ACT Government Health

# ACT Population Health Bulletin

Volume 3 Issue 4 November 2014

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**Upcoming Events**

- 12 November - 24 December 2014 Consultation on e-cigarettes - http://health.act.gov.au/consumers/community-consultation/personal-vaporisers-e-cigarettes
- 16 February 2015 - Health Promotion Innovation Fund closes - http://www.health.act.gov.au/health-services/population-health/health-improvement/act-health-promotion-grants-program/


November 2014
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# Introduction

## A message from the Chief Health Officer, Dr Paul Kelly

Despite impressive public health gains in recent decades, smoking remains one of the top three preventable contributors to ill health in Australia and throughout the world. Smoking is associated with a wide range of diseases, with cardiovascular and chronic respiratory disease and cancer of the lung prominent consequences in morbidity, disability and loss of productive life years.

In the ACT, we have had consistent declines in smoking prevalence, high awareness of the dangers, and impressive compliance with the legislative measures. Laws which limit the sale and the consumption of cigarettes and protect others, particularly children, from exposure to second-hand smoke are amongst the most comprehensive in the country. However, smoking remains a lethal but legal product, at least for adults, and so many challenges remain. The *Future Directions for Tobacco Reduction in the ACT 2013-2016* sets out a range of possible further measures to restrict supply and the opportunities to consume tobacco products in the ACT, both proven methods in tobacco control.

Whilst general measures are important, there are also opportunities for targeted strategies, guided by local data collected and analysed in the ACT. The 2014 Chief Health Officer's Report shows that there remains a high prevalence of smoking in youth, in pregnant women and in Aboriginal and Torres Strait Islanders. A program aimed at addressing the situation where all three risk groups coincide is the recently launched *Beyond Today... it's up to You* marketing campaign, featuring the personal stories of local residents.

We should also lead by example. The enforcement and clear messaging about smoking at the Canberra Hospital has led to the adoption of similar policies at all hospitals in the ACT during 2014. By sending this clear message, we not only influence the health and welfare of our staff, but also the tens of thousands of community members who are patients, clients and visitors at our health facilities each year.

However, we cannot afford to become complacent. Personal vaporisers, also known as e-cigarettes, can be used as a nicotine delivery device or as a way of re-normalising smoking, especially among youth. On the other hand, there is some suggestion that they can be a useful method for assisting in smoking cessation with a less toxic product.

We have learnt many lessons over the 50 year fight against tobacco consumption. A combination of persistence, emulating best practice in other jurisdictions, adopting innovative legislation nationally and locally, increased taxation and effective communication strategies will be required.

Thank you to all the contributors and to Brett Purdue who was the guest editor for this issue.

**Dr Paul Kelly**
**Editor**
**November 2014**

# Breaking News

## Fifty schools commit to keep Canberra kids active

On 7 November 2014 Chief Minister and Minister for Health Katy Gallagher congratulated Arawang Primary School for being one of the 30 new schools keeping children active by signing up to the Ride or Walk to School Program. There was a positive atmosphere with exciting BMX demonstrations for the students, and the Principal, Jennie Page declaring the school's commitment to the health of their students through programs like Ride or Walk to School and Fresh Tastes.


**Photograph: Ride or Walk to School Launch. ACT Health file photo**

Overweight and obesity can increase the risk of developing a range of chronic diseases and place a huge economic burden on our health system. Only about one-fifth of children aged 5 to 17 in the ACT are meeting physical activity recommendations, and one quarter are reported as being overweight or obese. The Ride or Walk to School Program is part of the solution to turn these figures around, supporting the ACT Government's Healthy Weight Initiative. The ACT Government is committed to supporting a healthy, active and productive community and has made it a priority to address the challenging levels of overweight and obesity within the ACT community, particularly in children.

Getting to and from school is a simple way that children can get some exercise which has health benefits as well as helping them to concentrate and learn in the classroom. Co-benefits include improving road safety, reducing traffic congestion around schools and reducing carbon emissions. The Ride or Walk to School Program provides schools with the equipment and knowledge to encourage riding or walking to school as the norm. It uses a multi-faceted approach that also includes addressing road safety issues and providing easily accessible and secure bike storage.

This is a significant milestone for the Physical Activity Foundation (PAF) and the Ride or Walk to School Program with 50 ACT schools now committed to the program. The PAF received a Healthy Canberra Grant to deliver the program in schools.

## Good Habits for Life

On 11 November 2014 ACT Member for Ginninderra, Yvette Berry MLA, launched the Good Habits for Life campaign, delivered by the Population Health Division.

The new Good Habits for Life website has a range of tips and support for parents and carers. The site includes tips to role model healthy habits for children and help them reach their full potential, through three core healthy lifestyle behaviours:

1. eating well;
2. moving more; and
3. connecting with those around them.

**Photograph: Good Habits for Life Launch. ACT Health file photo**

Almost two thirds of adults and around one quarter of children aged 5-17 in the ACT are overweight or obese – and these rates are increasing. This campaign aims to address this growing health issue and is part of the ACT Government's Healthy Weight Initiative, supporting a healthy, active and productive community. To find out more visit www.act.gov.au/goodhabits-forlife


# Breaking News

## Launch of Beyond Today...it's up to you

ACT Member for Ginninderra, Dr Chris Bourke MLA, launched the Aboriginal and Torres Strait Islander tobacco cessation mass media campaign 'Beyond Today...it's up to you' on 10 November 2014 at the ACT Legislative Assembly.

Comprehensive promotion will take place over the next six months on ACTION buses and bus shelters encouraging Aboriginal and Torres Strait lslander peoples to start their journey by contacting their local health service or GP.

Radio advertising over the month of November 2014 features John Paul Janke delivering information on the impact of smoking and where people can go to seek help.


**Photograph:**
**Front (left to right): D'Shontea Devow and Sienna Devow.**
**Back (left to right): Dion Devow and Dante` Devow.**
**ACT Health file photograph**

Tobacco use by ACT Aboriginal and Torres Strait Islander residents is significantly higher than that reported by non-Aboriginal and Torres Strait Islander residents according to the 2014 ACT Chief Health Officer's Report.

The percentage of ACT Aboriginal and Torres Strait Islander women who reported smoking during pregnancy was six times higher (55.9%) than the overall ACT percentage.

A range of community based activities and events, to be delivered by local Aboriginal and Torres Strait lslander community organisations, will be announced shortly.

Beyond Today information can be located on the ACT Health, Aboriginal and Torres Strait Islander Health Portal at: www.health.act.gov.au/beyondtoday

# Acronyms and Resources

**Acronyms**

| | |
|---|---|
| ABS | Australian Bureau of Statistics |
| ACOSH | Australian Council on Smoking and Health |
| ACTGHS | ACT General Health Survey |
| AIHW | Australian Institute of Health and Welfare |
| AMA | Australian Medical Association |
| COPD | Chronic obstructive pulmonary disease |
| DOSA | Designated outdoor smoking area |
| EVD | Ebola Virus Disease |
| FCTC | Framework Convention on Tobacco Control |
| GBD | Global Burden of Diseases |
| HRQL | Health-related quality of life |
| MJA | Medical Journal of Australia |
| MUH | Multiunit housing |
| NHPA | National Health Performance Agency |
| NRT | Nicotine replacement therapy |
| ORS | Office of Regulatory Services |
| PAF | Physical Activity Foundation |
| SHS | Secondhand tobacco smoke |
| TGA | Therapeutic Goods Administration |
| UFP | Ultra fine particles |

## Resources

- **Beyond Today** - http://health.act.gov.au/health-services/aboriginal-torres-strait-islander/information/beyond-today/
- **Canberra Hospital Smoke-free environment** - http://health.act.gov.au/health-services/canberra-hospital/canberra-hospital-is-completely-smoke-free
- **Cancer Council ACT** - http://www.actcancer.org/
- **Cancer Council NSW** - http://www.cancercouncil.com.au/
- **Future Directions on Tobacco Reduction** - http://www.health.act.gov.au/health-services/population-health/health-protection-service/tobacco-and-smoke-free/
- **Good Habits for Life** - https://goodhabitsforlife.act.gov.au/
- **Office of Regulatory Services** - http://www.ors.act.gov.au/
- **Quit Now** - http://www.quitnow.gov.au/
- **Ride and Walk to School** - http://health.act.gov.au/health-services/population-health/health-improvement/health-promotion/healthy-children-and-young-people/ride-or-walk-to-school
- **Tobacco control and smoke-free** - http://www.health.act.gov.au/health-services/population-health/health-protection-service/tobacco-and-smoke-free/

# Snapshot

## Morbidity and mortality attributed to smoking

Alex Raulli, Epidemiology Section, Population Health Division

Burden of disease is a measure of population health that aims to quantify the gap between the ideal of living to old age in good health, and the current situation where healthy life is shortened by illness, injury, disability and premature death.[1] Levels of death and disability from a comprehensive set of diseases, injuries and risks to health are combined to measure the total health 'burden'. Smoking-attributed morbidity and mortality forms part of the burden of disease measure.

The most recent assessment of burden of disease and injury is the revised Global Burden of Disease (GBD) Study 2010.[2] The GBD produced estimates for 187 countries including Australia. Smoking was the third highest risk factor for Australia in 2010 (8.2%) following dietary risk and high body mass (Figure 1).

Of the 8.2% total burden of disease and injury for which tobacco was responsible, cancer (3.36%), cardiovascular and circulatory disease (2.31%) and chronic respiratory disease (2.49%) accounted for almost this entire burden.[3]

The Australian Institute of Health and Welfare is undertaking a project to revise and update Australia's burden of disease estimates (last updated in 2007) with results expected in late 2015.

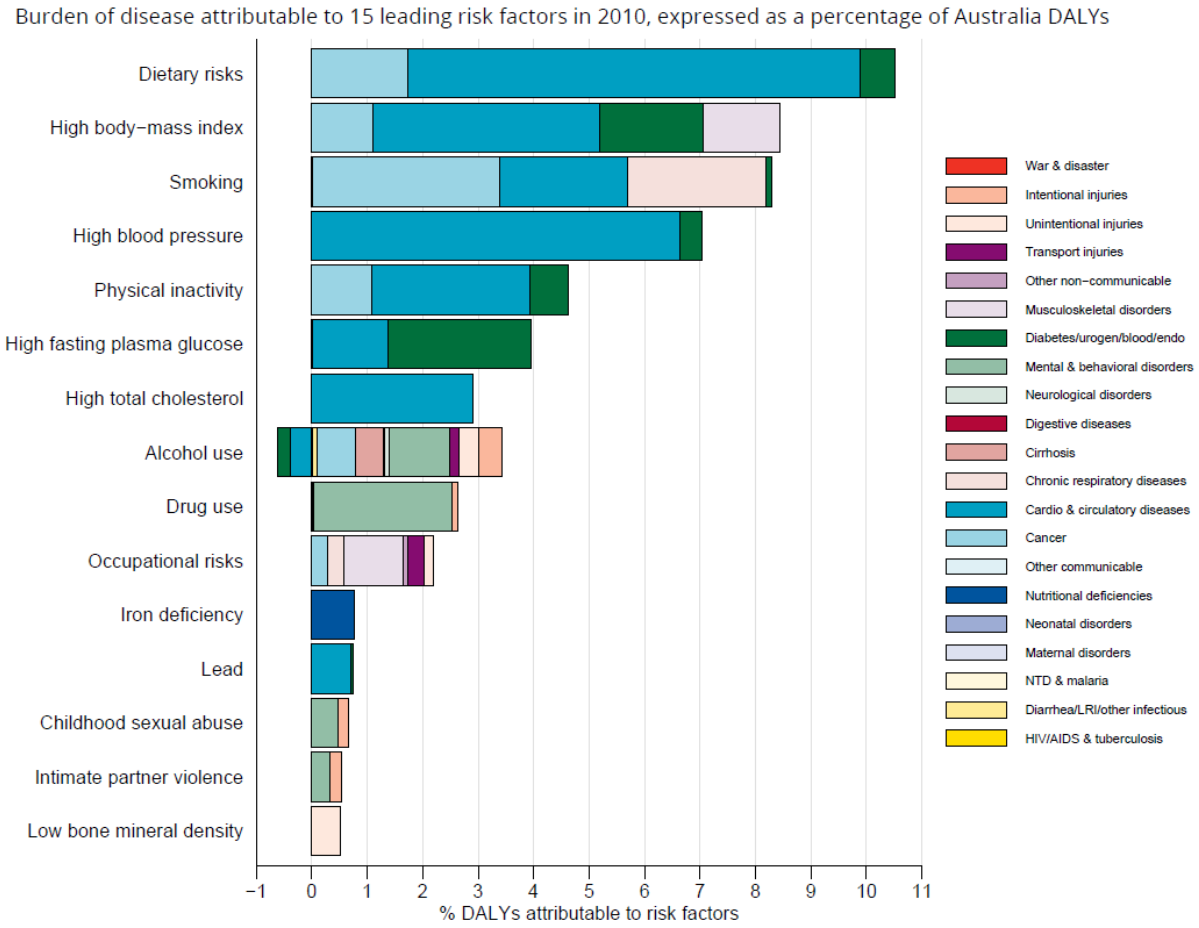


**Figure 1. Burden of disease attributable to 15 leading risk factors in 2010, expressed as a percentage of Australia Disability Adjusted Life Years (DALYs). Reproduced from Institute for Health Metrics and Evaluation. The global burden of disease study 2010. BGD Profile: Australia. Available from: http://www.healthdata.org/results/country-profiles.**

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# Health effects of tobacco smoking

Dr Ranil Appuhamy, Public Health Physician, Population Health Division

- Cigarette smoke contains over 7,000 chemicals and about 70 of them are known to cause cancer.
- Smoking has an adverse effect on nearly every organ of the body and a person's overall health.
- Smoking not only harms the person who is smoking but others around them due to second hand smoke.
- Stopping smoking can reverse or substantially improve the adverse health effects of smoking.

## Introduction

Tobacco has been used for many centuries. It was first documented in native America, imported in the sixteenth and seventeenth centuries to Europe and subsequently to the rest of the world.[1] The health effects of smoking are mainly due to cigarette smoke that is drawn through tobacco into the smoker's mouth (mainstream smoke) and smoke emitted from the burning ends of the cigarettes (side stream smoke).[1,2] Cigarette smoke contains over 7,000 chemicals and about 70 are carcinogens (cancer causing chemicals). Nicotine is the addictive substance in cigarette smoke.[1,2] Tobacco has been described as "the only legal consumer product that harms every user, killing up to half of those who use it as intended".[3]

Globally, tobacco kills nearly 6 million people annually. Over five million of those deaths are due to direct tobacco use, while more than 600,000 of these are due to passive smoking,[4] In Australia, tobacco is a significant cause of death and disability causing an estimated 15,000 deaths annually.[5]

The health effects of smoking have been extensively reviewed[1,6-8] and this article gives a brief overview.

## Health Effects

The health effects of cigarette smoke are caused by a variety of complex mechanisms that act at a cellular level and include damage to DNA, inflammation and oxidative stress (see Figure 1).[6] Although the risk and severity of diseases that are caused by smoking is related to the duration and quantity of cigarettes smoked, there is no safe level of exposure to cigarette smoke.[6] The first disease that comes to most people's mind when discussing the health effects of smoking is lung cancer. However, smoking affects the whole body creating a myriad of health effects (see Figure 2 on page 6).

