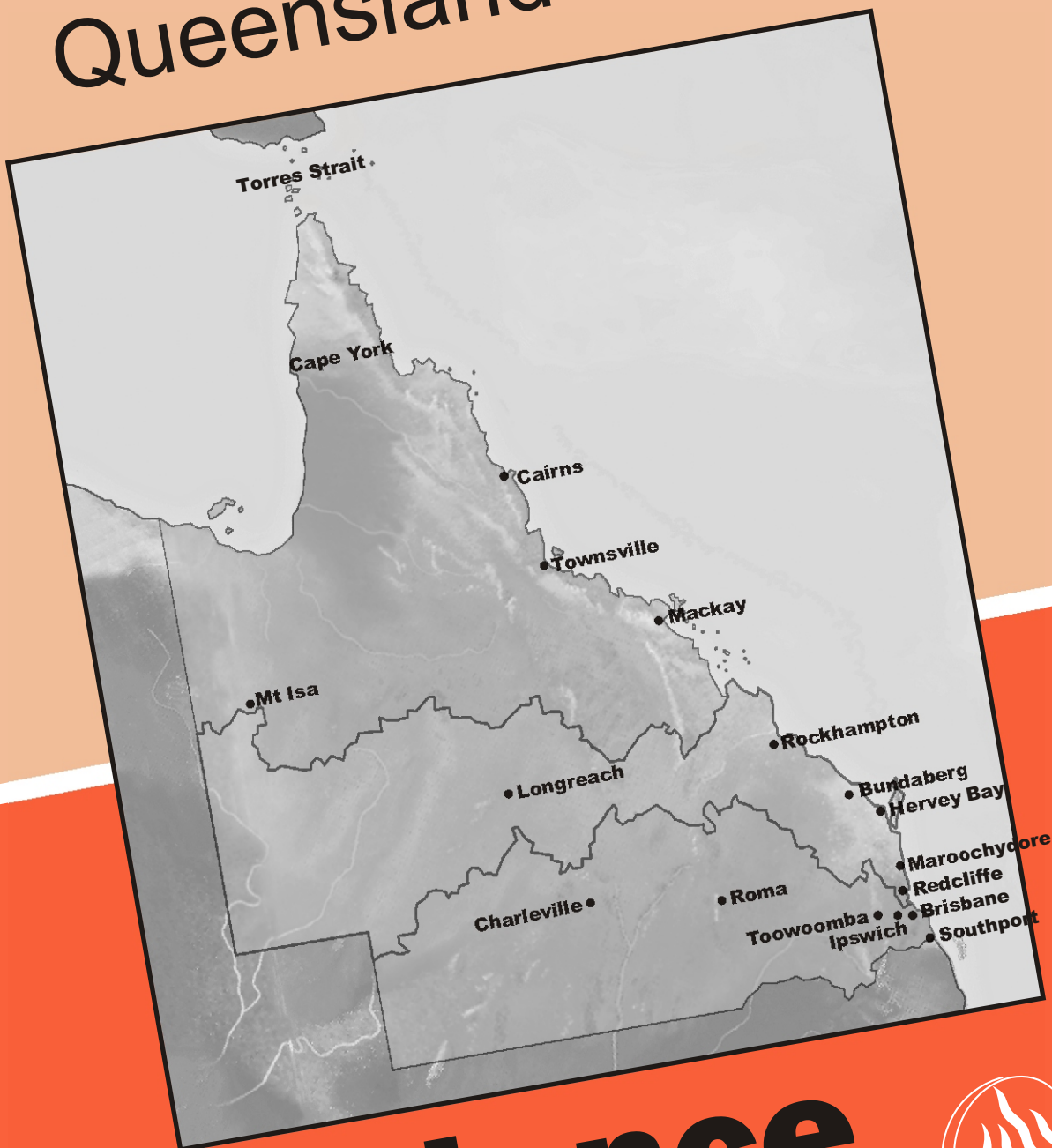


Health Determinants

Queensland 2004



at a glance



Queensland
Government
Queensland Health



Queensland Government
Queensland **Health**

**HEALTH DETERMINANTS QUEENSLAND
2004**

AT A GLANCE

**PUBLIC HEALTH SERVICES AND
HEALTH INFORMATION CENTRE**

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Foreword

The health of the people of Queensland is very good overall and continues to improve. However, recent declines in the amount of physical activity undertaken, poor nutrition, an increase in overweight and obesity, as well as high levels of smoking and alcohol misuse, tell us that this is not a time for complacency. In addition, the increasing inequalities in health and the poor health of Indigenous peoples require specific attention.

In order for us to address these issues, Queensland Health and others whose work impacts on health and wellbeing, need to focus on the areas that will have the greatest gains for all Queenslanders. Information is critical to enable us to make decisions about where to focus and invest.

Health Determinants Queensland 2004 is a key resource in this regard. It provides a summary of the most important factors influencing the health status of Queenslanders today and the areas of potential gain, and highlights the key responses needed to address them. This report brings together indicators of the major behavioural, social, economic and environmental determinants of health and their recent trends in Queensland. In doing so, it provides valuable guidance to government, non-government agencies and the community for improving health and reducing the burden of disease tomorrow and into the future.

It is absolutely clear that the influences on the health of Queenslanders go well beyond the scope of health agencies. All parts of society are and need to be engaged in the effort. Promoting and sustaining the health of the public is one of the most important functions of government and Queensland Health's new strategic intention highlights this.

Our mission is to promote a healthier Queensland. Our vision is to be leaders in health and partners for life. We will be successful in promoting a healthier Queensland through acting on the following five strategic intents:

- *Healthier staff* – optimise staffing levels, provide staff with the right knowledge and skills, and provide an environment that values their experience and which supports positive ideas to drive innovation, creativity and health enhancements
- *Healthier partnerships* – work with others to harmonise programs and activities that impact on health
- *Healthier people and communities* – promote healthier lifestyles and environments for individuals, families and communities and improve community-based chronic disease management
- *Healthier hospitals* – provide high quality and equitable acute emergency care, integrated with enhanced community-based services
- *Healthier resources* – use finite resources to maximum advantage.

Health Determinants Queensland 2004 provides an information basis from which we can make informed decisions about how to best action each of these intents – what initiatives need to be implemented in which areas to achieve the greatest possible gains in health.

I encourage everyone with an interest in health – which is all of us – to familiarise yourself with the information in this report and to use this information in planning priority setting, and decisions about resource allocation.

Dr Steve Buckland
Director-General
Queensland Health

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Health Determinants Queensland 2004

- Chapter 1 Whole of population
- Chapter 2 Children
- Chapter 3 Young people
- Chapter 4 Older people
- Chapter 5 Indigenous peoples
- Chapter 6 Health service district profiles

Companion documents

- Health Determinants Queensland 2004 at a glance*
- Health Determinants Queensland 2004: Statistical report.*

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1.1 Health Determinants Queensland 2004

Queenslanders enjoy a quality of life and health that is comparable to, or exceeds that found almost anywhere else in the world. Good health is one of Queensland's greatest assets.¹ The health of Queenslanders generally continues to improve.^{2,3} Despite this overall high standard, it is important to ensure that health is shared equally among all populations in Queensland and that the rate of improvement equals that of other states.

Many factors determine and influence health. In the last few decades there have been significant developments in thinking about the causes of good health or 'a state of complete physical, mental and social wellbeing, and not merely the absence of disease or infirmity'.⁴ Twenty years ago disease was seen as an outcome of the interaction of human biology, lifestyle factors and environmental factors, as well as being modified by healthcare.^{5,3} It is now understood that "health status results from a complex interaction of social, economic, environmental, behavioural and genetic factors".² As reported in *The State of Health of the Queensland Population*: "The diverse determinants of health status and health inequalities across the population need to continue to be addressed to meet the challenges for health (in Queensland) over the next 20 years."²

The factors that lead to someone developing disease are likely to have had their beginnings years earlier, through a complex chain of events fashioned by interactions of the individual, the environment, and broader social and economic factors. Determinants of health is the term used for those factors that have either a positive or negative influence on health at the individual or population level. Health determinants can be broadly divided into 'upstream' determinants (education, employment, income, living and working conditions), 'midstream' (health behaviours and psychosocial factors) and 'downstream' (physiological and biological factors).⁶

For the first time in Queensland, *Health Determinants Queensland 2004* combines indicators of the major behavioural, social, economic and environmental determinants of health. This report describes the relationship between health determinants and health outcomes. In doing so, it provides: evidence for investment in population health, both in the health sector and across government; priority areas for investment; and interventions, which can most improve the health of Queenslanders. Evidence-based strategies, which address the determinants of health, have the potential to reduce the burden of ill health and premature death in the lives of all Queenslanders, particularly those who are most disadvantaged.

