

Review and Update of priorities identified in the 2006 Huon Valley Health Needs Study

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Committee and Rotary Club of Huon Valley Inc

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Executive summary

- 1 A review of the 2006 Huon Valley Health Needs Study “the 2006 Study” has been initiated by the Rotary Club of Huon Valley Inc on behalf of the Huon Valley Health Services Advisory Committee (HVHSAC).
- 2 The purpose of the review is to determine whether the priorities identified in the 2006 Study remain health priorities for residents of the Huon Valley Local Government Area (LGA).
- 3 Southern GP Services were the successful tenderers engaged to undertake this review.
- 4 The key requirements of the review are to analyse local, state and national data sources to ensure epidemiological evidence supports the priorities identified in the 2006 Study; and to conduct a focus group session with key informants to assess alignment of the priorities identified in the 2006 Study with current needs.
- 5 This report presents the findings of the epidemiological analysis and focus group study, and summarises the key considerations in the refinement of the priorities identified in the 2006 Study.

The Southern GP Services approach

- 6 In order to achieve the project objectives, Southern GP Services have:
 - (a) Conducted a review of the 2006 Study and associated documentation;
 - (b) Conducted a targeted review of relevant national and state health reports to confirm the current evidence base supporting the priorities outlined in the 2006 Study;
 - (c) Reviewed extensive data sources including Census data, data from the Australian National Health Surveys, DHHS hospitalisations and communicable diseases notifications, Tasmanian Cancer Registry cancer incidence data, and Births, Deaths and Marriages deaths data;
 - (d) Conducted a focus group with representatives from the HVHSAC, GPs, nurses, allied health professionals and other health professionals from public, private and non-government sectors to assess alignment of current priorities identified by focus group participants with data sources, published reports, and the 2006 Study; and
 - (e) Undertaken additional interviews with key informants to supplement information collected at the focus group.
- 7 A series of recommendations have been made to provide the Rotary Club of Huon Valley Inc and HVHSAC with guidance regarding alignment of the priorities identified in the 2006 Study with current priorities.

Key findings

- 8 At the time of the last census, the Huon Valley has a population of approximately 14,848 persons. Less than 13% of the population was comprised of residents aged 65 years and over. The proportion of the Huon Valley population in the 0 to 14 year age group was higher than for Tasmania as a whole. Almost 9% of the Huon Valley population identified as Aboriginal, Torres Strait Islander or both.
- 9 The population of the Huon Valley is expected to continue to increase in the coming years. The proportion of persons aged 65 years and over in particular is expected to increase.
- 10 Residents of the Huon Valley experience higher rates of socio-economic disadvantaged compared to residents of Tasmania as a whole. Median weekly individual and household incomes are lower, and unemployment higher than Tasmania as a whole.
- 11 The main causes of death of residents in the Huon Valley are cardiovascular disease and cancer. The principal reasons for hospital admission are cancer, musculoskeletal disease and digestive disease in both males and females. In males, cardiovascular disease and injury and poisoning conditions are also significant causes of hospitalisation; and in females, complications due to pregnancy and genitourinary disease are also significant causes of hospitalisation in residents of the Huon Valley.
- 12 The major chronic diseases affecting residents of the Huon Valley are cancer, cardiovascular disease, arthritis and musculoskeletal conditions, mental health problems, diabetes mellitus and asthma.
- 13 The main risk factors for poor health affecting Huon Valley residents and Tasmanians are common:
- almost 1 in 4 adults smoke;
 - 13% of adults drink alcohol at harmful levels;
 - 89% of adults have inadequate fruit or vegetable intake;
 - 14% of children have inadequate fruit intake and 63% inadequate vegetable intake;
 - 73% of adults and 38% of children are physically inactive; and
 - 64% of adults and 19% of children are overweight or obese.

Recommendations of this review

- 14 The priorities identified in the 2006 Study remain priorities for residents of the Huon Valley with few exceptions.
- 15 A number of needs identified in the 2006 Study were for expanded clinical services for Huon Valley residents. Local government and community groups have neither the resources nor the capacity to address these needs, which are the responsibility of State and Federal governments. Instead, local level action should ensure the delivery of holistic, coordinated initiatives to increase the promotion of health and well-being, and prevent disease from developing within the community.
- 16 Health and well-being priorities for residents of the Huon Valley are:
- 16.1 Settings-based health and well-being initiatives, including in schools, child care facilities and workplaces.

- 16.2 Improved health and well-being in key target groups, including adolescents and young adults, school-aged children, infants and pregnant women.
- 17 The most urgent health and well-being priority that remains to be addressed at the local level from the 2006 Health Needs Study is the need for a dedicated position to improve the promotion of health and community services in the Huon Valley, and to coordinate a 'whole of community' approach to improving health and well-being.
- 18 To enable this to occur and to improve communication and coordination between service providers and community members, a database of services, activities, programs and initiatives that are available to Huon Valley residents should be developed, supported by web-based and other user interfaces.
- 19 Effective representation of Huon Valley residents in State and National health consultation and planning activities is required to ensure the clinical services needs of Huon Valley residents are addressed.

Terms and abbreviations used in this report

ABS

Australian Bureau of Statistics

AIHW

Australian Institute of Health and Welfare

BP

Blood pressure

COPD

Chronic obstructive pulmonary disease

CVD

Cardiovascular disease

LGA

Local Government Area

NHMRC

The National Health and Medical Research Council

WHO

World Health Organisation

Health priorities identifiable from the Huon Valley Health Needs Study

The “Huon Valley Health Needs Study 2006” was a comprehensive evaluation of the health needs of Huon Valley residents. Information appraised in the formulation of the report included interviews with service providers, community forums, other research and data, and a household survey. The report opted for a holistic view of health and how it can be improved within the community, consistent with World Health Organisation definitions and approaches, described below.

The priorities for action between 2006 and 2009 identified by the study included:

Short term priorities

- Develop an effective, locally based and comprehensive community transport service;
- Establish a dedicated position to improve the promotion of health and community services in the Huon Valley via web based and hard copy options;
- Apply for more Community Aged Care Packages through Esperance Multi-Purpose Centre and Eldercare to address community needs for in-home support;
- Develop a local home maintenance program which operates on either paid or volunteer staffing and also operates a register of fee for service providers;
- Seek funds for a full time health promotion coordinator for the Huon Valley to develop and implement an ongoing ‘whole of community’ motivational health program which is evaluated over time to assess outcomes;
- Work with other organisations involved in volunteering, both in the Huon and in Hobart (e.g. Volunteering Tasmania), to establish a local volunteering ‘entry and contact point’ for both volunteers and those seeking assistance from volunteer organisations;
- Seek funds from the More Allied Health Services program (MAHS) or other sources to increase the level of podiatry services provided in the Huon Valley; and
- Advocate for an increased level of Child and Adolescent Mental Health service in the Huon.

Longer term priorities

- Develop independent living options for older people which can provide access to higher levels of support over time as required by these residents;
- Develop local service hubs in each community which can provide nurse clinics, General Practitioner services, allied health and health promotion programs as required. Particular areas of focus are Geeveston and Cygnet;
- Seek funding through the Family Support Program to offer comprehensive, professional family support services across the Huon Valley;
- Advocate for increased funds to extend the operational hours of day respite services offered by Huon Valley Respite;
- Work with others to locate a suitable site for the delivery of centre based respite services in Huonville;
- Extend the range of recreational programs that can be offered to younger people with disabilities living in the Huon Valley;
- Offer antenatal classes at local service ‘hubs’ when the number of pregnant women reaches a number where this would be viable;
- Include provision for tele-health facilities at Esperance Multi-Purpose Service; and
- Advocate for improved access to public dental services for adults.

These priorities can be appraised according to four main domains of action:

- Prevention and health promotion;
- Care and support for the elderly and those with chronic conditions or disability; and

- Provision of health services; and
- Transport.

National and State action in priority areas subsequent to 2006

An intensive period of State and National health reform has been underway since the 2006 Study was completed. Many of the priorities identified in the 2006 Study are not unique to Huon Valley residents. Consequently, since the release of the 2006 report, a number of major State and Australian Government initiatives have been developed and / or implemented that impact the priorities identified in the 2006 study. These include the following:

Tasmania's Health Plan and Future Health¹

In May 2007, the Tasmanian Government released Tasmania's Health Plan – a blueprint for the reform of Tasmania's health services into the future. Tasmania's Health Plan brings together the Primary Health Services Plan, focusing on health services delivered in the community, and the Clinical Services Plan, focusing on services delivered in the major hospitals and by the ambulance service. Implementation of Tasmania's Health Plan involves more than 100 projects, most of which are underway and some completed. A number of these projects address priorities identified in the 2006 Health Needs Study including:

- Strengthen links between GPs and a range of DHHS services, such as mental health, drug and alcohol services with General Practice fostering a multi-disciplinary team approach to action around chronic disease.
- Expansion of GP provision of state funded community health services and development of demonstration services for GP provision of state funded community health services.
- Development of a chronic disease strategy that includes the development and adoption of statewide service standards drawing on existing national and other contemporary good practice. The "Connecting Care: A Chronic Disease Action Framework for Tasmania 2009 – 2013" charts the direction for a coordinated and strategic approach towards the better prevention, detection and management of chronic disease in Tasmania over the next four years. The Framework sets out a shared vision, principles, goals and action areas that can guide all individuals and groups working to improve the health and wellbeing of Tasmanians. Connecting Care has been developed in cooperation with an extensive network of clinicians, general practitioners, community sector organisations, researchers, health service managers and consumers from across Tasmania.
- Development of a statewide health promotion framework, recruitment of health promotion coordinators and development of a statewide chronic disease self-management plan.
- Development and implementation of community transport networks to better coordinate services and improve transport options; and development of a modern strategy for transport by implementing a statewide service model to coordinate patient and community transport services. A suite of actions have resulted from the Review of Patient Transport and Accommodation Services that will be phased in gradually across the State.

The establishment of the Aged Care and Rehabilitation Clinical Network has led to a range of initiatives including:

- Assessment and referral tools to improve access to Home and Community Care (HACC) services for all Tasmanians²
- Increased Telehealth service provision for older adults in rural areas
- Falls Prevention Action Plan

Re-configuration of health services across the State,

Amalgamation of primary health services with acute health services in the Southern region, with the aim of increasing integration of primary and acute service delivery has commenced. A

number of integrated care centres and GP Super Clinics are under development in the State, which will increase capacity for outreach services to be provided to Local Government Areas. Multidisciplinary care, the evidence-based best practice standard for provision of care for a range of chronic diseases, will be promoted through these initiatives.