**Photograph: by Theeradech Sanin. FreeDigitalPhotos.net**

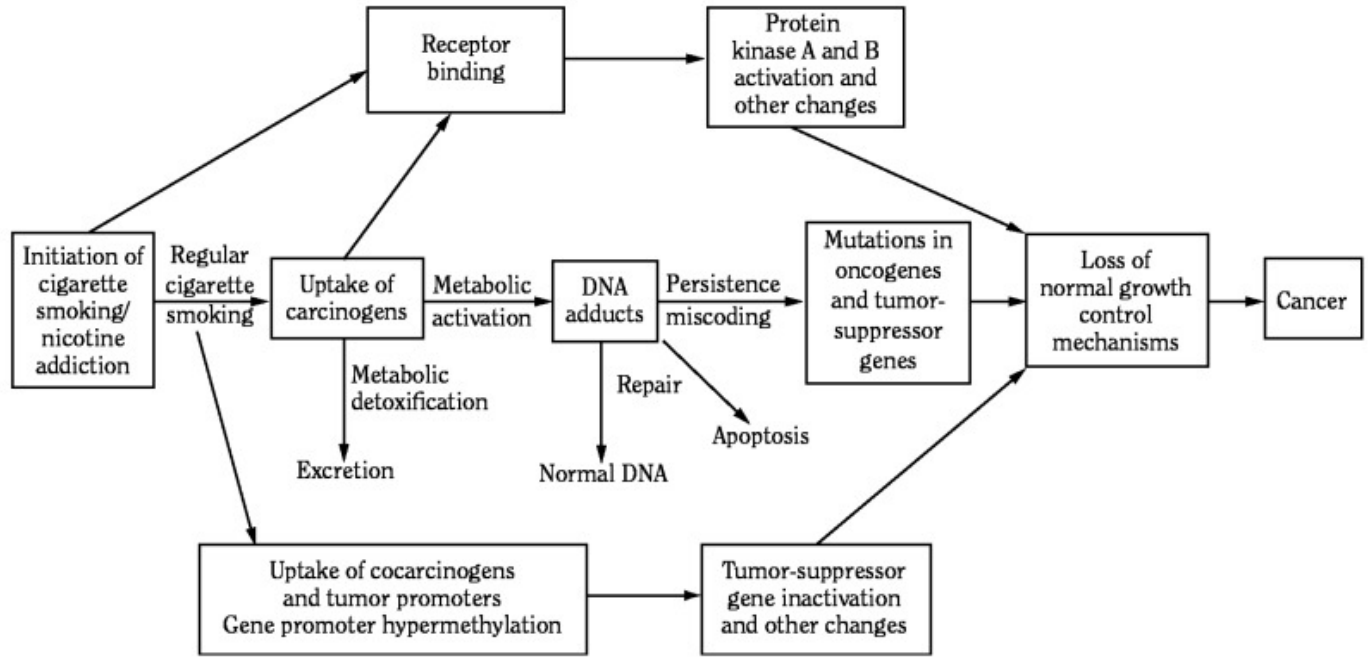


**Figure 1: Link between cigarette smoking and cancer caused by carcinogens in tobacco smoke. From the Department of Health and Human Services: How Tobacco Smoke Causes Disease: The Biology and Behavioral Basis for Smoking-Attributable Disease: A Report of the Surgeon General. Atlanta, 2010**

## Health effects of tobacco smoking *(Continued)*

### Cancer

Smokers are about 25 times more likely to get lung cancer compared to non-smokers.[7] The relationship between smoking and lung cancer was confirmed in large studies conducted in the 1950's. Since then, further cohort studies in various countries involving over 17.5 million person years and over 90 years of follow up have shown that the excess risk is proportional to the quantity and duration of cigarette smoking.[9] In addition to causing cancer of the lung, smoking can cause cancer almost anywhere in the body (see Figure 2). It has been associated with a range of other cancers including cancer of the bladder, blood (acute myeloid leukaemia), cervix, liver, oesophagus, kidney, pancreas, stomach, the colon and the rectum. Not only does smoking cause cancer, it increases the risk of dying from cancer and other diseases in both cancer patients and survivors.[7]

### Respiratory disease

Tobacco smoke and toxins are absorbed and deposited in the lungs. In addition to causing malignant disease of the airways, smoking is the main cause of chronic obstructive pulmonary disease (COPD).[7] Smoking can worsen asthma and increases the risk of respiratory infections including bronchitis, bronchiolitis, influenza, tuberculosis, legionnaires disease, and pneumonia.[7,10]

### Cardiovascular disease

Exposure to tobacco smoke either from active or passive smoking is causally related to almost all forms of cardiovascular disease.[7] Exposure to tobacco smoke is associated with atherosclerosis (building up of plaque in the arteries) and causes an increased risk of acute myocardial infarction, stroke, peripheral artery disease, aortic aneurysms and sudden death.[7] Smoking also affects the major risk factors for cardiovascular disease including hyperlipidemia, hypertension and diabetes.[7]

### Diabetes

Smoking is an important and modifiable risk factor for the development of type 2 diabetes.[7] The risk of developing diabetes is 30-40% higher in smokers compared to non-smokers and is proportional to the number of cigarettes smoked.[7] In addition to this, smokers who have been diagnosed with diabetes are at higher risk for blindness, renal diseases and circulatory complications.[7]

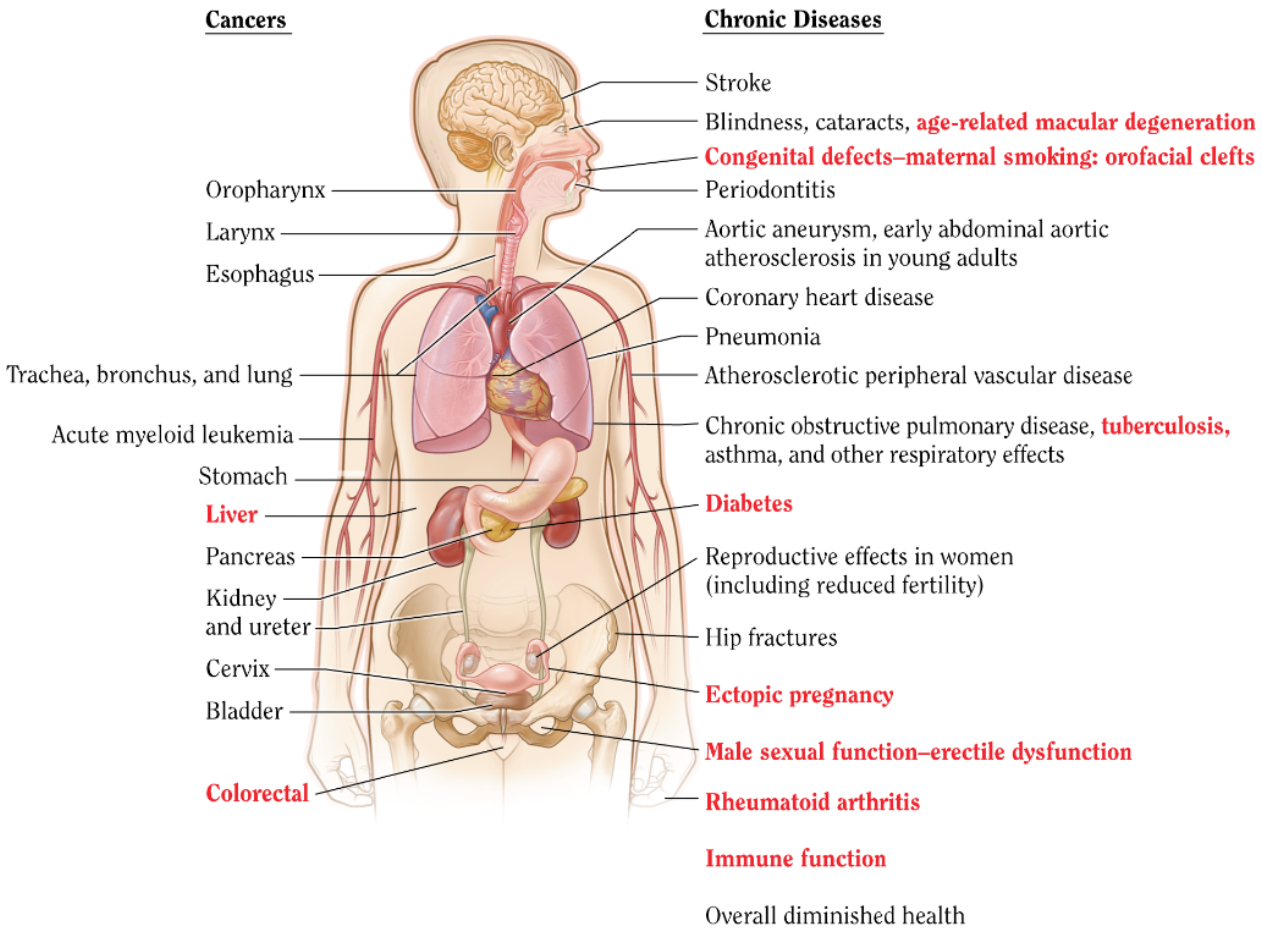


**Figure 2: Health consequence causally linked to smoking from the 2014 US Surgeon General's report on tobacco smoking. (Reference 7) Conditions in red are new diseases that have been causally linked in the 2014 report.**

## Health effects of tobacco smoking *(Continued)*

### Immune disorders

Various components of cigarette smoke like carbon monoxide, nicotine and some aromatic compounds can affect various aspects of the immune system.[7] This can compromise its ability to mount an appropriate immune response.[7] For example, smoking increases the risk of respiratory infections like tuberculosis and has been linked to rheumatoid arthritis.[7]

### Reproductive effects

Smoking is associated with a range of reproductive effects. Maternal smoking has been linked to ectopic pregnancy, some birth defects and behavioural disorders in children.[7] There is evidence to suggest a causal relationship between smoking and erectile dysfunction.[7]

### General health

Smokers in general, suffer from poorer health compared to non-smokers.[7] This begins at an early age and extends throughout adult like affecting not only quality of life but participation in the workforce.[7]

### Other diseases

A range of other disease has been associated with cigarette smoking and includes age related macular degeneration, dental disease, osteoporosis and hair loss.[7,10] Smoking is a major cause of early death and smokers are estimated to lose over a decade of life due to smoking.[7]

### Reversal of health effects

The adverse health effects of smoking can be reversed or substantially improved by stopping smoking. Stopping smoking has benefits for smokers of all ages with former smokers living longer than continuing smokers, regardless of the age of quitting.[8,11] While quitting has been associated with short-term issues like mouth ulcers, weight gain and constipation the overall short-term and long-term benefits are enormous.[10]

On cessation of smoking, the levels of nicotine and carbon monoxide decline rapidly.[10] There are immediate improvements in heart rate and blood pressure, improvements of the immune system, substantial improvements in lung function and reduction in the rates of respiratory infections.[8,10]

After the cessation of smoking, there is a marked reduction in the risk of stroke within 2-5 years with the risk returning to that of a non-smoker after 15 years.[10] With heart disease, the excess mortality due to smoking is halved within a year and after 15 years, the risk is almost the same as in non-smokers.[11] Quitting smoking causes improvements in vascular tone, reduces atherosclerosis and reduces the risk of sudden cardiac death.[10]

With COPD, although the damage caused to lung tissue is permanent, stopping smoking can improve lung function, reduces the progression of the disease and decreases the risk of hospitalisation.[8,10] Stopping smoking reduces the risk of lung and other smoking associated cancers.[8,10] For lung cancer, quitting at the age of 50 years halves the risk over the next 25 years.[10]

Quitting smoking can reduce the risk of dental disease associated with smoking including cancer and can improve oral health.[10] There are improvements in eye disease which include the development of macular regeneration, improved erectile function and improved female fertility after stopping smoking.[10]

The excess risk of death due to smoking declines soon after stopping smoking and continue to do so for at least 10-15 years.[11] There is also an overall improvement in quality of life after quitting smoking.[8,10]

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# Smoking rates in the ACT

Lindy Fritsche, Epidemiology Section, Population Health Division

Smoking rates both nationally and in the ACT are continuing to decrease, with 15% of ACT residents aged 18 years and over reporting being a current smoker in 2011-12.[1] Results show males were more likely to have smoking rates four to five percentage points greater than females.[2]

As with adults, smoking rates among ACT secondary students aged 12-17 are also in decline. In 2011, 5.8% of students reported smoking cigarettes on at least one day in the seven days before the survey compared to 6.7% in 2008.[3] Smoking rates among pregnant women decreased as maternal age increased.

Women in younger age groups were more likely to smoke during pregnancy, with 46.6% of teenage women who gave birth in the ACT reporting they smoked during pregnancy, compared to only 7.8% of women over the age of thirty.[4]

## Adult smoking

Smoking rates both nationally and in the ACT are continuing to decrease. Results from the 2011-12 Australian Health Survey indicate that 15% of ACT residents aged 18 years and over, reported being a current smoker.[1] This is down from the previous survey conducted in 2007-08 where 18.6% of adult ACT residents were current smokers.[2] Both surveys showed that males reported smoking rates which were four to five percentage points higher than those of females (Figure 1).[2]

## Student smoking

As with adults, results from the ACT Secondary School Alcohol and Drug Survey indicate smoking rates among ACT secondary students aged 12-17 are also in decline. In 2011, 5.8% of students reported smoking cigarettes on at least one day in the seven days before the survey (current smokers) compared to 6.7% in 2008.[3] Older students (16-17 years) were significantly more likely than younger students (12-15 years) to report being current smokers (10.9% compared to 3.3%). Smoking rates were similar between the sexes with 6.1% of males and 5.4% of female students reporting to be current smokers

