconomic disadvantage, environmental and neighbourhood features, which have an independent and more direct impact on health and well-being. This must be taken into consideration in relation to the design and development of prevention programs directed at those population subgroups whose health outcomes are currently poorer than for the rest of the population.

**Figure 2.3 A conceptual framework of the determinants of health**



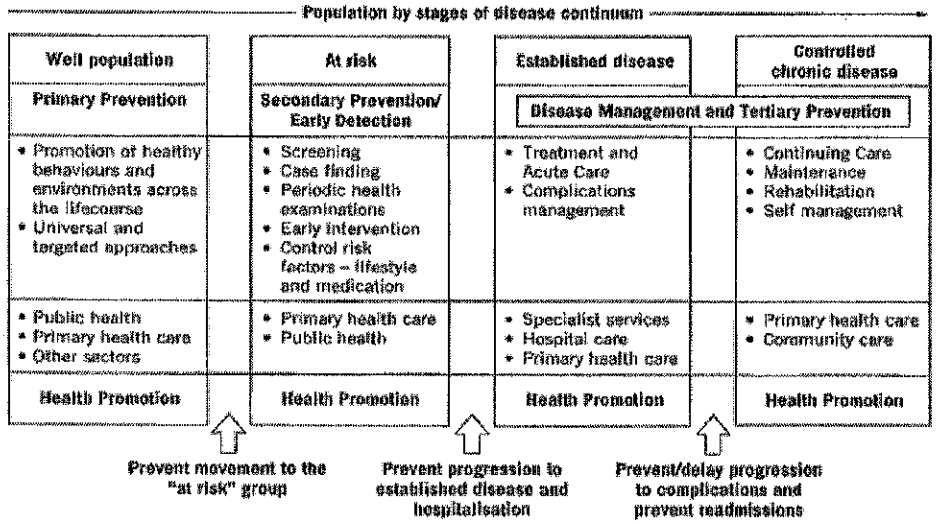

Source: AIHW (2006) p 143

Research is accumulating that demonstrates complex interplay among these influences from early life and onwards throughout the whole life-course. It is precisely these kinds of complex interactions between socio-environmental, behavioural and biological processes from early life that are contributing to the development of Type 2 diabetes and heart disease at a much younger age than was the case even half a generation ago.

## 2.4 Prevention of chronic disease in populations

Prevention has been defined as an 'action to reduce or eliminate or reduce the onset, causes, complications or recurrence of disease' (AIHW, 2006). Prevention approaches should focus on both the factors that influence the development or progression of chronic disease in the whole population, as well as, the population groups who are at highest risk. Primary prevention is typically directed towards preventing the initial occurrence of a disease in a population. Secondary prevention strategies focus on early detection and appropriate interventions; and tertiary prevention is generally directed at reducing the occurrence of relapse and maximising quality of life and wellbeing in those who already have a chronic disease (WHO, 1998). The concept of a continuum for preventing and managing chronic disease is helpful in defining different population subgroups in terms of those (1) who are well and without disease (primary prevention) (2) those who are at risk of, or in the early stages of the disease process (secondary prevention) and (3) people currently living with chronic disease (tertiary prevention) (**Figure 2.4**). This conceptualisation can also be useful in designing different levels and types of interventions for the whole of the population and/or specific populations subgroups.

**Figure 2.4. Chronic Disease Prevention and Management Continuum**




(National Public Health Partnership (2001) *Preventing chronic disease: A strategic framework—Background paper*, p.6)

Source: National Public Health Partnership (2001)

The current Australian Better Health Initiative[2] draws on this approach and aims to promote good health, disease prevention and early intervention across a continuum of population groups in order to reduce the burden of chronic disease. The five priority strategies are (the first three of which most pertinent to this review):

1. **Promoting healthy lifestyles**
2. **Supporting early detection of risk factors and chronic disease**
3. **Supporting lifestyle and risk factor modification**
4. Encouraging active patient self management of chronic conditions
5. Improving the communication and coordination between care services

## 2.5 Building sustainable systems and infrastructure for prevention

In addition to considering the strategies and programs that have been developed internationally to prevent chronic disease and promote well being, this report focuses on the systems that some other countries have used to underpin the organised effort to change patterns of disease burden in the population. This includes the issues related to system governance, policies and the infrastructure and resources required to develop, implement and evaluate effective strategies and programs to the population as a whole, as well as "closing the gap" for those population subgroups who are currently most disadvantaged.

[2] ABHI was announced by the Council of Australian Governments (COAG) on 10 February 2006 as a part of the Better Health for All Australians package and linked to the National Reform Agenda (COAG 2006)

# SECTION 3. PROJECT METHODOLOGY

A pragmatic methodology was adopted for this project so that useful policy-relevant information could be generated within a very limited time frame. This is outlined below.

## 3.1 Refine the scope of the brief

*Analysis of structural dimensions underpinning strategies and programs*

The Project Team expanded its review to consider issues related to the system governance, policies and the infrastructure and resources because of their significance in enabling primary prevention of chronic disease prevention to be prioritised, organised and implemented.

*Focus of strategies and programs under review*

The review focused on:

- Prevention strategies and programs aimed at shifting the entire distribution of risks in populations and key sub-groups.
- Prevention strategies and programs aimed at reducing the prevalence of a small number of key, behavioural risk factors, particularly, unhealthy diets, inadequate physical activity and obesity.

Prevention strategies and programs aimed at reducing tobacco use and alcohol-related harm were given less attention, due to time constraints and the role of two other teams commissioned to look at these areas.

*Countries under review*

The Project Team selected five OECD countries to review for this project; however, we have also referred to initiatives from some other countries, such as Thailand, where they were considered pertinent and relevant to the Australian situation. Country selection was based on the following criteria:

- There was easily accessible information and this was primarily available in English.
- Likelihood of adaptability of strategies and programs to Australia, based on:
    - Past experience of the uptake of policy ideas in Australia
    - Preventive health expenditures
    - Population health and risk profiles
    - High income (World Bank GNI per capita – US$ 9206 or more)

The countries selected for consideration in the review were:

| | | | | |
|---|---|---|---|---|
| Canada | England | USA | New Zealand | Finland |

## 3.2 Conceptual framework for understanding determinants of chronic disease

The conceptual frameworks already identified in **Section 2** were used to guide data collection. As requested by the National Preventive Health Taskforce (NPHT), the review concentrated primarily on specific risk factors for chronic disease – unhealthy eating, physical inactivity and obesity – with secondary reference being given to tobacco use and harmful use of alcohol.

### 3.3 Data and information collection strategy for each country

| | |
|---|---|
| Identify data sources and undertake desk review | Literature search<br>- Published peer-reviewed literature<br>- Systematic reviews<br>- Meta-reviews |
| | Grey literature<br>- Government reports<br>- Other reports and reviews |
| | Websites of international organisations, governments and lead organisations (such as World Bank, WHO, organisations with a focus on key risk factors or chronic diseases known to be supporting action on chronic diseases) |
| Seek advice through personal contacts with colleagues working in international organisations | WHO (HQ, EURO)<br>Public Health Agency of Canada<br>Ministry of Health/New Zealand |

### 3.4 Analyse data, prepare synthesis and identify lessons for Australia

Information on strategies and programs were drawn from government reports and other documentation and imported into data tables. Templates for the data tables were formulated from the list of areas set out as the focus for this review in the Statement of Requirement. Emerging directions internationally were identified by examining the data and findings of international reviews.

### 3.5 Limitations of the review

This review was limited by a number of factors:

- The timeline for the review was very short (three weeks). This imposed major limitations on the ability of the Project Team to comprehensively identify all national level strategies and programs and to analyse their development, system underpinnings and features. As a consequence, the report provides a select overview of strategies, programs and systems from five countries. Additionally, it has not been possible to provide comprehensive details of programs at a local or regional level of the five countries reviewed.
- Access to some data was limited, in particular, strategy and program data on human resources, financing and budgets, and evaluation of implementation and outcomes.
- The Project team did not have sufficient time to validate the data and findings with key informants.

# SECTION 4. RESULTS OF THE RAPID SIX-COUNTRY REVIEW

## 4.1 Introduction

This chapter provides a summary of the data and information collected from the selected countries. The purpose of this initial stocktake is to identify the key common elements and differences in approach among strategies and programs aimed at preventing chronic diseases, promoting health and the systems underpinning them, internationally and in five OECD countries. A description is provided of:

- International (pan-regional) policies and strategies that may influence national policy and program development;
- National systems that support chronic disease prevention (covering governance, policy, infrastructure and resources); and
- Specific national integrated chronic disease prevention strategies and programs.

## 4.2 Overview of policies, strategies and programs operating at a global or regional level

Policies, strategies and programs formulated by United Nations bodies such as WHO and international organisations such as the European Commission have had an important influence over time on the directions and approaches to prevention and health promotion by member countries (also see **Appendix 2**). Such regional or global-level strategies can provide focus, legitimacy, evidence and targets for action, prompts for social mobilisation and broad guidelines and models. Except for the WHO Framework Convention for Tobacco Control (FCTC), the influence of such frameworks is hard to discern and can be quite indirect.

More specifically, in relation to chronic disease prevention, WHO has played an important role in developing and promulgating a range of important policies, strategies and programs over the past 10 years (**Table 4.1**). A number of these are regularly cited in country program documentation as providing an important context for and legitimacy to the development, intensification or realignment of strategies and plans in specific countries. Other than the FCTC, the 2000 *WHO Global Strategy for the Prevention and Control of Non-Communicable Diseases* has probably been most influential. The World Health Assembly has only recently endorsed the action plan associated with the Strategy (WHO/WHA 2008) and recommends a focus on inequalities (gender, ethnic, socio-economic) and the needs of people with disabilities in national frameworks for prevention and control . The framework includes a multisectoral approach that integrates the prevention of chronic diseases into national health plans and urges the reorientation and strengthening of country health systems to meet the needs of people with chronic diseases (WHO, 2008).

This strategy and plan, as well as the 2004 *WHO Global Strategy on Diet, Physical Activity and Health*, reflect the increasing shift towards a more integrated and coordinated approach to chronic disease prevention in many different countries. This approach recognises that the major chronic diseases shared a cluster of risk factors, so that there should be more explicit and programmatic emphasis on the behavioural risk factors and their determinants, rather than focusing on specific diseases per se.

**Table 4.1: Major policies, strategies and programs**

| Chronic disease / Risk factor | Year | Policy, Strategy or Program |
|---|---|---|
| Chronic disease / risk factors<br><br>(Integrated approach) | Adopted - May 2000<br><br>Adopted - May 2008 | **WHO Global Strategy for the Prevention and Control of NCDs**<br>www.who.int/chp/about/integrated_cd/en/<br><br>(Draft) **Action Plan for Prevention and Control of Noncommunicable Diseases**<br>http://www.who.int/gb/ebwha/pdf_files/A61/A61_8-en.pdf |
| | Endorsed - Sept 2006 | Gaining health. The European Strategy for the Prevention and Control of Noncommunicable Diseases<br>www.euro.who.int/Document/RC56/edoc08.pdf |
| | Approved - Sept 2006 | PAHO Regional Strategy on an Integrated Approach to the Prevention and Control of Chronic Diseases Including Diet, Physical Activity, and Health<br>www.paho.org/english/gov/cd/CD47-17rv-e.pdf |
| Diet and Physical activity | Endorsed - May 2004 | **WHO Global Strategy on Diet, Physical Activity and Health**<br>www.who.int/dietphysicalactivity/strategy/eb11344/strategy_english_web.pdf |
| | 2005 | European Union's 2005 Platform on Diet, Physical Activity and Health<br>http://ec.europa.eu/health/ph_determinants/life_style/nutrition/platform/platform_en.htm |
| Diet | Endorsed - Sept 2000 | First European Food and Nutrition Action Plan<br>http://www.euro.who.int/nutrition/actionplan/20070620_3 |
| Physical activity | Launched - May 2007 | Steps to health: A European Framework to Promote Physical Activity for Health<br>http://www.euro.who.int/Document/E90191.pdf |
| Obesity | Adopted - Nov 2006 | European Charter on Counteracting Obesity<br>http://www.euro.who.int/obesity/conference2006 |
| Tobacco | Adopted - May 2003 (By all 192 Member States) | **WHO Framework Convention on Tobacco Control**<br>http://www.who.int/tobacco/framework/en/ |
| | Approved - Sept 2002 | European Strategy for Tobacco Control<br>\http://www.euro.who.int/tobaccofree/Policy/20030826_3 |
| Harmful use of Alcohol | Endorsed -Sept 2005 | Framework for alcohol policy in the WHO European Region<br>http://www.euro.who.int/document/e88335.pdf |
| Diabetes | Launched – Sept 2003 | WHO/International Diabetes Federation Diabetes Action Now Program<br>http://www.idf.org/home/index.cfm?unode=742485e7-0b0f-49df-84d6-a84deb748fef |
| Social determinants | Launched – May 2008 (interim statement in 2007) | WHO/Commission on Social Determinants of Health<br>http://www.who.int/social_determinants/en/ |

## 4.3 Overview of national systems supporting chronic disease prevention strategies and programs

Key elements of the systems of governance underpinning chronic disease prevention were identified in the six countries (see **Part B**).

### *Coordinated national leadership and direction*

All countries had a national focal point for leadership on chronic disease prevention, in a Cabinet Ministry, unit/department, and /or a national body of some form (e.g. an agency or

institute) (**Table 4.2**) This provided leadership over the establishment and implementation of health promotion/chronic disease prevention framework/s and all appeared to use partnerships as a key means for developing and implementing strategies and programs. Accountability for program delivery varied between Cabinet and Ministerial levels. The most common elements of the leadership function/role included:

- Coordination and strategic policy development
- Knowledge development and exchange
- Oversight and support for national campaigns and other initiatives at a population and/or regional level
- Monitoring and evaluation of campaign program implementation and progress
- Surveillance and monitoring of outcomes
- Communications and public information.

In England, there is a high-level cross-government committee in place (Sub-Committee on Health and Wellbeing) with responsibilities to "consider policy on health and wellbeing, including the prevention of ill-health, the promotion of healthy and active lifestyles and the reduction of health inequalities; and report as necessary to the Ministerial Committee on Domestic Affairs." This signals the increasing strategic, social and economic importance of prevention and serves to establish ongoing cross-portfolio engagement in the prevention agenda at a national level.

**Table 4.2. National focal points with responsibilities for chronic diseases prevention**

| FOCAL POINT | CANADA | ENGLAND | NEW ZEALAND | USA | THAILAND | FINLAND |
|---|---|---|---|---|---|---|
| **Cabinet/ equivalent** | | Sub-Committee on Health and Wellbeing (S-C of Ministerial Committee on Domestic Affairs /www.cabinetoffice.gov.uk/secretariats/committees/dahw.aspx | | | | |
| **Ministry of Health** | HealthCanada www.hc-sc.gc.ca/index-eng.php | Department of Health www.dh.gov.uk/en/index.htm | Ministry of Health www.moh.govt.nz/moh.nsf<br><br>National Advisory Committee on Health and Disability – Public Health Advisory Committee http://www.phac-aspc.gc.ca/index-eng.php | Department of Health and Human Services www.hhs.gov | Ministry of Public Health www.moph.go.th | Ministry of Social Affairs and Health www.stm.fi/Resource.phx/eng/index.htx |
| **Unit or department in MOH** | | Public Health – **Health Improvement Unit** www.dh.gov.uk/en/Publichealth/Healthimprovement/index.htm | **Public Health Directorate** www.moh.govt.nz/publichealth | Office of Disease Prevention and Health Promotion www.odphp.osophs.dhhs.gov | Department for Disease Control www.thaincd.ddc.moph.go.th/link.html | |
| **National Agency or Institute** | **Public Health Agency of Canada** www.phac-aspc.gc.ca/index-eng.php | National Institute for Health Research – Public Health Research programme | | Centers for Disease Control – Prevention of Chronic Disease www.cdc.gov/ | **ThaiHealth Promotion Foundation** www.thaihealth.or.th/en/ | **National Public Health Institute** ww.ktl.fi/portal/english/ |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Centre for Chronic Disease Prevention and Control www.phac-aspc.gc.ca/ccdpc-cpcmc/index.html and Canadian Health Services Research Foundation www.chsrf.ca/ | (NEW) www.nihr.ac.uk/ | | | | |

### *National health policy that incorporates prevention and health promotion*

In all countries, there is an overarching policy that provides a context for the prevention of chronic disease and health promotion. Population health targets are identified and used in most countries (e.g. England, New Zealand, USA, Finland) to give direction to and support accountability for national, organised efforts to promote health and prevent disease. Primary prevention and health promotion are major planks in all of these countries' health policies, although there are also differences between countries. For example, in broad terms, the US approach favours prevention efforts with a behavioural focus that locate responsibilities with individuals, while the UK approach has a stronger orientation towards population-level initiatives.

**Table 4.3. Policy context for chronic disease prevention**

| | CANADA | ENGLAND | NEW ZEALAND | USA | THAILAND | FINLAND |
|---|---|---|---|---|---|---|
| **Overarching Health Policy** | | Health Challenge England: Next steps for Choosing Health www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4139514 | Health Strategy www.moh.govt.nz/publications/nzhs | Healthy People 2010 www.healthypeople.gov/ | Healthy Thailand www.eng.moph.go.th | Health 2015 www.terveys2015.fi/esite_eng.pdf |
| **National population health targets** | Under development | Yes | Yes | Yes (2020 targets under development) | ? | Yes |
| **Integrated national policy** | Pan-Canadian Healthy Living Strategy: Community Action www.phac-aspc.gc.ca/hl-vs-strat/index.html | Healthy Weight, Healthy Lives www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_082378 | Healthy Eating - Healthy Action www.moh.govt.nz/healthyeatinghealthyaction | HealthierUS (President's Initiative) www.healthierus.gov/ | Health Risk Factors Contro | Development Programme for the Prevention and Care of Diabetes in Finland DEHKO http://www.diabetes.fi/sivu.php?artikkeli_id=831 |

### *Frameworks for national strategies and programs*

All countries have some form of overarching and integrated healthy public policy, programs and plans that address multiple risk factors associated with chronic disease. An indication of the range of policies and strategies across the risk factors/diseases in the selected countries appear in **Appendix 3**.

Within the overarching policy for population health are nested national integrated policies/frameworks related to chronic disease see **Table 4.3**. Common elements of these frameworks include:

- A population health or whole-of-society approach that also included some identification of high-risk population sub-groups.
- A life-course approach that also highlight the needs of different groups across the lifecourse, with an increasing focus on the needs of children during the 'early years'.
- A special focus on health disparities, socially disadvantaged population subgroups and the need to 'close the health gap' between different groups.
- An emphasis not only on the 'classical' risk factors but also on the more upstream determinants of health and ill-health or what have been called the social determinants of health or the 'causes of the causes'.
- An emphasis on the need for research and evidence to underpin and inform policy and practice.