Health Direct

A new health advice and information telephone service, Health Direct puts all Tasmanians in touch with a registered nurse who is able to provide clinical advice and support on health-related matters. The service is free and operates 24 hours a day, 7 days a week.

Diabetes Assist

A telephone-based health coaching service for patients with diabetes, Diabetes Assist provides coaching for patients with diabetes in how to achieve their health goals and improve well-being. Plans are underway to commence a similar service for all health-related risk factors (including obesity) for all Tasmanians in 2010.

Future Communities³

A reform in family services, out of home care and disability services has commenced within Tasmania. A contemporary model of service provision is being implemented, with a focus on community based options and individual choice. Partnerships between government and non-government service providers and people with disabilities and their families are being established so that governance is shared, and decision making is open and transparent. People at local levels will plan services to ensure resources are targeted to the things people with disabilities and their families' value and need. Funding is being re-distributed across the State according to the percentage of people with severe disabilities who live in each region. A Reform Unit headed by a dedicated director has been established within the Human Services Group to implement the changes. The State Government has also provided a significant increase in funding. In partnership with the Commonwealth Government, an additional \$50 million will be made available over a four year period. More people with disabilities and their families will get services they need with an increase in:

- accommodation places;
- individual support packages;
- community access packages; and
- respite places.

Allocation of these packages and supports has commenced.

The implementation of the disability reforms will mean that over the next four years an additional 1000 people who have severe and profound disabilities will be able to access supports.

Telehealth Tasmania Network

The Telehealth Tasmania Network enables the support and delivery of health services via the use of video conferencing equipment. The Network was developed to improve access to health care services for Tasmania's rural and isolated communities and has over 100 videoconferencing sites across the State at present.

Telehealth uses a mix of broadband and high-speed secure digital telephone lines to enable face-to-face visual communication between patients, primary health care providers and specialists to take place without the need for significant travel.

A range of specialist services are currently able to be delivered across the Telehealth Network including oncology and diabetes services. Patient support services and networks are also supported through the network.

Aged and Community Care Resources

Increased investment in aged and community care since 2006 has resulted in increased numbers of Tasmanians receiving support via the Community Aged Care Packages, Extended Aged Care at Home and Extended Aged Care at Home Dementia packages, Community Care Grants and Flexible Care Grants funding sources. Further increases in resources will be made available in Tasmania in 2010/2011⁴.

A range of other new Australian Government initiatives directly or indirectly influence the priorities identified in the 2006 Study. These include but are not limited to:

- The Aged Care Access Initiative: The Aged Care Access Initiative, announced in the 2008-09 Federal Budget, supports primary care provision for aged care residents through:
 - A GP incentive payment to encourage GPs to provide increased and continuing services in residential aged care facilities; and
 - A payment for Allied Health Professionals for clinical care services in residential aged care facilities, where these services are not covered by Medicare or other government funding arrangements
- The Australian Primary Care Collaboratives Program: The aims of the Australian Primary Care Collaboratives Program are to improve clinical health outcomes, reduce lifestyle risk factors, maintain health for chronic and complex conditions and improve access to Australian general practice.
- The GP Superclinics initiative – outlined above.

Influence of recent National and State reform activities on Huon Valley Priorities

Given the array of initiatives that have been implemented since the 2006 study, there is potential for duplication of effort across the majority of priorities outlined in the 2006 study.

Effective representation of Huon Valley residents in State and National health consultation and planning activities is required to ensure the health priorities of the Huon Valley and Tasmania are aligned and duplication does not occur.

Although health services were not the primary focus of the 2006 study, the 2006 report identified a significant number of changes in health and community services configuration and operations up to 2006 – in some cases resulting in increased service provision and in others resulting in diminished services. However, the majority of Huon Valley residents (over 88%) surveyed indicated that they were satisfied with health service provision in the Huon Valley. As the most intensive area of State and National reform activity is health services-related, it is likely that further changes to health services configuration and operations will occur.

The input of health service providers in the Huon Valley into State health services reform is required to ensure health services priorities of Huon Valley residents are addressed.

Health priorities identifiable from epidemiological data sources

Health can be defined as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity⁵. Therefore, health priorities for any community may include but not be limited to medical needs related to specific diseases or conditions.

The general determinants of health are defined in various ways. Human biology, environment, lifestyle, and healthcare services all influence the standard of health experienced within a population⁶. Thus, health is maintained and improved not only through the advancement and application of health science, but also through the efforts and intelligent lifestyle choices of the individual and society. Determinants of health can also be considered according to health risk factors - characteristics that increase a person's risk of developing a particular disease or condition. The known risk factors for poor health include:

- Chronic diseases and conditions;
- Social determinants of health* such as poverty, discrimination, low socioeconomic status, dangerous work, isolation, lack of social supports and networks;
- Psychological risk factors such as depression, anxiety and low self esteem;
- Behavioural risk factors such smoking, poor nutrition, physical inactivity and substance abuse; and
- Physical risk factors such as obesity, high blood pressure, high cholesterol and genetic factors⁷.

In order to understand the factors influencing the health of residents of the Huon Valley, it is therefore necessary to appraise a range of information sources including:

- Socio-demographic data, including population trends, income and employment;
- Chronic diseases affecting Huon Valley residents;
- Causes of death in Huon Valley residents;
- Major conditions affecting health services usage; and
- Mental health and behavioural information sources.

Available information sources relating to each of these factors are provided below. In analysing epidemiological information sources, a range of data sources are often available for review. In preparing this review of available data, the most robust, up-to-date and specific data describing the Huon Valley population has been compiled. In some cases, no data is available that relates specifically to residents of the Huon Valley. Where this is the case, applicable data relating to the Tasmanian population as a whole is provided. Comparisons with other local government areas, and with the Tasmanian population as a whole, are also provided where appropriate to enable comparisons to be made between the Huon Valley population and other population groups.

* The social determinants of health are the conditions of daily living that determine a person's chances of achieving good health. A safe environment, adequate income, meaningful roles in society, secure housing, higher level of education and social support within communities are associated with better health and wellbeing. Lower socioeconomic status, whether measured by income, educational attainment or occupation, is associated with poorer health, higher rates of chronic disease and their risk factors and higher use of health and human services.

The Huon Valley Population

The Huon Valley LGA covers 5,497 square kilometres and is the southern-most LGA in Australia. The estimated total population (as at 30 June 2008) is 14,848 persons, which is 2.9% of Tasmania's population⁸.

Aboriginal and / or Torres Strait Islander peoples comprise a higher percentage of the Huon Valley's population than other LGAs. Approximately 8.8% of the population of the Huon Valley identify as Aboriginal, Torres Strait Islander or both, which is higher than the 3.5% of Tasmanians and 2.3% of Australians as a whole who identify as Aboriginal and / or Torres Strait Islander⁹.

Table 1: Indigenous population size, Huon Valley, 2006

	Huon Valley	Tasmania	Australia
Total Population	14,001	476,481	2.9%
Indigenous	1,238	16,767	3.5%
%	8.8%	3.5%	2.3%
Median age	39	39	

At the time of the 2006 census, the age breakdown of the population of the Huon Valley was:

- 0 – 14 year olds = 21.9%
- 15 – 44 year olds = 36.3%
- 45 – 64 year olds = 28.9%
- 65+ year olds = 12.9%

The Huon Valley has a higher proportion of 0 – 14 year olds than Tasmania as a whole, and a slightly lower proportion of persons aged 15 – 64 years and 65+ years of age.

The estimated resident population of the Huon Valley is increasing in size, mainly due to increased numbers of residents in older age groups¹⁰:

- Between 2002 to 2007 the Huon Valley population increased in size by 5.1%;
- From 2002 to 2006 the proportion of children decreased from 23.8 to 21.9% and the proportion of those aged 15 to 44 years decreased from 38.7 to 36.3%;
- Over the same period, the proportion of those aged 45 to 64 years increased from 25.5 to 28.9% and the proportion of people aged 65 years and over increased from 11.9 to 12.9%.

The total population of the Huon Valley is projected to further increase by 8.3% from 2012 to 2032, with the proportion of the population aged 70 years and older projected to increase by 149.7% over the same period¹¹.

These statistics have significant implications for the health needs of Huon Valley residents.

- The increased number of residents overall will lead to increased demand for health services. Further, as the prevalence of chronic conditions and associated need for health services increases significantly within older age groups, particularly after age 65 years, the ageing of the population in the Huon Valley will further increase health services demand¹².
- Aboriginal and / or Torres Strait Islander peoples experience higher rates of chronic diseases, and much lower life expectancy than the general population. In general, the health services needs of Aboriginal and / or Torres Strait Islander peoples are greater as a result.

Chronic health conditions

A chronic disease is a serious medical condition or illness that is long lasting or recurrent. It is defined as a disease which has lasted or is expected to last for at least six months. Some of the most common chronic diseases in Tasmania include:

- cardiovascular diseases (CVD);
- cancer;
- type 2 diabetes;
- chronic obstructive pulmonary disease (COPD);
- mental health problems;
- arthritis and musculoskeletal conditions (including osteoarthritis and osteoporosis); and
- chronic kidney disease.

The World Health Organization (WHO) has noted that chronic diseases are the major cause of death and disability worldwide¹³. Australia reflects the global situation, with chronic diseases estimated to be responsible for nearly 80 per cent of the total burden of disease and injury¹⁴, and more than two thirds of all health expenditure¹⁵. Chronic diseases often come in clusters. For example type 2 diabetes can lead to heart disease, stroke and kidney problems. These chronic diseases also have a disproportionate impact on some population groups, particularly Aboriginal and Torres Strait Islander people.

Up-to-date data regarding rates of chronic diseases are not available for the Huon Valley. Instead, chronic disease data for Tasmania as a whole are presented here.

Four out of every five Tasmanians are affected by at least one chronic disease¹⁶. Tasmania has the highest proportion of residents reporting more than three diagnosed chronic conditions (45%), higher than the Australian proportion of 39%.

