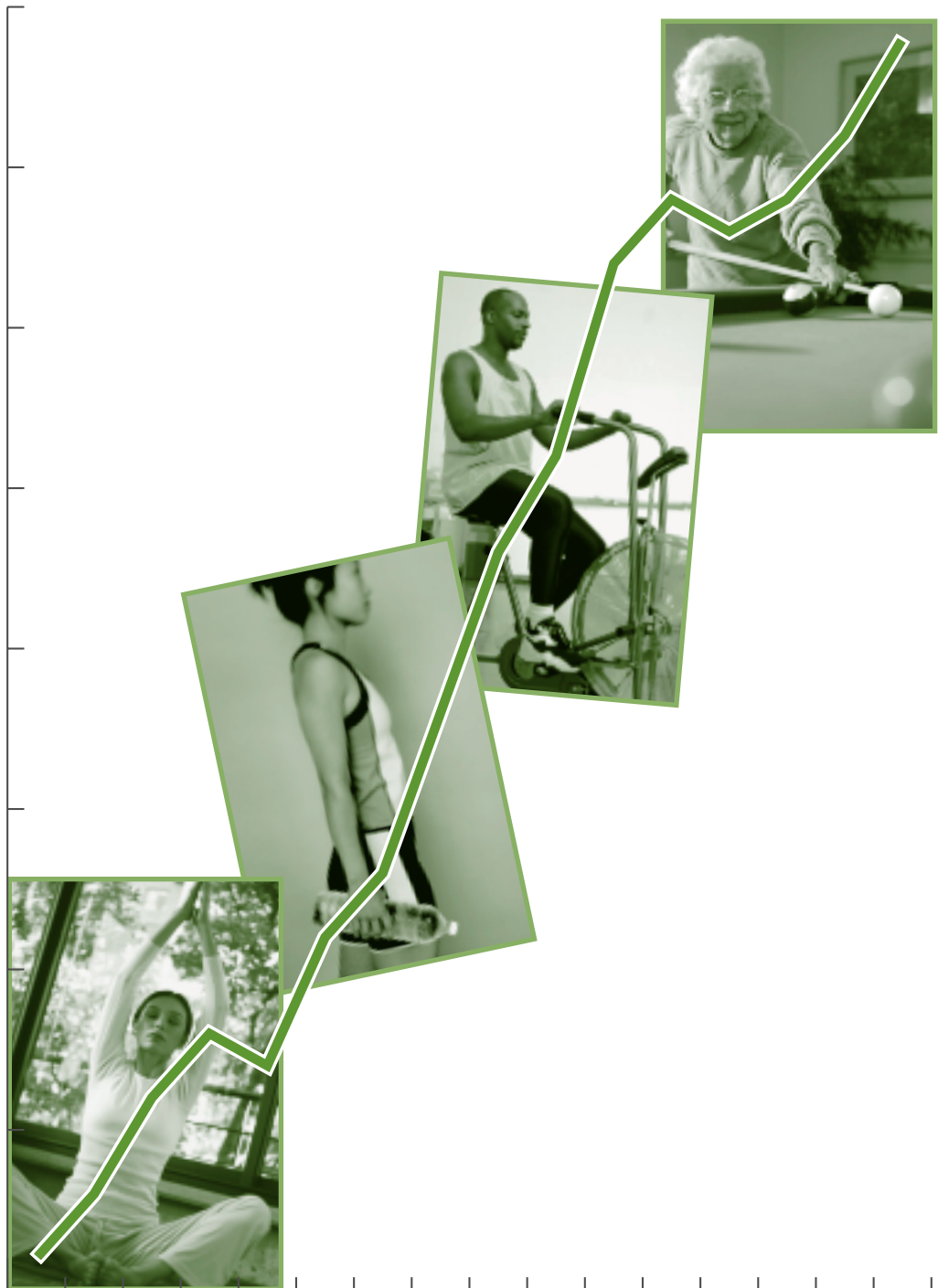


# NSW Chronic Disease Prevention Strategy

2003-2007



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September 2003





# Executive summary

The NSW Chronic Disease Prevention Strategy aims to lay out the strategic principles of chronic disease prevention for NSW for 2003–2007 from a population health perspective emphasising primary prevention. An integrated approach to preventive measures in modifying a shared set of behavioural and psychosocial health determinants particularly through settings-based and population-based programs is proposed. It aims to harness the benefits and value-add to existing health promotion programs within the portfolios dealing with tobacco smoking, nutrition, alcohol consumption, physical activity and mental health promotion with management of psychosocial risk factors. These determinants account for a cluster of chronic diseases and conditions which contribute to a major proportion of total burden on the community and on the health system of NSW. For the purpose of this strategy, this cluster of chronic diseases and conditions encompasses cardiovascular diseases, cancers, chronic lung disease, diabetes mellitus (type 2), obesity, injurious falls in older people, and poor emotional and psychological well-being. The strategy is designed to complement existing preventive programs (especially in secondary and tertiary prevention) within existing services for the management of these chronic diseases, notably the NSW Clinical Service Frameworks for significant chronic diseases as addressed in the Chronic Care Program,<sup>1,2,3</sup> as well as other well-established disease prevention programs. Although this strategy focuses overall on primary prevention, positive impact is also expected on secondary prevention programs through a population-based and integrated approach.

The Strategy provides an overarching framework for several existing State ‘sub-strategies’, and focuses on key settings such as primary health care, local government and schools. Equity issues need to be addressed. NSW Health Aboriginal Health Impact Statements will be completed as appropriate for all proposed projects, strategies and policies. There is substantial innovation inherent in the proposed strategy, notably in the way in which preventive management of psychosocial risk factors is incorporated. The importance of ongoing

dissemination of evidence of effectiveness and cost-effectiveness, and of ongoing evaluation and refinement of the approach is therefore emphasised.

Priorities for action include:

- provision of support for Area Health Services and key non-government organisations in programs of chronic disease prevention
- evaluation of an overarching ‘integration’ strategy to draw together existing programs and activities within statewide portfolios for various modifiable risk factors
- adoption of settings-based approaches to chronic disease prevention programs
- prioritisation of research on chronic disease prevention within the NSWHealth Health Promotion Demonstration Research Grants Scheme
- exploration of the development of systems to improve the monitoring and reporting of investments and service outputs for chronic disease prevention and health promotion, using an agreed and standardised methodology
- attention to inequity issues in the burden of chronic disease through specific measures including establishment of the Collaborative Centre for Aboriginal Health Promotion with a dedicated Aboriginal Health Promotion Grants Program and strategies to ensure appropriate, acceptable, and sustainable reach to at-risk groups.

# 2

## Preamble

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The NSW Chronic Disease Prevention Strategy was developed after an extensive consultation period. A discussion document<sup>4</sup> on the strategy was published and disseminated in 2001 and comments were invited. Many helpful comments were received during the consultation, and these have been incorporated in this final strategy document. Every effort has been made also to take account of relevant information which has become available since the consultation period. Examples include:

- the endorsement by the Australian Health Ministers' Advisory Council (AHMAC) and the subsequent release by the National Public Health Partnership (NPHP) of *Preventing Chronic Disease – A Strategic Framework* as the basis for further national collaborative action<sup>5</sup>
- the inclusion of Chronic Disease Prevention as a key strategic development area in the NPHP priority agenda as well as the Communiqué from the NSW Childhood Obesity Summit and the subsequent response from the NSW Government
- the development of NSW Clinical Service Frameworks for chronic respiratory disease,<sup>1</sup> for optimising cancer care,<sup>2</sup> and for heart failure<sup>3</sup> by the NSW Department of Health under the Chronic Care Program within the Government Action Plan, which reflects the preventive components in standards, milestones and targets of chronic disease prevention.

This strategy aligns with the vision, principles, and key goals of *Healthy People 2005 – New Directions for Public Health in NSW*.<sup>6</sup> It emphasises prevention from a population health perspective and with a focus on primary prevention (although positive impact is also expected on secondary prevention programs through a population-based and integrated approach). The strategy seeks to engender a 'whole of system' approach to prevention and management, paying due attention to environmental, psychosocial and behavioural determinants of health. For the purposes of this strategy, the term 'chronic disease' encompasses the following cluster of diseases and conditions:

- cardiovascular diseases, including ischaemic heart disease, stroke, hypertension
- cancers
- chronic lung disease
- diabetes (type 2)
- obesity
- injurious falls in older people
- poor emotional and psychological well-being.

