



***Tasmania's Workforce:
health impacts on participation and
productivity in the face of an ageing
population***

Summary Paper

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This Paper has been prepared by the Demographic Change Advisory Council for information purposes

The Council is a Tasmanian Government initiative, in conjunction with the Local Government Association of Tasmania, Tasmanian Chamber of Commerce and Industry, Tasmanian Council of Social Service, Unions Tasmania, University of Tasmania and the Australian Bureau of Statistics

Introduction

Tasmania's working age population (15 to 64 years of age) is projected to peak at around 320 000 in the next four years and then start to decline. The effect will be that fewer people will be available to work and provide the goods and services that the community demands.¹

Furthermore, Tasmania's workforce is projected to become increasingly older on average. For example, in 1986, approximately 25 per cent of people employed were aged 45 years or over. This share increased to 40 per cent by 2006 and is expected to increase further in future decades, though more slowly than in the recent past.

As Tasmania's workforce ages and the number of people entering the work force begins to decline, the capacity to maintain the supply of labour is going to be critical for economic wellbeing. One of the most important areas impacting on supply capacity is the health of the working age population, as it is an important determinant of labour productivity and participation.

This paper provides a summary of a report, titled *Tasmania's Workforce: health impacts on participation and productivity in the face of an ageing population*, which examines the impact that health status can have on labour force participation and productivity levels and outlines the health status of Tasmania's working age population compared with the national average. The full report is available on the Demographic Change Advisory Council's website, www.dcac.tas.gov.au.

Health impacts on labour force participation

An individual's health status can significantly impact on that person's ability and willingness to participate in the labour force.

In 2004–05, an Australian Bureau of Statistics (ABS) survey, titled *Barriers and Incentives to Labour Force Participation* (Cat No 6239.0) reported that there were 1.47 million Australians whose labour force participation was reduced because of ill health. This included people who worked and would like more hours but could not because of health issues, those who were not in the labour force and wanted to work, but could not because of health issues, and those who did not want more hours or a job for reasons of ill health.

¹ For more information on Tasmania's labour force participation rate and its ageing population refer to *Information Paper No 1: Who is not participating in Tasmania's labour force?* which can be located at www.dcac.tas.gov.au.

TABLE 1: HEALTH BARRIERS TO PARTICIPATION, AUSTRALIA, 2004–05

	Persons ('000s)	Per cent (%)
Unable to work because of disability	35.9	2.4
Short-term sickness or injury	151.3	10.3
Caring for ill/disabled/elderly person	298.7	20.4
Long-term sickness or disability	981.0	66.9
Total	1 466.9	100.0

Source: ABS, *Barriers and Incentives to Labour Force Participation, 2004–05*, Cat No 6239.0.

While these data are not available for Tasmania, if it is assumed that the national data are representative of reduced participation at a state level, there may be around 33 000 persons in Tasmania with reduced participation, or non-participation, due to ill health. This equates to around 7 per cent of the Tasmanian population in 2004–05, or almost 14 per cent of the current labour force, including the unemployed. This may understate the potential impact in Tasmania as the State has a greater proportion than nationally of persons with a disability and persons who care for other family members. Clearly, this represents a potentially significant additional labour supply if these people can be employed productively.

The burden of disease and injury generally increases with age. A recent study found that Australians aged between 45 to 64 years comprised around 24 per cent of the total population and experienced about 26 per cent of the total burden of disease and injury. By contrast, people aged between 15 to 44 years represented about 43 per cent of the population but experienced only 24 per cent of the burden of disease. Cancer, cardiovascular disease and neurological disorders accounted for more than half of the total burden in this age group. Therefore, the extent to which poor health impacts on labour force participation and productivity will be compounded by an ageing workforce.

Effects of specific health conditions on labour force participation

Different health conditions have different impacts on a person's willingness or ability to participate in the labour force (Figure 1).² According to one study, the following health conditions reduce the probability of a person participating in the labour force:

- mental health, by around 50 per cent;
- diabetes, by around 30 per cent;
- arthritis, by around 23 per cent;
- cardio-vascular disease, by around 22 per cent; and
- cancer, by around 15 per cent.