Cancer

Cancer is a disease that affects a significant number of Australians at some stage in their life. Cancer also represents one of the major causes of death¹⁷. Cancer is a disease of the body's cells. Normally, cells grow and reproduce in an orderly manner. Sometimes, though, abnormal cells will grow. These abnormal cells may then reproduce and spread uncontrolled throughout the body. Cancer is the term used to describe about 100 different diseases including malignant tumours, leukaemia (a disorder of the white blood cells), sarcoma of the bones, Hodgkin's disease and non-Hodgkin's lymphoma (affecting the lymph nodes) in which uncontrolled cell growth threatens the rest of the body¹⁸.

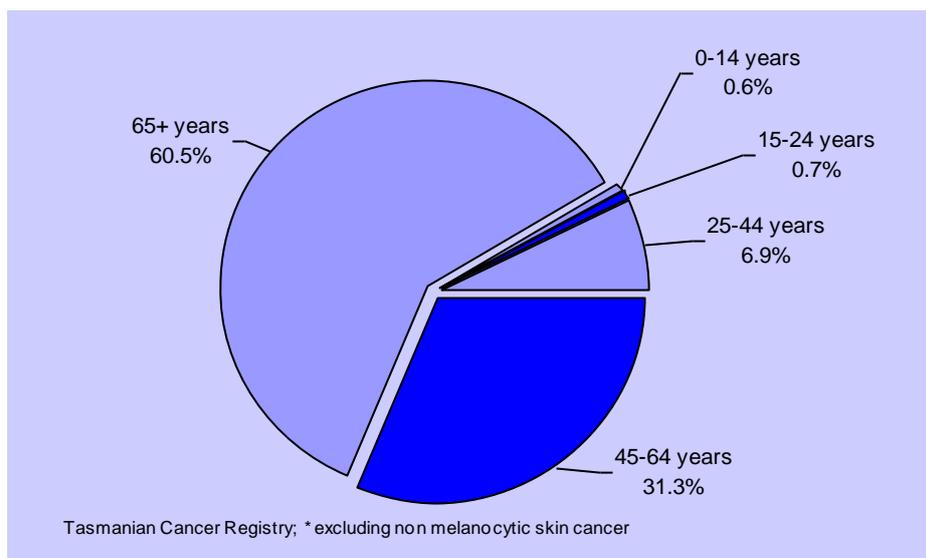
Cancer is a leading contributor to the overall burden of disease amongst Australians (19%). Of Australia's total burden of disease, lung cancer, colorectal cancer and breast cancer are the leading specific types of cancer contributing to Australia's total burden of disease (3% and 2% each respectively)¹⁹.

The commonest cancer (excluding non-melanoma skin cancer) diagnosed in males in Tasmania is prostate cancer (26% of all cases). Colorectal cancer (13%) and lung cancer (12%) are the second and third most commonly diagnosed cancers in males.

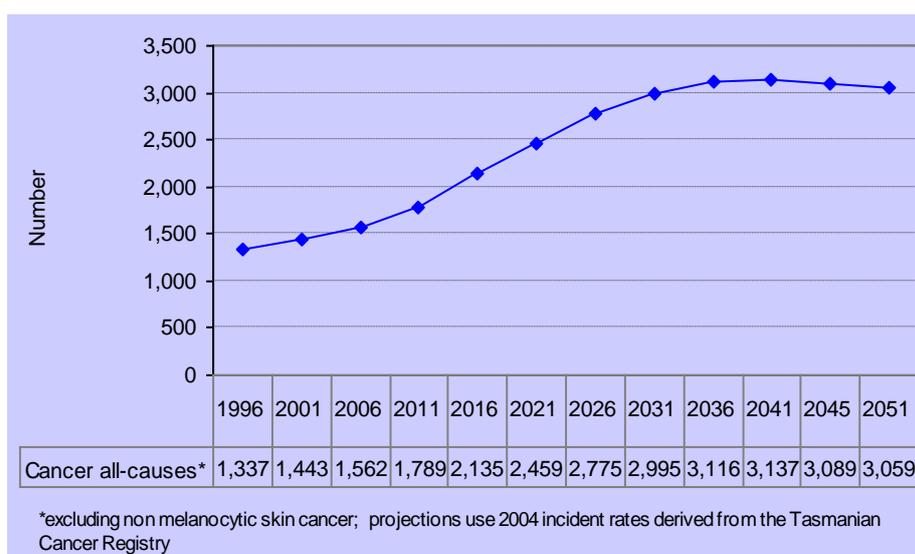
The most common cancer (excluding non-melanoma skin cancer) diagnosed in females in Tasmania is breast cancer (27% of all cases). Colorectal cancer (15%) and melanoma of the skin (10%) are the second and third most commonly diagnosed cancers in females.

The rate of cancer in Tasmania is similar to Australia as a whole. In the 2007-08 National Health Survey it was estimated that 2% of the population had a medically diagnosed cancer. Of these people, 89% reported a malignant cancer and 12% reported a benign cancer or cancer of uncertain nature. Skin cancer accounted for 37% of all malignant cancers. Cancer was most common in persons aged 65 years and over (6%).

The incidence of cancer increases with increasing age. The graph below shows that 60% of cases occur in persons aged 65 years and over²⁰.



The incidence of cancer in Tasmania is predicted to increase over the next four decades, mainly because of population ageing. Because the population in Tasmania is ageing at a rate faster than the national rate, the rate of increase in cancer incidence is predicted to be greater in Tasmania than for Australia as a whole²¹.



Cardiovascular disease

Despite steady improvement over the last three decades, cardiovascular disease remains one of the biggest causes of death in Australia and continues to generate a considerable burden on the population in terms of illness and disability. In relation to direct health care expenditure, cardiovascular disease is the most expensive health condition, costing 11% or 5.4 billion dollars of the total allocated health system expenditure in 2000-01²². The incidence of cardiovascular disease increases with age and the number of people with cardiovascular disease may increase in the future as the number of older Australians increases²³.

Tasmania has the highest rate of heart, stroke and vascular diseases of all States and Territories with 8% of the population affected, compared with 5% nationally. Tasmania also has

the highest rate of high blood pressure of all States and Territories with 13% of the population affected, compared with 9% nationally²⁴.

The major modifiable risk factors for cardiovascular disease are tobacco smoking, physical inactivity, a high-fat and energy rich diet, obesity, high blood glucose, high cholesterol, and hypertension (high blood pressure). A high dietary salt intake may also influence risk of CVD in some individuals²⁵. In addition, research evidence indicates a consistent socioeconomic gradient in mortality and hospitalisation rates for cardiovascular with the most disadvantaged people experiencing the highest rates of CVD²⁶.

Arthritis and musculoskeletal conditions

Arthritis and musculoskeletal conditions are defined as conditions of the bones, muscles and their attachments, and include joint problems such as arthritis. Although there are more than one hundred musculoskeletal conditions the most common are osteoarthritis, rheumatoid arthritis, osteoporosis and back pain²⁷.

Arthritis and musculoskeletal conditions are responsible for the main disabling condition in more than one in three Australians with a disability, and are a major area of health expenditure, with in excess of \$4.6 billion spent on the conditions²⁸.

- Arthritis is characterised by inflammation of the joints, often resulting in pain, stiffness, disability and deformity. The two most common types of arthritis are osteoarthritis and rheumatoid arthritis.
 - Osteoarthritis is a degenerative joint condition affecting the weight-bearing joints such as the hips, knees and ankles as well as the hands and spine. In the initial stages pain occurs in the joints during and after activity but as the condition progresses pain may be experienced from minimal movement or during rest²⁹.
 - Rheumatoid arthritis is an auto-immune disease causing chronic inflammation of the joints. It most commonly affects the hand joints and can lead to deformities of the hands³⁰.
- Osteoporosis is a condition whereby there is a progressive loss of bone density and decrease in the strength of the skeleton with a resultant risk of fracture³¹.
- Chronic back pain can be attributed to numerous causes including muscle strain or the displacement of an intervertebral disc³².

Tasmania has the highest rate of arthritis of all States and Territories, with 20% of the population affected, compared with 15% nationally. The prevalence of arthritis has increased over time. More females (23%) than males (17%) are affected by arthritis. Arthritis increases with increasing age – affecting one in two people aged over 65 years³³.

Mental health problems

Good mental health is fundamental to the wellbeing of individuals, their families, and the whole population. Conversely, mental health problems and mental illness are among the greatest causes of disability, diminished quality of life, and reduced productivity. People affected by mental health problems often have high levels of morbidity and mortality, experiencing poorer general health and higher rates of death from a range of causes, including suicide. These conditions are significant in terms of prevalence and disease burden, and have far-reaching impacts for families, carers and others in the community³⁴.

Mental illnesses are among the ten leading causes of disease burden in Australia, accounting for 13% of the total burden of disease³⁵. Long-term mental and behavioural problems include:

- Anxiety disorders (includes panic disorder, agoraphobia, social phobia, generalised anxiety disorder (GAD), obsessive-compulsive disorder (OCD) and post-traumatic stress disorder (PTSD))

- Mood (affective) disorders (includes depression, dysthymia, mania, hypomania and bipolar affective disorder)
- Alcohol use disorders (includes harmful use and dependence)
- Drug use disorders (includes harmful use and dependence)

One in nine Tasmanians report a long term mental or behavioural problem. The most frequently reported are depression (7% of the population) and anxiety (4% of the population)³⁶.

Diabetes mellitus

Diabetes is a chronic condition in which blood glucose levels become too high due to the body producing little or no insulin, or not using insulin properly. Insulin is a hormone produced by the pancreas to assist the body to use glucose³⁷. Diabetes can result in many long term health conditions, including heart disease, stroke, kidney failure, blindness and lower limb amputation. Diabetes may be prevented or delayed in many people by lifestyle interventions, including weight loss (of overweight or obese), improved nutrition, and regular physical activity³⁸.

Approximately 9% of Tasmanians have diabetes³⁹. Rates of diabetes are increasing over time. Diabetes increases with increasing age – over 14% of persons aged 65 years and over report having a diagnosis of diabetes⁴⁰.

By 2023, type 2 diabetes is predicted to be the leading cause of disease burden in Tasmania. Already, the prevalence of self-reported diabetes in Tasmania has increased by over 70% during the period 1995 to 2005 and hospitalisation rates for diabetes have more than doubled since 1995. There has been a sharp increase in mortality for diabetes in Tasmania since 1980, during which the male mortality rate more than quadrupled, whilst the female rate almost doubled.