The risks to health are not confined to those within the population with the highest levels of health risk factors. Rather, as the level of many health risk factors increase from low to medium to high levels, the risk of ill health or premature death also increases. Key findings of this report underline the gains that can be made by intervening before people reach recognised levels of these risk factors. This is particularly so for coronary heart disease, diabetes, stroke, hip fracture and neural tube defects.

The sequence and scope of indicators in this report are structured following the *National Health Performance Framework*.⁷ This framework has three tiers: health status and outcomes; determinants of health; and health system performance. As the focus of this report is determinants of health, limited health outcome indicators are presented. Extensive health outcome indicators were previously reported for Queensland in the first Health Indicators report, *Health Indicators for Queensland*.⁸⁻¹⁰ The third tier of the framework, measurement of health system performance, is beyond the scope of this publication.

The diverse determinants of health status and health inequalities across the population need to continue to be addressed, to meet the challenges for health in Queensland over the next 20 years.

The *National Health Performance Framework* was chosen for consistency with national and state directions; to help readers access and reference their particular areas of interest; and, to better identify challenges and points of intervention. Indicators listed in this report were selected on the basis of defined criteria.

Health Determinants Queensland 2004 is comprised of five population based chapters, reflecting the life course approach and the age specific nature of health determinants and outcomes. The *Whole of population* chapter reports the determinants of health that affect the entire population, key health outcomes and interventions to address these determinants. The chapter includes health determinants for socioeconomically disadvantaged, rural and remote and culturally and linguistically diverse

populations. The *Children, Young people, Older people* and *Indigenous peoples* chapters reflect the health determinants of specific relevance to those populations, and unique interventions to address these determinants. The *Health service profiles* chapter of the report is a suite of 34 profiles, one for each of the population based Health Service District in Queensland.

This report provides the burden of disease and injury data for Queensland to assess the relative impact of conditions and health behaviours on the health of the population. Population groups within Queensland with excess mortality and morbidity associated with conditions and determinants are also identified. This information is then related to the sociodemographic profile of each Health Service District to estimate those conditions and health determinants that warrant specific attention.

Health Determinants Queensland 2004 provides epidemiological evidence for investment in population health both in the health sector and across government and will assist policy development and decision making on balanced investment in line with national and state priorities. At a Health Service District level, these reports will complement district population and health status profiles to support decision makers at the local level to identify priority areas for primary prevention and practical interventions where investments can be made.

1.1.1 Life course approach

Health outcomes reflect the accumulation of exposures to advantageous and disadvantageous experiences and environments over varying stages of life. In recent years, a life course approach to the study of health and illness has helped to explain the existence of wide socioeconomic differentials in adult mortality and morbidity rates. Evidence suggests that such exposures accumulate throughout life and increase the risk of illness and premature death.¹¹

Exposure to disadvantageous experiences and environments do not equally impact on all people, or all stages through the life cycle. Some determinants have an immediate impact on health, while other early life or continuous physical and psychosocial exposures have a lag time and manifest in compromised health status later in life.

Associations between environmental and social exposures and health status are bi-directional, with a stronger influence of social disadvantage on poor health. The underlying nature of these associations and interactions is not yet fully understood. Some hypotheses indicate that the duration and intensity of exposure to adverse social and environmental determinants and subsequent risk factors are important in selected health outcomes.¹² For example, the risk of adverse effects of smoking is believed to proportionally increase if exposure commences early in life and if duration of exposure reaches older age. Similarly, longer exposures to poor diet, poverty, alcohol and/or a lack of physical activity are all seen to be more strongly predictive of negative health outcomes than shorter exposures. However, removal of some exposures can dramatically alter the course of health outcomes. For example, the adverse health effects of smoking are reduced following cessation of smoking at any age.

Evidence suggests that exposure to disadvantageous experiences and environments accumulate throughout life and increase the risk of illness and premature death.

The association between intrauterine and neonatal exposures and adverse health outcomes in adults has been extensively explored. The Barker hypothesis attempts to explain these associations.¹³ Some risks for adult health are predetermined at birth. Deficient maternal nutrition can impact on foetal growth and development, and lead to organ impairment and chronic disease later in life. Likewise, low birth weight babies, adjusted for gestational age, have an increased risk of early death and, if they survive, an increased risk of disability and chronic disease during childhood and adult life.¹⁴

Air pollution, urbanisation, residential proximity to mines and factories, occupational exposure to fumes, exposure to cigarette smoking, and inadequate nutrition during childhood and early adulthood have been identified as having potential for lifetime damaging effects and for generating and/or maintaining social class differentials in health.¹⁵

Chronic illness in childhood, more common in socially disadvantaged groups, can have long term consequences both for health and socioeconomic circumstances in later life. Exclusive breastfeeding for at least six months has been identified as a protective factor for emotional wellbeing and chronic diseases such as diabetes and asthma.¹⁶ Slow growth and short adult stature may be a reflection of nutritional status and adverse socioeconomic and psychosocial conditions in childhood.¹⁷ Lifestyle factors such as a

high fat diet and lack of physical activity are associated with the development of obesity and pathological cardiovascular lesions as early as four years of age, and certainly by young adulthood.¹⁸ The presence of chronic disease in early life, such as infectious diseases or respiratory illness, can also lead to both long term ill health and possible socioeconomic disadvantage later in life as a consequence of disability or unemployment.¹⁹

Adult lifestyle is also known to add to the ill effects of an inadequate intrauterine environment. People who had low birth weight have an adverse profile of later glucose and insulin metabolism.²⁰ In addition to birth weight, childhood growth and adult lifestyle affect the risk of impaired glucose tolerance and diabetes.¹³

1.1.2 Social determinants of health

In Queensland, as in other developed countries, the greatest burden of ill health is borne by the most disadvantaged groups. One of the dominant features affecting the health situation of all industrialised countries is the social gradient in health and disease.²¹ This gradient in health and disease is prevalent in all socioeconomic strata of society. On every rung up the socioeconomic disadvantage ladder from least to most disadvantaged, people experience more sickness, shorter life expectancy and poorer health.

People of greater socioeconomic disadvantage, experience worse health than those of higher socioeconomic status for almost every major cause of mortality or morbidity.²² Moreover, socioeconomic differences in health are evident for both females and males at every stage of the life course. Socioeconomic inequalities in health have been extensively reported for Queensland.² Social and economic disparities are one of the major public health challenges confronting Queensland.⁶

A safe environment, adequate income, meaningful social roles, secure housing, higher levels of education and social support are all associated with better health and wellbeing.²³⁻²⁶ In addition to health behaviours, these social, cultural, economic and environmental factors comprise what we call population health determinants and are the focus of this report. While each of these influences is dealt with in a separate section of this report, the interaction of all these factors ultimately determines the health of individuals, families and communities.²⁷

Social and economic disparities are one of the major public health challenges confronting Queensland.