The overarching national policies and the specific risk factor plans are all horizontally integrated with vertically integrated programs. **Horizontal** refers to integration across organisations, or sectors, designed to increase capacity, maximise efforts and minimise duplication. **Vertical** refers to a focus on one or more levels of influence which typically include individuals, organisations/settings and different kinds of socioeconomic, physical and other kinds of environments. Most countries have elements of pre-existing national policies and plans relevant to specific risk factors - such as tobacco control, healthy eating and physical activity – which have been embedded into more recently developed integrated approaches to chronic disease prevention and health promotion.

**Table 4.4. Themes across major national integrated approaches to primary prevention of chronic diseases**

| Theme | CANADA | ENGLAND | NEW ZEALAND | USA | THAILAND | FINLAND |
|---|---|---|---|---|---|---|
| **Integrated national policy** | Pan-Canadian Healthy Living Strategy: Community Action | Healthy Weight, Healthy Lives | Healthy Eating - Healthy Action | HealthierUS | Health Risk Factors Control | Development Programme for the Prevention and Care of Diabetes in Finland (DEHKO) |
| **Diet** | X | X | X | X | X | X |
| **Physical activity** | X | X | X | X | X | X |
| **Obesity** | Healthy weight | Healthy weight | Healthy weight | Healthy weight | Healthy weight | Healthy weight |
| **Tobacco** | X | | X | X | | X |
| **Alcohol** | | | X | X | | X |
| **Other themes** | Cancer Diabetes Development of supportive environments | Breastfeeding, Workplaces | Breastfeeding Development of supportive environments | Heart Disease/CVD Diabetes | | Diabetes |

The major national programs reviewed primarily addressed the more proximal causes of key risk factors contributing to common chronic diseases, that is, unhealthy diets, inadequate physical activity, and obesity. While the 'causes of the causes' were addressed more variably, all national strategies and programs at least acknowledged the importance and necessity of tackling the more upstream influences that include underlying population changes, socio-economic conditions, and the related impacts of globalisation. [Refer back to **Figure 2.2**].

### *National acts, laws and legislation for chronic disease prevention*

Legislation, regulations and taxation are increasingly being utilized alongside other approaches. With respect to the countries considered in this review:

- All have food and beverage legislation related to chronic disease prevention (and control), but they vary in nature. They include the use of explicit legislation and/or regulations with respect to food composition (e.g. type of fats permissible in foods), food taxes, food and beverage labelling and advertising/marketing (e.g. to children).
- Canada has a taxation incentive for physical activity. Mello, Studdert, and Brennan (2006) reviewed US State Legislative initiatives to combat obesity in the community between 1998–2005, and identified actions including environmental changes to local areas, community and workplace fitness campaigns and other public education programs. Initiatives involving the introduction of taxes and legislation were much less commonly employed than more individually-focused behaviour change programs. (**Appendix 4**) Legislation and incentives for physical activity in the other countries was not further explored at this stage, but there is increasing attention to the role of public health law in shaping health, for example through the work of Gostin in the US.
- All are signatories to the WHO Framework Convention on Tobacco Control (FCTC) and accordingly, have legislation for tobacco control including health warnings on tobacco products, smoke free environments, bans on smoking advertising and tobacco sponsorship, and taxation and pricing.
- All countries reviewed have legislation for reducing the harmful use of alcohol. They vary in nature and include taxes on products, restrictions on sales to minors and licensing of premises.

### *Financing and funding for prevention*

Financing for primary prevention of chronic disease tends to come from government sources. In the US, philanthropic, private and other kinds of organisations have a strong history supporting some program areas. Work is underway internationally to examine the financing of prevention and health promotion, and innovative ways to establish sustainable, adequate and ethical financing.

The national ministry of health in each country, together with national institutes or agencies, play key roles in funding strategies and programs. Information on the actual investment levels in programs was not easily ascertained within the timeframe of this review; however, there were certainly new investments being made in relation to research and evaluation in order to support further evidence development and the implementation of strategies. While reviews have stressed the importance of governments giving high priority to financing prevention and health promotion, the level of investment from the health budget in primary prevention is still quite low in most countries, accounting for up to only 3-4 percent of health expenditure.

To summarize the findings from this review:

- Thailand, through the ThaiHealth Promotion Foundation, is the only country considered in this review with a dedicated funding source (2% surcharge on alcohol and tobacco tax) and budget for the implementation of a national strategy for the primary prevention of chronic disease.
- For the specific risk factor components listed below in **Table 4.4**, Canada, England, New Zealand and Thailand have specific, dedicated budgets for addressing tobacco use, nutrition/diet, physical activity and alcohol consumption.
- Non-specific sources of financing appear to be the major source of funds in countries rather than more stable routes of financing such as taxation.

**Table 4.4- Budget and financing for chronic disease risk factor programs**

| | CANADA | ENGLAND | NEW ZEALAND | USA | THAILAND | FINLAND |
|---|---|---|---|---|---|---|
| Budget (2006-07) | Disease prevention = 331.8 m CAD Health promotion = 186.5 m CAD | Public Health (healthy individuals) = 1,069 million GDP (2004/05) 1.83% of NHS budget | Not obtained | | 55 m USD for ThaiHealth | Health 2015 = FIM 2.5 million from national budget |
| Financing | Consolidated revenue and Population Health Fund for community-based activities The Healthy Living Fund | National Lottery funding and consolidated revenue | Not obtained | Mix of federal grants, NGOs, sector, private sector | 2% surcharge on tobacco and alcohol tax | National budget KTL = 61% from National budget, 8.6% chargeable services, 6.8% Academy of Finland, 6.2% EU financing, 2.7% industry and commerce, 6.2% Co-financed research financing, ministries, 6.5% other DEHKO financed by Finland's Slot Machine Association (RAY), Finnish Diabetes Association and diabetes-related companies |

## *National health surveillance and reporting system*

All countries have recognised the need to establish surveillance systems that monitor:

- Macro-level trends and policies that impact on healthy eating and physical activity (such as urban design, transport, food product content, advertising, agricultural policies)
- Individual self-report data on physical activity and dietary intake (plus possible inclusions of car ownership, driving times, frequency of walking and cycling to work school; home food preparation)
- Measured biomedical risk factors (such as weight, blood pressure, cholesterol).

Furthermore, the review identified that:

- All five countries have established health information and monitoring system covering chronic disease and major risk factors, and all have included chronic diseases in their annual health reporting system. The performance of these systems was not analysed for this review.
- With respect to data included in the national annual health report system, all have a broad coverage across risk factors, cause-specific mortality, and mortality. [3]
- National policies acknowledge and are premised upon continuous, long-term population-level surveillance for key variables at the individual and environmental levels.

[3] Time limitations prevented specification of the regularity and mechanism of these (eg. Annual - nationwide - measured/ self-reported/ risk factor prevalence surveys)

### *Research, Evaluation and Knowledge Management*

The national systems for public health in England, Canada (Wolbeck et al 2006), USA and Finland have institutions that lead or support the ongoing development of knowledge and the evidence-base for interventions. Each of these institutions plays an important part in funding, creating and/or managing the links necessary for the production and use of knowledge and evidence that supports and informs effective policy and practice for chronic disease prevention and health promotion.

Institutions include Centres for Disease Control (CDC) in the US, Canadian Health Service Research Foundation (CHSRF) and Centre for Chronic Disease Prevention and Control (CCDPC) in Canada and National Institute for Health and Clinical Evidence (NICE) and National Institute for Public Health Research (NIHR) in England. They play critical roles in a range of essential activities for the production and utilisation of knowledge, including the funding of programs and supporting their evaluation. They are also supported by a number of other agencies and/or government-funded programs (**Table 4.5**).

**Table 4.5. Institutions with major responsibilities for research, evaluation and knowledge management**

| | CANADA | ENGLAND | NEW ZEALAND | USA | THAILAND | FINLAND |
|---|---|---|---|---|---|---|
| Primary Institution | Canadian Health Services Research Foundation | National Institute for Health and Clinical Excellence (NICE)<br><br>National Institute for Health Research – Public Health Research Program (NIHR) | Ministry of Health | Centres for Disease Control (CDC) | Units within Ministry of Health | National Public Health Institute (KTL) |
| Partner Institutions | Health Evidence Canada<br><br>Effective Public Health Practice Project<br><br>Chronic Diseases Knowledge Exchange program<br><br>Canadian Best Practices Portal<br><br>National Collaborating Centres for Public Health | Centre for Reviews and Dissemination, York<br><br>Evidence for Policy and Practice Information and Coordinating Centre<br><br>Public Health Observatories<br><br>Obesity Observatory | Health research Council of New Zealand | Prevention Research Centers<br><br>Community Guide to Preventive Services, National Center for Health Marketing (NCHM) | Centre for Alcohol Studies<br><br>The Tobacco Control Research and Knowledge Management Centre | |

Monitoring and evaluation programs have been established in England, Canada, USA and Finland, with associated institutions to assist in understanding the progress and the impact of multi-faceted, multi-level, multi-sector, and population-wide strategies/programs. A new Obesity Observatory was established in England in December 2007, to provide an authoritative source of data and evidence on obesity, overweight and their social, economic and environmental determinants and evaluating pilot programs/projects and demonstration sites.

## 4.4 Overview of strategies and programs in selected countries

### *Policy framework*

In all of the countries reviewed there is a mix of single risk factor /disease and integrated programs addressing risk factors associated with the prevention of chronic disease and the promotion of health and wellbeing.

The results reported on in this section are limited to integrated risk factor programs in the areas of physical activity, healthy eating and obesity. The list of single risk factor and disease programs in each country can be referred to in **Appendix 3** (at this stage this is an indicative overview). Programs associated with tobacco control and harmful use of alcohol are covered in separate reports commissioned by the Department of Health and Ageing and have not been detailed here.

The articulation between the more recently implemented integrated programs and older, but continuing, single risk factor/disease programs was not examined. With the exception of USA, the countries reviewed do not include chronic disease in their strategy title.

As stated earlier in this section the integrated programs typically focus on the proximal causes of key risk factors contributing to common chronic diseases while acknowledging the need to tackle the broad societal (distal) factors underlying chronic disease patterns. The upward articulation with macro-social and economic policies was not generally apparent in the policy documents and websites that were examined.

**Table 4.6: Specific national integrated programs responding to unhealthy diet, physical inactivity and obesity**

| CANADA | ENGLAND | NEW ZEALAND | USA | THAILAND (ThaiHealth only) | FINLAND |
|---|---|---|---|---|---|
| Integrated Pan Canadian Living Strategy | Healthy Weight Healthy Lives | Healthy Eating – Healthy Action | HealthierUS | Health Risk Factors Control Plan Physical Exercise and Sports for Health Plan | Development Programme for the Prevention and Care of Diabetes in Finland DEHKO |
| 2007 - 2011 | 2008 -2011 | 2004 - 2010 | Ongoing | 2007 -2009 | 2000-2010 |
| Goal set for: 2015 | Goal set for: 2020 | Goal set for: 2010 | Goal set for: 2010 | Goal set for: Not stated | Goal set for: 2010 |

All of the integrated programs detailed in **Table 4.6,** are nested in national health policies/frameworks related to promoting health and preventing chronic disease, the features of which have already been described.

The programs have elements reflecting both horizontal and vertical integration. Many of the more integrated programs implement action across a range of sectors and settings, including: schools; workplaces; transport; private sector; and local geographic institutions and areas.

### *Partnerships*

A myriad of institutional links and partnerships exist in each country to facilitate strategies and programs. They take a number of forms and arise to meet various needs. The utilisation of partnerships across government, non-government organisations, community, and private sector organisations is a feature of all programs and configured according to each country context.

Given the complexity of the integrated approaches, England and Canada have instituted mechanisms to achieve horizontal integration either pre- or post strategy implementation (**Box 1**).

**BOX 1 HORIZONTAL INTEGRATION**

**HEALTHY WEIGHT, HEALTHY LIVES, ENGLAND**
The Cabinet Sub-Committee on Health and Wellbeing has a remit to tackle obesity and promote healthy weight, and the membership includes all of the lead departments. A Cabinet Committee on Families, Children and Young People also monitors progress with respect to child weight problems. Reporting to the new committee is a new cross-Government obesity unit. This is based in the Department of Health but led jointly by the Department of Health and the Department for Children Schools and Families, and includes staff and resources from across Government.

**Integrated Pan Canadian Healthy Living Strategy, Canada**
To support the intersectoral development of the Strategy, the Coordinating Committee of the Intersectoral Healthy Living Network was established in September 2004, led by three chairs representing federal, provincial/territorial governments, and the non-government sector. Comprising representatives of regional networks, governments, the private and voluntary sectors, and national Aboriginal organizations, the Coordinating Committee acts as an engine to move the Pan-Canadian Healthy Living agenda forward.

### *Timeframe*

As shown in **Table 4.6** above, the timeframe for the implementation of integrated strategies was generally 3-4 years (possibly associated with electoral cycles) and the time for achieving goals was set for longer periods (around 10 years).

### *Leadership*

The implementation of the integrated program in each country is supported by a lead agency/institution, situated centrally in national government or other authority that provides overall direction, coordination and support (such as related capacity building and workforce development).

### *Program design and implementation strategy*

Typically, the integrated programs are multi-faceted and incorporate:

- multi-level interventions– national, sub-national and local level initiatives;
- multi-sector interventions – across government portfolios and the community and private sectors; and
- a combination of strategies that span legislation/regulation, social marketing, environmental changes, community development and capacity building, as well as, programs and services supporting and enabling individual change approaches.

### *Addressing socioeconomic inequalities and disadvantage*

All of the integrated programs incorporate a goal and associated sets of actions for reducing health disparities. The most common approach involves targeting "at risk" groups (such as native populations or particular ethnic groups) and addressing the needs of children and families.

The links between the integrated health-oriented programs and other government policies on social inclusion/exclusion or equity are not clear at this stage of the review. More insights about ways forward in this area are likely to be set out in the upcoming final report of the WHO Commission on the Social Determinants of Health (WHO 2008).

In the *Healthy Weight, Healthy Lives* strategy (England), an equality impact assessment is being used to identify the possible impact of the strategy on equality, and the policies it sets out, on people according to their age, disability, race, religion and beliefs, gender and sexual orientation. It aims to assess whether the strategy is likely to have adverse effects on any of these groups. In New Zealand, the Reducing Inequalities framework guides the design and implementation of the *Healthy Eating-Healthy Action* program. This means that the program must take full account of four key concerns:

- Structural – tackling the root causes of health inequalities, that is, the social, economic, cultural and historical factors that fundamentally determine health.
- Intermediary pathways – targeting material, psychosocial and behavioural factors that mediate the impact of structural factors on health.
- Health and disability services – undertaking specific actions within health and disability services.
- Impact – minimising the impact of disability and illness on socioeconomic position.

### *Monitoring and evaluation of implementation and outcomes*

All of the integrated programs stress the need for rigorous and ongoing evaluation and monitoring. Plans note goals and/or actions for the development/implementation of evaluation and monitoring systems to support continuous program improvement.

The OECD countries reviewed all had national agencies/institutions for supporting the evaluation of interventions. England, for example, has introduced an impact assessment process with it's *Healthy Weight, Healthy Living* strategy which monitors the impacts of its policies upon the public, private and tertiary sectors. This acknowledges the multi-sectoral nature of the interventions. In addition the impact on equality, including race, disability and gender is monitored through an Equality Impact Assessment. Research has also been bolstered through the commissioning of an obesity observatory that operates within a system of geographically based public health observatories.

# SECTION 5. LESSONS FOR AUSTRALIA

In this section of the report, we identify a number of findings and lessons arising from this rapid stocktake (see Part B) which require further consideration and analysis with respect to building and enabling sustainable systems for prevention in Australia in the future. Selective examples – called EXHIBITS - that were identified during the review are used to illustrate some of these potential lessons for Australia. These findings and lessons are discussed in two sub-sections: (1) systems underpinning the strategies and programs and (2) strategies and programs for primary prevention and health promotion.

## 5.1 The systems underpinning strategies and programs

***Lesson 1. Establishment of a high-level government or equivalent committee with appropriate inter-sectoral partners is necessary to champion primary prevention of chronic disease and ensure high-level political commitment and accountability.***

The highest status committee is a Cabinet Committee (and equivalents) that had cross-portfolio representation. In New Zealand, a recent review of the Healthy Eating-Healthy Action program has recommended that a Ministerial Committee, chaired by the Minister of Health, be established to provide high-level, whole-of-government leadership that focuses on improving obesogenic environments. The Ministerial Committee will also work alongside a steering group to set agreed targets. The group will include non-government organisations, academics, Maori and Pacific representatives and the food and advertising industries.

In England, a Sub-Committee on Health and Wellbeing has been established.