These diseases and conditions have been chosen not only because they place a high burden on the community and on the health system, but also because they are amenable to prevention and early intervention. Moreover, they share certain risk or protective factors – notably:

- tobacco smoking
- nutrition
- alcohol consumption
- physical activity
- 'stress' – psychosocial risk factors.\*

\* Although the term 'stress' is in common usage, its meaning and understanding may vary significantly between individuals. In this document it is used generally and collectively to refer to psychosocial determinants of health – further discussion follows.

This cluster approach allows the health and other sectors to focus efforts in more integrated and effective ways in preventive management of health determinants to achieve demonstrable health gains for the community. For example, there may be scope for integration and efficiency gain in communication and workforce development strategies, and possibly other identified shared components between programs. Given the innovatory nature of this strategy, further accumulation of evidence for effectiveness in integration of strategic components will be undertaken. Although most of these conditions usually occur and manifest later in life, antecedents to many of these problems begin early in life, so that prevention activities should commence early in life and continue through the entire life-course.

It is beyond the scope of this document to provide a systematic review of effectiveness of interventions to alter risk factors and outcome, although work has been undertaken by other reputable bodies, eg the International Union for Health Promotion and Education.<sup>7</sup> Furthermore, the Centers for Disease Control and Prevention of the USA has published a review of promising practices in chronic disease prevention and control.<sup>8</sup> However, it is recognised that ongoing collation and dissemination of known evidence for effective practice, generation of new evidence in identified gaps especially regarding cost-effectiveness under local conditions, and application of existing evidence in implementation and evaluation design of programs at all levels are essential.

With the holistic and life-course approaches to chronic disease prevention, common settings relevant to different life stages (eg local governments, schools, and health services like hospitals, community health, general practice clinics) may serve as key arenas for population health actions. A new model which illustrates some of the opportunities to achieve these focused efforts is represented within the integrated approach to management of behavioural risk factors in General Practice ('SNAP') put forward by the Joint Advisory Group (JAG) on General Practice and Population Health.<sup>9</sup> This approach affords opportunities for linkage within the existing national and state strategies addressing tobacco control, nutrition, alcohol and physical activity. There is potential for the incorporation of mental health promotion in preventive psychosocial risk management into future development of this SNAP framework.<sup>10</sup> Every effort will be made to ensure that links are maintained between State and Commonwealth initiatives in chronic disease prevention.

# 3

## The strategic analysis

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The concept of a chronic disease cluster, the modifiable risk factors approach and equity issues are discussed in some detail in the appendices.

Several themes emerge from the discussion:

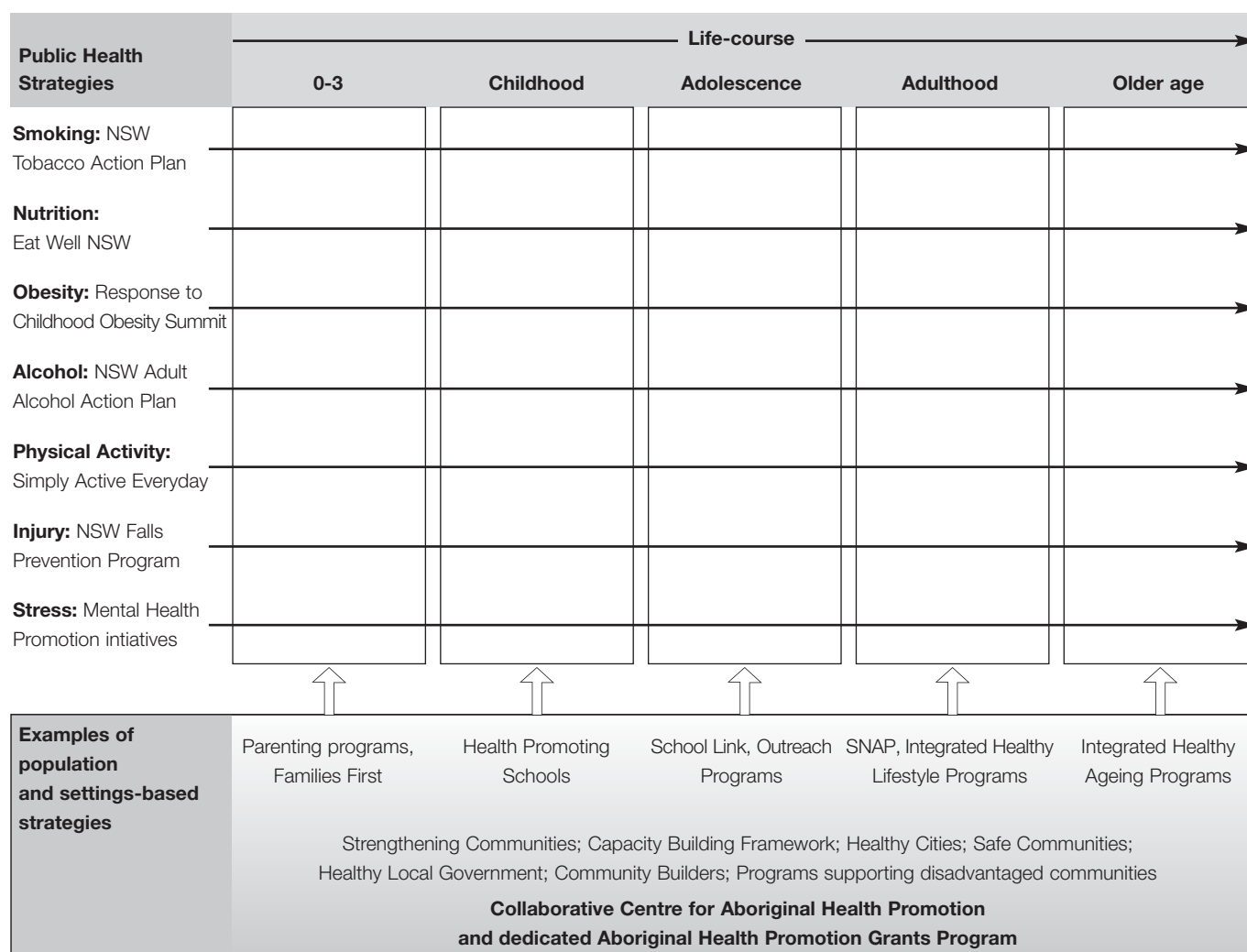
- At both national and NSW state level, only a limited number of chronic disease conditions account for the majority of the disease burden.
- A limited number of risk factors contribute significantly to these chronic disease conditions.
- A significant proportion of the disease burden is attributable to these risk factors.
- These risk factors often co-exist, and their effects on health may be interactive so that the effects of several risk factors combined may be more harmful than the sum of the individual risk factors.
- These few risk factors are modifiable, and share commonalities, especially regarding their relationship to bio-behavioural issues, embedded within a social, cultural and environmental context.
- Certain population sub-groups are more likely to demonstrate a higher prevalence of these risk factors, and thus share a disproportionately high burden of the disease conditions.
- These risk factors may exert their effects throughout the course of the whole life span of an individual.
- There are many influences, both positive and negative, on an individual's adoption or modification of these factors.
- Some non-modifiable factors, as well as some social, economic and environmental factors contribute to the context in which a health problem occurs, and will impact on the penetration, the relative success and the sustainability of programs for modification of these risk factors.
- Several national and state strategies are of direct relevance to prevention of this cluster of chronic diseases and conditions, and some key non-government organisations (NGOs) play important roles in preventive programs, yet it is apparent that inter-linkages are currently not optimally developed, so that individual

programs lend themselves to a more coordinated approach especially in communication and workforce development.