Access to health services, the ability to act on health advice, and the capacity to modify health risk factors are all influenced by the circumstances in which people live and work.²⁸ Studies have shown that those most needing care are least likely to receive it.^{29,30} The quality of care received by people with higher socioeconomic disadvantage is different from those with lower levels of disadvantage.³¹ In addition, socioeconomically disadvantaged people living in rural or remote areas also have reduced access to some preventive or illness management services. Differential access to ambulance services and travel time to health facilities were found to be associated with higher myocardial infarction mortality rates in rural areas of New South Wales.³² In 1981-95, mortality rates among working age adults were significantly higher for males and females in the most disadvantaged Local Government Areas in New South Wales, than in the least disadvantaged areas.^{33,34}

A wealth of evidence supports the strong association between poverty and ill health.^{6,11,35} In Australia, children living in single-parent households and without both biological parents, or with parents with lower formal education and income, are more likely to experience behavioural and emotional problems as well as physical limitations, than their less disadvantaged counterparts.³⁶ Socioeconomically disadvantaged adults who are less formally educated or poorly educated experience the highest rates of illness such as cardiovascular disease and diabetes.³⁷ They also have the highest prevalence of risky behaviours such as smoking and hazardous use of alcohol.³⁷ In addition, income inequality has a significant impact on population health.³⁴ Specifically, income and wealth inequalities have been correlated with increased all-cause mortality.^{38,39,40}

While our socioeconomic position connects us to the physical and social resources that can make our life better, the feelings of empowerment and status that go with the connection to these resources are also important. This second dimension is important because people who feel in control of their lives are also more likely to take control of their health.⁴¹

A lack of control over work and home life has powerful effects on our health.²¹ Like continuing anxiety, feelings of insecurity and social isolation, the psychosocial impact of a lack of control at home or at work accumulate during life and increase the chances of poor mental health, physiological wear and tear and premature death.

Psychosocial factors affect physical health through the stress response. Although the stresses of modern life rarely demand strenuous or even moderate physical responses, turning on the stress response diverts energy and resources away from many physiological processes important to long term health maintenance.²¹ For brief periods, this stress response has minimal impact, however, if people feel tense too often or the tension goes on for too long, they become more vulnerable to a wide range of conditions including infections, diabetes, high blood pressure, heart attack, stroke, depression and aggression. The lower people are in the social hierarchy of industrialised countries such as Australia, the more common these problems become.²¹

While many population health interventions target lifestyle factors where health gains can be made, the social influences on health behaviours must be considered in both the design and implementation of these interventions.³⁵ The World Health Organisation identify the need to understand the interaction between material disadvantage and social meanings.²¹ "It is not simply that poor material circumstances are harmful to health; the social meaning of being poor, unemployed, socially excluded, or otherwise stigmatised also matters."

As well as income and education, other social factors are also known to affect the health of populations. For example, unmarried and divorced people,⁴² and men have consistently higher age-adjusted death rates than married people and women. Additionally, social trends such as the increase in one-parent families, the ageing population and an increase in the age of people starting families are already influencing the economic environment and the health status of the population.³⁵

Ethnicity also can influence health outcomes. This may be due to limited service knowledge, poor language skills, employment discrimination,⁴³ an associated low socioeconomic living environment, and absence of social networks⁴⁴ within minority migrant communities and refugees, as well as due to genetic determinants. For example, racial minorities in Britain experience interpersonal violence, institutional discrimination, or socioeconomic disadvantage, all of which have independent detrimental effects on health, regardless of the health indicator used.⁴⁵

Social determinants of health are often beyond the control of the individual. Addressing them through multidisciplinary efforts at the population level can assist in preventing illness and improving the overall health of the community. While universal access to healthcare is one of the social determinants of health, more important to the health of the population as a whole are the social and economic conditions that make people ill and in need of healthcare in the first place.²¹

1.2 Whole of population: summary

How healthy are Queenslanders?

- The life expectancy of Queenslanders born in 1999-2001 was 76.9 years for males and 82.5 years for females, similar to that of Australia. Australia has one of the highest life expectancies in the world. In Queensland, premature mortality accounts for 56% of the burden of disease in males and 49% in females, close to that of Australia.
- By and large, Queenslanders are satisfied with their lives and their health. The vast majority of Queenslanders are satisfied with their health and rate their quality of life as good or very good and their health as excellent, very good or good.
- In comparison to Australia, Queensland has higher rates of deaths preventable through primary prevention for females, and potentially avoidable hospitalisations for males and females. Rates of death preventable through secondary and tertiary prevention are somewhat higher in Queensland than the national average. As the highest numbers of avoidable deaths are due to primary prevention, targeted efforts to reduce overweight and obesity levels, increase physical activity and improve diet among men and women would result in significant improvements in health in Queensland.
- Death rates due to coronary heart disease (CHD) in Queensland are the highest of the Australian states. Queensland also has high levels of overweight and obesity, physical inactivity and smoking. About half of the large decline in CHD in recent decades was due to a better control of risk factors: high blood cholesterol, smoking and high blood pressure.
- In recent years, more Queenslanders are experiencing diabetes. In 2000, one in four adults had diabetes or impaired glucose metabolism, which is a major risk factor for diabetes. Modifiable risk factors contribute significantly to the rate of onset of diabetes and its complications.
- Health behaviours such as tobacco smoking, physical inactivity, poor nutrition, and behaviours heading to obesity and high blood pressure, contribute to a sizeable proportion of the total burden of disease.

Key population groups

Indigenous status, the level of socioeconomic disadvantage, and to a lesser extent rural or remote location, all have a major effect on health. However, with current data the effect of each of these factors is unable to be separated from the effect of the other factors. This is because, Indigenous peoples most often live in areas of most socioeconomic disadvantage, and 55% live in rural and remote areas of Queensland. The result is that each of these factors combines and interacts to influence the health of a particular population. Thus, it is important to be aware that the key health issues for the socioeconomically disadvantaged groups, and rural and remote population groups outlined below, and those for Indigenous peoples, are not independent.

Males

- The rate of preventable deaths in Queensland males is twice as high as for females. The total burden of disease and injury in males is 17% higher than for females. CHD, stroke, lung cancer and suicide are the top four causes of burden of disease for Queensland males - most of which can be prevented by primary, secondary and tertiary measures.
- Men are more likely to die prematurely than women. In contrast to women, men are more likely to die of lung cancer, colorectal cancer, melanoma, CHD, stroke, suicide, injury and poisoning, road traffic injury, diabetes and chronic obstructive pulmonary disease (COPD).
- Men are more likely than women to have substance abuse disorders, with higher prevalence of harmful and hazardous alcohol consumption and illicit drug use. Males have more deaths and hospitalisations due to hazardous and harmful consumption of alcohol, tobacco smoking and illicit drug use.
- Men are less likely than women to consume sufficient fruits, vegetables and skim or low fat milk and are less likely to 'do the right thing' in the sun. Melanoma incidence and death rates for all Queenslanders are increasing, and men experience more melanoma than women.

Females

- Women are more likely than men to rate their quality of life as good or very good.
- While women live longer than men, they are more likely to experience and to die from asthma, and to have arthritis, anxiety disorders, affective disorders (including depression) and psychological distress.
- Stroke, CHD, depression and breast cancer are the top four causes of burden of disease for females, much of which can be prevented by primary, secondary and tertiary prevention.
- In the last seven years, fewer women have died of breast cancer. This reduction is due to both mammography screening and improved treatment.
- The death rate due to lung cancer is increasing for women, and 20% of women currently smoke. If the rates of smoking among young women are not reduced, lung cancer rates among women will continue to climb.

Socioeconomically disadvantaged groups

- At least 17% of the total burden of disease and injury in Australia is due to socioeconomic disadvantage. The greatest differences in burden between the least and most socioeconomically disadvantaged groups is for diabetes, intentional and unintentional injuries and mental disorders.
- On every rung up the socioeconomic disadvantage ladder, from least disadvantaged to most disadvantaged, people experience more sickness, shorter life expectancy and poorer health.
- Only 76% of Queenslanders in the most socioeconomically disadvantaged group rate their health as excellent, very good or good, compared with 82% in the least disadvantaged group.
- There are higher death rates due to lung cancer, CHD, injury and poisoning, road traffic injury, diabetes, asthma and COPD in areas of high socioeconomic disadvantage in Queensland, and similarly, these people are more likely to have arthritis.
- Socioeconomically disadvantaged people are less likely to have a functional dentition and more likely to have no natural teeth than those of lower disadvantage.
- In areas of most socioeconomic disadvantage, there are higher death and hospitalisation rates due to hazardous and harmful consumption of alcohol and tobacco smoking, as well as a higher proportion of harmful and hazardous alcohol consumption.
- People in the most socioeconomically disadvantaged areas are more likely to be overweight or obese and physically inactive.
- Women in the most socioeconomically disadvantaged areas are less likely to be screened for cervical cancer.
- People in areas of *low socioeconomic disadvantage* have a higher death rate due to illicit drugs.

