



**ACT**  
Government  
Health

# HEALTHY CANBERRA

Australian Capital Territory  
Chief Health Officer's  
Report 2018

## Acknowledgements

This publication has been prepared by the ACT Health Epidemiology Section, Health Improvement Branch, Population Health for the ACT Minister for Health and Wellbeing, the ACT Legislative Assembly and the ACT community.

The ACT Chief Health Officer, Dr Paul Kelly, together with the staff of the Epidemiology Section, wish to acknowledge the many contributors from ACT Health, non-government agencies and individuals who have provided their time and expertise in the preparation of this document.

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## Acknowledgment of Country

ACT Health acknowledges the Traditional Custodians of the land, the Ngunnawal people. ACT Health respects their continuing culture and connections to the land and the unique contributions they make to the life of this area. ACT Health also acknowledges and welcomes Aboriginal and Torres Strait Islander peoples who are part of the community we serve.

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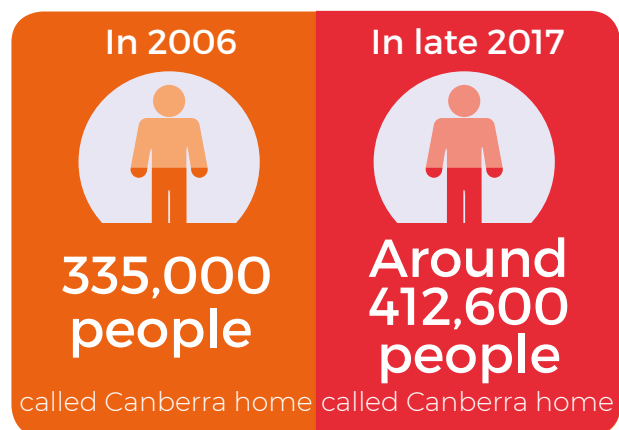


## INTRODUCTION

*Healthy Canberra 2018: Australian Capital Territory Chief Health Officer's Report* provides an opportunity to examine the health of Canberrans and explore potential opportunities for improvement.

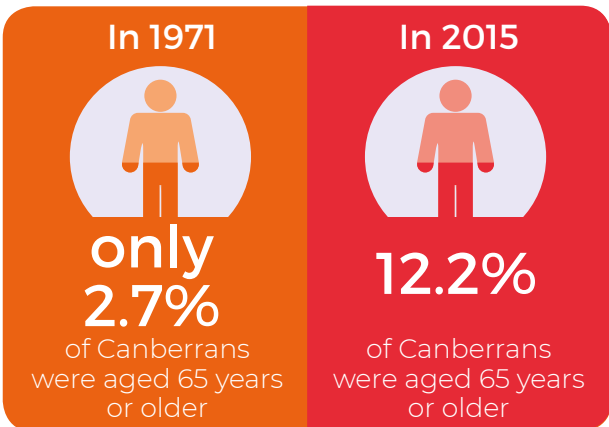
*Healthy Canberra 2018* has been prepared as required under Section 10 of the Public Health Act 1997. Where possible we have included the most recent data. The report focuses on priority health issues that cause the greatest burden of disease, are preventable and are fundamental to good health. Topics are presented under four themed chapters: *Healthy City, Healthy Weight, Healthy Lifestyle and Healthy People*. These represent the influences of our environment and our lifestyle on our health.

Since the last *Healthy Canberra* report, the ACT population passed 400,000.

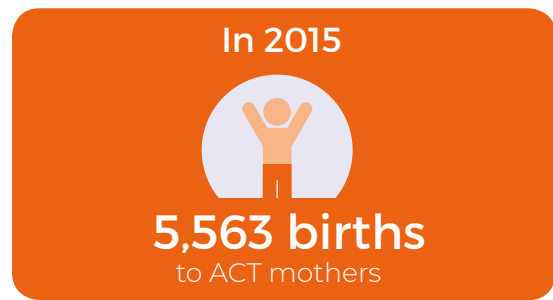


The increase in our population over the past decade was driven by domestic and international migration and births to ACT mothers.

As with the rest of Australia, Canberra's population is ageing.

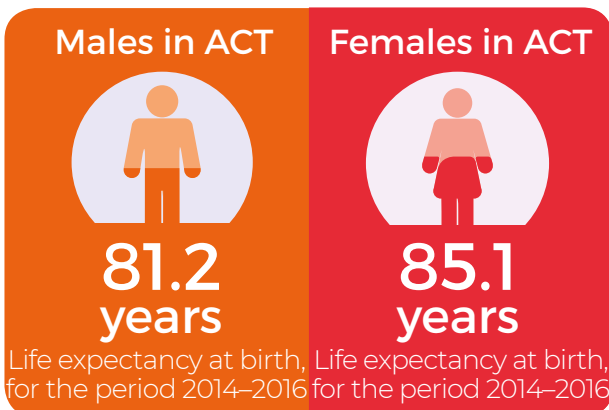
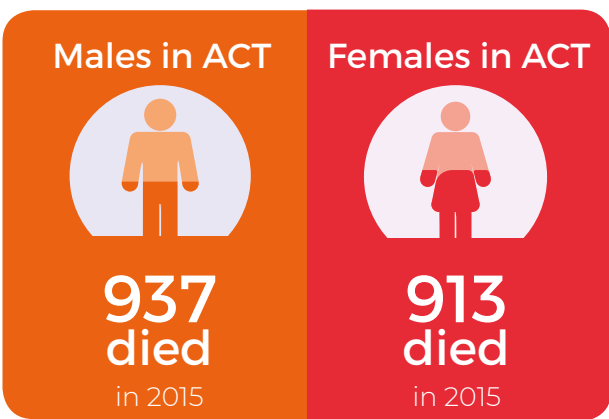


Canberrans enjoy one of the highest standards of health and wellbeing in the world and have the highest life expectancy in Australia. However, our ageing population, the increased prevalence of chronic conditions and increasing costs of new technologies make it ever more challenging to provide the high-quality health services and supportive environments that our community expects so that they can lead active, healthy and productive lives.



ACT males can expect to live 72.3 years in good health, while ACT females can expect to live 74.6 years in good health. In 2014–2015, roughly half of all adults in the ACT reported having a long-term health condition such as arthritis, asthma, cancer, diabetes, mental illness or heart disease. Cancer was the leading cause of death (144 deaths per 100,000 persons) followed by diseases of the circulatory system (126 deaths per 100,000 persons).

As with the rest of Australia, infectious diseases have less impact on the health of our population than they did in the first half of the 20th century. Maintaining high immunisation rates and strong legislation to ensure clean water will ensure that the ACT continues to reduce the impact of infectious diseases on the population.



Smoking is a major risk factor for both cancer and diseases of the circulatory system. While smoking rates have fallen significantly over the past two decades in the ACT, from 22.5% in 1998 to 9.5% in 2016, the rate of the decline has slowed in recent years. The good news is that fewer people are taking up smoking, and the average age of those who begin smoking is increasing. However, e-cigarettes are a potential concern, with international evidence emerging that e-cigarettes act as an entry point to tobacco smoking by young people.



Smoking rates  
have fallen  
by almost  
**58%**  
since 1998.

but remain  
**unacceptably  
high**  
among  
some populations

in the ACT such as Aboriginal and Torres Strait Islander people, those from areas classified as having higher levels of social disadvantage, persons living with mental illness, prisoners and some young mothers

While alcohol remains a major concern, the proportion of Canberrans aged 14 years and older who drank alcohol at levels considered risky over a lifetime fell from 22.0% in 2013 to 14.3% in 2016.

Overweight and obesity continues to be a major issue, with 63.5% of ACT adults classified as either overweight or obese in 2014/15. We have seen a fall in the proportion of young people aged 5–15 years who drank two or more cups of sugar-sweetened drinks per week; however, the number of Canberrans who eat the recommended serves of fruit and vegetables remains low among all age groups.

2015

**23%**  
**unhealthy  
food**

available at  
public schools

2017

**3%**  
**unhealthy  
food**

available at our  
public schools

Monitoring and reporting on the health of our population is a core responsibility of ACT Health. As one of our flagship statistical publications, *Healthy*

*Canberra 2018* is an example of our continuing commitment to providing high-quality health information. It has been published every two years since 1998, providing a longer-term view of current health trends and highlighting emerging issues. Several myth-busting sections have been included throughout the report to better explain key concepts in public health. The report stands as part of a suite of statistical reports and accessible information that will be of interest to policy makers, researchers and the wider public.

In an environment where those tasked with ensuring the health and wellbeing of our community face many challenges, accessible, up-to-date and accurate health information such as that included in this report and updated regularly on [stats.health.act.gov.au](http://stats.health.act.gov.au) is increasingly important. I trust that you find *Healthy Canberra 2018* useful and informative.



*PKelly*

Dr Paul Kelly  
ACT Chief Health Officer  
Population Health ACT Health

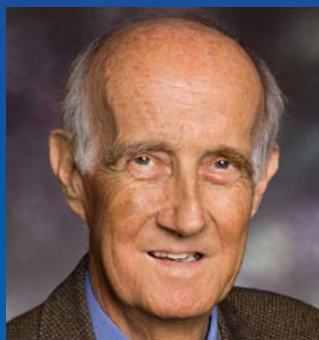
### Special acknowledgement

I would like to thank my four learned colleagues who provided special commentary throughout the report. As recognised leaders in their field, their contributions and insight in the field of population health are highly regarded.

I would also like to offer a special note to Professor Tony McMichael who passed away in 2014. He was a world renowned researcher in the field of climate change and its impact on health. He was a significant reason for me moving to Canberra and a valued mentor who is sorely missed.



# HEALTHY CITY



**Professor Anthony J McMichael AO.** 1942–2014

Director: National Centre for Population Health, Australian National University, 2001–2007

*“Climate change does not exist, or act, in isolation. Some health impacts of climate change occur directly, from extreme climate-related exposures . . . For example, heat waves and floods directly kill thousands of people every year. Most climate-related health risks, however, are mediated by less direct pathways . . . and are likely to have much greater adverse consequences for health and survival than the direct-acting risks. Indirect health effects arise via impacts on food yields, water flows, patterns and ranges of infectious disease occurrence, stresses on housing and settlements, impoverishment of the vulnerable, and the movement, sometimes displacement, of groups and populations.”*

*Climate Change and the Health of Nations: Famines, Fevers, and the Fate of Populations.* Oxford University Press, New York, 2014, pp. 7–8.

A healthy city is the foundation for good health. While Canberra has one of the safest and cleanest environments in the world, it can be easy to forget that ongoing efforts to maintain clean water, clean air and safe food are critical in keeping a city's residents healthy. Canberra's changing climate will impact our water resources, air quality and food system.

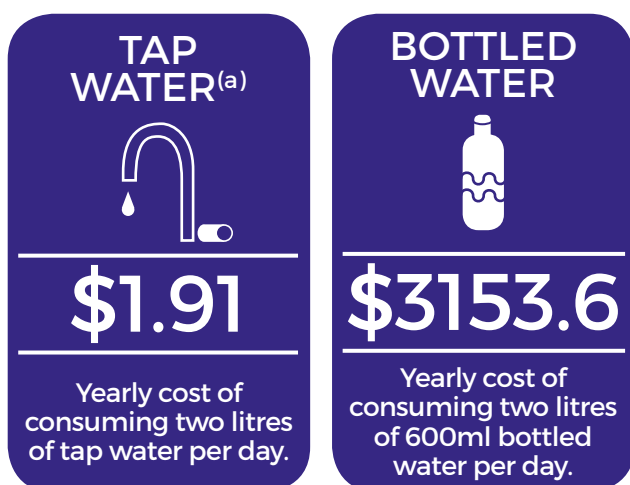
## CLEAN WATER

A safe and secure supply of drinking water is fundamental for public health.

### Promoting tap water as the drink of choice

In addition to tap water being a healthy drink, access to high-quality drinking water also plays an important role in reducing community consumption of sugar-sweetened drinks and associated waste.

Between 2013 and 2015, 30 water refill stations were installed in parks and public places throughout Canberra as part of the *Water on Tap* initiative; an additional 11 stations have since been installed. The water refill stations are 2.1 m high (for visibility) and consist of two bottle refill nozzles as well as a drinking fountain, making it easier for people to fill up their reusable bottles. Community feedback in 2016 found very high levels of public support for the water stations. People also changed their behaviour, as they felt encouraged to refill their water bottles.



a) based on a consumer price of \$2.61 Kl.  
Prices as per Coles online as at 9 October 2017.

### Drinking water supplies are protected by legislation

ACT Health regulates the supply of drinking water in the ACT and provides licences to operators of drinking water systems under the *Public Health Act 1997*. The *Public Health (Drinking Water) Code of Practice 2007* lists the technical requirements for the supply, quality, monitoring and reporting on drinking water by a water utility.

The code of practice requires certain events or incidents to be notified to the Chief Health Officer. Twenty notifications were made by Icon Water to ACT Health between 1 July 2014 and 30 June 2017 relating to blue-green algae, *Escherichia coli* (*E. coli*), chemical levels, turbidity and 'potential imminent public health risks'. ACT Health is satisfied that the investigations and actions taken by Icon Water were appropriate in reducing the public health risk to the ACT's drinking water supply.

### Blue-green algae can lead to closure of Canberra's lakes

Canberra's lakes are valuable community resources, providing amenity and opportunities for physical activity. However, water quality can be an issue, particularly when temperatures are high and lakes become contaminated by stormwater run-off; these conditions can be ideal for algal and bacterial blooms.

#### What are the health impacts of blue-green algae?

Blue-green algae can produce toxins that are harmful to humans and animals when they are swallowed or inhaled or come into direct contact with the skin. Reactions are variable, depending on the length and type of contact. Common symptoms include irritated skin/mucosa, flu-like symptoms and gastrointestinal illness resulting in vomiting, diarrhoea, fever and headache. For more information, see the ACT Guidelines for Recreational Water.



## Myth: Drinking fluoridated water is not safe

### MYTH BUSTED – Fluoridation is a safe and effective way to help reduce tooth decay

Canberrans have been consuming low amounts of fluoride since it was added to the Territory's drinking water in 1964 as a public health measure to prevent tooth decay.<sup>1</sup> However, myths regarding fluoride persist. Those who challenge the health benefits of fluoride claim that it does not prevent tooth decay and that prolonged ingestion can lead to reduced intelligence, damage to bones, brain, kidneys and thyroid, dental fluorosis and other severe health effects.

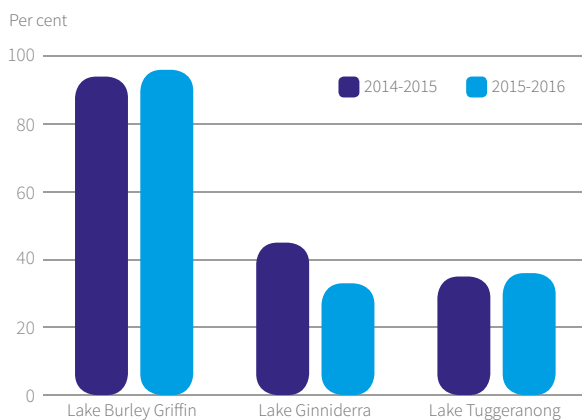
A recent review of the evidence by the National Health and Medical Research Council (NHMRC) tailored to Australia<sup>2</sup> concluded that water fluoridation helps to reduce tooth decay in children and adults. It also found no evidence that water fluoridation at current Australian levels is associated with cognitive dysfunction, lowered IQ, cancer, hip fracture, Down syndrome or any other adverse human health outcomes.

The NHMRC strongly recommended community water fluoridation as a safe, effective and ethical way to help reduce tooth decay across the population. It estimated that water fluoridation reduced the incidence of dental caries in children's teeth by around 35% compared to unfluoridated water.

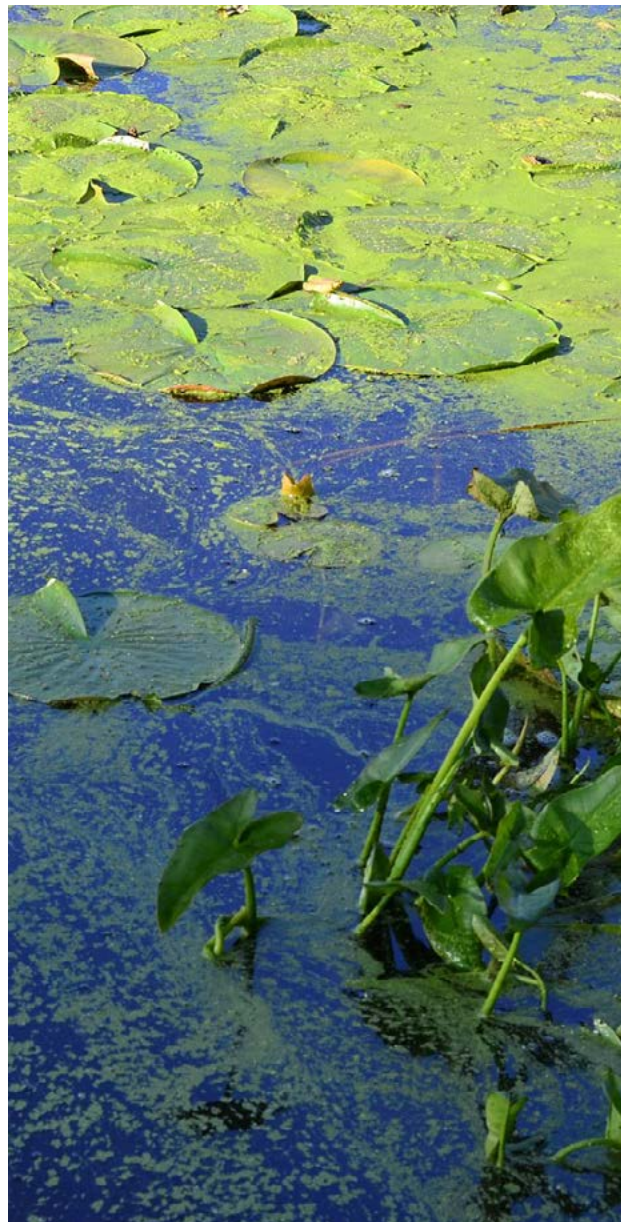
ACT Health regularly monitors Canberra's lakes. If bacteria or blue-green algae levels are high, public health advice is provided and recreational areas may be closed. Generally, large spikes in microbial pathogens are observed after heavy rain.

During the recreational seasons (October to March) in 2014–2016, Lake Ginninderra and Lake Tuggeranong had at least one recreational site closed to primary contact<sup>(a)</sup> for almost two-thirds of the time. In comparison, recreational areas in Lake Burley Griffin were open almost the entire season.

### Days (per cent) all recreational areas within ACT lakes were open, October and March, 2014/2015 and 2015/2016



<sup>(a)</sup> Primary contact involves whole-body contact in which the entire body or the face and trunk are frequently immersed or the face is frequently wet by spray.



## The impacts of climate change on public health

Climate change is one of the most complex issues facing us today. In the words of the World Health Organization’s Director-General, it is ‘the defining health issue of the 21st century.’<sup>3</sup> Canberra’s climate is already changing, and it impacts health both directly and indirectly.