It follows that:

- While these risk factors remain relevant throughout an individual's life-course, the specific components and appropriate interventions for modification will be different at different life stages (see Figure 1).
- Various settings become more or less relevant at different life stages as contexts for risk modification, eg school settings for children and younger people, and primary health care settings for adult populations.
- Health promotion programs to address these priority chronic diseases have to be comprehensive, broad, integrated and equity-friendly.
- Engagement of stakeholders of other sectors whose activities may impact on health (especially inequalities in health) is essential in strategic planning for chronic disease prevention.
- Since these modifiable risk factors are significantly influenced by their social context, community capacity building and holistic approaches are important aspects for chronic disease prevention programs.
- Special efforts are required for population sub-groups which are most at-risk, including Aboriginal and Torres Strait Islander peoples.
- Ongoing surveillance will be required at population level to enable planning, implementation, monitoring, and evaluation of chronic disease prevention activities.
- There is obvious potential to better harness the contribution of key NGOs for chronic disease prevention; at the national level the advent of the Australian Chronic Disease Prevention Alliance (consisting of the National Heart Foundation, Cancer Council, Diabetes Australia, Stroke Foundation and Kidney Foundation) in working in a joint approach with the National Public Health Partnership is timely.

**Figure 1. Examples of discrete public health (risk factor) strategies and population/ settings-based strategies across the life-course**



# 4

## Priorities for action

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Given the burden of chronic disease in NSW, the commonality of risk factors, commonalities across national and state health priority areas, and the current/emerging strategic context, the 'niche' opportunities to strengthen the prevention of chronic disease are represented in the following priorities for action:

1. To support Area Health Services (AHSs) and key non-government organisations (NGOs) in planning, implementation, research, evaluation, and workforce development initiatives with a focus on chronic disease prevention. Compilation and dissemination of known evidence, and ongoing generation and dissemination of new evidence of both effectiveness and cost-effectiveness of chronic disease prevention strategies are to be undertaken to provide a solid basis for priority setting, implementation, and evaluation of local programs.
2. To design, test, develop and evaluate a state-based pilot evaluation of an overarching 'integration' strategy to draw together existing programs and activities within statewide portfolios dealing with tobacco, nutrition, alcohol, physical activity and mental health promotion, with a view to progressing statewide implementation if evaluation results at pilot stage are favourable.
3. To adopt and actively support settings-based integrated approaches to chronic disease prevention. Settings which are likely to be effective include (but are not limited to) local governments, schools, and health services like community health, general practice clinics (such as the framework for integrated behavioural risk factors management within general practice – 'SNAP').
4. To focus on chronic disease prevention as the main priority within the NSWHealth Health Promotion Demonstration Research Grants Scheme.
5. To explore the development of systems to improve the monitoring and reporting of investments and service outputs for chronic disease prevention and health promotion, using an agreed and standardised methodology.
6. To address inequity in the burden of chronic disease in NSW through a range of strategies including:
  - ensuring greater compliance with best practice in program design and evaluation
  - investing in formative research such as the pre-testing of communications to ensure appropriateness and acceptability to at-risk groups
  - achieving greater precision in program marketing and targeting to ensure reach to at-risk groups
  - establishing a Collaborative Centre for Aboriginal Health Promotion with a dedicated Aboriginal Health Promotion Grants Program
  - applying the Aboriginal Health Impact Statement
  - providing robust community-based infrastructure and services to underpin programs and initiatives for chronic disease prevention.

# The framework for action

Priorities	What we will achieve	2003	2004	2005	2006
Support Area Health Services (AHSs) and key NGOs in planning, implementation, research, evaluation and workforce development initiatives with a focus on chronic disease prevention (CDP).	<ul style="list-style-type: none"> <li>– Annual investment increased to support AHSs action on CDP.</li> <li>– Complementary support provided to key NGOs.</li> <li>– Training and resources program in CDP developed for AHSs staff.</li> <li>– Systematic approach to dissemination of evidence for effective best practice of chronic disease prevention strategies.</li> <li>– Compilation, generation and dissemination of new evidence of cost-effectiveness of chronic disease prevention strategies.</li> <li>– Support provided for agreed network projects auspiced by the NSW Health Promotion Directors Forum.</li> </ul>	●	●	●	●
Design, test, develop and evaluate a state-based pilot evaluation of an overarching 'integration' strategy to draw together existing programs and activities within statewide portfolios dealing with tobacco, nutrition, alcohol, physical activity and mental health promotion, with a view to progressing statewide implementation if evaluation results at pilot stage are favourable.	<ul style="list-style-type: none"> <li>– New integrated program for chronic disease prevention piloted.</li> <li>– New flagship program for CDP and injury control (falls prevention) implemented statewide.</li> </ul>	●	●	●	●
Adopt and actively support settings-based integrated approaches to CDP.	<ul style="list-style-type: none"> <li>– SNAP trial project (integrated behavioural risk factors management within General Practice) piloted with NSW Divisions of General Practice and relevant general practice organisations.</li> <li>– Dissemination phase of SNAP implemented in partnership with Commonwealth and other jurisdictions (subject to evaluation of pilot phase).</li> <li>– Development and implementation of support for programs of chronic disease prevention in local governments.</li> <li>– Development and implementation of integrated health promotion programs for children and young people, including health promotion within schools setting.</li> </ul>	●	●	●	●
Focus on chronic disease prevention as the main priority within the NSWHealth Health Promotion Demonstration Research Grants Scheme.	<ul style="list-style-type: none"> <li>– New Health Promotion Demonstration Research Grants Scheme funded with emphasis on priorities of the NSW Chronic Disease Prevention Strategy.</li> </ul>	●	●	●	●
Explore the development of systems to improve the monitoring and reporting of investments and service outputs for chronic disease prevention and health promotion, using an agreed and standardised methodology.	<ul style="list-style-type: none"> <li>– Development of standardised methodology in a limited number of AHSs piloted – recommendations reported.</li> <li>– System implemented statewide subject to recommendations from pilot phase.</li> </ul>		●	●	●
Address inequity in the burden of chronic disease in NSW through a range of strategies.	<ul style="list-style-type: none"> <li>– Agreed minimum investment threshold for rural AHSs implemented subject to appropriate minimum planning standards.</li> <li>– Further development and dissemination phase for NSW Health Promotion Directors Forum Equity Project.</li> <li>– Compliance with defined best practice program design and evaluation.</li> <li>– Evaluation and reporting of strategies implemented with an emphasis on program reach for high risk populations.</li> <li>– Application of Aboriginal Health Impact Statement.</li> <li>– Collaborative Centre for Aboriginal Health Promotion with dedicated Aboriginal Health Promotion Grants Program.</li> </ul>	●	●	●	●



# Appendix A Defining the chronic disease prevention cluster



## Criteria

The criteria used in the choice of what is included in the cluster for this strategy include the following (adapted from the NPHP Background Paper):<sup>5</sup>

- The diseases and conditions included contribute to a significant proportion of the burden of disease, overall and/or for particular population groups.
- They can be prevented, or managed, on the basis of current knowledge.
- They share common modifiable risk factors and underlying determinants which are amenable to primary prevention.
- There is a strong evidence base for the inclusion of each condition, risk or protective factor, including preventive measures.
- The conditions share elements in their pathogenesis and hence are frequently present as co-morbidities in the same individual, and in population groups with similar exposures.
- The interrelationships between psychosocial factors, mental and physical health are recognised.
- There is a logical relationship between the various components.
- The areas included are compatible with other credible policy frameworks such as that of the World Health Organization (WHO).
- There is agreement and support for what is included among key stakeholders.
- Benefits to be delivered are expected to outweigh the costs of improvements in coordination, collaboration and integration across the nominated areas.

On the basis of these criteria, the conditions and risk factors proposed for inclusion ischaemic in the framework are as follows:

### **Primary conditions**

The primary conditions targeted are:

- cardiovascular diseases, including ischaemic heart disease, stroke and hypertension
- cancers
- chronic lung disease
- diabetes (type 2)
- obesity
- injurious falls in older people
- poor emotional and psychological well-being.

### **Primary risk/protective factors**

The primary risk/protective factors targeted (which have direct and widely agreed physiological effects) for individuals are:

- smoking
- nutrition
- alcohol
- physical activity
- 'stress' – psychosocial risk factors.

## **The concept of a cluster in chronic disease prevention**

The Chronic Disease Prevention Cluster is shown in Table 1. The cluster incorporates prevention of injurious falls in older people, poor emotional and psychological well-being, psychosocial risk factors, as well as the notion of social capital for health. It is accepted that other issues such as crime prevention and quality of life could legitimately feature in an analysis of social capital/strengthening communities; these are not shown in Table 1 which has a deliberately targeted focus on the chronic disease prevention components.