Rural and remote populations

- People living in remote areas of Queensland report higher satisfaction with life, particularly with safety and feeling part of the community, and are more willing to help each other, compared with urban and rural areas.
- People in remote areas are more likely to die of lung cancer, CHD, stroke, suicide, injury and poisoning, road traffic injury, diabetes, asthma and COPD, for the combined non-Indigenous and Indigenous populations.
- In remote areas, there are higher death and hospitalisation rates due to hazardous and harmful consumption of alcohol and tobacco smoking, as well as a higher proportion of harmful and hazardous alcohol consumption.
- People in remote areas are more likely to be overweight or obese, and physically inactive.
- Healthy food costs more in remote areas of Queensland.
- In *accessible* areas, people are more likely to die or be hospitalised due to illicit drugs.

Overseas-born people

- Very little is known of the health of overseas-born people in Queensland.
- People born overseas are less likely to rate their health as excellent or very good, compared with other Australians.
- People born in the South Pacific regions, the Middle East/North Africa, Southern Asia and Southern Europe are more likely to have diabetes.
- People born in Asia are less likely to be overweight or obese than the other Australians.
- Females born in Asia are less likely to smoke tobacco than other Australians.

What are the health determinants impacting on the health of Queenslanders?

Health determinants can be broadly divided into:

- ‘upstream’ (education, employment, income, living and working conditions);
- ‘midstream’ (health behaviours and psychosocial factors); and
- ‘downstream’ (physiological and biological factors).

In this report, ‘upstream’ determinants are addressed in environmental and socioeconomic factors, and ‘midstream’ determinants in community capacity and health behaviours. The downstream effects are addressed through health behaviours.

These health determinants have short, medium and long term impacts on the overall health of individuals and populations, specifically rates of hospitalisation and death. Actions to address these determinants are described in *Health Determinants Queensland 2004*. Such actions themselves will have short and long term impacts.

Environmental factors

- Basic healthy food costs more in rural and remote areas of Queensland. In 2001, the cost of a basket of healthy food was 24% higher in the very remote areas compared with highly accessible areas of the state.
- Food safety is critical to human health and wellbeing. In 2002, 26% of food businesses in Queensland had a food safety program and 64% had adequate hand washing facilities.
- Less than 5% of Queensland people have satisfactory water fluoride levels, compared with 69% of Australians.
- Many injuries to adults and children occur in the home. Two thirds of Queensland households have smoke alarms or detectors, two thirds have a circuit breaker on the electrical system and half have adjustable hot water thermostats.
- Ambient air quality in Queensland is generally very good. In 2002, the maximum levels for carbon monoxide and nitrogen dioxide concentration were not exceeded, although ozone levels were more variable. There were a number of days where atmospheric fine particles exceeded the desired level (these mainly resulted from dust storms and bush fires).

Socioeconomic factors

- In 2000, the weekly income of one in three men and one in two women was less than \$300. The median gross weekly income of one parent households was \$386 and was two and a half times lower than for couple-with-dependants households (\$933). Forty three percent of Queensland households reported some difficulty in making ends meet.
- There were inequalities in income in Queensland, particularly for women, people aged 15-24 years and 65 years and older, and one parent family households. Indications are that income inequality has increased in the last decade. Large gaps in income distribution lead to increases in social problems and poorer health among the population as a whole.
- Forty one percent of Queenslanders have post school qualifications, compared with 44% nationally. Queenslanders with low educational attainment are more likely to be unemployed, experience socioeconomic disadvantage and, therefore, to suffer poorer health and premature death than those with high levels of education.
- Socioeconomically disadvantaged people feel less able to influence government and had lower access to transportation, including access to motor vehicles.

Community capacity

- Generally, Queenslanders are a caring people. They report high levels of social support, willingness to help one another, caring for others, volunteerism and civic participation.
- Queenslanders with higher social capital are more likely to rate their quality of life as good or very good, their health as excellent, very good or good, to be satisfied with their health, and to have good health behaviours.
- Most Queenslanders feel in control of the decisions that affect their lives.
- One in ten Queenslanders live alone, and the average number of people in each house is expected to decrease by 2021. In 1996, 19.8% of Queensland children lived in one parent families and, by 2021 this is expected to increase to up to one in three children.
- In 2001, 24,569 people in Queensland were homeless, where 50% were less than 24 years and 10% less than 12 years of age.
- Women are less likely than men to feel safe either during the day or at home after dark.

Health behaviours

- In 1999-2001 tobacco smoking caused 3,402 deaths (19% of all male deaths and 10% of all female deaths) and 30,453 hospitalisations each year. One quarter of males and 20% of females smoke daily. One in eight youths aged 14-17 smoke daily.
- In 2001, levels of physical inactivity increased to 55%. Rates of physical activity drop as age increases and males are more active than females. In 1999-2001, insufficient physical activity caused 646 deaths and 7,004 hospitalisations each year.
- More than half of adult Queenslanders are overweight or obese. If current trends continue, three of four Australians will be overweight or obese by 2020.
- In 1999-2001, there were 812 deaths and 20,912 hospitalisations due to hazardous and harmful alcohol consumption each year. Suicide was the leading cause of such deaths. In 2001, 28% of male and female adults, and 25% of young males and 45% of young females aged 14-17 years drank hazardous or harmful levels of alcohol.
- In 2000 in Queensland, 16% of adults had untreated and 12% treated hypertension.
- Queenslanders consume too few fruits and vegetables.
- Increasing breast and cervical cancer screening will result in immediate health gains.
- In 1999-2001, illicit drug use caused 94 deaths and 4,187 hospitalisations each year, mostly in the 15-49 year age group.

1.3 Children: summary

The health of children and young people has been identified as a target health improvement area in the *Smart State: Health 2020 Directions statement* strategic vision for Queensland Health. Children aged 0-14 years represent 21% of the Queensland population.

The health of children is the result of a complex interplay of genetic, social, environmental, economic and cultural factors. The impact of these factors in childhood also affects health in adult life. There is growing evidence that maternal health in the antenatal period, effective nurturing in the early years, early brain development through infancy and toddler-hood, and the psychosocial transitions to young adulthood, have significant effects on health and wellbeing throughout life.

The health status of children in Queensland is relatively high compared with other age groups, and by international comparison. However, some key issues remain:

- poorer health of Indigenous children
- asthma
- mental health problems and disorders
- injury
- inappropriate nutrition
- overweight and obesity
- physical inactivity.

What is the health status of children in Queensland?

- The life expectancy of Queensland children born in 1999-2001 was 76.9 years for males and 82.5 years for females, similar to that of Australia.
- On average, Indigenous women in the state give birth at a younger age than non-Indigenous women. Almost two thirds of Queensland's total Indigenous population is under 25 years of age, hence the health of Indigenous children and young people is critical to the health of Indigenous peoples in this state.
- Asthma is the biggest cause of burden of disease and injury in Australian children. The level of asthma in Australia is among the highest in the world. After years of increasing steadily, the prevalence in children may have reached a plateau or may even be declining. Asthma is one of the most frequent reasons Australian children are admitted to hospital. Over the past ten years in Queensland, boys were more likely to be hospitalised for asthma than girls.
- Injury is the biggest cause of death in children. In 1996-98 in Queensland, injury and poisoning caused one third of all deaths in children. Half of these children were younger than five years. Boys are more likely than girls to be hospitalised for injury. In Australia, children living in remote areas are more likely to be hospitalised than those living in rural areas. They are in turn more likely to be hospitalised than children living in urban areas. Indigenous children are more likely to be hospitalised than non-Indigenous children.
- In Queensland in 2000/01, the incidence rates for Type 1 diabetes in children aged 0-14 years were 21.5 per 100,000 for boys and 18.7 for girls, similar to that of Australia. The incidence rate of Type 1 diabetes in Australian children is increasing. The number of children in Queensland or Australia who have Type 2 diabetes is unknown. However, it is expected to increase, since Type 2 diabetes is linked to lifestyle factors such as obesity and insufficient physical activity, which are rapidly increasing.
- Tooth decay is the single most common chronic childhood disease. Queensland children are more likely to experience tooth decay than Australian children. Infants and children are less likely to have tooth decay if they have access to fluoridated water and if frequent exposure to foods and drinks containing added sugars are avoided.
- About three-quarters of the cases of invasive meningococcal disease are aged less than 25 years; those less than five years make up 36% of cases. Similarly, for invasive pneumococcal disease, children aged 0-4 years make up the largest single age group (40%).
- In recent years, many cases of pertussis (25%) have occurred in young adolescents aged 10-14 whose immunity has waned. Booster doses are recommended at 15 years of age.

