

POPULATION HEALTH

State of
Public Health Report 2008

FOREWORD

Honourable members

It is my privilege to provide the second *State of Public Health Report* to Parliament, as required each 5 years by the *Public Health Act 1997*.

The first Report provided the basis for a contemporary understanding of the determinants of health and disease, and highlighted the need to address the emerging problem of chronic diseases by tackling their common risk factors – including smoking, nutrition, alcohol, and physical activity.

This second Report takes this theme further and tells the story of how much of the “causes” of health and illness in Tasmania – as elsewhere - lie outside of the health care system and are embedded in the social, political, economic and environmental contexts in which people find themselves.

The good news is that at the population level, the health of Tasmanians is the best it has ever been.

But it could, and should, be better. There are significant inequalities in health between population groups within Tasmania, and also between Tasmania and Australia as a whole. Tasmania as a whole tends to have poorer health status than most other jurisdictions for most of the major indicators described in this Report and in the more detailed companion publication, *Health Indicators Tasmania 2008*.

There are also strong indications of difficult times ahead, given our ageing demographic, our risk factor profile predisposing towards diseases such as Type 2 diabetes, and our less advantaged socioeconomic status.

Contrary to the expectations of many, these differences in health outcome measures are likely to be largely determined by the cumulative effect of socioeconomic and demographic factors, rather than by the quality of Tasmanian hospitals and health care system, or matters such as the length of our elective surgery waiting lists.

The Tasmanian Health Plan developed in 2007 is to be commended for taking a broad view that supports prevention as well as improvements to a complex and burdened health care system.

The difference between a future Tasmania that is healthy and flourishing, or a Tasmania that languishes and labours under the increasing burden of chronic disease, will depend on the decisions and actions taken now. The most sensible choices for a healthy future are not always the easiest for governments or the community, but they must be taken now.

I am proud of and grateful for the work accomplished by staff in the Population Health area which I manage within the Department of Health & Human Services and I would like to publicly thank them for their commitment. It is also important to recognise the many dedicated workers at all levels throughout the Department of

Health and Human Services – Tasmania’s largest government agency – and all those people in other sectors who are contributing to the population health outcomes that are being achieved through the organised efforts of our society.

The collective approach spans all levels of government across a range of departments, non-government organisations, community groups, industry and employers, and benefits the entire population across the lifespan. Many of the best forms of public health promotion and protection are subtle or have become so accepted as part of our societal norms that they have become invisible, and go unsung.

I commend such efforts to Parliament.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'R. Taylor', written in a cursive style.

Dr Roscoe Taylor
Director of Public Health

INTRODUCTION

This *State of Public Health Report* is supported by a considerably larger companion document *Health Indicators Tasmania 2008*, which contains more detailed information about the health of our population. In combination they provide a summary and analysis of the most salient aspects regarding the health status of Tasmanians.

The *State of Public Health Report* also describes key measures that have been taken to protect and promote health in Tasmania, and provides guidance and recommendations on further necessary actions.

“Public Health” is used here synonymously with the term Population Health but, confusingly for the public, Public Health does not focus on the public health **care** system alone nor does it include administrative oversight of that domain.

Public Health comprises too many fields of endeavour to cover comprehensively in a Report such as this. However it is common to find the following principles underlying our Population Health strategies and actions:

- Systems minded
- Population focussed
- Evidence informed

Non-communicable diseases now account for most of the causes of death and disease burden in Tasmania and globally. We know that a significant part of this burden is preventable or can be delayed, to achieve a healthier average lifespan with reduced levels of disability or dependency.

But no single entity can reduce non-communicable disease on its own. There is good evidence that Tasmania’s lower socio-economic status means that almost all the current public health strategies aimed at reducing risk factors such as smoking, poor nutrition, physical inactivity, obesity and overweight, alcohol and psychosocial conditions are more difficult to implement effectively.

More than ever, these determinants of health for Tasmanians are influenced by national economic and social policy settings. Therefore this Report also refers to the need for collective national as well as state action.

Usually a multi-pronged approach to prevention is required, and often the full benefit of these organised efforts towards public health takes many years to manifest in the form of improved population health outcomes data.

Similarly the data sources about chronic disease health outcomes which inform this Report and *Health Indicators Tasmania 2008* are by their nature retrospective, and reflect the aggregate influence of years of population health determinants.

The art and science of public health includes putting these data together, examining trends and future projections, to identify and recommend those actions that will avoid unnecessary population disease burdens or harm, in the years to come.

LIVING AND DYING IN TASMANIA – AN OVERVIEW

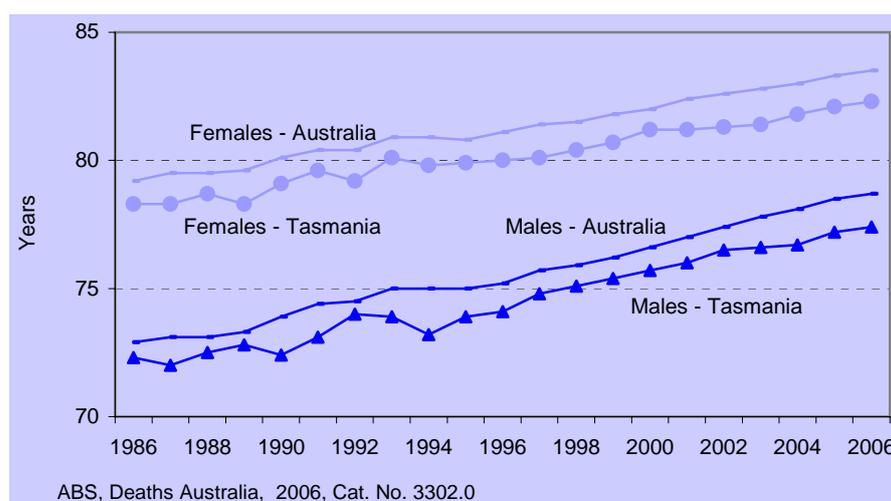
Birth rates, death rates, life expectancy figures, infant mortality rates and the age distribution profile of our population are the most robust health data we have for comparing Tasmania with other states and territories. These statistics provide fundamental truths – but the information is also crude, in that it is the causes behind any observed differences that matter most in terms of telling us what Tasmania needs to do to improve our health status.

Life expectancy in Tasmania has continued to improve significantly. Life expectancy at birth refers to the average number of years a newborn baby could expect to live if the current mortality rates remain the same in his or her lifetime. In 2006 Tasmanian males could expect to live for 77.4 years and females for 82.3 years.

Tasmanians have never before enjoyed such long lives.

However there is a significant gap in life expectancy between Tasmania and Australia as a whole, which has persisted over decades (Figure 1). Tasmania has the second lowest life expectancy of all states and territories after the Northern Territory.

Figure 1: Life Expectancy at Birth, Tasmania and Australia, 1986 - 2006



The reasons underlying this fundamental health inequality will be discussed in following sections.

Based on the limited data currently available about the prevalence of population health risk factors in Tasmania, it is feasible and indeed likely that our life expectancy gap will actually widen over time. This may become particularly evident amongst women given the very high levels of tobacco addiction experienced by our younger female population in recent decades, with some associated poorer health outcomes (such as increased lung cancer rates) already beginning to manifest. The relatively high prevalence of risk factors for diabetes is also likely to drive our overall health status downwards unless major preventive strategies are implemented.

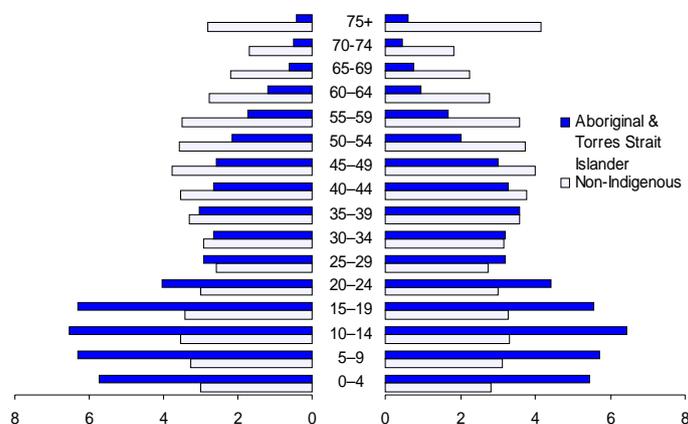
Aboriginal Tasmanians

In Tasmania at the time of the 2006 national Census, 3.5% of population reported themselves as of Indigenous origin – almost all this group being Aboriginal in Tasmania. This proportion is the highest of all states and territories apart from the Northern Territory (27.8%).

No life expectancy data are available for the Aboriginal population in Tasmania (or a number of other states and territories). Nationally, Aboriginal and Torres Strait Islander peoples have a much lower life expectancy than the general population. In the period 1996 to 2001 the life expectancy at birth for Indigenous Australians averaged around 17 years less than the general population.

Although data regarding Indigenous status in Tasmania have been questioned due to their self-reported nature, the age/sex demographic pyramid below (Figure 2) confirms a striking difference between the Aboriginal and non-Aboriginal populations in Tasmania. Birth rates are higher and there is a higher proportion of younger people in the Aboriginal population, but of concern there is also a significantly higher tapering off in older age groups, suggesting premature death and poorer health outcomes than non-Indigenous Tasmanians as a whole. Our data collection systems are still too poor to accurately describe health service utilisation or other health outcome measures for Aboriginal people in Tasmania.

Figure 2: Age/Sex Distribution of Indigenous and Non-Indigenous Populations, Tasmania 2006 (ABS census 2006)

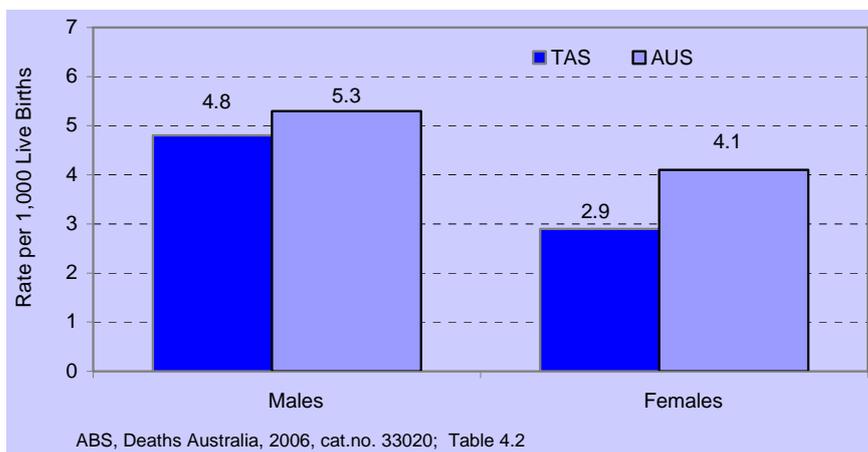


The reconciliation process both nationally and locally is profoundly important in reducing this inequity because it recognises the healing nature of respect, justice and equality for everyone. It involves actively addressing the disadvantage experienced by Aboriginal people by honouring the existence and culture of Aboriginal peoples and implementing practical measures to address inequity.