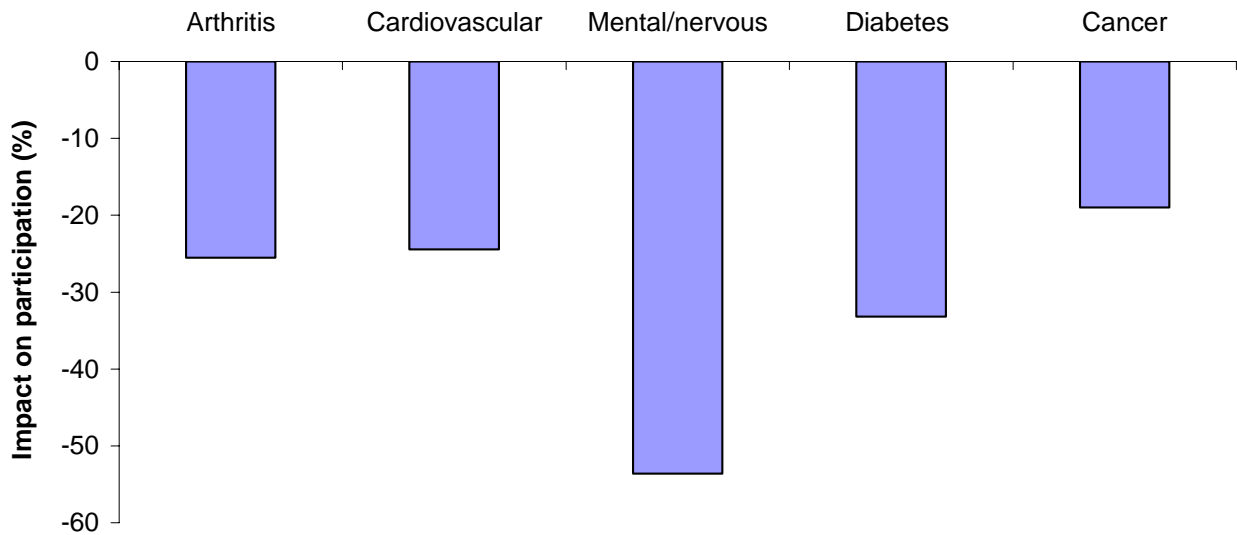
Tasmania's working age population has a relatively high proportion of people with health conditions that impact on participation and productivity (Figure 2). For example, in 2004–05, the proportion of working-age Tasmanians reported having:

- arthritis was almost 50 per cent higher than the national average (at 21 per cent in Tasmania compared with 14 per cent nationally); and

² Productivity Commission (2007) *Effects of Health and Education on Labour Force Participation*, Staff Working Paper

- a stroke, heart or another vascular condition, was almost 40 per cent higher than the national average (at 3.3 per cent compared with 2.4 per cent nationally).

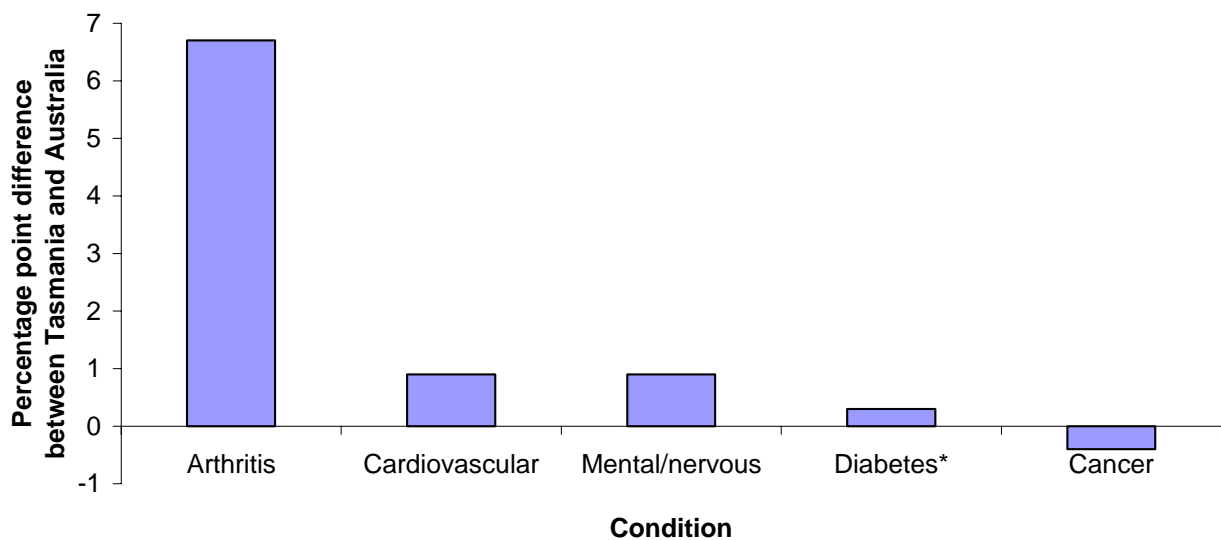
FIGURE 1: IMPACT ON LABOUR FORCE PARTICIPATION BY HEALTH CONDITION, 2001–04 AVERAGE (DIFFERENCE IN PARTICIPATION RATES BETWEEN PEOPLE THAT DO AND DO NOT HAVE SPECIFIC HEALTH CONDITIONS)*



Source: Productivity Commission (2007) Effects of Health and Education on Labour Force Participation, Staff Working Paper;

* The participation rate for people 'without specific health conditions' was the estimated rate for those without any of the health conditions in Figure 1 or major injuries.