Key population groups

Infants and young children

- The infant death rate in Queensland in 2000 was 6.2 deaths per 1,000 live births, higher than Australia at 5.2 deaths per 1,000 live births.
- In Queensland in 2000, there were 48,524 births. Seven percent of infants had low birth weight, similar to that of Australia. One in twelve children was born premature.
- Asthma is the biggest cause of burden of disease and injury in Australian children aged 0-4 years, followed by health problems associated with low birth weight.
- Low speed run-over (usually a car reversing over a child) is the third most frequent cause of injury death in Queensland children aged 1-4 years. Boys are more likely to be hospitalised due to road transport injury than girls.

Older children

- For Australian children aged 5-14 years, the biggest cause of disease burden is asthma, accounting for about one third of the burden. Mental health conditions such as depression, attention-deficit hyperactivity disorder and separation anxiety disorder, collectively account for 22% of the disease burden.
- Of all injuries, falls are the most common reason Australian children are hospitalised. In Queensland, boys are more likely to be hospitalised than girls.
- Girls are more likely to be hospitalised due to intentional self-harm than boys. Over the past 10 years, rates of hospitalisation for intentional self-harm have increased for boys and girls.
- In Australia, boys are more likely to have attention-deficit hyperactivity disorder than girls. Girls are more likely to have eating disorders than boys.
- For children aged 5-14 years in the state, 11% have a disability, and half of these children have a profound or severe limitation to core life activities. These figures were similar to Australia.

What are the health determinants impacting on Queensland children?

Environmental factors

- Many childhood injuries occur in the home. Households in Queensland with young children are more likely to have smoke alarms/detectors installed, and an adjustable hot water thermostat, than households without young children. The rate of hospitalisation for fire, burns and scalds in children has increased during the last decade. Boys are more likely to be hospitalised than girls. About one third of all hospitalisations for these injuries are for children aged 0-4 years.
- Nearly a quarter of households with young children have a swimming pool. Of these, 82% have child resistant fencing or self-locking gates. In the last 15 years, there has been an overall reduction in drowning rates in Queensland children aged 0-4 years.
- In Queensland in 2003, just over half of households with children, kept household cleaners and poisons locked away or out of reach. About 88% of such households kept paracetamol products, and 85% kept other medicines and vitamins, locked away or out of reach.
- In 1995, 40% of Queensland children aged 0-14 years lived in a household with at least one smoker, similar to that of Australia. In 1999-2001, environmental tobacco smoking caused 21 deaths each year in children aged 0-4 years. Low birth weight, followed by respiratory illness, was the leading cause of hospitalisations in children aged 0-4 years due to tobacco smoking.

Socioeconomic factors

- In Queensland in 2001, the weekly income of a quarter of Queensland families was less than \$500 per week. Of these low income families, 27% were one parent families and 30% were couple families with children. Children from low income families are more likely to suffer from chronic illness than those from high income families.
- Children with poor literacy and numeracy skills are more likely to be unemployed as adults. In Queensland in 2003, 92.6% of children in Year 3 reached the national reading benchmark, and 91.4% reached the numeracy benchmark, similar to that of Australia.
- In 2002, 20.5% of Queensland children aged 0-14 years did not have an employed parent, compared to 17.9% nationally.

Community capacity

- In Queensland in 2001, 59% of the population were living in couple families with children and 14% of the Queensland population were in one parent households. In 1996, 19.8% of Queensland children lived in one parent families, and by 2021, this is expected to increase up to one in three children.
- In 2001, 10% of homeless people in Australia were estimated to be children aged 0-11 years.
- One quarter of Queensland parents have participated in a parenting program.
- Based on parents' reports, the behaviour of almost 9% of children aged 2-12 years was assessed as disruptive or antisocial. Five percent of parents reported their child's behaviour as very or extremely difficult to manage. One quarter of parents who considered their child to have emotional or behavioural problems had consulted a professional for advice.
- In 2000, Queensland children aged less than three years spent a median of 16 hours per week in child care, compared to 13 hours per week for all Australian children.
- In Queensland, the rates of substantiated child abuse and neglect have been increasing, as in other states and territories of Australia.
- In Australia in 2000, 59% of children aged 5-14 years participated in organised sport (mainly boys) and about 29% of children participated in organised cultural activities (mainly girls). The most common leisure activity was watching television or videos (97%), followed by playing electronic or computer games (69%).

Health behaviours

- In Australia in 1995, one in six boys and girls aged 2-18 years were overweight, and a further 5% of boys and girls were obese. In 2002 in South Australia, about 20% of four year old children were overweight or obese, an increase of 60% since 1995. No recent Queensland statistics are available on growth and overweight and obesity levels in children.
- In Queensland in 1999-01 for children aged 0-4 years, hazardous and harmful alcohol consumption caused two deaths per year and illicit drugs caused three deaths. Of these deaths, newborn drug toxicity was the leading cause.
- In the state in 2000, 83.2% of infants were exclusively breastfed at discharge from hospital. Exclusive breastfeeding for the first six months of an infant's life is recommended.
- Australian children aged 5-12 years watch an average of 23 hours per week of television, including four hours of advertisements. Much of this is food advertising, where most is for foods of poor nutritional value.
- Data on the regularity of children's participation in physical activity is not available. Of Queensland children aged 5-14 years, 56% participate in organised sport, which is lower than for Australia.
- In Queensland in 2003, the majority of parents said it was not difficult to prevent their child from becoming sunburnt. However, 19% of parents reported one episode of painful sunburn in their child in the preceding summer, and 5% reported between two and ten episodes.
- In Queensland in 2003, 92.1% of children were fully vaccinated at 12 months of age, 90% were fully vaccinated at two years of age, and 94.5% had received their first dose of measles/mumps/rubella vaccine. These rates were similar to those of Australia.

1.4 Young people: summary

The health of children and young people has been identified as a target health improvement area in the *Smart State: Health 2020 Directions statement* strategic vision for Queensland Health. Young people aged 15-24 years represent 14% of the Queensland population.

The health of young people is the result of a complex interplay of genetic, social, environmental, economic and cultural factors. The impact of these factors in adolescence affects health in adult life. There is growing evidence that effective nurturing throughout childhood, and the psychosocial transitions to young adulthood, have significant effects on health and wellbeing throughout the life course.

The health status of young people in Queensland is relatively high compared with other age groups and by international comparison. However, some key issues remain:

- poorer health of Indigenous young people
- mental health problems and disorders
- alcohol, tobacco and other drug misuse
- injury
- suicide and self-harm
- inappropriate nutrition
- overweight and obesity
- physical inactivity.

What is the health status of young people in Queensland?

- In general, Queensland young people are satisfied with the quality of their lives and health. In 2002, young people aged 18-29 years report better quality of life and health status than older age groups. Most young people report satisfaction with their health.
- Two thirds of Queensland's total Indigenous population is under 25 years of age. Hence, the health of Indigenous children and young people is critical to overall Indigenous health in this state.
- In Australia in 1996, mental health disorders accounted for 55% of the burden of disease and injury in young people. Substance use disorders account for the majority of this burden. In Queensland over the last ten years, hospitalisations for intentional self-harm have increased for both young males and young females.
- Injury is responsible for more deaths of young people in Australia than all other causes combined.
- In Queensland over the past ten years, hospitalisations for diabetes have increased for young people.
- About three quarters of the cases of invasive meningococcal disease are aged less than 25 years; young people aged 15-19 (19% of cases) and 20-24 (11% of cases) years were more likely to contract this disease than all other age groups except children 0-4 years.
- In 1997-2001 in Queensland, rates for hepatitis C notifications in young people aged 20-24 years were consistently higher than rates for the total Queensland population.
- In 1997-2001 in Queensland, nearly two thirds of all diagnosed cases of chlamydia were aged 15-24 years. The highest rate occurred in 15-19 year old females.