**Photograph: by Mister GC. FreeDigitalPhotos.net**

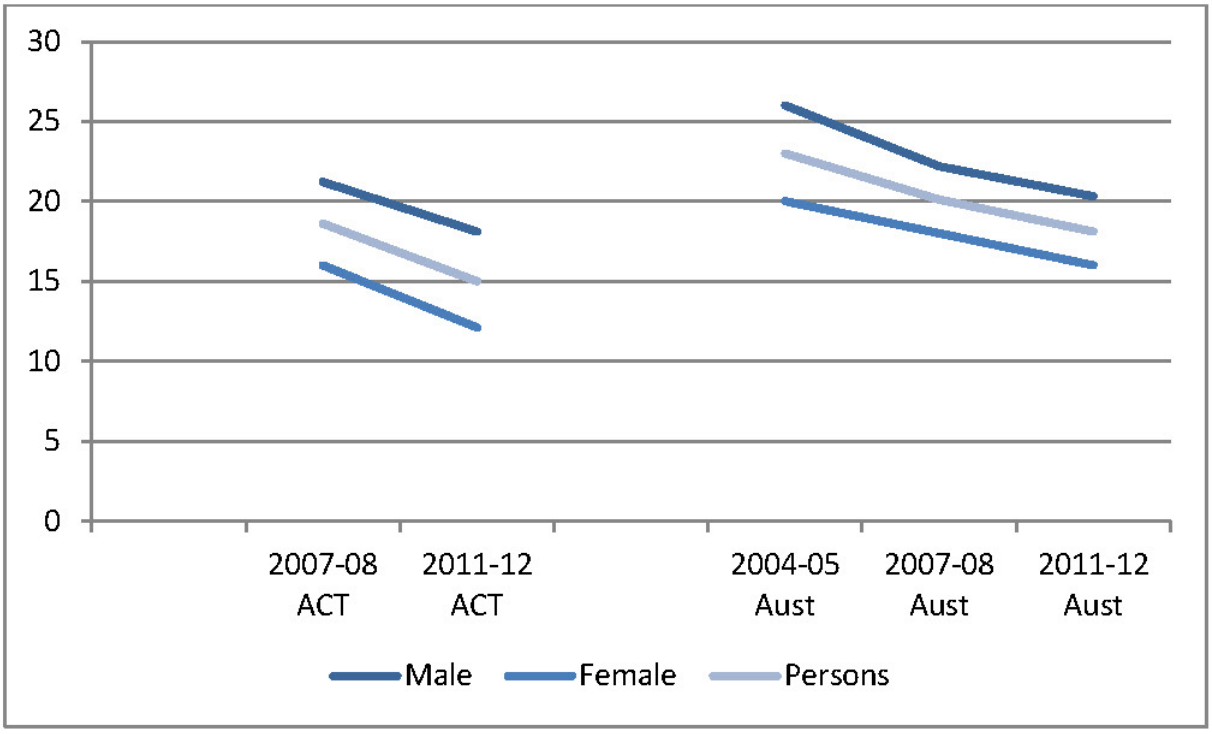


**Figure 3: Current smoker status, % of people aged 18 years & over, ACT & Australia, 2004-12**
**Source: ABS, Australian Health Survey: First results, 2011-12, cat. no. 4364.0**
**Source: ABS, National Health Survey: Summary of Results 2007-08, cat. no. 4362.0**
**Source: ABS, National Health Survey 2004–05: cat. no. 4363.0**

## Smoking rates in the ACT *(continued)*

### Smoking in pregnancy

Self reported data on smoking were collected from women who gave birth in the ACT from 2000 to 2011.[4] Rates in 2011 indicate that ACT women were less likely to smoke whilst pregnant (9.3%) than Australian women (13.2%) when compared to the National figures.[2]

It is interesting to note that smoking rates among pregnant women decreased as maternal age increased. Women in younger age groups were more likely to smoke during pregnancy, with 46.6% of teenage women who gave birth in the ACT reporting they smoked during pregnancy, compared to only 7.8% of women over the age of thirty (see Figure 2).[4]

The average birthweight for babies (excluding multiple births) born to women who smoked during pregnancy in 2011 was significantly lower (3,146 grams) than babies of women who did not smoke (3,422).[2]

### Smoking in Aboriginal and Torres Strait Islander people

Survey results show that Aboriginal and Torres Strait Islander residents in the ACT are less likely to be daily smokers than nationally (28.4% compared to 41.6%). However, ACT Aboriginal and Torres Strait Islander residents are consistently more likely to be daily smokers than ACT non-Aboriginal and Torres Strait Islander residents.[5] Similarly Aboriginal and Torres Strait Islander students were more likely to be current smokers than non-Aboriginal and Torres Strait Islander students (11.3%* and 5.6% respectively).[3]

The rates of smoking during pregnancy among Aboriginal and Torres Strait Islander women was higher than for non-Aboriginal and Torres Strait Islander women but across both groups younger women were more likely to smoke (see table 1).

*Estimate has a relative standard error between 25% and 50% and should be interpreted with caution.

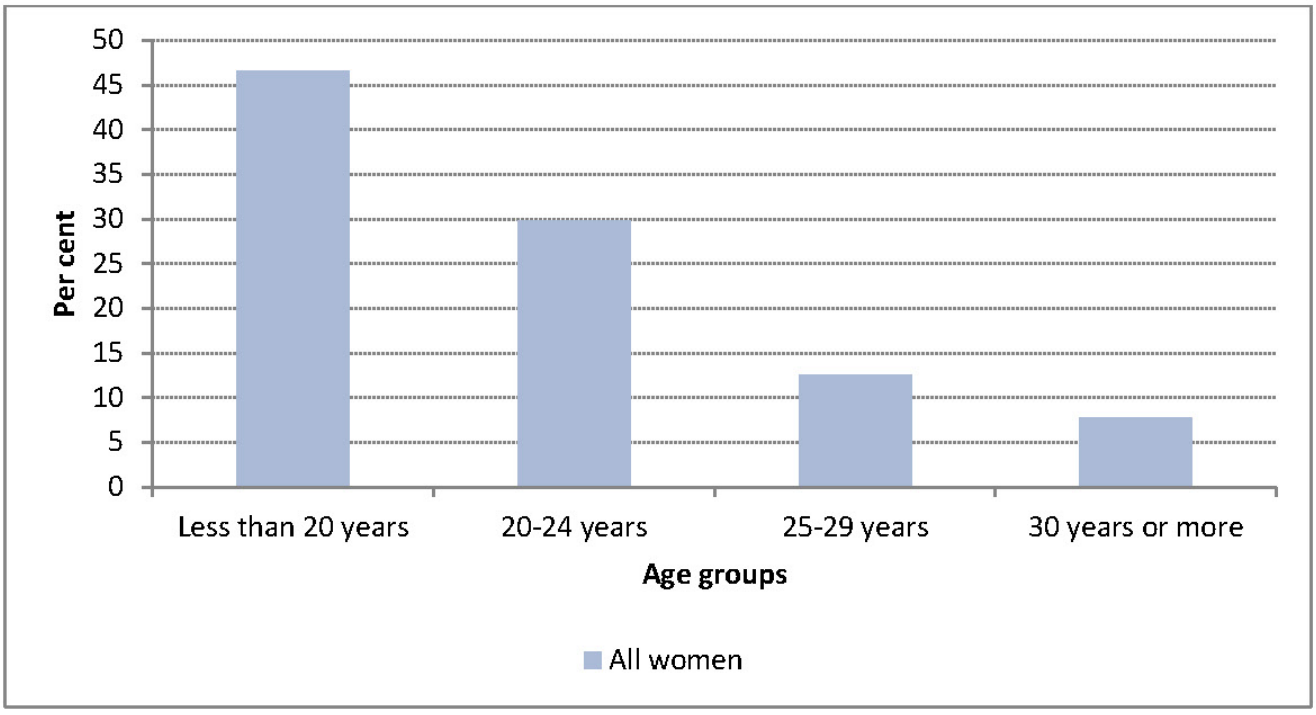


**Figure 4: Smoking during pregnancy, % by maternal age group, ACT residents, 2002-2011**
**Source: ACT Maternal Perinatal Data Collection, 2002-11**

| | Less than 20 years of age | 20-24 years | 25-29 years | 30 years or more |
|---|---|---|---|---|
| Aboriginal and Torres Strait Islander | 68 | 59.2 | 44.4 | 33.3 |
| Non-Aboriginal and Torres Strait Islander | 44.4 | 28.6 | 12 | 7.6 |
| All women | 46.6 | 29.8 | 12.5 | 7.8 |

**Table 1: Smoking during pregnancy, % by maternal age group & Aboriginal & Torres Strait Islander Status,**
**Source: Maternal Perinatal Data Collection**

## Smoking rates in the ACT *(continued)*

### Smoking by age groups

Results from the ACT General Health Survey (ACTGHS) show similar trends to those collected in the Australian Health Survey. Overall, 15% of ACT adults 18 years and over were current smokers with smoking rates decreasing with age (see Figure 3). Like the AHS rates, the ACTGHS also indicated that rates were significantly higher for males (17%) compared to females (12%). An area of concern is 18-24 year olds; with 30% reportedly being current smokers (males 34%, females 25%).[7]

### Self rated health

The concept of health-related quality of life (HRQL) refers to a person's or a group's perceived physical and mental health over time. Clinicians use HRQL to better understand how an illness interferes with a patient's day-to-day life. Public health professionals use HRQL to measure population health needs, and the effect of public health interventions in different populations.[6] Results from the 2011-12 ACTGHS indicate that current smokers are significantly less likely to report their self-rated health as excellent or very good (45.8%) compared to non smokers (55.4%).[7]

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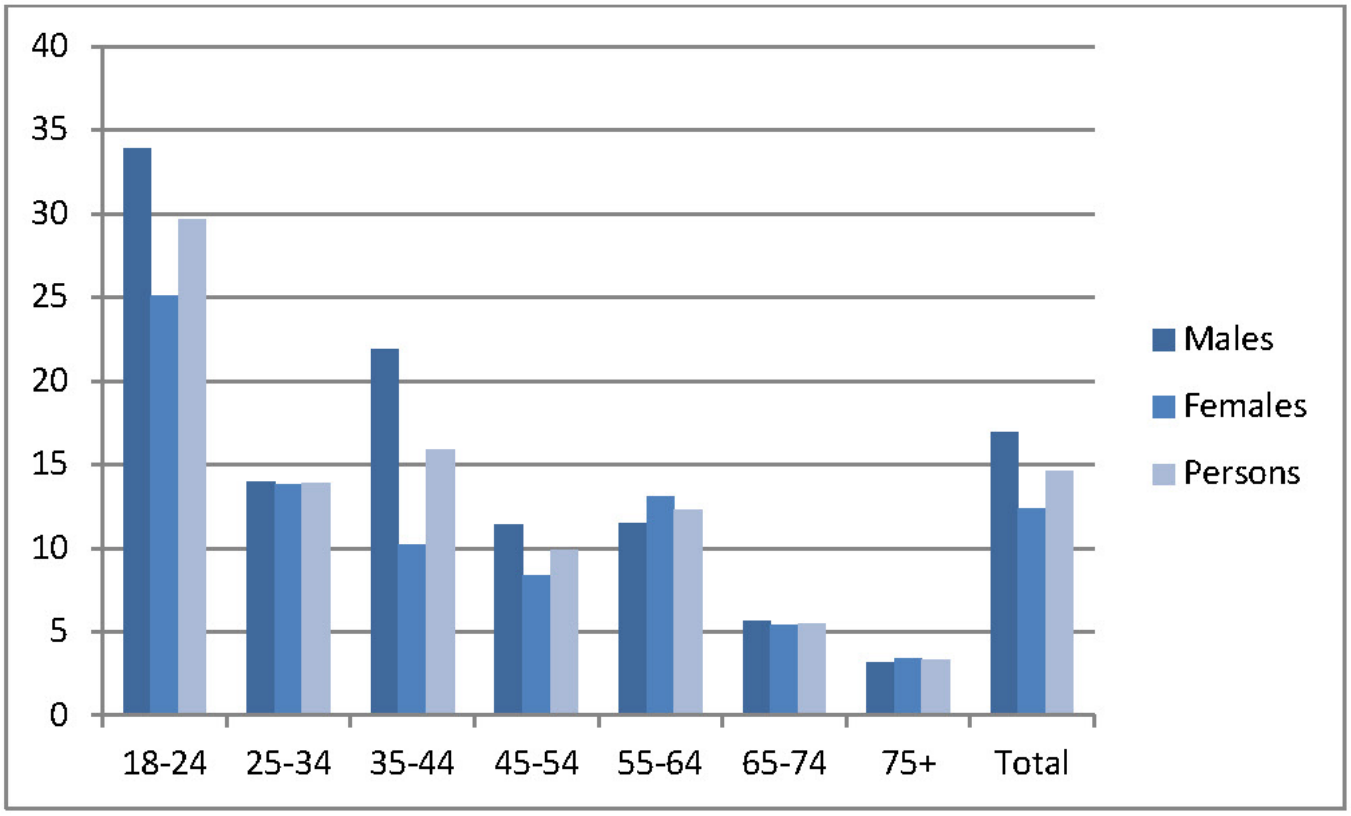



**Figure 5: Current smoker status, % of people aged 18 years and over, ACT 2011-12**
**Source: ACT General Health Survey, 2011 and 2012**

# ACT tobacco control

Nicola Clark, Environmental Health Project Team, Population Health Division

## Tobacco Control and Smoke-Free Environments

The ACT is a leader in tobacco control and smoke-free environments. The ACT first legislated for tobacco control in 1927 and 87 years later, continues to investigate options for new policies and legislation to curb tobacco smoking. This leadership was acknowledged in 2014 when the ACT was awarded top spot on the National Tobacco Scoreboard.

2014 marks 20 years since the ACT led the country with enacting the *Smoke-Free Areas (Enclosed Public Places) Act 1994*. Within 15 years, outdoor eating and drinking areas became smoke-free.

## Tobacco Control

It has only been in the last few decades that it has been found that tobacco has no safe level of use, yet the ACT's first tobacco legislation was the *Tobacco Ordinance 1927*. This Ordinance replaced the NSW laws that applied because NSW law was adopted at the time the ACT was founded. These were the *Tobacco Act 1884* and the *Juvenile Smoking Suppression Act 1903*. It was a simple ordinance, outlining the requirements for a licence to sell tobacco, cigars and cigarettes and making it an offence to sell tobacco to persons under 16 years of age.

From these relatively few restrictions placed on the sale and use of tobacco products, over 87 years the ACT has introduced measures to protect the community from the harmful effects of tobacco use. The regulation of tobacco and smoking products in the ACT has changed significantly over this period. In 1990, the *Tobacco Act 1927* was amended to increase the age a young person could legally purchase tobacco to 18 years, and to include provisions relating to advertising restrictions, as well as restrictions on the places tobacco could be sold.