**Table 1. Chronic Disease Prevention Cluster – risk and protective factors, biomedical risk factors, priority preventable diseases and conditions** (adapted from *Preventing Chronic Disease: A Strategic Framework (Background Paper)*. National Public Health Partnership, October 2001)<sup>5</sup>

Risk and protective factors	Biomedical risk factors	Priority preventable chronic diseases and conditions
<p><b>Risk factors:</b></p> <ul style="list-style-type: none"> <li>• smoking</li> <li>• poor nutrition – lack of vegetables and fruit</li> <li>• alcohol (harmful use)</li> <li>• physical inactivity</li> <li>• ‘stress’ – psychosocial risk factors</li> </ul> <p><b>Protective factors:</b></p> <ul style="list-style-type: none"> <li>• sound nutrition appropriate to life stage</li> <li>• alcohol (beneficial use)</li> <li>• mental health promotion (eg resilience enhanced by social support, self-esteem, family functioning)</li> <li>• stronger communities (eg social capital, safe communities)</li> </ul>	<ul style="list-style-type: none"> <li>• hypertension</li> <li>• dyslipidaemia</li> <li>• impaired glucose metabolism (impaired fasting glucose (IFG) and impaired glucose tolerance (IGT))</li> </ul>	<ul style="list-style-type: none"> <li>• ischaemic heart disease</li> <li>• stroke</li> <li>• cancers</li> <li>• chronic lung disease</li> <li>• diabetes (type 2)</li> <li>• obesity</li> <li>• injurious falls in older people</li> <li>• poor emotional and psychological well-being</li> </ul>
<p><b>Socio-environmental factors</b></p>		
<p>Including: • socioeconomic status • education • place of residence • occupation</p>		
<p><b>Non-modifiable factors</b></p>		
<p>• age • gender • ethnicity • genetic make-up • family history</p>		

There is a precedent for such a cluster concept, as exemplified by the approach adopted by the World Health Organization (WHO) – Global strategy for the prevention and control of non-communicable diseases. The WHO strategy focuses on four disease groups – cardiovascular disease, cancer, chronic obstructive pulmonary disease, and diabetes – and three major risk factors – tobacco use, unhealthy diet, and physical inactivity. Integrated action and the notion that promotion of health should be implemented through a life-course perspective are proposed.<sup>11</sup>

The National Public Health Partnership has also proposed a similar cluster approach.<sup>5</sup> These conditions can be grouped together based on commonalities in their risk factors and pathogenesis. Many are associated with what has been called the ‘metabolic syndrome’ (or ‘syndrome x’). The cluster framework also recognises the role played by non-modifiable factors, and the

relationship of broader social and environmental determinants to patterning of individual risk factors and the distribution of health outcomes.

The preventability of cardiovascular diseases, many kinds of cancer, chronic lung disease, with some or all of the major behavioural risk factors of tobacco smoking, inappropriate diet, physical inactivity, sometimes in association with additional biomedical risk conditions (some of which themselves may be brought about by these behavioural risk factors), notably dyslipidaemia, hypertension and impaired glucose metabolism is well established. Published studies have demonstrated the effectiveness of prevention or delay of development of type 2 diabetes mellitus through lifestyle interventions (consisting of weight reduction through healthy diet, physical activity and behavioural modification).<sup>12,13</sup>

In another study (the PREMIER Clinical Trial) the feasibility of multi-component behavioural interventions and their beneficial effects on reduction of blood pressure were demonstrated in both non-hypertensive individuals with above-optimal blood pressure and hypertensive individuals who were not on medication therapy.<sup>14</sup> The interventions consisted of a combination of advice for weight loss, regular physical activity of moderate intensity, reduction of dietary sodium, and moderation of alcohol intake. Additional measures of counselling sessions together with adoption of the DASH (Dietary Approaches to Stop Hypertension) diet suggested further benefits in reducing weight, improving fitness, lowering sodium intake, and reduction in blood pressure and prevalence of hypertension. (The DASH diet is a specific diet rich in fruit and vegetables and low-fat dairy products with reduced saturated and total fat intake.<sup>15</sup>) These changes should substantially lower the risk of cardiovascular as well as other chronic diseases including diabetes mellitus and some cancers.

The importance of physical activity in the prevention of falls in older people has been confirmed,<sup>16, 17, 18</sup> given the existing prominence of physical activity as a prevention strategy a pragmatic approach has been taken also to include injurious falls prevention in older people in the cluster. Successful primary and secondary prevention of osteoporosis may reduce the risk of hip fractures. However it is emphasised that the critical period of primary prevention of osteoporosis, mainly through sufficient dietary calcium intake and physical activity to maximise peak bone mass, occurs early in life.

Osteoarthritis, whilst not stipulated in the cluster, is one of the leading causes of disability in NSW, and contributes to 2.9 percent and 1.7 percent of the total disease burden in females and males respectively.<sup>19</sup> Obesity/overweight is associated with increased risk of arthritis. Reduction of obesity/overweight (through appropriate physical activity and nutrition) reduces the risk of developing osteoarthritis and lessens symptoms and disability of those already affected.

Mental health (ie emotional and psychological well-being) is not simply the absence of mental illness. Mental health has been defined as 'the successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with adversity; from early childhood until late life, mental health is the springboard of thinking and communication skills, learning, emotional growth, resilience, and self-esteem'.<sup>20</sup>

There is evidence that mental health promotion interventions for adults affected by adverse life events such as bereavement, physical illness, unemployment, divorce and separation, trauma and violence are efficacious, and that opportunistic early interventions such as parenting programs and also programs for harmful alcohol use are effective.<sup>21</sup> Additionally there is evidence for the relevance of a positive mental health promotion paradigm for a more integrated approach to the prevention of chronic diseases and for the promotion of healthy lifestyle. Mental disorders are often reported as co-morbid, possibly predisposing, to substance abuse.<sup>22, 23</sup> Consequently a pragmatic approach has been taken here to include mental health promotion (using 'stress' as the descriptor which encompasses psychosocial risk factors) in the cluster.

The NSW Aboriginal Mental Health Policy (1997)<sup>24</sup> reinforces Aboriginal people's holistic view of mental health, and both recognises and respects the continuing impact of historical, socioeconomic and political circumstances on Aboriginal people's mental health and social and emotional well-being.

A population health approach to mental health (as to other areas) will encompass epidemiology and surveillance, health promotion and disease prevention strategies. Although much more is known through research about mental illness than about mental health, this strategy will seek to emphasise and support public health practices to identify psychosocial risk factors for mental health problems and protective factors for enhancing mental health. Approaches which encourage interventions that impede the emergence of mental health problems and co-morbidities, and which actively promote good mental health have been shown to be effective.<sup>21, 25</sup>

Mental health promotion is applicable across the entire spectrum of mental health interventions and is aimed at reducing risks and increasing protective factors – thus promoting resilience. Programs that enhance social support, communication, self-efficacy, anxiety and anger management, and positive problem-focused coping strategies have been shown to be effective in reducing stress and addressing risk factors.<sup>21, 26</sup> Thus an effective population approach to mental health needs to target individual and social stressors by focusing upon coping strategies that increase optimism, connectedness, resilience, physical health and capacity across the entire community, with a particular focus on young people and their families. This approach is particularly important for children and young people. Mental health problems in childhood that are not prevented, identified or managed effectively may have effects that continue into adulthood.

An example of mental health promotion is the *MindMatters* school-based initiative. Examples of prevention initiatives include programs for parents of preschool-aged children with behavioural problems, such as Triple P (Positive Parenting Program), or, for adolescents, the school-based Resourceful Adolescent Program (RAP).

Building ‘social capital’ for health is increasingly acknowledged as a legitimate approach at the wider community level and is in keeping with the evidence about the social determinants of health.<sup>27</sup> Social capital relates to the trust, networks and norms which evolve in communities. Further research into building social capital is necessary. Examples are available of community programs which take this approach to address health, safety, crime prevention and other issues.<sup>28, 29</sup> In NSW, the Government has also established the ‘community builders’ project which draws together a wealth of information about strengthening communities.<sup>30</sup>

## Expanding the concept of prevention

Conventionally disease prevention activities have been classified according to the time point along the continuum of the natural history of the condition to which the interventions are applied. This terminology derives from a disease-focused approach to prevention. Primary prevention aims at preventing occurrence of ill-health by eliminating or reducing causal risk factors or determinants before the condition occurs. Secondary prevention generally refers to early detection (eg screening) of biological abnormalities and prompt treatment before a disease becomes clinically apparent, aiming at reducing morbidity and mortality caused by the disease. Tertiary prevention attempts to minimise impact, complications and disabilities arising from an established disease.