Infant mortality

Infant mortality is another important indicator of the health status of a population, and is measured as the rate of deaths occurring within the first year of life, per 1000 live births in a given year. Tasmania is performing very well at present (Figure 3) and in 2006 Tasmania recorded the second lowest rate of all jurisdictions at 3.9 deaths per 1,000 live births.

Figure 3: Infant Mortality Rate, Tasmania and Australia 2006

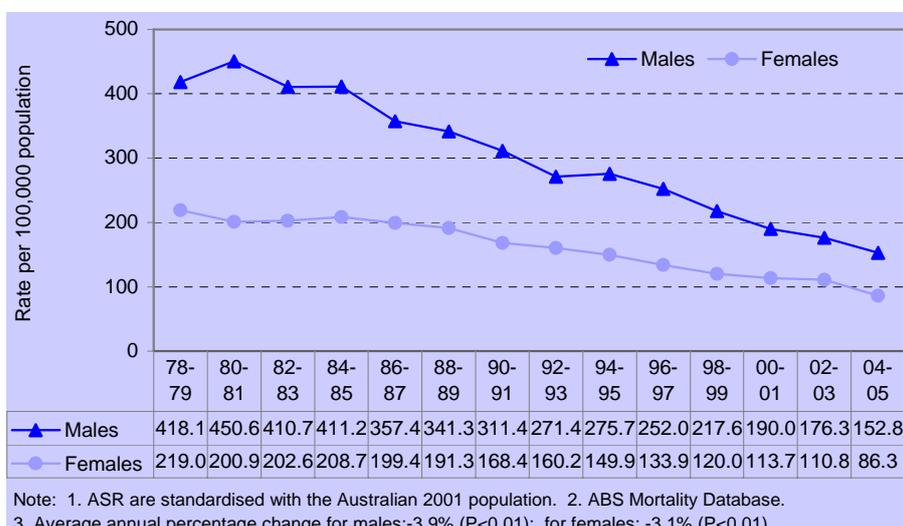


Infant mortality rates have continued to decline over the last century, firstly reflecting improvements in sanitation, nutrition and living standards followed by public health programs such as mass immunization and maternal and child health programs, and more recently improvements in antenatal, birthing and postnatal care. Education measures to reduce Sudden Infant Death Syndrome will also have contributed significantly to this very important health gain for Tasmanians.

Population mortality rates

One of the most striking contributions to improved mortality rates and life expectancy in Tasmania has been the steady downward decline in deaths from ischaemic heart disease over the past three decades (Figure 4).

Figure 4: Age-Standardised Mortality Rate for Ischaemic Heart Disease by Sex (ICD-9-CM 410-414, ICD-10-AM I20-I25), Tasmania, 1978-2005



The ongoing decline in cardiovascular death rates (related to declining smoking rates among men in particular, as well as improved detection and treatment of hypertension and elevated cholesterol levels, and improved treatment of established vascular conditions), has led to a tipping of the balance in the principal disease groups causing death since the previous *State of Public Health Report* in 2003. Now, the overall number of deaths from cancers (all types combined) exceeds the total of deaths from ischaemic heart disease and strokes combined (Table 1).

Table 1: Top Ten Causes of Death in Tasmania, 2001-05

Rank	Disease ICD-10*	Average number of deaths per year	% of all deaths
1	Cancer (all types) C00-C97	1128	28.8
2	Ischaemic heart diseases I20-I25	724	18.5
3	Cerebrovascular diseases I60-I69	305	7.8
4	Injury and poisoning V01-Y98	251	6.4
5	Chronic lower respiratory diseases J40-J47	215	5.5
6	Other forms of heart disease I30-I52	196	5.0
7	Diabetes mellitus E10-E14	137	3.5
8	Diseases of arteries, arterioles and capillaries I70-I79	94	2.4
9	Organic, including symptomatic, mental disorders F00-F09	74	1.9
10	Renal failure N17-N19	59	1.5
	All other causes of death	733	18.7

*International Classification of Diseases, 10th Revision; ABS Mortality Database

Deaths due to diabetes are also on the rise and this adverse trend can be expected to continue with the increasing prevalence of obesity in the community. Diabetes is also a major risk factor for cardiovascular disease and renal failure and therefore its effective impact is far greater than indicated in the above table. Diabetes continues to be a major challenge for public health.

Demographic Change

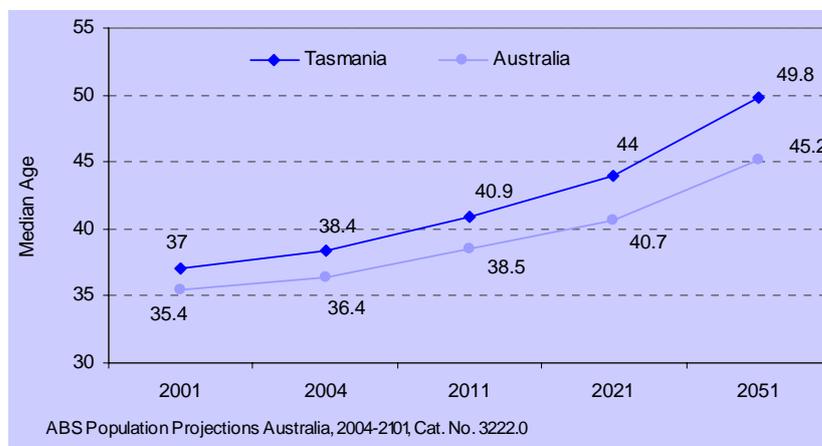
Population ageing is a particular issue for Tasmania and is already presenting a number of challenges to delivery of health care and meeting service demands.

The prevalence of chronic conditions and associated need for health services increases significantly within older age groups, particularly after the age of 65 years¹. Tasmania is experiencing the effect of population ageing to a greater degree than other states and territories with the average age being older than Australia as a

¹ Borowski et al. Longevity and Social Change in Australia. UNSW Press. 2007.

whole, and the gap is widening². The median age of Tasmanians is projected to be 49.8 years by 2051, an increase of 11.4 years on current levels (Figure 5).

Figure 5: Projections of Median Age, Tasmania and Australia, 2001-2051



Based on these projections over 30% of Tasmania’s population will be 65 years or over by the year 2040, which is double the current proportion (Figure 6). A recent increase in birth rates (discussed below) may ameliorate the impact of this to a small degree.

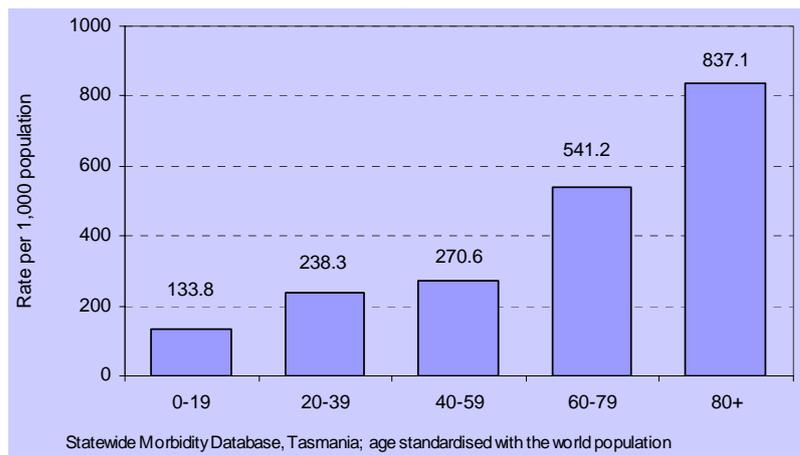
Figure 6: Proportion of Projected Population Aged 65 years and over, 2001-2051



It is inevitable that population ageing of this degree will have a significant impact on hospitalisation rates in Tasmania. Based on data from 2001 - 2005, the rate of hospitalisation doubles from age 40-59 years to age 60-79 years, with a further rate increase (>50%) for persons aged 80 years and over (Figure 7). Therefore the impact of a doubling in the proportion of the population aged 65 years and over is that the demand for hospital services in Tasmania will increase dramatically.

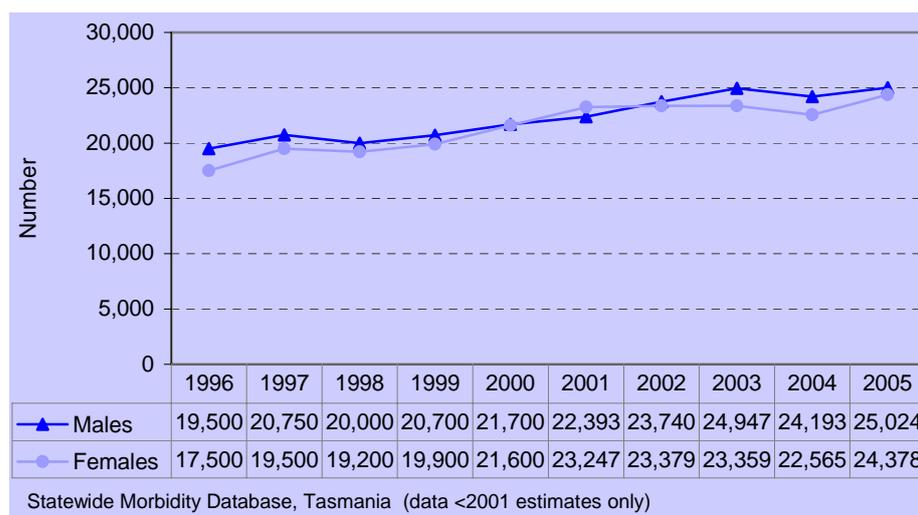
² Demographic Change in Tasmania: Challenges and Opportunities. Demographic Change Advisory Council of Tasmania, 2007.