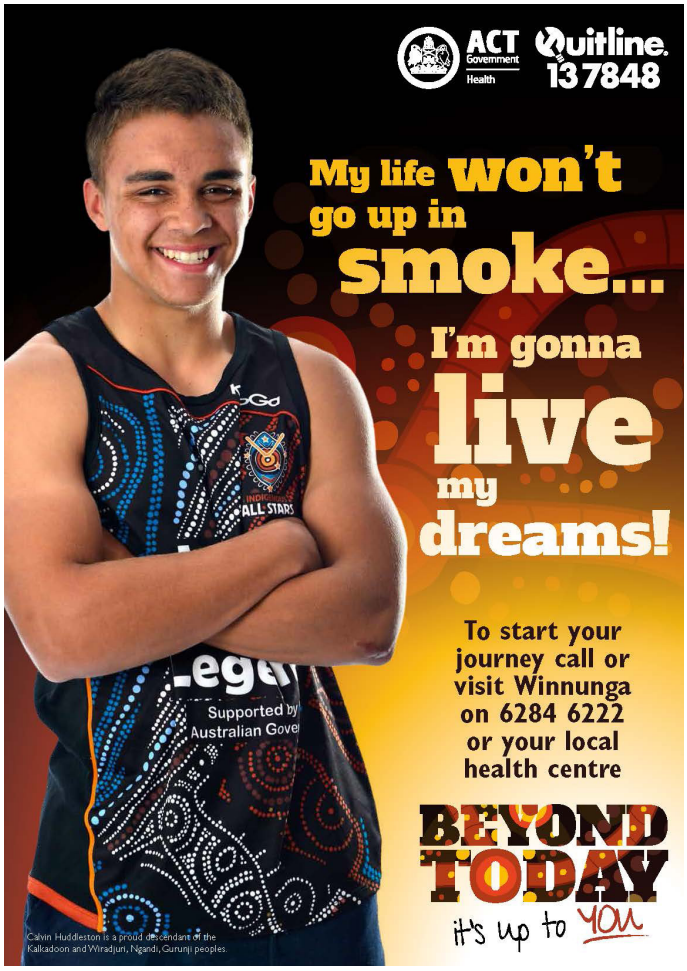
New measures were introduced in 2008, in the *Tobacco Amendment Act 2008*, including a ban imposed on the sale of fruit flavoured tobacco products, removal of tobacco advertising in the form of tobacco displays at retail outlets and prohibited tobacco products being included in customer rewards schemes.[1] The ban on tobacco displays commenced on 1 January 2010 for general retailers, with the specialist tobacconist display ban commencing 1 January 2011. The ACT was one of the first jurisdictions to have a point of sale display ban.[1]

In 2013, the ACT Minister for Health launched *Future Directions in Tobacco Reduction 2013-2016* (*Future Directions* - see page 25 of this issue). ACT Health publicly released the first discussion paper, *Options for Restricting Access to Tobacco*, in March 2014. The paper proposed options for restricting access to tobacco products, under two broad headings – reducing the number of tobacco licences in the ACT and restricting access to tobacco products. The paper proposed options intended to contribute to a reduction in tobacco use, and as the ACT is one of the few jurisdictions with a tobacco licensing system, the options proposed changes to the fee and licensing system. The consultation concluded in May 2014. ACT Health has collated the feedback and is preparing proposals for the government's consideration.

## 20 years of Smoke Free Environments

Smoke-free environments emerged as an important approach to decreasing exposure to second-hand smoke and denormalising smoking in the late 1980s and 1990s. In 1994, the ACT led the country by requiring enclosed public places to be smoke-free. The *Smoke-Free Areas (Enclosed Public Places) Act 1994* (the 1994 Act) commenced on 6 December 1994, and prohibited smoking in an enclosed public place (i.e. the public parts of premises) and covered a range of public places from shopping centres to theatres, hotels and motels. The 1994 Act allowed exemptions for premises that had liquor or gaming licenses (e.g. pubs and clubs). Another exemption was for the stage or performance area of a theatre to permit smoking by a performer as part of a production.

The ACT has also been a leader by implementing policies to manage smoking, particularly at government-owned facilities. Smoking was banned in federal government offices in 1986 and continued after ACT self-government in 1989. Canberra Stadium and Manuka Oval adopted a smoke-free policy in 2008, with smoking permitted only at designated outdoor locations outside the seating areas. Other major events, the Canberra Show and Floriade, have adopted smoke-free policies at their venues, with certain areas being smoke-free. ACT Health recently updated its Smoke-Free Environment Policy, previously updated in 2009. The new policy removes designated outdoor smoking areas from health facilities.



## ACT tobacco control *(continued)*

### 20 years of Smoke Free Environments *(continued)*

In 2003 the S*moking (Prohibition in Enclosed Public Places) Act 2003* was passed by the Legislative Assembly. This Act phased the removal of the 1994 exemptions and came into effect on 1 December 2006. This meant there were no longer areas in pubs and clubs where smoking could still occur. Unlike other jurisdictions that permit smoking, for example, in high-roller rooms at casinos, in the ACT no exemptions exist for smoking in an enclosed public place.

In 2009 the ACT Government consulted with the community about a ban on smoking in cars when children are present. It was identified as an important step in addressing the risks tobacco smoking poses to children. A child's brief exposure to this environment can result in detrimental health effects, triggering long term developmental and behavioural difficulties.[2] The legislation was introduced in August 2011, accompanied by a campaign to educate the community. The law commenced on 1 May 2012 and is enforced by ACT Policing.


On 9 December 2010 the *Smoking (Prohibition in Enclosed Public Places) Act 2003* was renamed the *Smoke-Free Public Places Act 2003*, and with this name change came a ban on smoking in outdoor eating and drinking places, and at underage functions. The Future Directions document provides an indication of the areas ACT Health is exploring as future smoke-free areas.[3]

### Strategies

Australia has a comprehensive tobacco control framework. The last forty years have seen an impressive amount of activity across the country, with advertising restrictions first proposed by the Commonwealth in the 1970s, through to plain packaging legislation in 2012. An important aspect of the Australian approach to tobacco control has been the establishment of strong and enduring partnerships between government, non-government organisations and community groups.

The first National Tobacco Strategy operated from 1999 to 2002-03, with subsequent strategies taking account of early successes and identifying new priorities. The *National Tobacco Strategy 2012-2018* was drafted to be consistent with Australia's obligations as a party to the World Health Organization Framework Convention on Tobacco Control (FCTC). The FCTC commits nations to implement a comprehensive range of policies, including:

- taxation;
- mass media education campaigns;
- support for cessation services;
- controlling access to tobacco;
- prohibition of tobacco advertising and marketing; and
- controlling exposure to second-hand smoke by restricting smoking in public and other spaces.[4]

At the local level there is the Alcohol, Tobacco and Other Drug Strategy and the Aboriginal Torres Strait Islanders Tobacco Control Strategic Framework. Both documents set out initiatives, such as new or improved smoking cessation programs among vulnerable populations.[5,6] The ACT is proud of its record in smoke-free and tobacco control reforms, but remains committed to continuing efforts to reduce smoking rates to less than 10% of the ACT population.

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# Snapshot

## National tobacco control scoreboard 2014

Kate Martin, Environmental Health Project Team, Population Health Division

Each year, the Australian Medical Association (AMA) and Australian Council on Smoking and Health (ACOSH) assess the performance of Australian state and territory governments in terms of tobacco control. The National Tobacco Scoreboard Achievement Award is awarded to the jurisdiction that has achieved outstanding progress in tobacco control over the previous 12 months. The Dirty Ashtray Award is awarded to the jurisdiction that has failed to do enough to protect the public from passive smoking or encourage smokers to cease smoking.

**Photograph: by niamwhan. FreeDigitalPhotos.net**

In 2014, the ACT and Tasmania were jointly awarded the National Tobacco Scoreboard Achievement Award for outstanding progress made in tobacco control legislation and investment.

The award highlighted the ACT Government's stance on prohibiting all point of sale advertising, vending machines carrying tobacco products, and the use of consumer reward schemes to purchase tobacco products. The ACT was also the first jurisdiction to divest government investments from the tobacco industry. The ACT Minister for Health has a formal policy of not meeting with tobacco companies.

The ACT Government's recent discussion paper on restricting access to tobacco was also praised. The discussion paper, released under *Future Directions for Tobacco Reduction in the ACT 2013-2016*, focused on options to limit the number of tobacco licensees and reduce the availability of tobacco products. The discussion paper was distributed to over 260 stakeholders, and posted on the ACT Health and the ACT Government community engagement websites. Over 60 submissions were received from tobacco licensees, public health advocates and industry groups.

The AMA and ACOSH agreed that the options canvassed in the discussion paper provided excellent avenues to restrict tobacco access and address the exposure risks of passive smoking.

The ACT Government welcomes the acknowledgement from the AMA and ACOSH for its successful tobacco control and smoke free policy and legislation. The ACT Government hopes limiting advertising and access to tobacco products within the ACT will send a strong message to other Governments to accelerate efforts to eliminate tobacco use and to encourage individuals to quit smoking.

# Canberra Hospital smoke free environment implementation

Ros Garrity, Project Manager, Strategy and Corporate, ACT Health.

In September 2014, ACT Health updated its Smoke-free Environment Policy[1] and implemented completely smoke-free environments across all ACT Health facilities, including Canberra Hospital. The ACT's other three major private hospitals (Calvary, National Capital Private and Calvary John James) also removed their designated outdoor smoking areas and went completely smoke free.

This case study will describe the steps involved in implementing the expanded smoke-free policy, outline the lessons learned, and discuss what must be done to maintain the smoke-free environments.

## Introduction

In 2012 ACT Health engaged an external consultant, Nous Group, to review the application of its May 2009 Smoke-Free Workplace Policy. Specifically, the review was to assess whether staff, patients and the community were complying with the policy and, if not, identify the main compliance issues.

The review found that ACT Health needed to work towards a more consistent approach in administering its smoke-free policy. It recommended the establishment of clear lines of leadership, rather than a distribution of responsibility model for promotion, compliance monitoring and enforcement.

The previous ACT Health smoke-free policy allowed people to smoke on ACT Health grounds in approved designated outdoor smoking areas (DOSAs). The review found the partial ban on smoking to be inadequate as it:

- did not eliminate exposure to environmental tobacco smoke;
- was not sustainable;
- resulted in continual patient complaints and verbal aggression;
- could be interpreted to implicitly condone smoking; and
- could result in patients being less likely to consider quitting.

There is growing government and community expectation that there be smoking bans in public places.[2] With the ACT Government leading the way, Australian state and territory governments continue to explore options for restricting or prohibiting smoking in public places.[3]

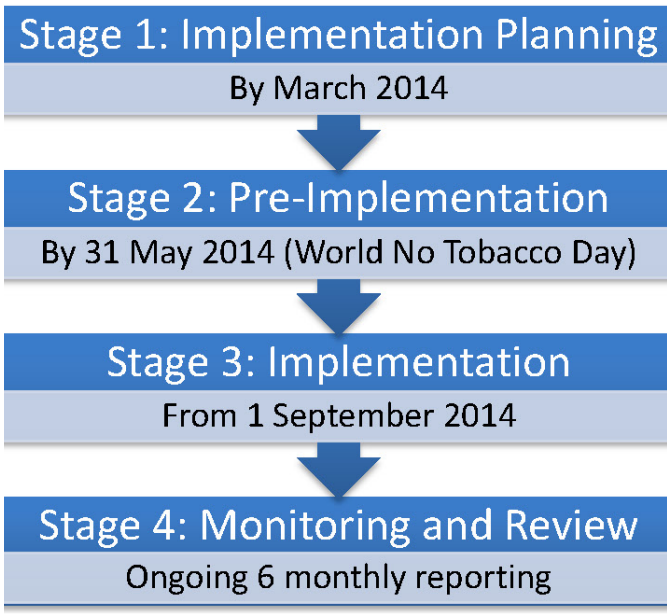
Interstate and internationally, other hospitals have already gone completely smoke-free.[2,4] After ongoing problems with compliance with the 2009 ACT Health Smoke-Free Workplace Policy, and with the management and enforcement of the DOSAs on the Canberra Hospital campus, the decision was made for ACT Health to follow suit.

ACT Health's Mental Health, Justice Health, Alcohol and Drug Services division went smoke-free on 1 January 2013, following the lead of other similar Australian mental health agencies.[5,6,7] This successful precedent in an area where consumers are more likely to be smokers established a path for the broader implementation.

## Project Stages

An Implementation Plan was developed to guide the Canberra Hospital Smoke-Free Environment Implementation. The Plan outlined four stages:

During these stages, a number of key changes were implemented to support the smoke-free environment implementation:




Stage 1:

- An extensive consultation process was conducted to enable staff and the ACT Community to have input into the updated Policy.

Stage 2:

- Two new Standard Operating Procedures were developed to support staff to implement the smoke-free environment; and
- Staff from all hospitals, and from organisations which are tenants in ACT Health facilities, were provided with ongoing training opportunities in smoking cessation support for patients, staff and stakeholders.

Stage 3:

- An increased range of Nicotine Replacement Therapy (NRT) was made available through the Canberra Hospital Pharmacy, for both inpatients and staff; and
- A Smoking Cessation Clinic commenced in September 2014 at the Canberra Hospital to support patients who smoke to remain smoke free during and beyond their hospital stay.

## Canberra Hospital smoke free environment implementation *(continued)*

### Project Stages *(continued)*

Stage 4:

- A Monitoring and Reporting process commenced, and an Evaluation Plan was put in place for completion six months after the smoke-free environment implementation; and
- ACT Health will work towards the establishment of statutory enforcement options to maintain the hospital smoke-free environments.

### Implementation

The consultation process on the updated ACT Health Smoke-Free Environment Policy identified overwhelming support for the implementation of a completely smoke-free environment from staff and visitors to the Canberra Hospital campus. The two key issues of concern were the need for stronger enforcement of the smoke-free environment, and the need to provide support to inpatient smokers who were unable to leave the hospital campus.

To address these issues, two Standard Operating Procedures were introduced to provide guidance for staff, covering Management of Nicotine Dependence, and Communication, Monitoring and Enforcement.

An application was made to the Canberra Hospital Formulary to increase the range of nicotine replacement therapy available for inpatients, from patches only to include faster acting forms including lozenges and the inhalator. In addition, staff across ACT Health were provided with increased ongoing training in care for smoking patients. This included training from an expert in smoking cessation, Dr Colin Mendelsohn, to increase staff skills and confidence in providing brief intervention for smokers.[8]

Various strategies were considered to enable stronger enforcement, including increased policing, and compliance cards. The option to introduce statutory enforcement (and the issuing of fines) for smokers on campus, as has been introduced by NSW Health in local government areas, is also being explored.


**Photograph: ACT Health file photograph**

Smoke-free signage was improved on the Canberra Hospital campus, including innovative options such as footpath stencils and movable A-Frame signage to be located in trouble spots. Regular communication with staff in the lead up through a monthly newsletter and intranet updates further ensured that they were kept informed and aware of progress as the implementation proceeded.


The ACT community was kept informed with the support of the Steering Committee for the Project, which included representation from Health Care Consumers Association and Cancer Council ACT. A comprehensive communication plan, driven by the Steering Committee, included posting of the monthly newsletter on the ACT Health internet site, regular contact with the media, and a launch in the lead up. DOSAs were removed just prior to the 1 September 2014 enforcement date.

Few problems were experienced following 1 September 2014. There was greatly increased compliance with the smoke-free environment following this date, and media attention was mainly supportive. Inpatients have made the transition to the completely smoke-free environment smoothly. All four of Canberra's major hospitals have moved simultaneously to being completely smoke-free, and this has led to good collaboration and less confusion for patients, staff and visitors to health services.

## Canberra Hospital smoke free environment implementation *(continued)*

### Future Directions

The success of the smoke-free environment implementation can be explained in terms of a number of key factors:

- There was a long lead in time and extensive communication about the transition to a smoke-free environment;
- All four major Canberra Hospitals made the transition together and used similar change management strategies;
- The project was managed centrally, with leadership backing, clear intent, and genuine support and involvement from most areas of ACT Health ; and
- A funded project officer coordinated the implementation with strong involvement from the steering committee of key stakeholders, including consumers, who worked together effectively across a number of different areas in ACT Health.

The Project's Steering Committee and Working Groups will continue to meet in the Monitoring and Enforcement stage of the smoke-free environment implementation, to address any issues that arise, and oversee reporting and evaluation of the project. Relevant business areas will report every six months to ACT Health's Executive Council on progress.

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# Plain packaging of tobacco products in Australia

Linda de Ridder, Environmental Health Project Team, Population Health Division

Australia is the first country to require plain packaging of tobacco products, with no logos, trademarks or promotional designs. The packages must be an unappealing dull green colour, with health warnings highly visible.