Alternatively, prevention strategies may be approached from a determinant-based focus instead of a disease-based focus. Straton and Sindall<sup>31</sup> proposed that preventive measures might also be considered in terms of target groups or different levels of organisation and delivery or in different settings. For example, preventive interventions may be organised at the level of the whole population or sub-groups, or may be delivered on a one-to-one basis for individuals, usually in a clinical setting.

Settings are major social structures that provide channels and mechanisms of influence for reaching defined population groups.<sup>32</sup> These structures are not necessarily organised primarily for health purposes, eg schools. There are frequent and sustained interaction and communication among formal and informal members within a setting. Thus settings potentially offer good access for social influence.

Social and economic determinants are arguably best addressed through activities at the level of the population or particular sub-groups. On the other hand, behavioural risk factors may be addressed either at the population level (eg legislation or regulations facilitating healthy behaviour, media campaigns) or in a one-to-one situation such as a clinical encounter (eg through patient education, advice on lifestyle, and appropriate medications). Early detection of biological risk factors or precursors of disease usually takes place in the clinical setting, but may be organised in the form of population-based programs, while management of established disease takes place in the clinical setting.<sup>31</sup>

It is also worth noting that preventive measures which address primary prevention goals for those who are well (eg measures aimed at behavioural risk factors) are also important interventions for those who have already developed biological changes and for those with established, clinically manifest disease.<sup>31</sup>

### **Complementarity with other chronic disease prevention programs**

This strategy emphasises prevention from a population health perspective and with a focus on primary prevention (although positive impact is also expected on secondary prevention programs through a population-based and integrated approach). In fact there are many ongoing effective programs in Australia (both government and non-government) which encompass prevention of other specific chronic diseases of significance. NSW Clinical Service Frameworks within the Chronic Care Program have been developed by the NSW Department of Health

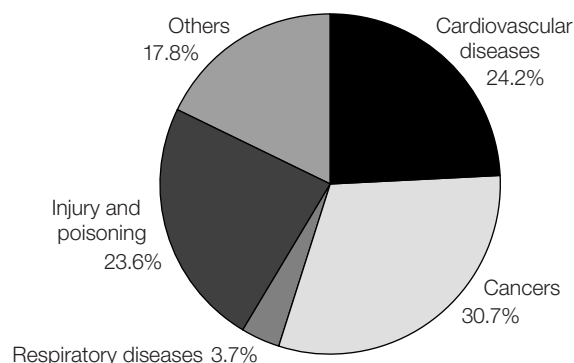
for chronic respiratory disease,<sup>1</sup> for optimising cancer care,<sup>2</sup> and for heart failure.<sup>3</sup> The prevention components within these frameworks also address the relevant risk factors, and are placing more emphasis on care of individuals and on early intervention (which includes screening and early detection) and relapse prevention. Non-government organisations also play a significant role in similar and other programs (eg sun protection strategies with respect to skin cancer prevention), especially in secondary prevention (eg screening and early detection of cancers of the breast and cervix, secondary prevention in patients with coronary heart disease, and secondary prevention for patients with diabetes mellitus) and tertiary prevention including empowerment of patients in self-management. These are all complementary to the population-focused and integrated approach described in this strategy. In fact many of these programs are well-established initiatives which are flagships of the national effort in control of those specific diseases. In line with the view of the National Public Health Partnership, it is unclear that inclusion in the chronic disease prevention cluster of these other conditions (not encompassed in the cluster within this strategy) would add value to these successful programs.<sup>5</sup>



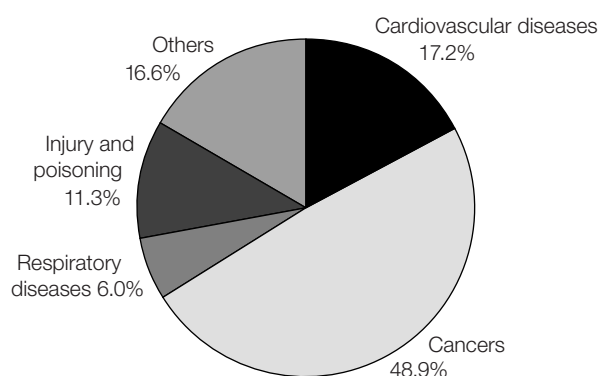
# Appendix B Modifiable risk factors and the burden of chronic disease in NSW

# B

**Chart 1. Causes of premature death in NSW by percentage 1998: males 15-64 years**

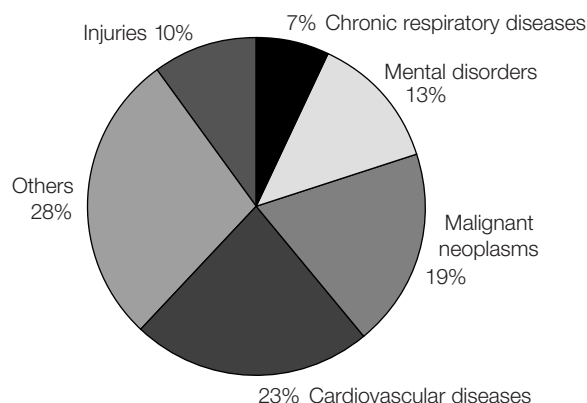


**Chart 2. Causes of premature death in NSW by percentage 1998: females 15-64 years**

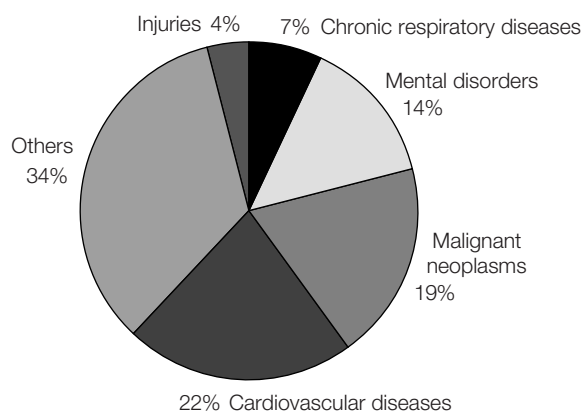


Charts 1 and 2 show the prominence of cardiovascular diseases, cancers and respiratory diseases as the major causes of premature death in NSW for both genders.<sup>33</sup>

**Chart 3. Leading causes of disability-adjusted life years (DALYs): males, NSW 1996 (all age)**



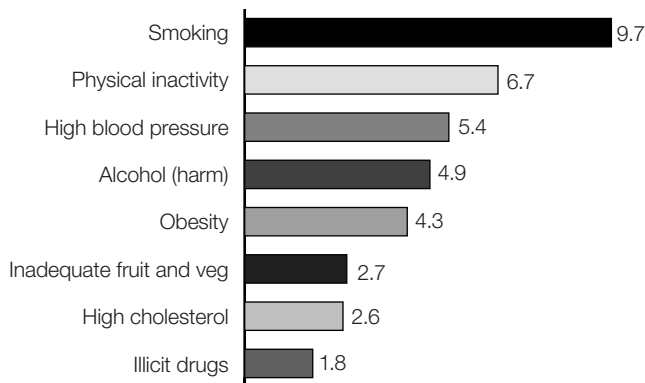
**Chart 4. Leading causes of disability-adjusted life years (DALYs): females, NSW 1996 (all age)**



Charts 3 and 4 (source: Report of the Chief Health Officer, 2002, NSW Department of Health<sup>19</sup>) illustrate the leading causes of disability-adjusted life years (DALYs) for both genders in 1996, which were cardiovascular diseases, malignant neoplasms, mental disorders, chronic respiratory diseases and injuries.

These major causes of premature death and DALYs share several risk factors, especially tobacco use and physical inactivity. The importance of these factors is further demonstrated by Figure 2 which shows the proportion of total disease burden (DALYs) caused by leading risk factors in Australia.<sup>34</sup> It is reasonable to assume that these estimates hold true for NSW.