Key population groups

Young men

- Road traffic accidents, alcohol dependence and harmful use, anxiety disorders, suicide and self-inflicted injuries, and heroin dependence and harmful use, are the top five causes of burden of disease and injury in young Australian males.
- In Queensland over the past ten years, young men are more likely to die or be hospitalised as a result of an injury, and specifically for road traffic accidents and intentional harm by another, than young women.
- Young males are more likely to commit suicide than young females. However, females were much more likely to be hospitalised for intentional self-harm.
- Young men aged 18-24 years are more likely than young women to have substance abuse disorders. Males have more deaths and hospitalisations due to hazardous and harmful consumption of alcohol and illicit drug use.

Young women

- Depression, anxiety disorders, bipolar affective disorder, alcohol dependence and harmful use, and eating disorders are the top five causes of burden of disease and injury in young Australian females.
- Young women aged 18-24 years are more likely than young men to have affective and anxiety disorders.
- In Queensland over the past 10 years, young females were more likely to be hospitalised for asthma than young males. In Australia, prevalence of asthma is highest in young females aged 15-24 years.
- Young females were much more likely to be hospitalised for intentional self-harm than young males, however males were more likely to commit suicide.
- In Queensland, young females aged 15-19 years were more likely to be diagnosed with chlamydia than any other male or female age group.

What are the health determinants impacting on young people in Queensland?

Socioeconomic factors

- In Queensland in 2002, 85.5% of female students and 77.4% of male students continued from Year 8 to Year 12, which was higher than the national average. In 2002, 55.9% of Indigenous students continued from Year 8 to Year 12, which was also higher than the national average.
- In Queensland in 2001, the weekly income of a quarter of Queensland families was less than \$500 per week. The majority (over 80%) of young people aged 15-24 years have an income of less than \$500 per week.

Community capacity

- Over 90% of young people in Queensland rated their families as of great importance in their lives. The majority of young people aged 15-29 years reported they were satisfied with their life overall, their personal safety, and their health and home. Young people were least satisfied with their financial situation and connection to their community.
- Young people aged 18-29 years reported higher informal social networks than older people, and lower community identity and community involvement than other age groups.
- In Queensland in 2002/03, young people aged 15-19 years were the most common victims of crimes. Young males aged 15-19 years were the most common offenders against another person and against property, followed by young males aged 20-24 years.
- In Australia in 2001, 36% of homeless people were estimated to be in the age group 12-24 years.

Health behaviours

- In Queensland in 2001, 13.5% of young people aged 14-17 years smoked daily. Nearly 30% of young males and about 25% of young females aged 18-29 years smoked daily.
- In the state in 2001, about 25% of young males and about 45% of young females aged 14-17 years drank alcohol at hazardous or harmful levels. For young people aged 18-24 years, 52% of males and 65% of females drank alcohol at these levels. In 1999-2001 for young people, there were 61 deaths and 2,955 hospitalisations due to hazardous and harmful alcohol consumption each year. Suicide and road transport accidents were the leading causes of such deaths.
- Young people aged 18-24 years are more likely to report use of illicit drugs than the population as a whole. One quarter of all deaths due to illicit drug use in Queensland was for young people aged 15-24 years. In 1999-2001 for young people, there were 24 deaths and 1,317 hospitalisations due to illicit drug use.
- In Queensland in 2001, about one third of young people were overweight or obese. Almost one in five young people were underweight, with levels three times higher in young females than young males.
- Young people are much less likely than other adult age groups to eat the recommended quantities of fruit and vegetables.
- In Queensland in 2001, just over one half of young people aged 18-29 years undertook sufficient physical activity for a health benefit. Over the past few years, the proportion of young people achieving sufficient physical activity has decreased. There are no current reliable physical activity data for adolescents.
- Young women aged 18-24 years are much less likely than older adult women to have had a Pap smear.
- The level of knowledge and awareness of sun protection issues in Queensland secondary schools is high.

1.5 Older people: summary

The Queensland population is both growing rapidly and ageing. The ageing of the 'baby boomers' born between 1946 and 1964 will accelerate this growth. In 2001, older people, that is those aged 65 years and older, comprised 12.4% of the Queensland population. By 2016, older people are projected to comprise 14.8% of the population or 672,967 people.

How healthy are older Queenslanders?

- In 1999-2000, men aged 65 years could expect to live a further 17.2 years and women 20.7 years. Australia has one of the highest life expectancies in the world. The life expectancy of Queenslanders born in 1999-2001 was 76.9 years for males and 82.5 years for females, similar to the Australian average.
- Generally, older Queenslanders were satisfied with their lives and their health. In 2002, the majority rated their quality of life as good or very good and their health as excellent, very good or good.
- The majority of older people remain in good health until a relatively short period before their death. Older people are not a homogenous group. Those aged 65-74 years are most often physically healthy, functionally independent and mentally alert. In contrast, people aged 75 years and older have a greater number of acute illnesses as well as functional, behavioural, social and economic needs.
- In 1998 in Queensland, 56% of people aged 65 years and older, and 88% of people aged 85 years and older reported they had a disability lasting at least six months. One third of older Queenslanders aged 65 years and older reported a severe or profound core activity limitation. Physical conditions such as arthritis were the most common cause of disability, followed by sight and hearing impairment. In 1998, 38% of older Queenslanders received assistance for at least one activity such as property maintenance or housework.
- Coronary heart disease (CHD), stroke, chronic obstructive pulmonary disease (COPD), lung cancer and colorectal cancer are the five most common causes of death of older people. In contrast, Alzheimer and other dementias, hearing loss, stroke, vision disorders and osteoarthritis contribute the greatest proportion of years of life lost due to disability.
- In 1997-99 for the total population, death rates due to CHD in Queensland were the highest of the Australian states. Queensland also has high rates of overweight and obesity, physical inactivity and smoking. About half of the large decline in CHD in recent decades was due to better control of risk factors, namely, high blood cholesterol, smoking and high blood pressure.
- In the last decade, more Queenslanders experienced diabetes. In 2000, one quarter of men and women older than 74 years were diagnosed with the disease, as well as 12% of men and 20% of women aged 65-74 years. An additional one in four older people had impaired glucose metabolism, which is a significant risk factor for diabetes. Risk factors which can be changed contribute significantly to the rate of onset of diabetes and its complications.
- In 1999-2001, there were 305 deaths and 3,854 hospitalisations per year in all older people due to hazardous and harmful alcohol consumption. In the same year, there were 2,577 deaths and 14,776 hospitalisations each year due to tobacco smoking. Smoking cessation leads to a marked and rapid fall in the risk of heart, stroke and vascular disease.
- For all older Queenslanders, falls are the most common cause of serious injury. Deaths and hospitalisations for falls have increased in the last decade. One in every three people over the age of 65 years may experience a fall within the next 12 months. By 2026, it is estimated that the number of hip fractures will double and, by 2051, increase fourfold. Most falls are preventable and predictable.
- For older Australians, osteoporosis is the second most frequently managed condition during GP encounters.

Key groups of older Queenslanders

The key health issues for older people in rural and remote areas of Queensland, areas of greatest socioeconomic disadvantage and for older Indigenous peoples, are also discussed in the *Whole of population* and *Indigenous peoples* chapters of this report.

Indigenous status, the level of socioeconomic disadvantage, and to a lesser extent rural or remote location, all has a major effect on health. However, current data does not allow the effect of each of these factors to be separated from the effect of the other factors. This is because, Indigenous peoples most often live in areas of most socioeconomic disadvantage, and 55% live in rural and remote areas of Queensland. The result is that each of these factors combines and interacts to influence the health of a particular population. Thus, it is important to be aware that the key health issues for the socioeconomically disadvantaged groups outlined below are not independent of the health issues for older Indigenous peoples and older people living in rural and remote areas.