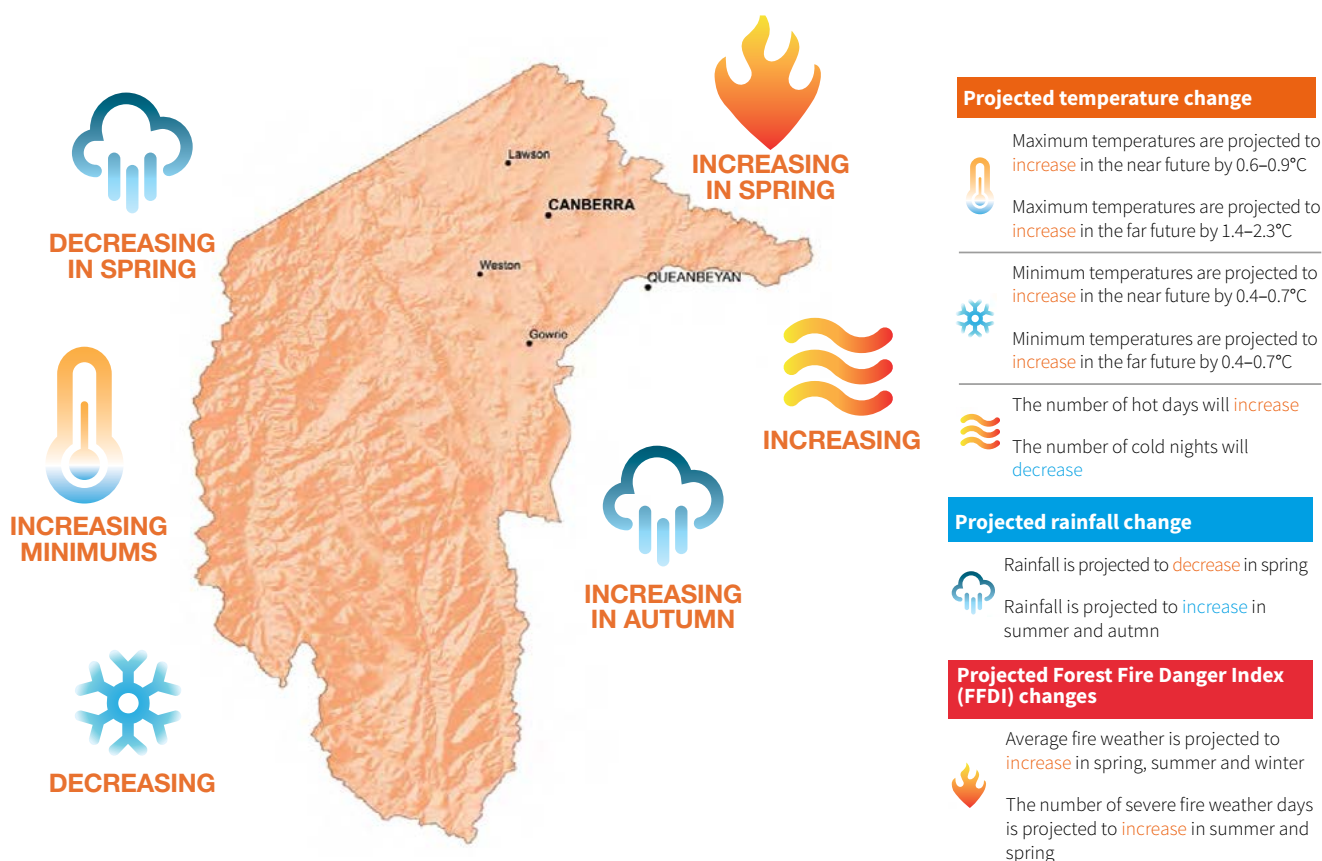
The direct impacts result from rising temperatures, heatwaves and increases in the frequency of complex extreme weather events such as windstorms, floods and droughts.<sup>4</sup> The health and social consequences of these events are

far-reaching, from reduced labour productivity, loss of electricity supply and heat-related deaths and hospitalisations, to direct injury, the spread of infectious diseases and mental health impacts.

Indirect effects of climate change include damage to critical infrastructure and housing from extreme weather events, lower crop yield and agriculture productivity and reducing access to clean water and air.

Both the direct and indirect impacts of climate change are disproportionately felt by the most disadvantaged in our communities. Children, the elderly, the socioeconomically disadvantaged and those with pre-existing medical problems are particularly vulnerable.<sup>5</sup>

## Projected changes for ACT



## CLEAN AIR

Clean air is an important part of keeping a city healthy. By global standards, the ACT has excellent ambient air quality on most days; however, smoke from fires, both within our borders and beyond, can pose a threat to health. Real-time air quality graphs are available on the ACT Health website.

ACT Health operates the Territory's air quality monitoring network. It comprises two National Environment Protection Measure (NEPM) performance monitoring stations in Monash and Florey and a smaller station in Civic. These measure carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), photochemical oxidants such as ozone (O<sub>3</sub>), fine particulate matter less than 10 micrometres (PM<sub>10</sub>) and particulate matter less than 2.5 micrometres (PM<sub>2.5</sub>).

### Smoke is the main air pollutant in Canberra

While several pollutants are monitored, deteriorations in air quality are almost exclusively due to an increase in fine particulate air pollutants. In Canberra, smoke is the main contributor to PM<sub>2.5</sub> levels. In line with increasing recognition of the health impacts of fine particulate air pollution, a new NEPM standard and goal was introduced for PM<sub>2.5</sub> in 2016.

A study by ACT Health from May 2014 to July 2015 revealed that the two main PM<sub>2.5</sub> sources across Canberra were traffic and wood burning (about 60% and 30%, respectively, of the total PM pollution). While PM<sub>2.5</sub> from traffic is fairly constant throughout the year, wood burning adds particulate pollution in winter, particularly with the temperature inversion phenomenon in low-lying areas of Canberra, which can result in higher concentrations of particulate matter.

From 2014 to 2016, there were 14 occasions when the PM<sub>2.5</sub> concentration exceeded the NEPM standard of 25µg/m<sup>3</sup> per 24 hours: 12 at the Monash station and 2 at the Florey site. Six of these events were related to hazard-reduction burns

and eight to smoke from wood fires used for home heating. The new NEPM PM<sub>2.5</sub> goal is 0 days with concentrations above the standard, noting that days with exceptional events such as bushfires and hazard-reduction burns do not count towards this total. The ACT did not meet this new goal in 2014, 2015 or 2016.

There was one occasion when the NEPM PM<sub>10</sub> standard was exceeded at Florey, due to a dust storm.

While there were some health concerns regarding wood smoke pollution in the Tuggeranong Valley during winter, the monitoring data across Canberra indicates that the overall ambient air quality was very high most of the time.

### Thunderstorms can cause asthma

Epidemic thunderstorm asthma is triggered by an uncommon combination of high-grass pollen and a specific kind of thunderstorm that exhibits rapid changes in wind, temperature and humidity. This usually occurs during the grass pollen season, which is late spring to early summer in south-east Australia.<sup>6</sup> Epidemic thunderstorm asthma can result in an increase in acute respiratory symptoms, an increase in hospital admissions and a high demand on health services.<sup>7,8</sup>

Thunderstorm asthma can lead to a sudden and significant increase in individuals who are sensitised to circulating allergens.

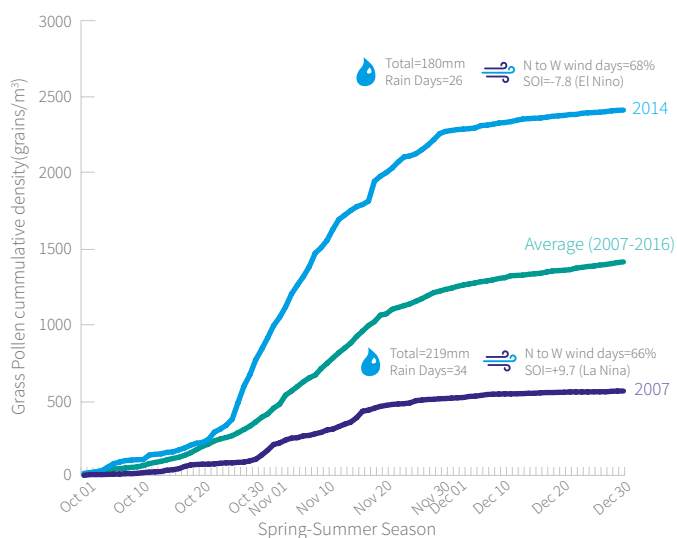
Not all people with asthma are affected by thunderstorm asthma, and many people who suffer from thunderstorm asthma do not have a history of asthma. Thunderstorm asthma also affects individuals who have a history of allergic rhinitis (hay fever), even if they do not have asthma.<sup>9</sup> Of the states and territories, the ACT had the highest rate of hay fever (26%) in 2014–2015. People with hay fever who may have undiagnosed asthma are particularly vulnerable, as they will not have been prescribed suitable asthma medication.

## Pollen monitoring protects the public from thunder-storm asthma

Pollen monitoring helps ACT Health warn the public of atmospheric conditions that may affect their health so that precautionary measures can be taken. Spring and summer 2016/2017 was the 6th year of pollen monitoring in the ACT. This is part of the Canberra Pollen Monitoring Program, developed and maintained by the Australian National University.

The figure below compares a low-grass pollen year (2009) and a high-grass pollen year (2014) with key climatic indicators that are likely to be driving low- or high-grass pollen counts. These include per cent days with northerly to westerly winds, total rain days and total rainfall, all conditions contributing to vegetation growth, pollen production and airborne pollen concentration.

### Climate influences on grass pollen counts in Canberra (Oct-Dec)

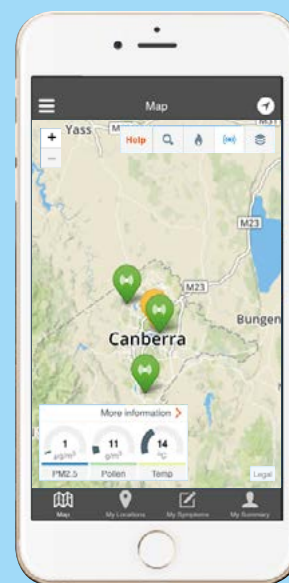


## AirRater app to help Canberrans manage allergy and asthma symptoms

The AirRater smartphone app, introduced in August 2017, provides users with real-time, geographically specific information on pollen, air pollutants and temperature in the ACT. It provides free and practical advice to Canberrans with asthma, hay fever and other lung conditions, and highlights the importance of early intervention to prevent severe symptoms.

The app allows users to enter information daily on their symptoms and medication use. Over time, AirRater will provide individualised reports showing each user how environmental conditions affect their symptoms and alerting them when those conditions exist. This will allow vulnerable Canberrans to modify their behaviours to minimise symptoms.

The AirRater app is a collaboration between ACT Health, the Menzies Institute for Medical Research, the University of Tasmania School of Biological Sciences, the Environmental Protection Authority Tasmania, CSIRO and the ANU. It uses data from the air quality monitoring stations located in Civic, Monash and Florey, pollen counts monitored at the ANU and Bureau of Meteorology weather-monitoring information.



## SAFE FOOD

It can be easy to forget that food can be potentially dangerous if not handled or prepared correctly. Everyone along the production chain, from farm to fork, has a role to play in ensuring the food we eat does not cause illness or disease. Most people will experience a foodborne illness in their lifetime. This highlights the importance of ensuring that the food we eat is not contaminated with harmful bacteria, viruses, toxins or harmful chemicals.<sup>10</sup>

The food safety standards, adopted by every Australian jurisdiction, ensure a nationally consistent approach to safe food handling. The standards outline a risk-based, preventive approach to providing safe and suitable foods and are based on the principle that food safety is best ensured by implementing food hygiene controls at each stage of food handling. Compliance involves adhering to the requirements of the *Food Act 2001* and the Australia New Zealand Food Standards Code. To protect the population, Public Health Officers undertake food safety inspections to

assess compliance of food businesses, including the assessment of adequacy of facilities, structural requirements, hygiene requirements and temperature control. ACT Health also prepares guidelines and information materials to help businesses follow safe food handling practices and to meet their legal obligations, including the *Food Safety is Your Business* guide and the *Food Stall Guidelines*. These are available from the ACT Health website ([www.health.act.gov.au/foodsafety](http://www.health.act.gov.au/foodsafety)), with key publications available in multiple languages.

### Foodborne illness outbreaks are usually caused by *Salmonella*

ACT Health aims to minimise the incidence and impact of foodborne illness on the community.

During 2015 and 2016, there were 15 foodborne or suspected foodborne outbreaks in the ACT, affecting 194 people, of whom 10 were hospitalised.

The bacteria *Salmonella typhimurium* was the most common single causative agent in foodborne disease outbreaks (6 out of 15 outbreaks), with raw or undercooked egg products being implicated in almost all of them (5 out of 6 outbreaks). Food safety legislation helps consumers choose where to eat.

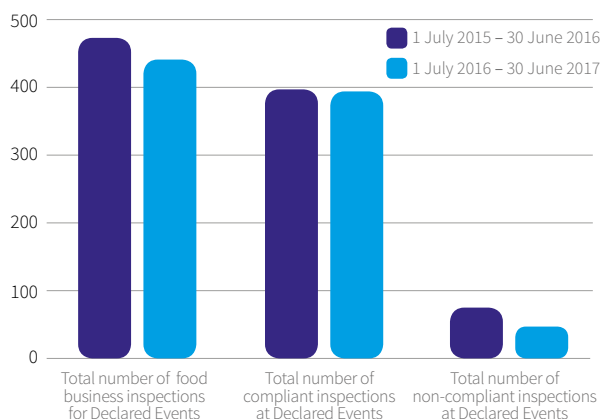


The Health Protection Service manages food safety in the ACT by regulating food businesses, developing food regulations and providing information for food-related businesses and the community. In the 2016/2017 financial year, 1,391 businesses were inspected, with only eight prohibition orders served (a legal direction to a food business to, for example, immediately stop trading).

The Register of Food Offences details food businesses that have been convicted of an offence against the *Food Act 2001*. This allows the community to make an informed choice about the food businesses they visit. Offence information is published on the register after the appeal period has expired and remains on the register for two years.

Between 1 July 2014 and 30 June 2017, 18 food businesses were published on the register and 35 were removed after their statutory two-year publishing period had passed.

### Compliance data for declared events



Note: Compliance means adhering to the requirements of the *Food Act 2001* and the Australia New Zealand Food Standards Code.





## High-risk public events have compliance checks for food safety

Events in the ACT are unregulated unless specifically declared by the Minister for Health as posing a high public health risk to the community; as such, all food stalls operating at a declared event must register with the Health Protection Service. In 2015, the National Multicultural Festival, National Folk Festival, Enlighten Night Noodle Market and Curry Festival in the City were declared as such events.

Fewer non-compliances were identified at declared events in the 2016/2017 financial year compared to the previous financial year. This may be attributed to improved food safety information given to stallholders, with an emphasis on common non-compliances and the importance of providing safe food to the community. As with previous years, Environmental Health Officers conducted information sessions with stallholders before the National Multicultural Festival, to provide food safety information and help them with any enquiries.

## Myth: Drinking raw milk provides health benefits

**MYTH BUSTED** - Raw milk has no proven health benefits and can be hazardous to health

*Raw milk is milk that has not been pasteurised (heated to 72 degrees for 15 seconds) to kill harmful bacteria. Pasteurisation is a legal requirement for milk produced for human consumption in Australia.*

*Raw (unpasteurised) milk has no proven health benefit and can be hazardous to health. It can carry dangerous bacteria such as E.coli, Listeria and Salmonella that can cause severe illness in humans. While the consumption of raw milk is not well documented, it is becoming more popular because of the trend towards more natural foods.*

*Proponents of raw milk assert that it provides nutritional and health benefits, as it has not undergone processing and retains the bacteria naturally present in milk.*

*A scientific review found no evidence that the health benefits of milk were compromised by pasteurisation, with the only disadvantage being the change in the taste of the milk.<sup>11</sup>*

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# HEALTHY WEIGHT



**Professor Rachel Davey**

Director, Centre for Research and Action in Public Health,  
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*“The design of our local urban and natural environments has great potential to contribute substantially to active, healthy living in Canberra. Our research has demonstrated that neighbourhoods designed to support active transport, with local services/amenities and affordable and healthy food within walking distance, help achieve lower rates of overweight and obesity. A cross-sectoral approach that increases as many walkable features as possible is needed to design activity- friendly neighbourhoods. With systematic policy and planning for health, we can make Canberra a city where good health and wellbeing is accessible to all.”*

# REDUCING OBESITY AND OVERWEIGHT

Worldwide, obesity has nearly tripled since 1975<sup>1</sup>, with similar trends reported in Australia.<sup>2</sup> In the ACT, overweight and obesity rates are generally lower than the national average; however, they are still a major concern. In the ACT, overweight and obesity is the third largest contributor to the burden of disease.

Obesity has been linked to adverse health outcomes, such as an increased risk of developing a variety of chronic conditions and early death. These conditions include cardiovascular diseases (mainly heart disease and stroke), diabetes, musculoskeletal disorders and some cancers. Obesity has been indicated as a cause of 39% of endometrial cancer cases, 37% of oesophageal cancer cases, 25% of kidney cancer cases, 11% of colon cancer cases and 9% of postmenopausal breast cancer cases.<sup>3</sup> Furthermore, the risk associated with these diseases increases with increasing body mass index (BMI).<sup>1</sup> Generally speaking, the more body fat a person carries, the greater the health risks.

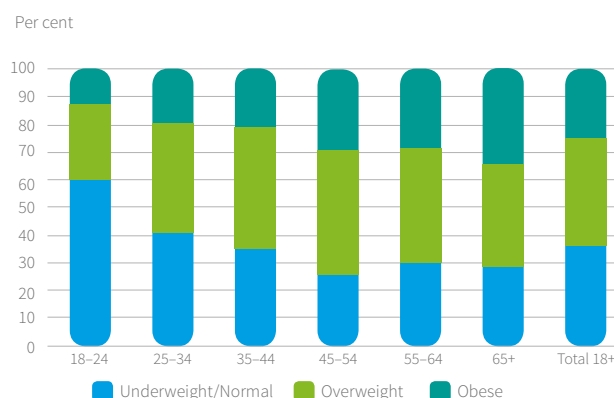
Research estimating the impact of obesity on life expectancy has also found a loss of between two and 10 years, which is similar to the impact of smoking.<sup>4</sup>

## More than half of Canberra's adults are overweight or obese

Overall, 63.5% of adults in the ACT were classified as either overweight or obese in 2014–2015; around 114,000 (39.1%) were overweight and 69,800 (23.9%) were obese.<sup>5</sup>

Of Canberrans aged 45–54 years, more than 7 in 10 were classified as either overweight or obese, compared to 4 in 10 aged 18–24 years. The proportion of adults classified as overweight or obese increased with age but remained relatively stable after around 45 years.

## Weight of ACT residents, 2014–15



Source: ABS 2016. 2014–15 National Health Survey: First results. Cat No. 4364.0.55.001. ABS: Canberra.

## Waist measurement matters

Where fat is located on your body is an important measure of your risk of developing ongoing health problems. Carrying excess body fat around your middle is more of a health risk than if it were on your hips and thighs, regardless of your height or build. For most adults, a waist measurement of more than 94 cm for men and 80 cm for women is an indicator of an increased level of internal fat deposits that coat the heart, kidneys, liver, digestive organs and pancreas. This can increase the risk of heart disease and stroke.

The waistlines of Australian adults are increasing more rapidly than body weight.<sup>6</sup> This is due to a reduction in muscle mass as a result of increasingly sedentary lifestyles and an increase in the proportion of body fat. The implication of this is that people are at an increased risk of disease if their waist gets too big, even if their body weight has not increased.