Figure 7: Hospitalisation Rate by Age, Tasmania, 2001-05 (all causes)



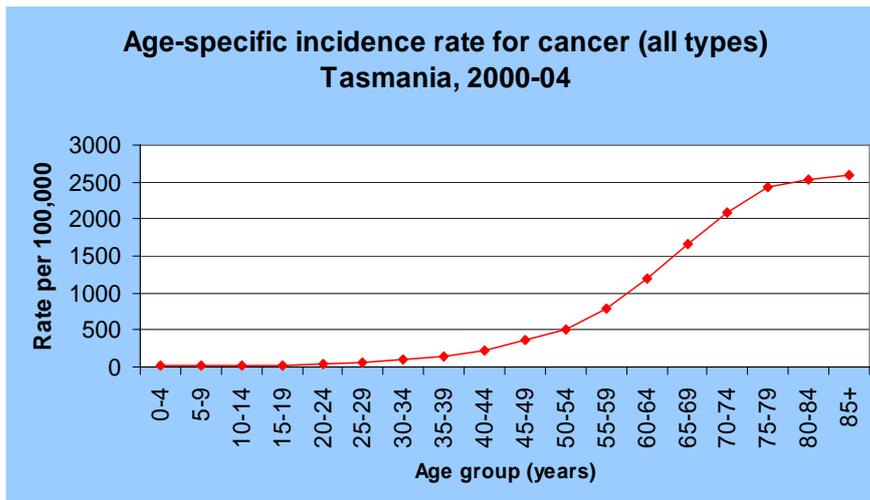
Over the period 1996 to 2005 in the over-65 age group, all-cause hospitalisations have increased by a very substantial 5,524 hospitalisations in males (28.3%) and 6,878 hospitalisations (39.3%) in females (Figure 8) .

Figure 8: All-Cause Hospitalisations by Sex, 65 Years and Over, Tasmania 1996-2005



Cancer

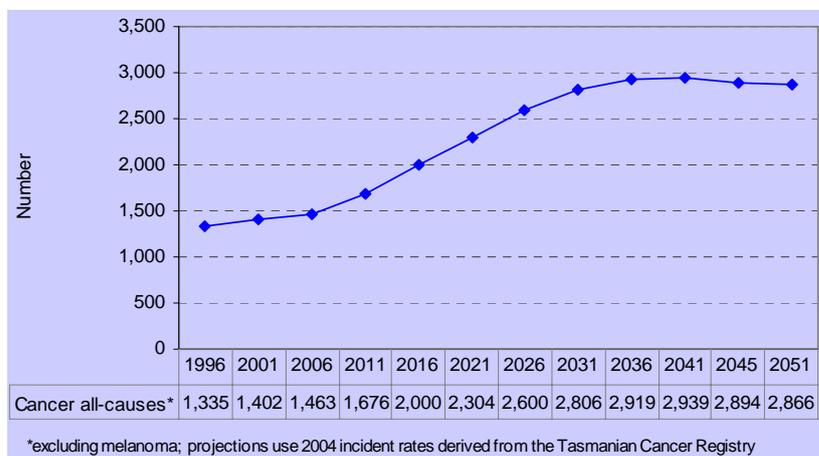
One factor underlying the increase in demand for hospital services with age is that the incidence of cancer is strongly associated with increasing age. Cancer is a common condition affecting one in three people over the course of their lifetime, and is often highly resource-intensive to manage.



Over 60% of all cancers experienced by Tasmanians occur in persons aged 65 years and over. Therefore the impact of a doubling in the proportion of the population aged 65 years and over is that the number of cancers occurring in Tasmanians will increase dramatically.

This is demonstrated in the following figure (Figure 9), which shows the projected increase in cases of cancer in Tasmania as a consequence of population ageing between the years 1996 and 2051. For the same size population we can expect over 500 additional new cases of cancer per annum by 2016 – a 30% increase.

Figure 9: All Causes Cancer* Incident Cases Projections, Tasmania 1996-2051



To improve our population health outcomes as well as help to ensure a more sustainable health system, much has to be done to delay the population risk of certain cancer types. Smoking, poor nutrition, excess alcohol intake and sedentary living all contribute in various ways to increased risk of some common cancers as well as to a range of other chronic conditions. The necessary steps to reduce these risk factors will be discussed further below.

Other major strategies to reduce morbidity and mortality from cancer include population screening programs to increase early detection (such as breast, cervical and colo-rectal cancer screening) and enable more effective treatment.

In addition, the introduction in 2007 of a new nationally-funded vaccination program (HPV vaccine) to prevent the acquisition of strains of human papilloma virus that cause cervical cancer, will significantly reduce both pre-cancerous and cancerous lesions of the cervix over coming decades.

Psychosocial and mental health and wellbeing

Very appropriately, in recent years there has been increased recognition of the importance of mental health and well being to the general community. Mental health problems include a wide range of behavioural and psychological conditions, the most common of which are anxiety and depression.

The high prevalence of mental health problems, combined with the significant disability associated with them, results in substantial disease burden attributable to mental health problems. It is estimated that mental health problems caused about one eighth of the total Australian disease burden in 2003, exceeded only by cancer and cardiovascular disease.³

The 2004/2005 National Health Survey provides the latest estimates of the prevalence of mental health problems in Australia and Tasmania. According to this survey, approximately 1 in 10 (equivalent to 2.1 million) Australians report a long-term mental or behavioural problem. Anxiety-related problems and mood (affective) problems are the most commonly reported conditions (each affecting approximately 5% of the population). The age group most affected is 18 to 64 year olds, with a total of 12.4% of this age group reporting the presence of a long-term mental or behavioural problem.

Within Tasmania 1 in 9 (equivalent to 55 500) persons reported a long-term mental or behavioural problem. More females (29,700 persons) than males (25,900 persons) in Tasmania report they are affected.

Less well appreciated is the two-way connection between chronic physical conditions (such as cancer, cardiovascular disease, and diabetes) and mental health issues such as anxiety and depression. This issue also extends to care-givers as well as those persons living with their conditions. More work is required to better understand how our health system can better empower such individuals and avoid the pitfalls of learned helplessness, despondency and despair. It is likely that a medical approach to such issues will often be less effective, and certainly insufficient by itself. The current efforts by the Department of Health and Human Services to foster and support self-management and health coaching approaches as a component of the Tasmanian Health Plan, are to be commended.

³ Begg S, Vos T, Goss J, Barker B, Stevenson C, Stanley L, Lopez A. The burden of disease and injury in Australia. Australian Centre for Burden of Disease and Cost-Effectiveness. 2006

Avoidable mortality

Given Tasmania's poorer life expectancy compared with Australia as a whole (the corollary of which is a higher mortality rate in Tasmania) it is imperative to assess how much of this burden can be prevented.

"Avoidable mortality" refers to deaths before the age of 75, that could potentially be avoided through effective interventions against specific diseases in a population. Avoidable mortality is a population-based method of determining unnecessary deaths from diseases for which effective public health and medical interventions are available. It is appropriate that this indicator has recently been adopted in the Tasmania *Together* process, with the aim of a 10% reduction by the year 2010.

Over the period 1997 – 2001 the age-standardised avoidable mortality rate from all causes in Tasmania was 192.0 deaths per 100,000 population compared with 176.6 for Australia, with Tasmania experiencing higher avoidable mortality rates than all other jurisdictions except the Northern Territory.

Over the years from 1979 to 2005, total avoidable death rates fell in Tasmania by 52%, and this is reflected in the increasing life expectancy described above.

Avoidable mortality can be further classified into primary, secondary and tertiary avoidable mortality, according to the type of intervention that is known to reduce deaths from specific diseases.

The Levels of Prevention

Primary prevention refers to interventions that prevent the emergence of risk factors and result in supportive environments for healthy behaviours across the life-course, **secondary prevention** refers to activities such as screening, case finding, periodic health examinations, early intervention, control of risk factors including lifestyle and medication, and **tertiary prevention** includes acute and chronic clinical care that prevents the progression of disease, reduces complications and enables rehabilitation.⁴

High avoidable mortality rates in any of these categories would suggest shortcomings in prevention strategies or a lack of interventions, and would warrant further investigation.

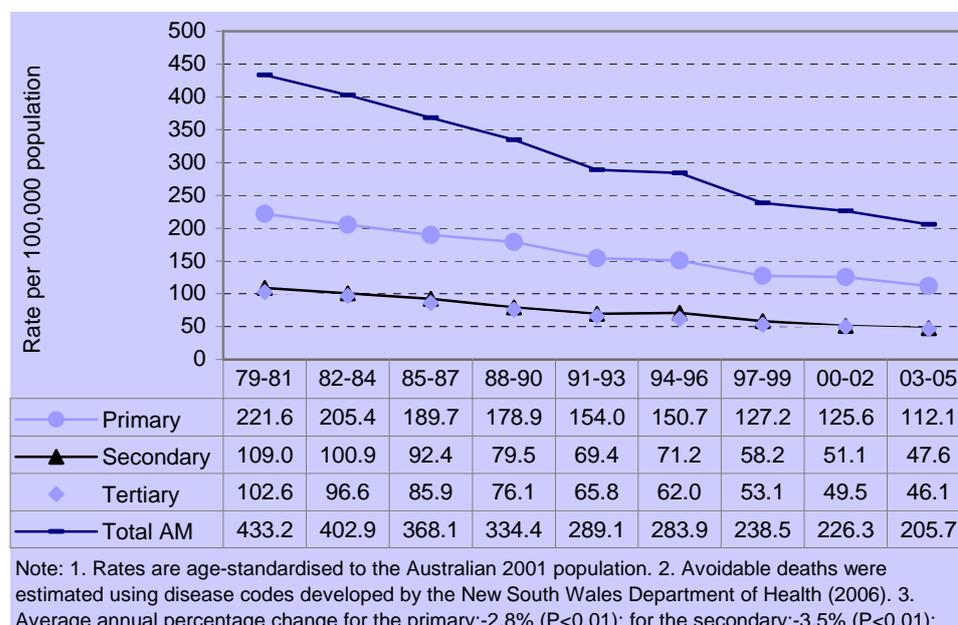
As Figure 10 below indicates, primary prevention efforts have contributed as much in quantitative terms to reduced avoidable deaths over the past 25 years, as both secondary and tertiary prevention measures combined.

Tobacco control measures have contributed very strongly to our health gains from primary prevention, and others include immunisation programs, traffic accident and other injury prevention measures, needle-syringe programs to reduce the transmission of blood-borne viruses. There is a range of other effective strategies that will have contributed. Relative to the spiralling costs of hospital-based health

⁴ National Public Health Partnership. *The Language of Prevention* 2006. NPHP Melbourne. http://www.nphp.gov.au/publications/a_z.htm (accessed 20 April 2008)

care, the health gains achieved through primary prevention measures have generally been of low cost to the community. A major advantage is that once primary prevention measures are put in place they tend to be accepted as the norm, they are sustainable, and provide enduring benefit for all of society.