Asthma

Asthma is a chronic inflammatory disease causing episodes of wheezing, breathlessness and chest tightness due to widespread narrowing of the airways within the lungs and obstruction of airflow. Symptoms are more prevalent either at night or in the early morning. The symptoms of an episode are usually reversible, either spontaneously or with treatment⁴¹.

Tasmania has one of the highest rates of asthma of all States and Territories, with 12% of the population affected. The prevalence of asthma has increased over time. More females (13%) than males (10%) report having being diagnosed with asthma⁴².

In summary, the major chronic diseases affecting residents of the Huon Valley are:

- cancer;
- cardiovascular disease;
- arthritis and musculoskeletal conditions;
- mental health problems;
- diabetes mellitus; and
- asthma.

Causes of death in the Huon Valley

Causes of death statistics are a key source of information on the health status of residents of the Huon Valley. Causes of death information provide insights into the diseases and factors contributing to reduced life expectancy. Causes of death statistics are one of the oldest and most comprehensive set of health statistics available in Australia. Statistics on causes of death are compiled from information on death certificates, completed by treating doctors and forwarded to Births, Deaths and Marriages. The Australian Bureau of Statistics compiles the statistics and codes causes of death using information from State databases and coroners reports.

Tasmania had the second lowest life expectancy of all states and territories. Tasmanian males can expect to live for 78 years and females for 82 years. Aboriginal and Torres Strait Islander peoples have a much lower life expectancy than the general population. Life expectancy at birth for indigenous Australians is estimated to be 67 years for males and 73 years⁴³.

There were 243 deaths in males and 238 deaths in females in the Huon Valley between 2003 and 2007 (the most recent data available). Leading causes of death vary between males and females, however in both sexes the vast majority of deaths between 2003 and 2007 were due to cardiovascular disease and cancer. In males, cancer was the leading cause of death whereas in females, cardiovascular disease was the leading cause of death.

Table 2: Leading causes of death in males and females, Huon Valley, 2003 to 2007

Males	Females
Cancer (73 deaths)	Cardiovascular disease (79 deaths)
Lung cancer (15 deaths)	Ischaemic heart disease (44 deaths)
Prostate cancer (10 deaths)	Stroke (15 deaths)
Cardiovascular disease (67 deaths)	Other forms of heart disease (12 deaths)
Ischaemic heart disease (43 deaths)	Cancer (72 deaths)
Stroke (12 deaths)	Lung cancer (11 deaths)
Other forms of heart disease (10 deaths)	Breast cancer (10 deaths)
Respiratory diseases (25 deaths)	Colorectal cancer (8 deaths)
Chronic obstructive pulmonary disease (12 deaths)	Uterine / ovarian cancer (6 deaths)
Pneumonia and influenza (6 deaths)	Mental health conditions (11 deaths)
Injury and poisoning (25 deaths)	Diabetes (10 deaths)
Suicide and self-inflicted injury (9 deaths)	
Transport accidents (6 deaths)	
Diabetes (8 deaths)	
Kidney failure (7 deaths)	

There were no conditions where the number of deaths in males or females in the Huon Valley was significantly greater than Tasmania as a whole. There were fewer than 5 deaths between 2003 and 2007 for each of the other cancers affecting males or females in the Huon Valley.

In summary, the leading causes of death for Huon Valley residents are:

- Cancer; and
- Cardiovascular disease.

Reasons for hospitalisations in residents of the Huon Valley

Hospitalisations data are a key source of information on the health status of residents of the Huon Valley. Statistics on hospitalisations are compiled from information provided by public and private hospitals to the Department of Health and Human Services, Tasmania.

There were 8,963 hospitalisations in males and 10,403 hospitalisations in females in the Huon Valley between 2004 and 2008 (the most recent data available). Leading causes of hospitalisations vary between males and females. Cancer was responsible for the most hospitalisations in males and complications due to pregnancy in females.

Table 3: Leading causes of hospitalisations in males and females, Huon Valley, 2004 to 2008

Males	Females
<p>Cancer (967 hospitalisations)</p> <ul style="list-style-type: none"> Non-melanoma skin cancer (140 hospitalisations) Prostate cancer (113 hospitalisations) Bladder cancer (61 hospitalisations) Colorectal cancer (47 hospitalisations) Lung cancer (30 hospitalisations) 	<p>Complications due to pregnancy (1361 hospitalisations)</p> <ul style="list-style-type: none"> Complications in pregnancy (404 hospitalisations) Complications during labour (339 hospitalisations)
<p>Digestive diseases (964 hospitalisations)</p> <ul style="list-style-type: none"> Diseases of the intestines and peritoneum (231 hospitalisations) Hernia of the abdominal cavity (201 hospitalisations) Disorders of the oesophagus, stomach and duodenum (149 hospitalisations) 	<p>Digestive diseases (1065 hospitalisations)</p> <ul style="list-style-type: none"> Diseases of the intestines and peritoneum (225 hospitalisations) Disorders of the oesophagus, stomach and duodenum (163 hospitalisations)
<p>Injury and poisoning (912 hospitalisations)</p>	<p>Musculoskeletal diseases (826 hospitalisations)</p> <ul style="list-style-type: none"> Arthritis and related conditions (373 hospitalisations)
<p>Cardiovascular disease (823 hospitalisations)</p> <ul style="list-style-type: none"> Ischaemic heart disease (341 hospitalisations) Other forms of heart disease (240 hospitalisations) Stroke (93 hospitalisations) 	<p>Cancer (754 hospitalisations)</p> <ul style="list-style-type: none"> Non-melanoma skin cancer (78 hospitalisations) Colorectal cancer (55 hospitalisations) Breast cancer (52 hospitalisations) Uterine / ovarian cancer (23 hospitalisations) Lung cancer (19 hospitalisations)
<p>Musculoskeletal diseases (796 hospitalisations)</p> <ul style="list-style-type: none"> Arthritis and related conditions (348 hospitalisations) 	<p>Genitourinary diseases (626 hospitalisations)</p>

In males, rates of hospitalisation for cancer were significantly higher than rates for Tasmania as a whole. Non-melanoma skin cancer was the most common cancer diagnosis leading to hospitalisation in males. In females, rates of hospitalisation for complications due to pregnancy, and for musculoskeletal diseases were higher than rates for Tasmania as a whole. Rates did not differ according to age category. Time series data for complications due to pregnancy before 1999 were unavailable for analysis due to a change in coding that occurred at this time.

Most hospitalisations for cardiovascular disease are due to ischaemic heart disease (341 hospitalisations in males and 137 hospitalisations in females), other forms of heart disease (240 hospitalisations in males and 139 hospitalisations in females) and stroke (93 hospitalisations in males and 75 hospitalisations in females).

Although mental disorders was not among the top 5 causes of hospitalisation in males or females, these conditions were responsible for 349 hospitalisations in males and 605 hospitalisations in females, significantly lower than hospitalisation rates for mental disorders for Tasmania as a whole.

Respiratory conditions were responsible for 389 hospitalisations in males and 327 hospitalisations in females. In males, almost equal numbers were due to pneumonia and influenza, other acute respiratory infections and bronchitis. In females, hospitalisations were due to pneumonia and influenza and bronchitis.

Musculoskeletal conditions were a significant cause of hospitalisations in both males and females. Arthritis and related conditions were responsible for a significant proportion of musculoskeletal hospitalisations in both males and females.

Digestive conditions were a significant cause of hospitalisations in both males and females. A range of clinical diagnoses led to hospitalisation in both sexes.

In males the majority of hospitalisations for injury and poisoning were for transport accidents (179 hospitalisations), falls (163 hospitalisations) or other unintentional injuries (353 hospitalisations). The rates of hospitalisations for transport accidents and other unintentional injuries were significantly higher than for Tasmanian males as a whole. In females the majority of hospitalisations for injury and poisoning were for falls (175 hospitalisations), medical complications / misadventure (141 hospitalisations) or other unintentional injuries (134 hospitalisations). Although transport accidents were a less common cause of injury in females (78 hospitalisations), this rate was also significantly higher than for Tasmanian females as a whole, as was the rate of unintentional injuries in females.

In summary, the leading causes of hospitalisations in Huon Valley residents are:

- Cancer;
- Cardiovascular disease;
- Digestive diseases;
- Complications due to pregnancy;
- Injury and poisoning conditions;
- Musculoskeletal diseases; and
- Genitourinary diseases.

The likelihood of hospitalisation and reasons patients are hospitalised vary according to the age and gender of the person (Table 4).

In children aged 0 to 9 years, perinatal conditions, injury and poisoning conditions, and respiratory diseases are associated with the greatest number of hospitalisations. There were more hospitalisations in males than females in this age group.

In children aged 10 to 19 years, injury and poisoning conditions and digestive diseases are responsible for a significant number of hospitalisations. In females, mental disorders also account for a significant proportion of hospitalisations in this age group. There were more hospitalisations in females than males in this age group.

In males aged between 20 and 39 years, injury and poisoning conditions, digestive diseases and musculoskeletal diseases are associated with the greatest number of hospitalisations. In females, digestive diseases, genitourinary diseases and mental disorders are associated with the greatest number of hospitalisations.

Review and update of priorities identified in the 2006 Huon Valley Health
Needs Study

Table 4: Hospitalisations – all causes, Huon Valley, 2004-2008

	Males (age group in years)					Females (age group in years)					Persons (age group in years)				
	0-9	10-19	20-39	40-69	70+	0-9	10-19	20-39	40-69	70+	0-9	10-19	20-39	40-69	70+
Infectious and parasitic disease	12	6	9	23	19	9	10	10	21	13	21	16	19	44	32
Cancer	33	17	29	495	393	30	6	58	467	193	63	23	87	962	586
Endocrine and nutritional conditions	5	12	26	94	62	6	18	95	148	41	11	30	121	242	103
Blood diseases	12	5	<5	34	36	8	5	<5	35	68	20	10	<5	69	104
Mental disorders	7	25	88	180	49	4	104	145	302	50	11	129	233	482	99
Nervous system diseases	33	14	30	220	182	32	16	52	166	149	65	30	82	386	331
Circulatory diseases	<5	<5	42	425	354	<5	<5	17	250	248	<5	<5	59	675	602
Respiratory diseases	90	23	41	89	146	38	28	32	135	94	128	51	73	224	240
Digestive diseases	56	59	127	530	192	20	82	230	559	174	76	141	357	1,089	366
Genitourinary diseases	41	14	19	220	179	13	37	158	359	59	54	51	177	579	238
Complication due to pregnancy	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Skin diseases	11	31	31	75	35	8	6	42	70	30	19	37	73	145	65
Musculoskeletal diseases	5	37	121	490	143	12	24	74	536	180	17	61	195	1,026	323
Congenital anomalies	49	11	<5	<5	<5	21	6	<5	<5	<5	70	17	<5	<5	<5
Perinatal conditions	136	<5	<5	<5	<5	108	<5	<5	<5	<5	244	<5	<5	<5	<5
Ill-defined conditions	45	22	59	320	164	37	34	127	326	119	82	56	186	646	283
Injury and poisoning conditions	93	129	309	287	94	55	79	129	230	126	148	208	438	517	220
All-causes	869	442	1,008	4,220	2,424	659	560	2,735	4,615	1,840	1,528	1,002	3,743	8,835	4,264

Health Risk Factors

Socio-Economic Disadvantage

Socio-economic disadvantage is a significant risk factor for poor health. People who are socio-economically disadvantaged experience poorer health, a higher incidence of chronic conditions, and higher levels of health services usage⁴⁴.