**Figure 2. Percentage of total disease burden (DALYs) caused by leading risk factors (source: AIHW)<sup>34</sup>**



In November 1999, the Australian Institute of Health and Welfare (AIHW) published the *Burden of Disease and Injury in Australia* study.<sup>34</sup> The methodology was based on the World Health Organization *Global Burden of Disease* study.<sup>35</sup> In this methodology, an assessment of overall burden to society is based on both mortality and disability components. The central measure is the disability-adjusted life year (DALY), which provides a more expanded framework for assessing health burden than with the traditional use of mortality alone.

The AIHW *Burden of Disease and Injury* report identified preventable risk factors that contribute to the overall disease burden for Australia.<sup>34</sup> Together, these risk factors as shown in Figure 2, which are amenable to preventive measures, account for at least a third of all mortality and disability. The study report acknowledged that ‘to the extent possible, estimates are based on relative risks derived from studies which control for the effects of other risk factors...’ and that ‘it is unlikely that these studies can control for all of the complexities of the interaction between risk factors... Although attributable risks are analysed separately for each risk factor, in reality risks are embedded within a social, cultural and environmental context’ (p 101).<sup>34</sup> Prevalence and relative risk data were available for ten risk factors, but other health determinants including psychosocial risk factors were not specifically studied.

In these Australian data, tobacco smoking ranks first as the risk factor contributing to preventable illnesses and morbidity overall and in males, whereas physical inactivity is the leading contributor among women, given their lower tobacco usage rates than men.

After physical inactivity comes the other risk factors, in descending order:

- hypertension
- obesity
- lack of fruit and vegetables
- high blood cholesterol
- alcohol (harmful effects minus benefit)
- illicit drug use.<sup>34</sup>

## Tobacco

Tobacco smoking is the greatest single contributor to premature death in NSW, accountable for around 40 percent of deaths in men and 20 percent of deaths in women before the age of 65 years.<sup>36</sup> It is estimated that it will kill approximately half of its long-term users.<sup>37</sup> Most people begin using tobacco early in life, and almost all first-time use occurs before the age of 20 years.<sup>38</sup> In NSW there were 6,551 tobacco related deaths in 1995.<sup>39</sup> A Commonwealth report by Collins and Lapsley<sup>40</sup> estimated that in 1998–1999, the social cost of tobacco use in Australia was \$21 billion, compared with \$12.5 billion for 1992. The tangible costs included net labour costs to the workforce and household, health care costs, and resources used in abusive consumption (which could have been spent on other items rather than tobacco). Net health care costs attributable to tobacco use was \$1.01 billion. Intangible social cost, especially premature mortality from tobacco use, was \$13.48 billion. Since about one-third of smokers in Australia resides in NSW, it is reasonable to assume that the cost of tobacco use approximates one-third of the national figure.

## Nutrition

There is increasing evidence that fresh fruit and vegetable consumption offers protection against some cancers, and that diets high in fruit and vegetables are protective against hypertension and coronary heart disease. The New Zealand Ministry of Health has reviewed relevant epidemiological studies and estimated the avoidable disease burden associated with inadequate fruit and vegetable consumption.<sup>41</sup> Inadequate fruit and vegetable consumption has been causally linked to cancer and cardiovascular disease and accounts for nearly 3 percent of the total burden of disease (3 percent for males and 2.4 percent for females) in Australia.<sup>34</sup>

Full breastfeeding for at least the first six months of life offers considerable health benefits to infants, and potential benefits over the entire life span of the individual. Breast-fed infants are less likely to develop high blood pressure, some infectious diseases, and some diet-related chronic diseases later in life. It has been estimated that a minimum of \$11.5 million could be saved each year in Australia if the prevalence of breastfeeding at three months was increased from the current level of 60 percent to 80 percent. These are conservative estimates.<sup>42</sup>

Obesity causes an estimated 4.3 percent of the total burden of disease and injury (Figure 2). This is broadly consistent with estimates of the WHO that obesity contributes between 2 percent and 7 percent of total health care costs in developed countries.<sup>43</sup> Tackling obesity requires a focus on prevention beginning in childhood and adolescence. A research reported in 2001 that approximately 19–23 percent of Australian children and adolescents were either overweight or obese, with a similar proportion being physically inactive.<sup>44</sup> Preventing childhood obesity requires a strategic focus on promoting healthy eating as well as encouraging physical activity in children. The strategy should focus on targeting both parents and children because parents are important role models for healthy eating patterns and for increasing participation in physical activity. Promoting healthy eating among children and parents will require a multifaceted approach but is likely to include actions such as encouraging consumption of fruit and vegetables commencing early in childhood, planning for healthy snacks, and promoting water rather than soft drinks and fruit juices as the preferred drink for children.

### Physical inactivity

Around 8,000 deaths per year in Australia are attributable to physical inactivity, and implicate at least \$400 million in direct health care costs to the health system (Stephenson et al 2000).<sup>45</sup> In addition, the burden of disease and injury study, conducted by AIHW, suggested that physical activity ranked second, only to tobacco control, as the most important factors in disease prevention in Australia.<sup>34</sup> The Stephenson et al health costs study suggested that costs of physical inactivity were comparable to other major risk factors, such as the direct costs of diet and nutrition related diseases.

The strongest health benefits for participation in regular moderate-intensity physical activities are for the primary prevention of coronary heart disease and reduction of other cardiovascular risk factors, the prevention of type 2 diabetes and some cancers.<sup>46,47</sup> There is considerable research evidence on the benefit of exercise programs in prevention of falls and injurious falls in older people in the community.<sup>16,17,18</sup>

Mental health benefits of physical activity have been recognised. Recent reviews have shown that aerobic exercise or strength training programs can reduce the symptoms of depression.<sup>48</sup> Physical activity is as effective as meditation or relaxation in the treatment of anxiety. A recent controlled trial found that exercise training among older adults was as effective as antidepressant medication, although the onset of benefit was slower.<sup>49</sup> In an analysis of four surveys, the level of physical activity was shown to be positively associated with general well-being, lower levels of anxiety and depression, and positive mood. This relationship was independent of the effects of socioeconomic status and physical health, and described younger and older members of both sexes.<sup>50</sup> In Australia, the baseline surveys of the Australian Longitudinal Study on Women's Health (ALWHS) demonstrated a clear relationship between mental health (as measured by the SF-36) and physical activity in large population samples of young, middle aged and older women.<sup>51</sup> The nature of the relationship between physical activity and mental health problems remains to be further clarified.

### Alcohol

There is growing evidence that regular light to moderate intake of alcohol protects against cardiovascular diseases, but that alcohol consumption at all levels above abstinence increases the risk of various other diseases and injuries.<sup>52</sup> The burden of disease and injury caused by alcohol consumption in men substantially outweighs the benefit from averting cardiovascular diseases. Overall the benefit amounts to around 2.8 percent of the total disease burden. However harm attributable to alcohol consumption accounts for 4.9 percent (6.6 percent in men) of the total disease burden.<sup>34</sup> Road traffic accidents and liver cirrhosis are the leading causes of death contributing to the mortality burden of alcohol consumption in Australia. Alcohol dependence and harmful use is by far the leading cause of years lost due to disability

among conditions caused by alcohol.<sup>34</sup> Alcohol abuse is also associated with crime and social problems, and loss in productivity. In 1997 and 1998, reported prevalence of risk alcohol drinking behaviour varied widely among different Health Areas in NSW. In men, the prevalence of risk drinking behaviour varied from 38.2 percent in South Western Sydney to 61 percent in the Far West Area. In women, the prevalence of risk drinking behaviour varied from 19.6 percent in South Western Sydney to 35.7 percent in the Central Coast Area.<sup>19</sup> Such variations reflect the distribution of underlying social determinants of health. A European study showed that increase in alcohol use could take place quite rapidly under conditions of increasing social inequity and loss of social cohesion.<sup>27</sup> Risk drinking is more prevalent among NSW adults who are single (rather than married), who have not finished high school, who live in rural areas and who are Australian-born (rather than overseas-born).<sup>53</sup> In 1998–1999 estimation of the economic cost of alcohol consumption imposed on the Australian community was more than \$7.560 billion per year.<sup>40</sup> This costing, based on 1998–1999 mortality and morbidity figures, comprised:

- \$5.541 billion of tangible costs, including those associated with loss of workforce productivity, health care costs, and resources used in addictive alcohol consumption
- \$2.019 billion of intangible costs, including mortality (value of loss of life to deceased, consumption foregone by deceased, suffering imposed on the rest of the community) and morbidity (pain and suffering of the sick and injured, and suffering imposed on the rest of the community).