Figure 10: Potentially Avoidable Mortality by Intervention Level, Population 0-74 Years, Tasmania, 1979-2005



As with many other health outcomes data in Tasmania, there is a lack of significant difference in avoidable mortality between the North-West, Northern and Southern regions. This indicates that a statewide approach to both prevention and health systems improvement – as proposed in the Tasmanian Health Plan – is entirely appropriate from a population health perspective.

Until very recently, there has been a failure in our health system to adequately focus on the primary prevention end of the continuum of prevention and care, and deal systematically with the burgeoning challenge of chronic disease. This was particularly evident at the national level given that the previous Federal Government, which had all the power in preventive health funding arrangements such as the Public Health Outcome Funding Agreement, appeared reticent in expediting a range of interventions that would make a difference to health and well-being across Australia.

The investment in preventive effort – which is not simply a matter of resources but also of strong and healthy public policy – has lagged severely behind an emphasis on the acute health care system and hospital waiting lists. However such approaches can no longer be regarded as sustainable. Because of our ageing demographic and relatively adverse risk factor profile in Tasmania, the difficult reality is that further major increases in investment into the current paradigm of a hospital-centric health care system will not stem the tide of chronic disease.

Clearly there is an urgent need to prevent cancers and other age-associated chronic conditions – including cardiovascular disease, diabetes and musculoskeletal conditions - so that health outcomes can be improved and health care system costs and social impacts including on workforce participation and productivity are minimised.

My key message to Parliament with this Report is that not only is there ample opportunity for improvements in health status of Tasmanians, it is imperative that we do so. Furthermore, this will be most efficiently, effectively and equitably achieved through primary prevention measures.

The advent of a new Australian Government combined with the development of the Tasmanian Health Plan offer a unique opportunity for collective action to improve the current health system and its broader outcomes through a focus on the determinants of health and primary prevention, and a re-orientation of the care system towards primary health and community well-being.

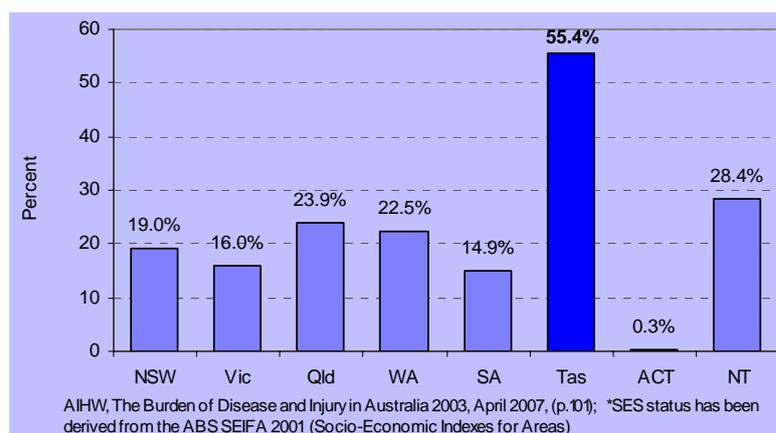
ADDRESSING OUR HEALTH INEQUALITIES

Inequalities in health status are increasingly evident in Australia and are sometimes particularly stark in Tasmania. When health inequalities are unfair and avoidable, they are inequities.

There is a clear gradient in health status between the most disadvantaged and most advantaged groups in our society, with lower socioeconomic status (SES) being associated with higher disability levels and higher premature death rates. Low SES - whether measured by income, educational attainment or occupation - means poorer health, a higher incidence of chronic conditions and higher levels of health care utilization⁵. This is not a healthy situation when it is further recognised that health inequalities themselves tend to exacerbate or drive further disadvantage⁶. Living with chronic conditions can reduce family income and prosperity, substantially leading to reduced education and other opportunities for family members.

As Figure 11, derived from Australian Bureau of Statistics data on Socio-Economic Indexes for Areas (SEIFA) demonstrates, Tasmania has the highest proportion of persons with low socio-economic status of all states and territories.⁷

Figure 11: Distribution of Low Socio-Economic Status by Jurisdiction, 2001



The factors underlying the SEIFA scores include that Tasmania has lower median weekly gross individual, household and family incomes. Tasmania historically has tended to have the highest unemployment rate in Australia. The situation has improved in recent times – in June 2006 the unemployment rate in Tasmania was 6.6% compared with 5.2% for Australia as a whole; and in March 2008 the estimated rate was 4.8% compared with 4.0%.

Because unemployment is consistently identified as a significant risk factor for poor mental and physical health, higher health care service utilization, and for premature death, it is a significant contributor to our overall health status.

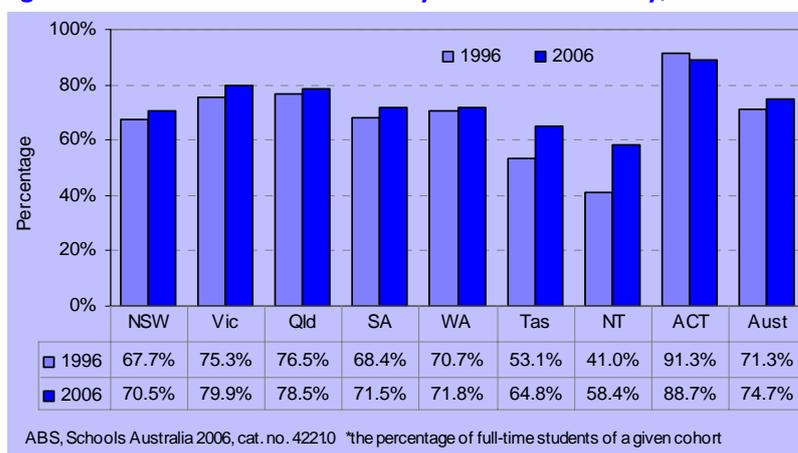
⁵ Marmot M. Social determinants of health inequalities; Lancet 2005. 365: 1099-104.

⁶ Social determinants of health: the solid facts. 2nd edition., Wilkinson R and Marmot M., WHO 2003

⁷ Begg S, Vos T, Barker B, Stevenson C, Stanley L, Lopez AD, 2007. The burden of disease and injury in Australia 2003. PHE 82. Canberra: AIHW.

Higher school retention rates can reduce social disadvantage through higher income and lower unemployment, which also positively affects health and wellbeing⁸. Tasmania's school retention rate, at 64.8% in 2006, was the second lowest in the country after the Northern Territory (Figure 12). However there has been a major improvement since 1996, when it was only 53.1%.

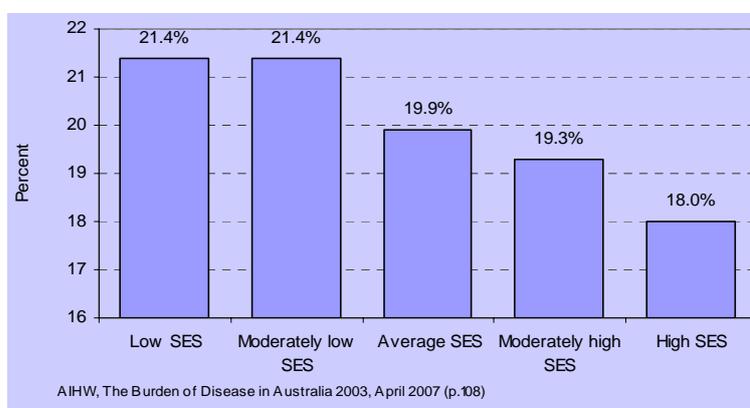
Figure 12: School Retention Rates* by State and Territory, 1996 and 2006



The consequences of these types of socioeconomic inequality for health – the “causes of the causes” of ill health in Tasmania⁹ - become very evident with the health outcome indicators described below.

In Australia, the burden of disease as measured by **Disability-Adjusted Life Years** or DALY's (a measure of the combination of premature death and years of life lived with a disability in a population) experienced by lower SES population groups is significantly greater than that experienced by persons of higher SES (Figure 13). Comparable data are not available for Tasmania but it is likely that the differences would be more pronounced.

Figure 13: Proportion of Total Burden of Disease (DALYs) for Socio-Economic Quintiles, Australia 2003

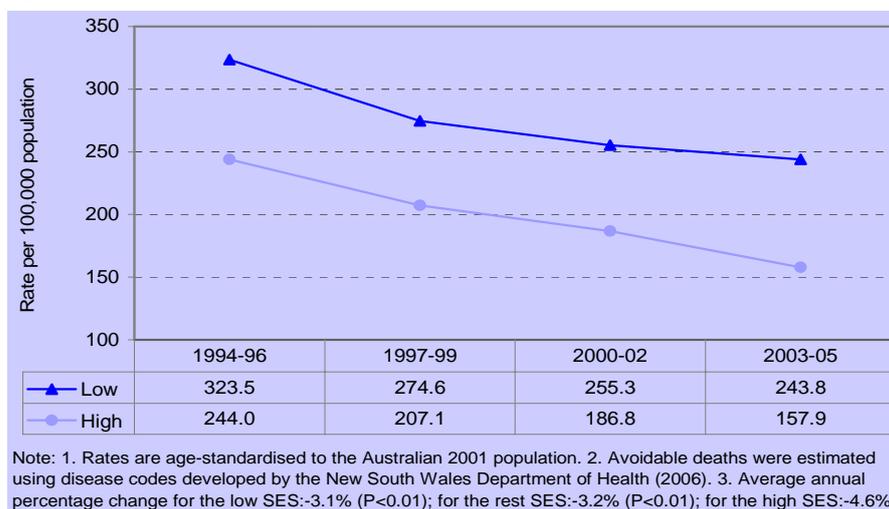


⁸ Moon et al. Australia's Young People: Their health and wellbeing. AIHW 1999.

⁹ Commission on Social determinants of Health: Interim Statement. Achieving Health Equity: From Root Causes to Fair Outcomes. World Health Organisation 2007.

Similarly in Tasmania, avoidable mortality (deaths from preventable causes before the age of 75) occurs across society but the burden falls more heavily on our lower socioeconomic groups (Figure 14). It is also significant that the rate of improvement has been greatest in our upper SES group. The reasons for this are many and complex, but can be better understood by examining the socioeconomic differentials in our common underlying health risk factors, and their trends over time.