FIGURE 2: PREVALENCE OF HEALTH CONDITION – PERCENTAGE POINT DIFFERENCE BETWEEN TASMANIA AND AUSTRALIA, 2004–05 (FOR PEOPLE AGED BETWEEN 18 AND 64 YEARS)*



Sources: The Australian Diabetes, Obesity and Lifestyle Study Steering Committee (2000), Obesity and Lifestyle Study (AusDiab), International Diabetes Institute; and ABS National Health Survey 2004–05.

*Note: the data for the prevalence of diabetes are for the year 1999 (based on a study that was published in 2000) and are for people aged between 25 and 64 years.

Numerous behavioural risk factors are important in determining the risk of chronic disease during a person's working life, and hence the overall labour force participation rate and productivity level. Unfortunately, Tasmania's population aged 15 to 64 years does not perform well on some of these risk factors, for example:

- Tasmania had the highest proportion of current daily tobacco smokers (27.5 per cent) of all jurisdictions in 2004–05; and
- around 65 per cent (or nearly two thirds) of Tasmanians aged over 25 years were overweight or obese, in 2000, compared with 60 per cent nationally.

However, Tasmania performs well on other behavioural risk factors. For example, in 2004–05, Tasmania had the lowest proportion of people aged 18 to 64 years that reported consuming alcohol at levels deemed to be of medium or high risk.

Effects of health conditions on productivity

Poor health is strongly correlated with the number of days absent from work. In most situations and occupations, a day away from work translates into a productivity loss, often in terms of increased cost of production or reduced output.

Results from various national studies suggest that poor health can impact on an employee's productivity through both the number of days that they take off work sick and the number of days that they are at work but operating at reduced capacity due to ill health. These studies found that:

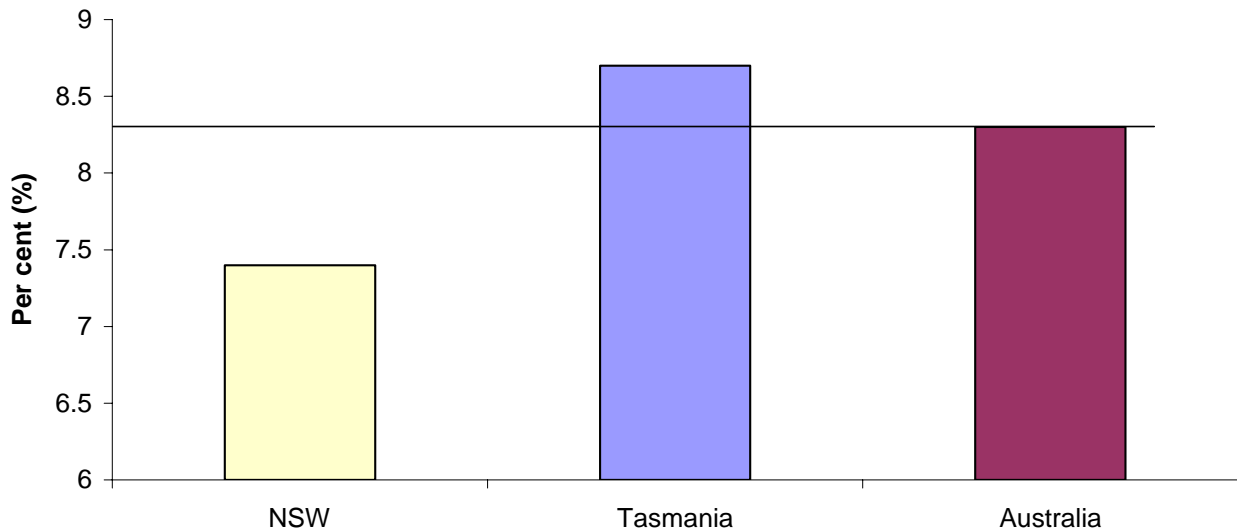
- employees with poor health have up to nine times the annual sickness absence of healthy individuals, that is 18 days absence per year compared to two days per year;
- for workers who were absent for personal illness or injury in 2001, the average absence was longer for employees with obesity (3.8 days) than employees without obesity (3.0 days);
- obesity was associated with over 4 million days lost from Australian workplaces in 2001, the equivalent of nearly 17 000 full-time employees for the whole year;
- absenteeism due to depression is estimated to account for around six million working days lost each year (or around 0.3 per cent). In addition, depression is estimated to reduce performance in the workplace by at least 40 per cent, which is estimated to equate to around 30 million working days per year of reduced productivity nationally;
- more than 2.5 million days were lost in 2001, due to alcohol-related absenteeism in the Australian workforce; and
- the productivity lost due to workers operating below their capacity because of poor health (presenteeism) is estimated to be about 2.5 per cent, or the equivalent of six working days per person per year. The total cost of presenteeism is four times that of absenteeism.