Older men

- CHD, stroke, lung cancer, COPD and dementia are the top five causes of burden of disease in older men in Queensland - most of which can be prevented by primary, secondary and tertiary measures.
- Men are more likely to die prematurely than women. In contrast to older women, men are more likely to die of lung cancer, CHD, suicide and COPD.
- Hospitalisation and death due to hazardous and harmful alcohol consumption, and tobacco smoking increase sharply from age 65 years onwards, and are at least twice as common in older men as older women.

Older women

- CHD, stroke, dementia, COPD and breast cancer are the top five causes of burden of disease for females; most of which can be prevented by primary, secondary and tertiary measures.
- While women live longer than men, older women are more likely to be hospitalised and die from falls than older men.
- Deaths due to lung cancer in older women have increased 40% in the last decade. If the rates of smoking among young women are not reduced, lung cancer rates among older women will continue to climb.
- Older women are ten times more likely to have osteoporosis than older men. More than one in ten females older than 64 years report osteoporosis.
- In the last seven years, fewer women have died of breast cancer. This decrease is due to both mammography screening and improved treatment.

Socioeconomically disadvantaged groups

- At least 17% of the total burden of disease and injury in Australia is due to socioeconomic disadvantage. The greatest differences in burden between the least and most socioeconomically disadvantaged groups are for diabetes, intentional and unintentional injuries and mental disorders.
- For the total population, on every rung of the socioeconomic disadvantage ladder from least disadvantaged to most disadvantaged, people experience more sickness, shorter life expectancy and poorer health.
- About half of Queenslanders aged 60-69 years have a functional dentition. This decreases to about one in three people for those aged 70 years and older. People who are socioeconomically disadvantaged are less likely to have a functional dentition, particularly those aged 50 years and older. About one in five Queenslanders aged 60-69 years have no natural teeth. This rate increases with age to more than one in three for those aged 70 years and older.

What are the health determinants impacting on the health of older Queenslanders?

Environmental factors

- In 1996, one in five Queenslanders aged 65-69 years lived alone, increasing to one in three for those aged 85-89 years. Females more commonly lived alone and this is projected to increase.
- Distance from transport was the least satisfactory feature of personal housing for older men and women. In 2002, one in eight Australians aged 75 years and older reported having difficulty getting to places needed. This was more common for older females. Older men had greater access to a motor vehicle than older women.
- Two thirds of all falls occur in the private home. One third of Queensland households with older people have anti-slip surfaces or strips in the bath or shower, and one quarter have handrails fitted in the bathroom or toilet.

Socioeconomic factors and community capacity

- In 2001 in Queensland, the weekly income of two thirds of older men and three quarters of older women was less than \$300. Two out of three people of those who met the age criteria were receiving the aged pension.
- Older Queenslanders are a caring people. They make a substantial contribution to voluntary work and caring activities, including child care. They report high levels of social support and willingness to help one another. Compared to young people, older people report higher levels of generalised trust.
- In 2002, most older Queenslanders felt in control of the decisions that affected their life.
- Seventy five percent of older Queenslanders feel safe at home during the day and 61% felt safe at home at night. These figures are slightly lower than for all Queenslanders. Older people in Queensland are less frequently the victims of crime than younger people.

Health behaviours

- In 2001, just over one third of Queenslanders aged 60-75 years undertook sufficient physical activity for a health benefit. Physical activity plays a role in the prevention and management of many health problems experienced by older people, yet older people are currently the least active of any age group in Queensland. Hospitalisations and death due to insufficient physical activity increases sharply from age 65 years. In 1999-2001, there were 442 deaths and 3,378 hospitalisations per year due to insufficient physical inactivity.
- Almost 75% of Queensland women and 61% of men aged 65-75 years were overweight or obese. About half the people aged 75 years and older were overweight or obese. Overweight and obese older Queenslanders are at greater risk of ill health from chronic diseases, disability and social impairment.
- Older Queenslanders consume too few fruits and vegetables.
- Three quarters of older Queenslanders reported having an influenza vaccination in 2003.
- In 2000, about 30% of older people in Queensland had untreated hypertension, and about 40% treated hypertension. Hypertension was less likely to be treated in older men than older women.
- More than two thirds of Queenslanders aged 65-74 years have elevated total cholesterol levels. For those aged 75 years and older, almost two thirds have elevated total cholesterol.
- In 2001, 10% of older men and 8% of older women drank hazardous or harmful levels of alcohol.
- One in 10 older men and one in 20 older women smoke daily.

1.6 Indigenous peoples: summary

By almost any measure, the health of Indigenous health is poorer than that of non-Indigenous people, in Queensland and in Australia overall.

It must be noted that it is difficult to separate out the burden of disease experienced by Indigenous peoples from that of the overall population, especially that of urban Indigenous peoples. While this report attempts to do so, we acknowledge that this important work is being carried further by the Queensland Department of Aboriginal and Torres Strait Islander Policy (DATSIP).

How healthy are Indigenous Queenslanders?

- The life expectancy of Indigenous Australians born in 1999-2001 was 20 years lower than that of non-Indigenous Australians. In Queensland for the period 1999-2001 half of non-Indigenous deaths occurred over the age of 78 years, while half of the Indigenous deaths occurred in people aged 54 and younger.
- The Northern Territory Aboriginal population has a rate of burden of disease 2.5 times higher than the non-Aboriginal population.
- Overall death rates of remote non-Indigenous Australians differed little from their urban counterparts, yet death rates were substantially higher for Indigenous Australians, both urban and remote.
- Chronic disease hospitalisations occur earlier in Indigenous Queenslanders than in non-Indigenous Queenslanders.

Key population groups

Indigenous status and level of socioeconomic disadvantage, and to a lesser extent rural or remote location have a major impact on health. However, with current data, the effect of each of these factors is unable to be separated from the effect of the other factors. This is because Indigenous peoples throughout the state most often live in areas of most socioeconomic disadvantage and 55% live in rural and remote areas of Queensland. The result is that each of these factors combines and interacts to influence the health of a particular population. Thus, it is important to be aware that the key health issues for the socioeconomically disadvantaged groups, and rural and remote population groups outlined below are not independent.

Outcomes for rural and remote Aborigines

Relative to the non-Indigenous population of Queensland, rural and remote Aborigines have:

- higher death and hospitalisation rates due to all causes, with higher death and/or hospitalisation rates specifically due to:
 - injuries, especially those due to interpersonal violence, particularly in women
 - diabetes
 - respiratory disease
 - lung cancer
 - cervical cancer
 - coronary heart disease
 - suicide and self-harm.
- higher hospitalisation rates due to infectious and parasitic diseases
- higher fertility and infant death rates
- more people suffering from, and being hospitalised for sexually transmissible infections.

Outcomes for remote Torres Strait Islanders

Relative to the non-Indigenous population of Queensland, Torres Strait Islanders have:

- higher death and hospitalisation rates due to all causes, with higher death and/or hospitalisation rates specifically due to:
 - diabetes
 - coronary heart disease
 - respiratory disease and
 - lung cancer
- higher hospitalisation rates due to infectious and parasitic diseases
- higher fertility and infant death rates
- more people suffering from, and being hospitalised for sexually transmissible infections.

Urban Indigenous peoples

There is little data that defines the health of urban Indigenous peoples. We know that urban Indigenous peoples have:

- the same basic demography as remote Indigenous peoples, suggesting that fertility and death rate patterns are the same
- higher rates of neonatal death (ie in the first 28 days of life) than in non-Indigenous peoples.

What are the health determinants impacting on the health of Indigenous Queenslanders?

Environmental factors

- Forty percent of permanent dwellings managed by Indigenous Housing Organisations required major repairs or replacement.
- Indigenous households in Queensland were almost three times as likely to have more than five people usually resident, according to the 2001 Census.
- The cost of healthy food in the very remote areas of Queensland was 27% higher than in the highly accessible parts of Queensland. This is especially salient, given that employment levels and income in very remote Queensland are low.

Socioeconomic factors

- Forty-three percent of Indigenous peoples are living in areas designated as the most disadvantaged 20% of Queensland.
- Unemployment (excluding Community Development Employment Projects (CDEP)) rates are 2 1/2 times those of non-Indigenous Queenslanders.
- Indigenous Queenslanders are twice as likely to live in a household with a combined gross income of less than \$300 per week.
- Indigenous Queenslanders also have low access to computers and the Internet, meaning that many are denied the benefits of the information revolution.