This approach aims to reduce the attractiveness of packaging, discourage people from initiating tobacco use and encourage people to quit.

The approach may already be having an impact, with reported reductions in tobacco sales and an increase in Quitline calls.

Australia is recognised as a world leader in its approach to tobacco control. One element of Australia's tobacco control measures is the requirement for the plain packaging of tobacco products. Australia is the first country to implement such restrictions.

Plain packaging is a key part of Australia's broader approach to tobacco control, which includes:

- legislation to restrict internet advertising of tobacco products in Australia;
- investment in anti-smoking social marketing campaigns;
- a 25 percent tobacco excise increase in April 2010;
- staged annual 12.5 percent increase in excise on tobacco and tobacco-related products (1 December 2013, 1 September 2014, 1 September 2015 and 1 September 2016);[1]
- a reduction in duty free concessions for tobacco products; and
- stronger penalties for tobacco smuggling offences.

Since 1 December 2012, all tobacco products sold, offered for sale, or otherwise supplied in Australia must be in plain packaging.

The *Tobacco Plain Packaging Act 2011* received Royal Assent on 1 December 2011. The Act requires tobacco products to be packaged in a specific dull green colour, with a large percentage of the package devoted to graphic health warnings. The use of trademarks, logos and designs is no longer permitted. The brand and product name may only be printed in plain text of limited size.

Health warnings were previously required on tobacco packages, but the new legislation increases the size of these warnings and specifies how much of the package must be devoted to these warnings. The warning statements, graphic images and explanatory messages that must appear on tobacco packages are detailed in the *Australian Government Competition and Consumer (Tobacco) Information Standard 2011* (an information standard under section 134 of the *Competition and Consumer Act 2010*). This Standard also requires packaging of tobacco products to include the Quitline logo and a telephone number for the Quitline service.

The plain packaging measures aim to:

- reduce the attractiveness and appeal of tobacco products to consumers, particularly young people;
- increase the visibility and effectiveness of mandated health warnings; and
- reduce the ability of packaging to mislead consumers about the harms of smoking.


**Photograph: Department of Health, Australian Government**

It is hoped that, as part of a comprehensive approach to tobacco control, these measures will contribute to reduced tobacco use and improve public health in the long term through:

- discouraging people from taking up smoking;
- encouraging people to quit smoking;
- discouraging people who have given up smoking from relapsing; and
- reducing people's exposure to smoke from tobacco products.

The packaging requirements assist Australia to meet obligations as a party to the World Health Organization Framework Convention on Tobacco Control. Parties to the Convention are bound to implement the 'Guidelines for implementation of Article 11 of the WHO Framework Convention on Tobacco Control (Packaging and labelling of tobacco products)' which was adopted in November 2008.

## Plain packaging of tobacco products in Australia *(continued)*

### Industry challenges to plain packaging legislation

The High Court of Australia heard two challenges to the plain packaging legislation between 17 and 19 April 2012, arguing that the *Tobacco Plain Packaging Act 2011* breached section 1 (xxxi) of the Australian Constitution, in that the Commonwealth was acquiring property otherwise than on just terms. The Court found that provisions of the Act were not contrary to the Constitution. By a 6:1 majority, the Court held that there had been no acquisition of property by the Commonwealth of Australia.[2]

Other legal challenges to Australia's legislation are also being pursued internationally, including by tobacco companies and the World Trade Organization.[3]

**Photograph: by hywards. FreeDigitalPhotos.net**

### Plain packaging in other countries

It is understood that countries considering plain packaging laws for tobacco products include Ireland, New Zealand, England and India.

On 3 October 2014, the Irish Parliament referred the *Public Health (Standardised Packaging of Tobacco) Bill 2014* to the Select Sub-Committee on Health for review.

The New Zealand Government has prepared a bill proposing changes to existing legislation. The first reading of the *Smoke-free Environments (Tobacco Plain Packaging) Amendment Bill* took place on 11 February 2014. The New Zealand Parliamentary Select Committee on Health reported on 5 August 2014, recommending that the Bill be passed with amendment. News reports suggest that the proposed legislation will not be passed until legal challenges to plain packaging in Australia have been settled.

### Evidence of effectiveness

Quitline calls

Plain packaging of tobacco products and highly visible health warnings are part of a long term approach to tobacco control. Evidence shows that these approaches are already having a positive effect, including through increased calls to Quitline.

A journal article published in January 2014, reported a significant increase in the number of calls to Quitline in the weeks following the introduction of mandatory plain packaging. The study, published in the Medical Journal of Australia (MJA), included a whole-of-population time series analysis that looked at Quitline data for New South Wales and the Australian Capital Territory. After adjusting for seasonal variation and background trends such as anti-tobacco advertising and cigarette price increases, the study reported a 78% increase in the number of calls coinciding with the introduction of plain packaging.[4]

It is not possible to determine whether the increased size of graphic health warnings and perhaps the higher visibility of the Quitline number may have also contributed to the increase in calls. However, the study did compare the increase with 2005/06 data which showed an increase in Quitline calls after graphic health warnings were first mandated on tobacco packages. The authors indicate that there was a more sustained increase in calls following the recent introduction of plain packaging.[4]

The peak in calls to Quitline occurred at four weeks following the introduction of plain packaging. In discussing the MJA research article, the British Medical Journal reported in February 2014 that the peak in calls had, at that time, been sustained for 43 weeks.[5]

Smoking rates

While not directly linked to the introduction of plain packaging, the 2013 National Drug Strategy Household Survey[6] shows that smoking rates continue to decline in Australia. The study indicated that:

- among people aged 14 and over, daily smoking declined significantly between 2010 and 2013, from 15.1% to 12.8%;
- smokers reduced the average number of cigarettes smoked per week from 111 cigarettes in 2010 to 96 in 2013; and
- the proportion of 18–24 year olds who had never smoked increased significantly between 2010 and 2013 (from 72% to 77%).

## Plain packaging of tobacco products in Australia *(continued)*

### Tobacco sales

While tobacco sales data are not publicly available, the Australian Government Department of Health used indicators to report on reductions in tobacco sales following the introduction of plain packaging:[7]

- Australian Bureau of Statistics (ABS) figures show that total consumption of tobacco and cigarettes in the March quarter 2014 is the lowest ever recorded, as measured by estimated expenditure on tobacco products (from $3.508 billion in December 2012 to $3.405 billion in March 2014).[8]
- The Commonwealth Treasury has advised that tobacco clearance declarations (required to clear goods imported by air and sea) fell by 3.4% in 2013 relative to 2012 when tobacco plain packaging was introduced. Clearances are an indicator of tobacco volumes in the Australian market.
- In April 2013, the CEO of a major tobacco company noted a decline in tobacco product sales:

*"....we've had the first six months of the plain pack environment in Australia. We've seen the market decline roughly 2% to 3%, so maybe not as bad as we might have anticipated."*[9]

**Photograph: by GameAnna. FreeDigitalPhotos.net**

### ACT situation

The plain packaging requirements align well with the ban on point of sale display of tobacco products in the ACT. By reducing the visibility of tobacco products and the attractiveness of the packages, it is hoped there will be a reduction in the uptake of smoking and an increase in attempts to quit smoking.

### Complaints about non-compliance

If a person sees tobacco packaging that they believe does not meet the requirements of the *Tobacco Plain Packaging Act 2011*, they can submit a complaint to the Australian Government Department of Health at http://www.health.gov.au/internet/main/publishing.nsf/Content/tobacco-plain-packaging-complaints-form or phone 1800 062 971.

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# Smoking in pregnancy

Tony Blattman, Health Promotion Section, Population Health Division

The ACT compares well to other jurisdictions in having relatively low rates of smoking amongst adults. In 2011-12, 15% of ACT residents aged 18 years and over reported being current smokers compared with 18.1% of adult Australians.[1] ACT smoking rates are also consistently trending downwards.

Despite this encouraging trend, there are still some areas of concern, including relatively high rates of smoking in young women, and of particular concern, the number of women smoking during pregnancy.

A 2014 National Health Performance Authority report notes that the rate of ACT women smoking during pregnancy is more than twice the average of a group of eight 'peer' communities.[2]

Smoking in pregnancy is associated with particular negative health consequences, and health promotion strategies must be specifically tailored to connect with the target audience of expectant mothers.

## The ACT compared to its 'peers'

In July 2014, the National Health Performance Authority (NHPA) released Healthy Communities: Child and Maternal Health 2009-2012.

The report notes that the percentage of ACT women who smoked during pregnancy was 10.2%. This compares well to the national rate of 13.2 %.[2] However, to provide a more fair and meaningful comparison of health outcomes, the NPHA report describes seven distinct population catchment types, or 'peers', based on factors such as socioeconomic status and urban/ regional/ rural status. The ACT sits in the 'Metro 1' peer group, which is a group of eight high income metropolitan communities. These include, for example, Sydney North Shore & Beaches and Inner East Melbourne. When compared to Metro 1 peer communities, the ACT has the highest percentage of women who smoked during pregnancy, with 10.2% representing more than twice the average rate (4.9%) for the eight Metro 1 communities described in the NHPA report. The ACT also has the highest rate of smoking during pregnancy among Aboriginal and Torres Strait Islander women (53.7%) within the Metro 1 peer group.[2]

The 2014 ACT Chief Health Officer's Report echoes this concern, providing further detail from self reported data on cigarette smoking collected from women who gave birth in the ACT from 2000 to 2011. The data collected relating to young women, and young Aboriginal and Torres Strait Islander women, is of particular concern. Forty-four per cent of ACT teenage women who gave birth report they smoked during pregnancy. Smoking during pregnancy decreased significantly with maternal age, however women in younger age groups were significantly more likely to use tobacco during pregnancy.[1]

Smoking during pregnancy was also significantly higher for younger Aboriginal and Torres Strait Islander women. 68% of Aboriginal and Torres Strait Islander women aged less than 20 years, and 59% of those aged 20 to 24 years, reported that they smoked during pregnancy. In comparison, in non-Aboriginal and Torres Strait Islander women 44% and 29% respectively reported smoking during pregnancy.[1]

**Photograph: by kdshutterman. FreeDigitalPhotos.net**

## Why is it important to address this issue?

Smoking is significantly associated with lower birth weight, and this is borne out by ACT data. The average birth weight of babies of ACT residents who reported smoking during pregnancy in 2011 was significantly lower than that of babies whose mothers did not smoke (3,146 grams compared to 3,422 grams). Low birth weight is associated with a range of health issues.

The effects of low birth weight can also extend beyond infancy and childhood. Although the relationship becomes more complex, a number of adult health conditions have also been associated with low birth weight, independent of socioeconomic status.[4]

Smoking is also a general risk factor for pregnancy, and in addition to low birth weight, smoking is associated with preterm birth, birth anomalies and perinatal death. Smoking also increases the mother's risk of spontaneous abortion and ectopic pregnancy. As such, quitting smoking reduces complications that may be associated with childbirth.[5,6]

Furthermore, the Australian Institute of Health and Welfare (AIHW) notes that:

*The effects of smoking during pregnancy persist into infancy and childhood. Smoking during pregnancy has been found to be associated with sudden infant death syndrome (SIDS), as well as childhood cancers, high blood pressure, asthma, obesity, lowered cognitive development and psychological problems.*[3]

All of these factors combine to provide expectant mothers with a tangible motivation to help them quit, making pregnancy a window of opportunity to entice smokers to quit.

## Smoking in pregnancy *(continued)*

### Where to from here?

A range of interventions, policies, regulations, price levers, and cultural and attitudinal shifts have seen smoking rates consistently trending downwards, approaching the point where smoking rates may be in the future expressed as a single digit percentage. The challenge remains to address smoking rates in specific subpopulations, including pregnant women. These populations are in need of precisely targeted interventions.

As we try to address smoking prevalence in smaller groups it is important to have epidemiological data identifying smoking behaviour in particular subsets of the population. Using this data, future anti-smoking programs should be based on research that tests the effectiveness of messages designed for specific target populations.

Future anti-smoking public information programs for young people and young women in particular, should utilise messages, and message delivery strategies, that more accurately reflect the different ways in which females and males tend to receive anti-smoking information. Messages should be crafted in ways that address the needs of young people and the reasons they smoke, rather than just using simple scare tactics.

An example of the above approaches can be seen in the *Beyond Today, it's up to you* campaign around smoking in pregnancy, delivered by ACT Health. The campaign has a specific focus on reducing smoking in the ACT among Aboriginal and Torres Strait Islander women who are pregnant or who have young children. The campaign development incorporated the review of published and unpublished literature, and interviews with key individuals and services in the ACT involving care and support to this target group. The findings of the review will determine initiatives to be progressed in the future.

As Mahoney notes in 'Strategic communication and anti-smoking campaigns':

*Health promotion strategists have a tough job to convince young people to quit smoking – or to avoid starting. The problem strategists face is not that young people reject health-based anti-smoking messages; it is that young people smoke for more entrenched, perhaps less rational, reasons.*[7]

Anti-smoking campaign strategies therefore need to be moulded to reflect the lived experience and aspirations of a younger audience, as well as their rational, and less than rational, motivations.

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# Smoking cessation in the ACT Aboriginal and Torres Strait Islander communities

Yvonne Mills, Senior Policy Officer, Aboriginal and Torres Strait Islander Health Unit, Policy and Government Relations

The ACT Government is working with local Aboriginal and Torres Strait Islander community organisations on ways to reduce the smoking rates in this target group. Engagement with the community includes involvement and participation in a social marketing campaign *Beyond Today....it's up to you.*

Beyond Today local champions have contributed to the campaign by coming forward to tell their stories of success in quitting or the affect smoking has had on them or their families.

## ACT Aboriginal and Torres Strait Islander Tobacco Control Strategy 2010-2014

*Tackling Smoking* was an initiative of the ACT Jurisdictional Implementation Plan, a commitment under the National Partnership Agreement on Closing the Gap in Indigenous Health Outcomes, to reduce smoking rates amongst Aboriginal and Torres Strait Islander people living in the ACT. Key to this commitment was the development of the *ACT Aboriginal and Torres Strait Islander Tobacco Control Strategy 2010-2014* (the Strategy). The Strategy was designed around areas of priority following an examination of tobacco control research and associated evidence.

Through the review of literature and a consultation process, four key areas for action were identified for resourcing under the Strategy:

- Development and implementation of a multi-component cessation and reduction program based on family, social and workplace networks;
- A social marketing program;
- A research and evaluation agenda; and
- Building on legislative change, bans and other policy initiatives.

To provide a driving force behind the project, an advisory group made up of key stakeholders was established to ensure the Strategy was successfully implemented, monitored and evaluated. The advisory group continues to meet and an evaluation of the project is anticipated to be completed in late 2014 .