Some Tasmania-specific data highlight how health can impact on the State's productivity, for example in 2004–05:

- almost nine per cent of Tasmania's employed population reported that they had "cut down on their usual activities for all or most of the day due to an illness/injury" (Figure 3);

- on average, Tasmanian workers took around nine days off work due to illness (compared to 8.7 days per person nationally). For Tasmania, this is the equivalent to around 8 000 full-time workers being away from work, for a whole year, due to illness — which is roughly equivalent to half the State's construction industry workforce; and
- it is estimated that Tasmania lost around \$551.7 million in output due to workplace absences for illness in 2004–05.

FIGURE 3: EMPLOYED PERSONS AGED 15 TO 64: PERCENTAGE REPORTING DAYS OF REDUCED ACTIVITY - AUSTRALIA, TASMANIA AND THE BEST PERFORMING STATE, 2004–05



Source: National Health Survey: Summary of Results; State Tables, 2004–05, ABS Cat. No 4362.0

Effects of work on health status

There is not a 'one-way' relationship between health and participation rates. Participating in the labour force can have positive and negative impacts on an individual's health. For example, participating in the workforce may help to build an individual's self esteem or social networks, which may in turn have positive health outcomes. Alternatively, working long hours, hard physical work, and work-related accidents, injuries or stress may have negative health effects, which can, in turn, result in lost productivity or reduced labour force participation.

Work-related injuries data highlight the impact that work and work conditions can have on people's health and, in turn, their capacity for future labour market participation.

In 2005–06, around 142 000 days were lost due to workplace incidents in Tasmania, which represents 1.8 per cent of the estimated total days worked in the State.

Tasmanians recorded more compensation claims per million hours worked than the national average. However, the average length of time off work was lower than the national average.

Tasmanian industries with the highest number of claims for days away from work due to injury, per 1 000 employees, in 2005–06 were manufacturing (38.8 claims per 1 000 employees), government administration and defence (28.8 claims), transport and storage (27.7 claims), health and community services (26.4 claims) and mining (24.7 claims). Three industries (cultural and recreation services, finance and insurance, and communication services) reported less than 10 claims for days away from work due to injury, per 1 000 employees.

There appear to be some age-related trends for various claim types in Tasmania, for example:

- wounds, lacerations, amputations and internal organ damage tend to be higher in the younger age groups (15 to 34 years);
- burns are more prevalent in the 15 to 24 year age group; and
- musculo-skeletal and connective tissue diseases, and traumatic joint, ligament and muscle/tendon injuries occur more commonly for those of middle age (35 to 59 year age group).

Employers can influence and benefit from a healthy workforce

While individuals' behaviour and lifestyle may ultimately make the greatest difference to the health status of the Tasmanian population, governments, businesses, and other stakeholders can play important roles in improving the State's population health.

Employers (in both private and public sectors) have a particularly important role to play. Given the amount of time people spend in workplaces and the number of people employed (around 46 per cent of the Tasmanian population), the workplace is a significant 'point of contact' for promoting health issues.

At the same time, developing a healthier workforce can result in tangible business benefits. Numerous studies have found that the benefits of many health promotion programs (such as significant increases in employee motivation and productivity, improved employee satisfaction and increased staff retention) outweigh the costs of such programs.

There are a number of examples and case studies of Tasmanian firms, across a range of industry sectors (including mining, manufacturing and communication services), introducing health and wellbeing programs that provide direct tangible benefits to employees, employers and, some instances, local communities.

Conclusion

The health of the working age population impacts on Tasmania's labour force participation and productivity rates.

Tasmanians have generally poorer levels of health, significantly higher rates of many conditions of ill health, and are more likely to partake in some risky behaviours, than nationally. As a result, they may be away from work longer (or have greater levels of reduced activity).

This explains, in part, why Tasmanian participation rates are below the national average and it also provides one reason why Tasmanian employees may, on average, be less productive than their mainland counterparts.

Individuals, businesses and governments all benefit, in various ways, from having a healthy population. All parties have important roles in improving the health and wellbeing of Tasmanians, which in turn will help the community continue to prosper in light of an ageing population.

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