**EXHIBIT - SUB-COMMITTEE ON HEALTH AND WELLBEING**
**Terms of Reference:**
"To consider policy on health and wellbeing, including the prevention of ill-health, the promotion of healthy and active lifestyles and the reduction of health inequalities; and report as necessary to the Ministerial Committee on Domestic Affairs."
**Membership:**
Minister for the Cabinet Office, and Chancellor of the Duchy of Lancaster (Chair)
Secretaries of State for: the Home Department; Health; Environment, Food and Rural Affairs; Business, Enterprise and Regulatory Reform; Work and Pensions; and Secretary of State for Wales; Transport; Communities and Local Government; Children, Schools and Families; Innovation, Universities and Skills; Culture, Media and Sport
Chief Secretary to the Treasury
Secretary of State for Innovation, Universities and Skills
Minister of State, Scotland Office
Minister for the Olympics and Minister for London (Paymaster General)
Minister of State, Northern Ireland
Parliamentary Under Secretary of State, Government Equalities Office
Parliamentary Secretary, Cabinet Office (Gillian Merron)
**Obesity**
Remit includes tackling obesity and promoting healthy weight. The Cabinet Committee on Families, Children and Young People monitors progress with respect to child weight problems.
Reporting to the new committee is a new cross-Government obesity unit based in the Department of Health (DOH) but led jointly by the DOH and the Department for Children Schools and Families, and includes staff and resources from across Government. The major responsibilities of the new unit will include: taking forward the commitment outlined in this strategy; producing the annual report; leading across Government in developing further proposals as necessary to fulfil our ambition to reverse the rising tide of obesity and overweight; acting as the focal point for knowledge on healthy weight in Government; managing relationships between Government, industry and other stakeholders. The unit is supported in its responsibilities by: 1. an Expert Panel of academics, building on the Foresight science advisers 2. a Delivery Reference Group composed of experienced representatives from across the delivery chain and across the country.
The Government will assess the impacts, through the Impact Assessment process, including the health impacts, of its policies upon the public, private and third sectors. Additionally the Government will assess the impact on

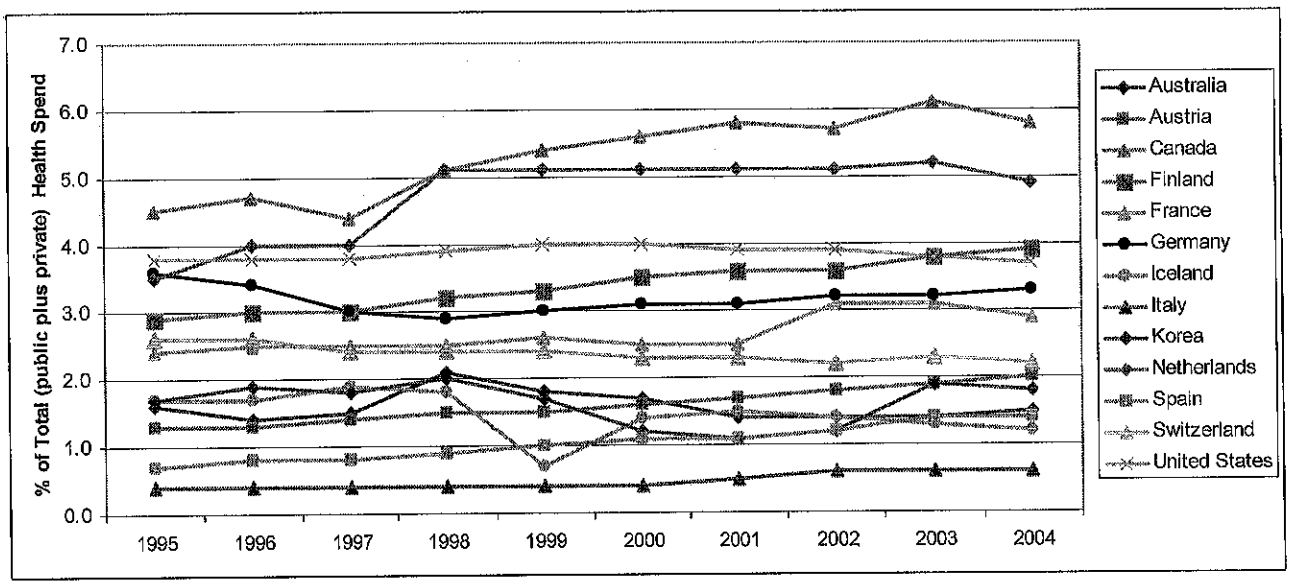
equality, including race, disability and gender and has undertaken an Equality Impact Assessment. Full impact assessments on these policies will be carried out as these policies are taken forward. The new unit will also work to align policies with the forthcoming Cross-Government Global Health Strategy.
The Government aims to support stakeholders in business and the third sector in engaging with each other on how they can meet the challenge of tackling excess weight in the population by building a Coalition for Better Health, which would: reach agreements on joint programmes, disseminate knowledge on what works, and what doesn't; challenge each other to go further.

Swinburn (2008) has outlined the roles of government in relation to obesity prevention, which has implications for the more general role for government in primary prevention of chronic disease. (**Appendix 5**).

***Lesson 2. New approaches to long-term funding for primary prevention of chronic disease need to be developed and recognise the limited approaches of the past and the need for more innovative and sustainable financing models in the future.***

A recent AIHW Report has estimated that Australia's total investment in 'public health' by all Australian health jurisdictions is currently 1.8% and unchanged in almost a decade (AIHW 2008), which is low compared to a (still inadequate) OECD average of about 3 per cent for 'prevention' (OECD 2000). The spending on prevention and health promotion is only a proportion of this 1.8%. OECD trend data on prevention and public health programs for Australia, Canada, Finland and the US appear in **Figure 5.1**.

**Figure 5.1 Trend in percentage of total health expenditure accounted for by prevention and public health programmes in selected OECD countries 1995 to 2004.**




Source: OECD System of Health Accounts, October 2006

Relying on a very small proportion of funding from a national health budget to provide adequate, sustainable financing of a long-term and well organised chronic disease prevention and health promotion program has proven to be insufficient in most countries because of the inherent pressures on such funds from the health care delivery system. It also reflects a narrow understanding of what actions are needed and the roles of a wide range of stakeholders. Some innovative national financing models – such as the one in Thailand – have been developed in recent years (**Appendix 6**). The funding arrangements of the new obesity strategy in England could also be further explored to gain insight into the financing arrangements of a cross-portfolio initiative. This is an area that needs closer scrutiny and analysis. Health England (a national reference group for health and wellbeing) is currently

investigating prevention financing, and has to date engaged an expert advisory group on prevention financing to examine an initial set of questions.

***Lesson 3. Strengthened system components are needed for developing and implementing an effective chronic disease primary prevention strategy and related programs.***

Lack of integration among the jurisdictions and between programs has long been a criticism of the Australian situation and clearly, this will be a challenge for developing and implementing a more nationally coordinated approach to prevention and health promotion in the future (Willcox 2006; AIHPS & VicHealth 2008; Lin et al 2008).

Some of the specific elements that have been introduced internationally to strengthen the effectiveness and accountability of the system supporting chronic disease prevention are population health targets, workforce development and mechanisms to ensure continuous system learning. Elements within systems are being strengthened in different ways across countries. Ideally, new infrastructure and resources enable each system to operate as an **integrated whole**, capable of being adaptive to emerging issues and resilient to stresses on the system such as changes in participation of particular sectors in action. Further analysis is required to examine innovations across countries that are building a more integrated and coordinated system.

***Lesson 4. Establishment of measurable targets for primary prevention and health promotion is critical for long term monitoring and evaluation of implementation and outcomes.***

Most countries have some form of national health targets that also include chronic disease. These need to include not only measurement of the disease conditions and the behavioural risk factors, but also the more upstream determinants and influences on these. Advocates of health targets propose that they will help to direct cross-sectoral efforts involving multiple settings, players and levels, without being prescriptive of how to achieve the targets. In the US, a rolling program of national public health objectives and targets under the Healthy People initiative has existed since 1979. It is based on the notion that setting objectives and monitoring progress can motivate action at different levels. The role of the States is particularly important in that context. The targets have been reviewed for the next chapter of the program – Healthy People 2020 (Blakey et al 2006).

In Sweden's case, public health targets reflect the trend in health policy towards more emphasis on determinants of health and societal interventions (less on individuals). While there is debate about their value in supporting governance with targets (Lager et al 2007) the targets initiative represents a bold move to orient sectors, systems and activities to cooperatively developing the social conditions needed to ensure good health for the whole population. The process of formulating targets successfully raised awareness among policy makers and civil servants of the broad social and economic determinants of health problems such as chronic disease and the role of other sectors, such as transport (preventing road injury) and housing (secure, healthy homes) in contributing to health. An intersectoral committee designed the 11 targets (**Appendix 7**) thus producing agreement at the highest political levels of the intersectoral approach to health. Implementation remains an issue: "A major block is that some ministries do not consistently address health considerations in their policies. Inter-sectoral rhetoric is not the same as inter-sectoral action. …I fear also that

sometimes issues regarding socioeconomic determinants of health are simplified, and their complexity is not recognised. A better link between research and policy is necessary." [4]

***Lesson 5. Establishment of sustainable infrastructure that facilitates the production, dissemination and use of evidence and learning is essential if strategies and programs are to be effective.***

To continue improving the health and wellbeing of the population, reliable and relevant evidence on the most effective ways of protecting people from disease, preventing illness and promoting good health is required. This information can only come from research (including ongoing evaluation of strategies and programs).

Countries examined in this review have recognised the complexity of primary prevention interventions (especially for healthy eating and physical activity) and have, or are, implementing integrated research and surveillance agendas to align efforts nationally to effect change, and to ensure that:

- Policy and program decisions are based on timely, regular and meaningful data.
- There is coordination and integration of investments in research, policy and practice.
- Communities have easy, efficient, timely access to the knowledge they need, in usable form, to inform decisions.
- Researchers are better able to conduct research to address policy and practice.
- The existing research is synthesized and translated for use by population and public health organisations.
- Key intersectoral stakeholders at all levels collaborate in the various phases of the knowledge development and exchange cycle, to create the ability to "learn as we go" – what works, and in what context.
- Research, surveillance and evaluation are integrated with policy and program development.

Mechanisms that allow for ongoing cross-strategy/program learning at national and international levels are needed so that measures adopted to address the same issues in other jurisdictions or different issues in a variety of jurisdictions can be instructive in developing efforts to prevent chronic disease. According to Yach et al (2003) in regard to tobacco:

*The accumulation of experience from many countries means that it is now much clearer what works and what does not. It confirms the wisdom of the early adopters: Be comprehensive; keep the debate alive, interesting, and provocative in the media; incrementally tighten laws as public support and demand for action increases; move to make smoking an unacceptable and antisocial behaviour; and globalise action to counter the global reach and strategies of tobacco companies – particularly their marketing and investment practices.*

While learning is important, McLaren reminds us that uncritical translation of programs from one context to another (such as the North Karelia project in Finland) carries the risk of failure (McLaren 2006).

## 5.2 Strategies and Programs

Clearly, Australia continues to make a very significant contribution internationally to the development, implementation and evaluation of effective strategies and programs for preventing chronic disease and promoting health.

[4] Interview with Commissioner Denny Vagero, Sweden
http://www.who.int/social_determinants/commissioners/interview_vagero/en/index.html

***Lesson 6. Strategies and programs should incorporate an integrated approach and a life-course perspective.***

Chronic disease prevention initiatives have traditionally taken their starting point from specific diseases such as heart disease, diabetes, chronic obstructive pulmonary disease and some cancers. This has given rise to vertical programs that aim to bring about change in relation to a number of the same risk issues. With growing evidence and increasing recognition that these diseases share a number of the same behavioural risk factors – e.g. tobacco use, unhealthy diet and sedentary lifestyle - as well as social risk factors – e.g. inequalities - there is a major opportunity to reconceptualise a national framework for chronic disease prevention initiatives in Australia in terms of a much more integrated approach. There are now a number of examples of OECD countries which have developed such an approach.

In addition, the life-course approach to chronic disease prevention has been advocated internationally in recent years, reflecting the emergence of research that tracks associations between exposures and outcomes at the individual and population levels.
Public health strategies that target individual chronic diseases have often operated without reference to one another. There is also research which demonstrates that this 'narrow' approaches leads to limited program effectiveness and efficiency (Robinson et al 2007). However, a systematic review of research on more integrated approaches to the prevention of excess weight and chronic disease in populations has also demonstrated an equivocal picture. It showed that some non-integrated (single component) strategies were quite effective and that the same mixed outcomes were apparent for more vertically and horizontally integrated strategies (Shiell, 2004).

What the evidence does suggest is that because of the multi-faceted, multi-level, multi-sector and population-wide nature of risk factors (proximal and distal) an integrated approach is more likely to:

- ensure greater alignment, coordination and direction for all sectors;
- provide a national context and reference point for all sectors, governments and Aboriginal organisations to measure the success of their own strategies and interventions;
- provide a forum for multiple players to align efforts and to work collaboratively to address common risk factors;
- ensure stakeholders are better and more broadly informed, thereby facilitating greater synergy and improved identification of opportunities across sectors public;
- overcome any inconsistencies or confusion of multiple "messages"; and
- lead to an increase in large scale efforts in knowledge development and exchange.

Requirements identified to support integrated chronic disease prevention and healthy living initiatives include:

- multi-level and multi-sector partnerships;
- policy development;
- flexibility in financing across different levels of government and organisations;
- capacity building (e.g. knowledge and resource development); and
- a combination of surveillance and information dissemination (Robinson et al 2007).

**Exhibit - The Sydney Declaration**
Partners making up the Oxford Health Alliance (2006) proposed four fronts for action that by nature represent one form of an integrated approach to primary prevention of chronic disease:

- Healthy places – designing towns, cities and rural areas, which are smoke-free, and where it is easy to walk, cycle and play, with unpolluted open spaces and safe local areas that foster social interaction.
- Healthy food – making healthy food affordable, and available to all.
- Healthy business – engaging business in the agendas promoting healthy people, healthy places, healthy planet and making good health good business.

- Healthy public policy – formulating comprehensive, innovative and 'joined-up' legislation and social and economic policies that promote health.
- Healthy societies – addressing equity and socio-economic disadvantage.

Source: Oxford Health Alliance (2008)

Potential barriers to integration may include:

- the lack of financial resources that span multiple-disease strategies and competing priorities (e.g., acute care and public health crises that divert policy attention and resources);
- issues for individual agencies of territoriality and perceived "loss of glory" (i.e., sharing credit for achievements) that may affect fundraising;
- resource costs involved in creating partnerships and slow progress in making things happen;
- problems integrating programs that have varied policies, service frameworks, and practices (i.e., silo effect); and
- difficulty protecting under-funded programs when integrating them with programs that have adequate resources.

***Lesson 7. Strategies and programs need to be adequately supported and funded to demonstrate their effectiveness.***

An important observation from the impact of public health policy and systems integration on chronic disease health outcomes is that considerable time is required for full implementation to occur and changes in determinants of the problem to be realised. Coordinated funding for capacity development is required and this takes time as well. Reliable implementation over an extended period of time (10 years or more) is essential and the means for the positive effects of programs to be sustained need to be considered. This requires significant levels of leadership, considerable investment in all aspects of program development, delivery, research and knowledge exchange into policy and practice.

***Lessons 8. Strategies and programs need to be well designed using the best available evidence and implemented using multi-level and multi-sectoral approaches.***

The evidence informing integrated programs and strategies consistently points toward multi-faceted interventions that are:

- addressing the fundamental behavioural and social causes of chronic disease
- using multiple approaches simultaneously – laws, communication (social marketing and education), social and community support/capacity building, and economic incentives and disincentives.
- operating at multiple levels: individuals, families, schools, workplaces, communities, and nation.
- designed to account for the special needs of specific target risk groups such as children, seniors, ethnic groups or at-risk communities.
- being long in duration because change takes time and needs to be constantly supported for each subsequent generation.
- engaging with a variety of sectors that are not traditionally associated with "health", such as business, transport, engineering, law, media and others.
- implementing a nationally comprehensive communications and social marketing campaign that provides clear and consistent messages.

In British Columbia, Canada, the integrated health strategy was based on 'four E's'; namely:

**EXHIBIT - THE 4-E'S FOR MAINTAINING HEALTH**

**Education:** campaigns that give populations and individuals the facts about specific health issues or behaviours, stressing the harms and the actions needed to avoid them. The education process must be multi-faceted, ongoing, and creative. It must use multiple settings, multiple variations of the message, and multiple avenues of communication - such as media, schools, and government campaigns.

**Environmental** supports: are design and social developments that support behavioural change. They might include nicotine patches, drug treatments, or cessation programs for tobacco use; comfortable, effective seatbelts or helmets to help injury reduction; vending machines stocked with healthy choices of food; pedometers used to measure daily activity; bike lanes or trails to promote cycling or walking.

**Economic** levers: are financial incentives and disincentives to discourage an unhealthy behaviour. Raising taxes, such as on tobacco, can discourage use. Removing taxes or providing tax deductions from other items, like sporting activities or exercise equipment, can encourage their use. Fines, tolls or other levies act as disincentives for unhealthy or risky actions, while rebates, price cuts, subsidies can support healthy actions and choices. Economic disincentives have been used very effectively to discourage tobacco use.

**Enforcement**: involves implementing legislation such as banning smoking in workplaces and public spaces, imposing age restrictions for cigarette purchases, and introducing helmet and seatbelt laws. It is usually the final step that comes after the groundwork has been done by the activities under the three other "Es".

***Lesson 9. Addressing inequalities and the health gap between different population subgroups needs to be a critical dimension of all strategies and programs.***

Countries' efforts to address health inequalities and the health gap between different population subgroups demonstrate that this requires a whole-of-system response that addresses both the proximal and more distal influences of the inequalities. Work from New Zealand on ensuring that inequalities are always addressed through programs is instructive and stems from the Treaty of Waitangi (**Appendix 8**). The following exhibit sets out how England is approaching the issue of health inequalities. The approach used in England illustrates many of the themes arising from the review in terms of what constitutes useful ways forward in this complex and politically challenging area. For instance, setting targets helps to ensure accountability to the public for actions and support the monitoring and evaluation of progress.