One-quarter of ACT males and one-fifth of ACT females recorded a waist circumference that put them at an increased risk of developing chronic disease, while a further one-third of males and almost half of females were at a substantially increased risk.

**Measuring your waist is a simple way to check your risk of developing chronic disease.**

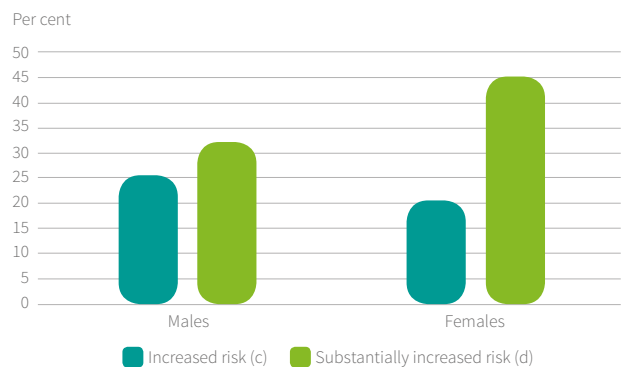
**Increased risk:**

*A waist circumference of 94 cm or more for males or 80 cm or more for women.*

**Substantially increased risk:**

*A waist circumference of 102 cm or more for men or 88 cm or more for women*

**Risk of developing chronic disease based on waist circumference in ACT adults, 2014 – 2015**



ABS 2016, 2014-15 National Health Survey: First results, Cat No. 4364.0.55.001. ABS: Canberra.

## Changes in BMI across the lifespan and between generations

While it appears that overweight and obesity rates have stabilised in recent years, the overall picture is more complex. Changes at a population level are often too small and nuanced to be seen using data from population health surveys alone. Additional data sources are required to gain a complete understanding of the potential impact of overweight and obesity in the future.

Health surveys such as the Australian Bureau of Statistics' National Health Survey and the ACT General Health Survey are useful tools for examining the health status of a population at a given point in time. However, longitudinal studies that follow individuals over extended periods can provide unique insights and a deeper understanding of health issues affecting a population.

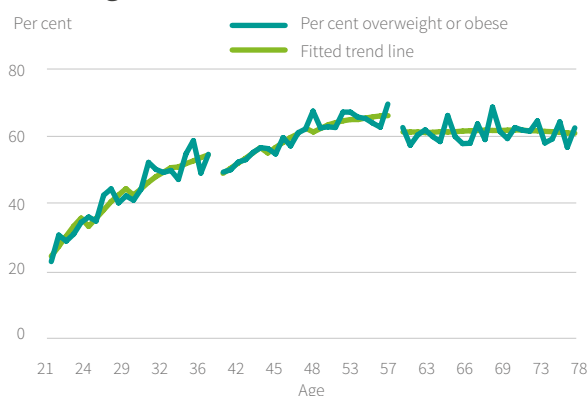
The PATH Through Life Project was established in 1999 and is based on three cohorts, or groups of people, from the ACT and Queanbeyan. At the start of the study, these cohorts were aged 20–24 years, 40–44 years and 60–64 years.

Longitudinal data show us that not only do people tend to put on weight as they age but there is also a generational increase in BMI between the cohorts. For example, 55% of the youngest cohort were overweight or obese at age 37 in 2015 compared with only 50% of the middle cohort at age 40 in 2000. If this trend continues, the younger cohort will be substantially heavier than their peers by the time they reach their 40s and 50s.

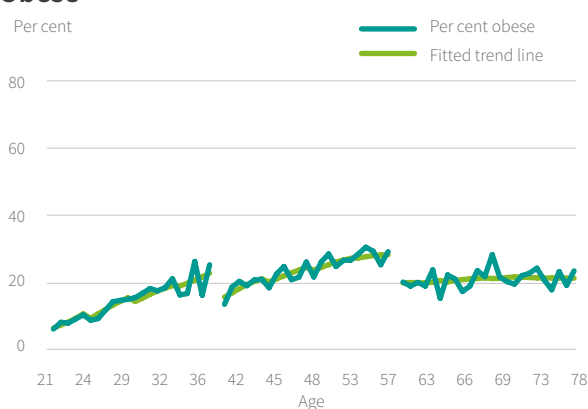
This demonstrates the importance of instilling healthy habits from a young age, as children who are obese are more likely to continue being obese throughout their lifetime.<sup>2</sup>

## Prevalence of overweight and obesity for cohorts of people born in 1980–1984, 1956–1960 and 1937–1941

### Overweight or obese



### Obese



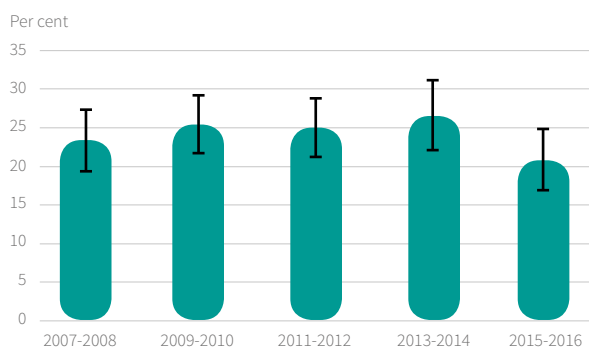
Source: ACT Health Epidemiology Section analysis of PATH Through Life Project data.

## Obese children at risk of developing chronic disease

Children who are obese are very likely to remain obese as adults and are at risk of developing serious chronic diseases. Obese children may experience breathing difficulties, increased risk of fractures, hypertension, early markers of cardiovascular disease, insulin resistance and psychological effects.<sup>1</sup>

As observed throughout the rest of Australia, the proportion of children classified as overweight or obese continues to be a concern in the ACT. Surveys conducted over the past decade have reported that at least 1 in 5 children in the ACT are overweight or obese. While the latest figures for 2015–2016 suggest a downward trend, the survey estimates tend to fluctuate in the ACT due to our small population, and this decrease was not statistically significant. The trend in future years will be closely monitored to see if it continues downward and reaches significance.

## Percentage of ACT children aged 5–17 years classified as overweight or obese



Source: ACT General Health Survey.

In 2016, 78.6% of our Kindergarten students were considered to be a healthy weight, while 11.8% were considered overweight and 3.6% were considered obese. Of those students classified as obese, 65.8% of their parents perceived their child as being at a healthy weight.

Of Year 6 students in the ACT, 1 in 5 were considered overweight or obese in 2015, with boys only slightly more overweight/obese than girls (22.0% and 20.8%, respectively). Almost 1 in 20 Year 6 students were frequently teased about their weight.

For secondary school students, 17.2% were considered overweight or obese in 2014 (1 in 5 males and 1 in 10 females). Among students who attempted to control their weight, 61.7% used increased physical activity while 31.9% changed their diet.

## Perceptions about weight

In 2015



**14.1%**  
Y6 students

stated that they were unhappy with their weight.



**18.2%**  
of Y6 students

who considered themselves to be overweight or obese, were in fact a healthy weight or underweight.

*This was more common among girls than boys.*



**33.8%**  
of Y6 students

who considered themselves to be either underweight or a healthy weight, were found to be either overweight or obese.

While in 2014



**21.2%**  
secondary students

stated that they were unhappy with their weight.



**17.1%**  
secondary students

who considered themselves to be overweight or obese, were in fact a healthy weight or underweight.

*This was more common among females than males.*



**4.8%**  
secondary students

who considered themselves to be either a healthy weight or underweight, were found to be overweight or obese.



## HEALTHY EATING

### Sugar-sweetened drinks contributing to childhood obesity

A sugar-sweetened drink is one that is sweetened with any form of added sugar, such as sucrose, fructose, glucose or fruit sugar syrup. Examples include soft drinks (including diet drinks), energy drinks, fruit drinks, flavoured mineral waters, sports drinks, cordials, iced teas, sweetened waters, sports waters and flavoured crushed ice drinks.

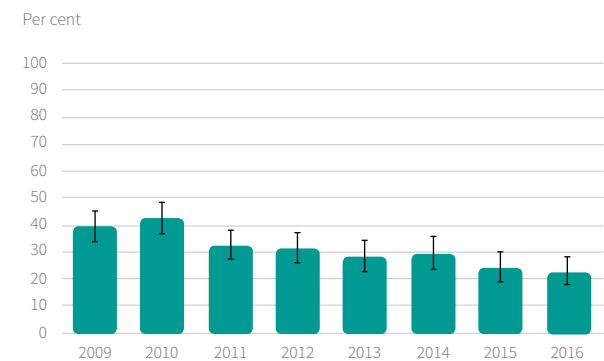
The consumption of sugar-sweetened drinks has been suggested as a contributory factor to the rising levels of childhood obesity in many countries. Recent systematic reviews of the literature have confirmed the link between consumption of free sugars, particularly in the form of sugar-sweetened beverages, and weight gain in both children and adults. Similarly, reducing the intake of sugar-sweetened beverages has been shown to reduce weight gain in children, particularly in those who are already overweight.<sup>7</sup>

Sugar-sweetened drinks are generally consumed quickly and do not provide the same feeling of fullness that solid food provides, so consumers

tend not to reduce intake of other foods sufficiently to compensate for the extra calories provided by those beverages. Excess calories contribute to overweight and obesity as they can be readily converted to body fat and stored within various tissues. Overconsumption is likely exacerbated by an increase in the serving sizes of sugar-sweetened drinks over the last several decades.<sup>7</sup>

The percentage of children (aged 5–15 years) consuming sugar-sweetened drinks in the ACT is trending down. In 2010, 42.7% of ACT children consumed at least two sweetened drinks per week, with that number falling to 23.0% in 2016.

#### Percentage of ACT children aged 5–15 years who drank two or more cups of sugar-sweetened drinks per week



Source: ACT General Health Survey.

## Fruit and vegetables necessary for good health

A high intake of fruit and vegetables is the foundation of a healthy diet. The Australian Dietary Guidelines provide up-to-date advice about the amount and kinds of foods that we need to eat for health and wellbeing. The recommendations to eat two serves of fruit and five or more serves of vegetables is based on a large body of evidence. A high intake of fruit and vegetables reduces the risk of heart disease, early death, some cancers, type 2 diabetes and stroke.

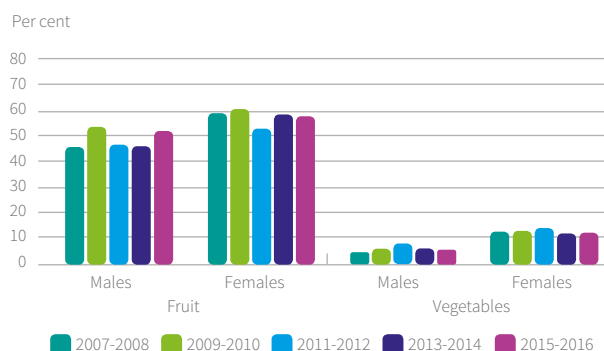
## Vegetable intake remains low in adults

The proportion of adults in Canberra who consumed the recommended serves of fruit and vegetables has remained consistently low over the past decade. Only around 1 in 10 males and females consumed the recommended five serves of vegetables per day (7.1% and 13.6%, respectively).

In general, across all age groups, men were less likely to eat vegetables than women. On average, males consume 2.2 serves of vegetables per day, while females consume 2.8 serves daily. A higher proportion of people aged 50 years or older consumed five or more serves of vegetables daily. Persons aged 60–69 years reported the highest proportion of those who consumed five or more serves of vegetables in 2014–2016 (17.0%).

The picture is better for fruit intake. In 2015–2016, 52.0% of males and 57.7% of females consumed two serves of fruit per day. Fruit intake is generally highest among children, with three-quarters of those aged 5–9 eating enough fruit. This rate fell steadily by age, with persons aged 30–39 years recording the lowest rate (50.8%). Older adults were more likely to consume two or more serves of fruit per day than their younger counterparts.

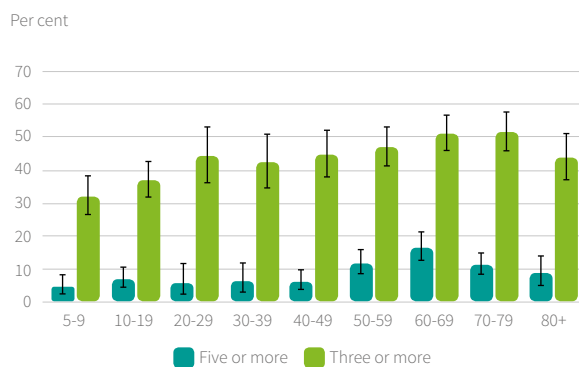
## Percentage of adults in the ACT who eat two serves of fruit and five serves of vegetables daily



Source: ACT General Health Survey.

Although very few people reach the recommended intake of vegetables, there are signs that a larger proportion of Canberrans are consuming three serves of vegetables a day, which provides some health benefits and a base from which to improve. The proportion of those who consume at least three serves of vegetables increased with age. Around 32.8% of children aged 5–9 years consumed three or more serves of vegetables, compared to 52.9% of older Canberrans aged 70–79 years.

## Percentage of ACT residents who eat 3+ or 5+ daily serves of vegetables, 2014–2016



Source: ACT General Health Survey.

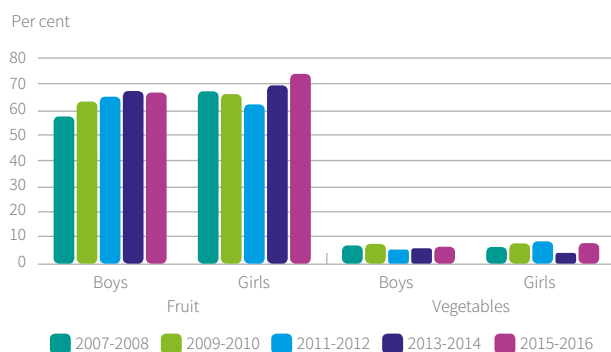
## Children eating more fruit, but vegetable intake is still too low

Vegetable and fruit consumption is especially important early in life, as food preferences and dietary patterns often start in childhood and continue on to adolescence and adulthood.

Similar to adults, children and young people are more likely to eat enough fruit and fall short when it comes to vegetable intake.

Among people aged 5–17 years in 2015–2016, 66.8% of boys and 74.1% of girls consumed the recommended two serves of fruit each day. However, less than 1 in 10 boys and girls consumed the recommended five serves of vegetables daily (6.8% and 8.2%, respectively).

### Percentage of ACT children aged 5–17 years who consumed two serves of fruit and five serves of vegetables daily



Source: ACT General Health Survey.

While less than 10% of children and young people aged 5–17 years in the ACT are consuming the recommended five serves of vegetables, in 2015–2016, more than one-third of this age group (boys 34.7%, girls 37.3%) consumed at least three serves of vegetables daily. Despite being below the recommended daily serves, this provides a base to work from where we can encourage young Canberrans to consume more vegetables.

## How much fruit and veg should children eat?

*The recommended daily serves of fruit and vegetables for children depends on their age and sex.*

*Boys and girls aged 4–8 years should eat 1½ serves of fruit and 4½ serves of vegetables each day.*

*Boys and girls aged 12–18 years should both eat 2 serves of fruit daily; however, boys of this age should eat 5½ serves of vegetables while girls should eat 5 serves.*

**Source: Australian Government Department of Health<sup>8</sup>**

## Steps towards a healthy food environment

Food choices are shaped by the environment around us – our shops, workplaces, schools and the media. Often this environment makes it too easy to choose unhealthy foods and can crowd out healthy food messages from other sources.<sup>10</sup>

While there is much important work to do, the ACT has been recognised as a leader in creating healthy food environments. The Food Environment Policy Index (February 2017) describes the extent to which Australian governments are implementing globally recommended policies for tackling obesity and unhealthy food environments.

The ACT scored strongly in many policy domains and was recognised as a leader in:

- › restricting advertising of unhealthy food on government buses
- › monitoring unhealthy food marketing to children
- › requiring fast food chains display the energy content of each menu item
- › setting clear targets for obesity rates
- › showing clear leadership through the whole-of-government Healthy Weight Initiative.

In 2015, a community consultation was held on ways to reduce the marketing of unhealthy food and drinks and increase the promotion and



availability of healthier options. The consultation attracted more than 500 responses, and the supporting social media campaign reached more than 200,000 Facebook users and 32,000 Twitter users. Respondents noted the impact of marketing on children's food and drink preferences and purchase requests and indicated support for restricting marketing techniques that cause their children to pester them for unhealthy products.

In response the ACT government is:

- › working with businesses, sporting clubs and event organisers to role model health-promoting strategies across ACT Government venues, events and workplaces
- › introducing arrangements with its bus advertising provider, Go Transit, to ensure that ACTION bus advertisements promote healthier choices consistent with the Australian Dietary Guidelines and the Australian Guide to Healthy Eating
- › working collaboratively under the Council of Australian Governments' Health Council to consider collective action that could improve children's health by limiting the promotion and availability of unhealthy food and drinks.

## Myth: A healthy diet is too expensive

**MYTH BUSTED** – Replacing discretionary foods with healthy foods can reduce costs

*In 2015, research was undertaken to calculate the amount of money spent on discretionary foods in Canberra. The results found that discretionary food and drinks made up half (50–60%) of the total food spend.*

*In a household of two adults and two children (one teenage boy and one primary school aged girl), the average fortnightly amount spent on food and drinks was \$753, of which \$435 (58%) was for discretionary foods including \$119 for takeaways, \$27 for soft drinks and \$87 for alcoholic beverages.*

*If discretionary foods were replaced with healthy foods that allowed the family to meet their recommended intake of core foods, the total spend would be \$626, a saving of \$127 or 16%.<sup>9</sup>*

*“Children are more vulnerable to marketing than parents, and targeting them creates problems for parents. It would help the community if parents didn't have to battle their kids every time they went to the supermarket.”*

*“No unhealthy food at checkouts – pester power is too strong.”*

**We are listening and responding to the Canberra community**

*“Why do we allow marketing [of] unhealthy food and drinks, particularly to children, at all?”*



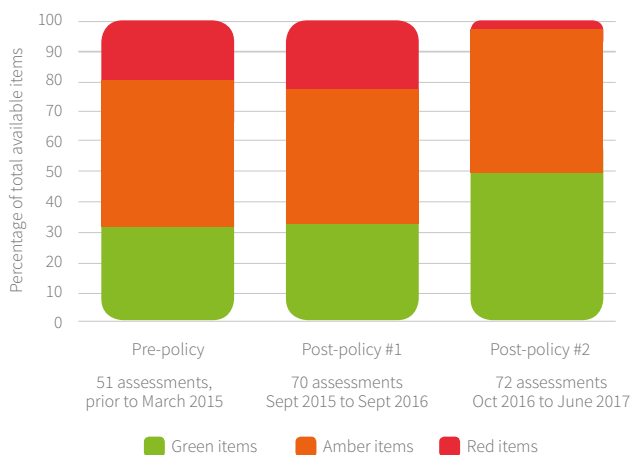
## Healthier school canteens

One of the actions from the ACT Government's Towards Zero Growth: Healthy Weight Action Plan was the implementation of an ACT public school food and drink policy with supporting resources that mandate the implementation of the National Healthy School Canteen Guidelines in ACT Government schools.

The 2016–2017 Healthy Weight Initiative Progress Report noted that:

- › canteens have continued their concerted effort to make changes to meet the guidelines and policy requirements
- › the ACT Nutrition Support Service completed 70 canteen menu assessments in ACT public schools in 2015–16 and 72 in 2016–2017
- › GREEN food and drinks now represent 49% of all the food and drinks available across public school canteens, and the proportion of RED food and drinks has dropped from 23% to only 3% of all food and drink items.