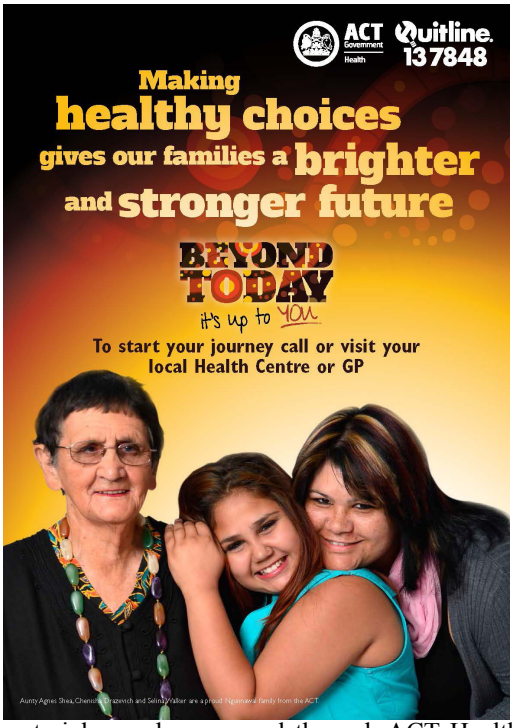
## Beyond Today....it's up to you

Implementing the social marketing program included the development of Beyond Today....it's up to you , a community-based campaign that aims to promote smoking cessation and health lifestyle behaviours among Aboriginal and Torres Strait Islander communities of the ACT and surrounding region. In 2012, the campaign was developed and launched in December of the same year.

Campaign materials and messages are based on information gathered from a digital story telling project. This project adopted a community-based approach to research that enabled Aboriginal and Torres Strait Islander people who have successfully quit or have been affected by smoke-related illnesses to express themselves in their own voice.

Beyond Today local community champions actively participated in the campaign and are featured in the campaign materials including:

- posters;
- brochures;
- banners;
- short videos; and
- songs created and performed by local Aboriginal and Torres Strait Islander children and young people.




These materials can be accessed through ACT Health's Aboriginal and Torres Strait Islander Health Portal under the Beyond Today site at http://health.act.gov.au/c/health?a=sp&did=11049236

Senior Ngunnawal Elder, Mrs Agnes Shea OAM is featured in the campaign as a local community champion telling her story which has been captured in the campaign materials. See her story on page 23.

## Future of the Beyond Today campaign

Continuation of the campaign, through 2014 – 2015 will involve comprehensive promotion and advertising to provide local Aboriginal and Torres Strait Islander people with consistent and regular messages about starting the journey. The messages include Information about where to go for help to stop smoking and take up a healthy lifestyle.

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## Smoking cessation in the ACT Aboriginal and Torres Strait Islander communities *(continued)*

### This is my story

**Senior Ngunnawal Elder**
**Mrs Agnes Shea OAM**

My Grandfather started smoking at the age of 14.

My brother Joe was born partly crippled. He couldn't participate in sport. He really enjoyed smoking because it was one of the few social activities he could participate in. He got emphysema first then cancer of the lungs.

My youngest son, John, has smoked all his life. In his 40's he noticed darkness on one of his toes; it was gangrene. In 2001, aged 44, they cut off his leg just below the knee. In 2006, they cut off his other leg just below the knee. In 2008, they cut his first leg again above the knee.

Back in 2007, doctors told him he had two days to live and that was a shock. But he keeps going in his wheelchair.

The family help him; the family is always working together. Most people assume he has diabetes, he doesn't. The blocked arteries were caused by smoking which led to gangrene and amputations.

I've never smoked; I don't see any reasons for smoking. It doesn't fill you, it doesn't quench your thirst and it's an unhealthy habit. Being an Elder, I have seen the long term impact that smoking has on people and their families.

I worry about the young people; there is a lot of peer group pressure on young people today to smoke.

Not smoking is a health choice that people do have. There is help and support within the community.

I want to see young people achieve their dreams and lead a strong healthy nation – then they can show the way for upcoming generations.

# Proactive retail tobacco compliance program

Office of Regulatory Services, Justice and Community Safety Directorate.

The Office of Regulatory Services is responsible for the enforcement of a broad range of legislation including the *Tobacco Act 1927* and the *Smoke-free Public Places Act 2003*. This article discusses the how the Office of Regulatory Services undertakes this regulatory role through compliance testing and proactive compliance campaigns with tobacco retailers.

## ACT Legislation

The Office of Regulatory Services (ORS) is responsible for the licensing of tobacco retailers and the enforcement of a broad range of legislation including the *Tobacco Act 1927* and the *Smoke-free Public Places Act 2003*. The Tobacco Act was introduced to provide regulation in relation to the supply, advertising and promotion of smoking products. In addition, it outlines the requirements for licensing and offences.

Since 9 December 2010, under the Smoke-Free Public Places Act, smoking has been prohibited in most outdoor drinking and eating places in the ACT. The Act provides for some pubs, bars and licensed clubs to provide a Designated Outdoor Smoking Area (DOSA) where there is no food or drink service, but in which patrons may smoke and drink. The main purpose of a DOSA is to allow an area for customers to briefly enter in order to smoke and then return to non smoking areas of the premises.

Compliance with the Tobacco Act and the Smoke-Free Public Places Act is achieved by both proactive and reactive campaigns. Programmed tobacco compliance campaigns take place over a three-year cycle of compliance activity, with specific targets and operational objectives based on identified risks factors, whereas reactive campaigns are a result of notifications from the community.

## The Role of the Office of Regulatory Services

ORS inspectors, under the *Fair Trading (Australian Consumer Law) Act 1992* and the Tobacco Act, have the authority to enter premises to undertake an inspection. This includes requiring the occupier of the premises to provide information and answer questions during the inspection. The ORS also has the authority to administer tobacco compliance testing, following approval by the Minister.

Under section 14 of the Tobacco Act it is an offence to supply smoking products to persons under 18 years of age. Compliance testing is a strategy to test the compliance of tobacco sellers in relation to section 14. Under the supervision of an ORS authorised officer, compliance testing involves a trained young person (referred to as a purchase assistant) attempting to purchase cigarettes or other tobacco products from a retailer.

The aim of introducing a program of compliance testing is to reduce the supply of cigarettes to people under the age of 18 years by increasing tobacco retailer compliance with the cigarette “sales to minors” provisions of the Tobacco Act.

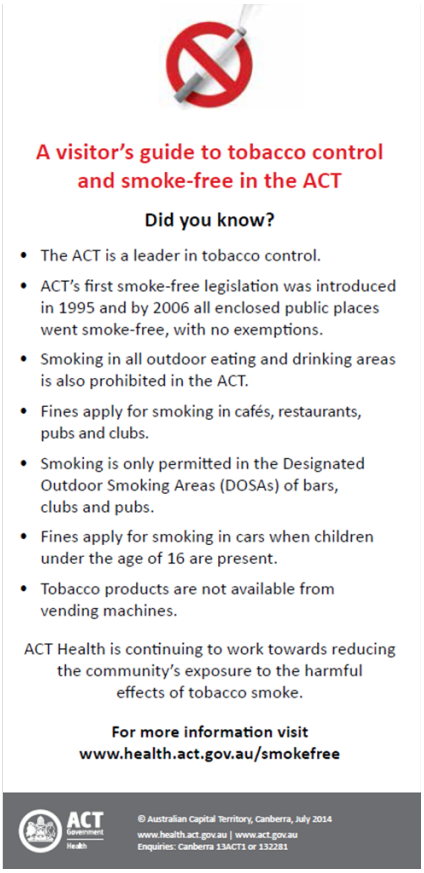
## 2014 Compliance Program

The 2014 tobacco proactive compliance inspection program took place in the first half of 2014 and targeted tobacco licensees and retailers in the ACT. The purpose of the inspection program was to identify businesses selling smoking products in the ACT and ensure that they comply with the obligations of the *Tobacco Act 1927*. At the same time, the ORS aimed to raise awareness amongst licensees of their obligations under the Act and remind licensees that enforcement action may be taken against businesses that are operating in contravention of the Act.

ORS inspectors visited 133 retail tobacconists during the program, with a focus on the following obligations: compliance with the prohibition of advertising smoking products; the storage of smoking products (out of view at points of sale); the prohibition on the sale of prohibited products; and compliance with the number of points of sale outlined in their licence. The compliance program ran for more than three months, with ORS inspectors finding a high level of compliance with the Act in the ACT. No issues were identified with any of the 133 retail tobacconists.

## Education for the ACT Community

During the compliance program, ORS inspectors aimed to raise awareness amongst licensees of their obligations under the Act. The ORS has a number of resources available for licensees, including pamphlets, recently updated ‘no smoking’ stickers for display in the windows of premises, ‘no smoking’ stickers for display on tables, and ‘no-smoking’ coasters. To order the resources, contact the ORS on 6207 3000 (then select option 8).



# Future directions in tobacco reduction

Nicola Clark, Environmental Health Project Team, Population Health Division

## Strengthening the effort in tobacco reduction

On World No Tobacco Day 2013 (31 May), the Minister for Health released *Future Directions for Tobacco Reduction in the ACT 2013 – 2016* (*Future Directions*).[1] *Future Directions* focuses on strategies in two key action areas. These are restricting access to tobacco, including minimising promotion, and restricting places of tobacco use. The basis for *Future Directions* was to provide a local focus to the National Tobacco Strategy 2012-2018 and the National Preventative Health Strategy.

*Future Directions* started a process of engagement with the ACT community. Its strategies will be explored and achieved by government, non-government agencies, and other stakeholders working together to maintain strong partnerships. Efforts to reduce the effects of smoking on the ACT population are strengthened through this collaboration.

## Reason for Tobacco Control

Tobacco use is one of the largest preventable causes of death and disease in Australia. Smoking claims the lives of 15,000 Australians every year.[2] It has been estimated that if no one smoked it would eliminate:

- about one-third of all cancers;
- one-quarter of all heart disease; and
- a range of other diseases and conditions would exist only in greatly diminished form.

The burden of disease caused by tobacco smoke requires multi-faceted strategies to reduce the prevalence of smoking and its associated health, social and economic costs. Robust policy development and strong legislation has been required to discourage tobacco use, and wherever possible to protect people that are unwillingly exposed to environmental tobacco smoke.

The ACT monitors its success in the reduction of smoking through the smoking rate. There are several surveys conducted to obtain the smoking rate. According to the National Drug Strategy Household Survey, the ACT's daily smoking rate for people aged 18 years and over is 11.7%[3], the lowest in the country, compared to the smoking rate for Australia of 15.9%.[4] The daily smoking rate has halved in the ACT since 1998 (22.9%).[5]

The 2012 National Healthcare Agreement commits Australian governments to achieve a performance benchmark of reducing the national smoking rate to 10% of the population by 2018.[5] If the ACT's trend continues, it is expected the ACT daily smoking rate will be less than 10% in 2018.

## Future Directions

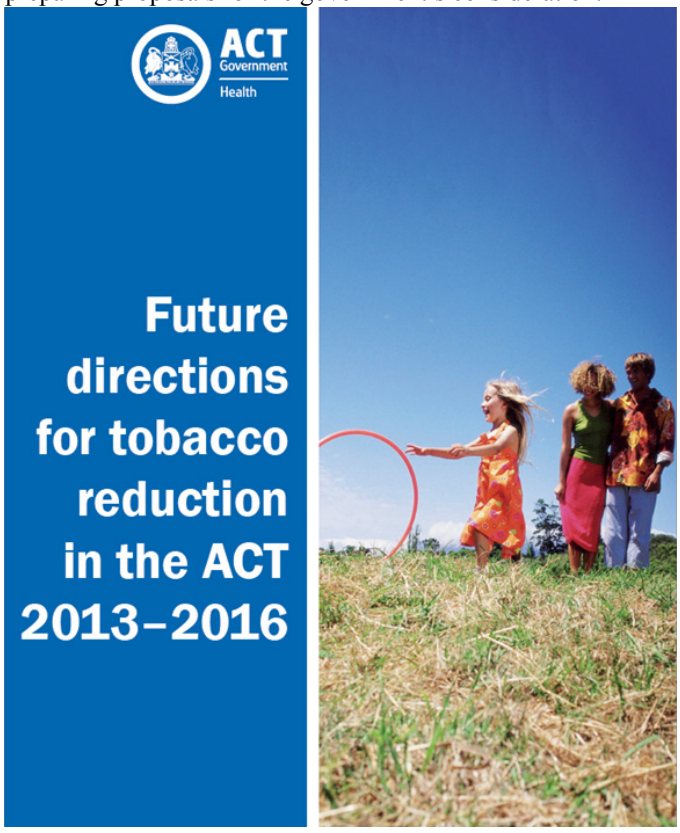
An important aspect of tobacco control is the establishment of strong and enduring partnerships between government, non-government organisations, and community groups. A reduction in tobacco use and exposure to tobacco smoke is intended to be achieved through progressively applying a comprehensive range of policies, including:

- mass media education campaigns;
- support for cessation services;
- prohibitions on tobacco advertising and marketing; and
- controlling exposure to second-hand smoke by restricting smoking.

Restricting access to tobacco

The *Tobacco Act 1927* provides stringent requirements around the sale of tobacco products, with a ban on the display of tobacco products, restrictions on advertising, and requirements for licensing. In March 2014 ACT Health released the discussion paper, Options for Restricting Access to Tobacco, focusing on a key action area of *Future Directions*. The paper proposed options for restricting access to tobacco products under two broad headings: reducing the number of tobacco licences in the ACT; and restricting access to tobacco products.

The discussion paper outlined several suggestions to reduce the number of tobacco outlets in the ACT, including an increased licence fee and a cap on the number of licences. Several options for restricting access to tobacco products were also canvassed, including a fit and proper person test, and limits on when and where tobacco can be sold. The consultation ended in May 2014. ACT Health has collated the feedback and is preparing proposals for the government's consideration.



## Future Directions *(continued)*

Restricting places of tobacco use

The ACT Government is committed to building on the successes of smoke-free enclosed public places and outdoor eating and drinking areas. Accordingly, *Future Directions* lists 10 places for restricting tobacco for investigation, including:

- outdoor areas at public swimming pools;
- in and around bus interchanges;
- building entrances;
- large public gatherings and events;
- ACT Health facilities; and
- addressing smoke-drift in multi-unit developments.

The main focus of these initiatives is to address areas where smoking can affect children. The initiatives will focus on working with the public and private sectors to limit tobacco use and exposure, primarily through educational campaigns. If education and public information campaigns are considered unlikely to alter behaviour, then a legislative approach will be investigated.

A new policy to manage smoking at ACT Health facilities commenced on 1 September 2014, following a consultation and education process. Smoking is no longer allowed on the Canberra Hospital campus, with all designated outdoor smoking areas removed. Smoking is also restricted at the Calvary Hospital, the Calvary John James Hospital, and at the National Capital Private Hospital. There will need to be vigilance with enforcing the policy, including regular reminders that smoking is not permitted, and the regular removal of tobacco related litter from footpaths and garden beds. The removal of litter is an element of changing people's behaviour. By removing the litter it sends a behavioural cue that this not an okay place to smoke.


Behavioural cues and reminders that it is no longer normal to smoke at certain places have been a feature of smoke-free initiatives for a number of years. In more recent times, identifying the areas where a person can smoke, such as designated smoking areas, has also been adopted. The designated outdoor smoking area (DOSA), was very effective in introducing the ban on smoking in outdoor eating and drinking areas in the ACT, and may again prove useful as options to restrict tobacco use in other areas around the ACT are explored.