Socio-economic disadvantage can be measured in a number of ways, including by measuring income or employment levels. According to these measures, the Huon Valley population experiences socio-economic disadvantage compared with both Tasmania and Australia as a whole.

Median individual and household incomes for residents of the Huon Valley are below Tasmanian and Australian income levels⁴⁵.

Table 5: Median weekly incomes, Huon Valley, 2006

	Huon Valley	Tasmania	Australia
Median weekly individual income	\$349	\$398	\$466
Median weekly household	\$711	\$801	\$1,027

The percentage of people on income support payments in the Huon Valley is 23%, higher than the Tasmanian rate of 21%. A total of 33% of residents are either Health Care Card or Pension Concession Card holders, above the Tasmanian level of 29%⁴⁶.

The rate of full-time employment in the Huon Valley is generally lower than Tasmanian and Australian averages and the main sources of employment are industry-related⁴⁷.

Table 6: Levels of employment, Huon Valley, 2006

	Huon Valley	Tasmania	Australia
Unemployed (%)	7.3%	6.6%	5.2%
Full time employed	51.5%	56.0%	60.7%
Part-time	34.3%	30.7%	27.9%
Other	6.9%	6.6%	6.1%

The major employment sources in the Huon Valley are agriculture, forestry and fishing, manufacturing and construction⁴⁸.

Table 7: Employment sources, Huon Valley, 2006

	Age group in years									
	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Total
Agriculture, forestry & fishing	18	55	137	150	142	112	38	9	0	661
Manufacturing	26	32	74	104	82	49	7	0	0	374

Construction	29	27	85	105	97	50	4	0	0	397
Retail trade	18	24	50	47	54	44	7	4	0	248
Public administration & safety	3	4	26	56	64	29	3	0	0	185

Lifestyle risk factors

There is general agreement that many risk factors for chronic disease are preventable, particularly:

- poor nutrition;
- physical inactivity;
- overweight and obesity;
- tobacco use; and
- harmful alcohol use.

A major focus of efforts to reduce chronic disease rates is targeting population rates of smoking, poor nutrition, physical inactivity, excess alcohol intake and mental health problems, which are the main modifiable risk factors for poor health.

There are no Huon Valley-specific data regarding rates of health risk factors. Tasmanian data are available and are described below.

Smoking

Tobacco smoking is the leading cause of all preventable disease and death in Tasmania. The main diseases associated with smoking are lung cancer, chronic obstructive pulmonary disease (including chronic bronchitis and emphysema) and cardiovascular disease (including heart disease and stroke)⁴⁹. Tobacco use contributes to more deaths and drug-related hospitalisations than alcohol and illicit drugs combined⁵⁰.

The most recent Tasmanian smoking prevalence data are from the 2007/2008 National Health Survey conducted by the Australian Bureau of Statistics. A total of 1,970 Tasmanians participated⁵¹.

According to the results of this survey, 23% of Tasmanian adults are daily smokers. This is the highest proportion of all States and Territories surveyed and higher than the Australian average (19%). Smoking is more common in males than females.

Age influences smoking rates, as demonstrated in the table below. In every age group, Tasmanian rates of smoking are higher than Australia as a whole.

Table 8: Smoking rates by age group, Tasmania, 2007/08

	Age group						
	15-17 years	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years
Percentage of Tasmanians who smoke	9%	37%	34%	30%	26%	20%	8%
Percentage of	7%	23%	28%	25%	23%	N/S	N/S

Australians as a whole who smoke							
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N/S = not specified

Rates of smoking in Tasmania have not decreased significantly since 1995. Smoking is strongly associated with socio-economic status. Socio-economic data are usually analysed according to socio-economic quintile, where the population is divided into 5 groups, from highest to lowest socio-economic status. In Tasmania, 31% of people in the lowest socio-economic quintile smoke, compared with 8% in the highest socio-economic quintile. In the absence of smoking data specific to the Huon Valley, it is reasonable to assume that, as socio-economic status in the Huon Valley is lower than Tasmania as a whole, smoking rates are likely to be higher than Tasmania as a whole.

Alcohol

Excess alcohol consumption is responsible for a variety of short and long-term harms including various cancers, liver disease, falls, road trauma, violence, neurological disease, cardiovascular disease, gastrointestinal disorders, mental health problems, and injury. In addition, excess alcohol consumption is associated with social costs including reduced paid and unpaid labour, crime and health costs⁵².

The most recent Tasmanian alcohol prevalence data are from the 2007/2008 National Health Survey conducted by the Australian Bureau of Statistics (1,970 Tasmanians participated)⁵³.

According to the results of this survey, 13% of Tasmanian adults consume alcohol at risky and high risk levels. This is the same as the national estimate of risky and high risk drinking.

Rates of excess alcohol consumption have increased over time, from 7% in 1995 to 13% currently. Excess consumption is highest in the 25-34 year old age group, as demonstrated in the table below.

Table 9: Risky / high risk alcohol consumption by age group, Tasmania, 2007/08

	Age group					
	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years
Percentage of Tasmanians with risky / high risk alcohol intake	15%	18%	14%	13%	15%	7%

Excess alcohol intake is associated with socio-economic status. In Tasmania, 14% of people in the lowest socio-economic quintile drink alcohol to excess, compared with 12% in the highest socio-economic quintile. In the absence of alcohol intake data specific to the Huon Valley, it is reasonable to assume that, as socio-economic status in the Huon Valley is lower than Tasmania as a whole, rates of risky and high risk drinking are likely to be higher than Tasmania as a whole.

Nutrition

A nutritious diet is essential for optimum health. Australian dietary guidelines from the NHMRC recommend consumption of a wide variety of nutritious foods, including adequate consumption of fruit and vegetables. Poor nutrition is a risk factor for a range of chronic conditions, including cardiovascular disease, type 2 diabetes and some cancers⁵⁴. It has been estimated that approximately 30% of all cancers are preventable by a diet high in vegetables and fruit⁵⁵.

The most recent Tasmanian nutrition data for adults are from the 2007/2008 National Health Survey conducted by the Australian Bureau of Statistics (1,970 Tasmanians participated) and for children are from the Tasmanian Child Health and Wellbeing Survey (2009)^{56 57}.

According to the results of this survey, 89% of Tasmanian adults have inadequate fruit or vegetable consumption, the best result of all States and Territories, and better than the Australian estimate of 94%, but still a very high percentage and with room for significant improvement.

A total of 48% of Tasmanian adults consume adequate amounts of fruit and 21% consume adequate amounts of vegetables. These proportions have remained relatively stable over time. Fruit and vegetable consumption tends to improve with increasing age. By comparison, among children aged 4 to 12 years, 86% have adequate fruit consumption and 37% have adequate vegetable consumption.

Table 10: Fruit and vegetable intake by age group, Tasmania, 2007/08

	Age group						
	4-12 years	15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years
Percentage of Tasmanians consuming adequate vegetables	37%	19%	16%	16%	22%	28%	25%
Percentage of Tasmanians consuming adequate fruit	86%	43%	44%	44%	45%	55%	59%

Physical activity

Physical activity is defined by the World Health Organisation as activity attained at work, for transport, during domestic duties or in leisure time⁵⁸. Regular physical activity provides people of all ages and conditions with a wide variety of physical, social and mental health benefits. Insufficient physical activity is a risk factor for cardiovascular disease, obesity, type 2 diabetes, cancer and mental health problems⁵⁹.

The National Physical Activity Guidelines recommend a moderate level of physical activity, including at least 30 minutes of moderate intensity activity on most, preferably all, days of the week for adults and 60 minutes per day for children.

The most recent Tasmanian physical activity data for adults are from the 2007/2008 National Health Survey conducted by the Australian Bureau of Statistics (1,970 Tasmanians participated) and for Tasmanian children are from the Tasmanian Child Health and Wellbeing Survey (2009)⁶⁰.

According to the results of this survey, 73% of Tasmanian adults have insufficient physical activity for health benefit (are sedentary or have low levels of physical activity). This is the same as the national estimate. Among Tasmanian children, 38% have insufficient physical activity for health benefit.

The proportion of Tasmanian adults who are physically inactive has decreased slightly over time, by 3% since 1989/1990. Trend data are unavailable for children. Physical inactivity levels increase with increasing age.

Table 11: Levels of physical inactivity by age group, Tasmania, 2007/08

	Age group					
	4-12 years	15-24 years	25-44 years	45-54 years	55-64 years	65+ years
Percentage of Tasmanians who are sedentary	N/A	18%	33%	39%	38%	49%
Percentage of Tasmanians who have low levels of physical activity	N/A	37%	35%	28%	29%	26%
Total	38%	55%	68%	67%	67%	75%

* N/A = data not available

Physical inactivity is associated with socio-economic status. In Tasmania, 79% of people in the lowest socio-economic quintile are physically inactive, compared with 51% in the highest socio-economic quintile. In the absence of physical activity data specific to the Huon Valley, it is reasonable to assume that, as socio-economic status in the Huon Valley is lower than Tasmania as a whole, rates of physical inactivity are likely to be higher than Tasmania as a whole.