**EXHIBIT - TACKLING HEALTH INEQUALITIES IN ENGLAND**

| | |
|---|---|
| **History** | A programme of addressing inequalities in health was initiated in England by the Acheson report "Independent Inquiry into Inequalities in health", http://www.archive.official-documents.co.uk/document/doh/ih/ih.htm, which triggered a series of key policy documents that brought health inequalities forward as a cross-government priority. Government-wide targets known as PSA or Public Service Agreement targets, aimed for faster improvement in health outcomes in a fifth of areas with the worst health and deprivation indices (in life expectancy, death from heart disease and stroke, and cancers). |
| **Context** | England along with all UK countries recognised the need to tackle health inequalities through a common approach, and working with regional and local structures of government as necessary. The approach involves a focus on both health (health care and health behaviour) factors, and on the wider, social determinants in health that achieve a sustainable reduction in health inequalities.<br>All UK countries share a commitment to tackling health inequalities through addressing the wider, social determinants of health, as well as with targets; although the targets are framed slightly differently in each country. |
| **Policies and action** | The national health inequalities strategy for England is set out in the *Programme for Action* (2003) covering around a third of the population, not just socially excluded groups. It outlines a twin track approach with a national target to: *reduce health inequalities by 10% as measured by infant mortality and life expectancy at birth by 2010.*<br>This approach combines action to achieve a long-term, sustainable reduction in health inequalities through the National Health Service (NHS), and through other government departments. The strategy identified 77 commitments from 12 government departments. The aim is to improve the health of people in disadvantaged groups and areas faster than the rest of the population. This includes reversing the 'inverse care law' where those with |

| | |
|---|---|
| | greatest health needs have least access to services.<br>Action is on a broad front and is reflected in the strategy themes:<br>• supporting families, mothers and children<br>• engaging communities and individuals<br>• preventing illness and providing effective treatment and care<br>• addressing the underlying determinants of health<br>Delivery involves action at local, regional and national level. Local government in England has new responsibilities for the health and well being of their communities as well as responsibility for a range of services covering the wider determinants such as education and housing. Working with local NHS bodies also helps deliver this strategy.<br>A different focus has been deployed to deliver the 2010 target part of the strategy. On reducing the life expectancy gap, the specific interventions required are<br>• reducing smoking in manual social groups<br>• preventing and managing other risk factors, such as diet, and obesity, physical inactivity and high blood pressure<br>• improving environmental health, including housing conditions and reducing accidents<br>• targeting the over-50s - among whom the greatest short-term impact will be made, as well as<br>• UK action also includes reductions in suicide rates and teenage pregnancy. |
| **Targets** | The UK Government's Public Service Agreement (PSA) to reduce health inequalities<br>The single overall target:<br>• Reduce health inequalities by 10% by 2010 as measured by infant mortality (from a 1997-99 baseline) and life expectancy at birth (from a 1995-97 baseline).<br>The single target is supported by the following two specific targets:<br>• Starting with children under one year, by 2010 to reduce the gap in mortality by at least 10% between "routine and manual" groups and the population as a whole.<br>• Starting with Local Authorities, by 2010 to reduce by at least 10% the life expectancy gap between the fifth of areas with the worst health and deprivation indicators and the population as a whole.<br>Supporting Targets:<br>• Substantially reduce mortality rates by 2010 from heart disease and stroke and related disease by at least 40% in people under 75 with a 40% reduction in the inequalities gap between the fifth of areas with the worst health and deprivation factors (Spearhead areas) and the population as a whole.<br>• Substantially reduce mortality rates by 2010 from cancers by at least 20% in people under 75 with a reduction in the inequalities gap of at least 6% between the fifth of areas with the worst health and deprivation indicators (spearhead areas) and the population as a whole.<br>• Reduce adult smoking rates to 21% or less by 2010, with a reduction in prevalence among routine and manual groups to 26% or less. |
| **Key strengths of the strategy** | • An independent, scientific review on the evidence of health inequalities<br>• A strategic approach that encompasses the social determinants of health underpinned by a cross government partnership<br>• National targets to galvanise action at all levels, supported by an outcomes based performance framework and focus on delivery. |
| **Challenges** | A Department of Health/Treasury review concluded that to achieve the desired targets it will be necessary to ensure:<br>• a clear local plan and timescale for delivering the target<br>• the engagement of key players in health and local government<br>• greater clarity about the actions needed to address health inequalities, including an assessment of the impact of different interventions<br>• action to address the low expectations about their health by people living in disadvantaged groups and areas, and<br>• a clear performance management framework focused on outcomes and tracking delivery.<br><br>In January 2006, the NHS in England announced that tackling health inequalities is to be one of the top six priorities for the service. |

| | |
|---|---|
| **Policy Link** | **Social Exclusion**<br>A three phase initiative commenced in 1997.<br>1997-2001 – dedicated Social Exclusion Unit (SEU) in Cabinet Office directly accountable to Prime Minister. Focus was on developing new policies for selected 'socially excluded groups and areas'.<br>2001-2006 - SEU transferred to the Office of the Deputy Prime Minister with a focus on mainstream services of central and local government being changed to better meet the needs of disadvantaged groups.<br>Spring 2007 to 2008 - SEU abolished and a Social Exclusion Task Force established back in the Cabinet Office with a narrower focus on 'deep' exclusion i.e. 'those experiencing entrenched and deep-seated exclusion [who] are often harder to reach and harder to engage'. |

# SECTION 6. BIBLIOGRAPHY


AIHW (2004). Australia's Health 2004. Canberra, ACT: Australian Institute of Health and Welfare.
www.aihw.gov.au/publications/index.cfm/title/10014

AIHW (2006). Chronic diseases and associated risk factors in Australia. Canberra, ACT: Australian Institute of Health and Welfare.
www.aihw.gov.au/publications/phe/cdarfa06/cdarfa06-c00.pdf

AIHW (2008). National public health expenditure report 2005-06. Canberra, ACT: Australian Institute of Health and Welfare.
www.aihw.gov.au/publications/index.cfm/title/10528

Australian Institute of Health Policy Studies (AIHPS) and VicHealth (2008). A platform for advancing the health and wellbeing of all Australians.
www.aihps.org

Bayarsaikhan D and Muiser J (2007). Financing health promotion. Discussion paper. No 4. Geneva: World Health Organisation.

Blakey, C., Nichols, D and Oppenheimer, C. (2006). "Healthy People: Looking Ahead to 2020," presented at the American Public Health Association Annual Meeting, Boston, MA. November.

DHS. (2006). Chronic Disease Management Program Guidelines for Primary Care Partnerships and Community Health Services. Melbourne, Victoria: Victorian Government Department of Human Services.
www.health.vic.gov.au/communityhealth/publications/cdm_guidelines.html

IANPH. (2007) Framework for the Creation and Development of National Public Health Institutes. A Series of Technical and Policy Briefs, No 1.
www.ianphi.org/what_we_do/nphi_benchmarking_and_tools/nphi_framework_and_toolkit/

IANPH. (2007). NPHI Case Studies. Profiles for creation and growth: What factors support the creation of a successful NPHI?
www.ianphi.org/what_we_do/nphi_benchmarking_and_tools/nphi_case_studies

Lager A, Guldbrandsson K and Fossum B (2007). The chance of Sweden's public health targets making a difference. Health Policy, 80(2007) 413-421.

Lin V, Fawkes S, and Hughes A (2008). A Vision for Prevention in Australia: Discussion Paper. Australian Institute of Health Policy Studies (AIHPS).

McLaren, L, Ghali LM, Lorenzetti D and Rock M (2006). Out of context? Translating evidence from the North Karelia project over place and time.
Health Education Research. 18 Sep, 22:414-424

Mello MM, Studdert, Brennan TA (2006). Obesity – the new frontier of public health law. NEngl J Med: 354(24): 2601-2610.

Merson M, Black R and Mills A (2006). International Public Health: Diseases, programs, systems and policies. 2nd Ed. London: Jones Bartlett Publishers

Minke SW, Smith C, Plotnikoff RC, Khalema E and Paine K (2006). The evolution of integrated chrinic disease prevention in Alberta, Canada. Preventing Chronic Disease [serial online]. Jul.
www.cdc.gov/pcd/issues/2006/jul/05_0225.htm

National Public Health Partnership (2001). Preventing Chronic Disease: A strategic framework – Background paper. Melbourne, Victoria.

OECD (2000) A system of health accounts. Paris, France.
www.oecd.org/dataoecd/41/4/1841456.pdf

Oxford Health Alliance (2008). The Sydney Declaration. Healthy People in Healthy Places on a Healthy Planet.
www.oxha.org/knowledge/publications/Sydney%20Resolution%20FINAL%2027.02.08.pdf

Robinson K, Farmer T, Elliott SJ, Eyles J (2007). From heart health promotion to chronic disease prevention: contributions of the Canadian Heart Health Initiative. Prev Chronic Dis Apr.
www.cdc.gov/pcd/issues/2007/apr/06_0076.html

Sheill A. (2004). Are integrated approaches working to promote healthy weights and prevent obesity and chronic disease? Calgary, Alberta: University of Calgary.

Smith GD (2007). Life-course approaches to inequalities in adult chronic disease risk. Proceedings of the Nutrition Society, May, 66(2): 216-36

Spencer N. (2003). Weighing the Evidence: How is birth weight determined? Oxon: Radcliffe Medical Press.

Stachenko S (2006). Physical Activity and Healthy Eating Interventions in the Americas: Supporting the WHO Global Strategy on Diet, Physical Activity and Health. Paper presented at Healthy Eating & Active Living Conference, Nov 29-30, Toronto, Canada.
www.mhp.gov.on.ca/english/health/HEAL/conferencepresentations/Stachenko_Presentation.pdf

Stuckler D (2008). Population causes and consequences of leading chronic diseases: a comparative analysis of prevailing explanations. The Milbank Quarterly, Vol 86, Issue 2 pp273-326.

Swinburn B (2008). Obesity prevention: the role of policies, laws and regulations. Australia and New Zealand Health Policy, 5:12.
www.anzhealthpolicy.com/content/5/1/12

Tangcharoensathien V, Somaini B, Moodie R and Hoskins D. (2005). Sustainable financing for Health Promotion: Issues and Challenges. Paper presented at 6th Global Conference on Health Promotion, August, Bangkok, Thailand.

Tong B & Stevenson C (2007). Comorbidity of cardiovascular disease, diabetes and chronic kidney disease in Australia. Cardiovascular Disease Series no. 28. Cat. no. CVD 37.Canberra: AIHW.

Victorian Health Promotion Foundation (2005), 'VicHealth Position Statement on Health Inequalities', VicHealth, Melbourne.
www.vichealth.vic.gov.au/assets/contentFiles/HI_Position_Paper_latest.pdf

WHO (1998). Health Promotion Glossary WHOHPR/HEP/98.1 viewed 1 June 2008, www.who.int/hpr/NPH/docs/hp_glossary_en.pdf

WHO (2006). Comparative analysis of nutrition policies in the WHO European Region. A comparative analysis of nutrition policies and plans of action in WHO European Member States. WHO: Copenhagen

WHO/WHA (2008) Sixty-first World Health Assembly. 19-24 May 2008, Geneva, Switzerland
www.who.int/mediacentre/events/2008/wha61/en/

WHO (2008). How does Swedish public health policy address determinants of health? Interview with Commissioner Denny Vagero, Sweden.
www.who.int/social_determinants/commissioners/interview_vagero/en/

WHO (2008). WHO Commission on the Social Determinants of Health.
www.who.int/social_determinants/resources/interim_statement/en/index.html.

Willcox S (2006). Purchasing Prevention: Making every cent count: Background paper. Australian Institute of Health Policy Studies (AIHPS)
www.aihps.org

Wolbeck Minke S, Smith C, Plotnikoff RC, Khalema E, Raine K (2006). The evolution of integrated chronic disease prevention in Alberta, Canada. Preventing Chronic Disease.
www.cdc.gov/pcd/issues/2006/jul/05_0225.htm

Yach D, Hawkes C, Epping-Jordan JE and Galbraith S (2003). The World Health Organisation Framework Convention on Tobacco Control: Implications for the Global Epidemics of Food-related Deaths and Disease. Journal of Public Health Policy, 24(2-3), pp274-290

# A rapid review of chronic disease prevention strategies and programs in selected OECD countries

**PART A**

**Report authors:**
Sally Fawkes, Barb Mouy,
Brian Oldenburg, Rebecca Watson, Asnawi Abdullah
16 June 2008

# TABLE OF CONTENTS

## Part A

# ACKNOWLEDGEMENTS

The Project Team wishes to acknowledge a number of individuals who provided very helpful advice and feedback during this project. These included (in alphabetical order): Dr. Maximilian de Courten, Dr. Gauden Galea, Mr Todd Harper, Professor Vivian Lin and Dr Anna Peeters.

**For communication about this report, please contact:**

Rebecca Watson
School of Public Health and Preventive Medicine,
Monash University
info@aihps.org
Phone: 03 9903 0564

# ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| ABHI | Australian Better Health Initiative |
| AIHPS | Australian Institute of Health Policy Studies |
| AIHW | Australian Institute of Health and Welfare |
| CCDPC | Centre for Chronic Disease Prevention and Control |
| CDC | Centres for Disease Control (USA) |
| CHSRF | Canadian Health Service Research Foundation |
| COAG | Council of Australian Governments |
| CVD | Cardiovascular disease |
| DOHA | Department of Health and Ageing (Australian Government) |
| KTL | National Public Health Institute (Finland) |
| NICE | National Institute for Health and Clinical Evidence |
| NIHR | National Institute for Public Health Research |
| NPHT | National Preventive Health Taskforce |
| OECD | Organisation for Economic Cooperation and Development |
| VicHealth | Victorian Health Promotion Foundation |
| WHO | World Health Organisation |

# SECTION 1. EXECUTIVE SUMMARY

## *Background*

The incidence and prevalence of chronic disease such as diabetes and cardiovascular diseases (CVD) are accelerating worldwide and they now make a significant contribution to the burden of disease in almost all countries in the world. In Australia, these conditions not only have significant adverse effects on individuals and their families, but also on the economy, society and the health system as it is currently organised. The current Australian government has recognised the importance of these issues and the ways in which a more nationally coordinated and organised approach to primary and secondary prevention might assist. Germane to this new approach is the need to consider new approaches to prevention and to learn from the experience of other countries.

This report provides a rapid review of the approaches that some other OECD countries have adopted for primary prevention and identifies some of the key features of the systems that underpin these approaches. The major countries selected for the review were: Canada, England, New Zealand, USA and Finland. Prevention policy and some related issues in Thailand were also considered in accordance with the Statement of Requirements for this project. The report identifies a range of issues and emerging themes in relation to the primary prevention efforts of the countries included in this rapid review.

## *Review findings*

While the health ministries or departments in each of the OECD countries reviewed have the overall mandate for population health and prevention, in England, there is also a higher-level cross-government committee in place (Sub-Committee on Health and Wellbeing). This signals the increasing strategic, social and economic importance of prevention and serves to establish ongoing cross-portfolio engagement in the prevention agenda at a national level.

In four countries, a national institute or agency was in place that played a major role in leadership and coordination of the primary prevention and health promotion effort in their respective jurisdictions. The functions of these entities included some or all of the following elements in relation to prevention: coordination and strategic policy development; knowledge development and exchange; oversight and support for national campaigns and other initiatives at a population and/or regional level; monitoring and evaluation of program implementation; surveillance and monitoring of outcomes; and finally, communications and public information. Some of these functions were carried out through formalised partnerships, including government, non-government agencies and/or other organisations.

All of the countries reviewed had a comprehensive, overarching policy for health that incorporated a national framework and strategies which were more specifically relevant to the prevention of chronic disease and the promotion of the health and wellbeing of the whole population. Most of these polices were also well integrated both horizontally and vertically.

Common elements of these frameworks include:

- A population health or whole-of-society approach that also includes some identification of high-risk population sub-groups.
- A life-course approach that also highlight the needs of different groups across the lifecourse, with an increasing focus on the needs of children during the 'early years'.
- A special focus on health disparities, socially disadvantaged population subgroups and the need to 'close the health gap' between different groups.

- An emphasis not only on the 'classical' risk factors but also on the more upstream determinants of health and ill-health or what have referred to as the social determinants of health or the 'causes of the causes'.
- A significant commitment to improve the exchange processes between research, policy and practice.

While there is already considerable evidence that can be used to guide and inform action in relation to the primary prevention of chronic diseases and the promotion of well-being across the life-course, it is well recognised that there is still a lot to be learned about how to improve the overall prevention effort. More emphasis needs to be given to the production of evidence necessary to inform primary prevention strategies as well as the dissemination of evidence at an international level.

Many different kinds of partnerships – across government departments, at different levels of government, and between government, non-government, community and private sector organisations – are being employed in these countries to develop and implement new approaches to prevention and health promotion. The available evidence suggests that strategic partnerships are very important in the development and successful implementation of system-wide efforts related to prevention.

The national ministry of health in each country, together with national public health institutes or agencies, play the key roles in funding strategies and programs. Information on the actual investment levels in programs was not easily ascertained within the timeframe of this review; however, there were certainly new investments being made in relation to research and evaluation in order to support further evidence development and the implementation of strategies. While recent reviews have stressed the importance of governments giving high priority to financing prevention and health promotion, the level of investment from the health budget in primary prevention is still quite low in most countries, accounting for up to only 3-4 percent of health expenditure.

## *Lessons for Australia*

The report identifies a number of findings and lessons arising from this rapid stocktake which require further consideration and analysis with respect to building and enabling sustainable systems for prevention in Australia in the future. Selective examples are used to illustrate some of these potential lessons for Australia. These lessons are presented in two groupings (1) systems underpinning the strategies and programs and (2) strategies and programs for primary prevention and health promotion.

**The systems underpinning the strategies and programs:**

*1. Establishment of a high-level government or equivalent committee with appropriate inter-sectoral partners is necessary to champion primary prevention of chronic disease and ensure high-level political commitment and accountability.*

*2. New approaches to long-term funding for primary prevention of chronic disease need to be developed and recognise the limited approaches of the past and the need for more innovative and sustainable financing models.*

*3. Strengthened system components are needed for developing and implementing an effective chronic disease primary prevention strategy and programs.*

*4. Establishment of measurable targets for primary prevention and health promotion is critical for long term monitoring and evaluation of implementation and outcomes.*

*5. Establishment of sustainable infrastructure that facilitates the production, dissemination and use of evidence and learning is essential if strategies and programs are to be effective.*

**Strategies and programs:**

*6. Strategies and programs should incorporate an integrated approach and a life-course perspective.*

*7. Strategies and programs need to be adequately supported and funded tp demonstrate their effectiveness.*

*8. Strategies and programs need to be designed using the best available evidence and implemented using multi-level and multi-sectoral approaches.*

*9. Addressing inequalities and the health gap between different population subgroups needs to be a critical dimension of all strategies and programs.*

# SECTION 2. BACKGROUND

## *Introduction*

The incidence and prevalence of chronic disease such as diabetes and cardiovascular disease are accelerating worldwide and they now make the major contribution to the burden of disease in Australia and other countries in the world. The management and prevention of chronic disease will have increasingly important implications for the social and economic fabric of countries like Australia, including the structure and organisation of our health system. Consequently, the health agencies of all countries have to grapple with these issues and to consider new ways of reducing the societal and economic burden associated with chronic disease. However, action to prevent chronic disease and strategies to promote the health and well-being of the whole population, poses major challenges because of the complexity of their causes and the gaps in our knowledge about what to do in order to prevent them. Notwithstanding the fact that there are still many important knowledge gaps, there is already much that we do know, so this remains an implementation challenge for now.

Australia has already put some considerable effort into developing appropriate and contemporary frameworks for chronic disease prevention and health promotion[1]. However, there is still much to be done in order to build a really sustainable and integrated system for prevention in Australia that leads to the implementation of effective strategies and programs with appropriate levels of investment. Key elements for developing such a platform must include the following: engaging all levels of society, strengthening leadership and coordination, creating sustainable funding, building the appropriate infrastructure and resources for action, integrating evidence into policy and practice, and improving the fairness and equity of this response. These were the 6 interlocking strategies that were identified in the lead up to and during the recent Australian Institute of Health Policy Studies (AIHPS) and VicHealth National Prevention Summit (AIHPS & VicHealth 2008; Lin et al 2008).

To the extent that this was possible in the time available, this report documents and reviews prominent strategies and programs that are being undertaken internationally to prevent major chronic diseases and to promote the health and wellbeing of populations (**Appendix 1**). The review focuses on the experiences of 5 OECD countries, that is, Canada, UK, New Zealand, USA and Finland. The review also considers the experiences of some other countries, in particular, Thailand, where this was considered to be particularly pertinent to the terms of reference for this report. The report draws some preliminary lessons and recommendations from this rapid review of these countries. However, a more detailed comparative analysis between these countries and Australia is required before any formal recommendations can be made. The review has focused particularly on the organised systems and elements of system governance, policy and infrastructure that underpin the strategies and programs described, and which appear to be critical to the effective development, implementation and evaluation of these.