Figure 14: Potentially Avoidable Mortality by Socio-Economic Status, Tasmania, 1994-2005



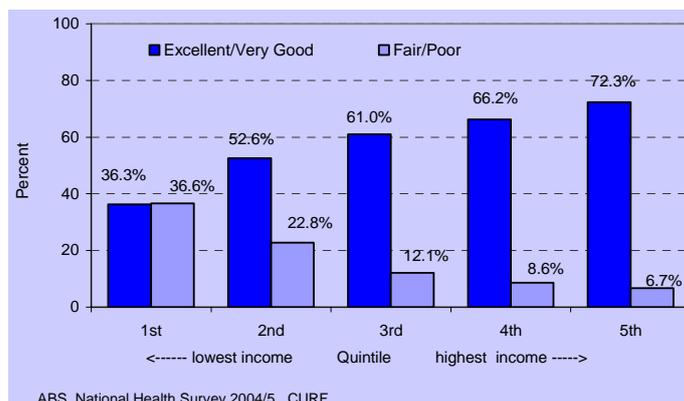
Self assessed health status

How a person rates their own health has been shown to be strongly associated with their actual health and likelihood of survival.

In the National Health Survey (NHS) 2004/5 the percentage of Tasmanians aged 15 years and over who reported their health as good or very good / excellent was 81.3%, approaching that of the Australian figure of 84.0%.

However on further analysis there is a striking gradient in self-assessed health status across our socio-economic groups in Tasmania, using household income as a simple proxy measure (Figure 15). Persons in the lowest household income quintile report much higher levels of poor or only fair health (36.6%) compared with those in the highest household income quintile (6.7%).

Figure 15: Self-Assessed Health by Household Income Quintile, Tasmania 2004/5



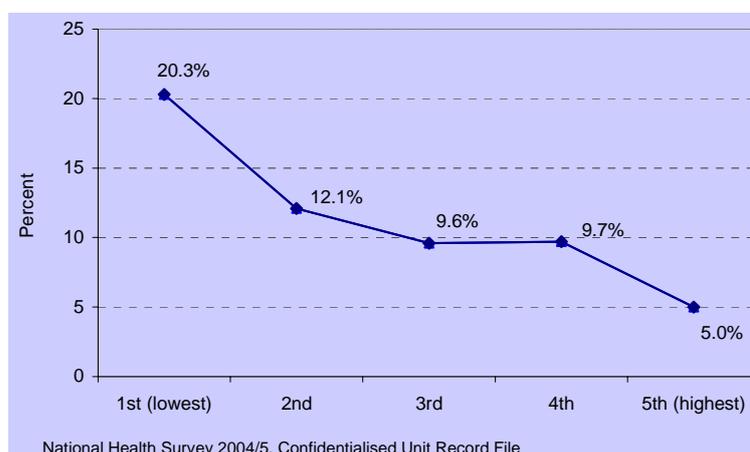
Psychological Distress

The prevalence of self-reported psychological distress is another indicator of the mental health of Australians. The 2004/5 NHS measured psychological distress using the Kessler 10 (K10) scale of psychological distress, which seeks to measure the level of anxiety and depressive symptoms a person experienced in the 4 weeks before the interview.

According to the 2004/5 NHS a significant proportion of both the Australian and Tasmanian population experience high or very high levels of psychological distress. In Tasmania a total of 10.8% of males and 14.3% of females report high or very high levels of psychological distress. These proportions were not significantly different to Australian estimates.

A four-fold gradient in psychosocial distress is found across income groups in Tasmania (Figure 16).

Figure 16: High/Very High Level of Psychological Distress by Household Income Quintile, Tasmania 2004/5



Health risk factors

Health risk factors are characteristics that are associated with an increased risk of developing a particular disease or condition.

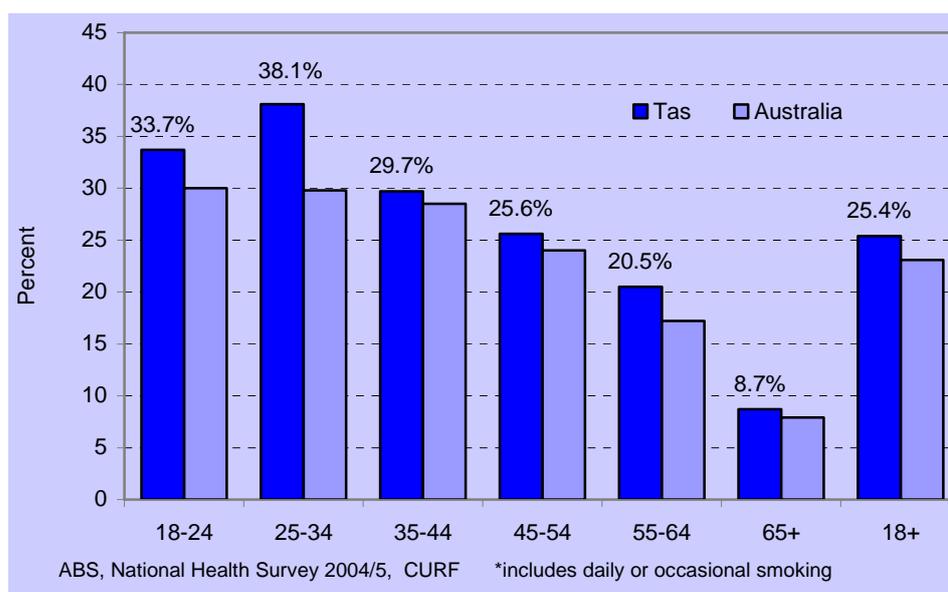
Much preventive health work in Tasmania now focuses on the cluster of risk factors that collectively give rise to a large and burdensome – but preventable - range of chronic conditions. The Department of Health and Human Services' *Framework for the Prevention and Management of Chronic Conditions* established the “SNAPPs” approach (Smoking, Nutrition, Alcohol, Physical activity, and Psychosocial factors). These risk factors are in turn subject to the influence of the “causes behind the causes” discussed above.

Smoking

Tobacco remains the leading cause of preventable disease and death in Australia and Tasmania. Tobacco was responsible for 7.8% of the total burden of disease in Australia in 2003, with lung cancer, chronic obstructive pulmonary disease and ischaemic heart disease accounting for more than three-quarters of this burden.¹⁰

In 2004/5 Tasmania had the highest rate of current smokers (daily or occasional smokers) of all states and territories, with 25.4% reporting they currently smoke tobacco. The proportion remains higher than Australia as a whole, across all age groups (Figure 17).

Figure 17: Current Smokers* by Age, Tasmania and Australia, 2004/5

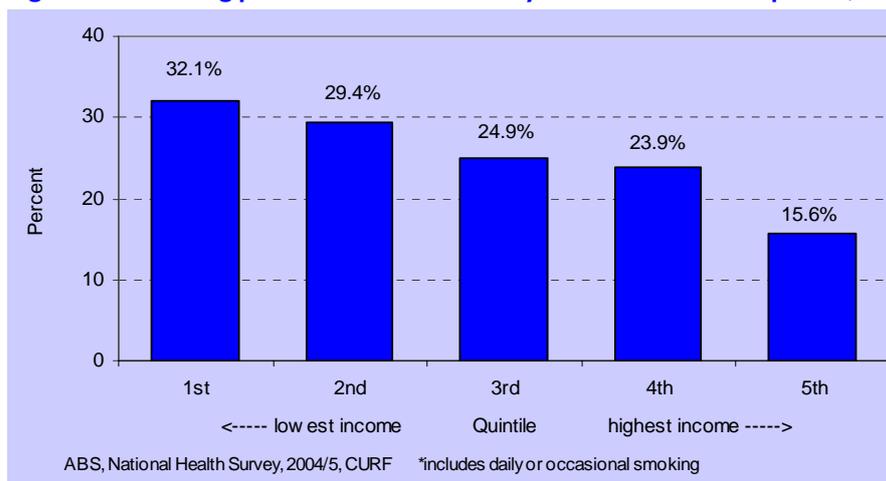


The above graph demonstrates smoking behaviour by age group, which is an example of the level of information that can be obtained when sample sizes are adequate. Tasmania achieved this by purchasing an 'over-sample' during the National Health Survey in 2004/5, however this approach was not possible for the NHS survey in 2007 therefore future data are likely to be more limited.

Within Tasmania, the prevalence of smoking declines with rising household income levels, from 32.1% in the lowest income quintile to 15.6% in the highest income quintile (Figure 18).

¹⁰ Begg S, Vos T, Goss J, Barker B, Stevenson C, Stanley L, Lopez A. The burden of disease and injury in Australia. Australian Centre for Burden of Disease and Cost-Effectiveness. 2006

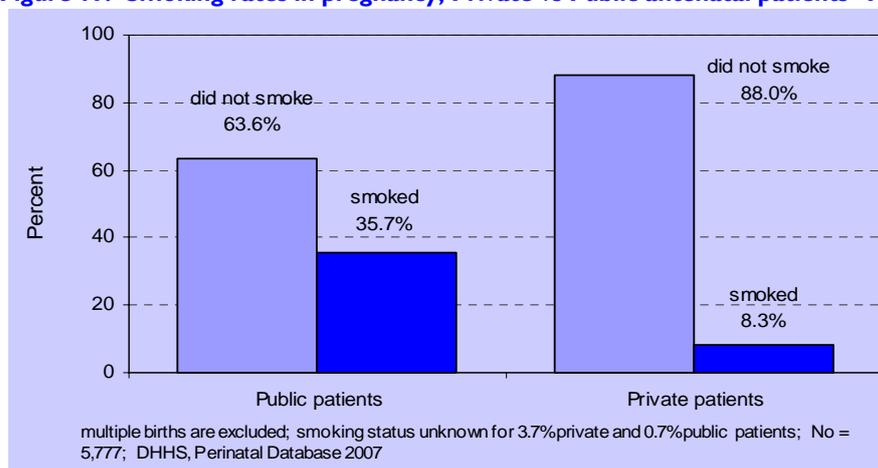
Figure 18: Smoking prevalence in Tasmania by Household income quintile, 2004/5



Health inequalities are now emerging because our high-SES group has heeded anti-smoking educational messages and are more able to quit smoking than are low-SES groups, for example by being more able to access programs and support that assist in quitting.

Further evidence for this comes from Tasmanian data on smoking during pregnancy. There is a striking (four-fold) difference in smoking rates between pregnant women who are public hospital patients compared with those in the private hospital sector, who tend to be older and have higher SES backgrounds (Figure 19). Smoking rates in young women of child-bearing age are extraordinarily high in Tasmania, even during pregnancy.

Figure 19: Smoking rates in pregnancy, Private vs Public antenatal patients Tasmania 2005



The consequence is that these mothers are bearing a higher proportion of babies with complications such as low birth weight and increased risks such as sudden infant death syndrome. Low birth weight is associated with a range of risks in later life, including heart and kidney disease and diabetes. A recent surge in birth rates (attributed in part to the Australian Government’s incentive payment scheme) may accentuate this issue, with lower SES young women currently more likely to have a baby at a younger age. After the Northern Territory, Tasmania has the second

greatest teenage pregnancy rate at 26.6 births per 1,000 women aged 19 years and under, compared with the national average figure of 15.4.