Overweight and obesity

Overweight and obesity are defined by the World Health Organisation according to a person's body mass index (BMI) (weight in kilograms divided by height squared). According to this definition, overweight is a BMI between 25 and 29.9, and obesity is a BMI of 30 or above⁶¹.

Overweight and obesity are risk factors for a range of health problems, including cardiovascular disease, type 2 diabetes, cancer, fertility problems, mental health problems, arthritis and musculoskeletal conditions, gallbladder disease and liver disease. Obesity is more risky to health than being overweight is⁶².

The fundamental cause of obesity and overweight is an energy imbalance between calories consumed on one hand, and calories expended on the other hand. Globally, the rates of overweight and obesity within the population are increasing. This is attributed to a number of factors including:

- a shift in diet towards increased intake of energy-dense foods that are high in fat and sugars but low in vitamins, minerals and other nutrients; and
- a trend towards decreased physical activity due to the increasingly sedentary nature of many forms of work, changing modes of transportation, and increasing urbanization⁶³.

The most recent Tasmanian body weight data for adults are from the 2007/2008 National Health Survey conducted by the Australian Bureau of Statistics (1,970 Tasmanians participated) and for children are from the Tasmanian Child Health and Wellbeing Survey (2009)^{64 65}.

According to the results of this survey, 64% of Tasmanian adults and 19% of Tasmanian children aged 5 to 17 years are overweight or obese. Age strongly influences overweight and obesity rates – rates increase with increasing age.

Table 12: Levels of overweight and obesity by age group, Tasmania, 2007/08

	Age group						
	5-17 years	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65+ years
Percentage of Tasmanians with overweight / obesity	19%	43%	48%	67%	68%	73%	76%

Obesity is more common in Tasmanian females (30%) than in males (24%).

The impact of obesity on diabetes hospitalisations is already being observed.

In summary, the main risk factors for poor health affecting Huon Valley residents and Tasmanians are common:

- residents of the Huon Valley and Tasmania as a whole experience socio-economic disadvantage at rates higher than Australia as a whole;
- almost 1 in 4 adults smoke;
- 13% of adults drink alcohol at harmful levels;
- 89% of adults have inadequate fruit or vegetable intake;
- 14% of children have inadequate fruit intake and 63% inadequate vegetable intake;
- 73% of adults and 38% of children are physically inactive; and
- 64% of adults and 19% of children are overweight or obese.

Impact of epidemiological findings on Huon Valley Priorities

Based on the analysis of available epidemiological data a range of specific health issues currently affect residents of the Huon Valley. Many of these are best addressed at the local community level.

Cardiovascular disease and cancer are the leading causes of death in the Huon Valley and significant causes of hospitalisation and health care among Huon Valley residents. Fortunately there is significant potential for prevention of cardiovascular disease and cancer, and for improving the health and wellbeing of residents affected by cardiovascular disease and cancer.

Lifestyle risk factors for cardiovascular disease and cancer include poor nutrition, physical inactivity, excess alcohol consumption, tobacco smoking, excess body weight and poor mental health. Lifestyle risk factors also worsen cardiovascular disease in people already affected by these illnesses. Although data specific to the residents of the Huon Valley are unavailable, Tasmanian data demonstrate high rates of tobacco smoking, physical inactivity, poor nutrition and excess body weight in the population, and a significant number of Tasmanians consuming alcohol to excess. A range of strategies can be implemented at the community level to address these risk factors.

Injury is a significant health issue resulting in a significant proportion of hospitalisations in the Huon Valley. The principal injury types of concern are transport accidents and falls. Injury prevention and control was first recognised as a national health priority for Australia in 1986. There are several risk factors that contribute to the risk of injury including alcohol consumption and work. Alcohol is an important risk factor for both fatal and non-fatal injuries while some occupations, such as manual work, increase the risk of injury occurring. The construction injury is most likely to be the employment type associated with worker injury⁶⁶.

Good infant and maternal health can have a significant positive impact on the future health and wellbeing of an individual⁶⁷. Therefore, infant and maternal health is an important indicator of

the health and wellbeing of a population. Complications associated with pregnancy remains a significant health issue affecting female Huon Valley residents. Access to appropriate antenatal care, and prevention of teenage pregnancy are protective against poor outcomes associated with pregnancy. A mother who is healthy, receives good nutrition and does not smoke or drink alcohol is more likely to give birth to a healthy child⁶⁸.

There is tremendous scope for improvement in lifestyle risk factors for Huon Valley residents. As demonstrated above, lifestyle risk factors are associated with the major causes of death, hospitalisation and chronic disease in residents of the Huon Valley.

Focus group study and individual interviews

Aim

The aim of the focus group study and individual interviews was to capture stakeholders' views regarding current health priorities of residents of the Huon Valley, and whether the health priorities identified in the 2006 Huon Valley Health Needs Study remain health priorities for residents of the Huon Valley.

Consultation process

Qualitative methods were used for the purposes of the consultation, as they are the preferred methods for in-depth investigation of complex issues.

A stepwise approach was used for the consultation process, according to the following procedure:

- Epidemiological data analysis was first performed (the findings of which are outlined above) in order to appraise available health data regarding residents of the Huon Valley;
- Key findings of the data analysis were prepared into a PowerPoint® presentation, to be used to guide focus group discussion and orient focus group participants to available information regarding the health of Huon Valley residents (presentation provided at Attachment 1);
- The Primary Health Coordinator (Southern Tasmania) was approached by GP South to identify key stakeholders who should be invited to participate in a focus group discussion. Selection was made to ensure representation across health and community settings within the Huon Valley, and to ensure geographical representation;

Focus group methods

The participants invited to participate in the focus group were identified using a purposive sampling technique to ensure maximum variation on dimensions of interest⁶⁹. Subjects were purposefully selected by the Primary Health Coordinator and GP South to capture the following dimensions of importance:

- Geographical location
- Service provider type
- Age
- Primary type of work (e.g. aged care, youth, community)
- Familiarity with Huon Valley
- Previous level of engagement in discussions regarding health needs in the Huon Valley

The rationale for this approach was to explore unique or diverse variations in attitudes and knowledge that have emerged in adapting to different conditions and to identify important common patterns that cut across variations. Purposive sampling can be an obvious source of selection bias and may therefore not be representative of the population of the Huon Valley as

a whole. However, the technique has the advantage of providing a breadth of views from a diverse group of participants, not necessarily obtainable from random sampling⁷⁰.

A total of 16 key stakeholders were invited to attend the focus group discussion. Of these, 10 were able to attend. The focus group was convened at the Huon Valley Community Health Centre in February 2009. The session was 2 ½ hours in duration. The focus group was convened by an experienced facilitator who is also a medical practitioner.

Participants were informed of the purposes of the focus group and verbal informed consent was obtained from participants prior to commencement.

The focus group session was tape recorded for the purposes of review of session material by the facilitator on conclusion of the focus group. Focus group findings were content transcribed by the facilitator according to the major themes that emerged. The tape recording was then destroyed by the facilitator.

Individual interviews

In order to supplement the findings of the focus group study and to test hypotheses generated, a series of individual interviews were also conducted. Participants were key stakeholders identified by the focus group attendees. Their participation was sought as focus group attendees wished to ensure the broadest range of stakeholder views possible were captured for the purposes of the study given time and resource constraints for completion of the study.

Individual interviews were conducted by telephone or face to face, depending on the preference of the stakeholder. Interviews lasted up to 60 minutes in duration. Views sought included:

- Stakeholder opinions regarding current health priorities of Huon Valley residents; and
- Views regarding the currency of the priorities identified in the 2006 Huon Valley Health Needs Study.

Interviews were conducted until content saturation was achieved. A total of 9 individual interviews were conducted. Participants were informed of the purposes of the interview and verbal informed consent was obtained from participants prior to commencement. Interviews were content transcribed by the facilitator at the time of the interview. The facilitator was the same person who facilitated the focus group.

Data analysis

Transcripts were coded by hand by the facilitator in order to describe key findings of the focus group and interviews. Coding was used to compare similarities and differences of potential patterns and themes in the data between the focus group and interviews. These events, observations, or experiences were then grouped according to the major areas of enquiry.

Findings

Current health priorities for Huon Valley residents

A number of current health priorities for residents of the Huon Valley were identified by study participants. These can be categorised into settings-based priorities and target group-based priorities.

Key settings identified for health action include:

- Schools;
- Child care facilities; and
- Workplaces.

Key target groups for health action are:

- Adolescents and young adults;

- School-aged children;
- Infants; and
- Pregnant women.

Schools are viewed as a priority area for health action. A number of participants expressed the opinion that focussing on the well-being of children in order to prevent illness and maximise health literacy and awareness is an important strategy for improving the health of the population in the Huon Valley overall. Initiatives to improve physical activity participation, encourage healthy nutrition, and improve the mental health of children were particularly emphasised as priority areas for action. The use of school gardens, healthy canteens, encouraging water intake instead of nutritionally poor beverages, and modelling healthy lifestyle behaviours are examples of initiatives that address these priorities.

In older children, especially those of high school age, initiatives to encourage sexual health and pregnancy prevention, drug and alcohol awareness, smoking prevention and cessation, and general health literacy are important for improving health and well-being into adulthood. Improving mental health and resilience in older children is also a priority area for improving health and well-being.

Child care facilities are an important setting for family-focussed health and well-being initiatives according to study participants. Encouraging the participation of parents in promoting the health and well-being of their children is essential for the success of initiatives. Parental health literacy is thought to be poor in the Huon Valley. Many parents lack awareness of the health and well-being requirements of children, including requirements for dental health. Further, parents often make poor food choices for their children due to the use of junk food as a reward for children, and the perception that providing more expensive, nutritionally poor foods and beverages to children are associated with greater status for their children.

Some participants believe that parental initiatives are also required to improve health and well-being of school aged, and older children, particularly Aboriginal and Torres Strait Islander families, where it is culturally desirable to include families in health and well-being initiatives with young people of all ages.

Initiatives to improve parental health literacy are essential for improving the health and well-being of all young people. Providing parents with assistance in reading food labels, assisting them to comply with good health practices, and encouraging the use of 'reverse literacy', where improving children's knowledge and awareness can flow to improvements in the knowledge and awareness of their parents, are initiatives suggested to address this issue.