## *Key concepts and themes*

### 2.1 Characteristics of chronic disease

The term chronic disease, also known as non-communicable disease (NCD), refers to an array of conditions and diseases that share common characteristics. They:

- are complex and have multiple causes.

[1] For example, the National Chronic Disease Strategy released by the Department of Health and Ageing in 2006 (DOHA, 2006)

- usually have a long and gradual onset, although clinical diagnosis and identification is often only made following an acute event.
- occur across the lifecycle and become more prevalent with older age.
- can severely compromise quality of life and work performance as a result of accumulating limitations and disability.
- are long term and persistent, leading to gradual deterioration of physical, psychological and social health.
- often occur together, known as co-morbidity.

While usually not immediately life threatening, these conditions are now the most common and leading cause of premature mortality in Australia and most other countries in the world (AIHW, 2006).

## 2.2 Burden of chronic disease in Australia

Recent Australian data indicate that the most common chronic diseases include cancer, cardiovascular diseases (CVD) such as ischaemic heart disease and stroke, injuries, chronic respiratory disease and diabetes (AIHW 2006).

**Figure 2.1 Burden of disease by broad cause group - Australia, 2003**

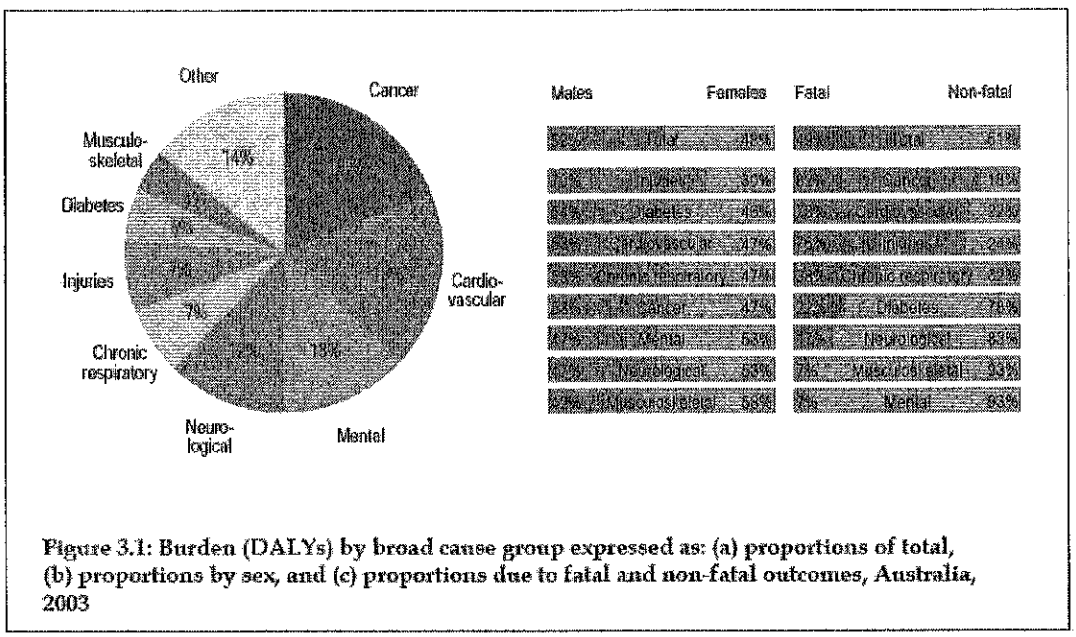
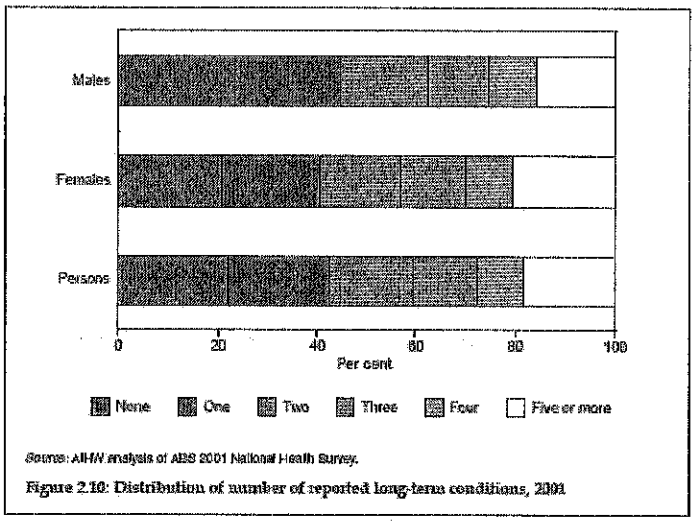



**Figure 3.1: Burden (DALYs) by broad cause group expressed as: (a) proportions of total, (b) proportions by sex, and (c) proportions due to fatal and non-fatal outcomes, Australia, 2003**

Burden of disease research show that these diseases will persist well into the next decades as sources of ill health among Australians and some are expected to increase in prevalence, such as Type 2 diabetes. The burden of chronic disease disproportionately affects: socially and economically disadvantaged population sub-groups, most particularly Indigenous Australians; older Australians, especially the frail aged; and people with mental illness and physical and intellectual disabilities.

Co-morbidity is common, and of increasing significance in Australian as the population ages (**Figure 2.2**).

**Figure 2.2. Distribution of number of reported long term conditions**




Source: AIHW, 2004 p 34

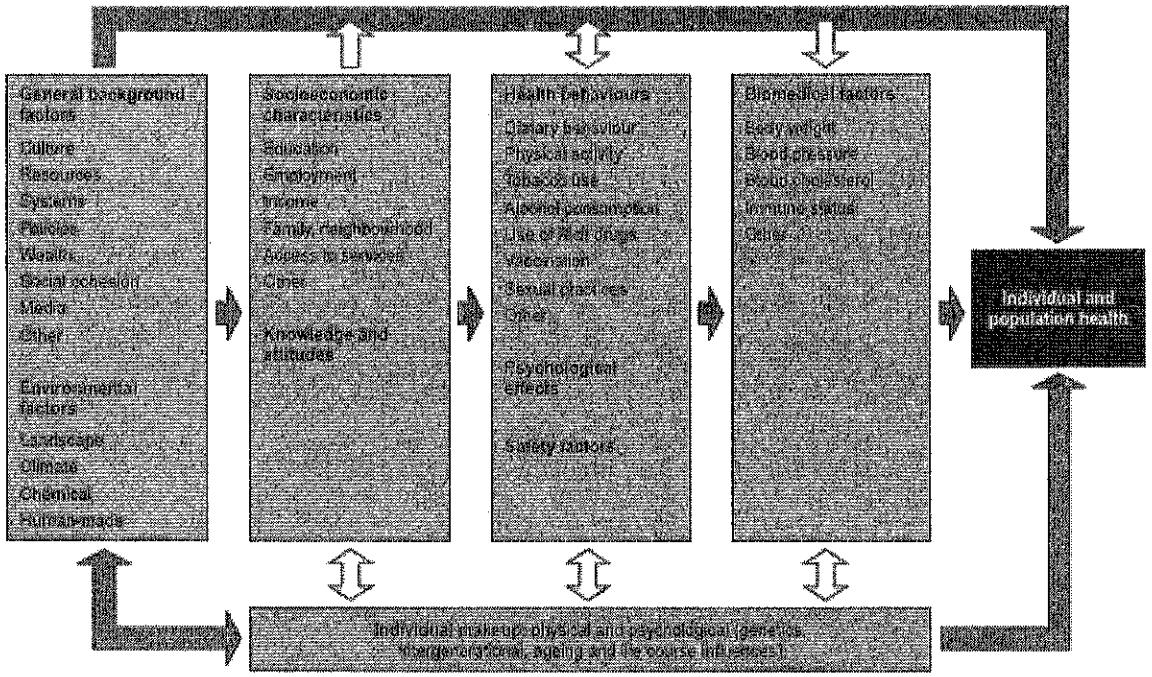
## 2.3 Causes of chronic disease

While both communicable and non-communicable diseases can become chronic in their effects, this report primarily focuses on the **prevention of chronic diseases** associated with key **risk behavioural factors or causes** that epidemiologic studies have demonstrated can be modified, namely:

- Unhealthy nutrition and diet
- Physical inactivity or sedentary lifestyles
- Overweight and obesity
- Tobacco smoking
- Harmful use of alcohol.

However, it is very important to consider the more upstream determinants of health or what have been called, the determinants of health, or more recently, the 'causes of the causes', as these are both directly and indirectly linked to the behavioural risk factors already identified. These are summarised in **Figure 2.3**. What also must be taken into consideration are those more upstream influences, including socioeconomic disadvantage, environmental and neighbourhood features, which have an independent and more direct impact on health and well-being. This must be taken into consideration in relation to the design and development of prevention programs directed at those population subgroups whose health outcomes are currently poorer than for the rest of the population.

**Figure 2.3 A conceptual framework of the determinants of health**



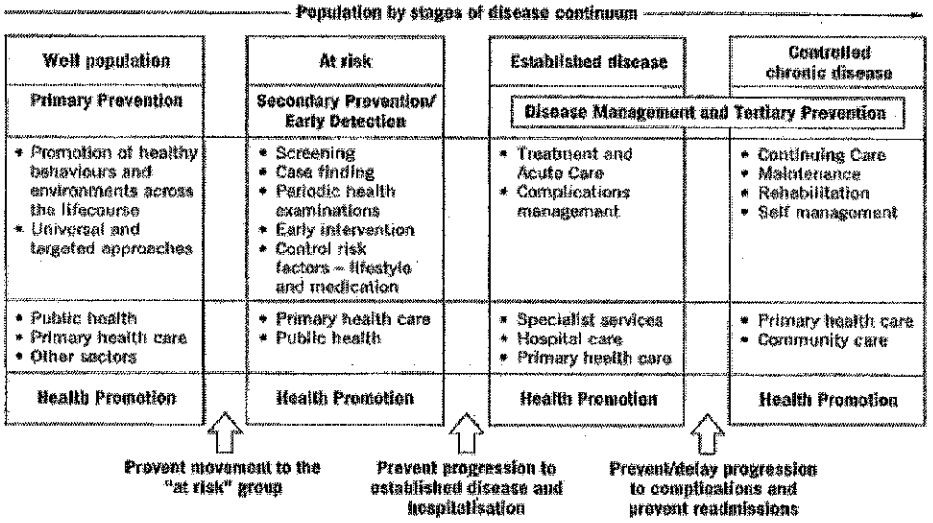

Source: AIHW (2006) p 143

Research is accumulating that demonstrates complex interplay among these influences from early life and onwards throughout the whole life-course. It is precisely these kinds of complex interactions between socio-environmental, behavioural and biological processes from early life that are contributing to the development of Type 2 diabetes and heart disease at a much younger age than was the case even half a generation ago.

## 2.4 Prevention of chronic disease in populations

Prevention has been defined as an 'action to reduce or eliminate or reduce the onset, causes, complications or recurrence of disease' (AIHW, 2006). Prevention approaches should focus on both the factors that influence the development or progression of chronic disease in the whole population, as well as, the population groups who are at highest risk. Primary prevention is typically directed towards preventing the initial occurrence of a disease in a population. Secondary prevention strategies focus on early detection and appropriate interventions; and tertiary prevention is generally directed at reducing the occurrence of relapse and maximising quality of life and wellbeing in those who already have a chronic disease (WHO, 1998). The concept of a continuum for preventing and managing chronic disease is helpful in defining different population subgroups in terms of those (1) who are well and without disease (primary prevention) (2) those who are at risk of, or in the early stages of the disease process (secondary prevention) and (3) people currently living with chronic disease (tertiary prevention) (**Figure 2.4**). This conceptualisation can also be useful in designing different levels and types of interventions for the whole of the population and/or specific populations subgroups.

**Figure 2.4. Chronic Disease Prevention and Management Continuum**




(National Public Health Partnership (2001) *Preventing chronic disease: A strategic framework—Background paper*, p.6)

Source: National Public Health Partnership (2001)

The current Australian Better Health Initiative[2] draws on this approach and aims to promote good health, disease prevention and early intervention across a continuum of population groups in order to reduce the burden of chronic disease. The five priority strategies are (the first three of which most pertinent to this review):

1. **Promoting healthy lifestyles**
2. **Supporting early detection of risk factors and chronic disease**
3. **Supporting lifestyle and risk factor modification**
4. Encouraging active patient self management of chronic conditions
5. Improving the communication and coordination between care services

## 2.5 Building sustainable systems and infrastructure for prevention

In addition to considering the strategies and programs that have been developed internationally to prevent chronic disease and promote well being, this report focuses on the systems that some other countries have used to underpin the organised effort to change patterns of disease burden in the population. This includes the issues related to system governance, policies and the infrastructure and resources required to develop, implement and evaluate effective strategies and programs to the population as a whole, as well as "closing the gap" for those population subgroups who are currently most disadvantaged.

[2] ABHI was announced by the Council of Australian Governments (COAG) on 10 February 2006 as a part of the Better Health for All Australians package and linked to the National Reform Agenda (COAG 2006)

# SECTION 3. PROJECT METHODOLOGY

A pragmatic methodology was adopted for this project so that useful policy-relevant information could be generated within a very limited time frame. This is outlined below.

## 3.1 Refine the scope of the brief

*Analysis of structural dimensions underpinning strategies and programs*

The Project Team expanded its review to consider issues related to the system governance, policies and the infrastructure and resources because of their significance in enabling primary prevention of chronic disease prevention to be prioritised, organised and implemented.

*Focus of strategies and programs under review*

The review focused on:

- Prevention strategies and programs aimed at shifting the entire distribution of risks in populations and key sub-groups.
- Prevention strategies and programs aimed at reducing the prevalence of a small number of key, behavioural risk factors, particularly, unhealthy diets, inadequate physical activity and obesity.

Prevention strategies and programs aimed at reducing tobacco use and alcohol-related harm were given less attention, due to time constraints and the role of two other teams commissioned to look at these areas.

*Countries under review*

The Project Team selected five OECD countries to review for this project; however, we have also referred to initiatives from some other countries, such as Thailand, where they were considered pertinent and relevant to the Australian situation. Country selection was based on the following criteria:

- There was easily accessible information and this was primarily available in English.
- Likelihood of adaptability of strategies and programs to Australia, based on:
    - Past experience of the uptake of policy ideas in Australia
    - Preventive health expenditures
    - Population health and risk profiles
    - High income (World Bank GNI per capita – US$ 9206 or more)

The countries selected for consideration in the review were:

Canada England USA New Zealand Finland

## 3.2 Conceptual framework for understanding determinants of chronic disease

The conceptual frameworks already identified in **Section 2** were used to guide data collection. As requested by the National Preventive Health Taskforce (NPHT), the review concentrated primarily on specific risk factors for chronic disease – unhealthy eating, physical inactivity and obesity – with secondary reference being given to tobacco use and harmful use of alcohol.

### 3.3 Data and information collection strategy for each country

| | |
|---|---|
| Identify data sources and undertake desk review | Literature search<br>- Published peer-reviewed literature<br>- Systematic reviews<br>- Meta-reviews |
| | Grey literature<br>- Government reports<br>- Other reports and reviews |
| | Websites of international organisations, governments and lead organisations (such as World Bank, WHO, organisations with a focus on key risk factors or chronic diseases known to be supporting action on chronic diseases) |
| Seek advice through personal contacts with colleagues working in international organisations | WHO (HQ, EURO)<br>Public Health Agency of Canada<br>Ministry of Health/New Zealand |

### 3.4 Analyse data, prepare synthesis and identify lessons for Australia

Information on strategies and programs were drawn from government reports and other documentation and imported into data tables. Templates for the data tables were formulated from the list of areas set out as the focus for this review in the Statement of Requirement. Emerging directions internationally were identified by examining the data and findings of international reviews.

### 3.5 Limitations of the review

This review was limited by a number of factors:

- The timeline for the review was very short (three weeks). This imposed major limitations on the ability of the Project Team to comprehensively identify all national level strategies and programs and to analyse their development, system underpinnings and features. As a consequence, the report provides a select overview of strategies, programs and systems from five countries. Additionally, it has not been possible to provide comprehensive details of programs at a local or regional level of the five countries reviewed.
- Access to some data was limited, in particular, strategy and program data on human resources, financing and budgets, and evaluation of implementation and outcomes.
- The Project team did not have sufficient time to validate the data and findings with key informants.

# SECTION 4. RESULTS OF THE RAPID SIX-COUNTRY REVIEW

## 4.1 Introduction

This chapter provides a summary of the data and information collected from the selected countries. The purpose of this initial stocktake is to identify the key common elements and differences in approach among strategies and programs aimed at preventing chronic diseases, promoting health and the systems underpinning them, internationally and in five OECD countries. A description is provided of:

- International (pan-regional) policies and strategies that may influence national policy and program development;
- National systems that support chronic disease prevention (covering governance, policy, infrastructure and resources); and
- Specific national integrated chronic disease prevention strategies and programs.

## 4.2 Overview of policies, strategies and programs operating at a global or regional level

Policies, strategies and programs formulated by United Nations bodies such as WHO and international organisations such as the European Commission have had an important influence over time on the directions and approaches to prevention and health promotion by member countries (also see **Appendix 2**). Such regional or global-level strategies can provide focus, legitimacy, evidence and targets for action, prompts for social mobilisation and broad guidelines and models. Except for the WHO Framework Convention for Tobacco Control (FCTC), the influence of such frameworks is hard to discern and can be quite indirect.

More specifically, in relation to chronic disease prevention, WHO has played an important role in developing and promulgating a range of important policies, strategies and programs over the past 10 years (**Table 4.1**). A number of these are regularly cited in country program documentation as providing an important context for and legitimacy to the development, intensification or realignment of strategies and plans in specific countries. Other than the FCTC, the 2000 *WHO Global Strategy for the Prevention and Control of Non-Communicable Diseases* has probably been most influential. The World Health Assembly has only recently endorsed the action plan associated with the Strategy (WHO/WHA 2008) and recommends a focus on inequalities (gender, ethnic, socio-economic) and the needs of people with disabilities in national frameworks for prevention and control . The framework includes a multisectoral approach that integrates the prevention of chronic diseases into national health plans and urges the reorientation and strengthening of country health systems to meet the needs of people with chronic diseases (WHO, 2008).

This strategy and plan, as well as the 2004 *WHO Global Strategy on Diet, Physical Activity and Health*, reflect the increasing shift towards a more integrated and coordinated approach to chronic disease prevention in many different countries. This approach recognises that the major chronic diseases shared a cluster of risk factors, so that there should be more explicit and programmatic emphasis on the behavioural risk factors and their determinants, rather than focusing on specific diseases per se.