### **‘Stress’ – psychosocial risk factors**

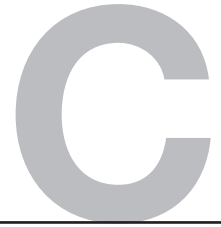
Stress is a complex concept and encompasses different events and the way we cope with them. Whether an event is perceived as stressful depends on the nature of the event and on the person’s resources and coping strategies. Effective coping is enhanced by an ability to recognise stressors (or risk factors) and draw upon protective factors. Poor coping strategies can often lead to poor emotional and psychological well-being such as depression and anxiety. Promoting awareness of the early signs and symptoms of mental health problems (and how to address them) can reduce the population burden of psychological distress.

The population burden of poor emotional and psychological well-being is significant. Close to one in five adults in Australia will be affected by a mental health problem at some stage in their lives and 50 percent of these are affected in the long-term.<sup>34</sup> In Australia, the burden of disease currently attributed to mental health is 13.2 percent of the total disease burden, and about 30 percent of the non-fatal disease burden. In addition, depression is the fourth leading disease cause of disease burden in Australia after ischaemic heart disease, stroke, and chronic obstructive pulmonary disease, and the leading cause of non-fatal disease burden.<sup>34</sup> Mental health costs the health system at least \$3 billion (9.6 percent) of total health expenditure.<sup>34</sup>

The NSW population burden of psychological distress in people aged 16 and over was just over two million days per four weeks, or 26 million days per annum, when people were ‘totally unable’ to perform their usual functions.<sup>19</sup> In addition to the human cost of loneliness, isolation, stigma, and suicide, there are financial costs to society.

The National Heart Foundation of Australia (NHFA) published in March 2003 an update of its position statement on ‘stress’ and coronary heart disease (CHD) to reflect new evidence on the relationship between major psychosocial and behavioural risk factors and the development and progression of CHD, as well as the occurrence of acute cardiac events.<sup>54</sup> Its expert working group which reviewed the evidence concluded that there is strong and consistent evidence of an independent causal association between depression, social isolation and lack of quality social support and both the aetiology and prognosis of CHD. Moreover, the magnitude of increased risk contributed by these psychosocial factors is of a similar order to that of the more conventional CHD risk factors such as smoking, dyslipidaemia and hypertension.<sup>54</sup>

# Appendix C Equity issues



Inequalities or differences in health status among different population subgroups are apparent in population health datasets in NSW as in other places. Inequalities in the burden of chronic disease are similarly observable. Inequities occur when those differences in health status or in burden of disease occur for reasons that are seen as avoidable and unfair. Although equity is highlighted in a separate section in this discussion, it is emphasised that equity is not a stand-alone issue but is integral to all interventions across the socioeconomic spectrum.

The reports *The health of the people of New South Wales – Report of the Chief Health Officer 2002*<sup>19</sup> and *Report on the 1997 and 1998 NSW Health Surveys*<sup>55</sup> demonstrated many inequalities in the health of the NSW population, based on gender, ethnicity, indigenous status, area of residence, and socioeconomic factors. Whether these differences represent inequities in health depends on an assessment of their fairness and preventability.<sup>56,57</sup> There is much room for improvement in the measurement of inequalities in health. Issues to be considered in this regard include the appropriateness of focusing on determinants of health at individual level when macrolevel determinants (such as unemployment and income) may have a far greater impact on health and require different policy interventions.<sup>58</sup> This is particularly important considering evidence that socioeconomic determinants that lead to poor health tend to be concentrated in the same groups in society.<sup>59</sup> Moreover, for many conditions, notably non-communicable diseases such as cardiovascular diseases, the relationship between multiple social and economic factors and health are more difficult to understand, and therefore to measure. Identifying the role of influences that operate throughout life – the ‘life-course approach’ – may help to tease out differences both between and within socioeconomic groups, which may vary for different conditions.<sup>57</sup>

In Australia, there is a marked gradient in the total burden of disease associated with socioeconomic disadvantage, as defined by the value of the index of socioeconomic status for a statistical local area (SLA) of usual residence (ie at a local government small area level).<sup>34</sup> The ratio of the age-standardised DALY (per 1,000 population) for the top and bottom quintiles of socioeconomic disadvantage is a measure of the differential disease burden between the most disadvantaged and least disadvantaged groups. (This takes into account differences in the age structure of the population across quintiles of socioeconomic disadvantage.) Table 2 is extracted from the AIHW report – *The burden of disease and injury in Australia*.<sup>34</sup> It summarises the differentials in disease burden between the top and bottom quintiles for selected main disease cause categories. (The report also emphasised that the contribution of non-fatal conditions to socioeconomic differentials in burden of disease described was provisional and required further analyses). In NSW, a strong association has been observed between socioeconomic status and premature deaths from cardiovascular diseases in males. The association was not as strong for females. Data from the 1997 and 1998 NSW Health Surveys also showed an association between increasing socioeconomic disadvantage and higher rates for smoking, overweight or obesity, hazardous or harmful alcohol consumption, and psychosocial distress.<sup>55</sup>

**Table 2. Differentials in the burden of disease and injury between top and bottom quintiles of socioeconomic disadvantage, by selected main disease categories and sex, Australia, 1996<sup>34</sup>**

Disease category	DALY ratio <sup>a</sup> (bottom quintile/ top quintile)	
	Male	Female
A Infectious and parasitic diseases and acute respiratory infections	1.30*	1.43*
D Neonatal causes	1.34*	1.32*
F Malignant Neoplasms	1.19*	1.11*
H Diabetes mellitus	1.64*	2.26*
I Endocrine and metabolic disorders	1.21*	1.37*
J Mental disorders	1.43*	1.53*
K Nervous system disorders	1.32	0.84
L Cardiovascular diseases	1.30*	1.22
M Chronic respiratory diseases	1.48*	1.34*
N Diseases of the digestive system	2.11*	1.54*
O Genitourinary diseases	1.16*	1.23*
Q Musculoskeletal diseases	1.44*	1.44*
T Unintentional injuries	1.79*	1.39*
U Intentional injuries	1.76*	1.54*
Other causes	1.17	1.20*
All causes	1.37*	1.27*

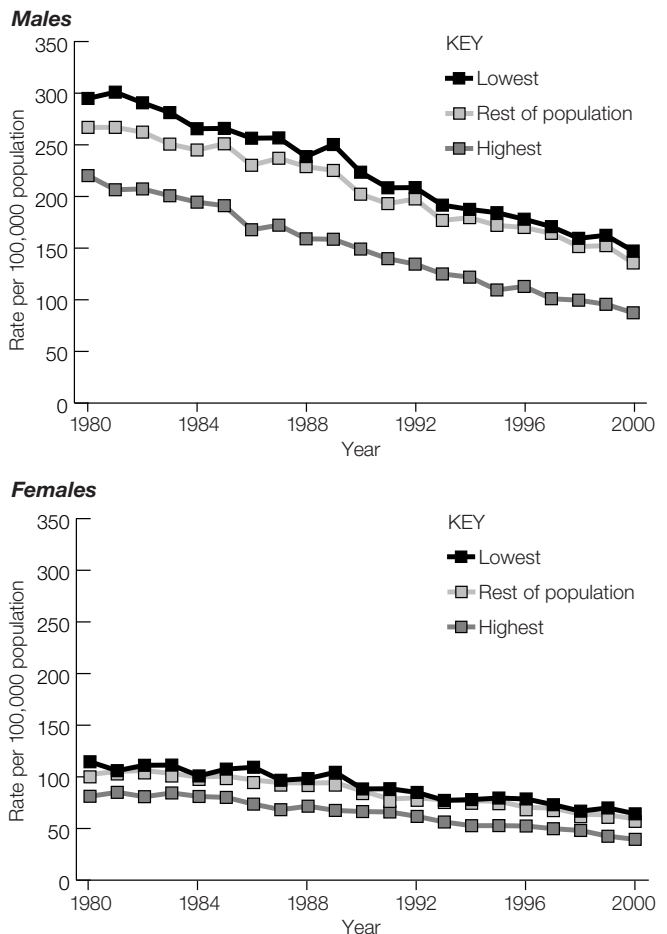
a Ratio of age-standardised DALYs per 1,000 population for most disadvantaged (5th) quintile of area index of socioeconomic disadvantage to age-standardised DALYs per 1,000 population for least disadvantaged (1st) quintile.