### Canteen menu assessments in ACT public schools, 2015/2016 and 2016/2017



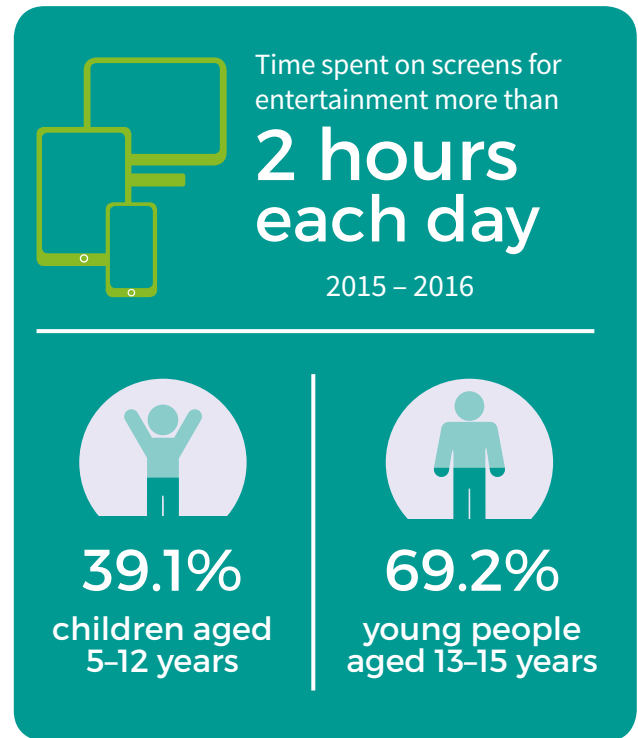
## ACTIVE LIVING

Active living is a way of life where physical activity is integrated into daily routines. Examples include taking the stairs, walking the dog, riding a bike, walking to the shops and playing in the park. Building incidental physical activity into everyday life can help more Canberrans meet the national physical activity guidelines.

### Australian Physical Activity and Sedentary Behaviour Guidelines for adults

- › Doing any physical activity is better than doing none. If you currently do no physical activity, start by doing some, and gradually build up to the recommended amount.
- › Each week, accumulate 150–300 minutes of moderate-intensity physical activity or 75–150 minutes of vigorous-intensity physical activity, or an equivalent combination of both.
- › Be active on most, or preferably all, days every week.
- › Do muscle-strengthening activities on at least two days each week.
- › Minimise the amount of time spent in prolonged sitting. Break up long periods of sitting as often as possible.

## Roughly half of all Canberrans are meeting the physical activity guidelines



Source: ACT General Health Survey.

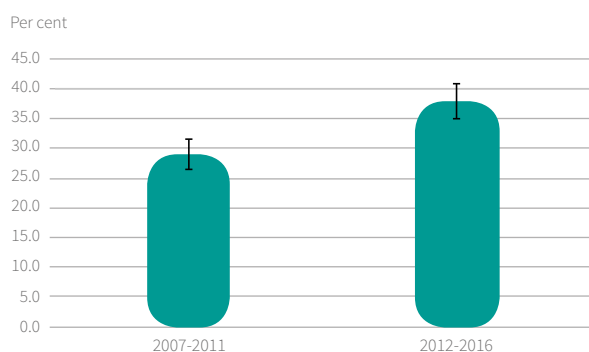
## More children riding or walking to school

Active travel to school is one of the most efficient ways to ensure children receive the recommended 60 minutes of physical activity each day.

Between 2007 and 2016, the proportion of children who rode or walked to school increased by an average of 1.6% per year. In 2012–2016, 38.7% of children rode or walked to school.

The distance in which students live from school was assessed, with 73% of students living less than 2 kilometres from their school of enrolment and less than 10% living more than 5 kilometres away. Part-way drop-off locations provide alternatives for parents who need to drive their children to school.

### Percentage of ACT children aged 5–17 years participating in active travel<sup>(a)</sup>



a) Usual method of transport to work or school.  
Source: ACT General Health Survey

*Active transport includes non-motorised forms of transport involving physical activity, such as walking and cycling. It also includes the use of public transport, as many of these trips include walking or cycling and therefore increase levels of physical activity.<sup>11</sup>*

## Ride or Walk to School

The Ride or Walk to School program aims to increase walking, cycling and use of public transport among primary school students in the ACT to address childhood overweight and obesity levels. There are many benefits of students using active travel to and from school:

- › Health benefits – Riding or walking to school is a simple way to fit physical activity into kids' days.
- › Educational benefits – Kids who ride or walk to school are more likely to be alert and ready to learn during the school day.
- › Environmental benefits – When kids walk or ride their bikes, the wider community benefits through:
  - reduced traffic congestion
  - reduced noise and air pollution
  - reduced greenhouse emissions
  - safer school environments.

The program was designed in consultation with the ACT Children and Young People's Commissioner and with input from more than 550 students from Kindergarten to Year 12 across nine schools. Stakeholders were also consulted to address barriers to active travel, and the program was launched in 2012.

Ride or Walk to School has reached more than 31,500 students in 68 primary schools. It has helped schools develop active travel plans, guidelines and maps with safe routes, provided professional development for teachers, provided bikes, helmets and maintenance kits, assisted with bike storage, run self-defence classes to enhance student safety and given BMX workshops to increase confidence and skills. A high school version of the program is now available, with It's Your Move – Safe Cycle lending high schools bikes and providing curriculum resources for a three-week cycling education program linked to the Australian curriculum.

The recent independent evaluation of the Ride or Walk to School program found that it has successfully increased the rates of active travel among primary school students participating in the program:

- › The proportion of students in participating schools using active travel at least once a week increased from 58% to 65%.

- Children attending a school participating in the program were more likely to use active travel as their usual mode of travel to school (51%) compared with children in schools not participating in the program (31%).
- Most teachers (92%) participating in the Safe Cycle component of the program reported increased confidence in teaching cycling education.

The full evaluation report is available online.

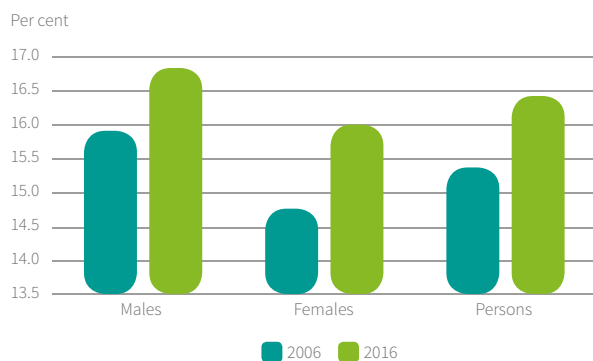
The programs are currently managed on behalf of ACT Health by the Physical Activity Foundation. More information on Ride or Walk to School and It's Your Move – Safe Cycle is available online.

## Few Canberrans actively commuting

In 2006, around 23,000 Canberrans aged 15 years or older chose some form of active travel to work; by 2016, this had increased to 29,000. Active travel increased from 15.4% to 16.4% of all travel to work. Of those Canberrans who used active transport options to travel to work in 2016:

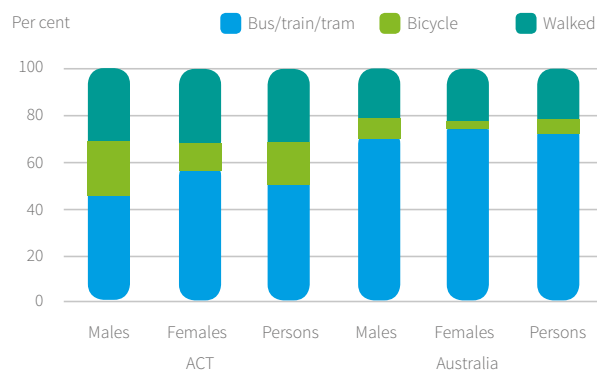
- almost twice as many males (23.6%) as females (12.1%) rode a bicycle
- females (55.9%) were more likely to catch a bus than males (44.9%)
- a similar proportion of males and females walked to work (31.5% and 31.9%, respectively).

### Percentage of people in the ACT aged 15 years and older utilising active travel to work



Based on usual place of residence. Excludes persons who worked from home, did not go to work and method of travel not stated. Source: Census of Population and Housing, General Community Profile, Australia & the Australian Capital Territory Cat. No.2001.0.

### Percentage of people aged 15 years and older participating in active transport for work by method, 2016



Based on usual place of residence. Excludes persons who worked from home, did not go to work and method of travel not stated.

Source: Census of Population and Housing, General Community Profile, Australia & the Australian Capital Territory Cat. No.2001.0.

## Integrating active living into the Territory Plan

*Urban planning can play a vital role in creating a healthier population, as outlined in the ACT Government's Towards Zero Growth: Healthy Weight Action Plan (2013) and demonstrated through its work with the Heart Foundation ACT on the Active Living Program. Urban environments that promote active lifestyles lead to economically, environmentally and socially thriving and resilient cities.*

*At the end of 2017, active living principles were incorporated through Variation 348 into Canberra's planning and statutory framework (the Territory Plan), meaning that they will impact all aspects of future planning and development. The six principles are connected places, open space, mixed land use and density, safe and attractive places, supportive infrastructure and environments for all.*

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# HEALTHY LIFESTYLE



**Professor Michael Moore, AM.**

CEO: Public Health Association of Australia,  
2008–2018

President: World Federation of Public Health  
Associations

*“Achieving healthier lifestyles means ensuring an appropriate balance between personal responsibility and good government stewardship. The most effective policies to reduce death, disease, illness and injury combine these two facets. Applying sensible regulation, running effective campaigns and engaging with the community in appropriate settings will continue to improve the health of our community and the productivity of our citizens.”*

Lifestyle risk behaviours – including smoking, drinking alcohol, unsafe sex and illicit drug use – are responsible for a large proportion of disease burden in the ACT. Individuals frequently make choices that impact their health; however, it is important to recognise that these health behaviours do not occur in a vacuum, but are influenced by a complex interplay of factors.<sup>1</sup> Reducing risk behaviours requires collaboration across multiple agencies and community sectors. Interventions such as supportive policy environments, regulation and health education are all important to help Canberrans make healthier and safer lifestyle choices to improve the health of our community.

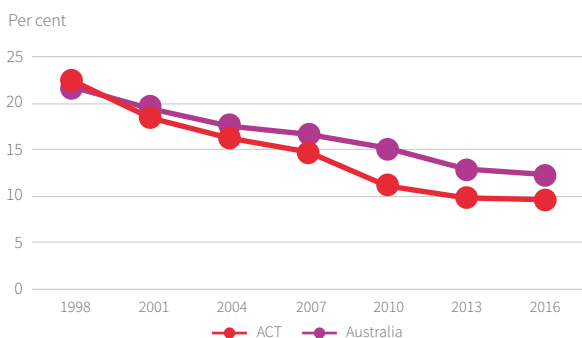
## REDUCING TOBACCO USE

Through a range of public health initiatives, Australia now has one of the lowest smoking rates in the world.<sup>2</sup> Tobacco smoking rates in the ACT have fallen significantly over the past two decades, representing a major public health success. However, smoking remains a leading health risk, contributing to 5.4% of the total burden of disease in the ACT.

### Decline in tobacco smoking

The proportion of people aged 14 years and over who smoke every day has declined steadily both in the ACT and across Australia. The daily smoking rate has more than halved, from 22.5% in 1998 to 9.5% in 2016. The ACT continues to have the lowest smoking rate in Australia. However, it is the leading contributor to the burden of disease in the ACT.

#### Percentage of people aged 14 years and older who smoke every day

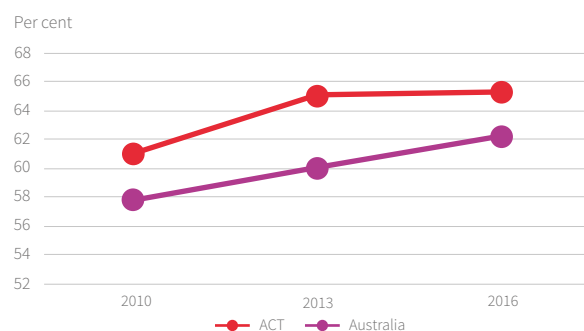


Source: AIHW National Drug Strategy Household Survey, multiple years.

### Fewer people taking up smoking

Fewer people are taking up smoking, and the proportion of people who have never smoked is increasing over time. In 2016, almost 66% of ACT residents aged 14 years and older reported that they have never smoked. This was the highest figure of all Australian jurisdictions and an increase on the 2010 figure of around 61%.

#### Percentage of people aged 14 years and over who have never smoked



Source: AIHW National Drug Strategy Household Survey, 2016.

### Some groups of people have higher smoking rates

There are pockets within the ACT community where smoking rates remain stubbornly high. These are generally people who are socially excluded and/or from low socioeconomic groups, such as people who identify as Aboriginal and Torres Strait Islander,





people with a mental illness, people with other drug or alcohol dependencies, imprisoned people and the homeless. In addition, across Australia, people who have migrated from countries with high smoking rates and those who identify as LGBTI are also much more likely to smoke.<sup>3</sup> In the ACT, data regarding smoking rates in most of these groups is limited, due to our small population.

## Younger people starting smoking later

Younger people are delaying the age at which they first start smoking. In 1998, nationally, the average age of initiation was 14.2 years; by 2016, this figure had risen to 16.3 years.

## Aboriginal and Torres Strait Islander people more likely to smoke

Aboriginal and Torres Strait Islander Australians are significantly more likely to smoke than their non-Indigenous counterparts, regardless of the state or territory in which they live.<sup>4</sup> In the ACT, 36.9% of Aboriginal and Torres Strait Islander people aged 15 years and older smoked on a daily basis in 2014–2015. While this was similar to the national rate (38.9%), it was three times higher than the rate for the non-Indigenous population.

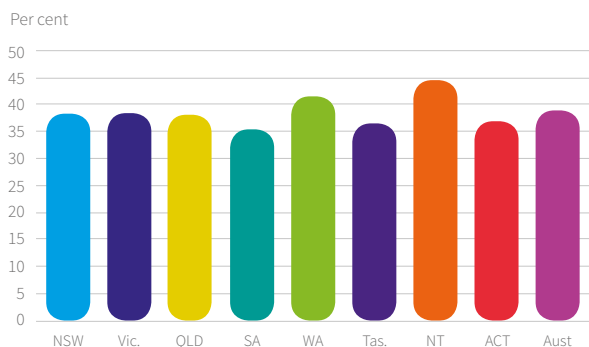
## Smoking rates vary

*Despite the significant fall in smoking rates across Australia, there is significant variation across Australia, according to the National Health Survey:*

- People who were **unemployed** were almost twice as likely to smoke than people with jobs.
- Of people experiencing the highest level of relative **socioeconomic disadvantage**, 21.4% were current smokers in contrast to only 8% of people experiencing the least socioeconomic disadvantage.
- People with a higher level of **education** were in general less likely to smoke. Only 5.6% of people with a bachelor's degree were current smokers, whereas that figure was 16.0% for people who did no further study after finishing Year 12.
- People **living alone** or as a **single parent** with children were around twice as likely to smoke (19.0% and 23.4%, respectively) than couples with or without children (11.5% and 10% respectively).

*Although we can't be certain due to small numbers in the ACT, it is likely that similar variations exist here.*

## Percentage of Aboriginal and Torres Strait Islander people aged 15 years and older who smoke every day, 2014–2015



Source: ABS Cat. No. 4714.0. National Aboriginal and Torres Strait Islander Social Survey, Australia, 2014–15.

## Smoking in pregnancy harms the child

There has been a decrease in the number of mothers who smoked during pregnancy, from 10.6% in 2010 to 6.6% in 2015. However, smoking rates among teenage mothers remained high at around 37%. By comparison, 20.9% of mothers aged 20–24 years and 5.1% of mothers aged 25–39 years reported that they had smoked during their pregnancy.

**Myth: It is harmful to stop smoking while pregnant, and there are advantages to smoking, like having a small baby**

**MYTH BUSTED –** Quitting smoking during pregnancy is good for mother and baby

*Smoking in pregnancy is the most important preventable cause of a range of adverse pregnancy outcomes for mother and baby. There is growing evidence of serious harm extending into childhood and even adulthood.*

*Birthweight is highly related to smoking. Babies of women who smoked during pregnancy are significantly more likely to have a low birthweight than those of women who did not smoke. Babies born with low birthweight have poorer survival and health. It is also a risk factor for physical and neurological disability and the development of conditions such as type 2 diabetes and high blood pressure later in life.*

*Mothers who quit smoking by the third month of pregnancy or the end of the first trimester have babies the same weight as those of non-smokers.<sup>4</sup>*

## Percentage of women who smoke ACT, 2011–2015



**37.1%**  
under  
20 years



**20.9%**  
20–24  
years



**5.1%**  
25–39  
years



**5.8%**  
over  
40 years

reported smoking at first antenatal visit

Source: ACT Maternal Perinatal Data Collection.

Overall, Aboriginal and Torres Strait Islander women were six times more likely to smoke during pregnancy (45.4%) than their non-Aboriginal and Torres Strait Islander counterparts (6.3%). This trend was consistent across all age groups.

**Percentage of women who smoke by Aboriginal and Torres Strait Islander status, ACT, 2011–2015**

Age	Aboriginal and Torres Strait Islander	Non-Aboriginal and Torres Strait Islander
Under 20 years	43.6%	36.2%
20–24 years	53.4%	19.2%
25–39 years	42.9%	4.6%
Over 40 years	33.3%	5.5%

Source: ACT Maternal Perinatal Data Collection.

## Are electronic cigarettes harmless?

Electronic cigarettes (e-cigarettes or personal vaporisers) are products that create aerosols containing flavouring agents that are inhaled. They simulate the act of tobacco smoking and are frequently marketed as a mechanism to help smokers quit. While e-cigarettes may be less harmful than smoking, they increase the risk of harm to health for ex-smokers and those who have never smoked.<sup>5</sup>

The 2016 Australian National Drug Strategy Household Survey<sup>6</sup> found that e-cigarette use was most common in smokers under 25 years of age and that most young people try e-cigarettes out of curiosity. There is emerging international evidence that e-cigarettes are acting as an entry point to tobacco smoking by young people.<sup>7</sup>

In 2013, the NSW Ministry of Health found that 70% of vape liquid samples tested contained high levels of nicotine.<sup>8</sup> This makes it likely that some e-cigarette liquids sold in the ACT may also contain nicotine, even when labelled ‘nicotine-free’.

Based on 2015–2016 figures from the ACT General Health Survey, around 95% of Canberrans stated that they had not tried electronic cigarettes and about 3.4% had tried an electronic cigarette but were not a current user.