Environmental control measures and other strategies that de-normalise smoking behaviour have the great advantage that they affect all socioeconomic groups, and the benefits are much greater than for educational approaches or “health messages” alone. These are discussed further in Section Four.

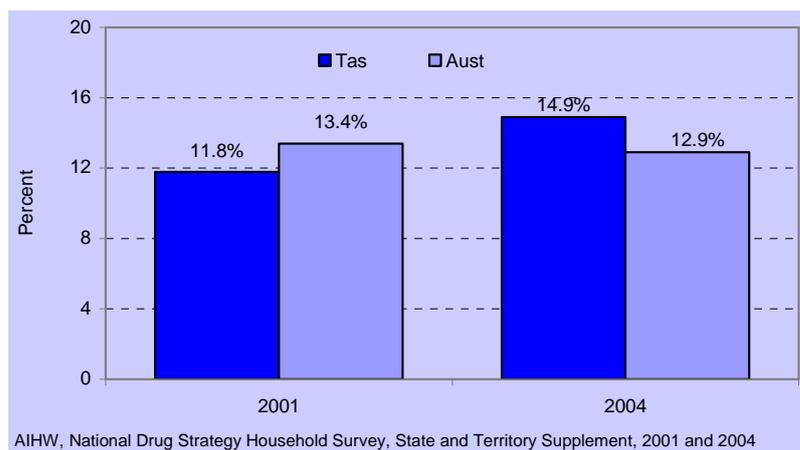
“It makes little sense to expect individuals to behave differently from their peers; it is more appropriate to seek general change in behavioural norms and in the circumstances which facilitate their adoption.”

Rose G. *The strategy of preventive medicine*. Oxford: Oxford University Press; 1992.

Alcohol

Excess alcohol consumption has increased in Tasmania (Figure 20).

Figure 20: Proportion of Population Aged 14 Years and Over at High Risk of Short term Alcohol Related Harm at Least Monthly, Tasmania and Australia, 2001 and 2004



The evidence for harm from levels that previously may have been regarded as acceptable is also mounting, and current National Health & Medical Research Council Guidelines are under review. It is likely that the new Guidelines will be significantly more stringent in defining harmful levels of consumption.

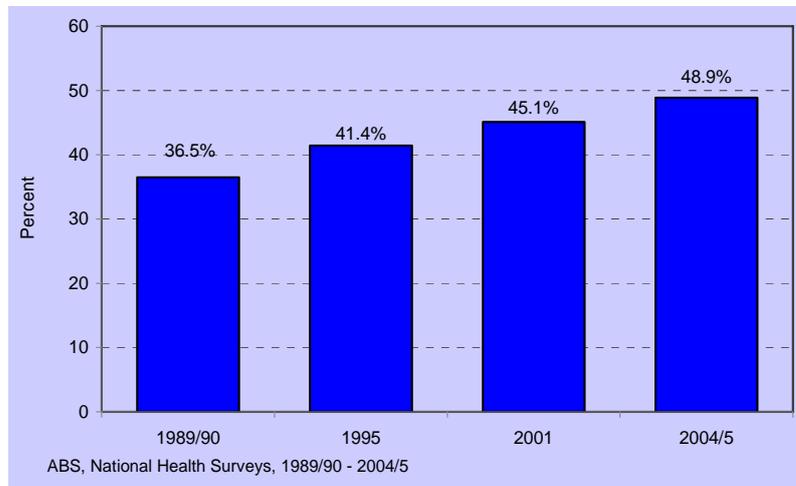
It is clear that a systematic multi-pronged population health approach involving both federal and state governments will be required to reduce alcohol consumption levels throughout the whole community.

Nutrition, Physical Activity and Obesity/Overweight

Good nutrition and sufficient physical activity are vital to maintaining good health outcomes at the population level. In recent years much attention has focussed on the growing prevalence of obesity and overweight – but while it is a convenient descriptor and biomarker, an emphasis on weight loss *per se* by individuals is not

likely to be the strategic path by which Australia or Tasmania will reverse the current adverse trend (Figure 21).

Figure 21: Prevalence of Overweight and Obesity (self-reported data) 18 Years and Over, Tasmania 1989/90- 2004/5



Stigmatisation of overweight people can be an unintended and unfortunate consequence of excessive societal focus on “weight” (as distinct from good nutrition and physical activity), and body image disturbance in young people has been linked to the media portrayal of weight issues. Yet there is evidence to suggest that overweight or obese people who are physically active and have a healthy diet may often enjoy better health outcomes than a slender person who is highly sedentary.

The available evidence indicates that once excess fat has been acquired, it is very difficult to lose it and then maintain a healthy weight. No matter how intensive the programs put in place, if these are based on advice, education and behavioural approaches alone then weight re-gain tends to occur over time and the sustainability of such programs becomes an issue.

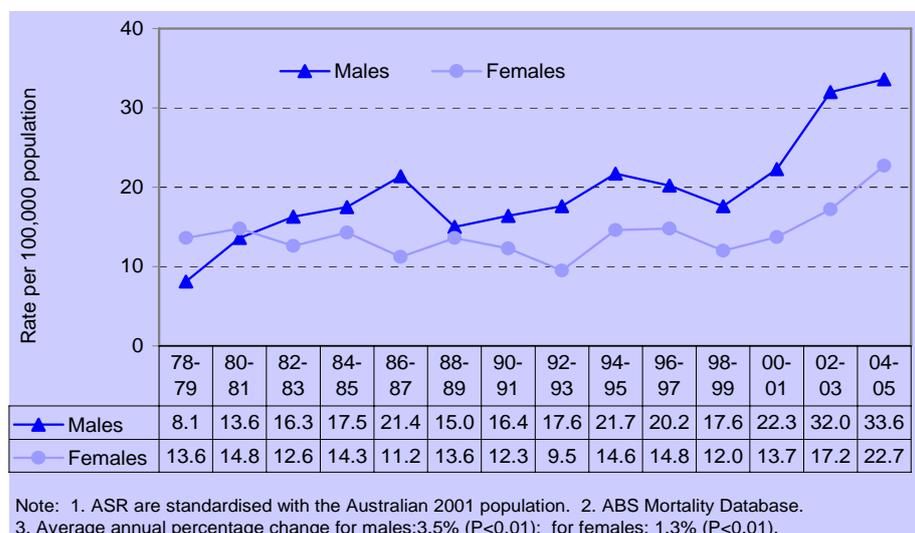
Socio-environmental changes offer the best hope we have for addressing this socially-determined and major public health issue.

A major weakness in our present data is that Tasmania must rely on national surveys collecting data on self-reported height and weight. A more robust and objective measure is required if we are to accurately monitor the direction of observed trends over time and understand or improve the effectiveness of our interventions. The resources required for such monitoring are relatively minor but the investment has been strangely difficult to acquire.

The present indications are that as a consequence of our sedentary living, excessive caloric intake and ageing population demographic, Tasmania will continue to see increasing rates of hospitalisations for Type 2 Diabetes and its complications (such as renal failure, vascular disease, and visual impairment). Diabetes is increasingly common as a cause of premature mortality, with the Tasmanian age-standardised death rate for diabetes mellitus in 2005 being 29.1 deaths per 100,000 persons,

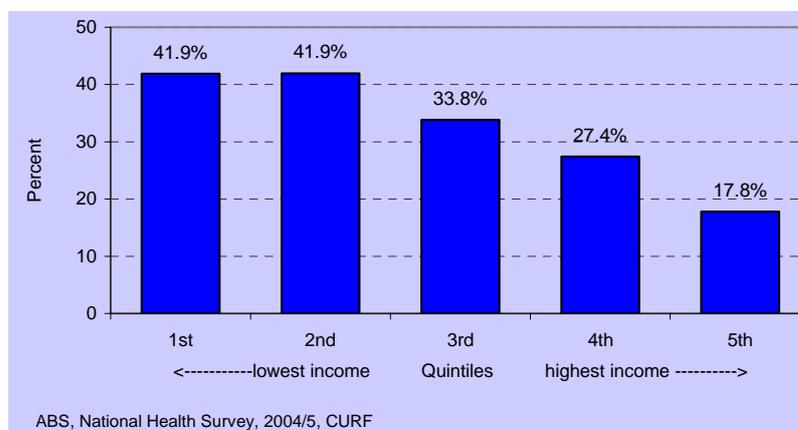
significantly higher than the Australian rate of 16.1 deaths per 100,000 persons (Figure 22).

Figure 22: Age-Standardised Mortality Rate for Diabetes by Sex (ICD-9-CM 250, ICD-10-AM E10-E14), Tasmania, 1978-2005



In Tasmania a socio-economic gradient in sedentary behaviour is clearly demonstrated in Figure 23 below.

Figure 23: Sedentary Activity Levels by Household Income Quintiles, 15 Years and Over, Tasmania, 2004/5



Once again, measures that rely on education or “health messages” (such as isolated media campaigns, which tend to be both expensive and ineffective) are unlikely to influence this risk factor across the whole socioeconomic spectrum. Initiatives that improve opportunities for physical activity – or reduce sedentariness and increase “incidental” activity through modifications to the built environment and social structures are likely to have greater long-term success. The work of the Premier’s Physical Activity Council in championing evidence-informed initiatives that are consistent with the comprehensive approach of the Tasmanian Physical Activity Plan is also profoundly important.

"Much can be done by individuals themselves to improve their own health prospects, but whether or not they will actually take such action depends substantially on economic and social structures for which governments are responsible."

Rose G. *The strategy of preventive medicine*. Oxford: Oxford University Press; 1992.

KEY PUBLIC HEALTH CHALLENGES AND ACHIEVEMENTS 2003 - 2008

The following represents a selection of the many activities that have taken place or issues that have emerged in the public health arena over the past five years and require to be addressed as a priority.

Communicable diseases and Immunisation programs

Tasmania continues to maintain very high childhood vaccination coverage rates and has successfully rolled out a number of new national vaccination programs. Our coverage rates for children at the 12-month milestone have consistently exceeded those of most other states and territories – but maintaining these rates through to 6 years of age remains a challenge.