\* Asterisk indicates that rate ratio differs significantly ( $p < 0.05$ ) from 1.0 (no differential between top and bottom quintiles).

Figure 3 shows the ‘primary potentially avoidable deaths’ for highest and lowest socioeconomic status (SES) quintiles for persons under age 75 years in NSW 1980 to 2000.<sup>19</sup> Potentially avoidable deaths are deaths attributed to conditions that are considered preventable or otherwise avoidable through early intervention. The data show that the burden of primary potentially avoidable mortality decreased overall and across all SES groups between 1980 and 2000. In absolute terms the gap in potentially avoidable mortality between the highest and lowest SES groups narrowed in both genders. However, the relative differences in rates between the lowest and the highest SES groups increased in both genders.<sup>19</sup>

The diseases contributing most to the burden of primary potentially avoidable mortality were ischaemic heart disease and lung cancer in both 1980 and 2000. For ischaemic heart disease, mortality decreased relatively more quickly for the highest SES group than for the lowest SES group. These results imply that proportionally greater lifestyle changes, such as smoking cessation, occurred in people from higher SES groups, and underscore the significance of devising strategies to minimise the discrepancy. There is a need for ensuring greater compliance with best practice in program design and evaluation, for greater care in formative research such as the pre-testing of communications, for greater precision in program marketing and targeting, and for the creation of more robust community-based infrastructure and services to underpin future programs and initiatives for chronic disease prevention.

**Figure 3. Primary potentially avoidable deaths for highest and lowest socioeconomic status quintiles and rest of population by sex, persons aged less than 75 years, NSW 1980-2000<sup>19</sup>**



In NSW, Aboriginal people have poorer health for the majority of available indicators for morbidity and mortality. In relation to chronic disease prevention, a number of issues are worth particular attention.

The association between lower socioeconomic status and poorer health is well documented. The Aboriginal population in 1996 had an unemployment rate over three times that of the general population (27 percent versus 8.8 percent) and unemployment was higher in rural than urban areas. Proportion of lower-income families and of those not completing higher education are higher than in the non-Aboriginal population, and are higher in Aboriginal people living in rural areas compared with those living in urban areas.<sup>19</sup>

In 1998–2000, the life expectancy of Aboriginal males in NSW was estimated to be 56.3 years and Aboriginal females to be 63.6 years (compared with 76.4 and 82.0 for the general population of NSW respectively) – about 20 years less than that of the general population. Deaths among Aboriginal people were more likely to occur at younger ages. The median age at death for Aboriginal males and females was 51 and 59 years respectively, over 20 years less than that for non-Aboriginal males and females (75 and 81 years respectively).<sup>19</sup>

The reported prevalence of health-related behaviours varies quite markedly among the available sources of survey data for Aboriginal and Torres Strait Islander peoples. Forty-one percent of Aboriginal people reported being a current smoker (compared with 24 percent of non-Aboriginal people), with rates being higher in urban than rural areas. Smoking in pregnancy is a risk factor for both low birth weight and prematurity, and the risk is especially high for smoking in the second half of pregnancy. In 2000, 55.2 percent of Aboriginal mothers reported smoking in the second half of pregnancy. The proportion of Aboriginal people with harmful use of alcohol is higher than that of non-Aboriginal people.<sup>19</sup>

The rates of self-reported diabetes mellitus from the 1997 and 1998 Health Surveys were 7.1 percent for Aboriginal people, compared with 3.5 percent for non-Aboriginal people.<sup>55</sup> Of those surveyed, 47 percent of Aboriginal people were overweight or obese, with slightly higher rates in rural than urban areas. By comparison, 42 percent of non-Aboriginal people were overweight or obese.<sup>19</sup>

Reporting of Aboriginal deaths is insufficient for comment on patterns of causes of death in NSW. However, in Western Australia, South Australia and the Northern Territory combined, circulatory diseases were responsible for 29 percent and 23 percent of excess deaths among Aboriginal males and females respectively.<sup>19</sup> National statistics (1997–1999) revealed that the standardised mortality ratios for the Aboriginal people (based on all-Australian rates) were 3.1 (males) and 2.8 (females) for circulatory diseases, 1.4 for neoplasms, and 7.2 (males) and 9.4 (females) for endocrine/metabolic diseases (mainly diabetes mellitus).<sup>60</sup>

Indigenous status is believed to be substantially under-reported in data collections that record morbidity in NSW hospitals. Despite this, age-adjusted hospital separation rates for all causes among Aboriginal people were substantially higher than those for non-Aboriginal people over the period 1993–1994 to 1999–2000. Moreover, age-adjusted hospital separation rates for cardiovascular diseases (coronary heart disease and stroke) among Aboriginal people were consistently higher than the rates for non-Aboriginal people over the period 1993–1994 to 1999–2000. In 1999–2000 the rate among Aboriginal people was almost double (3,325 per 100,000 population) that of non-Aboriginal people (2,054 per 100,000). Furthermore, age-adjusted hospital separation rates for a primary diagnosis of diabetes mellitus among Aboriginal people were over five times higher than the rates for non-Aboriginal people over the period 1993–1994 to 1999–2000.<sup>19</sup>

These statistics imply that prevention of chronic disease in the Aboriginal population is particularly important, especially to achieve the goal of equity in population health. Prevention of chronic disease in the Aboriginal population is a significant component in promotion of Aboriginal health, recognising that there are other significant programs in Aboriginal health which synergistically address prevention of similar spectrum of health issues, eg the NSW Aboriginal Vascular Health Program, NSW Aboriginal and Torres Strait Islander Tobacco Control Advisory Project, and NSW Aboriginal Mental Health Policy Review Group. Directions for Aboriginal health in NSW have been clearly expressed in the NSW Aboriginal Health Policy and the NSW Aboriginal Health Strategic Plan.<sup>61</sup> ‘Increasing the effectiveness of health

promotion’ and ‘improving social and emotional well-being’ are two of the five key priorities of that strategic plan. The scope of the Aboriginal Health Promotion Program will focus on the ‘increasing the effectiveness of health promotion’ priority but will also address the other key priorities, particularly those relating to disease prevention, primary health care (diabetes and circulatory disease) and social and emotional well-being.

Development of programs for Aboriginal health promotion in general, and for chronic disease prevention in particular, needs to follow established principles for better practice in Aboriginal health promotion.<sup>62</sup> These principles include:

- acknowledging the historical, cultural and social context, and diversity, of Aboriginal communities
- evidence-based practice
- capacity building of communities, relevant agencies, organisations and workforce, ensuring equitable resource allocation, cultural security and respect in the workplace
- ensuring ongoing community involvement and consultation
- practical application of Aboriginal self-determination principles
- adherence to the holistic definition of health
- effective partnerships to address health determinants
- ensuring sustainability and transferability of programs
- demonstration of transparency and accountability in decision making.

The establishment of The Collaborative Centre for Aboriginal Health Promotion is a prime opportunity to enhance the delivery of more effective and sustainable health promotion programs for Aboriginal people and their communities. Establishment of the centre is endorsed by the NSW Aboriginal Health Partnership, and is under the auspices of the Aboriginal Health and Medical Research Council of NSW. The mission of the Centre is to improve the effectiveness of Aboriginal Health Promotion in NSW and throughout Australia. The Centre supports Key Priority Areas in both the NSW Aboriginal Health Strategic Plan<sup>61</sup> and the National Strategic Framework for Aboriginal and Torres Strait Islander Health.<sup>63</sup> The Centre will be expected to take account of the principles of community control, holistic approach, intersectoral approach, partnership, localised decision making, and accountability. The Centre is responsible for (but not limited to):

- the strengthening of leadership and advocacy for Aboriginal health promotion
- further development of/value-adding to the Australian Indigenous HealthInfoNet with a specific focus on Aboriginal Health Promotion
- a strategic approach to workforce development for Aboriginal health promotion, initially with a NSW focus but in the longer term with the desire of linking as appropriate with other jurisdictions
- liaising with/maintaining key networks within NSW but also at national and international levels, with a focus on better practice Aboriginal health promotion
- providing technical advice and support on Aboriginal health promotion matters, particularly NSW community grant application processes, monitoring, better practice, strategic planning and program evaluation.

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