**Table 4.1: Major policies, strategies and programs**

| Chronic disease / Risk factor | Year | Policy, Strategy or Program |
|---|---|---|
| Chronic disease / risk factors<br><br>(Integrated approach) | Adopted - May 2000<br><br>Adopted - May 2008 | **WHO Global Strategy for the Prevention and Control of NCDs**<br>www.who.int/chp/about/integrated_cd/en/<br><br>(Draft) **Action Plan for Prevention and Control of Noncommunicable Diseases**<br>http://www.who.int/gb/ebwha/pdf_files/A61/A61_8-en.pdf |
| | Endorsed - Sept 2006 | Gaining health. The European Strategy for the Prevention and Control of Noncommunicable Diseases<br>www.euro.who.int/Document/RC56/edoc08.pdf |
| | Approved - Sept 2006 | PAHO Regional Strategy on an Integrated Approach to the Prevention and Control of Chronic Diseases Including Diet, Physical Activity, and Health<br>www.paho.org/english/gov/cd/CD47-17rv-e.pdf |
| Diet and Physical activity | Endorsed - May 2004 | **WHO Global Strategy on Diet, Physical Activity and Health**<br>www.who.int/dietphysicalactivity/strategy/eb11344/strategy_english_web.pdf |
| | 2005 | European Union's 2005 Platform on Diet, Physical Activity and Health<br>http://ec.europa.eu/health/ph_determinants/life_style/nutrition/platform/platform_en.htm |
| Diet | Endorsed - Sept 2000 | First European Food and Nutrition Action Plan<br>http://www.euro.who.int/nutrition/actionplan/20070620_3 |
| Physical activity | Launched - May 2007 | Steps to health: A European Framework to Promote Physical Activity for Health<br>http://www.euro.who.int/Document/E90191.pdf |
| Obesity | Adopted - Nov 2006 | European Charter on Counteracting Obesity<br>http://www.euro.who.int/obesity/conference2006 |
| Tobacco | Adopted - May 2003 (By all 192 Member States) | **WHO Framework Convention on Tobacco Control**<br>http://www.who.int/tobacco/framework/en/ |
| | Approved - Sept 2002 | European Strategy for Tobacco Control<br>\http://www.euro.who.int/tobaccofree/Policy/20030826_3 |
| Harmful use of Alcohol | Endorsed -Sept 2005 | Framework for alcohol policy in the WHO European Region<br>http://www.euro.who.int/document/e88335.pdf |
| Diabetes | Launched – Sept 2003 | WHO/International Diabetes Federation Diabetes Action Now Program<br>http://www.idf.org/home/index.cfm?unode=742485e7-0b0f-49df-84d6-a84deb748fcf |
| Social determinants | Launched – May 2008 (interim statement in 2007) | WHO/Commission on Social Determinants of Health<br>http://www.who.int/social_determinants/en/ |

## 4.3 Overview of national systems supporting chronic disease prevention strategies and programs

Key elements of the systems of governance underpinning chronic disease prevention were identified in the six countries (see **Part B**).

### *Coordinated national leadership and direction*

All countries had a national focal point for leadership on chronic disease prevention, in a Cabinet Ministry, unit/department, and /or a national body of some form (e.g. an agency or

institute) (**Table 4.2**) This provided leadership over the establishment and implementation of health promotion/chronic disease prevention framework/s and all appeared to use partnerships as a key means for developing and implementing strategies and programs. Accountability for program delivery varied between Cabinet and Ministerial levels. The most common elements of the leadership function/role included:

- Coordination and strategic policy development
- Knowledge development and exchange
- Oversight and support for national campaigns and other initiatives at a population and/or regional level
- Monitoring and evaluation of campaign program implementation and progress
- Surveillance and monitoring of outcomes
- Communications and public information.

In England, there is a high-level cross-government committee in place (Sub-Committee on Health and Wellbeing) with responsibilities to "consider policy on health and wellbeing, including the prevention of ill-health, the promotion of healthy and active lifestyles and the reduction of health inequalities; and report as necessary to the Ministerial Committee on Domestic Affairs." This signals the increasing strategic, social and economic importance of prevention and serves to establish ongoing cross-portfolio engagement in the prevention agenda at a national level.

**Table 4.2. National focal points with responsibilities for chronic diseases prevention**

| FOCAL POINT | CANADA | ENGLAND | NEW ZEALAND | USA | THAILAND | FINLAND |
|---|---|---|---|---|---|---|
| **Cabinet/ equivalent** | | Sub-Committee on Health and Wellbeing (S-C of Ministerial Committee on Domestic Affairs /www.cabinetoffice.gov.uk/secretariats/committees/dahw.aspx | | | | |
| **Ministry of Health** | HealthCanada www.hc-sc.gc.ca/index-eng.php | Department of Health www.dh.gov.uk/en/index.htm | Ministry of Health www.moh.govt.nz/moh.nsf<br><br>National Advisory Committee on Health and Disability – Public Health Advisory Committee http://www.phac.health.govt.nz/moh.nsf/dx/com/phac-about-us-for | Department of Health and Human Services www.hhs.gov | Ministry of Public Health www.moph.go.th | Ministry of Social Affairs and Health www.stm.fi/Resource.phx/eng/index.htx |
| **Unit or department in MOH** | | Public Health – **Health Improvement Unit** www.dh.gov.uk/en/Publichealth/Healthimprovement/index.htm | **Public Health Directorate** www.moh.govt.nz/publichealth | Office of Disease Prevention and Health Promotion www.odphp.osophs.dhhs.gov | Department for Disease Control www.thaigov.ddc.moph.go.th/link.html | |
| **National Agency or Institute** | **Public Health Agency of Canada** www.phac-aspc.gc.ca/index-eng.php - | National Institute for Health Research – Public Health Research programme | | Centers for Disease Control – Prevention of Chronic Disease www.cdc.gov/ | **ThaiHealth Promotion Foundation** www.thaihealth.or.th/en/ | **National Public Health Institute** ww.ktl.fi/portal/english/ |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Centre for Chronic Disease Prevention and Control www.phac-aspc.gc.ca/ccdpc-cpcmc/index.html and Canadian Health Services Research Foundation www.chsrf.ca/ | (NEW) www.nihr.ac.uk/ | | | | |

### *National health policy that incorporates prevention and health promotion*

In all countries, there is an overarching policy that provides a context for the prevention of chronic disease and health promotion. Population health targets are identified and used in most countries (e.g. England, New Zealand, USA, Finland) to give direction to and support accountability for national, organised efforts to promote health and prevent disease. Primary prevention and health promotion are major planks in all of these countries' health policies, although there are also differences between countries. For example, in broad terms, the US approach favours prevention efforts with a behavioural focus that locate responsibilities with individuals, while the UK approach has a stronger orientation towards population-level initiatives.

**Table 4.3. Policy context for chronic disease prevention**

| | CANADA | ENGLAND | NEW ZEALAND | USA | THAILAND | FINLAND |
|---|---|---|---|---|---|---|
| **Overarching Health Policy** | | Health Challenge England: Next steps for Choosing Health www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4139514 | Health Strategy www.moh.govt.nz/publications/nzhs | Healthy People 2010 www.healthypeople.gov/ | Healthy Thailand www.eng.moph.go.th | Health 2015 www.terveys2015.fi/esite_eng.pdf |
| **National population health targets** | Under development | Yes | Yes | Yes (2020 targets under development) | ? | Yes |
| **Integrated national policy** | Pan-Canadian Healthy Living Strategy: Community Action www.phac-aspc.gc.ca/hl-vs-strat/index.html | Healthy Weight, Healthy Lives www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_082378 | Healthy Eating Healthy Action www.moh.govt.nz/healthyeatinghealthyaction | HealthierUS (President's initiative) www.healthierus.gov/ | Health Risk Factors Control | Development Programme for the Prevention and Care of Diabetes in Finland DEHKO http://www.diabetes.fi/sivu.php?artikkeli_id=831 |

### *Frameworks for national strategies and programs*

All countries have some form of overarching and integrated healthy public policy, programs and plans that address multiple risk factors associated with chronic disease. An indication of the range of policies and strategies across the risk factors/diseases in the selected countries appear in **Appendix 3**.

Within the overarching policy for population health are nested national integrated policies/frameworks related to chronic disease see **Table 4.3**. Common elements of these frameworks include:

- A population health or whole-of-society approach that also included some identification of high-risk population sub-groups.
- A life-course approach that also highlight the needs of different groups across the lifecourse, with an increasing focus on the needs of children during the 'early years'.
- A special focus on health disparities, socially disadvantaged population subgroups and the need to 'close the health gap' between different groups.
- An emphasis not only on the 'classical' risk factors but also on the more upstream determinants of health and ill-health or what have been called the social determinants of health or the 'causes of the causes'.
- An emphasis on the need for research and evidence to underpin and inform policy and practice.

The overarching national policies and the specific risk factor plans are all horizontally integrated with vertically integrated programs. **Horizontal** refers to integration across organisations, or sectors, designed to increase capacity, maximise efforts and minimise duplication. **Vertical** refers to a focus on one or more levels of influence which typically include individuals, organisations/settings and different kinds of socioeconomic, physical and other kinds of environments. Most countries have elements of pre-existing national policies and plans relevant to specific risk factors - such as tobacco control, healthy eating and physical activity – which have been embedded into more recently developed integrated approaches to chronic disease prevention and health promotion.

**Table 4.4. Themes across major national integrated approaches to primary prevention of chronic diseases**

| Theme | CANADA | ENGLAND | NEW ZEALAND | USA | THAILAND | FINLAND |
|---|---|---|---|---|---|---|
| **Integrated national policy** | Pan-Canadian Healthy Living Strategy; Community Action | Healthy Weight, Healthy Lives | Healthy Eating - Healthy Action | HealthierUS | Health Risk Factors Control | Development Programme for the Prevention and Care of Diabetes in Finland (DEHKO) |
| **Diet** | x | X | X | X | x | x |
| **Physical activity** | x | X | X | X | x | x |
| **Obesity** | Healthy weight | Healthy weight | Healthy weight | Healthy weight | Healthy weight | Healthy weight |
| **Tobacco** | x | | X | X | | x |
| **Alcohol** | | | X | X | | x |
| **Other themes** | Cancer Diabetes Development of supportive environments | Breastfeeding, Workplaces | Breastfeeding Development of supportive environments | Heart Disease/CVD Diabetes | | Diabetes |

The major national programs reviewed primarily addressed the more proximal causes of key risk factors contributing to common chronic diseases, that is, unhealthy diets, inadequate physical activity, and obesity. While the 'causes of the causes' were addressed more variably, all national strategies and programs at least acknowledged the importance and necessity of tackling the more upstream influences that include underlying population changes, socio-economic conditions, and the related impacts of globalisation. [Refer back to **Figure 2.2**].

### *National acts, laws and legislation for chronic disease prevention*

Legislation, regulations and taxation are increasingly being utilized alongside other approaches. With respect to the countries considered in this review:

- All have food and beverage legislation related to chronic disease prevention (and control), but they vary in nature. They include the use of explicit legislation and/or regulations with respect to food composition (e.g. type of fats permissible in foods), food taxes, food and beverage labelling and advertising/marketing (e.g. to children).
- Canada has a taxation incentive for physical activity. Mello, Studdert, and Brennan (2006) reviewed US State Legislative initiatives to combat obesity in the community between 1998–2005, and identified actions including environmental changes to local areas, community and workplace fitness campaigns and other public education programs. Initiatives involving the introduction of taxes and legislation were much less commonly employed than more individually-focused behaviour change programs. (**Appendix 4**) Legislation and incentives for physical activity in the other countries was not further explored at this stage, but there is increasing attention to the role of public health law in shaping health, for example through the work of Gostin in the US.
- All are signatories to the WHO Framework Convention on Tobacco Control (FCTC) and accordingly, have legislation for tobacco control including health warnings on tobacco products, smoke free environments, bans on smoking advertising and tobacco sponsorship, and taxation and pricing.
- All countries reviewed have legislation for reducing the harmful use of alcohol. They vary in nature and include taxes on products, restrictions on sales to minors and licensing of premises.

### *Financing and funding for prevention*

Financing for primary prevention of chronic disease tends to come from government sources. In the US, philanthropic, private and other kinds of organisations have a strong history supporting some program areas. Work is underway internationally to examine the financing of prevention and health promotion, and innovative ways to establish sustainable, adequate and ethical financing.

The national ministry of health in each country, together with national institutes or agencies, play key roles in funding strategies and programs. Information on the actual investment levels in programs was not easily ascertained within the timeframe of this review; however, there were certainly new investments being made in relation to research and evaluation in order to support further evidence development and the implementation of strategies. While reviews have stressed the importance of governments giving high priority to financing prevention and health promotion, the level of investment from the health budget in primary prevention is still quite low in most countries, accounting for up to only 3-4 percent of health expenditure.

To summarize the findings from this review:

- Thailand, through the ThaiHealth Promotion Foundation, is the only country considered in this review with a dedicated funding source (2% surcharge on alcohol and tobacco tax) and budget for the implementation of a national strategy for the primary prevention of chronic disease.
- For the specific risk factor components listed below in **Table 4.4**, Canada, England, New Zealand and Thailand have specific, dedicated budgets for addressing tobacco use, nutrition/diet, physical activity and alcohol consumption.
- Non-specific sources of financing appear to be the major source of funds in countries rather than more stable routes of financing such as taxation.

**Table 4.4- Budget and financing for chronic disease risk factor programs**

| | CANADA | ENGLAND | NEW ZEALAND | USA | THAILAND | FINLAND |
|---|---|---|---|---|---|---|
| Budget (2006-07) | Disease prevention = 331.8 m CAD Health promotion = 186.5 m CAD | Public Health (healthy individuals) = 1,069 million GDP (2004/05) 1.83% of NHS budget | Not obtained | | 55 m USD for ThaiHealth | Health 2015 = FIM 2.5 million from national budget |
| Financing | Consolidated revenue and Population Health Fund for community-based activities The Healthy Living Fund | National Lottery funding and consolidated revenue | Not obtained | Mix of federal grants, NGOs, sector, private sector | 2% surcharge on tobacco and alcohol tax | National budget, KTL = 61% from National budget, 8.6% chargeable services, 6.8% Academy of Finland, 6.2% EU financing, 2.7% Industry and commerce, 8.2% Co financed research financing, ministries, 6.5% other. DEHKO financed by Finland's Slot Machine Association (RAY), Finnish Diabetes Association and diabetes related companies |

## *National health surveillance and reporting system*

All countries have recognised the need to establish surveillance systems that monitor:

- Macro-level trends and policies that impact on healthy eating and physical activity (such as urban design, transport, food product content, advertising, agricultural policies)
- Individual self-report data on physical activity and dietary intake (plus possible inclusions of car ownership, driving times, frequency of walking and cycling to work school; home food preparation)
- Measured biomedical risk factors (such as weight, blood pressure, cholesterol).

Furthermore, the review identified that:

- All five countries have established health information and monitoring system covering chronic disease and major risk factors, and all have included chronic diseases in their annual health reporting system. The performance of these systems was not analysed for this review.
- With respect to data included in the national annual health report system, all have a broad coverage across risk factors, cause-specific mortality, and mortality. [3]
- National policies acknowledge and are premised upon continuous, long-term population-level surveillance for key variables at the individual and environmental levels.

[3] Time limitations prevented specification of the regularity and mechanism of these (eg. Annual - nationwide - measured/ self-reported/ risk factor prevalence surveys)

### *Research, Evaluation and Knowledge Management*

The national systems for public health in England, Canada (Wolbeck et al 2006), USA and Finland have institutions that lead or support the ongoing development of knowledge and the evidence-base for interventions. Each of these institutions plays an important part in funding, creating and/or managing the links necessary for the production and use of knowledge and evidence that supports and informs effective policy and practice for chronic disease prevention and health promotion.

Institutions include Centres for Disease Control (CDC) in the US, Canadian Health Service Research Foundation (CHSRF) and Centre for Chronic Disease Prevention and Control (CCDPC) in Canada and National Institute for Health and Clinical Evidence (NICE) and National Institute for Public Health Research (NIHR) in England. They play critical roles in a range of essential activities for the production and utilisation of knowledge, including the funding of programs and supporting their evaluation. They are also supported by a number of other agencies and/or government-funded programs (**Table 4.5**).

**Table 4.5. Institutions with major responsibilities for research, evaluation and knowledge management**

| | CANADA | ENGLAND | NEW ZEALAND | USA | THAILAND | FINLAND |
|---|---|---|---|---|---|---|
| Primary Institution | Canadian Health Services Research Foundation | National Institute for Health and Clinical Excellence (NICE)<br><br>National Institute for Health Research – Public Health Research Program (NIHR) | Ministry of Health | Centres for Disease Control (CDC) | Units within Ministry of Health | National Public Health Institute (KTL) |
| Partner Institutions | Health Evidence Canada<br><br>Effective Public Health Practice Project<br><br>Chronic Diseases Knowledge Exchange program<br><br>Canadian Best Practices Portal<br><br>National Collaborating Centres for Public Health | Centre for Reviews and Dissemination, York<br><br>Evidence for Policy and Practice Information and Coordinating Centre<br><br>Public Health Observatories<br><br>Obesity Observatory | Health research Council of New Zealand | Prevention Research Centers<br><br>Community Guide to Preventive Services, National Center for Health Marketing (NCHM) | Centre for Alcohol Studies<br><br>The Tobacco Control Research and Knowledge Management Centre | |

Monitoring and evaluation programs have been established in England, Canada, USA and Finland, with associated institutions to assist in understanding the progress and the impact of multi-faceted, multi-level, multi-sector, and population-wide strategies/programs. A new Obesity Observatory was established in England in December 2007, to provide an authoritative source of data and evidence on obesity, overweight and their social, economic and environmental determinants and evaluating pilot programs/projects and demonstration sites.

## 4.4 Overview of strategies and programs in selected countries

### *Policy framework*

In all of the countries reviewed there is a mix of single risk factor /disease and integrated programs addressing risk factors associated with the prevention of chronic disease and the promotion of health and wellbeing.

The results reported on in this section are limited to integrated risk factor programs in the areas of physical activity, healthy eating and obesity. The list of single risk factor and disease programs in each country can be referred to in **Appendix 3** (at this stage this is an indicative overview). Programs associated with tobacco control and harmful use of alcohol are covered in separate reports commissioned by the Department of Health and Ageing and have not been detailed here.

The articulation between the more recently implemented integrated programs and older, but continuing, single risk factor/disease programs was not examined. With the exception of USA, the countries reviewed do not include chronic disease in their strategy title.