## Taking a precautionary approach to prevent harm from electronic cigarettes

*The risks and benefits of electronic cigarettes are not fully known and are the subject of debate among health experts. The ACT takes a precautionary approach to the regulation of e-cigarettes, preventing harm where there is scientific uncertainty until a body of evidence establishes a requirement for alternative regulation. It also takes into account the potential for e-cigarettes to disrupt the decline in tobacco use in the ACT.*

*Since August 2016, electronic cigarettes and personal vaporisers (e-cigarettes) have been regulated as smoking products under the Tobacco and Other Smoking Products Act 1927. This means that e-cigarettes cannot be sold to anyone under 18 years, they cannot be used in smoke-free areas and they have the same restrictions on advertising, display and marketing as tobacco. E-cigarettes are regulated as tobacco products even if they do not contain nicotine.*

*Under the Medicines Poisons and Therapeutic Goods Act 2008, the sale or supply of liquid nicotine for use in e-cigarettes is illegal without a prescription. Nicotine is classified as a Schedule 7 substance (dangerous poison) by the Commonwealth Poisons Standard. Any decision to prescribe nicotine as a therapeutic substance should be made in close consultation between patients and their doctor.*

*The ACT bases its approach on a range of evidence, including that provided by the National Health and Medical Research Council (NHMRC) CEO Statement on Electronic Cigarettes<sup>6,9</sup> and the scheduling decision made by the Therapeutic Goods Administration in relation to the use of nicotine.<sup>10</sup>*

## Canberrans want to reduce tobacco-related problems

The majority of Canberrans aged 14 years and older support measures to reduce the problems associated with tobacco use in the ACT. Such support tends to be slightly higher in the ACT than nationally. In 2016, almost 9 in every 10 Canberrans supported stricter enforcement of the law against the supply of tobacco to minors, while around 7 in 10 people supported the idea of making it harder to buy tobacco products in shops. Almost two-thirds supported raising the legal age for sale or supply of tobacco products to 21, and almost 8 in 10 supported prohibition of the sale of e-cigarettes to people under 18 years of age.



## Smoke-free legislation and smoke-free places

The ACT Government has taken action to limit the harmful effects of passive smoking and reduce the exposure of children and young people to role-model smoking:

- › In March 2016, the *Smoke-Free Public Places Act 2003* was amended to allow the establishment of new smoke-free public places and events by Ministerial declaration.
- › In September 2016, play spaces managed by the ACT Government were declared smoke- and vape-free.
- › In October 2017, public transport waiting areas were declared smoke- and vape-free.
- › Smoke-free policies are also in place in the ACT in the grounds of many major facilities, including all hospitals and ACT Health facilities, ACT Government schools, all tertiary institutions, the GIO Stadium and Manuka Oval.



# REDUCING ALCOHOL-RELATED HARM

While Australians perceived methamphetamines (including ice) to be the drug of most concern to the community, alcohol remains Australia's most extensively used drug.<sup>6</sup> In the ACT, alcohol accounts for 4.2% of the total burden of disease, making it the fourth-highest risk factor leading to ill-health. Excessive alcohol consumption is associated with liver, breast, mouth and pharyngeal, bowel, laryngeal and oesophageal cancers.<sup>11</sup>

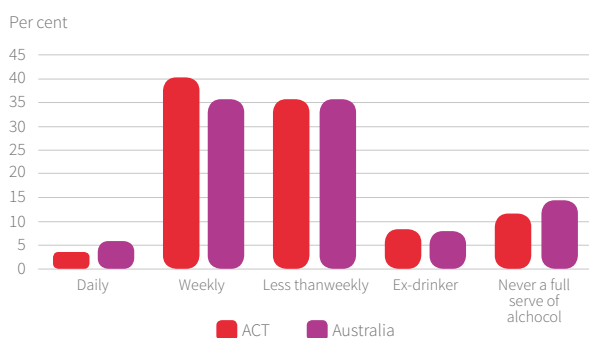
Alcohol consumption is widespread in Australia and embedded into many cultural and social traditions. However, recent national research shows that attitudes towards alcohol are changing. In 2001, 22% of people across Australia named excessive alcohol consumption as the most serious drug problem in Australia; by 2013, this rate had doubled (44%).<sup>12</sup>

## Most Canberrans drink alcohol

While the vast majority of Canberrans were classified as current drinkers in 2016 (79.8%), less than 3.6% of those aged 14 years and older reported that they drank alcohol daily; 40.4% stated that they drank weekly, and for 35.8% it was less than weekly.

Younger people are starting to drink alcohol later. The average age of initiation for males and females in the ACT increased from 14.4 years in 2008 to 16.1 years in 2016.

### Percentage of people aged 14 years and over who drink alcohol daily, 2016



Source: AIHW National Drug Strategy Household Survey, 2016.

## Rates of risky drinking are declining

Lifetime risky drinking of alcohol is the accumulated risk from drinking either on many occasions or regularly (for example, daily) over a lifetime. The lifetime risk of harm from alcohol-related disease or injury increases with the amount consumed.

In 2016, 14.3% of the ACT population aged 14 years and older drank alcohol at levels considered risky over a lifetime. This has fallen significantly since 2013, when that figure was 22.0%.

### Australian guidelines to reduce the health risks from drinking alcohol

#### **Guideline 1: Reducing the risk of alcohol-related harm over a lifetime**

*The lifetime risk of harm from drinking alcohol increases with the amount consumed.*

*For healthy men and women, drinking no more than two standard drinks on any day reduces the lifetime risk of harm from alcohol-related disease or injury.*

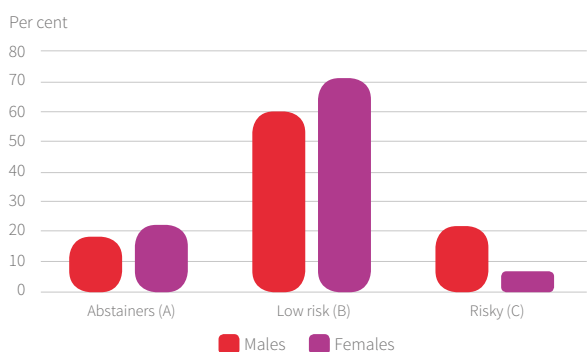
#### **Guideline 2: Reducing the risk of injury on a single occasion of drinking**

*On a single occasion of drinking, the risk of alcohol-related injury increases with the amount consumed. For healthy men and women, drinking no more than four standard drinks on a single occasion reduces the risk of alcohol-related injury arising from that occasion.*

Men are more likely to drink alcohol at levels that put them at risk of lifetime harm. In 2016, around one in five ACT males aged 14 years and older drank at those levels (on average, they had at least two standard drinks per day). This was three times higher than their female counterparts.

However, for both males and females, these figures represented a significant decrease on the figures reported in 2013 (32.7% and 11.6% for males and females, respectively).

### Percentage of ACT residents aged 14 years and older at risk of lifetime harm from alcohol



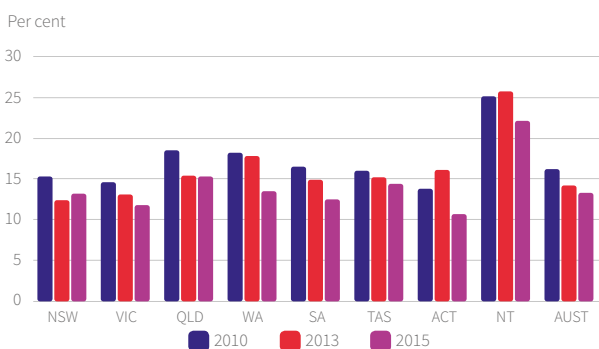
(A) Not consumed alcohol in the previous 12 months.  
 (B) On average, had no more than two standard drinks per day.  
 (C) On average, had more than two standard drinks per day.  
 Source: AIHW National Drug Strategy Household Survey 2016.

## Single-occasion risky drinking

Single-occasion risky drinking of alcohol is defined as drinking more than four standard drinks on a single occasion.

Around 1 in 10 Canberrans aged 14 years and older engaged in risky drinking at least once a week in 2016. This was the lowest rate recorded by the jurisdictions and a significant decline on the 2013 figure of 16.1%.

### Percentage of people aged 14 years and older engaging in single-occasion risky drinking at least weekly<sup>(a)</sup>

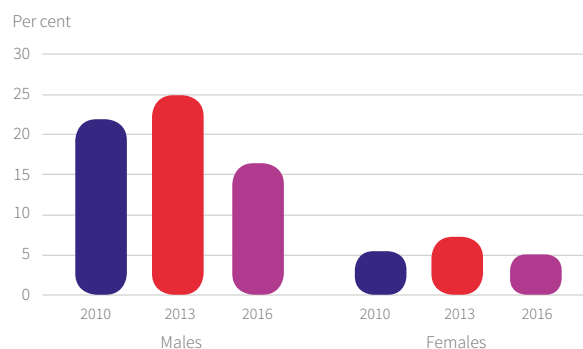


<sup>(a)</sup> Had at least four standard drinks at least once a week.  
 Source: AIHW National Drug Strategy Household Survey 2016

## Men more likely to drink alcohol at risky levels

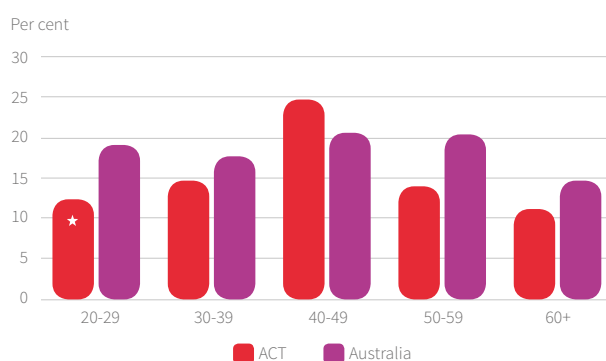
The proportion of ACT men aged 14 years and older who engaged in risky drinking at least weekly fell significantly between 2013 and 2016 (25.0% and 16.5%, respectively). While this fall is encouraging, it is still three times higher than the figure recorded by ACT women, with 5.1% stating that they had consumed alcohol at risky levels at least weekly in 2016. Canberrans between the age of 40 and 49 were the most likely to drink alcohol at levels that put them at risk of long-term harm.

### Percentage of people in the ACT aged 14 years and older engaging in single-occasion risky drinking at least weekly<sup>(a)</sup>



<sup>(a)</sup> Had more than four standard drinks at least once a week.  
 Source: AIHW National Drug Strategy Household Survey 2016.

### Percentage of people at risk of alcohol-related harm over a lifetime<sup>(a)</sup>, 2016



\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

<sup>(a)</sup> On average, had more than two standard drinks per day.  
 Source: AIHW National Drug Strategy Household Survey 2016.

## Does alcohol use impact Canberra's emergency departments?

Modelled estimates based on nationally agreed and validated methods were used to estimate presentations to ACT emergency departments due to alcohol-attributable injuries and the toxic effects of alcohol have been trending upwards over the last four years. Emergency department presentations for alcohol-attributable injuries have been increasing at an average of 4.2% per year.

### Alcohol-related presentations to ACT emergency departments

Financial year	ED presentations for toxic effects of alcohol		ED presentations for alcohol attributable injuries* (15+ years)	
	Number	Incidence rate (per 1,000)	Estimated number	Incidence rate (per 1,000)
2012/13	721	1.9	6,724	21.9
2013/14	710	1.9	7,057	22.7
2014/15	762	2	7,411	23.6
2015/16	783	2	8,037	24.8

\* Attributable injuries were modelled using methods described in Chikritzhs et al, 2011.<sup>13</sup>  
 Note: The estimated number of alcohol-attributed injuries uses abstainers as the reference group and the 2007 drinking prevalence.  
 Sources: ABS ERP 2017 ACT Emergency Department Data Collection.

## Community support to reduce alcohol-related problems

Most Canberrans supported the idea of reducing the problems in the community associated with alcohol:



Source: AIHW 2017. National Drug Strategy Household Survey 2016: detailed findings.

# REDUCING HARM FROM ILLICIT DRUGS

Illicit use of drugs (illicit drug use) covers the use of illegal drugs and non-medical use of pharmaceutical drugs. Illicit drug use causes many health, social and economic harms, including injury, mental health problems and road trauma. Social harms include violence and other crime, contribution to domestic and family violence, and unhealthy childhood development and trauma. Drug problems are associated with social and health determinants, such as unemployment, homelessness, poverty and family breakdown.<sup>14</sup>

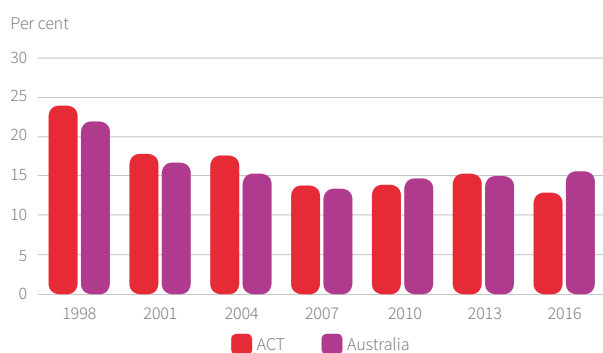
In the ACT, illicit drug use contributes to 2.2% of the total burden of disease and injury. However, while illicit drug use is an important issue for the health of Canberrans, tobacco and alcohol continue to cause more poor health and early death.

Monitoring the use of illicit drugs poses a particular challenge as, due to the illegal nature of this activity and subsequent difficulty of collecting data, we only have a partial picture about patterns of supply, use and harm.

## Canberra has the lowest use of illicit drugs

In 2016, 12.9% of Canberrans aged 14 years and older reported illicit use of any drug in the previous year. This was the lowest figure reported by any state or territory and almost half the figure reported in 1998 (23.9%).

### Percentage of people aged 14 years and older reporting recent illicit use of any drug<sup>(a)</sup>



<sup>(a)</sup> Used at least 1 of 16 illicit drugs in the past 12 months. The number and type of illicit drug used varied between 2010 and 2016.

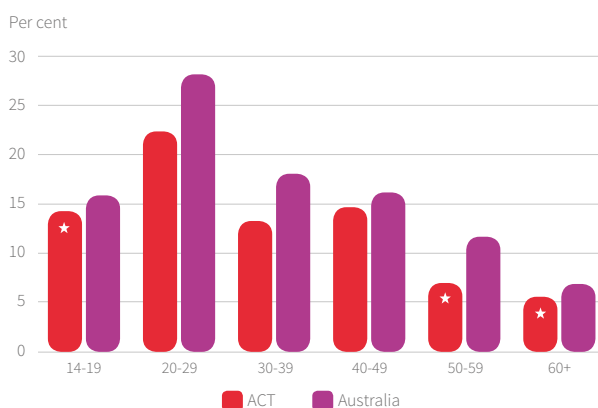
Source: National Drug Strategy Household Survey various years

## Young males more likely to use illicit drugs

Recent illicit drug use was more common among males than females in the ACT. In 2016, 16.1% of males and 9.7% of females aged 14 years and older had used an illicit drug in the previous 12 months.

Canberrans aged 20–29 years were most likely to have reported using an illicit drug in the previous 12 months (22.4%). However, this figure was lower than the national figure for the same age group (28.2%).

### Percentage of people reporting illicit drug use in the previous 12 months, 2016

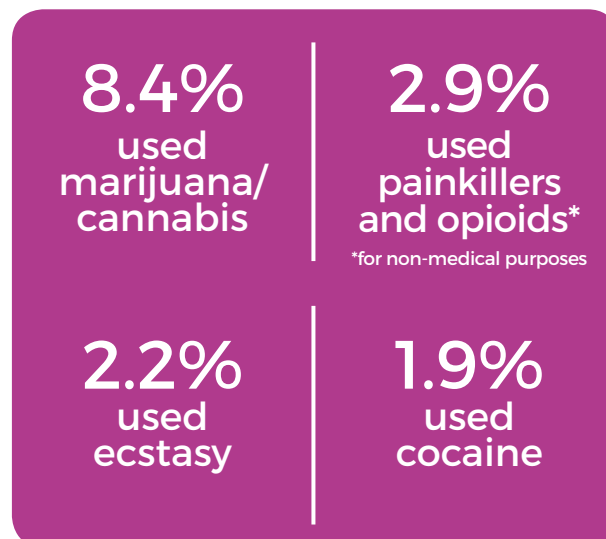


\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

Source: AIHW National Drug Strategy Household Survey 2016.

## Cannabis is the most commonly used illicit drug

In 2016, cannabis was the most widely used illicit drug in the ACT, followed by the misuse of prescription painkillers and opioids and misuse of other pharmaceuticals.



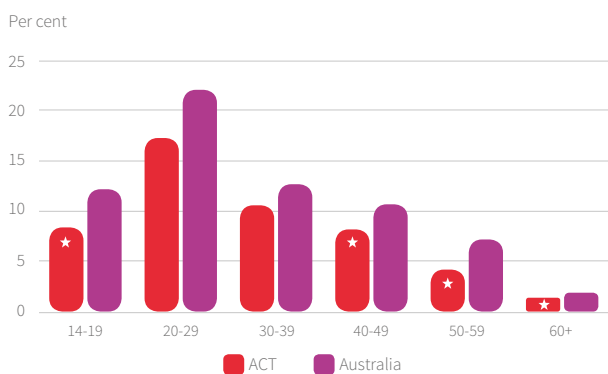
Source: AIHW National Drug Strategy Household Survey 2016.



The proportion of people 14 years and older who had used cannabis in the last 12 months halved over the last two decades, falling from 20.3% in 1998 to 9.1% in 2007. Use in the ACT has remained relatively stable over the past decade (8.4% in 2016) and is the lowest rate in Australia.

ACT males aged 14 years and older were almost twice as likely to have used cannabis in the previous 12 months as ACT females (11.4% and 5.6%, respectively), while people aged 20–29 years were the most likely to have used cannabis in the past 12 months (17.3%). This is compared to around 10.6% of those aged 30–39 years.

### Percentage of people who have used cannabis in the previous 12 months, 2016



\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

Source: AIHW National Drug Strategy Household Survey 2016.

## ACT Medicinal Cannabis Scheme

In August 2016, the ACT Minister for Health and Wellbeing announced that a scheme would be established to give people safe and legal access to high-quality medicinal cannabis products. The ACT Medicinal Cannabis Scheme was implemented on 21 November 2016, following the Therapeutic Goods Administration’s decision to list medicinal cannabis as a controlled drug (Schedule 8) in the Poisons Standard. On 27 October 2017, the ACT Chief Health Officer made changes to the Controlled Medicines Prescribing Standards (Prescribing Standards) to allow patients to have

more timely processing of medicinal cannabis prescribing applications for indications directly attributed to:

- › spasticity in multiple sclerosis
- › nausea and vomiting related to cancer chemotherapy
- › pain and/or anxiety in patients with active malignancy or a life-limiting disease where (in either case) the prognosis might reasonably be expected to be 12 months or less
- › refractory paediatric epilepsy.

Prescribers can still apply for medicinal cannabis prescribing approval for other conditions; these applications will be assessed on a case-by-case basis. Patients need to speak with their doctor or specialist about whether medicinal cannabis is suitable for their condition.

The ACT Medicinal Cannabis Scheme aligns with the Australian Government’s scheme, with a focus on the supply of medicinal-grade formulations for indications with an established evidence base. ACT Health will continue to monitor the emerging evidence of effectiveness for chronic pain and other indications in collaboration with the Australian Government Department of Health. The Prescribing Standards may be amended to accommodate changes as the evidence base and experience with using medicinal cannabis grows. ACT Health is also committed to hosting education events for health professionals on medicinal cannabis, to ensure that prescribers have the confidence and skills to determine whether medicinal cannabis is suitable for their patients and to prescribe appropriately where medicinal cannabis is indicated. ACT Health will continue to work with the national and local stakeholders, drawing upon the advice of the ACT Medicinal Cannabis Advisory Group and the ACT Medicinal Cannabis Medical Advisory Panel, in order to ensure the ACT maintains a viable and progressive scheme.