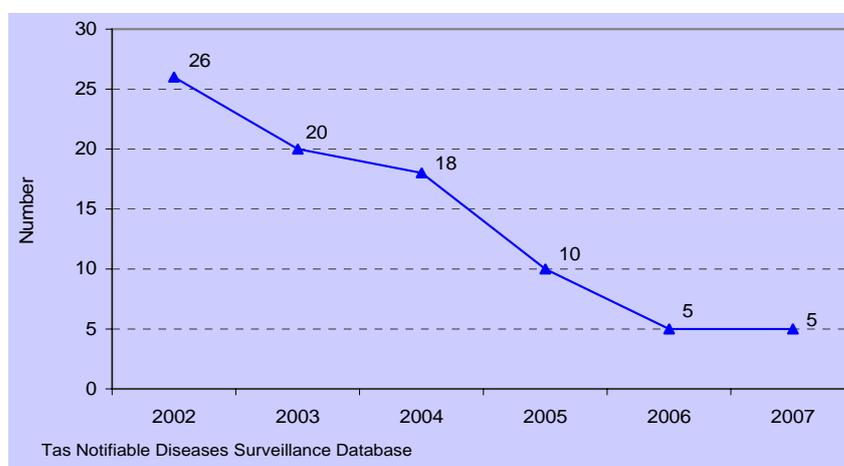
The benefits of expanding the immunisation workforce in Tasmania through establishing a nurse immuniser training and endorsement process in 2003 have been realised many times over by primary care providers and local councils alike, given the rapid expansion of the National Immunisation Program to include new vaccines such as the Group C meningococcal vaccine, infant pneumococcal vaccine, varicella (chickenpox) vaccine, and the HPV vaccine against cervical cancer.

Tasmania has been able to build upon its robust vaccination services infrastructure in rolling out the HPV vaccine with its complex 3-dose schedule, to large numbers of young females at short notice.

Such capacity must continue to be enhanced to ensure preparedness to cope with foreseeable threats such as pandemic influenza.

The returns on investment from vaccination programs can be rapid: the experience in Tasmania with meningococcal infection illustrates this with a dramatic drop in case numbers following commencement of a Group C meningococcal vaccination program during 2003 (Figure 24). Almost all the meningococcal cases that now occur are of the Group B serotype, for which there is as yet no vaccine suitable for a program.

Figure 24: Meningococcal Case Notifications, Tasmania, 2002-07



Influenza

In 2007 Australia experienced a moderately severe influenza A epidemic. Tasmania was also affected, with 417 laboratory-confirmed cases being notified. The record high numbers of notifications in part reflects access to improved testing methods in 2007, but would still represent only a fraction of the actual number of cases in the community. Our population aged over 65 years was effectively shielded by the reasonably high influenza vaccination coverage rates of around 80% that Tasmania has consistently achieved in recent years. In addition to substantial community morbidity and workplace absenteeism, the epidemic caused a significant load on general practitioner clinics and hospitals for some weeks.

Data collected by our Communicable Diseases Prevention Unit indicate that the vast majority of cases occurred in non-vaccinated people. Annual influenza vaccination is a highly effective measure that requires further encouragement throughout the community, and there is a good case for workplaces investing in such a program for employees.

Pandemic Influenza

A global pandemic of a new and highly pathogenic strain of influenza would result in impacts many times more severe than the relatively minor experience of 2007. It is very likely that at some stage in the future, Tasmania will be exposed to the threat of pandemic influenza.

The ongoing circulation of a highly pathogenic strain of H5N1 avian influenza amongst poultry and other birds in a number of countries is creating circumstances that may enable genetic re-assortment of the virus to become more transmissible between humans. The mortality rate to date amongst humans who have directly acquired H5N1 infection from sick poultry is over 60%.

Significant planning and preparatory efforts have been underway in recent years, with the completion of the whole-of-government Tasmanian Action Plan for Human Influenza Pandemics in 2008 being a vital step forward given the likely whole-of-community consequences of such an event.

Tasmania has been taking part in extensive national planning in a range of ways through the Australian Health Protection Committee and Council of Australian Governments. We have developed innovative approaches to address some of the foreseeable needs and challenges and cooperation across Government has been excellent; however at the time of writing I remain concerned about a number of key strategic areas for the protection of public health.

These include our ability to rapidly implement border control and quarantine measures in time to prevent ingress of the virus; the capacity of our small Communicable Diseases Prevention Unit to undertake surveillance for new cases, contact tracing and containment; and the degree to which local governments and local primary care providers will work together, supplemented by staff from the Department of Health & Human Services, to support their community in providing local "flu clinics" as safe places for the assessment and basic treatment of cases as a pandemic becomes more widespread. Each of these is achievable but further detailed

and exhaustive planning is required, followed by ongoing maintenance of preparedness.

Enteric infections and Foodborne illness

Norovirus has emerged as our most common cause of outbreaks of gastroenteritis, with 44 confirmed norovirus outbreaks detected and managed over the past five years, involving over 2100 cases. A further 114 outbreaks of suspected viral gastroenteritis (a number of which may also have been due to norovirus) involving over 2500 cases have also been detected and managed.

Norovirus infections have led to episodic disruption of our hospitals and aged care facilities.

Rigorous and ongoing attention to infection control and isolation procedures are required to contain this problem. In response to this a public health initiative, in consultation with key stakeholders, was implemented and resulted in the development of the guidelines “Management of Gastroenteritis in Residential Care Facilities”.

While Tasmania generally continues to experience lower case notification rates of salmonella than Australia as a whole, a number of outbreaks of *Salmonella typhimurium* (phage type 135a) have occurred since 2005. These point-source outbreaks have involved bakeries, restaurants and caterers, and in six cases there has been a link back to one egg farm. The issues identified have highlighted the need for a whole-of-system approach to prevent the hazard from salmonella organisms multiplying to become a public health risk.

In addition to working with food businesses and local Councils involved to improve food handling practices and remove sources of risk, the Public & Environmental Health Service has worked with the Department of Primary Industry and Water to address on-farm and egg transport issues in a farm-to-fork approach. Foods containing raw egg products have been shown to require particular care, therefore a new measure has been introduced this year requiring specific food safety plans to be developed by businesses preparing raw egg products.

It is apparent that salmonellosis associated with eggs and poultry meat remains an ongoing concern in other parts of Australia as well as Tasmania. The current development of a national *Primary Production and Processing Standard for Eggs and Egg Products* is an important development that needs to be expedited.

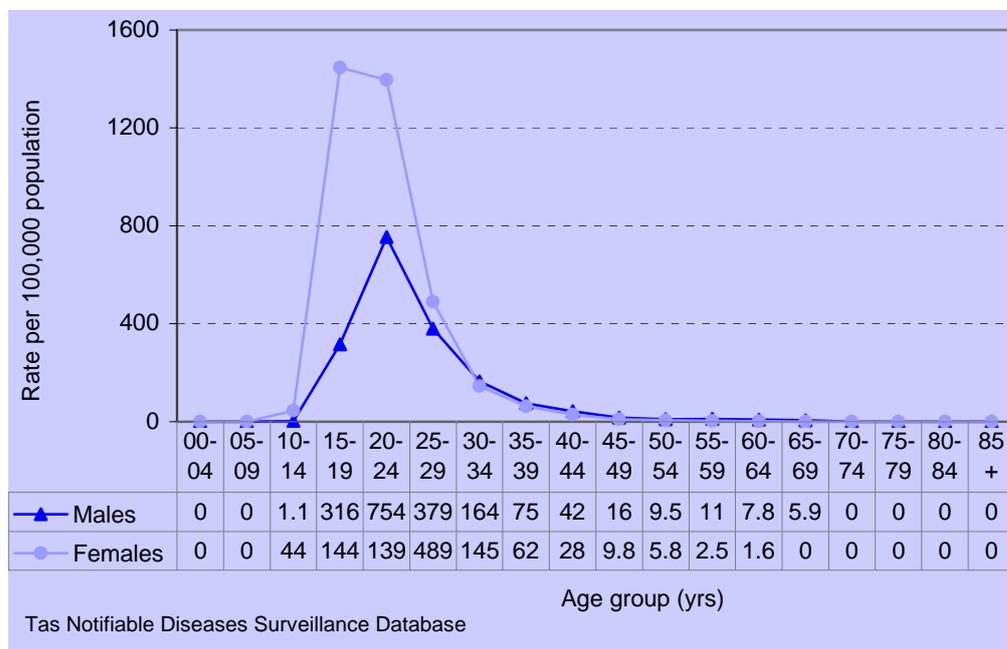
Sexually transmissible infections

There has been a major (over four-fold) increase in notifications of Chlamydia infection over the past decade.

In part this increase in notifications reflects improved and more accessible laboratory diagnosis methods, but a proportion is likely to reflect a true increase in prevalence.

The incidence rates are particularly high in teenagers, and it seems evident that sexuality education and public health messages regarding the practice of safe sex are failing (Figure 25).

Figure 25: Notification Rate for Chlamydial Infection by Age and Sex, Tasmania, 2003-07



Given the often ‘silent’ nature of this disease, it is likely that there are many more undiagnosed and untreated cases in the community – particularly amongst young males. A robust prevalence study – preferably national - is long overdue as the basis for further public health interventions to reduce the community burden from a range of complications including long-term infertility and pelvic pain, and at the same time improve safe sex practices to protect against a range of other conditions including HIV.

Infection Control and Health-care Associated Infections

The recent establishment of a small Unit within the Department of Health & Human Services dedicated to the surveillance and control of healthcare-associated infections (such as wound infections following surgery) is a welcome step forward in improving the quality and safety of our health care system. Investment in infection control will help save the system and the public from unnecessary complications and re-admissions to hospital.

Environmental Health

As flagged in the 2003 State of Public Health Report, a major concern has been the apparent inability of local Councils to recruit and retain adequate numbers of environmental health officers. Environmental health activities carried out by local government remain a fundamental cornerstone of public health, helping to ensure the ongoing and often ‘invisible’ health benefits of food safety, water and air quality, waste management, hazardous substance management, pest control, noise

abatement, healthy housing, and a range of other issues. Contemporary environmental health practitioners are able to assess environmental health risks and work with communities to identify and implement measures to protect or promote health in many different ways.

Tasmania has contributed strongly to national efforts to identify the factors underlying the workforce shortage and develop strategies to promote the profession. Much remains to be done to maximise the potential of trained environmental health staff, and a promising option for the future is the development of an environmental health technician role to relieve environmental health officers of some duties at the same time as providing for a career pathway within local government.

The Department's Public and Environmental Health Service, in conjunction with the Australian Institute of Environmental Health and other parties, has worked with the University of Tasmania to establish a new and attractive environmental health degree course that has commenced in 2008, to increase the output of trained graduates. Two cadetships to support trainees in rural councils in Tasmania were established in 2004.