*Future Directions* identified issues for investigation over 2013 to 2016. There will, however, be other possible areas for restricting tobacco access and use that the ACT Government will investigate as they are identified. For example, an emerging issue is electronic nicotine delivery systems (also referred to as e-cigarettes and, more recently, personal vaporising devices). In 2013 Western Australia took action against a retailer selling e-cigarettes, on the basis of their resemblance to a smoking product.[6] The Queensland Government tabled legislation in September 2014 to apply existing tobacco laws to personal vaporising devices including prohibiting sale and supply to children, restricting advertising and display at retail outlets, and prohibiting use in smoke-free places. See page 30 of this issue for more details.

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# Case Study

## Enabling smoke-free apartment living in NSW

Michelle Havill, Rae Fry, and Scott Walsberger, Tobacco Control Unit, Cancer Council NSW

### Background

Secondhand tobacco smoke (SHS) is a preventable cause of death and disease, and there is no safe level of exposure.[1] Among adults it is a known cause of cancer, respiratory, and cardiovascular diseases, and among children it has been shown to contribute to sudden infant death syndrome, low birth weight, lower respiratory tract illness, middle ear disease and asthma.[2,3] Approximately nine in ten NSW households minimise their exposure to SHS by implementing smoke-free rules within their home.[4] However, achieving smoke-free homes can be a challenge for residents of multiunit housing (MUH), where smoke has been shown to transfer between units. Community members affected by unwanted SHS exposure in MUH often contact Cancer Council NSW for advice on what to do about this issue.

Within multiunit housing, secondhand tobacco smoke is not easily contained. Tobacco smoke can contaminate non-smoking units and common areas via open doors and windows; cracks in walls, floors and ceilings; shared ventilation; gaps around plumbing, gaps under doors or through poor insulation.[5-8] Research using air monitors has found increased levels of environmental markers for SHS in non-smoking units of MUH complexes.[5,6] These findings have been supported by self-reported exposure to secondhand smoke in non-smoking households.[8,9] While Australian research on SHS exposure in MUH is limited, one study found that people living in MUH were 19% more likely to report exposure to SHS inside their home than people living in houses.[10]

Implementing 100% smoke-free building policies is the most effective way to protect residents from SHS.[5,6] Ventilation systems, partial smoking bans and physical separation of smokers from non-smokers have been shown to be ineffective in eliminating SHS transfer.[6,8,11,12] Research evaluating the effectiveness of smoke-free building policies has found lower concentrations of secondhand tobacco in buildings with complete smoke-free policies, compared to buildings with partial or no policies.[6] Similarly, self-reported exposure to secondhand smoke is less frequent in buildings with 100% smoke-free policies.[8]

In NSW smoke-free MUH can be achieved by implementing a smoke-free by-law (i.e. in strata title and community title schemes) or a smoke-free rule (i.e. in company title and retirement village schemes). Within strata schemes, the most common form of MUH management in NSW, owners' corporations have the authority to introduce by-laws that prevent smoking on common property and private lots (i.e. inside areas, as well as balconies and courtyards). These by-laws can be introduced via a special resolution at a general meeting of the owners' corporation, where 75% of votes are cast in favour of the resolution.[13] However, anecdotal evidence suggests that there has been low uptake of smoke-free by-laws in NSW. Cancer Council NSW suspects that this may be a result of low community awareness that by-laws can be implemented to prohibit smoking, and the challenges associated with achieving 75% owner support for a smoke-free by-law.

### Cancer Council NSW's Smoke-free Apartment Living Program

Cancer Council NSW believes all people should be able to live in smoke-free homes if they choose. The Achieving Smoke-free Apartment Living program aims to reduce exposure to SHS by creating a more supportive environment for MUH complexes to implement smoke-free by-laws. Figure 1 illustrates the Cancer Council NSW two-pronged approach, Firstly, building community capacity to advocate for and introduce smoke-free by-laws in their own MUH complexes. Secondly, advocating to state government to address SHS exposure in MUH through legislative and regulatory reform.

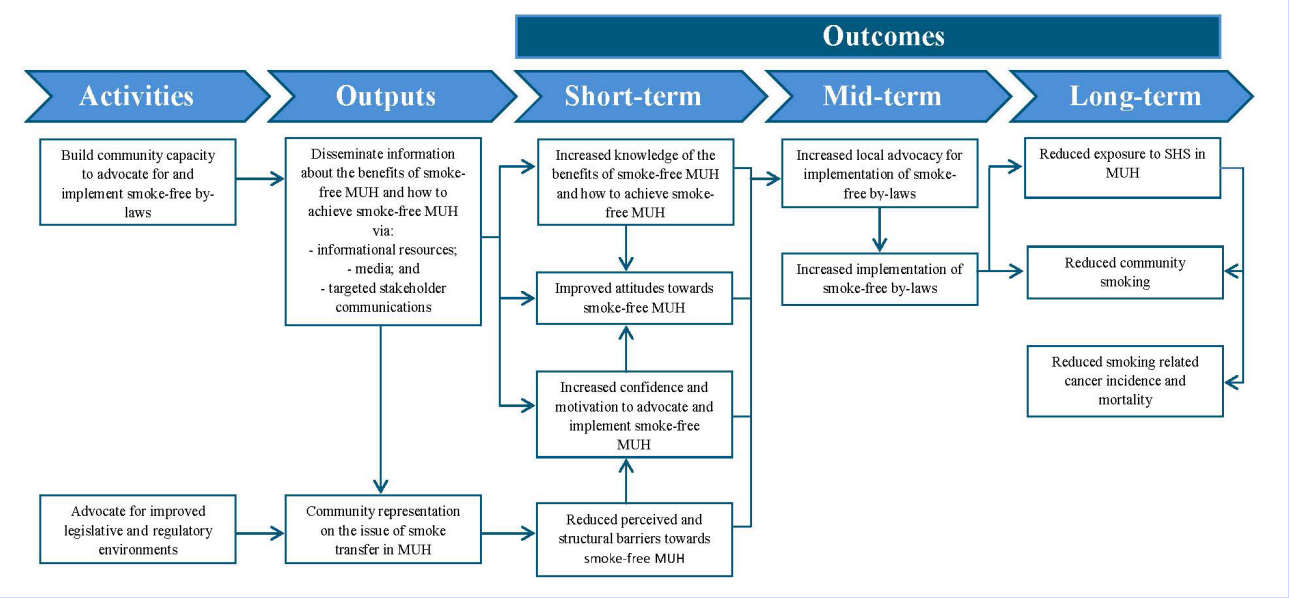


**Figure 1. Cancer Council NSW's two-pronged approach to reducing exposure to SHS in MUH**

# Case Study

## Enabling smoke-free apartment living in NSW *(continued)*

### 1. Building community capacity to implement smoke-free by-laws

Cancer Council NSW's Achieving Smoke-free Apartment Living resource is a key component of a capacity building approach. The resource provides information on the health, legal and financial benefits of smoke-free housing, steps that can be taken to achieve smoke-free MUH, and examples of comprehensive smoke-free by-laws. Specifically, it aims to improve:

- Attitudes towards smoke-free MUH;
- Awareness that smoke-free by-laws can be implemented in MUH;
- Awareness of community demand for smoke-free MUH;
- Confidence to advocate for a smoke-free by-law; and
- Salience of successful smoke-free by-laws in MUH.

**Photograph: by artur84. FreeDigitalPhotos.net**

Qualitative and quantitative evaluation of the resource is in progress to find out:

1. whether the Achieving Smoke-free Apartment Living resource is effective in building the capacity of individuals to advocate for smoke-free by-laws;
2. the reach of the resource; and
3. how the resource could be improved to increase its reach and effectiveness.

Cancer Council NSW will use the results of this evaluation study to improve information materials for community members who wish to implement smoke-free by-laws, target key stakeholder communications, and strengthen advocacy to the NSW Government on this issue.

### 2. Advocating for a supportive legislative and regulatory environment

The advocacy component of Cancer Council's Smoke-free Apartment Living program aims to create a legislative environment that supports and simplifies the adoption of smoke-free by-laws in MUH. A recent review of strata legislation in NSW provided Cancer Council NSW with the opportunity to make recommendations for addressing the problem of SHS in strata schemes. We suggested that legislation explicitly define tobacco smoke as a nuisance and a hazard, and that a smoke-free model by-law be included in the revised laws.[14] Proposed reforms include both these and also better avenues for enforcement and a requirement for all strata schemes to review their by-laws within 12 months of the review.[15]

The revised NSW strata laws are expected to be progressed in early 2015. However, there is little evidence that these changes alone will adequately address public concern as to adopt a smoke-free by-law MUH complexes will still require 75% owner support. Ongoing community capacity building will be essential to accomplish increased uptake of smoke-free by-laws in MUH in NSW.

### Recommendations for increasing the availability of smoke-free multi-unit housing

- Ensure that legislation facilitates the implementation and enforcement of smoke-free policies in MUH;
- State within relevant legislation that SHS can constitute a nuisance or a hazard;
- Outline the elements of a smoke-free policy that would effectively address the problem of SHS drift in MUH;
- Provide and promote publically accessible information on the benefits of smoke-free MUH and the steps that can be taken to achieve smoke-free MUH;
- Develop interventions to promote and support the adoption of smoke-free MUH; and
- Monitor the adoption of smoke-free multiunit housing and evaluate the impact of policies and interventions aimed at increasing the availability of smoke-free MUH.

Cancer Council NSW

# Case Study

## Enabling smoke-free apartment living in NSW *(continued)*

### Future Directions for the ACT

Future Directions for Tobacco Reduction 2013-2016 proposes exploring an initiative around smoke-drift in multi-unit developments. Development of the initiative is scheduled to commence in March 2015. The NSW's approach will be included as part of consultation on the development of the initiative.

In the ACT, if your strata community is experiencing smoke-drift issues the Office of Regulatory Services (ORS) suggests managing smoke-drift issues internally, through discussions between owners and those creating the smoke-drift. The Cancer Council NSW's Achieving Smoke-free Apartment Living information kit is a useful resource in approaching such discussions, which should be with a view to encouraging smokers' to consider that smoke-drift is occurring and mitigate smoke-drift. From this consultation process, a cooperative "house" rule could be developed governing smoking at the strata complex. If compliance with the "house" rule does not occur, owners' corporations can obtain advice from their Strata Manager or ORS on formalising the rule under the ACT's Unit Titles (Management) Act 2011.

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# Electronic cigarettes

Michelle Ashworth, Environmental Health Project Team, Population Health Division

Electronic cigarettes are currently being manufactured for the Australian market without quality and safety controls. There is little conclusive evidence on the potential harms or benefits of electronic cigarettes, and they have not yet been assessed under Australian Standards or approved as a therapeutic device by the Therapeutic Goods Administration. While some experts welcome electronic cigarettes as a pathway to the reduction of tobacco smoking, others characterise them as products that could undermine efforts to de-normalise smoking behaviour. Given the uncertainty surrounding their efficacy in supporting smokers to quit, and the limited evidence on the health effects (particularly long term) of e-cigarette use and passive vapour, regulatory approaches will need to remain adaptable to new scientific evidence.

## What are electronic cigarettes?

Personal vaporisers, of which electronic cigarettes (e-cigarettes) are the most prevalent, are battery operated devices designed to heat liquid to a vapour for inhalation. Most devices contain an electronic vaporisation system, battery and a liquid cartridge (e-liquid). E-cigarettes can be disposable, rechargeable and/or refillable. Although some devices look like tobacco products (e.g. cigarettes, cigars or pipes), they are also produced to resemble everyday items such as lipsticks and pens.

The main base ingredients of the e-liquid solution are typically propylene glycol and glycerine. Ingredients added to this solution at manufacture include flavouring agents and/or nicotine. While simulating the act of smoking and producing vapour, e-cigarettes do not contain tobacco or produce smoke with carbon monoxide or tar.

**Photograph: by Goldy. FreeDigitalPhotos.net**

## Availability and use

Since entering the market ten years ago, e cigarettes are now sold by hundreds of companies, many of which are owned by the tobacco industry. International sales of e-cigarettes are predicted to exceed $5 billion in 2014,[1] with industry analysts expecting consumption to surpass traditional cigarettes within the next ten years.[2] The growing US e-cigarette market currently has over 400 brands and 7,000 flavours.[3]

There are no current data on the prevalence of e cigarette use in Australia or the ACT. E-cigarettes containing nicotine cannot legally be sold or possessed for personal use in the ACT. In the ACT, non-nicotine e-cigarettes can be purchased at selected retail settings including service stations, adult stores and suburban supermarkets.

## Public health issues

A number of policy and public health issues associated with e-cigarettes and e-liquids are emerging in Australia and internationally. These include:

- consumer safety concerns;
- the impact of e-cigarettes on smoking cessation; and
- the uptake and re-normalisation of smoking.

## Consumer Safety

E-cigarettes are largely unregulated in Australia in terms of their content, labelling, safety, sales, advertising, and places of use. The regulatory framework of the Therapeutic Goods Administration (TGA) would provide an avenue for e cigarettes to be recognised as a legitimate therapeutic good. However, to date, no application has been approved by the TGA.

## E-Liquids

Nicotine is classified as a Schedule 7 poison under the Standard for the Uniform Scheduling of Medicines and Poisons. E-liquids sold within Australia are not approved to contain nicotine, however recent tests conducted in Tasmania and NSW found nicotine in 20-70% of products analysed. [4,5]

There have been reported cases globally and in Australia of poisonings from ingestion of e-liquid containing high levels of nicotine, with at least one case resulting in death.[6] The US Centre for Disease Control and Prevention recently reported that the number of calls to poison centres across the country involving an e-liquid containing nicotine rose from one per month in September 2010 to 215 per month in February 2014.[7] More than half of the reported poisonings involved children under the age of five. Nicotine is a highly addictive substance with a wide variety of short and long-term health effects. The immediate effects of nicotine on the body include increased heart rate, blood pressure and metabolic rate, and the promotion of blood coagulation.[8] Long term exposure to nicotine has been linked to adverse reproductive health outcomes including effects on foetal lung development during pregnancy.[9] Further epidemiological studies are required to investigate the relationship between long term use of nicotine (apart from tobacco) and the increased risk of cardiovascular disease and the effects on immune and cognitive function.

While non-nicotine e-cigarettes have not been assessed for safety, research indicates that exposure to propylene glycol (one of the components of e-liquid) can cause eye and respiratory irritation.[10] The other chemical components of e-liquids appear to vary considerably between manufacturers and are typically not disclosed on the label.

## Electronic cigarettes *(continued)*

### Vapour Emissions

E-cigarettes produce vapour of ultra fine particles (UFP) from a battery-powered heater and liquid cartridges. E-cigarettes deliver nicotine and/or other substances through the inhalation of this vapour.