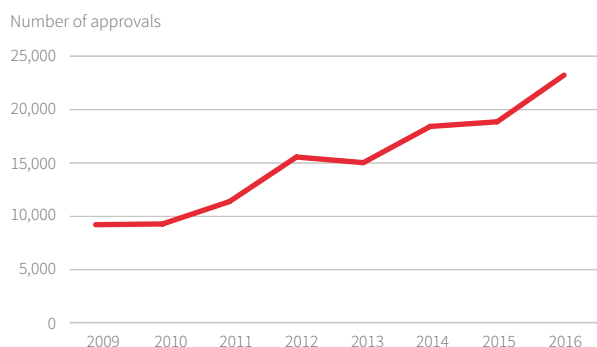
## Pharmaceutical abuse and misuse in the ACT – the Drugs and Poisons Information System (DAPIS)

Nationally, pharmaceutical abuse and misuse is fast becoming an area of public health concern, at a rate of 1 in 20 Australians in 2016.<sup>6</sup> Of these medications, opioids (including oxycodone) are the biggest contributors. Australia-wide, there was a 15-fold increase in the prescribing of strong opioids between 1992 and 2011 (500,000 to 7,500,000 prescriptions), with an associated 32-fold increase in costs to the Australian Government.<sup>15</sup>

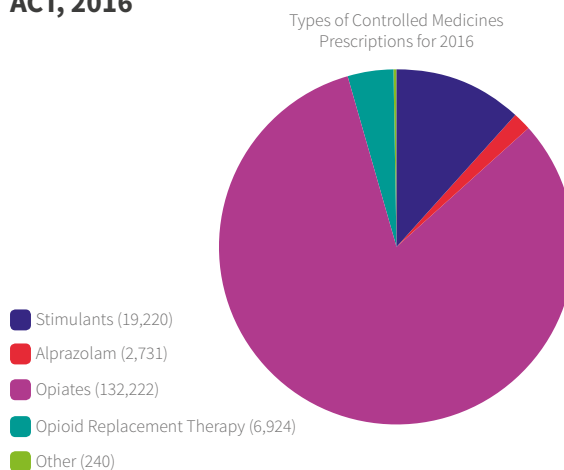
Historically, opioids were mainly used to treat acute pain and pain associated with cancer. Over the last 20 years, their use has expanded into managing chronic non-cancer-related pain conditions, contributing to a significant rise in prescribing. While much of this increase represents legitimate use, this rise is also coupled with an increase in associated harms such as overdoses, diversion (on-selling for non-medical conditions) and dependence. Up to 36% of patients who start on these medicines can meet the criteria for lifelong opioid dependence.<sup>16</sup>

In the ACT, legislation requires prescribers to obtain approval from the Chief Health Officer to prescribe a controlled medicine for more than 2 weeks as well as in some other defined circumstances. In 2016, a total of 23,229 controlled medicine approvals were processed and 161,337 controlled medicine prescriptions were dispensed. The majority of these were for opiates (85%).

### Number of controlled medicine approvals processed, ACT, 2009–2016



### Controlled medicine prescriptions by type, ACT, 2016



The ACT Health Protection Service (HPS) has implemented the following measures to reduce harms from controlled medicines:

- › Introduction of the Drugs and Poisons Information System (DAPIS) in 2014, to monitor prescribing of controlled medicines in the ACT by the HPS – this system enables identification of individuals who may be at risk of harm, prompting intervention strategies for assisting with patient care and management by the HPS.
- › Changes to regulation and introduction of the Controlled Medicines Prescribing Standards in 2016 – these standards provide guidance for prescribing controlled medicines in accordance with clinical best practice.

Over the coming years, the HPS will be monitoring the DAPIS data, to identify trends that will guide public policy and help reduce harm to the community.

In 2019, a new online prescription monitoring tool for doctors and pharmacists will be introduced to assist their clinical decision-making.

ACT Health is also collaborating with other jurisdictions in the development and implementation of a national prescription monitoring program for controlled medicines, to address the growing concern of misuse and abuse across the country.

# ENCOURAGING SAFE PRACTICES

Safe practices, such as condom use and safe injecting drug use, can prevent the spread of sexually transmissible infections and bloodborne viruses.

## Hepatitis C

The hepatitis C virus is a bloodborne virus. The primary risk factor for transmission in Australia is the sharing or re-using of needles and syringes. Groups at a higher or disproportionate risk include people who inject drugs, people in custodial settings and Aboriginal and/or Torres Strait Islander people.

Hepatitis C cases are classified as newly acquired or unspecified.

### Newly acquired hepatitis C

There were 29 newly acquired (that is, within 24 months before diagnosis) cases of hepatitis C reported in the ACT between 1 January 2015 and 31 December 2016. The median age was 30 years. Almost 70% were male, 7% identified as Aboriginal or Torres Strait Islander and 87% were born in Australia. Of the 29 newly acquired cases, over one-third were detected among the prison population. This may be associated with greater testing opportunities within a recognised vulnerable group.

### Unspecified hepatitis C infection

The majority of notifications reported in the ACT were unspecified, meaning that it was not possible to confirm whether the virus was newly acquired or had been present in the body for more than 24 months. There were 333 unspecified cases of hepatitis C notified in the ACT between 1 January 2015 and 31 December 2016. Of these, 63% were male and the median age was 41 years.

The hepatitis C notification rate remained relatively stable between 2012 and 2016.<sup>17</sup>

### Increased access to treatment for hepatitis C

Historically, hepatitis C has had a low treatment rate. However, in March 2016, the Australian Government listed direct-acting antiviral medications on the Pharmaceutical Benefits Scheme. These are more effective and safer for the

treatment of chronic hepatitis C and resulted in a significant increase in the number of people taking up treatment for the disease. The ACT has the highest rate of treatment uptake in Australia. From its introduction in March 2016 until December 2016, the proportion of people with chronic hepatitis C infection initiating direct-acting antiviral treatment in the ACT was 23%; South Australia and Tasmania had the second-highest rates of uptake (both 17%).<sup>17</sup> While initial uptake has been promising, a significant number of individuals who are either eligible or would benefit from it have not yet taken up treatment.

## Hepatitis B

In Australia, hepatitis B in adults and adolescents is transmitted through a variety of pathways including both blood-to-blood contact and sexual transmission.<sup>18</sup> In the ACT, fewer than five newly acquired hepatitis B infections were reported between 1 January 2015 and 31 December 2016.

Hepatitis B is preventable by a vaccine. In Australia, the vaccine is given at birth, followed by three doses in the first six months. It has been provided free in Australia to all children since 2000. However, adults remain vulnerable if unvaccinated.



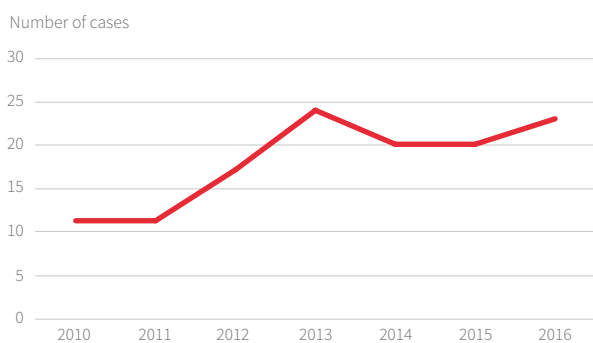
## Human immunodeficiency virus (HIV)

Between 1 January 2015 and 31 December 2016, 43 HIV cases were notified in the ACT. The majority of cases were male (79%), the median age was 39 years and around half were Australian-born. One in four (25%) cases were reported by someone aged 20–29 years at the time of diagnosis.

Of all HIV notifications listing male-to-male sex as a risk factor throughout the 2011–2015 reporting period, less than 18% were diagnosed late.<sup>a</sup>

By comparison, 43% of men and 50% of women reporting heterosexual contact only were diagnosed late.<sup>18</sup> Therefore, work is still required to ensure that appropriate diagnosis, treatment and care is occurring for all at-risk groups.

### HIV notifications in the ACT



Source: ACT Notifiable Diseases Database

## Other sexually transmissible infections

### Chlamydia rates are increasing

Chlamydia is a sexually transmissible infection and remains one of the most common infectious diseases in the ACT. It primarily affects young people and, if left untreated, can result in infertility in women. The majority of chlamydia infections remain undiagnosed (it is estimated that only 28% of new infections in 2016 were diagnosed) and, therefore, untreated.<sup>18</sup>

There were 3,818 cases of chlamydia notified between 2014 and 2016. Numbers increased annually during that time, from 1,196 in 2014 to 1,360 in 2016. This is consistent with trends across Australia, where chlamydia rates have been steadily increasing since 2007.

<sup>a</sup> CD4+ cell count at HIV diagnosis can indicate how long a person has had HIV before being diagnosed. Late HIV diagnosis is defined as CD4+ cell count less than 350 cells/ $\mu$ L at diagnosis, (see the Kirby report for further details)

Chlamydia rates were similar for males and females, with the highest number of notifications in the 20–29 years age group. The number of notifications increased each year among adults aged 30–39, 40–49 and over 50.

At a national level, testing for chlamydia has increased. Analysis suggests that the increase in chlamydia notifications is related to this increase in testing.<sup>18</sup> While there is limited direct evidence for testing levels in the ACT, it is unlikely that the ACT is very different from the national picture.

### Gonorrhoea rates are increasing

Gonorrhoea is a sexually transmissible infection that is common among men who have sex with men. In recent years, there has been a significant increase in rates of gonococcal disease notifications in males in the ACT, as well as in males and females in the eastern states of Victoria, New South Wales and Queensland.<sup>19</sup> Gonorrhoea has the potential to cause meningitis, as well as infertility in women.

There were 461 cases of gonorrhoea notified in the ACT between 2014 and 2016. Numbers increased annually during that time, with 119, 141 and 201 cases notified in 2014, 2015 and 2016, respectively.

The highest number of notifications was in the 20–29 years age group; the median age was 28.

Similar to chlamydia, the number of tests for gonorrhoea increased in Australia between 2015 and 2016. However, in this case, the increase in notifications in the ACT is thought to be due to increased spread of gonorrhoea (true infections) rather than increased testing.<sup>18</sup>

### Age-standardised gonorrhoea notifications in the ACT



Source: NNDSS in [https://kirby.unsw.edu.au/sites/default/files/kirby/report/SERP\\_Annual-Surveillance-Report-2017\\_compressed.pdf](https://kirby.unsw.edu.au/sites/default/files/kirby/report/SERP_Annual-Surveillance-Report-2017_compressed.pdf). Gonorrhoea is becoming resistant to antibiotics

## Gonorrhoea is becoming resistant to antibiotics

Antibiotic resistance is the ability of bacteria to resist the effects of the drugs used to treat them.<sup>20</sup> Gonorrhoea is an emerging concern in the context of increasing antibiotic resistance globally and in Australia. The Australian Gonococcal Surveillance Programme has monitored antimicrobial

resistance in clinical isolates of *Neisseria gonorrhoea*, the bacteria that causes the sexually transmitted disease gonorrhoea, since 1981. In 2015 in the ACT, one-third of the 69 isolates tested were resistant to penicillin and one-quarter were resistant to ciprofloxacin. None tested were resistant to azithromycin.

### Proportion of gonococcal isolates resistant to antibiotics

	Number of isolates tested	Resistance Azithromycin (number tested)	% resistant	Resistance Penicillin (number tested)	% resistant	Resistance Ciprofloxacin (number tested)	% resistant
ACT 2014	75	7	9.3%	9	12.0%	33	44%
Australia 2014	4,804	119	2.5%	119	2.5%	1,370	29%
ACT 2015	69	0	0%	23	33.3%	18	26.1%
Australia 2015	5,411	138	2.6%	1,217	22.5%	1,473	27.2%



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# HEALTHY PEOPLE



## **Professor Kaarin Anstey**

Honorary Professor of Psychology and Population Health, Australian National University (ANU); Director of the ANU Centre for Research on Ageing, Health and Wellbeing 2012–2017; Principal Investigator of the Personality & Total Health (PATH) Through Life study (2006 to present)

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*“Cognition is invisible and is often only noticed when it is impaired, leading to memory loss, confusion, language problems and difficulties managing our everyday lives. Ultimately cognitive decline and impairment leads to dementia. However research is increasingly revealing that we can impact our long term cognitive health through tangible, everyday choices and activities. Healthy lifestyles and managing chronic conditions such as high blood pressure, high cholesterol, diabetes, and keeping mentally and socially active will also reduce our risk of cognitive decline. Activities to improve physical fitness and weight, or more generally, our practices that are good for heart health, are also good for our brain. With the lack of a pharmaceutical cure for Alzheimer’s disease, and the many benefits of a healthy lifestyle, there is every reason for us to make changes to protect our cognitive health.”*

People in the ACT enjoy one of the highest life expectancies in the world and can also expect to live many of those years in good health. However, not all Canberrans are as healthy as they could be. Chronic diseases now cause most of the poor health and premature death in the ACT. Once established, these conditions, illnesses and diseases often remain throughout a person's life, requiring long-term management by health professionals. Many chronic diseases share common risk factors that are generally preventable. Recognising these risk factors and proactively reducing or eliminating them is an important preventive health measure for maintaining healthy bodies and minds and reducing demand on the health care system.

## QUALITY OF LIFE

### Canberrans have a high life expectancy

In the ACT in 2011, life expectancy at birth was 81.2 years for males and 85.1 years for females.

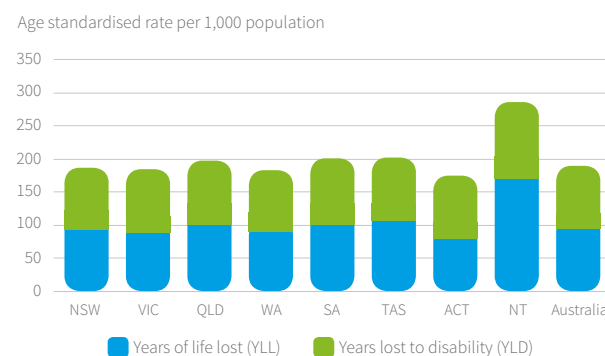
### Proportion of life lived in full health is similar to the national average

It is not just life expectancy that is important. Health-adjusted life expectancy includes the notion of years, on average, a population can expect to live in good health. Males in the ACT in 2011 could expect to live 72.3 years in good health, while for females that figure was 74.6 years. The percentage of life lived in full health in the ACT is similar to that of the rest of Australia. Population health initiatives aim to ensure that the period lived in good health is as long as possible.

### The ACT has the lowest burden of disease in Australia

The ACT had the lowest total burden of disease in Australia in 2011 (175.1 years per 1,000 population). Differences between the states and territories were primarily due to the difference in fatal burden, with the ACT recording the lowest years of life lost (YLL), (78.9 years per 1,000 population). Rates of non-fatal burden (YLD) were similar across all jurisdictions (96.2 years per 1,000 population in the ACT).

#### Total burden of disease by state and territory, 2011



Note: Total Disability-adjusted life years (DALY) = YLL + YLD.  
Source: AIHW 2016, Australian Burden of Disease Study 2011.



## Males in ACT



**81.2**  
years  
life expectancy

**72.3**  
years  
health-adjusted life expectancy

**89.1**  
per cent  
life expectancy in full health

## Males in Australia



**79.9**  
years  
life expectancy

**70.9**  
years  
health-adjusted life expectancy

**88.7**  
per cent  
life expectancy in full health

## Females in ACT



**85.1**  
years  
life expectancy

**74.6**  
years  
health-adjusted life expectancy

**87.7**  
per cent  
life expectancy in full health

## Females in Australia



**84.3**  
years  
life expectancy

**74.4**  
years  
health-adjusted life expectancy

**88.2**  
per cent  
life expectancy in full health

Source: Health adjusted life expectancy in Australia: expected years lived in full health 2011.

## What is burden of disease and why does it matter?

*Burden of disease analysis can be used to compare the impact of different diseases, risk factors, conditions or injuries on a population, to quantify the gap between the ideal health of a population and the actual health of a population. It measures the fatal (for example, dying from cancer) and non-fatal (for example, living with cancer) effects of diseases in a consistent manner so that they can then be combined into a summary measure of health called disability-adjusted life years, or DALY.<sup>2</sup>*

*A DALY combines the impacts of dying early and living with illness. It estimates years of life lost due to premature death (YLL) and years lived in ill health or with disability (YLD) to count the total years of healthy life lost from disease and injury. The analysis also estimates the contribution of various risk factors to health loss, known as the attributable burden.<sup>2</sup>*

*The estimates produced from a burden of disease study remain the best summary measure of a population's health, as they take into account age at death and severity of disease.<sup>2</sup>*

## Lifestyle risk factors contribute to burden of disease

Across Australia, 31% of the burden of disease could be prevented by reducing exposure to modifiable risk factors.<sup>1</sup> In the ACT, the top six were tobacco use, poor diet (based on all dietary risks combined), high body mass index, alcohol use, high blood pressure and physical inactivity.

### Top six risk factors contributing to the total burden of disease, 2011

Risk factor	ACT %	Australia %
Tobacco use	5.4	9.0
Combined dietary risks	5.1	7.0
High body mass index	4.5	5.5
Alcohol use	4.2	5.1
High blood pressure	4.2	4.9
Physical inactivity	4.0	5.0

Source: AIHW 2016, Australian Burden of Disease Study.

**Note:** Combined dietary risk is based on an analysis of the joint effects of all dietary risk factors included in the AIHW burden of disease 2011 study.

Alcohol was the leading contributor to disease burden for those aged 15–45 years of age, while it was tobacco for those aged 45 years and older (Table 3). Throughout the entire life course, males consistently experienced a higher amount of disease burden than females, due to the risk factors of alcohol and tobacco. High body mass and high blood pressure increasingly contribute to disease burden with age.

### Leading contributors to the burden of disease by age and sex, ACT, 2011

Risk factor	% (proportion of total burden attributable to the risk factor)	Risk factor	% (proportion of total burden attributable to the risk factor)
<b>Males aged 0–14 years</b>		<b>Females aged 0–14 years</b>	
High blood plasma sugar	0.12	Iron deficiency	0.65
Iron deficiency	0.09	High blood plasma sugar	0.13
Alcohol use	0.08	Alcohol use	0.04
<b>Males aged 15–24 years</b>		<b>Females aged 15–24 years</b>	
Alcohol use	11.4	Alcohol use	4.0
Illicit drug use	5.6	Occupational exposures and hazards	1.1
Occupational exposures and hazards	3.0	Illicit drug use	1.7
<b>Males aged 25–44 years</b>		<b>Females aged 25–44 years</b>	
Alcohol use	10.2	Alcohol use	2.8
Illicit drug use	5.6	Illicit drug use	2.3
Occupational exposures and hazards	4.0	Occupational exposures and hazards	2.2
<b>Males aged 45–64 years</b>		<b>Females aged 45–64 years</b>	
Tobacco use	6.9	Physical inactivity	5.2
High body mass index	6.2	Tobacco use	4.4
High blood pressure	5.4	High body mass index	4.1
<b>Males aged 65 years and older</b>		<b>Females aged 65 years and older</b>	
Tobacco use	10.9	Tobacco use	8.9
High blood pressure	8.9	High blood pressure	8.5
High body mass index	7.9	High body mass index	6.9

Methods and definitions are available from AIHW 2016 Australian Burden of Disease Study 2011: Methods and supplementary material.

Source: AIHW Australian Burden of Disease Study 2011, unpublished data.



## CHRONIC DISEASE

Canberrans are living longer and with more years in good health. However, between 2013 and 2016, roughly half of all adults reported having a long-term health condition such as arthritis, asthma, cancer, diabetes, mental illness or heart disease. This is similar to national rates.