As stated earlier in this section the integrated programs typically focus on the proximal causes of key risk factors contributing to common chronic diseases while acknowledging the need to tackle the broad societal (distal) factors underlying chronic disease patterns. The upward articulation with macro-social and economic policies was not generally apparent in the policy documents and websites that were examined.

**Table 4.6: Specific national integrated programs responding to unhealthy diet, physical inactivity and obesity**

| CANADA | ENGLAND | NEW ZEALAND | USA | THAILAND (ThaiHealth only) | FINLAND |
|---|---|---|---|---|---|
| Integrated Pan Canadian Living Strategy | Healthy Weight, Healthy Lives | Healthy Eating – Healthy Action | HealthierUS | Health Risk Factors Control Plan<br>Physical Exercise and Sports for Health Plan | Development Programme for the Prevention and Care of Diabetes in Finland DEHKO |
| 2007 - 2011 | 2008 -2011 | 2004 - 2010 | Ongoing | 2007 -2009 | 2000-2010 |
| Goal set for: 2015 | Goal set for: 2020 | Goal set for: 2010 | Goal set for: 2010 | Goal set for: Not stated | Goal set for: 2010 |

All of the integrated programs detailed in **Table 4.6**, are nested in national health policies/frameworks related to promoting health and preventing chronic disease, the features of which have already been described.

The programs have elements reflecting both horizontal and vertical integration. Many of the more integrated programs implement action across a range of sectors and settings, including: schools; workplaces; transport; private sector; and local geographic institutions and areas.

### *Partnerships*

A myriad of institutional links and partnerships exist in each country to facilitate strategies and programs. They take a number of forms and arise to meet various needs. The utilisation of partnerships across government, non-government organisations, community, and private sector organisations is a feature of all programs and configured according to each country context.

Given the complexity of the integrated approaches, England and Canada have instituted mechanisms to achieve horizontal integration either pre- or post strategy implementation (**Box 1**).

**BOX 1 HORIZONTAL INTEGRATION**

**HEALTHY WEIGHT, HEALTHY LIVES, ENGLAND**

The Cabinet Sub-Committee on Health and Wellbeing has a remit to tackle obesity and promote healthy weight, and the membership includes all of the lead departments. A Cabinet Committee on Families, Children and Young People also monitors progress with respect to child weight problems. Reporting to the new committee is a new cross-Government obesity unit. This is based in the Department of Health but led jointly by the Department of Health and the Department for Children Schools and Families, and includes staff and resources from across Government.

**Integrated Pan Canadian Healthy Living Strategy, Canada**

To support the intersectoral development of the Strategy, the Coordinating Committee of the Intersectoral Healthy Living Network was established in September 2004, led by three chairs representing federal, provincial/territorial governments, and the non-government sector. Comprising representatives of regional networks, governments, the private and voluntary sectors, and national Aboriginal organizations, the Coordinating Committee acts as an engine to move the Pan-Canadian Healthy Living agenda forward.

### *Timeframe*

As shown in **Table 4.6** above, the timeframe for the implementation of integrated strategies was generally 3-4 years (possibly associated with electoral cycles) and the time for achieving goals was set for longer periods (around 10 years).

### *Leadership*

The implementation of the integrated program in each country is supported by a lead agency/institution, situated centrally in national government or other authority that provides overall direction, coordination and support (such as related capacity building and workforce development).

### *Program design and implementation strategy*

Typically, the integrated programs are multi-faceted and incorporate:

- multi-level interventions– national, sub-national and local level initiatives;
- multi-sector interventions – across government portfolios and the community and private sectors; and
- a combination of strategies that span legislation/regulation, social marketing, environmental changes, community development and capacity building, as well as, programs and services supporting and enabling individual change approaches.

### *Addressing socioeconomic inequalities and disadvantage*

All of the integrated programs incorporate a goal and associated sets of actions for reducing health disparities. The most common approach involves targeting "at risk" groups (such as native populations or particular ethnic groups) and addressing the needs of children and families.

The links between the integrated health-oriented programs and other government policies on social inclusion/exclusion or equity are not clear at this stage of the review. More insights about ways forward in this area are likely to be set out in the upcoming final report of the WHO Commission on the Social Determinants of Health (WHO 2008).

In the *Healthy Weight, Healthy Lives* strategy (England), an equality impact assessment is being used to identify the possible impact of the strategy on equality, and the policies it sets out, on people according to their age, disability, race, religion and beliefs, gender and sexual orientation. It aims to assess whether the strategy is likely to have adverse effects on any of these groups. In New Zealand, the Reducing Inequalities framework guides the design and implementation of the *Healthy Eating-Healthy Action* program. This means that the program must take full account of four key concerns:

- Structural – tackling the root causes of health inequalities, that is, the social, economic, cultural and historical factors that fundamentally determine health.
- Intermediary pathways – targeting material, psychosocial and behavioural factors that mediate the impact of structural factors on health.
- Health and disability services – undertaking specific actions within health and disability services.
- Impact – minimising the impact of disability and illness on socioeconomic position.

### *Monitoring and evaluation of implementation and outcomes*

All of the integrated programs stress the need for rigorous and ongoing evaluation and monitoring. Plans note goals and/or actions for the development/implementation of evaluation and monitoring systems to support continuous program improvement.

The OECD countries reviewed all had national agencies/institutions for supporting the evaluation of interventions. England, for example, has introduced an impact assessment process with it's *Healthy Weight, Healthy Living* strategy which monitors the impacts of its policies upon the public, private and tertiary sectors. This acknowledges the multi-sectoral nature of the interventions. In addition the impact on equality, including race, disability and gender is monitored through an Equality Impact Assessment. Research has also been bolstered through the commissioning of an obesity observatory that operates within a system of geographically based public health observatories.

# SECTION 5. LESSONS FOR AUSTRALIA

In this section of the report, we identify a number of findings and lessons arising from this rapid stocktake (see Part B) which require further consideration and analysis with respect to building and enabling sustainable systems for prevention in Australia in the future. Selective examples – called EXHIBITS - that were identified during the review are used to illustrate some of these potential lessons for Australia. These findings and lessons are discussed in two sub-sections: (1) systems underpinning the strategies and programs and (2) strategies and programs for primary prevention and health promotion.

## 5.1 The systems underpinning strategies and programs

***Lesson 1. Establishment of a high-level government or equivalent committee with appropriate inter-sectoral partners is necessary to champion primary prevention of chronic disease and ensure high-level political commitment and accountability.***

The highest status committee is a Cabinet Committee (and equivalents) that had cross-portfolio representation. In New Zealand, a recent review of the Healthy Eating-Healthy Action program has recommended that a Ministerial Committee, chaired by the Minister of Health, be established to provide high-level, whole-of-government leadership that focuses on improving obesogenic environments. The Ministerial Committee will also work alongside a steering group to set agreed targets. The group will include non-government organisations, academics, Maori and Pacific representatives and the food and advertising industries.

In England, a Sub-Committee on Health and Wellbeing has been established.

**EXHIBIT - SUB-COMMITTEE ON HEALTH AND WELLBEING**

**Terms of Reference:**

"To consider policy on health and wellbeing, including the prevention of ill-health, the promotion of healthy and active lifestyles and the reduction of health inequalities; and report as necessary to the Ministerial Committee on Domestic Affairs."

**Membership:**

Minister for the Cabinet Office, and Chancellor of the Duchy of Lancaster (Chair)
Secretaries of State for the Home Department; Health; Environment, Food and Rural Affairs; Business, Enterprise and Regulatory Reform; Work and Pensions; and Secretary of State for Wales; Transport; Communities and Local Government; Children, Schools and Families; Innovation, Universities and Skills; Culture, Media and Sport
Chief Secretary to the Treasury
Secretary of State for Innovation, Universities and Skills
Minister of State, Scotland Office
Minister for the Olympics and Minister for London (Paymaster General)
Minister of State, Northern Ireland
Parliamentary Under Secretary of State, Government Equalities Office
Parliamentary Secretary, Cabinet Office (Gillian Merron)

**Obesity**

Remit includes tackling obesity and promoting healthy weight. The Cabinet Committee on Families, Children and Young People monitors progress with respect to child weight problems.
Reporting to the new committee is a new cross-Government obesity unit based in the Department of Health (DOH) but led jointly by the DOH and the Department for Children Schools and Families, and includes staff and resources from across Government. The major responsibilities of the new unit will include: taking forward the commitment outlined in this strategy; producing the annual report; leading across Government in developing further proposals as necessary to fulfil our ambition to reverse the rising tide of obesity and overweight; acting as the focal point for knowledge on healthy weight in Government; managing relationships between Government, industry and other stakeholders. The unit is supported in its responsibilities by: 1. an Expert Panel of academics, building on the Foresight science advisers 2. a Delivery Reference Group composed of experienced representatives from across the delivery chain and across the country.
The Government will assess the impacts, through the Impact Assessment process, including the health impacts, of its policies upon the public, private and third sectors. Additionally the Government will assess the impact on

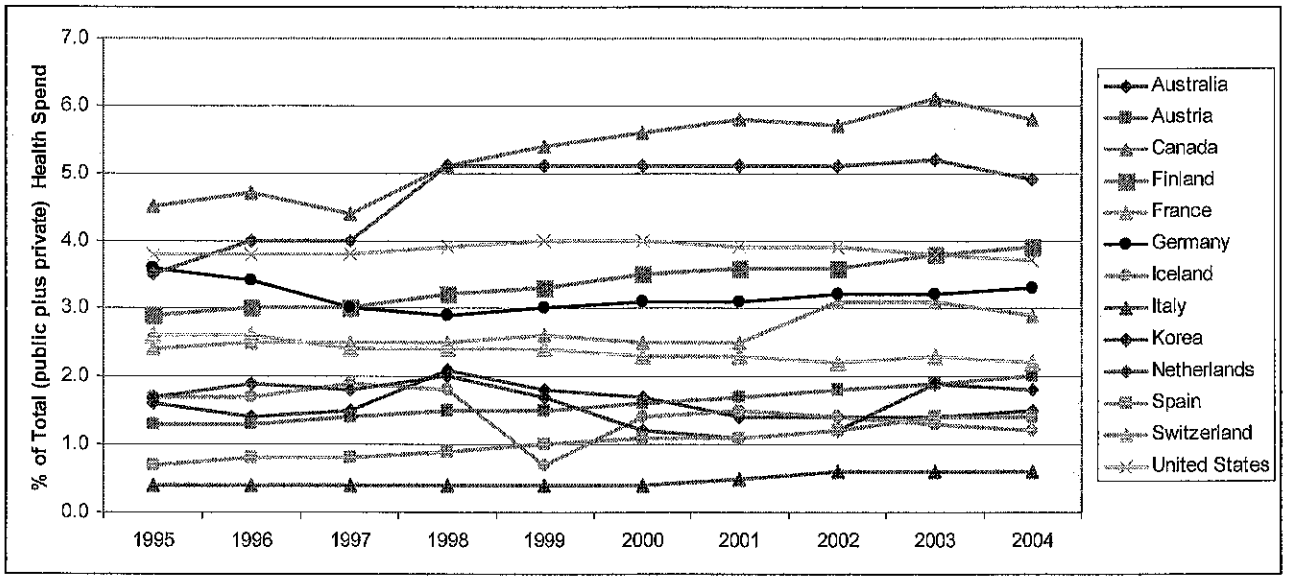
equality, including race, disability and gender and has undertaken an Equality Impact Assessment. Full impact assessments on these policies will be carried out as these policies are taken forward. The new unit will also work to align policies with the forthcoming Cross-Government Global Health Strategy.
The Government aims to support stakeholders in business and the third sector in engaging with each other on how they can meet the challenge of tackling excess weight in the population by building a Coalition for Better Health, which would: reach agreements on joint programmes; disseminate knowledge on what works, and what doesn't; challenge each other to go further.

Swinburn (2008) has outlined the roles of government in relation to obesity prevention, which has implications for the more general role for government in primary prevention of chronic disease. (**Appendix 5**).

***Lesson 2. New approaches to long-term funding for primary prevention of chronic disease need to be developed and recognise the limited approaches of the past and the need for more innovative and sustainable financing models in the future.***

A recent AIHW Report has estimated that Australia's total investment in 'public health' by all Australian health jurisdictions is currently 1.8% and unchanged in almost a decade (AIHW 2008), which is low compared to a (still inadequate) OECD average of about 3 per cent for 'prevention' (OECD 2000). The spending on prevention and health promotion is only a proportion of this 1.8%. OECD trend data on prevention and public health programs for Australia, Canada, Finland and the US appear in **Figure 5.1**.

**Figure 5.1 Trend in percentage of total health expenditure accounted for by prevention and public health programmes in selected OECD countries 1995 to 2004.**




Source: OECD System of Health Accounts, October 2006

Relying on a very small proportion of funding from a national health budget to provide adequate, sustainable financing of a long-term and well organised chronic disease prevention and health promotion program has proven to be insufficient in most countries because of the inherent pressures on such funds from the health care delivery system. It also reflects a narrow understanding of what actions are needed and the roles of a wide range of stakeholders. Some innovative national financing models – such as the one in Thailand – have been developed in recent years (**Appendix 6**). The funding arrangements of the new obesity strategy in England could also be further explored to gain insight into the financing arrangements of a cross-portfolio initiative. This is an area that needs closer scrutiny and analysis. Health England (a national reference group for health and wellbeing) is currently

investigating prevention financing, and has to date engaged an expert advisory group on prevention financing to examine an initial set of questions.

***Lesson 3. Strengthened system components are needed for developing and implementing an effective chronic disease primary prevention strategy and related programs.***

Lack of integration among the jurisdictions and between programs has long been a criticism of the Australian situation and clearly, this will be a challenge for developing and implementing a more nationally coordinated approach to prevention and health promotion in the future (Willcox 2006; AIHPS & VicHealth 2008; Lin et al 2008).

Some of the specific elements that have been introduced internationally to strengthen the effectiveness and accountability of the system supporting chronic disease prevention are population health targets, workforce development and mechanisms to ensure continuous system learning. Elements within systems are being strengthened in different ways across countries. Ideally, new infrastructure and resources enable each system to operate as an **integrated whole**, capable of being adaptive to emerging issues and resilient to stresses on the system such as changes in participation of particular sectors in action. Further analysis is required to examine innovations across countries that are building a more integrated and coordinated system.

***Lesson 4. Establishment of measurable targets for primary prevention and health promotion is critical for long term monitoring and evaluation of implementation and outcomes.***

Most countries have some form of national health targets that also include chronic disease. These need to include not only measurement of the disease conditions and the behavioural risk factors, but also the more upstream determinants and influences on these. Advocates of health targets propose that they will help to direct cross-sectoral efforts involving multiple settings, players and levels, without being prescriptive of how to achieve the targets. In the US, a rolling program of national public health objectives and targets under the Healthy People initiative has existed since 1979. It is based on the notion that setting objectives and monitoring progress can motivate action at different levels. The role of the States is particularly important in that context. The targets have been reviewed for the next chapter of the program – Healthy People 2020 (Blakey et al 2006).

In Sweden's case, public health targets reflect the trend in health policy towards more emphasis on determinants of health and societal interventions (less on individuals). While there is debate about their value in supporting governance with targets (Lager et al 2007) the targets initiative represents a bold move to orient sectors, systems and activities to cooperatively developing the social conditions needed to ensure good health for the whole population. The process of formulating targets successfully raised awareness among policy makers and civil servants of the broad social and economic determinants of health problems such as chronic disease and the role of other sectors, such as transport (preventing road injury) and housing (secure, healthy homes) in contributing to health. An intersectoral committee designed the 11 targets (**Appendix 7**) thus producing agreement at the highest political levels of the intersectoral approach to health. Implementation remains an issue: "A major block is that some ministries do not consistently address health considerations in their policies. Inter-sectoral rhetoric is not the same as inter-sectoral action. ...I fear also that

sometimes issues regarding socioeconomic determinants of health are simplified, and their complexity is not recognised. A better link between research and policy is necessary." [4]

***Lesson 5. Establishment of sustainable infrastructure that facilitates the production, dissemination and use of evidence and learning is essential if strategies and programs are to be effective.***

To continue improving the health and wellbeing of the population, reliable and relevant evidence on the most effective ways of protecting people from disease, preventing illness and promoting good health is required. This information can only come from research (including ongoing evaluation of strategies and programs).

Countries examined in this review have recognised the complexity of primary prevention interventions (especially for healthy eating and physical activity) and have, or are, implementing integrated research and surveillance agendas to align efforts nationally to effect change, and to ensure that:

- Policy and program decisions are based on timely, regular and meaningful data.
- There is coordination and integration of investments in research, policy and practice.
- Communities have easy, efficient, timely access to the knowledge they need, in usable form, to inform decisions.
- Researchers are better able to conduct research to address policy and practice.
- The existing research is synthesized and translated for use by population and public health organisations.
- Key intersectoral stakeholders at all levels collaborate in the various phases of the knowledge development and exchange cycle, to create the ability to "learn as we go" – what works, and in what context.
- Research, surveillance and evaluation are integrated with policy and program development.

Mechanisms that allow for ongoing cross-strategy/program learning at national and international levels are needed so that measures adopted to address the same issues in other jurisdictions or different issues in a variety of jurisdictions can be instructive in developing efforts to prevent chronic disease. According to Yach et al (2003) in regard to tobacco:

*The accumulation of experience from many countries means that it is now much clearer what works and what does not. It confirms the wisdom of the early adopters: Be comprehensive; keep the debate alive, interesting, and provocative in the media; incrementally tighten laws as public support and demand for action increases; move to make smoking an unacceptable and antisocial behaviour; and globalise action to counter the global reach and strategies of tobacco companies – particularly their marketing and investment practices.*

While learning is important, McLaren reminds us that uncritical translation of programs from one context to another (such as the North Karelia project in Finland) carries the risk of failure (McLaren 2006).

## 5.2 Strategies and Programs

Clearly, Australia continues to make a very significant contribution internationally to the development, implementation and evaluation of effective strategies and programs for preventing chronic disease and promoting health.

[4] Interview with Commissioner Denny Vagero, Sweden
http://www.who.int/social_determinants/commissioners/interview_vagero/en/index.html

***Lesson 6. Strategies and programs should incorporate an integrated approach and a life-course perspective.***

Chronic disease prevention initiatives have traditionally taken their starting point from specific diseases such as heart disease, diabetes, chronic obstructive pulmonary disease and some cancers. This has given rise to vertical programs that aim to bring about change in relation to a number of the same risk issues. With growing evidence and increasing recognition that these diseases share a number of the same behavioural risk factors – e.g. tobacco use, unhealthy diet and sedentary lifestyle - as well as social risk factors – e.g. inequalities - there is a major opportunity to reconceptualise a national framework for chronic disease prevention initiatives in Australia in terms of a much more integrated approach. There are now a number of examples of OECD countries which have developed such an approach.