Community capacity

- Many Indigenous Queenslanders live in the remotest parts of Queensland.
- Most remote Indigenous Queenslanders have access to public broadcasts.
- Access to public telephones is poor.
- Half of the Indigenous communities with a population of 50 or more were located more than 50km from a hospital or from a school that was capable of educating to a year 10 level.

Health behaviours

Relative to the non-Indigenous population, Indigenous Queenslanders have:

- higher prevalence of obesity, dyslipidaemia and hypertension
- high prevalence of tobacco smoking, and risky alcohol consumption
- inflated costs of healthy food, contributing to low consumption of fruit and vegetables
- higher prevalence of sedentariness.

1.7 References

1. Queensland Government. *Priorities in Progress. A report to all Queenslanders on outcomes under the Charter of Social and Fiscal Responsibility 2001-02.*
2. Queensland Health. *The state of health of the Queensland population.* Brisbane 2001.
3. Australian Institute of Health and Welfare. *Australia's Health 1996: The fifth biennial health report from the Australian Institute of Health and Welfare.* Canberra: Australian Institute of Health and Welfare; 1996.
4. World Health Organization. *Constitution of the WHO.* Basic Documents, 37th ed. Geneva; 1946.
5. Lalonde M. *A new perspective on the health of Canadians.* Ottawa: Information Canada; 1974.
6. Turrell G, Oldenburg B, McGuffog I, Dent R. *Socioeconomic determinants of health: towards a national research program and a policy and intervention agenda.* Canberra: Queensland University of Technology; April 1999.
7. National Health Performance Committee. National report on health sector performance indicators 2001. Report to Australian Health Ministers' Conference. Paper presented at: Australian Health Ministers' Conference, 2002.
8. Queensland Health. *Health indicators for Queensland: Central Zone 2001.* Brisbane: Public Health Services, Queensland Health; 2001.
9. Queensland Health. *Health indicators for Queensland: Northern Zone 2001.* Brisbane: Public Health Services, Queensland Health; 2001.
10. Queensland Health. *Health indicators for Queensland: Southern Zone 2001.* Brisbane: Public Health Services, Queensland Health; 2001.
11. World Health Organization. *The World Health Report 2002: Reducing risks, promoting healthy life.* France 2002.
12. Schmidt KS. Programmed at birth. *New Scientist.* 1999;2195:26 - 31.
13. Osmond C, Barker D J. Fetal, infant and childhood growth are predictors of coronary heart disease, diabetes, and hypertension in adult men and women. *Environmental Health Perspectives.* June 2000;108(Supplement 3):545-553.
14. Australian Institute of Health and Welfare. *Australia's Health 1998: The sixth biennial health report from the Australian Institute of Health and Welfare.* Canberra: Australian Institute of Health and Welfare; 1998.
15. Blane D, Montgomery SM, Berney LR. Research note: social class differences in lifetime exposures to environmental hazards. *Sociology of Health and Illness.* 1998;20(4):532-536.
16. National Health and Medical Research Centre. *Infant feeding guidelines.* Canberra 2002.
17. Zimet GD, Owens R, Dahms W, Cutler M, Litvene M, Cuttler L. Psychosocial outcome of children evaluated for short stature. *Archives of Pediatrics & Adolescent Medicine.* 1997;151(10):1017-1023.
18. Wissler RW. An overview of the quantitative influence of several risk factors on progression of atherosclerosis in young people in the United States. Pathobiological determinants of atherosclerosis in youth (PDAY Research Group). *American Journal of Medical Science.* 1995;310:S29 - S36.
19. Holland P, Berney L R, Blane D, Davey Smith G, Gunnell D J, Montgomery S M. Life course accumulation of disadvantage: childhood health and hazard exposure during adulthood. *Social Science and Medicine.* 2000;50:1285-1295.
20. Newsome CA, Schiell AW, Fall CH, Phillips DI, Schier R, Law CM. Is birth weight related to later glucose and insulin metabolism, a systematic review. *Diabetes Medicine.* 2003;20(5):339-348.
21. World Health Organization. *Social determinants of health: the solid facts.* 2003.
22. University of Adelaide Public Health Information Development Unit. *A social health atlas of Australia.* Second ed: Openbook Publishers; 1999.
23. Queensland Health. *Discrimination: A Factsheet. Social Determinants of Health.* Brisbane: Southern Public Health Unit Network, Queensland Health; 2003.
24. Queensland Health. *Education: A Factsheet. Social Determinants of Health.* Brisbane: Southern Public Health Unit Network, Queensland Health; 2003.
25. Queensland Health. *Indigenous People: A Factsheet. Social Determinants of Health.* Brisbane: Southern Public Health Unit Network, Queensland Health; 2003.
26. Queensland Health. *Transport. A Factsheet. Social Determinants of Health.* Brisbane: Southern Public Health Unit Network, Queensland Health; 2003.
27. Federal Provincial and Territorial Advisory Committee on Population Health. *Toward a healthy future: Second report on the health of Canadians.* Charlottetown: P.E.I.; September, 1999.
28. Wilkinson R, Marmot M, eds. *Social determinants of health: the solid facts.* 2 ed. Copenhagen: World Health Organisation; 1998.

29. Hart JT. The inverse care law. *Lancet*. 1997;1971(i):405-412.
30. Furler J, Harris E, Chondros P, Powell-Davies PG, Harris MF, Young DY. The inverse law revisited: impact of disadvantaged location on accessing longer GP consultation times. *Medical Journal of Australia*. 2002;177:80-83.
31. Harris MF, Pridden D, Ruscoe W, Infante F A, O'Toole B I. Quality of care provided by general practitioners using or not using division based diabetes registers. *Medical Journal of Australia*. 2002;177:250-252.
32. Burnley IH. Transitions and inequalities in acute myocardial infarction mortality in NSW, 1969-94. *Australian and New Zealand Journal of Public Health*. 1999;23(4):343 - 351.
33. Yue XQ, Robertson C, Brett I. Socioeconomic correlates of mortality differentials by local government area in rural Northern New South Wales, 1981 - 1995. *Australian and New Zealand Journal of Public Health*. 2000;24(4):365 -369.
34. Kennedy BP, Kawachi I, Prothrow-Stith D. Income distribution and mortality: Cross Sectional Ecological Study of the Robin Hood index in the United States. *British Medical Journal*. 1996;312(7037):1004 -1007.
35. Queensland Health. *Social determinants of health: The role of public health services*. Brisbane 2001.
36. Spurrier N, Sawyer M, Clark JJ, Baghurst P. Socio-economic differentials in the health-related quality of life of Australian children: Results of a national study. *Australian and New Zealand Journal of Public Health*. 2003;27(1):27 - 33.
37. Australian Institute of Health and Welfare. *National Health Priority Areas Report: cardiovascular health*. Canberra: Australian Institute of Health and Welfare and Commonwealth Department of Health, Ageing and Community Services; 1998. AIHW Cat. no. PHE 9.
38. Black D, Morris JN, Smith C, Townsend P, Whitehead M. *Inequalities in health. The Black report: The health divide*. London: Penguin; 1988.
39. Kawachi I, Kennedy BP. The relationship of income inequality to mortality: Does the choice of indicator matter? *Social Science and Medicine*. 1997;45(7):1121-1127.
40. National Health Strategy. *Pathways to better health*. Canberra 1993.
41. McCulloch A. An examination of social capital and social disorganisation in neighbourhoods in the British household panel survey. *Social Science and Medicine*. 2003;56:1427.
42. Wyke S, Ford G. Competing explanations for associations between marital status and health. *Social Science and Medicine*. 1992;36:907-917.
43. Darity WJ. Employment discrimination, segregation, and health. *American Journal of Public Health*. 2003;93(2):226-231.
44. Kawachi I, Colditz GA, Ascherio A, et al. A prospective study of social networks in relation to total mortality and cardiovascular disease in men in the USA. *Journal of Epidemiology and Community Health*. 1996;50:245 - 251.
45. Karlsen S, Nazroo DBJ. Relation between racial discrimination, social class, and health among ethnic minority groups. *American Journal of Public Health*. 2002;94(4):624 - 631.



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