### Proportion of adults with a long-term health condition

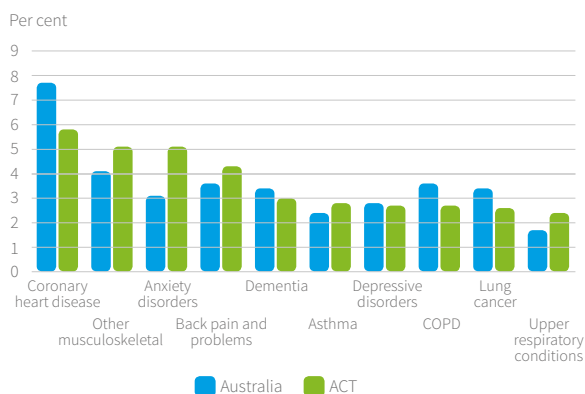
	ACT %	Australia %
2013–2014	48.5	48.4
2014–2015	51.8	49.2
2015–2016	50.2	50.2

Australian Institute of Health and Welfare analysis of Australian Bureau of Statistics, Patient Experience Survey.

### Chronic diseases are the leading cause of disease burden

In 2011, coronary heart disease (5.8%), musculo-skeletal conditions other than back pain (5.1%) and anxiety disorders (5.1%) were the leading causes of disease burden in the ACT.

### Top ten causes of the total disease burden, 2011



Source: AIHW 2016, Australian Burden of Disease Study 2011.

### Myth: Individuals are to blame if they develop a chronic illness through their unhealthy 'lifestyle'

**MYTH BUSTED** – Our ability to make healthy choices is influenced by our environment

*Some people believe that if a person develops a chronic illness as a result of an unhealthy 'lifestyle' then they have no one to blame but themselves. The truth is that the ability to make healthy choices is heavily influenced by access to the resources and conditions that contribute to a healthy life.*

*Access to health care, secure income or employment, adequate housing and living conditions, education, health-promoting environments and social supports are all important enablers for maximising health.*

*This is especially true for children, who cannot choose the environment in which they live and who have limited or no control over their diet and passive exposure to tobacco smoke.*

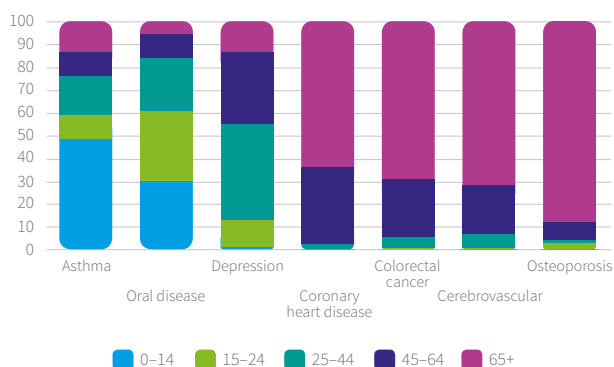
Source: World Health Organization (WHO) Widespread misunderstandings about chronic disease – and the reality [www.who.int/chp](http://www.who.int/chp)

## Chronic diseases vary by age

Hospitalisations for chronic disease vary by age. In 2016:

- › 48.3% of people hospitalised with a principal diagnosis of asthma were children aged 14 years or younger
- › 60.5% of people hospitalised for oral disease were 24 years or younger
- › people aged 25–44 years made up almost half of hospitalisation for depression (42.0%)
- › people aged 65 years or older made up the majority of hospitalisations for osteoporosis (88.0%), cerebrovascular disease (72.0%), colorectal cancer (69.1%) and coronary heart disease (63.9%).

### Hospitalisations for leading chronic diseases, ACT, 2015/2016



Source: ACT Admitted Patient Care Data.

## Many Canberrans have more than one chronic disease

Co-morbidity refers to the existence of two or more diseases in a person at the same time. This might be due to chance, but in many cases it is because there is an association between the diseases. A range of chronic diseases share common risk factors, or one disease can be a risk factor for another. Understanding co-morbidities provides important information for the prevention and treatment of chronic diseases.

In 2014–2015, more than half (53.1%) of all adults in the ACT had at least one of the following chronic diseases: arthritis, asthma, back problems, cancer, chronic obstructive pulmonary disease, cardiovascular disease, diabetes and mental health conditions. Of all adults, 23.2% had at least two of these chronic diseases. Of those aged 45 years and over, 44.8% had at least two of these conditions.

### Proportion of adults in the ACT experiencing chronic diseases and co-morbidities

	2004 – 2005 (%)	2007 – 2008 (%)	2011 – 2012 (%)	2014 – 2015 (%)
<b>Chronic diseases and conditions<sup>(a)</sup></b>				
All ages				
At least 1 of 8 selected chronic conditions	48.8	43.9	48.7	53.1
At least 2 of 8 selected chronic conditions	19.6	17.7	20.0	23.2
Persons aged 45 years and older				
At least 2 of 8 selected chronic conditions	40.1	34.9	42.2	44.8
<b>Chronic diseases<sup>(b)</sup></b>				
All ages				
At least 1 of 4 selected chronic diseases	22.3	18.4	21.9	23.5
At least 2 of 4 selected chronic diseases	3.3	3.2	3.9	3.8
Persons aged 45 years and older				
At least 2 of 4 selected chronic diseases	8.4	8.1	9.8	9.4

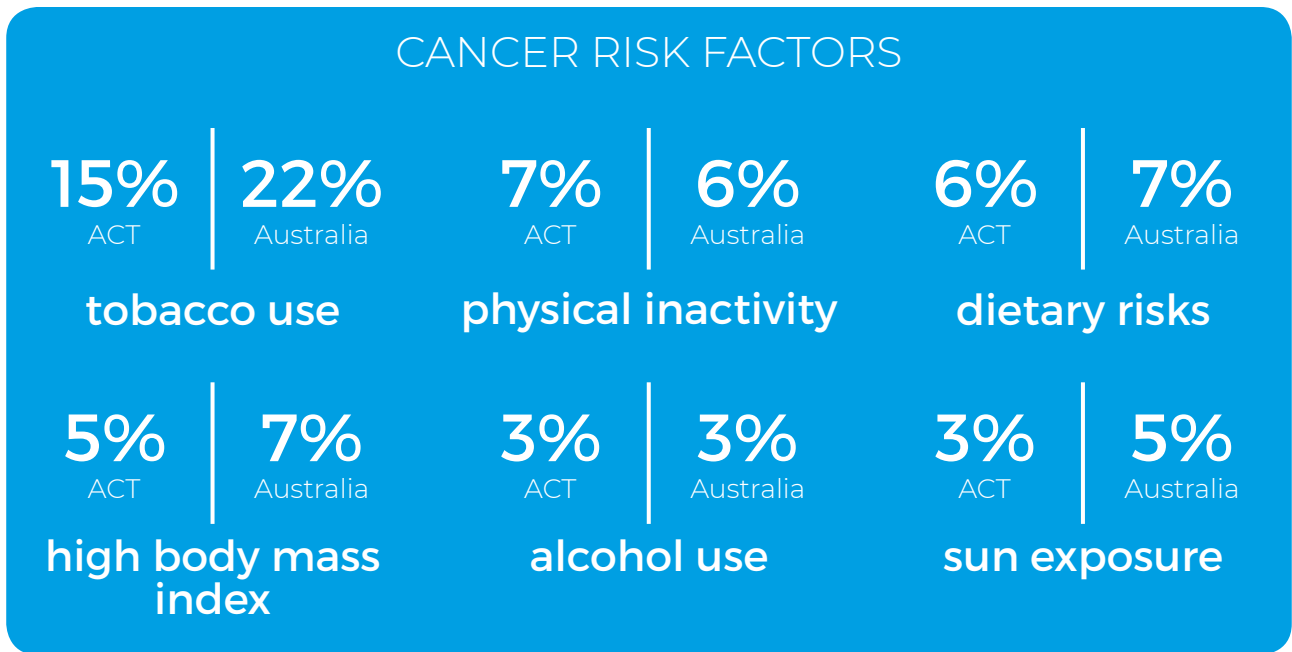
<sup>(a)</sup> Arthritis, asthma, back problems, cancer, chronic obstructive pulmonary disease, cardiovascular disease, diabetes and mental health conditions.

<sup>(b)</sup> Cancer, chronic obstructive pulmonary disease, cardiovascular disease or diabetes.

Source: ABS National Health Survey, various years, unpublished.

# CANCER

In the ACT, 37% of the cancer burden was attributable to modifiable risk factors (compared to 44% nationally).



## Cancers attributable to modifiable risk factors<sup>2</sup>

<b>Tobacco use</b>
Lung, oesophageal, pancreatic, mouth and pharyngeal, liver, stomach, kidney, cervical, bowel and bladder cancers and leukaemia
<b>Physical inactivity</b>
Bowel and breast cancer
<b>Dietary risks</b> (diets low in fruit, vegetables, fibre or milk, or diets high in processed or red meat)
Lung, oesophageal, mouth and pharyngeal, laryngeal and bowel cancers
<b>High body mass</b>
Bowel, breast, gallbladder, kidney, oesophageal, pancreatic, uterine, ovarian, liver and thyroid cancers and leukaemia
<b>Alcohol use</b>
Liver, breast, mouth and pharyngeal, bowel, laryngeal and oesophageal cancers
<b>Sun exposure</b>
Melanoma and non-melanotic skin cancer



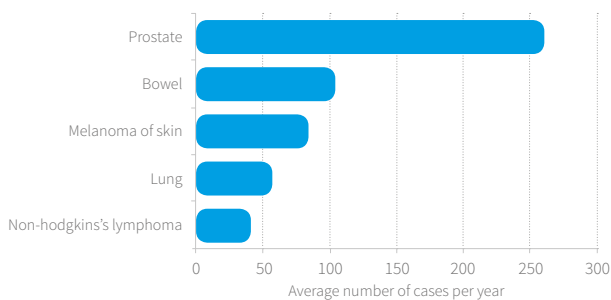
## Incidence of cancer is lower than the national average

In the ACT, the number of cases of cancer has increased over time because of the increasing population and the ageing population (cancer risk increases with age).

There were 1,646 new cases of cancer diagnosed in the ACT in 2015, with more males (54%) diagnosed than females (46%). The age-standardised incidence rate for the ACT in 2015 was 428.7 cases per 100,000, lower than the national incidence rate in 2014 of 483.8 cases per 100,000.<sup>4</sup>

The median age at diagnosis was 67 years for males and 64 years for females.

### Common cancers diagnosed in males, ACT, 2011–2015



Source: ACT Cancer Registry

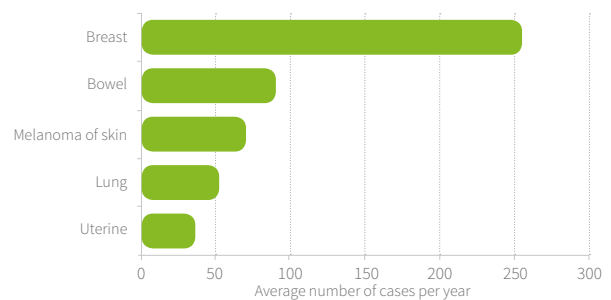
## Prostate and breast cancers are the most common

For the period 2011–2015, the five most commonly diagnosed cancers accounted for 64% of all newly diagnosed cancers in both males and females.

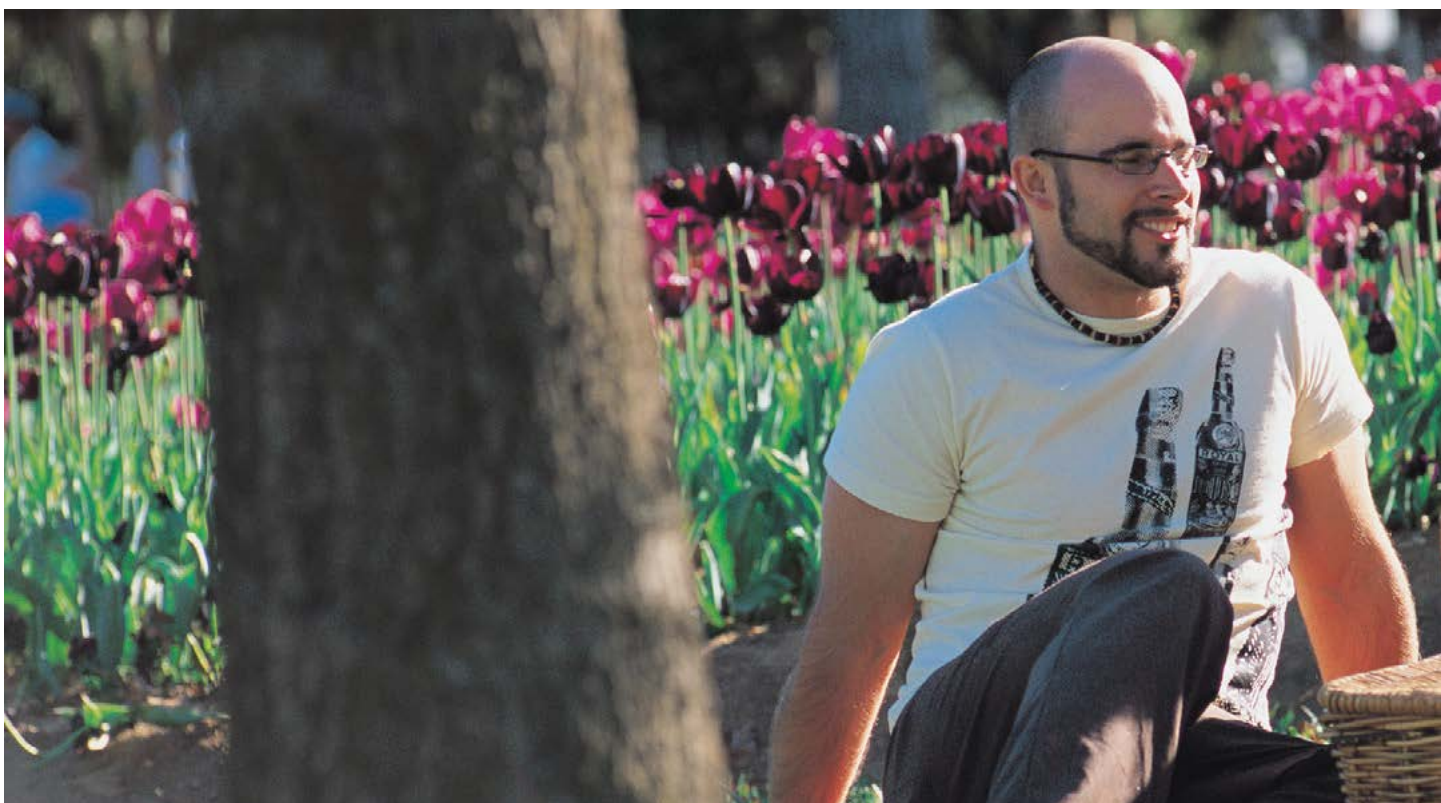
For males, the five most common cancer types were prostate, bowel, melanoma of skin, lung and non-Hodgkin's lymphoma. For females, they were breast, bowel, melanoma of skin, lung and uterine.

The five most common cancers in the ACT are similar to those nationally.

### Common cancers diagnosed in females, ACT, 2011–2015



Source: ACT Cancer Registry

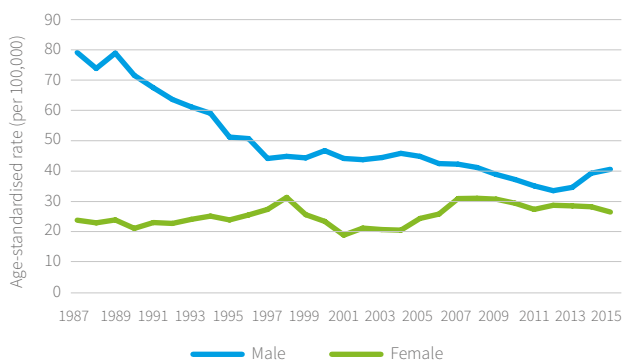


## Lung, bowel and pancreatic cancers among the most common causes of cancer death

For the period 2011–2015, the five most common causes of death from cancer accounted for 54% of all cancer deaths in males and 62% in females.

For males, the five most common causes of cancer death were from lung, bowel, prostate, pancreatic and cancers of indefinite and unspecified site. For females, they were breast, lung, bowel, pancreatic and cancers of indefinite and unspecified site.

### Age-standardised incidence rate of lung cancer in the ACT



Source: ACT Cancer Registry  
Notes: Rates are based on three year leading averages.



## Decline in lung cancer

The decline in lung cancer rates clearly illustrates the effect of reducing a modifiable risk. Lung cancer incidence in males has significantly decreased; however, the picture for females is quite different, with a small increase that is approaching statistical significance. The difference reflects historical differences in smoking behaviour. While not all lung cancers are caused by smoking, it is the most important risk behaviour.

There is approximately a 20–30-year lag between smoking prevalence and lung cancer incidence.<sup>5</sup> Smoking was common in Australia in the mid-20th century, with more than 3 in 4 men and 1 in 4 women smoking regularly in 1945. Over the following 20 years, smoking rates fell in men in response to concerns over its health effects, resulting in a decrease in lung cancer incidence in men from the early 1980s. However, cigarette advertising on television in the late 1950s counteracted the health concerns. In addition, many women took up smoking in the late 1960s and early 1970s as a statement of independence and equality. This has resulted in the smoking trend for women lagging behind that for men and, consequently, the lung cancer trend.<sup>6</sup>

From the 1970s, anti-smoking health education grew. In the 1980s, governments and cancer councils began to challenge the power of tobacco companies, and Quit campaigns were established. A number of regulatory measures have been introduced since then, such as hazard warnings on cigarette packets, plain packaging, increased taxes on cigarettes, smoke-free policies and restrictions on tobacco advertising. These contributed powerfully to reducing the appeal of tobacco products, increasing knowledge about health effects, reducing the social acceptability of smoking and improving knowledge about how to quit. As a result, the prevalence of smoking has declined significantly.<sup>6</sup> These changes occurred over a long period – coordinated action takes time and the results are often not seen for many years.

## ASBESTOS AND MESOTHELIOMA

While mesothelioma is not a common cancer, it is a cancer of interest in the ACT because exposure to asbestos is the predominant cause, and more than 1,000 houses were filled with Mr Fluffy loose-fill asbestos insulation between 1968 and 1979 (known as 'Mr Fluffy' houses). However, a person exposed to loose-fill asbestos insulation will not necessarily develop a related medical condition. In 2016, 10 ACT residents were diagnosed with mesothelioma. The age-standardised incidence rate for the ACT (2.7 per 100,000) was similar to the rate for Australia (2.5 per 100,000).<sup>7</sup>

### Results from the ACT Asbestos Health Study

The ACT Government commissioned the Australian National University to undertake a study to improve understanding of the health risks of loose-fill asbestos insulation.<sup>8</sup> The study covered the period from November 1983 to December 2013 and found that around 17,000 people had lived in a Mr Fluffy house in Canberra (1.7% of the population).

Of the 285 current and former residents of the ACT diagnosed with mesothelioma during the study period, seven had lived in a Mr Fluffy house before their mesothelioma was diagnosed. It was found that living in a Mr Fluffy house could be associated with mesothelioma in males. After taking into account age and time of diagnosis, the rate of mesothelioma in males who had lived in a Mr Fluffy house was two-and-a-half times that of males who had not lived in a Mr Fluffy house. This equated to an additional four cases of mesothelioma over the number expected from the mesothelioma rate in men who had not lived in a Mr Fluffy house. There were no cases of mesothelioma in females who had lived in a Mr Fluffy house during the study period. The ACT Government noted the findings of the final report of the study indicating an increased risk of mesothelioma among men living in a Mr Fluffy property. The ACT Government established the Asbestos Response Taskforce in 2014 to deliver the Loose Fill Asbestos Insulation Eradication Scheme to assist homeowners and their families directly affected by the legacy of Mr Fluffy in their residential homes.