Drinking water

In 2005 a new Drinking Water Quality Guideline was established under the Public Health Act 1997 that incorporates a nationally and internationally recognised risk management approach to water quality. Water authorities are now required to assess hazards from catchment to tap and manage risks accordingly. Future annual reports on drinking water quality in Tasmania issued by the Director of Public Health will also report on whether these authorities have fulfilled their drinking water quality management planning obligations, in keeping with the principle that transparency for consumers is a vital aspect of good drinking water quality management.

A challenge with such an approach – particularly for those local councils supplying a number of very small communities – is having the skill, knowledge and resources to enable effective risk management of drinking water quality.

It is anticipated that these needs will be better addressed through the water and sewerage reform process underway at the time of writing.

A further challenge facing Tasmania is catchment management. There is a need for 'whole of government' and multiple stakeholder engagement to ensure ongoing protection of water quantity and quality in drinking water catchments as a vital resource over time.

The introduction in 2005 of a quarterly and flood-event based waterways sampling program across Tasmania as recommended by the Agricultural, Silvicultural and Veterinary Chemicals Council has enabled a more transparent and thorough appraisal of water catchment contamination from chemical usage, than would exist elsewhere in Australia. This program especially supports the smaller water authorities who would otherwise be unlikely to afford the chemical monitoring required to properly assess this hazard for their Drinking Water Quality

Management Planning requirements. Over the past four years there have been two episodes of persisting drinking water supply contamination with the herbicide simazine – albeit at low levels well below drinking water Health-based Guideline Values – and in both instances the company involved has been requested to discontinue use of that chemical in the catchment, and has done so.

Climate change

More ominous than the burgeoning epidemic of chronic disease, or even the spectre of an influenza pandemic, are the very real and long-term public health consequences of global ecosystem degradation and climate change. The foreseeable risks to health have been well documented but of particular relevance to Tasmania include increased frequency of extreme weather events, effects on food supply, freshwater supplies, impaired vitality of ecosystems and loss of livelihoods.

Tasmania must vigorously pursue ways to reduce carbon emissions; included among these is the urgent need for resolution of any remaining scientific questions regarding carbon loss from old growth forest and forest floors through logging activities, and actions that need to be taken accordingly.

The prolonged drought in parts of Tasmania has given rise to new public health concerns such as protracted algal blooms affecting drinking water supplies in several locations. It would appear that water scarcity is likely to persist, and a range of adaptation measures will be required to ensure the viability of communities and food supplies in the longer term.

Public health is a major stakeholder and should be included in policy decision making around climate change, particularly given the shared agenda in terms of strategies such as the promotion of active transport.

Tobacco control

Section 3 of this Report described the disturbingly high smoking rates that have persisted in Tasmania up to the time of the most recent national survey in 2004.

A range of tobacco control measures have been implemented over the past four years:

- In 2004, graphic health warnings were introduced at the point of sale, which are changed regularly
- 2004 onwards significant increase in number of controlled purchase operations and prosecutions to enforce the sale of cigarettes to children
- From 1 January 2006 smoke free areas were extended to include bars
- In 2006 the sale of split packet cigarettes was prohibited
- In 2007 the sale of fruit and confectionery flavoured cigarettes was prohibited
- From 1 January 2008 smoke free areas were extended to include cars with children
- From 19 June 2008 point of sale display of tobacco products by general retailers will be restricted to one square metre, with complete removal of displays by 1 February 2011

- From 19 June 2008 a four square metre restriction on displays will apply to specialist tobacconist premises.

The Tasmanian Government - and Parliament as a whole - is to be congratulated for its strong and proactive stance on legislative measures against smoking. The challenge now is to improve investment in smoking cessation support for Tasmanians seeking to quit.

At the national level there is clear scope for further activity, particularly increasing tobacco taxes to reflect the higher burden of disease that smokers incur on the health system.

Radiation Health

A major achievement has been the successful introduction of the new *Radiation Protection Act 2005*, incorporating a contemporary risk management approach to minimise community exposure to unnecessary radiation.

Work is currently underway to better regulate the hazard of ultraviolet radiation from solaria, so that younger people and the more vulnerable fair-skinned population are protected from the risk of skin cancer.

Food and Nutrition

While data on the diet of Tasmanians are very limited, indicators of fruit and vegetable consumption suggest that many Tasmanians fall well short of recommended intakes.

For infants the NHMRC recommends exclusive breastfeeding to around six months, and continuing partial breastfeeding until at least 12 months of age. National targets, established as a practical rather than ideal standard, aim for breastfeeding initiation rates of 90%, with 80% still breastfeeding, at least partially, at 6 months.

Data from the Child Health and Parenting Service over the past ten years consistently suggest that only around 50% of infants were still being breastfed when they presented for their six month check.

In 2004 the Tasmanian Government adopted the Tasmanian Food and Nutrition Policy which lays out a ten year plan for improving food and nutrition in Tasmania. The Policy covers key focus areas of environment, food safety, promoting healthy eating, breastfeeding, food security, primary production, distribution, retail and wholesale, food service, labelling, media, marketing and advertising, technology and workforce development. The Policy is necessarily ambitious in its scope but provides Tasmania with an opportunity to improve population health in a sustainable manner involving partnership with industry.

Leadership for improved nutrition is also very necessary at the national level; for example through policy-making to influence healthy choices by regulation to improve product labelling, food advertising and the food supply. The recent agreement by the Australian and New Zealand Food Regulation Ministerial Council, to require

mandatory fortification of bread-making flour with the vitamin folate by September 2009, is an example of a national strategy that will equitably, efficiently and effectively reduce the occurrence of neural tube defects in pregnancy.

Iodine Deficiency

On a global basis iodine deficiency is considered the greatest single cause of preventable brain damage and mental retardation. Tasmania has a history of iodine deficiency with evidence of cases of severe deficiency prior to the 1950s. In the 1960s and 70s public health interventions protected the population from iodine deficiency. In the 1980s, iodine, present in milk as residues from sanitisation practices in the dairy industry, was thought to have provided protection.

Results from urinary iodine surveys of Tasmanian school children in the late 1990s suggested a re-emergence of mild iodine deficiency. One plausible explanation for the re-emergence was a reduced reliance on iodine containing sanitising agents by the dairy industry.

In response, Tasmanian instigated a voluntary iodine fortification program in 2001 encouraging bread manufacturers to switch from the use of regular salt to iodised salt in bread baking. Urinary iodine surveys of Tasmanian school children were conducted from 2003-2007 to monitor changes in population iodine status. A small, but significant improvement was observed, shifting the population from mild deficiency to sufficiency. However, concurrent investigations into the iodine status of pregnant women suggested the program had little or no effect on this important sub-population group which is of significant public health concern.

In March 2008 a food standard was gazetted by Food Standards Australia New Zealand requiring the mandatory replacement of salt with iodised salt in bread in New Zealand. Amendment to this New Zealand only standard is now being considered in Australia to create a joint Standard for both Australia and New Zealand. Tasmania has been a major player in progressing this initiative, which is anticipated to provide sustainable benefit for iodine-deficient populations elsewhere in Australia as well as Tasmania.

Refugee Health

Tasmania continues to be one of the leading States, in receiving more refugees per capita than any other State or Territory. Over the past four years, between 300 and 400 refugees have settled in Tasmania each year. The majority of refugees have come from African countries, including Sudan, Ethiopia, Liberia, Congo, Sierra Leone and Burundi. The intake is now changing, with increasing numbers of refugees from Burma and Afghanistan arriving. Many of these people have spent a number of years in crowded refugee camps, and as a result, have a range of diverse and complex health needs.

Very substantial progress has been made in developing systems to better assess health needs and support new arrivals, but further work at both state and national levels is still required.

Breast cancer screening

The BreastScreen Tasmania program commenced in 1993 with joint funding by the Australian and Tasmanian Governments. This program has maintained an excellent level of service despite major difficulties arising from radiology and radiography workforce shortages with associated higher costs, and increasing numbers of women in the 50 – 69 years target age bracket. The actual number of eligible women screened biennially has increased significantly over the past 5 years from 30 624 to 33 047, but the proportion of the target group reached has fallen from 59% in 2002-03 to 57% in 2006-07. The national target (based also on previous assessments of cost-effectiveness) is 70%. This highlights the points made earlier about the difficulties our services face in dealing with the ageing demographic.

Breast cancer incidence has risen since the commencement of the program, with earlier detections from screening being one of the key reasons, but mortality rates have been held relatively flat.

A national review is currently underway and will need to take into account issues such as new and emerging technologies, workforce shortages, the heavy reporting and administrative burden arising from accreditation requirements, in order to determine the most sustainable future model for this important program.

RECOMMENDATIONS

There are a number of specific recommendations throughout this Report, however the following are highlighted for immediate consideration by Government:

- The principles, targets and benchmarks of *Tasmania Together* provide an outstanding platform for improving the broad determinants of health. Government should reinvigorate and maintain strong support for this process, closely aligning activity across all Departments to progress the *Tasmania Together* agenda.
- The primary prevention benefits that flow from *Tasmania Together* will also help to underpin the Tasmanian Health Plan, the implementation of which should re-orient the health system to provide a greater emphasis on primary health. Improving the health of the population in the community through primary prevention, earlier detection of emerging health problems, and better integration of community-based with hospital care so that the needs of clients are being addressed and coordinated from outside of hospitals, is the most logical strategy for Tasmania to achieve a sustainable health system. Tasmania is well placed to take the lead by example in supporting the current national health reform agenda, and to do so will require very high levels of collaboration between the State and Commonwealth governments, and between private and public health care providers – particularly in the primary health care field.
- Government as a whole would do well to develop and implement explicit processes - for example through the newly-established Social Inclusion Unit - to incorporate “equity impact assessment” into the consideration of major new interventions or policy proposals. Socio-economic health gradients exist within Tasmania that should not be inadvertently compounded, nor should intergenerational equity be compromised through unsustainable decisions.
- Without the fundamental public health tool of a robust ongoing health risk factor monitoring and surveillance system for Tasmania (which stands virtually alone amongst the jurisdictions in this regard) my ability in the future as Director of Public Health to monitor and report on the causes of health trends is seriously compromised. State Government investment in an ongoing health monitoring and surveillance system for Tasmania to assess trends in risk factors, health service utilisation and performance, and health outcomes should be a top priority in responding to the emerging burden of chronic disease and the need for service integration.
- A further major priority for new investment must be the establishment of a robust smoking cessation program for Tasmania, in accordance with the recommendations made by the Department of Health and Human Services following a recent review of smoking cessation interventions in Tasmania.



Tasmania
Explore the possibilities