There have been a limited number of studies looking at the composition and concentration of e-cigarette vapour emissions, with a particular focus on UFP. Research to date suggests that toxins in e-cigarette vapour are at much lower levels than in conventional cigarette emissions, and potentially less hazardous in terms of second-hand exposure. A recent study noted that e cigarettes, both with and without nicotine, are 479 times and 363 times respectively less pollutant than conventional cigarettes.[11]

E-cigarettes do, however, produce UFP and some studies have indicated that these emissions impair indoor air quality and have the potential to lead to passive vapour inhalation.[12] A key feature of UFP is that no exposure threshold has been identified for which there are no associated adverse health effects, such as cardiovascular disease, respiratory disease and increased mortality.[13]

A 2012 Italian study noted that e-cigarettes can cause exposure to a different range of chemicals compared with conventional cigarettes (not just 'water vapour' as often reported), suggesting the need for further investigation of the long term health impact of e-cigarette emissions.[14]

### Smoking Cessation

Proponents consider that properly regulated e cigarettes could play an important role in reducing tobacco related harms.[15] It is argued that e-cigarettes are more attractive to smokers, cheaper, just as effective in supporting quit attempts, and could provide better nicotine delivery than nicotine replacement therapy (NRT) products.[16] A 2014 survey by Action on Smoking and Health UK found that 38% of all adults surveyed who had ever tried e-cigarettes, did so for the purpose of quitting tobacco entirely.[17]

There have been several international studies evaluating the effectiveness of e-cigarettes as a smoking cessation tool, with mixed results.

**Photograph: by patrisyu. FreeDigitalPhotos.net**

A number of small studies have found no statistical difference in continuous smoking abstinence between the use of nicotine containing e-cigarettes and nicotine patches.[18] However, a UK study of 5863 adults who had smoked within the last 12 months and who had made at least one quit attempt, found that e-cigarette users were 1.63 times more likely to report abstinence than those who used NRT products, and 1.61 times higher compared with those using no aid.[19]

Limited research has shown that many people who use e-cigarettes do not actually quit smoking, resulting in the dual use of cigarettes and e cigarettes. High rates of dual use may result in a greater public health burden, and possibly increased individual risk if a smoker maintains even a low level cigarette addiction for many years instead of quitting.[10]

### Uptake and renormalisation of smoking

Campaigners argue that the growing use of e-cigarettes could undermine years of smoking prevention and cessation efforts by reinforcing the normality and attractiveness of smoking. The freedom to use e-cigarettes 'anywhere' in defiance of existing smoke-free legislation is being promoted online by some manufacturers.[20]

By simulating the hand to mouth action of smoking together with vapour production, e-cigarette use in smoke-free areas increases social exposure to the act of smoking and potentially, its renormalisation. E-cigarette use in public places may also provide visual cues to smoke, undermining quit attempts and promoting relapse in tobacco users.[21]

There is concern that non-smokers, and young people in particular, will be attracted to e-cigarettes through their wide range of product flavours (e.g. fruit, lollies and alcohol), 'no-risk' hype and slick product marketing. Some e-cigarette companies are targeting the youth market through the use of social media such as Facebook™, Twitter™, Pinterest™ and YouTube™. Advertising strategies that glamorise e-cigarette use, including celebrity endorsements, bejewelled e-cigarettes and designer necklace products are also evident.

A recent US study showed experimentation and use of e-cigarettes doubled among US middle and high school students between 2011 (3.3%) and 2012 (6.8%). Among those who had tried e-cigarettes, 9.3% reported never having smoked tobacco cigarettes.[22]As many e-cigarette companies are now increasingly owned by tobacco companies, there is concern that once addicted to nicotine, e-cigarette users may then take up tobacco smoking.[23]

## Electronic cigarettes *(continued)*

### Policy Options

The Health Protection Service is currently investigating options to regulate the sale, marketing and use of e-cigarettes in public places. To protect non-smokers, particularly young people, this could include prohibiting the sale of e-cigarettes to minors and restricting point-of-sale displays.

Given the concerns about the possible health effects of passive exposure to e-cigarette vapour, and the difficulty of differentiating between tobacco products and e-cigarettes, options to limit places of use under smoke-free legislation will also be explored.

A discussion paper was released for public consultation on 12 November 2014, and is available at http://www.timetotalk.act.gov.au/consultations/?engagement=discussion-paper-options-to-protect-the-community-from-potential-harms-associated-with-personal-vaporisers-e-cigarettes. Consultation closes 24 December 2014.

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# Area Highlight

## Environmental Health Project Team

**The Environmental Health Project Team (Project Team) is a section of the Health Protection Service responsible for providing regulatory policy advice, input and information on a wide range of environmental health issues. These include food safety, tobacco control, safety of recreational water and drinking water, health care facility licensing, cooling towers and other environmental factors that may impact on health.**

**Staff in the Project Team have varying experience and qualifications in such areas as policy development and implementation, science, law and teaching.**


**(L-R) Holly Coates, Erica Nixon, Katherine Davis, Michelle Ashworth, Nicola Clark, Kate Martin**
**Absent: Bronwyn Wilkes**

**If you wish to contact the Project Team you can email us at hps@act.gov.au or call (02) 6205 1700.**

# Notifiable Disease Report

## Number of notifications of selected notifiable conditions received in the Australian Capital Territory between 1 January and 30 September 2014

| | Number of notifications 1 Jan 2014 to 30 Sep 2014 | 1st QTR 2014 | 2nd QTR 2014 | 3rd QTR 2014 | Annual Total 2013 | 5 year average 1 Jan to 30 Sep (2009-2013) |
|---|---|---|---|---|---|---|
| **VACCINE PREVENTABLE CONDITIONS** | | | | | | |
| INFLUENZA A | 1080 | 45 | 63 | 972 | 348 | 460.0 |
| INFLUENZA B | 63 | 6 | 4 | 53 | 218 | 76.8 |
| MEASLES | 7 | 1 | 0 | 6 | 1 | 0.8 |
| MENINGOCOCCAL DISEASE (INVASIVE) | 2 | 0 | 1 | 1 | 3 | 1.8 |
| MUMPS | 2 | 0 | 1 | 1 | 1 | 1.8 |
| PERTUSSIS | 172 | 45 | 46 | 81 | 234 | 328.6 |
| PNEUMOCOCCAL DISEASE (INVASIVE) | 12 | 3 | 4 | 5 | 14 | 18.0 |
| **GASTROINTESTINAL DISEASES** | | | | | | |
| CAMPYLOBACTERIOSIS | 381 | 142 | 135 | 104 | 375 | 350.0 |
| CRYPTOSPORIDIOSIS | 27 | 22 | 4 | 1 | 39 | 34.0 |
| GIARDIA | 105 | 38 | 40 | 27 | 122 | 85.6 |
| HEPATITIS A * | 5 | 2 | 1 | 2 | 4 | 2.6 |
| HEPATITIS E | 1 | 0 | 1 | 0 | 1 | 1.0 |
| SALMONELLOSIS | 164 | 58 | 71 | 35 | 279 | 162.8 |
| SHIGELLOSIS | 11 | 8 | 0 | 3 | 10 | 4.8 |
| YERSINIOSIS | 5 | 1 | 2 | 2 | 2 | 2.8 |
| **SEXUALLY TRANSMITTED INFECTIONS** | | | | | | |
| CHLAMYDIA | 910 | 298 | 306 | 306 | 1269 | 897.6 |
| GONOCOCCAL INFECTION | 91 | 49 | 28 | 14 | 114 | 69.2 |
| SYPHILIS <2 YEARS DURATION | 14 | 5 | 5 | 4 | 10 | 9.8 |
| **VECTORBORNE & ARBOVIRUS** | | | | | | |
| DENGUE FEVER | 15 | 6 | 8 | 1 | 12 | 12.8 |
| MALARIA | 9 | 2 | 3 | 4 | 13 | 8.0 |
| ROSS RIVER VIRUS INFECTION | 2 | 0 | 2 | 0 | 4 | 8.2 |
| **RESPIRATORY CONDITIONS** | | | | | | |
| TUBERCULOSIS # | 21 | 8 | 5 | 8 | 18 | 11.4 |

# All Diseases except Tuberculosis are reported by onset date or closest known test date. Tuberculosis is reported by notification date.

* This condition includes cases that meet the probable and confirmed case definitions. Both probable and confirmed cases are nationally notifiable.

For the relevant year, Q1 refers to 1 January to 31 March, Q2 refers to 1 April to 30 June, Q3 refers to 1 July to 30 September, Q4 refers to 1 October to 31 December.

N.B. Data reported are the number of notifications received by ACT Health. Data are provisional and subject to change.

The number of notifications received for all notifiable diseases in the ACT is available at http://www9.health.gov.au/cda/source/cda-index.cfm

HIV data are reported annually by the Kirby Institute: http://www.kirby.unsw.edu.au/surveillance/Annual-Surveillance-Reports

## Notes on notifications

Influenza

The number of influenza cases notified to ACT Health indicates that influenza activity peaked in August, with decreasing activity observed throughout September. This is consistent with expected seasonal patterns.

A total of 1143 notifications of influenza were notified between 1 January and 30 September 2014. This is slightly more than double the number of notifications received in 2013 (n=566). Of the influenza notifications received this year, 52% (n=590) were in females, and most notifications were in 30 to 39 year olds (n=207, 18%). Influenza A accounted for 94% (n=1080) of all influenza cases.

Measles

Measles is a highly infectious, acute viral illness spread by respiratory secretions, including aerosol transmission. The most effective protection against measles is vaccination. Two doses of Measles Mumps Rubella (MMR) vaccine are recommended and are given to children at 12 months and 18 months of age under the National Immunisation Program. The Health Protection Service (HPS) investigates and implements disease control measures for each case of confirmed measles in line with national guidelines.

There were six cases of measles notified in the ACT in quarter 3 of 2014. All six cases were in children that that had not been immunised. Two cases acquired their infections overseas. The remaining four cases were a family cluster.

Invasive Pneumococcal Disease

Invasive Pneumococcal disease (IPD) is caused by the bacterium *Streptococcus pneumoniae*. Illnesses range from mild infections, such as ear infection, to pneumonia and life-threatening infections of the bloodstream and central nervous system, such as meningitis. There have been 12 cases of IPD notified this year between January and September. On average between 2009 and 2013, there were 24.2 cases of IPD notified annually in the ACT, although notifications have been trending downward since 2012. Immunisation can substantially reduce the risk of infection, especially in young children. Under the National Immunisation Program, pneumococcal vaccination is recommended for children, the medically at risk and older Australians.

Gonococcal Infection

Gonorrhea is a sexually transmitted infection for which notifications have been increasing in the ACT and nationally in recent years. A total of 91 notifications have been received year to date, which is 32% higher than the five year average for the same period (n=69.2). There were 14 notifications received this quarter compared to 28 in quarter 2 and 49 in quarter 1.

# Hot topics

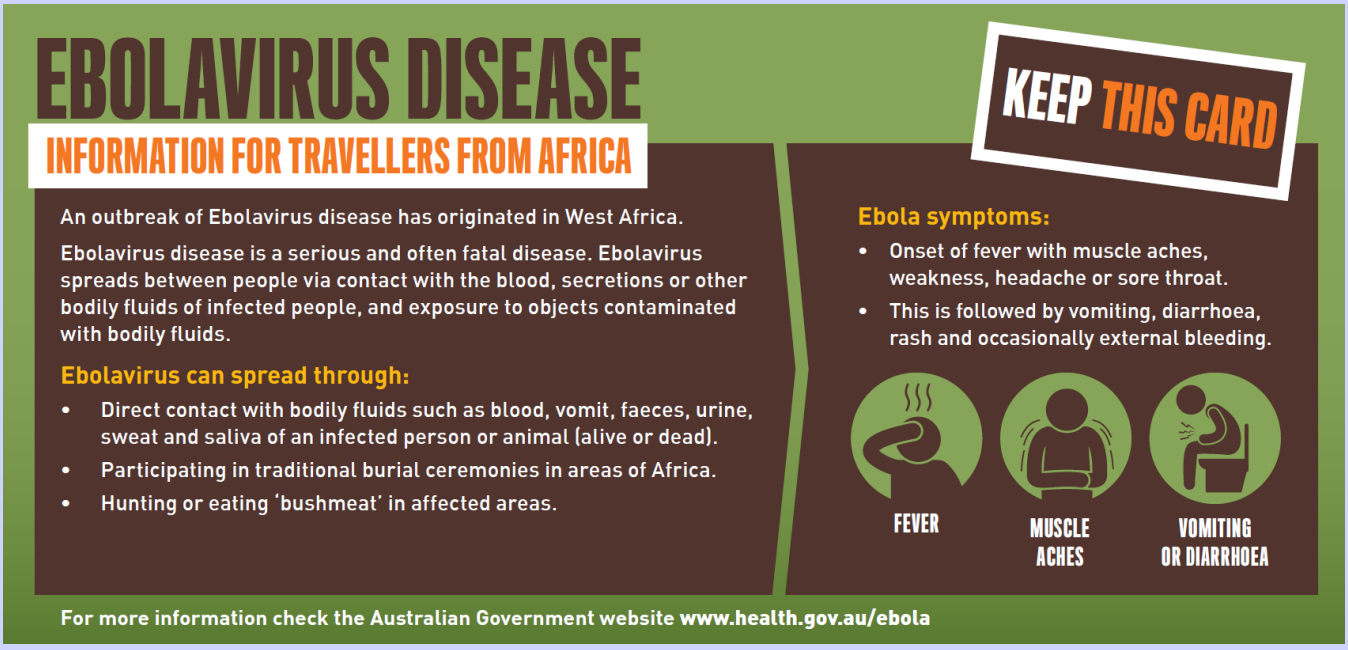
## Ebola Virus Disease

Ebola Virus Disease (EVD) is a severe acute viral illness often characterized by the sudden onset of fever, intense weakness, muscle pain, headache and sore throat. This is followed by vomiting, diarrhoea, rash, impaired kidney and liver function, and in some cases, both internal and external bleeding. The incubation period, that is, the time interval from infection with the virus to onset of symptoms is 2 to 21 days. EVD is transmitted through contact with the bodily fluids of an infected person or animal. There is currently no licensed vaccine to prevent Ebola, but there are a number of vaccines under evaluation. Treatment for Ebola is largely supportive.

There is an outbreak of EVD affecting the West African countries of Sierra Leone, Liberia and Guinea. As of 23 November 2014, there have been 15,901 confirmed, probable, and suspected cases and 5674 deaths reported in these countries. There have also been cases reported in Mali, USA, Spain, Nigeria and Senegal which have been either due to or triggered by cases imported from the outbreak affected countries. There was a separate unrelated Ebola outbreak in the Democratic Republic of Congo which has now been declared over by the World Health Organization. Details of outbreaks are available at the World Health Organization Website at: who.int/csr/disease/ebola/en/

No cases of EVD have been reported in Australia. Very few people travel to Australia from West Africa, therefore the risk to Australia remains low. At a national level, Australia has in place robust border protection systems, to enable the early detection of any potential cases entering the country. National Guidelines have been developed by the Communicable Diseases Network of Australia which ACT Health will follow in the event of a suspected or confirmed EVD case. Information about EVD is available at http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-ebola.htm

In the ACT, local preparedness activities in the event of a case of EVD have been ongoing. ACT Health has been undertaking preparedness activities and is working with airport and airline authorities, the ACT Medicare local, ACT Ambulance Service, ACT hospitals and clinicians to provide information about EVD and review preparedness plans.




**Information card provided to returned travellers from Africa.**

# TIPS TO BEAT THE HEAT!


## WATCH OUT

Be on the lookout for any symptoms of heat related illness.
See your GP if you are unwell.
In a medical emergency cal 000.

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