## MENTAL HEALTH

Mental health is a state of wellbeing in which an individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community (WHO 2014).

Poor mental health adversely affects people's physical health, quality of life and overall functioning, which in turn affects families, friends, workplaces and the broader community. Mental illness is a leading cause of chronic disease in the ACT, with anxiety disorders and depressive disorders contributing to 5.1% and 2.7% of the burden of disease, respectively.

Many Canberrans will experience a mental illness at some stage in their lives. This can affect people's lives at differing levels of severity, from mild impairment to severe and disabling impacts requiring health care. Early intervention for those experiencing early symptoms of mental illness (or better still, preventing it in the first place) can have significant and life-changing consequences for a person's mental health and reduce the impact on society.

### Wellbeing

#### What is the PATH project?

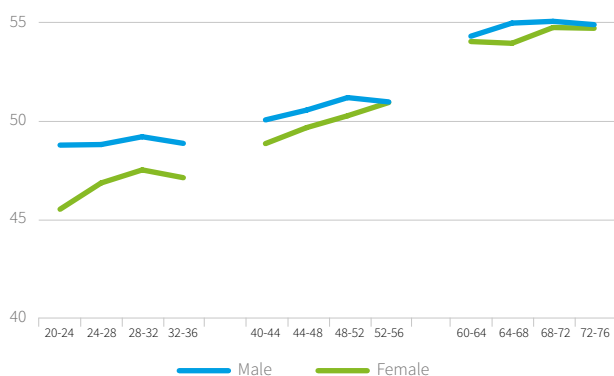
*Primarily funded by NHMRC grants, the Personality & Total Health (PATH) Through Life project is a large, on-going, population-based, longitudinal cohort study ranging from early to late adulthood. Approximately 7,500 participants in three cohorts ranging in age from young (aged 20–24 at baseline), midlife (aged 40–44 at baseline) and older (aged 60–64 at baseline) adults were randomly sampled from the electoral roll of the ACT and the nearby city of Queanbeyan. Each cohort has been interviewed at four-year intervals, with the last full cohort data completed in 2015.*



While there is no consensus for a single definition of wellbeing, there is general agreement that it includes the absence of negative emotions, the presence of positive emotions and moods, life satisfaction and positive functioning.<sup>9</sup> Resilience, emotional health and sense of mastery are important measures of wellbeing. Considerably more is known about mental illness than about mental wellbeing; this paucity of data is particularly noticeable when it comes to Canberra's young people.

Emotional health is a positive state of wellbeing that enables an individual to be able to function in society and meet the demands of everyday life. Data from PATH participants show increasing trends for emotional health scores, with women reporting significantly poorer emotional health than males in both the 20s and 40s cohorts of almost all waves. Both males and females in the 60s cohort reported similar high levels of emotional health.<sup>10</sup>

#### Emotional health<sup>(a)</sup> for cohorts of people born in 1980–1984, 1956–1960 and 1937–1941



<sup>(a)</sup> Self-reported, based on the SF-12 scale: composite scores are computed using the scores of twelve questions and range from 0 to 100, where a zero score indicates the lowest level of health measured by the scales and 100 indicates the highest level of health. Source: PATH Through Life Project data, unpublished.

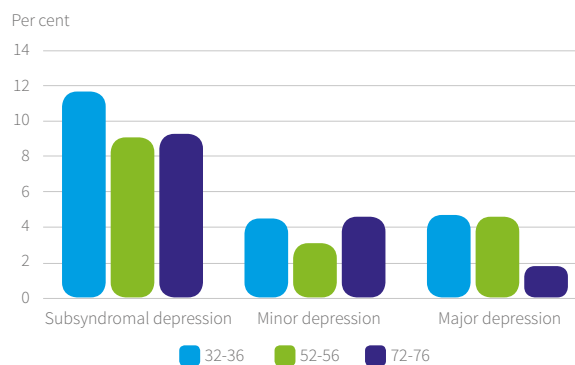
## DEPRESSION, ANXIETY AND PSYCHOLOGICAL DISTRESS

### Depressive mood disorders are the most common mental disorder

Depressive mood disorders are among the most common mental disorders, contributing 2.7% to the burden of disease in the ACT (similar to the national figure of 2.8%). Depression can occur in people of all ages, genders and backgrounds; however, the experience of depression can vary across the lifespan and across population groups.<sup>10</sup> There is a shortfall of data for young Canberrans experiencing depression; however, nationally, mental health disorders account for a high disease burden among young people.<sup>11</sup>

Based on available data, the prevalence of depression appears to fall with age. The youngest cohort (32–36 years) of PATH participants reported the highest proportion (4.7%) of major depression compared with 1.8% for the oldest cohort (72–76 years).

#### Prevalence of depression among PATH study cohorts



Source: PATH Through Life Project data, unpublished.

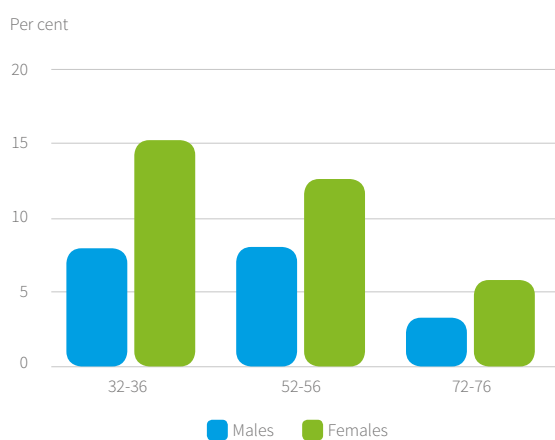
## Anxiety disorders are higher than the national average

Anxiety disorders account for 5.1% of the burden of disease in the ACT (higher than the national figure of 3.1%).

In the PATH sample (2015 data), 15.3% of younger female participants (32–36 years) reported that they had suffered an anxiety attack in the previous 4 weeks. Females reported higher rates of anxiety attacks than males for all cohorts but particularly in the youngest cohort, where the percentage was almost double that for males (8.0%).

As with depression, there is a paucity of data on the prevalence of anxiety among young Canberrans. However, nationally, anxiety is a leading contributor to the burden of disease in people in this age group.<sup>11</sup>

### Percentage of people who have experienced a recent anxiety attack among PATH study cohorts



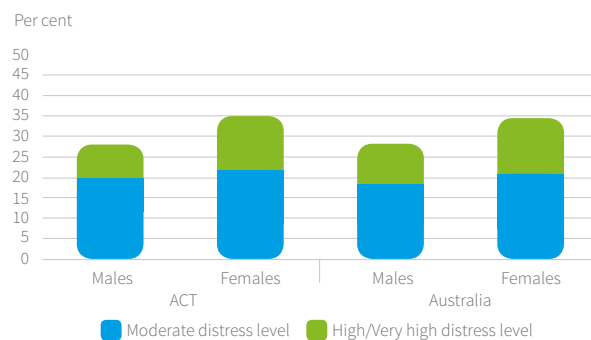
Source: PATH Through Life Project data, unpublished.

## Females experience psychological distress more than males

Psychological distress measures can be used to indicate the frequency and severity of mental health symptoms, such as anxiety and depression, experienced in the population. The Kessler Psychological Distress Scale (K10) questionnaire is a measure of psychosocial distress, based on questions about people's level of nervousness, agitation, psychological fatigue and depression in the past 4 weeks.<sup>12</sup>

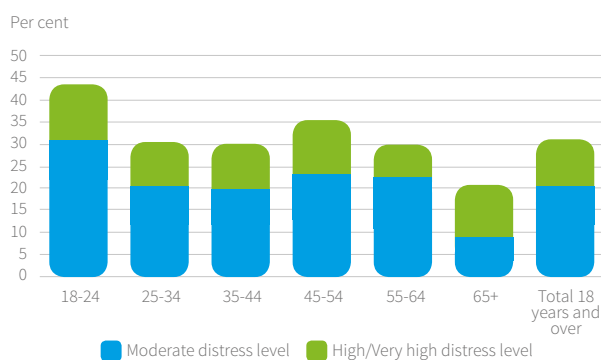
In 2014–2015, females in the ACT were more likely to have experienced high or very high levels of psychological distress (13.2%) than males (8.3%). Younger Canberrans (18–24 years) were the most likely to experience psychological distress, with those aged 45–54 the second-most likely group.

### Percentage of people in the ACT experiencing psychological distress by sex, 2014–2015



Source: ABS 2016. 2014-15 National Health Survey: First results. Cat No 4364.0.55.001. ABS: Canberra.

### Percentage of people in the ACT experiencing psychological distress by age, 2014–2015

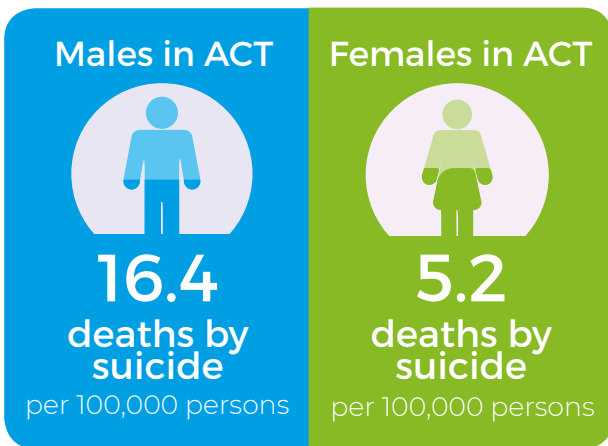


Source: ABS 2016. 2014-15 National Health Survey: First results. Cat No. 4364.0.55.001. ABS: Canberra.

# SUICIDE

Suicide is a major public health issue; while relatively uncommon, it has devastating impacts on families, friends and communities. It is the leading cause of death for Australians aged 15–44 years and the second-leading cause for those aged 45–54 years. While suicide is preventable, it is often described as ‘hidden’ or ‘silent’. The true occurrence of suicide, how to reliably predict it and how to best prevent it are also largely hidden from view.<sup>16</sup>

In 2015, the suicide rate for ACT males was more than three times higher than that for females.



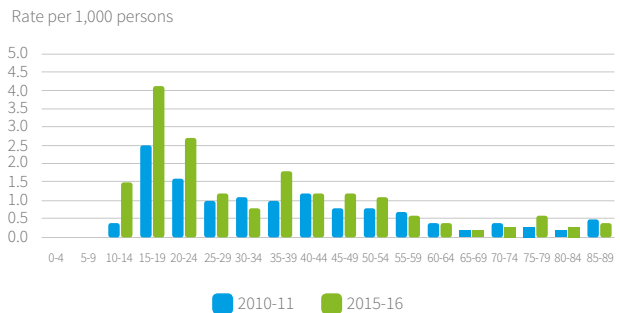
# SELF-HARM

Self-harm refers to any behaviour involving deliberately causing pain or injury to oneself.

Of the 506 hospitalisations for self-harm in ACT residents reported in 2015/2016, 76.4% were females. Poisoning from drugs or medications was the most common method among both males and females, followed by use of a sharp object.

Almost half (45.7%) the hospitalisations were Canberrans aged 10–24 years. Between 2010/2011 and 2015/2016, hospitalisation rates among this age group increased, while rates among other age groups remained relatively stable.

## Hospitalisations for self-harm in the ACT



Source: ACT Admitted Patient Care Data.

## The importance of screening and early intervention – Year 7 Health Check

The new Year 7 Health Check Program is an ACT Government priority and will provide an opportunity to support the health and wellbeing of all children. In addition to monitoring risk factors for chronic diseases, such as weight status, the program will incorporate an evidence-based emotional wellbeing screening component that will be used to help young people and direct them to mental health support services, if appropriate.

Addressing health issues early reduces the potential burden and impact on quality of life for a young person and their family. Obese children and adolescents are five times more likely to be obese in adulthood,<sup>13</sup> and this increases their risk of premature mortality, predominantly related to cardiovascular disease.<sup>14</sup> Some research suggests that childhood obesity may also contribute to future mental health problems.<sup>15</sup>

The program will be informed by consultation with stakeholders across multiple sectors. Piloting in selected schools will begin in late 2018, with implementation occurring in 2019. Schools are an ideal setting for an effective screening or surveillance program, providing a venue where health and education departments can work together to intervene early and possibly prevent the onset of health issues in Canberra children.



## Mental health and physical health are intimately linked

There is strong evidence of the bidirectional relationship between mental illnesses and physical health outcomes.<sup>17</sup> People with lived experience of mental illness have worse health outcomes than the rest the population, including a significant reduction in life expectancy. Some evidence suggests a life expectancy gap of 14–23 years between those living with severe mental illness and the general population, with the gap appearing to widen for some illnesses.<sup>18</sup>

### FOR SUPPORT CONTACT

Beyond Blue: 1300 22 4636

Lifeline: 13 11 14

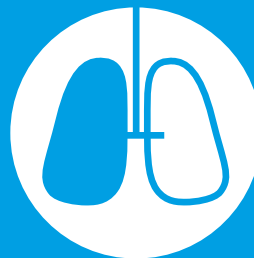
Across Australia, people with a severe mental illness are:



**6x more**  
likely to die from  
cardiovascular  
disease



**5x more**  
likely to  
smoke



**4x more**  
likely to die from  
respiratory disease



likely to die  
**14-23**  
**years**  
earlier than the  
general population

Source: National Mental Health Commission<sup>19</sup>



## DEMENTIA

Dementia is not a specific disease; rather, it is a group of conditions characterised by a deterioration in thinking, memory, behaviour and the ability to perform everyday tasks. While dementia mainly affects older people, it is not a normal part of ageing. The condition is degenerative and irreversible. Although there is no certain way to prevent dementia, there is good evidence that a healthy lifestyle can reduce the risk of developing dementia as people age. Risk factors include physical inactivity, obesity, unhealthy diets, tobacco use, harmful use of alcohol, diabetes and midlife hypertension.

In 2016, an estimated 4,400 people (1,700 men and 2,700 women) were living with dementia in the ACT.<sup>20</sup> Half of the people who lived in permanent residential aged care in the ACT had a diagnosis of dementia.<sup>21</sup>

In 2015/2016<sup>a</sup>, there were 2,531 hospital separations for ACT residents that involved a diagnosis of dementia (47% males; 53%

females). Of these, almost half were for patients whose dementia was classified as affecting their in-hospital care.

While dementia can sometimes occur in younger people, the highest rates are seen among older age groups. In 2015/2016, ACT residents aged under 55 years made up almost half (47.8%) of non-dementia hospitalisations but less than 1% of dementia-related hospitalisations; in contrast, those aged 85 years or older made up just 6.5% of all non-dementia hospitalisations but just over half (52.7%) of dementia-related hospitalisations.

For residents aged 75 years or more, those without dementia had an average length of stay of 3.8 days, compared with 12.1 days for those whose dementia was classified as affecting their in-hospital care. Almost one-quarter (24.4%) of the latter group needed assistance or supervision on discharge or required admission to another appropriate health care facility (such as residential aged care), compared with 2.5% of those without dementia.

<sup>(a)</sup> Due to changes in coding practice, 2015–16 ACT hospitalisations data should not be compared to previous years.

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# LOOKING TO THE FUTURE



## WHAT DO THE DATA TELL US?

### We need to protect our health gains and keep an eye on the future

- › *Healthy Canberra 2018* highlights a number of areas where we have made significant health gains; however, we must remain vigilant and ready to **prevent, detect and respond to emerging health threats**. For example, while we have made significant progress in relation to reducing tobacco smoking, there remain small pockets of entrenched smokers for whom smoking cessation remains a challenge. Electronic cigarettes (e-cigarettes) pose a risk of re-normalising smoking behaviour, especially in adolescents. The ACT Government has legislated for some important controls on the use of e-cigarettes, and as new evidence emerges, ACT Health will continue to monitor the situation and adjust our policies, where appropriate.

- › Achievements in public health can have **unintended consequences**; careful monitoring is needed in order to be able to respond to new public health threats. Biomedical interventions in the realm of blood-borne viruses and sexually transmissible diseases could create new problems to solve. For example, recent advances in the treatment of HIV includes pre-exposure prophylaxis, which is highly effective in preventing transmission in men who have sex with men and raises hope of preventing further cases. However, its success could result in complacency about condom use and an increase in risky behaviour, creating challenges for control of other STIs, such as gonorrhoea and syphilis.

### We need to shift our focus from disease to wellbeing

- › Canberrans enjoy a high standard of health; however, rates of chronic disease in the ACT present a public health challenge. People with a chronic disease can live for many years with recurring bouts of illness, significantly reducing their quality of life and leading to increased and costly health service use and hospitalisation.





### Scaling up our prevention efforts

encourages and supports Canberrans to live healthier, more active lives and adopt lifestyle behaviours that enhance wellbeing and reduce their risk of developing chronic illness.

- › In **improving community and individual wellbeing**, we need to consider the protective psychological factors, the social and economic conditions and the lifestyle choices that can promote mental health and wellbeing. Wellbeing can be enhanced by factors as diverse as personal resilience, social engagement (including volunteering), financial security and having a sense of personal safety and trust. We need to be sensitive to community perceptions about what constitutes ‘wellness’ and understand the conditions that affect the quality of day-to-day living and general sense of wellbeing.
- › A state of wellbeing arises from **good physical and mental health across the lifespan**, and it is important to measure health and wellbeing at key development points. Children in the ACT receive a comprehensive health check in Kindergarten and the health of

children is surveyed in Year 6. A new Year 7 health check will commence in early 2019, replacing the Year 6 check. This enhanced health check will include mental health screening and presents an opportunity for early intervention with children as they enter high school.

## We need to focus on prevention, promotion and protection

- › The 2015 *Global Charter for the Public’s Health* describes the role and function of an effective and resilient public health system to provide services across the domains of prevention, promotion and protection. We need to ensure that **health-promoting activities** continue to consider the underpinning social, economic and ecological determinants of health and strive to address inequality and health literacy. **Prevention efforts** should continue to span the primary, secondary and tertiary prevention tiers and include immunisation, screening programs, targeted as well as population health approaches and high-quality, person-centred health care. We must maintain delivery of **health protection services** to include monitoring of the health and safety of our environment (clean air, clean water and safe food), control of communicable diseases and healthcare-associated infections, and emergency preparedness and response.
- › The path to a healthier Canberra requires **collaboration and connecting our efforts** across the health sector, across government and in partnership with academics, industry, community organisations and individuals. Working together and pooling knowledge, skills and resources we have the best chance of delivering a sustained and comprehensive approach to Canberra’s health challenges.



## We need to mobilise new technologies

- › The traditional methods that underpin population health monitoring, prevention and response, such as epidemiology, laboratory sciences, health promotion and immunisation, remain as pertinent today as ever. However, there are **new disciplines** that have the scope to radically change the landscape, including genomics for microbiological diagnosis and precision health in the form of individual risk assessment and treatment, as well as internet-based surveillance methods, real-time reporting and sophisticated modelling techniques for decision analysis and health program planning.
- › We need to build on existing partnerships and develop new collaborations with organisations outside of health to facilitate the **use of new non-traditional methods to inform population health and prevention** and provide a more holistic understanding of the ACT population. This will be particularly useful for sub-groups who are hard to reach using traditional data collection methods, such as adolescents and young adults. Future data sources and example analytics may include: use of mobile technology as data collection tools (for example, the ACT AirRater app), social media and primary health data from services targeting specific sub-populations, such as students or refugees.



[www.stats.health.act.gov.au](http://www.stats.health.act.gov.au)