A widely expressed view among participants is that education, support and counselling for women during pregnancy and in the postnatal period is lacking in the Huon Valley. Young mothers, particularly those of low socioeconomic status, are seen as particularly vulnerable due to the lack of supports available to them. This is thought to result in poor adherence by pregnant women to appropriate health and well-being behaviours and to increase the risk of poor outcomes associated with pregnancy, including high rates of tobacco smoking, poor nutrition, poor identification and management of complications due to pregnancy, and increased risk of mental health problems associated with pregnancy, including postnatal depression. A direct impact on children's health and well-being was acknowledged by participants. Opportunities for education, training and support for pregnant women and new mothers are therefore viewed as a priority area for action.

Working age adults are a target group for whom health and well-being is often neglected. Men in particular are thought to be vulnerable due to their infrequent contact with health services when of working age. Workplaces are an important setting where health and well-being can be improved, according to participants. Nutrition, mental health, tobacco, alcohol and drug use, weight management and physical activity promotion are areas of particular relevance to working

age men. Some participants expressed support for the provision of men's health checks within workplaces.

Men's sheds were proposed as an innovative method for improving health and well-being opportunities for men in the Huon Valley. Essential requirements for successful implementation of men's sheds are available infrastructure, an individual to coordinate activities and engage face-to-face with target groups, and the ability to operate the shed outside working hours.

Status of health priorities identified in the 2006 Study

Health priorities identified in the 2006 Huon Valley Health Needs Study were reviewed in the focus group session and individual interviews. The majority of participants report that the priorities identified in the 2006 Study remain priorities for residents of the Huon Valley with few exceptions.

The most urgent priority that remains to be addressed from the 2006 Health Needs Study is the need for a dedicated position to improve the promotion of health and community services in the Huon Valley, and to coordinate a 'whole of community' approach to improving health and well-being.

Although the health services identified in the 2006 Study, such as podiatry, aged care, mental health, dental and respite services, are important to address clinical needs of patients in the Huon Valley, participants felt that health services are primarily the responsibility of governments (both State and Federal). Advocacy and representation of the Huon Valley in state and federal decision-making regarding resource allocation was the preferred approach to address these priority areas, rather than local level initiatives. In the view of participants, local government and community groups have neither the resources nor the capacity to address these needs. Instead, local level action should ensure the delivery of holistic, coordinated initiatives to increase the promotion of health and well-being, and prevent disease from developing within the community.

Study participants report that community transport, whilst still a priority, has improved significantly since the 2006 Study. The appointment of a district coordinator for volunteer community transport services and the provision of an additional 7 vehicles has led to greater availability of transport. The number of volunteers supporting the services continues to increase, with almost 50 volunteers currently providing transport services. In addition, the model of service provision is more flexible than previously, with both health and social indications for transport recognised as legitimate uses of the service, and which are provided for. A particular issue identified with available transport services is the lack of awareness of the service among health care providers and members of the community. Inclusion of community transport services on a website describing health and social services in the Huon Valley was proposed as a possible mechanism to promote community transport more widely.

Volunteer coordination has also improved in the Huon Valley since 2006 with the development of a database of providers and a 'volunteer connect' service, which matches volunteers with volunteering need.

Allied health service availability was identified as an areas where needs have increased since the 2006 study. Long waiting times for podiatry services are still experienced. In most areas access to public physiotherapy services is also problematic.

Better communication with residents of the Huon Valley regarding available services, programs and supports was also viewed as an ongoing priority that should be addressed as a matter of urgency. Improved communication will reduce service duplication, improve utilisation of existing resources, and assist both community members and service providers to better match client's needs to available resources.

The health and well-being provider's role

A dedicated health and well-being professional position is required in the Huon Valley to improve access to preventive health and well-being services and programs in the Huon Valley. This position is felt to be an urgent priority for the region.

The position is needed to provide a number of functions:

- To improve communication to Huon Valley residents regarding health and well-being services and programs available and how these can be accessed;
- To act as an access point to whom providers can refer community members for information;
- To improve coordination of activities between existing service providers to reduce duplication of health and well-being activities and services;
- To facilitate networking between providers;
- To support advocacy at State and Federal government level to improve access to services for Huon Valley residents;
- To prepare funding submissions and grant applications to attract further health and well-being resources to the Huon Valley community; and
- To coordinate the collection of data regarding health priorities for the Huon Valley to ensure local service providers are better informed regarding health needs and have the information required to be responsive to these needs.

The priority areas for the position should be those described above, namely:

- Settings-based health and well-being action, including in:
 - Schools;
 - Child care facilities; and
 - Workplaces.
- Health and well-being action for key target groups, including:
 - Adolescents and young adults;
 - School-aged children;
 - Infants; and
 - Pregnant women.

Enhanced communication

There is an urgent need for enhanced communication in the Huon Valley regarding available services. According to study participants, many of the services currently available in the Huon Valley are not utilised to their full capacity, in part because community members are unaware of the service, or because other service providers lack awareness of services, therefore do not refer their clients to them. Further, many health and well-being activities, such as educational events, in the Huon Valley are not accessed by community members due to difficulty marketing these activities appropriately.

Poor communication also leads to duplication of activities. For example, a number of walking groups have been established in the Huon Valley within close geographical proximity to each other and operating on similar days and times of the week. Improved awareness of other services' activities will assist services to select and schedule activities that complement rather than compete with other services.

According to participants, a database of providers is a logical and necessary starting point to improving communication. The database will need to provide information to both community members and to other service providers. Key information required in the database falls into two main categories:

- Available services; and

- Activities, programs and initiatives.

The type of services, activities, programs and initiatives included should be broad and should encompass health and well-being needs holistically, and include health care providers, transport, care and support services, and social, recreational and cultural organisations. Given the scope of this type of community database, development of the database would necessarily be phased over time, commencing with essential services and expanding gradually to incorporate other data entry types.

In order to maintain currency of the database, providers would need to have access to the database and undertake to maintain and update it regularly.

Database development would need to involve a small working group who can assist in the development of a framework / database logic for how information should be presented and which information should be captured. This step is important to prevent the database becoming a 'wiki' in configuration, resulting in difficulties in navigation for users. Basic information required regarding services includes:

- Who the provider is;
- Where the service is offered;
- What services the provider is able to offer;
- Restrictions on access (e.g. eligibility criteria, days and times of operation);
- Any costs associated with using the service; and
- How to access the service.

Information required regarding activities, programs and initiatives includes the above. In addition, dates and times when these will be provided are also required.

To enable users to access the database, information needs to be provided via a user interface. For many users this will be in the form of a website. Many participants were concerned that a website-only interface would disadvantage the many residents of the Huon Valley who do not have access to a computer or who use computers infrequently. As a result, it was suggested that a 1800 number could also be operated (by the health and well-being position or similar) that could act as a contact point for community members and could search the database on the caller's behalf. Paper-based versions of the database were discouraged, due to the likelihood they would become out of date very quickly. An essential requirement of any user interface is the use of plain language and, in the case of a website, simple configuration (as many Huon Valley residents access the internet via dial-up connections, which are slower to download complex web pages).

It was unclear from participants who should be the provider of the website. Most felt the Huon Valley Council would be a suitable organisation to provide this. Some participants were concerned that Huon Valley residents would not necessarily think of the Council as a source of health information. As a result, marketing of the website widely once launched was suggested to improve people's awareness.

Summary

While the residents of the Huon Valley are healthy by international standards, chronic diseases and their associated risk factors are major contributors to poor health and death within the population.

Efforts to improve health and well-being have multiple potential benefits for Huon Valley residents, including reducing deaths and hospitalisations associated with cardiovascular disease, cancer and other chronic diseases; improving health, quality of life and disease prognosis for many residents affected by chronic diseases; and improving health and wellbeing within the population in general.

Intervening early in life is important. A relationship exists between growth and development during foetal and infant life and health in later years. For example, poor nutrition, cigarette smoking and alcohol use during pregnancy can result in long-term adverse health consequences. Complications associated with pregnancy are a significant cause of hospitalisations in the female residents of the Huon Valley. Addressing risk factors for poor pregnancy outcomes, particularly tobacco smoking, is important to reduce pregnancy complications and improve health and wellbeing in newborn children.

Early life events also play a powerful role in influencing later susceptibility to chronic conditions such as obesity, cardiovascular disease and type 2 diabetes. Obesity rates in children and young people are high. This will contribute to the development of cardiovascular disease, diabetes and some cancers in later life if not addressed. Intervening early, and successfully promoting health and well-being, will prevent in the future much of the chronic disease currently affecting older Huon Valley residents.

The National Preventive Health Taskforce has identified a range of strategies able to be adopted by communities to address lifestyle risk factors for disease. These are outlined in the 2009 report: "Australia: the healthiest country by 2020" and include the following:

- Local organisations can set and drive policies and programs, taking national policies to the local level and designing programs that are relevant to community need.
- Local organisations can engage with people in the community and are vital in dissemination of information and in building health literacy in the community.
- Local organisations can engage with local business and can reinforce and support consistent healthy policy and business practices throughout communities.
- Local employers can provide healthy workplace programs.
- Schools, childcare and after-school programs can implement a healthy food policy (for example, in canteens) and physical activity programs (schools, childcare and after-school programs are discussed in more detail below).
- Sporting clubs and the recreation sector can provide opportunities for adults and children in the community to participate in sport and recreation.
- Gyms, exercise classes, walking and cycling groups can provide opportunities for physical activity and for weight loss.
- The public transport sector plays an important role in local infrastructure development that can help shape active neighbourhoods.
- Planners can design environments that create healthy towns and other localities, ensuring play spaces for children, cycle paths linking home with work and schools, and road infrastructure that encourages public transport.
- The food industry sells its products through the retail sector in the local community and can make a major contribution in making sure healthy food choices are easy choices for the people in the community.

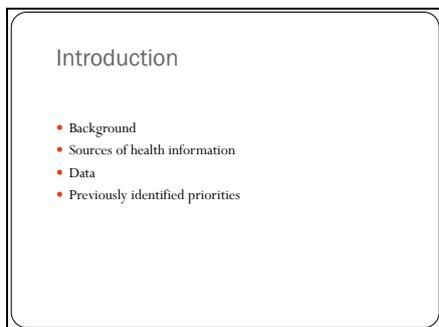
- The hospitality industry can set in place responsible service practices to ensure the safety of their customers.
- The police, welfare agencies and justice system can play a vital role in preventing and intervening early on alcohol-related issues – and support the hospitality industry and the local community in ensuring safe and responsible drinking in public places.
- Non-government organisations are vital partners in prevention, providing research and development, advocacy, social marketing, public information and primary care and support for local organisations to embed prevention at the local level.
- Health services, especially in the primary healthcare sector, provide services, information and support on prevention and management of overweight and obesity, low-risk drinking and assist with prevention of smoking and support for tobacco cessation and injury prevention.
- The media at all levels, including local media reinforce healthy behaviour through reporting and disseminating information on weight, physical activity, tobacco, alcohol, nutrition, injury prevention.