In addition, the life-course approach to chronic disease prevention has been advocated internationally in recent years, reflecting the emergence of research that tracks associations between exposures and outcomes at the individual and population levels.
Public health strategies that target individual chronic diseases have often operated without reference to one another. There is also research which demonstrates that this 'narrow' approaches leads to limited program effectiveness and efficiency (Robinson et al 2007). However, a systematic review of research on more integrated approaches to the prevention of excess weight and chronic disease in populations has also demonstrated an equivocal picture. It showed that some non-integrated (single component) strategies were quite effective and that the same mixed outcomes were apparent for more vertically and horizontally integrated strategies (Shiell, 2004).

What the evidence does suggest is that because of the multi-faceted, multi-level, multi-sector and population-wide nature of risk factors (proximal and distal) an integrated approach is more likely to:

- ensure greater alignment, coordination and direction for all sectors;
- provide a national context and reference point for all sectors, governments and Aboriginal organisations to measure the success of their own strategies and interventions;
- provide a forum for multiple players to align efforts and to work collaboratively to address common risk factors;
- ensure stakeholders are better and more broadly informed, thereby facilitating greater synergy and improved identification of opportunities across sectors public;
- overcome any inconsistencies or confusion of multiple "messages"; and
- lead to an increase in large scale efforts in knowledge development and exchange.

Requirements identified to support integrated chronic disease prevention and healthy living initiatives include:

- multi-level and multi-sector partnerships;
- policy development;
- flexibility in financing across different levels of government and organisations;
- capacity building (e.g. knowledge and resource development); and
- a combination of surveillance and information dissemination (Robinson et al 2007).

**Exhibit - The Sydney Declaration**
Partners making up the Oxford Health Alliance (2008) proposed four fronts for action that by nature represent one form of an integrated approach to primary prevention of chronic disease:

- Healthy places – designing towns, cities and rural areas, which are smoke-free, and where it is easy to walk, cycle and play, with unpolluted open spaces and safe local areas that foster social interaction.
- Healthy food – making healthy food affordable, and available to all.
- Healthy business – engaging business in the agendas promoting healthy people, healthy places, healthy planet and making good health good business.

- Healthy public policy – formulating comprehensive, innovative and 'joined-up' legislation and social and economic policies that promote health.
- Healthy societies – addressing equity and socio-economic disadvantage.

Source: Oxford Health Alliance (2008)

Potential barriers to integration may include:

- the lack of financial resources that span multiple-disease strategies and competing priorities (e.g., acute care and public health crises that divert policy attention and resources);
- issues for individual agencies of territoriality and perceived "loss of glory" (i.e., sharing credit for achievements) that may affect fundraising;
- resource costs involved in creating partnerships and slow progress in making things happen;
- problems integrating programs that have varied policies, service frameworks, and practices (i.e., silo effect); and
- difficulty protecting under-funded programs when integrating them with programs that have adequate resources.

***Lesson 7. Strategies and programs need to be adequately supported and funded to demonstrate their effectiveness.***

An important observation from the impact of public health policy and systems integration on chronic disease health outcomes is that considerable time is required for full implementation to occur and changes in determinants of the problem to be realised. Coordinated funding for capacity development is required and this takes time as well. Reliable implementation over an extended period of time (10 years or more) is essential and the means for the positive effects of programs to be sustained need to be considered. This requires significant levels of leadership, considerable investment in all aspects of program development, delivery, research and knowledge exchange into policy and practice.

***Lessons 8. Strategies and programs need to be well designed using the best available evidence and implemented using multi-level and multi-sectoral approaches.***

The evidence informing integrated programs and strategies consistently points toward multi-faceted interventions that are:

- addressing the fundamental behavioural and social causes of chronic disease
- using multiple approaches simultaneously – laws, communication (social marketing and education), social and community support/capacity building, and economic incentives and disincentives.
- operating at multiple levels: individuals, families, schools, workplaces, communities, and nation.
- designed to account for the special needs of specific target risk groups such as children, seniors, ethnic groups or at-risk communities.
- being long in duration because change takes time and needs to be constantly supported for each subsequent generation.
- engaging with a variety of sectors that are not traditionally associated with "health", such as business, transport, engineering, law, media and others.
- implementing a nationally comprehensive communications and social marketing campaign that provides clear and consistent messages.

In British Columbia, Canada, the integrated health strategy was based on 'four E's'; namely:

**EXHIBIT - THE 4-E'S FOR MAINTAINING HEALTH**

**Education:** campaigns that give populations and individuals the facts about specific health issues or behaviours, stressing the harms and the actions needed to avoid them. The education process must be multi-faceted, ongoing, and creative. It must use multiple settings, multiple variations of the message, and multiple avenues of communication - such as media, schools, and government campaigns.

**Environmental** supports: are design and social developments that support behavioural change. They might include nicotine patches, drug treatments, or cessation programs for tobacco use; comfortable, effective seatbelts or helmets to help injury reduction; vending machines stocked with healthy choices of food; pedometers used to measure daily activity; bike lanes or trails to promote cycling or walking.

**Economic** levers: are financial incentives and disincentives to discourage an unhealthy behaviour. Raising taxes, such as on tobacco, can discourage use. Removing taxes or providing tax deductions from other items, like sporting activities or exercise equipment, can encourage their use. Fines, tolls or other levies act as disincentives for unhealthy or risky actions, while rebates, price cuts, subsidies can support healthy actions and choices. Economic disincentives have been used very effectively to discourage tobacco use.

**Enforcement:** involves implementing legislation such as banning smoking in workplaces and public spaces, imposing age restrictions for cigarette purchases, and introducing helmet and seatbelt laws. It is usually the final step that comes after the groundwork has been done by the activities under the three other "Es".

***Lesson 9. Addressing inequalities and the health gap between different population subgroups needs to be a critical dimension of all strategies and programs.***

Countries' efforts to address health inequalities and the health gap between different population subgroups demonstrate that this requires a whole-of-system response that addresses both the proximal and more distal influences of the inequalities. Work from New Zealand on ensuring that inequalities are always addressed through programs is instructive and stems from the Treaty of Waitangi (**Appendix 8**). The following exhibit sets out how England is approaching the issue of health inequalities. The approach used in England illustrates many of the themes arising from the review in terms of what constitutes useful ways forward in this complex and politically challenging area. For instance, setting targets helps to ensure accountability to the public for actions and support the monitoring and evaluation of progress.

**EXHIBIT - TACKLING HEALTH INEQUALITIES IN ENGLAND**

| | |
|---|---|
| **History** | A programme of addressing inequalities in health was initiated in England by the Acheson report "Independent Inquiry into Inequalities in Health": http://www.archive.official-documents.co.uk/document/doh/ih/ih.htm, which triggered a series of key policy documents that brought health inequalities forward as a cross-government priority. Government-wide targets known as PSA or Public Service Agreement targets, aimed for faster improvement in health outcomes in a fifth of areas with the worst health and deprivation indices (in life expectancy, death from heart disease and stroke, and cancers). |
| **Context** | England along with all UK countries recognised the need to tackle health inequalities through a common approach, and working with regional and local structures of government as necessary. The approach involves a focus on both health (health care and health behaviour) factors, and on the wider, social determinants in health that achieve a sustainable reduction in health inequalities.<br>All UK countries share a commitment to tackling health inequalities through addressing the wider, social determinants of health, as well as with targets, although the targets are framed slightly differently in each country. |
| **Policies and action** | The national health inequalities strategy for England is set out in the *Programme for Action* (2003) covering around a third of the population, not just socially excluded groups. It outlines a twin track approach with a national target to *reduce health inequalities by 10% as measured by infant mortality and life expectancy at birth by 2010*.<br>This approach combines action to achieve a long-term, sustainable reduction in health inequalities through the National Health Service (NHS), and through other government departments. The strategy identified 77 commitments from 12 government departments.<br>The aim is to improve the health of people in disadvantaged groups and areas faster than the rest of the population. This includes reversing the 'inverse care law' where those with |

| | |
|---|---|
| | greatest health needs have least access to services.<br>Action is on a broad front and is reflected in the strategy themes:<br>• supporting families, mothers and children<br>• engaging communities and individuals<br>• preventing illness and providing effective treatment and care<br>• addressing the underlying determinants of health<br>Delivery involves action at local, regional and national level. Local government in England has new responsibilities for the health and well being of their communities as well as responsibility for a range of services covering the wider determinants such as education and housing. Working with local NHS bodies also helps deliver this strategy.<br>A different focus has been deployed to deliver the 2010 target part of the strategy. On reducing the life expectancy gap, the specific interventions required are<br>• reducing smoking in manual social groups<br>• preventing and managing other risk factors, such as diet, and obesity, physical inactivity and high blood pressure<br>• improving environmental health, including housing conditions and reducing accidents<br>• targeting the over-50s –among whom the greatest short-term impact will be made, as well as<br>• UK action also includes reductions in suicide rates and teenage pregnancy. |
| **Targets** | The UK Government's Public Service Agreement (PSA) to reduce health inequalities<br>The single overall target:<br>• Reduce health inequalities by 10% by 2010 as measured by infant mortality (from a 1997-99 baseline) and life expectancy at birth (from a 1995-97 baseline).<br>The single target is supported by the following two specific targets:<br>• Starting with children under one year, by 2010 to reduce the gap in mortality by at least 10% between "routine and manual" groups and the population as a whole.<br>• Starting with Local Authorities, by 2010 to reduce by at least 10% the life expectancy gap between the fifth of areas with the worst health and deprivation indicators and the population as a whole.<br>Supporting Targets:<br>• Substantially reduce mortality rates by 2010 from heart disease and stroke and related disease by at least 40% in people under 75 with a 40% reduction in the inequalities gap between the fifth of areas with the worst health and deprivation factors (Spearhead areas) and the population as a whole.<br>• Substantially reduce mortality rates by 2010 from cancers by at least 20% in people under 75 with a reduction in the inequalities gap of at least 6% between the fifth of areas with the worst health and deprivation indicators (spearhead areas) and the population as a whole.<br>• Reduce adult smoking rates to 21% or less by 2010, with a reduction in prevalence among routine and manual groups to 26% or less. |
| **Key strengths of the strategy** | • An independent, scientific review on the evidence of health inequalities<br>• A strategic approach that encompasses the social determinants of health underpinned by a cross government partnership<br>• National targets to galvanise action at all levels, supported by an outcomes based performance framework and focus on delivery |
| **Challenges** | A Department of Health/Treasury review concluded that to achieve the desired targets it will be necessary to ensure:<br>• a clear local plan and timescale for delivering the target<br>• the engagement of key players in health and local government<br>• greater clarity about the actions needed to address health inequalities, including an assessment of the impact of different interventions<br>• action to address the low expectations about their health by people living in disadvantaged groups and areas, and<br>• a clear performance management framework focused on outcomes and tracking delivery.<br><br>In January 2006, the NHS in England announced that tackling health inequalities is to be one of the top six priorities for the service. |

| | |
|---|---|
| **Policy Link** | **Social Exclusion**<br>A three phase initiative commenced in 1997.<br>1997-2001 – dedicated Social Exclusion Unit (SEU) in Cabinet Office directly accountable to Prime Minister. Focus was on developing new policies for selected 'socially excluded groups and areas'.<br>2001-2006 - SEU transferred to the Office of the Deputy Prime Minister with a focus on mainstream services of central and local government being changed to better meet the needs of disadvantaged groups.<br>Spring 2007 to 2008 - SEU abolished and a Social Exclusion Task Force established back in the Cabinet Office with a narrower focus on 'deep' exclusion i.e. 'those experiencing entrenched and deep-seated exclusion [who] are often harder to reach and harder to engage'. |

# SECTION 6. BIBLIOGRAPHY

AIHW (2004). Australia's Health 2004. Canberra, ACT: Australian Institute of Health and Welfare.
http://www.aihw.gov.au/publications/index.cfm/title/10014

AIHW (2006). Chronic diseases and associated risk factors in Australia. Canberra, ACT: Australian Institute of Health and Welfare.
http://www.aihw.gov.au/publications/phe/cdarfa06/cdarfa06-c00.pdf

AIHW (2008). National public health expenditure report 2005-06. Canberra, ACT: Australian Institute of Health and Welfare.
http://www.aihw.gov.au/publications/index.cfm/title/10528

Australian Institute of Health Policy Studies (AIHPS) and VicHealth (2008). A platform for advancing the health and wellbeing of all Australians.
www.aihps.org

Bayarsaikhan D and Muiser J (2007). Financing health promotion. Discussion paper. No 4. Geneva: World Health Organisation.

Blakey, C., Nichols, D and Oppenheimer, C. (2006). "Healthy People: Looking Ahead to 2020," presented at the American Public Health Association Annual Meeting, Boston, MA. November.

DHS. (2006). Chronic Disease Management Program Guidelines for Primary Care Partnerships and Community Health Services. Melbourne, Victoria: Victorian Government Department of Human Services.
http://www.health.vic.gov.au/communityhealth/publications/cdm_guidelines.htm.

IANPH. (2007) Framework for the Creation and Development of National Public Health Institutes. A Series of Technical and Policy Briefs, No 1.
http://www.ianphi.org/what_we_do/nphi_benchmarking_and_tools/nphi_framework_and_toolkit/

IANPH. (2007). NPHI Case Studies. Profiles for creation and growth: What factors support the creation of a successful NPHI?
http://www.ianphi.org/what_we_do/nphi_benchmarking_and_tools/nphi_case_studies

Lager A, Guldbrandsson K and Fossum B (2007). The chance of Sweden's public health targets making a difference. Health Policy, 80(2007) 413-421.

Lin V, Fawkes S, and Hughes A (2008). A Vision for Prevention in Australia: Discussion Paper. Australian Institute of Health Policy Studies (AIHPS).

McLaren, L, Ghali LM, Lorenzetti D and Rock M (2006). Out of context? Translating evidence from the North Karelia project over place and time.
Health Education Research. 18 Sep, 22:414-424

Mello MM, Studdert, Brennan TA (2006). Obesity – the new frontier of public health law. NEngl J Med: 354(24): 2601-2610.

Merson M, Black R and Mills A (2006). International Public Health: Diseases, programs, systems and policies. 2nd Ed. London: Jones Bartlett Publishers

Minke SW, Smith C, Plotnikoff RC, Khalema E and Paine K (2006). The evolution of integrated chrinic disease prevention in Alberta, Canada. Preventing Chronic Disease [serial online]. Jul. http://www.cdc.gov/pcd/issues/2006/jul/05_0225.htm

National Public Health Partnership (2001). Preventing Chronic Disease: A strategic framework – Background paper. Melbourne, Victoria.

OECD (2000) A system of health accounts. Paris, France.
http://www.oecd.org/dataoecd/41/4/1841456.pdf

Oxford Health Alliance (2008). The Sydney Declaration. Healthy People in Healthy Places on a Healthy Planet.
http://www.oxha.org/knowledge/publications/Sydney%20Resolution%20FINAL%2027.02.08.pdf

Robinson K, Farmer T, Elliott SJ, Eyles J (2007). From heart health promotion to chronic disease prevention: contributions of the Canadian Heart Health Initiative. Prev Chronic Dis Apr. http://www.cdc.gov/pcd/issues/2007/apr/06_0076.htm.

Sheill A. (2004). Are integrated approaches working to promote healthy weights and prevent obesity and chronic disease? Calgary, Alberta: University of Calgary.

Smith GD (2007). Life-course approaches to inequalities in adult chronic disease risk. Proceedings of the Nutrition Society, May, 66(2): 216-36

Spencer N. (2003). Weighing the Evidence: How is birth weight determined? Oxon: Radcliffe Medical Press.

Stachenko S (2006). Physical Activity and Healthy Eating Interventions in the Americas: Supporting the WHO Global Strategy on Diet, Physical Activity and Health. Paper presented at Healthy Eating & Active Living Conference, Nov 29-30, Toronto, Canada.
http://www.mhp.gov.on.ca/english/health/HEAL/conferencepresentations/Stachenko_Presentation.pdf

Stuckler D (2008). Population causes and consequences of leading chronic diseases: a comparative analysis of prevailing explanations. The Milbank Quarterly, Vol 86, Issue 2 pp273-326.

Swinburn B (2008). Obesity prevention: the role of policies, laws and regulations. Australia and New Zealand Health Policy, 5:12.
http://www.anzhealthpolicy.com/content/5/1/12

Tangcharoensathien V, Somaini B, Moodie R and Hoskins D. (2005). Sustainable financing for Health Promotion: Issues and Challenges. Paper presented at 6th Global Conference on Health Promotion, August, Bangkok, Thailand.

Tong B & Stevenson C (2007). Comorbidity of cardiovascular disease, diabetes and chronic kidney disease in Australia. Cardiovascular Disease Series no. 28. Cat. no. CVD 37.Canberra: AIHW.

Victorian Health Promotion Foundation (2005), 'VicHealth Position Statement on Health Inequalities', VicHealth, Melbourne.
http://www.vichealth.vic.gov.au/assets/contentFiles/HI_Position_Paper_latest.pdf

WHO (1998). Health Promotion Glossary WHOHPR/HEP/98.1 viewed 1 June 2008, http://www.who.int/hpr/NPH/docs/hp_glossary_en.pdf

WHO (2006). Comparative analysis of nutrition policies in the WHO European Region. A comparative analysis of nutrition policies and plans of action in WHO European Member States. WHO: Copenhagen

WHO/WHA (2008) Sixty-first World Health Assembly. 19-24 May 2008, Geneva, Switzerland
http://www.who.int/mediacentre/events/2008/wha61/en/

WHO (2008). How does Swedish public health policy address determinants of health? Interview with Commissioner Denny Vagero, Sweden.
http://www.who.int/social_determinants/commissioners/interview_vagero/en/

WHO (2008). WHO Commission on the Social Determinants of Health.
http://www.who.int/social_determinants/resources/interim_statement/en/index.html.

Willcox S (2006). Purchasing Prevention: Making every cent count: Background paper. Australian Institute of Health Policy Studies (AIHPS)
www.aihps.org

Wolbeck Minke S, Smith C, Plotnikoff RC, Khalema E, Raine K (2006). The evolution of integrated chronic disease prevention in Alberta, Canada. Preventing Chronic Disease.
http://www.cdc.gov/pcd/issues/2006/jul/05_0225.htm.

Yach D, Hawkes C, Epping-Jordan JE and Galbraith S (2003). The World Health Organisation Framework Convention on Tobacco Control: Implications for the Global Epidemics of Food-related Deaths and Disease. Journal of Public Health Policy, 24(2-3), pp274-290