Appendix 1 – Focus group presentation

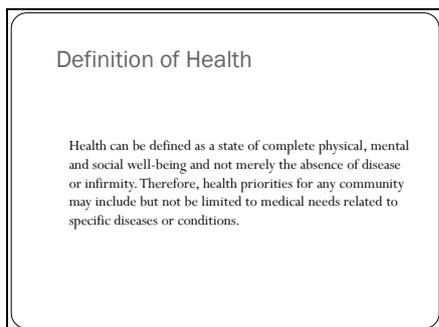
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Slide 2



Slide 3



Slide 4

Sources of information relevant to health

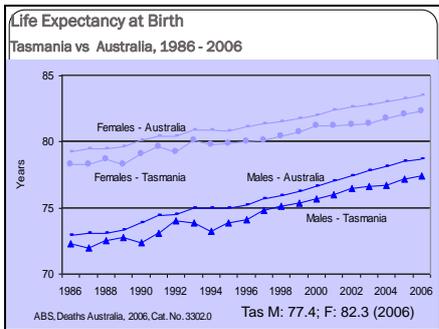
- Socio-demographic data, including population trends, income and employment;
- Chronic diseases affecting Huon Valley residents;
- Causes of death in Huon Valley residents;
- Major conditions affecting health services usage; and
- Mental health and behavioural information sources.

Slide 5

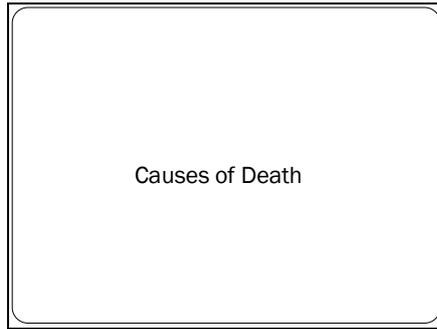
Huon Valley population

- 14,848 persons (2.9% of Tas population)
- 22% = 0 to 14 yrs (Tas = 19.7%)
- 65% = 15 to 64 yrs (Tas = 66%)
- 13% = 65+ yrs (Tas = 15%)
- 8.8% = Aboriginal, Torres Strait Islander or both (Tas = 3.5%; Aust = 2.3%)
- Total Huon Valley population projected to increase by 8.3% from 2012 to 2032

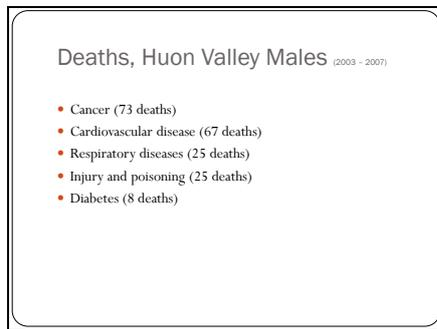
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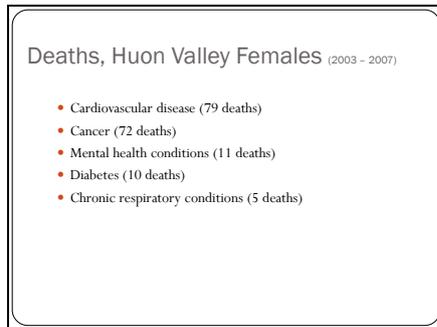
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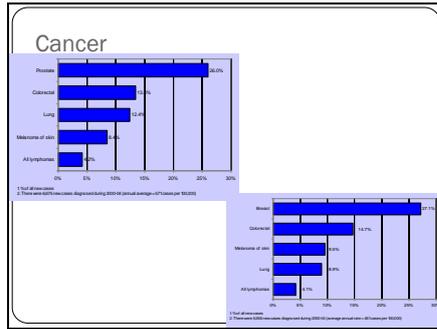
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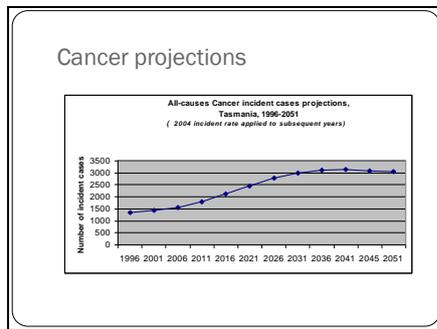
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Slide 10



Slide 11



Slide 12

- ### Chronic conditions
- Cancer
 - Cardiovascular disease
 - Over 36% of Tasmania's adult population are affected by arthritis or a musculoskeletal condition.
 - 1 in 9 Tasmanian adults report that they have a long-term mental or behavioural problem.
 - Tasmania has the second highest age-standardised death rate for accidents and intentional self-harm of all states and territories.
 - By 2023, type 2 diabetes is predicted to be the leading cause of disease burden in Australia.

Slide 13

Causes of hospitalisations

Males	Females
Cancer	Complications due to pregnancy
Digestive diseases	Digestive diseases
Injury and poisoning	Musculoskeletal diseases
Cardiovascular disease	Cancer
Musculoskeletal disease	Genitourinary diseases

Slide 14

- Risk factors
- 23% of adults smoke
 - 13% of adults drink alcohol at harmful levels;
 - 89% of adults have inadequate fruit or vegetable intake;
 - 14% of children have inadequate fruit intake and 63% inadequate vegetable intake;
 - 73% of adults and 38% of children are physically inactive; and
 - 64% of adults and 19% of children are overweight or obese.

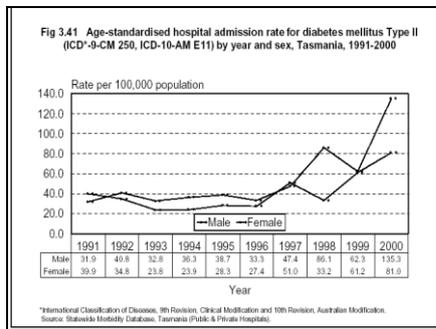
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- Obesity
- Classified by the WHO as a pandemic
 - Estimated impact on affected countries is large
 - Prevalence is increasing rapidly
 - Considerable disease burden – in particular, diabetes; also – CVD, cancer and functional disability

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HEALTH RISKS ASSOCIATED WITH OBESITY		
Greatly increased (RR'>>3)	Moderately increased (RR 2-3)	Mildly increased (RR 1-2)
TYPE 2 DIABETES	Coronary heart disease	Cancer
Gallbladder disease	Hypertension	
High blood fats eg cholesterol	Osteoarthritis	Increased anaesthetic risk
Metabolic Syndrome	Gout	Polycystic ovary syndrome
Infertility		
Sleep apnoea		

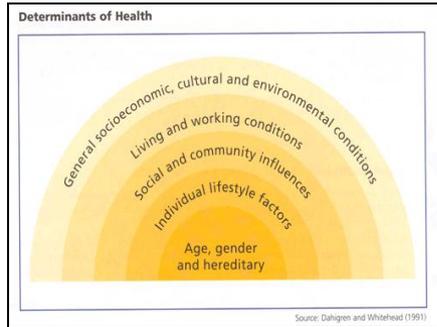
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Slide 18

- What determines health?
- Social, economic and physical environments
 - Early childhood development
 - Personal health practices
 - Individual capacity and coping skills (“resilience” included)
 - Human biology
 - Health Services

Slide 19



The context of people's lives determine their health, and so blaming individuals for having poor health or crediting them for good health is inappropriate.

Individuals are unlikely to be able to directly control many of the determinants of health. These determinants include the above factors, and many others:

Income and social status - higher income and social status are linked to better health. The greater the gap between the richest and poorest people, the greater the differences in health.

Education – low education levels are linked with poor health, more stress and lower self-confidence.

Slide 20

Social determinants of Health

- Social determinants are the conditions in which people live and work.
- They are the "causes behind the causes" of ill-health.

Slide 21

What are the Social Determinants?

- The social gradient
- Stress
- Early life
- Social exclusion
- Work
- Employment
- Social support
- Addiction
- Food
- Transport

Slide 22

Population sub-groups at the lower end of the social gradient experience higher mortality rates



than those higher up the social gradient.

Slide 23

Short-term priorities

- Develop an effective, locally based and comprehensive community transport service;
- Establish a dedicated position to improve the promotion of health and community services in the Huon Valley via web based and hard copy options;
- Apply for more Community Aged Care Packages through Esperance Multi-Purpose Centre and Eldercare to address community needs for in-home support;
- Develop a local home maintenance program which operates on either paid or volunteer staffing and also operates a register of fee for service providers;
- Seek funds for a full time health promotion coordinator for the Huon Valley to develop and implement an ongoing 'whole of community' motivational health program which is evaluated over time to assess outcomes;
- Work with other organisations involved in volunteering, both in the Huon and in Hobart (e.g. Volunteering Tasmania), to establish a local volunteering 'entry and contact point' for both volunteers and those seeking assistance from volunteer organisations;
- Seek funds from the More Allied Health Services program (MAHS) or other sources to increase the level of podiatry services provided in the Huon Valley; and
- Advocate for an increased level of Child and Adolescent Mental Health service in the Huon.

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Long-term priorities

- Develop independent living options for older people which can provide access to higher levels of support over time as required by these residents;
- Develop local service hubs in each community which can provide nurse clinics, General Practitioner services, allied health and health promotion programs as required. Particular areas of focus are Geeveston and Cygnet;
- Seek funding through the Family Support Program to offer comprehensive, professional family support services across the Huon Valley;
- Advocate for increased funds to extend the operational hours of day respite services offered by Huon Valley Respite;
- Work with others to locate a suitable site for the delivery of centre based respite services in Huonville;
- Extend the range of recreational programs that can be offered to younger people with disabilities living in the Huon Valley;
- Offer antenatal classes at local service 'hubs' when the number of pregnant women reaches a number where this would be viable;
- Include provision for tele-health facilities at Esperance Multi-Purpose Service; and
- Advocate for improved access to public dental services for adults.

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